GOVERNMENT OF INDIA

India

METEOROLOGICAL DEPARTMENT.

THE

INDIA WEATHER REVIEW

FOR THE YEAR

1895.

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BY

JOHN ELIOT, M.A., F.R.S.,

METEOROLOGICAL REPORTER TO THE GOVERNMENT OF INDIA.

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WEATHER BUREAU

Corrigenda in the Monthly Weather Reviews and Annual Summary for the year 1894.

For "75" *read* 12 in the column of elevation and apply — ·064 in column 3 under 'Pressure' against Trincomalee in Table I, from June to December 1894, in pages 274, 346, 390, 432, 478, 520 and 566 respectively of the Monthly Weather Reviews for 1894.

Apply —·022 to the entries against Port Victoria in column 6 under 'Pressure' in Table II, from June to December 1894 in pages 280, 352, 396, 438, 484, 526, and 572 respectively of the Monthly Weather Reviews for 1894.

For "52 meteorological districts, etc." *read* 51 meteorological districts, etc., in line 1 in heading of Table VI in page 591 of the Annual Summary for 1894.

For "29·499" *read* 29·502 in the column of June against Burdwan in page 600 of the Annual Summary for 1894.

For "28·752" *read* 28·753 in the column of September against Hoshangabad in page 601 of the Annual Summary for 1894.

Omit—10·44 in column 6 under "Rainfall" against XIII—EXTRA INDIA and *insert*—10·44 in column 6 under "Rainfall" against Colombo in page 675 of the Annual Summary for 1894.

For "·938" and "·896" *read* ·943 and ·881 in columns 4 and 6 under "Pressure" respectively, against Port Victoria in page 682 of the Annual Summary for 1894.

WEATHER BUREAU

Corrigenda in the Monthly Weather Reviews for the year 1895.

Page.	Column	Part.	Subject.
34	...	January 1895 .	*For* "24·4" *read* 14·4 against Camorta in column 13 under "Temperature of air."
,,	...	Ditto ,, .	*For* "72·4" *read* 92·4 against Rangoon in column 9 under "Temperature of air."
...	...	...	Apply a correction of —·010 to the entries against Naya-Dumka in columns 1, 3, 4 and 6 under "Pressure" in Table I of January and February 1895.
38	...	Ditto ,, .	*For* "42·8" *read* 42·4 against 'VII.—Indus valley and N. W. Rajputana in column 13 under 'Temperature of air.'
,,	...	Ditto ,,	*For* "41·1" and "41·4" *read* 46·1 and 36·4 against Kurrachee in columns 11 and 13 respectively, under "Temperature of air."
39	...	Ditto ,, .	*For* "6" *read* 76 against Jhansi in column of "Mean humidity."
43	...	Ditto ,, .	*For* "2·11" *read* ? against Pishin in column 5 and for "?" 2·11 against Quetta in column 5 under "Rainfall."
44	...	Ditto ,, .	*For* "29·970" *read* 29·906 against Trincomalee in column 3 under "Pressure."
...	...	...	*For* "75" *read* 12 in the column of elevation against Trincomalee in Table I from January to December 1895.
49	...	Ditto ,, .	*For* "·675", "·652" and "+·071" *read* ·645, ·642 and +·061 against Vizagapatam in columns 2, 4 and 5, respectively, under "Vapour tension."
...	...	...	Apply a correction of —·022 to the entries against Port Victoria in column 6 under "Pressure" in Table II from January to November 1895.
79	1	February ,, .	*For* "?" and "0·90" *read* 0·90 and ? against Berar in figure columns 3 and 4 respectively of the 2nd tabular statement.
90	...	Ditto ,, .	*For* "29·951" and "29·955" *read* 29·982 and 29·922 against Trincomalee, respectively, in columns 1 and 3 under "Pressure."
93	...	Ditto ,, .	*For* "93" *read* 64 against Meerut in the column of Normal, under "Wind velocity."
94	...	Ditto ,, .	Apply a correction of —·006 to the entries against Darjeeling in columns 4 and 5 under "Pressure."
134	...	March ,,	*For* "29·861", "29·864", "29·951," and "29·795" *read* 29·916, 29·854, 30·006, and 29·850 against Trincomalee, respectively, in columns 1, 3, 4, and 6 under "Pressure."
135	...	Ditto ,, .	*For* "13" *read* 1 against Zanzibar in column 3 under "Wind Direction."
136	...	Ditto ,, .	Apply a correction of —·018 to the entries against Akyab in columns 4 and 5 under "Pressure."
,,	...	Ditto ,, .	*For* "71·9" and "29·6" *read* 58·1 and 43·4 against Agra in columns 5 and 6 respectively, under "Temperature of air."
180	...	April ,, .	*For* "89·7" and 30·2" *read* 89·2 and 30·4 against Akola in columns 6 and 8 under "Temperature of air."
,,	...	Ditto ,, .	*For* "0" *read* ? against Mormugao in column 2 under "Pressure, 8 A.M., in inches."
182	...	Ditto ,, .	*For* "29·589" *read* 27·589 against Chitaldroog in column 4 under "Pressure, 8 A.M., in inches".
184	...	Ditto ,,	*For* "22·202" *read* 24·202 against Wellington in column 6 under "Pressure, 8 A.M., in inches".
,,	...	Ditto ,, .	*For* "29·806", "29·808", "28·869" and "29·697" *read* 29·861, 29·798, 29·924 and 29·752 against Trincomalee, respectively, in columns, 1, 3, 4 and 6 under "Pressure."

Corrigenda in the Monthly Weather Reviews for the year 1895—continued.

Page.	Column	Part.	SUBJECT.
185	...	April 1895 .	*For* "0" *read* 0·01 against Kashgar in last figure column under "Heaviest rainfall during month."
,,	...	Ditto ,, .	*insert* 6 in the figure column 1 against Minicoy under "Rainfall".
189	...	Ditto ,, .	*For* "·357" *read* ·257 against Mount Abu in column 1, under "Vapour tension."
199	2	May ,, .	*For* "—·058" and "+·109" *read* —·050 and + ·101 against Lahore in columns 4 and 5, respectively, in the tabular statement.
222	...	Ditto ,, .	*For* "29·928" *read* 28·928 against Yamethin in column 6 under "Pressure."
224	...	Ditto ,, .	*For* "—2·8" *read* + 2·8 against Gaya in column 7 under "Temperature."
230	...	Ditto ,, .	*For* "46·4", "4th" and "45·2" *read* 44·1, 2nd and 47·5 against Quetta in columns 11, 12 and 13, respectively, under "Temperature of air."
231	...	Ditto ,, .	*For* "2·21" and "7·12" *read* 2·17 and 7·08 against Mysore in columns 4 and 7, respectively, under "Rainfall."
232	...	Ditto ,, .	*For* "29·766", "29·768", "29·832" and "29·651" *read* 29·821, 29·758, 29·887 and 29·706 against Trincomalee, respectively, in columns 1, 3, 4 and 6 under 'Pressure'.
,,	...	Ditto ,, .	*For* "841", "901" and "9·9" *read* 84·1, 90·1 and 7·9 against Minicoy in columns 1, 2 and 8, respectively, under "Temperature of air".
234	...	Ditto ,, .	*For* "28·281" and "·103" *read* 28·284 and ·106 against Jeypore in columns 1 and 3, respectively, under "Pressure."
245	2	June ,, .	*For* "23·85" and "—2·71" *read* 23·81 and —2·74 against Burma Coast and Bay Islands in columns 2 and 4 of the tabular statement.
277	...	Ditto ,, .	*For* "23·85" and "—2·71" *read* 23·81 and —2·74 against Burma Coast and Bay Islands in columns 4 and 6, respectively, under "Rainfall."
,,	...	Ditto ,, .	*For* "26·44", "+7·65", "26·44" and "+7·65" *read* 26·24, + 7·45, 26·24 and + 7·45 against Port Blair, respectively, in columns 4, 6, 7 and 9 under "Rainfall."
278	...	Ditto ,, .	*For* "+·038" *read* +·025 against Burdwan in column 2 under 'Pressure.'
284	...	Ditto ,, .	*For* "87·8" *read* 87·1 against Kurnool in column 6 under "Temperature of air".
285	...	Ditto ,, .	*For* "·701" *read* ·761 against Coimbatore in column 2 under "Hygrometry, 8 A.M.".
286	...	Ditto ,, .	*For* "29·730", "29·782", "29·819" and "29·610" *read* 29·785, 29·722, 29·874 and 29·665 against Trincomalee, respectively, in columns 1, 3, 4 and 6 under "Pressure"
287	...	Ditto ,, .	*For* "9" and "+2·30" *read* 10 and +3·30 against Mount Abu in columns 1 and 3, respectively, under "Rainfall."
288	...	Ditto ,, .	*For* "90·11" *read* 90·1 against Ajmere in column 9 under "Temperature of air."
330	...	July ,, .	*For* "730?" against Ranchi and "2,128" against Daltonganj, *read* 2,128 and 730?. respectively, in the column of Elevation.
331	...	Ditto ,, .	*For* "Daltonganj" and "Ranchi" *read* Ranchi and Daltonganj, respectively, in the column of "Station."
...	...	.....	Apply +·055 in columns 1, 4. and 6 and —·010 in column 3 under "Pressure" against Trincomalee in Table I from July to December 1895.
339	...	Ditto ,, .	*For* "2·0" *read* "20·2" against Minicoy in column 1 under "Wind velocity."
,,	...	Ditto ,, .	*For* "?" *read* 6·8 against Minicoy in column 1 under "Mean cloud amount."
,,	...	Ditto ,, .	*For* "7" *read* 6·7 against Zanzibar in column 1 under "Wind velocity."
351	2	August ,, .	*For* "—·012" and "+·001" *read* —·008 and —·003, against Jacobabad, in columns 4 and 5, respectively, of the first tabular statement.

Corrigenda in the Monthly Weather Reviews for the year 1895—concluded.

Page.	Column	Part.	Subject.
373	...	August 1895 .	*For* " 13·85 " *read* 14·15 against Dapoota in column 4 under " Rainfall ".
,,	...	Ditto ,, .	*Add* ·02 to the entries against 'IV, Bengal and Orissa,' in columns 4 and 6 under " Rainfall."
,,	...	Ditto ,, .	*Add* " +0·50" to the entries against Noakhali in columns 4, 6, 7 and 9 under "Rainfall."
374	...	Ditto ,, .	*For* " 29·797 " *read* 29·701 against Puri in column 4 under " Pressure."
376	...	Ditto ,, .	*For* " +0·" *read* +0·2 against Indore in column 7 under " Temperature of air."
382	...	Ditto ,, .	*For* " 194·3 " *read* 94·3 against Kashgar in column 9 under " Temperature of air."
,,	...	Ditto ,, .	*For* " 98·848 " *read* 29·848 against Minicoy in column 3 under " Pressure."
383	...	Ditto ,, .	*Omit* 7 against Baghdad in columns 4, 6 and 7, and also against Kabul in columns 1, 7 and 9 under " Wind direction."
384	...	Ditto ,, .	*For* " 77·0 " *read* 75·0 against Jeypore in column 4 under " Temperature Wet Bulb."
,,	...	Ditto ,, .	*Omit* figures in columns 1 and 4 under " Temperature, Wet-Bulb " against Leh., and insert ? in them from August to October 1895.
,,	...	Ditto ,, .	*Omit* figures in columns 1, 4 and 5 under " Vapour tension " and in columns 1, 4, and 5 under " Humidity " and insert ? in them from August to October 1895.
409	2	September ,, .	*For* " 5·6 " *read* 5·26 in line 5, para. 3.
434	...	Ditto ,, .	*For* " 84·8 " *read* 84·6 against Zanzibar in column 9 under " Temperature of air ".
436	...	Ditto ,,	*For* " 72·5 " *read* 71·8 against Jeypore in column 4 under ' Temperature Wet Bulb."
448	1	October ,, .	*For* " —·019 " and " +·005 " *read* —·014 and 0 against Lahore, respectively, in columns 4 and 5 of the first tabular statement.
580	...	December ,, .	*For* " ? " *read* ·865 against Port Victoria in column 6 under " Pressure".
581	...	Ditto ,, .	" Corrected " should be inserted at the foot of the table.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, JANUARY, 1895.

INTRODUCTION.

THE monthly review of the weather in India for the month of January 1895 is based on observations taken daily at 8 A.M. at 204 stations, and on additional observations recorded at 10 A.M. and 4 P.M. at 89 stations. In the case of the rainfall section of the review there are also utilized the weekly rainfall telegrams received from District Officers throughout India, and the rainfall statements of the month published in the Government Gazettes by the Provincial Governments that have been issued prior to the date of the publication of the review. A brief summary of the information relating to the weather in the Bay of Bengal and Arabian Sea, extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given. In the remaining monthly reviews of the present year, the brief statements of the methods of recording and tabulating the data for each of the elements of observation given in the present number at the commencement of each section, will not be repeated.

Summary of the chief features of the weather in India during the month of January 1895.

The month of January is the first month of the north-east monsoon proper. North-east winds prevail over the whole of the Arabian Sea and Bay of Bengal to the north of the equatorial belt of low pressure. The normal features of the weather in India are moderate temperature, and large daily range of temperature and hence also of humidity (more especially in Northern and Central India and the Deccan), and clear skies and fine bright weather, with light to moderate winds, which are generally opposite in direction to those that prevail in the south-west monsoon.

Weather is usually fine throughout the whole month in the Peninsula. In Northern and Central India it is disturbed at intervals by shallow depressions or feeble cyclonic storms which either form in North-Western India or advance from Baluchistan. These depressions are generally shallow and ill-defined. but extensive. These (primary) depressions, which usually advance eastwards across Northern India, frequently give rise to deep secondary stationary depressions in the Punjab. When a primary depression is not accompanied by a secondary depression, it either gives no rain or light to moderate scattered rain over Northern and Central India. When a primary depression gives rise to a secondary depression in the Punjab, the double disturbance usually gives heavy rain in North-Western India, heavy to excessive snowfal

in the Himalayan mountain areas, and very stormy weather in the Punjab and Afghan hills. These storms hence form one of the most important abnormal features of the month. They usually produce large and marked temperature changes. A warm wave in which temperature is frequently from 5° to 15° above the normal precedes each storm, and a dry cool wave follows in its rear.

The meteorology of the month of January 1895 resembled that of December 1894 in its more important features. Weather was more frequently disturbed than usual, but the disturbances or storms were less severe than frequently occur in the cold-weather period in Northern India. The passage of the storms across Northern India was followed in each case by a short period of unsettled showery weather in Upper India. The precipitation of the month was in considerable excess in North-Western and Central India, but was very small in amount in the Central Provinces and North-Eastern India and practically *nil* in Bombay, Madras and Burma. The character of the storms and the distribution of the rainfall mainly determined the variations of the temperature, humidity and cloud features of the month from the normal.

A feeble cold-weather disturbance passed into India from Baluchistan on the 31st of the previous month. It drifted as a diffused feeble disturbance across Northern India on the 1st and 2nd of January and disappeared on the 3rd. Light local thundershowers were received in the South-East Punjab and some parts of Rajputana, and the North-Western Provinces on the 1st and 2nd. Fine clear weather generally obtained during the next three days in Northern and Central India.

Temperature at the commencement of the month was in slight defect in Upper India and in considerable excess in the Central Provinces and Bengal. The high temperature conditions extended northwards on the 3rd and 4th into Central India, and the mean temperature of the 24 hours preceding 8 A.M. of the 5th was 3° above the normal in the area, including Central India, Berar and the Central Provinces.

Weather was disturbed in Persia from the 1st to the 5th. A shallow depression formed in that area on the 4th and 5th and drifted slowly eastward, giving moderate rain and snow in Persia on the 5th and the 6th. It began to affect Baluchistan and Upper India on the 5th, when pressure gave way rapidly. The central depression was in Baluchistan on the morning of the 6th, Central Rajputana on the 7th, Bundelkhand on the 8th, Bihar on the 9th, and South Bengal on the 10th, and hence advanced at an average rate of about 400 miles per diem. Baluchistan received moderate rain on the 6th and 7th, and Kashmir, the Punjab and Rajputana on the 7th and 8th and light showers on the 9th. Although the disturbance passed eastwards into North-Eastern India on the 9th weather continued unsettled and showery in the East Punjab and the north-western districts of the North-Western Provinces until the 12th, when a rapid rise of pressure in North-Western India established high pressure conditions and fine weather.

Temperature was very largely below the normal in Baluchistan during this period and was slightly below it in the north-west frontier districts. It had, on the other hand, increased rapidly on the 7th and was largely in excess in the area including the North-Western Provinces, Central India, Berar, the Central Provinces and Bihar from the 8th to the 12th as is shown by the following table, giving the variations of the mean temperature from the normal in these areas from the 7th to the 12th:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of					
	7th	8th	9th	10th	11th	12th
	°	°	°	°	°	°
North-Western Provinces and Oudh.	+4·2	+4·1	+4·5	+1·7	+5·6	+5·0
Sind and Rajputana.	+2·7	+3·1	+1·6	0	−1·7	−3·2
Central India and Gujarat.	+3·1	+3·7	+5·1	+1·5	+1·6	+1·6
Central Provinces and Berar.	+1·4	+2·9	+3·6	+3·6	+3·4	+4·1

The re-establishment of fine weather in Upper India on the 12th was followed by the extension of the area of considerable deficiency of temperature from the north-west frontier districts across the North-Western Provinces on the 13th and 14th. Temperature continued considerably in excess in the Central Provinces and Bengal.

A local fall of pressure in North Bombay and Berar on the 14th indicated the formation of a very feeble diffused disturbance in that area which was transmitted eastwards to Bengal during the next 48 hours. Rajputana, the North-Western Provinces, Central India and the northern districts of the Central Provinces received numerous thundershowers on the 15th and 16th, and North Bengal and Bihar on the 16th, and Upper Assam from the 16th to the 19th. During this period from the 15th to the 19th, the area of deficient temperature extended eastwards into Bengal and southwards into the Central Provinces, and temperature was more or less in defect over the whole of India, except Madras, on the 17th and 18th. The deficiency was greatest on the 17th at Indore (−11°) and on the 18th at Khandwa (−10°). Temperature was, however, now increasing rapidly in Baluchistan and Upper India in front of the second cold-weather storm of the month which was advancing through Baluchistan from Persia.

The following gives the variations of the mean temperature from the normal in Northern and Central India from the 16th to the 19th:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	16th	17th.	18th	19th	Mean of period.
	°	°	°	°	°
Punjab	−3·8	−2·7	−3·0	−2·3	−3·0
North-Western Provinces and Oudh.	−2·6	−3·0	−4·8	−3·9	−3·6
Sind and Rajputana .	−6·2	−6·6	−3·8	−2·3	−4·7
Central India and Gujarat	−4·8	−7·7	−6·8	−4·8	−6·0
Central Provinces and Berar.	+2·3	−1·2	−4·7	−5·2	−2·2
Bengal and Assam .	−·04	+1·2	−1·8	−3·5	−1·1

The deficiency was exhibited almost equally in the day and night temperatures.

Another depression (the second of the month) formed in the Persian area during this period. It advanced along a more southerly track than the first cold-weather storm of the month (from the 5th to the 10th), and gave heavy rain to Muscat on the 17th and following three days, and moderate rain to Jask from the 15th to the 19th. It passed through South Baluchistan and Lower Sind on the 20th. British Baluchistan received some light showers on the 19th and 20th, but the precipitation in that area due to the storm was very slight. The primary depression passed into South Rajputana and Central India during the next 24 hours and gave rise to a moderately deep secondary depression in the South-East Punjab. It filled up rapidly during the next 24 hours whilst the primary depression continued to advance eastwards. It passed through Chota Nagpur on the 22nd and South Bengal on the 23rd and Upper Burma on the 24th. The double disturbance gave moderate general rain to the Punjab, Rajputana, and the greater part of the North-Western Provinces, from the 21st to the 23rd, and light showers in Bihar, Chota-Nagpur and Bengal on the 22nd and 23rd, and showers in Assam from the 23rd to the 26th.

Well-marked temperature changes preceded and accompanied the march of this disturbance across Northern India. Temperature, as stated above, was largely in defect in Central and North-Eastern India on the 18th and 19th. A warm wave preceded the storm and marched across Northern India, displacing the area of low and deficient temperature and was followed by a well-defined cool wave. The march of these waves across India is clearly indicated by the following temperature variation data for the period, the 20th to the 25th:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of					
	20th	21st	22nd	23rd	24th	25th
	°	°	°	°	°	°
Baluchistan .	−5·6	−8·9	−12·8	−8·2	−2·5	−5·8
Punjab . .	−2·7	−1·2	−5·0	−5·0	−3·9	−3·8
Sind and Rajputana.	+0·2	−2·3	−10·3	−9·6	−7·4	−6·0
North-Western Provinces.	−3·4	+0·9	−0·3	−4·3	−4·0	−5·1
Gujarat and Central India.	−2·1	+1·5	−5·2	−9·4	−8·1	−4·3
Bengal and Assam.	−4·1	−3·5	−0·1	+2·0	−2·6	−3·8
Central Provinces and Berar.	−2·5	+0·5	+1·8	−5·9	−8·3	−4·5
Burma . .	−1·1	−2·7	−2·9	−1·1	−0·1	−0·5

At the end of this period, *i.e.*, on the 24th and 25th, temperature was more or less considerably below the normal over the whole of Northern and Central India. It was, on the other hand, in slight excess in Madras and Mysore.

Temperature steadily increased during the next three days, more especially in North-Western India. The area of greatest deficiency of temperature was hence transferred eastwards from the North-Western Provinces on the 26th to South Bengal on the 28th and East Bengal and Burma on the 29th. The chief feature of this period was the very rapid increase of temperature in Central India, Khandesh, Berar and the Central Provinces, as is shown by the following data:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		Change during period.
	26th	29th	
	°	°	°
Punjab	−2·0	+0·4	+2·4
North-Western Provinces . .	−3·4	−0·9	+2·5
Sind and Rajputana . . .	−3·0	+2·6	+5·6
Gujarat and Central India . .	−2·7	+6·5	+9·2
Central Provinces and Berar . .	−0·3	+5·3	+5·6
Bengal and Assam	−2·6	−0·7	+1·9

This feature of excessive temperature in Central India intensified slightly during the remainder of the month, and on the 31st the mean temperature was from 8° to 12° above the normal in the area defined by the stations of Ajmere, Saugor, Pachmarhi, Khandwa and Neemuch.

A change of considerable importance in the pressure distribution occurred during this period. Pressure had been in considerable defect at the hill stations in Northern India from the month of November up to the end of the third week of January when it increased rapidly at the hill stations relatively to the plains stations and was more or less considerably in excess for some time afterwards.

A feeble depression formed or appeared in Lower Sind and Kathiawar on the 30th and advanced eastwards into Rajputana and Central India on the 31st. It was of little importance but gave some light showers on the 31st in the North Punjab and the hill districts.

Pressure.—The mean pressure of the Indian land area was ·009″ below the normal. Pressure was in very slight defect relative to this condition in Assam, Burma and the Peninsula, and in slight excess in Northern and Central India. The pressure anomalies were less than ·02″, except in two small areas, *viz.*, Sind, represented by Kurrachee (at which the amount was +·023″), and Jacobabad (+·034″) and the East Punjab, represented by Rawalpindi (+·026″), Sialkot (+·028″) and Lahore (+·023″). The pressure conditions at the level of the plains were hence approximately normal. The only important feature in the pressure distribution was (as in December) a moderate deficiency at the level of the hill stations in Northern and Central India as compared with the neighbouring plain stations. This deficiency or vertical pressure anomaly averaged ·033″, and was hence slightly larger than in the month of December.

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

Meteorological Province.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Burma and Bay Islands	−·025	−·016
Burma Inland	−·024	−·015
Assam	−·019	−·010
Bengal and Orissa	−·010	−·001
Gangetic Plain and Chota Nagpur	−·002	+·007
Upper Sub-Himalayas	+·005	+·014
Indus Valley and North-West Rajputana	+·005	+·014
East Rajputana, Central India and Gujarat	−·006	+·003
Deccan	−·013	−·004
West Coast	−·014	−·005
South India	−·014	−·005

Temperature.—The variations of the temperature conditions of the month from the normal were very similar in character to those of the previous month.

The mean maximum or day temperature of the month was in slight excess in the Peninsula. It was, on the other hand, more or less in defect in North-West and Central India (*i.e.*, to the north and west of a line from Poona to Darbhanga). The deficiency was large in Baluchistan, the Punjab, Sind, Kathiawar, Gujarat, Rajputana, Central India, and the North-Western Provinces (excepting the eastern districts). It was more than 4° in amount in Baluchistan, the South-East Punjab, East Rajputana, the south-western districts of the North-Western Provinces and Bundelkhand and was absolutely greatest at Quetta (−7°·1), Ludhiana (−6°·1) and Agra (−5°·4). The reduction of the day temperature below the normal in that area was due to the unusually frequent rainfall of the month.

The mean night temperature was in moderate defect in Baluchistan and the north-west frontier districts and in slight defect in Central Burma. It was in moderate to considerable excess over nearly the whole of the remainder of India. The excess ranged between 2° and 4° in an area including the North-Western Provinces, Bundelkhand, Baghelkhand, the Central Provinces, Berar, Khandesh and the North Deccan, and slightly exceeded 4° in Baghelkhand and Bundelkhand and also in Upper Assam.

The mean temperature of the month was in moderate to considerable defect in Baluchistan, the north-west frontier districts and the Upper India hill districts and was due to decreased temperature both by day and night. The deficiency was more than 3° in amount at Quetta (−5°·4), Bhuj (−3°·9), Bickaneer (−3°·4), Murree (−3°·2) and Chakrata (3°·1). The mean temperature of the month was in slight defect in the North-Western Provinces, the South-East Punjab, South Rajputana and Central India. It was normal or in slight excess to the south and east of a line running from Malegaon to Gorakhpur. The excess was largest in amount in an area including the following stations for which the variations of the mean temperature from the normal are given in brackets:—

Raipur (+2°·3), Chanda (+2°·1), Akola (+2°·7) and Sholapur (+2°·0). The excess in this area was mainly due to increased night temperature, and hence the diurnal range was somewhat less than the normal.

The following table gives temperature variation data of the month for the eleven meteorological provinces of India:—

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

Winds.—were more westerly than usual in Burma and were of normal strength. They were slightly stronger and steadier in Bengal and were on the average of the month much more directly from the north than usual, the westerly component being abnormally weak. The mean air movement of the month down the Gangetic Plain was normal in direction, and on the whole stronger and steadier than usual. Winds were unusually strong at the hill stations in Upper India, their mean velocity for the month being nearly 50 per cent. above the normal.

Winds were lighter than usual and very unsteady in Central India, Berar, the Central Provinces and the Deccan. North-west winds of unusual steadiness and normal strength obtained on the West Coast, between Bombay and Cochin. The following gives a rough comparison of the actual and normal air movement of the month in the ten meteorological provinces of the Empire :—

Meteorological Province.	Wind Velocity in miles per diem.		
	Average actual, January 1895.	Average normal, January.	Variation from normal.
Burma Coast and Bay Islands .	155	117	+38
Assam	44	61	−17
Bengal and Orissa . . .	74	78	− 4
Gangetic Plain and Chota Nagpur.	90	62	+28
Upper Sub-Himalayas . .	44	48	− 4
Indus Valley and North-West Rajputana.	54	49	+ 5
East Rajputana, Central India and Gujarat	91	92	− 1
Deccan	106	103	+ 3
West Coast	156	120	+36
South India	123	94	+29

Humidity and cloud.—The air was slightly drier in Burma and South-West Bengal, and very slightly damper in Assam, North Bengal and Bihar. The variations of the mean humidity conditions were however small and of little importance, except in Burma, where the decreased humidity was the continuation of a prominent feature of the meteorology of that area during the previous two months. The mean absolute and the mean relative humidity were both largely n excess in an area, including the East Punjab, Rajputana, Central India, the North-Western Provinces and the northern districts of the Central Provinces. Over a large part of this area the mean humidity percentage of the month was more than to above the normal. The excess was greatest at Lucknow (+16), Agra (+16) and Sutna (+15). The air was drier than usual in the Indus Valley districts, the west coast districts and Southern India, and more especially in the area represented by Trichinopoly (where the humidity percentage was 8 in defect). The air was on the whole slightly damper than usual in the Deccan and Madras East Coast districts.

There was slightly less cloud than usual in Burma, Bengal, Assam, Bihar and Chota Nagpur. The mean actual cloud amount was small in Arakan and Central and South Bengal, ranging between 1·0 and 1·5. Cloud was largely in excess in the area of increased humidity and rainfall in North-Western and Central India, more especially in the North-Western Provinces, the East Punjab and East Rajputana. The mean cloud amount was, for example, double the normal estimate at Agra and Allahabad. There was even less cloud than usual in Lower Sind and the west coast districts, and skies were practically clear throughout the whole month in the latter area. The mean amount at Bombay was 0·6 and at Karwar 0·2. There was also less cloud in Mysore and South Madras.

The following table gives variation data of the mean aqueous vapour pressure, mean humidity, and mean cloud amount of ten meteorological provinces for the month of January 1895 :—

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.
	"		
Burma Coast and Bay Islands	−·017	−3	−0·3
Assam	+·028	+2	−0·3
Bengal and Orissa . .	+·006	−2	0
Gangetic Plain and Chota Nagpur	+·031	+5	+0·5
Upper Sub-Himalayas . .	+·037	+11	+1·4
Indus Valley and North-West Rajputana.	−·055	−9	+0·3
East Rajputana, Central India and Gujarat.	+·041	+11	+1·1
Deccan	+·054	+7	+0·5
West Coast	+·009	0	−0·5
South India	+·011	+1	+0·1

Rainfall.—The rainfall of the month was *nil* (*i.e.*, less than a tenth of an inch) over the whole of India to the south of a line joining Bhuj, Deesa, Khandwa, Sambalpur, Dacca and Bhamo (excepting Travancore and South Madras, which received some light local showers during the month). The rainfall was small in amount and below the normal in the whole of Bengal, Bihar and Chota

Nagpur. Frequent rain was, on the other hand, received in North-Western and Central India and the precipitation of the month was more or less considerably in excess. The chief periods of fairly general rainfall in that area were the 5th to the 12th, the 15th to the 17th, the 21st to the 23rd and the 31st. The rainfall in the first and third periods was due to the passage of well-defined cold-weather storms across Northern India. The precipitation was slightly in excess in the first ranges of the Himalayas (and more especially in Kashmir), but diminished rapidly into the interior and was less than usual in Ladakh and Little Thibet. There was less snow than usual in the Afghan mountains but probably more in the Western Himalayas.

The precipitation in the plains was heaviest in the sub-montane districts of the Punjab and in the western and central districts of the North-Western Provinces, where it was from two to four times the normal fall of the period. The rainfall of the month was in large excess in the East Punjab, normal in the West Punjab and Baluchistan, in large excess in the western and central districts and normal in the eastern districts of the North-Western Provinces, and in moderate to largish excess in Rajputana and Central India. The following table gives comparative rainfall data for the eleven meteorological provinces of India, based on the rainfall data of 187 meteorological stations :—

Meteorological Province.	Rainfall.		
	Mean actual for January 1895.	Mean normal for January.	Variation from normal.
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands .	0·89	0·33	+0.56
Burma Inland . . .	0·01	0·02	−0·02
Assam	0·64	0·90	−0·26
Bengal and Orissa . .	0·16	0·43	−0·26
Gangetic Plain and Chota Nagpur.	0·82	0·70	+0·12
Upper Sub-Himalayas . .	3·21	1·74	+1·46
Indus Valley and North-West Rajputana.	0·67	0·56	+0·02
East Rajputana, Central India and Gujarat.	0·47	0·38	+0·17
Deccan	0·15	0·34	−0·14
West Coast	0·06	0·27	−0·19
South India	0·11	0·38	−0·27

Atmospheric Pressure.

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

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

Aden.	Dinajpur.	Noakhali.
Akyab.	Faridpur.	Nowgong.
Arrah.	Ghazipur.	Perim.
Barisal.	Gorakhpur.	Rampur Boalia.
Bhamo.	Hyderabad (Sind).	Rangpur.
Bhuj.	Jalpaiguri.	Rawalpindi.
Bogra.	Mandalay.	Sambhar.
Bushire.	Mangalore.	Sialkot.
Chapra.	Midnapore.	Silchar.
Cochin.	Mooltan.	Sirajganj.
Cocos Island.	Mymensingh.	Toungoo.
Comilla.	Naya Dumka.	
Cuddapah.	Negapatam.	

The instruments at the following stations are by various makers and of various kinds, but are being gradually replaced by Casella small observatory standard barometers :—

Amini Divi.	Gnatong.	Leh.
Chanda.	Kailang.	Malegaon.
Chikalda.	Katmandu.	Mercara.
Dehra.	Kurnool.	Sirsa.

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

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

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

The elevations of the barometers of all stations, with the exception of Camorta, Kindat, Bhamo, Taunggyi, Minbu, Lashio, Daltonganj, Kachh Fort, Gilghit, Gantak, Teheran, Ispahan, Jask, Muscat, Baghdad, Kashgar, Meshed, Kabul, Mardan, Kalimpong, Amini Divi, Shortt's Island, Veraval, Bijapur, Aurangabad, Indur, Bidar, Cherat, Gnatong, Yatung, and Perim, have been obtained as accurately as possible. In the great majority of cases they have been referred to datum levels determined by the Great Trigonometrical Survey of India.

The readings of the barometers are reduced to 32° F. and are corrected to constant gravity (Lat. 45°), and in

the cases of all stations, the elevations of which are accurately known and are below 3,500 feet, to sea-level. Each reading is separately corrected and the means of the month are the means of the daily corrected readings.

In Table I, columns 2 to 8, under the general heading "Pressure 8 A.M.," are given for each station the 8 A.M. barometric data of the month, including the mean 8 A.M. pressure reduced to 32° F., and its variation from the normal mean pressure (reduced to 32° F.) of the month, the mean 8 A.M. pressure corrected to constant gravity and to sea-level, the highest and lowest pressures and their respective dates of occurrence and the total range of 8 A.M. pressure during the month.

In Table II, under the heading "Pressure," are given the monthly means of the two hours of observation, 10 A.M. and 4 P.M., reduced to 32° F, the mean daily range, the mean daily pressure reduced to 32° F. and its variation from the normal and the mean daily pressure reduced to 32°F. and corrected to constant gravity and sea-level for all second class observing stations. The mean daily pressures have been obtained at all stations except Zanzibar (for which crude means are used) by taking the means of the 10 and 16 hours' observations and applying corrections for each month, derived from the observations of the same or a neighbouring station, to give true daily means.

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

The normal 8 A.M. daily and monthly means of pressure utilized in the pressure section of the review, have been deduced from the barometric observations of the sixteen years period 1878–93, the same period being selected for all stations (with one or two exceptions), in order that the means may be fairly comparable.

A small chart, No. 4 of Plate III, gives the distribution of the monthly mean daily pressure corrected to standard gravity and to sea-level, and of the mean winds, in the same form aud manner as in the monthly charts issued with the annual reports on the meteorology of India, previous to the year 1891. The data on which this chart is based will be found in Table II.

The monthly means employed in the determination of the variations of the mean actual from the mean normal pressures of the month given in Table II are derived from all the available trustworthy pressure data for each station, and hence are the means for very varying numbers of years, ranging from six years in the case of Chamba to forty-four years in the case of Bombay.

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

The mean pressure conditions in January 1895 at the level of the plains agreed closely with the normal. The mean pressure for the whole of India was ·009″ below the normal.

Pressure variation and anomaly data of the month for the large meteorological divisions of India are given in page 4.

Pressure was, relatively to the normal, in very slight defect in Burma and Assam and the Peninsula, and in slight excess in North and Central India. The anomalies were generally very small in amount, but exceeded ·02″ in two areas, for which data are given below :—

Division.	Station.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
		″	″
Sind	Kurrachee	+·014	+·023
	Jacobabad	+·025	+·034
East Punjab	Rawalpindi	+·017	+·026
	Sialkot	+·019	+·028
	Lahore	+·014	+·023

The chief feature in the pressure distribution was a considerable deficiency at the level of the hill stations in Northern India, as compared with the neighbouring plain stations. The following gives data for several pairs of stations :—

Hill station.	Variation of pressure from normal (*a*).	Neighbouring plains station.	Variation of pressure from normal (*b*).	Vertical pressure anomaly or (*a*)—(*b*).
	″		″	″
Leh	−·013	Lahore	+·012	−·025
Murree	−·021	Peshawar	+·009	−·030
Simla	−·035	Ludhiana	+·009	−·044
Ranikhet	+·004?	Bareilly	−·001	+·005?
Mount Abu	−·028	Deesa	−·019	−·009
Quetta	+·011	Jacobabad	+·025	−·014

This condition did not extend so far south as Pachmarhi, or east as Darjeeling.

The chief features of the mean pressure conditions of the month were—

(1) Slight deficiency over the whole Indian area.

(2) Slight relative excess in North-Western and Central India, greatest in the East Punjab and Sind, but small in amount and of little importance.

(3) Slight relative deficiency in Burma, Assam and the Peninsula.

(4) A moderately large deficiency of pressure at the hill stations as compared with the plain stations in Upper India and Baluchistan. This was the only important pressure feature of the month and was directly related to the weather and unsettled frequent rainfall of the period in North-Western India.

Barometric depressions and cold-weather storms of the month.

It was stated in last month's review that a shallow depression advanced from Baluchistan into Sind and Rajputana on the 29th and 30th and was in the northern districts of the Central Provinces on the 31st. Pressure decreased slightly, but irregularly in North-Eastern India and the Peninsula on that day and the shallow residual depression was entering Chota Nagpur on the morning of the 1st. Light to moderate thundershowers had fallen in the Upper India hill districts and the North-Western Provinces and light showers in Rajputana. The falls were heavy locally in some parts of the North-Western Provinces (*e.g.*, Bahraich 3·08 inches). Skies were clearing in the Punjab at 8 A.M., but were heavily clouded in the North-Western Provinces and lightly clouded in Bihar and North Bengal. The residual depression passed through Bengal during the next 24 hours, but gave little or no rain except in the sub-montane and hill districts where a few light local showers were received.

Pressure had increased rapidly in Upper India and high pressure conditions were re-established on the morning of the 2nd in North-Western India. Some local thundershowers had been received during the previous 24 hours in that area, chiefly in the hill districts and the South-East Punjab. Pressure continued to increase and was more or less in excess on the morning of the 4th in North-Western and Central India. Conditions were, however, slightly abnormal and unsettled in the Persian area and the north-west frontier districts, as skies continued heavily clouded in Baluchistan, Sind and the Punjab. Pressure gave way during the next two days, *i. e.*, on the 4th and 5th over the whole of India and a cold-weather disturbance began to affect Baluchistan on the 5th. The following gives an account of this disturbance.

Cold-weather cyclonic storm and disturbance of the 5th to the 12th January.—Weather was unsettled in Persia from the 1st to the 5th or 6th of the month. Pressure was normal or in slight defect and varied somewhat irregularly. An anti-cyclone, in the central area of which pressure exceeded 30·4″, lay over Central Russia and a deepish depression in which pressure was below 29·4″ covered the Central Mediterranean Sea and Italy. These two systems were unchanged in position and character from the 2nd to the 6th, during which period weather was unsettled and showery in Persia. Baghdad had light showers on the 1st, 3rd, and 5th, Bushire on the 1st and 5th, Jask on the 3rd and 4th, and Muscat on the 3rd, 4th, and 5th. Snow fell during this period at the higher level stations in Persia. Thus Dehbeed had heavy snow on the 1st and again on the 5th and 6th and light snow on the 3rd and Dasht Arjin and Shiraz had snow (probably heavy) on the 1st and 5th.

The European observations establish that the depression under discussion did not advance from that area, and the Persian observations indicate that it probably formed in Persia on the 4th and 5th. Pressure was nearly two-tenths of an inch below the normal on the 5th at Baghdad and Bushire. The disturbance began to advance eastwards on that day as pressure increased rapidly at these two stations and fell rapidly (nearly an eighth of an inch in amount) at Muscat and Jask during the next 24 hours.

North-westerly to westerly winds prevailed at all these stations at 8 A.M. of the 6th. Pressure had given way rapidly in Baluchistan during the preceding 24 hours, the reported fall at Chaman being ·23″ and at Quetta ·15″. A deepish depression lay on the morning of the 6th over Baluchistan, the centre of which was probably in about Long. 65° or 66°E. Light to moderate rain or snow had fallen generally in Baluchistan (and also in Kashmir) and amounts slightly exceeding one inch were registered at three stations (Shalabagh, Kolepur, and Ramban).

7th January.—Pressure had increased briskly to rapidly in Baluchistan and fallen briskly in Central Rajputana to which the depression was now transferred. The centre was in about Long. 73° E. Pressure was only a tenth of an inch below the normal in the central depression. Winds were light and irregular in North-Western India, but strong winds had prevailed during the previous 24 hours at Murree and Cherat, their velocity at the former station averaging 21 miles per hour for that period.

Skies were heavily clouded in North-Western India and rain had fallen more or less generally in the Punjab, Baluchistan and Kashmir and light local showers in Rajputana. The rainfall was most general and heaviest in the Punjab. The largest amounts were registered at Murree (1·5″) and at Kotkhai in the Simla district (1·3″).

8th January.—Pressure had increased briskly in Upper India and fallen slightly in Bundelkhand and Baghelkhand to which the shallow depression had now advanced. The depression was, however, filling up and was very faintly indicated in the chart of the day. Skies were clouding over in North-Eastern India, but the rainfall of the previous 24 hours was confined almost entirely to the East and South-East Punjab, Rajputana, Kashmir and the north-western districts of the North-Western Provinces. The largest recorded falls were 2·1″ at Murree and 2·0″ at Jhelum. No rain had fallen in Baluchistan or Sind.

9th January.—As had occurred on more than one occasion in December (*vide* Account of Storm and Disturbance of the 9th to the 15th December, pages 535—6, December 1894 Review), the advance of the present cold-weather storm from North-West into North-East India was followed by a short period of disturbed weather in the former area. It is not possible from the observations taken at 24 hours' intervals to decide with certainty as to whether this was due to the advance of a second (and very feeble) disturbance from Baluchistan into North-Western India in the rear of the first or not. In the present case the barometric changes were so irregular in North-Western India as to indicate that they were due to local actions probably connected with the large contrasts of temperature obtaining at this time in Northern India. The original depression was now passing through Bengal, but was a very feeble residual disturbance and of no importance, and skies were clear at the great majority of stations in North-Eastern India. Rain had fallen more generally than on the previous day in the Punjab, Kashmir and Rajputana, and light showers had fallen in some parts of Central India. No rain had been received in Baluchistan, Sind or the western districts of the Punjab.

10th January.—Pressure had increased slightly to briskly in North-Western India and was unchanged in North-Eastern India. Pressure was now normal in amount in the Punjab and the North-Western Provinces, and was in slight to moderate defect elsewhere. Cloudy showery weather continued in the East Punjab and the western districts of the North-Western Provinces and Central India and had extended to the northern districts of the Central Provinces. The precipitation was smaller in amount than on the previous two days. The largest falls were 1·65″ at Buggeh in the Amritsar district and also at Mamoki in the Lahore district and 1·43″ at Dharmsala. Hailstorms were reported from several tahsils of the Gurgaon district.

11th January.—The barometric changes were again irregular in North-Western India. Skies were now clearing in Rajputana and the Punjab, but were still heavily clouded in the hill and submontane districts of the Punjab and the North-Western Provinces and light showers had fallen in that area.

12th January.—Pressure had increased briskly to rapidly in Baluchistan and North-Western India, thus re-establishing high pressure conditions in that area. Light showers had fallen in the hill and submontane districts of Upper India. Skies were, however, clearing and were generally free from cloud over the whole of Northern and Central India on the evening of the 12th.

The disturbance described above was very similar to that of the second week of December. It commenced as a depression in Persia which was transmitted somewhat rapidly eastwards at an average rate of about 450 miles per diem. It did not give rise to a secondary depression in the Punjab, but its advance across Northern India was followed for three or four days afterwards by feebly unsettled conditions in Upper India, shown chiefly by large irregular changes of pressure and by the occurrence of severe thunderstorms and hailstorms. The precipitation accompanying the disturbance was hence almost restricted to Baluchistan, the Punjab, Rajputana, Kashmir, the North-Western Provinces and Central India. The following gives a statement of the average rainfall in these areas day by day from the 6th to the 12th :—

PROVINCE.	AVERAGE ACTUAL RAINFALL IN 24 HOURS PRECEDING 8 A.M. OF							
	6th.	7th.	8th.	9th.	10th.	11th.	12th.	Total period.
	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.	Inches.
Baluchistan . .	0·27	0·17	0·01	*Nil.*	*Nil.*	*Nil*	*Nil.*	0·45
Punjab . . .	0·03	0·24	0·22	0·26	0·29	ρ·17	0·05	1·26
Rajputana . .	*Nil.*	0·03	0·14	0·18	0·05	*Nil.*	*Nil.*	0·40
Kashmir . .	0·42	0·60	0·59	0·58	0·91	0·88	0·15	4·13
North-Western Provinces.	0·01	0·04	0·11	0·16	0·23	0·07	0·06	0·68
Central India . .	0·04	0·01	0·03	0·07	0·06	0·02	0·06	0·29

Feeble disturbance of the 14th to the 16th January.—The pressure changes were irregular on the 12th. Pressure was on the 13th in slight to considerable excess in Upper India and Baluchistan and in slight to moderate defect in the Peninsula and North-Eastern India. Pressure gave way locally on the 12th and 13th, relatively to the remainder of India, in Gujarat, Khandesh, Berar and the neighbouring districts of the Central Provinces, and was in considerable defect in that area on the morning of the 14th The shallow depression filled up almost entirely during the next 24 hours, and was at the same time displaced eastwards into the Central Provinces. Pressure fell briskly during the next 24 hours locally in Bengal and a feeble depression lay over that area on the morning of the 16th. The barometric changes of the period from the 12th to the 16th were so irregular that it is extremely doubtful whether the transfer of the position of the lowest barometer or of greatest deficiency of pressure should be regarded as the

movement of a definite cyclonic system either in the upper or lower atmosphere. This feeble and irregular disturbance gave light to moderate rainfall (chiefly as thunder-showers) over a considerable area. The Central Provinces, Rajputana and Central India had rain on the 14th and 15th (*i.e.*, during the 24 hours preceding 8 A.M. of those dates and Chota Nagpur, Bihar and Bengal on the 15th and 16th.) As frequently happens in these feeble disturbances of the cold weather, Assam received light to moderate rain after the disturbance had ceased to affect Northern and Central India. It obtained light daily showers from the 16th to the 19th.

The pressure changes over India during this period from the 16th to the 19th were fairly regular and moderate in amount and fine weather with clear or lightly-clouded skies generally obtained. Meanwhile the second cold-weather disturbance of the month was forming in the Persian area.

The European charts show that high pressure or anti-cyclonic conditions held steadily in Russia and the East Mediterranean Sea from the 13th to the 21st, pressure ranging between 29·9″ and 30·4″ over the whole of that area. Pressure fell from the 13th to the 15th at Baghdad and Bushire and was an eighth of an inch in defect on the 15th. It then increased steadily until the 20th, when the highest pressure of the month was recorded (30·30″). Both Bushire and Baghdad had moderate to heavy rain on the 15th and 16th. This disturbance, indicated by the low pressure conditions and rainfall, appears to have been transferred very slowly eastwards during the next three or four days as Jask and Muscat had rainy weather from the 15th to the 20th. Muscat received a total of 3·1″ and Jask ·8″ during this period. Pressure was lowest at these stations on the 18th. Heavy snow fell during this period at the higher stations in Persia. Thus Dehbeed had snow on the 15th and 18th, Sivand and Dasht Arjin from the 13th to the 15th, Shiraz on the 18th, and Soh on the 15th and 16th. The following extracts from the logs of the S. S. *Chanda* and S. S. *Kilwa* show that weather was squally with (probably) much rain in the Persian Gulf and the Gulf of Oman during this period :—

Date.	Hour.	Name of Vessel.	Position. Lat. N.	Position. Long. E.	Barometer.	Wind. Direction.	Wind. Force.	Weather.
			° ′	° ′	″			
17th.	4 A.M.	S.S. *Chanda*	...	...	...	NW	2	.....
	8 A.M.		25·11	61·12	30·100	NW	2	Passing clouds.
	Noon.		25·15	60·34	...	E		.....
	4 P.M.		...	...	...	SE	2	Overcast.
	8 P.M.		...	...	...	N	6	Dirty appearance.
	9-30 P.M.		...	...	...	NNW	8	Rising sea with rain.
18th	10-30 P.M.	S.S. *Chanda*	...	...	...	N	...	Heavy rain.
	Mid-night.		...	...	...	NE	4	Overcast.
	4 A.M.	S.S. *Kilwa*.	...	...	...	Calm.	0 to 1	Overcast and hazy.
	8 A.M.		...	...	30·060	Var.	2	Rainy.
	Noon.		25·17	57·41	...	NNE	4	Rainy.
	4 P.M.		...	...	...	NE by N	2	Overcast.
	8 P.M.		...	...	...	NE by N	6	Squally dirty looking weather.
	Mid-night.		...	...	...	NE	6	Overcast with heavy swell.
	4 A.M.	S.S. *Chanda*	...	...	...	NE	4	Continuous rain.
	8 A.M.		...	...	30·070	NE	6	Occasional rain.
	9-50 A.M.		Anchored at Jask.		...	...	...	.....
	Noon.		...	...	...	Var.	2	.....
	1-5 P.M.		Left Jask.		...	...	...	.....
	4 P.M.		...	...	...	N	2	.....
	8 P.M.		...	...	...	Calm.	...	.....
	Mid-night.		...	...	...	NNW	2	.....
	4 A.M.	S.S. *Kilwa*	...	...	...	NE	6	High beam swell with rain at times.
	8 A.M.		...	...	29·947	NE	7	Heavy rain squalls and considerable swell.
	8-30 A.M.		Anchored at Muscat.		...	...	...	.....
	Noon.		...	...	...	NE	4	Very heavy rain from 8·30 A.M. until 10 A.M. heavy swell.
	7-10 P.M.		Left Muscat		...	...	...	.....
	8 P.M.		...	...	...	ENE	4	Heavy swell.
	Mid-night.		...	...	...	E	...	Squally.

The preceding has hence shown that a disturbance originated in Persia on the 14th and 15th during a period of high pressure conditions to the north and west in the Russian and East Mediterranean areas. This disturbance drifted slowly eastwards, affecting West Persia chiefly on the 15th, Central Persia on the 16th and 17th, and East and South-East Persia on the 18th and 19th. Pressure gave way slightly in Baluchistan on the 19th and was normal in amount at 8A.M. of the 20th. Skies were partially clouded in that area and also in Upper India, but no rain had fallen during the 24 hours preceding 8 A.M. of the 20th in any part of India. The charts of the 20th, more

especially that showing the abnormal pressure distribution, indicate that a very shallow depression was lying over Lower Sind and South Baluchistan. This was very probably the continuation of the feeble depression and disturbance which had affected the Persian area during the previous five days. The following gives a history of the passage of this storm across Northern India during the next four days :—

Cold-weather disturbance of the 20th to the 23rd January.—This cyclonic disturbance, as pointed out above, probably originated in West Persia and drifted slowly eastwards. It advanced along a more southerly track than the previous cold-weather disturbance of the month and lay over South Baluchistan and Lower Sind on the morning of the 20th. Skies were overcast in Sind and Baluchistan at 8 A. M. of that day and were slightly clouded in the Punjab and Rajputana and generally clear elsewhere.

21st January.—Pressure had given way more or less rapidly in the Punjab, Rajputana, Central India and the western districts of the North-Western Provinces. The changes were due to the advance of the feeble primary depression during the previous 24 hours from East Baluchistan and Sind to South Rajputana and Central India and the formation of a deepish secondary depression in the South-East Punjab. The centre of the primary depression, which was very faintly indicated in the chart of the day, was in about Long. 76° E.

The following gives 8 A. M. data for stations in the secondary depression in the South-East Punjab :—

Station.	Pressure.			Wind direction at 8 A.M.	Wind velocity.		Cloud.	Rainfall.	Weather.
	8 A. M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.		Average hourly velocity in miles during past 24 hours.	8 A. M.			
	"	"	"					Inch.	
Sambhar .	29·891	—·190	—·162	WNW	9	...	10	0·10	
Agra . .	·903	—·198	—·169	SE	3	4	10	...	
Roorkee .	·916	—·144	—·128	SE	2	6	10	0·04	
Ludhiana .	·821	—·276	—·233	SE	1	4	10	0·11	
Montgomery .	·888	—·212	?	N	5	6	8	0·63	
Bickaneer .	·892	—·132	?	WNW	5	8	10	0·30	
Simla . .	?	—·192	—·219	ESE	8	...	10	0·20	Snow-storm.
Murree . .	?	—·160	—·184	NE	8	4	10	0·10	Snowing.

The preceding data indicate that pressure was nearly a quarter of an inch below the normal at the centre of the secondary depression. The air movement in it at the level of the plains was very feeble, but strong stormy winds (cyclonic in direction) were blowing at the hill stations more especially at Simla. Skies were now overcast over the whole of North-Western India, but were as yet clear in North-Eastern India and the Central Provinces. The disturbance had given practically no rain in Baluchistan during the previous 24 hours. Moderate and fairly general rain had, on the other hand, been received in the East and South Punjab and Central Rajputana and also in Kashmir. Falls exceeding an inch had been recorded at several stations in those areas, the heaviest being 1·43 inches at Dalhousie, 1·35 inches at Kasur in the Lahore district, and 1·23 inches at Jummoo.

22nd January.—Pressure had increased over the whole of North-Western India during the previous 24 hours even more rapidly than it fell on the 20th and the secondary depression had hence completely disappeared. Pressure was again in moderate to considerable excess in North-Western India and high pressure conditions were fully re-established in that area. Pressure had given way slightly in North-Eastern India and the primary depression lay over the area defined by the stations of Sutna, Allahabad and Benares where pressure was in slight defect. Skies had cleared at the majority of stations in North-Western India, but were now heavily clouded in Bihar and Chota Nagpur and were clouding over in Bengal. Moderate and fairly general rain had fallen in the eastern and hill districts of the Punjab and in the western districts of the North-Western Provinces. Dadahur in the Nabha State had received 2·35 inches, Nagar 1·7 inches, Simla 1·66 inches, Kangra 1·54 inches, and Dharmsala 1·5 inches.

23rd January.—Pressure had further increased in North-Western and Central India thus emphasizing the high pressure conditions established in that area. It had given way briskly in Bengal and the primary depression was passing through that area and was probably central in about Long. 88° E. Skies were now clear over the whole of North-Western and Central India and in the Peninsula and also in Burma, but were heavily clouded in Bengal and Assam where light showers had generally fallen.

24th January.—Pressure had increased slightly to briskly in North-Eastern India during the previous 24 hours, and the depression had advanced eastwards into Upper Burma where skies had clouded over and some light showers had fallen. Light showers had also fallen in Bengal, chiefly in the eastern and northern districts, but skies were clearing rapidly in that area. Assam continued to have cloudy showery weather for two days longer, until the 26th.

The storm under discussion was an interesting example of a double disturbance of the cold-weather type. It formed in the Persian plateau under probably the usual conditions of the generation of cold-weather cyclonic storms in that area (*viz.*, the prevalence of strongly marked anti-cyclonic conditions to the north-west and west). The centre advanced along a track somewhat more to the south than usual in the Persian area and the disturbance was during this period a very shallow primary depression. It gave practically no rain to British Baluchistan, but on the other hand gave unusually heavy rain to Muscat and Jask and probably in the Persian Gulf and Gulf of Oman. It advanced as a very feeble primary depression in an easterly direction through Northern India and gave rise to a deepish secondary depression in the Punjab. The centre of the primary depression was in about Long. 66°E. at 8 A.M. on the 20th, Long. 74°E on the 21st, Long. 81°E. on the 22nd, Long. 88°E. on the 23rd, and disappeared in Upper Burma on the 24th. It hence advanced at an average rate of about 450 miles per diem during its march across India.

A stationary secondary depression formed rapidly in the Punjab on the 22nd and filled up even more rapidly on the 23rd.

The double disturbance gave moderate rain to the East and South Punjab and light rain in the Gangetic Plain, Rajputana, and Bengal. The following gives a summary of the rainfall accompanying the storm :—

Province.	Average actual rainfall in 24 hours preceding 8 A.M. of				
	21st	22nd	23rd	24th	Total of period.
	Inch.	Inch.	Inch.	Inch.	Inch.
Punjab	0·19	0·25	...	...	0·44
N.-W. Provinces . .	0·09	0·12	0·04	...	0·25
Rajputana . . .	0·03	0·01	...	...	0·04
Bihar	0·01	0·02	0·10	...	0·13
Chota Nagpur . .	0·01	0·01	0·19	...	0·21
Bengal	...	...	0·09	0·03	0·12

High pressure or anti-cyclonic conditions held steadily in Baluchistan and North-Western India from the 23rd to the 29th. Pressure fell briskly in Sind, Rajputana, and Baluchistan on the 29th, and a shallow depression of small extent was shown in Lower Sind and Cutch on the morning of the 30th. The observations at the West Persian stations including Teheran, Ispahan, Bushire, and Baghdad indicate clearly that it did not form in or pass through that area. Pressure fell at Muscat and Jask simultaneously with the fall in British Baluchistan and Sind on the 29th and 30th. The depression hence formed in South Baluchistan and Sind on the 29th and 30th. It advanced into Central Rajputana during the next 24 hours giving some light showers in the South-East Punjab and North-East Rajputana.

Summary of the Reports of the weather and snowfall in the mountain districts to the North and North-West of India.

I.—Afghan Mountain Districts.

(*1*). *Hills bordering the Dera Ismail Khan District.*—Tank Border. The following report was received from the Assistant Commissioner :—

"Snow fell on the following dates in January on the hills of the Tank Border:—

2nd.—At Kanigoram (height 6,500 feet) snow fell to a depth of 2 inches in the morning. The snowfall extended over the whole of the Mahsud hills down to about 5,500 feet. Snow fell again during the night at Makin and Kanigoram.

6th.—Snow fell on the hills above 5,500 feet high.

22nd.—On the night of the 22nd and 23rd there was a slight fall on the hills above 6,000 feet.

30th and 31st.—Snow fell on the higher hills, but was not heavy.

At the end of the month a depth of about 3 inches of snow was lying on the Manza Oba Pass over Spirah into Shakim (height 8,000 feet). On the Nizanarai Pass there was about 6 inches of snow and on the Tanimela Pass (9,400 feet high) about 15 inches.

On the hills at the head of the Shakar Valley snow was lying in sheltered places at elevations of 8,000 feet to a depth of 1 to 2 feet, but was completely melted on all sunny slopes up to 10,000 feet.

The general opinion of the natives of the districts is that the winter has been unusually mild and the snowfall less than usual."

(*2*). *Shirani country.*—The snowfall during the month of January on the Kaisar and Mizri hills (*i.e.*, Kat, Marmaz, Obashta Nawateza) amounted to about 8 feet in depth. It was received chiefly between the 4th and 7th and on the 10th.

(*3*). *Kurram.*—The heaviest fall of snow in the month was on the 12th. It descended to Manra which is about 4,000 feet above the sea level. At Parachinar which is about 6,200 feet high the fall measured about a foot. During the remainder of the month there were several smaller storms that confined themselves to the high range of the Sofed Koh and the snowfall descended to about 8,000 feet. The month was considered unusually mild for Kurram. The storms were not accompanied by any wind

and they were confined to Upper Kurram as a rule. There were no gales such as usually follow every snowstorm in Kurram.

At Parachinar there was never more than a foot of snow lying at any time during the month. On the Agham Pass it had accumulated to about 6 feet at the end of the month.

The inhabitants of Kurram consider that the snowfall this year has been unusually mild as compared with previous years.

(4). *Khyber Pass Districts.*—Snow fell on two occasions during the first fortnight of the month. The total fall was about 1½ feet. The fall in the Shinwari country was only 6 inches in depth. The snowfall of the period is said to be somewhat larger than usual.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1). *Hazara.*—Slight snow fell at Abbotabad on the 1st. Rain commenced on the 7th and continued until the 12th. On the 7th it was attended with slight snow, which thawed as it fell. Weather was dry during the remainder of the month.

(2). *Kashmir.*—Snow fell on eleven days during the month at Srinagar, *viz.*, the 1st, 6th to the 12th, the 21st and 22nd and 31st. The total fall of the month measured five feet six inches. The month was unusually cold and stormy.

(3). *Hills adjacent to Murree.*—Snow fell on the 1st, the 7th to the 12th and the 21st and 22nd. The heaviest fall occurred on the 11th, when 2¼ feet were registered. The total fall during the month was 7 feet. The fall at Kahuta was slightly less, amounting to 6 feet. The snowfall at Murree was less than in January 1894, when a total of 9 feet was recorded.

(4). *Chamba.*—The Deputy Conservator of Forests, Chamba Division, sends a very full and interesting account of the snowfall in that State from the 15th October to the 15th January.

"The following gives the dates of the snowstorms that occurred during the period with the height to which the snowline descended:—

Month.	Date of snowstorm.	Level to which snow fall descended.
November 1894	4th	9,000 feet.
	26th	8,500 ,,
December 1894	2nd and 3rd	6,000 ,,
	11th and 14th	3,500 ,, on inner ranges.
		5,000 ,, on outer ranges.
	23rd to 25th	2,600 ,, on inner ranges.
		4,000 ,, on outer ranges.
	30th and 31st	3,000 ,, on inner ranges,
		4,500 ,, on outer ranges.
January 1895	7th to 13th	4,000 ,,

The following table gives accurate measurements of the observed snowfall at six places at different elevations in the Chamba State during the period from the 15th October to 15th January:—

Month.	Date.	Depth of snow fall at Kalatop 8,000 ft.	Thanela 7,000 ft.	Bandal 8,500 ft.	Tisa 5,000 ft.	Chamba 3,000 ft.	Barman 7,000 ft.
		Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.	Ft. In.
December 1894	2nd and 3rd	1 6	0 9	Rain.	Slight	Rain	0 5
	11th to 14th	5 6	5 4	...	0 6	Do.	4 0
	23rd to 25th	3 0	3 0	1 11	0 7½	0 4	...
	30th and 31st	5 0	4 3	3 0	1 0	0 1	...
January 1895	7th to 13th	2 10	..	1 9	0 3	Rain	6 0
	TOTAL	17 10	13 4	6 8	2 4	0 5	10 5

The data for Killar Pangi (at an elevation of 8,600 feet) are not complete. It received 2½ feet in November, and 6½ feet during the first fortnight of December."

The storms, it is stated, came from west. Each storm at the forest snow-gauge stations commenced with rain and changed gradually to snow. The storms were accompanied by less wind than usual. The weather was damper than usual, and a great deal of rain fell mixed with the snow during the storms. Snow began to fall very early in the season, and the total up to the middle of January has been large and probably much above the normal.

(5). *Upper Sutlej Valley.*—The following account of the snowfall in the Upper Sutlej Valley for the period 15th November to 15th December has been received from the Deputy Conservator of Forests, Bushahr Division:—

"During the month of November snow fell on four different dates when it reached a lower limit of 7,500 feet. In December there were six falls, the lowest limit reached being 5,750 feet. The depth of the snowfall during each storm varied; in the early falls 6 inches to a foot were registered at Kilba (height 6,000 feet), and in the later ones falls of 1 foot to 2 feet 6 inches were recorded. On the Changsil Pass from the Pabar Valley into Garhwal *viâ* Wodra Kowar, 10,000 feet in elevation, the depth of snow is reported to be 8 feet.

"It is remarkable to note with regard to the general character of the weather that during each snowstorm the wind was reported to have been from north (with one exception on 31st December when it blew from south). The storms, as far as could be seen, extended to the whole of the country under observation. Between the snowstorms the weather was unusually fine and the skies clear.

It is reported that the depth of snow on the Rupin Pass into Baspa, the Buldar Pass into Spitti, and the Shotal Pass into Pabar (elevations between 15,000 and 16,000

feet) varied from 10 to 12 feet at the end of the period. At Kilba, 6,500 feet high, on the 15th November, the accumulation of snow was 2 feet in depth."

(6). *Kulu.*—The following report has been received from the Assistant Commissioner.

"There were falls of snow on the 1st, 2nd, 5th, 7th, 8th to the 12th, 15th, 20th, and 21st and 22nd January 1895 in the Kulu Tahsil and on the 1st, 5th, 7th, 8th, 9th, 10th, 11th, 12th, 15th, 19th, 21st, 22nd, and 25th January 1895 in the Plach Tahsil. The falls descended to an elevation of 5,000 feet. The total fall during the month at an elevation of 7,000 feet was 6 feet.

"The weather was cold and cloudy during the month under report. The snow melted rapidly in the lower parts of the valley in consequence of frequent rain. The falls of snow and rain were general in Kulu. All the passes were closed during the month. The following table shows the reported depth of snow on the higher passes and peaks of the sub-division at the end of January 1895 and also at the corresponding period of the past two years for comparison :—

District.	Name of Pass.	Height above sea-level.	Reported depth of snow at the end of January 1895.	Reported depth of snow at the end of January 1894.	Reported depth of snow at the end of January 1893.
		Feet	Feet.	Feet.	Feet.
Kulu	Rotang	13,000	19	16	19
	Hamta	14,500	38?	14	16½
	Chander Khani	14,500	7	13	17
	Barsai	?	12	14	12
	Bujadhar	?	11	11	11
	Lohri Achri	?	13	11	10¾
	Bhubhu	10,000	9	7	9½
	Pashtari	?	11	6	7
	Majhang	?	2	2	5
Plach	Sirikhand	15,000	20	14	13
	Chul	?	9	7	8
	Maghian	?	9	7	7
	Dundku	?	10	7	8
	Tikar	?	8	7	7
	Nunu	?	7	5	4
	Ramgarh	?	2	2	2
	Jalori	10,500	10	7	6
	Raghopur	?	10	8	6
	Lambri	?	12	7	7
	Sakiran	?	12	8	7
	Supakun	?	10	9	8
	Gargarasan	17,000	18	11	8
	Basleo	11,000	11½	7	6
	Plach	?	14	10	7
	Tirath	?	17	12	8

III.—NORTH-WESTERN PROVINCES' HIMALAYAS.

Almora District.—The following information has been received from the Officiating Commissioner of Kumaon :—

Malla Danpur.—Snow fell on the following occasions during the month :—

3rd January 1 foot and 7th and 8th January 1 foot, 16th and 17th 6 inches, 21st and 22nd 1½ feet.

Malla Johar.—Snow fell to the following depths on the passes of Ratnadhara and Utadhara :—1st to 3rd January 5 feet, and 15th January 3 feet, 16th 5 feet, 18th 2 feet, 21st 8 feet, 22nd 1 foot, and 31st 2 feet, and in Milam the fall during the same period was 4½ feet, and at Bagdwar 1 foot.

Mallas Byans, Chaudans and Darma.—Snow fell on the 1st, 7th, 8th, 9th, 14th, 20th, 21st, 24th, and 31st, the fall averaging 3 feet in depth in these pattis during the first half of the month. The fall is stated to be greater than occurred in January 1894.

Summary of Special Storm Reports.

An occasional feature of cold-weather disturbances of the month in the plains of Northern India is the occurrence of thunderstorms and hailstorms. The following gives a statement of the storms in January 1895, for which special reports were received :—

5th.—Hailstorm at Alate in the Dewas State, which did some damage to the crops.

Hailstorm at Neemuch at 11 A.M.

8th.—Hailstorm at Lalsot in the Jeypore State.

9th.—Hailstorm about noon in the Nagina Pargana of the Bijnor district. It affected 174 villages, passing from west to east. The hailstorm lasted for a few minutes and did no injury to the crops. Heavy thunder and lightning occurred during the storm.

Hailstorm at Hindown, Uneara and Nimka Thanas in the Jeypore State. The largest stones were stated to be of the size of a sparrow's egg.

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Hailstorm in the Raghogarh State, Central India, which destroyed the standing crops in an area of about eight square miles. The storm lasted about an hour and was accompanied by severe thunder. The largest stones were about the size of plums.

Hailstorm in the Bajrangarh district of Gwalior, which destroyed the crops of sixteen villages.

Hailstorm in the Nohar Tahsil of the Bickaneer State. The largest stones were of the size of large plums.

14th—Thunderstorm at Allahabad. Hailstorm in the Hazur Tahsil of the Rewah State at 8 P.M. It caused slight damage to the rabbi crop.

Brief Summary of the Weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—A moderate to strong north-east monsoon prevailed over the whole of the Arabian Sea during the first three weeks of the month. The air-movement averaged 4·2 on the 21st and 22nd. Winds decreased considerably during the next five days and on the morning of the 28th averaged only 3·0 in force or 1·2 less than on the 21st and 22nd. They began to increase again at the end of the month and averaged 3·8 on the 31st. The strongest winds throughout the month were experienced in the south-east of the sea and were on several occasions of force 6.

Weather was fine over the whole of the Arabian Sea during the month except in the area of strongest air-movement in the south-east where showers were of frequent occurrence, more especially during the first three weeks of the month. Squalls were also experienced on one or two occasions in the neighbourhood of Socotra.

In the Persian Gulf on the other hand there were two well-defined periods of disturbed weather, *viz.*, the 3rd to the 5th and the 17th to the 21st. During the latter period heavy rain squalls and a considerable sea were experienced by the S.S. "*Kilwa*" proceeding from Bushire to Kurrachee.

Strong winds, rainy weather and a rising sea obtained in the Gulf of Aden from the 28th to the end of the month. This is shown clearly by the data of Aden which received the unusual amount of 1·21 inches of rain during this period, and where the air-movement increased from an average of 6 miles per hour on the 28th to 20 miles per hour on the 30th.

In the western half of the equatorial belt winds were variable, though mostly from northerly directions, and weather was more or less squally and showery throughout the month.

Bay of Bengal.—Moderate to strong north-east monsoon winds obtained over the Bay during the first ten days of the month. The air-movement during this period was strongest on the 4th and 5th when it averaged 4·4 in force. From the 11th to the 22nd the current was weak and averaged only 2·6. Winds increased again in strength during the next four days, and on the morning of the 26th and 27th were blowing with an average force of 3·6. They fell off again during the remainder of the month and averaged only 2·2 on the 31st.

Fine cloudy weather was experienced over the north and centre of the Bay throughout the month. In the neighbourhood of the East and South Ceylon Coasts on the other hand showers and squalls were of frequent occurrence, more especially during the period from the 6th to the 11th and on the 15th and 16th.

In the Straits of Malacca there were two periods of unsettled weather. During the first period (from the 1st to the 4th) weather was most disturbed in the northern half of the Straits and during the second period (from the 9th to the 11th) in the southern half. 3·39 inches of rain were registered at Penang during the first period and 3·63 inches at Singapore during the second period.

Winds, although chiefly from northerly directions in the equatorial belt, were variable and unsteady in the eastern half during the greater part of the month.

Temperature of the Air.

The mean temperature data are given in Table I and Table II under the heading "Temperature of the air." In Table I they are based upon observations of the dry bulb thermometer and the maximum and minimum thermometers recorded at 8 A.M. The variations of the mean maximum and mean minimum temperatures from the corresponding normal means for the month are given in Table I for all stations, for which sixteen years' trustworthy temperature observations are available. With a few exceptions (chiefly in Bengal), the normal mean maximum and minimum temperatures of the month have been obtained for all stations from the observations of the same period, *viz.*, 1878 to 1893, and are hence fairly comparable with each other. The mean daily temperature in this table is taken as the mean of the maximum and minimum. It differs from the true mean of the day by small amounts which vary from month to month. But the variations of the mean daily temperature from the normal, as determined by the use of this definition, agree in almost all cases closely with the variation of the true daily means derived from the readings at 16 hours and of the maximum and minimum thermometers, and the employment of corrections

deduced from the various series of hourly observations which have been taken at many stations in different parts of India.

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

In Table II are given means of the 10 and 16 hours' temperatures of the month in addition to maximum and minimum temperature data. The mean temperature of the month (*i.e.*, the arithmetical mean of the mean temperature of each day of the month) is also shown. The mean temperature of the day is obtained by the use of the formula—

$$\frac{\text{Maximum} + 16\text{ hours} + 2\text{ Minimum}}{4}$$

and by applying a constant correction for each month obtained from the hourly observations at the same, or a neighbouring station, except in the case of Mergui, Darjeeling, Katmandu, Quetta, Mercara, Wellington, Aden, Mount Abu, and Zanzibar (for all of which crude means are given), and Vizagapatam and Madras. For Vizagapatam the means of observations at 4, 10, 16, and 22 hours are given, and for Madras the means as given in the registers sent by the Government Astronomer.

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

The variations of the mean temperature of the month given in Table II have been obtained by a comparison of the actual means with normal means calculated in the same manner. They have been derived from all the available trustworthy temperature data for each station, and hence for very varying number of years ranging from 46 years in the case of Bombay to 10 years in the case of Kailang.

It should be noted that the day or 24 hours period in Table II terminates at 4 P.M. (and not at 8 A.M.), and hence the monthly means are for monthly periods ending at 4 P.M. of the last day of the month in question.

The mean distribution of temperature in India in each month is exhibited by means of three charts, which show the variations of the mean maximum, mean minimum and mean daily temperature from their normal values for the month. These charts are Nos. 1, 2, and 3 of Plate III. In these charts equal variations of temperature are indicated by lines, the lines being drawn for differences of 2° of variation. A continuous line indicates that the temperature was in excess by the amount stated by the number given near the line, and a broken line that it was in defect by the amount indicated by the number placed near the line. The line of no variation, separating areas of excess from areas of deficient temperature, consists of a continuous and of a broken line placed parallel and near to each other, the broken line being on the side of deficient temperature, and the continuous line on that of increased temperature. The variations of the temperature of the month from the normal at the hill stations (*i.e.* stations the elevations of which exceed 5,000 feet) are given in figures with a positive or negative sign to indicate excess or defect.

Tables of normal mean maximum, minimum and mean daily temperature for each month and for the whole year were given in the annual summary for 1891. Similar tables are given in the annual review of 1894, based on the data for sixteen years, 1878 to 1893.

Weather was more disturbed and rainfall more frequent than usual in the month of January 1895 as in the preceding month. The general character of the disturbances and of the distribution of rainfall were also very similar in the two months. The variations of the mean temperature conditions of the month from the normal were hence very similar in character in the two months.

The mean maximum or day temperature of the month was in slight excess in Burma and the Peninsula and more or less in defect over Northern and Central India and Baluchistan.

The deficiency was considerable over the whole of North-Western India or to the north of a line running from Surat through Hoshangabad to Gorakhpur, in which it ranged between 2° and 7° in amount. It was most pronounced in two areas, one including Baluchistan and the other the South-East Punjab, East Rajputana and the North-Western Provinces in which it exceeded 4° in amount. The following gives mean maximum temperature data for these areas :—

Province.	Station.	Mean maximum temperature.		
		Actual, January 1895.	Normal, January.	Variation of actual from normal.
		°	°	°
Baluchistan	Quetta	44·4	51·5	−7·1
Punjab	Ludhiana	61·5	67·6	−6·1
	Sirsa	66·3	70·9	−4·6
	Lahore	63·3	67·4	−4·1
	Sialkot	62·5	66·6	−4·1
North-Western Provinces.	Roorkee	65·1	69·5	−4·4
	Agra	68·1	73·5	−5·4
	Jhansi	71·9	76·0	−4·1
Rajputana	Jeypore	69·5	73·7	−4·2
	Ajmere	69·4	74·0	−4·6

The day temperature was as largely below the normal at the hill stations in Upper and Central India as at the neighbouring plain stations. The following gives data for five hill stations :—

Station.	Mean maximum temperature.		
	Actual, January 1895.	Normal, January.	Variation of actual from normal.
	°	°	°
Murree	43·8	47·9	−4·1
Simla	43·4	46·4	−3·0
Chakrata	46·7	50·6	−3·9
Ranikhet	51·1	54·2	−3·1
Mount Abu	63·5	67·0	−3·5

The mean maximum temperature of the month was in slight excess at Pachmarhi (+0°·7) and in moderate excess at Wellington (+ 2°·2).

The mean minimum or night temperature of the month was higher than usual over the whole Indian area with the exception of Central Burma, Baluchistan, the West Punjab, West Rajputana, Sind and Kathiawar. The deficiency was more than 2° in amount for the following stations :—

Station.	Mean minimum temperature.		
	Actual, January 1895.	Normal, January.	Variation of actual from normal.
	°	°	°
Quetta	25·6	29·3	−3·7
Peshawar	37·2	39·4	−2·2
Dera Ismail Khan	38·4	40·6	−2·2
Kurrachee	51·4	54·4	−3·0
Bhuj	51·2	54·9	−3·7
Rajkot	49·1	51·2	−2·1
Bickaneer	47·4	50·2	−2·8

The deficiency was hence most marked in Baluchistan, the Indus Valley and Cutch. It extended southwards along the west coast as far as Bombay, where the mean minimum temperature of the month was 1° below the normal.

The mean minimum or night temperature of the month was in considerable to large excess (ranging from 2° to 5°) in Upper Assam, and in a large area including the greater part of the North-Western Provinces, Baghelkhand, Bundelkhand, Berar, the Central Provinces and the North Deccan. The excess was more than 3° in amount at the stations for which data are given in the following table :—

Station.	Mean minimum temperature.		
	Actual, January 1895.	Normal, January.	Variation of actual from normal.
	°	°	°
Nowgong	52·6	46·9	+5·7
Sutna	51·7	47·3	+4·4
Allahabad	51·3	47·7	+3·6
Jubbulpore	51·5	48·3	+3·3
Hoshangabad	55·6	52·4	+3·2
Chanda	57·7	54·6	+3·1
Akola	57·0	53·4	+3·6
Sholapur	61·1	57·7	+3·4

The mean temperature of the month was in defect to the north-west of a line stretching from Poona through Indore to Gorakhpur. The reduction of temperature was considerable (exceeding 2°) over the greater part of the Punjab and Rajputana and in Sind, Cutch, Kathiawar and Baluchistan. It was 3° or upwards in the stations for which data are given in the following table :—

Area.	Station.	Mean daily temperature.		
		Actual, January 1895.	Normal, January.	Variation of actual from normal.
		°	°	°
Cutch	Bhuj	63·6	67·5	−3·9
Sind	Kurrachee	62·4	65·4	−3·0
West Rajputana	Bickaneer	57·7	61·1	−3·4
Baluchistan	Quetta	35·9	40·4	−5·4

The mean temperature of the month was also considerably below the normal at the hill stations in Upper and Central India. It was normal or in excess in the whole of India to the south and west of a line running through Karwar, Poona, Indore and Gorakhpur. The excess was generally small in amount, but was 2° or above in the area

represented by the stations for which data are given below:—

Station.	Mean daily temperature. Actual, January 1895.	Normal, January.	Variation of actual from normal.
	°	°	°
Akola	71·6	68·9	+2·7
Raipur	70·4	68·1	+2·3
Chanda	71·9	69·8	+2·1
Sholapur	74·6	72·6	+2·0

The night temperature was in considerable excess in that area and the day temperature normal or in very slight excess, and hence the mean diurnal range was greater than usual, by amounts averaging 2°.

The deficiency at the hill stations exceeded 3° in amount in four cases, as shown below:—.

Station.	Mean daily temperature. Actual, January 1895.	Normal, January.	Variation of actual from normal.
	°	°	°
Murree	38·5	41·7	−3·2
Simla	38·5	41·5	−3·0
Chakrata	40·1	43·2	−3·1
Mount Abu	56·1	59·1	−3·0

The following table gives temperature data for 51 meteorological divisions of the Empire:—

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Variation from normal of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	88·6	64·4	76·5	24·1	31·9	+1·0	−0·8	+1·8
	Lower Burma	86·8	66·0	76·4	20·8	28·6	+0·8	+1·0	−0·2
	Central do.	87·3	52·7	70·0	34·6	44·8	+1·4	−1·9	+3·3
	Upper do.	77·8	50·5	64·2	27·3	35·7	?	?	?
	Arakan	80·8	57·8	69·3	23·0	34·5	−0·6	−1·7	+1·1
Bengal and Assam	Eastern Bengal	75·0	53·7	64·4	21·3	32·3	−0·4	+0·5	−0·9
	Assam (Surma)	77·3	54·0	65·6	23·3	34·9	+0·1	+1·7	−1·6
	Do. (Brahmaputra)	71·4	54·0	62·7	17·4	26·5	−0·3	+2·3	−2·6
	Deltaic Bengal	77·1	54·9	66·0	22·3	35·8	−0·6	−0·2	−0·4
	Central do.	75·9	53·5	64·8	22·4	36·0	−1·3	+1·0	−2·3
	North do.	74·2	50·0	62·1	24·3	34·4	−0·9	+1·0	−1·9
	Orissa	80·4	61·8	71·1	18·6	29·2	+0·3	+1·1	−0·8
	Chota Nagpur	75·6	52·2	64·0	23·4	39·1	+0·3	+1·2	−0·9
	Bihar (South)	74·3	52·2	63·4	22·0	34·9	+0·1	+1·6	−1·5
	Do. (North)	73·0	50·4	61·7	22·6	33·9	−0·5	+1·5	−2·0
North-Western Provinces and Oudh.	North-Western Provinces (East)	72·2	50·7	61·5	21·5	35·9	−1·7	+2·5	−4·2
	Oudh (South)	70·2	48·8	59·5	21·4	38·9	−3·6	+2·4	−6·0
	Do. (North)	70·4	49·1	59·8	21·3	37·4	?	?	?
	North-Western Provinces (Central)	69·0	49·1	59·1	19·9	35·2	?	?	?
	Do. do. (West)	70·1	50·7	60·4	19·3	36·9	−4·8	+1·2	−6·0
	Do. do. (Submontane)	65·4	46·8	56·2	18·6	32·0	−3·5	+1·9	−5·4
Punjab	Punjab (South)	65·6	45·8	55·7	19·8	34·7	−5·4	+0·6	−6·0
	Do. (Central)	63·3	42·3	52·8	21·0	35·1	−4·1	+0·9	−5·0
	Do. (Submontane)	62·8	45·1	54·0	17·8	30·7	−6·1	+2·4	−8·5
	Do. (Hill Districts)	42·0	31·2	36·6	10·8	28·8	−3·6	−2·6	−1·0
	Do. (North-West)	63·2	37·5	50·4	25·7	39·4	−2·9	−1·3	−1·6
	Do. (West)	66·9	40·9	53·8	26·2	42·2	−2·0	−0·9	−1·1
Bombay and Malabar Coast Districts (Madras).	Malabar	87·4	71·8	79·6	15·6	23·0	+0·7	+1·8	−1·1
	Madras (South Central)	88·5	65·3	76·9	23·2	30·7	+1·1	+1·6	−0·5
	Coorg	77·8	57·9	67·9	19·9	26·3	+1·4	+1·9	−0·5
	Mysore	82·8	59·1	70·9	23·7	32·5	+1·9	+1·1	+0·8
	Konkan	84·0	68·1	76·1	15·9	25·2	−1·5	0	−1·5
	Bombay Deccan	86·3	58·9	72·6	27·4	37·2	+1·1	+1·7	−0·6
	Hyderabad (North)	85·8	58·3	72·0	27·5	38·0	?	?	?
	Khandesh	84·2	53·9	69·0	30·3	43·7	−0·2	+2·5	−2·7

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Variation from normal of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Central Provinces and Berar.	Berar	85·1	58·3	71·7	26·8	43·6	+0·8	+2·9	−2·1
	Central Provinces (West)	80·0	55·1	67·6	24·9	44·1	−1·8	+3·0	−4·8
	Do. (Central)	79·2	54·3	66·8	24·9	42·6	−0·4	+2·9	−3·3
	Do. (East)	82·6	57·6	70·1	25·1	36·9	+1·1	+2·5	−1·4
Bombay (North)	Gujarat	82·9	56·9	69·9	26·0	39·8	−2·6	−0·2	−2·4
	Kathiawar	80·2	53·5	66·9	26·7	42·1	−3·7	−2·1	−1·6
	Sind and Cutch	73·0	48·0	60·5	25·1	40·8	−3·6	−2·8	−0·8
Rajputana and Central India.	Central India (East)	72·3	52·3	62·3	20·2	37·9	−2·7	+5·1	−7·8
	Rajputana (East), Central India (West)	73·6	48·9	61·2	24·7	45·1	−2·9	+0·5	−3·4
	Do. (West)	71·7	46·4	59·0	25·3	50·0	−3·9	−2·8	−1·1
Madras	East Coast (North)	81·6	66·2	73·9	15·4	23·9	−0·5	+0·7	−1·2
	Hyderabad (South)	85·6	62·1	73·9	23·5	34·7	+0·6	+2·0	−1·4
	Madras (Central)	88·1	62·7	75·4	25·3	35·3	−0·3	+1·4	−1·7
	East Coast (Central)	85·0	66·4	75·8	18·6	23·5	+0·1	−0·1	+0·2
	Do. (South)	85·0	68·7	76·9	16·3	22·7	+1·0	+0·8	+0·2
	Madras (South)	86·0	72·0	79·0	14·0	21·5	−0·7	+0·3	−1·0

The following is a brief sketch of the more important features of the temperature conditions throughout the month. At the commencement of the month temperature was in slight to moderate defect in Sind, Baluchistan, the Punjab and Rajputana and was in largish excess in the North-Western Provinces, Central India and the Central Provinces. The following temperature variation data for the 24 hours preceding 8 A M. of the 1st show fully the temperature conditions obtaining on that date :—

Meteorological Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	+0·6	−0·2	+0·2
Bengal and Assam	−0·2	+0·2	0
N.-W. Provinces and Oudh	−1·1	+8·3	+3·6
Punjab	−5·4	+3·2	−1·1
Sind and Rajputana	−5·0	0	−2·5
Central India and Gujarat	+0·7	+2·7	+1·7
Central Provinces and Berar	+4·5	+2·0	+3·3
Bombay	+2·4	−1·9	+0·3
Madras	+0·1	−2·2	−1·1

The cool wave which followed the disturbance of the 1st and 2nd considerably reduced temperature in the North-Western Provinces and Central India and temperature was more or less in defect in the whole of North-Western and Central India on the 2nd and 3rd, but increased in the North-Western Provinces and Central India rapidly on the 4th and 5th :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of 2nd.	3rd.	4th.	5th.
	°	°	°	°
Punjab	−2·0	−3·0	−0·5	−1·6
Sind and Rajputana	−1·1	−1·2	−0·3	−2·4
North-Western Provinces and Oudh	−2·1	−0·7	+1·1	+0·5
Central India and Gujarat	−2·0	−0·2	+1·5	+2·8

During this period temperature continued steadily in moderate to considerable excess in North-Eastern India and the Central Provinces and Berar as is shown by the following data :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of 2nd.	3rd.	4th.	5th.
	°	°	°	°
Bengal and Assam	+1·3	+2·2	+1·5	+0·6
Central Provinces and Berar	+2·8	+2·8	+3·6	+2·8

The chief features during the period from the 1st to the 5th were, hence, lower temperature than usual in Balu-

chistan, Sind, the Punjab and Rajputana, and higher temperature in the Central Provinces and to a less extent in North-Eastern India. Temperature fell briskly in North-Eastern India and the northern half of the Peninsula and increased rapidly in North-Western India on the 7th, and was above the normal over the whole of India on that day for which variation data are given below :—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	+1·5	−0·2	+0·7
Bengal and Assam	+1·0	+1·6	+1·3
N.-W. Provinces and Oudh	+1·0	+7·3	+4·2
Punjab	−3·3	+7·3	+2·0
Sind and Rajputana	−1·6	+7·0	+2·7
Central India and Gujarat	+2·0	+4·2	+3·1
Central Provinces and Berar	+0·9	+1·8	+1·4
Bombay	+0·2	+1·2	+0·7
Madras	−0·5	+2·8	+1·2

A cold-weather disturbance gave showery weather in North-Western India from the 7th to the 12th. This reduced temperature considerably below the normal in the area of rainfall in North-Western India. Temperature, on the other hand, increased in North-Eastern India, the Central Provinces and the Deccan and was largely in excess during the same period.

The following gives variation data for the area of diminished temperature, including Baluchistan, the Punjab, Sind and Rajputana, during the period from the 8th to the 12th :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	8th	9th.	10th.	11th.	12th.
	°	°	°	°	°
Baluchistan (Quetta)	−8·5	−13·9	−14·0	−10·5	−15·9
Punjab	−1·6	+0·9	0	−0·6	−3·6
Sind	−0·3	−2·8	−3·5	−4·1	−5·2
Rajputana	+4·7	+3·8	+1·8	−0·5	−2·2

The preceding data indicate that the reduction was comparatively small in amount in the Punjab and Rajputana as compared with Baluchistan.

The following gives corresponding data for the area of large excess of temperature in North-Eastern India and the Central Provinces.

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of					
	8th.	9th.	10th.	11th.	12th.	Mean of period.
	°	°	°	°	°	°
North-Western Provinces and Oudh.	+4·1	+4·5	+1·7	+5·6	+5·0	+4·2
Central Provinces and Berar.	+2·9	+3·6	+3·6	+3·4	+4·1	+3·5
Bengal and Assam.	+1·7	+1·8	+2·5	+3·4	+4·9	+2·9

The excess was absolutely greatest on the 12th at Sutna (11°) and Allahabad and Nowgong (10°).

During the period from the 7th to the 12th the chief abnormal features of the temperature conditions were, 1st, a large deficiency of temperature in Baluchistan; 2nd, slight to moderate deficiency in the Punjab accompanying rainfall, and due almost solely to diminished day temperature; and 3rd, largely increased temperature in the Gangetic plain, Bengal, the Central Provinces and the North Deccan, due to slightly higher day temperature and much higher night temperature than usual.

The disturbance which gave rise to those conditions passed away on the 12th, and a cool wave rapidly extended from the north-west frontier and displaced the warm wave, transferring it eastwards into Burma.

The following gives the variations of the mean temperature from the 12th to the 16th for the larger provinces of Northern India, and illustrates roughly the advance of the cool wave :—

Province.	Variation from normal of Mean temperature of 24 hours preceding 8 A.M. of				
	12th.	13th.	14th.	15th.	16th.
	°	°	°	°	°
Punjab	−3·6	−5·6	−6·1	−6·3	−3·8
North-Western Provinces and Oudh.	+5·0	−2·8	−4·1	−4·4	−2·6
Bengal and Assam	+4·9	+5·5	+3·2	+2·0	−0·4
Burma	+1·0	+1·7	+2·3	+2·6	+2·5

The result of the advance of this cool wave across Northern India from the 13th to the 16th was that on the 16th and following days temperature was more or less considerably below the normal in Northern and Central India

and was more or less in excess in the Peninsula and Burma, a contrast of frequent occurrence in the cold weather. These conditions continued until the 20th and are illustrated by the following mean variation data of the 16th, 18th and 20th:—

Meteorological Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		
	16th.	18th.	20th.
	°	°	°
Burma	+2·5	+2·8	−1·1
Bengal and Assam	−0·4	−1·8	−4·1
N.-W. Provinces and Oudh	−2·6	−4·8	−3·4
Punjab	−3·8	−3·0	−2·7
Sind and Rajputana	−6·2	−3·8	+0·2
Central India and Gujarat	−4·8	−6·8	−2·1
Central Provinces and Berar	+2·3	−4·7	−2·5
Bombay	−0·1	−1·0	+0·4
Madras	+1·8	+1·7	+1·6

During this period the area of greatest deficiency of temperature was transferred eastwards from Cutch, Kathiawar and Rajputana on the 16th to Bengal and Arakan on the 20th.

The temperature conditions of Northern and Central India during the next week were determined by the advance of a cold-weather depression across Baluchistan and Northern India. It was preceded by a warm wave and followed by a well-marked cool wave. The following illustrates the advance of these two waves and the eastward displacement of the cool wave, which lay over North-Eastern India at the commencement of the period:—

Date.	West cold wave.		Warm wave?		East cold wave.	
	Station.	Mean temperature variation from normal.	Station.	Mean temperature variation from normal.	Station.	Mean temperature variation from normal.
		°		°		°
21st	Quetta	−8·9	Neemuch	+4·4	Akyab	−5·5
,,	...	...	Ajmere	+3·6	Saugor Island	−5·4
22nd	Mount Abu	−16·0	Raipur	+7·4	Akyab	−4·6
,,	Deesa	−12·5	Sutna	+7·0	Thayetmyo	−3·8
23rd	Indore	−13·4	Balasore	+5·2	Thayetmyo	−3·2
,,	Jeypore	−12·0	Burdwan	+5·2	Akyab	−2·6
24th	Seoni	−11·9				
,,	Pachmarhi	−12·3				

On the 24th temperature was reduced more or less considerably below the normal over the whole Indian area with the exception of Lower Burma and the greater part of Madras. The following comparative data for the 20th and 24th show the large effect produced by its advance:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		Mean reduction of temperature.
	20th.	24th.	From 20th to 24th.
	°	°	°
Sind and Rajputana	+0·2	−7·4	−7·6
Central India and Gujarat	−2·1	−8·1	−6·0
Central Provinces and Berar	−2·5	−8·3	−5·8

Temperature increased rapidly during the next three days over the whole of India as is shown by the following comparative mean variation data of the 24th and 27th for the same areas as in the preceding table:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		Mean increase of temperature.
	24th.	27th.	From 24th to 27th.
	°	°	°
Sind and Rajputana	−7·4	−1·9	+5·5
Central India and Gujarat	−8·1	+0·6	+8·7
Central Provinces and Berar	−8·3	+0·8	+9·1

Temperature was on the 28th again in considerable excess in Central India, Kathiawar, Gujarat, Berar and the Central Provinces and the excess intensified in that area and extended to Rajputana during the next three days, as is shown by the following mean variation data:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of			
	28th.	29th.	30th.	31st.
	°	°	°	°
Sind and Rajputana	−0·1	+2·6	+5·1	+6·0
Central India and Gujarat	+3·7	+6·5	+6·2	+5·7
Central Provinces and Berar	+2·6	+5·3	+5·7	+7·1
Bombay	+2·2	+2·5	+2·4	+2·6

The chief features of the temperature conditions during the last week of the month were hence (1) rapid increase of temperature over the whole of Northern India, and (2) large excess of temperature in the area including the Central Provinces, Berar, Kathiawar, Central India and

Rajputana. The excess was greatest on the 31st and was most marked on that day in the area including the following stations:—Neemuch (+11°·2), Ajmere (+10°·5) and Saugor (10°·0)

The following gives variation data for the 24 hours preceding 8 A.M. of the 31st and illustrates the temperature conditions obtaining at the end of the month:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	−1·5	−1·1	−1·3
Bengal and Assam	+0·5	+0·1	+0·3
N.-W. Provinces and Oudh	−0·6	+6·7	+3·1
Punjab	−2·0	+3·8	+0·9
Sind and Rajputana	+4·2	+7·8	+6·0
Central India and Gujarat	+3·2	+8·1	+5·7
Central Provinces and Berar	+4·3	+9·9	+7·1
Bombay	+1·0	+3·0	+2·0
Madras	−0·3	−0·9	−0·6

The following table gives the mean variation of temperature, week by week during the month, and also for the whole month, for the larger political divisions of India, taken from the weekly weather summaries published in the *Gazette of India*:—

Division.	Variation from normal of mean temperature of week ending					
	5th Jany.	12th Jany.	19th Jany.	26th Jany.	2nd Feby.	For whole month.
	°	°	°	°	°	
Burma	+0·1	+0·5	+2·2	−1·3	−0·4	+0·2
Bengal and Assam	+0·5	+2·3	+0·9	−2·1	+0·3	+0·3
North-Western Provinces and Oudh.	+0·6	+3·8	−3·7	−2·8	+0·5	−0·6
Punjab	−1·0	−0·2	−4·3	−3·4	+0·6	−2·0
Sind and Rajputana	−0·7	+0·4	−6·2	−5·5	+1·7	−2·4
Central India and Gujarat	+1·3	+2·7	−5·3	−4·3	+3·4	−0·9
Central Provinces and Berar	+2·2	+3·0	0	−2·7	+4·9	+1·2
Bombay	−0·1	+0·6	+0·5	−0·9	+1·5	+0·4
Madras	−0·5	+1·1	+1·9	+0·8	−0·1	+0·8

Winds.

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

The wind data for 10 and 16 hours are given in a similar form in Table II. Under the heading "Wind" is shown the number of times that each of eight wind directions were observed at the hours of record, the trigonometrical resultant of these observations computed by Lambert's formula and the mean diurnal movement of the air at each station and the average monthly values of the last two elements computed from the previous wind observations at that station.

The mean wind directions of the month for the second-class stations are indicated in the small chart No. 4 of Plate III by means of arrows flying with the wind. In this chart the lengths of the arrows are drawn so as to indicate the comparative wind-prevalence in the mean direction on a scale such that five-eighths of an inch would represent a wind blowing continuously throughout the month from the mean direction.

The following gives a statement of the chief features of the air-movement of the month, based on a comparison of the mean wind direction and intensity (determined from the 10 and 16 hours' wind observations) and the corresponding normal values of these elements for the month.

Winds were of normal strength and steadiness in January 1895 at Port Blair, but were more westerly than usual in Burma. The following gives data illustrating this deflection:—

Station.	Wind direction.		
	Mean actual, January 1895.	Mean normal, January.	Westerly deflection.
Rangoon	N 3° W	N 22° E	25°
Diamond Island	N 21° W	N 6° E	27°
Akyab	N 37° W	N 23° W	14°

The deflection was hence large and well marked.

Winds were of normal strength in Bengal and Assam and were slightly steadier than usual. They were, however, more directly from the north than usual and the westerly element was very feeble. The following gives data for four stations showing the decreasing westing of the mean air movement of the month in South and Central Bengal :—

Station.	Wind direction.		
	Mean actual, January 1895.	Mean normal, January.	Decreased westerly deflection.
Chittagong	N 5° W	N 24° W	19°
Narayanganj	N 33° W	N 53° W	20°
Calcutta	N 8° W	N 38° W	30°
Burdwan	N 21° W	N 32° W	11°

Winds were normal in direction in the Gangetic plain, Chota Nagpur and the Punjab and the air-movement somewhat steadier and stronger than usual. The following gives comparative data of the mean velocity and steadiness of the winds in that area :—

Division.	Steadiness.			Velocity in miles per diem.		Percentage variation.
	Mean actual percentage, January 1895.	Mean normal percentage, January.	Variation from normal.	Mean actual, January 1895.	Mean normal, January.	
Chota Nagpur	60	54	+ 6	176	118	+49
Bihar	56	46	+10	85	54	+57
N.-W. Provinces and Oudh.	39	30	+ 9	57	53	+ 8
Bengal	56	39	+17	69	74	− 7

Winds were more irregular than usual in Rajputana, Central India and the Central Provincesand were especially unsteady in the latter area. The following gives examples of the great irregularity and unsteadiness of the air-movement in the Central Provinces, Berar and the Bombay Deccan :—

Station.	Steadiness.			Velocity in miles per diem.		Percentage variation.
	Mean actual percentage, January 1895.	Mean normal percentage, January.	Variation from normal.	Mean actual, January 1895.	Mean normal, January.	
Saugor	13	24	−11	70	66	+ 6
Raipur	15	21	− 6	57	67	−13
Khandwa	16	23	− 7	109	69	+58
Akola	24	30	− 6	107	83	+29
Poona	20	24	− 4	134	137	− 2

Winds were steadier than usual in the west coast districts south of Bombay and had a much stronger westerly element than usual, *e.g.*:—

Station.	Wind direction.			Steadiness.		Variation from normal.
	Mean actual, January 1895.	Mean normal January.	Westerly deflection.	Mean actual percentage, January 1895.	Mean normal percentage, January.	
Ratnagiri	N 64° W	N 34° W	30°	60	30	+30
Karwar	N 51° W	N 5° W	46°	64	53	+11
Cochin	N 50° W	S 11° W	?	37	13	+24

Winds were slightly weaker than usual in South Madras and the East Coast districts. The following gives data for two stations :—

Station.	Steadiness.			Velocity in miles, per diem.		Percentage variation.
	Mean actual percentage, January 1895.	Mean normal, January.	Variation from normal.	Mean actual, January 1895.	Mean normal, January	
Madras	85	76	+ 9	116	143	−19
Trichinopoly	92	77	+15	81	115	−30

As usual when weather is frequently disturbed in North-Western India in the cold-weather months, the air-movement at the hill stations was considerably above the normal. This is shown clearly by the following data :—

Station.	Velocity in miles per diem.		
	Mean actual, January 1895.	Mean normal, January.	Percentage variation.
Murree	257	198	+30
Simla	132	?	?
Chakrata	165	114	+45
Mount Abu	152	113	+35
Darjeeling	105	62	+69

North-easterly winds predominated at Ranikhet and Chakrata, at which stations the normal direction is west-

south-west. Winds were much steadier than usual at Murree, Simla, Chakrata and Darjeeling, where the wind vanes and the anemometers are placed on the crests of ridges, but were especially unsteady at Mount Abu (steadiness percentage 6), Ranikhet and Chamba (steadiness percentage 5) and Srinagar (steadiness percentage 3). All these stations are in valleys or under the lee of hills.

The chief abnormal features of the air movement in India during January 1895 may hence be summarized as follows:—

(1) Winds more westerly than usual in Burma.
(2) Winds more northerly and less westerly in Bengal.
(3) Air-movement slightly stronger and steadier in the Gangetic plain and the Punjab and very much stronger at the hill stations.
(4) Air-movement very unsteady in Rajputana, Central India, the Central Provinces, Berar and the Bombay Deccan.
(5) Winds more westerly and slightly steadier than usual in the West Coast districts.

The following gives comparative data of the mean air-movement of the month:—

Province.	Velocity in miles per diem.		Percentage variation.
	Mean actual, January 1895.	Mean normal, January.	
Burma	151	103	+47
Bengal	69	74	— 7
Chota Nagpur	176	118	+49
Bihar	85	54	+57
North-Western Provinces	57	53	+ 8
Punjab	46	43	+ 7
Rajputana	109	115	— 5
Central India	80	66	+21
Central Provinces	82	64	+28
Berar	107	83	+29

Humidity and Cloud.

The hygrometric data for the month employed in the following paragraphs are given in Table II. In that table are columns giving the means of the wet bulb readings at 10 and 16 hours and of the minimum wet bulb readings, the mean vapour tension and humidity at the same hours and also the daily means of these elements. The hygrometric data are taken from the tables accompanying the *Vade Mecum*, which are computed by means of Regnault's modification of August's formula. The normal values, by means of which the variations have been derived, are the means calculated in the same way for periods varying from 5 to 20 years.

The proportion of cloud is estimated in tenths of the sky expanse, an overcast sky being denoted by 10 and a cloudless sky by 0. The daily means are the arithmetical means of the cloud amount at 10 and 16 hours, and the normal means, with which the actual daily means of the month are compared, are the means for periods varying from 5 to 20 years of the available cloud data for the same hours.

The mean humidity conditions of the month at Port Blair were almost identical with the normal. The air contained somewhat less aqueous vapour and was drier than usual in Burma, and South-West Bengal. The mean absolute humidity and relative humidity of the month were on the other hand in slight excess in North Bengal, Assam, and Bihar. The variations, however, were in no case large or important in these areas. The conditions in Burma were the continuation of a feature which was prominent in the meteorology of that area in November and December. The following gives comparative data for these areas:—

Provinces.	Absolute humidity.			Relative humidity.		
	Average actual, January 1895.	Average normal, January.	Variation from normal.	Average actual, January 1895.	Average normal, January.	Variation from normal.
	"	"	"	%	%	
Burma	·558	·568	—·020	66	70	—4
Assam	·453	·425	+·028	81	79	+2
Bengal	·444	·443	+·001	69	71	—2
Orissa	·528	·508	+·020	71	72	—1
Chota Nagpur	·285	·267	+·018	50	51	—1
Bihar	·402	·381	+·021	72	69	+3

The air was in January 1895 abnormally damp in the North-Western Provinces, East Punjab, Rajputana, Central India, and the northern districts of the Central Provinces and the humidity percentage was more than 10 in excess at the great majority of the observing stations in those areas. The excess in the mean humidity percentage of the month was greatest at Lucknow and Agra (each 16 in excess), Sutna (15 in excess), Nowgong (14 in excess), Roorkee (13 in

excess) and Jeypore and Saugor (12 in excess). The excess was chiefly due to an increased amount of aqueous vapour in the air, but also in part to diminished temperature. The mean relative humidity of the month was also above the normal at the Upper India hill stations, but to a slightly less amount than at the neighbouring plain stations. The following gives comparative data for this large area of increased humidity:—

Province.	Absolute Humidity.			Relative Humidity.		
	Average actual, January 1895.	Average normal, January.	Variation from normal.	Average actual January 1895.	Average normal, January.	Variation from normal.
	"	"	"	%	%	
North Western Provinces and Oudh.	·352	·305	+·047	73	62	+11
East Punjab	·300	·273	+·027	74	64	+10
Rajputana	·270	·264	+·006	51	45	+ 6
Central India	·376	·278	+·098	69	54	+15
Central Provinces (North)	·381	·301	+·080	64	54	+10

The mean absolute humidity or aqueous vapour pressure was slightly below the normal at Quetta and considerably below it at the Indus Valley stations. The relative humidity was on the other hand in slight excess at Quetta (+4). It was in very large defect in the case of Peshawar (—14) and in slight defect at Mooltan and Jacobabad.

The variations of the humidity conditions of the month from the normal were smaller in the Peninsula than in Northern India. The absolute humidity was normal in Mysore and (probably) Coorg and was in slight to moderate excess in Madras (except at Trichinopoly) and the west coast districts. The air was also generally damper; but the increase in the humidity percentage was small except perhaps at Vizagapatam (+10). The mean humidity of the month was below the normal at Trichinopoly, and it is probable that in this respect Trichinopoly represented the whole of South Madras.

The following gives a brief summary of the mean humidity conditions of the month:—

1st.—The air was somewhat drier than usual in Burma.

2nd.—The humidity conditions were normal on the average of the month in Bengal, Assam, Bihar, Chota Nagpur and Orissa.

3rd.—The air was abnormally damp in the North-Western Provinces, East Punjab, Rajputana, Central India and the north-western districts of the Central Provinces.

4th.—It was drier than usual in the West Punjab and Sind.

5th.—The mean humidity conditions of the month differed little from the normal in the Peninsula except in South Madras where the air was drier than usual.

The variations of the mean cloud estimate of the month from the normal were generally small and somewhat irregular in character in Burma and North-Eastern India. They, however, indicate that skies were more serene than usual in that area and more especially in the Assam Valley and Burma.

The following gives comparative data:—

Province.	Mean cloud amount.		
	Actual in January 1895.	Normal in January.	Variation from normal.
Andamans	3·5	3·3	+0·2
Burma	1·6	2·1	—0·5
Assam	3·2	3·5	—0·3
Bengal	1·6	1·7	—0·1
Orissa	2·2	1·9	+0·3
Chota Nagpur	2·0	2·3	—0·3
Bihar	2·0	2·1	—0·1

There was a large excess of cloud in the North-Western Provinces, the Punjab (except the north-west districts), Sind, Rajputana, Central India and the northern districts of the Central Provinces, represented by Jubbulpore and Saugor. Comparative mean data for the above districts are given below:—

Province.	Mean cloud amount.		
	Actual, January 1895.	Normal, January.	Variation from normal.
North-Western Provinces and Oudh	4·2	2·8	+1·4
Punjab	4·5	3·7	+0·8
Sind	4·0	2·9	+1·1
Rajputana	3·2	2·6	+0·6
Central India	3·8	2·5	+1·3
Central Provinces (North)	3·0	1·8	+1·2

At several stations in that area of increased cloud, more especially at Agra and Allahabad, the cloud amount was nearly double the normal or average amount of the month.

The mean cloud amount for the hill stations in Upper

India was above the normal, but only to a small extent, more especially when compared with the neighbouring plain stations. The following gives comparative data for four hill stations in North-Western India:—

Station.	Mean cloud amount.		
	Actual, January 1895.	Normal, January.	Variation from normal.
Quetta	4·3	4·2	+0·1
Mount Abu	2·7	2·6	+0·1
Leh	7·2	6·5	+0·7
Simla	6·3	5·4	+0·9

The estimates for Ranikhet and Chikalda are almost certainly too high, due probably to a recent change of observer in both cases.

The variations of the mean of the month from the normal were somewhat irregular in the Peninsula. There was less cloud than usual in the west coast districts, as represented by the stations for which data are given below:—

Station.	Mean cloud amount.		
	Actual, January 1895.	Normal, January.	Variation from normal.
Bombay	0·6	1·5	−0·9
Karwar	0·2	0·9	−0·7
Cochin	1·0	2·0	−1·0

Skies were also more free from cloud in these districts than in any other part of India. The mean cloud estimate of the month for Karwar was only 0·2, for Bombay 0·6 and for Cochin 1·0.

The cloud amount was considerably less than usual in South Madras, as represented by Trichinopoly (1·3 in defect) and in Mysore, as represented by Bangalore (1·0 in defect). There was slightly more cloud than usual in the Deccan and the Madras east coast districts.

Skies were most serene in the west coast districts and to a less extent in South Bengal, (as represented by Calcutta, Chittagong and Berhampore) and the Central Deccan (as represented by Sholapur, Hyderabad and Belgaum).

The chief features of the mean cloud distribution of the month were —

1st.—Slightly less cloud than usual in Burma and North-Eastern India.

2nd.—Large excess of cloud in the area of increased humidity and heavier rainfall than usual, including the North-Western Provinces the Punjab, Sind, Rajputana and Central India.

3rd.—Clear skies throughout the month in the west coast districts.

4th.—Less cloud than usual in South Madras and Mysore and a slight excess in the Madras Deccan and east coast districts.

5th —Skies were practically free from cloud during the month in the Bombay and Arakan coast districts and South-West Bengal. They were most heavily clouded in Upper India.

Rainfall.

Rainfall observations are made at upwards of 2,000 stations in India. The hour of observation is 8 A M. The rainfall data for each province are tabulated in the Office of the Meteorological Reporter, Director of Land Records, or other office in the province, and published in the provincial Gazette. A weekly statement of the rainfall of every district is telegraphed to the Simla Meteorological Office by District Officers, and a summary of this information is published in the *Gazette of India* weekly.

The charts illustrating the distribution of rainfall in the month under discussion are based in part upon the rainfall data of the meteorological observatories throughout India, and in part upon the rainfall information relating to the month telegraphed to Simla by District Officers, and the rainfall statements of the month published by the local Governments.

The first rainfall chart (Plate IV) shows the actual distribution of the rainfall of the month, so far as it is indicated by the returns of upwards of 170 meteorological stations. The distribution of rainfall is shown on this chart by means of isohyetic lines, or lines of equal amounts of rainfall, the numbers attached to each line stating the rainfall in inches.

Northern India usually receives light to moderate rain in the month of January from cold weather cyclonic storms. The precipitation is generally heaviest in the hill districts, and decreases in amount southwards from the foot of these hills. Rain is also occasionally received in the

South Madras coast districts, usually under the same conditions as in December. This rainfall is, however, exceptional in occurrence.

The month of January 1895 was somewhat more disturbed than usual in North-Western India, and the rainfall of the month was hence in general excess in that area.

There were four periods of disturbance and of rainfall during the month, two of which were due to the passage of well-defined cold weather storms across Northern India.

The first disturbance belongs in part to the previous month of December. It was due to a feebly marked depression which advanced from Baluchistan on the 30th into Central India on the 1st, and died out in North-Eastern India on the 2nd. It gave moderate and general rain to the Punjab on the 1st.

The second disturbance advanced from the Persian area passing across Northern India from the 6th to the 9th and disappeared in North-East India on the 10th. Weather continued feebly unsettled until the 12th in North-Western India. Baluchistan, the Punjab, Kashmir, Rajputana and Central India received light to moderate rain during this period. The rainfall was most general and heaviest in the Punjab submontane and hill districts.

The third period of rainfall occurred during the movement of a diffused and feeble disturbance from Berar and Central India eastwards to Bengal. Central India, Rajputana, and the northern districts of the Central Provinces received numerous thunderstorms on the 14th and 15th, Bihar, Chota Nagpur and North Bengal light local showers on the 15th and 16th, and the Upper Assam Valley from the 16th to the 19th.

The fourth period of rainfall was from the 21st to the 24th The precipitation occurred in connection with a cold weather storm which crossed Northern India between the 21st and 24th,and which gave rise to a well-marked secondary depression in the East Punjab. Kashmir and the East Punjab received moderately heavy rain from the 21st to the 23rd, Rajputana light rain during the same period, the North-Western Provinces from the 21st to 23rd, Bihar on the 22nd and 23rd, Chota Nagpur on the 23rd, Bengal on the 23rd and 24th, and Assam from the 23rd to the 26th.

Kashmir, the Punjab and Rajputana received light to moderate showers on the 31st during the earlier stages of a depression which gave light general rain in North-Western India on the 1st and 2nd of February.

Practically no rain fell during the month in Burma, East Bengal, Gujarat, Kathiawar, the Bombay Deccan, Konkan, Mysore, Coorg, the whole of Madras (except the southern division), Hyderabad, and the southern districts of the Central Provinces and Berar. The rainfall was very light, and below the small normal average of the month in Assam, Bengal, Orissa, Chota Nagpur, Bihar and Sind. It was moderate in amount and more or less in excess in the North-Western Provinces, the Punjab, Central India and Rajputana and the Upper India hill districts.

The following table gives comparative rainfall data of the month for the fifty-one meteorological districts or divisions into which India is divided. The data for Bengal, the North-Western Provinces, Punjab, Bombay, Rajputana, Central India and Madras are obtained from the statements published in the provincial gazettes which were received in time to be utilised in the preparation of the table. The data in the case of the remaining provinces are based on the weekly telegrams received from District Officers in those provinces :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, January 1895.	Average normal, January.	Average actual, January 1895.	Average normal, January.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	0	0·02	—0·02
	Lower Burma*	?	?	0	0·16	—0·16
	Central do*	?	?	0	0·08	—0·08
	Upper do.*	?	?	0·03	?	?
	Arakan*	?	?	0	0·10	—0·10
Bengal and Assam	Eastern Bengal	0·3	1·2	0·07	0·57	—0·50
	Assam (Surma)*	?	?	0·19	0·88	—0·69
	Do. (Brahmaputra)*	?	?	0·63	1·01	—0·38
	Deltaic Bengal	0·3	0·9	0·10	0·46	—0·36
	Central do.	0·7	0·9	0·23	0·42	—0·19
	North do.	0·5	1·2	0·13	0·64	—0·51
	Orissa	0·3	0·7	0·15	0·38	—0·23
	Chota Nagpur	1·2	1·4	0·36	0·70	—0·34
	Bihar (South)	1·5	1·4	0·53	0·62	—0·09
	Do. (North)	1·4	1·3	0·38	0·61	—0·23

Province.	Division.	Number of rainy days. Average actual, January, 1895.	Number of rainy days. Average normal, January.	Rainfall. Average actual, January 1895.	Rainfall. Average normal, January	Rainfall. Variation from normal.
				Inches.	Inches.	Inches.
North-Western Provinces and Oudh.	North-Western Provinces (East)	1·3	1·4	0·75	0·65	+0·10
	Oudh (South)	3·6	1·4	1·35	0·72	+0·63
	Do. (North)	3·6	1·3	1·24	0·78	+0·46
	North-Western Provinces (Central)	4·1	1·3	1·83	0·59	+1·24
	Do. do. (West)	4·0	1·3	1·77	0·54	+1·23
	Do. do. (Sub-montane)	5·6	2·1	2·65	1·45	+1·20
Punjab	Punjab (South)	3·6	1·2	1·48	0·56	+0·92
	Do. (Central)	4·6	1·5	2·12	0·74	+1·38
	Do. (Sub-montane)	6·6	2·4	2·96	1·57	+1·39
	Do. (Hill Districts)	7·9	4·2	4·65	3·36	+1·29
	Do. (North-West)	3·7	2·8	1·75	1·69	+0·06
	Do. (West)	1·8	1·3	0·57	0·61	—0·04
Bombay and Malabar Coast Districts (Madras).	Malabar	0·1	0·3	0·02	0·19	—0·17
	Madras (South Central)	0	0·3	0	0·12	—0·12
	Coorg	0·1	?	0·02	?	?
	Mysore*	?	?	0	0·07	—0·07
	Konkan	0	0·2	0	0·14	—0·14
	Bombay Deccan	0	0·1	0·01	0·07	—0·06
	Khandesh	0·2	0·2	0·10	0·10	0
Central Provinces and Berar.	Berar*	?	?	0·03	0·29	—0·26
	Central Provinces (West)*	?	?	0·06	0·49	—0·43
	Do. do. (Central)*	?	?	0·29	0·57	—0·28
	Do. do. (East)*	?	?	0·02	0·53	—0·51
Bombay (North)	Gujarat	0	0·2	0	0·06	—0·06
	Kathiawar	0	0·2	0	0·05	—0·05
	Sind	1·0	?	0·24	0·40	—0·16
Rajputana and Central India.	Central India (East)	2·7	?	1·03	0·59	+0·44
	Rajputana (East) Central India (West)	2·5	?	0·91	0·25	+0·66
	Rajputana (West)	0·8	?	0·24	0·23	+0·01
Madras	East Coast (North)	0·1	0·3	0·05	0·20	—0·15
	Do. (do.) (*a*)	0	0·3	0	0·07	—0·07
	Hyderabad (South)*	?	?	0	0·17	—0·17
	Madras (Central)	0	0·1	0	0·05	—0·05
	East Coast (Central)	0	0·6	0·01	0·48	—0·47
	East Coast (South)	0·1	0·8	0·01	0·47	—0·46
	Madras (South)	0·6	1·0	0·18	0·61	—0·43

* Note.—The figures entered against divisions marked with an asterisk have been obtained from the Weekly Telegraphic Reports.

British Baluchistan received moderate rain on the 2nd and again on the 6th and 7th, and some local showers on the 19th, 20th and 21st. The distribution of the rainfall was very irregular, but so far as can be judged from the returns of the three stations, for which normal data are available, the rainfall of the month was probably less than usual. The following gives comparative data for these three stations:—

Station.	Rainfall. Actual, January 1895.	Rainfall. Normal, January	Rainfall. Variation from normal.
	Inches.	Inches.	Inches.
Kalat	3·03	1·69	+1·34
Pishin	1·37	3·07	—1·70
Quetta	1·31	1·83	—0·52

Kashmir received heavy rain or snow from the 6th to the 11th, and showers on the 15th, the 20th to 22nd, and the 31st. The following amounts in 24 hours exceeding 1·5 inches were registered during the first period:—

Station.	Heaviest fall in 24 hours preceding 8 A.M. of date.	Date.
	Inches.	
Ramban	2·00	6th.
Ramban	2·10	10th.
Kishtwar	1·53	,,
Kistwar	1·76	11th.
Srinagar	1·75	,,
Anantnag	1·95	10th.

The total fall of the month was very small at Iskardo and *nil* at Leh and perhaps Gilghit, and hence the distribution of the rainfall and snow of the period was entirely different in character from that of the winter of 1894, when the precipitation was heaviest in the Upper Indus Valley (*i.e.*, Ladakh), Little Thibet and the highest elevations in the interior.

The Punjab obtained frequent rain throughout the month. The periods of rainfall during the month were as follows:—

1st.—The 1st on which day the central, submontane and hill districts received light showers.

2nd.—The 7th to the 12th. The whole of the Punjab with the exception of the western districts, (more especially Dera Ismail Khan, Dera Ghazi Khan, Muzaffargarh, Kohat and Bannu) received daily general rain during this period, and falls in 24 hours exceeding 1 inch occurred at a large number of stations. The heaviest falls were the following:—

District.	Station.	Heaviest fall in 24 hours preceding 8 A.M. of date.	Date.
		Inches.	
Jhelam	Jhelam	2·00	8th.
Rawalpindi	Murree	2·10	,,
Rawalpindi	Kahuta	1·75	,,
Gujrat	Kharian	1·74	,,
Amritsar	Buggeh	1·65	10th.
Gurdaspur	Madhopur	1·50	11th.

3rd.—The 21st and 22nd. The southern, central, north-west and submontane districts received light to moderate general rain during this period. No rain fell in the districts of Peshawar, Hazara, Kohat, Bannu and Dera Ismail Khan. Rainfalls exceeding 1·5 inches in 24 hours occurred at the following stations in this period and indicate roughly where the precipitation was heaviest and most general:—

District.	Station.	Heaviest fall in 24 hours preceding 8 A.M. of date.	Date.
		Inches.	
Kangra	Nagar	1·70	22nd.
	Kangra	1·54	,,
	Dharmsala	1·50	,,
Simla	Simla	1·66	,,

4th—The 31st. The central and submontane districts received light to moderate showers, and the western districts light local showers.

The following gives rainfall data for the six divisions of the province:—

Division.	Numrer of Rainy days.			Rainfall.			
	Actual, January 1895.	Normal, January.	Variation from normal.	Actual, January 1895.	Normal, January.	Variation from normal.	Percentage variation.
				Inches.	Inches.	Inches.	
Punjab, South.	3·6	1·2	+2·4	1·48	0·56	+0·92	+164
Do., Central	4·6	1·5	+3·1	2·12	0·74	+1·38	+186
Do., Submontane.	6·6	2·4	+4·2	2·96	1·57	+1·39	+89
Do., Hills	7·9	4·2	+3·7	4·65	3·36	+1·29	+38
Do., North-West.	3·7	2·8	+0·9	1·75	1·69	+0·06	+4
Do., West	1·8	1·3	+0·5	0·57	0·61	−0·04	−7

The rainfall of the month was hence practically normal in amount in the western and north-western divisions. In the remaining four divisions it was in large excess, more especially in the south and central divisions, which obtained nearly three times the normal fall of the period, and the submontane division which received double its normal fall.

The rainfall of the month in the North-Western Provinces occurred during the following periods:—

(*1*)—From the 1st to the 5th. The western and central districts obtained frequent light to moderate showers during this period.

(*2*)—From the 9th to the 12th. The rainfall during this period was general and moderate in amount in the central and submontane districts, and heavy in the hill districts. Light showers were received in Oudh and the western districts. Practically no rain fell in the eastern districts, *i.e.* in Ghazipur, Benares, Jaunpur, Mirzapore, Gorakpur, Basti, Azamgarh and Ballia.

(*3*).—From the 14th to the 16th, when the whole province received moderate showers.

(*4*).—From the 21st to 23rd, during which the whole of Oudh and the submontane districts of the North-Western Provinces received light to moderate showers and the hill districts moderate rain or snow.

The precipitation was in each of these periods larger in amount in the hill districts than in the plains. The following gives mean data for each of these periods of rainfall for those hill districts and the submontane districts :—

Area.	District.	Average total rainfall received during				Total.
		First period.	Second period.	Third period.	Fourth period.	
		Inches.	Inches.	Inches.	Inches.	Inches.
Hill Districts.	Dehra Dun	0·82	1·65	0·11	1·27	3·85
	Almora	0·24	0·76	0·17	1·39	2·56
	Garhwal	0·71	0·73	0·33	1·73	3·50
	Naini Tal	0·32	0·51	0·41	1·16	2·40
Plain Districts.	Saharanpur	0·29	0·97	0·23	0·59	2·08
	Bijnor	0·29	1·20	1·00	0·54	3·03
	Bareilly	0·01	0·52	0·30	0·90	1·73
	Pilibhit	0·25	0·32	0·17	0·65	1·39
	Moradabad	0·02	1·02	0·48	0·15	1·67

The rainfall of the month was largest in the hill districts and decreased in amount eastwards and southwards from the hills. It was in large excess relative to the normal in the central, western and submontane districts of the North-Western Provinces and in South Oudh, which obtained averages of from two to three times the normal fall of the period. The following gives comparative rainfall data for the month :—

Division.	Number of rainy days		Rainfall.		
	Actual average, January 1895.	Variation, from normal.	Actual average, January 1895.	Normal average, January.	Percentage variation.
			Inches.	Inches.	
Oudh, North	3·6	+2·3	1·24	0·78	+ 59
Do., South	3·6	+2·2	1·35	0·72	+ 88
N.-W. P. (East)	1·3	−0·1	0·75	0·65	+ 15
Do. (Central)	4·1	+2·8	1·83	0·59	+210
Do. (Submontane)	5·6	+3·5	2·65	1·45	+ 83
Do. (West)	4·0	+2·7	1·77	0·54	+228

The excess was greatest relatively to the normal in the districts for which data are given below :—

District.	Rainfall.		
	Average actual, January 1895.	Average normal, January.	Variation from normal.
	Inches.	Inches.	Inches.
Hardoi	2·04	0·72	+1·32
Cawnpore	1·53	0·60	+0·93
Etawah	2·55	0·49	+2·06
Farukhabad	2·60	0·55	+2·05
Mainpuri	2·39	0·47	+1·92
Etah	2·27	0·56	+1·71
Agra	1·71	0·41	+1·30
Meerut	4·24	0·91	+3·33
Budaon	2·28	0·85	+1·43
Muzaffarnagar	3·40	1·15	+2·25
Saharanpur	3·41	1·55	+1·86

Rajputana received more or less general rain during the same periods as the Punjab, *viz.*, the 1st, the 7th to the 11th, the 21st and 22nd, and the 31st. The rainfall of the month was in general excess, as is shown by the comparative data for the larger states given in the following table :—

Station.	Rainfall.			
	Actual average, January 1895.	Normal average, January.	Variation, from normal.	Percentage variation.
	Inches.	Inch.	Inch.	
Jodhpore	0·22	0·22	0	0
Jeypore	1·31	0·32	+0·99	+322
Ajmere	0·23	0·20	+0·03	+ 15
Bhurtpore	1·08	0·38	+0·70	+184
Ulwar	1·04	0·49	+0·55	+112
Kotah	0·98	0·16	+0·82	+513
Kerowlee	1·26	0·37	+0·89	+241
Oodeypore	0·01	0·09	−0·08	− 89

Central India obtained light local showers from the 5th to the 13th, (heaviest and most general in the Gwalior

State) and numerous thunder showers which gave fairly general rain during the period from the 13th to the 15th. The following gives comparative data of the rainfall of the month in the larger states :—

State.	Rainfall.		
	Average actual, January 1895.	Actual normal, January.	Variation, from normal.
	Inches.	Inch.	Inches.
Rewa	0·90	0·99	−0·09
Bhopal	0·63	0·52	+0·11
Gwalior	1·17	0·24	+0·93
Bundelkhand	1·56	0·54	+1·02

There were two brief periods of showery weather in Bengal. The first was from the 15th to the 17th. Chota Nagpur, Bihar and North Bengal obtained light but fairly general rain. The second period was from the 22nd to the 24th. Bihar received light rain on 22nd and 23rd, Chota Nagpur light local showers on the 23rd and Bengal local showers on the 23rd and 24th. The average total rainfall of the month was practically *nil* in Orissa and the southern districts of Bengal. Over the remainder of the province it ranged between a tenth and three quarters of an inch, and was below the small normal of the month over the whole area. The deficiency was least in South Bihar and Central Bengal (where it averaged two tenths of an inch) and greatest in actual amount in East and North Bengal for which it averaged half an inch.

The following gives comparative data of the rainfall in that province :—

Division.	Number of rainy days.		Rainfall.	
	Mean actual, January 1895.	Variation from normal.	Actual, January 1895.	Variation of actual from normal.
			Inch.	Inch.
Bengal, East . . .	0·3	−0·9	0·07	−0·50
Do., North . .	0·5	−0·7	0·13	−0·51
Do., Deltaic . .	0·3	−0·6	0·10	−0·36
Do., Central . .	0·7	−0·2	0·23	−0·19
Orissa	0·3	−0·4	0·15	−0·23
Chota Nagpur . .	1·2	−0·2	0 36	−0·34
North Bihar . . .	1·4	+ 0·1	0·38	−0·23
South Bihar . . .	1·5	+0·1	0·53	−0·09

In Assam there were two periods of light rainfall. The first period was from the 16th to the 19th or during the three days after the passage of the first cold weather disturbance of the month eastwards through Bengal. The showers were confined to the eastern districts of the Assam Valley, *viz.*, Sibsagar, Lakhimpur and Darrang. The second period was from the 23rd to the 26th or during the three or four days following the advance of the second cold weather disturbance of the month through Bengal into Upper Burma. The Cachar and Sylhet districts of Assam Surma, and the Goalpara and Kamrup districts of the Assam Valley had showers on the 23rd or 24th, and the Nowgong, Sibsagar, Lakhimpur and Darrang districts in the Upper Assam Valley received light daily rain from the 23rd to the 26th. The following is a statement of the rainfall of the two divisions of the province :—

Division.	Number of rainy days.		Rainfall.		
	Mean actual, January 1895.	Variation from normal, January.	Mean actual, January 1895.	Variation from normal, January.	Percentage variation from normal.
			Inch.	Inch.	
Surma . .	0·7	1·5	0·19	−0·43	−69
Brahmaputra	2·3	2·9	0·74	−0·31	−30

The northern districts of the Central Provinces received showers in three periods during the month. The Saugor, Damoh and Hoshangabad districts had light to moderate showers on the 9th and 10th, the Saugor, Damoh, Jubbulpore and Hoshangabad districts light showers on the 15th, and Saugor and Jubbulpore very light local showers on the 29th. The rainfall of the month was in slight excess in these districts. It was absolutely or practically *nil* over the remainder of the province. The following table gives comparative data for the three divisions of the province and for Berar :—

Division.	Number of rainy days.		Rainfall.		
	Actual, January 1895.	Variation from normal, January.	Actual, January 1895.	Variation from normal, January.	Percentage variation.
			Inch.	Inch.	
Central Provinces (East).	0·1	= 0·7	0·03	−0·44	−94
Ditto (Central)	0·8	− 0·3	0·22	−0·31	−58
Ditto (West) .	0·3	− 0·6	0·08	−048	−86
Berar . . .	0·3	?	0·10	?	?

No rain fell during the month in the Bombay Presidency except in Khandesh, which received some very light showers on the 8th and 9th, and in Sind where light local showers fell from the 4th to the 9th and on the 21st. The total fall of the month in Sind ranged between *nil* at Hyderabad and half an inch at Jacobabad.

The rainfall of the month in the Madras Presidency was practically *nil*. Light local showers were received in the districts of Tanjore, Madura and Tinnevelly during the period from the 5th to the 9th; but the average total fall in each of these districts was less than a quarter of an inch. The rainfall of the month was hence in general defect by amounts increasing from the north-east districts to the central and south districts, where the normal fall of the month is about half an inch.

The following gives comparative data for the six divisions into which the presidency is divided :—

Division,	Rainfall.		
	Actual: January 1895.	Normal January.	Variation from normal.
	Inch.	Inch.	Inch.
Madras, Central . . .	0	0·05	−0·05
Do., East Coast, Central .	0·01	0·48	−0·47
Do., ditto, South .	0·01	0·47	−0·46
Do., South . . .	0·18	0·61	−0·43
Do., do., Central . .	0	0·12	−0·12
Malabar	0·02	0·19	−0·17

Table

Abstract of Observations taken at 8 A.M. at 204

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
I.—Burma Coast and Bay Islands.		...	...	−·025	...	...	...	...	...	...	...	86·7	+0·6	66·6	−0·1	76·6	+0·3	20·1	...	...	...	...	27·7
Bay Islands	Port Blair	61	29·931	?	29·923	29·976	22nd	29·890	31st	·096	78·1	85·5	?	75·8	?	80·6	?	9·7	87·7	8th	71·8	12th	15·9
	Camorta§	?	29·942	?	?	30·005	22nd	29·911	1st	·094	81·8	86·1	?	76·6	?	81·3	?	9·5	87·9	31st	73·5	6th	24·4
Tenasserim	Mergui	96	29·913	?	29·941	29·959	21st	29·842	4th	·117	76·4	88·1	?	70·2	?	79·1	?	17·9	90·4	12th	64·3	27th	26·1
	Tavoy	26	29·999	?	29·956	30·059	22nd	29·958	1st & 2nd.	·101	70·5	90·5	?	65·7	?	78·1	?	24·8	92·7	1st & 4th	57·7	13th	35·0
	Moulmein	94	29·921	−·031	29·955	29·974	21st & 22nd.	29·889	18th	·085	68·9	90·2	+1·9	65·6	0	77·9	+1·0	24·6	92·0	5th	60·4	11th	31·6
	Toungoo	183	29·828	−·023	29·962	29·887	22nd	29·779	31st	·108	61·4	85·4	+0·1	56·1	−1·5	70·8	−0·7	29·3	87·8	3 days	53·1	22nd & 24th	34·7
Lower Burma	Rangoon	41	29·959?	?	29·937?	30·019	21st	29·923	18th	·096	67·1	90·5	+1·8	63·7	−0·2	77·1	+0·8	26·8	72·4	3 days	59·8	9th	32·6
	Bassein	27	29·996	−·019	29·959	30·037	22nd	29·957	13th	·080	65·9	87·0	+1·6	61·5	+0·5	74·3	+1·1	25·5	90·2	18th & 19th.	55·0	22nd	35·2
	Diamond Island.	41	29·969	−·024	29·945	30·020	21st	29·932	12th & 13th.	·088	75·3	83·0	−0·9	72·9	+2·6	77·9	+0·9	10·1	87·6	18th	70·4	3 days	17·2
Arakan	Akyab	20	30·015	−·026	29·978	30·057	21st	29·966	12th	·091	62·0	80·8	−0·6	57·8	−1·7	69·3	−1·2	23·0	86·7	14th	52·2	20th	34·5
II.—Burma Inland		...	...	−·024	...	...	...	...	...	...	...	80·9	+1·4	50·2	−1·9	65·5	−0·3	30·7	...	...	...	...	39·5
Central Burma	Thayetmyo	134	29·901	−·024	29·983	29·966	4th	29·839	12th	·127	62·2	86·8	+1·4	51·7	−1·9	69·3	−0·3	35·1	92·1	17th	46·2	23rd	45·9
	Minbu	?	29·877	?	...	29·950	4th	29·812	18th & 30th.	·138	64·4	87·5	?	54·0	?	70·8	?	33·5	92·6	18th	47·0	20th	45·6
	Yamethin	645	29·342	?	...	29·419	4th	29·289	31st	·130	59·8	87·7	?	52·4	?	70·0	?	35·3	93·1	18th	50·1	8 days	43·0
	Taunggyi	...	...	...	...	...	...	...	...	...	47·6	73·6	?	41·4	?	57·5	?	32·2	76·2	7th & 16th.	37·1	21st	39·1
Upper Burma	Mandalay	248	29·762	?	...	29·808	3rd	29·699	18th	·109	63·1	83·4	?	56·3	?	69·8	?	27·1	87·0	24th	53·2	7th	33·8
	Kindat	?	29·681	?	...	29·727	4th	29·620	30th	·107	55·5	75·5	?	53·2	?	64·4	?	22·3	79·8	19th	47·0	19th	32·8
	Lashio	?	27·208	?	...	27·301	4th	27·158	30th	·143	52·4	74·2	?	44·1	?	59·1	?	30·1	78·1	12th	40·1	9th	38·0
	Bhamo	?	29·663	?	...	29·743	4th	29·593	17th	·150	53·5	78·2	?	48·4	?	63·3	?	29·8	82·0	16th	43·9	10th	38·1
III.—Assam		...	...	−·019	...	...	...	...	...	...	...	73·4	−0·2	54·0	+2·1	63·7	+1·0	19·4	...	...	...	...	29·3
Assam (Surma)	Silchar	104	29·969	−·014	30·032	30·036	4th	29·903	13th	·133	58·0	77·3	+0·1	54·0	+1·7	65·6	+0·9	23·3	82·3	15th	47·4	20th	34·9
Brahmaputra	Sibsagar	333	29·747	−·025	30·057	29·848	3rd	29·656	13th	·192	57·2*	69·4†	−0·5	53·9*	+4·1	61·7*	+1·8	15·5	74·3	31st	47·4	22nd	26·9
	Dhubri	115	29·955	−·018	30·033	30·044	4th	29·864	13th	·180	56·3	73·4	−0·1	54·1	+0·5	63·7	+0·2	19·3	77·1	13th & 14th.	51·1	21st	26·0
IV.—Bengal and Orissa		...	...	−·010	...	...	...	...	...	...	...	76·6	−0·5	55·0	+0·6	65·8	+0·1	21·5	...	...	...	...	33·7
East Bengal	Chittagong	87	29·963	−·020	30·003	30·024	4th	29·918	31st	·106	61·0	78·1	+0·3	55·8	+0·4	67·0	+0·4	22·3	82·7	15th	51·1	20th	31·6
	Lungleh	?	?	?	...	...	...	...	...	...	57·8‡	65·0	?	50·8	?	57·9	?	14·2	71·3	12th	42·7	8th	28·6
	Noakhali	43	30·024	?	30·016	30·090	4th	29·974	31st	·116	61·5	77·2	?	53·2	?	65·2	?	24·0	81·5	14th & 15th.	47·4	20th	34·1
	Comilla	36	30·034	?	30·019	30·094	4th	29·977	31st	·117	61·4	77·5	?	53·2	?	65·4	?	24·3	81·4	3 days	47·6	20th	33·8
	Sirajganj	49	30·021	?	30·022	30·111	4th	29·956	13th	·155	57·0	74·7	?	52·6	?	63·6	?	22·1	81·3	13th	46·5	19th	34·8
	Narayanganj	26	30·040	−·016	30·015	30·105	4th	29·985	31st	·120	60·5	76·5	−1·7	55·9	+0·9	66·2	−0·4	20·6	82·1	13th	51·3	20th & 21st	30·8
	Barisal	13	30·057	?	30·016	30·129	4th	30·005	31st	·124	61·3	76·5	0	54·9	−0·1	65·7	−0·1	21·6	82·8	13th	49·5	29th	33·3
	Mymensingh	59	30·004	?	30·018	30·072	4th	29·944	13th	·128	57·2	74·3	−0·2	53·3	+0·9	63·8	+0·4	21·0	78·8	13th & 14th.	47·1	19th	31·7
Deltaic Bengal	Faridpur	46	30·033	?	30·029	30·118	4th	29·975	31st	·143	60·2	74·7	?	53·6	?	64·2	?	21·1	80·7	13th	48·0	19th & 21st	32·7
	Jessore	33	30·044	−·003	30·025	30·128	4th	29·979	12th	·149	59·0	76·3	−1·7	52·3	−0·9	64·3	−1·3	24·0	83·6	13th	46·4	21st	37·2
	Calcutta	21	30·062	−·008	30·030	30·134	4th	29·994	12th	·140	60·0	77·0	+0·1	55·6	+0·2	66·3	+0·2	21·4	84·2	13th	49·2	20th	35·0
	Saugor Island	25	30·052	−·006	30·022	30·127	4th	29·992	31st	·135	62·7	76·4	−0·2	59·4	0	67·8	−0·1	17·0	82·2	12th	50·7	25th	31·5
	Krishnagar	47	30·037	?	30·036	30·121	4th	29·965	12th	·156	59·9	77·0	?	51·9	?	64·5	?	25·1	84·2	13th	44·7	21st	39·5
	Midnapore	149	29·945	?	30·049	30·022	4th	29·875	31st	·147	62·3	81·3	?	56·3	?	68·9	?	25·0	88·3	13th	49·2	25th	39·1

* Mean of 22 days.
† ,, ,, 21 ,,
‡ ,, ,, 24 ,,
§ ,, ,, 28 ,,

I.

Stations in India, Burma, etc., in January 1895.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 31st January 1895.	Normal rainfall for period, 1st January to 31st January.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·89	0·33	+0·03	...	...	...	...	**I.—Burma Coast and Bay Islands.**	
...	12	12	2	...	...	...	2	3	6·9	7·0	− 1	83	·799	2·9	0	?	?	0	0·81	− 0·81	0	0·81	− 0·81	0	Port Blair .	Bay Islands.
...	...	14	14	...	...	...	...	...	?	?	?	73	·794	3·4	4	?	?	5·98	?	?	5·98	?	?	4·10	Camorta‡ .	
...	8	6	4	4	3	2	1	3	1·8	2·0	−10	81	·739	4·2	6	?	?	2·87	0·61	+ 2·26	2·87	0·61	+ 2·26	1·28	Mergui .	Tenasserim.
30	...	...	...	...	...	...	...	1	1·2	?	?	90	·678	0·5	0	?	?	0	?	?	0	?	?	0	Tavoy.	
...	1	16	9	2	...	1	2	...	1·6	2·4	−33	84	·599	2·6	0	0·09	−0·09	0	0·51	− 0·51	0	0·51	− 0·51	0	Moulmein.	
13	14	...	...	...	...	...	...	4	1·4	1·9	−26	89	·495	0·3	0	0·27	−0·27	0	0·12	− 0·12	0	0·12	− 0·12	0	Toungoo.	
...	9	6	1	2	1	4	5	3	4·1	4·3	− 5	81	·540	1·6	0	0·27	−0·27	0	0·17	− 0·17	0	0·17	− 0·17	0	Rangoon .	Lower Burma.
11	4	8	...	2	...	...	...	6	4·7	2·9	+62	89	·566	1·7	0	0	0	0	0·17	− 0·17	0	0·17	− 0·17	0	Bassein.	
1	14	10	1	...	...	...	...	5	10·1	6·6	+53	74	·650	2·5	0	0·44	−0·44	0	0·18	− 0·18	0	0·18	− 0·18	0	Diamond Island.	
...	27	3	...	...	...	...	...	1	3·4	2·6	+31	87	·489	0·5	0	0·18	−0·18	0	0·08	− 0·08	0	0·08	− 0·08	0	Akyab .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·01	0·02	−0·02	...	...	...	...	**II.—Burma Inland.**	
...	6	7	5	2	2	2	3	4	2·3	2·4	−4	72	·403	0	0	0	0	0	0·02	− 0·02	0	0·02	−0·02	0	Thayetmyo .	Central Burma.
12	3	...	...	...	...	...	3	13	4·5	?	?	72	·437	0·1	0	?	?	0	?	?	0	?	?	0	Minbu.	
11	7	1	...	5	1	...	...	6	3·0	?	?	81	·416	0·1	0	?	?	0	?	?	0	?	?	0	Yamethin.	
18	...	...	...	7	6	...	...	...	?	?	?	78	·258	0·8	0	?	?	0	?	?	0	?	?	0	Taunggyi .	
23	4	...	1	...	2	1	...	...	1·3	?	?	78	·449	0	0	?	?	0	?	?	0	?	?	0	Mandalay .	Upper Burma.
25	2	...	...	...	1	1	..	2	1·6	?	?	95	·429	0·8	0	?	?	0·02	?	?	0·02	?	?	0·02	Kindat.	
...	13	17	...	1	...	...	...	...	?	?	?	88	·342	2·9	0	?	?	0	?	?	0	?	?	0	Lashio.	
26	1	2	...	...	...	...	...	2	1·0	?	?	96	·400	2·7	0	?	?	0·04	?	?	0·04	?	?	0·04	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·64	0·90	−0·26	...	...	...	...	**III.—Assam.**	
30	...	...	...	...	...	1	...	...	0·7	2·0	−65	94	·458	3·6	1	1·91	−0·91	0·16	0·77	− 0·61	0·16	0·77	− 0·61	0·16	Silchar .	Assam (Surma),
17	...	8	...	3	1	2	...	...	2·6	1·8	4	9	*	4·2	*	4·09	+2·91	1·58	1·48	+ 0·10	1·58	1·48	+ 0·10	0·40	Sibsagar .	Brahmaputra.
8	6	5	3	3	1	2	3	...	2·3	3·9	−	4			9	29	− ·29	·15	·41	− ·26	0·18	0·44	− 0·26	0·08	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	·16	43	−0·26	...	...	...	...	**IV.—Bengal and Orissa.**	
...	9	18	2	1	...	1	...	...	2·5	3·7	−32	88	·478	1·0	0	0·82	−0·82	0	0·39	− 0·39	0	0·39	− 0·39	0	Chittagong .	East Bengal.
...	...	...	...	...	...	...	...	...	?	?	?	70†	·330†	?	0	?	?	0	?	?	0	?	?	0	Lungleh.	
...	10	14	2	...	...	1	...	4	2·9	?	?	89	·490	0·6	0	1·10	−1.10	0	0·62	− 0·62	0	0·62	− 0·62	0	Noakhali.	
24	7	...	..	...	...	...	...	...	1·0	?	?	91	·495	0·6	0	1·53	−1·53	0	0·68	− 0·68	0	0·68	− 0·68	0	Comilla.	
22	3	...	...	...	...	1	2	3	1·1	?	?	91	·426	1·3	1	1·11	−0.11	0·10	0·45	− 0·35	0·10	0·45	− 0·35	0·10	Sirajganj.	
12	6	5	2	...	...	...	...	6	2·6	2·1	+24	87	·460	1·6	0	1·09	−1·09	0·02	0·32	− 0·30	0·02	0·32	− 0·30	0·02	Narayanganj.	
24	3	3	1	...	...	...	...	...	1·9	?	?	86	·469	1·0	0	1·30	−1·30	0·05	0·77	− 0·72	0·05	0·77	− 0·72	0·05	Barisal.	
7	4	9	4	...	...	...	3	4	1·8	?	?	92	·431	2·1*	2	0·80	+1·20	0·29	0·38	− 0·09	0·29	0·38	− 0·09	0·15	Mymensingh.	
23	7	1	...	...	...	...	...	...	1·0	?	?	88	·464	1.1	0	0·85	−0·85	0·07	0·34	− 0·27	0·07	0·34	− 0·27	0·07	Faridpur .	Deltaic Bengal.
25	4	1	...	...	...	...	...	1	1·5	1·6	− 6	88	·446	0·7	1	0·82	+0·18	0·28	0·49	− 0·21	0·28	0·49	− 0·21	0·28	Jessore.	
18	8	2	...	1	...	...	...	2	2·1	3·0	−30*	86	·449	1·3	0	0·82	−0·82	0	0·38	− 0·38	0	0·38	− 0·38	0	Calcutta.	
...	10	14	1	...	2	1	...	3	7·6	6·3	+21	91	·523	2·2	0	1·00	−1·00	0	0·23	− 0·23	0	0·23	− 0·23	0	Saugor Island.	
2	2	2	2	1	2	3	8	9	2·8	?	?	80	·415	2·1	1	0·80	+0·20	0·48	0·30	+ 0·18	0·48	0·30	+ 0·18	0·48	Krishnagar.	
7	15	6	...	...	...	...	...	3	2·7	?	?	69	·398	1·3	0	1·00	−1·00	0	0·61	− 0·61	0	0·61	− 0·61	0	Midnapore.	

* Mean of 22 days. † Mean of 23 days.

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal.	Bankura	298	29·763	?	30·030	29·831	4th	29·698	31st	·133	60·8	78·6	?	55·5	?	67·1	?	23·1	87·1	12th	48·8	20th	38·3
	Raniganj	334	29·746	?	30·052	29·817	4th	29·683	31st	·134	58·1	77·4	?	54·8	?	66·1	?	22·6	85·6	12th	49·2	20th	36·4
	Burdwan	99	29·881	−·010	30·034	30·059	4th	29·911	31st	·148	59·1	77·4	−1·1	55·7	+1·0	66·5	−0·1	21·7	85·1	13th	48·1	20th	37·0
	Naya Dumka	489	29·577	?	30·058	29·670	15th	29·494	31st	·176	58·2	75·0	?	52·3	?	63·7	?	22·7	83·6	12th	45·7	30th	37·9
	Berhampore	67	30·016	−·007	30·035	30·094	4th	29·946	31st	·148	59·1	75·2	−1·6	55·1	+1·8	65·2	+0·1	20·1	83·6	13th	49·6	21st	34·0
	Rampur Boalia.	70	29·999	?	30·022	30·098	4th	29·936	31st	·162	59·6	74·3	?	53·0	?	63·6	?	21·3	81·6	13th	47·6	28th	34·0
	Malda	72	29·997	?	30·026	30·093	4th	29·926	12th	·167	56·8	75·0	?	49·8	?	62·5	?	25·2	81·8	13th	45·2	19th	36·6
	Bogra	61	30·004	?	30·021	30·086	4th	29·940	13th	·146	57·8	74·6	−1·1	51·8	+0·2	63·3	−0·5	22·8	80·3	13th	46·4	19th	33·9
North Bengal	Dinajpur	123	29·944	?	30·031	30·039	4th	29·862	13th	·177	55·0	74·4	−0·9	50·2	+1·0	62·3	+0·1	24·2	79·5	12th	45·5	19th & 20th.	34·0
	Rangpur	123	29·943	?	30·029	30·041	4th	29·863	13th	·178	55·0	74·0	?	49·7	?	61·9	?	24·3	78·8	13th	44·0	20th	34·8
	Jalpaiguri	284	Observations not reliable and incomplete.																				
Orissa	Balasore	56	30·027	−·004	30·031	30·094	4th	29·961	31st	·133	62·6	80·7	+0·6	57·4	+1·7	69·0	+1·2	23·3	85·9	13th	49·4	25th	36·5
	False Point	21	30·052	−·014	30·015	30·119	4th	29·975	31st	·144	66·3	79·5	+0·7	58·4	−0·5	69·0	+0·1	21·1	86·4	14th	52·5	21st & 26th.	33·9
	Cuttack	80	29·992	−·014	30·018	30·050	4th	29·925	31st	·125	64·9	84·2	−0·4	62·0	+2·1	73·1	+0·9	22·2	88·2	17th	57·1	25th & 26th.	31·1
	Shortt's Island	?	30·061	?	?	30·141	4th	29·985	31st	·156	71·3	78·0	?	66·7	?	72·3	?	11·3	84·6	13th	62·6	29th	22·0
	Puri	24	30·055	?	30·010	30·118	4th	29·988	17th & 31st.	·130	68·1	79·5	?	64·3	?	71·9	?	15·2	82·6	9th	59·6	25th & 26th.	23·0
V.—Gangetic Plain and Chota Nagpur.		...	...	−·002	...	...	...	...	...	...	...	73·0	−0·8	51·0	+1·9	62·0	+0·6	22·1	...	...	...	...	35·9
Chota Nagpur	Hazaribagh	2,007	28·006	−·007	30·059	28·083	4th	27·947	31st	·136	56·8	72·9	+0·1	51·2	+0·7	62·1	+0·4	21·7	81·8	12th	43·0	24th	38·8
	Ranchi	2,128	27·896	+·018	30·066	27·975	4th	27·839	31st	·136	57·6	73·9*	+0·2	52·2†	+2·1	63·4*	+1·2	21·7	81·9	13th	44·7	24th	37·2
	Daltonganj	730?	29·333	?	30·064	29·401	3rd	29·262	31st	·139	57·6	74·6	?	50·2	?	62·4	?	24·4	82·4	13th	42·0	19th	40·4
	Chaibassa	760	29·294	+·012	30·045	29·363	4th	29·241	31st	·122	59·9	80·8	+0·4	55·1	+1·6	67·9	+1·0	25·7	87·6	13th	47·6	25th	40·0
Bihar (South)	Gaya	375	29·708	+·002	30·061	29·779	4th	29·637	31st	·142	58·1	75·8	+0·1	52·3	+0·8	64·1	+0·5	23·5	83·8	12th	47·4	27th	36·4
	Dehri	351	29·732	?	30·060	29·806	3rd	29·655	31st	·151	60·2	75·4	?	54·4	?	64·9	?	21·0	83·3	12th	50·6	24th	32·7
	Patna	183	29·902	−·009	30·049	29·995	15th	29·827	12th	·168	57·9	72·8	+0·1	52·2	+2·3	62·5	+1·2	20·6	79·9	12th	45·4	20th	34·5
	Arrah	190	29·887	?	30·043	29·979	4th	29·822	12th	·157	55·3	73·9	?	51·0	?	62·5	?	22·9	80·7	11th	45·8	20th & 24th.	34·9
	Buxar	239	29·841	?	30·051	29·920	4th	29·767	31st	·153	58·5	73·7	?	51·8	?	62·8	?	21·9	80·6	11th	44·4	27th	36·2
Bihar (North)	Purnea	125	29·945	−·009	30·034	30·040	4th	29·872	13th	·168	53·3	73·5	−1·2	49·7	+1·8	61·7	+0·3	23·8	78·0	13th	45·3	21st	32·7
	Bhagalpur	160	29·906	?	30·027	30·000	4th	29·837	12th	·163	58·2	74·1	?	50·8	?	62·5	?	23·3	81·8	13th	44·8	20th	37·0
	Darbhanga	166	29·905	−·009	30·036	29·997	4th	29·831	12th	·166	55·8	72·5	+0·3	53·2	+1·1	62·9	+0·7	19·3	78·6	12th	48·9	19th	29·7
	Muzaffarpur	178	29·901	?	30·046	29·984	4th	29·821	12th	·163	55·0	72·3	?	50·3	?	61·3	?	22·0	78·7	13th	45·3	20th	33·4
	Motihari	224	29·841	?	30·039	29·931	4th	29·764	12th	·167	54·0	72·3	?	46·5	?	59·4	?	25·8	79·8	12th	41·0	19th	38·8
	Chapra	181	29·895	?	30·043	29·986	4th	29·825	12th	·161	55·0	73·1	?	52·0	?	62·5	?	21·1	79·3	13th	47·5	19th & 20th.	31·8
N.-W. P. (Eastern Districts).	Benares	267	29·814	+·002	30·056	29·897	4th	29·718	31st	·179	54·5	73·2	−1·2	50·1	+2·1	61·7	+0·5	23·1	80·6	12th	44·5	25th & 27th.	36·1
	Allahabad	309	29·772	0	30·057	29·870	4th	29·688	31st	·182	56·1	72·9	−1·1	51·3	+3·6	62·1	+1·3	21·6	82·2	8th	44·4	20th & 25th.	37·8
N.-W. P. (East Submontane).	Gorakhpur	256	29·800	−·012	30·033	29·890	4th	29·730	12th	·160	55·7	70·5	−2·7	50·8	+1·9	60·7	−0·4	19·7	78·0	12th	44·3	14th	33·7
Oudh (South)	Lucknow	368	29·699	−·008	30·054	29·769	4th	29·616	31st	·153	54·6	70·2	−3·6	48·8	+2·4	59·5	−0·6	21·4	80·4	11th	41·5	28th	38·9
Oudh (North)	Bahraich	403	29·669?	?	30·063?	29·724	4th	29·612	31st	·112	53·2	70·4	?	49·1	?	59·8	?	21·3	79·9	12th	42·5	14th	37·4
N.-W. Provinces (Central).	Cawnpore	416	29·658	?	30·059	29·757	4th	29·542	21st	·215	54·9	70·2	?	49·8	?	60·0	?	20·4	78·7	11th	42·0	29th	36·7
	Mainpuri	516	29·553?	?	30·063?	29·640	4th	29·411	21st	·229	51·9	67·7	?	48·4	?	58·1	?	19·3	75·3	8th	41·6	14th	33·7

* Mean of 24 days. † Mean of 30 days.

I—*continued.*

in India, Burma, etc., in January 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 31st January 1895.	Normal rainfall for period, 1st January to 31st January.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
23	1	...	1	...	...	...	4	2	1·0	P	P	75	·404	1·7	1	1·10	−0·10	0·11	0·37	− 0·26	0·11	0·37	− 0·26	0·11	Bankura .	Central Bengal.
20	4	1	...	...	...	...	1	5	1·3	P	P	78	·384	2·0	1	1·05	−0·05	0·79	0·33	+ 0·46	0·79	0·33	+ 0·46	0·75	Raniganj.	
14	4	4	1	...	...	...	1	7	1·4	1·8	−22	78	·394	1·7	1	0·27	+0·73	1·20	0·23	+ 0·97	1·20	0·23	+ 0·97	1·20	Burdwan.	
3	4	1	1	...	...	...	5	17	2·6	P	P	77	·371	1·5	1	1·28	−0·28	0·19	0·58	− 0·39	0·19	0·58	− 0·39	0·13	Naya Dumka.	
5	2	1	3	...	...	6	9	5	1·3	1·8	−28	88	·437	1·6	1	0·73	+0·27	0·19	0·39	− 0·20	0·19	0·39	− 0·20	0·15	Berhampore.	
16	5	...	...	...	2	2	4	2	3·2	P	P	87	·438	1·1	1	0·80	+0·20	0·13	0·40	− 0·27	0·13	0·40	− 0·27	0·10	Rampur Boalia.	
5	...	...	...	...	...	1	8	17	2·0	P	P	89	·411	1·1	1	0·90	+0·10	0·24	0·43	− 0·19	0·24	0·43	− 0·19	0·18	Malda.	
16	10	...	1	...	...	...	3	1	1·2*	P	P	87	·419	0·7	1	0·85	+0·15	0·23	0·45	− 0·22	0·23	0·45	− 0·22	0·16	Bogra.	
...	2	2	1	1	1	5	14	5	2·4	P	P	89	·384	1·1	1	0·90	+0·10	0·20	0·40	− 0·20	0·20	0·40	− 0·20	0·15	Dinajpur .	North Bengal.
5	3	7	1	1	3	6	3	2	1·8	P	P	94	·409	2·9	0	0·75	−0·75	0·05	0·58	− 0·53	0·05	0·58	− 0·53	0·04	Rangpur.	
												Observations not reliable and incomplete.													Jalpaiguri.	
5	11	1	1	...	...	1	2	10	2·3	P	P	84	·487	0·8	0	0·75	−0·75	0	0·49	− 0·49	0	0·49	− 0·49	0	Balasore .	Orissa.
2	18	2	1	...	...	...	1	7	6·0	6·0	0	90	·583	1·6	1	0·82	+0·18	0·13	0·63	− 0·50	0·13	0·63	− 0·50	0·13	False Point.	
24	...	3	1	...	...	1	1	1	1·2	1·4	−14	86	·531	1·8	0	0·45	−0·45	0	0·23	− 0·23	0	0·23	− 0·23	0	Cuttack.	
...	7	8	1	...	1	1	5	8	9·0	P	P	79	·602	0·8	0	P	P	0	P	P	0	P	P	0	Shortt's Island.	
8	12	8	...	...	...	2	...	1	5·4†	P	P	85	·592	0·9	0	0·50	−0·50	0	0·25	− 0·25	0	0·25	− 0·25	0	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·82	0·70	+0·11	...	...	...	...	**V.—Gangetic Plain and Chota Nagpur.**	
6	3	...	1	...	4	3	4	10	7·3	4·9	+49	73	·328	2·7	2	1·27	+0·73	0·43	0·55	− 0·12	0·43	0·55	− 0·12	0·23	Hazaribagh.	Chota Nagpur.
21	1	...	...	...	...	1	1	7	5·6	P	P	76	·346	1·2	1	1·53	−0·53	0·25	0·56	− 0·31	0·25	0·56	− 0·31	0·17	Ranchi.	
...	5	...	1	..	...	8	5	12	1·8	P	P	80	·381	2·2	2	P	P	0·77	P	P	0·77	P	P	0·40	Daltonganj.	
7	1	3	...	...	...	5	12	2	1·1	P	P	86	·450	1·9	2	1·55	+0·45	0·43	0·73	− 0·30	0·43	0·73	− 0·30	0·31	Chaibassa.	
...	...	...	...	2	16	6	6	1	5·6	1·6	+250?	84	·409	2·5	2	1·09	+0·91	0·40	0·62	− 0·22	0·40	0·62	− 0·22	0·20	Gaya . .	Bihar (South).
...	...	...	2	1	4	16	6	2	6·3	P	P	82	·433	1·8	1	1·43	−0·43	0·61	0·62	− 0·01	0·61	0·62	− 0·01	0·55	Dehri.	
4	...	...	1	...	3	10	12	1	3·5	2·0	+75	81	·395	1·8	2	1·18	+0·82	0·55	0·66	− 0·11	0·55	0·66	− 0·11	0·42	Patna.	
...	4	1	...	1	3	8	8	6	3·1	P	P	84	·378	2·3	1	1·70	−0·70	0·46	0·71	− 0·25	0·46	0·71	− 0·25	0·39	Arrah.	
...	...	1	3	1	1	8	15	2	2·7	P	P	78	·390	2·5	1	1·80	−0·80	0·43	0·79	− 0·36	0·43	0·79	− 0·36	0·39	Buxar.	
11	...	...	2	1	1	10	3	3	3·3	1·7	+94	92	·378	1·2	0	0·55	−0·55	0·17	0·60	− 0·43	0·17	0·60	−0·43	0·07	Purnea .	Bihar (North).
3	...	...	...	3	9	5	11	...	3·2	P	P	80	·390	1·5	1	1·30	−0·30	0·23	0·48	− 0·25	0·23	0·48	−0·25	0·12	Bhagalpur.	
5	2	...	1	1	...	6	10	6	3·5	2·3	+52	88	·393	2·0	2	1·27	+0·73	0·53	0·69	− 0·16	0·53	0·69	−0·16	0·30	Darbhanga.	
12	...	...	...	1	...	8	9	1	3·1	P	P	92	·401	1·7	2	1·53	+0·47	0·72	0·79	− 0·07	0·72	0·79	−0·07	0·45	Muzaffarpur.	
7	1	...	2	...	...	10	11	...	5·3	P	P	92	·384	2·1	2	1·41	+0·59	0·47	0·65	− 0·18	0·47	0·65	−0·18	0·26	Motihari.	
3	...	1	...	1	2	9	12	3	4·1	P	P	90	·391	2·4	1	1·70	−0·70	0·46	0·66	− 0·20	0·46	0·66	−0·20	0·43	Chapra.	
14	...	...	3	1	1	10	2	...	3·1	2·9	+7	92	·396	2·5	1	1·55	−0·55	0·87	0·79	+ 0·08	0·87	0·79	+0·08	0·83	Benares .	N.-W. P. (Eastern Districts).
4	1	3	3	3	1	3	9	4	4·4	1·9	+132	88	·402	2·9	3	2·09	+0·91	0·92	0·85	+ 0·07	0·92	0·85	+0·07	0·55	Allahabad.	
2	3	1	1	1	3	4	10	6	1·5	1·7	−12	82	·372	2·8	3	1·18	+1·82	0·83	0·84	− 0·01	0·83	0·84	−0·01	0·32	Gorakhpur .	N.-W. P. (East Submontane).
6	2	4	1	1	1	5	6	5	1·4	2·4	−42	88	·380	4·3	4	1·64	+2·36	1·73	1·10	+ 0·63	1·73	1·10	+0·63	0·57	Lucknow .	Oudh (South).
1	6	...	1	3	...	5	4	11	3·4	P	P	90	·372	1·0	5	P	P	1·65	0·86	+ 0·79	1·65	0·86	+0·79	0·59	Bahraich .	Oudh (North).
9	1	2	2	1	...	1	11	4	3·9	P	P	87	·381	3·0	4	1·40	+2·60	2·03	0·64	+ 1·39	2·03	0·64	+1·39	0·87	Cawnpore .	N.-W. Provinces (Central).
14	4	2	1	1	1	1	7	...	0·6	P	P	85	·339	4·0	4	P	P	3·01	0·61	+ 2·40	3·01	0·61	+2·40	1·14	Mainpuri.	

* Mean of 26 days.
† ,, ,, 29 ,,

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
VI.—Upper Sub-Himalayas		...	...	+·005	...	...	...	...	...	...	...	63·8	−4·1	44·7	+1·0	54·3	−1·6	19·2	...	...	...	...	32·6
N.-W. Provinces (Submontane).	Bareilly .	568	29·480	−·001	30·057	29·575	4th	29·392	21st	·183	50·9	67·2	−3·1	48·1	+2·0	57·7	−0·6	19·1	74·2	12th	40·2	13th	34·0
	Dehra Dun .	2,233	27·761	−·007	30·084	27·865	4th	27·650	21st	·215	47·2	63·2	−2·4	44·9	+0·2	54·1	−1·1	18·3	69·5	6th	38·0	23rd	31·5
	Roorkee .	887	29·139	−·005	30·065	29·231	4th	29·007	21st	·224	48·6	65·1	−4·4	47·0	+2·7	56·1	−0·9	18·1	71·8	6th	40·0	29th	31·8
	Meerut .	738	29·303	−·004	30·066	29·403	4th	29·151	21st	·252	49·0	66·2	−3·9	47·3	+2·7	56·8	−0·6	18·9	72·6	7th	42·1	5 days	30·5
Punjab (Central)	Delhi .	718	29·335	−·001	30·074	29·454	4th	29·175	21st	·279	51·0	64·8	−6·2	47·9	−0·1	56·4	−3·2	16·9	72·5	7th	41·9	25th	30·6
	Lahore .	702	29·364	+·014	30·102	29·471	4th	29·181	21st	·290	44·9	63·3	−4·1	42·3	+0·9	52·8	−1·6	21·0	70·3	29th	35·2	14th	35·1
Punjab (Submontane).	Umballa .	962?	29·137	?	30·079	29·240	4th	28·938	21st	·302	48·3	64·1	?	44·0	?	54·1	?	20·1	72·0	7th	38·0	29th	34·0
	Ludhiana .	812	29·238	+·009	30·086	29·335	4th	28·989	21st	·346	48·3	61·5	−6·1	46·1	+2·4	53·8	−1·9	15·4	66·7	9th	39·4	13th	27·3
Punjab (North) .	Sialkot .	830	29·219	+·019	30·093	29·332	4th	29·045	21st	·287	46·2	62·5	−4·1	42·4	−0·4	52·5	−2·3	20·1	70·5	6th	36·8	14th	33·7
	Rawalpindi .	1,652	28·379	+·017	30·111	28·501	4th	28·241	21st	·260	40·5	60·5	−2·8	36·7	−1·2	48·6	−2·0	23·8	69·1	28th & 29th.	31·9	13th & 20th.	37·2
VII.—Indus Valley and N.-W. Rajputana.		...	...	+·005	...	...	...	...	...	...	...	69·0	−3·1	42·9	−1·7	56·0	−2·5	26·0	...	...	...	...	42·8
Punjab (West) .	Peshawar .	1,110	28·983	+·009	30·131	29·115	4th	28·770	21st	·345	40·4	62·2	−1·7	37·4	−2·0	49·8	−1·9	24·8	71·2	28th	31·9	11th	39·3
	Mardan .	?				Not recorded.					39·0	67·5	?	33·7	?	50·6	?	33·8	72·0	1st & 29th.	28·0	20th & 27th.	44·0
	Khushab .	612	29·458?	?	30·102?	29·576	12th	29·273	21st	·303	44·6	?	?	41·3	?	?	?	?	?	...	31·0	29th	?
	Montgomery	558	29·521	?	30·099	29·629	4th	29·315	21st	·314	45·4	65·8	?	40·7	?	53·3	?	25·1	72·3	29th & 30th	31·5	14th & 15th.	40·8
	D. I. Khan .	573	29·514	+·005	30·118	29·636	4th	29·346	21st	·290	42·3	67·4	−1·7	38·4	−2·2	52·9	−2·0	29·0	78·2	29th	31·0	14th & 15th.	47·2
	Mooltan .	420	29·684	+·003	30·113	29·786	4th	29·529	21st	·257	46·7	67·6	−2·2	43·1	+0·4	55·3	−0·9	24·5	75·3	3 days	36·6	15th	38·7
	Sirsa . .	662	29·399	+·003	30·085	29·505	4th	29·168	21st	·337	46·8	66·3	−4·6	43·7	+1·2	55·0	−1·7	22·6	73·5	29th	34·7	15th	38·8
Sind and Cutch .	Jacobabad .	186	29·935	+·025	30·100	30·041	4th	29·788	31st	·253	47·1	69·6	−3·7	41·5	−1·6	55·5	−2·7	28·1	77·9	30th	31·5	15th	46·4
	Hyderabad .	117				Observations not recorded.																	
	Kurrachee .	49	30·068	+·014	30·071	30·170	16th	29·898	31st	·272	57·2	73·6	−3·0	51·4	−3·0	62·4	−3·0	22·2	82·5	30th	41·1	13th	41·4
	Bhuj* . .	395	29·658	−·021	30·032	29·763	23rd	29·519	30th	·244	57·5	76·0	−4·1	51·2	−3·7	63·6	−3·9	24·8	84·9	29th	42·5	13th	42·4
Rajputana (West)	Bickaneer .	753	29·308	?	30·083	29·414	4th	29·121	21st	·293	50·7	68·0	−3·9	47·4	−2·8	57·7	−3·4	20·6	77·6	31st	39·1	15th	38·5
	Pachpadra .	380	29·723	?	30·090	29·873	26th	29·579	13th	·294	53·6	75·3	?	45·3	?	60·3	?	30·0	83·6	30th	30·0?	1st	53·6
VIII.—East Rajputana, Central India and Gujarat.		...	...	−·006	...	...	...	...	...	...	...	75·3	−3·4	51·3	+0·7	63·3	−1·4	24·1	...	...	...	...	41·9
Rajputana (East)	Jeypore .	1,431	28·614	−·004	30·102	28·713	4th	28·421	21st	·292	51·3	69·5	−4·2	48·0	−0·4	58·8	−2·3	21·5	80·0	8th	38·7	13th	41·3
	Sambhar .	1,254	28·784	−·001	30·088	28·881	4th	28·604	21st	·277	51·0	69·1	−3·3	45·7	−0·4	57·4	−1·9	23·4	78·3	8th	38·0	4 days	40·3
	Ajmere .	1,611	28·437	−·004	30·121	28·528	23rd	28·272	21st	·256	50·3	69·4	−4·6	47·4?	+2·5?	58·4?	−1·1?	22·0?	78·4	31st	35·9	23rd	42·5
	Deesa . .	466	29·579	−·019	30·031	29·708	23rd	29·462	31st	·246	57·8	81·6	−1·0	51·2	−0·3	66·4	−0·7	30·4	90·7	29th	38·0	22nd	52·7
Kathiawar .	Rajkot .	429	29·624	−·004	30·029	29·746	22nd	29·525	30th	·221	60·3	80·6	−3·7	49·1	−2·1	64·9	−2·9	31·5	88·4	3 days	41·5	22nd	46·9
	Veraval .	?	30·031	?	29·991	30·175	22nd	29·955	26th	·220	63·4	79·8	?	57·9	?	68·8	?	21·9	84·6	14th & 18th.	47·3	22nd	37·3
Central India .	Nowgong .	757	29·311	−·009	30·074	29·399	23rd	29·187	21st & 31st.	·212	56·4	71·4	−4·0	51·2	+4·3	61·3	+0·2	20·2	79·6	8th & 9th,	43·1	23rd	36·5
	Indore .	1,823	28·190	−·010	30·051	28·289	23rd	28·092	31st	·197	57·0	77·3†	−1·7†	50·6	+0·3	63·7†	−0·7	26·7	86·7	30th	37·6	23rd	49·1
	Neemuch .	1,630	28·412	+·015	30·088	28·506	23rd	28·262	31st	·244	56·2	74·9	−2·5	50·3	+1·4	62·6	−0·6	24·6	84·8	30th	40·0	3 days	44·8
Gujarat . .	Surat . .	36	30·005	−·022	29·986	30·118	22nd	29·930	14th	·188	62·1	83·7	−2·6	56·1	−0·2	70·0	−1·4	27·6	89·6	27th	50·6	3 days	39·0
	Ahmedabad.	176	29·892	?	30·027	30·026	23rd	29·803	31st	·223	62·6	82·0	?	57·6	?	69·8	?	24·4	89·2	29th & 30th.	48·7	22nd	40·5
N.-W. P. (West) .	Agra . .	555	29·520	−·011	30·079	29·617	4th	29·353	21st	·264	51·9	68·1	−5·4	48·6	+0·1	58·4	−2·7?	19·5	76·1	8th	41·4	13th & 17th.	34·7
	Jhansi .	858	29·217	+·004	30·086	29·296	23rd	29·060	21st	·236	57·0	71·9	−4·1	52·8	+2·2	62·4	−1·0	19·1	83·0	8th	43·9	23rd	39·1

* Mean of 26 days. † Mean of 24 days.

I—*continued.*

in India, Burma, etc., in January 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.								Heaviest rainfall during month.	Station.	Meteorological Provinces or Districts.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 31st January 1895.	Normal rainfall for period, 1st January to 31st January.	Variation from normal of period.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·21	1·74	+1·47	...	...	...	...	VI.—Upper Sub-Himalayas.	
10	4	1	...	2	...	...	1	13	2·0	2·8	− 29	87	·330	3·6	5	2·36	+2·64	2·22	1·10	+1·12	2·22	1·10	+ 1·12	0·86	Bareilly .	N.-W. Provinces (Submontane).
28	1	1	...	1	...	...	...	...	1·1	1·8	− 39	87	·287	5·7	7	3·73	+3·27	3·69	2·54	+ 1·15	3·69	2·54	+ 1·15	1·37	Dehra Dun.	
16	...	...	1	1	...	...	2	11	2·7	2·2	+ 23	92	·320	4·8	9	2·73	+6·27	3·99	1·76	+ 2·23	3·99	1.76	+ 2·23	1·09	Roorkee.	
16	...	2	1	...	...	...	12	...	1·7	2·1	− 19	86	·305	4·7	6	2·45	+3·55	4·69	1·27	+ 3·42	4·69	1·27	+ 3·42	1·51	Meerut.	
21	...	...	2	1	...	...	6	1	0·6	3·0	− 80	80	·306	4·6	9	1·82	+7·18	3·76	1·24	+ 2·52	3·76	1·24	+ 2·52	1·28	Delhi . .	Punjab (Central).
18	2	...	...	2	...	...	6	3	1·7	1·9	− 11	87	·263	4·6	5	2·00	+3·00	1·96	1·06	+ 0·90	1·96	1·06	+ 0·90	0·50	Lahore.	
17	...	...	1	2	...	...	2	9	1·7	?	?	92	·311	4·5	8	?	?	2·53	1·15	+ 1·38	2·53	1·15	+ 1·38	0·76	Umballa .	Punjab (Submontane).
23	...	1	...	1	...	...	2	4	1·5	1·1	+ 36	88	·301	5·2	7	3·00	+4·00	2·81	1·97	+ 0·84	2·81	1·97	+ 0·84	0·81	Ludhiana.	
28	1	...	2	...	...	...	...	...	1·1	1·4	− 21	87	·278	3·8	6	2·36	+3·64	3·92	2·49	+ 1·43	3·92	2·49	+ 1·43	0·95	Sialkot .	Punjab (North).
22	...	...	1	...	1	1	3	3	0·6	1·9	− 68	90	·232	4·5	4	4·00	0	2·51	2·84	− 0·33	2·51	2·84	− 0·33	0·94	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·67	0·56	+0·02	...	...	...	...	VII.—Indus Valley and N.-W. Rajputana.	
5	1	...	1	3	11	8	1	1	3·7	2·5	+ 48	63	·161	4·3	0	2·73	−2·73	0·08	1·77	− 1·69	0·08	1·77	− 1·69	0·08	Peshawar	Punjab (West).
...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	3	?	?	1·59	?	?	1·59	?	?	0·90	Mardan.	
21	...	6	1	...	...	3	...	...	3·6*	?	?	67	·206	2·5	0	1·30	−1·30	0·10	0·52	− 0·42	0·10	0·52	− 0·42	0·05	Khushab.	
14	6	5	1	1	1	...	2	1	2·5	?	?	80	·247	4·0	2	0·90	+1·10	0·85	0·24	+ 0·61	0·85	0·24	+ 0·61	0·63	Montgomery.	
23	2	...	...	...	...	...	1	5	1·9	1·4	+ 36	59	·161	2·9	1	1·45	−0·45	0·16	0·53	− 0·37	0·16	0·53	− 0·37	0·16	D. I. Khan.	
16	1	11	1	2	...	...	...	...	0·9	1·7	− 47	71	·240	4·2	2	1·27	+0·73	0·61	0·48	+ 0·13	0·61	0·48	+ 0·13	0·45	Mooltan.	
11	3	1	2	3	...	...	5	6	3·9	2·6	+ 50	85	·277	5·0	5	1·36	+3·64	1·97	0·90	+ 1·07	1·97	0·90	+ 1·07	0.50	Sirsa.	
22	5	1	1	...	...	...	...	2	2·2	2·1	+ 5	59	·193	4·4	2	0·73	+1·27	0·53	0·25	+ 0·28	0·53	0·25	+ 0·28	0·27	Jacobabad .	Sind and Cutch.
...	...	...											O	bserva	tions	not	record	ed.							Hyderabad.	
...	...	30	1	...	...	...	...	...	9·4	10·0	− 6	58	·277	3·2	0	1·18	−1·18	0·24	0·72	− 0·48	0·24	0·72	− 0·48	0·08	Kurrachee.	
11	2	4	1	...	...	3	2	3	7·9	6·0	+ 32	59	·284	1·4	0	?	?	0	0·11	− 0·11	0	0·11	− 0·11	0	Bhuj.‡	
9	6	5	...	...	1	2	1	7	3·2	2·9	+ 10	75	·281	4·4	2	?		1·07	0·30	+ 0·77	1·07	0·30	+ 0·77	0·65	Bickaneer .	Rajputana (West).
24	1	5	...	...	...	...	...	1	9·6	2·8	+243	77	·316	5·0	3	?	?	0·80	0·37	+ 0·43	0·80	0·37	+ 0·43	0·40	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·47	0·38	+0·17	...	...	...	...	VIII.—East Rajputana, Central India and Gujarat.	
13	2	5	5	...	...	2	2	2	2·3	3·9	− 41	80	·309	4·4	2	1·60	+0·40	0·48	0·69	− 0·21	0·48	0·69	− 0·21	0·15	Jeypore .	Rajputana (East).
12	6	3	4	1	1	...	2	2	5·4	4·5	+ 20	79	·305	3·9	3	1·10	+1·90	0·67	0·47	+ 0·20	0·67	0·47	+ 0·20	0·19	Sambhar.	
22	...	4	...	1	2	1	1	...	2·0	1·9	+ 5	83	·311	3·3	3	1·45	+1·55	0·58	0·52	+ 0·06	0·58	0·52	+ 0·06	0·17	Ajmere.	
...	4	11	9	1	3	1	2	...	9·3	8·6	+ 8	51	·251	1·6	0	0·36	−0·36	0	0·17	− 0·17	0	0·17	− 0·17	0	Deesa.	
5	3	13	8	...	...	...	1	1	5·6	5·2	+ 8	49	·271	0·9	0	0·20	−0·20	0	0·04	− 0·04	0	0·04	− 0·04	0	Rajkot .	Kathiawar.
6	10	12	1	...	...	...	2	...	4·3	?	?	55	·329	1·6	0	?	?	0	?	?	0	?	?	0	Veraval.	
8	5	3	5	...	2	2	5	1	2·0	1·4	+ 43	86	·389	3·7	3	1·73	+1·27	1·64	0·65	+ 0·99	1·64	0·65	+ 0·99	0·63	Nowgong .	Central India.
12	5	6	...	...	5	2	1	...	2·6	2·5	+ 4	74	·356	3·7	1	0·36	+0·64	0·10	0·18	− 0·08	0·10	0·18	− 0·08	0·10	Indore.	
3	...	10	11	4	...	2	...	...	6·5	8·1	− 20	71	·327	3·5	1	0·45	+0·55	0·35	0·30	+ 0·05	0·35	0·30	+ 0·05	0·32	Neemuch.	
10	4	2	1	...	...	2	4	8	?	5·2	?	72	·412	1·0	0	0·18	−0·18	0	0·05	− 0·05	0	0·05	− 0·05	0	Surat . .	Gujarat.
2	2	13	7	2	...	...	1	2	5·4	?	?	55	·317	3·3	0	?	?	0	?	?	0	?	?	0	Ahmedabad.†	
3	1	5	...	3	...	8	...	11	3·1	3·5	− 11	83	·324	3·8	4	1·27	+2·73	1·04	0·53	+ 0·51	1·04	0·53	+0·51	0·35	Agra . .	N.-W. P. (West).
12	2	4	2	4	...	2	...	5	2·5	2·2	+ 14	6	·362	3·4	4	1·18	+2·82	1·20	0·59	+ 0·61	1·20	0·59	+0·61	0·50	Jhansi.	

* Mean of 29 days. † Wind direction for 29 days. ‡ Mean of 26 days.

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
IX.—Deccan	...	...	...	—·013	...	...	...	...	...	...	...	83·2	0	57·6	+2·5	70·4	+1·2	25·6	...	...	...	...	39·2
Bombay (Deccan)	Belgaum	2,524	27·473	—·011	29·973	27·527	4th	27·428	13th	·099	66·7	83·7	+0·6	58·2	+0·9	71·0	+0·8	25·5	87·8	18th	55·4	22nd & 23rd.	32·4
	Sholapur	1,590	28·427	—·019	30·003	28·497	4th	28·379	13th	·118	69·5	88·0	+0·6	61·1	+3·4	74·6	+2·0	26·9	92·7	25th	53·6	1st	39·1
	Poona	1,840	28·170	—·023	30·019	28·230	23rd	28·097	13th	·133	62·7	87·3	+2·2	55·8	+0·8	71·6	+1·5	31·5	91·5	31st	50·5	23rd	41·0
	Bijapur	1,946	28·061	?	29·994	28·121	5th	28·011	13th	·110	67·5	86·1	?	60·5	?	73·3	?	25·6	90·3	18th	54·1	6th	36·2
Khandesh	Malegaon	1,430	28·586	—·022	30·026	28·693	23rd	28·497	31st	·196	62·8	84·9	−0·2	54·5	+2·5	69·7	+1·2	30·4	89·9	29th & 30th.	43·9	23rd	46·0
	Ahmednagar	2,152	27·861	?	30·023	27·928	4th	27·792	13th	·136	62·9	83·4	?	53·2	?	68·3	?	30·2	86·3	4 days.	44·9	6th	41·4
Berar	Akola	930	29·089	—·024	30·012	29·190	23rd	29·011	31st	·179	63·1	86·2	+1·8	57·0	+3·6	71·6	+2·7	29·2	91·9	30th	45·2	23rd	46·7
	Amraoti	1,215	28·808	—·012	30·023	28·901	4th	28·741	31st	·160	65·2	83·9	−0·3	59·5	+2·2	71·7	+1·0	24·4	89·4	30th & 31st.	48·9	23rd	40·5
Central Provinces (West).	Khandwa	1,048	28·975	—·023	30·031	29·102	23rd	28·869	31st	·233	58·7	81·9	−1·4	54·6	+2·7	68·3	+0·7	27·3	90·2	31st	42·1	23rd & 24th	48·1
	Hoshangabad	1,020	29·026	—·013	30·059	29·148	23rd	28·898	31st	·250	59·0	78·1	−2·1	55·6	+3·2	66·9	+0·6	22·5	87·3	31st	42·8	23rd & 24th.	44·5
	Nagpur	1,025	29·006	—·016	30·033	29·092	23rd	28·923	31st	·169	62·6	?83·3*	−0·9*	57·2	+1·7	?70·5*	+0·4	26·1	87·8	31st	48·2	24th	39·8
Central Provinces (Central).	Chanda	634	29·408	—·015	30·015	29·501	23rd	29·337	31st	·164	64·7	86·1	+1·1	57·7	+3·1	71·9	+2·1	28·4	90·5	30th & 31st.	48·1	24th	42·4
	Seoni	2,033	27·993	—·004	30·055	28·071	4th	27·915	21st	·156	59·1	77·7	−1·2	?52·6	+1·2?	?65·2	0 ?	25·1?	82·1	4 days	42·0	24th	40·1
	Jubbulpore	1,327	28·712	—·008	30·065	28·789	23rd	28·607	31st	·182	58·3	76·8	−0·5	51·5	+3·2	64·2	+1·4	25·3	84·4	31st	38·4	24th	46·0
	Saugor	1,762	28·259	—·005	30·063	28·320	4th	28·135	31st	·185	56·8	74·7	−1·9	54·3	+2·9	64·5	+0·5	20·4	83·8	31st	42·0	23rd	41·8
Central Provinces (East).	Raipur	970	29·077	—·002	30·040	29·149	4th	29·012	31st	·137	64·0	82·4	+1·4	58·3	+3·1	70·4	+2·3	24·1	86·3	3 days	50·4	24th & 25th.	35·9
	Sutna	1,040	29·002	—·011	30·064	29·080	23rd	28·908	21st	·172	56·5	73·2	−1·4	51·7	+4·4	62·5	+1·5	21·5	82·5	22nd	43·2	3 days	39·2
	Sambalpur	463	29·590	+·004	30·027	29·666	4th	29·520	31st	·146	63·9	82·8	+0·8	56·8	+1·8	69·8	+1·3	26·0	86·0	30th & 31st.	48·2	25th	37·8
Hyderabad (North).	Aurangabad	?	28·169	?	...	28·234	23rd	28·113	14th	·121	67·3	85·4	?	56·6	?	71·0	?	28·8	89·4	29th	50·9	24th	38·5
	Indur	?	...	?	...	...	...	...	...	...	69·7	86·1	?	60·0	?	73·0	?	26·1	89·7	17th	53·2	1st	36·5
	Bidar	?	27·851	?	?	27·925	4th	27·799	14th	·126	66·8	83·4	?	61·3	?	72·3	?	22·1	87·1	19th	55·7	5th	31·4
Hyderabad (South).	Gulbarga	1,502	28·521	?	30·012	28·588	5th	28·469	13th	·119	67·8	86·6	?	60·1	?	73·4	?	26·5	90·2	19th	54·0	5th	36·2
	Raichur	1,378	28·645	?	29·999	28·705	4th & 5th.	28·605	13th	·100	69·8	87·3	?	64·8	?	76·1	?	22·5	91·6	21st	60·2	3rd	31·4
	Hyderabad (Deccan).	1,690	28·337	—·016	30·027	28·408	4th	28·288	31st	·120	65·5	84·6	+0·6	59·9	+2·0	72·3	+1·3	24·7	88·9	18th	53·8	12th	35·1
	Secunderabad	1,787	28·258	?	30·048	28·328	4th	28·206	31st	·122	64·8	84·8	?	59·9	?	72·4	?	24·9	89·1	31st	53·1	5th	36·0
	Khamamet	373	29·685	?	30·016	29·749	4th	29·634	31st	·115	68·3	84·6	?	65·9	?	75·3	?	18·7	91·0	25th	56·2	5th	34·8
X.—West Coast	...	...	...	—·014	...	...	...	...	...	...	...	85·5	−0·7	69·7	+0·7	77·6	0	15·7	...	...	...	...	24·2
Konkan	Bombay	37	29·997	—·003	29·975	30·097	22nd	29·913	13th	·184	70·2	80·8	−1·5	66·8	−1·0	73·8	−1·3	14·0	84·0	5th & 6th.	61·0	23rd	23·0
	Ratnagiri	110	29·897	—·008	29·949	29·988	22nd	29·849	13th	·139	72·1	84·9	−2·5	66·8	+0·6	75·9	−1·0	18·1	92·4	5th	62·4	23rd	30·0
	Mormugao	60	29·947	?	29·943	30·034	22nd	29·907	18th	·127	71·9	85·3	?	69·6	?	77·5	?	15·7	90·0	20th	66·3	1st & 23rd.	23·7
	Goa	23	30·016	—·006	29·953	30·107	22nd	29·967	18th	·140	73·6	83·2	?	71·1	?	77·2	?	12·1	87·5	1st & 21st,	67·0	16th & 24th.	20·5
	Karwar	44	29·969	—·007	29·946	30·049	22rd	29·935	17th	·114	69·0	85·8	−0·6	66·2	+0·4	76·0	−0·1	19·6	90·3	4th	61·6	1st	28·7
Malabar	Cochin	10	29·970	—·026	29·908	30·047	22nd	29·931	14th	·116	75·8	90·2	+1·5	73·0	+1·7	81·6	+1·6	17·2	93·3	31st	68·7	1st	24·6
	Calicut	27	29·968	—·026	29·925	30·031	22nd	29·931	14th	·100	76·2	87·6	?	71·0	?	79·3	?	16·6	89·8	31st	65·6	1st	24·2
	Mangalore	65	29·934	—·024	29·932	30·004	23rd	29·892	6th	·112	75·6	87·7	−0·2	71·1	+1·9	79·4	+0·9	16·6	91·8	21st	67·0	1st	24·8
	Trivandrum	198	29·778	?	29·909	29·858	22nd	29·729	14th	·129	75·5	83·9	?	72·1	?	78·0	?	11·8	87·0	20th	68·5	5 days	18·5
XI.—South India	...	...	...	—·014	...	...	...	...	...	...	...	84·5	+0·6	65·3	+1·0	74·9	+0·8	19·3	...	...	...	...	27·0
Madras (South)	Pamban	37	29·984	?	29·948	30·049	22nd	29·945	2nd	·104	77·8	82·4	?	75·3	?	78·9	?	7·1	88·3	14th	72·2	24th	16·1
	Tinnevelly	168	29·868	?	29·968	29·929	22nd	29·825	14th	·104	74·8	88·5	?	71·7	?	80·1	?	16·8	91·2	4 days	67·9	1st	23·3
	Madura	447	29·582	?	29·975	29·629	22nd	29·529	6th	·100	73·7	87·1	−0·7	68·9	+0·3	78·0	−0·2	18·2	89·4	20th	64·2	30th & 31st.	25·2

* Mean of 23 days.

I—*continued.*

in India, Burma, etc., in January 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 31st January 1895.	Normal rainfall for period from 1st January to 31st January.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·15	0·34	−0·14	...	...	...	...	IX.—Deccan.	
11	2	2	9	7	...	...	...	...	7·3	10·9	− 33	65	·424	0·5	0	0·27	−0·27	0	0·06	− 0·06	0	0·06	− 0·06	0	Belgaum .	Bombay (Deccan).
3	1	2	4	19	2	...	...	...	10·4	7·1	+ 46	56	·407	0·9	0	0·36	−0·36	0	0·11	− 0·11	0	0·11	− 0·11	0	Sholapur.	
17	...	...	4	2	...	...	2	6	5·6	5·7	− 2	64	·371	1·1	0	0·36	−0·36	0	0·06	− 0·06	0	0·06	− 0·06	0	Poona.	
2	...	1	12	11	1	1	2	1	4·8	?	?	79	·541	0·9	0	0·20	−0·20	0	?	?	0	?	?	0	Bijapur.	
4	2	2	...	...	...	1	10	12	7·9	3·9	+103	70	·400	2·4	0	0·27	−0·27	0	0·16	− 0·16	0	0·16	− 0·16	0	Malegaon .	Khandesh.
12	2	3	...	7	1	1	1	4	6·4	?	?	72	·424	1·3	0	?	?	0	?	?	0	?	?	0	Ahmednagar.	
7	...	5	8	4	2	1	1	3	4·3	3·4	+ 26	59	·344	1·6	0	0·45	−0·45	0·01	0·43	− 0·42	0·01	0·43	− 0·42	0·01	Akola .	Berar.
...	1	9	4	10	3	2	2	...	4·4	3·2	+ 38	58	·368	1·4	0	0·55	−0·55	0·03	0·39	− 0·36	0·03	0·39	− 0·36	0·03	Amraoti.	
5	2	8	7	3	...	1	3	2	5·1	2·8	+ 82	73	·364	2·5	1	0·45	+0·55	0·12	0·31	− 0·19	0·12	0·31	− 0·19	0·12	Khandwa .	Central Provinces (West).
5	...	14	8	2	1	...	...	1	4·2	2·5	+ 68	80	·414	3·7	2	0·82	+1·18	0·55	0·25	+ 0·30	0·55	0·25	+ 0·30	0·30	Hoshangabad.	
26	3	1	1	...	...	...	...	...	3·6?	3·1	+ 16	73	·421	1·9	0	0·64	−0·64	0	0·55	− 0·55	0	0·55	− 0·55	0	Nagpur.	
7	4	2	10	5	...	...	...	3	2·8	2·1	+ 33	68	·427	1·1	0	?	?	0·02	0·37	− 0·35	0·02	0·37	− 0·35	0·02	Chanda .	Central Provinces (Central).
...	...	...	...	...	...	...	...	...	?	2·7	?	82	·420	1·9	0	1·18	−1·18	0·04	0·63	− 0·59	0·04	0·63	− 0·59	0·04	Seoni.	
6	2	9	...	7	3	1	2	1	2·5	2·2	+ 14	80	·395	3·2	2	1·73	+0·27	0·70	0·76	− 0·06	0·70	0·76	− 0·06	0·35	Jubbulpore.	
11	1	7	3	4	3	1	...	1	3·0	2·8	+ 7	80	·374	2·7	2	1·36	+0·64	0·76	0·70	+ 0·06	0·76	0·70	+ 0·06	0·48	Saugor.	
23	3	4	...	...	...	1	...	...	2·2	2·6	− 15	69	·424	1·8	0	0·45	−0·45	0	0·20	− 0·20	0	0·20	− 0·20	0	Raipur .	Central Provinces (East).
6	8	1	4	5	...	...	4	3	4·8	4·0	+ 20	83	·380	2·9	3	1·73	+1·27	1·32	1·05	+ 0·27	1·32	1·05	+ 0·27	0·60	Sutna.	
...	16	14	...	...	...	...	...	1	2·5	1·6	+ 56	76	·455	1·4	0	?	?	0·11	0·30	− 0·19	0·11	0·30	− 0·19	0·08	Sambalpur.	
20	...	6	1	2	...	1	...	1	3·6	?	?	54	·368	1·7	1	?	?	0·20	0·19	+ 0·01	0·20	0·19	+ 0·01	0·13	Aurangabad .	Hyderabad (North).
8	2	...	8	5	5	2	...	1	5·1*	?	?	71	·519	0·4	0	?	?	0	0·05	− 0·05	0	0·05	− 0·05	0	Indur.	
...	...	...	3	7	7	7	6	1	7·1	?	?	79	·517	0·5	0	0	0	0	0	0	0	0	0	0	Bidar.	
13	...	3	8	4	2		...	...	7·7	?	?	63	·429	1·2	0	?	?	0	0·08	− 0·08	0	0·08	− 0·08	0	Gulbarga .	Hyderabad (South).
...	...	1	3	13	10	...	1	2	7·0	?	?	67	·491	0·6	0	?	?	0	?	?	0	?	?	0	Raichur.	
18	...	2	2	9	...	...	...	...	3·8	?	?	81	·514	1·0	0	?	?	0	0·09	− 0·09	0	0·09	− 0·09	0	Hyderabad (Deccan).	
2	...	2	15	10	1	1	...	...	5·8	3·8	+ 53	75	·460	1·1	0	?	?	0	?	?	0	?	?	0	Secunderabad	
21	...	...	2	7	1	...	...	...	5·7	?	?	85	·595	0·9	0	?	?	0	?	?	0	?	?	0	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	0·27	−0·19	...	...	...	...	X.—West Coast.	
...	9	10	9	2	1	...	...	...	9·7	10·1	− 4	74	·558	1·2	0	0·27	−0·27	0	0·13	− 0·13	0	0·13	− 0·13	0	Bombay .	Konkan.
7	4	6	2	10	2	...	...	...	4·9	9·8	− 50	73	·569	1·5	0	0·45	−0·45	0	0·22	− 0·22	0	0·22	− 0·22	0	Ratnagiri.	
...	6	3	13	7	1	...	...	1	8·9	?	?	84	·657	0·1	0	?	?	0	?	?	0	?	?	0	Mormugao.	
1	1	6	20	2	...	...	...	...	5·2	?	?	71	·594	0·1	0	?	?	0	0·25	− 0·25	0	0·25	− 0·25	0	Goa.	
...	...	15	16	...	...	...	...	...	4·7	?	?	84	·590	0·3	0	0·27	− 0·27	0	0·12	− 0·12	0	0·12	− 0·12	0	Karwar.	
2	4	19	4	2	...	...	...	...	5·4	?	?	73	·660	0·8	1	0·82	+0·18	0·32	0·59	− 0·27	0·32	0·59	− 0·27	0·25	Cochin .	Malabar.
3	3	10	8	7	...	...	...	...	10·9	?	?	78	·699	1·0	0	0·38	−0·38	0	0·08	− 0·08	0	0·08	− 0·08	0	Calicut.	
12	...	...	15	4	...	...	...	...	2·3	3·9	− 41	74	·656	0	0	0·10	- 0·10	0	0·09	− 0·09	0	0·09	− 0·09	0	Mangalore.	
13	2	6	3	2	...	2	...	3	3·8	?	?	75	·666	2·9	1	?	?	0·26	0·64	− 0·38	0·26	0·64	− 0·38	0·19	Trivandrum.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	0·38	−0·27	...	...	...	...	XI.—South India.	
...	7	20	4	...	...	...	...	...	12·8	?	?	79	·755	3·6	3	1·50	+1·50	1·41	1·80	− 0·39	1·41	1·80	− 0·39	0·80	Pamban. .	Madras (South).
...	11	3	...	...	...	...	1	16	5·9	?	?	77	·670	6·0	1	2·20	−1·20	0·44	?	?	0·44	?	?	0·44	Tinnevelly.	
3	12	8	...	...	...	...	...	8	4·3	5·4	− 20	78	·652	1·8	0	1·00	−1·00	0	0·33	− 0·33	0	0·33	− 0·33	0	Madura.	

* Mean of 29 days.

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras (South Central).	Salem	940	29·109	−·018	30·009	29·168	22nd	29·073	13th	·095	73·4	89·4	+1·2	65·2	+1·9	77·3	+1·6	24·2	92·4	25th	60·4	1st	32·0
	Coimbatore	1,348	28·675	−·007	29·996	28·730	20th	28·641	10th	·089	70·7	87·5	+0·9	65·3	+1·3	76·4	+1·1	22·2	90·4	18th & 24th.	61·1	21st & 29th.	29·3
Coorg	Mercara	3,781	26·291	?	...	26·343	20th & 22nd.	26·260	10th	·083	62·8	77·5	+1·4	57·9	+1·9	67·9	+1·7	19·9	81·5	18th	55·2	2nd	26·3
Mysore	Chitaldroog	2,405	27·622	?	29·983	27·663	22nd	27·572	13th	·091	69·6	84·3	?	61·7	?	73·0	?	22·6	88·1	19th	54·9	4th	33·2
	Bangalore	3,021	27·020	−·019	30·003	27·061	22nd	26·990	13th	·071	63·2	81·2	+1·9	57·7	+1·1	69·5	+1·5	23·5	84·8	18th & 19th.	53·4	1st & 30th.	31·4
	Hassan	3,091	26·953	?	29·968	27·004	20th	26·918	10th	·086	66·4	81·8	?	56·3	?	69·0	?	25·5	85·7	19th	51·3	21st	34·4
	Mysore	2,518	27·507	?	29·986	27·558	20th	27·474	10th	·084	67·5	83·8	?	60·6	?	72·4	?	23·6	86·9	18th & 19th.	55·9	1st	31·0
Madras (East Coast, South).	Negapatam	31	29·995	−·010	29·956	30·062	22nd	29·964	2nd	·098	76·5	81·4	−0·3	72·2	+1·6	76·8	+0·7	9·2	83·2	28th	67·7	25th & 31st.	15·5
	Cuddalore	12	30·028	?	29·970	30·081	20th	29·986	6th	·095	73·3	83·5	?	67·4	?	75·5	?	16·1	85·3	13th	62·3	23rd	23·0
	Trichinopoly	255	29·777	−·015	29·972	29·837	20th	29·737	2nd	·100	73·9	88·9	+1·7	68·0	+1·1	78·5	+1·4	20·9	91·0	3 days	62·9	30th	28·1
	Madras	22	30·030	−·019	29·983	30·076	22nd	29·997	13th & 17th.	·079	74·2	86·1	+1·5	67·1	−0·4	76·6	+0·6	19·0	88·0	20th	64·0	23rd	24·0
Madras (East Coast, Central).	Nellore	71	29·980	?	29·986	30·021	22nd	29·949	31st	·072	75·4	86·6	?	67·3	?	77·0	?	19·3	88·7	20th & 31st.	65·1	28th	23·6
	Masulipatam	15	30·055	?	30·005	30·107	4th	30·006	17th	·101	71·3	83·4	+0·1	65·3	−0·1	74·5	0	17·8	86·0	25th	62·7	18th	23·3
Madras (Central)	Cuddapah	433	29·607	?	29·991	29·651	4th	29·577	13th & 25th.	·074	73·6	89·1	?	65·9	?	77·5	?	23·2	94·1	24th	61·9	3rd	32·2
	Kurnool	923	29·108	?	30·001	29·165	4th	29·062	17th	·103	70·4	87·9	?	60·4	?	74·2	?	27·5	91·7	19th	53·2	4th	38·5
	Bellary	1,475	28·548	−·008	30·005	28·607	4th	28·501	13th	·106	69·2	87·2	−0·3	61·9	+1·4	74·6	+0·6	25·3	91·9	18th & 19th.	56·6	4th	35·3
Madras (East Coast, North).	Rajahmundry	112	29·945	?	29·998	29·994	4th	29·894	31st	·100	70·7	86·8	?	65·4	?	76·1	?	21·4	91·0	25th	61·0	4 days	30·0
	Cocanada	26	30·039	?	30·000	30·093	4th	29·986	31st	·107	70·5	80·7	?	66·0	?	73·3	?	14·7	85·7	31st	61·6	6th	24·1
	Vizagapatam	31	30·027	−·015	29·997	30·086	4th	29·966	31st	·120	71·8	78·5	−0·5	71·0	+0·7	74·8	+0·1‖	7·5	81·3	31st	65·5	1st	15·8
	Gopalpur	21	30·050	?	30·011	30·121	4th	29·977	31st	·144	66·5	80·3	?	62·5	?	71·4	?	17·8	83·2	31st	57·6	1st	25·6
XII.—Hill Stations.																							
Baluchistan	Shirino	?	...	...	...	...	...	...	...	...	31·1*	46·3*	?	22·0*	?	34·2*	?	24·3	60·1	28th	15·0	22nd	45·1
	Kachh	?	23·982	?	...	24·001	4th & 12th.	23·881	31st	·117	28·2	41·2	?	19·9	?	30·6	?	21·3	56·0	27th	9·0	12th	47·0
	Pishin	?	...	...	...	...	...	...	...	...	?	47·8	?	19·1	?	33·4	?	28·7	62·0	28th	10·9	12th & 13th.	51·1
	Quetta	5,502	24·692	+·011	?	24·779	12th	24·578	31st	·201	28·8	44·4	−7·1	25·6	−3·7	35·0	−5·4	18·8	58·7	28th	15·8	13th	42·9
	Kalat	...	...	...	...	...	...	...	...	...	27·3	46·3	?	13·0	?	29·6	?	33·3	59·3	29th	0	12th	59·3
	Chaman	4,311	25·794	?	?	25·910	12th	25·563	6th	·347	34·2	46·6	?	29·7	?	38·2	?	16·9	60·1	28th & 29th.	22·6	12th & 13th.	37·5
Northern India	Leh	11,503	19·632	?	?	19·941	28th	19·433	1st	·508	4·5	19·2	?	0	?	9·6	?	19·2	33·6	9th	−11·0	29th	44·6
	Srinagar	5,204	25·019	?	?	25·202	28th	24·794	21st	·408	26·0	33·6	?	21·3	?	27·5	?	12·3	41·4	2nd	10·1	14th & 15th.	31·3
	Gilghit	?	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cherat	?	25·779	?	?	25·887	4th	25·593	21st	·294	40·0	47·0	?	36·7	?	41·9	?	10·3	55·7	30th	29·1	12th	26·6
	Murree	6,344	23·832	−·021	?	23·943	5th	23·661	21st	·282	35·3	43·8	−4·1	33·2	−2·2	38·5	−3·2	10·6	57·6	28th & 29th.	25·5	12th	32·1
	Poo	?					Not recorded.				?	35·4	?	18·5	?	26·9	?	16·9	43·1	9th	9·0	29th	34·1
	Simla	7,224	23·087	?	?	23·185	4th	22·901	21st	·284	37·4	43·4	−3·0	33·6	−2·9	38·5	−3·0	9·8	50·3	31st	25·2	22nd	25·1
	Chakrata	6,977	23·332	+·004	?	23·418	4th	23·223	21st	·195	37·2	46·7	−3·9	34·0‖	−2·2‖	40·1‖	−3·1	12·7	55·3	31st	27·5	22nd	27·8
	Mussooree	6,705	23·565	?	?	23·654	4th & 5th.	23·454	21st	·200	38·4	45·3	?	35·7	?	40·5	?	9·6	53·2	29th	29·0	22nd	24·2
	Ranikhet	6,069	24·139	+·004	?	24·230	8th	24·068	1st	·162	41·6	51·1	−3·1	39·0	−0·7	45·0	−1·9	12·1	57·8	29th	31·5	15th	26·3
	Yatung	10,480?	...	?	...	...	...	...	...	...	?	42·6	?	20·6	?	31·6	?	22·0	54·9	10th & 11th.	15·4	2nd	39·5
	Gnatong	?	19·146	?	?	19·283	10th	19·034	18th	·249	26·4	34·3	?	20·2	?	27·3	?	14·1	43·4	8th	13·6	28th	29·8
	Darjeeling	7,421	22·976	−·002	?	23·068	4th	22·890	18th	·178	37·9	44·6	−0·4	35·0	+0·4	39·8	0	9·6	52·1	15th	31·2	20th & 21st.	20·9
	Gantok	?	+24·522	?	?	24·610	7th	24·438	18th	·172	45·1†	56·3†	?	39·2†	?	47·7†	?	17·1	62·7	16th	35·0	20th	27·7
	Kalimpong	?	‡26·019	?	?	26·139	7th	25·845	3rd	·294	48·8 †	57·9†	?	?	?	?	?	?	62·7	31st	?	...	?

* Mean of 27 days. † Mean of 30 days. ‡ Mean of 21 days. ‖ Mean of 29 days.

I—*continued.*

in India, Burma, etc., in January 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.									Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 31st January 1895.	Normal rainfall for period, 1st January to 31st January.	Variation from normal of period.	Heaviest rainfall during month.		
12	7	10	2	...	...	...	...	...	5·7	5·0	+ 14	68	·570	3·1	0	0·36	−0·36	0	0·31	− 0·31	0	0·31	− 0·31	0	Salem	Madras (South Central).
...	...	1	30	...	...	...	...	...	1·2	3·1	− 61	84	·635	4·5	0	0·64	−0·64	0	0·19	− 0·19	0	0·19	− 0·19	0	Coimbatore.	
14	1	8	7	1	...	...	...	...	3·2	4·3	− 26	78	·451	2·9	0	0·30	−0·30	0·02	0·04	− 0·02	0·02	0·04	− 0·02	0·02	Mercara	Coorg.
1	1	1	13	11	1	...	1	2	8·5	?	?	61	·438	1·2	0	?	?	0	?	?	0	?	?	0	Chitaldroog	
...	...	4	21	6	...	...	...	...	8·9	3·8	+134	83	·485	2·8	0	0·50	−0·50	0	0·19	− 0·19	0	0·19	− 0·19	0	Bangalore	Mysore.
10	...	2	11	8	...	...	...	...	2·9	?	?	71	·461	2·6	0	?	?	0	?	?	0	?	?	0	Hassan.	
1	1	9	18	1	1	...	...	...	8·4	?	?	81	·539	0·9	0	?	?	0	?	?	0	?	?	0	Mysore.	
...	1	17	...	...	...	1	...	12	14·6	5·4	+170	77	·708	4·6	0	2·82	−2·82	0	1·46	− 1·46	0	1·46	− 1·46	0	Negapatam	Madras (East Coast, South).
...	11	1	1	...	...	...	1	17	2·9	?	?	91	·715	3·2	0	1·40	−1·40	0·13	?	?	0·13	?	?	0·08	Cuddalore.	
11	10	10	...	...	...	...	...	...	3·4	4·7	− 28	75	·631	3·0	0	0·91	−0·91	0	0·26	− 0·26	0	0·26	− 0·26	0	Trichinopoly.	
7	11	7	1	...	...	...	...	5	5·0	6·1	− 18	81	·691	3·5	0	1·36	−1·36	0	0·89	− 0·89	0	0·89	− 0·89	0	Madras.	
6	2	...	...	...	4	...	2	17	4·1	?	?	87	·684	5·5	0	0·60	−0·60	0	?	?	0	?	?	0	Nellore	Madras (East Coast, Central).
6	16	9	...	...	...	...	...	...	4·9	5·2	− 6	86	·659	2·2	0	0·27	−0·27	0	0·12	− 0·12	0	0·12	− 0·12	0	Masulipatam	
...	...	...	11	20	...	...	...	...	?	?	?	72	·598	1·6	0	0·20	−0·20	0	0·02	− 0·02	0	0·02	− 0·02	0	Cuddapah	Madras (Central).
24	...	...	7	...	...	...	...	...	?	?	?	69	·509	1·1	0	0·60	−0·60	0	0·08	− 0·08	0	0·08	− 0·08	0	Kurnool.	
...	...	...	8	20	2	...	1	...	3·9	3·3	+ 18	69	·492	2·5	0	0·18	−0·18	0	0·13	− 0·13	0	0·13	− 0·13	0	Bellary.	
3	19	6	3	...	...	...	...	...	?	?	?	73	·552	2·7	1	0·30	+0·70	0·40	0·08	+ 0·32	0·40	0·08	+ 0·32	0·40	Rajahmundry	Madras (East Coast, North).
...	13	4	...	...	...	...	1	13	8·0	?	?	80	·592	1·5	0	0·50	−0·50	0·04	0·14	− 0·10	0·04	0·14	− 0·10	0·03	Cocanada.	
...	2	...	1	1	...	2	21	4	1·9	1·8	+ 6	79	·615	2·3	0	0·64	−0·64	0	0·19	− 0·19	0	0·19	− 0·19	0	Vizagapatam.	
...	13	...	...	...	...	...	2	16	8·3	6·5	+ 28	86	·556	0·2	0	0·38	−0·38	0	0·18	− 0·18	0	0·18	− 0·18	0	Gopalpur.	
																									XII.—Hill Stations.	
...	...	2	6	6	7	4	1	1	3·8*	?	?	?	?	?	1	?	?	0·66	?	?	0·66	?	?	0·56	Shirino	Baluchistan.
5	3	2	1	1	...	...	14	5	?	?	?	83	·129	2·1	2	?	?	1·16	?	?	1·16	?	?	0·90	Kachh.	
...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	4	?	?	1·47	2·11	?	1·47	?	?	0·68	Pishin.	
26	...	...	...	...	1	...	...	4	3·1	3·8	− 18	84	·141	3·8	4	4·36	−0·36	1·27	?	− 0·84	1·27	2·11	− 0·84	0·67	Quetta.	
...	12	...	...	...	19	...	...	...	?	?	?	?	?	?	3	?	?	0·97	?	?	0·97	?	?	0·60	Kalat.	
...	1	3	12	10	2	1	1	1	3·8	?	?	77	·153	5·5	2	?	?	0·89	?	?	0·89	?	?	0·74	Chaman,‖	
3	...	15	5	1	5	2	...	...	0·6	?	?	66	·037	7·6	1	?	?	0·43	?	?	0·43	?	?	0·19	Leh.	
17	...	...	1	6	5	1	...	1	3·9	?	?	90	·130	9·8	9	?	?	6·11	?	?	6·11	?	?	1·75	Srinagar	Northern India.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Gilghit.	
4	16	...	...	1	...	...	...	16	20·3	?	?	47	·115	5·5	1	?	?	0·38	?	?	0·38	?	?	0·16	Cherat.	
3	2	1	5	17	1	...	1	1	10·4	8·1	+ 28	68	·134	5·5	9	3·18	+5·82	4·26	3·52	+ 0·74	4·26	3·52	+ 0·74	1·17	Murree.	
20	2	2	3	...	...	...	...	4	?	?	?	?	?	7·0	13	?	?	3·95	?	?	3·95	?	?	0·80	Poo.	
8	...	...	5	3	7	6	1	1	5·4	2·0	+170	62	·134	5·4	11	4·27	+6·73	5·17	2·35	+ 2·82	5·17	2·35	+ 2·82	1·66	Simla.	
5	1	8	15	1	...	...	1	...	6·9	4·8	+ 44	64	·139	5·2	8	?	?	6·87	3·53	+ 3·34	6·87	3·53	+ 3·34	1·51	Chakrata.	
2	3	5	9	2	...	...	6	4	?	?	?	72	·165	5·3	10	3·30	+6·70	4·67	?	?	4·67	?	?	1·20	Mussooree.	
15	3	5	3	2	1	2	...	...	2·1	1·4	+ 50	69	·179	5·4	9	3·71	+5·29	4·57	2·94	+ 1·63	4·57	2·94	+ 1·63	0·95	Ranikhet.	
...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	2	?	?	0·61	?	?	0·61	?	?	0·31	Yatung.	
1	5	...	2	5	...	2	4	12	11·0	?	?	73	·102	4·3	3	?	?	0·58	?	?	0·58	?	?	0·20	Gnatong.	
4	...	7	6	2	1	4	5	2	4·3	2·6	− 65	90	·205	5·5	0	1·71	−1·71	0·16	0·72	− 0·56	0·16	0·72	− 0·56	0·04	Darjeeling.	
...	4	3	3	1	3	4	11	1	0·8†	?	?	88‡	·265‡	5·3‡	1	?	?	0·51	?	?	0·51	?	?	0·21	Gantak.	
...	4	...	1	2	...	...	2	16	?	?	?	(a)93	·323 (a)	(a)5·2	0	?	?	0·02	?	?	0·02	?	?	0·02	Kalimpong.	

* Mean of 25 days. † Mean of 29 days. ‡ Mean of 30 days. (a) Mean of 21 days.

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea-level and to constant gravity, 45° Lat.	Highest pressure during recorded month.	Date.	Lowest pressure during recorded month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	26·111	−·028	?	26·164	4th	25·990	21st	·174	54·3	63·5	−3·5	48·7	−2·4	56·1	−3·0	14·8	72·6	28th	38·1	22nd	34·5
	Pachmarhi	3,528	26·559	−·001	?	26·621	4th	26·490	31st	·131	60·9	71·6	+0·7	50·8	+3·4	61·2	+2·1	20·8	78·7	31st	34·3	24th	44·4
South India	Wellington	6,200	24·298	−·011	?	24·341	22nd	24·266	2nd	·075	55·8	68·7	+2·2	45·6	+0·1	57·2	+1·2	23·1	74·2	12th	35·7	1st	38·5
XIII.—Extra India.																							
Ceylon	Trincomalee	75	29·966	?	29·970	30·038	22nd	29·922	6th	·116	*80·7	*85·0	?	*75·0	?	*80·0	?	10·0	89·5	12th	69·0	24th	20·5
	Colombo	40	29·937	−·015	29·903	30·014	22nd	29·901	14th	·113	81·4	86·9	?	72·5	?	79·7	?	14·4	90·5	30th	67·0	31st	23·5
	Galle	48	29·923	?	29·897	29·997	22nd	29·888	13th	·109	78·9	82·6	?	†74·2	?	†78·4	?	8·4	85·5	15th	72·0	3 days	13·5
Persia	Meshed	?	?	?	?	?	?	?	?	?	‡18·3	?	?	8·2	?	?	?	?	?	?	−11·0	8th	?
	Teheran	?	26·210	?	?	26·405	20th	25·850	5th	·555	24·5	†37·6	?	19·0	?	†28·1	?	18·6	49·3	3rd	8·8	10th	40·5
	Isphahan	?	?	?	?	?	?	?	?	?	25·6	†44·4	?	19·7	?	†32·0	?	24·7	52·2	29th	12·9	20th	39·3
	Bushire	14	30·160	?	30·132	30·331	20th	30·016	2nd	·315	54·0	62·2	?	51·3	?	56·8	?	10·9	69·7	5th	45·8	20th	23·9
	Jask	...	†30·149	?	?	30·288	21st	29·949	31st	·339	60·2	71·5	?	56·9	?	64·2	?	14·6	75·8	1st	49·3	21st	26·5
Arabia	Muscat	...	30·124	?	?	30·278	21st	29·954	31st	·324	66·4	69·6	?	64·8	?	67·2	?	4·8	74·0	7th	58·7	22nd	15·3
	Baghdad	...	29·770	?	?	29·947	20th	29·602	4th & 14th,	·345	42·2	58·8	?	39·0	?	48·9	?	19·8	67·5	29th	30·0	20th	37·5
	Aden	94	29·939	+·004	30·015	30·066	23rd	29·916	3rd	·150	75·4	79·7	−1·9	73·7	+1·5	76·7	−0·2	6·0	82·8	1st	69·9	6th & 13th	12·9
	Perim	...	29·857	?	?	29·935	23rd	29·775	7th	·160	76·9	83·3	?	†74·3	?	78·8	?	9·0	84·7	1st	72·0	29th	12·7
Afghanistan	Kabul	...	Observations imperfect.																				
Central Asia	Kashgar	?	25·818	?	?	25·970	29th	25·580	7th	·390	11·9	29·0	?	7·9	?	18·5	?	21·1	42·1	31st	1·3	4th & 22nd,	40·8
Arabian Sea Islands,	Amini Divi	15	30·046	?	29·989	30·111	22nd	29·990	11th	·121	81·7	?	?	74·1	?	?	?	?	?	?	67·2	1st	?
	Minicoy	10	†29·986	?	†29·921	30·056	23rd	29·952	7th	·104	†79·3	†85·7	?	*77·4	?	*81·4	?	8·3	88·5	28th	73·4	1st	15·1
Africa	Zanzibar	73	29·914	?	29·914	29·998	23rd	29·851	7th	·147	81·4	86·2	?	79·7	?	82·9	?	6·5	87·7	5th	78·3	26th & 28th,	9·4

* Mean of 22 days. † Mean of 30 days. ‡ Mean of 24 days.

I—*concluded.*

in India, Burma, etc., in January 1895—concluded.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8A.		Mean cloud amount.	Rainfall.									Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 31st January 1895.	Normal rainfall for period, 1st January to 31st January.	Variation from normal of period.	Heaviest rainfall during month.		
6	4	10	1	1	2	5	1	1	6·2	4·8	+ 29	54	·231	2·2	1	0·73	+0·27	0·10	0·42	−0·32	0·10	0·42	− 0·32	0·10	Mount Abu.	Central India.
3	1	1	3	7	5	8	2	1	6·4	3·1	+106	60	·327	2·2	0	1·55	−1·55	0·02	0·51	−0·49	0·02	0·51	− 0·49	0·02	Pachmarhi.	
30	...	...	1	...	...	...	...	...	2·0	2·4	− 17	68	·308	1·5	0	1·75	−1·75	0·04	1·04	−1·00	0·04	1·04	− 1·00	0·04	Wellington.	South India.
																									XIII.—Extra India.	
2	5	23	...	...	...	1	...	...	1·4	?	?	*68	*·720	1·5	6	?	?	5·89	5·26	+0·63	5·89	5·26	+ 0·63	3·02	Trincomalee.	Ceylon.
...	11	15	2	2	...	...	...	1	8·8	8·4	+ 5	72	·781	3·5	9	?	?	5·00	2·92	+2·08	5·00	2·92	+ 2·08	2·08	Colombo.	
26	...	5	...	...	...	...	...	...	2·4	?	?	89	·884	3·5	8	?	?	5·29	4·29	+1·00	5·29	4·29	+ 1·00	1·21	Galle.	
			Not recorded.									?	?	0	0	?	?	0	?	?	0	?	?	0	Meshed.	Persia.
25	6	...	...	...	...	...	...	...	2·6	?	?	80	·107	0·8	2	?	?	1·08	?	?	1·08	?	?	0·80	Teheran.	
2	...	1	1	3	2	6	12	4	3·3	?	?	87	·122	3·2	0	?	?	0	?	?	0	?	?	0	Ispahan.	
...	2	16	6	2	...	2	...	3	?	7·9	?	83	·349	?	5	?	?	2·40	3·63	−1·23	2·40	3·63	− 1·23	1·64	Bushire.	
1	13	11	4	1	...	...	...	1	11·6	?	?	63	·334	2·6	3	?	?	1·48	?	?	1·48	?	?	0·55	Jask.	
...	3	3	5	5	3	2	5	5	4·3	?	?	71	·464	3·2	10	?	?	4·18	?	?	4·18	?	?	1·31	Muscat.	Arabia.
13	5	3	1	2	1	3	1	2	0·5	?	?	83	·224	0·6	2	?	?	1·62	?	?	1·62	?	?	0·84	Baghdad.	
1	...	15	11	4	...	...	...	...	11·7	12·0	− 3	76	·660	6·8	4	?	?	1·21	0·28	+0·93	1·21	0·28	+ 0·93	0·54	Aden.	
...	...	...	16	15	...	...	...	...	11·8	?	?	73	·681	6·9	0	?	?	0·15	?	?	0·15	?	?	0·06	Perim.	
												Observations imperfect.							‖						Kabul.	Afghanistan.
29	...	...	...	...	...	...	1	1	0·4	?	?	?	?	5·9	0	?	?	0·06	?	?	0·06	?	?	0·05	Kashgar.	Central Asia.
...	11	1	...	...	...	...	...	19	†7·9	?	?	73	·795	4·5	1	?	?	0·50	?	?	?	?	?	0·50	Amini Divi.	Arabian Sea Islands.
2	8	15	1	3	...	...	...	...	‡7·1	?	?	†80	†·797	†4·2	3	?	?	1·38	?	?	1·38	?	?	0·65	Minicoy.§	
...	17	13	1	...	...	...	...	...	9·0	?	?	79	·848	6·0	1	?	?	0·17	?	?	0·17	?	?	0·14	Zanzibar.	Africa.

* Mean of 22 days. † Mean of 30 days. ‡ Mean of 29 days. § Wind direction for 29 days.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 89

Meteorological Province.	Station.	Elevation of barometer 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·912	29·835	·107	29·884	−·009	29·875	85·5	75·8	9·7	87·7	71·8	15·9	82·0	83·8	79·8	+ 0·4	72·3	75·9	76·2	74·8
	Rangoon	...	·974	·840	·134	·906	−·046	·884	90·6	63·8	26·8	92·5	59·8	32·7	76·9	88·9	75·0	+ 1·2	61·1	67·6	68·8	65·8
	Diamond Island	...	·987	·876	·111	·928	−·036	·901	82·8	72·9	9·9	87·5	70·4	17·1	79·0	80·2	76·7	+ 0·9	67·7	70·5	71·0	69·7
	Cocos Island	111	·891	·796	·095	·840	?	·884	82·2	73·5	8·7	83·7	71·6	12·1	79·8	78·3	76·5	?	68·4	72·3	71·3	70·7
	Akyab	...	30·036	·921	·115	·983	−·015	·945	80·8	57·8	23·0	86·5	52·3	34·2	72·6	77·7	68·9	− 1·3	55·7	65·9	68·6	63·4
Assam.	Silchar	...	29·993	·856	·137	·925	−·008	·983	77·3	54·0	23·3	82·3	47·4	34·9	65·5	75·3	64·5	+ 1·2	53·2	61·6	64·0	59·5
	Sibsagar	...	·767	·619	·148	·690	−·042	·995	69·6*	53·9*	15·7	74·3*	47·5*	26·8	61·5*	68·1*	60·6*	+ 2·8	53·9*	60·2*	62·9*	59·0*
	Dhubri	...	·985	·842	·143	·907	−·018	·981	73·3	54·1	19·2	77·1	51·0	26·1	62·3	72·1	62·2	0	53·0	59·1	62·7	58·3
Bengal and Orissa.	Chittagong	...	·986	·865	·121	·922	−·023	·959	78·2	55·8	22·4	82·6	51·1	31·5	69·9	74·9	66·6	+ 0·5	55·0	64·2	65·6	61·6
	Naryangunge	...	30·066	·944	·122	·998	−·002	·966	76·7	55·9	20·8	82·1	51·1	31·0	69·3	74·9	66·5	+ 0·5	54·0	62·6	64·1	60·2
	Calcutta (Alipore)	...	·088	·956	·132	30·010	−·006	·977	77·1	55·8	21·3	84·0	49·1	34·9	69·1	76·3	65·6	+ 0·4	54·6	60·9	62·9	59·5
	Do. (Chowringhee).	...	·097	?	?	?	?	?	78·4	56·4	22·0	84·9	50·4	34·5	70·8	?	?	?	55·3	63·0	?	?
	Saugor Island	...	·075	·951	·124	·003	−·003	·973	76·6	59·0	17·6	82·2	50·7	31·5	71·2	74·6	66·9	− 0·2	56·8	64·9	65·7	62·5
	Burdwan	...	·005	·867	·138	29·924	−·012	·974	77·7	55·7	22·0	85·2	48·1	37·1	69·3	76·2	65·9	− 0·1	54·2	59·6	62·5	58·8
	Berhampore	...	·040	·910	·130	·963	0	·980	75·4	55·1	20·3	83·6	49·6	34·0	67·1	74·8	64·7	0	52·8	60·7	63·1	58·9
	False Point	...	·072	·955	·117	30·009	−·020	·972	79·6	58·4	21·2	86·2	52·5	33·7	75·7	76·4	67·8	− 0·3	58·2	68·0	68·3	64·9
	Cuttack	...	·008	·872	·136	29·936	−·022	·960	84·4	62·0	22·4	88·0	57·1	30·9	73·3	82·1	72·0	+ 1·2	60·4	65·4	66·9	64·2
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	28·036	27·927	·109	27·974	−·006	·978	73·1	51·2	21·9	81·8	43·0	38·8	64·7	71·2	61·2	+ 0·4	44·5	55·3	57·5	52·5
	Patna	...	29·918	29·805	·113	29·853	−·013	·995	72·9	52·2	20·7	79·9	45·4	34·5	65·3	71·4	62·0	+ 1·5	50·3	58·9	61·3	56·8
	Darbhanga	...	·936	·805	·131	·862	−·014	·989	72·5	53·2	19·3	78·6	48·9	29·7	63·9	71·0	62·3	+ 0·2	52·5	59·1	61·0	57·5
	Allahabad	...	·801	·683	·118	·729	−·002	30·010	72·9	51·5	21·4	82·0	44·4	37·6	64·1	71·4	61·1	+ 0·6	50·2	58·1	60·2	56·2
	Ghazipur	220	·877	·755	·122	·805	−·016	29·988	73·6	52·4	21·2	81·1	45·9	35·2	65·2	71·6	61·5	+ 2·1	49·1	58·4	59·8	54·4
	Lucknow	...	·735	·623	·112	·670	−·001	30·014	70·3	48·8	21·5	80·4	41·5	38·9	61·4	68·3	60·5	− 0·4	48·3	56·8	59·3	54·8
Indus Valley and Upper Sub-Himalayas.	Dehra Dun	...	27·795	27·712	·083	27·744	0	·033	63·2	44·9	18·3	69·5	38·2	31·3	54·7	59·8	52·8	− 2·2	43·2	50·5	52·0	48·6
	Roorkee	...	29·183	29·082	·101	29·122	+·009	·026	65·3†	47·0	18·3	72·0	40·0	32·0	55·1	63·1	55·0†	− 0·9	46·1	52·4	55·6	51·3
	Meerut	...	·335	·244	·091	·281	−·003	·025	66·3	47·4	18·9	72·6	42·1	30·5	56·5	63·7	55·7	− 0·4	46·5	52·2	55·5	51·4
	Lahore	...	·396	·307	·089	·310	+·012	·066	63·3	42·3	21·0	70·1	35·4	34·7	53·1	62·3	51·5	− 0·4	40·6	49·1	53·5	47·7
	Ludhiana	...	·275	·188	·087	·220	+·017	·050	61·9	46·1	15·8	66·6	39·2	27·4	54·8	60·6	52·8	+ 0·2?	45·3	51·5	54·0	50·3
N.-W. Rajputana	Peshawar	...	·014	28·918	·096	28·954	+·011	·114	62·5	37·4	25·1	71·2	32·3	38·9	52·0	60·7	48·4	− 1·2	34·0	43·2	47·0	41·4
	Mooltan	...	·704	29·622	·082	29·651	+·024?	·065	67·5	43·1	24·4	75·5	36·6	38·9	57·6	65·8	53·8	− 0·2	39·9	48·9	54·0	47·6
	Jacobabad	...	·967	·847	·120	·895	+·026	·051	69·9	41·5	28·4	77·8	31·7	46·1	60·3	67·8	54·1	− 2·6	?	49·2	52·3	?
	Kurrachee	...	30·076	·992	·084	30·025	+·015	·028	73·5	52·4	21·1	82·5	46·1	36·4	64·9	70·6	61·8	− 3·4	45·0	55·4	57·2	52·5
E. Rajputana C. India, and Gujarat.	Jeypore	...	28·650	28·544	·106	28·586	+·007	·053	69·5	47·7	21·8	79·8	38·0	41·8	61·3	67·5	56·8	− 1·9	45·4	53·0	56·5	51·6
	Ajmere	...	·458	·349	·109	·397	−·011	·030	69·7	47·4	22·3	78·4	36·1	42·3	59·5	68·8	57·8	+ 0·2	45·0	52·7	57·5	51·7
	Deesa	...	29·603	29·480	·123	29·529	−·010	29·961	81·7	51·2	30·5	90·7	38·2	52·5	71·8	79·6	66·4	− 1·1	45·6	56·1	58·2	53·3
	Nowgong	...	·325	·214	·111	·260	−·007	30·005	71·4	51·4	20·0	79·9	43·1	36·8	62·5	69·0	60·5	− 0·1	50·2	56·6	59·0	55·3
	Agra	...	·554	·448	·106	·489	+·009?	·034	68·2	48·5	19·7	76·4	41·4	35·0	60·0	66·3	57·4	− 1·4	46·9	54·5	57·7	53·2
Deccan.	Belgaum	...	27·480	27·354	·126	27·412	−·024?	29·847	83·8	58·2	25·6	88·2	54·9	33·3	75·0	81·8	70·5	+ 0·6	55·7	61·6	62·9	60·1
	Sholapur	...	28·436	28·291	·145	28·360	−·027	·894	88·0	61·1	26·9	92·6	53·9	38·7	77·3	86·2	73·8	+ 2·0	54·2	63·9	66·1	61·4
	Poona	...	·174	·036	·138	·103	−·030	·883	87·3	55·7	31·6	91·3	50·3	41·0	75·6	85·3	71·2	+ 2·2	52·3	60·8	63·6	58·9
	Akola	...	29·108	·959	·149	29·025	−·031	·917	86·3	56·9	29·4	91·9	45·2	46·7	74·3	85·2	70·7	+ 2·8	52·9	61·1	65·8	59·9
	Buldana	2,132	27·866	27·752	·114	27·801	−·042	·882	81·8	58·8	23·0	86·5	49·4	37·1	74·1	79·4	69·0	+ 0·6	51·8	59·3	60·5	57·2
	Khandwa	...	28·980	28·847	·133	28·906	−·029	·924	82·0	54·6	27·4	90·2	42·1	48·1	70·6	80·5	67·2	+ 0·5	51·0	60·1	63·3	58·1

* Mean of 22 days.

† Mean of 24 days.

II.

Stations in India, Burma, etc., for January 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.														Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from																					
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
·747	·814	·801	·788	−·006	84	74	69	76	0	3·5	3·5	3·5	+0·2	3	24	30	5	...	...	...	...	...	N. 30° E.	N. 39° E.	84	78	164	159	...	...	Port Blair .	Burma Coast and Bay Islands.
·504	·554	·436	498	−·069	85	60	32	59	−7	1·4	1·8	1·6	−0·7	...	18	17	4	1	...	6	10	6	N. 3° W.	N. 22° E.	47	35	95	96	...	...	Rangoon .	
·614	·634	·638	·629	−·012	76	64	62	67	−5	2·4	2·5	2·5	+0·1	...	12	15	...	...	1	...	8	26	N. 21° W.	N. 6° E.	69	74	280*	147	...	...	Diamond Island.	
·628	·693	·677	·686	?	76	68	70	71	?	0·6	0·5	0·6	?	...	60	...	...	...	...	...	...	...	N.	?	97	?	?	?	Nil	Nil	Cocos Island.	
·420	·550	·584	·518	+·021	87	69	61	72	+1	0·4	0·7	0·6	−0·9	...	25	5	...	...	...	...	24	8	N. 37° W.	N. 23° W.	69	39	79	65	...	...	Akyab .	
·398	·497	·446	·447	+·021	95	79	51	75	+1	3·5	3·8	3·7	+0·5	45	...	...	...	5	6	4	2	...	S. 5° W.	S. 29° E.	19	27	17*	47	...	...	Silchar .	Assam.
·420*	·505*	·506*	·477*	+·053	100*	93*	75*	85*	+3	4·3	4·3	4·3	−1·1	27	...	26	1	6	...	2	...	...	N. 60° E.	N. 61° E.	42	51	63*	43	...	...	Sibsagar .	
·392	·461	·448	·436	+·011	93	82	57	78	+2	1·6	1·6	1·6	−0·3	16	5	10	7	5	...	13	6	...	S. 75° E.	N. 71° E.	4	20	52	93	...	...	Dhubri .	
·427	·527	·509	·488	+·021	95	72	59	75	+2	1·1	1·2	1·2	−0·2	...	10	17	6	...	1	...	6	22	N. 5° W.	N. 24° W.	60	48	68*	89	...	...	Chittagong	Bengal and Orissa.
·398	·486	·466	·450	+·014	89	66	52	69	0	1·3	2·6	2·0	+0·4	2	11	10	1	1	...	4	10	23	N. 33° W.	N. 53° W.	60	32	62	51	...	...	Naryangunge	
·416	·432	·401	·416	−·021	93	60	44	66	−5	0·8	1·4	1·1	−0·4	...	26	8	1	1	...	1	3	13	N. 8° W.	N. 38° W.	74	38	46	68	...	...	Calcutta (Alipore).	
·428	·480	?	?	?	93	64	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	Nil	Nil	Do. (Chowringhee.)	
·439	·536	·519	·498	−·023	86	69	60	72	−4	2·0	2·3	2·2	+0·5	...	25	11	...	...	8	9	2	7	N. 13° W.	N. 1° E.	39	19	174	151	...	...	Saugor Island.	
·406	·386	·389	·394	0	91	54	43	63	0	1·5	1·8	1·7	0	12	20	2	3	1	1	1	4	18	N. 21° W.	N. 32° W.	55	46	34*	43	...	...	Burdwan .	
·374	·449	·426	·416	+·021	85	67	49	67	−3	1·6	1·4	1·5	−0·7	10	5	...	4	2	2	5	21	13	N. 76° W.	N. 41° W.	47	50	32	43	...	...	Berhampore	
·491	·587	·585	·554	+·011	99	66	64	76	−3	2·7	2·8	2·8	+0·8	...	13	8	14	12	8	2	2	3	N. 72° E.	N. 51° E.	39	22	143*	147	...	...	False Point	
·509	·534	·460	·501	+·029	90	64	42	66	+1	1·7	1·3	1·5	−0·2	33	7	8	4	1	1	1	4	3	N. 16° E.	N. 45° E.	21	11	29	33	...	...	Cuttack .	
·217	·327	·311	·285	+·018	56	54	41	50	−1	2·7	1·2	2·0	−0·3	...	7	1	...	3	7	1	16	27	N. 63° W.	N. 62° W.	60	54	176	118	...	...	Hazaribagh.	
·346	·417	·413	·392	+·029	87	67	54	69	+2	1·9	2·0	2·0	−0·5	3	3	1	4	2	2	9	24	14	N. 85° W.	N. 83° W.	55	45	85*	48	...	...	Patna .	Gangetic Plain and Chota Nagpur.
·389	·440	·405	·411	+·013	95	74	53	74	+3	1·9	1·9	1·9	+0·4	...	2	1	4	4	2	10	26	13	W.	S. 80° W.	56	47	85	59	...	...	Darbhanga	
·353	·410	·378	·380	+·040	91	68	49	69	+1	3·2	4·3	3·8	+1·8	2	4	10	8	3	2	1	17	15	N. 33° W.	N. 34° W.	32	20	104	50	...	...	Allahabad.	
·329	·405	·363	·340	+·010	87	64	47	65	+7	2·5	2·3	2·4	+0·4	9	1	2	3	6	1	13	18	9	S. 77° W.	S. 76° W.	40	38	51	37	0·61	0·53	Ghazipur.	
·338	·407	·390	·378	+·077	96	74	57	76	+16	4·0	4·1	4·1	+1·2	9	5	7	4	2	...	7	16	12	N. 58° W.	N. 57° W.	37	41	37*	57	...	...	Lucknow.	
·263	·319	·293	·291	?	88	74	58	73	?	5·9	6·0	6·0	+1·9	13	1	4	3	7	9	10	13	...	S. 28° W.	S. 75° W.	32	17	27	43	...	...	Dehra Dun	
·303	·360	·346	·336	+·052	93	83	60	78	+13	4·7	5·1	4·9	+1·5	20	2	2	1	2	...	3	13	19	N. 61° W.	N. 72° W.	45	16	65	52	...	...	Roorkee .	Upper Sub-Himalayas.
·309	·338	·336	·328	+·043	94	74	58	75	+11	3·5	4·1	3·8	+0·6	17	1	4	5	1	...	1	29	4	N. 78° W.	N. 49° W.	40	45	39	50	...	...	Meerut .	
·237	·300	·297	·278	+·013	86	74	54	71	+10	4·5	5·2	4·9	+1·6	9	10	5	5	6	2	...	12	13	N. 27° W.	N. 25° W.	31	21	43	45	...	...	Lahore .	
·290	·342	·334	·322	+·041	89	79	63	77	+10	5·0	5·6	5·3	+1·2	15	3	10	...	9	...	1	5	19	N. 19° W.	N. 56° W.	27	25	36	30	...	...	Ludhiana .	
·157	·174	·156	·162	−·063	70	45	30	48	−14	3·9	4·0	4·0	−0·7	14	10	4	5	6	9	3	3	8	N. 19° E.	S. 19° E.	5	6	88*	60	...	...	Peshawar .	
·208	·233	·263	·254	−·026	74	49	42	55	−4	3·9	3·6	3·8	+1·0	18	2	32	1	2	...	4	...	3	N. 42° E.	N. 9° W.	48	24	17*	37	...	...	Mooltan .	Indus Valley and N.W. Rajputana.
?	·206	·191	?	?	?	40	29	?	?	3·9	4·1	4·0	+1·1	16	17	3	3	3	1	...	1	18	N. 13° W.	N. 10° W.	47	27	57*	49	...	...	Jacobabad.	
·09	·317	·292	·272	−·076	52	52	39	48	−8	2·4	2·0	2·2	−0·4	...	3	50	8	...	...	1	...	..	N. 49° E.	N. 23° W.	92	17	223	237	...	...	Kurrachee .	
·283	·311	·327	·307	+·039	84	56	49	63	+12	4·6	4·8	4·7	+1·5	...	4	9	13	5	1	8	10	12	N. 8° W.	N. 15° E.	14	21	54	91	...	...	Jeypore .	
·278	·320	·342	·314	+·051	82	62	48	64	+13	2·9	3·2	3·1	+0·8	9	6	16	4	5	11	3	4	4	N. 70° E.	N. 82° E.	16	8	48	47	...	...	Ajmere .	E. Rajputana, Central India, and Gujarat.
·241	·250	·207	·233	−·028	62	32	20	38	0	1·2	2·4	1·8	−0·5	...	5	19	17	6	5	3	5	2	N. 72° E.	N. 3° W.	45	39	225	207	...	...	Deesa .	
·355	·387	·378	·374	+·085	92	67	53	71	+14	4·0	4·8	4·4	+1·5	1	7	3	20	...	7	1	10	13	N. 12° E.	N. 24° W.	18	22	49*	32	...	...	Nowgong .	
·312	·360	·367	·348	+·060	89	69	57	72	+16	4·4	4·7	4·6	+2·2	...	...	16	...	7	...	5	...	34	N. 23° W.	N. 64° W.	47	35	77	82	...	...	Agra .	
·415	·382	·343	·380	+·028	85	44	32	54	+8	0·7	1·6	1·2	−0·4	...	3	5	13	21	10	4	3	...	S. 50° E.	S. 71° E.	56	50	181	261	...	...	Belgaum .	Deccan.
·339	·429	·393	·387	+·045	62	46	31	46	+3	0·6	1·6	1·1	−0·9	4	1	1	4	44	3	3	...	2	S. 44° E.	S. 60° E.	74	55	237*	171	...	...	Sholapur .	
·354	·351	·321	·342	+·019	79	40	26	48	+7	1·1	2·6	1·9	+0·1	20	...	1	6	5	1	6	11	10	S. 85° W.	S. 63° E.	20	24	134	137	...	...	Poona .	
·353	·368	·374	·365	+·044	75	44	30	50	+2	1·5	2·5	2·0	+0·7	12	2	2	7	11	8	10	4	6	S. 4° E.	N. 54° E.	24	30	107	83	...	...	Akola.	
·304	·326	·296	·309	−·007	61	38	29	43	−1	1·8	3·4	2·6	+0·4	11	3	4	1	6	10	18	1	8	S. 37° W.	N. 76° E.	31	21	?	134	0·02	0·02	Buldana .	
·338	·412	·372	·374	+·045	77	52	35	55	+5	1·5	2·4	2·0	+0·5	...	4	12	2	6	7	11	3	17	N. 56° W.	N. 25° E.	16	23	109	69	...	...	Khandwa .	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 89

Meteorological Province	Station	Elevation of barometer cistern above sealevel 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*concld.*	Hoshangabad	...	29·049	28·911	·138	28·972	−·020	29·976	78·2	55·6	22·6	87·1	42·8	44·3	67·0	77·5	66·1	+0·4	52·5	60·4	64·8	59·2
	Nagpur	...	·033	·890	·143	·954	−·001?	·949	83·1	57·2	25·9	88·3	48·2	40·1	72·0	81·9	69·2	+1·0	53·7	62·6	65·9	60·7
	Nagpur Sanitary Commissioner's Office	...	·063	·922	·141	·985	?	·971?	84·6	56·7	27·9	90·1	47·6	42·5	72·6	83·2	70·3	P	53·7	61·5	64·8	59·9
	Jubbulpore	...	28·726	·600	·126	28·655	−·009	·971	76·9	51·5	25·4	84·9	38·5	46·4	66·5	75·1	63·1	+1·5	50·6	59·1	62·3	57·3
	Saugor	...	·283	·172	·111	·220	−·003	·975	74·9	54·4	20·5	83·8	42·6	41·2	66·6	73·7	63·6	+0·6	50·1	58·2	60·9	56·4
	Raipur	...	29·097	·964	·133	29·023	−·004	·947	82·7	58·3	24·4	89·1	50·4	38·7	72·9	81·4	69·5	+2·7	54·5	62·2	64·5	60·4
	Sutna	...	·025	·909	·116	28·957	−·010	·994	73·3	51·7	21·6	82·5	43·2	39·3	65·1	72·0	61·4	+1·3	49·9	57·5	60·5	56·3
	Hyderabad (Deccan)	...	28·350	·221	·129	·280	P	·922	84·9	59·9	25·0	89·7	53·8	35·9	76·7	81·5	71·6	P	57·9	65·7	66·1	63·2
West Coast	Bombay	...	30·006	29·892	·114	29·940	−·012	·918	80·7	66·8	13·9	84·1	60·8	23·3	74·3	77·8	72·6	−0·5	61·9	66·8	69·2	66·0
	Ratnagiri	...	29·906	·791	·115	·839	−·015	·888	84·6	66·8	17·8	92·6	62·6	30·0	80·6	81·4	74·5	−0·6	62·9	69·6	71·9	68·1
	Karwar	...	·976	·853	·123	·905	−·013	·881	85·8	66·2	19·6	90·2	61·6	28·6	78·1	83·6	75·0	−0·3	64·7	70·4	72·5	69·2
	Cochin	...	·977	·866	·111	·913	−·008?	·850	90·1	73·0	17·1	93·1	68·8	24·3	83·9	86·9	80·4	+1·8	69·5	72·6	75·0	72·4
	Salem	...	·110	28·962	·148	·039	−·016	·915	89·6	65·1	24·5	92·4	60·2	32·2	80·5	86·5	75·9	+1·7	63·1	69·2	70·5	67·6
South India	Mysore	...	27·514	27·382	·132	27·448	P	·876	84·3	60·6	23·7	87·1	55·9	31·2	74·9	82·7	72·1	P	57·9	66·7	68·7	64·4
	Mercara	...	26·300	26·195	·105	26·251	−·008	P	78·0	57·9	20·1	81·5	55·1	26·4	69·3	74·6	67·1	+1·8	54·9	60·7	60·7	58·8
	Bangalore	...	27·029	·910	·119	·969	−·015	·883	81·5	57·7	23·8	85·1	53·4	31·7	72·2	79·7	69·2	+1·4	56·3	61·5	61·9	59·9
	Hassan	...	26·961	·840	·121	·900	P	·876	81·8	56·3	25·5	85·7	51·3	34·4	73·1	80·2	68·7	P	53·1	61·4	61·6	58·7
	Chitaldroog	...	27·628	27·490	·138	27·555	P	·876	84·5	61·7	22·8	88·2	55·0	33·2	75·8	83·1	72·8	P	54·5	62·9	63·1	60·1
	Trichinopoly	...	29·780	29·640	·140	29·713	−·010	·901	89·0	68·0	21·0	91·2	62·9	28·3	81·8	86·8	77·3	+1·8	65·3	69·7	70·8	68·6
	Madras	...	30·041	·937	·104	·985	−·007	·938	86·0	67·1	18·9	88·1	64·2	23·9	81·9	81·8	75·8	+0·3	P	72·5	72·1	71·0
	Bellary	...	28·559	28·412	·147	28·482	+·002	·901	87·3	61·9	25·4	91·9	56·4	35·5	77·4	85·7	73·9	+0·7	58·0	65·0	66·1	63·1
	Vizagapatam	...	30·053	29·944	·109	29·969	−·004	·959	78·5	71·0	7·5	82·0	65·5	16·5	75·6	77·7	71·3	−1·4	67·0	69·4	70·5	69·0
	Cocanada	...	·059	·935	·124	·997	P	·960	81·0	65·9	15·1	87·2	61·6	25·6	77·5	79·6	73·1	P	64·0	70·4	71·2	68·5
Hill Station, Baluchistan	Quetta	...	24·713	24·635	·078	24·664	+·006	P	44·4	25·6	18·8	58·8	15·9	42·9	36·6	41·1	34·2	−6·0	24·2	32·0	35·3	30·5
Hill Stations, Northern India	Leh	...	19·632	19·592	·040	19·613	−·013	P	19·1	0	19·1	33·6	11·0	44·6	11·4	13·2	7·8	−0·9	−1·1	8·8	10·7	6·2
	Srinagar	...	25·039	24·945	·094	24·984	P	P	33·2	21·3	11·9	41·4	9·9	31·5	28·1	32·2	27·0	P	21·0	26·2	28·5	25·2
	Murree	...	23·866	23·832	·034	23·841	−·020	P	43·7	33·1	10·6	57·8	25·4	32·4	38·9	39·7	37·0	−2·4	28·1	33·2	31·9	32·2
	Chamba	3,605	27·059	26·957	·102	27·007	+·003	P	57·2	39·7	17·5	68·9	33·9	35·0	47·0	53·2	46·2	−2·3	37·8	42·2	45·8	41·9
	Kailang	10,087	20·798	20·743	·055	20·770	+·017	P	28·3	9·4	18·9	36·3	−5·0	41·3	18·8	23·6	16·5	−5·7	8·6	16·6	20·2	15·1
	Simla (Ridge)	...	23·121	23·074	·047	23·088	−·022	P	43·7	33·6	10·1	50·3	25·2	25·1	40·3	40·4	37·4	−2·5	29·7	34·4	35·6	33·2
	Chakrata	...	·368	·303	·065	·326	−·001	P	46·4	34·0	12·4	55·3	27·5	27·8	40·9	42·5	38·5	−3·3	31·1	35·7	37·5	34·8
	Ranikhet	...	24·175	24·103	·072	24·124	+·014	P	50·7	39·0	11·7	57·9	31·5	26·4	45·9	46·9	43·4	−2·8	36·0	40·8	42·2	39·7
	Katmandu	4,388	25·743	25·640	·103	25·686	−·007	P	66·2?	38·3	27·9	70·3?	32·4	37·9	47·2	59·4	50·5?	−0·1?	36·4	44·1	51·2	43·9
	Darjeeling	...	23·005	22·924	·081	22·960	+·003	P	44·6	35·0	9·6	52·1	31·2	20·9	41·4	42·4	39·3	+0·1	34·1	39·3	40·6	38·0
	Demagiri	P	P	P	P	P	P	P	85·3	55·9	29·4	91·7	50·6	41·1	66·3	77·2	68·6	+5·0	P	P	P	P
	Tura	3,943	P	P	P	P	P	P	70·8	56·7	14·1	75·3	51·2	24·1	64·8	68·1	63·0	P	P	57·9	59·5	P
Hill Stations, Central India	Mount Abu	...	26·133	26·055	·078	26·082	−·038	P	63·5	48·7	14·8	72·5	38·1	34·4	59·3	60·5	55·3	−2·9	43·2	48·8	49·8	47·3
	Pachmarhi	...	·573	·483	·090	·520	0	P	71·7	50·7	21·0	78·7	34·3	44·4	66·1	68·6	58·8	+1·8	46·5	55·4	56·2	52·7
	Chikalda	3,642	·434	·312	·092	·380	−·035	P	72·2	57·2	15·0	76·8	42·4	34·4	65·8	70·6	62·6	+0·3	51·4	55·5	58·0	55·0
	Makhia							Temporarily closed.														

II—*continued.*

Stations in India, Burma, etc., for January 1895—continued.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province
														Number of winds from								Mean wind direction.	Normal mean wind direction of month.								
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																									%	%						
·365	·449	·462	·426	+·087	80	67	49	65	+11	3·4	2·9	3·2	+1·4	5	...	33	11	2	1	3	5	2	N. 53° E.	N. 59° E.	55	39	103	58	...	...	Hoshangabad.	Deccan—*contd.*
·376	·457	·441	·424	+·073	79	57	40	59	+ 8	2·1	3·2	2·7	+0·5	20	4	8	10	9	7	1	1	2	S. 81° E.	N. 72° E.	31	30	89	73	...	...	Nagpur .	
·383	·416	·385	·352	?	82	51	33	55	?	1·1	2·5	1·8	?	...	10	23	11	8	4	3	3	...	N. 63° E.	?	50	?	28*	?	...	...	Nagpur(Sanitary Commissioner's office),	
·365	·416	·412	·397	+·068	94	63	46	68	+ 8	3·1	2·7	2·9	+0·8	10	14	15	1	6	6	3	2	5	N. 28° E.	N. 8° E.	27	17	63	50	...	...	Jubbulpore.	
·319	·392	·382	·364	+·091	73	60	46	60	+12	2·7	3·2	3·0	+1·5	...	2	16	5	10	8	9	2	10	S. 82° E.	N. 13° E.	13	24	70	66	...	...	Saugor .	
·380	·422	·384	·395	+·042	77	52	36	55	+ 1	1·5	1·9	1·7	+0·2	25	8	9	3	2	2	5	5	3	N. 1° E.	N. 5° E.	15	21	57*	67	...	...	Raipur .	
·345	·386	·391	·377	+·110	88	62	49	66	+15	3·1	3·2	3·2	+1·1	1	15	7	7	8	1	2	5	16	N. 1° W.	N. 16° W.	37	27	111*	100	...	...	Sutna .	
·457	·498	·458	·471	?	88	54	42	62	?	0·5	1·4	1·0	?	5	...	3	8	32	11	3	...	...	S. 42° E.	?	71	?	91*	?	...	...	Hyderabad (Deccan).	
·493	·562	·603	·553	—·026	74	66	63	68	− 2	0·6	0·6	0·6	−0·9	...	8	13	9	3	...	...	8	21	N. 5° W.	N. 6° E.	48	63	233	242	...	...	Bombay .	West Coast.
·526	·579	·654	·586	+·031	80	56	61	65	+ 5	1·1	1·4	1·3	+0·7	...	9	...	2	3	...	10	14	24	N. 64° W.	N. 34° W.	60	30	199*	216	...	...	Ratnagiri .	
·596	·642	·651	·630	+·035	92	67	57	72	+ 3	0·2	0·1	0·2	−0·7	2	2	7	3	...	...	2	18	28	N. 51° W.	N. 5° W.	64	53	112	?	...	...	Karwar .	
·679	·654	·710	·681	—·005	83	56	56	65	— 5	1·2	0·7	1·0	−1·0	7	6	14	3	...	...	4	26	2	N. 50° W.	S. 11° W.	37	13	131	?	...	...	Cochin .	
·554	·563	·533	·550	−·017	89	54	43	62	− 3	3·3	3·3	3·3	+0·7	8	12	30	8	1	...	1	1	1	N. 40° E.	S. 84° E.	68	61	136	115	...	...	Salem .	South India.
·450	·554	·530	·511	?	85	64	47	65	?	1·5	2·4	2·0	?	2	...	10	47	3	...	...	...	...	N. 85° E.	?	90	?	208*	?	...	...	Mysore .	
·399	·432	·385	·405	—·021	83	61	45	63	+ 1	3·1	3·2	3·2	+0·1	22	5	13	12	5	...	1	1	3	N. 60° E.	N. 68° E.	39	60	76	105	...	...	Mercara .	
·442	·427	·350	·406	+·007	92	54	35	60	— 1	1·4	1·9	1·7	−1·0	...	...	11	31	20	...	...	...	...	S. 83° E.	N. 88° E.	85	83	209*	92	...	...	Bangalore	
·369	·402	·323	·367	?	81	50	31	54	?	2·6	3·1	2·9	?	8	...	12	24	18	...	...	...	...	S. 85° E.	?	72	?	70*	?	...	...	Hassan .	
·337	·414	·329	·360	?	62	47	29	46	?	1·3	1·8	1·6	?	...	1	10	35	14	2	...	...	...	S. 86° E.	?	84	?	177*	?	...	...	Chitaldroog.	
·591	·566	·540	·566	−·043	86	52	43	60	− 8	2·2	3·5	2·9	−1·3	...	14	45	3	...	...	...	...	...	N. 37° E.	N. 48° E.	92	77	81	115	...	...	Trichinopoly.	
?	·674	·658	·693	+·053	?	62	61	78	+ 4	5·1	3·2	4·2	+0·3	...	6	32	21	3	...	...	...	...	N. 60° E.	N. 48° E.	85	76	116	143	...	...	Madras .	
·437	·467	·400	·435	+·028	79	50	33	54	+ 5	2·6	3·5	3·1	+0·9	2	...	1	26	29	4	...	...	...	S. 63° E.	S. 69° E.	85	68	93	80	...	...	Bellary .	
·616	·675	·666	·652	+·071	82	72	70	75	+10	2·4	2·3	2·4	+0·7	...	4	11	3	6	10	10	12	6	S. 57° W.	S. 60° E.	16	42	45	42	...	...	Vizagapatam.	
·576	·649	·654	·626	?	90	69	64	74	?	1·9	1·4	1·7	?	1	...	23	11	21	1	2	3	...	S. 88° E.	?	61	?	192*	?	...	...	Cocanada .	
·118	·136	·151	·135	−·023	85	65	62	70	+ 4	3·6	4·9	4·3	+0·1	22	3	...	...	1	4	4	8	20	N. 69° W.	N. 83° W.	42	27	73*	84	...	...	Quetta .	Hill Station, Baluchistan.
·035	·047	·052	·045	−·027	77	62	65	68	+ 3	7·3	7·0	7·2	+0·7	13	...	18	6	5	13	6	1	...	S. 65° E.	S. 8° E.	31	24	14	24	...	...	Leh .	Hill Stations, Northern India.
·118	·126	·121	·122	?	97	79	64	80	?	9·5	8·6	9·1	?	22	8	1	...	10	10	1	...	10	S.	?	3	?	67*	?	...	...	Srinagar .	
·111	·132	·156	·132	−·007	62	59	64	61	+ 3	6·0	6·5	6·3	+0·4	9	2	1	2	13	2	1	1	...	S. 46° E.	S. 54° E.	72	35	257*	198	...	...	Murree .	
·209	·216	·226	·217	+·001	84	68	58	70	+ 4	6·2	6·0	6·1	+0·1	49	1	...	2	6	...	...	1	3	S. 72° E.	S. 70° E.	5	13	74*	64	7·27	1·71	Chamba .	
·063	·080	·085	0·76	—·023	88	76	67	77	+ 5	6·6	6·7	6·7	0	...	1	...	...	8	7	10	23	13	S. 74° W.	S. 68° W.	56	48	16	20	3·68	0·66	Kailang .	
·129	·140	·162	·143	—·008	69	58	65	64	+ 6	5·8	6·8	6·3	+0·9	11	2	6	4	2	12	21	1	1	S. 17° W.	S. 31° W.	37	19	132	?	...	...	Simla (Ridge),	
·148	·158	·177	·163	+·007	77	63	66	71	+ 9	5·2	5·7	5·5	+0·8	7	...	14	19	3	...	...	12	7	N. 48° E.	S. 66° W.	31	9	165	114	...	...	Chakrata .	
·183	·204	·223	·204	+·013	78	67	71	72	+10	5·9	5·8	5·9	+1·9	42	2	7	2	...	4	3	2	...	N. 74° E.	S. 70° W.	5	17	51	43	...	...	Ranikhet .	
·199	·256	·284	·247	−·006	85	79	56	73	− 1	4·3	3·6	4·0	+0·6	...	...	1	15	...	...	3	21	22	N. 58° W.	N. 78° W.	43	64	21	?	0·69	0·25	Katmandu .	
·189	·221	·236	·215	+·012	92	85	87	88	+ 8	6·2	6·9	6·6	+0·9	2	4	6	3	2	2	15	16	8	S. 89° W.	S. 84° W.	41	22	105	62	...	...	Darjeeling .	
?	?	?	?	?	?	?	?	?	?	?	?	?	?	...	4	7	1	1	...	5	10	34	N. 47° W.	N. 50° W.	68	34	?	?	Nil	Nil	Demagiri .	
?	*·404	·412	?	?	?	66	60	?	?	2·9	3·5	3·2	+0·4	...	6	1	3	2	22	22	2	4	S. 27° W.	S. 4° W.	53	53	?	?	0·16	0·15	Tura .	
·224	·231	·242	·232	+·034	63	45	45	51	+10	2·3	3·0	2·7	+0·1	...	5	19	4	4	6	14	5	5	N 30° E.	N. 83° W.	6	6	152*	113	...	...	Mount Abu	Hill Stations, Central India.
·277	·323	·315	·305	+·028	72	50	45	56	+ 2	1·9	3·4	2·7	+0·4	6	6	2	7	12	2	17	7	3	S. 18° W.	N. 68° W.	23	13	135*	73	...	...	Pachmarhi.	
·320	·328	·341	·330	+·020	67	51	45	54	+ 2	2·8	4·7	3·8	+1·8	22	2	...	...	9	15	4	...	10	S. 13° W.	S. 48° W.	26	24	159	118	0·15	0·15	Chikalda .	
																															Makhla .	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and at 4 P.M. at 89

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S.L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, S. India.	Wellington . .	...	24·301	24·231	·070	24·266	−·003	?	68·6	45·6	23·0	74·4	35·6	38·8	63·7	63·9	55·9	+0·8	43·9	53·8	55·8	51·2
Extra India.	Muscat . .	...	30·142	30·046	·096	30·094	?	?	69·4	64·8	4·6	74·0	58·7	15·3	68·1	69·2	67·1	?	59·4	62·1	62·6	61·4
	Aden . . .	...	29·995	29·887	·108	29·933	−·003	29·960	79·7	73·7	6·0	81·5	69·9	11·6	77·0	78·5	76·4	+0·5	68·4	70·6	70·0	69·7
	Perim . . .	...	·866	·769	·097	·810	?	?	83·4	74·2	9·2	84·5	72·0	12·5	80·0	80·2	78·0	?	61·8	71·9	71·6	68·4
	Minicoy . .	...	·992	·889	·103	·937	?	·871	85·7	77·4	8·3	88·5	73·4	15·1	82·0	83·2	80·6	?	72·9	75·6	76·0	75·0
	Zanzibar . .	...	·898	·788	·110	·843	?	·843	86·3	79·7	6·6	88·0	78·3	9·7	82·9	85·9	82·9	?	75·9	76·6	76·8	76·4
	Port Victoria (Seychelles).	15	·968	·885	·083	·927	?	·887	82·3	76·4	5·9	83·7	73·7	10·0	80·4	81·0	79·1	?	73·0	75·3	75·2	74·5

II—*concluded.*

Stations in India, Burma, etc., for January 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from																	
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·274	·315	·364	·318	+·018	88	55	61	68	0	2·8	4·1	3·5	+0·2	5	...	3	6	26	20	2	...	...	S. 34° E.	S. 14° E.	74	62	46	53	...	...	Wellington.	Hill Station, S. India.
·441	·482	·483	·469	?	70	70	67	69	?	3·7	3·2	3·5	?	...	9	6	20	1	...	2	6	18	N. 11° E.	?	39	?	103	?	...	...	Muscat	Extra India.
·626	·666	·624	·638	−·006	75	72	61	70	− 2	7·1	1·2	4·2	+0·3	2	...	16	31	11	2	...	...	...	N. 88° E.	N. 84° E.	81	70	377	309	...	...	Aden	
·388	·673	·662	·573	?	47	66	64	59	?	5·4	2·3	3·9	?	...	...	...	21	38	3	...	...	...	S 58° E	?	90	?	282	?	...	...	Perim	
·757	·801	·803	·797	?	80	73	71	75	?	4·2	4·3	4·2	?	...	24	32	5	...	...	...	...	1	N 30° E	?	87	?	169	?	...	...	Minicoy	
·845	·833	·802	·827	?	83	74	65	74	?	3·8	2·8	3·3	?	...	21	34	3	1	1	...	...	1	N. 31° E	N. 27° E.	86	60	215*	195	...	...	Zanzibar	
·769	·810	·799	·793	?	85	78	76	79	?	7·4	7·0	7·2	?	...	14	3	...	1	...	1	9	34	N. 39°W.	?	79	?	151	?	13·82	2·56	Port Victoria (Seychelles)	

* Corrected.

G. I. C. P. O.—No. 141 Meteor.—13-5-95.—400.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr., I.—June 94.—5,000

Zinco., B. I. O., Calcutta.

LITHO. BY J.N.MUNDLE

Explanation

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

Reg. No. 159. Wr. I.—June 94.—5 000.

Zinco., Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

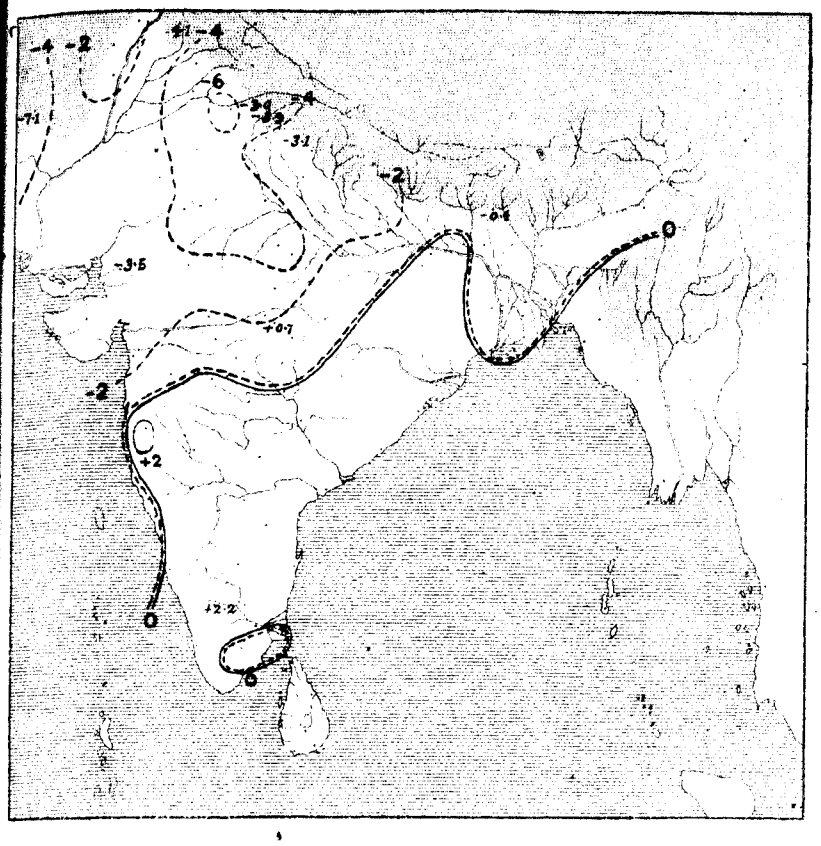
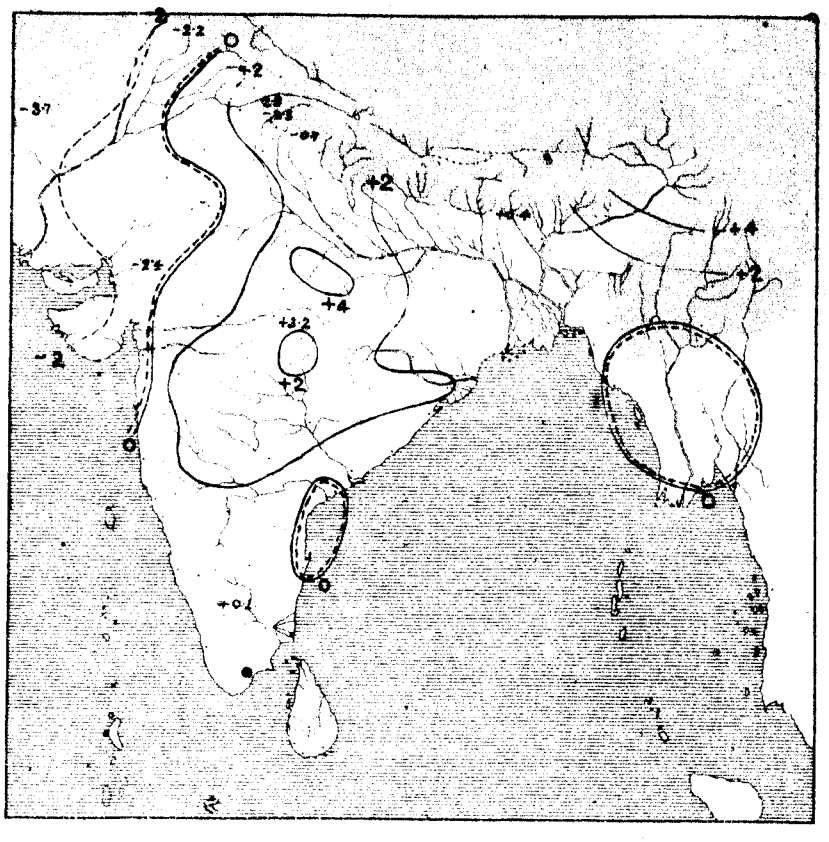


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

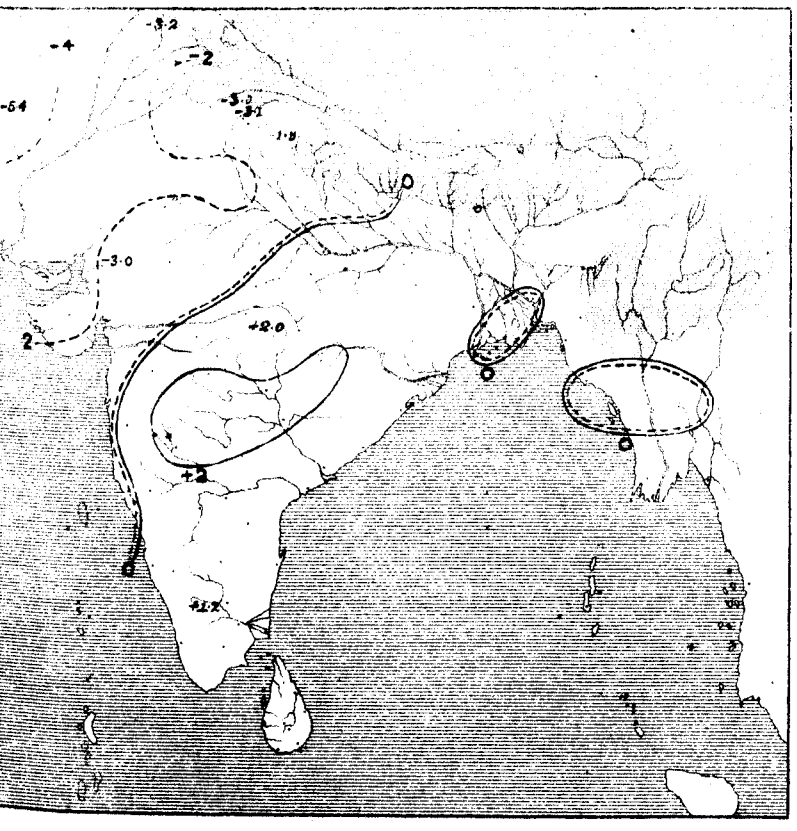
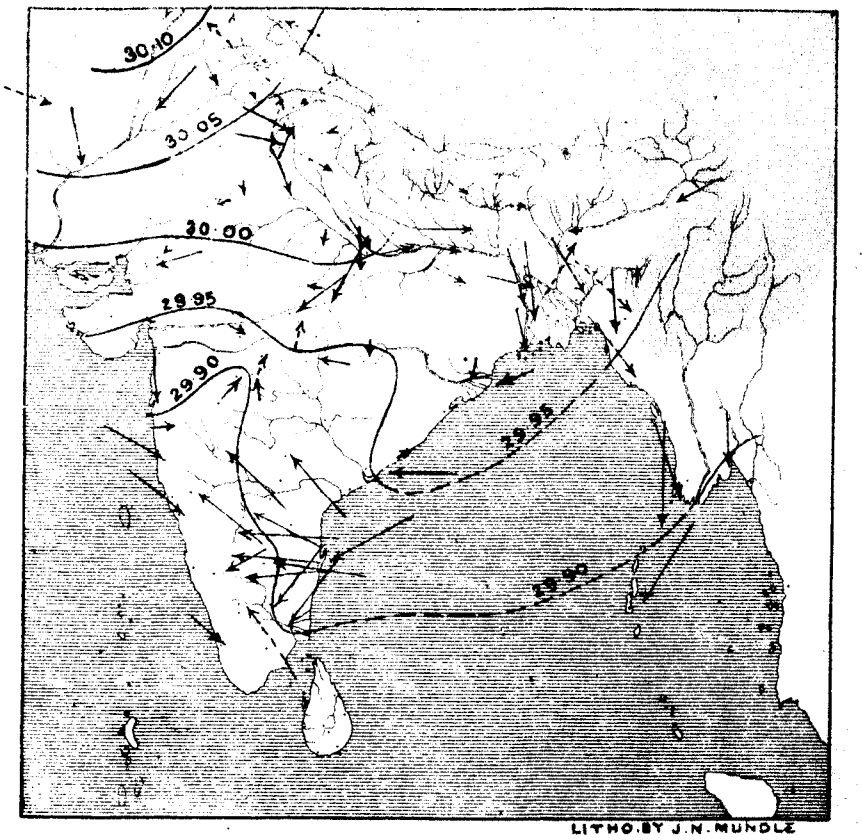


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF JANUARY 1895.



LITHO. BY J. N. MUNDLE

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{20}$th of an inch being equal to 100 per cent.

LITHO. BY J.N.MUNDLE.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Reg. No. 155. Wr. 1.—June 94.—6,000.

Zinco., Calcutta.

LITHO. BY J. N. MUNDLE.

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 51 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 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 figures.

1. Tenasserim	15. Behar (North)	29. Madras (South Central)	43. Central India (East)
2. Lower Burma	16. North Western Provinces (East)	30. Coorg	43(a). Do. do. (a)
3. Central do.	17. Oudh (South)	31. Mysore	44. Rajputana (East) Central India (West)
4. Upper do.	18. Do. (North)	32. Konkan	45. Rajputana (West))
5. Arakan	19. North Western Provinces (Central)	33. Bombay Deccan	46. East Coast (North)
6. Eastern Bengal	20. Do. do. (West)	34. Hyderabad (North)	46(a). Do. do. (a)
7. Assam (Surma)	21. Do. do (Submontane)	35. Khandeish	47. Hyderabad (South)
8. Do. (Brahmaputra)	22. Punjab (South)	36. Berar	48. Madras (Central)
9. Deltaic Bengal	23. Do (Central)	37. Central Provinces (West)	49. East Coast (Central)
10. Central do.	24. Do. (Submontane)	38. Do. (Central)	50. East Coast (South)
11. North do.	25. Do (Hill Districts)	39. Do. (East)	51. Madras (South)
12. Orissa	26. Do. (North West)	40. Gujarat	
13. Chota Nagpore	27. Do. (West)	41. Kathiawar	
14. Behar (South)	28. Malabar	42. Sind	

Reg. No. 156, Wr. [illegible] June 94 —5 00.

Litho. S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, FEBRUARY, 1895.

INTRODUCTION.

THIS Review of the weather in India during the month of February 1895 is based on observations taken daily at 8 A.M. at 205 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 89 stations. In the rainfall summary, the rainfall data of the meteorological observatories and the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the preparation of the Review are utilized. A summary of the weather in the Bay of Bengal and the Arabian Sea derived from information extracted from the logs of vessels entering the ports of Calcutta and Bombay is given.

Summary of the chief features of the weather in India during the month of February, 1895.

February is usually the last month of the cold weather in Northern India. Temperature increases rapidly, more especially in the latter half of the month, and pressure decreases slowly in Upper India. The north-east winds in the Bay of Bengal and Arabian Sea usually diminish slightly in strength during the month. The general character of the air movement in India in February is similar to that of January. An important change, however, commences at the head of the Bay in the latter half of the month, shown by the establishment of local southerly winds on the Bengal Coast. These extend at first to a short distance from the coast landwards and seawards and are very unsteady, but gradually increase in intensity and volume, and become an important feature of the air movement in India during the hot weather months. The establishment of these winds usually accompanies the appearance of a shallow depression in West Bengal and Chota Nagpur. It is at first very feeble, but gradually developes, and becomes an important feature of the pressure distribution of the hot weather months.

The chief disturbances of February are cold weather storms similar in all respects to the corresponding storms of the preceding month. In North-Eastern India there are periods of slight local disturbance shown chiefly by the occurrence of series of thunderstorms at irregular intervals after the setting in of the hot weather southerly winds on the Bengal Coast.

The following is a summary of the more important features of the meteorology of the month :—

Temperature was at the commencement of the month in general excess. The excess was chiefly shown in the night temperature, and was due to the large amount of cloud accompanying the approach of a cold weather disturbance from the Persian area to the north-west frontier. The mean temperature of the 24 hours preceding 8 A.M. of the 1st averaged 8° in excess in the Central Provinces, 4° in the North-Western Provinces, 3° in Central India and 2° in Bengal and the Punjab.

It was stated in last month's weather review that a feeble depression was passing through Baluchistan on the 30th

and 31st of that month. It was transferred to Sind on the morning of the 1st, and a secondary depression had formed during the previous 24 hours in the North-West Punjab. The primary depression advanced eastwards into Central India and the northern districts of the Central Provinces on the morning of the 2nd and into Bihar and West and Central Bengal on the morning of the 3rd. The secondary depression was nearly stationary during this period, and began to fill up on the morning of the 2nd. It disappeared by the morning of the 3rd. The double disturbance gave numerous thunderstorms and hailstorms, which in some cases caused considerable damage to the crops. The Punjab, North-Western Provinces, Bihar, Bundelkhand and Baghelkhand received general and moderate rain. The heaviest thundershowers occurred in the Dehra Dun and Kangra districts, several stations registering over three inches. Moderate to heavy snow fell during the disturbance in the Punjab and Kashmir Himalayas, snow falling down to about 5,000 feet.

The disturbance filled up on the 4th, and the cool wave in its rear advanced eastwards over Northern and Central India, and temperature was hence reduced considerably below the normal on the 6th and following days over the whole of that area. The following gives comparative data for the 1st and 7th, showing the general reduction of temperature produced by the advance of this cool wave:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		Abnormal change of temperature from 1st to 7th.
	1st.	7th.	
	°	°	°
Punjab	+2·2	−1·9	− 4·1
N.-W. Provinces and Oudh	+3·8	−4·9	− 8·7
Rajputana and Sind	+1·2	−1·9	− 3·1
Gujarat and Central India	+3·1	−4·4	− 7·5
Berar and Central Provinces	+7·8	−2·9	−10·7
Bengal and Assam	+2·1	−4·1	− 6·2

Temperature was hence on the 7th more or less considerably below the normal in Northern and Central India, but was in moderate excess in Madras, a contrast of conditions which frequently obtains in the cold weather.

Meanwhile pressure had fallen rapidly in Persia from the 5th to the 7th, and weather had become cloudy and showery in that area. The disturbance was very ill-defined and feeble. It affected Persia from the 6th to the 9th and Baluchistan from the 8th to the 10th, during which that area received light rain. The disturbance passed eastwards through Sind on the 10th, Rajputana and Central India on the 11th, and Chota Nagpur and Bengal on the 12th. It gave light thundershowers in Central India and the Central Provinces on the 10th, the Central Provinces, Chota Nagpur and Orissa on the 11th, and Assam on the 12th and 13th. A feeble cold wave advanced in the rear of the disturbance from Sind and Kathiawar through Central India and the Central Provinces to Bengal, producing a moderate reduction of temperature. Whilst this feeble cool wave crossing Central India, temperature increased considerably in Upper India and was largely in excess on the 14th and 15th. The following gives the variation of the mean and maximum temperatures from the normal from the 12th to the 15th in Baluchistan, Punjab, Sind and Rajputana:—

Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				Variation from normal of maximum temperature of 24 hours preceding 8 A.M. of			
	12th.	13th.	14th.	15th.	12th.	13th.	14th.	15th.
	°	°	°	°	°	°	°	°
Baluchistan (Quetta)	+0·9	+2·5	+4·1	+8·4	+0·9	+6·0	+9·8	+12·3
Punjab	+2·5	+3·0	+4·2	+5·6	+2·4	+3·6	+5·6	+6·5
Sind	+0·8	+2·7	+3·6	+3·8	+1·7	+4·7	+4·5	+5·4
Rajputana	+2·0	+0·2	+1·9	+3·8	+1·4	+1·7	+3·9	+6·1

The temperature conditions now established in Upper India and Baluchistan held steadily during the remainder of the month and formed one of the more noteworthy features of the meteorology of the month.

The following table which gives the variations of the maximum temperature of five representative stations for every third day from the 15th to the end of the month, illustrates this feature of excessive temperature in Upper India:—

Station.	Variation from normal of maximum temperature of 24 hours preceding 8 A.M. of			
	18th.	21st.	24th.	27th.
Quetta	+12·7	+13·9	+13·0	+12·0
Jacobabad	+12·7	+13·1	+13·5	+11·3
Deesa	+0·4	+9·5	+7·4	+6·4
Mooltan	+11·5	+13·2	+13·1	+11·1
Bickaneer	+13·0	+11·5	+11·1	+8·9

This excessive temperature, which probably also extended westwards from Baluchistan over the plateau of Iran (Persia), gave rise to a succession of large oscillations or surges of pressure. The first commenced on the 14th, pressure falling steadily and rapidly over the whole of India and Persia until the 17th. This was followed by a large and rapid rise of pressure on the 18th and 19th, which re-established high pressure conditions for a short

period. Local thundershowers of little importance occurred in the Central Provinces on the 16th, 17th and 18th. A feeble oscillation occurred between the 20th and 24th. Series of thunderstorms occurred during this second surge in the Central Provinces, Berar and the Deccan, which caused a large local reduction of temperature. The third surge extended from the 24th to the end of the month. Pressure gave way simultaneously over the whole area from the 25th to the 27th, and increased rapidly on the 28th. Numerous thunderstorms visited Upper and Central Burma on the 25th, 26th and 27th, which reduced temperature considerably in that area.

During the whole of this period temperature was steadily and largely in excess in North-Western India and Baluchistan, and very high maximum temperatures were recorded on the 27th and 28th. They were, however, not so large as those recorded in those areas in the very dry and hot months of February 1878, 1886 and 1887. Temperature was, on the other hand, in moderate defect over the greater part of North-Eastern India and the Peninsula.

The following table giving mean temperature variation data for the last day of the month illustrates the remarkable temperature conditions obtaining during the last fortnight of the month:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	−2·2	−2·4	−2·3
Bengal and Assam	+0·9	−1·8	−0·5
N.-W. Provinces and Oudh	+1·4	+0·1	+0·8
Punjab	+8·3	+3·3	+5·8
Sind and Rajputana	+7·2	+1·8	+4·5
Central India and Gujarat	+3·4	+0·8	+2·1
Central Provinces and Berar	+0·1	+0·7	+0·4
Bombay	−0·2	+0·3	+0·1
Madras	−1·7	−2·1	−1·9

Pressure.—The mean pressure of the whole of India was ·009″ higher than the normal. The pressure anomalies at the level of the plains were small in amount and the mean pressure distribution of the month was hence very approximately normal. Pressure was, relatively to the general condition, in slight excess in North-Eastern and Central India, the Gangetic plain and the Central Provinces, and in slight defect elsewhere, except in Lower Burma and the Indus Valley, where the local deficiency was moderate in amount, slightly exceeding ·02″. The most important feature in the pressure distribution was the large excess at the hill stations as compared with the plain stations. The vertical pressure anomalies, which were negative in December and January, changed in character at the end of January and were positive and unusually large in amount in February. Thus the vertical pressure anomaly for Leh and Lahore was ·12″, an unusually high value. This change in the anomalies accompanied (or preceded) a large change in the general character of the weather in Northern India and the Himalayan mountain area, *viz.*, from more disturbed and showery weather to finer and more settled weather than usual. The change also indicated the probability of an early and severe hot weather in Northern India.

The following table gives comparative pressure variation data for the eleven meteorological provinces of India:—

Meteorological Province.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Burma Coast and Bay Islands	−·010	−·019
Burma, Inland	0	−·009
Assam	+·018	+·009
Bengal and Orissa	+·018	+·009
Gangetic plain and Chota Nagpur	+·023	+·014
Upper Sub-Himalayas	+·015	+·006
Indus Valley and North-West Rajputana	−·016	−·025
East Rajputana, Central India, and Gujarat	+·008	−·001
Deccan	+·014	+·005
West Coast	+·005	−·004
South India	+·011	+·002

Temperature.—The snowfall reports received up to date indicate that the snowfall of the present winter was less than usual in the Afghan mountains. It commenced earlier than usual, and was undoubtedly heavy in December and January in the Punjab and Kashmir Himalayas. In consequence, however, of the early termination of the winter rains, the snow accumulation in that area was probably not excessive at the commencement of February, and it decreased considerably during the month due to the prevalence of unusually clear dry weather. Hence the snow accumulation exercised little influence on the temperature conditions in India during the month.

The mean maximum or day temperature of the month was in moderate to large excess in Upper India. The excess was more than 4° in amount in the West Punjab, Upper Sind, West Rajputana and Baluchistan and exceeded 6° at Quetta (+7·8°), Jacobabad (+6·9°), Mooltan (+6·5°) and Bickaneer (+6·2°). It was generally in slight defect in Burma, North-Eastern India, and the Peninsula; but the variations were small and less than 2°, except in the area defined by the following stations:—Nagpur (−4·7°), Amraoti (−3·1°), Seoni (−2·6°), Akola (−2·0°), Malegaon (−2·1°) and Sholapur (−2·3°). This cool area hence included Berar and the adjacent districts of the Bombay Deccan and the Central Provinces.

The mean minimum or night temperature was normal or in slight defect in South Bengal, Arakan, Upper Burma, Cutch and Kathiawar, and locally at Bombay and Madras. It was in excess over the remainder of India; but the excess was nowhere large and exceeded 3° at the following stations only:—Lahore (+4·4°), Mooltan (+4·5), Ludhiana (+3·6°), Sirsa (+3·0°) and Akola (+3·1°). The excess was more than 2° in a narrow belt of country, stretching from the Punjab submontane districts southwards to Berar and the Central Deccan.

The mean temperature of the month differed little from the normal in North-Eastern India and Burma, as the day and night temperatures varied in opposite directions from the normal. Temperature was, on the other hand, in moderate to considerable excess in North-Western India, due chiefly to excessive day temperature. The following gives data for the stations at which the mean temperature of the month was 3° or more above the normal:—

Station.	Mean daily temperature.		
	Actual, February 1895.	Normal, February.	Variation of actual from normal.
	°	°	°
Murree	46·0	40·7	+5·3
Quetta	46·0	41·8	+4·2
Peshawar	57·0	53·5	+3·5
Rawalpindi	55·5	52·4	+3·1
Lahore	60·5	57·2	+3·3
Dera Ismail Khan	61·2	57·9	+3·3
Sirsa	64·3	60·6	+3·7
Mooltan	65·0	59·5	+5·5
Jacobabad	66·6	62·4	+4·2
Bickaneer	67·8	64·3	+3·5

The diurnal range of temperature averaged about 4° more than usual in Upper India and Baluchistan and was 3° less than usual in the Central Provinces, Berar and the North Deccan.

The following table gives temperature variation data of the month of February 1895for the eleven meteorological provinces of India:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, February 1895.	Mean minimum temperature, February 1895.	Mean daily temperature, February 1895.
	°	°	°
Burma Coast and Bay Islands	−0·3	+0·1	−0·1
Burma Inland	−0·7	−0·4	−0·6
Assam	+1·5	−0·3	+0·6
Bengal and Orissa	+0·2	−0·3	−0·1
Gangetic plain and Chota Nagpur	−0·5	+0·8	+0·2
Upper Sub-Himalayas	+1·3	+2·1	+1·7
Indus Valley and North-West Rajputana.	+4·7	+1·7	+3·2
East Rajputana, Central India and Gujarat.	+1·1	+0·9	+1·0
Deccan	−1·7	+1·7	0
West Coast	+0·2	+0·5	+0·4
South India	−0·2	+0·8	+0·3

Winds—were slightly stronger in Lower Burma and at Port Blair. Land winds held steadily throughout the month in South Bengal, and the mean wind direction was hence north-westerly as in January. Winds were much steadier in the Gangetic plain, more especially in Bihar and the eastern districts of the North-Western Provinces. They were light and irregular in the Punjab, but were somewhat stronger than usual at the hill stations in Upper India. Southerly winds set in much earlier than usual in Lower Sind, Kathiawar and South-West Rajputana, and the mean direction of the air movement was from south instead of north as usual in February. Winds were even more unsteady though slightly stronger than usual in the Central Provinces, Berar and the Bombay Deccan. They were normal in the West Coast districts and varied slightly but irregularly from the normal in Madras.

Humidity and Cloud.—The air was slightly drier in Burma, Assam, Bengal and Orissa and at Port Blair. The mean humidity percentage of Diamond Island was 6 below the normal, 7 at Berhampur, and 11 at Calcutta. The increased dryness was most largely shown in West Bengal.

Humidity was above the normal in Bihar, the North-Western Provinces, the Punjab (except the South-West districts), Rajputana, Central India, Berar, the Central Provinces and North Deccan. The excess in the humidity percentage was moderately large over the greater part of that area, and was very large at Nagpur (+21), and Akola, Sutna, and perhaps Ghazipur (+15). This increase of humidity was mainly due to an excess of aqueous vapour present in the air. The air was, on the other hand, very dry at the Punjab hill stations and in Baluchistan. The mean humidity percentage of the month was 14 below the normal at Murree and 13 at Quetta. The air was also drier at Mooltan, Jacobabad, and Kurrachee and at the west coast stations, including Bombay, Karwar, and Cochin. It was also drier than usual in Mysore, Coorg and South Madras. The humidity percentage was 7 below the normal at Trichinopoly and 2 below it at Bangalore.

There was slightly less cloud than usual in Burma and Assam and at Port Blair and a slight excess in Bengal, Orissa and Chota Nagpur. The mean cloud amount was largely below the normal in Bihar, the North-Western Provinces, the Punjab, Sind, Baluchistan, Rajputana and Central India. The deficiency was as marked at the hill as at the plains stations, and was absolutely greatest at Leh, where the mean amount for the month (4·0) was 2·7 below the normal.

Cloud was in moderate to considerable excess in the Central Provinces, Berar, Khandesh and the Deccan and also in the Konkan. The excess was most marked at Nagpur and Raipur. Skies were remarkably free from cloud in South Madras, Mysore and Malabar, as is shown by the following data for three stations :—

Station.	Mean cloud amount.		
	Actual, February 1895.	Normal, February.	Variation from normal.
Cochin	0·1	2·1	—2·0
Bangalore	0·4	2·2	—1·8
Mysore	0·5	?	?

The following table gives variation data of the mean aqueous vapour pressure, relative humidity and cloud amount in ten of the eleven meteorological provinces of India :—

Meteorological Provinces.	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.
Burma Coast and Bay Islands	−·032	−3	−0·7
Assam	+·005	−1	−1·4
Bengal and Orissa	−·034	−5	+0·5
Gangetic Plain and Chota Nagpur	+·040	+5	−0·3
Upper Sub-Himalayas	+·049	+6	−1·7
Indus Valley and North-West Rajputana.	+·022	0	−1·5
East Rajputana, Central India, and Gujarat.	+·030	+5	−1·2
Deccan	+·067	+9	+1·0
West Coast	−·028	−3	−0·1
South India	+·003	+1	−0·2

Rainfall.—The rainfall of the month was small in amount, more especially when compared with the heavy rainfall of the preceding two months. The only important cold weather disturbance was one which covered Northern India between the 1st and 4th. It was a double disturbance, and gave a moderate burst of rain to the Punjab, the North-Western Provinces and Bihar. A feeble disturbance gave light showers in Baluchistan from the 8th to the 10th. It crossed Northern India, and gave a few thundershowers of little or no importance in Central India, the Central Provinces, Chota Nagpur, Orissa and the Upper India hill districts from the 10th to the 12th. The weather was feebly disturbed in the Deccan and Central Provinces on the 16th, 17th and 18th and from the 20th to the 24th, when series of thunderstorms gave light to moderate rain in that area.

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

(1) Very deficient rain or snow in Baluchistan.

(2) The precipitation in the Western Himalayas was much below the average, and occurred chiefly during the first week of the month.

(3) Normal rain in the Punjab and Bihar, and rain slightly in excess in the North-Western Provinces.

(4) Rainfall in slight to moderate excess of the small normal of the period in Berar, the Central Provinces, the Bombay Deccan, Hyderabad and Ganjam.

(5) Scanty rain in Assam, where the commencement of the spring rains was hence considerably delayed.

(6) Practically no rain fell in Bengal, and the rainfall was hence in considerable defect (over one inch) in South and East Bengal, where the deficiency was greatest.

(7) The rainfall was also practically *nil* in Madras, Mysore, Malabar, Coorg and the South Deccan and in considerable defect in the southern districts of Madras, which usually receive moderate rain from thunderstorms in February.

It may be noted that the rainfall was less than a tenth of an inch in amount in Bengal, Rajputana, Gujarat, Sind, Kathiawar, Konkan, Malabar, Mysore, Coorg, Madras (except the northern districts), Arakan and Tenasserim. It exceeded an inch only in the submontane and hill districts of Upper India, Upper Assam, and Sikkim, and locally at a few stations in the Central Provinces and Berar. The following table gives comparative data of the eleven meteorological provinces:—

Meteorological Province.	Rainfall.		
	Mean actual for February 1895.	Mean normal for February.	Variation from normal.
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands.	0·50	0·48	−0·20
Burma, Inland . . .	0·39	0·10	+0·13
Assam	0·56	1·32	−0·76
Bengal and Orissa . . .	0·12	0·94	−0·83
Gangetic Plain and Chota Nagpur.	0·43	0·48	−0·04
Upper Sub-Himalayas . .	0·92	1·27	−0·27
Indus Valley and North-West Rajputana.	0·40	0·42	−0·19
East Rajputana, Central India, and Gujarat.	0·25	0·19	+0·10
Deccan	0·54	0·21	+0·31
West Coast . . .	0·02	0·17	−0·15
South India	0·04	0·26	−0·21

Atmospheric Pressure.

The mean pressure of the whole Indian area for the month was ·009″ above the normal. Relatively to this general condition, pressure was at the level of the plains in slight excess in Assam, Bengal, the North-Western Provinces, the East Punjab, Rajputana, Central India, the Central Provinces, Berar, Hyderabad and North Madras and in defect over the remainder of India and in Burma. The local excess was nowhere above ·020″ and was hence small in amount. The negative anomalies were more than ·02″ in two areas, *viz.*, Lower Burma and the north-west frontier districts. The following gives data for those two areas:—

Area.	Station.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
		Inches.	Inches.
Lower Burma . .	Moulmein . .	−·013	−·022
	Rangoon . .	−·016	−·025
	Diamond Island .	−·015	−·024
North-West Frontier Districts.	Peshawar . .	−·012	−·021
	Dera Ismail Khan .	−·028	−·037
	Mooltan . .	−·025	−·034
	Jacobabad . .	−·015	−·024
	Kurrachee . .	−·019	−·028
	Bhuj . . .	−·014	−·023

The variations of the mean pressure conditions of the month at the level of the plains were hence insignificant and indicated the absence of any marked abnormal features. In striking contrast to this was a large excess of pressure at the level of the hill stations relative to the adjacent plain stations. The following gives data in illustration:—

Hill Station.	Barometric variation from normal.	Plain Station.	Pressure anomaly.	Variation pressure anomaly.
	Inch.		Inch.	Inch.
Leh . . .	+·118	Lahore . .	+·001	+·117
Kailang . .	+·080	Ludhiana . .	+·012	+·068
Murree . .	+·045	Peshawar . .	−·021	+·066
Quetta . .	+·044	Jacobabad . .	−·024	+·068
Simla . .	+·037	Ludhiana . .	+·012	+·025
Chakrata . .	+·046	Roorkee . .	+·007	+·039
Ranikhet . .	+·039	Bareilly . .	+·016	+·023
Darjeeling . .	+·032	Purnea . .	+·014	+·018

The preceding data hence establish that the vertical pressure anomalies were positive and unusually large in amount in Upper India. They decreased eastwards and were comparatively small in the Central and Eastern Himalayas. They ranged between ·02″ (for Darjeeling and Purnea) and ·12″ (for Leh and Lahore). The vertical pressure anomalies were negative and moderately large in November, December and January, but changed rapidly in character in the last week of January, and were, during the whole of February, of the type invariably associated with finer and drier weather than usual in North-Western India during the cold weather.

The change is shown clearly by the following data:—

Station.	Vertical pressure anomaly.			
	November 1894.	December 1894.	January 1895.	February 1895.
	″	″	″	
Leh and Lahore	—·021	—·035	—·025	+·116
Kailang and Lahore	+·007	—·026	+·005	+·078
Murree and Peshawar	—·013	—·037	—·030	+·057
Simla and Ludhiana	—·023	—·030	—·044	+·016
Darjeeling and Purne	—·036	—·015	+·007	+·009

Barometric depressions and cold weather storms of the month.

The depressions and disturbances of the month were very feeble and ill-defined, and it is hence not possible to trace their character with certainty. The following gives a brief sketch of the four disturbances of the month so far as can be drawn from the available data:—

Disturbance of the 1st to the 4th February.—A very shallow depression was passing through Baluchistan at the end of the previous month. It lay over Lower Sind on the morning of the 1st. Pressure had given way very rapidly in the North-West Punjab during the previous 24 hours, and a moderately deep secondary depression lay over that area. Winds were unusually light at the level of the plains in the Punjab depression, the majority of stations in the North and Central Punjab reporting calms at 8 A.M. Murree and Cherat, on the other hand, had very strong winds. The 8 A.M. wind velocity at the former station was 32 miles per hour. Skies were overcast over the whole of North-Western India, and cloud was extending eastwards into Bihar and southwards into the Central Provinces. Light to moderate showers had fallen in the Punjab, Central India and the North-Western Provinces.

2nd February.—The primary depression had advanced eastwards during the previous 24 hours, and lay over Rajputana, Central India at 8 A.M., and the northern districts of the Central Provinces. Pressure had increased slightly in the Punjab. The secondary depression in that area was practically unchanged in position, and was beginning to fill up. Skies were clearing in Upper India, and were clouding over in Bengal and Assam. The double disturbance had given light to moderate rain in the South-East Punjab, the North-Western Provinces and Bihar. Severe thunderstorms and hailstorms had visited several stations, more especially Mussoorie and Chakrata in the hills and Dehra and Ludhiana in the plains.

3rd February.—The primary depression had again advanced eastwards during the previous 24 hours and covered Bihar and West Bengal at 8 A.M. The secondary depression had filled up almost entirely, and a very shallow residual depression was shown in the Punjab at 8 A.M.

The advance of the primary depression was now giving strong winds and disturbed weather in Sikkim. Skies were clear over the greater part of North-Western India and were partially clouded in Bengal. Light to moderate rain had been received during the past day in the Upper India hill districts and the North Punjab, and some light showers in Bihar and Chota Nagpur.

4th February.—Pressure had increased briskly to rapidly in Upper India and marked high pressure conditions now obtained in that area and Baluchistan. The primary depression was passing through Bengal into Burma. Skies had, however, cleared in Bengal, and were, as hitherto, clear in Burma. The disturbance had given some showers in the Upper Assam Valley during the previous 24 hours. It ceased to affect the Indian area on the 5th.

The present disturbance was a double disturbance of the ordinary type, consisting of a feeble primary and a moderate stationary or secondary depression in the Punjab. The primary disturbance advanced rapidly across Northern India at a rate averaging about 500 miles per diem. The following gives a summary of the rainfall distribution accompanying the storm:—

Province.	Average actual rainfall in 24 hours preceding 8 A.M. of				
	1st.	2nd.	3rd.	4th.	Total of period.
	Inch.	Inch.	Inch.	Inch.	Inch.
Punjab	0·21	0·27	0·29	0·04	0·81
Rajputana	0·02	0·01	0	0	0·03
North-Western Provinces and Oudh.	0·30	0·37	0·01	0·01	0·69
Central India	0·15	0·13	0	0	0·28
Bengal	0	0·03	0·04	0	0·07
Assam	0	0	0·05	0·15	0·20

Disturbance of the 8th to the 12th.—This almost certainly formed in the Persian area. Pressure fell about two-tenths of an inch at Baghdad, Bushire, Teheran, Ispahan and Muscat between the 5th and 7th, and a shallow but well defined depression lay over Persia on the 7th. Pressure was lowest on the 7th at all the Persian stations. It increased slightly on the 8th and was unchanged on the 9th, after which it increased rapidly an the 10th to its normal amount. Bushire and Baghdad received moderate showers on the 5th and 6th, and Jask light showers from the 7th to the 9th. Snow fell on the higher elevation in Persia from the 3rd to the 8th. Weather was squally during the period in the Persian Gulf. Thus the S.S. *Pemba*, anchored at Bushire on the 6th, had heavy rain and lightning, and at Busreh on the 7th had a hard squall of wind and rain at 4 A.M.

The information, although limited, establishes fully that weather was disturbed at this period in the Persian Gulf and Persia. The disturbance commenced to affect Baluchistan and Sind on the 6th when pressure gave way and skies began to cloud over. Pressure increased during the next 24 hours in Northern India, but continued to fall briskly in Baluchistan and was on the morning of the 7th in considerable defect in Baluchistan and Sind. The peculiar pressure features which had characterized the storm in Persia, were now reproduced in Baluchistan and Upper India. Pressure increased slightly in that area on the 8th and 9th, but cloudy weather continued and showers were received over the Baluchistan plateau on both days.

Pressure increased briskly in Baluchistan during the next 24 hours, and the disturbance at 8 A.M. of the 10th was shown in Sind and West Rajputana as a very shallow depression, in which pressure was only ·05″ below the normal. It advanced eastward as an area of slight deficiency of pressure during the next 24 hours into Baghelkhand, Central India, and the northern districts of the Central Provinces, to which it had given light local thundershowers during the preceding day. Light showers had also fallen at the Upper India hill stations and in Chota Nagpur.

The disturbance passed eastwards through Bengal on the 12th and Upper Burma on the 13th as a very shallow depression (or area of slightly deficient pressure). It gave some light showers of little importance on the 12th and 13th in the Assam Valley.

The disturbance was hence throughout ill-defined and very feeble. It is almost certain that it originated in the Persian area, and the existence of the feeble storm, unchanged in character for a week, is an example of the remarkable vitality of the disturbances of the cold weather in the Persian area and Northern India.

Disturbance of the 14th to the 17th.—A considerable increase of pressure in Northern India accompanied the disappearance of this disturbance on the 13th, on which day pressure was in general excess. Pressure decreased steadily and largely during the next three days over the whole Indian area. The following gives the mean daily change from the 15th to the 17th :—

Province.	Change of pressure in 24 hours preceding 8 A.M. of				Variation from normal of mean 8 A.M. pressure on
	15th.	16th.	17th.	Total fall.	17th.
	″	″	″	″	″
Punjab . . .	—·072	—·059	—·015	—·146	—·080
North-Western Provinces and Oudh.	—·068	—·043	—·055	—·166	—·080
Sind and Rajputana .	—·077	—·074	—·022	—·173	—·111
Central India and Gujarat	—·080	—·044	—·008	—·132	—·067
Central Provinces and Berar.	—·065	—·049	—·031	—·145	—·047
Bengal and Assam .	—·030	—·073	—·032	—·135	—·053
Burma	—·027	—·043	0	—·070	—·037
Bombay . . .	—·038	—·019	—·005	—·062	—·029
Madras . . .	—·031	—·042	—·015	—·088	—·024

This decrease of pressure occurred simultaneously over the whole Indian and Persian area (and also at Kashgar in Central Asia), and it was as strongly shown at the level of the hills as at the plain stations. Thus at Leh the barometer fell ·154″ during the period, at Kailang ·140° and at Kashgar ·49″. Weather was slightly disturbed in Central India, the Central Provinces, Berar and the Deccan on the 16th, 17th and 18th, and series of local thunder-storms occurred, giving light rain.

Pressure increased with unusual rapidity during the next 48 hours, as is shown by the following :—

Division.	Rise of pressure in 24 hours preceding 8 A.M. of			Variation from normal of mean 8 A.M. pressure on
	18th.	19th.	Total rise.	19th.
	″	″	″	″
Punjab	+·152	+·063	+·215	+·123
North-Western Provinces and Oudh.	+·121	+·062	+·183	+·096
Sind and Rajputana . . .	+·151	+·109	+·260	+·132
Central India and Gujarat . .	+·106	+·053	+·159	+·094
Central Provinces and Berar .	+·102	+·067	+·169	+·114
Bengal and Assam . . .	+·106	+·038	+·144	+·092
Burma	+·089	+·030	+·119	+·071
Bombay	+·046	+·039	+·085	+·050
Madras	+·060	+·046	+·106	+·078

This recovery of pressure hence re-established high (and excessive) pressure conditions over the whole Indian area. The large oscillations of pressure over the whole of the Indian and Persian area, of which the present is an example, occur almost exclusively during the hot weather period and usually when the temperature is largely above the normal in North-Western and Central India. The oscillation or surge under discussion occurred during a period of excessive temperature in Baluchistan and Upper India as is shown by the following:—

Station.	Variation from normal of maximum temperature of 24 hours preceding 8 A.M. of				
	15th.	16th.	17th.	18th.	19th.
	°	°	°	°	°
Quetta . . .	+12·3	+13·7	+16·1	+12·7	+13·9
Mooltan . . .	+ 7·8	+10·4	+12·5	+11·5	+11·0
Jacobabad . . .	+10·2	+10·2	+11·8	+12·7	+10·5
Bickaneer . . .	+10·1	+ 9·6	+11·8	+13·0	+12·9

It may be noted that the excessive temperature held steadily throughout the surge and that the excess was even more marked in the Baluchistan plateau than in the plains of Sind and Rajputana.

Pressure gave way briskly to rapidly on the 19th, and changed slightly but irregularly during the next 72 hours. Light thunderstorms and duststorms occurred in the Central Provinces, Berar and the Deccan from the 19th to the 24th, although pressure was in general excess, the excess being greatest in the Central Provinces and Chota Nagpur. Hence, as is frequently the case in India, the weather was related, not to the actual pressure amounts and their variations from the normal, but to the changes from day to day.

Disturbance of the 24th to the 26th.—Pressure increased generaliy on the 23rd, the rise being large in the North and East Punjab.

This was followed by a large oscillation or surge similar to that of the 12th to the 15th. Pressure decreased steadily and largely from the 24th to the 26th, as is shown by the following:—

Province.	Change of pressure in 24 hours preceding 8 A.M. of			Total of pressure.	Variation from normal of mean 8 A.M. pressure on 27th.
	25th.	26th.	27th.		
	"	"	"	"	"
Punjab . . .	—·044	—·067	—·035	—·146	—·003
North-Western Provinces and Oudh.	—·046	—·072	—·049	—·167	—·001
Rajputana and Sind .	—·018	—·056	—·028	—·102	+·003
Central India and Gujarat	—·030	—·052	—·013	—·095	+·011
Central Provinces and Berar.	—·030	—·058	—·038	—·126	+·020
Bengal and Assam .	—·036	—·060	—·036	—·132	+·014
Burma	—·014	—·055	+·005	—·074	+·007
Bombay . . .	—·025	—·030	—·020	—·075	+·017
Madras . . .	—·019	—·033	—·026	—·078	+·032

The result of this large change was to give on the morning of the 27th normal pressure over the greater part of the Indian area. Pressure was in slight excess in the Deccan and in slight defect in Sind. A shallow stationary hot weather depression lay over Sind on the 26th and 27th. Thundershowers fell in Upper and Central Burma on these days, causing a large reduction of temperature. Pressure increased slightly to briskly on the 27th and was again in general excess on the morning of the 28th.

The following gives the variations of the maximum or day temperature at several stations in Upper India during the surge:—

Station.	Variation from Normal of Maximum temperature of 24 hours preceding 8 A.M. of				
	24th.	25th.	26th.	27th.	28th.
	°	°	°	°	°
Deesa	+ 7·4	+ 7·1	+ 7·3	+ 6·4	+ 6·9
Bickaneer . . .	+11·1	+10·6	+ 7·2	+ 8·9	+ 9·4
Jacobabad . . .	+13·5	+13·6	+10·6	+11·3	+12·7
Mooltan . . .	+13·1	+12·5	+12·8	+11·1	+11·3
Quetta	+13·0	+16·2	+14·0	+12·0	+15·0

Summary of the Reports of the Weather and snowfall in the Mountain Districts to the North and North-West of India.

The following is a statement of the information relating to the snowfall of the month of February 1895 in the Himalayan and Afghan mountain areas received up to date:—

I.—AFGHAN MOUNTAIN DISTRICTS.

(1) *Shirani Country* (*West of Dera Ismail Khan*).—Snow fell on the highest peaks of Kaisar and Mizri Ghar during the first week of the month to a depth of 3 feet 6 inches.

(2) *Wana* (*Tank Frontier District*).—The following report of the weather during the month in Waziristan has been received:—

February 1st.—Heavy snow fell for a few hours on the hills about 8,000 feet.

February *2nd.*—Weather clearing.
„ *3rd to 6th.*—Fine clear weather.
„ *7th.*—Cloudy.
„ *8th.*—Snow from 11 A.M. to 6 P.M. The depth of the snowfall in the Shakai valley (elevation 6,500 feet) was about half an inch.
„ *9th.*—Slight snow on hills about 10,000 feet.
„ *10th to 14th.*—Fine weather.
„ *15th to 17th.*—Short sharp local storms in the afternoons with small snow above 8,000 feet.
„ *18th to 27th.*—Fine clear weather.
„ *28th.*—Heavy storm during the evening lasting till 11 A.M. of the 1st of March. The hills above 8,000 feet were covered with snow, probably from 4 to 6 inches in depth.

The weather in the district during the month is considered by the natives to have been exceptionally mild.

(3) *Khyber Pass Districts.*—During the first week in February about 1½ feet of snow fell on the Lakha hill and nearly one foot on the Tor Sappar range. A little snow also fell on the Loargi plateau, but it soon melted. Two feet of snow fell during the same period in Tirah.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Hazara District.*—Snow fell on the higher ranges of this district on the 1st. The depth of the snow on the 15th was about 2 feet on the Kagan hills, one foot on the Kaush hills and from 1 to 1½ feet on the higher peaks of the Hazara hills. The weather was unusually dry and warm during the month. The snowfall is said to be very small in amount this year, and was melting fast at the end of the month.

(2) *Murree and adjacent hills.*—The following gives comparative data of the snowfall in this area for the month:—

Station.	Snowfall during month to February.							
	1895.		1894.		1893.		1892.	
	Ft.	Ins.	Ft.	Ins.	Ft.	Ins.	Ft.	Ins.
Murree	3	3	4	10	13	10	0	5
Kahuta	*Nil.*		*Nil.*		6	0	*Nil.*	

The fall occurred almost entirely during the first three days of the month and was moderate in amount at Murree and barely one-fourth of that of February 1893 and of February 1891.

(3) *Kashmir.*—The following is a statement of the snowfall of the month at Srinagar.

Date.	Fall.	
	Feet.	Inches.
1st	2	1
2nd	1	0
17th	0	8
18th	0	1
Total	3	10

(4) *Ladakh.*—The Superintendent of the Leh Observatory, writing on the 18th February, says:—

"This year we are having a very cold winter. Usually any fall of snow we receive melts away in two or three days. It has been lying here 2 feet deep from the middle of December."

(5) *Chamba State.*—Snowstorms occurred during two periods, *viz.*, the 1st to the 4th and the 8th to the 11th. The following gives the fall at six positions, the elevations of which range from 3,000 to 8,000 feet:—

	Height in feet.	Total fall during				Total snowfall.	
		First storm period, 1st to 4th.		Second storm period, 8th to 11th.			
		Ft.	Ins.	Ft.	Ins.	Ft.	Ins.
Chamba	3,000	Rain		Rain.			
Tisa	5,000	1	3	*Nil.*		1	3
Bhandal	5,600	4	0	Rain.		4	0
Barmour	7,000	2	0	0	10	2	10
Thanela	7,000	4	2	Slight.		4	2
Kalatop	8,000	5	6	Slight.		5	6

The snowfall descended to about 4,000 feet in the first storm. The second storm was very local. The fall in both storms was heavier on the outer than on the inner ranges. The weather was slightly warmer than usual during the month.

(6) *Kulu.*—The report received from the Assistant Commissioner states that there were falls of snow on the 1st, 2nd, 3rd and 11th in the Kulu Tahsil, and on the 3rd, 4th, 11th and 12th in the Plach Tahsil. The falls during the month occurred chiefly on the higher elevations, and no snow was received below an elevation of 7,000 feet. The weather during the month was brighter and warmer than usual and the snow had begun to melt rapidly. The snowfall of the month was normal in amount.

The following table gives the reported depth of snow on the higher passes at the end of the month, with corresponding data for the past four years :—

Tahsil.	Name of pass.	Height above sea level in feet.	Reported depth of snow on 25th February.							
			1895.		1894.		1893.		1892.		1891.	
			Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.	Ft.	In.
Kulu	Rotang	13,000	21	0	19	0	29	0	6	0	19	0
	Hamta	14,500	12	0	16	0	24	6	6	0	16	0
	Barsai	...	8	0	12	0	19	6	4	0	9	0
	Chandarkhani	...	6	0	12	0	26	0	8	0	15	0
	Bujadhar	...	7	0	11	0	19	0	1	6	13	0
	Lohri Achri	...	8	0	11	0	19	0	5	0	10	0
	Bhubu	10,000	8	0	8	0	17	6	5	0	9	0
	Pastari	...	9	0	5	0	12	0	4	0	8	0
Plach	Srikhand	15,000	24	0	18	0	33	0	9	0	35	0
	Chul	...	9	0	6	0	24	0	3	0	13	0
	Maghin	...	7	0	6	0	20	0	3	0	11	0
	Tikar	...	7	0	6	0	20	0	3	0	11	0
	Dundku	...	8	0	8	0	22	0	4	0	15	0
	Nuhnu	..	7	0	4	0	10	0	2	0	7	0
	Jalori	10,500	9	0	6	0	20	0	3	0	10	0
	Raghopur	..	10	0	6	0	21	0	3	0	11	0
	Lambri	..	9	0	6	0	22	0	3	0	11	0
	Sakiran	...	10	0	6	6	19	0	3	0	12	0
	Supakun	...	10	0	9	0	19	0	6	0	17	0
	Gargarasan	17,000	19	0	11	0	24	0	7	0	21	0
	Basleo	11,000	9	6	6	0	22	0	4	0	12	0
	Plach	...	14	0	9	0	23	0	5	0	14	0
	Tirath	...	17	0	11	0	24	0	5	0	14	0

III.—The North-Western Provinces' Himalayas.

Almora District.—Malla Darpur.—The following is a statement of the period and depth of snowfall on the passes of the Pindari and Kaphini and Kantela Peaks during the month :—

Date.	Depth of snow.	
	Feet.	Inches.
1st and 2nd	1	0
10th	0	6
16th and 17th	1	6
18th and 23rd	2	0
Total	5	0

The weather was colder and more cloudy than usual.

Malla Johar.—Snow fell on the following occasions on the Utadhara and Ratnadhara passes during the month :—

Date.	Depth of snow.	
	Feet.	Inches.
1st	2	0
16th	2	6
27th	1	6
Total	6	0

All communication across the higher passes was stopped during the month. The weather was colder than usual and very cloudy.

Mallas Byans, Chandans and Darma.—The following gives the snowfall on the passes, where the measurements were made :—

Date.	Depth of snow.	
	Feet.	Inches.
1st	1	0
11th	1	0
12th	0	6
Total	2	6

The general opinion appears to be that the snowfall during the month was heavier than usual.

Summary of the snowfall information.—The information received to date gives a very imperfect view of the character of the snowfall of the present winter in the mountain areas bordering Northern India. It indicates that in the Afghan and Baluchistan plateaux and mountain areas, the fall has been less than the average and the winter milder than usual.

In the Punjab and Kashmir Himalayas snow began to fall in November, and hence unusually early in the season, and continued steadily throughout December and January, and it is almost certain that the fall was abnormally heavy, more especially on the higher elevations in these months. The fall in February was less than usual; but the weather was unusually cold in Kashmir, Lahoul and Ladakh, and perhaps in Central Asia, and hence snow melted very slowly notwithstanding the prevalence of much fine sunny weather. Winter also began earlier than usual in Kumaon and Garhwál; but the fall in that area was, judging from the reports, in no way exceptional in amount and was probably normal. The observations taken at Gnatong and Yatong in Sikkim show that snow fell very frequently. The amounts were generally small and the total fall from November to February was almost certainly below the normal.

Summary of Special Storm Reports.

Local thunderstorms and hailstorms occasionally occur in the month of February during the periods of general disturbance known as cold-weather storms. They also occur during hot-weather disturbances, when temperature increases more rapidly than usual and is considerably above the normal. Severe local storms appear to be more frequent under the latter conditions than during the cold-weather disturbances. The number of storms reported during the month was greater than usual, and hailstorms appear to have been abnormally frequent. The following reported storms only were of sufficient importance to be deserving of record:—

1st.—Thunderstorm at Jeypur at 3-25 P.M.
Hailstorm at Simla from 0-15 P.M. to 1·30 P.M.
Thunderstorm at Allahabad at 6 P.M. The barometric changes were large and very irregular during the whole day.
Severe thunderstorm at Chakrata with heavy hail during the evening, lasting over four hours. Storm came down from north-east.
Severe thunderstorm with hail at Mussoorie. The storm came from north-west and lasted from 5 P.M. to 10 P.M.
Hailstorm in the Kothi State. It came from south-west and lasted from 5 P.M. to 6 P.M. It caused slight damage to the crops of 21 villages of the Kothi State.

9th.—Hailstorm in the Deoli Parganah of Bhopal, which inflicted some slight damage on the crops.

10th.—Duststorm at Raipur (4-20 P.M. to 4-30 P.M.)
Duststorm at Jubbulpur, lasting from 8 P.M. to 8-20 P.M.
Hailstorm in four villages of the Karwai State which totally destroyed the standing crops.
Hailstorm at Hindaun in the Jeypur State.
Severe hailstorm in 13 villages of the Bajrangarh district of the Gwalior State, which destroyed the crops. The storm lasted from 10 to 45 minutes, and the stones were stated to be in some places of the size of a lemon.

12th.—Hailstorm at Jorhat in the Sibsagar district. The storm passed from north-west to south-east.

16th.—Thunderstorm at Khandwa at 5-30 P.M.
Duststorm at Jubbulpur from 5 P.M. to 5-15 P.M.

17th.—Thunderstorm at Khandwa at 3 P.M.

20th.—Duststorm at Poona at 5-25 P.M.
Severe thunderstorm at Mhow, which lasted from 10-30 P.M. to midnight.

21st.—Duststorm followed by a thunderstorm at Hoshangabad from 4 P.M. to 6 P.M.
Hailstorm at Khandwa at 6 P.M.

23rd.—Thunderstorm at Hyderabad (Deccan) from 3-30 P.M. to 5-45 P.M.

24th.—Hailstorm at Shillong and Jowai in the Khasi and Jhantia hills.

25th.—Slight hailstorm in the Padwa taluka of the Vizagapatam district.

29th.—Hailstorm at Jowai in the Khasi Hills.

27th.—Duststorm at Raipur from 3-55 P.M. to 4-15 P.M.
Duststorm at Nagpur from 4 P.M. to 4-50 P.M.

Brief Summary of the weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—Weather was even finer than usual over the greater part of the sea area during the month, and more especially in the Persian Gulf and the Gulf of Oman and off the Mekran coast. Weather was slightly disturbed and squally in that part of the sea area from the 1st to the 6th. Winds of force 5 and 6 with occasional squalls, heavy rain and much lightning were experienced by several vessels. Weather improved on the 7th and fine weather with light to moderate winds obtained over the Persian Gulf during the remainder of the month.

Winds varied very considerably in strength in the extreme south of the Red Sea and the Gulf of Aden during the month. They were steady in direction from south to south-east, and very strong in that area during three periods, *viz.*, from the 1st to the 5th, 11th to the 16th and the 20th to the 23rd. The S.S. *Evelyn* had south-south-east winds of force 8 in Lat. 15½° N. and Long. 42° E. on the 4th, and winds of force 6 and 7 were experienced by a large number of vessels during the second and third periods.

In the open sea winds were weakest in the north and increased in strength southwards and usually ranged in force between 2 and 5. Fine clear weather generally obtained, except in the south, where winds were strongest, skies were occasionally clouded, and local showers and squalls experienced. The mean air movement varied to some extent during the month, the changes being directly related to the pressure conditions in Northern India and the Persian area. It was normal on the 2nd and increased on the 4th, when it was about 33 per cent. above the normal strength. It was feeble on the 7th and 8th and strong from the 10th to the 13th. It fell below the mean for the month on the 14th and averaged 2·6 or 0·4 below the normal from the 14th to the 17th. It was slightly stronger than usual from the 20th to the 24th (more especially on the 23rd), averaging about 3·4. During the last four days of the month it fell below the normal, averaging 2·6 in force or 0·4 in defect.

Bay of Bengal.—Fine weather obtained over the Bay during the whole month. Winds were generally weakest at the head of the Bay and increased in strength southwards to the entrance to the Bay, where steady north-east winds of force 4 and 5 prevailed throughout the month. The mean air movement varied very little from the normal (2·5) day by day during the period from the 1st to the 19th. It increased considerably on the 20th and averaged 3·5 or 1·0 in excess of the normal from the 21st to the 25th, but decreased to its normal amount on the 27th and 28th.

Temperature of the Air.

The temperature conditions of the month of February 1895 in India were such as usually occur, when the winter snowfall in the Himalayan and Afghan regions is normal or less than the usual amount. The mean maximum temperature of the month was slightly above the normal in North Bengal and Assam. It was in moderate to large excess in the Punjab, Sind, Cutch, Rajputana and Baluchistan. The excess was more than 4° in Upper Sind, West Rajputana and the West and North Punjab. It was more than 6° in the area defined by the following stations, for which data are given below:—

Station.	Mean maximum temperature.		
	Actual, February 1895.	Normal, February.	Variation of actual from normal.
	°	°	°
Quetta	59·9	52·1	+7·8
Jacobabad	84·0	77·1	+6·9
Mooltan	79·4	72·9	+6·5
Bickaneer	81·4	75·2	+6·2

The mean maximum or day temperature of the month was generally below the normal in the Peninsula, the Gangetic Plain and Chota Nagpur. The variations were small in amount and less than 2° in amount for the whole of that area, except in the part defined by the stations for which comparative data are given below:—

Station.	Mean maximum temperature.		
	Actual, February 1895.	Normal, February.	Variation of actual from normal.
	°	°	°
Nagpur	86·5	91·2	−4·7
Amraoti	86·6	89·7	−3·1
Seoni	81·2	83·8	−2·6
Akola	88·3	90·3	−2·0
Malegaon	87·7	89·8	−2·1
Sholapur	91·5	93·8	−2·3

The excessive day temperature was exhibited chiefly during the last twelve days of the month, and very high maximum temperatures were registered in Sind and Rajputana on the 27th and 28th. They were, however, not so excessive as are occasionally experienced in the month of February during unusually dry cold weather periods.

The following gives comparative data for six stations in that area in illustration of the preceding remarks:—

Station.	Highest maximum, February 1895.	Highest maximum previously recorded in February,	Year.
	°	°	°
Kurrachee	93·5	89·5	1886
Jacobabad	96·5	100·7	1887
Pachpadra	98·5	100·3	1887
Deesa	97·3	99·3	1886
Rajkot	95·9	102·9	1886
Surat	96·7	103·7	1878
		100·4	1886

The mean minimum or night temperature of the month was higher than usual over the whole of India and Burma, except Assam, South Bengal, Cutch and Kathiawar, and locally at Madras. The variations were generally small in amount, but exceeded 2° in the areas, for which data are given below:—

Province.	Station.	Mean minimum temperature. Actual, February 1895.	Normal, February	Variation of actual from normal.
		°	°	°
Deccan	Akola	59·7	56·6	+3·1
	Khandwa	57·3	55·0	+2·3
	Chanda	61·5	58·8	+2·7
	Hyderabad (Deccan).	64·9	62·7	+2·2
	Sholapur	63·8	61·7	+2·1
Punjab.	Peshawar	44·0	41·5	+2·5
	Sialkot	47·5	45·3	+2·2
	Lahore	48·3	43·9	+4·4
	Ludhiana	50·2	46·6	+3·6
	Sirsa	49·0	46·0	+3·0
N.-W. Provinces.	Meerut	50·4	47·5	+2·9
	Jhansi	57·0	54·2	+2·8
Rajputana and Central India.	Jeypore	52·2	50·0	+2·2
	Nowgong	52·6	50·0	+2·6
	Sutna	53·9	51·0	+2·9
	Saugor	56·8	54·2	+2·6

These stations (with the exception of those in the Deccan) are situated in a long narrow strip of country running in a south-easterly direction from the foot of the Punjab Himalayas to Baghelkhund. The variations of the mean day and night temperatures for the month were generally opposite in character in the Peninsula and North-Eastern India, and the variations of the mean temperature of the month were hence small in amount over the whole of that area. The mean temperature of the month was in slight to moderate general excess in North-Western India, chiefly due to much higher day temperature than usual. It was more than 2° in excess in Upper Sind, Baluchistan the Punjab,and North Rajputana, and was upwards of 3° above the normal at the stations for which comparative data are given below:—

Station.	Mean daily temperature. Actual, February 1895.	Normal, February.	Variation of actual from normal.
	°	°	°
Murree	46·0	40·7	+5·3
Quetta	46·0	41·8	+4·2
Mooltan	65·0	59·5	+5·5
Jacobabad	66·6	62·4	+4·2
Dera Ismail Khan	61·2	57·9	+3·3
Peshawar	57·0	53·5	+3·5
Rawalpindi	55·5	52·4	+3·1
Lahore	60·5	57·2	+3·3
Sirsa	64·3	60·6	+3·7
Bickaneer	67·8	64·3	+3·5

One of the more remarkable features of the temperature conditions of the month was the unusually low temperature which prevailed at Leh and Kailang. The mean temperature of the month was 3·3° below the normal at Kailang and 8·3° at Leh. The mean temperature of the month at Leh was 14°, at Kailang 17·4°, and at Srinagar at an elevation of only 5,000 feet in the Kashmir Valley 25°·3. This feature of very low temperature was apparently restricted to the Kashmir and Punjab Himalayan area and did not extend to Persia and Central Asia. The following

gives the lowest night temperatures observed during the month at stations in these areas and the lowest minimum hitherto recorded in February for comparison :—

Station.	Lowest minimum temperature recorded during month.	Date.	Lowest in February hitherto.
	°		°
Leh	−4·5	6th	−10·0 in 1885.
Kailang	−9·0	6th	− 7·0 in 1885.
Kalat	1·4?	3rd	3·0 in 1893.
Poo	8·8	6th	16·5 in 1894.
Kashgar	12·3	3rd	8·9 in 1894.
Meshed	16·0	3rd	1·0 in 1891.
Kabul	17·4	4th	8·8 in 1894.
Quetta	19·8	3rd	14·0 in 1880.

The chief features of the mean temperature conditions of the month were as follow :—

1st.—A large excess in the day temperature and a moderate excess in the night temperature, and hence a considerable excess in the mean temperature of the month in Upper India and Baluchistan.

2nd.—Moderate deficiency in the day temperature and moderate excess in the night temperature in Berar, the Central Provinces and Bombay Deccan, and hence normal mean temperature for the month in that area.

3rd.—The variations of the mean day and night temperatures were small in amount over the remainder of India, and hence the mean temperature conditions of the month were practically normal over nearly the whole of North-Eastern and Southern India and Burma.

The following gives temperature variation data for each of fifty-one meteorological divisions or areas into which India is arranged for meteorological statistics :—

Province.	Division.	Actual Temperature.					Variation from normal		
		Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Diurnal range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	90·1	65·9	78·0	24·2	34·8	−0·7	+0·3	−1·0
	Lower Burma	88·7	67·5	78·1	21·2	30·1	0	+0·5	−0·5
	Central do.	86·7	54·1	70·4	32·7	46·2	−1·6	+0·3	−1·9
	Upper do.	82·5	51·9	67·2	30·6	42·8	+0·2	−1·0	+1·2
	Arakan	84·3	59·0	71·7	25·3	38·5	−0·3	−1·9	+1·6
Bengal and Assam	Eastern Bengal	81·2	55·3	68·2	25·9	38·9	+0·4	−0·8	+1·2
	Assam (Surma)	82·0	54·1	68·1	27·9	42·9	+2·1	−0·9	+3·0
	Do. (Brahmaputra)	76·2	53·9	64·9	22·3	34·6	+1·3	0	+1·3
	Deltaic Bengal	82·2	57·5	69·9	24·8	37·7	−0·2	−1·3	+1·1
	Central do.	81·0	54·9	67·9	26·0	38·9	−0·4	−0·5	+0·1
	North do.	78·7	51·9	65·3	26·7	41·3	+2·1	+1·5	+0·6
	Orissa	84·1	66·0	75·1	18·1	28·0	−0·2	+0·4	−0·6
	Chota Nagpur	79·1	54·3	66·8	24·8	40·3	−0·1	+0·6	−0·7
	Bihar (South)	79·2	54·7	66·9	24·5	40·3	−0·9	+0·6	−1·5
	Do. (North)	78·1	52·1	65·1	26·0	41·6	+0·5	+0·9	−0·4
North-Western Provinces and Oudh.	North-Western Provinces (East)	78·4	52·7	65·5	25·7	43·5	−1·0	+1·2	−2·2
	Oudh (South)	77·6	50·5	64·1	27·1	43·3	−0·9	+0·2	−1·1
	Do. (North)	77·2	51·9	64·5	25·3	40·4	?	?	?
	North-Western Provinces (Central)	77·4	50·7	64·0	26·7	44·0	?	?	?
	Do. do. (West)	80·2	55·2	67·7	25·0	44·0	+0·9	+2·2	−1·3
	Do. do. (Submontane)	73·4	48·8	61·2	24·6	39·6	+0·6	+1·3	−0·7
Punjab	Punjab (South)	77·5	51·3	64·4	26·2	45·9	+2·3	+2·5	−0·2
	Do. (Central)	72·7	48·3	60·5	24·4	43·6	+2·2	+4·4	−2·2
	Do. (Submontane)	72·9	48·5	61·0	24·5	39·5	+0·2	+3·6	−3·4
	Do. (Hill Districts)	48·1	34·5	41·3	13·6	39·3	+3·0	+3·9	−0·9
	Do. (North-West)	70·5	44·1	57·3	26·4	45·2	+3·6	+2·2	+1·4
	Do. (West)	78·0	47·6	62·9	30·2	51·6	+5·8	+3·0	+2·8

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Variation from normal. Maximum	Minimum.	Diurnal range.
		°	°	°	°	°	°	°	°
Bombay and Malabar Coast Districts (Madras).	Malabar	88·3	73·1	80·7	15·2	22·4	+0·6	+0·6	0
	Madras (South Central)	92·5	65·8	79·2	26·7	33·9	−0·3	+0·9	−1·2
	Coorg	80·9	59·8	70·4	21·1	26·8	−0·3	+2·5	−2·8
	Mysore	86·9	61·7	74·3	25·2	31·7	+0·2	+0·2	0
	Konkan	84·6	69·1	76·9	15·6	29·1	−0·1	+0·4	−0·5
	Bombay Deccan	89·5	61·3	75·5	28·3	38·0	−1·5	+0·8	−2·3
	Hyderabad (North)	88·7	61·5	75·1	27·2	39·0	P	P	P
	Khandesh	86·8	56·0	71·4	30·8	45·9	−2·1	+0·8	−2·9
Central Provinces and Berar.	Berar	87·5	61·1	74·3	26·4	42·0	−2·6	+2·4	−5·0
	Central Provinces (West)	85·9	58·3	72·2	27·7	45·8	−2·4	+1·8	−4·2
	Do. (Central)	82·8	57·0	69·9	25·9	41·8	−1·7	+2·0	−3·7
	Do. (East)	86·7	60·8	73·7	25·9	37·7	−0·8	+1·0	−1·8
Bombay (North)	Gujarat	88·7	59·2	74·0	29·5	46·6	−0·8	0	−0·8
	Kathiawar	84·6	56·7	70·6	28·0	50·1	−0·8	−1·2	+0·4
	Sind	83·6	54·9	69·2	28·7	53·0	+3·6	+0·4	+3·2
Rajputana and Central India.	Central India (East)	78·4	53·3	65·9	25·2	44·6	−1·4	+2·8	−4·2
	Rajputana (East), Central India (West)	82·3	51·4	66·9	30·8	52·2	+2·2	+0·7	+1·5
	Do. (West)	83·2	51·6	67·4	31·7	55·3	+6·2	+0·8	+5·4
Madras	East Coast (North)	85·4	70·5	78·0	14·9	20·0	0	+0·8	−0·8
	Hyderabad (South)	90·7	66·2	78·5	24·5	31·5	−1·8	+2·2	−4·0
	Madras (Central)	93·1	66·7	79·9	26·4	34·2	−1·2	+1·1	−2·3
	East Coast (Central)	87·9	68·4	78·2	19·6	26·0	−0·3	+0·9	−1·2
	Do. (South)	87·5	69·2	78·3	18·3	24·8	+0·4	+0·9	−0·5
	Madras (South)	89·7	72·1	81·0	17·6	22·1	−0·9	−0·2	−0·7

At the commencement of the month temperature was more or less in excess over the whole of India. The excess was chiefly due to high night temperature accompanying cloudy weather.

The following gives variation data for the 24 hours preceding 8 A M. of the 1st:—

Meteorological Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	−0·9	+0·3	−0·3
Bengal and Assam	+1·2	+3·0	+2·1
N.-W. Provinces and Oudh	−1·4	+9·0	+3·8
Punjab	−3·0	+7·3	+2·2
Sind and Rajputana	−1·2	+3·5	+1·2
Central India and Gujarat	−1·7	+7·8	+3·1
Central Provinces and Berar	+4·2	+11·3	+7·8
Bombay	−1·5	+2·2	+0·4
Madras	+0·5	+0·8	+0·7

Temperature was hence largely above the normal in the Central Provinces (+8°) and considerably above it in the North-Western Provinces (4°).

A feeble cold weather disturbance gave light rain in Northern India during the next three days. The cool wave following this disturbance appeared in the north-west frontier districts on the 2nd and gradually extended across Northern and Central India during the next four days. The following mean temperature variation data for the period from the 2nd to the 7th, illustrate the eastward advance of the cool wave:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M., of 2nd.	3rd.	4th.	5th.	6th.	7th.
	°	°	°	°	°	°
Punjab	−0·1	+0·2	−4·0	−3·3	−2·2	−1·9
N.-W. Provinces and Oudh	+1·2	+0·2	−0·9	−3·9	−5·3	−4·9
Sind and Rajputana	−0·7	−2·9	−5·1	−4·7	−3·9	−1·9
Central India and Gujarat	−2·3	−2·6	−4·2	−5·8	−5·9	−4·4
Bihar and Chota Nagpur	+4·1	+1·7	+2·0	−1·9	−5·1	−5·1
Bengal	+3·8	+3·2	+3·4	+1·3	−3·0	−3·8
Burma	+2·0	+1·7	+1·7	+0·7	0	−1·4

The advance of this cool wave across Northern India hence reduced temperature more or less considerably below the normal over the whole of Northern and Central India. The reduction of temperature was most pronounced on the 6th and 7th.

The following gives a comparison of the mean temperature variation data of the 1st and 7th :—

Meteorological Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		
	1st.	7th.	Mean reduction of temperature during period.
	°	°	°
Burma	−0·3	−1·4	1·1
Bengal and Assam	+2·1	−4·1	6·2
N.-W. Provinces and Oudh	+3·8	−4·9	8·7
Punjab	+2·2	−1·9	4·1
Sind and Rajputana	+1·2	−1·9	3·1
Central India and Gujarat	+3·1	−4·4	7·5
Central Provinces and Berar	+7·8	−2·9	10·7

Temperature which averaged 0·7° in excess in Madras on the 1st increased steadily during this period, and was on the mean of all stations 2·4° in excess on the 7th. It is of course an illustration of the contrast between the meteorological changes in Madras as compared with Northern India, of frequent occurrence in the cold weather.

Temperature was now increasing rapidly in Baluchistan and Upper India, and a warm wave crossed the frontier during the next 24 hours and rapidly advanced over Northern and Central India. The crest of the preceding cool wave (or area of greatest deficiency of temperature) which was in the North-Western Provinces on the 7th and 8th was transferred to Bihar on the 9th, to South Bengal on the 10th and to Burma on the 11th. The warm wave which appeared on the frontier on the 8th preceded and accompanied the eastward advance across Northern India of a slight disturbance giving cloudy weather. Temperature was more or less above the normal over the whole of India on the 11th, but was in slight defect in Burma. The following gives mean temperature variation data for the 7th and 11th :—

Meteorological Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		
	7th.	11th.	Change of mean temperature from the 7th to the 11th.
	°	°	°
Burma	−1·4	−1·9	−0·5
Bengal and Assam	−4·1	+1·6	+5·7
N.-W. Provinces and Oudh	−4·9	+3·9	+8·8
Punjab	−1·9	+1·2	+3·1
Sind and Rajputana	−1·9	+2·0	+3·9
Central India and Gujarat	−4·4	+1·2	+5·6
Central Provinces and Berar	−2·9	+4·2	+7·1
Bombay	−0·9	0	+0·9
Madras	+2·4	+1·4	−1·0

Temperature had hence increased most rapidly, and was most largely above the normal on the 11th in the North-Western Provinces and Central Provinces.

Light local thundershowers in a belt of country stretching east from Berar and Khandesh to Bengal reduced temperature to a moderate extent which occurred during the next three days. The following gives variation data for the area affected :—

Meteorological Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of			
	12th.	13th.	14th.	15th.
	°	°	°	°
Bombay	−2·1	−1·7	−1·8	+1·2
Berar	−1·2	−1·8	−0·7	+3·5
Central Provinces	−0·4	−1·2	−3·2	−0·4
Central India and Gujarat	−0·7	−0·6	−0·7	+1·9
Bengal and Assam	+0·9	+2·5	−0·4	−1·2
Burma	−1·0	+0·3	+0·7	−0·6

The reduction of temperature due to this disturbance was hence not large. It was transmitted eastwards. The most noteworthy temperature change during this period was a considerable increase in Baluchistan, Sind, the Punjab and Rajputana, which areas had now temperatures both by day and night in considerable or large excess—a feature which held with great steadiness during the remainder of the month. The following gives mean temperature variation data of that area from the 12th to the 15th :—

Meteorological Province.	Variaton from normal of mean temperature of 24 hours preceding 8 A.M. of			
	12th.	13th.	14th.	15th.
	°	°	°	°
Quetta	+0·9	+2·5	+4·1	+8·4
Sind	+0·8	+2·7	+3·6	+3·8
Punjab	+2·5	+3·0	+4·2	+5·6
Rajputana	+2·0	+0·2	+1·9	+3·8

Temperature continued to increase in North-Western and Central India, and was more or less considerably above the normal during the next week. The following gives

comparative data for this area of large excess of temperature during the period from the 16th to the 21st:—

Station or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of					
	16th.	17th.	18th.	19th.	20th.	21st.
	°	°	°	°	°	°
Quetta . . .	+7·4	+9·2	+8·1	+7·6	+6·6	+6·5
Sind . . .	+3·3	+4·9	+3·7	+5·0	+7·2	+6·7
Punjab . . .	+5·2	+6·8	+7·0	+6·9	+6·4	+6·6
Rajputana . .	+6·2	+7·0	+8·0	+7·3	+4·4	+5·1
North-Western Provinces and Oudh.	+2·6	+3·1	+4·0	+4·7	+2·9	+1·6
Central India and Gujarat.	+4·0	+2·0	+2·4	+3·4	+5·2	+4·2

Temperature was during this period most largely in excess in Baluchistan, Sind, West Rajputana and the West Punjab. The excess was chiefly due to very high day temperature, as is shown by the following variation data for the 21st, a day typical of the period:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	+1·3	+1·1	+1·2
Bengal and Assam	+2·4	−1·4	+0·5
North-Western Provinces and Oudh.	+3·1	+0·1	+1·6
Punjab	+9·7	+3·4	+6·6
Sind and Rajputana . . .	+9·4	+1·9	+5·7
Central India and Gujarat . .	+4·7	+3·6	+4·2
Central Provinces and Berar . .	−0·9	+3·6	+1·4
Bombay	+1·5	+3·6	+2·6
Madras	−2·2	−0·5	−1·4
Quetta (Baluchistan) . . .	+13·9	−0·9	+6·5

Temperature was steadily below the normal during the period in Madras—another example of the opposition between the conditions in Tropical and Extra-Tropical India which so frequently subsists. The following gives data in illustration:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of					
	16th.	17th.	18th.	19th.	20th.	21st.
	°	°	°	°	°	°
Madras . . .	−0·8	−0·8	−1·4	−1·6	−1·6	−1·4
Mysore (Bangalore) .	−1·7	−1·0	−1·4	−2·2	−2·5	−2·2
Coorg (Mercara) .	+1·3	−0·3	+1·4	−0·7	+1·2	+0·5

Temperature continued largely above the normal in North-Western India and Baluchistan during the last week of the month, as is shown by the following data:—

Station or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of						
	22nd.	23rd.	24th.	25th.	26th.	27th.	28th.
	°	°	°	°	°	°	°
Quetta . . .	+6·2	+5·7	+5·2	+8·0	+11·5	+7·9	+14·3
Punjab . . .	+5·3	+5·5	+5·8	+5·2	+5·2	+4·4	+5·8
Sind . . .	+6·3	+7·0	+6·4	+7·0	+6·8	+3·9	+6·0
Rajputana . .	+4·0	+4·2	+5·0	+2·9	+3·6	+2·2	+3·8
Central India and Gujarat.	+3·0	+2·1	+2·0	+2·6	+2·3	+1·6	+2·1
North-Western Provinces and Oudh.	+1·8	+1·0	+1·2	+1·0	+0·6	+0·5	+0·8

As in the previous week, the increased temperature was mainly due to large excess in the day temperature, the night temperature being only slightly above the normal of the period.

The most noteworthy feature of the last week of the month was the low temperature in the Peninsula, Bengal and Burma, due chiefly to the occurrence of a series of thunderstorms in the Central Provinces and the Deccan. The following gives temperature variation data for this area of diminished temperature during the last week of the month:—

Meteorological Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of						
	22nd.	23rd.	24th.	25th.	26th.	27th.	28th.
	°	°	°	°	°	°	°
Central Provinces and Berar.	−5·6	−2·9	−1·4	−1·1	−1·5	−0·1	+0·4
Bombay . . .	+1·7	+1·2	+0·7	+0·6	+0·3	+0·5	+0·1
Bengal and Assam .	+0·5	−0·3	−0·2	−0·6	−1·0	−1·6	−0·5
Burma . . .	+1·4	+2·1	+2·8	+2·9	+0·5	−2·2	−2·3

The following variation data for the 24 hours preceding 8 A.M. of the 28th illustrates the temperature conditions prevailing over India at the end of the month :—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	−2·2	−2·4	−2·3
Bengal and Assam	+0·9	−1·8	−0·5
North Western Provinces and Oudh.	+1·4	+0·1	+0·8
Punjab	+8·3	+3·3	+5·8
Sind and Rajputana	+7·2	+1·8	+4·5
Central India and Gujarat	+3·4	+0·8	+2·1
Central Provinces and Berar	+0·1	+0·7	+0·4
Bombay	−0·2	+0·3	+0·1
Madras	−1·7	−2·1	−1·9

The following table gives the variations of the mean temperature, week by week, during the month, and of the whole month, in the larger political divisions :—

Division.	Variation from normal of mean temperature for week ending				
	9th February.	16th February.	23rd February.	2nd March.	For whole month.
	°	°	°	°	°
Burma	−0·4	−1·0	+0·1	0	−0·2
Bengal and Assam	−1·1	+0·3	+0·9	−0·7	+0·1
North-Western Provinces and Oudh.	−3·0	+1·7	+2·7	+1·3	+0·7
Punjab	−1·8	+3·4	+6·4	+6·0	+3·1
Sind and Rajputana	−2·5	+2·8	+5·7	+4·7	+2·4
Central India and Gujarat.	−3·5	+1·2	+3·2	+2·3	+0·7
Central Provinces and Berar.	−1·2	+1·0	−0·6	−0·5	0
Bombay	−1·3	0	+1·1	+0·5	0
Madras	+2·0	+0·9	−1·4	−1·3	+0·3

Winds.

The normal direction of the air movement in the Indian land and sea area in February is almost identical with that of January. In consequence of the increase of temperature and decrease of pressure which usually commences in February, the gradients favouring the southerly air movement in the Indian monsoon area diminish and the north-east winds in the Arabian Sea and Bay of Bengal are hence, as a rule, slightly feebler in February than in January.

A further consequence of the increasing temperature is a tendency to the establishment of local southerly winds in South Bengal. This is usually associated with the formation of a low pressure area in Chota Nagpur or West Bengal, which develops into the hot weather depression and trough of low pressure of the rains running from Orissa west-north-westwards to Upper Sind.

The rapid increase of temperature in the Deccan at this time also causes a considerable change in the air movement at the Coromandel coast stations, where the winds gradually shift to south-east and become the long shore winds of March and April.

Winds were normal in direction and steadiness at Port Blair and in Burma, and were considerably stronger than usual at Port Blair and Diamond Island.

Winds were on the whole weaker in strength in Bengal and Orissa. Local sea winds were later in setting in than usual, and nence the mean winds of the month were from north-westerly directions, as in January, and not from south-west as is the case in normal years. The following gives data in illustration :—

Station.	Velocity in miles per diem.			Wind direction.	
	Mean actual, February 1895.	Mean normal, February.	Variation from normal.	Mean actual, February 1895.	Mean normal, February.
Saugor Island	195	189	+ 6	N 74° W	S 50° W
Calcutta	60	85	−25	N 35° W	S 81° W
Dacca	63	63	0	N 38° W	S 76° W

The mean air movement was normal in direction and strength in the Gangetic plain, but was much steadier than usual. The following gives data in illustration of the last feature :—

Station.	Steadiness.		
	Mean actual, February 1895.	Mean normal, February.	Variation from normal.
Burdwan	50	43	+ 7
Patna	71	47	+24
Allahabad	61	25	+36
Lucknow	53	44	+ 9

Winds were as usual light in the Punjab, and the mean wind direction of the month at the stations in that area varied very irregularly from the normal. Winds were much steadier at Peshawar.

In Sind, Rajputana and Kathiawar sea-winds set in much earlier than usual, due to the excessive temperature of the last fortnight of the month. The undue prevalence of southerly winds is shown by the following comparative data :—

Station.	Wind direction.		Steadiness.		
	Actual, February 1895.	Normal, February.	Actual, February 1895.	Normal, February	Variation from normal.
Kurrachee . .	S 31° W	N 80° W	27	27	0
Deesa . . .	S 14° E	N 28° W	6	36	−30

Winds were on the whole slightly stronger than normal in Central India, the Central Provinces, Berar and the Deccan. They were very unsteady, and, as usual in such cases, the mean wind directions of the month for the stations in that area varied irregularly from the normal. The following gives data for four stations in illustration :—

Station.	Steadiness.			Wind direction.	
	Actual, February 1895.	Normal, February.	Variation from normal.	Actual, February 1895.	Normal, February.
Akola . . .	9	25	−16	S 72° E	N 1° E
Khandwa . .	5	32	−27	N 15° E	N 8° W
Poona . . .	16	21	− 5	S 79° W	N 28° W
Sholapur . .	25	32	− 7	S 49° E	S 33° E

Winds were normal in strength and direction at the west coast stations of Bombay, Ratnagiri and Karwar. They were also normal in strength at the Madras stations, but differed slightly in mean directions from the normal. Thus the mean air movement at Madras was from S. 60°E., the normal being E., and at Salem was N. 44° E., the normal being S. 75° E.

Winds were stronger at the hill stations in Northern and Central India, as is shown by the following :—

Station.	Velocity in miles per diem			Steadiness.		
	Actual, February 1895.	Normal, February.	Percentage Variation from normal.	Actual, February 1895.	Normal, February.	Variation from normal.
Murree . .	212	196	+ 8	41	29	+12
Chakrata . .	162	125	+30	12	3	+ 9
Darjeeling .	147	121	+22	28	33	− 5
Pachmarhi .	123	92	+34	25	24	+ 1

There was an unusual preponderance of northerly winds at Chakrata where the mean wind direction of the month was N. 66°W., the normal being S. 54° E. The mean directions of the air movement of the other hill stations did not differ to any important extent from the normal.

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

(1) Southerly winds were later in being established than usual in South Bengal, and the mean wind directions of the month in that area were from north-west instead of from south-west.

(2) Winds were much steadier in the Gangetic plain than usual.

(3) Winds were stronger at the hill stations in Northern and Central India.

(4) Sea winds set in earlier than usual in Sind, Kathiawar and South-West Rajputana and the mean winds were hence from southerly instead of from northerly directions.

(5) Winds were slightly stronger than usual, but were every unsteady in the Central Provinces, Berar and the Bombay-Deccan.

The following table gives comparative data of the mean air movement of the month in different provinces :—

Province.	Velocity in miles per diem.		Percentage variation.
	Actual, February 1895.	Normal, February.	
Burma	174	115	+51
Bengal	77	91	−15
Chota Nagpur	172	156	+10
Bihar	91	80	+11
North-Western Provinces . .	51	73	−30
Punjab	45	57	−21
Rajputana	93	127	−27
Central India	79	79	0
Central Provinces	86	78	+10
Berar	117	93	+26

Humidity and Cloud.

The air contained less aqueous vapour and was drier than usual on the mean of the month at Port Blair, and in Burma, Bengal, Orissa, Chota Nagpur and Assam. Decreased humidity has been a persistent feature of the meteorology, Burma and the grater part of North-Eastern India from November 1894 to the end of February 1895. The following gives comparative data for this area of decreased humidity for the month of February :—

Station or Division.	Absolute Humidity.			Relative Humidity.		
	Actual, February 1895.	Normal, February.	Variation from normal.	Actual, February 1895.	Normal, February.	Variation from normal.
	"	"	"	%	%	
Port Blair	·749	·814	−·065	73	77	−4
Burma	·570	·591	−·021	65	68	−3
Bengal	·432	·475	−·043	61	67	−6
Orissa	·566	·573	−·007	67	70	−3
Chota Nagpur	·254	·244	+·010	40	42	−2
Assam	·426	·421	+·005	71	71	0

The mean relative humidity of the month was most largely below the normal at Calcutta (11 in defect), Berhampur (7 in defect) and Saugor Island and Diamond Island (6 in defect).

Humidity was, on the other hand, more or less considerably above the normal over the large area including Bihar, the North-Western Provinces, the Punjab (except the south-west districts), Rajputana, Central India, the Central Provinces, Berar and the Bombay-Deccan. This was also the continuation of a prominent feature in the meteorology of the months of December 1894 and January 1895.

The excess in the mean humidity percentage was more than 10 at several stations and was greatest at the following stations:—Nagpur (21 in excess) and Akola and Sutna (15 in excess). The increased humidity was mainly, or entirely due to a larger amount of aqueous vapour present in the air.

The following gives comparative humidity data for this area of increased humidity:—

Division.	Absolute Humidity.			Relative Humidity.		
	Actual, February 1895.	Normal, February.	Variation from normal.	Actual, February 1895.	Normal, February.	Variation from normal.
	"	"	"	%	%	
Bihar	·388	·363	+·025	62	60	+ 2
North-Western Provinces.	·344	·288	+·056	60	52	+ 8
Punjab	·307	·268	+·039	60	58	+ 2
Rajputana	·250	·246	+·004	40	39	+ 1
Central India	·344	·252	+·092	57	43	+14
Central Provinces	·384	·307	+·077	52	44	+ 8
Berar	·358	·280	+·078	47	35	+12
Bombay-Deccan	·339	·312	+·027	43	35	+ 8

The air was even drier than usual at Mooltan (5 in defect), Deesa (1 in defect) and probably Jacobabad. The mean 4 P.M. humidity percentage of the month at Deesa was only 13, and at Jacobabad 20. Very low humidities were recorded at stations in Sind, the South-West Punjab and Rajputana, more especially during the period of excessive temperature in the last fortnight of the month. The most noteworthy were the following:—

Station.	Date.	Lowest humidity of month at 4 P.M. of date.
		%
Kurrachee	19th	11
Jacobabad	23rd	10
Deesa	23rd and 24th.	6
Jeypore	25th	15
Mooltan	25th and 26th.	18
Ajmere	27th	19

The air was drier than usual at all the hill stations in the Punjab Himalayas, (except Leh), and in Baluchistan. The following gives data for three stations:—

Station.	Absolute Humidity.			Relative Humidity.		
	Actual, February 1895.	Normal, February.	Variation from normal.	Actual, February 1895.	Normal, February.	Variation from normal.
	"	"	"	%	%	
Murree	·135	·151	−·016	49	63	−14
Quetta	·155	·164	−·009	52	65	−13
Simla	·138	·152	−·014	52	55	− 3

The mean data for Murree and Simla (given in Table II) are interesting, as they show that the air contained considerably less vapour at the coolest time of the night than at 4 P.M. and also that the humidity percentage was lower at the coolest than at the warmest time of the day. Thus at Murree the mean humidity at the coolest time of the night obtained from observations of the dry and wet minimum thermometers was only 47 and at 4 P.M. (and hence practically at the hottest time of the day) it was 52 per cent. This was due to the abnormal prevalence of northerly winds (day winds blowing from the higher elevations of the interior) during the night and of southerly winds from the plains during the day.

The air was slightly drier and contained somewhat less vapour than usual in the west coast districts The following gives data:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, February 1895.	Normal, February.	Variation from normal.	Actual, February 1895	Normal February.	Variation from normal.
	"	"	"	%	%	
Bombay . .	·572	·606	−·034	66	69	−3
Karwar . .	·642	·653	−·011	70	73	−3
Cochin . .	·710	·742	−·032	66	71	−5

The variations of the mean humidity conditions of the month were irregular in the East Deccan and Southern India.

The air was damper than usual at Salem, Madras, Bellary and Vizagapatam, and the positive variation was large at Bellary (7); but it is very doubtful whether the mean values for that station are trustworthy. The relative humidity was on the other hand in considerable defect at Trichinopoly (7 in defect) and in slight defect at Bangalore and Marcara.

The mean relative humidity of the month was in slight excess at the hill stations in the Eastern and Central Himalayas and in considerable excess at the hill stations in Berar and the Central Provinces. It was 3 above the normal at Wellington.

The chief features of the mean humidity conditions of the month were—

(1) Decreased humidity in Burma, Assam, Bengal, Orissa and Chota Nagpur, most marked in West Bengal.

(2) Increased humidity in Bihar, the North-Western Provinces, East and North Punjab, Rajputana, Central India, the Central Provinces, Berar and the Bombay Deccan. This feature was well marked over the whole area; but was most clearly exhibited at Nagpur, Akola and Sutna, where the mean humidity percentage of the month was from 15 to 21 above the normal.

(3) The air was slightly drier than usual in the area, represented by Mooltan, Jacobabad and Deesa and also in the west coast districts.

(4) Humidity was in slight to moderate defect in South Madras, Mysore and Coorg and in slight to moderate excess in East and North Madras.

(5) The air was abnormally dry in Baluchistan and the Punjab and Kashmir Himalayas.

Cloud.—The variations of the mean cloud amount of the month were inverse in character to those of the humidity over by far the greater part of the country. Skies were more free from cloud than usual in the Andamans, Burma and Assam, as is shown by the following:—

DIVISION.	MEAN CLOUD AMOUNT.		
	Actual, February 1895.	Normal, February.	Variation from normal.
Andamans (Port Blair) . .	2·0	2·8	−0·8
Burma	1·1	1·7	−0·6
Assam	2·0	3·4	−1·4

Cloud was, on the other hand, in slight excess in Bengal, Orissa and Chota Nagpur. The excess was greatest at False Point (+1·3) and Hazaribagh (+1·1). The following gives comparative data for this area:—

DIVISION.	MEAN CLOUD AMOUNT.		
	Actual, February 1895.	Normal, February.	Variation from normal.
Bengal	2·2	1·9	+0·3
Orissa	3·1	2·2	+0·9
Chota Nagpur . . .	3·1	2·0	+1·1

There was a marked deficiency of cloud over the area including Bihar, the North-Western Provinces, the Punjab, Sind, Rajputana and Central India, as is shown by the following:—

AREA.	MEAN CLOUD AMOUNT.		
	Actual, February 1895.	Normal, February.	Variation from normal.
Bihar	1·3	2·0	−0·7
North-Western Provinces .	1·5	2·8	−1·3
Punjab	2·5	3·7	−1·2
Sind	1·3	3·3	−2·0
Rajputana	1·3	2·5	−1·2
Central India . . .	1·9	2·7	−0·8

The deficiency was most strongly shown at Dehra Dun, Roorkee and Kurrachee, at which it ranged between 2·0 and 2·3.

The decreased cloud was as strongly marked a feature at the hill stations in North-Western India as in the plains. The deficiency ranged between 1·3 at Murree and 2·7 at Leh. The following gives data for five representative stations :—

Station.	Mean cloud amount.		
	Actual, February 1895.	Normal, February.	Variation from normal.
Quetta	2·2	4·2	−2·0
Leh	4·0	6·7	−2·7
Simla	3·2	5·3	−2·1
Ranikhet	1·9	4·4	−2·5
Mount Abu	1·0	2·8	−1·8

The mean cloud amount of the month was in excess in Berar, the Central Provinces, the Bombay Deccan and Konkan. The following gives comparative data :—

Area.	Mean cloud amount.		
	Actual, February 1895.	Normal, February.	Variation from normal.
Berar	2·9	1·7	+1·2
Central Provinces	2·8	1·6	+1·2
Bombay Deccan	2·2	1·4	+0·8
Konkan (Bombay and Ratnagiri).	1·7	0·8	+0·9

There was generally less cloud in the East Deccan, Mysore and Madras. Thus the mean cloud amount at Bangalore was only 0·4 or 1·8 less than the normal, at Cochin 0·1 or 2·0 less than the normal, and at Trichinopoly 1·5 below the normal. Bellary is an apparent exception; but it is more probable that it is due to a recent change of observers than that it represents a local abnormal peculiarity of the meteorological conditions of the month in the Deccan area. There was more cloud than usual at Pachmarhi and less at Wellington.

The mean cloud amount of the month was 0·5 or less at the following stations :—

Station.	Mean cloud amount.		
	Actual, February 1895.	Normal, February.	Variation from normal.
Cochin	0·1	2·1	−2·0
Mysore	0·5	?	?
Bangalore	0·4	2·2	−1·8

Skies were hence remarkably free from cloud during the month in Malabar and Mysore.

The following gives the chief features of the cloud distribution of the month :—

(1) Less cloud than usual in Assam, Burma and the Andamans. The deficiency was moderate in amount.

(2) Moderate excess of cloud in Bengal, Orissa and Chota Nagpur.

(3) Large deficiency of cloud in Bihar, the North-Western Provinces, the Punjab, Sind, Rajputana, Central India also Baluchistan and the Western Himalayan area. The deficiency was absolutely greatest at Leh, and it hence probably represented a meteorological condition, which extended northwards and north-westwards into Central Asia.

(4) Moderate excess of cloud in Berar, the Central Provinces, Bombay Deccan and Konkan.

(5) A considerable deficiency of cloud in Southern India (and more especially in the area represented by Cochin, Bangalore, and Trichinopoly) and in Malabar, South Madras and Mysore.

Rainfall.

Rainfall in February is usually due to the occurrence of storms of the type known as cold weather storms. The rainfall is chiefly received in Northern India, and is generally heaviest in the Punjab, more especially in the hill and submontane districts. Bengal, Lower Burma and Malabar occasionally obtain thunder showers, but, as a rule, the conditions for these storms do not occur before March.

The rainfall of the month of February 1895 was less than the normal over the greater part of India. It was very deficient in North Eastern India, more especially in Assam The chief periods of rainfall were as follow :—

1st.—From the 1st to the 4th during the advance of a feeble cold weather depression across Northern India. The Punjab, North-Western Provinces, Bihar and Central India received a moderate fall of rain during this period. Very heavy thunderstorms and hailstorms visited the Gurdaspur, Kangra and Dehra Dun Districts.

2nd.—The 10th to the 12th, during the passage of a very feeble and ill-defined disturbance across the north of the Peninsula. Light thunder showers fell in Berar, the Central Provinces, Chota Nagpur and Orissa.

3rd.—The 20th to the 25th, during which thunder storms gave light local and irregularly distributed rain in the Deccan, Central Provinces and Central India.

The rainfall was in slight to moderate defect over nearly the whole of India. The following were the chief features of the rainfall distribution of the month:—

(1) Little or no rain fell in Lower Burma, Arakan, Bengal, Madras (except the northern districts) Mysore, Coorg, Malabar, Konkan, Gujarat, Khandesh, Sind and Rajputana.

(2) Baluchistan received very light rain, only about one-fifth of its normal amount.

(3) The rainfall was practically normal in the Punjab and in slight to moderate defect in the North-Western Provinces.

(4) It was slightly above the small normal of the period in the Central Provinces, Berar and Hyderabad.

(5) It was in considerable and serious defect in Assam and East Bengal.

(6) The precipitation in the Himalayas was slightly below the normal of the month.

The following table gives mean actual, mean normal and variation rainfall data for the 51 meteorological divisions or districts, into which India is divided, in the same form as in the previous months and has been prepared in exactly the same manner as hitherto:—

Province.	Division.	Number of Rainy days.		Rainfall.		
		Average Actual, February 1895.	Average Normal, February.	Average Actual, February 1895.	Average Normal, February.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	0·07	0·05	+0·02
	Lower Burma*	?	?	0·08	0·17	−0·09
	Central do.*	?	?	0·29	0·14	+0·15
	Upper do.*	?	?	0·14	?	?
	Arakan*	?	?	0·01	0·14	−0·13
Bengal and Assam	Eastern Bengal	0	1·7	0·01	1·01	−1·00
	Assam (Surma)*	?	?	0·15	1·92	−1·77
	Do. (Brahmaputra)*	?	?	0·78	1·22	−0·44
	Deltaic Bengal	0·2	1·8	0·06	1·17	−1·11
	Central do.	0·6	1·4	0·17	0·83	−0·66
	North do.	0·3	1·4	0·09	0·51	−0·42
	Orissa	1·5	1·5	0·86	0·90	−0·04
	Chota Nagpur	1·4	1·3	0·55	0·64	−0·09
	Bihar (South)	1·0	1·1	0·54	0·43	+0·11
	Do. (North)	0·9	1·2	0·33	0·47	−0·14
North-Western Provinces and Oudh.	North-Western Provinces (East)*	?	?	0·12	0·42	−0·30
	Do. do. Submontane (a)*	?	?	0·13	0·44	−0·31
	Oudh (South)*	?	?	0·18	0·25	−0·07
	Do. (North)*	?	?	0·23	0·32	−0·09
	North-Western Provinces (Central)*	?	?	0·20	0·22	−0·02
	Do. do. (West)*	?	?	0·24	0·37	−0·13
	Do. do. (Submontane)*B	?	?	0·53	1·34	−0·81
Punjab	Punjab (South)	0·6	1·1	0·19	0·45	−0·26
	Do. (Central)	1·8	1·2	0·65	0·50	+0·15
	Do. (Submontane)	2·1	2·4	1·23	1·30	−0·07
	Do. (Hill Districts)	3·5	4·4	2·71	3·04	−0·33
	Do. (North-West)	2·6	2·7	1·55	1·40	+0·15
	Do. (West)	0·6	1·1	0·25	0·44	−0·19
Bombay and Malabar Coast Districts (Madras).	Malabar	0	0·2	0	0·16	−0·16
	Madras (South Central)	0·1	0·2	0·06	0·13	−0·07
	Coorg	0·3	?	0·08	?	?
	Mysore*	?	?	0	0·04	−0·04
	Konkan	0·2	0	0·06	0	+0·06
	Bombay Deccan	0·6	0·1	0·18	0·03	+0·15
	Khandesh	1·0	0	0·38	0·03	+0·35
Central Provinces and Berar.	Berar*	?	?	0·86	0·22	+0·64
	Central Provinces (West)*	?	?	0·65	0·22	+0·43
	Do. (Central)*	?	?	0·91	0·31	+0·60
	Do. (East)*	?	?	0·21	0·36	−0·15

Province.	Division.	Number of Rainy days.		Rainfall.		
		Average Actual, February 1895.	Average Normal, February.	Average Actual, February 1895.	Average Normal, February.	Variation from normal.
				Inch.	Inch.	Inch.
Bombay (North)	Gujarat	0·1	0	0·02	0·02	0
	Kathiawar	0·2	0	0·07	0·09	−0·02
	Sind	0·4	?	0·08	0·31	−0·23
Rajputana and Central India.	Central India (East)*	?	?	0·28	0·23	+0·05
	Rajputana (East), Central India (West)*	?	?	0·04	0·16	−0·12
	Rajputana (West)*	?	?	0	0 20	−0·20
Madras	East Coast (North)	1·0	0·4	0·49	0·22	+0·27
	Do. (do.) (*a*)	1·5	0·4	0·64	0·19	+0·45
	Hyderabad (South)*	?	?	0·25	0·12	+0·13
	Madras (Central)	0·1	0·1	0·02	0·03	−0·01
	East Coast (Central)	0	0·2	0	0·19	−0·98
	Do. (South)	0	0·2	0	0·28	−0·21
	Madras (South)	0	0·8	0	0·56	−0·56

NOTE—The figures entered against divisions marked with an asterisk have been obtained from the weekly Telegraphic Reports.

The month was absolutely or practically rainless in Tenasserim, Lower Burma, Arakan, East Bengal, Deltaic and North Bengal, Malabar, Coorg, Mysore, the Konkan, Gujarat, Kathiawar, Sind, Rajputana, and the whole of Madras with the exception of the northern coast districts.

Baluchistan received light but fairly general rain from the 8th to the 10th. The rainfall of the month was very considerably below the normal, as is shown by the following comparative data for the three stations for which means are available :—

Station.	Rainfall.		
	Actual, February 1895.	Normal, February.	Percentage variation.
	Inches.	Inches.	
Kalat	0·23	1·78	−87
Pishin	0·40	1·35	−70
Quetta	0·21	1·50	−86

The preceding data hence suggest that the rainfall in that area was probably only about a fifth of the normal amount of the month.

There was in the Punjab only one period of fairly general rain, *viz.*, from the 1st to the 4th. The rainfall of this period was heaviest in the northern and eastern districts and the hill districts. Some heavy falls were received in the Kangra, Gurdaspur and Hoshiarpur districts. The Dera Ismail Khan, Dera Ghazi Khan, Muzaffargarh districts obtained practically no rain during this period. The most noteworthy rainfalls in 24 hours were the following :—

District.	Station.	Rainfall in 24 hours preceding 8 A.M. of date.	Date.
		Inches.	
Kangra	Dharmsala	4·02	2nd.
	Kangra	3·23	2nd.
	Palampur	3·05	2nd.
Hoshiarpur	Una	3·36	2nd.
	Hoshiarpur (Sudder Station)	3·60	3rd.

Numerous hailstorms occurred during the disturbance, more especially in the Gurdaspur district.

Light showers fell in the Gurgaon and Delhi districts on the 11th, and in the Kangra and Simla hill districts on the 11th and 12th. The Peshawar, Rawalpindi and Hazara districts obtained light showers on the 16th and 17th.

The following is a summary of the rainfall data of the month as published in the Punjab Gazette.

Division.	Rainy days.			Rainfall.		
	Actual, February 1895.	Normal, February.	Variation from normal.	Actual, February 1895.	Normal, February	Variation from normal.
				Inches.	Inches.	Inch.
Punjab South	0·6	1·1	−0·5	·0·19	0·45	−0·26
,, Central	1·8	1·2	+0·6	0·65	0·50	+0·15
,, Submontane.	2·1	2·4	−0·3	1·23	1·30	−0·07
,, Hills	3·5	4·4	−0·9	2·71	3·04	−0·33
,, North-West.	2·6	2·7	−0·1	1·55	1 40	+0·15
,, West	0·6	1·1	−0·5	0·25	0·44	−0·19

The rainfall of the month was practically normal in amount in the Punjab. It was in slight excess in the Central and North-West districts and in slight to moderate defect elsewhere. The deficiency was nowhere large or serious.

The North-Western Provinces had a moderate general burst of rain on the 1st and 2nd. The fall was heaviest in the central, north-western, submontane and hill districts, and was very light in the eastern districts. The following heavy falls were received in the Dehra Dun district on the 1st and 2nd :—

DATE.	STATION.	Rainfall in 24 hours preceding 8 A.M. of date.
		Inches.
1st	Mussoorie	2·53
,,	Raipur	2·30
2nd	Kalsi	2·52
,,	Dehra	2·57
,,	Rajpur	2·25
,,	Chakrata	3·08

These heavy falls accompanied a series of severe thunderstorms which visited the Dehra Dun district on the 1st of the month. Local showers of little importance were received in the central, western and hill districts on the 11th and 12th.

The following gives comparative data of the rainfall of the month in the six divisions of the province.

DIVISION.	NUMBER OF RAINY DAYS.		RAINFALL.		
	Actual, February 1895.	Variation from normal.	Actual, February 1895.	Normal, February.	Percentage variation.
			Inches.	Inches.	
Oudh (North) . .	1·6	+0·8	0·72	0·31	+132
Do. (South) . .	1·3	+0·7	0·60	0·23	+161
N.-W. P. (East) . .	1·1	+0·3	0·44	0·34	+ 29
Do. (Central) . .	1·6	+1·0	0·67	0·21	+219
Do. (Submontane) .	1·9	+0·1	1·04	1·10	− 5
Do. (West) . .	1·7	+0·9	0·63	0·31	+103

The preceding data indicate that the rainfall of the month was above the small normal of the month over nearly the whole of the province. The submontane districts received an average of 1·0 inch, or 5 per cent. less than the normal fall of the month.

Light general rain fell in Bhopal, Gwalior, and Bundelkhand on the 1st and 2nd, and again on the 10th and 11th, and light local showers were received in the same districts from the 16th to the 18th. The following gives comparative data of the rainfall of the month for these states or political divisions:—

STATE.	RAINFALL.			
	Actual, February 1895.	Normal, February.	Variation from normal.	Percentage, variation.
	Inches.	Inch.	Inch.	
Bhopal	0·52	0·24	+0·28	+117
Gwalior	0·19	0·26	−0·07	−27
Bundelkhand	1·12	0·33	+0·79	+239
Rewah	0·96	0·39	+0·57	+146
Maihar	1·10	0·37	+0·73	+197

A few showers of no importance were received in Rajputana, but the total rainfall averaged less than a tenth of an inch, and hence the month was practically rainless.

The month was unusually dry over the greater part of Bengal. Bihar received moderate general rain on the 2nd from the first disturbance and Chota Nagpur and the Sonthal Parganas on the 2nd and 3rd, North and West Bengal obtained some light local showers of little importance on the 2nd and 3rd. Frequent showers were received in British Bhutan from the 13th to the end of the month, and light showers in Orissa and Chota Nagpur from the 10th to the 13th, Orissa, Chota Nagpur, Bihar obtained their normal small amount, but the rainfall of the month was practically *nil* over nearly the whole of Bengal and was in considerable defect. The deficiency was absolutely greatest in the Deltaic division, the normal fall of which in February is 1·2 inches. It obtained an average of less than a tenth of an inch. The following gives comparative data for the eight divisions of the province :—

DIVISION.	NUMBER OF RAINY DAYS.			RAINFALL.			
	Actual, February 1895.	Normal, February.	Variation from normal.	Actual, February 1895.	Normal, February.	Variation from normal.	Percentage variation.
				Inch.	Inches.	Inches.	
East Bengal . .	0	1·7	−1·7	0·01	1·01	−1·00	−99
Deltaic ,, . .	0·2	1·8	−1·6	0·06	1·17	−1·11	−95
Central ,, . .	0·6	1·4	−0·8	0·17	0·83	−0·66	−80
North ,, . .	0·3	1·4	−1·1	0·09	0·51	−0·42	−82
Orissa . . .	1·5	1·5	0	0·86	0·90	−0·04	− 4
Chota Nagpur . .	1·4	1·3	+0·1	0·55	0·64	−0·09	−14
Bihar (South) . .	1·0	1·1	−0·1	0·54	0·43	−0·11	−26
,, (North) . .	0·9	1·2	−0·3	0·33	0·47	−0·14	−30

The rainfall of the month was almost as markedly in defect in Assam as in Bengal. Light showers were received in the Brahmaputra Valley on the 2nd and 3rd and the 12th and 13th and again on the 17th. Cachar and Sylhet obtained light showers on the 12th and 13th. The following gives comparative data based on the returns published in the *Assam Gazette*:—

Division.	Number of rainy days			Rainfall.			
	Actual, February 1895.	Normal, February.	Variation from normal.	Actual, February 1895.	Normal, February.	Variation from normal.	Percentage, variation.
				Inch.	Inches.	Inches.	
Assam (Surma) .	?	?	?	0·15	1·92	−1·77	−92
„ (Brahmaputra) .	?	?	?	0·78	1·22	−0·44	−36

Numerous thunderstorms occurred daily in Berar between the 15th and 22nd and in the Central Provinces on the 11th and 12th and from the 16th to the 19th. These thunderstorms gave a total rainfall which, although not large in actual amount considerably exceeded the normal of the month, as is shown by the following comparative data:—

Division.	Number of rainy days.		Rainfall.			
	Actual, February 1895.	Normal, February.	Actual, February 1895.	Normal, February.	Variation from normal.	Percentage, variation.
			Inches.	Inch.	Inches.	
Central Provinces (East.) .	0·9	0·6	0·27	0·32	—0·05	— 16
Ditto (Central) .	2·3	0·6	1·29	0·24	+1·05	+438
Ditto (West) .	1·9	0·5	0·69	0·21	+0·48	+229
Berar	2·4	?	?	0·90	?	?

Light local showers accompanying thunderstorms were received in the Bombay Deccan and Khandesh from the 19th to the 25th. The heaviest fall in 24 hours was 0·93 inch at Junnar, in the Poona district. The rainfall due to these storms was very irregularly distributed, and averaged less than two-tenths of an inch in the Bombay Deccan and four-tenths of an inch for Khandesh. Practically no rain fell over the remainder of the Bombay Presidency.

The month was absolutely or practically rainless in Travancore, Mysore, Coorg and over the whole of Madras, with the exception of the northern districts, more especially Ganjam and Vizagapatam. These districts received thunderstorms from the 7th to the 9th, and on the 12th, 13th and the 25th. The mean rainfall of the month in the Ganjam district was 1·41 inches, or 0·96 inch more than the normal, and in the Vizagapatam district, 0·35 inch, or 0·16 inch above the normal. The following comparative data for the 21 Collectorates of the Presidency show the amount of the deficiency, in the remaining districts. It was largest in actual amount in the southern districts:—

District.	Number of rainy days.				
	Actual, February 1895.	Normal, February.	Actual, February 1895.	Normal, February.	Variation from normal.
			Inches.	Inches.	Inches.
Ganjam	3·0	0·8	1·41	0·45	+0·96
Vizagapatam . .	0·8	0·4	0·35	0·19	+0·16
Godavari . . .	0·1	0·2	0·04	0·12	−0·08
Kistna	0·1	0·2	0·04	0·06	−0·02
Nellore	0	0·2	0	0·19	−0·19
Chingleput . . .	0	0·2	0	0·42	−0·42
Madras	0	0·2	0	0·28	−0·28
North Arcot . . .	0	0·2	0	0·20	−0·20
South Arcot . . .	0	0·2	0	0·20	−0·20
Tanjore . . .	0	0·5	0	0·54	−0·54
Trichinopoly . . .	0	0·1	0	0·11	−0·11
Madura . . .	0	0·5	0·01	0·39	−0·38
Tinnevelly . . .	0	1·2	0	0·81	−0·81
Malabar . . .	0	0·4	0	0·26	−0·26
South Canara . .	0	0	0	0·02	−0·02
Salem	0	0·2	0·01	0·10	−0·09
Coimbatore . . .	0·1	0·2	0·13	0·17	−0·04
Nilgiris	0·7	0·5	0·32	0·23	+0·09
Cuddapah . . .	0	0·1	0	0·06	−0·06
Anantapur . . .	0	0·1	0	0·03	−0·03
Bellary	0·2	0	0·03	0·02	+0·01
Kurnool . . .	0·3	0·1	0·06	0·01	+0·05

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1. Burma Coast and Bay Islands.		...	...	−·010	...	...	...	...	...	...	...	88·2	−0·3	67·6	+0·1	77·9	−0·1	20·6	...	...	...	...	30·1
Bay Islands	Port Blair	61	29·934	?	29·927	29·986	18th	29·878	4th	·108	77·0	85·4	?	74·5	?	79·9	?	10·9	89·1	14th	70·6	8th	18·5
	Camorta	?	29·954	?	?	29·995	24th	29·907	4th	·088	81·9	86·2	?	76·4	?	81·3	?	9·8	88·3	26th	73·2	18th	15·1
Tenasserim	Mergui	96	29·908	?	29·937	29·962	23rd	29·826	4th	·136	77·9	88·6	?	70·1	?	79·3	?	18·5	94·4	19th	66·0	17th	28·4
	Tavoy	26	29·983	?	29·940	30·037	23rd	29·912	5th	·125	70·1	91·0	?	65·2	?	78·1	?	25·8	94·2	26th	59·2	4th & 17th.	35·0
	Moulmein	94	29·909	−·013	29·942	29·975	19th	29·819	5th	·156	71·3	91·2	−0·1	67·6	+0·1	79·4	0	23·6	95·0	26th	61·9	12th	33·1
	Toungoo	183	29·802	−·010	29·936	29·883	24th & 25th,	29·698	4th	·185	64·7	89·5	−1·2	60·7	+0·5	75·1	−0·4	28·8	95·7	24th	53·1	8th	42·6
Lower Burma	Rangoon	41	29·952	−·016	29·931	30·025	19th	29·867	4th	·158	68·3	93·4	+1·0	65·4	+0·2	79·4	+0·6	28·0	97·6	22nd	59·8	2 days	37·8
	Bassein	27	29·974	−·001	29·936	30·049	19th	29·873	4th	·176	69·5	90·3	+0·8	64·1	+0·2	77·2	+0·5	26·2	96·2	24th	59·0	2 days	37·2
	Diamond Island	41	29·955	−·015	29·931	30·025	19th	29·863	4th	·162	76·0	82·3	−1·8	73·0	+1·2	77·7	−0·3	9·3	85·6	26th	70·4	1st	15·2
Arakan	Akyab	20	30·000	−·004	29·963	30·061	19th	29·910	4th	·151	64·4	84·3	−0·3	59·0	−1·9	71·7	−1·1	25·3	89·2	2 days	50·7	8th	38·5
2. Burma Inland		...	...	0	...	...	...	...	...	...	...	84·6	−0·7	53·0	−0·4	68·8	−0·6	31·6	...	...	...	...	44·5
Central Burma	Thayetmyo	134	29·860	0	29·941	29·942	19th	29·749	4th	·193	65·3	90·8	−1·6	56·3	+0·3	73·6	−0·7	34·5	98·1	23rd	49·2	8th	48·9
	Minbu	?	29·837	?	?	29·926	19th	29·712	4th	·214	66·9	89·2	?	58·6	?	73·9	?	30·6	93·6	4 days	51·0	9th	42·6
	Yamethin	645	29·319	?	?	29·400	19th	29·212	4th	·188	63·6	91·4	?	56·7	?	74·1	?	34·7	97·1	23rd	50·1	2 days	47·0
	Taunggyi	?			Not r	ecorded.					55·6	75·3	?	44·5	?	59·9	?	30·8	81·7	25th	35·6	8th	46·1
Upper Burma	Mandalay	248	29·739	?	?	29·829	19th	29·607	4th	·222	67·6	88·2	?	58·3	?	73·3	?	29·9	92·0	2 days	51·7	8th	40·3
	Kindat	?	29·650	?	?	29·743	19th	29·499	4th	·244	55·6	81·7	+0·2	52·3	−1·0	67·0	−0·4	29·4	86·3	25th	44·5	7th	41·8
	Lashio	?	27·174	?	?	27·283	21st	27·085	4th	·198	52·3	77·3	?	46·7	?	62·0	?	30·6	84·1	25th	40·1	8th	44·0
	Bhamo	?	29·635	?	?	29·732	21st	29·473	4th	·259	58·0	82·7	?	50·2	?	66·5	?	32·5	87·0	22nd	41·9	8th	45·1
3. Assam		...	...	+·018	...	...	...	...	...	...	...	78·1	+1·5	51·0	−0·3	66·0	+0·6	24·1	...	...	...	...	37·4
Assam (Surma)	Silchar	104	29·953	+·016	30·015	30·043	20th	29·834	4th	·209	59·6	82·0	+2·1	54·1	−0·9	68·1	+0·6	27·9	88·4	24th	45·5	7th	42·9
Brahmaputra	Sibsagar	333	29·727	+·017	30·037	29·831	20th	29·534	4th	·297	57·1	73·8	+1·1	52·6	−0·5	63·2	+0·3	21·2	79·8	25th	44·9	7th	34·9
	Dhubri	115	29·923	+·021	30·001	30·015	24th	29·755	4th	·260	58·6	78·5	+1·4	55·2†	+0·5	66·6†	+1·0	23·3	84·1	25th	49·8	6th	34·3
4. Bengal and Orissa		...	...	+·018	...	...	...	...	...	...	...	81·1	+0·2	57·0	−0·3	69·1	−0·1	24·1	...	...	...	...	36·9
East Bengal	Chittagong	87	29·943	+·064	29·983	30·007	20th	29·856	4th	·151	62·1	82·3	+0·8	56·5	−2·0	69·5	−0·6	25·8	86·7	2 days	49·1	8th	37·6
	Lungleh	?			Not r	ecorded.					58·5*	67·5	?	52·4	?	59·9	?	15·1	74·9	21st	40·2	21st	34·7
	Noakhali	43	30·000	?	29·991	30·072	20th	29·914	4th	·158	64·6	81·2	?	54·2	?	67·7	?	27·0	85·5	21st	45·7	8th	39·8
	Comilla	36	30·004	?	29·989	30·075	19th	29·914	4th	·161	63·5	82·5	?	54·6	?	68·5	?	27·9	86·9	23rd	46·1	8th	40·8
	Sirajganj	49	29·988	?	29·989	30·061	20th	29·872	4th	·189	59·9	80·0	?	53·4	?	66·7	?	26·6	86·4	26th	45·2	7th	41·2
	Narayanganj	26	30·012	+·010	29·987	30·083	20th	29·907	4th	·176	63·4	81·5	−2·2	56·9	−0·9	69·2	−1·6	24·6	86·1	28th	49·2	8th	36·9
	Barisal	13	30·035	+·021	29·994	30·108	20th	29·941	4th	·167	65·0	81·7	+1·7	57·3	−0·8	69·5	+0·5	24·4	85·8	3 days	49·0	8th	36·8
	Mymensingh	59	29·979	+·010	29·993	30·052	20th	29·864	4th	·188	60·0	79·1	+1·3	54·0	+0·4	66·5	+0·9	25·1	84·7	2 days	45·5	7th	39·2
Deltaic Bengal	Faridpur	46	30·003	?	29·999	30·073	20th	29·904	4th	·169	63·0	80·3	?	55·0	?	67·6	?	25·3	85·8	28th	48·5	7th	37·3
	Jessore	33	30·007	+·014	29·988	30·080	20th	29·915	4th	·165	63·6	82·1	−1·0	54·7	−1·9	68·4	−1·5	27·4	87·5	28th	45·9	8th	41·6
	Calcutta	21	30·026	+·015	29·991	30·104	21st	29·936	4th	·168	64·1	81·9	+0·3	58·6	−1·2	70·3	−0·5	23·3	88·1	28th	52·7	8th	35·4
	Saugor Island	25	30·019	+·019	29·989	30·103	24th	29·926	4th	·177	68·0	80·8	−0·1	64·2	−0·9	72·5	−0·5	16·6	87·0	20th	55·9	7th	31·1
	Krishnagar	47	29·999	?	29·998	30·072	24th	29·903	4th	·169	63·2	82·2	?	52·7	?	67·5	?	29·5	88·0	28th	46·1	8th	41·9
	Midnapore	149	29·913	?	30·015	29·996	24th	29·818	3rd & 4th,	·178	67·3	86·4	?	59·7	?	73·1	?	26·7	92·8	28th	53·2	6th & 7th	39·6

* Mean of 27 days. † Mean of 25 days.

I.

in India, Burma, etc., in February 1895.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8A.M.		Mean cloud amount.	RAINFALL.								Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 28th February 1895.	Normal rainfall for period, 1st January to 28th February.	Variation from normal of period.		
...	...	...	...	...	...	...	...	...	...	...	-	...	...	...	...	...	...	0·50	0·48	-0·20	...	...	...	...	**1. Burma Coast and Bay Islands.**	
...	6	5	1	1	...	...	8	7	6·0	5·1	+ 18	82	·764	1·6	0	?	?	0	1·17	- 1·17	0	1·98	- 1·98	0	Port Blair .	BAY ISLANDS.
...	10	9	9	...	...	...	...	...	?	?	?	72	·786	4·2	5	?	?	0·92	?	?	6·90	?	?	0·34	Camorta.	
...	11	2	1	...	1	2	...	11	1·7	2·0	- 15	80	·767	3·6	3	?	?	1·14	1·43	- 0·29	4·01	2·04	+ 1·97	0·43	Mergui .	TENASSERIM.
23	...	...	...	...	...	1	...	4	1·6	?	?	89	·661	0·2	1	?	?	1·87	?	?	1·87	?	?	1·87	Tavoy.	
...	...	5	14	4	...	2	...	3	2·5	2·4	+ 4	84	·648	2·0	0	0·45	-0·45	0·04	0·20	- 0·16	0·04	0·71	- 0·67	0·04	Moulmein.	
7	11	1	2	2	...	1	...	4	1·9	1·9	0	85	·524	0·9	3	0·36	+2·64	0·69	0·18	+ 0·51	0·69	0·30	+ 0·39	0·26	Toungoo.	
...	1	2	1	...	5	8	10	1	3·6	3·9	- 8	86	·603	0·8	1	0·45	+0·55	0·36	0·34	+ 0·02	0·36	0·51	- 0·15	0·27	Rangoon .	LOWER BURMA.
5	4	...	1	1	...	...	3	14	6·0	3·8	+ 58	86	·624	1·1	0	0·45	-0·45	0	0·30	- 0·30	0	0·47	- 0·47	0	Bassein.	
...	11	8	2	...	...	...	1	6	12·6	7·2	+ 75	73	·651	1·3	0	0·40	-0·40	0	0·10	- 0·10	0	0·28	- 0·28	0	Diamond Island.	
...	25	2	...	...	1	...	...	...	4·1	3·4	+ 21	81	·490	1·1	0	0·36	-0·36	0·02	0·11	- 0·09	0·02	0·19	- 0·17	0·02	Akyab .	ARAKAN.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·39	0·10	+0·13	...	...	...	...	**2. Burma Inland.**	
...	6	2	4	1	3	3	5	4	2·7	4·2	- 36	65	·412	0·7	1	0	+1·00	0·44	0·01	+ 0·43	0·44	0·03	+ 0·41	0·42	Thayetmyo	CENTRAL BURMA.
5	5	1	...	2	...	...	...	15	5·4	?	?	59	·389	0·9	0	?	?	0·10	?	?	0·10	?	?	0·09	Minbu.	
11	5	1	...	6	1	...	...	4	3·3	?	?	72	·431	0·5	1	?	?	0·18	?	?	0·18	?	?	0·12	Yamethin.	
18	...	1	...	4	1	4	...	...	0·2	?	?	70	·313	1·4	2	?	?	0·89	?	?	0·89	?	?	0·56	Taunggyi	
20	1	...	...	3	2	2	...	...	1·5	?	?	64	·433	0·6	1	?	?	0·11	?	?	0·11	?	?	0·11	Mandalay .	UPPER BURMA.
25	2	...	...	...	...	1	...	...	1·3	?	?	96	·431	1·1	0	?	?	0·01	0·18	- 0·17	0·03	0·76	- 0·73	0·01	Kindat.	
...	7	5	...	1	1	4	...	10	?	?	?	84	·327	3·2	1	?	?	0·66	?	?	0·66	?	?	0·66	Lashio.	
23	...	2	...	...	...	...	...	3	1·7	?	?	86	·416	0·7	2	?	?	0·70	?	?	0·74	?	?	0·38	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·56	1·32	-0·76	...	...	...	...	**3. Assam.**	
25	1	...	...	1	1	...	...	...	1·8	2·8	- 36	87	·448	2·0†	1	3·91	-2·91	0·19	1·63	- 1·44	0·35	2·40	- 2·05	0·19	Silchar .	ASSAM (SURMA).
10	...	12	2	2	...	...	1	..	3·0	2·2	+ 36	97	·457	2·9	3	4·55	-1·55	1·45	1·80	- 0·35	3·03	3·28	- 0·25	0·72	Sibsagar .	BRAHMAPUTRA.
7	3	11	2	1	...	4	...	...	2·1	4·0	- 48	85	·422	1·3	0	0·71	-0·71	0·03	0·52	- 0·49	0·21	0·96	- 0·75	0·02	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·12	0·94	-0·83	...	...	...	...	**4. Bengal and Orissa.**	
1	8	17	2	...	...	...	...	...	2·9	4·4	- 34	83	·477	1·1	0	1·55	-1·55	0	0·63	- 0·63	0	1·02	- 1·02	0	Chittagong	EAST BENGAL.
			Not recorded.						?	?	?	65*	·320*	?	0	?	?	0	?	?	0	?	?	0	Lungleh.	
...	5	12	5	1	1	...	1	3	2·9	?	?	80	·487	1·1	0	1·60	-1·60	0	0·91	- 0·91	0	1·53	- 1·53	0	Noakhali.	
12	6	3	...	2	2	2	...	1	1·2	?	?	86	·511	1·2	0	2·00	-2·00	0	0·87	- 0·87	0	1·55	- 1·55	0	Comilla.	
			Not recorded.						0·8	?	?	81	·419	1·2	0	1·47	-1·47	0	1·01	- 1·01	0·10	1·46	- 1·36	0	Sirajganj.	
10	6	3	1	1	...	...	3	4	2·6	2·6	0	79	·468	1·6	0	1·91	-1·91	0	1·51	- 1·51	0·02	1·83	- 1·81	0	Narayanganj	
22	4	1	...	...	...	1	...	...	2·1	?	?	80	·499	0·8	0	1·75	-1·75	0	1·00	- 1·00	0·05	1·77	- 1·72	0	Barisal.	
7	3	10	5	1	...	...	1	1	2·2	?	?	83	·432	0·9	0	1·30	-1·30	0	1·01	- 1·01	0·30	1·39	- 1·09	0	Mymensingh.	
24	3	...	...	...	...	...	...	1	0·9	?	?	82	·474	0·9	0	2·05	-2·05	0	1·41	- 1·41	0·07	1·75	- 1·68	0	Faridpur .	DELTAIC BENGAL.
21	4	...	...	...	...	...	...	3	1·7	2·0	- 15	76	·454	1·8	0	2·00	-2·00	0	1·48	- 1·48	0·28	1·97	- 1·69	0	Jessore.	
14	6	2	1	1	...	...	1	3	2·6	3·8	- 32	78	·476	1·2	0	1·64	-1·64	0·02	1·24	- 1·22	0·02	1·62	- 1·60	0·01	Calcutta.	
...	7	10	1	...	3	1	3	3	8·0	7·9	+ 1	87	·604	2·3	0	2·00	-2·00	0·08	1·34	- 1·26	0·08	1·57	- 1·49	0·08	Saugor Island.	
2	3	3	1	3	4	1	4	7	2·9	?	?	72	·416	1·1	0	1·55	-1·55	0	1·04	- 1·04	0·48	1·34	- 0·86	0	Krishnagar.	
6	11	4	...	...	2	2	1	2	2·8	?	?	62	·418	1·3	0	1·40	-1·40	0	0·99	- 0·89	0	1·50	- 1·50	0	Midnapore.	

* Mean of 27 days. † Mean of 23 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal	Bankura	298	29·726	?	29·991	29·806	24th	29·624	3rd	·182	64·5	83·2	?	57·6	?	70·4	?	25·6	90·1	28th	50·8	6th	39·3
	Raniganj	334	29·719	?	30·021	29·801	3 days	29·617	4th	·184	62·3	82·0	?	57·0	?	69·5	?	25·0	88·1	28th	50·8	7th	37·3
	Burdwan	99	29·946	+·018	29·998	30·027	20th	29·841	3rd	·186	63·0	82·4	−0·8	57·2	−0·9	69·8	−0·9	25·2	88·2	28th	52·1	8th	36·1
	Naya Dumka	489	29·545	?	30·020	29·632	20th	29·430	4th	·202	62·4	79·8	?	54·4	?	67·1	?	25·4	86·0	28th	47·3	8th	38·7
	Berhampore	67	29·977	+·017	29·995	30·054	21st	29·860	4th	·194	61·3	80·3	−1·6	55·8	−0·1	68·1	−0·9	24·5	85·8	26th	49·1	2 days	36·7
	Rampur Boalia	70	29·965	?	29·988	30·049	24th	29·851	4th	·198	63·1	79·2	?	54·2	?	66·7	?	25·0	85·1	25th & 28th	47·1	8th	38·0
	Malda*	72	29·962	?	29·990	30·041	21st	29·819	4th	·222	60·6	80·3	?	50·5	?	65·4	?	29·8	86·7	25th	44·2	8th	42·5
	Bogra	61	29·969	+·030	29·985	30·043	24th	29·839	4th	·204	60·3	80·4	+1·3	52·7	−0·6	66·5	+0·4	27·7	86·8	26th	44·4	7th	42·4
North Bengal	Dinajpur	123	29·915	+·029	30·001	30·002	24th	29·757	4th	·245	58·6	79·7	+1·3	52·2	+1·0	66·0	+1·2	27·5	85·3	4 days	44·5	6th	40·8
	Rangpur	123	29·912	?	29·997	29·999	24th	29·748	4th	·251	58·3	78·5	?	50·9	?	64·7	?	27·6	84·3	26th	42·1	6th	42·2
	Jalpaiguri	284	29·750	+·029	30·008	29·850	24th	29·563	4th	·287	59·2	77·8	+2·9	52·7*	+1·9	65·3*	+2·4	25·1	84·4	25th	43·6	9th	40·8
Orissa	Balasore	56	30·002	+·028	30·006	30·084	20th	29·908	3rd	·176	66·4	84·2	+0·7	60·5	+0·3	72·3	+0·5	23·7	90·4	27th	55·0	26th	35·4
	False Point	21	30·019	+·015	29·982	30·106	24th	29·925	4th	·181	71·6	82·6	0	64·0	−0·3	73·3	−0·2	18·6	87·9	27th	58·5	15th	29·4
	Cuttack	80	29·954	+·008	29·979	30·041	24th	29·863	4th	·178	69·2	88·7	−1·3	66·3	+1·2	77·5	−0·1	22·4	94·2	28th	61·7	26th	32·5
	Shortt's Island	?	30·018	?	?	30·106	24th	29·923	4th	·183	74·3	81·8	?	69·8	?	75·3	?	2·0	85·2	27th	65·9	12th	19·3
	Puri	24	30·026	?	29·987	30·109	21st	29·930	4th	·179	73·7	83·3	?	69·5	?	76·4	?	13·8	87·7	21st	64·1	15th	23·6
5. Gangetic Plain and Chota Nagpur.		...	...	+·023	...	...	...	...	...	...	...	78·4	−0·5	53·0	+0·8	65·6	+0·2	25·5	...	...	...	...	41·6
Chota Nagpur	Hazaribagh	2,007	27·989	+·021	30·029	28·079	24th	27·890	4th	·189	61·7	77·1	−0·6	54·3	+0·4	65·7	−0·1	22·8	85·4	28th	44·0	6th	41·4
	Ranchi	2,128	27·879	+·040?	30·031	27·973	20th	27·760	3rd	·213	61·2	?	?	54·3	+1·1	?	?	?	84·1	28th	45·9	7th	38·2
	Daltonganj	730?	29·291	?	30·018	29·387	21st	29·178	17th	·209	59·4	76·1	?	51·6	?	63·9	?	24·5	84·2	25th	43·0	7th	41·2
	Chaibassa	760	29·272	+·028	30·017	29·358	21st	29·167	3rd	·191	63·4	84·2	+0·5	57·1	+0·2	70·7	+0·4	27·1	91·0	28th	50·7	5th	40·3
Bihar, South	Gaya	375	29·670	+·023	30·020	29·759	21st	29·556	17th	·203	62·0	80·2	−1·1	55·1†	−0·7	67·1	−0·9	25·1	88·2	19th	47·4	7th	40·8
	Dehri	351	29·688	?	30·013	29·774	21st	29·606	4th	·168	62·8	80·2	?	57·1	?	68·7	?	23·1	86·9	19th	48·7	8th	38·2
	Patna	183	29·865	+·014	30·011	29·955	24th	29·755	17th	·200	62·7	77·4	−0·6	54·5	+1·9	65·9	+0·7	22·9	85·3	28th	45·4	8th	39·9
	Arrah	190	29·851	?	30·005	29·952	21st	29·739	17th	·213	59·1	79·2	?	52·8	?	66·0	?	26·4	85·6	28th	44·7	7th	40·9
	Buxar	239	29·801	?	30·008	29·895	21st	29·698	17th	·197	62·0	79·0	?	54·2	?	66·6	?	24·8	85·6	4 days	43·9	7th	41·7
Bihar, North	Purnea	125	29·910	+·023	29·998	30·012	24th	29·748	4th	·264	56·5	78·9	+0·1	51·3	+0·6	65·1	+0·4	27·6	84·4	2 days	41·3	2 days	40·1
	Bhagalpur	160	29·872	?	29·992	29·960	24th	29·735	4th	·225	63·1	79·8	?	52·6	?	66·2	?	27·2	87·4	28th	42·2	8th	45·2
	Darbhanga	166	29·867	+·019	29·997	29·968	24th	29·721	4th	·247	59·6	77·1	+0·9	54·9	+1·2	66·0	+1·1	22·2	83·1	28th	47·0	8th	36·1
	Muzaffarpur	178	29·862	?	30·005	29·957	24th	29·725	4th	·232	58·3	76·9	?	51·4	?	64·2	?	25·5	83·7	28th	42·8	8th	40·9
	Motihari	224	29·810	?	30·005	29·908	21st	29·675	4th	·233	58·4	77·8	?	48·9	?	63·4	?	28·9	84·5	28th	39·5	8th	45·0
	Chapra	181	29·861	?	30·006	29·958	21st	29·750	4th & 17th, 17th	·208	58·9	78·2	?	53·6	?	65·9	?	24·6	86·9	27th	44·6	8th	42·3
N.-W. Provinces (Eastern Districts).	Benares	267	29·773	+·021	30·012	29·861	21st	29·663	17th	·198	59·0	78·8	−1·6	51·6	+0·2	65·2	−0·7	27·2	86·7	27th	42·1	7th	44·6
	Allahabad	309	29·734	+·021	30·015	29·821	21st	29·622	17th	·199	60·9	79·1	−0·6	53·0	+2·0	66·1	+0·7	26·1	88·6	27th	43·9	7th	44·7
N.-W. Provinces (East Sub-montane).	Gorakhpur	256	29·768	+·024	29·998	29·860	24th	29·653	17th	·207	59·1	77·2	−0·8	53·4	+1·5	65·3	+0·4	23·8	84·4	27th	43·3	7th	41·1
Oudh, South	Lucknow	368	29·661	+·015	30·013	29·768	24th	29·554	17th	·214	59·2	77·6	−0·9	50·5	+0·2	64·1	−0·4	27·1	84·3	4 days	41·0	8th	43·3
Oudh, North	Bahraich	403	29·634	?	30·024	29·754	24th	29·514	5th	·240	57·9	77·2	?	51·9	?	64·5	?	25·3	83·9	27th	43·5	7th	40·4
N.-W. Provinces (Central).	Cawnpore	416	29·620	?	30·016	29·714	21st	29·513	17th	·201	59·4	77·9	?	51·0	?	64·4	?	26·9	85·8	27th & 28th.	41·0	8th	44·8
	Mainpuri	516	29·508	?	30·016	29·606	24th	29·398	17th	·208	56·9	76·8	?	50·3	?	63·6	?	26·5	86·3	28th	43·1	3 days	43·2

* Mean of 27 days.

† Mean of 23 days.

I—*continued.*

in India, Burma, etc., in February 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.							Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st Jan. to 28th Feb. 1895.	Normal rainfall for period, 1st Jan. to 28th Feb.	Variation from normal of period.			
24	...	...	...	...	...	...	4	...	1·0	?	?	65	·395	1·8	1	1·75	− 0·75	0·21	0·87	− 0·66	0·32	1·24	− 0·92	0·21	Bankura .	CENTRAL BENGAL.
20	2	1	...	...	...	...	2	3	0·9	?	?	63	·354	1·8	1	1·35	− 0·35	0·10	1·19	− 1·09	0·89	1·52	− 0·63	0·10	Raniganj.	
11	5	4	...	1	...	1	1	5	1·5	2·3	−35	65	·374	1·3	0	1·64	− 1·64	0·02	1·01	− 0·99	1·22	1·24	− 0·02	0·02	Burdwan.	
5	2	...	...	...	1	1	8	11	2·6	?	?	65	·366	2·0	2	1·44	+ 0·56	0·39	0·72	− 0·33	0·58	1·30	− 0·72	0·28	Naya Dumka	
7	1	...	...	3	1	8	6	2	1·7	2·4	−29	80	·432	1·6	1	1·73	− 1·73	0·16	1·19	− 1·03	0·35	1·58	− 1·23	0·16	Berhampore.	
15	4	...	...	1	...	4	3	1	3·1	?	?	76	·435	0·9	1	1·35	− 0·35	0·10	0·79	− 0·69	0·23	1·19	− 0·96	0·10	Rampur Boalia.	
4	1	...	...	...	2	8	7	5	2·5	?	?	78	·417	1·0	0	1·10	— 1·10	0·05	0·52	− 0·47	0·29	0·95	− 0·66	0·05	Malda.*	
17	2	3	1	1	...	1	1	14	1·4	?	?	79	·418	0·5	0	1·35	— 1·35	0	0·85	− 0·85	0·23	1·30	— 1·07	0	Bogra.	
...	2	...	...	1	2	9	12	2	3·6	?	?	80	·399	0·4	0	1·25	− 1·25	0·05	0·50	− 0·45	0·25	0·90	− 0·65	0·05	Dinajpur .	NORTH BENGAL.
1	5	8	3	1	3	6	1	...	2·4	?	?	85	·420	1·6	0	1·00	− 1·00	0·02	0·39	− 0·37	0·07	0·97	− 0·90	0·02	Rangpur.	
...	6	7	5	2	...	1	1	6	2·0	?	?	83	·417	0	0	1·05	− 1·05	0·01	0·29	− 0·28	0·03	0·83	− 0·80	0·01	Jalpaiguri.	
3	10	2	...	...	...	2	1	10	3·7	?	?	76	·509	1·3	2	2·20	− 0·20	0·88	1·36	− 0·48	0·88	1·85	— 0·97	0·54	Balasore .	ORISSA.
2	7	5	2	...	2	2	2	6	7·2	7·5	− 4	85	·660	2·9	1	1·55	− 0·55	0·91	0·99	− 0·08	1·04	1·62	— 0·58	0·80	False Point.	
18	2	4	2	...	...	1	1	...	1·8	2·2	−18	81	·586	1·8	0	1·36	— 1·36	0	0·58	− 0·58	0	0·81	− 0·81	0	Cuttack.	
1	11	...	...	1	2	5	5	3	9·2	?	?	77	·656	0·7	1	?	?	0·42	?	?	0·42	?	?	0·30	Shortt's Island.	
9	8	4	1	...	...	3	1	2	8·5	?	?	82	·682	1·6	1	1·20	− 0·20	0·25	0·86	− 0·61	0·25	1·11	− 0·86	0·16	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·43	0·48	−0·04	...	...	...	...	5. Gangetic Plain and Chota Nagpur.	
5	1	...	2	1	5	5	5	4	7·0	6·5	+ 8	59	·319	3·0	2	1·45	+ 0·55	0·40	0·77	− 0·37	0·83	1·39	− 0·56	0·21	Hazaribagh.	CHOTA NAGPUR.
15	1	2	...	...	...	...	...	10	6·8	?	?	61	·324	1·7	0	1·94	− 1·94	0·16	1·02	− 0·86	0·41	1·58	− 1·17	0·09	Ranchi.	
...	...	...	1	3	1	15	4	4	2·5	?	?	79	·401	3·0	1	?	?	0·28	?	?	1·05	?	?	0·16	Daltonganj.	
6	...	...	...	...	1	9	9	3	1·4	?	?	75	·436	2·3	2	1·35	+ 0·65	0·40	0·84	− 0·44	0·75	1·57	— 0·82	0·18	Chaibassa.	
...	1	...	1	1	18	2	3	2	5·6	2·6	+115	70	·389	2·8	1	0·73	+ 0·27	0·72	0·65	+ 0·07	1·12	1·27	— 0·15	0·62	Gaya .	BIHAR, SOUTH.
...	...	...	1	1	8	15	2	1	5·8	?	?	73	·423	1·5	1	0·67	+ 0·33	0·59	0·20	+ 0·39	1·20	0·82	+ 0·38	0·58	Dehri.	
3	...	...	2	...	2	6	14	1	3·0	2·9	+ 3	67	·383	2·2	1	0·82	+ 0·18	0·71	0·56	+ 0·15	1·26	1·22	+ 0·04	0·71	Patna	
...	1	1	...	...	2	12	7	5	2·7	?	?	77	·385	1·8	1	0·65	+ 0·15	0·50	0·45	+ 0·05	0·96	1·16	− 0·20	0·50	Arrah.	
4	1	2	...	1	1	7	9	3	2·0	?	?	70	·393	1·3	1	1·10	− 0·10	0·44	0·36	+ 0·08	0·87	1·15	— 0·28	0·39	Buxar.	
7	...	2	2	...	1	11	3	2	3·6†	2·5	+ 44	88	·406	1·0	1	1·00	0	0·14	0·67	− 0·53	0·31	1·27	− 0·96	0·14	Purnea .	BIHAR, NORTH
6	...	2	...	...	6	9	4	1	3·2	?	?	65	·379	2·3	1	1·25	− 0·25	0·11	0·48	− 0·37	0·34	0·96	− 0·62	0·11	Bhagalpur.	
3	1	2	...	1	1	4	10	6	3·5	3·3	+ 6	79	·404	1·5	1	1·27	− 0·27	0·44	0·55	− 0·11	0·97	1·24	− 0·27	0·44	Darbhanga.	
13	...	...	2	1	...	5	6	1	2·9	?	?	86	·420	1·1	1	1·26	− 0·26	0·29	0·41	− 0·12	1·01	1·20	− 0·19	0·29	Muzaffarpur	
5	...	1	2	...	...	9	11	...	5·2	?	?	87	·422	1·5	1	1·06	− 0·06	0·56	0·35	+ 0·21	1·03	1·00	+ 0·03	0·56	Motihari.	
4	...	1	1	1	1	10	8	2	3·5	?	?	79	·404	1·4	1	0·80	+ 0·20	0·38	0·33	+ 0·05	0·84	0·99	− 0·15	0·36	Chapra.	
11	1	...	1	1	3	9	2	...	3·1	4·1	− 24	83	·416	1·3	1	0·82	+ 0·13	0·38	0·37	+ 0·01	1·25	1·16	+ 0·09	0·30	Benares .	N.-W. PROVINCES (EASTERN DISTRICTS).
8	1	2	1	1	3	6	5	1	3·3	2·7	+ 22	77	·413	1·8	3	0·64	+ 2·36	0·41	0·28	+ 0·13	1·33	1·13	+ 0·20	0·21	Allahabad .	
2	4	...	1	1	2	2	10	6	1·6	2·3	− 30	74	·378	1·8	1	0·73	+ 0·27	0·52	0·41	+ 0·11	1·35	1·25	+ 0·10	0·52	Gorakhpur	N.-W. PROVINCES (EAST SUB-MONTANE).
10	1	1	1	...	...	4	6	5	1·4	3·3	− 58	79	·396	2·0	2	0·55	+ 1·45	0·41	0·25	+ 0·16	2·14	1·35	+ 0·79	0·30	Lucknow .	OUDH, SOUTH.
8	1	1	2	...	...	3	6	7	2·7	?	?	81	·397	0·7	2	?	?	0·59	0·63	− 0·04	2·24	1·49	+ 0·75	0·46	Bahraich .	OUDH, NORTH.
10	1	1	1	1	...	3	8	3	3·3	?	?	73	·371	0·9	1	0·60	+ 0·40	0·32	0·28	+ 0·04	2·35	0·92	+ 1·43	0·32	Cawnpore .	N.-W. PROVINCES (CENTRAL).
21	...	1	...	...	...	1	4	1	0·3	?	?	83	·387	1·8	2	?	?	0·73	0·16	+ 0·57	3·74	0·77	+ 2·97	0·46	Mainpuri.	

* Mean of 21 days.

† Mean of 25 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
6. Upper—Sub-Himalayas	...	...	+·015	...	...	...	...	...	...	...	72·8	+1·3	48·3	+2·1	60·6	+1·7	24·5	...	...	...	...	40·9
N.-W. Provinces (Sub-montane).	Bareilly	568	29·442	+·025	30·012	29·558	24th	29·341	17th	·217	55·3	74·4	−0·4	50·2	+1·4	62·3	+0·5	24·2	82·3	28th	41·7	6th	40·6
	Dehra Dun	2,233	27·738	+·013	30·036	27·872	24th	27·611	5th	·261	52·0	70·6	+1·8	47·0	+0·3	58·9	+1·1	23·6	76·5	28th	39·0	4th	37·5
	Roorkee	887	29·104	+·016	30·022	29·219	21st & 24th.	29·007	17th	·212	51·9	73·5	+0·3	47·6	+0·5	60·6	+0·4	25·9	80·3	25th	40·5	6th	39·8
	Meerut	738	29·262	+·011	30·016	29·368	24th	29·163	17th	·205	54·0	75·2	+0·8	50·4	+2·9	62·9	+1·9	24·8	83·6	28th	43·1	6th	40·5
Punjab, Central.	Delhi	718	29·289	+·007	30·015	29·384	19th	29·191	17th	·193	57·6	75·4	+0·3	53·5	+2·0	64·5	+1·2	21·9	84·5	28th	44·9	5th & 6th.	39·6
	Lahore	702	29·312	+·016	30·037	29·414	19th	29·140	1st	·274	52·3	72·7	+2·2	48·3	+4·4	60·5	+3·3	24·4	84·3	28th	40·7	7th	43·6
Punjab (Sub-montane).	Patiala	?	29·175*	?	?	29·254	19th	29·079	1st	·175	54·5	73·4*	?	47·5	?	60·4*	?	25·9	81·9	28th	40·0	4th	41·9
	Umballa	962?	29·081	?	30·029	29·197	21st	28·955	1st	·242	52·2	74·1	?	46·7	?	60·4	?	27·4	82·0	28th	39·5	4th	42·5
	Ludhiana	812	29·194	+·021	30·032	29·294	24th	29·057	1st	·237	53·3	71·7	+0·2	50·2†	+3·6†	61·5†	+1·9?	21·5	80·1	28th	43·6	8th	36·5
Punjab, North.	Sialkot	830	29·169	+·018	30·030	29·267	24th	29·020	1st	·247	52·5	71·5	+2·2	47·5	+2·2	59·5	+2·2	24·0	81·0	28th	39·3	6th	41·7
	Rawalpindi	1,652	28·335	+·012	30·040	28·461	19th	28·132	1st	·329	47·1	68·6	+4·2	42·4	+1·9	55·5	+3·1	26·2	80·1	28th	34·9	6th	45·2
7. Indus Valley and North-West Rajputana.	...	...	−·016	...	...	...	...	...	...	...	79·3	+4·7	49·5	+1·7	64·5	+3·2	30·5	...	...	...	...	51·8
Punjab, West	Peshawar	1,110	28·925	−·012	30·052	29·072	19th	28·684	1st	·388	48·5	70·1	+4·4	44·0	+2·5	57·0	+3·5	26·1	81·6	28th	35·4	5th	46·2
	Mardan	?	...	Not recorded.			...	...	...	...	47·5	71·8	?	42·6	?	57·2	?	29·2	82·8	28th	35·0	6th	47·8
	Khushab	612	29·404?	?	30·032?	29·538	19th	29·206	1st	·332	52·8	?	?	46·8	?	?	?	?	86·3	28th	35·0	6th	51·3
	Montgomery	558	29·459	?	30·023	29·593	19th	29·286	1st	·307	55·2	77·8	?	47·4	?	62·6	?	30·4	90·3	24th & 28th	39·5	6th	50·8
	D. I. Khan	573	29·441	−·028	30·033	29·576	19th	29·254	1st	·322	49·6	76·8	+5·1	45·5	+1·4	61·2	+3·3	31·3	88·1	28th	34·0	5th	54·1
	Mooltan	420	29·608	−·025	30·027	29·751	19th	29·453	1st	·298	55·2	79·4	+6·5	50·6	+4·5	65·0	+5·5	28·8	90·3	26th & 28th.	40·1	5th	50·2
	Sirsa	662	29·345	0	30·019	29·469	19th	29·185	1st	·284	53·3	79·5	+4·3	49·0	+3·0	64·3	+3·7	30·5	91·4	28th	39·2	6th	52·2
Sind and Cutch.	Jacobabad	186	29·850	−·015	30·009	30·002	19th	29·696	17th	·306	58·6	84·0	+6·9	49·2	+1·4	66·6	+4·2	34·8	96·5	28th	33·5	5th	63·0
	Hyderabad	117								Not recorded.													
	Kurrachee	49	29·997	−·019	30·000	30·105	19th	29·880	17th	·225	61·1	81·3	+2·3	57·7	0	69·5	+1·2	23·6	93·5	24th	45·1	3rd	48·4
	Bhuj	395	29·622	−·014	29·988	29·705	12th	29·532	1st	·173	65·8	85·5	+1·7	57·7	−0·2	71·6	+0·8	27·8	95·5	23rd	48·0	3rd & 4th.	47·5
Rajputana, West	Bickaneer	753	29·250	?	30·010	29·397	19th	29·094	1st	·303	58·7	81·4	+6·2	54·2	+0·8	67·8	+3·5	27·2	92·2	28th	45·1	6th	47·1
	Pachpadra	380	?	?	?	?	...	?	...	?	56·4	85·1	?	49·0	?	67·0	?	36·1	98·5	28th	35·0	3rd	63·5
8. East Rajputana, Central India and Gujarat.	...	...	+·008	...	...	...	...	...	...	...	83·0	+1·1	54·1	+0·9	68·6	+1·0	28·9	...	...	...	...	49·2
Rajputana, East	Jeypore	1,431	28·588	+·011	30·052	28·710	19th	28·448	1st	·262	58·7	80·6	+2·7	52·2	+2·2	66·4	+2·5	28·4	90·5	28th	40·2	4th	50·3
	Sambhar	1,254	28·751	+·010	30·037	28·872	19th	28·616	1st	·256	57·0	79·5	+3·1	48·2	+0·1	63·9	+1·6	31·3	89·9	28th	38·4	4th	51·5
	Ajmere	1,611	28·409	+·010	30·076	28·540	19th	28·276	1st	·264	55·1	79·4	+2·1	48·8	+0·4	64·1	+1·3	30·6	89·9	28th	36·4	6th	53·5
	Deesa	466	29·555	−·007	29·993	29·622	19th	29·456	1st	·166	63·2	88·7	+3·0	53·4	−1·3	71·1	+0·9	35·3	97·3	26th & 28th.	42·5	6th	54·8
Kathiawar	Rajkot	429	29·603	+·002	30·003	29·668	12th	29·524	1st	·144	66·0	86·7	−0·8	52·9	−1·2	69·8	−1·0	33·8	95·9	24th	39·1	4th	56·8
	Veraval	?	30·010	?	29·970	30·100	11th	29·942	8th	·158	66·8	82·5	?	60·4	?	71·4	?	22·1	93·1	24th	49·8	4th	43·3
Central India	Nowgong	757	29·276	+·010	30·032	29·377	19th	29·166	17th	·211	59·9	78·6	−1·7	52·6	+2·6	65·6	+0·5	26·0	88·0	27th	42·6	6th & 7th.	45·4
	Indore	1,823	28·182	+·014	30·023	28·268	22nd	28·097	1st	·171	62·6	82·8	+0·3	53·5	+1·9	68·2	+1·1	29·3	90·7	28th	39·6	5th	51·1
	Neemuch	1,630	28·387?	+·026?	30·042?	28·490?	19th	28·238?	1st	·252	62·1	82·5	+2·0	52·5	+1·0	67·5	+1·5	30·0	91·8	28th	39·9	6th	51·9
Gujarat	Surat	36	29·997	−·002	29·977	30·074	11th	29·919	7th	·155	66·6	88·7	−0·8	58·4	0	73·6	−0·4	30·3	96·7	4 days	50·1	3rd	46·6
	Ahmedabad	176	29·869	?	30·002	29·938	19th	29·792	8th	·146	66·5	88·7	?	60·0	?	74·4	?	28·7	97·2	27th & 28th.	50·7	4th	46·5
N.-W. P., West	Agra	555	29·476	0	30·024	29·579	19th	29·359	1st	·220	59·3	79·0	+0·8	53·3	+1·6	66·2	+1·2	25·7	87·6	25th & 28th.	42·9	3 days	44·7
	Jhansi	858	29·179	+·011	30·036	29·287	19th	29·041	1st	·246	63·1	81·3	+0·9	57·0	+2·8	69·2	+1·9	24·3	91·6	27th	47·9	7th	43·7

* Mean of 26 days. † Mean of 25 days.

I—*continued.*

in India, Burma, etc., in February 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.								Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 28th February 1895.	Normal rainfall for period, 1st January to 28th February.	Variation from normal of period.		
...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·92	1·27	−0·27	...	...	...	...	**6. Upper—Sub-Himalayas.**	
14	...	2	...	1	1	...	2	8	1·8	4·0	−55	80	·356	1·3	2	1·18	+0·62	0·97	0·61	+0·36	3·19	1·71	+1·48	0·50	Bareilly .	N.-W. PROVINCES (SUB-MONTANE).
27	...	1	...	...	...	...	...	...	1·8	2·0	−10	77	·300	1·9	2	3·00	−1·00	2·81	1·93	+0·88	6·49	4·47	+2·02	2·25	Dehra Dun.	
22	2	...	1	1	...	...	...	2	1·8	2·8	−36	87	·339	1·0	2	2·09	−0·09	0·81	1·22	−·041	4·80	2·98	+1·82	0·63	Roorkee.	
19	1	...	1	1	...	1	5	...	1·6	2·6	−38	78	·325	1·5	2	1·27	+0·73	0·48	0·79	−0·31	5·17	2·06	+3·11	0·32	Meerut.	
20	...	...	...	1	...	...	7	...	0·5	3·6	−86	70	·336	1·9	3	1·00	+2·00	0·53	0·61	−0·08	4·29	1·85	+2·44	0·25	Delhi .	PUNJAB, CENTRAL.
10	3	2	4	4	...	...	3	2	2·1	2·4	−13	84	·332	2·0	3	2·00	+1·00	0·98	1·10	−0·12	2·94	2·16	+0·78	0·45	Lahore.	
12	3	5	2	2	1	1	1	1	?	?	?	85	·365	1·3	0	?	?	0·14	?	?	(a) 0·14	?	?	0·09	Putiala .	PUNJAB (SUB-MONTANE).
12	1	1	2	2	...	...	1	9	2·2	?	?	87	·338	1·4	1	?	?	0·32	1·07	−0·75	2·85	2·20	+0·65	0·22	Umballa .	
15	2	1	1	1	1	...	3	4	2·0	1·6	+25	82	·336	1·9	2	1·82	+0·18	0·46	1·23	−0·77	3·23	3·20	+0·03	0·33	Ludhiana.	
22	3	1	2	...	...	...	...	...	1·4	1·7	−18	78	·391	1·8	3	2·45	+0·55	1·17	1·70	−0·53	5·09	4·19	+0·90	0·47	Sialkot .	PUNJAB, NORTH.
17	3	1	...	1	...	...	...	6	1·0	2·4	−58	82	·269	3·2	2	3·18	−1·18	1·42	2·41	−0·99	3·93	5·25	−1·32	0·75	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·40	0·42	−0·19	...	...	...	...	**7. Indus Valley and North-West Rajputana.**	
11	1	...	1	...	5	7	...	3	2·7	3·3	−18	81	·278	3·0	2	2·00	0	0·88	0·98	−0·10	0·96	2·75	−1·79	0·35	Peshawar .	PUNJAB, WEST.
Not recorded.									?	?	?	?	?	?	4		?	2·16	?	?	3·75	?	?	1·56	Mardan.	
14	1	6	4	...	...	2	1	...	2·6	?	?	66	·263	2·0	0	1·70	−1·70	0·06?	0·76	−0·70	0·16	1·28	−1·12	0·04	Khushab.	
13	1	2	2	8	1	...	1	...	3·2	?	?	73	·314	2·1	2	1·10	+0·90	0·91	0·63	+0·28	1·76	0·87	+0·89	0·65	Montgomery	
22	...	4	2	...	...	...	...	...	1·5	2·0	−25	71	·254	2·1	1	0·91	+0·09	0·10	0·52	−0·42	0·26	1·05	−0·79	0·10	D. I. Khan.	
16	1	2	...	...	...	7	...	2	0·9	2·4	−63	64	·282	1·5	0	1·00	−1·00	0·09	0·38	−0·29	0·70	0·86	−0·16	0·09	Mooltan.	
11	...	...	4	6	2	1	3	1	4·6	3·4	+35	73	·298	1·5	1	0·55	+0·45	0·23	0·27	−0·04	2·20	1·17	+1·03	0·23	Sirsa.	
16	2	3	3	...	2	...	...	2	2·8	3·0	− 7	47	·232	2·1	0	1·00	−1·00	0	0·40	−0·40	0·53	0·65	−0·12	0	Jacobabad .	SIND AND CUTCH.
																									Hyderabad.	
...	5	12	4	1	...	...	3	3	7·8	10·5	−26	69	·379	0·9	1	0·36	+0·64	0·32	0·31	+0·01	0·56	1·03	−0·47	0·29	Kurrachee.	
9	1	1	...	1	1	5	10	...	7·0	6·7	+ 4	63	·400	1·2	0	?	?	0	0·11	−0·11	0	0·22	−0·22	0	Bhuj.	
1	3	4	...	2	3	6	1	8	4·0	3·7	+ 8	48	·235	1·4	0		?	0·03	0·22	−0·19	1·10	0·52	+0·58	0·03	Bickaneer .	RAJPUTANA, WEST.
27	...	1	...	...	...	...	...	...	5·4	3·3	+64	54*	·230*	2·4	0	?	?	0	0·09	−0·09	0·80	0·46	+0·34	0	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	0·19	+0·10	...	...	...	...	**8. East Rajputana, Central India and Gujarat.**	
12	...	1	3	1	...	2	5	4	2·3	4·4	−48	63	·312	1·2	0	0·60	−0·60	0·11	0·19	−0·08	0·59	0·88	−0·29	0·06	Jeypore .	RAJPUTANA, EAST.
20	2	2	2	...	...	1	1	...	4·6*	5·3	−13	61	·284	0·7	0	0·55	−0·55	0·06	0·21	−0·15	0·73	0·68	+0·05	0·03	Sambhar.	
21	...	1	...	1	1	2	1	1	1·6	2·5	−36	67	·290	0·8	0	0·64	−0·64	0	0·30	−0·30	0·58	0·82	−0·24	0	Ajmere.	
...	1	9	4	4	3	4	1	2	7·6	9·0	−16	38	·223	0·4	0	0·27	−0·27	0	0·10	−0·10	0	0·27	−0·27	0	Deesa.	
6	1	10	4	...	...	...	1	6	5·1	6·2	−18	53	·353	0·5	2	0·10	+1·90	0·38	0·08	+0·30	0·38	0·12	+0·26	0·23	Rajkot .	KATHIAWAR.
1	11	9	1	...	...	...	...	1	6·2	?	?	60	·397	1·5	0	?	?	0	?	?	0	?	?	0	Veraval.	
10	3	...	...	1	3	7	4	...	1·7	1·7	0	77	·401	2·1	4	0·73	+3·27	0·84	0·27	+0·57	2·48	0·92	+1·56	0·28	Nowgong .	CENTRAL INDIA.
10	5	2	1	1	5	3	1	...	2·3	3·0	−23	63	·362	1·8	2	0·55	+1·45	0·66	0·18	+0·48	0·76	0·36	+0·40	0·35	Indore.	
17	...	4	4	1	1	1	...	..	2·9	9·1	−68	47	·267	0·5	0	0·55	−0·55	0·03	0·19	−0·16	0·38	0·49	−0·11	0·03	Neemuch.	
3	4	...	3	...	1	5	6	6	?	5·4	?	64	·426	0·4	0	0	0	0	0·01	−0·01	0	0·06	−0·06	0	Surat .	GUJARAT.
1	3	10	4	...	...	1	...	7	5·1*	?	?	46	·296	·2	0	?	* ?	0	?	?	0	?	?	0	Ahmedabad.	
4	...	2	...	5	...	7	...	10	3·1	4·0	−23	68	·342	0·6	2	0·36	+1·64	0·51	0·21	+0·30	1·55	0·74	+0·81	0·32	Agra .	N.-W. P., WEST.
13	...	...	1	1	2	7	1	3	2·3	2·7	−15	60	·340	1·5	3	1·09	+1·91	0·62	0·33	+0·29	1·82	0·92	+0·90	0·22	Jhansi.	

* Mean of 27 days.

(a) Total rainfall from 1st February 1895.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
9. Deccan		...	...	+·014	...	...	...	...	...	...	...	87·1	−1·7	60·6	+1·7	73·9	0	26·5	...	...	...	...	39·0
Bombay, Deccan	Belgaum	2,524	27·470	+·004	29·956	27·548	24th	27·394	6th	·154	69·9	87·0	−1·6	60·1	+0·6	73·6	−0·5	26·9	90·2	28th	53·9	8th	36·3
	Sholapur	1,590	28·416	+·005	29·984	28·502	19th & 21st	28·323	6th	·179	71·9	91·5	−2·3	63·8	+2·1	77·7	−0·1	27·7	94·2	18th	58·1	8th & 12th.	36·1
	Poona	1,840	28·174	+·010	30·019	28·265	24th	28·089	7th	·176	64·1	90·2	−0·6	57·1	−0·4	73·7	−0·5	33·1	94·5	15th & 16th.	48·0	7th	46·5
	Bijapur	1,946	28·058	?	29·974	28·151	19th	27·962	6th	·189	71·5	89·4	?	64·1	?	76·8	?	25·3	91·3	6th	58·1	1st	33·2
Khandesh	Malegaon	1,430	28·576	+·004	30·009	28·667	19th	28·492	7th	·175	64·5	87·7	−2·1	55·7	+0·8	71·7	−0·7	32·0	92·9	28th	44·5	4th	48·4
	Ahmednagar	2,152	27·862	?	30·011	27·950	21st	27·774	7th	·176	65·8	85·9	?	56·3	?	71·1	?	29·6	90·3	15th	46·9	8th	43·4
Berar	Akola	930	29·079	+·013	29·994	29·191	21st	28·990	1st	·201	66·5	88·3	−2·0	59·7	+3·1	74·0	+0·6	28·6	94·9	28th	48·1	6th	46·8
	Amraoti	1,215	28·795	+·023	30·004	28·905	21st	28·692	1st	·213	67·4	86·6	−3·1	62·5	+1·6	74·6	−0·8	24·1	93·9	28th	56·8	5th	37·1
Central Provinces, West.	Khandwa	1,045	28·960	+·001	30·008	29·051	19th	28·881	1st & 8th.	·170	62·1	87·4	−1·1	57·3	+2·3	72·4	+0·6	30·1	96·2	28th	46·1	4th & 5th.	50·1
	Hoshangabad	1,020	29·011	+·012	30·039	29·115	19th	28·910	1st	·205	61·2	83·9	−1·3	57·0	+1·9	70·5	+0·3	26·9	91·9	28th	45·8	5th	46·1
	Nagpur	1,025	28·990	+·015	30·007	29·100	21st	28·887	1st	·213	66·3	86·5*	−4·7*	60·5	+1·2	73·7*	−1·8	26·0	93·3	28th	52·2	5th	41·1
Central Provinces, Central	Chanda	634	29·392	+·022	29·993	29·496	21st	29·303	8th	·183	68·9	89·7	−1·9	61·5	+2·7	75·6	+0·4	28·2	95·0	28th	54·1	26th	40·9
	Seoni	2,033	27·982	+·023	30·028	28·076	21st	27·889	1st	·187	62·7	81·2	−2·6	56·2	+1·2	68·8	−0·7	25·0	87·6	28th	49·9	5th & 7th.	37·7
	Jubbulpore	1,327	28·695	+·023	30·038	28·787	19th	28·604	1st	·183	61·5	80·4	−1·5	53·3	+1·6	66·8	+0·1	27·1	88·4	27th	43·4	6th	45·0
	Saugor	1,762	28·247†	+·028	30·035	28·341	19th	28·133	1st	·208	60·7	80·0	−0·6	56·8	+2·6	68·4	+1·0	23·2	88·3	28th	44·6	5th	43·7
Central Provinces, East.	Raipur	970	29·057	+·029	30·012	29·148	19th	28·967	1st	·181	68·1	86·1	−0·8	61·6	+1·6	73·8	+0·4	24·5	92·3	28th	54·8	6th	37·5
	Sutna	1,040	28·979	+·016	30·032	29·072	19th	28·862	17th	·210	60·2	78·2	−1·0	53·9	+2·9	66·1	+1·0	24·3	87·0	27th	43·3	7th	43·7
	Sambalpur	463	29·562	+·024	29·995	29·648	23rd	29·462	3rd	·186	67·2	87·2	−0·7	60·0	+0·4	73·6	−0·2	27·2	91·5	28th	53·7	6th	37·8
Hyderabad, North.	Aurangabad	?	28·168	?	?	28·287	21st	28·077	7th	·210	70·4	87·8	?	58·5	?	73·2	?	29·3	92·9	16th	49·1	4th	43·8
	Indur	?		Not	recorded.		...	...	...	...	73·5	89·5	?	64·5	?	77·0	?	25·0	93·1	27th	58·9	4th	34·2
	Bidar	?	27·842†	?	?	27·934	24th	27·752	7th	·182	72·2	86·7	?	64·7	?	75·7	?	22·0	89·3	28th	61·2	8th	28·1
Hyderabad, South.	Gulbarga	1,502		Not	recorded.		...	...	...	...	72·8	91·3	?	64·8	?	78·1	?	26·5	93·5	28th	59·7	8th	33·8
	Raichur	1,378	28·627	?	29·969	28·713	24th	28·534	6th	·179	73·7	91·5	?	67·9	?	79·7	?	23·6	95·1	12th	62·7	16th	32·4
†	Hyderabad (Deccan).	1,690	28·316	−·014?	29·988	28·404	24th	28·234	6th	·170	70·4	89·1	−1·8	64·9	+2·2	77·0	+0·2	24·2	91·4	3 days	63·2	4 days	28·2
	Secunderabad.	1,787	28·231	?	30·004	28·310	24th	28·138	6th	·172	69·3	89·7	?	64·3	?	77·0	?	25·4	92·6	9th	59·5	25th	33·1
	Khamamet	373	29·664	?	29·991	29·753	24th	29·576	4th	·177	74·4	92·0	?	69·0	?	80·5	?	23·0	95·0	25th	65·2	2nd	29·8
10. West Coast		...	...	+·005	...	...	...	...	...	...	...	86·3	+0·2	70·8	+0·5	78·6	+0·4	15·4	...	...	...	...	26·1
Konkan	Bombay.	37	29·991	+·006	29·968	30·085	11th	29·912	6th	·173	71·6	82·8	+0·3	68·2	−0·2	75·5	+0·1	14·6	91·5	22nd	61·5	4th	30·0
	Ratnagiri	110	29·894	+·013	29·945	29·966	24th	29·814	5th	·152	74·1	85·9	−0·4	67·7	+0·8	76·9	+0·2	18·2	96·4	21st	61·9	8th & 12th.	34·5
	Mormugao	60	29·952	?	29·947	30·011	11th	29·876	6th	·135	73·8	85·1	?	71·0	?	78·1	?	14·1	92·0	3 days	67·3	4th	24·7
	Goa	23	30·011	+·018	29·918	30·066	11th	29·944	4th	·122	74·5	83·4	?	70·8	?	77·1	?	12·6	92·0	26th	67·0	15th	25·0
	Karwar	44	29·970	+·013	29·947	30·025	11th	29·899	4th	·126	71·0	85·9	−0·3	67·6	+0·5	76·8	+0·1	18·3	94·8	25th	63·6	13th	31·2
Malabar	Cochin	10	29·981	−·006	29·919	30·040	28th	29·931	4th	·109	77·9	91·2	+1·7	74·4	+1·3	82·8	+1·5	16·8	94·3	25th	70·2	1st	24·1
	Calicut	27	29·972	−·006	29·928	30·020	11th & 14th.	29·915	4th	·105	77·4	88·5	−0·3	72·0	−0·5	80·3	−0·4	16·5	90·8	26th	69·1	1st	21·7
	Mangalore	65	29·939	−·003	29·937	29·990	28th	29·880	4th	·110	77·0	88·2	+0·4	72·4	+1·0	80·3	+0·7	15·8	95·3	26th	70·0	1st	25·3
	Trivandrum	198	29·790	?	29·922	29·843	28th	29·731	4th	·112	76·9	85·3	?	73·5	?	79·4	?	11·8	88·0	27th	69·5	1st & 2nd.	18·5
11. South India		...	...	+·011	...	...	...	...	...	...	...	88·2	−0·2	67·4	+0·8	77·8	+0·3	20·8	...	...	...	...	27·0
Madras, South.	Pamban	37	29·993	?	29·957	30·054	14th	29·925	4th	·129	76·8	85·0	?	75·1	?	80·1	?	9·9	86·3	5 days	72·2	12th	14·1
	Tinnevelly	168	29·869	?	29·969	29·922	14th	29·797	4th	·125	76·6	93·0	?	72·3	?	82·7	?	20·7	94·7	27th	69·9	1st & 12th.	24·8
	Madura	447	29·581	+·011	29·974	29·635	14th	29·513	4th	·122	75·1	91·2	−0·9	69·0	−0·2	80·1	−0·6	22·2	92·4	5 days	65·1	1st	27·3

* Mean of 14 days.
† " " 25 "

I—*continued.*

in India, Burma, etc., in February 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.							Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 27th February 1895.	Normal rainfall for period, 1st January to 27th February.	Variation from normal of period.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·54	0·21	+0·31	...	...	...	...	9. Deccan.	
9	2	4	6	5	1	...	1	...	9·9	10·0	− 1	53	·381	1·5	0	0·09	−0·09	0·03	0·02	+0·01	0·03	0·08	− 0·05	0·03	Belgaum .	BOMBAY, DECCAN.
3	2	6	2	7	1	1	2	4	8·9*	6·5	+ 37	45	·363	1·3	0	0·09	−0·09	0·07	0·03	+0·04	0·07	0·14	− 0·07	0·07	Sholapur.	
13	1	1	2	3	...	1	3	4	5·6	6·3	− 11	56	·341	1·7	1	0	+1·00	0·24	0·04	+0·20	0·24	0·10	+ 0·14	0·24	Poona.	
1	...	1	5	5	...	1	8	7	5·1	P	P	58	·451	2·1	1	0·10	+0·90	0·16	P	P	0·16	P	P	0·16	Bijapur.	
...	1	2	1	...	1	...	9	14	8·2	5·0	+ 64	66	·403	2·6	0	0·18	−0·18	0·05	0·05	0	0·05	0·21	− 0·16	0·03	Malegaon .	KHANDESH.
14	5	4	1	1	...	2	...	1	6·9	P	P	75	·488	1·5	3	P	P	0·93	P	P	0·93	P	P	0·64	Ahmednagar.	
7	1	3	7	2	1	2	3	2	4·9	3·8	+ 29	60	·393	3·0	1	0·18	+0·82	1·03	0·13	+ 0·90	1·04	0·56	+ 0·48	0·88	Akola .	BERAR.
...	2	10	6	4	...	1	1	4	3·1	3·7	− 16	55	·369	2·2	2	0·27	+1·73	0·68	0·19	+ 0·49	0·71	0·58	+ 0·13	0·34	Amraoti.	
6	4	7	1	3	1	1	...	5	4·4	3·6	+ 22	61	·346	2·0	0	0·18	−0·18	0·06	0·06	0	0·81	0·37	+ 0·44	0·04	Khandwa .	CENTRAL PROVINCES, WEST.
6	...	8	9	1	1	1	1	1	3·5	2·9	+ 21	72	·395	2·2	2	0·36	+1·64	0·90	0·23	+ 0·67	1·45	0·48	+ 0·97	0·70	Hoshangabad.	
20	3	3	1	1	...	...	...	...	4·9	3·9	+ 26	76	·498	4·0	2	0·91	+1·09	0·67	0·27	+ 0·40	0·67	0·82	− 0·15	0·21	Nagpur.	
12	1	1	9	1	...	...	...	4	3·5	2·7	+ 30	63	·454	2·4	2	P	P	0·70	0·23	+ 0·47	0·72	0·60	+ 0·12	0·50	Chanda .	CENTRAL PROVINCES, CENTRAL.
				Not recorded.					P	2·9	P	74	·428	4·7	4	1·55	+2·45	1·28	0·75	+ 0·53	1·32	1·38	− 0·06	0·37	Seoni.	
5	2	4	1	3	9	3	1	...	2·6	2·5	+ 4	74	·409	2·4	3	0·91	+2·09	0·85	0·47	+ 0·38	1·55	1·23	+ 0·32	0·50	Jubbulpore.	
9	1	1	5	6	4	1	1	...	2·9	2·8	+ 4	65	·348	1·5	3	0·82	+2·18	1·42	0·30	+ 1·12	2·18	1·00	+ 1·18	0·91	Saugor.	
16	5	2	1	...	...	1	2	1	3·1	3·7	− 16	58	·398	2·9	0	0·73	−0·73	0·09	0·33	− 0·24	0·09	0·53	− 0·44	0·05	Raipur .	CENTRAL PROVINCES, EAST.
3	7	2	2	...	5	...	4	5	4·0	4·7	− 15	73	·383	1·8	3	1·18	+1·82	1·14	0·59	+ 0·55	2·46	1·64	+ 0·82	0·50	Sutna.	
...	12	9	...	2	1	1	...	3	2·9	1·7	+ 71	70	·468	1·8	1	P	P	0·17	0·51	− 0·34	0·28	0·81	− 0·53	0·11	Sambalpur.	
19	...	4	2	2	...	...	1	...	3·3	P	P	48	·357	3·1	1	P	P	0·72	0·03	+ 0·69	0·92	0·22	+ 0·70	0·68	Aurangabad	HYDERABAD, NORTH.
4	5	...	8	5	3	1	1	1	5·8	P	P	65	·535	2·3	0	P	P	0·16	0·01	+ 0·15	0·16	0·06	+ 0·10	0·05	Indur.	
...	3	3	6	2	5	5	3	1	7·2	P	P	62	·489	1·2	1	P	P	0·27	0·01	+ 0·26	0·27	0·01	+ 0·26	0·22	Bidar.	
7	1	6	4	5	3	2	...	...	8·3	P	P	49	·398	1·4	0	P	P	0·01	0·12	− 0·11	0·01	0·20	− 0·19	0·01	Gulbarga.	HYDERABAD, SOUTH.
...	1	1	3	9	8	4	1	1	6·5	P	P	58	·486	1·1	1	P	P	0·95	P	P	0·95	P	P	0·89	Raichur.	
14	...	...	3	5	1	...	2	...	3·7	P	P	73	·545	1·0	1	P	P	0·47	0·04	+ 0·43	0·47	0·13	+0·34	0·41	Hyderabad (Deccan).	
5	...	4	10	3	3	2	...	1	5·9	3·8	+ 55	69	·489	0·9	1	P	P	0·55	P	P	0·55	P	P	0·27	Secunderabad.	
13	1	...	...	11	3	...	...	...	7·1	P	P	81	·694	1·1	1	P	P	0·46	P	P	0·46	P	P	0·43	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	0·17	−0·15	...	...	...	...	10. West Coast.	
...	4	13	10	1	...	...	...	...	9·4	10·7	− 12	74	·571	2·6	0	0	0	0·07	0·01	+ 0·06	0·07	0·14	− 0·07	0·07	Bombay.	KONKAN.
2	1	7	2	11	5	...	...	...	5·1	9·8	− 48	63	·529	2·1	1	0	+1·00	0·11	0	+ 0·11	0·11	0·22	− 0·11	0·11	Ratnagiri.	
...	6	4	8	6	3	...	...		10·3	P	P	79	·672	0·6	0	P	0	0	P	P	0	P	P	0	Mormugao.	
1	2	5	18	...	1	1	...	...	6·8	P	P	70	·601	0·8	0	P	0	0	0	0	0	0·25	− 0·25	0	Goa.	
...	4	14	9	...	...	...	...	1	5·7	P	P	83	·625	0·8	0	0	0	0	0	0	0	0·12	− 0·12	0	Karwar.	
2	5	15	6	...	...	...	...	...	5·9	P	P	72	·694	0·1	0	1·00	−1·00	0	0·62	− 0·62	0·32	1·21	− 0·89	0	Cochin .	MALABAR.
4	2	6	11	4	1	...	...	...	13·3	P	P	79	·733	1·1	0	0·13	−0·13	0	0·22	− 0·22	0	0·30	− 0·30	0	Calicut.	
9	...	5	12	2	...	...	...	...	2·3	3·5	−34	75	·696	0·9	0	0	0	0	0·01	− 0·01	0	0·10	− 0·10	0	Mangalore.	
7	...	7	4	3	2	1	1	3	4·5	P	P	73	·685	1·2	0	P	0	0	0·51	− 0·51	0·26	1·15	− 0·89	0	Trivandrum.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	0·26	−0·21	...	...	...	...	11. South India.	
...	3	18	7	...	...	...	...	...	12·4	P	P	74	·751	3·4	0	0·50	−0·50	0	0·13	− 0·13	1·41	1·93	− 0·52	0	Pamban .	MADRAS, SOUTH.
...	11	3	...	...	...	...	1	13	6·0	P	P	74	·682	1·7	0	1·50	−1·50	0	P	P	0·44	P	P	0	Tinnevelly.	
5	11	8	...	...	...	...	...	4	4·0	5·0	− 20	75	·656	1·4	0	0·45	−0·45	0	0·31	− 0·31	0	0·64	−0·64	0	Madura.	

* Mean of 26 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.									Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras, South Central.	Salem	940	29·111	0	30·008	29·165	19th	29·044	6th	·121	74·8	93·4	0	65·9	+1·1	79·7	+0·6	27·5	97·4	27th	61·9	1st & 19th.	35·5
	Coimbatore	1,348	28·672	+·005	29·992	28·726	14th	28·605	4th & 6th.	·121	71·0	91·5	−0·5	65·6	+0·6	78·6	+0·1	25·9	94·4	27th	62·1	23rd	32·3
Coorg	Mercara	3,781	26·295	+·006	?	26·380	28th	26·240	4th	·140	66·1	80·9	−0·3	59·8	+2·5	70·4	+1·1	21·1	83·0	28th	56·2	1st & 19th.	26·8
Mysore	Chitaldroog	2,405?	27·619	?	29·962?	27·702	19th	27·539	4th	·163	73·1	88·6	?	66·1	?	77·4	?	22·5	90·6	28th	62·4	3rd	28·2
	Bangalore Fort	3,021	27·023	−·003	29·992	27·077	24th	26·956	4th	·121	65·5	85·4	+0·2	59·1	+0·2	72·3	+0·2	26·3	87·8	8th	55·4	1st	32·4
	Hassan	3,091	26·958	?	29·984	27·014	24th	26·897	6th	·117	69·3	85·3	?	58·5	?	71·9	?	26·8	87·9	7th	52·8	1st	35·1
	Mysore	2,518	27·513	?	29·980	27·561	24th	27·451	4th	·110	69·9	88·1	?	63·1	?	75·6	?	25·0	89·9	3 days	58·9	1st & 22nd.	31·0
Madras, East Coast, South.	Negapatam	31	29·998	+·006	29·958	30·054	24th	29·928	4th	·126	78·4	84·0	−0·2	74·2	+2·7	79·1	+1·3	9·8	87·2	9th	68·7	1st	18·5
	Cuddalore	12	30·027	?	29·968	30·076	24th	29·961	4th & 6th.	·115	74·7	85·9	?	67·5	?	76·7	?	18·4	88·3	4th	63·8	17th	24·5
	Trichinopoly	255	29·782	+·006	29·976	29·834	14th	29·714	4th	·120	75·2	92·6	+0·6	68·2	+0·3	80·4	+0·5	24·4	95·0	27th & 28th	64·9	17th	30·1
	Madras	22	30·026	+·005	29·980	30·094	19th	29·926	5th	·168	75·4	87·4	+0·8	66·7	−1·3	77·1	−0·3	20·7	89·5	26th	63·5	17th	26·0
Madras, East Coast, Central.	Nellore	71	29·965	?	29·971	30·037	19th & 24th.	29·865	6th	·172	74·7	89·2	?	68·1	?	78·8	?	21·1	90·7	4 days	63·6	10th	27·1
	Masulipatam	15	30·036	+·024	29·986	30·110	19th	29·948	4th	·162	75·2	86·6	−0·3	68·6	+0·9	77·6	+0·3	18·0	89·0	27th	64·2	2nd	24·8
Madras, Central	Cuddapah	433	29·589	?	29·969	29·670	24th	29·513	4th & 6th.	·157	77·5	93·9	−0·6	68·8	+0·6	81·4	0	25·1	99·2	28th	66·4	4 days	32·8
	Kurnool	923	29·087	+·004	29·971	29·180	24th	29·001	6th	·179	74·6	92·5	−1·9	65·2	+1·5	78·9	−0·2	27·3	95·2	14th	60·3	2nd & 3rd.	34·9
	Bellary	1,475	28·531	+·015	29·974	28·640	24th	28·454	6th	·186	73·7	92·9	−1·2	66·0	+1·2	79·5	0	26·9	96·6	13th	61·6	20th	35·0
Madras, East Coast, North.	Rajahmundry	112	29·924	+·033?	29·975	29·998	19th	29·838	4th	·160	75·6	91·1	−0·6	69·9	+1·5	80·5	+0·5	21·2	94·0	3 days	68·0	3 days	26·0
	Cocanada	26	30·019	+·023	29·980	30·083	19th	29·930	4th	·153	74·7	84·9	+1·1	69·2	−0·1	77·1	+0·5	15·7	88·2	27th	67·6	4 days	20·6
	Vizagapatam	31	30·006	+·012	29·975	30·090	23rd	29·917	4th	·173	75·0	81·9	−0·6	75·1	+0·9	78·5	+0·2	6·8	83·8	28th	73·0	27th	10·8
	Gopalpur	21	30·020	?	29·981	30·127	21st	29·917	4th	·210	71·5	83·6	?	67·8	?	75·7	?	15·8	86·7	21st	64·1	27th	22·6
12. Hill Stations		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baluchistan	Shirino	?			Not recorded.						40·6	60·7	?	24·5	?	42·6	?	36·2	73·7	28th	10·0	5th	63·7
	Kachh	?	23·972	?	?	24·014	19th	23·778	1st	·236	34·9	54·7	?	26·7	?	40·7	?	28·0	68·0	25th	12·0	8th	56·0
	Pishin				Not recorded.						?	64·2	?	25·1	?	44·7	?	39·1	78·1	28th	9·9	3rd & 5th.	68·2
	Quetta	5,502	24·705	+·044	?	24·866	19th	24·510	1st	·356	39·5	59·9	+7·8	32·0	+0·6	46·0	+4·2	27·9	73·2	28th	19·8	3rd	53·4
	Kalat	?			Not recorded.						36·1	59·8	?	18·5	?	39·2	?	41·3	74·5	25th	1·4	3rd	73·1
	Chaman	4,311	25·758	?	?	25·920	19th	25·606	1st	·314	50·0	63·3	?	42·3	?	52·8	?	21·0	78·1	28th	24·1	2nd	54·0
Northern India	Leh	11,503	19·721	?	?	19·943	21st & 22nd.	19·359	2nd	·584	7·2	22·7	?	3·0	?	12·8	?	19·7	30·1	27th & 28th.	−4·5	6th	34·6
	Srinagar	5,204	25·071	?	?	25·244	21st	24·759	2nd	·485	23·1	33·0	?	18·5	?	25·8	?	14·5	44·0	20th	−3·9	6th	47·9
	Gilgit	?			?							Not recorded.											
	Cherat	?	25·771	?	?	25·911	19th	25·531	1st	·380	47·5	58·6	?	41·6	?	50·1	?	17·0	72·8	28th	31·1	3rd & 4th.	41·7
	Murree	6,344	23·860	+·045	?	23·996	19th	23·625	1st	·371	42·7	52·4	+4·9	39·5	+5·6	46·0	+5·3	12·9	66·6	28th	28·5	3rd	38·1
	Poo	?			Not recorded.						?	39·0	?	19·0	?	29·0	?	20·0	46·1	28th	8·8	6th	37·3
	Simla	7,224	23·116	+·037	?	23·242	21st	22·955	5th	·287	41·2	48·2	+1·1	38·2	+2·1	43·2	+1·6	10·0	55·8	21st	26·3	4th	29·5
	Chakrata	6,977	23·342	+·046		23·476	24th	23·175	5th	·301	41·6	52·7	+1·8	37·4†	+1·6†	45·1†	+1·7	15·3	59·8	21st	25·6	4th	34·2
	Mussooree	6,705	23·572	?	?	23·693	24th	23·410	5th	·289	43·0	51·7	?	39·0	?	45·4	?	12·7	59·7	28th	29·0	4th	30·7
	Ranikhet	6,069	24·138	+·039	?	24·270	24th	23·972	5th	·298	45·5	55·9	+0·7	42·4	+1·8	49·2	+1·3	13·5	62·7	21st & 28th.	33·5	4th	29·2
	Yatung	10,180?			Not recorded.						?	42·4	?	20·8	?	31·6	?	21·6	48·9	2nd & 22nd.	15·4	7th	33·5
	Gnatong	?	19·146	?	?	19·277	24th	18·979	6th	·298	24·6	34·2	?	17·3	?	25·8	?	16·9	41·4	21st	11·7	13th	29·7
	Darjeeling	7,421	22·974	+·032	?	23·126	24th	22·798	4th	·328	40·2	48·0	+1·8	36·1	+2·0	42·1	+1·9	11·9	55·1	24th	28·7	6th	26·4
	Gantak	?	24·516*	?	?	24·651	24th	24·330	4th	·321	46·2*	59·2*	?	39·6*	?	49·4*	?	19·6	66·4	25th	33·1	6th	33·3
	Kalimpong	?										Not recorded.											

* Mean of 23 days. † Mean of 27 days.

I —*continued.*

in India, Burma, etc., in February 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.								Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Nofmal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 28th February 1895.	Normal rainfall for period, 1st January to 28th February.	Variation from normal of period.			
7	4	16	1	...	...	...	...	...	6·4	5·6	+14	69	·604	0·7	0	0·09	−0·09	0	0·30	− 0·30	0	0·61	− 0·61	0	Salem .	MADRAS, SOUTH CENTRAL.
...	...	17	11	...	...	...	...	...	1·7	3·2	−47	84	·645	3·1	0	0·30	−0·30	0	0·29	− 0·29	0	0 48	− 0·48	0	Coimbatore.	
21	...	2	5	...	..	...	...	...	2·4	4·0	−40	67	·438	0·3	0	0·30	−0·30	0	0·07	− 0·07	0·02	0·11	− 0·09	0	Mercara .	COORG.
1	2	1	5	7	3	3	4	2	8·6	?	?	52	·419	0·3	0	?	?	0	?	?	0	?	?	0	Chitaldroog.	MYSORE.
...	...	2	13	12	1	...	...	...	9·5	3·6	+164	70	·440	0·4	0	0·18	−0·18	0	0·11	− 0·11	0	0·30	— 0·30	0	Bangalore Fort.	
7	...	2	8	11	...	...	...	...	3·2	?	?	60	·432	0·6	0	?	?	0·03	?	?	0	?	?	0·03	Hassan.	
1	...	4	9	2	7	5	...	...	7·5	?	?	68	·491	0·4	0	?	?	0	?	?	0	?	?	0	Mysore.	
2	...	12	4	...	...	...	...	10	14·4	3·6	+300	75	·737	4·3	0	0·55	−0·55	0	0·53	− 0·53	0	1·99	— 1·99	0	Negapatam	MADRAS, EAST COAST, SOUTH.
...	7	...	...	...	...	...	4	17	2·3	?	?	87	·750	2·2	0	0·40	−0·40	0	?	?	0·13	?	?	0	Cuddalore.	
13	9	6	...	...	...	...	...	...	3·1	4·1	−24	74	·651	1·5	0	0	0	0	0·90	− 0·90	0	1·16	− 1·16	0	Trichinopoly.	
7	1	1	1	...	3	9	5	1	5·1	5·0	+ 2	78	·688	2·8	0	0·09	−0·09	0	0·28	− 0·28	0	1·17	− 1·17	0	Madras.	
10	...	...	...	6	5	...	1	6	4·5	?	?	84	·726	2·6	0	0·20	−0·20	0	?	?	0	?	?	0	Nellore .	MADRAS, EAST COAST, CENTRAL.
10	11	2	1	1	2	...	...	1	4·4	5·1	−14	82	·717	2·0	0	0·27	−0·27	0	0·17	− 0·17	0	0·29	− 0·29	0	Masulipatam.	
...	...	1	6	18	3	...	...	...	?	?	?	62	·589	0·6	0	0·10	−0·10	0	0·06	− 0·06	0	0·08	− 0·08	0	Cuddapah .	MADRAS, CENTRAL.
19	1	2	4	1	...	...	1	...	?	?	?	60	·511	1·0	1	0	+1·00	0·17	0	+ 0·17	0·17	0·08	+ 0·09	0·17	Kurnool.	
4	...	2	4	12	4	1	...	1	4·0	4·0	0	56	·465	1·9	0	0·09	−0·09	0	0·04	− 0·04	0	0·17	− 0·17	0	Bellary.	
3	13	7	4	...	...	...	...	1	?	?	?	70	·633	2·0	0	0·30	−0·30	0·08	0·17	− 0·09	0·48	0·25	+ 0·23	0·08	Rajahmundry	MADRAS, EAST COAST, NORTH.
1	8	1	...	...	...	...	2	16	6·9	?	?	76	·641	1·2	0	0·40	−0·40	0	0·43	− 0·43	0·04	0·57	− 0·53	0	Cocanada.	
...	1	...	...	...	...	...	25	2	2·1	2·0	+ 5	78	·700	2·2	0	0·18	−0·18	0	0·11	— 0·11	0	0·30	− 0·30	0	Vizagapatam.	
1	11	1	...	...	...	1	2	12	8·4	9·6	−13	82	·632	0·7	2	1·13	+0·87	0·61	0·55	+ 0·06	0·61	0·73	− 0·12	0·37	Gopalpur.	
...	..	..	..	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	**12. Hill Stations.**	
...	1	2	3	11	3	3	2	3	4·8	?	?	70	·169	?	1	?	. ?	0·50	?	?	1·16	?	?	0·24	Shirino.	BALUCHISTAN.
14	3	1	2	2	...	...	2	4	?	?	?	67	·143	1·8	3	?	?	0·52	?	?	1·68	?	?	0·25	Kachh.	
				Not	recor	ded.			?	?	?	?	?	?	0	?	?	0	?	?	1·47	?	?	0	Pishin.	
26	...	...	...	1	1	...	...	...	3·1	4·4	−30	72	·173	2·5	1	4·09	−3·09	0·25	2·21	− 1·96	1·52	4·32	− 2·80	0·12	Quetta.	
...	3	...	1	...	23	...	...	1	?	?	?	?	?	?	1	?	?	0·23	?	?	1·20	?	?	0·20	Kalat.	
...	2	1	10	9	3	1	...	2	5·6	?	?	59	·207	4·2	0	?	?	0·15	?	?	1·04	?	?	0·05	Chaman.	
1	...	20	3	1	2	1	...	...	0·8	?	?	60	·037	4·5	0	?	?	0·04	?	?	0·47	?	?	0·04	Leh.	NORTHERN INDIA.
16	...	...	1	3	3	3	1	1	2·2	?	?	79	·102	5·2	5	?	?	4·81	?	?	10·92	?	?	2·37	Srinagar.	
													Not	recor	ded.										Gilgit.	
7	12	...	...	2	1	...	...	6	11·2	?	?	57	·182	2·9	3	?	?	1·80	?	?	2·18	?	?	1·10	Cherat.	
3	4	...	2	8	...	...	...	11	9·0	8·2	+10	46	·115	3·4	6	3·36	+2·64	3·16	3·73	− 0·57	7·42	7·25	+ 0·17	0·90	Murree.	
12	3	2	3	...	1	1	3	3	?	?	?	?	?	3·0	2	?	?	0·95	?	?	4·90	?	?	0·63	Poo.	
9	3	6	4	3	1	2	...	...	6·0	2·5	+140	50	·120	1·8	4	4·36	−0·36	1·93	2·68	− 0·75	7·10	5·03	+ 2·07	1·31	Simla.	
1	...	8	14	1	1	2	1	...	6·5	5·4	+20	62	·163	1·6	4	?	?	4·26	3·81	+ 0·45	11·13	7·34	+ 3·79	3·17	Chakrata.	
...	...	5	9	4	3	...	3	4	?	?	?	67	·185	1·5	4	3·50	+0·50	3·76	?	?	8·43	?	?	3·00	Mussooree.	
16	2	4	...	3	...	2	1	...	2·8	2·0	+40	65	·212	1·6	2	4·09	−2·09	1·20	1·95	− 0·75	5·77	4·89	+ 0·88	0·95	Raniknet.	
				Not	recor	ded.			?	?	?	?	?	?	4	?	?	1·13	?	?	1·74	?	?	0·45	Yatung.	
3	1	1	3	9	0	1	2	8	6·6	?	?	74	·097	0·4	8	?	?	3·32	?	?	3·89	?	?	0·84	Gnatong.	
5	...	6	6	1	4	3	3	...	6·1	5·1	+20	83	·206	6·1	1	2·29	−1·29	0·32	0·63	− 0·31	0·48	1·35	− 0·87	0·13	Darjeeling.	
1	2	2	5	1	...	6	5	1	2·2*	?	?	81†	·255†	5·2‡	5	?	?	2·18	?	?	2·69	?	?	0·96	Gantak.	
													Not	recor	ded.								?		Kalimpong	

* Mean of 21 days. † Mean of 23 days. ‡ Mean of 22 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	26·105	−·011	P	26·215	21st	25·976	16th	·239	61·0	69·7	+0·8	54·0	+0·8	61·9	+0·9	15·7	78·1	26th	43·6	4th	34·5
	Pachmarhi	3,528	26·548	+·019	P	26·642	19th	26·452	1st	·190	62·4*	74·6*	0*	51·4*	+1·3*	63·0*	+0·7*	23·2	78·7	4 days	39·3	5th	39·4
South India	Wellington	6,200	24·313	0	P	24·366	24th	24·257	4th	·109	57·6	70·4	0	45·8	−0·9	58·1	−0·5	24·6	75·2	13th	41·2	2nd	34·0
13. Extra India	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ceylon	Trincomalee	75	29·951	P	29·955	30·036	10th	29·902	4th	·134	82·5	85·4	P	76·1	P	80·8	P	9·3	87·0	3 days	72·0	2nd	15·0
	Colombo	40	29·952	−·002	29·917	30·005	11th & 14th.	29·882	4th	·123	84·3	88·7	P	73·0	P	80·9	P	15·0	93·5	24th	70·0	1st & 15th	23·5
	Galle	48	29·942	P	29·916	29·992	28th	29·875	4th	·117	80·2	84·4	P	75·1	P	79·7	P	9·3	87·5	21st	72·5	1st	15·0
Persia	Meshed	3,104				Not recorded.					41·0	P	P	34·8	P	P	P	?	P	...	16·0	3rd	P
	Teharan	P	26·021	P	P	26·200	1st	25·800	25th	·400	45·0	59·4	P	39·7	P	49·5	P	19·7	74·3	21st	26·8	2nd	47·5
	Ispahan	P	P	P	P	P	...	P	...	P	41·7	60·7	P	34·4	P	47.6	P	26·3	70·4	23rd	20·3	2nd	50·1
	Bushire	14	30·053	P	30·025	30·176	19th	29·891	7th	·285	60·7	70·5	P	57·2	P	63·8	P	13·3	82·8	25th	48·8	2nd	34·0
	Jask	P	30·042‡	P	P	30·197	11th	29·886	7th	·311	66·3	75·6	P	61·9	?	68·8	P	13·7	81·9	28th	54·2	3rd	27·7
Arabia	Muscat	P	30·056	P	P	30·194	19th	29·900	7th	·294	69·4	72·5	?	67·6	P	70·1	P	4·9	81·4	28th	63·3	2nd	18·1
	Baghdad*	P	29·630a	P	P	29·779	14th	29·536	24th	·243	53·2	68·4	P	48·9	P	58·6	P	19·5	74·3	24th	40·5	2nd	34·3
	Aden	94	29·962	+·008	29·989	30·036	19th	29·877	4th	·159	75·3	79·8	− 2·5	73·7	+0·7	76·8	−0·9	6·1	83·8	17th	70·1	16th	13·7
	Perim	P	29·822	P	?	29·893	11th	29·738	17th	·155	76·2	82·9	P	73·8†	P	78·3†	P	9·1	84·7	28th	72·8	5th	11·9
Afghanistan	Kabul	P			Not recorded.						35·1	57·4	P	29·7	P	43·6	P	27·7	74·2	24th	17·4	4th	56·8
Central Asia	Kashgar	P	25·695	P	P	25·950	20th	25·310	2nd	·640	26·8	50·0‡	P	23·0‡	P	36·4†	P	27·0	73·2	27th	12·3	3rd	60·9
Arabian Sea Islands.	Minicoy	10	29·997	P	29·932	30·052	28th	29·942	4th	·110	79·9	87·2	P	P	P	P	P	P	89·0	26th	P	...	P
Africa	Zanzibar	73	29·920	P	29·919	29·983	24th	29·825	17th	·158	82·8	87·2	P	80·4	P	83·8	P	6·8	88·9	27th	78·6	1st	10·3

(a) Mean of 24 days. * Mean of 25 days. † Mean of 26 days. ‡ Mean of 27 days.

I—*concluded.*

in India, Burma, etc., in February 1895—concluded.

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.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 28th February 1895.	Normal rainfall for period, 1st January to 28th February.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
3	3	10	1	1	3	3	2	2	6·1	5·6	+ 9	38	·203	0·8	0	0·36	−0·36	0	0·36	− 0·36	0·10	0·78	− 0·68	0	Mount Abu	Central India.
3	...	1	4	4	3	7	4	2	6·1	3·8	+61	54*	·312*	2·4	3	0·82	+2·18	0·77	0·45	+ 0·32	0·79	0·96	− 0·17	0·39	Pachmarhi.	
28	...	...	...	...	...	...	...	...	2·3	2·7	−15	61	·294	0·1	2	0·50	+1·50	0·74	1·53	− 0·79	0·78	2·57	− 1·79	0·51	Wellington.	South India.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13. Extra India.	
2	3	18	...	1	...	1	...	3	·1·4	P	P	74	·826	3·4	0	P	P	0	2·10	−2·10	5·89	7·36	− 1·47	0	Trincomalee	Ceylon.
...	9	9	4	3	...	1	...	2	7·4	6·2	+ 19	67	·797	1·4	2	P	P	0·81	2·63	−1·82	5·81	5·55	+ 0·26	0·57	Colombo.	
15	1	11	1	...	...	...	...	...	2·9	P	P	81	·846	2·5	2	P	P	2·55	3·18	−0·63	7·84	7·47	+ 0·37	1·97	Galle.	
				Not	recorded.				?	P	P	?	P	4·2	0	?	P	0·11	P	P	0·11	?	P	0·07	Meshed.	Persia.
26	...	2	...	...	...	...	...	...	4·2	P	P	65	·195	3·0	2	P	P	0·83	P	P	1·91	P	?	0·59	Teharan.	
4	2	...	...	3	2	10	4	3	6·5	P	P	84	·232	4·3	0	P	P	0	P	P	0	P	P	0	Ispahan.	
...	2	11	4	7	...	...	...	4	2·5*	P	P	80	·424	?	2	P	P	0·83	3·17	−2·34	3·23	6·80	− 3·57	0·50	Bushire.	
6	10	6	...	1	...	...	...	4	9·5	P	P	75	·487	1·9	4	P	P	1·29	P	P	2·77	P	P	0·70	Jask.	
...	1	1	5	3	2	2	9	3	3·4†	P	P	75	·544	1·5	1	P	P	0·63	P	P	4·81	P	P	0·57	Muscat	Arabia.
7	2	4	2	3	4	2	...	1	1·3‡	P	P	81	·331	1·8	2	P	P	0·59	P	P	2·21	P	P	0·40	Baghdad.*	
5	...	10	11	2	...	...	...	...	10·6§	12·9	− 18	77	·673	6·6	0	P	P	0·09	0·33	−0·24	1·30	0·61	+ 0·69	0·08	Aden.	
3	...	...	16	8	...	...	...	1	11·3	P	P	76	·683	7·3	1	P	P	0·10	P	P	0·25	P	P	0·10	Perim.	
...	3	4	11	2	2	2	3	1	P	P	P	P	P	3·6	0	P	P	0	P	P	0	P	P	0	Kabul	Afghanistan.
23	1	2	1	...	...	...	1	...	1·7	P	P	P	P	4·6	0	P	P	0	P	P	0·06	P	P	0	Kashgar	Central Asia.
5	9	6	3	2	...	1	...	2	5·3	P	P	78	·796	3·4	0	P	?	0	P	P	1·38	P	P	0	Minicoy	Arabian Sea Islands.
...	13	12	1	2	...	...	...	...	7·1	P	P	76	·860	4·0	1	P	P	0·37	P	P	0·54	P	P	0·35	Zanzibar	Africa.

* Mean of 25 days. † Mean of 27·9 days. ‡ Mean of 2½ days. § Mean of 27 days. ‖ Total rainfall from 1st February 1895.

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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·355	29·846	·109	29·896	+·008	29·888	85·5	74·5	11·0	89·1	70·6	18·5	82·1	84·2	79·2	−0·5	71·1	74·8	75·2	73·7
	Rangoon	...	·969	·825	·144	·893	−·020	·871	93·2	65·5	27·7	97·6	59·8	37·8	78·9	89·5	76·7	+0·7	62·7	69·2	71·6	67·8
	Diamond Island	...	·979	·872	·107	·921	−·015	·896	82·4	73·0	9·4	85·8	70·2	15·6	79·6	79·5	76·5	−0·1	67·4	71·3	70·9	69·8
	Cocos Island	111	·900	·805	·095	·849	?	·892	84·0*	73·4	10·6	88·2	70·9	17·3	80·6	79·8*	77·2†	?	67·6	71·8	71·3*	70·2†
	Akyab	...	30·024	·905	·119	·957	+·003	·919	84·7	58·8	25·9	89·5	50·7	38·8	75·1	80·7	71·2	−1·1	56·8	66·4	69·9	64·4
Assam.	Silchar	...	29·969	·828	·141	·895	+·008	·952	82·2	54·1	28·1	88·4	45·5	42·9	70·0	80·2	67·2	+0·3	53·1	62·7	64·4	59·9
	Sibsagar	...	·741	·585	·156	·661	−·009	·962	74·1	52·7	21·4	79·8	45·0	34·8	64·4	72·8	62·0	+0·9	52·6	61·1	64·0	59·2
	Dhubri	...	·956	·806	·150	·877	+·019	·950	78·7	55·1‡	23·6	84·9	49·8	35·1	66·4	78·0	65·1‡	+0·6	53·6	60·2	63·0	58·9
Bengal and Orissa.	Chittagong	...	·969	·847	·122	·901	−·004	·938	82·7	56·6	26·1	86·6	49·1	37·5	72·9	79·4	69·3	−0·8	55·4	64·4	66·5	62·1
	Narayanganj	...	30·038	·914	·124	·969	+·016	·937	81·9	56·9	25·0	87·4	49·4	38·0	74·1	79·7	69·2	−0·7	54·2	63·7	64·8	60·9
	Calcutta (Alipore)	...	·052	·927	·125	·979	+·027	·946	82·2	58·7	23·5	87·9	52·5	35·4	73·8	81·2	69·8	0	56·2	62·8	63·8	60·9
	Ditto (Chowringhee).	...	·057	?	?	?	?	?	83·6	59·1	24·5	89·0	52·9	36·1	75·5	?	?	?	56·8	64·4	?	?
	Saugor Island	...	·045	·927	·118	·973	+·025	·943	81·2	64·2	17·0	87·0	55·9	31·1	75·1	78·6	71·5	−0·6	61·6	67·5	68·2	65·7
	Burdwan	...	29·972	·838	·134	·892	+·013	·941	82·9	57·2	25·7	88·9	52·1	36·8	73·3	81·5	69·2	−1·1	55·1	60·9	62·5	59·5
	Berhampore	...	30·005	·880	·125	·930	+·022	·946	80·5	56·0	24·5	87·9	49·1	38·8	71·7	80·0	67·6	−1·0	53·0	61·5	62·9	59·2
	False Point	...	·049	·932	·117	·988	+·013	·951	82·7	64·1	18·6	88·0	58·6	29·4	79·1	79·3	72·0	0	63·7	70·6	70·4	68·2
	Cuttack	...	29·978	·841	·137	·910	+·012	·933	89·0	66·3	22·7	94·2	61·8	32·4	78·5	86·1	76·1	0	63·5	68·3	67·7	66·5
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	28·016	27·913	·103	27·961	+·022	·948	77·2	54·3	22·9	85·4	44·0	41·4	68·9	75·4	65·2	−0·4	45·2	56·3	57·9	53·1
	Patna	...	29·885	29·775	·110	29·824	+·023	·965	77·7	54·5	23·2	85·3	45·4	39·9	69·9	76·4	65·7	+0·6	51·6	60·7	62·1	58·1
	Darbhanga	...	·900	·772	·128	·830	+·018	·955	77·5	55·0	22·5	83·7	47·0	36·7	68·6	76·8	66·0	+1·3	53·4	60·6	62·4	58·6
	Allahabad	...	·764	·648	·116	·697	+·019	·974	79·6	53·0	26·6	89·0	43·7	45·3	71·0	78·9	65·6	+0·2	51·1	60·6	61·3	57·7
	Ghazipur	220	·856	·735	·121	·788	+·027	·968	79·5	54·6	24·9	87·0	44·6	42·4	72·0	77·4	66·1	+2·5	52·0	61·0	60·6	57·8
	Lucknow	...	·692	·583	·109	·631	+·016	·967	78·0	50·3	27·7	87·4	41·0	46·4	69·3	76·9	64·2	−0·6	49·2	60·0	61·2	56·8
Upper Sub-Himalayas.	Dehra Dun	...	27·765	27·685	·080	27·718	+·011	·971	71·4	47·0	24·4	78·4	38·9	39·5	61·9	67·0	57·5	−0·3	44·7	53·7	55·4	51·3
	Roorkee	...	29·138	29·041	·097	29·082	+·014	·968	74·2	47·6	26·6	81·6	40·4	41·2	62·8	72·3	59·8	−0·3	46·6	56·8	58·8	54·1
	Meerut	...	·290	·195	·095	·239	+·007	·966	75·8	50·4	25·4	84·0	43·1	40·9	64·7	74·0	62·2	+1·2	49·1	56·7	58·9	54·9
	Lahore	...	·335	·259	·076	·287	+·002	·997	73·5	48·3	25·2	84·1	40·7	43·4	62·0	72·7	60·1	+3·5	46·3	55·8	59·3	53·8
	Ludhiana	...	·220	·136	·084	·169	+·015	·982	72·3	50·3‡	22·0	81·7	43·6	38·1	63·3	71·0	60·9‡	+3·3	47·8	56·1	58·4	54·1
Indus Valley and N.-W. Rajputana.	Peshawar	...	28·945	28·851	·094	28·888	−·020	30·026	70·7	44·0	26·7	81·6	35·4	46·2	59·3	69·3	56·4	+4·1	41·4	52·0	55·4	49·6
	Mooltan	...	29·620	29·531	·089	29·566	−·019	29·967	80·3	50·6	29·7	92·3	40·3	52·0	67·4	78·9	64·6	+6·2	45·9	56·0	61·0	54·4
	Jacobabad	...	·877	·752	·125	·804	−·017	·953	85·1	49·2	35·9	96·7	33·7	63·0	72·6	83·4	66·1	+4·2	?	56·8	60·4	?
	Kurrachee	...	30·021	·912	·109	·958	−·023	·961	81·6	57·7	23·9	93·4	45·3	48·1	71·8	78·9	69·1	+0·9	52·0	62·3	65·6	60·0
E. Rajputana, C. India and Gujarat.	Jeypore	...	28·617	28·515	·102	28·556	+·014	·994	81·4	52·0	29·4	92·4	39·9	52·5	72·2	79·3	66·2	+3·1	47·0	57·6	59·1	54·6
	Ajmere	...	·434	·318	·116	·372	−·001	·974	80·0	48·8	31·2	91·4	36·4	55·0	69·6	79·0	64·5	+2·8§	44·2	56·7	60·4	53·6
	Deesa	...	29·576	29·454	·122	29·506	0	·929	89·3	53·5	35·8	99·2	42·5	56·7	78·9	87·5	71·0	+0·6	45·4	58·1	60·3	54·6
	Nowgong	...	·290	·180	·110	·225	+·003	·960	79·4	52·5	26·9	90·8	42·4	48·4	69·8	77·5	65·3	+0·4	51·0	59·8	60·8	57·2
	Agra	...	·501	·401	·100	·442	+·007	·972	79·7	53·2	26·5	89·2	42·9	46·3	70·5	78·0	65·8	+1·5	50·0	59·1	61·2	56·8
Deccan.	Belgaum	...	27·483	27·354	·129	27·414	−·003	·836	87·2	60·1	27·1	90·6	53·8	36·8	78·3	84·5	72·4	−0·4	56·2	61·0	63·6	60·2
	Sholapur	...	28·430	28·282	·148	28·351	+·002	·875	91·8	63·8	28·0	94·3	58·1	36·2	80·9	89·6	77·9	−0·1	54·7	63·4	67·2	61·3
	Poona	...	·182	·037	·145	·108	+·008	·883	90·4	57·1	33·3	95·4	48·0	47·4	76·9	87·5	73·1	+0·1	52·4	59·7	62·7	58·3
	Akola	...	29·107	·955	·152	29·025	+·011	·914	88·6	59·6	29·0	95·3	48·1	47·2	76·5	86·8	73·4	+0·5	55·1	63·4	66·6	61·7
	Buldana	2,132	27·872	27·753	·119	27·806	−·009	·883	83·7	60·6	23·1	90·9	53·9	37·0	74·8	81·1	71·2	−2·2	53·6	59·8	61·4	58·2

* Mean of 24 days. † Mean 3 days. Mean of 25 days. § Mean of 21 days.

II.

at 89 Stations in India, Burma, etc., for the month of February 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
·720	·768	·758	·749	−·065	84	70	64	73	− 4	1·3	2·6	2·0	−0·8	...	12	26	11	4	...	...	1	2	N 46° E	N 41° E	74	76	143	115	...	...	Port Blair	Burma Coast and Bay Islands.
·538	·589	·537	·555	−·021	85	60	39	61	− 2	0·8	1·9	1·4	−0·6	...	6	8	2	8	8	6	7	3	S 1° W	S 46° W	8	18	97	92	...	...	Rangoon	
·597	·656	·646	·633	−·048	73	65	63	67	− 6	1·0	1·3	1·2	−0·9	...	15	5	1	1	1	...	7	26	N 30° W	N 25° W	73	86	329¶	168	...	...	Diamond Island	
·600	·665	·655*	·639†	?	73	63	64*	67†	?	1·0	0·6*	0·8	?	...	49	...	...	...	...	...	...	1	N 1° W	?	88	?	377‖	?	*Nil*	*Nil*	Cocos Island.	
·439	·538	·591	·523	+·006	88	62	56	68	− 1	0·8	0·7	0·8	−0·3	...	19	8	2	...	2	1	10	14	N 22° W	N 27° W	61	45	97	84	...	...	Akyab	
·394	·475	·386	·418	−·020	93	64	38	65	− 5	1·9	3·8	2·9	−0·2	28	...	1	2	9	8	5	3	...	S 8° E	S 33° E	32	25	41¶	61	...	...	Silchar	Assam.
·401	·496	·481	·459	+·011	100	82	60	81	0	2·5	1·8	2·2	−3·3	17	2	30	1	6	...	...	...	...	N 51° E	N 58° E	59	53	71¶	51	...	...	Sibsagar	
·391‡	·443	·378	·402‡	+·023	90‡	69	39	67‡	+ 3	0·6	1·2	0·9	−0·7	10	...	5	14	1	1	18	7	...	S 8° W	S 22° E	20	13	50	95	...	...	Dhubri	
·428	·494	·482	·468	−·036	93	61	48	67	− 3	0·9	1·3	1·1	−0·6	...	6	15	10	1	...	2	10	12	N 3° E	N 38° W	41	30	70¶	106	...	...	Chittagong	
·389	·457	·416	·421	−·026	83	54	42	60	− 4	1·2	3·4	2·3	+0·5	...	4	6	5	8	1	3	9	20	N 38° W	S 76° W	30	35	63	63	...	...	Naryanganj	Bengal and Orissa.
·426	·430	·464	·407	−·080	85	52	35	57	−11	2·0	2·1	2·1	+0·3	3	13	7	2	3	3	7	7	11	N 35°W	S 81° W	34	23	60	85	...	...	Calcutta (Alipore).	
·438	·461	?	?	?	86	52	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?		?	?	?	*Nil*	*Nil*	Ditto (Chowringhee).	
·521	·579	·556	·552	−·071	86	66	58	70	− 6	2·9	2·8	2·9	+0·9	...	10	10	1	2	15	7	3	8	N 74° W	S 50° W	8	23	195	189	...	...	Saugor Island.	
·411	·372	·314	·366	−·031	87	45	30	54	− 2	2·0	2·9	2·5	+0·7	4	18	6	1	1	2	2	15	7	N 33° W	N 58° W	50	43	35¶	52	...	...	Burdwan	Gangetic Plain and Chota Nagpur.
·367	·417	·351	·378	−·016	80	54	35	57	− 7	1·6	2·4	2·0	+0·1	3	5	3	1	1	3	6	26	8	N 82° W	N 72° W	61	44	42	56	...	...	Berhampore	
·588	·637	·628	·617	−·008	98	64	62	75	− 3	4·2	3·5	3·9	+1·3	1	5	6	12	10	15	...	3	4	S 59° E	S 12° W	36	16	172¶	185	...	...	False Point	
·553	·558	·434	·515	−·005	85	57	36	59	− 3	1·9	2·4	2·2	+0·4	12	12	9	5	2	2	6	6	2	N 5° E	S 16° W	21	13	43	50	...	...	Cuttack	
·192	·302	·268	·254	+·010	45	44	31	40	− 2	3·2	3·0	3·1	+1·1	...	11	2	2	3	5	2	9	22	N 47° W	N 68° W	50	60	172	156	...	...	Hazaribagh	
·349	·413	·371	·378	+·029	81	57	42	60	+ 3	1·8	1·3	1·6	−0·8	1	1	3	1	1	1	3	29	16	N 75° W	N 79° W	71	47	93¶	71	...	...	Patna	
·390	·428	·375	·398	+·021	87	61	42	63	0	1·2	0·8	1·0	−0·5	1	2	1	1	3	1	9	24	14	N 85° W	S 72° W	66	46	89	88	...	...	Darbhanga	
·356	·397	·309	·354	+·029	87	53	33	58	+ 3	1·9	1·8	1·9	−0·1	2	5	2	1	1	3	7	16	19	N 70° W	N 66° W	61	25	77	70	...	...	Allahabad	
·358	·390	·309	·352	+·087	82	50	34	55	+15	1·1	1·2	1·2	−0·5	4	1	2	...	1	1	17	22	8	S 81° W	S 82° W	68	58	49	55	0·40	0·36	Ghazipur	
·338	·397	·334	·356	+·064	92	56	38	62	+11	1·9	1·4	1·7	−1·2	5	5	1	3	...	2	10	13	17	N 73° W	N 58° W	53	44	36¶	78	...	...	Lucknow	
·269	·316	·302	·296	?	83	57	46	62	?	1·0	2·5	1·8	−2·3	...	4	2	3	2	13	20	10	2	S 42° W	S 85° W	52	19	43	48	...	...	Dehra Dun	
·309	·386	·322	·339	+·056	93	68	41	67	+ 7	1·2	1·4	1·3	−2·0	15	1	4	6	1	3	6	6	14	N 62° W	N 52° W	21	23	44	68	...	...	Roorkee	Upper Sub-Himalayas.
·336	·359	·302	·332	+·044	91	59	37	62	+ 6	1·3	1·3	1·3	−1·5	19	1	...	3	3	1	3	23	3	S 85° W	N 54° W	39	52	39	93	...	...	Meerut	
·292	·369	·333	·331	+·054	86	67	43	65	+ 8	1·9	2·5	2·2	−1·3	3	6	7	4	2	6	3	11	14	N 48° W	N 25° W	30	30	52	57	...	...	Lahore	
·317‡	·360	·326	·337‡	+·041	87‡	62	44	64‡	+ 2	2·2	3·1	2·7	−1·3	10	6	5	1	5	2	2	4	21	N 35° W	N 48° W	37	39	45	41	...	...	Ludhiana	
·232	·303	·271	·269	+·040	80	61	40	61	+ 4	2·7	4·3	3·5	−0·8	16	5	7	14	5	2	1	1	5	N 67° E	N 21° W	34	9	64¶	80	...	...	Peshawar	
·253	·306	·307	·289	+·020	69	45	32	48	− 5	1·6	1·2	1·4	−1·3	8	...	12	1	4	1	21	...	8	S 62° W	N 5° E	17	18	20¶	51	...	...	Mooltan	Indus Valley and N.-W. Rajputana.
?	·259	·226	?	?	?	33	20	?	?	1·9	1·6	1·8	−1·6	16	4	7	7	4	8	2	1	7	N 78° E	N 17° E	14	36	64¶	69	...	...	Jacobabad	
·522	·449	·466	·412	+·006	66	57	48	57	0	0·4	1·0	0·7	−2·3	...	...	3	10	11	1	11	18	2	S 31° W	N 80° W	27	27	189	252	...	...	Kurrachee	
·267	·303	·257	·276	+·022	68	38	26	44	+ 1	1·0	2·4	1·7	−1·1	2	4	4	4	4	4	9	13	12	N 83° W	N 9° W	32	38	57	104	...	...	Jeypore	
·241	·306	·297	·279	+·023	71	43	30	48	+ 4	0·9	1·8	1·4	−0·9	7	5	3	1	9	10	8	7	6	S 34° W	S 77° W	23	8	40	63	...	...	Ajmere	E. Rajputana, C. India and Gujarat.
·204	·214	·167	·195	−·032	49	22	13	28	− 1	0·8	1·0	0·9	−1·6	...	4	10	5	9	6	9	7	6	S 14° E	N 28° W	6	36	181	215	...	...	Deesa	
·359	·388	·315	·354	+·079	90	54	34	59	+12	1·4	2·5	2·0	−1·2	1	2	5	4	1	2	10	16	13	N 79° W	N 52° W	47	33	45¶	41	...	...	Nowgong	
·323	·356	·321	·333	+·057	79	49	34	54	+ 7	1·0	1·1	1·1	−1·3	...	...	3	...	8	...	17	...	28	N 80° W	N 75° W	45	38	73	97	...	...	Agra	
·406	·322	·330	·353	+·020	78	34	28	47	+ 9	1·0	2·8	1·9	+0·7	...	6	7	9	11	6	10	6	...	S 42° E	S 78° E	23	23	245	241	...	...	Belgaum	
·320	·371	·389	·360	+·047	53	35	28	39	+ 5	0·5	3·9	2·2	+0·6	4	3	10	3	17	5	6	5	3	S 49° E	S 33° E	25	32	200¶	160	...	...	Sholapur	Deccan.
·342	·303	·263	·303	+·014	73	33	21	42	+10	2·0	3·1	2·6	+1·0	9	...	4	9	4	1	8	13	7	S 79° W	N 28° W	16	21	134	150	...	...	Poona	
·384	·414	·384	·394	+·113	74	46	31	50	+15	2·2	3·4	2·8	+1·4	5	4	7	8	9	5	6	5	7	S 72° E	N 1° E	9	25	117	93	...	...	Akola	
·329	·333	·302	·322	+·042	61	39	29	43	+ 9	2·0	3·7	2·9	+1·0	3	1	4	3	11	2	7	5	20	N 73° W	N 5° W	20	29	?	147	1·35	1·11	Buldana	

‖ Mean of 19 days and corrected. ¶ Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 89 Stations

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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*continued.*	Khandwa	...	28·967	28·831	·136	28·893	−·005	29·899	87·7	57·3	30·4	96·4	46·1	50·3	76·1	85·3	71·7	+0·6	51·5	60·9	63·7	58·7
	Hoshangabad	...	29·033	·892	·141	·957	+·006	·949	84·1	57·3	26·8	91·8	46·0	45·8	72·1	83·3	70·3	0	53·1	61·4	65·0	59·8
	Nagpur	...	·015	·871	·144	·937	+·021	·926	?	60·4	?	?	52·2	?	75·7	83·9	?	?	55·5	66·7	70·3	64·2
	Do. (Sanitary Commr.'s Office)	...	·047	·906	·141	·977	?	?	87·5	60·8	26·7	93·7	54·6	39·1	76·3	85·5	73·6	?	55·8	62·9	65·2	61·3
	Jubbulpore	...	28·713	28·586	·127	28·644	+·014	·949	80·6	53·3	27·3	89·0	43·4	45·6	70·2	78·9	66·3	+0·1	52·1	60·8	62·6	58·5
	Saugor	...	·270	·160	·110	·209	+·028	·945	80·3	56·9	23·4	89·9	44·6	45·3	71·8	79·4	68·2	+1·0	50·8	59·4	61·3	57·2
	Raipur	...	29·077	·945	·132	29·005	+·020	·922	86·1	61·6	24·5	92·1	54·6	37·5	77·2	84·1	73·1	+0·5	55·5	62·5	63·7	60·6
	Sutna	...	·006	·886	·120	·938	+·008	·962	79·3*	53·9	25·4	88·5	43·0	45·5	70·8	77·7	66·2*	+1·7	51·2	59·2	59·6	56·7
	Hyderabad (Deccan).	...	28·336	·201	·135	28·263	?	·889	89·2	64·8	24·4	91·7	63·1	28·6	80·5	86·8	76·4	?	61·2	67·4	68·0	65·5
West Coast.	Bombay	...	30·004	29·887	·117	29·937	+·013	·914	83·0	68·2	14·8	91·4	61·4	30·0	76·0	79·8	75·1	0	63·2	67·7	70·5	67·1
	Ratnagiri	...	29·909	·792	·117	·841	+·008	·889	86·1	67·8	18·3	96·3	62·1	34·2	82·3	82·7	76·4	+0·4	62·7	68·7	71·9	67·8
	Karwar	...	·982	·853	·129	·908	+·002	·884	86·0	67·6	18·4	94·8	63·6	31·2	80·4	84·2	76·6	+0·1	65·9	70·8	73·4	70·1
	Cochin	...	·992	·870	·122	29·922	+·005	·859	91·2	74·4	16·8	94·1	70·4	23·7	85·2	87·2	82·1	+1·4	70·7	73·7	75·9	73·4
South India.	Salem	...	·118	28·946	·172	·036	−·001	·907	93·5	65·9	27·6	97·6	61·9	35·7	82·1	91·1	78·1	+0·8	64·2	70·5	72·5	69·1
	Mysore	...	27·525	27·380	·145	27·453	?	·865	88·3	63·1	25·2	90·1	58·9	31·2	77·8	86·5	75·2	?	58·5	65·2	66·7	63·4
	Mercara	...	26·310	26·191	·119	26·255	+·001	?	80·9	59·8	21·1	82·9	56·2	26·7	72·6	77·6	69·6	+1·1	55·9	60·5	62·3	59·6
	Bangalore	...	27·036	·908	·128	·971	+·002	·865	85·6	59·1	26·5	87·6	55·6	32·0	75·8	83·6	71·9	+0·3	56·1	61·3	61·5	59·6
	Hassan	...	26·967	·843	·124	·904	?	·861	85·5	58·5	27·0	87·9	52·8	35·1	76·5	83·6	71·5	?	54·0	61·3	61·1	58·8
	Chitaldroog	...	27·614	27·483	·131	27·544	?	·845	88·9	66·0	22·9	90·7	62·5	28·2	79·9	87·0	77·0	?	55·2	62·9	64·2	60·7
	Trichinopoly	...	29·784	29·629	·155	29·711	+·004	·897	92·7	68·1	24·6	95·4	65·0	30·4	84·2	90·8	78·9	+0·9	65·5	70·2	70·5	68·7
	Madras	...	30·045	·929	·116	·982	+·014	·935	87·5	66·7	20·8	90·1	63·5	26·6	83·0	83·6	76·6	−0·5	?	72·0	72·3	70·7
	Bellary	...	28·545	28·393	·152	28·464	+·021	·870	93·1	66·0	27·1	96·5	61·5	35·0	82·1	90·6	79·6	0	59·0	65·7	67·8	64·1
	Vizagapatam	...	30·032	29·905	·127	29·959	+·008	·928	82·0	75·1	6·9	83·6	73·0	10·6	79·6	81·2	78·5	−0·4	70·7	71·5	72·4	71·5
	Cocanada	...	·042	·906	·136	·973	?	·936	85·0	69·2	15·8	91·5	67·4	24·1	81·4	83·4	76·7	?	66·9	72·5	72·5	70·6
Hill Stations, Baluchistan.	Quetta	...	24·719	24·640	·079	24·673	+·029	?	61·0	31·9	29·1	7·4	20·0	53·4	52·1	58·2	45·7	+4·3	29·4	41·9	44·2	38·5
Hill Stations, Northern India.	Leh	11,503	19·729	19·672	·057	19·707	+·118	?	23·9	2·9	21·0	33·1	−4·5	37·6	14·6	21·1	14·0	−8·3	1·9	11·9	18·3	10·7
	Srinagar	...	25·087	25·005	·082	25·039	?	?	33·0	18·3	14·7	44·0	−4·1	48·1	26·3	31·6	25·3	?	17·7	23·1	26·8	22·5
	Murree	...	23·889	23·861	·028	23·868	+·034	?	53·2	39·5	13·7	66·8	28·4	38·4	47·5	47·9	44·4	+4·9	31·8	38·4	39·6	36·6
	Chamba	3,005	27·031	26·943	·088	26·993	+·009	?	64·8	43·4	21·4	75·5	32·9	42·6	52·4	62·0	52·0	+1·6	40·3	45·4	51·0	45·6
	Kailang	10,087	20·847	20·788	·059	20·824	+·080	?	30·0	9·0	21·0	38·0	−9·0	47·0	20·3	27·1	17·4	−3·3	8·2	17·5	22·7	16·1
	Simla (Ridge)	...	23·132	23·084	·048	23·101	+·018	?	48·4	38·0	10·4	55·8	26·3	29·5	44·4	45·8	41·9	+1·4	31·7	36·3	38·7	35·5
	Chakrata	....	23 366	23·314	·052	23·333	+·037	?	53·3	37·2	16·1	59·6	25·7	33·9	47·6	49·9	43·9	+1·2	33·8	40·6	42·7	38·9
	Ranikhet	...	24·165	24 096	·069	24·119	+·035	?	56·6	42·4	14·2	62·9	33·6	29·3	51·4	53·8	48·1	+0·6	38·5	44·2	45·9	42·9
	Katmandu	4,388	25·728	25·627	·101	25·673	+·020	?	69·2	39 0	30·2	74·5	32·4	42·1	52·2	62·3	52·2	−0·6	37·4	46·2	53·4	46·3
	Darjeeling	...	23·006	22·921	·085	22·964	+·030	?	48·1	36·1	12·0	55·1	28·7	26·4	43·3	45·0	41·4	+1·2	34·7	40·5	41·5	39·1
	Demagiri	?	?	?	?	?	?	?	80·5	54·7	25·8	83·9	46·6	37·3	70·4	77·3	66 8	+1·8	?	?	?	?
	Tura	3,943	?	?	?	?	?	?	77·1	60·3	16·8	83·2	54·0	29·2	70·8	74·3	68·1	?	?	59·4	60·4	?
Hill Stations, Central India.	Mount Abu	...	26·124	26·049	·075	26·077	−·016	?	70·3	54·0	16·3	79·8	43·7	36·1	65·3	68·1	61·6	+1·1	44·2	50·4	51·6	48·8
	Pachmarhi	...	·569	·477	·092	·517	+·019	?	74·4*	51·4†	23·0	78·7	39·3	39·4	67·9†	71·5*	61·9*	−0·3	46·2‡	54·3‡	55·9*	52·1*
	Chikalda	3,642	·441	·343	·098	·386	−·005	?	74·6	61 6	13·0	82·4	55·1	27·3	67·6	73·1	67·5	−0·3	54·7	56·8	60·0	57·2

* Mean of 24 days.
‡ ,, 25 ,,

II—*continued.*

in India, Burma, etc., for the month of February 1895—continued.

Vapour tension.					Humidity.					Cloud.				Wind direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall of the month.	Heaviest rainfall during the month.		
·315	·354	·325	·331	+·015	66	38	26	43	+1	2·1	3·3	2·7	+1·4	...	3	8	5	11	4	8	...	17	N. 15° E.	N. 8° W.	% 5	% 32	105	88	...	...	Khandwa .	Deccan—*continued.*
·359	·418	·395	·391	+·084	74	52	35	54	+10	1·9	2·6	2·3	+0·8	10	...	11	17	...	4	7	5	2	N. 89° E.	N. 58° E.	23	18	85	65	...	...	Hoshangabad.	
·387	·549	·578	·504	+·182	72	62	50	61	+21	3·5	5·1	4·3	+2·4	...	9	12	8	9	6	6	2	4	N. 74° E.	N. 55° E.	25	17	119	93	...	...	Nagpur .	
·332	·413	·372	·392	?	72	46	31	50	?	2·5	3·8	3·2	?	4	13	10	9	10	5	2	3	...	N. 71° E.	?	36	?	40*	?	...	...	Do. (Sanitary Commr.'s Office)	
·380	·424	·370	·391	+·080	92	57	38	62	+ 4	2·1	2·5	2·3	+0·2	1	14	14	2	7	4	4	2	8	N. 20° E.	N. 13° W.	34	20	61	59	...	...	Jubbulpore .	
·301	·359	·323	·328	+·088	64	47	33	48	+10	1·3	2·2	1·8	+0·4	...	3	4	6	24	11	6	2	...	S. 37° E.	N. 6° W.	59	24	69	68	...	...	Saugor .	
·365	·374	·323	·354	+·007	66	40	28	45	0	2·3	4·0	3·2	+1·8	21	7	6	3	1	1	3	7	7	N. 26° W.	N. 40° W.	25	13	75*	93	...	...	Raipur .	
·350	·364	·290	·334	+·104	83	49	32	55	+15	1·5	1·8	1·7	−0·3	2	8	2	6	1	10	1	9	17	N. 54° W.	N. 41° W.	30	38	113*	116	...	...	Sutna. .	
·497	·509	·451	·486	?	80	49	36	55	?	0·2	3·9	2·1	?	4	3	3	7	16	8	2	5	4	S. 18° E.	?	25	?	86*	?	...	...	Hyderabad (Deccan).	
·521	·569	·625	·572	−·031	75	63	61	66	−3	2·3	0·8	1·6	+0·3	...	4	13	10	1	...	...	9	19	N. 5° W.	N. 4° W.	46	60	226	256	...	...	Bombay .	West Coast.
·504	·523	·642	·556	−·036	74	48	58	60	−2	1·9	1·6	1·8	+1·4	1	8	...	2	3	...	6	11	25	N. 56° W.	N. 52° W.	62	52	205*	219	...	...	Ratnagiri .	
·615	·627	·680	·642	−·011	91	61	58	70	−3	0·9	0·5	0·7	+0·1	...	3	4	...	...	...	...	26	23	N. 61° W.	N. 50° W.	80	61	137	?	...	...	Karwar .	
·706	·681	·743	·710	−·032	83	56	57	66	−5	0·1	...	0·1	−2·0	2	11	9	2	1	...	3	26	2	N. 52° W.	N. 89° W.	46	28	140	?	...	...	Cochin .	
·581	·592	·549	·574	+·019	91	54	38	61	+4	1·2	1·8	1·5	−0·3	9	7	26	9	1	...	1	...	3	N. 44° E.	S. 75° E.	65	53	152	129	...	...	Salem .	South India.
·437	·467	·411	·438	?	75	49	33	52	?	0·2	0·7	0·5	?	4	2	9	30	8	1	1	1	...	N. 88° E.	?	71	?	179*	?	...	...	Mysore .	
·406	·390	·392	·396	−·003	78	49	43	57	− 1	1·5	3·0	2·3	−0·2	25	2	6	6	4	1	1	2	9	N. 26° E.	N. 59° E.	16	35	59	95	...	...	Mercara .	
·417	·376	·294	·362	−·032	83	42	25	50	−2	0	0·8	0·4	−1·8	1	1	7	27	15	2	2	...	1	S. 80° E.	S. 67° E.	73	66	259	86	...	...	Bangalore (Fort)	
·368	·368	·279	·338	?	74	41	24	46	?	1·3	2·5	1·9	?	4	...	10	19	22	1	...	...	...	S. 77° E.	?	77	?	77*	?	...	...	Hassan .	
·305	·365	·316	·329	?	47	36	25	36	?	0·1	1·6	0·9	?	1	...	12	20	14	2	1	3	3	S. 86° E.	?	59	?	179*	?	...	...	Chitaldroog .	
·595	·552	·477	·541	−·069	86	47	33	55	−7	1·0	1·6	1·3	−1·5	8	9	33	5	1	...	...	...	...	N. 43° E.	N. 65° E.	77	74	78	101	...	...	Trichinopoly .	
?	·640	·642	·674	+·010	?	57	56	74	+1	2·9	1·8	2·4	−0·2	...	...	3	22	22	8	1	...	...	S. 60° E.	E.	80	68	121	119	...	...	Madras .	
·416	·428	·397	·414	+·054	65	39	28	44	+7	1·3	5·7	3·5	+2·2	3	1	3	16	21	5	3	1	3	S. 59° E.	S. 56° E.	59	50	98	94	...	...	Bellary .	
·699	·675	·686	·687	+·045	81	66	64	70	+5	2·7	1·3	2·0	+0·7	...	...	...	...	11	16	16	12	1	S. 25° W.	S. 11° W.	68	43	51	49	...	...	Vizagapatam .	
·630	·682	·651	·654	?	88	63	57	70	?	1·9	1·1	1·5	?	...	...	7	13	25	4	4	3	...	S. 57° E.	?	64	?	167*	?	...	...	Cocanada .	
·143	·169	·153	·155	−·009	78	45	32	52	−13	1·8	2·6	2·2	−2·0	21	1	1	1	2	6	6	9	9	S. 78° W.	N. 76° W.	30	30	91*	96	...	...	Quetta .	Hill Stations, Baluchistan.
·040	·056	·081	·059	−·018	79	65	70	71	+ 6	4·3	3·7	4·0	−2·7	19	...	21	1	3	10	2	...	...	N. 86° E.	S. 25° E.	30	18	20	33	0·05	0·04	Leh .	Hill Stations, Northern India.
·097	·098	·100	·098	?	91	66	54	70	?	5·2	4·6	4·9	?	27	2	1	...	9	11	1	1	4	S. 12° E.	?	23	?	44*	?	...	...	Srinagar .	
·104	·141	·160	·135	−·016	47	47	52	49	−14	3·8	4·6	4·2	−1·3	5	4	1	2	29	5	2	1	7	S. 42° E.	S. 39° E.	41	29	212*	196	...	...	Murree .	
·219	·227	·254	·233	+·007	77	58	47	61	− 2	3·5	4·8	4·2	−1·3	31	1	1	...	4	...	...	5	14	N. 52° W.	N. 21° E.	25	7	123*	86	5·85	3·33	Chamba .	
·059	·078	·089	·075	−·030	86	70	60	72	− 5	4·1	4·6	4·4	−1·9	...	...	...	2	1	12	16	18	7	S. 59° W.	S. 69° W.	66	64	12	26	1·95	1·47	Kailang .	
·118	·132	·164	·138	−·014	54	48	55	52	− 3	2·6	3·7	3·2	−2·1	13	8	9	5	2	6	13	...	...	S. 60° E.	S. 22° W.	7	28	148	?	...	...	Simla (Ridge).	
·161	·185	·202	·184	+·024	72	57	58	63	+ 1	1·3	3·7	2·5	−2·3	1	...	5	15	5	...	1	24	5	N. 66° W.	S. 54° E.	12	3	162	125	...	...	Chakrata .	
·196	·218	·230	·215	+·023	72	58	56	62	+ 2	1·7	2·1	1·9	−2·5	18	2	3	1	1	1	16	10	4	S. 74° W.	S. 55° W.	37	24	65	52	...	...	Ranikhet .	
·208	·293	·311	·271	+·027	87	75	56	73	+8	3·0	4·8	3·9	+0·8	...	...	6	20	...	...	...	27	3	N. 38° W.	N. 82° W.	14	67	24	?	1·22	0·60	Katmandu .	
·189	·224	·226	·214	+·003	88	80	75	80	+1	7·1	7·5	7·3	+1·6	1	3	11	3	3	1	18	13	2	S. 76° W.	S. 83° W.	28	33	147	121	...	...	Darjeeling .	
?	?	?	?	?	?	?	?	?	?	?	?	?	?	...	8	4	3	5	4	15	2	15	N. 76° W.	N. 55° W.	25	32	?	?	*Nil*	...	Demagiri .	
?	·378	·368	?	?	?	51	44	?	?	1·8	3·4	2·6	+0·2	...	...	2	...	1	26	25	2	...	S. 22° W.	S. 12° W.	84	66	?	?	0·05	0·05	Tura .	
·183	·201	·199	·194	+·018	43	32	28	34	0	0·9	1·1	1·0	−1·8	...	6	11	...	13	5	11	5	5	S. 8° E.	N. 71° W.	9	24	144*	131	...	...	Mount Abu .	Hill Stations, Central India.
·260‡	·274‡	·274*	·270*	+·034	67‡	39‡	35*	47*	+5	1·8	3·4	2·6	+0·7	2	10	1	5	6	4	8	14	6	N. 85° W.	N. 49° W.	25	24	123*	92	...	...	Pachmarhi .	
·355	·340	·372	·354	+·070	65	51	46	53	+12	3·7	5·4	4·6	+3·1	26	3	...	...	7	8	5	1	6	S. 23° W.	N. 83° W.	18	26	144	143	0·08	0·40	Chikalda .	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 89 Stations

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, South India.	Wellington	...	24·324	4·245	·079	24·285	+·008	?	70·5	45·8	24·7	75·4	41·0	34·4	65·5	66·7	57·2	−0·7	43·8	53·5	55·0	50·8
Extra India.	Muscat	...	30·076	29·987	·089	30·031	?	?	72·8	67·6	5·2	81·4	63·3	18·1	71·4	72·5	70·2	?	61·2	65·7	66·7	64·5
	Aden	...	29·976	·859	·117	29·910	+·001	29·937	80·1	73·7	6·4	83·9	70·1	13·8	76·8	78·3	76·5	−0·3	68·7	70·9	70·1	69·9
	Perim	...	·837	·727	·110	·775	?	?	83·4	73·8	9·6	85·1	72·8	12·3	78·9	79·9	77·7	?	60·3	71·9	71·8	68·0
	Minicoy	...	30·011	·900	·111	·951	?	?	87·3	?	?	89·0	?	?	?	?	?	?	73·0	76·2	76·6	75·3
	Zanzibar	...	29·913	·787	·126	·850	?	·849	87·5	80·4	7·1	89·6	78·6	11·0	84·2	87·2	83·9	?	76·6	78·1	78·1	77·6
	Port Victoria (Seychelles)	15	·973	·886	·087	·930	?	·893	83·9	77·9	6·0	84·8	75·6	9·2	81·9	82·8	80·6	?	73·6	76·3	76·4	75·4

II—*concluded.*

in India, Burma, etc., for the month of February 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
·269	·288	·314	·290	+·010	86	46	48	60	+3	0·8	2·9	1·9	−0·6	1	...	5	6	27	17	...	...	...	S. 41° E.	S. 31° E.	77	60	53	62	...	...	Wellington	Hill Station, South India.
·465	·558	·581	·535	?	68	73	72	71	?	1·8	1·1	1·5	?	...	3	11	13	3	3	1	6	15	N. 20° E.	?	29	?	80	?	...	...	Muscat	Extra India.
·637	·682	·628	·649	−·007	77	74	65	72	0	6·3	2·8	4·6	+0·5	7	...	14	24	10	1	...	...	...	N. 88° E.	N. 81° E.	73	72	368	332	...	...	Aden	
·341	·690	·673	·565	?	41	70	66	59	?	6·0	3·3	4·7	?	6	...	...	19	28	...	...	1	1	S. 63° E.	?	75	?	269	?	...	...	Perim	
?	?	?	?	?	?	?	?	?	?	3·5	3·6	3·6	?	6	27	13	6	2	...	...	...	2	N. 67° E.	?	69	?	127	?	...	...	Minicoy	
·867	·882	·839	·863	?	84	75	65	75	?	2·9	2·7	2·8	?	1	20	19	8	1	1	2	1	3	N. 29° E.	N. 25° E.	66	26	147*	162	...	...	Zanzibar	
·773	·831	·820	·808	?	81	76	73	77	?	6·3	6·5	6·4	?	...	13	6	6	2	...	...	4	25	N. 17° W.	?	62	?	145	?	7·00	3·58	Port Victoria (Seychelles)	

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* Corrected.

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr., I.—June 01.—5,000.

Zinco., S. C. O., Calcutta.

K. M. G.

Explanation.

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

Reg. No. 1[illegible], Wr. I.—June 94.—5,000.

Zinco[illegible], Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

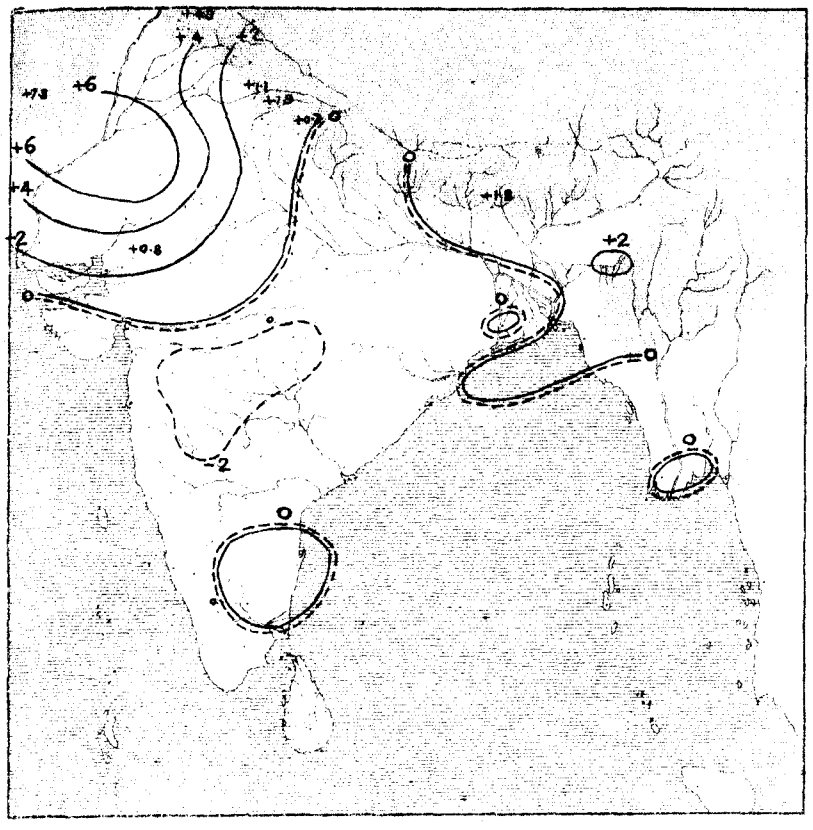
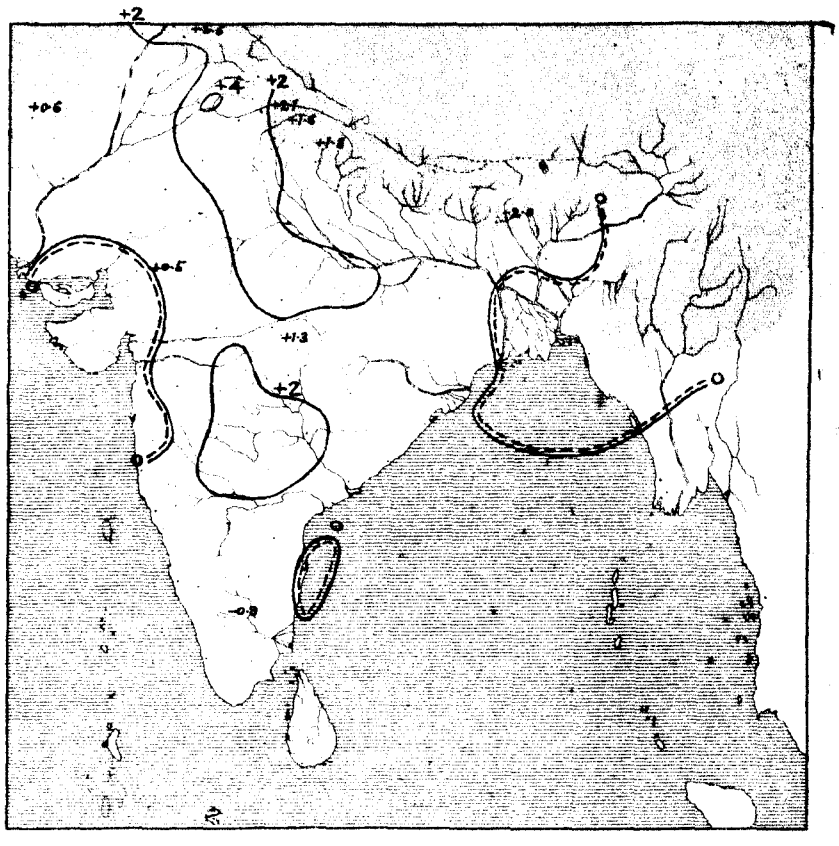


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

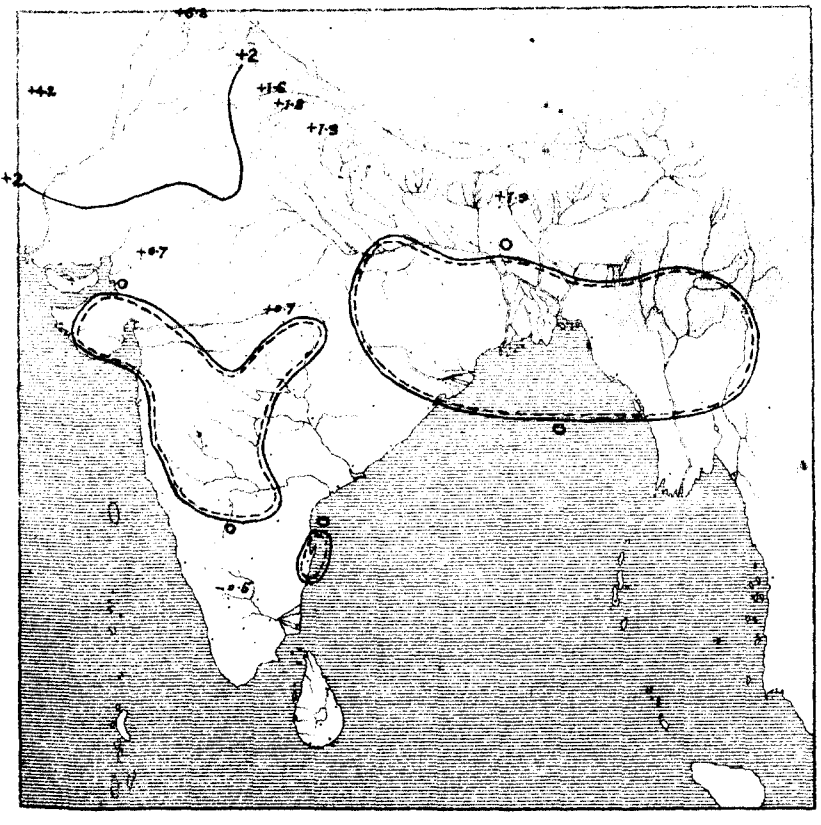
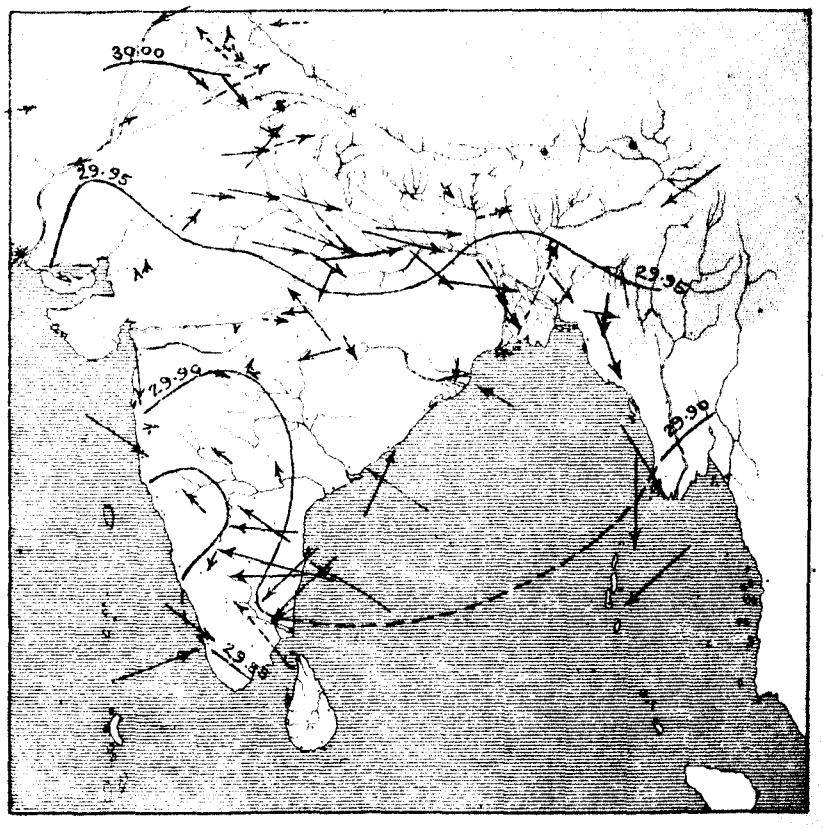


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF FEBRUARY 1895.



H.M.G.

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{20}$th of an inch bein[illegible] equal to 100 [illegible] m.

K. M. C.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

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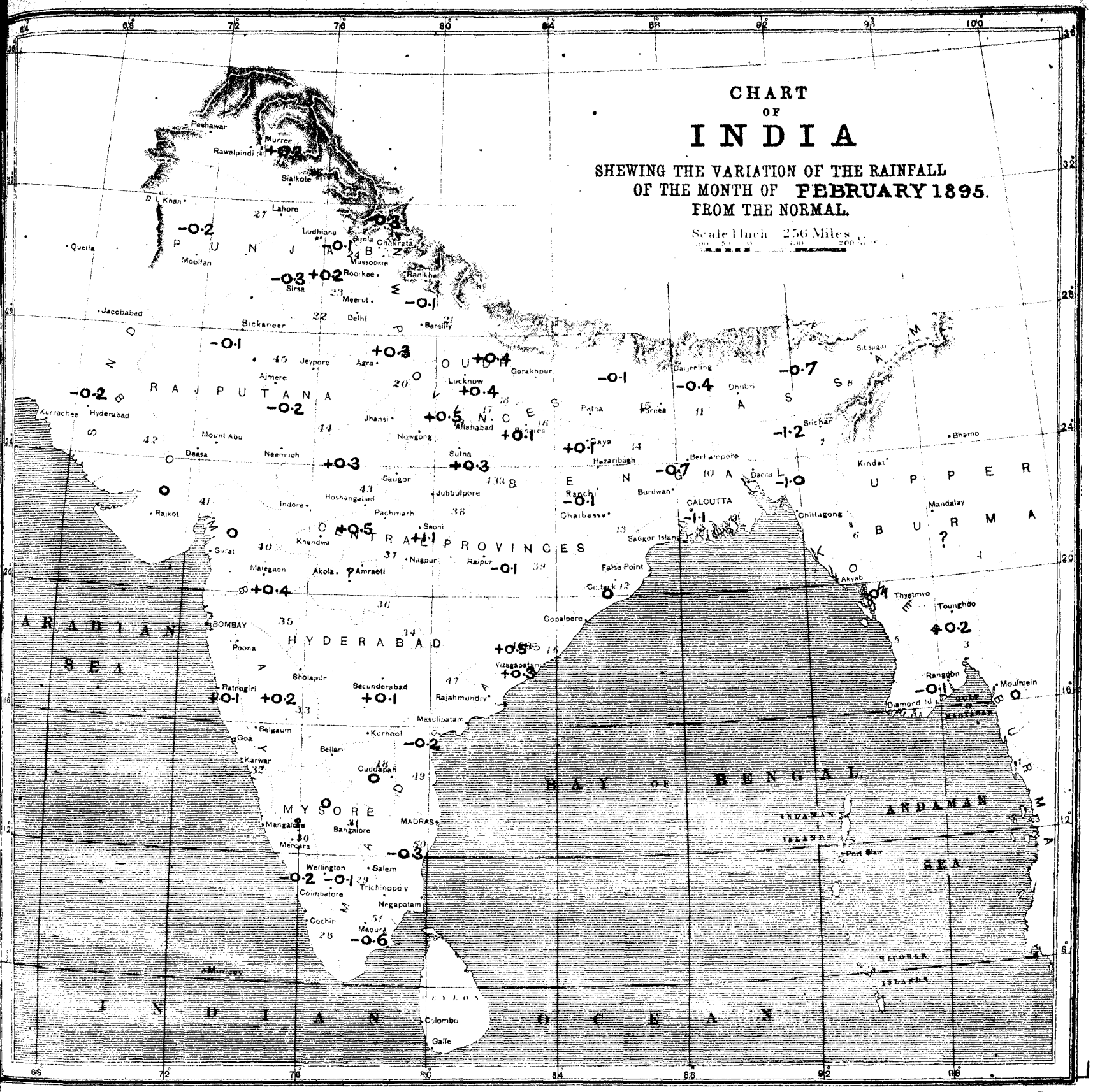

K.M.G.

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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg. No. 56, Wr., I.—Mar. 95.—5,000.

Litho., S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

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CALCUTTA, MARCH, 1895.

INTRODUCTION.

THIS review of the weather in India during the month of March 1895 is based on observations taken daily at 8 A.M. at 205 stations, and on additional observations taken at 8 A.M. and 4 P.M. at 89 stations. In the rainfall summary, the rainfall data of the meteorological observatories and the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the preparation of the review, are utilized. A summary of the weather in the Bay of Bengal and the Arabian Sea, derived from information extracted from the logs of vessels entering the ports of Calcutta and Bombay is given.

Summary of the chief features of the weather in India during the month of March 1895.

The month of March is usually the commencement of the hot weather in Northern and Central India. The hottest area in February in India is defined by the isotherm of 80° and includes the South Deccan and the Tinnevelly, Madura, Trichinopoly and Coimbatore districts of South Madras. The North Punjab is the coolest area at this time. The mean temperature of Peshawar and Rawalpindi, allowance being made for elevation above the sea, is slightly below 60°. Temperature during the next month increases least rapidly in Southern India and most rapidly in Central and Northern India, the rise of temperature varying from 3° in Southern India to about 10° in Northern India. The area of highest mean temperature for the month of March includes the whole of the Deccan, Berar, and the greater part of the Central Provinces. In that area the mean daily temperature of the month slightly exceeds 85°, the highest mean temperatures being those at Cuddapah (87°·7), Kurnool (86°·9), Sironcha (85°·4) and Bellary (85°·2). When allowance is made for elevation above the sea, the temperature in the South and Central Deccan ranges from 87° to 89°. The lowest temperatures obtain in March as in February in the North Punjab, where the mean daily temperature averages 65° during the month.

The slow change from the cold weather distribution of pressure to the hot weather and south-west monsoon distribution commences in March. Pressure continues highest in Upper India, but the difference of pressure between Upper and Southern India usually diminishes from a mean of ·2″ in February to a mean of ·1″ in March. An important change in the distribution of pressure occurs during this month, accompanying the setting in of southerly winds on the Bengal coast. The combination of these winds with the westerly winds of the Gangetic Plain and the easterly winds down the Assam Valley tends to give a permanent cyclonic circulation in North-Eastern India,

and to develop a shallow depression, the central area of which usually lies over Chota Nagpur and the Bilaspur and Sambalpur districts of the Central Provinces.

Pressure at the commencement of the month was above the normal, the excess being considerable in North-Eastern India, where it exceeded a tenth of an inch. No change of importance occurred until the 7th, when pressure gave way rapidly in Northern India. During this period from the 1st to the 7th, temperature was largely above the normal in North-Western India The following gives the variations of the mean temperature from the normal in that area during the period :—

Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of March.						
	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.
	°	°	°	°	°	°	°
Baluchistan (Quetta) .	+11·3	+5·4	+9·6	+7·1	+9·6	+8·5	+8·0
Punjab . . .	+ 7·5	+7·9	+2·3	+4·6	+6·0	+7·0	+6·8
Sind . . .	+ 6·0	+3·0	+2·8	+4·8	+5·9	+6·2	+7·4
Rajputana . .	+ 4·9	+8·0	+1·4	+0·4	+1·3	+4·2	+3·6

The increase was much more largely shown in the day than in the night temperature. Thus on the 7th the maximum temperature was from 10° to 14° above the normal at a large number of stations in Sind and the Punjab and was 10½° in excess at Quetta.

Temperature was during this period steadily in moderate defect in the Madras Presidency. The following gives data :—

Variation from normal of:	Date.						
	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.
	°	°	°	°	°	°	°
Maximum temperature	−1·2	−1·4	−2·0	−2·5	−1·9	−2·7	−2·0
Minimum temperature	−3·0	−3·5	−4·1	−4·6	−1·8	−2·0	−1·7
Mean temperature .	−2·1	−2·5	−3·1	−3·6	−1·9	−2·4	−1·9

Unusually fine weather with remarkably clear skies obtained during this period in the Deccan and Southern India, and the data for the period from the 1st to the 5th indicate that the decreased temperature was largely, if not entirely, due to increased radiation by night. It is a remarkable example of the contrast of temperature conditions between Madras and Northern India which so frequently obtains in the cold weather.

Pressure gave way rapidly on the 7th in Baluchistan and Upper Sind, and a depression due to hot weather actions in Upper India lay over Upper Sind on the 8th. It was unchanged in position on the 9th. A feeble low pressure wave was transmitted across Northern India during the next three days. It was in Rajputana on the 10th, Chota Nagpur and the north-eastern districts of the Central Provinces on the 11th, and Bihar and Bengal on the 12th and 13th. It gave slightly disturbed weather with numerous thunderstorms and hailstorms to Baluchistan and North-Western and Central India from the 8th to the 11th, to the Central Provinces on the 10th and 11th, and to Bengal on the 11th and 12th. A cold wave advanced across Northern India in the rear of this disturbance. The following table, giving mean variation data for the 7th, 10th and 13th, shows the effect of this disturbance in temporarily reducing temperature in Northern and Central India :—

Meteorological Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of March.		
	7th.	10th.	13th.
	°	°	°
Baluchistan (Quetta) . .	+8·0	−0·6	−2·3
Punjab	+6·8	−0·6	+1·5
Sind and Rajputana . .	+4·8	−1·9	−1·2
North-Western Provinces and Oudh.	+2·9	+0·2	−2·3
Central India and Gujarat .	+3·8	−2·9	−1·5
Central Provinces and Berar .	+1·0	−1·1	−2·6
Bengal and Assam . .	+0·9	+1·9	−1·0

The reduction of temperature was moderately large, but not so large as occasionally occurs after cold weather storms in Northern India. During this period whilst temperature decreased largely in Northern India it increased in Madras so that although it averaged 2° in defect on the 7th it varied from ½° to 1° in excess from the 9th to the 13th.

The passage of the first disturbance of the month across Northern India left the atmosphere in an unsettled condition, shown chiefly by large and irregular changes of pressure on the 12th and 13th. A large local fall of pressure in Upper Sind on the 12th gave rise to a low pressure area on the 13th in Upper Sind and the South-West Punjab. Pressure fell very rapidly over the whole Indian area during the next 24 hours due so far as can be judged to an expansional movement over that area and not to the transmission of an extensive low pressure wave or cyclonic depression across it from west to east. Pressure was almost stationary during the next 24 hours and increased rapidly on the 16th and 17th, and was approximately normal in amount and distribution on the 18th. The depression which formed on the 13th in Upper Sind was to some extent obscured on the 14th by the large pressure changes in Upper India. It was stationary on the 14th and 15th in the South-West Punjab and Upper Sind and advanced eastwards across the South Punjab on the 16th

and disappeared in the East Punjab before the morning of the 17th. The North and Central Punjab and the Punjab hill districts received moderate to heavy rain from the 13th to the 16th. The disappearance of the disturbance was followed by the advance of a well-marked cool wave from the North-West Frontier across Northern India.

The reduction of temperature due to the advance of this wave was greatest on the 16th in Baluchistan, on the 17th in West Rajputana, on the 19th in the Central Provinces, on the 20th in Chota Nagpur, and on the 21st in Bengal.

Series of thunderstorms occurred in the Central Provinces on the 18th, 19th and 20th, in Chota Nagpur on the 19th and 20th, and in Bengal on the 20th and 21st. The rainfall due to these storms caused a considerable fall of temperature, which in combination with the effect of the passage of the cool wave gave unusually low temperatures to the Central Provinces and North-Eastern India from the 20th to the 22nd, as is seen from the following data :—

Meteorological Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of March.				
	19th.	20th.	21st.	22nd.	23rd.
	°	°	°	°	
Central Provinces and Berar.	−6·1	−7·5	−7·7	−5·7	−3·0
Bengal and Assam . .	+1·2	−2·9	−7·8	−5·7	−3·5

This, the third disturbance of the month, was apparently due to the formation of a very feeble low pressure area in the Central Provinces on the 19th, which was transmitted eastwards into Bengal, where it filled up.

Temperature increased very rapidly in Baluchistan and North-Western India on the 20th and following days, and was in considerable excess (3°·0) on the 23rd in the Punjab, Sind and Rajputana. This rapid increase of temperature immediately preceded the formation of the fourth disturbance of the month. A shallow depression was shown over Sind and the South-West Punjab on the 22nd. It increased slightly in intensity on the 23rd and was unchanged in position until the morning of the 24th, when it began to advance eastwards across the Central Punjab. It was at the foot of the Punjab Himalayas on the morning of the 25th and disappeared during the day. It hence resembled the second disturbance of the month in its origin and track, and like that storm, gave moderately heavy rain to the northern and submontane districts of the Punjab and the Kashmir and Punjab hill districts.

A well-marked cool wave advanced across Northern India after the disappearance of the storm. The following gives the greatest excess of temperature in the warm wave and the greatest deficiency in the cool wave during their common advance across Northern India from the 25th to the 27th :—

Data.	Cool Wave.		Warm wave.	
	Station.	Variation from normal of mean daily temperature.	Station.	Variation from normal of mean daily temperature.
25th	D. I. Khan . .	−13°·1	Jhansi . .	+6°·0
26th	Indore . . .	−10°·8	Chaibassa . .	+4°·4
27th	Jubbulpore . .	−8°·5	Chittagong . .	+0°·8

Fine weather prevailed during the remainder of the month and temperature increased rapidly and at the end of the month was approximately normal. Very low humidities were recorded in Rajputana, Central India and the Central Provinces during the passage of the cool waves across Northern India after the second and fourth disturbances of the month. Humidity percentages of 5 were recorded at 4 P.M. of the 15th and 16th at Jacobabad, at 4 P.M. of the 20th, 21st and 22nd at Deesa, and at 4 P.M. of the 27th at Chikalda and Buldana.

Pressure.—The mean pressure of the whole Indian area was ·018 inch below the normal, almost exactly the same amount as in March 1894. Relatively to the general conditions pressure was in slight excess in Rajputana, Central India, Berar, the Central Provinces, and the eastern half of the Peninsula, and in slight local defect elsewhere. The anomalies were small for all stations except Ranchi, Chaibassa, Sambalpur and Raipur, where they slightly exceeded ·02″. Pressure was in very slight excess at the hill stations as compared with the neighbouring plains stations.

The following table gives mean pressure variation and anomaly data of the month for the eleven meteorological provinces :—

Meteorological Province.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Burma Coast and Bay Islands . . .	−·030	−·012
Burma Inland	−·026	−·008
Assam	−·025	−·007
Bengal and Orissa	−·019	−·001
Gangetic Plain and Chota Nagpur . . .	−·014	+·004
Upper Sub-Himalayas	−·018	0
Indus Valley and North-West Rajputana .	−·024	−·006
East Rajputana, Central India and Gujarat .	−·013	+·005
Deccan	−·011	+·007
West Coast	−·030	−·012
South India	−·017	+·001

Temperature.—The day temperature of the month was in slight excess in East Bengal, South India and the West

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Coast districts and also in Upper Sind, West Rajputana and the South Punjab and was in defect elsewhere. The variations were generally small, but exceeded 2° in two areas. The first area is defined by the stations of Lucknow, Gaya, Raipur and Amraoti, in which the deficiency ranged between 2°·0 at Raipur and 3°·9 at Nowgong. The second area included the stations of Peshawar and Dera Ismail Khan, at which the mean maximum temperature of the month was 3° below the normal.

The mean night temperature varied from the normal less than the day temperature, and generally inversely to the latter. It was in excess in Northern India and the western half of the Peninsula. The excess was slightly greater than 2° in the Punjab and the Bombay Deccan. The mean night temperature was below the normal over the remainder of India. The deficiency exceeded 2° at Madras (2°·8) and Cocanada and Sambalpur (2°·7).

The mean temperature conditions of the month varied generally very slightly from the normal. The only important feature was a moderate deficiency in a portion of the Central Provinces defined by the stations of Jubbulpore (—2°·6), Saugor (—2°·1), Seoni (—2°·1) and Nagpur (—2°·0). The mean temperature of the month was on the whole in slight excess in Upper India, Baluchistan, the western half of the Peninsula and North and East Bengal and in defect elsewhere.

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

METEOROLOGICAL PROVINCE.	VARIATION FROM NORMAL OF		
	Mean maximum temperature, March 1895.	Mean minimum temperature, March 1895.	Mean daily temperature, March 1895.
	°	°	°
Burma Coast and Bay Islands .	—0·1	+0·3	+0·1
Burma Inland . . .	—1·2	+0·2	—0·5
Assam	—0·4	0	—0·2
Bengal and Orissa . . .	+0·2	—0·5	—0·1
Gangetic Plain and Chota Nagpur.	—1·6	+0·2	—0·7
Upper Sub-Himalayas . .	—0·4	+1·5	+0·6
Indus Valley and North-West Rajputana.	—0·1	+0·9	+0·4
East Rajputana, Central India and Gujarat.	—1·2	+0·1	—0·5
Deccan	—1·7	+0·1	—0·8
West Coast	+0·6	+0·7	+0·6
South India	—0·3	—0·9	—0·6

Winds.—The mean air movement of the month in India presents few features of interest. Winds were on the whole stronger and steadier in the Gangetic Plain and at the hill stations in Northern India. They were more westerly than usual in the North-Western Provinces and also in West and Central Bengal. Winds were slightly weaker and steadier in Rajputana and Central India, but varied somewhat irregularly in direction from the normal. Winds were, on the whole, most unsteady and variable in Berar, the Central Provinces and the Deccan. North-east winds held steadily in the centre of the Bay as shown by the data of Port Blair. They were somewhat more easterly than usual.

Humidity and Cloud.—The air was slightly drier than usual at Port Blair and in Burma, and slightly damper in Assam; but the variations were unimportant. The air was much drier than usual in Bengal, more especially in the western and southern districts, where dry land winds prevailed to an unusual extent. The decreased humidity was most strongly shown at Calcutta, where the mean humidity percentage was 14 below the normal. Humidity was normal in Bihar and higher than usual in the North-Western Provinces, the Punjab, Rajputana, Central India, Berar and the Central Provinces. The humidity percentage was more than 10 in excess at Jubbulpore (+16), Sutna (+14), Hoshangabad (+13) and Saugor and Peshawar (each +11). The humidity was hence most largely in excess in the northern and eastern districts of the Central Provinces and in the North Punjab. The humidity conditions were practically normal in the Deccan, Konkan and the Coromandel coast districts. The air was much drier than usual in Malabar, South Madras and Mysore. The mean humidity of the month was 6 in defect at Bangalore and 5 at Wellington, Cochin and Trichinopoly.

There was somewhat more cloud than usual in Burma and Assam, and also in the area of increased humidity in North-Western and Central India. The excess was greatest in the North Punjab and some parts of the Central Provinces. Cloud was largely in defect in Southern India, more especially in Malabar and Mysore. Skies were most free from cloud at Bangalore and Cochin, where the mean cloud amount of the month was only 0·9.

The following table gives variation data of the mean aqueous vapour pressure, mean humidity and mean cloud amount of ten meteorological provinces for the month of March 1895:—

METEOROLOGICAL PROVINCE.	VARIATION FROM NORMAL OF		
	Mean aqueous vapour.	Mean humidity.	Mean cloud amount.
	"		
Burma Coast and Bay Islands . .	—·022	—3	+0·4
Assam	+·002	+2	+0·4
Bengal and Orissa	—·066	—7	—0·3
Gangetic Plain and Chota Nagpur .	+·020	+3	+0·4

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour.	Mean humidity.	Mean cloud amount.
	"		
Upper Sub-Himalayas . . .	+·040	+4	+0·4
Indus Valley and North-West Rajputana.	+·024	+4	+0·2
East Rajputana, Central India and Gujarat.	+·010	+4	+0·5
Deccan	+·035	+6	+0·5
West Coast	+·003	−1	−0·5
South India	−·026	0	−·08

Rainfall.—There were four periods of disturbances during the month, *viz.*, the 8th to the 12th, the 13th to the 16th, the 18th to the 22nd, and the 23rd to the 25th. During the first disturbance thundershowers occurred over the greater part of Northern and Central India. The second and fourth disturbances gave rain chiefly to the North-West and East Punjab and the Kashmir and Punjab hill districts, and the rainfall was unusually heavy. The third disturbance affected the Central Provinces and Bengal chiefly, to which it gave light thundershowers. The chief feature of the rainfall of the month was the excessive precipitation in the North Punjab (or the districts of Peshawar, Kohat and Bannu). The rainfall of the month was small in amount in Sind, Rajputana, Central India and the North-Western Provinces, and did not differ to any important extent from the normal. It was slightly larger than usual in the Central Provinces, more especially the northern districts. The rainfall of the month was scanty in Bengal and Assam and was considerably in defect in those districts which usually receive moderate rain from thunderstorms during the month, more especially East and South Bengal and Cachar. The deficiency was greatest in Cachar (Assam Surma), which obtained an average of only 4·03 inches, or 5·17 inches less than the normal of the month. Burma, Bombay and the Deccan received practically no rain; but the normal fall is very small in these areas. The rainfall was also *nil* in the Madras Presidency, and was hence in considerable defect in those districts, including Malabar, the Nilgiris and Tinnevelly, which usually receive moderate rain from thunderstorms in this month. The chief features of the distribution of the rainfall of the month were excessive rain in the North and West Punjab and very scanty and deficient rain in Assam and Bengal, and in South Madras, Travancore and Malabar.

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

Meteorological Province.	Rainfall,		
	Average actual for March 1895.	Average normal for March.	Variation from normal.
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands . .	0·36	0·52	−0·15
Burma Inland	0·13	0·78	−0·65
Assam	4·56	5·27	−0·70
Bengal and Orissa	0·52	1·68	−1·22
Gangetic Plain and Chota Nagpur .	0·27	0·50	−0·24
Upper Sub-Himalayas . . .	0·66	0·95	−0·25
Indus Valley and North-West Rajputana.	2·00	0·43	+1·19
East Rajputana, Central India and Gujarat.	0·32	0·18	+0·19
Deccan	0·37	0·47	−0·04
West Coast	0·01	0·58	−0·57
South India	0·04	0·53	−0·47

Atmospheric Pressure.

The mean pressure of the whole of India as determined from 8 A.M. observations recorded at 195 observatories was ·018″ below the normal, and hence almost exactly the same amount in defect as in March 1894, when it was ·017″ below the normal.

Relatively to the general condition pressure was in local excess in Chota Nagpur, the greater part of the North-Western Provinces and Rajputana, Central India, Berar, the Central Provinces, Hyderabad and North and Central Madras, and in slight local defect over the remainder of India and in Burma. The local anomalies were generally small in amount, but exceeded ·02″ in the area defined by the stations for which variation data are given below:—

Station.	Pressure.	
	Variation from normal.	Anomaly.
	"	"
Ranchi	+·006	+·024
Chaibassa	+·005	+·023
Sambalpur	+·008	+·026
Raipur	+·011	+·029

Pressure was in slight excess at the hill stations as compared with the neighbouring plain stations, but the vertical pressure anomalies were in all cases small.

The following gives data for eight pairs of stations :—

Hill Station.	Variation from normal pressure.	Plain Station.	Variation from normal pressure.	Vertical pressure anomaly (Hill–Plain).
	"		"	"
Quetta . .	−·023	Jacobabad . .	−·022	−·001
Leh . . .	+·006	Lahore . .	−·018	+·024
Kailang . .	+·008	Lahore . .	−·018	+·026
Murree . .	−·012	Peshawar . .	−·021	+·009
Simla . .	−·018	Ludhiana . .	−·008?	−·010?
Chakrata . .	+·002	Roorkee . .	−·023	+·025
Darjeeling . .	−·015	Dhubri . .	−·016	+·001
Mount Abu .	−·012	Deesa . .	−·016	+·004

There were hence no strongly marked abnormal features in the mean pressure distribution of the month. The following summarizes the chief features :—

1st.—Slight general deficiency of pressure.

2nd.—Slight local excess of pressure in Chota Nagpur, the greater part of the North-Western Provinces, Rajputana, Central India, Berar, the Central Provinces, Hyderabad, and North and Central Madras, greatest in amount in Chota Nagpur and the eastern districts of the Central Provinces.

3rd.—Slight local deficiency in Burma, Assam, East Bengal, Upper India, and the western half of the Peninsula.

4th.—Slight excess of pressure at the hill stations relatively to the plains, greatest in amount at the high level stations of Leh and Kailang.

Barometric depressions and storms of the month.

Weather was somewhat more disturbed than usual in March 1895. There were four periods of disturbance, *viz.*, the 9th to the 12th, the 14th and 15th, the 18th to the 20th and the 23rd to the 25th. These disturbances apparently originated in India and were due to hot weather actions. These hot weather depressions and disturbances differ in several respects from the storms of the cold weather period. They usually form in Sind, the South-West Punjab, West Rajputana, or the Central Provinces during periods of high temperature and considerable excess of temperature. The depressions are usually stationary for periods of two to four days during which they intensify very slightly. Finally they either fill up or advance eastwards across Northern India following the same general course as the storms of the cold weather. This is apparently due to the ascensional movement in the depression in such cases gradually extending upwards into the higher strata characterized by uniform eastward movement when the depression is carried eastwards by that upper current.

Depression of the 8th to the 11th March.—Fine weather with much higher temperature than usual obtained from the 1st to the 7th in North-Western India. Pressure changed briskly to rapidly, but somewhat irregularly from day to day. The chief feature during this period was a moderate excess of pressure in Baluchistan and a moderate to considerable excess in North-Eastern and Central India. Pressure gave way rapidly on the 6th and 7th in Northern and Central India and a shallow depression was shown in Sind on the 8th and 9th. The pressure changes from day to day and the variations from the normal indicate that the very feeble disturbance was transmitted eastward during the next three days, although the charts show no closed low pressure area during this period corresponding to the shallow area of deficient pressure shown by the chart of pressure abnormals. The central disturbance was in Rajputana on the 10th, Central India on the 11th, Bihar and West Bengal on the 12th, and East Bengal on the 13th.

The general disturbance appears to have extended over the Persian area, as pressure was more or less below the mean of the month from the 8th to the 12th. It was lowest at Baghdad on the 11th, Bushire on the 10th, Jask on the 9th, and Muscat on the 11th. Hence the disturbance did not form in the Persian area and advance as a definite depression eastwards from that area across Northern India. This is further confirmed by the distribution and character of the precipitation accompanying the storm. It commenced on the 8th over the whole area including Baluchistan, Sind, Rajputana, Central India and the Punjab and continued until the 11th. It extended into the Central Provinces on the 9th, the North-Western Provinces on the 10th, Bihar and West Bengal on the 11th, and East Bengal and Assam on the 12th. The following table gives the mean rainfall in

Northern and Central India day by day from the 8th to the 12th :—

Division.	Average actual rainfall during 24 hours preceding 8 A.M. of March.					Total 8th to 12th March.
	8th	9th.	10th.	11th.	12th.	
	Inch.	Inch.	Inch.	Inch.	Inch.	Inch.
Baluchistan . . .	0·12	0·30	0·17	0·06	0·05	0·70
Sind	0·02	0·08	0·30	0	0	0·40
Rajputana . . .	0·09	0·14	0·12	0·08	0	0·43
Punjab	0·01	0·12	0·22	0·16	0	0·51
Central India . . .	0·02	0·06	0·08	0·10	0·01	0·27
Central Provinces . .	0	0·05	0·11	0·10	0	0·26
North-Western Provinces and Oudh.	0	0	0·04	0·14	0·01	0·19
Bihar	0	0	0·01	0·02	0	0·03
Chota Nagpur . . .	0	0	0	0·16	0·01	0·17
Bengal	0	0	0	0·01	0·10	0·11
Assam	0·02	0	0·01	0·10	0·39	0·52

A noteworthy feature of the storm were the numerous severe hailstorms which occurred in Rajputana, Central India and the Punjab (chiefly the hill districts), which in some cases more or less completely destroyed the standing crops.

The passage of the disturbance across Bengal initiated a period of showery weather in Assam which lasted until the 21st or 22nd.

The disturbance hence originated during a period of unusually high temperature in the area including North-Western India, Baluchistan and Persia. The observations appear to indicate that the depression which affected India formed in Sind, and after being stationary for upwards of 48 hours, was transmitted eastwards as an area of slightly deficient pressure and shown chiefly by a local reduction of pressure in the area through which it was passing.

Disturbance of the 14th and the 15th March.—Pressure was normal in amount in Baluchistan and North-Western India on the 12th. It gave way briskly to rapidly during the next 24 hours in Sind and Rajputana and the South and Central Punjab, and a shallow depression (in which pressure was a tenth of an inch below the normal), lay over Upper Sind, the South-West Punjab, and British Baluchistan on the morning of the 13th. The comparison of the observations taken in that area and in Persia and at Baghdad indicates that the depression formed in Upper Sind and the South-West Punjab.

The pressure changes of the next four days are unusually interesting, as they are an example of the largest and most general modifications of pressure which occur in the Indian area. Pressure gave way with unusual rapidity during the 24 hours preceding 8 A.M. of the 14th over the whole Indian area. It was practically unchanged during the next 24 hours and then increased rapidly on the 16th and 17th, so that on the morning of the 18th pressure was again approximately normal in amount over nearly the whole area.

The following gives the daily changes of pressure for the provinces of India and also for a number of stations in Extra-India for the period from the 14th to the 18th :—

Province or Station.	Mean pressure change in 24 hours preceding 8 A.M. of March.				
	14th.	15th.	16th.	17th.	18th.
	"	"	"	"	"
Punjab	−·185	+·014	+·122	+·102	+·026
Sind	−·114	+·020	+·110	+·053	+·044
Rajputana . . .	−·149	+·017	+·072	+·103	+·014
North-Western Provinces and Oudh.	−·140	+·026	+·041	+·074	+·042
Central India . . .	−·144	+·012	+·052	+·062	+·026
Bihar and Chota Nagpur .	−·131	+·016	+·007	+·095	+·038
Bengal	−·096	+·003	+·014	+·057	+·067
Central Provinces . .	−·125	−·012	+·035	+·079	+·007
Bombay	−·067	+·008	+·020	+·001	+·030
Madras	−·062	−·001	+·021	+·025	+·061
Burma	−·075	+·012	+·014	+·033	+·032
Quetta	−·150	+·084	+·108	+·018	+·016
Leh	−·140	+·028	+·011	+·004	+·195
Kailang . . .	−·054	−·031	+·036	+·020	+·068
Gnatong . . .	−·071	+·054	+·036	+·085	−·018
Gilgit	−·200	+·040	+·140	+·060	+·120
Murree	−·194	+·027	+·097	+·070	+·058
Ispahan	−·060	−·040	+·010	+·100	−·190
Muscat	−·093	+·008	+·008	−·026	+·013
Perim	−·004	−·014	−·007	−·007	+·021
Aden	−·012	+·002	−·006	0	+·032
Baghdad . . .	+·050	−·131	−·251	+·153	−·044
Zanzibar . . .	+·026	+·023	−·037	−·020	+·025
Seychelles . . .	—·027	—·001	+·030	—·007	+·012
Ceylon (Colombo) . .	−·038	−·015	+·009	+·006	+·044
Penang	—·100	0	+·010	—·003	+·055
Singapore . . .	—·050	—·012	—.014	—·013	+·064
Kashgar . . .	+·300	−·030	+·270	−·300	0

An examination of the whole of the data for the Indian and Persian land areas shows most clearly that the large general reduction of pressure was not due to the horizontal transmission of a wave of low pressure across the Indian area or of a large cyclonic disturbance. The changes occurred simultaneously over the whole of India and diminished in amount in all directions from Northern India as the central area of the pressure movement.

The increase as well as the decrease of pressure in this oscillatory change was simultaneous over the Indian land area and the former change was, in fact, in all respects, a movement inverse to the decrease, being greatest where the latter was greatest and *vice versâ*. The decrease was also nearly as large in actual amount (and larger relatively to the total or actual pressure) at the high level stations of Leh, Gilgit and Murree, as at the plains stations in Northern India.

The facts hence suggest that the pressure changes during the period were due to a vertical oscillatory movement (*i. e.*, of expansion and condensation), such as are of frequent occurrence on the small scale in India. They also indicate that they affect a great height of the atmosphere, extending upwards probably beyond the region of the highest cirrus. The oscillation under discussion was one of the largest which has occurred during the past three years.

This general pressure change gave very uniform pressure over the Punjab on the 14th. The shallow depression in the South Punjab on the 13th was again shown in the chart of the 15th unchanged in position. It advanced eastwards during the next 24 hours and was in the South-East Punjab on the morning of the 16th. Numerous thunderstorms occurred in the Punjab from the 14th to the 16th, and the northern districts, including Rawalpindi, Hazara and Peshawar received heavy rain. A shallow depression formed in North Bengal and Bihar on the 14th and 15th. It was unchanged in position on the 16th and 17th and then filled up. Assam received moderately heavy rain during this period.

Feeble disturbance of the 19th to the 21st March.—The pressure changes were very irregular in Central India and the northern half of the Peninsula on the 17th and 18th. Numerous thunderstorms, accompanied in many cases by hail, occurred in the Central Provinces and Bengal on the 18th and two following days. Skies cleared on the morning of the 20th in that area. Showery weather, however, continued in Assam, Sikkim and East Bengal until the 22nd, when a rapid local increase of pressure established high pressure conditions in Assam and North Bengal, which continued until the 25th.

Disturbance of the 24th and the 25th March.—Weather was slightly disturbed in Persia on the 22nd, 23rd and 24th, but the observations show that this was not due to the formation of a cold weather cyclonic storm in that area. It was, in fact, apparently part of an extensive but feeble disturbance in North-Western India and the Persian area due to hot weather actions and conditions. Pressure decreased locally in the South-West Punjab and Upper Sind on the 21st, and a shallow depression was shown in that area on the chart of the 22nd. It intensified slightly during the next 24 hours, and cloudy showery weather set in over Baluchistan and the North Punjab.

The pressure changes of the next 24 hours were exceedingly irregular; but the chief feature in the pressure distribution of the 24th was an area in Upper India in which pressure was nearly quarter of an inch in defect. It included the stations of Quetta, Dera Ismail Khan, Jacobabad, and probably Mooltan (the barometric observations at 8 A.M. given in the daily weather report being almost certainly wrong). Baluchistan and the North Punjab had again received numerous showers. The depression advanced eastwards into the East Punjab and filled up partially during the next 24 hours. The North and East Punjab were visited by series of thunderstorms and hailstorms during the previous 24 hours.

A very rapid recovery of pressure in the Punjab during the next 24 hours established high pressure conditions for a short period in that area. The pressure changes were large and rapid during the remainder of the month. Fine dry weather, however, held steadily, and at the end of the month the pressure conditions were practically normal. The disturbance of the 21st to the 25th was of the ordinary hot weather type. It formed in the West Punjab on the 22nd and was stationary until the 24th, and thence advanced across the Central Punjab into the East Punjab on the morning of the 25th and filled up rapidly in the evening of that day. The following gives a statement of the rainfall due to the disturbance :—

METEOROLOGICAL DIVISION.	AVERAGE ACTUAL RAINFALL DURING 24 HOURS PRECEDING 8 A.M. OF MARCH.					Total 21st to 25th March.
	21st.	22nd.	23rd.	24th.	25th.	
	Inch.	Inch.	Inch.	Inch.	Inch.	Inches.
Baluchistan	0·01	0·06	0·16	0 12	0·01	0·36
Punjab (West) . .	0	0	0·03	0·39	0·11	0·53
,, (North-West) .	0	0	0·20	0·52	0·46	1·18
,, (Central) . .	0	0	0	0·04	0·05	0·09
,, (Submontane) .	0	0	0	0·10	0·18	0·28
,, (South) . .	0	0	0	0·01	0·03	0·04
,, (Hill Districts) .	0	0	0	0·28	0·59	0·87

Summary of the Reports of the weather and snowfall in the Mountain Districts to the North and North-West of India.

I—THE AFGHAN MOUNTAINS.

(1) *Khyber District.*—No snow fell on the Khyber range during the month.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Hills adjacent to Murree.*—No snow fell at this station or at Kahuta during the month.

(2) *Hazara District.*—The Deputy Commissioner has sent the following report of the weather in this district:—"The weather was unusually dry and warm from the 1st to the 8th. Rain began on the 9th and continued with short breaks until the 15th. The falls were heavy and in some cases accompanied by hail. Slight showers fell on the 16th and 18th, and almost continuous rain from the 23rd to 26th. Light falls of snow were received on the higher ranges during the rain of the 23rd to the 26th. The snowfall of the past season has been unusually small in amount and is melting very rapidly."

(3) *Chamba.*—The following report, dated 22nd April, has been received from the Deputy Conservator of Forests, Chamba Division:—"No snow fell during the first fortnight of March. A slight sprinkling was received down to 7,000 feet on the 14th. A storm on the 24th and 25th gave a moderate to heavy fall on the higher ranges. The snow line descended to 5,000 feet in the inner and to 6,000 feet in the outer ranges during the storm. The fall at Kalatop was 4 inches and at Thanela 5 inches. The weather was colder than usual and the snow hence melted very slowly. The snow accumulation appears to be heavy on the higher and inner ranges. The snow slides formed in the interior are generally smaller than was the case last year. At high elevations crops have suffered from being buried in snow for a long period, and in other places hailstorms have done much damage. The past winter resembles that of 1890-91 more closely than any other subsequent winter. The amount of snow appears to be much the same as in 1890-91, but the falls began earlier in the present year and were particularly heavy in the inner ranges at the commencement of the season."

(4) *Kulu.*—The following report has been received from the Assistant Commissioner, Kulu:—"There were falls of snow on the 11th, 15th, 16th, 20th, 24th and 25th, in the Kulu Tahsil, and on the 10th, 11th, 12th, 16th, 20th, 24th, 25th and 26th on the higher passes of the Plach Tahsil. The falls during the month were not general in the sub-division, but occurred only on the higher ranges. There has been much hot sunshine, and the snow has hence melted rapidly. It was cold only on rainy days. A few Lahoulis have succeeded in crossing the Rotang pass."

The following table gives the reported depth of snow on the higher passes of the Kulu sub-division at the end of the month and at the corresponding periods of the past four years for comparison:—

Tahsil.	Name of Pass.	Height above sea-level in feet.	Depth of snow on 25th of March 1895.	March 1894.	March 1893.	March 1892.	March 1891.
			Feet.	Feet.	Feet.	Feet.	Feet.
Kulu.	Rotang	13,000	17	16	27	5	13
	Hamta	14,500	10	15	25	4	13
	Barsai	?	6	11	14	3	9
	Chander Khani	?	5	11	26	4	14
	Bujadhar	?	5	10	15½	1	10
	Lohri Achri	?	6	10	12	1	8
	Bhubbu	10,000	5	6	12	1	9
	Pastari	?	5	4	10	2	9
	Majhang	?	...	1½	6	?	5
	Srikhand	15,000	20	20	40	10	39
Plach.	Chul	?	6	6	20	1	9½
	Maghin	?	5	8	19	1	11
	Tikar	?	5	8	14	1	9
	Dundku	?	6	9	15	2	15
	Nohnu	?	2	3	6	1	7
	Ramgarh	?	...	½	?	?	½
	Jalori	10,500	6	8	14	1	7
	Raghopur	?	7	10	14	1	8
	Lamtri	?	5	7	15	1	8
	Sakiran	?	5	8	15	2	13
	Supakun	?	6	10	15	2	23
	Basleo	11,000	6	8	15	1	9
	Plach	?	8	9	20	2	11
	Tirath	?	11	12	25	3	15
	Gargarasan	...	12	...	...	...	...

(5) *Lahoul.*—The Superintendent of the Kailang observatory has sent the following account of the winter in that district, dated the 10th April:—

"The following is a statement of the snowfall at Kailang during the winter as registered at the observatory :—

Month.	Number of days on which snow fell.	Total snow-fall of period.	
		Ft.	Ins.
December 1894	7	4	0
January 1895	11	3	6
February ,, ...	6	2	0
March ,, ...	13	3	6
April ,, 1st to 15th	4	1	6
TOTAL .	41	14	6

The winter set in unusually early, heavy falls of snow having occurred even in November. The Rotang Pass, which generally remains open to the beginning of January, was closed before the middle of December.

The winter was characterized by less snow than usual in this district, but the cold was intense and persistent. As early as the 18th December the minimum thermometer came down to zero, and on the 26th December it fell to 4° below zero. This has never before happened in December since the establishment of the observatory at Kailang. The weather at present is cloudy and very cold.

The northern slopes of the hills are still thickly covered with snow down to the bottom of the valley (10,000 feet), and *the southern* slopes to about 11,000 feet. The cold is at present (10th April) very sharp, and the snow is hence disappearing very slowly. The passes which lead into Ladakh and Zanskar are still closed.

I have no reliable information as to the depth of snow on the surrounding hills and passes, but judging from the prevailing cold the snow on them will melt more slowly than in other years, and this may hence affect the temperature in the plains.

The natives consider this winter an exceptionally cold one with little snow which is disappearing unusually slowly."

(6) *Upper Sutlej Valley and neighbouring mountains.*—The Deputy Conservator of Forests, Bushahr Division, has sent the following full and interesting account of the snowfall in that district during the past winter :—"The following is a brief statement of the chief snowstorms and weather in this district from the 15th December 1894 to the 15th of March 1895, in the Sutlej Valley.

December.—A heavy fall of snow accompanied by a northerly wind occurred on the 15th. The cold was intense. The snow line came down to 5,750 feet elevation. Snow fell on the 23rd on the higher slopes as low as 9,000 feet, while at lower elevations as low as 5,000 feet rain and snow fell. There was very little wind with this storm. Another very heavy fall occurred on the 27th descending to 5,750 feet. It commenced with a strong southerly wind.. Slight snow fell on the 31st covering slopes down to 5,750 feet. A northerly wind prevailed during the storm.

January.—Snow fell as low as 7,000 feet on the 1st accompanied by a north-east wind. Snowstorms accompanied by south-easterly and northerly winds occurred on the 4th, 7th, 10th, 11th, 17th, 21st, 22nd, 30th and 31st. On the 21st the thermometer during the snowstorm stood at 32°. Rain followed the snow on the 22nd.

February.—During February snow fell on the 1st, 2nd, 3rd and 15th. On the 1st the snowfall at Kilba was 3 inches deep, and on the 2nd, 15 inches deep.

March.—In March snow fell on the 8th, 11th, 14th and 15th with wind from north-east. Rain and snow fell on the 11th, 14th and 15th. At a height of 8,000 feet below the Shatal Pass leading into the Pabar Valley, the depth of snow on the 15th was 5 feet. On the 11th, 14th and 15th both rain and snow fell. On the latter date the rainfall was heavy. The depth of snow at 10,000 feet elevation on the Cis-Sutlej range in the middle of March was 14 feet. During many of the falls of snow the wind blew from all quarters, bearing from north-east to south-west. The snowstorms of January and February were, as far as could be observed, general over the whole of the mountains on both sides of the Sutlej Kanáwar. In the intervals between the snowstorms of January and February the weather was frosty with cloudless skies. Later on in March the weather was warmer, but high north-easterly winds off the Kailas snow-covered slopes prevailed. On the higher passes of the district, *e. g.*, the Buldar Pass from the Babeh Valley into Spitti, the depth of snow is reported to be over 20 feet, and on the Rupin Pass from the Baspa Valley into the Rupin Valley 22 feet deep. On the date I am writing (25th April 1895) the snow line on the northern slopes of the Upper Sutlej Valley is 11,000 feet.

The early and late snowstorms have done much damage to crops on the higher slopes above 8,000 feet, and the sheep pens and huts have suffered considerably by the heavy snow accumulation. The people say that the snowfall commenced much earlier than usual, and that during March the falls were heavier and more continuous than usual."

Upper Sutlej Valley (Poo).—The Superintendent of the meteorological observatory at Poo has sent the following information of the snowfall in that part of the Sutlej Valley.

"The following is a statement of the snowfall at Poo :—

Period of Snowstorm.	Depth of snow in feet and inches. Feet.	Inches.
December 25th and 29th to 31st	0	9
January 1st to 3rd	0	5
„ 5th to 13th	3	0
„ 15th	0	2
„ 20th to 25th	1	4
„ 31st to 2nd February	1	0
February 6th and 7th	0	3
March 15th to 17th	0	10
„ 24th to 26th	2	4
TOTAL	10	1

At the beginning of February the snow was lying to a depth of 3 ft. 6 inches at Poo (elevation 9,050 feet). The winter has been unusually cold throughout. The natives consider that the winter has been a good one with larger amounts of snow than usual."

III.—THE NORTH-WESTERN PROVINCES' HIMALAYAS.

Kumaun.—The following gives the periods and amount of snowfall on selected passes in the three pattis or subdivisions of the district :—

Name of patti.	Date.	Depth of snow in feet and inches.	
Malla Danpur	5th and 7th	1	0
	16th	0	6
	25th	0	10
	TOTAL	2	4
Malla Johar	11th	3	0
	21st	2	0
	31st	1	9
	TOTAL	6	9
Mallas Byans, Chandans and Darma	3rd	1	0
	10th	1	0
	13th	0	6
	TOTAL	2	6

The fall is said by the natives of the district to be heavier than in the preceding winter.

IV.—ASSAM HIMALAYAS.

The information for this area is as usual very scanty. The following gives the only report received up to date respecting this area.

North Lakhimpur District.—No snow has been observed this season on the lower slopes of the Himalayas. The Dufflas report that the snowfall on the higher ranges has been much the same as usual.

Summary of the snowfall information.—The reports confirm the inferences given in the February Review. It is certain that the snowfall of the past winter has been considerably below the normal in Baluchistan and Afghanistan. The winter commenced unusually early in the Kashmir and Punjab Himalayas, but as the season advanced it diminished in severity, and it is almost certain that the snowfall on the higher elevations in February and March was not much heavier than usual. The accumulation at the beginning of March was almost certainly larger than usual on the higher ranges to the north and west of the Punjab. The snow has, however, melted faster than usual, except, perhaps, on the highest ranges, and the snow line at the end of March was between 10,000 and 12,000 feet or probably slightly higher than usual. There is hence no large abnormal accumulation of snow this year in this area. The distribution of the snow throughout the season in Kumaun and Garhwal was similar to that of the Punjab Himalayas, but less in amount. There has been no heavy snowfall in Ladakh, such as there was last year, but the winter has been unusually cold.

The snowfall in Sikkim and the Assam Himalayas is probably somewhat less than usual, but the reports are as yet too scanty to enable a correct estimate to be formed.

Summary of special storm Reports.

The following gives a brief summary of the more important storms of which special reports were received from observers during the month :—

2nd.—Thunderstorm at Simla. Duststorm and thunderstorm at Jeypore. Storm began at 6-10 P.M.

7th.—Thunderstorm at Pachpadra at 1-30 P.M.

8th.—Dust storm at Jeypore at 6 P.M. Thunderstorm at Mount Abu from 2 P.M. to 5-30 P.M. Thunderstorm at Khandwa at 10 P.M.

9th.—Thunderstorm at Indore at 10-10 A.M. Thunderstorm at Khandwa at 9 P.M.

9th.—Severe hailstorm at Nagpur at 10 P.M. Storm came from north. Duststorm followed by a thunderstorm at Jubbulpore. Storm came down from north-west. Thunderstorm at Allahabad. Storm lasted from 7 P.M. to midnight. Thunderstorm at Cawnpore from 3-20 P.M. to 4-30 P.M. Storm came from west. Severe hailstorm at Raipur from 7-45 P.M. to 8 P.M.

10th.—Thunderstorm at Lahore from 3-30 P.M. to 4-30 P.M. Thunderstorm with hail at Simla from 2 P.M. to 2-45 P.M.

16th.—Thunderstorm at Khandwa at 10 P.M. Duststorm at Burdwan at 3-45 P.M.

17th.—Thunderstorm at Barisal at 3-45 P.M.

18th.—Thunderstorm at Nagpur from 3 to 3-30 P.M. Duststorm at Raipur at 5-20 P. M. Thunderstorm with hail at Jubbulpore from noon to 1 P.M. Storm came from north-west.

19th.—Severe thunderstorm with hail at Hyderabad (Deccan) from 10 P.M. to 11-30 P.M.

20th.—Thunderstorm at Calcutta from 7 P.M. to 8 P.M. Thunderstorm at Barisal from 9 P.M. to 9-30 P.M.

21st.—Hailstorm at Barisal at 8-45 P.M.

24th.—Hailstorm at Rawalpindi. Storm began at 6-30 P.M. and came from north-west.

25th.—Duststorm at Jubbulpore at 4-50 P.M.

The following gives a brief summary of the more important hailstorms in Kashmir, Assam, Rajputana and Central India during the month of which reports have been received from the Political Agents or other local authorities:—

4th March.—Severe hailstorm at Sarangpur and Padhana in the Dewas State. It caused great damage to the opium crop.

9th.—Hailstorm at Dewas at 8-45 A.M.

10th.—Hail storm in four villages of Nawab Baroda State. The stones were of the size of 'bullets.' The estimated damage to the crops is four annas. Hailstorm at Jeypore at 8-35 A.M. The stones were of the size of wild plum. Hailstorms at Chomu in the Jeypore State at 8 P.M. The stones were reported to be of the size of lemons. Hailstorms in the Bhopal State. The crops in 30 villages of Dewas Parganah suffered severely. The injury was estimated at 8 to 12 annas in amount.

11th.—Severe hailstorm in a small strip of country in the Lakhimpur district. The storm came from north-west and inflicted great injury on the tea plants of the Talup and Khobang Gardens. "Not a leaf was left on the bushes of the Khobang Tea Estate." 44 cooly houses were blown down by the wind.

16th.—Severe hailstorm at Poonch in Kashmir at 4 P.M.

17th.—Hailstorm at 28 villages in the Sunamganj sub-division of the Sylhet district. The injury to crops was slight, averaging about 2 annas.

20th.—Severe hailstorm in the Bagerhat sub-division of the Khulna district. The storm came from north-west.

25th.—Hailstorm at Poonch in Kashmir at 10 A.M. Hailstorm at Kishtwar in Kashmir at 1 P.M. Some of the stones are reported to have weighed several ounces, the heaviest weighing eight ounces. The storms occurred about 4 P.M.

31st.—Severe hailstorm at 18 villages in the Sunamganj sub-division in the Sylhet district. The mango crop was almost completely destroyed.

Brief Summary of the Weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—Winds were slightly stronger than usual in this area from the 1st to the 5th. They were very strong in the extreme south of the Red Sea from the 3rd to the 10th. The S. S. *Dictator* in Lat. 14°50′N. and Long. 42°E. on the 7th had south winds force 7. Winds decreased in the Arabian Sea from the 5th, when they averaged 3·5 in force, to the 9th and 10th when they were of mean force 2·6. They increased on the 13th and 14th, and were slightly above their normal strength during the next three or four days. Weather was cloudy and slightly unsettled with occasional rain in the Persian Gulf and Gulf of Oman and off the Mekran Coast from the 11th to the 21st. North-west winds of force 6 and 7 were experienced by the S. S. *Pemba* and *Henry Balckow* on the 14th in the Persian Gulf. The S. S. *Chanda* had squally weather on the 17th and the S. S. *Pemba* on the 19th in the Persian Gulf, and the S. S. *Chanda* showery squally weather in the Gulf of Oman near Jask and Muscat on the 20th, 21st and 22nd. Weather improved on the 23rd in the Persian Gulf and was fine with moderate north-west winds during the remainder of the month. Winds were of normal strength in the centre and south of the Arabian Sea from the 20th to the end of month and ranged in direction between north and north-east. Weather was fine with light to moderate fresh winds (ranging in force from 2 to 5) and sea slight to moderate.

Bay of Bengal.—Fine and generally clear weather prevailed over the Bay during the month. Light and un-

steady southerly winds obtained off the Bengal Coast, but in the centre and south of the Bay north-east winds held steadily and were strongest in the south. The general strength of the air movement in the Bay varied slightly during the month. It was normal on the 1st and decreased to the 4th, when it was feeble, averaging only 2·0. It was normal in strength from the 7th to 13th, and was feeble from the 14th to the 16th, averaging 2·3. It was slightly stronger than the normal from the 17th to the 22nd and weaker from the 23rd to the 30th, but the variations were very small, and the air movement was hence even steadier than usual during this period except at the head of the Bay.

Weather was on the other hand occasionally squally with heavy rain at the entrance to the Bay and over the equatorial belt. The ship *Eusemere* had a deluge of rain on the 1st in Lat. 1°·57′S. and Long. 84°·57′E., and the ship *Dynomene* in Lat. 2°·58′S. and Long. 91°·12′E. at 8 A.M. of the 2nd had heavy incessant rain in the early morning. Northerly winds extended as far as Lat. 9°S. at the beginning of the month. Squally weather continued to be reported by vessels passing across that area during the greater part of the month. Thus four out of five vessels in it had squalls or heavy rain on the 20th, and again on the 23rd and 24th. One vessel reported heavy thunderstorms in about Lat. 1°S. Long. 83°E. on those days. Weather improved on the 25th and 26th, and fine weather prevailed over the entrance of the Bay during the remainder of the month.

Temperature of the Air.

The mean day or maximum temperature of the month was below the normal over the greater part of India. It was in slight excess in Southern India, the West Coast districts, Lower Burma, East Bengal, the South Punjab and the adjacent districts of Sind and Rajputana. The excess in these areas was generally less than 1° in amount, but was large at Sirsa (4°·6) and at Cochin (2°·1). The deficiency was more than 2° in amount in the area defined by the stations, for which comparative data are given below :—

Province.	Station.	Mean maximum temperature. Actual, March 1895.	Normal, March.	Variation of actual from normal.
		°	°	°
North-Western Provinces and Oudh.	Benares	90·2	93·3	−3·1
	Allahabad	90·4	93·3	−2·9
	Lucknow	89·1	91·4	−2·3
Central India	Nowgong	89·4	93·3	−3·9
	Sutna	88·4	91·6	−3·2
Central Provinces	Jubbulpore	89·0	93·1	−4·1
	Hoshangabad	92·4	96·1	−3·7
	Saugor	88·8	92·3	−3·5
	Seoni	90·3	93·5	−3·2
	Nagpur	95·6	98·5	−2·9

The mean maximum temperature of the month was also more than 2° below the normal locally at Sibsagar (−2°·1), Peshawar (−3°·1) and Dera Ismail Khan (−2°·8).

The mean day temperature of the month was slightly higher than usual at the hill stations in Upper India and at Quetta.

The mean night or minimum temperature was above the normal in Northern India and the western half of the Peninsula. The excess was more than 2° in two areas, the first including nearly the whole of the Punjab and the other the Bombay Deccan. The following gives comparative data for these areas :—

Province.	Station.	Mean minimum temperature. Actual, March 1895.	Normal, March.	Variation of actual from normal.
		°	°	°
Punjab	Lahore	58·7	54·8	+3·9
	Mooltan	61·1	58·0	+3·1
	Rawalpindi	51·9	49·0	+2·9
	Peshawar	54·3	51·7	+2·6
	Sirsa	59·3	57·1	+2·2
Bombay Deccan	Malegaon	65·9	63·6	+2·3
	Sholapur	70·8	68·8	+2·0

The mean minimum temperature of the month was below the normal in the remainder of India. The deficiency was greatest in Orissa and the Madras coast districts and was absolutely greatest in amount at Madras (−2°·8), Cocanada (−2°·7), Sambalpur (−2°·7) and Cuttack (−2°·0).

The mean night temperature was in somewhat larger excess than the day temperature at the hill stations of Upper India and at Quetta.

The variations of the mean temperature conditions of the month from the normal were generally small in amount. The mean temperature of the month was in slight excess in East and North Bengal, the Punjab, Upper Sind, Baluchistan, and the western half of the Peninsula.

The excess was greatest at Sirsa (+3°·4), Mooltan (+1°·9), and Cochin and Lahore (+1°·8). The mean temperature of the month was below the normal over the remainder of India, generally by small amounts. The deficiency exceeded 2° in an area represented by the stations, for which data are given below :—

PROVINCE.	STATION.	MEAN DAILY TEMPERATURE.		
		Actual, March 1895.	Normal, March.	Variation of actual from normal.
		°	°	°
CENTRAL PROVINCES .	Jubbulpore .	74·5	77·1	−2·6
	Saugor . .	76·3	78·4	−2·1
	Seoni . .	76·4	78·5	−2·1
	Nagpur . .	81·1	83·1	−2·0

The temperature conditions of the month hence did not differ to any large extent from the normal. The most noteworthy features were :—

1st.—A moderate deficiency in the western half of the Central Provinces, chiefly due to decreased day temperature.

2nd.—A slight to moderate deficiency in Madras, greatest in the Coromandel coast districts, due mainly to diminished night temperature.

3rd.—Increased temperature in the Malabar coast districts.

4th.—Increased temperature in the South Punjab, more especially at Sirsa and Mooltan.

The following table gives temperature data for 51 meteorological divisions of the empire :—

PROVINCE.	DIVISION.	ACTUAL TEMPERATURE.					VARIATION FROM NORMAL OF MONTH OF		
		Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
BURMA . .	Tenasserim	93·8	71·0	82·4	22·8	34·1	−0·1	+0·9	−1·0
	Lower Burma	92·0	72·3	82·2	19·7	28·2	−0·1	+0·4	−0·5
	Central do.	97·7	67·0	82·4	30·7	46·5	−1·2	+0·2	−1·4
	Upper do.	90·1	60·6	75·4	29·6	43·8	?	?	?
	Arakan	88·5	67·5	78·0	21·0	31·0	−0·4	−1·3	+0·9
BENGAL AND ASSAM	Eastern Bengal	87·0	65·9	76·5	21·0	34·3	+0·9	−0·2	+1·1
	Assam (Surma)	86·6	63·1	74·9	23·5	34·3	+1·3	+0·3	+1·0
	Do. (Brahmaputra) . . .	81·6	62·2	71·9	19·4	31·9	−1·3	−0·1	−1·2
	Deltaic Bengal	91·4	68·2	79·8	23·2	38·4	−0·1	−0·9	+0·8
	Central do.	91·4	65·3	78·4	26·1	41·1	−0·5	−0·4	−0·1
	North do.	87·0	61·5	74·2	25·5	39·8	−0·1	+1·6	−1·7
	Orissa	90·1	71·6	80·9	18·5	31·9	+0·6	−1·7	+2·3
	Chota Nagpur	87·2	63·0	75·2	24·2	40·1	−0·8	−0·7	−0·1
	Bihar (South)	90·7	65·3	78·1	25·3	40·8	−1·9	+0·9	−2·8
	Do. (North)	88·9	62·3	75·6	26·6	41·9	−0·8	+1·1	−1·9
NORTH-WESTERN PROVINCES AND OUDH.	North-Western Provinces (East) .	90·1	62·5	76·3	27·5	43·4	−2·4	+0·2	−2·6
	Oudh (South)	89·1	60·0	74·5	29·1	44·3	−2·3	−0·6	−1·7
	Do. (North)	88·4	61·5	75·0	26·9	41·4	?	?	?
	North-Western Provinces (Central) .	89·2	60·8	75·0	28·4	43·6	?	?	?
	Do. do. (West) .	90·9	65·5	78·2	25·4	42·7	−1·5	+1·3	−2·8
	Do. do. (Submontane)	84·6	58·0	71·3	26·7	41·4	−0·3	+0·8	−1·1
PUNJAB . .	Punjab (South)	88·5	61·2	74·8	27·3	42·9	+1·5	+1·6	−0·1
	Do. (Central)	83·3	58·7	71·0	24·6	38·1	−0·4	+3·9	−4·3
	Do. (Submontane) . . .	83·8	58·5	71·2	25·3	40·6	−2·0	+1·3	−3·3
	Do. (Hill Districts) . . .	56·1	43·2	49·7	12·8	34·1	+0·1	+0·8	−0·7
	Do. (North-West) . . .	76·4	53·8	65·1	22·6	39·2	−0·6	+2·3	−2·9
	Do. (West)	84·6	59·0	71·8	25·7	40·7	−0·5	+2·5	−3·0
BOMBAY AND MALABAR COAST DISTRICTS (MADRAS).	Malabar	90·3	76·9	83·7	13·4	19·8	+1·1	+1·0	+0·1
	Madras (South Central) . . .	98·0	69·8	83·9	28·3	41·9	+0·6	−0·5	+1·1
	Coorg	83·4	62·8	73·1	20·6	32·3	−1·1	+1·6	−2·7
	Mysore	92·2	66·2	79·2	26·0	36·6	+0·8	−0·5	+1·3
	Konkan	86·5	74·0	80·3	12·5	19·1	+0·1	+0·4	−0·3
	Bombay Deccan	97·5	67·7	82·6	29·6	40·5	+0·2	+1·0	−0·8
	Hyderabad (North) . . .	97·1	68·9	83·0	28·3	40·5	?	?	?
	Khandesh	95·9	65·6	80·8	30·4	44·3	−0·2	+2·3	−2·5

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Variation from normal of month of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Central Provinces and Berar	Berar	97·3	68·6	83·0	28·7	42·7	−1·3	+1·4	−2·7
	Central Provinces (West)	95·1	65·6	80·4	29·5	43·6	−2·3	−0·1	−2·2
	Do. (Central)	91·7	63·4	77·5	28·3	43·3	−3·2	−0·7	−2·5
	Do. (East)	95·4	66·1	80·8	29·3	45·3	−1·4	−1·9	+0·5
Bombay (North)	Gujarat	96·4	67·2	81·9	29·2	42·9	+0·2	+0·5	−0·3
	Kathiawar	90·1	63·7	76·9	26·4	41·4	−2·1	−1·0	−1·1
	Sind and Cutch	89·7	63·6	76·6	26·1	41·8	−0·6	−0·2	−0·4
Rajputana and Central India.	Central India (East)	88·9	61·2	75·1	27·8	43·8	−3·6	+0·3	−3·9
	Rajputana (East), Central India (West)	90·6	60·8	75·7	29·8	46·0	−0·7	−0·2	−0·5
	Do. (West)	92·8	61·3	77·1	31·6	47·6	+1·4	−2·0	+3·4
Madras	East Coast (North)	89·8	73·1	81·5	16·7	25·0	0	−1·9	+1·9
	Hyderabad (South)	97·4	71·2	84·3	26·1	36·2	−2·1	−0·7	−1·4
	Madras (Central)	100·1	72·1	86·2	28·0	39·2	−0·5	−0·8	+0·3
	East Coast (Central)	91·9	70·7	81·3	21·2	31·6	−1·8	−1·2	−0·6
	Do. (South)	90·8	71·6	81·2	19·2	28·4	−0·4	−1·1	+0·7
	Madras (South)	93·9	74·4	84·2	19·5	28·4	−0·5	−0·4	−0·1

Temperature at the commencement of the month was very largely in excess in North-Western India, due to increased temperature both by day and night, and in moderate defect in the Peninsula, South Bengal and Burma. No large change occurred during the next week, and the temperature conditions of the 8th were similar in general character to those of the 1st. The following gives mean temperature variation data of the 1st and 8th :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of March. 1st.	8th.
	°	°
Burma	−1·0	−1·1
Bengal and Assam	−0·4	+1·4
North-Western Provinces and Oudh	+1·5	+2·4
Punjab	+7·5	+7·2
Sind and Rajputana	+5·2	+6·4
Central India and Gujarat	+2·6	+5·2
Central Provinces and Berar	−0·3	+2·5
Bombay	+0·8	+2·6
Madras	−2.1	−0·6

The following variation data for the 8th illustrate the fact that the increased temperature was almost as largely shown in the night as in the day period, the general rule in the hot weather :—

Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	−0·2	−2·0	−1·1
Bengal and Assam	+2·4	+0·3	+1·4
North-Western Provinces and Oudh.	+3·6	+1·1	+2·4
Punjab	+8·9	+5·5	+7·2
Sind and Rajputana	+7·5	+5·3	+6·4
Central India and Gujarat	+5·0	+5·3	+5·2
Central Provinces and Berar	+2·0	+3·0	+2·5
Bombay	+1·6	+3·6	+2·6
Madras	−0·5	−0·6	−0·6

The weather was disturbed in North-Western and Central India from the 8th to the 12th, and series of dust-storms, hailstorms and thunderstorms occurred in the Punjab, Rajputana and Central India, which reduced temper-

ature largely in that area. The following gives a comparison of the mean temperatures of the 11th and 8th:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of March.		Change of mean temperature from 8th to 11th March.
	11th.	8th.	
	°	°	°
Burma	+0·1	−1·1	+ 1·2
Bengal and Assam	+0·8	+1·4	− 0·6
North-Western Provinces and Oudh.	−2·6	+2·4	− 5·0
Punjab	−5·5	+7·2	−12·7
Sind and Rajputana	−4·7	+6·4	−11·1
Central India and Gujarat	−2·8	+5·2	− 8·0
Central Provinces and Berar	−3·0	+2·5	− 5·5
Bombay	+0·3	+2·6	− 2·3
Madras	+0·4	−0·6	+ 1·0
Quetta (Baluchistan)	−5·5	+8·8	−14·3

The reduction of temperature was hence greatest in the Punjab and Baluchistan, over the whole of which it probably averaged at least 13°.

Temperature increased rapidly in Northern and Central India during the next three days, and was on the 14th and 15th in slight to moderate general excess. The second disturbance of the month gave showery weather in the North and Central Punjab on the 14th and 15th.

Snow fell down to 9,000 feet in the Kashmir and Punjab Himalayas. A well-marked cool wave advanced from the north-west frontier during the next six days. The progress of this cool wave is clearly shown by the following variation data for the larger provinces in Northern and Central India:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of March.						
	15th.	16th.	17th.	18th.	19th.	20th.	21st.
	°	°	°	°	°	°	°
Baluchistan (Quetta)	−3·9	−11·5	−9·6	−4·0	−0·9	+6·4	−0·9
Punjab	+1·1	−2·0	−2·3	−2·1	−3·5	−2·9	−1·5
Sind and Rajputana	+1·0	−3·5	−5·3	−4·0	−4·4	−4·1	−1·7
North-Western Provinces and Oudh.	+3·4	+2·8	+1·0	−0·6	−3·4	−4·7	−5·1
Central India and Gujarat.	+1·7	−1·1	−6·2	−1·9	−4·9	−5·5	−4·4
Central Provinces and Berar.	+0·9	+2·9	−0·2	−3·0	−6·1	−7·5	−7·7
Bengal and Assam	+1·2	+3·3	+3·6	−1·4	+1·2	−2·9	−7·8
Burma	+0·5	+1·3	+1·6	+4·9	+3·4	+1·0	+1·3

The third disturbance of the month from the 19th to the 21st gave numerous thundershowers in the Central Provinces and North-Eastern India. It further reduced temperature in that area, already below the normal by the advance of the cool wave from the north-west frontier. The period from the 19th to the 22nd was hence unusually cool in North-Eastern and Central India and the Central Provinces, as is shown by the following:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of March.			
	19th.	20th.	21st.	22nd.
	°	°	°	°
Bengal and Assam	+1·2	−2·9	−7·8	−5·7
Central Provinces and Berar	−6·1	−7·5	−7·7	−5·7
Central India and Gujarat	−4·9	−5·5	−4·4	−1·9

The reduction of temperature below the normal during the period in Bengal and the Central Provinces was as large in the night as in the day temperature.

Temperature during this period had increased rapidly in Baluchistan and North-Western India and was in considerable excess on the 23rd. Variation data are given for that day to illustrate the contrast of conditions between North-Western, and North-Eastern and Central India:—

Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
		°	°
Burma	−1·1	−2·2	−1·7
Bengal and Assam	−4·1	−2·9	−3·5
North-Western Provinces and Oudh.	−3·6	+0·1	−1·8
Punjab	−0·1	+5·9	+2·9
Sind and Rajputana	+2·4	+3·8	+3·1
Central India and Gujarat	+0·7	−1·4	−0·4
Central Provinces and Berar	−2·6	−3·3	−3·0
Bombay	+1·5	+0·2	+0·9
Madras	−1·0	−0·3	−0·7

The rapid increase of temperature in Upper India on the 22nd and 23rd was followed by a short period of showery weather in the Punjab on the 24th, 25th and 26th. The area of increased temperature was transferred eastwards across Northern India during the next three days and was followed by a well-defined cool wave. The passage of these

two waves is shown by the following mean temperature variation data for the period, the 24th to 28th :—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MARCH				
	24th.	25th.	26th.	27th.	28th.
	°	°	°	°	°
Punjab	+1·1	−4·5	−6·0	−4·6	−2·1
Sind and Rajputana .	+4·3	−1·1	−4·7	−4·6	−2·6
North-Western Provinces and Oudh.	+0·6	+2·1	−4·7	−5·0	−4·0
Central India and Gujarat	+0·5	−1·5	−6·9	−5·7	−3·3
Central Provinces and Berar.	+0·1	+2·7	−3·0	−5·4	−3·6
Bengal and Assam . .	−0·9	−0·1	+0·9	−2·4	−2·1
Burma	−0·9	−0·4	−0·6	−1·5	−0·1

Temperature increased rapidly during the next two days and was at the end of the month practically normal over nearly the whole area. The following gives variation data for the 31st, which show the conditions obtaining on that date :—

PROVINCE.	VARIATION FROM NORMAL OF		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	0	−1·5	−0·8
Bengal and Assam . .	+1·6	+0·6	+1·1
North-Western Provinces and Oudh.	+0·2	−3·0	−1·4
Punjab	+0·8	−1·0	−0·1
Sind and Rajputana . .	+0·9	−1·6	−0·4
Central India and Gujarat .	−0·9	−3·2	−2·1
Central Provinces and Berar .	−0·4	+1·6	+0·6
Bombay	−0·4	−0·2	−0·3
Madras	+0·1	−2·6	−1·3

The following gives the variations of the mean daily temperature from the normal, week by week, during the month in nine of the larger provinces or political divisions of the Empire :—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF WEEK ENDING MARCH				
	9th.	16th.	23rd.	30th.	For whole month.
	°	°	°	°	°
Burma	−0·2	+0·2	+1·4	−0·8	0
Bengal and Assam . .	+1·2	+0·6	−2·4	−0·7	−0·2
North-Western Provinces and Oudh.	+2·4	−0·2	−2·6	−2·0	−0·4
Punjab	+5·6	−0·6	−1·4	−2·4	+0·9
Sind and Rajputana .	+3·0	−1·6	−2·4	−1·4	−0·2
Central India and Gujarat	+2·1	−1·1	−3·6	−3·0	−1·2
Central Provinces and Berar.	+1·1	−1·0	−4·7	−1·3	−1·3
Bombay	+1·4	+1·4	−0·2	0	+0·7
Madras	−1·9	+0·7	−0·4	−0·7	−0·7

Winds.

Winds were more steady than usual in Sind and the Punjab. The mean diurnal movement in the Punjab was, as usual in March, very light, averaging 3 miles per hour.

Winds were also steadier in the North-Western Provinces, more especially at the eastern stations. Their average velocity was slightly greater and their mean direction more westerly than usual. Winds were also steadier and stronger in Bihar but were less westerly than usual. The following data for three stations illustrate these features :—

STATION.	WIND DIRECTION.		VARIATION FROM NORMAL OF	
	Actual, March 1895.	Normal, March.	Steadiness (actual).	Velocity (percentage).
Meerut	W	N 51° W	+16	+19
Allahabad . . .	N 75° W	N 65° W	+26	+55
Patna	N 52° W	N 74° W	+ 8	+32

Winds were also stronger in Chota Nagpur as represented by the single station of Hazaribagh and were, as in Bihar, somewhat less westerly (and more northerly) than usual in March.

Winds were of normal strength but slightly steadier than usual in Bengal. The westerly element in the winds was abnormally strong in West and Central Bengal, thus showing a larger preponderance of dry land winds than usual in that area. As is invariably the case, the winds at Saugor Island and False Point exhibited the opposite deflection to that obtaining at the inland stations, that is, winds were less westerly than usual. The contrast between the deflection of the mean winds at the coast and inland stations is shown by the data of the five stations given below:—

Station.	Wind direction.		
	Actual, March 1895.	Normal, March.	Increased westing.
			°
False Point	S 14° W	S 38° W	−24
Saugor Island	S 21° W	S 33° W	−12
Calcutta	S 77° W	S 32° W	+45
Burdwan	N 57° W	S 78° W	?
Dacca	S 54° W	S 23° W	+31

Winds were steadier than usual in Rajputana and Central India but were slightly weaker. They varied very irregularly from the normal in direction. Winds were on the whole most unsteady and variable in direction in Berar, the Central Provinces, and Deccan. The following gives examples showing the great unsteadiness of the wind in these areas:—

Station.	Steadiness.		Wind direction.	
	Actual percentage, March 1895.	Normal percentage, March.	Actual, March 1895.	Normal, March.
Akola	11	44	N 12° W	N 43° W
Hoshangabad	18	15	N 78° E	N 55° W
Jubbulpore	16	22	N 17° W	N 69° W
Belgaum	13	8	N 3° E	S 88° W
Sholapur	29	9	S 62° E	N 51° E

Winds were on the whole normal in direction and strength on the Bombay and Madras coasts.

Winds were on the average of the month normal in direction at the hill stations in Northern India, except at Simla, where northerly winds prevailed to an abnormal amount. They were slightly stronger and steadier than usual at these stations and also at Wellington in Southern India.

The following gives a comparative statement of the mean air movement of the month in different provinces:—

Province.	Velocity in miles per diem.		
	Average actual, March 1895.	Average normal, March.	Variation from normal.
Punjab	70	70	0
N.-W. Provinces and Oudh	82	77	+5
Bengal	141	139	+2
Rajputana	118	144	−26
Central India	83	96	−13
Central Provinces	94	91	+3
Berar	150	144	+6
Bombay Coast	255	255	0
Madras	104	111	−7

Humidity and Cloud.

The mean absolute and relative humidities of the month were slightly below the normal at Port Blair and in Burma. The mean humidity percentage at Diamond Island was 5 lower than the normal (76) and at Port Blair 4 lower.

The amount of aqueous vapour present in the air was in defect over the whole of Bengal, Orissa, Chota Nagpur and Bihar. The deficiency was very large in West and South Bengal and more especially at Calcutta, where the humidity percentage was 14 below the normal. The deficiency diminished in amount northwards to Assam, where humidity was in slight excess, and eastwards to Bihar, where the mean conditions of the month were practically normal.

The following gives comparative data for this area of decreased humidity :—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, March 1895.	Average normal, March	Variation from normal.	Average actual, March 1895.	Average normal, March.	Variation from normal.
	"	"	"	%	%	
Bengal . .	·578	·644	−·066	60	67	−7
Orissa . .	·658	·725	−·067	65	73	−8
Chota Nagpur .	·277	·289	−·012	32	34	−2
Bihar . .	·429	·433	−·004	50	50	0
Assam . .	·547	·545	+·002	72	70	+2

In the large area including the North-Western Provinces, the Punjab, Rajputana, Central India, Berar and the Central Provinces, the air was on the mean of the month considerably damper than is usual in March. This was due chiefly to excess of vapour but in part to lower temperature than usual. The mean relative humidity was more than 10 in excess at Peshawar (+11), Hoshangabad (+13), Jubbulpore (+16), Saugor (+11) and Sutna (+14). The excess was hence most marked in the North Punjab and the northern districts of the Central Provinces and Baghelkhand. The following table gives comparative data of this element of observation for these districts of increased humidity in March :—

Province.	Absolute humidity.			Relative humidity.		
	Average actual, March 1895.	Average normal, March.	Variation from normal.	Average actual, March 1895.	Average normal, March.	Variation from normal.
	"	"	"	%	%	
Punjab . .	·402	·360	+·042	58	53	+ 5
N.-W. Provinces and Oudh .	·389	·347	+·042	48	42	+ 6
Rajputana .	·315	·324	−·009	38	36	+ 2
Central India .	·366	·294	+·072	46	35	+11
Berar . .	·322	·291	+·031	32	28	+ 4
Central Parovinces . .	·372	·324	+·048	41	33	+ 8

The mean humidity conditions of the month differed little from the normal in the Bombay and Madras coast districts (except Malabar). In the interior of Southern India, including Mysore, and also in Malabar, the air was much drier than usual. Thus the mean humidity percentage was 5 below the normal at Bangalore, Cochin and Trichinopoly.

The humidity conditions at the hill stations varied irregularly. Thus the mean humidity of the month was largely in excess at Leh (+9), Darjeeling (+7) and Mount Abu (+6). It was normal in amount at Chakrata and Ranikhet and slightly below it at Simla. The air was drier than usual at Wellington (as in Southern India generally), where the humidity percentage was 5 in defect.

The lowest percentages of humidity during the month were recorded at the stations of Jacobabad, Deesa, Poona, Buldana and Chikalda. The following gives the dates on which humidity percentages of 5 or less were recorded :—

Station.	Date.	Humidity at 4 P.M.
		%
Jacobabad	15th	5
Ditto	16th	5
Poona	20th	4
Deeas	20th	5
Do.	21st	5
Do.	22nd	5
Chikalda	27th	5
Buldana	27th	5

The mean relative humidity of the month was lowest at Buldana (28 per cent.) and Sholapur (29 per cent.), which were hence on the mean of the whole month the driest stations in India.

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

(1) The air was slightly drier than usual in Lower Burma and the Andamans.

(2) It was unusually dry in South and West Bengal, more especially at Calcutta where the mean humidity of the month was 14 in defect.

(3) It was much damper than usual in the North-Western Provinces, the Punjab, Rajputana, Central India, Berar and the Central Provinces. The increased humidity was most marked in the North Punjab and in the northern districts of the Central Provinces and Baghelkhand, where the mean humidity of the month was from 10 to 16 in excess.

(4) It was considerably drier than usual in South India and Malabar.

There was a slight excess of cloud in Burma, Assam and Chota Nagpur. The mean cloud estimate of the month was, on the other hand, below the normal in Bengal, Orissa and Bihar. The following gives comparative data:—

DIVISION.	MEAN CLOUD AMOUNT.		
	Average actual, March 1895.	Average normal, March.	Variation from normal.
Bengal	2·9	3·0	−0·1
Orissa	2·0	2·9	−0·9
Chota Nagpur	3·5	2·5	+1·0
Bihar	1·5	2·1	−0·6

The mean cloud amount was in considerable to large excess over the whole area of largely increased humidity in North-Western and Central India, *i.e.*, in the North-Western Provinces, the Punjab, Rajputana, Central India, Berar and the Central Provinces. Comparative data for this area are given below:—

DIVISION.	MEAN CLOUD AMOUNT.		
	Average actual, March 1895.	Average normal, March.	Variation from normal.
Upper Sind	4·2	3·1	+1·1
Punjab	4·4	3·6	+0·8
North-Western Provinces and Oudh	3·0	2·4	+0·6
Rajputana	3·0	2·5	+0·5
Central India	3·1	2·5	+0·6
Berar	2·0	1·9	+0·1
Central Provinces	3·0	2·0	+1·0

A noteworthy feature of the meteorology of this month was the abnormal clearness of the skies in Southern India, as is indicated by the unusually small amount of cloud at the stations in that area. The following gives data for four stations in illustration:—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, March 1895.	Normal, March.	Variation from normal.
Wellington	1·5	3·0	−1·5
Cochin	0·9	2·9	−2·0
Trichinopoly	1·5	3·2	−1·7
Bangalore	0·9	2·6	−1·7

The deficiency was hence as marked at the hill station of Wellington as at the plains stations.

The mean cloud amount was in excess of the normal at the lower hill stations in Northern and Central India. The excess was large at Darjeeling (+2·2), Tura (+2·0) and Chikalda (+1·4). There was slightly less cloud than usual at Leh (−0·4) and Kailang (−0·3).

The mean cloud amount of the month was least at the stations for which data are given below:—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, March 1895.	Normal, March.	Variation from normal.
Bangalore	0·9	2·6	−1·7
Cochin	0·9	2·9	−2·0
Cocanada	1·0	?	?
Hyderabad (Deccan)	1·1	?	?
Darbhanga	1·1	1·4	−0·3

Skies were most clouded in the Himalayas and the Assam Valley. The largest mean cloud estimates at stations in the first area were 7·4 at Darjeeling and 6·9 at Murree and in Assam, 6·3 at Sibsagar.

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

(1) Slight excess of cloud in Burma and Assam.

(2) Slight deficieney in Bengal, Orissa and Bihar.

(3) Considerable to large excess in the Himalayan area, the Punjab, the North-Western Provinces, Rajputana and Central India, Chota Nagpur, Berar and the Central Provinces.

(4) Large deficiency in South and Central Madras, Mysore and Malabar.

Rainfall.

The rainfall of the month of March is small in amount over by far the greater part of India, ranging between an average of a hundredth of an inch and an inch in amount over the whole of India, except the following districts:—

1st.—South Madras where it slightly exceeds an inch.

2nd.—Bengal, Orissa and Assam in which it ranges from an inch in Orissa and Central Bengal to three inches in East Bengal, four inches in the Assam Valley and nine inches in Cachar.

3rd.—The submontane and hill districts of the North-Western Provinces and the Punjab and the north-west division of the Punjab in which it ranges between one inch in the submontane districts and three and-a-half inches in the Punjab hills.

The chief abnormal features of the distribution of the rainfall of the month of March were:—

(1) Considerable deficiency in Bengal and the Assam valley and a large deficiency in Cachar (or Assam Surma).

(2) Considerable deficiency in the hill districts of the North-Western Provinces and the Punjab.

(3) Large excess in the western and northern districts of the Punjab, more especially the Peshawar, Bannu, Kohat and Dera Ismail Khan districts.

(4) Largish deficiency in the southern districts of Madras and in Malabar.

The following table gives comparative data of the month for the 51 meteorological divisions of India:—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, March 1895.	Average normal, March.	Average actual, March 1895.	Average normal, March.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	0·17	0·33	—0·16
	Lower Burma*	?	?	0·03	0·14	—0·11
	Central do.*	?	?	0·11	0·11	0
	Upper do.*	?	?	0·17	?	?
	Arakan*	?	?	0	0·32	—0·32
Bengal and Assam	Eastern Bengal	2·2	3·6	0·92	2·83	—1·91
	Assam (Surma)*	?	?	4·03	9·20	—5·17
	Do. (Brahmaputra)*	?	?	3·07	4·01	—0·94
	Deltaic Bengal	1·5	2·6	0·46	1·83	—1·37
	Central do.	1·4	1·6	0·44	0·93	—0·49
	North do.	1·7	2·2	0·85	1·53	—0·68
	Orissa	0·7	1·8	0·38	1·04	—0·66
	Chota Nagpur	1·8	1·7	0·59	0·86	—0·27
	Bihar (South)	0·4	0·9	0·10	0·37	—0·27
	Do. (North)	0·3	0·8	0·11	0·38	—0·27
North-Western Provinces and Oudh.	North-Western Provinces (East)	0·9	0·7	0·30	0·26	+0·04
	Oudh (South)	0·7	0·7	0·34	0·30	+0·04
	Do. (North)	0·6	0·9	0·25	0·43	—0·18
	North-Western Provinces (Central)	0·7	0·7	0·31	0·30	+0·01
	Do. do. (West)	0·8	1·0	0·21	0·37	—0·16
	Do. do. (Sub-montane)	0·6	1·7	0·22	1·05	—0·83
Punjab	Punjab (South)	0·8	0·8	0·23	0·44	—0·21
	Do. (Central)	0·9	1·0	0·27	0·48	—0·21
	Do. (Sub-montane)	1·6	1·6	0·59	1·11	—0·52
	Do. (Hill Districts)	4·9	4·4	1·99	3·45	—1·46
	Do. (North-West)	7·0	2·7	4·07	1·72	+2·35
	Do. (West)	3·5	1·2	2·18	0·61	+1·57
Bombay and Malabar Coast Districts (Madras).	Malabar	0·2	0·8	0·14	0·44	—0·30
	Madras (South Central)	0	0·9	0·01	0·54	—0·53
	Coorg	0·8	?	0·26	?	?
	Mysore*	?	?	0·02	0·34	—0·32
	Konkan	0	0·2	0·01	0·07	—0·06
	Bombay Deccan	0·1	0·4	0·03	0·20	—0·17
	Khandesh	0·2	0	0·06	0·03	+0·03

Province.	Division.	Number of rainy days. Average actual, March, 1895.	Number of rainy days. Average normal, March.	Rainfall. Average actual, March 1895.	Rainfall. Average normal, March.	Rainfall. Variation from normal.
				Inches.	Inches.	Inches.
Central Provinces and Berar.	Berar*	?	?	0·23	0·19	+0·04
	Central Provinces (West)*	?	?	0·36	0·28	+0·08
	Do. do. (Central)*	?	?	1·11	0·50	+0·61
	Do. do. (East)*	?	?	0·71	0·65	+0·06
Bombay (North)	Gujarat	0·2	0	0·05	0·01	+0·04
	Kathiawar	0·2	0·1	0·06	0·05	+0·01
	Sind	0·5	?	0·40	0·28	+0·12
Rajputana and Central India.	Central India (East)	1·2	?	0·39	0·20	+0·19
	Rajputana (East) Central India (West)	1·4	?	0·53	0·14	+0·39
	Rajputana (West)	1·0	?	0·34	0·08	+0·26
Madras	East Coast (North)	0·2	0·8	0·06	0·51	—0·45
	Ditto. (do.) (*a*)	0	2·0	0·05	1·01	—0·96
	Hyderabad (South)*	?	?	0·22	0·54	—0·32
	Madras (Central)	0	0·3	0	0·14	—0·14
	East Coast (Central)	0	0·3	0	0·21	—0·21
	Ditto. (South)	0	0·5	0	0·36	—0·36
	Madras (South)	0	1·5	0·01	1·03	—1·02

* Note.—The figures entered against divisions marked with an asterisk have been obtained from the Weekly Telegraphic Reports.

The rainfall of the month was actually or practically (*i.e.*, less than a tenth of an inch) *nil* in Lower Sind, Cutch, Gujarat, Kathiawar, Bombay, Mysore, Madras, the whole of Burma (with the exception of the more northerly districts and the Tavoy and Mergui districts) and parts of North Bihar and the submontane districts of the North-Western Provinces. It was less than an inch in total amount over the whole of the remainder of India with the exception of four areas, *viz*:—

(1) Baluchistan.

(2) The North and Central Punjab and the Punjab hill districts.

(3) Assam and Sikkim.

(4) A small portion of the Central Provinces defined by the stations of Pachmarhi, Jubbulpore and Saugor.

Baluchistan received slightly more frequent rain than usual. The periods of rainfall were the 1st, the 8th to the 15th and the 20th to the 25th. The rainfall was on the whole heaviest and most general during the second period. The rainfall of the month was very irregularly distributed, but so far as can be judged from the comparison of the actual with the normal for three stations at which observations have been recorded for at least ten years, it was probably slightly below the normal in average amount for the whole area. The following gives comparative data for the three stations:—

Station.	Rainfall. Actual, March 1895.	Rainfall. Normal, March.	Rainfall. Variation from normal.
	Inches.	Inches.	Inch.
Kalat	0·92	1·77	−0·85
Pishin	2·01	1·48	+·53
Quetta	1·23	1·92	−0·69

The north-western and western districts of the Punjab obtained unusually frequent and abundant rainfall during the month. Light to moderate rain was also received in the remaining divisions of the province, but the total rainfall of the month was in slight to moderate defect. The periods of rainfall were:—

1st.—The 9th to the 11th. The North-western and western districts obtained moderate rain during the period. Light local showers were received in the remainder of the Province. The following amounts exceeding 1·5 inches were recorded during the period:—

District.	Station.	Date.	Heaviest rainfall during previous 24 hours.
			Inches.
Bannu . .	Isa Khel	9th	2·75
Peshawar .	Peshawar	10th	1·96
	Nabakki	10th	1·63
Kohat . .	Kohat	10th	1·86
	Khushalgarh . . .	10th	17·4

2nd.—From the 13th to the 16th. The north-western and western districts received heavy and abnormal continuous rain during this period, the hill districts light to moderate showers and the submontane districts light showers. No rain fell during this period in the south and central districts. Falls of 1·5 inches and upwards in 24 hours were recorded at several stations in the Bannu, Peshawar and Kohat districts. The following gives data:—

District.	Station.	Date.	Heaviest rainfall during previous 24 hours.
			Inches.
Peshawar .	Mardan	15th	2·37
	Nowshera	15th	1·98
	Charsadda	15th	1·85
Kohat . .	Kohat	14th	1·70
	Banda Daudshah . .	14th	1·59
	Kohat	16th	1·56
Bannu . .	Isa Khel	13th	1·52

3rd.—From the 24th to the 26th. The north-western and western districts and the hill districts received moderately heavy rain and the southern, central and south-western districts light local showers. The following amounts in 24 hours exceeding 1·5 inches were recorded:—

District.	Station.	Date.	Heaviest rainfall in inches during previous 24 hours.
Simla . . .	Kilba . . .	25th	1·57
Kangra . . .	Kulu . . .	25th	1·52
Hazara . . .	Mansahra . .	24th	1·61
Rawalpindi .	Rawalpindi . .	25th	1·83
	Murree . . .	25th	1·55

The heaviest rainfalls during this period hence occurred in the hill districts.

The following gives a statement of the rainfall of the month based on the complete returns published in the *Punjab Gazette*:—

Division.	Number of rainy days.			Rainfall.		
	Average actual, March 1895.	Average normal, March.	Variation from normal.	Average actual, March 1895.	Average normal, March.	Variation from normal.
				Inches.	Inches.	Inches.
Punjab, South .	0·8	0·8	0	0·23	0·44	−0·21
Do., Central.	0·9	1·0	−0·1	0·27	0·48	−0·21
Do., Submontane .	1·6	1·6	0	0·59	1·11	−0·52
Do., Hills .	4·9	4·4	+0·5	1·99	3·45	−1·46
Do., North-West .	7·0	2·7	+4·3	4·07	1·72	+2·35
Do., West .	3·5	1·2	+2·3	2·18	0·61	+1·57

The most noteworthy feature was the excessive rainfall in the northern and north-western districts. This is shown more clearly by the following comparative data:—

Station.	Rainfall.			Percentage variation.
	Actual, March 1895.	Normal, March.	Variation from normal.	
	Inches.	Inches.	Inches.	
Jhelum	3·27	1·11	+2·16	+194
Rawalpindi . . .	4·79	2·04	+2·75	+135
Peshawar . . .	6·09	1·53	+4·56	+298
Hazara	6·77	4·36	+2·41	+ 55
Kohat	6·59	2·03	+4·56	+225
Baunu	5·02	0·95	+4·07	+428
Dera Ismail Khan . .	3·72	0·64	+3·08	+481
Shahpur . . .	2·80	0·80	+2·00	+250

Weather was showery in the North-Western Provinces on the 10th and 11th and in the submontane districts on the 24th and 25th. No rain was received in the Ballia, Naini Tal, Pilibhit, Shahjehanpur, Bulandshahr, Bareilly and Mainpuri districts. The rainfall of the month was hence generally below the small average of the month. The deficiency was small in actual amount except in the hill districts, which received barely 20 per cent. of the normal fall of the month (1·05 inches). The following table gives comparative data :—

Division.	Number of rainy days.		Rainfall.		
	Average actual, March 1895.	Variation from normal.	Average actual, March 1895.	Normal, March.	Percentage variation.
			Inch.	Inch.	
Oudh, North . . .	0·6	−0·3	0·25	0·43	−42
Do., South . . .	0·7	0	0·34	0·30	+13
N.-W. P. (East) . .	0·9	+0·2	0·30	0 26	+15
Do. (Central). .	0·7	0	0·31	0 30	+ 3
Do. (Submontane) .	0 6	−1·1	0·22	1·05	−79
Do. (West) . .	0·8	−0·2	0·21	0·37	−43

Rajputana received light thundershowers from the 8th to the 11th or during the first disturbance of the month. They gave local falls generally in slight excess of the small normal fall of the period. The following gives comparative data for the larger states :—

State.	Rainfall.			
	Average actual, March 1895.	Average normal, March.	Variation from normal.	Percentage variation.
	Inch.	Inch.	Inch.	
Jodhpore . . .	0·34	0·08	+0·26	+325
Jeypore . . .	0·77	0·20	+0·57	+285
Ajmere	0·46	0·20	+0·26	+130
Bhurtpore . . .	0·57	0·18	+0 39	+217
Ulwar	0·61	0·26	+0·35	+135
Kotah	0·40	0·05	+0·35	+700
Kerowlee . . .	0·35	0·08	+0·27	+338
Oodeypore . . .	0·19	0·03	+0·16	+533
Dholpur	0·45	?	?	?
Sirohee	0·52	0·07	+0·45	+643

Central India obtained light rain from thundershowers during the first disturbance of the month from the 8th to the 11th. Rewa and Bundelkhand had light showers also on the 18th and 19th. The following gives comparative data for the larger states or divisions :—

State.	Rainfall.			
	Average actual, March 1895.	Average normal, March.	Variation from normal.	Percentage variation.
	Inch.	Inch.	Inch.	
Rewah	0·72	0·35	+0·37	+106
Bhopal	0·53	0·05	+0·48	+960
Gwalior	0·08	0·12	−0·04	− 33
Bundelkhand . . .	0·54	0·19	+0·35	+184

Light to moderate showers more or less local in character were received in Bengal and Chota Nagpur on the 11th and 12th, the 18th to 21st and the 26th. Bihar obtained very light local showers during the same periods and Orissa light to moderate showers during the second period. The rainfall of the month was scanty in every part of the province. It was greatest in actual amount in East Bengal which received an average of ·92 inch or 1·91 inches below the normal of the period. The deficiency was also large in Deltaic Bengal in which the mean rainfall of the month was 1·37 inches below the normal (1·83 inches). The deficiency was least in actual amount in Bihar and Chota Nagpur in which it averaged nearly three-tenths of an inch. The province received from one-half (in Chota Nagpur and Central and North Bengal) to one-fourth (in Deltaic Bengal) of the normal rainfall of the period. The following gives comparative data for the eight divisions of the province :—

Division.	Number of rainy days.		Rainfall.		
	Average actual, March 1895.	Variation from normal.	Average actual, March 1895.	ariation actual from normal.	Percentage variation from normal.
			Inch.	Inches.	
Bengal East . . .	2·2	−1·4	0·92	−1·91	−67
Do. North . . .	1·7	−0·5	0·85	−0·68	−44
Do. Deltaic . .	1·5	−1·1	0·46	−1·37	−75
Do. Central . .	1·4	−0·2	0·44	−0·49	−53
Orissa	0·7	−1·1	0·38	−0·66	−63
Chota Nagpur . .	1·8	+0·1	0·59	−0·27	−31
North Bihar . . .	0·3	−0·5	0·11	−0·27	−71
South Bihar . . .	0·4	−0·5	0·10	−0·27	−73

The weather was unusually dry in Assam during the first eleven days of the month. The Sibsagar and Lakhimpur districts received light showers on the 4th, 5th, 7th and 8th. Moderate rain fell almost daily in all districts except Goalpara and Kamrup until the 22nd and again from the 25th to the 27th. The largest amounts were received in the Sibsagar, Lakhimpur and Cachar districts. The rainfall of the month was in slight defect in the Brahmaputra valley and in large defect (46 per cent.) in Assam (Surma) or Cachar. The following gives comparative data for the province:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, March 1895.	Variation from normal.	Average actual, March 1895.	Variaton from normal.	Percentage variation from normal.
			Inches.	Inches.	
Surma	7·4	−1·3	4·58	−3·88	−46
Brahmaputra	8·0	+0·4	4·11	−0·02	0

The Central Provinces received light rain from thundershowers on the 10th and 11th and again from the 17th to the 20th. The showers were most general in the northern districts during the first period and in the eastern districts during the second period.

No rain fell over by far the greater part of the Bombay Presidency. Light local showers were received in Sind, Cutch, Kathiawar, Khandesh and Gujarat on the 8th, 9th and 10th, but the amounts were small and the total rainfall of the month averaged less than a tenth of an inch in all divisions except Sind.

The following gives a summary of the rainfall data of the month:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, March 1895.	Variation from normal.	Average actual, March 1895.	Variation from normal.	Percentage variation from normal.
			Inch.	Inch.	
Konkan	0	−0·2	0·01	−0·06	−86
Bombay Deccan	0·1	−0·3	0·03	−0·17	−85
Khandesh	0·2	+0·2	0·06	+0·03	+100
Gujarat	0.2	+0·2	0·05	+0·04	+400
Kathiawar	0·2	+0·1	0·06	+0·01	+20
Sind	0·5	?	0·40	+0·12	+43

Some light local showers were received in the Ganjam, Vizagapatam, Godavari, Malabar and Nilgiris districts of the Madras Presidency. No rain fell during the month in the remainder of that area. The rainfall of the month was in marked defect, more especially in the southern districts which usually receive occasional moderate showers from thunderstorms during the month. The extent of the deficiency in different parts of the Presidency is shown by the following comparative data for each of the collectorates:—

District.	No. of rainy days.		Rainfall.		
	Average actual, March 1895.	Average normal March.	Average actual, March 1895.	Average normal, March.	Variation from normal.
			Inches.	Inches.	Inches.
Ganjam	0·3	1·2	0·08	0·67	−0·59
Vizagapatam	0·1	1·0	0·03	0·62	−0·59
Godavari	0·2	0·4	0·08	0·28	−0·20
Kistna	0·1	0·6	0·05	0·46	−0·41
Nellore	0	0·3	0	0·21	−0·21
Chingleput	0	0·4	0	0·23	−0·23
Madras	0	0·5	0	0·41	−0·41
North Arcot	0	0·4	0	0·21	−0·21
South Arcot	0	0·5	0	0·31	−0·31
Tanjore	0	0·6	0	0·52	−0·52
Trichinopoly	0	0·7	0	0·55	−0·55
Madura	0	1·2	0·01	0·85	−0·84
Tinnevelly	0	2·0	0	1·35	−1·35
Malabar	0·4	1·3	0·21	0·71	−0·50
South Canara	0	0·9	0·01	0·05	−0·04
Salem	0	0·9	0·02	0·57	−0·55
Coimbatore	0	0·8	0	0·50	−0·50
Nilgiris	0·4	1·9	0·09	1·41	−1·32
Cuddapa	0	0·4	0	0·21	−0·21
Anantapur	0	0·2	0	0·10	−0·10
Bellary	0	0·3	0	0·10	−0·10
Kurnool	0·1	0·3	0·01	0·12	−0·11

Table

Abstract of Observations taken at 8 A.M. at 205

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
I.—Burma Coast and Bay Islands.		...	...	−·030	...	...	...	...	...	...	...	92·3	−0·1	71·7	+0·3	82·0	+0·1	20·6	...	...	...	...	30·2
Bay Islands	Port Blair	61	29·877	?	29·869	29·955	1st	29·801	15th	·154	80·8	90·6	?	76·6	?	83·6	?	14·0	93·6	27th	73·7	27th	19·9
	Camorta	...								Not received.													
Tenasserim	Mergui	96	29·855	?	29·883	29·955	6th	29·790	16th	·165	81·0	90·6	?	73·1	?	81·9	?	17·5	95·3	18th	69·9	15th	25·4
	Tavoy	26	29·939	?	29·896	30·020	5th	29·856	14th	·164	75·6	93·1	?	69·3	?	81·2	?	23·8	96·7	18th	62·7	27th	34·0
	Moulmein	94	29·859	−·029	29·891	29·963	5th	29·769	14th	·194	78·5	95·1	+1·2	73·0	+0·7	84·1	+1·0	22·1	98·9	17th	64·4	10th	34·5
	Toungoo	181	29·735	−·028	29·861	29·840	1st	29·646	15th	·194	74·4	96·4	−1·3	68·5	+1·0	82·5	−0·2	27·9	101·7	18th	59·1	3rd	42·6
Lower Burma	Rangoon	41	29·897	−·034	29·875	30·000	5th	29·815	2 days	·185	74·4	97·6	+1·3	70·7	−0·2	84·2	+0·6	26·9	100·6	18th	66·3	3rd	34·3
	Bassein	27	29·915	−·020	29·878	30·005	1st & 5th,	29·831	15th	·174	76·9	94·6	+0·3	70·4	+0·2	82·5	+0·3	24·2	101·2	18th	65·0	1st	36·2
	Diamond Island,	41	29·902	−·032	29·878	29·995	5th	29·820	14th	·175	78·6	83·9	−1·8	75·9	+1·2	79·9	−0·3	8·0	87·1	19th	72·9	1st	14·2
Arakan	Akyab	20	29·922	−·034	29·885	30·027	1st	29·824	14th	·203	74·2	88·5	−0·4	67·5	−1·3	78·0	−0·9	21·0	92·2	3 days	61·2	1st	31·0
II.—Burma Inland		...	...	−·026	...	...	...	...	...	...	...	91·8	−1·2	61·9	+0·2	77·0	−0·5	30·0	...	...	...	...	44·6
Central Burma	Thayetmyo	134	29·784	−·026	29·861	29·910	1st	29·689	14th	·221	77·4	98·5	−1·2	66·4	+0·2	82·5	−0·5	32·1	104·6	19th	57·2	1st	47·4
	Minbu	?	29·748	?	?	29·882	1st	29·633	14th	·249	75·2	97·4	?	68·5	?	83·0	?	28·9	104·6	19th	60·0	5th	44·6
	Yamethin	645	29·254	?	?	29·373	1st	29·158	14th	·215	74·7	97·2	?	66·1	?	81·7	?	31·1	101·7	3 days	54·1	2 days	47·6
	Taunggyi	?				Not recorded.					61·6	80·8	?	51·5	?	66·2	?	29·3	86·7	17th	44·5	1st	42·2
Upper Burma	Mandalay	243	29·649	?	?	29·801	1st	29·555	15th	·246	77·4	96·1	?	67·3	?	81·7	?	28·8	102·6	18th	58·2	2 days	44·4
	Kindat	?	29·547	?	?	29·701	2nd	29·436	26th	·265	67·0	90·8	?	59·5	?	75·2	?	31·3	98·3	31st	54·5	2nd	43·8
	Lashio	?	27·122	?	?	27·220	2nd	27·048	26th	·172	61·8	84·6	?	55·1	?	69·9	?	29·5	88·6	17th	47·0	2nd	41·6
	Bhamo	?	29·541	?	?	29·704	1st	29·419	26th	·255	67·6	89·1	?	60·4	?	74·8	?	28·7	95·1	17th	49·9	3rd	45·2
III.—Assam		...	...	−·025	...	...	...	...	...	...	...	83·2	−0·4	62·5	0	72·9	−0·2	20·7	...	...	...	...	32·7
Assam (Surma)	Silchar	104	29·836	−·028	29·895	29·992	1st	29·682	14th	·310	69·0	86·6	+1·3	63·1	+0·3	74·9	+0·8	23·5	91·7	3rd	57·4	22nd	34·3
Brahmaputra	Sibsagar	333	29·605	−·031	29·908	29·788	1st	29·470	16th	·318	63·7	77·1	−2·1	60·8	+0·7	68·9	−0·7	16·3	83·5	19th	54·7	1st	28·8
	Dhubri	115	29·793	−·016	29·867	29·968	1st	29·645	14th	·323	68·3	86·0	−0·5	63·6*	−0·9	74·8*	−0·7	22·4	92·4	19th	57·5	2nd	34·9
IV.—Bengal and Orissa		...	...	−·019	...	...	...	...	...	...	...	89·6	+0·2	66·7	−0·5	78·2	−0·1	22·8	...	...	...	...	37·1
East Bengal	Chittagong	87	29·847	−·030	29·884	29·966	1st	29·720	14th	·246	73·5	87·9	+1·7	66·7	−1·0	77·3	+0·4	21·2	91·2	4th	58·1	2 days	33·1
	Lungleh	?				Not recorded.					66·2	74·5	?	61·1	?	67·8	?	13·4	79·9	18th	53·2	21st	26·7
	Noakhali	43	29·889	?	29·880	30·033	1st	29·767	14th	·266	75·9	87·1	?	67·4	?	77·3	?	19·7	89·7	11th	56·6	1st	33·1
	Comilla	36	29·892	?	29·876	30·032	1st	29·756	14th	·276	74·6	90·1	?	66·9	?	78·5	?	23·2	94·3	30th	57·0	1st	37·3
	Sirajganj	49	29·853	?	29·853	30·001	2nd	29·704	14th	·297	70·9	89·6	?	63·5	?	76·6	?	26·1	99·1	31st	57·8	2nd	41·3
	Narayanganj	26	29·890	−·027	29·865	30·042	1st	29·748	14th	·294	73·8	89·5	−0·5	68·4	0	79·0	−0·3	21·1	94·6	16th	60·8	3 days	33·8
	Barisal	13	29·920	−·013	29·879	30·067	1st	29·789	14th	·278	74·9	89·2	+1·3	68·9	−0·3	79·1	+0·5	20·3	92·8	17th	60·0	2nd	32·8
	Mymensingh	59	29·855	−·022	29·867	30·012	1st	29·703	14th	·309	69·9	87·7	+1·2	64·6	+0·5	76·2	+0·9	23·1	93·7	17th	57·1	2nd	36·6
Deltaic Bengal	Faridpur	46	29·877	?	29·871	30·031	1st	29·740	14th	·291	73·0	89·6	?	65·8	?	77·7	?	23·8	96·8	16th	57·0	21st	39·8
	Jessore	33	29·877	−·022	29·857	30·025	1st	29·750	14th	·275	74·3	91·8	−0·7	67·0	−1·3	79·4	−1·0	24·8	98·5	31st	56·3	21st	42·2
	Calcutta	21	29·894	−·017	29·861	30·034	1st	29·772	15th	·262	74·0	91·1	+0·7	68·6	−1·1	79·9	−0·2	22·5	97·4	2 days	59·2	21st	38·2
	Saugor Island	25	29·895	−·012	29·865	30·020	3rd	29·780	16th	·240	77·7	87·1	−0·1	74·8	−0·2	81·0	−0·2	12·3	91·2	3 days	64·9	2nd	26·3
	Krishnagar	47	29·857	?	29·853	29·992	1st	29·727	15th	·265	74·5	92·5	?	64·9	?	78·7	?	27·6	99·4	31st	57·1	1st	42·3
	Midnapore	149	29·776	?	29·875	29·922	1st	29·651	15th	·271	76·3	96·5	?	68·1	?	82·3	?	28·4	103·9	17th	62·2	3rd &21st	41·7

* Mean of 29 days.

I.

Stations in India, Burma, etc., in March 1895.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	S.E.	S.	S.W.	W.	N.W.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st March 1895.	Normal rainfall for period, 1st March to 31st March.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·36	0·52	−0·15	...	...	...	...	**I.—Burma Coast and Bay Islands.**	
...	7	6	2	...	...	1	6	9	5·1	4·4	+16	80	·843	2·7	1	P	P	0·14	0·47	− 0·33	0·14	0·47	− 0·33	0·14	Port Blair .	Bay Islands.
													N	ot rec	eived.										Camorta .	
...	11	1	2	2	1	2	1	11	2·3	2·0	+15	79	·833	4·0	5	P	P	2·87	2·48	+ 0·29	2·87	2·48	+ 0·29	1·28	Mergui .	Tenasserim.
23	1	...	...	...	...	...	...	7	1·8	P	P	84	·745	0	1	P	P	0·21	P	P	0·21	P	P	0·21	Tavoy.	
...	...	...	16	7	3	5	...	...	3·3	3·0	+10	78	·759	2·7	0	0·36	−0·36	0	0·41	− 0·41	0	0·41	− 0·41	0	Moulmein.	
...	...	...	16	7	3	5	...	...	3·3	3·0	+10	78	·759	2·7	0	0·36	−0·36	0	0·05	− 0·05	0	0·05	− 0·05	0	Toungoo.	
10	...	2	4	7	4	...	2	2	2·6	2·8	− 7	74	·639	0·8	0	0·18	−0·18	0	0·05	− 0·05	0	0·05	− 0·05	0	Rangoon .	Lower Burma.
...	2	...	...	...	2	13	13	1	4·4	5·0	−12	85	·723	2·3	0	0·36	−0·36	0	0·28	− 0·28	0	0·28	− 0·28	0	Bassein.	
13	1	...	...	...	...	...	8	19	3·9	4·9	−20	83	·771	1·6	0	0	0	0	0·02	− 0·02	0	0·02	− 0·02	0	Diamond Island.	
...	14	1	...	1	...	...	2	13	13·1	7·9	+66	76	·737	4·3	0	0	0	0	0·01	− 0·01	0	0·01	− 0·01	0		
...	19	8	1	1	1	...	...	1	4·3	3·7	+16	80	·682	2·2	0	0·82	−0·82	0	0·42	− 0·42	0	0·42	− 0·42	0	Akyab .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·13	0·78	−0·65	...	...	...	...	**II.—Burma Inland.**	
...	5	2	2	1	3	5	10	3	4·1	5·2	−21	57	·534	0	0	0	0	0	0·05	− 0·05	0	0·05	− 0·05	0	Thayetmyo .	Central Burma.
5	1	...	1	12	2	1	1	8	7·9	P	P	54	·482	0·5	0	P	P	0	P	P	0	P	P	0	Minbu.	
6	3	...	1	16	5	...	...	...	3·5	P	P	59	·502	0	0	P	P	0	P	P	0	P	P	0	Yamethin.	
17	...	...	...	7	2	5	...	...	0·6	P	P	59	·326	0·8	0	P	P	0	P	P	0	P	P	0	Taunggyi .	
3	4	1	...	4	16	2	...	1	4·9	P	P	53	·498	0·3	0	P	P	0·03	P	P	0·03	P	P	0·03	Mandalay .	Upper Burma.
15	3	...	...	1	3	3	5	1	2·1	P	P	85	·562	2·0	1	P	P	0·26	1·51	− 1·25	0·26	1·51	− 1·25	0·11	Kindat.	
...	13	1	...	...	...	...	1	16	P	P	P	76	·421	2·7	0	P	P	0	P	P	0	P	P	0	Lashio.	
20	3	6	...	...	1	1	...	...	2·7	P	P	81	·544	1·2	2	P	P	0·76	P	P	0·76	P	P	0·46	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4·55	5·27	−0·70	...	...	...	...	**III.—Assam.**	
25	...	...	2	2	1	...	1	...	1·6	3·3	−52	82	·582	5·1	9	9·82	−0·82	4·46	8·81	− 4·35	4·46	8·81	− 4·35	1·11	Silchar .	Assam (Surma).
7	3	18	1	...	...	...	...	2	3·8	2·8	+36	95	·561	7·2	11	9·27	+1·73	8·33	4·83	+ 3·50	8·33	4·83	+ 3·50	1·82	Sibsagar .	Brahmaputra.
1	1	13	7	...	1	5	3	...	6·0	6·3	− 5	79	·544	2·6	1	2·29	−1·29	0·93	2·16	− 1·23	0·93	2·16	− 1·23	0·83	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·52	1·68	− 1·22	...	...	...	...	**IV.—Bengal and Orissa.**	
...	4	10	7	7	1	1	1	...	5·3	5·8	− 9	81	·676	3·1	1	3·45	−2·45	0·25	2·56	− 2·31	0·25	2·56	− 2·31	0·25	Chittagong .	East Bengal.
			No	t rec	orde	d.			P	P	P	67	·436	P	5	P	P	1·86	P	P	1·86	P	P	0·77	Lungleh.	
...	1	5	4	1	4	11	3	2	4·4	P	P	82	·739	2·1	2	3·65	−1·65	0·35	3·55	− 3·20	0·35	3·55	− 3·20	0·12	Noakhali.	
6	...	1	1	1	14	5	3	...	4·4	P	P	90	·773	4·1	3	4·41	−1·41	0·49	3·76	− 3·27	0·49	3·76	− 3·27	0·16	Comilla.	
16	...	...	1	2	5	4	2	1	1·6	P	P	79	·594	2·8	2	2·26	−0·26	0·66	1·28	− 0·62	0·66	1·28	− 0·62	0·49	Sirajganj.	
4	1	...	2	2	6	10	4	2	4·8	4·7	+ 2	82	·689	4·9	2	4·00	−2·00	0·49	3·11	− 2·62	0·49	3·11	− 2·62	0·31	Narayanganj.	
15	...	2	...	...	5	5	...	4	3·5	P	P	83	·729	5·0	4	4·65	−0·65	1·87	2·72	− 0·85	1·87	2·72	− 0·85	0·74	Barisal.	
3	...	9	9	6	3	...	...	1	3·8	P	P	82	·602	0·4	3	5·90	−2·90	0·80	2·21	− 1·41	0·80	2·24	− 1·41	0·50	Mymensingh.	
12	...	...	...	2	10	3	1	3	2·3	P	P	79	·652	2·6	2	3·85	−1·85	0·82	2·93	− 2·11	0·82	2·93	− 2·11	0·69	Faridpur .	Deltaic Bengal.
6	...	...	...	5	5	10	3	2	2·5	3·2	−22	78	·672	3·8	1	3·64	−2·64	0·23	2·42	− 2·19	0·23	2·42	− 2·19	0·21	Jessore.	
4	2	...	1	1	5	14	2	2	4·5	5·5	−18	81	·683	2·8	1	2·09	−1·09	0·18	1·43	− 1·25	0·18	1·43	− 1·25	0·11	Calcutta.	
...	3	...	1	...	6	14	5	2	14·2	12·3	+15	82	·781	5·1	0	2·18	−2·18	0·08	1·63	− 1·55	0·08	1·63	− 1·55	0·08	Saugor Island.	
...	1	...	3	5	7	9	4	2	5·0	P	P	66	·568	2·8	1	2·20	−1·20	0·45	1·48	− 1·03	0·45	1·48	− 1·03	0·38	Krishnagar.	
5	7	1	...	...	8	3	...	7	4·7	P	P	59	·534	1·7	1	2·20	−1·20	0·27	1·46	− 1·19	0·27	1·46	− 1·19	0·23	Midnapore.	

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal.	Bankura	298	29·600	P	29·856	29·747	1st	29·474	15th	·273	74·4	93·8	P	66·9	P	80·4	P	26·9	102·1	26th & 31st,	60·7	21st	41·4
	Raniganj	334	29·578	P	29·869	29·734	1st	29·442	14th	·292	73·3	92·8	P	66·1	P	79·5	P	26·7	102·0	31st	59·1	21st	42·9
	Burdwan	99	29·802	−·024	29·851	29·947	1st	29·673	15th	·274	72·6	92·7	−0·9	66·8	−1·7	79·8	−1·3	25·9	99·7	31st	58·1	21st	41·6
	Naya Dumka	489	29·401	P	29·859	29·560	1st	29·255	14th	·305	75·1	88·8	P	65·5	P	77·2	P	23·3	97·3	31st	59·9	1st	37·4
	Berhampore	67	29·835	−·017	29·851	29·985	1st	29·694	2 days	·291	72·1	91·5	−1·3	66·0	0	78·8	−0·7	25·5	99·5	31st	59·2	21st	40·3
	Rampur Boalia.	70	29·823	P	29·844	29·974	1st	29·672	15th	·302	73·1	90·3	P	65·2	P	77·8	P	25·1	98·1	31st	57·9	1st	40·2
	Malda	72	29·810	P	29·835	29·979	1st	29·662	15th	·317	72·2*	90·9*	P	62·0*	P	76·5*	P	28·9	100·3	31st	56·8	2nd	43·5
	Bogra	61	29·834	P	29·849	30·011	1st	29·677	15th	·334	72·0	90·3	+0·8	64·0	+0·4	77·1	+0·6	26·3	99·5	31st	57·8	21st	41·7
North Bengal	Dinajpur	123	25·774	P	29·856	29·944	1st	29·634	14th	·310	69·4	89·2	0	62·6	+1·1	75·9	+0·6	26·6	96·8	31st	56·9	7th	39·9
	Rangpur	123	29·779	P	29·860	29·952	1st	29·628	14th	·324	69·5	86·9	P	60·7	P	73·8	P	26·2	93·8	31st	52·5	11th	41·3
	Jalpaiguri	284	29·620	P	29·871	29·794	1st	29·476	14th	·318	67·8	84·9	−0·1	61·2	+2·0	73·0	+1·0	23·7	91·4	27th	53·1	12th	38·3
Orissa	Balasore	56	29·872	P	29·875	30·014	1st	29·763	15th	·251	74·7	92·7	+1·6	68·0	−1·8	80·4	−0·1	24·7	100·5	30th	59·6	2nd	40·9
	False Point	21	29·910	−·011	29·873	30·051	1st	29·800	15th	·251	77·4	87·1	−0·5	71·0	−1·2	79·1	−0·9	16·1	93·5	18th	62·0	3rd	31·5
	Cuttack	80	29·840	−·016	29·865	29·987	1st	29·729	15th	·258	75·2	97·4	+0·6	70·7	−2·0	84·1	−0·7	26·7	103·8	30th	61·2	1st	39·6
	Shortt's Island	P	29·903	P	P	30·047	1st	29·787	15th	·260	78·2	86·9	P	74·0	P	80·5	P	12·9	90·7	7th	65·8	20th	24·9
	Puri	24	29·916	P	29·880	30·049	1st	29·807	15th	·242	78·3	86·3†	P	74·3†	P	80·3†	P	12·0	89·2	27th	67·6	7th & 20th,	21·6
V.—Gangetic Plain and Chota Nagpur.		...	...	−·014	...	...	...	...	...	...	...	89·2	−1·6	62·9	+0·2	76·1	−0·7	26·3	...	...	...	...	41·8
Chota Nagpur	Hazaribagh	2,007	27·888	−·013	29·868	28·019	1st	27·755	14th	·264	72·5	86·9	−1·8	63·5	−0·4	75·2	−1·1	23·4	97·8	26th	58·2	11th & 20th,	39·6
	Daltonganj	730?	29·166	P	29·876	29·316	1st	29·024	25th	·292	68·6	81·4	P	60·0	P	70·8	P	21·4	90·9	24th	53·0	1st	37·9
	Ranchi	2,128	27·781	+·006	29·886	27·909	1st	27·666	14th	·243	70·6	86·3	−0·8	62·9	−0·2	74·6	−0·5	23·4	95·1	26th	56·4	1st	38·7
	Chaibassa	760	29·150	+·005	29·876	29·293	1st	29·031	15th	·262	73·0	94·3	+0·2	65·7	−1·5	80·0	−0·7	28·6	102·7	26th	58·6	1st	44·1
Bihar (South)	Gaya	375	29·530	−·014	29·869	29·695	1st	29·372	14th	·323	73·3	91·4?	−2·3	66·5‡	+0·3‡	79·3‡	−1·0	24·9	101·5	31st	60·3	11th	41·2
	Dehri	351	29·550	P	29·864	29·716	1st	29·388	14th	·328	74·0	91·5	P	66·6	P	79·1	P	24·9	101·4	31st	61·7	11th & 22nd.	39·7
	Patna	183	29·710	−·026	29·850	29·881	1st	29·555	14th	·326	74·2	89·6	−1·5	65·0	+1·4	77·3	−0·1	24·6	100·0	31st	59·8	6th	40·2
	Arrah	190	29·704	P	29·851	29·877	1st	29·542	14th	·335	72·0	91·2	P	63·6	P	77·4	P	27·6	100·7	31st	57·2	1st	43·5
	Buxar	239	29·649	P	29·849	29·812	1st	29·487	14th	·325	72·5	89·6	P	64·9	P	77·3	P	24·7	98·4	31st	58·9	12th	39·5
Bihar (North)	Purnea	125	29·765	−·017	29·848	29·949	1st	29·608	14th	·341	68·9	89·1	−1·1	62·1	+1·7	75·6	+0·3	27·0	96·7	31st	54·3	1st	42·4
	Bhagalpur	160	29·727	P	29·843	29·904	1st	29·575	14th	·329	74·1	90·5	P	63·9	P	77·2	P	26·6	101·1	31st	56·2	1st	44·9
	Darbhanga	166	29·717	−·028	29·842	29·912	1st	29·545	14th	·367	70·1	87·2	−0·5	63·7	+0·5	75·5	0	23·5	96·5	31st	59·2	9th	37·3
	Muzaffarpur	178	29·707	P	29·845	29·888	1st	29·546	14th	·342	69·9	88·0	P	61·9	P	74·9	P	26·1	97·7	31st	56·3	1st	41·4
	Motihari	224	29·657	P	29·845	29·850	1st	29·493	14th	·357	70·7	88·8	P	58·9	P	73·9	P	29·9	98·6	31st	53·4	1st	45·2
	Chapra	181	29·705	P	29·846	29·886	1st	29·540	14th	·346	71·1	89·7	P	63·4	P	76·6	P	26·3	99·2	31st	58·8	2nd	40·4
N.-W. P. (Eastern Districts).	Benares	267	29·633	−·013	29·864	29·793	1st	29·473	14th	·320	70·5	90·2	−3·1	61·4	−0·9	75·8	−2·0	28·8	99·3	31st	54·5	1st	44·8
	Allahabad	309	29·593	−·017	29·865	29·759	1st	29·443	14th	·316	72·2	90·4	−2·9	62·5	+0·3	76·5	−1·3	27·9	99·7	31st	56·4	1st	43·3
N.-W. P. (East Submontane).	Gorakhpur	256	29·613	−·025	29·835	29·799	2nd	29·456	14th	·343	69·5	89·6	−1·2	63·7	+1·2	76·7	0	25·9	99·8	31st	57·8	21st	42·0
Oudh (South)	Lucknow	368	29·519	−·017	29·858	29·692	1st	29·370	14th	·322	71·8	89·3	−2·1	60·0	−0·6	74·7	−1·4	25·3	98·3	30th & 31st,	54·0	1st	44·3
Oudh (North)	Bahraich	403	29·482	P	29·858	29·678	1st	29·234	14th	·344	69·8	88·4	P	61·5	P	75·0	P	26·9	97·4	30th & 31st.	56·0	4 days	41·4
N.-W. Provinces (Central).	Cawnpore	416	29·480	P	29·863	29·645	1st	29·333	14th	·312	71·4	89·1	P	61·2	P	75·2	P	27·9	98·4	31st	55·0	1st & 2nd.	43·4
	Mainpuri	516	29·375	P	29·866	29·543	2nd	29·209	14th	·334	69·1	89·2	P	60·3	?	74·8	P	28·9	98·8	25th	55·1	20th	43·7

* Mean of 26 days. † Mean of 30 days. ‡ Mean of 27 days.

I—*continued.*

in India, Burma, etc., in March 1895—continued.

Wind Direction. Number of winds from								Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.									Heaviest rainfall during month.	Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st March 1895.	Normal rainfall for period, 1st March to 31st March.	Variation from normal of period.			
14	...	...	...	...	2	1	13	1	2·3	?	?	56	·469	2·5	2	1·85	+0·15	0·32	1·25	− 0·93	0·32	1·25	− 0·93	0·13	Bankura .	Central Bengal.
13	2	1	...	...	1	1	9	4	1·9	?	?	54	·442	2·4	1	1·45	−0·45	0·22	0·65	− 0·43	0·22	0·65	− 0·43	0·11	Raniganj.	
8	2	...	...	2	5	3	7	4	2·8	3·4	−18	66	·531	3·1	1	1·82	−0·82	0·21	1·73	− 1·52	0·21	1·73	− 1·52	0·14	Burdwan.	
3	...	...	2	1	...	4	11	10	3·9	?	?	49	·429	1·9	1	1·28	−0·28	0·12	0·70	− 0·58	0·12	0·70	− 0·58	0·10	Naya Dumka.	
7	2	2	...	2	4	9	5	...	3·1	3·4	−9	71	·561	2·7	3	1·64	+1·36	0·88	1·21	− 0·33	0·88	1·21	− 0·33	0·53	Berhampore.	
9	1	1	1	1	5	10	2	1	3·8	?	?	72	·601	1·6	2	1·35	+0·65	0·85	0·81	+ 0·04	0·85	0·81	+ 0·04	0·62	Rampur Boalia.	
3	2	1	1	1	4	11	4	4	2·9	?	?	65†	·509†	1·8	1	1·10	−0·10	0·36	0·74	− 0·38	0·36	0·74	− 0·38	0·24	Malda.	
6	...	5	1	7	2	2	7	1	2·7	?	?	74	·589	2·0	2	3·50	−1·50	1·00	0·82	+ 0·18	1·00	0·82	+ 0·18	0·75	Bogra.	
...	2	8	2	1	...	9	7	2	4·5	?	?	70	·500	1·6	1	2·60	−1·60	0·18	0·92	− 0·74	0·18	0·92	− 0·74	0·18	Dinajpur .	North Benga
3	1	6	7	1	7	4	1	1	3·3	?	?	77	·558	2·4	2	1·60	+0·40	1·16	1·30	− 0·14	1·16	1·30	− 0·14	0·92	Rangpur.	
1	3	6	11	6	1	...	2	1	2·2*	?	?	77	·527	3·2	0	5·79	−5·79	0·11	1·80	− 1·69	0·11	1·80	− 1·69	0·09	Jalpaiguri.	
1	1	3	1	...	3	7	6	9	6·0	?	?	76	·663	2·0	1	3·85	−2·85	0·33	1·35	− 1·02	0·33	1·35	− 1·02	0·28	Balasore .	Orissa.
...	3	1	2	...	1	14	5	5	11·0	10·9	+1	84	·790	4·2	0	2·00	−2·00	0·03	1·26	− 1·23	0·03	1·26	− 1·23	0·03	False Point.	
13	6	...	...	1	1	8	1	1	2·9	3·5	−17	76	·666	1·9	0	1·64	−1·64	0·06	1·34	− 1·28	0·06	1·34	− 1·28	0·06	Cuttack.	
1	2	2	1	...	3	14	7	1	14·2	?	?	80	·772	1·2	1	?	?	0·76	?	?	0·76	?	?	0·76	Shortt's Island	
3	4	1	1	1	...	14	7	...	12·6	?	?	82	·797	2·0†	0	0·80	−0·80	0·06	0·52	− 0·46	0·06	0·52	− 0·46	0·06	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·27	0·50	−0·24	...	...	...	...	**V.—Gangetic Plain and Chota Nagpur.**	
4	1	...	...	3	4	8	7	4	10·2	7·4	+38	46	·358	2·4	1	1·82	−0·82	0·35	0·96	− 0·61	0·35	0·96	− 0·61	0·12	Hazaribagh.	Chota Nagpur.
...	3	...	...	...	4	10	9	5	4·5	?	?	72	·497	2·7	2	?	?	0·38	?	?	0·38	?	?	0·17	Daltonganj.	
11	1	...	...	...	..	5	8	6	7·3‡	?	?	51	·368	1·6	4	2·32	+1·68	1·09	1·40	− 0·31	1·09	1·40	− 0·31	0·37	Ranchi.	
3	2	1	...	...	1	12	9	3	2·5	?	?	57	·459	2·5	2	2·20	−0·20	0·80	1·21	− 0·41	0·80	1·21	− 0·41	0·46	Chaibassa.	
...	...	...	3	3	10	6	9	...	6·8	3·3	+106	65	·543	2·3	2	1·18	+0·82	0·36	0·58	− 0·22	0·36	0·58	− 0·22	0·18	Gaya . .	Bihar (South).
...	...	...	1	...	9	17	4	...	8·3‖	?	?	56	·459	1·9	1	1·14	−0·14	0·23	0·70	− 0·47	0·23	0·70	− 0·47	0·12	Dehri.	
2	1	...	4	1	...	5	17	1	3·9	3·4	+15	52	·438	1·5	0	0·82	−0·82	0·06	0·48	− 0·42	0·06	0·48	− 0·42	0·02	Patna.	
...	1	3	1	1	...	12	11	2	4·4	?	?	62	·467	1·3	0	0·95	−0·95	0·06	0·34	− 0·28	0·06	0·34	− 0·28	0·04	Arrah.	
1	1	...	2	2	2	2	18	3	4·5*	?	?	53	·451	2·1	0	0·85	−0·85	0·11	0·28	− 0·17	0·11	0·28	− 0·17	0·09	Buxar.	
2	...	3	7	1	2	7	7	2	4·0	3·4	+18	71	·499	1·5	2	0·73	+1·27	0·36	0·49	− 0·13	0·36	0·49	− 0·13	0·22	Purnea .	Bihar (North).
3	1	4	2	...	6	8	5	2	4·8	?	?	54	·446	1·7	0	0·65	−0·65	0·12	0·33	− 0·21	0·12	0·33	− 0·21	0·08	Bhagalpur.	
2	...	...	4	5	1	3	11	5	5·0	4·5	+11	66	·476	0·8	0	0·91	−0·91	0·03	0·41	− 0·38	0·03	0·41	− 0·38	0·03	Darbhanga.	
4	...	1	3	3	...	8	10	2	5·3*	?	?	72	·521	0·5	0	1·05	−1·05	0·02	0·42	− 0·40	0·02	0·42	− 0·40	0·02	Muzaffarpur.	
2	1	2	5	2	...	8	10	...	7·1	?	?	68	·498	1·0	0	0·82	−0·82	0·03	0·37	− 0·34	0·03	0·37	− 0·34	0·03	Motihari.	
2	...	...	2	3	1	13	9	1	5·7	?	?	64	·485	1·8	0	0·75	−0·75	0·01	0·29	− 0·28	0·01	0·29	− 0·28	0·01	Chapra.	
7	...	...	1	...	5	11	7	...	4·8	4·8	0	68	·505	2·5	1	0·64	+0·36	0·31	0·28	+ 0·03	0·31	0·28	+ 0·03	0·25	Benares .	N.-W. P. (Eastern Districts).
3	...	...	1	3	2	4	12	6	4·7	2·8	+68	59	·462	2·9	1	0·73	+0·27	0·32	0·32	0	0·32	0·32	0	0·29	Allahabad.	
...	2	1	2	1	6	6	11	2	2·6	3·6	−28	63	·456	1·8	1	0·73	+0·27	0·32	0·42	− 0·10	0·32	0·42	− 0·10	0·30	Gorakhpur .	N.-W. P. (East Submontane).
4	2	...	...	3	2	7	5	8	3·4	4·0	−15	59‡	·457‡	3·1	1	1·00	0	0·55	0·37	+ 0·18	0·55	0·37	+ 0·18	0·55	Lucknow .	Oudh (South).
4	...	2	4	1	...	4	5	11	4·1	?	?	64	·462	0·9	0	?	?	0·10	0·47	− 0·37	0·10	0·47	− 0·37	0·06	Bahraich .	Oudh (North).
2	2	2	1	2	3	3	10	6	4·9	?	?	57	·431	1·0	1	0·80	+0·20	0·34	0·24	+ 0·10	0·34	0·24	+ 0·10	0·34	Cawnpore .	N.-W. Provinces (Central).
14	...	1	1	2	1	6	5	1	1·5	?	?	60	·428	2·6	0	?	?	0·09	0·24	− 0·15	0·09	0·24	− 0·15	0·09	Mainpuri.	

* Mean of 30 days. † Mean of 26 days. ‡ Mean of 29 days. ‖ Mean of 28 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
VI.—Upper Sub-Himalayas		...	...	−·018	...	...	...	...	...	...	...	83·4	−0·4	58·0	+1·5	70·7	+0·6	25·4	...	...	...	...	400
N.-W. Provinces (Submontane).	Bareilly	568	29·302	−·014	29·855	29·434	1st	29·131	14th	·353	66·8	86·5	−1·1	60·0	+1·0	73·3	−0·1	26·5	95·8	30th	53·7	26th	42·1
	Dehra Dun	2,233	27·638	−·031	29·880	27·796	2nd	27·482	14th	·314	62·8	80·3	+0·9	55·7	+0·4	68·1	+0·7	24·6	87·5	29th	48·5	20th	39·0
	Roorkee	887	28·975	−·023	29·865	29·155	2nd	28·803	14th	·352	64·1	85·5	−0·3	57·3	+0·9	71·4	+0·3	28·2	93·2	30th	50·8	8th	42·4
	Meerut	738	29·131	−·020	29·862	29·304	2nd	28·950	14th	·354	66·5	86·1	−0·8	59·0	+1·2	72·6	+0·2	27·1	95·5	30th	53·6	20th	41·9
Punjab (Central)	Delhi	718	29·164	−·020	29·869	29·332	2nd	28·994	14th	·338	69·3	86·6	−1·6	63·0	+0·9	74·8	−0·4	23·6	94·5	30th	56·4	11th	38·1
	Lahore	702	29·182	−·018	29·884	29·351	3rd	28·956	14th	·395	64·1	83·3	−0·4	58·7	+3·9	71·0	+1·8	24·6	91·3	29th & 30th.	53·2	19th	38·1
Punjab (Submontane).	Umballa	962?	28·962	?	29·874	29·137	2nd	28·770	14th	·367	66·1	84·3	?	58·5	?	71·4	?	25·8	94·0	30th	50·5	1st & 20th.	43·5
	Patiala	?	29·058†	?	?	29·212	2nd	28·858	14th	·354	66·8	83·9	?	58·5	?	71·2	?	25·4	92·0	29th & 31st	52·5	20th	39·5
	Ludhiana	812	29·072	−·008	29·885	29·237	2nd	28·874	14th	·363	65·4	83·2	−2·0	58·5	+1·3	70·9	−0·4	24·7	92·6	31st	53·8	4th	38·8
Punjab (North)	Sialkot	830	29·060	0	29·895	29·209	3rd	28·840	14th	·369	64·0	81·4	−0·4	56·6	+1·3	69·0	+0·5	24·8	90·6	31st	51·2	3rd & 20th.	39·4
	Rawalpindi*	1,652	28·239	−·027	29·899	28·393	3rd	28·008	14th	·385	58·1	76·3	+1·8	51·9	+2·9	64·1	+2·4	24·4	83·6	8th	46·0	3rd & 4th.	37·6
VII.—Indus Valley and N.-W. Rajputana.		...	...	−·024	...	...	...	...	...	...	...	85·9	−0·1	59·6	+0·9	72·8	+0·4	26·4	...	...	...	...	425
Punjab (West)	Peshawar	1,110	28·828	−·021	29·924	28·989	3rd	28·597	14th	·392	59·4	73·6	−3·1	54·3	+2·6	64·0	−0·3	19·3	85·1	9th	46·5	16th	38·6
	Mardan	?				Not recorded.					56·4	74·3	?	52·3	?	63·3	?	22·0	84·0	9th	43·0	16th	41·0
	Khushab	612	29·276	?	29·883	29·457	3rd	29·047	24th	·410	65·7	82·0	?	59·1	?	70·6	?	22·9	91·8	8th	52·0	16th	39·8
	Montgomery	558	29·328	?	29·874	29·509	3rd	29·092	14th & 15th.	·417	68·7	88·2	?	58·3	?	73·3	?	29·9	97·3	23rd & 31st	53·0	19th & 20th.	44·3
	D. I. Khan	573	29·314	?	29·886	29·500	3rd	29·071	15th	·429	62·3	81·2	−2·8	57·3	+1·9	69·3	−0·5	23·9	91·1	8th	51·7	17th	39·4
	Mooltan	420	29·479	−·038	29·885	29·673	3rd	29·232	15th	·441	66·8	87·0	+0·7	61·1	+3·1	74·1	+1·9	25·9	93·8	31st	54·7	19th	39·1
	Sirsa	662	29·220	−·023	29·874	29·384	3rd	29·021	14th	·363	66·0	90·3	+4·6	59·3	+2·2	74·8	+3·4	31·0	101·4	24th	53·8	4th	47·6
Sind and Cutch	Jacobabad	186	29·713	−·022	29·866	29·925	3rd	29·464	14th	·461	71·4	91·2	+0·1	60·5	+1·1	75·9	+0·6	30·7	100·0	31st	50·0	17th	50·0
	Hyderabad	117				Observations not recorded.																	
	Kurrachee	49	29·892	−·026	29·894	30·021	2nd	29·778	24th	·243	70·8	85·3	−0·7	65·9	−0·2	75·6	−0·5	19·4	94·0	7th	59·0	17th	35·0
	Bhuj*	395	29·542	−·015	29·900	29·632	2nd	29·442	15th	·196	73·3	92·7	−1·0	64·1	−1·7	78·4	−1·4	28·6	100·0	23rd	59·5	17th	40·5
Rajputana (West)	Bickaneer	753	29·126	?	29·862	29·293	2nd	28·932	14th	·361	70·9	90·8	+1·4	63·5	−2·0	77·2	−0·3	27·3	99·6	23rd	57·1	9th & 18th.	42·5
	Pachpadra	380	29·546	?	29·895	29·681	3rd	29·370	24th	·311	71·2	94·8	?	59·0	?	76·9	?	35·8	104·5	24th	51·9	9th & 17th.	52·6
VIII.—East Rajputana, Central India and Gujarat.		...	...	−·013	...	...	...	...	...	...	...	1 ·4	−1·2	62·9	+0·1	77·2	−0·5	28·4	...	...	...	...	44·1
Rajputana (East)	Jeypore	1,431	28·490	−·005	29·917	28·623	1st	28·331	14th ‡	·292	69·6	88·5	−1·5	60·2	−0·7	74·4	−1·1	28·3	97·5	3 days	55·1	20th	42·4
	Sambhar	1,254	28·654	−·004	29·906	28·783	3rd	28·492	24th	·291	68·5	88·4	+0·2	59·8	+0·5	74·1	+0·4	28·6	98·0	24th	52·4	5th	45·6
	Ajmere	1,611	28·318	−·010	29·935	28·442	5th	28·168	15th	·274	68·5	88·4	−0·9	59·8	+0·6	74·1	−0·2	28·6	97·4	24th	51·8	20th	45·6
	Deesa	466	29·466	−·016	29·898	29·555	5th	29·358	14th	·197	74·0	95·8	−0·1	63·0	−0·9	79·4	−0·5	32·8	102·9	2 days	52·6	17th	50·3
Kathiawar	Rajkot	429	29·519	−·013	29·909	29·604	2nd	29·418	14th	·186	74·1	94·2	−2·1	61·6	−1·0	77·9	−1·6	32·6	101·9	22nd	55·0	17th & 20th.	46·9
	Veraval	?	29·931	?	29·891	30·037	2nd	29·814	14th	·193	73·2	86·0	?	65·8	?	75·9	?	20·2	95·1	8th & 23rd,	59·3	20th	35·8
Central India	Nowgong	757	29·154	−·015	29·891	29·299	2nd	29·009	14th & 15th.	·290	69·6	89·8‡	−3·5	61·1	+0·3	75·5‡	−1·6	28·7	99·0	25th	55·5	1st & 6th.	43·5
	Indore	1,823	28·105	−·007	29·904	28·198	6th	27·994	14th	·204	72·3	91·5	−1·1	60·4	−0·2	76·0	−0·7	31·1	98·6	24th & 30th.	53·1	26th	45·5
	Neemuch	1,630	28·309	?	29·923	28·415	5th & 6th,	28·174	14th	·241	73·0	90·9	−1·0	61·3	−0·3	76·1	−0·7	29·6	100·3	24th	53·8	17th	46·5
Gujarat	Surat	36	29·911	−·028	29·890	30·007	2nd	29·822	14th	·185	75·5	96·3	+0·2	66·1	+0·5	81·3	+0·4	30·2	104·2	7th & 23rd.	59·5	20th	44·7
	Ahmedabad	176	29·776	?	29·904	29·864	5th	29·673	14th	·191	76·1	96·5	?	68·3	?	82·4	?	28·2	103·2	23rd	62·1	17th & 19th.	41·1
N.-W. P. (West)	Agra	555	29·349	−·023	29·880	29·518	2nd	29·177	14th	·341	71·2	89·3	−2·2	63·4	+0·6	76·3	−0·8	25·9	101·5	25th	57·9	11th	43·6
	Jhansi	858	29·067	−·011	29·897	29·211	2nd	28·904	14th	·307	75·3	92·4	−0·7	67·5	+2·0	80·0	+0·7	24·9	102·1	25th	60·4	11th & 13th.	41·7

* Mean of 19 days. † Mean of 25 days. ‡ Mean of 29 days.

I—*continued.*

in India, Burma, etc., in March 1895—continued.

Wind Direction. Number of winds from Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st March 1895.	Normal rainfall for period, 1st March to 31st March.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·66	0·95	−0·25	...	...	...	...	VI.—Upper Sub-Himalayas.	
13	3	4	...	2	...	...	1	8	2·9	4·3	− 33	62	·407	1·6	0	1·82	−1·82	0·02	0·94	− 0·92	0·02	0·94	− 0·92	0·02	Bareilly .	N.-W. Provinces (Submontane).
27	...	1	...	1	...	1	...	1	1·5*	2·3	− 35	64	·368	3·8	1	2·64	−1·64	0·25	1·07	− 0·82	0·25	1·07	− 0·82	0·25	Dehra Dun.	
16	1	3	...	2	1	1	1	6	2·8	2·9	− 3	70	·422	2·4	1	1·82	−0·82	0·29	0·72	− 0·43	0·29	0·72	− 0·43	0·27	Roorkee.	
14	...	...	1	1	...	3	11	1	2·9	2·7	+ 7	63	·408	2·0	2	1·55	+0·45	0·23	0·77	− 0·54	0·23	0·77	− 0·54	0·12	Meerut.	
9	...	...	1	2	...	1	16	2	3·7	3·9	− 5	54	·383	2·5	0	1·18	−1·18	0·10	0·56	− 0·46	0·10	0·56	− 0·46	0·08	Delhi .	Punjab (Central).
7	8	1	1	7	2	...	3	2	3·0	3·1	− 3	73	·438	3·5	2	1·36	+0·64	0·63	0·73	− 0·10	0·63	0·73	− 0·10	0·35	Lahore.	
9	1	1	3	2	1	...	3	11	3·0	P	P	69	·436	2·5	0	P	P	0·12	0·73	− 0·61	0·12	0·73	− 0·61	0·08	Umballa .	Punjab (Submontane).
3	4	2	4	1	7	4	5	1	P	P	P	73	·480	2·1	1	P	P	0·22	P	P	0·22	P	P	0·19	Patiala.	
12	2	5	...	3	2	...	2	5	2·7	1·8	+ 50	70	·439	4·7	2	2·36	−0·36	0·33	0·99	− 0·66	0·33	0·99	− 0·66	0·14	Ludhiana.	
21	6	...	4	...	...	...	...	...	2·2	1·9	+ 16	73	·431	3·6	4	2·64	+1·36	1·33	1·18	+ 0·15	1·33	1·18	+ 0·15	0·46	Sialkot .	Punjab (North).
6	2	3	...	2	...	1	1	4	2·1	2·6	− 19	75	·363	5·3	7	3·91	+3·09	3·70	1·76	+ 1·94	3·70	1·76	+ 1·94	1·42	Rawalpindi.‡	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·00	0·43	+1·19	...	...	...	...	VII.—Indus Valley and N.-W. Rajputana.	
16	...	1	1	...	5	6	...	2	2·8	3·7	− 24	80	·401	6·1	10	3·55	+6·45	7·53	1·70	+ 5·83	7·53	1·70	+ 5·83	1·96	Peshawar	Punjab (West).
			Not	rec	orde	d.			P	P	P	P	P	P	10	P	P	6·10	P	P	6·10	P	P	2·25	Mardan.	
2	4	9	6	1	...	3	4	2	4·8	P	P	69	·431	5·0	5	1·60	+3·40	3·32	0·54	+ 2·78	3·32	0·54	+ 2·78	1·50	Khushab.	
14	3	3	4	3	4	...	...	...	4·1	P	P	59	·400	3·5	2	1·00	+1·00	0·27	0·41	− 0·14	0·27	0·41	− 0·14	0·15	Montgomery.	
19	1	4	1	1	...	...	...	5	2·2	2·1	+ 5	79	·444	3·8	7	1·55	+5·45	4·24	0·63	+ 3·61	4·24	0·63	+ 3·61	1·63	D. I. Khan.	
6	...	13	1	8	1	1	...	1	1·6	2·1	− 24	65	·434	2·9	2	1·18	+0·82	0·71	0·38	+ 0·33	0·71	0·38	+ 0·33	0·55	Mooltan.	
11	3	2	2	3	3	3	2	2	4·5	3·8	+ 18	60	·376	3·4	1	0·55	+0·45	0·37	0·37	0	0·37	0·37	0	0·35	Sirsa.	
9	3	1	5	5	1	4	...	3	4·1	3·9	+ 5	45	·336	3·9	1	0·73	+0·27	0·22	0·14	+ 0·08	0·22	0·14	+ 0·08	0·22	Jacobabad .	Sind and Cutch.
													O	bserva	tions	not	record	ed.							Hyderabad.	
...	3	3	2	...	1	5	10	7	11·3	11·8	− 4	76	·578	2·0	0	0·55	−0·55	0·07	0·23	− 0·16	0·07	0·23	− 0·16	0·07	Kurrachee.	
1	5	1	1	...	...	2	12	9	9·2	8·3	+ 11	69	·565	2·9	0	P	P	0·10	0·09	+ 0·01	0·10	0·09	+ 0·01	0·06	Bhuj.‡	
2	1	3	7	6	3	5	1	3	4·8	4·3	+ 12	51	·385	4·3	2	P	P	0·31	0·20	+ 0·11	0·31	0·20	+ 0·11	0·10	Bickaneer .	Rajputana (West).
18	1	2	1	1	2	2	...	4	P	4·1	P	65	·492	4·1	2	P	P	0·70	0·07	+ 0·63	0·70	0·07	+ 0·63	0·60	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·32	0·18	+0·19	...	...	...	...	VIII.—East Rajputana, Central India and Gujarat.	
10	3	3	1	...	...	3	4	7	3·6	5·7	− 37	56	·400	3·5	3	0·50	+2·50	1·32	0·39	+ 0·93	1·32	0·39	+ 0·93	0·69	Jeypore .	Rajputana (East).
13	4	3	2	...	1	2	5	1	5·9	6·2	− 5	54	·372	3·2	2	0·64	+1·36	0·35	0·36	− 0·01	0·35	0·36	− 0·01	0·17	Sambhar.	
19	...	3	...	2	...	3	4	...	3·4	3·6	− 6	53	·365	2·9	1	0·27	+0·73	0·32	0·17	+ 0·15	0·32	0·17	+ 0·15	0·30	Ajmere.	
...	7	7	3	...	...	1	10	3	7·9	8·9	− 11	41	·345	1·8	1	0·18	+0·82	0·36	0·05	+ 0·31	0·36	0·05	+ 0·31	0·33	Deesa.	
1	7	6	1	...	...	...	2	14	6·9	8·1	− 15	59	·507	1·0	0	0	0	0·06	0·01	+ 0·05	0·06	0·01	+ 0·05	0·06	Rajkot .	Kathiawar.
...	21	...	...	...	...	...	...	10	8·1	P	P	66	·543	1·8	0	P	P	0	P	P	0	P	P	0	Veraval.	
14	1	...	...	...	1	5	10	...	1·9	2·3	− 17	61	·433	3·5	1	0·55	+0·45	0·41	0·27	+ 0·14	0·41	0·27	+ 0·14	0·25	Nowgong .	Central India.
8	2	2	2	2	2	...	6	7	2·5	3·7	− 32	47	·370	2·8	2	0	+2·00	0·78	0·02	+ 0·76	0·78	0·02	+ 0·76	0·50	Indore.	
6	4	5	7	3	...	2	2	2	7·8	9·1	− 14	39	·304	2·8	0	0·18	−0·18	0·14	0·08	+ 0·06	0·14	0·08	+ 0·06	0·07	Neemuch.	
7	6	2	...	...	...	3	6	7	P	6·5	P	59	·528	2·3	0	0	0	0	0	0	0	0	0	0	Surat .	Gujarat.
...	6	4	2	1	...	...	2	9	5·6	P	P	46	·409	2·5	0	P	P	0·04	P	P	0·04	P	P	0·04	Ahmedabad.	
1	...	2	...	5	...	11	...	12	4·3	4·5	− 4	52	·392	2·9	2	0·82	+1·18	0·25	0·31	− 0·06	0·25	0·31	− 0·06	0·15	Agra .	N.-W. P. (West).
11	1	1	1	...	2	11	1	3	2·7	3·4	− 21	42	·353	1·7	0	1·00	−1·00	0·16	0·35	− 0·19	0·16	0·35	− 0·19	0·09	Jhansi.	

* Mean of 27 days.

‡ Mean of 19 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
IX.—Deccan	...	...	...	—·011	...	...	...	...	...	...	...	95·4	−1·7	67·2	+0·1	81·4	−0·8	28·2	...	...	...	...	41·1
Bombay (Deccan)	Belgaum	2,524	27·412	−·019	29·861	27·500	1st	27·347	14th	·153	75·8	93·9	+0·1	65·1	+1·0	79·5	+0·6	28·8	98·2	28th	60·4	9th	37·8
	Sholapur	1,590	28·332	−·018	29·868	28·430	1st	28·245	15th	·185	80·9	99·2	−1·3	70·8	+2·0	85·6	+0·4	28·4	104·7	31st	65·1	20th	39·6
	Poona	1,840	28·094	−·026	29·895	28·172	1st & 22nd.	28·021	14th	·151	74·4	99·0	+1·9	64·3	0	81·7	+1·0	34·7	103·0	29th & 30th.	58·9	11th	44·1
	Bijapur	?1,946	27·984	?	29·867	28·083	1st	27·918	15th	·165	78·9	97·0	?	70·4	?	83·7	?	26·6	100·7	30th	60·1	12th	40·6
Khandesh	Malegaon	1,430	28·494	−·024	29·887	28·563	2nd	28·414	14th	·149	77·4	97·2	−0·2	65·9	+2·3	81·6	+1·1	31·3	102·3	24th	57·4	26th	44·9
	Ahmednagar	2,152	27·785	?	29·880	27·863	6th	27·715	14th & 15th.	·148	77·2	94·6	?	65·2	?	80·0	?	29·4	99·2	30th	55·5	20th	43·7
Berar	Akola	930	28·986	−·010	29·880	29·084	1st	28·878	15th	·206	75·5	98·3	−0·5	67·1	+1·2	82·7	+0·4	31·2	104·2	31st	59·9	21st	44·3
	Amraoti	1,216	28·698	−·009	29·881	28·800	1st & 2nd.	28·588	15th	·212	76·7	96·2	−2·0	70·1	+1·6	83·2	−0·2	26·1	103·3	31st	62·3	20th	41·0
Central Provinces (West).	Khandwa	1,045	28·881	−·010	29·898	28·996	2nd	28·787	14th	·209	75·2	97·2	−0·3	65·3	+0·3	81·3	0	31·9	103·7	24th & 29th.	56·1	8th	47·6
	Hoshangabad	1,020	28·906	−·017	29·910	29·020	3rd	28·788	14th	·232	70·6	92·4	−3·7	64·8	+0·4	78·6	−1·7	27·6	101·0	31st	58·8	21st	42·2
	Nagpur	1,025				Not recorded.					75·2	95·8	−2·8	66·6	−1·0	81·2	−1·9	29·2	103·3	31st	60·7	20th	42·6
Central Provinces (Central).	Chanda	634	29·282	−·007	29·869	29·391	1st	29·173	15th	·218	77·6	98·5	−1·8	67·2	−0·1	82·8	−1·0	31·3	104·9	31st	61·1	22nd	43·8
	Seoni	2,033	27·901	+·001	29·906	28·027	1st	27·792	15th	·235	71·4	90·3	−3·2	62·5	−1·0	76·4	−2·1	27·8	99·2	28th	54·9	20th	44·3
	Jubbulpore	1,327	28·595	−·005	29·912	28·707	1st	28·470	15th	·237	69·4	89·0	−4·1	60·0	−1·0	74·5	−2·6	29·0	98·0	31st	53·4	2nd	44·6
	Saugor	1,762	28·156	?	29·905	28·280	2nd	28·029	15th	·251	70·1	88·8	−3·5	63·7	−0·6	76·3	−2·1	25·1	97·9	29th	57·3	21st	40·6
Central Provinces (East).	Raipur	970	28·958	+·011	29·894	29·086	1st	28·830	15th	·256	75·4	94·5	−2·0	67·5	−1·1	81·0	−1·6	27·0	101·5	30th	56·8	11th	44·7
	Sutna	1,040	28·861	−·018	29·888	29·001	1st	28·725	25th	·276	70·3	88·4	−3·2	61·2	+0·2	74·8	−1·5	27·2	98·5	25th	54·3	2nd	44·2
	Sambalpur	463	29·452	+·008	29·874	29·595	1st	29·331	25th	·264	74·9	96·3	−0·8	64·7	−2·7	80·5	−1·8	31·6	103·0	26th & 31st.	57·2	2nd	45·8
Hyderabad (North).	Aurangabad	?	28·079	?	?	28·174	1st	27·977	16th	·197	79·9	97·1	?	67·4	?	82·3	?	29·7	102·1	24th	60·4	28th	41·7
	Indur	?				Not recorded.					81·7	97·1	?	70·3	?	83·7	?	26·8	103·6	31st	64·4	1st	39·2
	Bidar	?	27·772	?	?	27·881	1st	27·682	14th	·199	79·9	94·0	?	71·1	?	82·6	?	22·9	97·5	29th & 31st.	65·1	20th	32·4
Hyderabad South).	Gulbarga	1,502	28·417	?	29·864	28·532	1st	28·334	15th	·198	80·8	98·7	?	71·9	?	85·3	?	26·8	103·0	31st	66·1	3rd	36·9
	Raichur	1,378	28·536	?	29·856	28·648	1st	28·460	15th	·188	80·1	98·7	?	74·3	?	86·6	?	24·4	106·5	14th	68·6	4th	37·9
	Hyderabad (Deccan).	1,690	28·242	−·025	29·891	28·334	1st	28·156	14th	·178	75·9	95·7	−2·1	68·8	−0·7	82·3	−1·4	26·9	99·9	15th	64·2	3rd	35·7
	Secunderabad	1,787	28·165	?	29·914	28·255	1st & 2nd.	28·086	14th	·169	74·8	96·5	?	68·9	?	82·7	?	27·6	101·2	15th & 31st.	65·0	4th	36·2
	Khamamet	373	29·572	?	29·894	29·674	1st	29·472	14th	·202	77·8	97·3	?	72·3	?	84·8	?	25·0	102·8	15th	68·3	19th	34·5
X.—West Coast	...	...	...	—·030	...	...	...	...	...	...	...	88·2	+0·6	75·3	+0·7	81·8	+0·6	12·9	...	...	...	...	19·4
Konkan	Bombay	37	29·909	−·027	29·886	30·015	2nd	29·826	14th	·189	77·8	85·9	+0·3	73·9	+0·4	79·9	+0·4	12·0	89·5	7th	71·0	26th	18·5
	Ratnagiri	110	29·816	−·028	29·865	29·926	1st	29·751	14th	·175	78·9	87·6	−0·1	73·2	+0·9	80·4	+0·4	14·4	90·9	22nd	67·9	21st	23·0
	Mormugao	60	29·878	?	29·873	29·982	1st	29·809	17th	·173	80·1	86·7	?	75·7	?	81·2	?	11·0	91·0	23rd	72·4	3rd & 4th.	18·6
	Goa	23	29·940	?	29·877	30·054	1st	29·868	17th	·186	80·0	84·6	?	74·5	?	79·6	?	10·1	86·5	18th	71·0	26th	15·5
	Karwar	44	29·897	−·021	29·873	30·005	1st	29·819	17th	·186	76·4	87·8	0	73·0	−0·1	80·4	−0·1	14·8	89·3	4 days	69·6	21st	19·7
Malabar	Cochin	10	29·923	−·035	29·861	30·031	1st	29·860	14th & 17th.	·171	82·4	92·7	+2·1	78·2	+1·5	85·5	+1·8	14·5	94·3	4 days	73·7	4th	20·6
	Calicut	27	29·909	−·035	29·865	30·012	1st	29·844	14th & 15th.	·168	82·6	90·8	+0·3	76·2	+0·3	83·5	+0·3	14·6	92·8	4 days.	71·1	4th	21·7
	Mangalore	65	29·875	−·031	29·873	29·976	1st	29·802	17th	·174	81·4	89·7	+0·8	76·9	+1·1	83·3	+1·0	12·8	91·3	22nd & 24th	72·9	3rd & 4th.	18·4
	Trivandrum	198	29·740	?	29·870	29·846	1st	29·672	14th	·174	80·2	88·1	?	76·4	?	82·3	?	11·7	90·0	18th & 29th.	71·5	3rd	18·5
XI.—South India	...	...	...	—·017	...	...	...	...	...	...	...	92·9	−0·3	70·7	−0·9	81·8	−0·6	22·1	...	...	...	...	32·3
Madras (South)	Pamban	37	29·923	?	29·887	30·013	1st & 5th.	29·861	14th	·152	81·9	87·9	?	76·1	?	82·1	?	11·8	91·3	27th & 28th.	73·2	24th	18·1
	Tinnevelly	168	29·790	?	29·889	29·887	1st	29·719	15th	·168	80·5	97·5	?	75·1	?	86·3	?	22·4	100·8	3 days	69·4	3rd	31·4
	Madura	447	29·507	−·019	29·894	29·599	1st	29·432	14th	·167	79·7	96·4	−0·5	72·1	−0·4	84·3	−0·5	24·3	100·0	7th & 29th.	64·2	3rd	35·8

I—*continued.*

in India, Burma, etc., in March 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st March 1895.	Normal rainfall for period from 1st March to 31st March.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·37	0·47	−0·04	...	...	...	...	IX.—Deccan.	
12	6	3	2	3	2	1	1	1	10·6	11·6	− 9	46	·397	0·4	0	1·00	−1·00	0	0·35	− 0·35	0	0·35	− 0·35	0	Belgaum .	Bombay (Deccan).
3	4	4	...	13	1	...	1	5	10·2	7·4	+ 38	35	·365	0·8	0	0·36	−0·36	0·03	0·34	− 0·31	0·03	0·34	− 0·31	0·03	Sholapur.	
23	...	...	...	1	...	...	3	4	4·6	8·3	− 45	40	·340	1·1	0	0·36	−0·36	0	0·05	− 0·05	0	0·05	− 0·05	0	Poona.	
3	...	1	5	5	...	3	9	5	2·9	P	P	56	·559	1·2	0	0·03	−0·03	0·03	P	P	0·03	P	P	0·03	Bijapur.	
5	3	2	1	1	...	1	8	10	9·9	6·4	+ 55	60	·552	2·5	1	0	+1·00	0·14	0·03	+ 0·11	0·14	0·03	+ 0·11	0·13	Malegaon .	Khandesh.
9	10	5	...	2	2	...	..	3	7·1	P	P	70	·663	1·5	0	P	P	0	P	P	0	P	P	0	Ahmednagar.	
5	1	4	7	3	3	2	3	3	5·4	4·4	+ 23	41	·358	3·1	2	0·82	+1·18	0·22	0·55	− 0·33	0·22	0·55	− 0·33	0·10	Akola . .	Berar.
...	1	11	6	6	1	2	1	3	1·9	4·0	− 53	37	·333	1·6	2	0·45	+1·55	0·26	0·40	− 0·14	0·26	0·40	− 0·14	0·14	Amraoti.	
5	1	6	3	1	...	...	4	11	5·1	4·6	+ 11	42	·359	2·0	1	0·18	+0·82	0·17	0·13	+ 0·04	0·17	0·13	+ 0·04	0·16	Khandwa .	Central Provinces (West).
6	...	5	10	1	2	1	3	3	3·0	2·6	+ 15	58	·427	3·3	1	0·36	+0·64	0·39	0·23	+ 0·16	0·39	0·23	+ 0·16	0·23	Hoshangabad.	
18	3	4	4	...	1	...	...	1	4·8	4·5	+ 7	51	·441	3·5	3	1·00	+2·00	0·71	0·61	+ 0·10	0·71	0·61	+ 0·10	0·29	Nagpur.	
6	5	3	6	9	...	...	1	1	3·0	3·2	− 6	46	·433	1·5	1	P	P	0·70	1·49	− 0·79	0·70	1·49	− 0·79	0·70	Chanda .	Central Provinces (Central).
			Not	rec	orde	d.			P	3·4	P	57	·438	3·6	1	1·73	−0·73	0·37	0·70	− 0·33	0·37	0·70	− 0·33	0·12	Seoni.	
9	...	2	1	8	8	2	1	...	2·3	3·0	− 23	65	·463	3·3	4	0·82	+3·18	1·50	0·51	+ 0·99	1·50	0·51	+ 0·99	0·57	Jubbulpore.	
13	1	1	3	6	3	3	...	1	2·7	3·2	− 16	55	·395	2·4	4	0·64	+3·36	1·49	0·26	+ 1·23	1·49	0·26	+ 1·23	0·61	Saugor.	
17	3	2	1	1	1	2	2	2	5·5	4·7	+ 17	46	·400	1·9	3	1·00	+2·00	0·89	0·81	+ 0·08	0·89	0·81	+ 0·08	0·40	Raipur .	Central Provinces (East).
3	7	1	1	...	6	...	8	5	4·9	5·5	− 11	58	·414	2·5	3	0·91	+2·09	0·99	0·50	+ 0·49	0·99	0·50	+ 0·49	0·48	Sutna.	
...	7	7	3	6	2	2	2	2	3·8	2·0	+ 90	55	·475	1·4	2	P	P	0·44	1·20	− 0·76	0·44	1·20	− 0·76	0·21	Sambalpur.	
16	1	7	2	2	1	1	1	0	3·3	P	P	35	·347	2·0	1	P	P	0·19	0·06	+ 0·13	0·19	0·06	+ 0·13	0·15	Aurangabad.	Hyderabad (North).
6	1	3	7	4	2	2	3	3	6·1	P	P	55	·592	1·5	0	P	P	0	0·27	− 0·27	0	0·27	− 0·27	0	Indur.	
...	2	3	4	2	7	10	3	...	7·6	P	P	59	603	0·5	0	P	?	0	0·34	− 0·34	0	0·34	− 0·34	0	Bidar.	
8	2	5	5	4	4	3	...	...	8·8	P	P	43	·442	1·0	0	P	P	0	0·21	− 0·21	0	0·21	− 0·21	0	Gulbarga .	Hyderabad (South).
...	...	1	2	12	10	3	3	...	6·9	P	P	48	·501	1·2	0	P	P	0	P	P	0	P	P	0	Raichur.	
15	...	2	5	4	2	...	3	...	3·9	P	P	62	·553	1·0	1	P	P	0·41	0·75	− 0·34	0·41	0·75	− 0·34	0·41	Hyderabad (Deccan).	
7	...	...	13	4	...	...	2	5	5·9	5·0	+ 18	54	·465	1·2	1	P	P	0·24	P	P	0·24	P	P	0·24	Secunderabad	
1	...	...	1	16	12	1	...	...	8·1	P	P	77	·747	1·4	1	P	P	0·46	P	P	0·46	P	P	0·46	Khamamet.	
...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	0·01	0·58	−0·57	...	...	...	...	X.—West Coast.	
...	13	7	2	2	2	...	...	5	11·5	11·5	0	76	·735	2·1	0	0·09	−0·09	0	0·03	− 0·03	0	0·03	− 0·03	0	Bombay .	Konkan.
...	7	2	1	6	5	1	...	9	5·8	9·9	− 41	70	·690	2·0	0	0	0	0	0·01	− 0·01	0	0·01	− 0·01	0	Ratnagiri.	
5	5	3	7	6	3	1	1	...	9·2	P	P	78	·811	1·9	0	P	P	0	P	P	0	P	P	0	Mormugao.	
13	...	5	9	1	2	...	...	1	6·4	P	P	73	·757	2·5	0	P	P	0	0	0	0	0	0	0	Goa.	
2	5	11	9	2	...	1	...	1	5·5	P	P	85	·763	1·2	0	0	0	0	0	0	0	0	0	0	Karwar.	
4	7	18	2	...	...	...	...	...	6·8	P	P	75	·839	1·9	0	2·45	−2·45	0·06	2·44	− 2·38	0·06	2·44	− 2·38	0·03	Cochin .	Malabar.
10	5	5	7	1	...	...	...	3	14·0	P	P	73	·815	0·9	0	0·63	−0·63	0	0·52	− 0·52	0	0·52	− 0·52	0	Calicut.	
24	...	2	4	1	...	...	...	...	2·2	3·4	− 35	76	·821	1·5	0	0·10	−0·10	0	0·06	− 0·06	0	0·06	− 0·06	0	Mangalore.	
13	5	7	1	1	...	1	...	3	4·5	P	P	74	·770	1·3	0	P	P	0	1·57	− 1·57	0	1·57	− 1·57	0	Trivandrum.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	0·53	−0·47	...	...	...	...	XI.—South India.	
...	...	9	15	6	...	1	...	...	8·9	P	P	77	·839	3·0	0	1·30	−1·30	0	0·79	− 0·79	0	0·79	− 0·79	0	Pamban. .	Madras (South).
...	12	2	...	...	...	...	1	16	5·7	P	P	73	·765	2·6	0	2·40	−2·40	0	P	P	0	P	P	0	Tinnevelly.	
3	11	5	3	4	1	...	...	4	2·1	4·1	− 49	73	·749	2·1	0	0·36	−0·36	0	0·61	− 0·61	0	0·61	− 0·61	0	Madura. .	

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras (South Central).	Salem	940	29·036	−·025	29·923	29·133	1st	28·964	14th	·169	78·6	99·1	+0·6	70·2	−0·4	84·7	+0·1	28·9	104·4	27th	60·9	3rd	43·5
	Coimbatore	1,348	28·602	−·026	29·905	28·703	1st	28·529	14th	·174	76·1	96·9	+0·6	69·3	−0·6	83·1	0	27·6	101·4	27th	61·1	1st & 4th.	40·3
Coorg	Mercara	3,781	26·291	?	?	26·328	1st	26·221	14th	·107	69·8	83·6	−0·9	62·5*	+1·3	73·1*	+0·2	21·1	90·0	18th	57·7	3rd	32·3
Mysore	Chitaldroog	2,405	27·560	?	29·876	27·654	1st	27·489	15th	·165	78·1	94·2	?	70·3	?	82·3	?	23·9	98·2	28th	64·4	4th	33·8
	Bangalore Fort.	3,021	26·966	−·029	29·887	27·053	1st	26·903	14th	·150	72·6	91·1	+0·8	63·8	−0·5	77·5	+0·2	27·3	94·8	31st	56·4	3rd & 4th.	38·4
	Hassan	3,091	26·908	?	29·902	26·998	1st	26·851	14th & 15th.	·147	73·6	90·4	?	63·1	?	76·8	?	27·3	93·1	27th	54·0	4th	39·1
	Mysore	2,518	27·455	?	29·895	27·547	1st	27·385	14th	·162	74·2	93·0	?	67·6	?	80·3	?	25·4	96·9	28th	62·0	3rd & 5th.	34·9
Madras (East Coast, South).	Negapatam	31	29·928	−·015	29·898	30·025	1st	29·864	14th	·161	80·5	87·3	−1·4	75·6	+0·3	81·4	−0·6	11·7	90·7	18th	69·2	3rd & 4th.	21·5
	Cuddalore	12	29·952	?	29·893	30·051	1st	29·868	15th	·183	78·7	88·9	?	69·9	?	79·4	?	19·0	91·3	27th	64·3	4th	27·0
	Trichinopoly	255	29·705	−·022	29·895	29·807	1st	29·633	14th	·174	79·1	97·6	+0·1	71·7	−0·9	84·7	−0·4	25·9	102·0	27th	64·9	1st	37·1
	Madras	22	29·944	−·017	29·897	30·048	1st	29·853	15th	·195	78·8	89·4	+0·2	69·3	−2·8	79·4	−1·3	20·1	91·5	22nd	63·5	1st & 3rd	28·0
Madras (East Coast, Central).	Nellore	71	29·875	?	29·880	29·987	1st	29·769	15th	·218	77·8	94·2	?	70·2	?	82·2	?	24·0	99·8	31st	65·1	3rd	34·7
	Masulipatam	15	29·917	−·009	29·897	30·050	1st	29·847	15th	·203	79·1	89·6	−1·8	71·2	−1·2	80·4	−1·5	18·4	95·1	31st	66·7	4th & 7th.	28·4
Madras (Central)	Cuddapah	433	29·495	?	29·868	29·606	1st	29·405	15th	·201	83·2	101·0	−0·1	73·6	−1·4	87·4	−0·8	27·4	105·2	3 days	67·5	2nd	37·7
	Kurnool	924	28·999	−·016	29·865	29·102	1st	28·919	15th	·183	82·0	99·8	−0·9	70·9	−1·1	85·4	−1·0	28·9	104·3	30th	63·8	1st	40·5
	Bellary	1,475	28·446	−·018	29·867	28·560	1st	28·374	15th	·186	80·1	99·6	−0·6	71·8	0	85·8	−0·3	27·8	103·6	30th	64·1	4th	39·5
Madras (East Coast, North).	Rajahmundry	112	29·837	−·007	29·887	29·946	1st	29·736	15th	·210	78·7	96·1	+0·2	72·6	−1·2	84·4	−0·5	23·5	99·0	30th	69·0	2nd & 4th.	30·0
	Cocanada	26	29·930	−·002	29·891	30·039	1st	29·827	14th	·212	78·2	90·6	+1·0	71·8	−2·7	81·2	−0·9	18·8	95·7	4 days	67·6	3 days	28·1
	Vizagapatam	31	29·913	−·020	29·882	30·019	1st	29·813	14th	·206	78·7	84·9	−1·3	77·7	−1·9	81·3	−1·6	7·2	88·3	31st	74·5	4 days	13·8
	Gopalpur	21	29·913	?	29·874	30·042	1st	29·810	15th	·232	75·7	8 74	?	70·2	?	78·9	?	17·2	92·2	14th	64·1	2nd & 3rd.	28·1
XII.—Hill Stations.																							
Baluchistan	Shirino	...									Not recorded.												
	Kachh	?	23·905*	?	?	24·005	3rd	23·702	24th	·303	46·8	58·6	?	37·5	?	48·0	?	21·1	67·0	3 days	25·0	17th	42·0
	Pishin	?				Not recorded.					?	69·2	?	36·2	?	52·7	?	33·0	81·1	8th	23·9	16th & 17th.	57·2
	Quetta	5,502	24·626	−·023	?	24·801	3rd	24·390	24th	·411	50·6	65·4	+0·9	41·2	+1·4	53·3	+1·2	24·2	72·2	8th	29·3	17th	42·9
	Kalat	?				Not recorded.					45·2	65·1	?	27·5	?	46·3	?	37·6	74 1	3rd	15·0	16th	59·1
	Chaman	4,311	25·656	?	?	25·828	3rd	25·450	14th	·378	56·9	68·5	?	49·1	?	58·8	?	19·4	78·1	8th	36·6	15th	41·5
Northern India	Leh	11,503	19·698	?	?	19·890	5th	19·496	14th	·394	27·5	43·4	?	22·0	?	32·7	?	21·4	54·1	23rd	7·3	1st	46·8
	Srinagar	5,204	24·985	?	?	25·219	5th	24·698	24th	·521	38·0	45·1	?	34·2	?	39·7	?	10·9	61·4	22nd & 31st	22·1	1st	39.3
	Astor (Kashmir)	?				Not recorded.					33·6	47·7	?	29·0	?	38·4	?	18·7	54·2	13th	22·3	1st	31·9
	Gilghit	?	26·520	?	?	26·540	4th & 11th.	26·500	13th	?·040	50 2	64·7	?	46·7	?	55·7	?	18·0	71·4	31st	41·3	1st	30·1
	Cherat	?	25·715	?	?	25·890	2nd	25·458	15th	·432	53·4	62·9	?	48·9	?	55·9	?	14·0	76·3	9th	42·1	16th	34·2
	Murree	6,344	23·826	−·012	?	23·968	2nd	23·601	24th	·367	47·9	58·3	−0·4	44·7	+0·9	51·5	+0·3	13·6	69·6	8th	35·0	25th	34·6
	Poo	?				Not recorded.					?	52·0	?	33·1	?	42·5	?	18·9	62·3	23rd	26·0	1st	36·3
	Simla	7,224	23·092	−·018	?	23·228	2nd	22·973	14th	·255	49·7	57·3	+0·4	45·2	+0·7	51·3	+0·6	12·1	66·2	24th	39·1	20th	27·1
	Chakrata	6,977	23·326	+·002	?	23·474	2nd	23·220	14th	·254	52·0	62·7	+0·8	45·4†	+1·4†	54·0†	+1·1	17·3	70·3	28th	35·1	20th	35·2
	Mussooree	6,705	23·549	?	?	23·705	2nd	23·451	14th	·254	52·4	62·0	?	47·0	?	54·5	?	15·0	69·3	28th	38·5	20th	30·8
	Ranikhet	6,069	24·104	−·001	?	24·245	2nd	23·976	14th	·269	54·7	66·3	+1·2	49·5	+0·6	57·9	+0·9	16·8	74·0	28th	42·0	20th	32·0
	Yatung	10,480?				Not recorded.					?	48·6	?	29·1	?	38·9	?	19·5	59·0	26th	21·5	12th	37·5
	Gnatong	?	19·183	?	?	19·312	2nd	19·040	14th	·272	32·3	40·5	?	24·8	?	32·7	?	15·7	49·0	24th	15·6	12th	33·4
	Darjeeling	7,421	22·953	−·015	?	23·106	2nd	22·800	14th	·306	48·0	54·8	−1·9	43·1	+0·1	49·0	−0·9	11·7	61·1	19th	36·6	21st	24·5
	Gantak	?	24·474	?	?	24·708	3rd	24·317	14th	·391	53·1	63·8	?	47·3	?	55·5	?	16·5	71·8	29th	37·9	12th	

* Mean of 28 days. † Mean of 30 days.

I—*continued.*

in India, Burma, etc., in March 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st March 1895.	Normal rainfall for period, 1st March to 31st March.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
13	3	12	2	...	...	...	1	...	5·8	5·5	+ 5	67	·669	1·0	0	1·64	−1·64	0	0·88	− 0·88	0	0·88	− 0·88	0	Salem .	Madras (South Central).
...	...	4	22	2	3	...	...	...	2·1	3·3	− 36	80	·726	2·4	0	1·18	−1·18	0	0·59	− 0·59	0	0·59	− 0·59	0	Coimbatore.	
21	...	1	4	...	3	...	...	2	2·5	3·4	+ 26	69	·510	0·9	2	2·00	0	0·86	0·87	− 0·01	0·86	0·87	− 0·01	0·51	Mercara .	Coorg.
...	1	1	2	5	4	5	9	4	7·5	?	?	53	·512	0·9	0	?	?	0	?	?	0	?	?	0	Chitaldroog .	
1	...	1	6	8	5	7	3	...	7·9	3·6	+119	61	·499	0·7	0	0·82	−0·82	0	0·54	− 0·54	0	0·54	− 0·54	0	Bangalore Fort.	Mysore.
8	...	3	5	5	4	2	1	3	3·6	?	?	68	·568	1·0	0	?	?	0	?	?	0	?	?	0	Hassan.	
5	...	2	2	4	7	6	4	1	7·5	?	?	69	·574	1·3	0	?	?	0	?	?	0	?	?	0	Mysore.	
6	...	6	4	5	2	...	1	7	13·7	3·6	+281	76	·792	4·6	0	0·73	−0·73	0	0·54	− 0·54	0	0·54	− 0·54	0	Negapatam.	Madras (East Coast, South).
...	5	...	...	...	2	3	6	15	2·0	?	?	86	·853	1·5	0	1·50	−1·50	0	?	?	0	?	?	0	Cuddalore.	
14	9	7	1	...	...	...	...	...	3·3	3·8	− 13	72	·724	2·5	0	0·82	−0·82	0	0·55	− 0·55	0	0·55	− 0·55	0	Trichinopoly.	
1	2	...	...	...	5	15	4	4	5·8	6·4	− 9	75	·743	2·0	0	0·64	−0·64	0	0·39	− 0·39	0	0·39	− 0·39	0	Madras.	
4	...	...	2	15	9	...	...	1	6·1	?	?	82	·780	2·6	0	0·40	−0·40	0	?	?	0	?	?	0	Nellore .	Madras (East Coast, Central).
11	2	2	2	6	7	1	...	...	5·1	6·8	− 25	83	·828	2·5	0	0·27	−0·27	0	0·12	− 0·12	0	0·12	− 0·12	0	Masulipatam	
1	...	3	15	6	3	3	...	...	?	?	?	52	·594	0·6	0	0·20	−0·20	0	0·06	− 0·06	0	0·06	− 0·06	0	Cuddapah .	Madras (Central).
17	1	4	9	...	...	...	...	...	?	?	?	49	·536	1·2	0	0·67	−0·67	0·03	0·54	− 0·51	0·03	0·54	− 0·51	0·03	Kurnool.	
7	...	1	2	8	6	3	2	2	4·1	4·6	− 11	48	·494	1·4	0	0·73	−0·73	0	0·22	− 0·22	0	0·22	− 0·22	0	Bellary.	
2	9	4	5	...	1	2	3	5	?	?	?	70	·707	4·3	0	0·05	−0·05	0·05	0·43	− 0·38	0·05	0·43	− 0·38	0·05	Rajahmundry	Madras (East Coast, North).
...	2	...	1	1	1	2	13	11	6·6	?	?	76	·725	1·5	0	0·60	−0·60	0·06	0·53	− 0·47	0·06	0·53	− 0·47	0·06	Cocanada.	
...	...	...	...	...	...	...	28	3	2·6	3·0	− 13	76	·745	1·6	0	1·09	−1·09	0	0·39	− 0·39	0	0·39	− 0·39	0	Vizagapatam.	
...	8	1	...	...	1	9	2	10	12·9	11·8	+ 9	74	·659	0·1	0	1·13	−1·13	0	0·90	− 0·90	0	0·90	− 0·90	0	Gopalpur.	
XII.—Hill Stations.																										
														Not recorded.											Shirino .	Baluchistan.
9	3	1	6	3	0	3	5	1	?	?	?	69	·219	3·4	6	?	?	1·49	?	?	1·49	?	?	0·35	Kachh.	
			Not recorded.						?	?	?	?	?	?	0	?	?	0	?	?	0	?	?	0	Pishin.	
17	...	...	...	4	6	1	1	2	4·5	4·8	− 6	64	·236	4·2	3	4·91	−1·91	1·23	1·70	− 0·47	1·23	1·70	− 0·47	0·43	Quetta.	
...	1	...	...	...	28	...	...	2	?	?	?	?	?	?	4	?	?	0·92	?	?	0·92	?	?	0·39	Kalat.	
...	2	1	5	8	9	5	1	...	6·1	?	?	60	·276	5·5	6	?	?	1·41	?	?	1·41	?	?	0·35	Chaman.	
1	2	14	4	2	3	2	3	...	1·3	?	?	59	·090	5·5	2	?	?	0·41	?	?	0·41	?	?	0·22	Leh.	
12	2	1	...	4	5	2	2	3	4·1	?	?	85	·202	6·6	9	?	?	5·30	?	?	5·30	?	?	1·78	Srinagar .	Northern India.
...	...	...	...	...	13	13	5	...	8·7*	?	?	?	?	6·6*	6	?	?	3·84	?	?	3·84	?	?	1·13	Astor (Kashmir).	
			Not recorded.						?	?	?	55	·198	5·4	1	?	?	0·44	?	?	0·44	?	?	0·36	Gilghit.	
3	18	1	...	...	1	1	1	6	16·4	?	?	67	·264	7·3	10	?	?	9·59	?	?	9·59	?	?	2·38	Cherat.	
5	2	...	2	13	...	...	2	7	13·0	9·4	+ 38	54	·182	6·8	11	5·36	+5·64	7·60	3·65	+ 3·95	7·60	3·65	+ 3·95	1·97	Murree.	
20	...	...	2	5	2	1	...	1	?	?	?	?	?	4·2	5	?	?	2·98	?	?	2·98	?	?	1·75	Poo.	
3	5	9	3	2	5	4	...	...	7·0	2·8	+150	45	·157	3·8	5	4·64	+0·36	1·29	2·24	− 0·95	1·29	2·24	− 0·95	0·36	Simla.	
2	...	4	17	2	1	2	2	1	7·7	5·9	+ 31	54	·219	2·9	2	4·80	−2·80	0·80	2·39	− 1·59	0·80	2·39	− 1·59	0·43	Chakrata.	
...	1	4	9	3	1	...	6	7	?	?	?	52	·201	2·6	2	?	?	0·65	?	?	0·65	?	?	0·33	Mussooree.	
18	3	2	2	1	1	3	1	...	4·0	2·6	+ 54	60	·252	2·5	1	4·00	−3·00	0·64	2·24	− 1·60	0·64	2·24	− 1·60	0·59	Ranikhet.	
			Not recorded.						?	?	?	?	?	?	13	?	?	5·35	?	?	5·35	?	?	0·91	Yatung.	
3	2	4	4	4	1	2	7	4	6·1	?	?	71	·127	4·8	14	?	?	7·80	?	?	7·80	?	?	1·66	Gnatong.	
3	1	3	8	2	2	7	4	1	8·1	6·6	+ 23	79	·260	5·4	2	4·29	−2·29	1·08	1·63	− 0·55	1·08	1·63	− 0·55	0·45	Darjeeling.	
...	1	4	2	2	5	4	9	3	2·2	?	?	81	·330	3·5	12	?	?	7·49	?	?	7·49	?	?	2·29	Gantak.	

* Mean of 30 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	26·080	−·012	?	26·185	5th	25·939	15th	·246	68·2	76·4	−2·1	60·9	−0·9	68·7	−1·5	15·5	84·2	23rd	53·9	15th & 25th	30·3
	Pachmarhi	3,528	26·492	−·005	?	26·591	1st	26·407	15th	·184	?	?	?	?	?	?	?	?	?		?		?
South India	Wellington	6,200	24·280	−·030	?	24·353	1st	24·236	15th & 17th.	·117	63·8	75·1	+1·4	49·5	−3·3	62·3	−1·0	25·6	79·7	27th	41·7	4th	38·0
XIII.—Extra India.																							
Ceylon	Trincomalee	75	29·861	?	29·864	29·951	1st	29·795	15th	·156	84·1	87·7	?	76·5	?	82·1	?	11·2	90·0	28th	73·0	3rd	17·0
	Colombo	40	29·900	−·033	29·886	29·981	1st	29·842	10th	·139	84·8	88·9	?	75·6	?	82·3	?	13·3	91·0	17th & 19th	72·0	1st & 4th	19·0
	Galle	48	29·895	?	29·868	29·966	1st	29·824	15th	·142	82·4	85·5	?	†77·0	?	†81·3	?	8·5	88·0	31st	74·5	22nd & 23rd	13·5
Persia	Meshed	3,104				Not recorded					47·9	?	?	40·6	?	?	?	?	?		33·0	15th & 28th	?
	Teheran	?	25·857	?	?	26·025	5th	25·550	25th	·475	43·7	56·1	?	37·5	?	46·8	?	18·6	67·3	31st	30·5	27th	36·8
	Isphahan	?				Not recorded.					44·8	58·8	?	36·1	?	47·5	?	22·7	70·6	29th	25·9	13th	44·7
	Bushire	14	†29·954	?	29·925†	30·098	1st	29·725	20th	·373	62·9	70·9	?	57·9	?	64·4	?	13·0	83·6	23rd	50·1	15th	33·5
	Jask	?	29·948	?	?	30·082	3rd	29·777	9th	·305	69·7	77·1	?	65·3	?	71·2	?	11·8	81·3	20th	58.4	15th	22·9
Arabia	Muscat	?	29·949	?	?	30·061	3rd	29·729	11th	·332	73·0	75·9	?	71·0	?	73·4	?	4·9	82·4	20th	66·9	14th	15·5
	Baghdad	?	29·521	?	?	29·721	4th	29·296	19th	·425	54·6	69·5	?	48·0	?	58·7	?	21·5	78·6	29th	38·4	4th	40·2
	Aden*	94	29·858	−·042	29·885	30·019	1st	29·787	12th	·232	78·5	83·6	−1·7	76·8	+2·0	80·3	+0·2	6·8	88·3	24th & 27th	73·9	8th	14·4
	Perim	?	29·732	?	?	29·868	1st	29·651	20th	·217	78·4	85·2	?	*75·7	?	*80·4	?	9·5	87·1	26th & 27th	73·4	6th	13·7
Afghanistan	Kabul	?			Not recorded						44·2	* 61·5	?	†39·0	?	*50·3	?	22·5	78·2	31st	30·4	17th	47·8
Central Asia	Kashgar†	...	25·642	?	?	26·030	16th	25·270	12th	·760	41·3	57·6	?	36·7	?	47·2	?	20·9	78·2	6th	28·9	18th	49·3
Arabian Sea Islands.	Amini Divi	15									Not received.												
	Minicoy	10	29·945	?	29·880	30·046	1st	29·886	14th & 15th	·160	82·1	88·9	?	‡79·8	?	‡84·4	?	9·1	90·5	12th	75·1	3rd	15·4
Africa	Zanzibar	73	29·892	?	29·892	29·954	2nd	29·828	12th	·126	81·7	86·7	?	79·7	?	83·2	?	7·0	89·6	1st	74·7	9th	14·9

* Mean of 29 days. † Mean of 30 days. ‡ Mean of 21 days.

—concluded.

India, Burma, etc., in March 1895—concluded.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8A.M.			Rainfall.									Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.	Mean cloud amount.	Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st March 1895.	Normal rainfall for period, 1st March to 31st March.	Variation from normal of period.	Heaviest rainfall during month.		
2	4	11	1	2	1	6	1	3	7·8	6·7	+ 15	39	·261	1·9	1	0·27	+0·73	0·66	0·12	+0·54	0·66	0·12	+ 0·54	0·64	Mount Abu.	Central India.
1	3	2	4	3	2	6	7	3	7·1	4·6	+ 54	?	?	2·9	5	0·73	+4·27	1·77	0·32	+1·45	1·77	0·32	+ 1·45	0·52	Pachmarhi.	
27	1	2	...	1	...	...	...	...	2·6	2·8	− 7	51	·308	0	1	3·13	−2·13	0·19	2·81	−2·62	0·19	2·81	− 2·62	0·19	Wellington.	South India.
																									XIII.—Extra India.	
1	1	15	2	6	...	5	...	1	1·0	?	?	77	·904	3·4	0	?	?	0	1·21	−1·21	0	1·21	− 1·21	0	Trincomalee.	Ceylon.
...	7	2	1	2	4	6	4	5	6·4	5·0	+28	69	·838	3·1	2	?	?	1·84	4·65	−2·81	1·84	4·65	− 2·81	0·83	Colombo.	
18	1	6	5	...	...	...	...	1	3·3	?	?	82	·908	2·5	3	?	?	4·82	4·73	+0·09	4·82	4·73	+ 0·09	2·80	Galle.	
			Not recorded.						?	?	?	?	?	5·3	6	?	?	3·54	?	?	3·54	?	?	1·03	Meshed.	Persia.
24	...	2	...	...	...	3	...	2	4·8	?	?	65	·186	1·3	8	?	?	2·95	?	?	2·95	?	?	0·59	Teheran.	
1	3	1	1	1	...	17	2	5	9·4	?	?	88	·267	3·7	4	?	?	0·81	?	?	0·81	?	?	0·32	Ispahan.	
...	5	7	3	6	4	1	...	5	7·4	8·9	−17	63	·361	?	1	?	?	0·29	0·72	−0·43	0·29	0·72	− 0·43	0·21	Bushire.	
5	7	3	5	1	...	...	...	10	12·7	?	?	72	·524	4·0†	2	?	?	0·88	?	?	0·88	?	?	0·51	Jask.	
...	...	1	1	2	3	3	14	7	4·3	?	?	66	·537	3·1	4	?	?	2·54	?	?	2·54	?	?	1·70	Muscat.	Arabia.
3	7	2	...	1	6	2	2	8	7·4	?	?	72	·309	1·1	0	?	?	0·07	?	?	0·07	?	?	0·05	Baghdad.	
...	...	5	20.	3	1	...	...	...	11·1‡	14·9	−26	82	·790	5·8	0	?	?	0	1·16	−1·16	0	1·16	− 1·16	0	Aden.*	
2	...	1	11	12	1	1	...	3	11·5	?	?	80	·780	7·2	1	?	?	0·24	?	?	0·24	?	?	0·18	Perim.	
...	1	1	13	3	2	1	9	1	?	?	?	?	?	3·2	9	?	?	5·60	?	?	5·60	?	?	1·24	Kabul.	Afghanistan.
19	2	2	3	...	...	1	3	...	2·3	?	?	?	?	7·2	0	?	?	0	?	?	0	?	?	0	Kashgar.	Central Asia.
															Not received.										Amini Divi.	Arabian Sea Islands.
1	8	5	2	1	...	...	1	13	5·0	?	?	77	·849	3·3	1	?	?	1·28	?	?	1·28	?	?	1·15	Minicoy.	
1	6	13	2	4	3	12	1	1	5·1	?	?	83	·895	5·7	8	?	?	5·23	?	?	5·23	?	?	1·36	Zanzibar.	Africa.

* Mean of 29 days. † Mean of 30 days. ‡ Mean of 28 days.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 89

Meteorological Province.	Station.	Elevation of barometer 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·896	29·786	·110	29·830	−·027	29·821	90·7	76·5	14·1	93·6	73·7	19·9	85·8	88·7	82·1	+ 0·8	73·6	78·0	79·2	76·9
	Rangoon	...	·901	·750	·151	·828	−·040	·805	97·6	70·7	26·9	100·8	66·2	34·6	83·2	92·8	81·3	+ 1·1	67·6	73·2	75·2	72·0
	Diamond Island	...	·922	·808	·114	·854	−·034	·830	83·9	76·0	7·9	87·0	73·0	14·0	81·9	81·8	78·3	− 0·3	71·6	73·7	74·0	73·1
	Cocos Island	111	·843	·713	·100	·763	?	·825	88·0	75·4	12·6	91·2	72·9	18·3	84·3	83·5	79·5	?	70·6	74·5	74·1	73·1
	Akyab	...	·940	·821	·119	·894	−·009	·838	88·6	67·5	21·1	92·3	61·2	31·1	82·7	85·1	77·7	− 0·4	65·4	73·8	75·7	71·6
Assam.	Silchar	...	·853	·714	·139	·780	−·025	·835	86·6	63·1	23·5	91·7	57·4	34·3	76·8	83·5	73·8	+ 0·4	61·6	68·7	69·9	66·7
	Sibsagar	...	·621	·473	·148	·547	−·042	·844	77·0	60·7	16·3	83·5	54·7	28·8	68·6	75·7	67·5	− 0·1	60·6	65·4	68·3	64·7
	Dhubri	...	·809	·660	·149	·732	−·023	·801	85·8	63·4	22·4	92·4	57·4	35·0	74·8	84·5	73·4	− 1·2	61·0	66·5	68·2	65·3
Bengal and Orissa.	Chittagong	...	·862	·741	·121	·796	−·034	·830	87·9	66·7	21·2	91·1	57·9	33·2	82·0	84·0	76·9	+ 0·1	65·2	73·2	73·1	70·5
	Naryangunge	...	·908	·775	·133	·838	−·012	·805	89·7	68·4	21·3	94·8	60·7	34·1	80·5	87·9	78·4	− 0·1	64·8	71·3	70·3	68·8
	Calcutta (Alipore)	...	·908	·777	·131	·836	−·019	·803	91·3	68·7	22·6	97·5	59·2	38·3	81·6	90·2	79·3	− 0·1	64·6	70·7	69·0	68·1
	Do. (Chowringhee).	...	·913	?	?	?	?	?	92·7	68·9	23·8	99·0	60·1	38·9	83·7	?	?	?	65·7	72·6	?	?
	Saugor Island	...	·913	·787	·126	·843	−·015	·812	87·2	74·8	12·4	91·4	64·8	26·6	81·4	84·0	79·1	− 0·5	71·6	75·2	76·3	74·4
	Burdwan	...	·820	·683	·137	·743	−·017	·789	93·2	66·7	26·5	99·7	59·9	39·8	82·1	91·5	79·5	− 1·5	62·8	67·0	67·3	65·7
	Berhampore	...	·849	·714	·135	·773	−·016	·788	91·8	66·0	25·8	99·5	59·2	40·3	82·1	90·9	78·6	− 0·1	60·8	68·7	68·9	66·1
	False Point	...	·927	·804	·123	·865	−·021	·827	87·2	71·0	16·2	93·5	62·0	31·5	84·4	83·8	77·2	− 0·8	70·1	74·9	75·9	73·6
	Cuttack	...	·856	·707	·149	·786	−·016	·807	97·4	70·7	26·7	103·9	64·4	39·5	84·2	94·5	81·9	− 0·1	67·7	71·0	71·3	70·0
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	27·908	27·799	·109	27·849	−·017	·789	87·3	63·5	23·8	97·8	58·2	39·6	79·3	84·9	75·1	− 0·4	56·7	61·6	62·4	58·2
	Patna	...	29·720	29·590	·130	29·650	−·027	·785	90·1	65·0	25·1	100·0	59·8	40·2	81·9	88·7	77·6	+ 0·4	59·2	66·0	66·3	63·8
	Darbhanga	...	·736	·599	·137	·663	−·027	·783	87·8	63·7	24·1	96·8	59·2	37·6	79·3	87·2	76·0	− 0·1	60·5	66·3	67·2	64·7
	Allahabad	...	·611	·493	·118	·541	−·013	·810	90·6	62·6	28·0	99·6	56·4	43·2	81·6	89·3	75·4	− 1·9	57·9	66·1	66·6	63·5
	Ghazipur	220	·683	·571	·117	·622	−·016	·796	91·6	64·9	26·7	101·1	57·7	43·4	82·8	86·8	77·8	+ 0·9	58·8	65·8	65·6	63·4
	Lucknow	...	·542	·426	·116	·478	−·021	·804	89·6	60·0	29·6	98·3	54·0	44·3	80·5	87·7	75·1	− 1·4	56·1	65·9	66·4	62·9
Indus Valley and Upper Sub-Himalayas. N.-W. Rajputana	Dehra Dun	...	27·664	27·584	·080	27·616	−·019	·817	80·8	55·7	25·1	87·9	48·7	39·2	71·9	77·0	67·2	0	51·6	60·2	61·0	57·6
	Roorkee	...	28·998	28·895	·103	28·910	−·020	·793	86·0	56·9	29·1	93·3	51·0	42·3	75·4	83·9	70·8	+ 0·9	54·3	63·7	64·7	60·9
	Meerut	...	29·156	29·059	·097	29·100	−·017	·807	86·5	59·0	27·5	95·7	53·7	42·0	77·7	84·3	72·0	+ 0·5	56·2	63·5	63·7	61·1
	Labore	...	·202	·114	·088	·152	−·018	·843	83·5	58·7	24·8	91·6	53·3	38·3	72·5	82·4	70·6	+ 2·2	55·2	63·2	65·3	61·2
	Ludhiana	...	·094	·003	·091	·043	−·013	·833	83·4	58·5	24·9	92·5	54·0	38·5	74·9	81·8	70·4	+ 0·6	55·4	62·8	64·0	60·7
	Peshawar	...	28·843	28·757	·086	28·794	−·020	·918	73·5	54·4	19·1	85·1	46·5	38·6	65·8	71·7	63·4	+ 0·2	51·5	58·9	60·7	57·0
	Mooltan	...	29·493	29·399	·094	29·440	−·025	·863	87·0	61·1	25·9	96·8	54·7	42·1	75·7	84·3	73·2	+ 2·2	55·4	64·0	67·0	62·2
	Jacobabad	...	·731	·608	·123	·663	−·023	·809	91·5	60·5	31·0	102·1	50·0	52·1	82·1	89·1	75·2	+ 0·2	?	62·9	65·0	?
	Kurrachee	...	·317	·821	·096	·866	−·012	·867	85·3	65·9	19·4	94·0	58·9	35·1	78·7	81·9	74·8	− 0·7	61·7	69·1	72·6	67·8
E, Rajputana, C, India, and Gujarat.	Jeypore	...	28·513	28·404	·109	28·453	+·004	·864	88·7	60·1	28·6	97·5	55·1	42·4	79·7	87·1	73·9	− 0·9	54·0	62·1	63·4	59·8
	Ajmere	...	·334	·223	·111	·275	−·008	·844	88·7	59·5	29·2	97·4	52·0	45·4	80·1	87·3	74·2	+ 0·4	53·0	62·9	65·5	60·5
	Deesa	...	29·483	29·355	·128	29·413	−·011	·829	95·7	62·9	32·8	102·8	52·4	50·4	85·7	93·4	79·7	− 1·1	53·7	63·5	64·5	60·6
	Nowgong	...	·164	·049	·115	·099	−·014	·811	90·1	61·1	29·0	99·0	55·3	43·7	80·6	87·8	75·4	− 1·8	56·8	64·5	65·2	62·2
	Agra	...	·366	·251	·115	·297	−·020	·812	89·7	63·4	26·3	101·5	71·9	29·6	80·9	88·3	75·7	− 0·6	56·3	65·0	65·8	62·3
Deccan.	Belgaum	...	27·417	27·284	·133	27·349	−·035	·733	94·1	64·8	29·3	98·2	60·3	37·9	85·5	90·4	78·0	+ 0·8	60·0	63·5	67·3	63·6
	Sholapur	...	28·340	28·185	·155	28·259	−·029	·752	99·5	70·9	28·6	104·9	65·1	39·8	90·3	97·7	84·8	+ 0·6	57·4	66·8	70·0	64·7
	Poona	...	·096	27·953	·143	·030	−·026	·768	99·3	64·3	35·0	103·5	59·1	44·4	87·8	96·1	81·3	+ 1·5	56·7	62·9	65·4	61·7
	Akola	...	·999	28·843	·156	·916	−·017	·783	98·8	67·1	31·7	104·3	59·9	44·4	87·5	97·4	83·5	+ 0·6	57·8	66·6	69·5	64·7
	Buldana	2,132	27·807	27·675	·132	27·736	−·025	·765	93·4	69·8	23·6	99·6	63·8	35·8	84·9	91·8	82·1	− 0·3	57·0	62·6	63·8	61·1
	Khandwa	...	28·889	28·744	·145	28·812	−·011	·796	97·4	65·4	32·0	103·7	56·1	47·6	86·5	95·5	81·3	+ 0·1	54·9	64·3	65·9	61·7

II.

Stations in India, Burma, etc., for March 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province or District.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·790	·856	·870	·839	−·030	86	69	64	73	−4	2·9	3·1	3·0	+0·1	...	6	25	13	13	1	1	1	2	N. 69° E.	N. 56° E.	63	69	122	100	...	...	Port Blair .	Burma Coast and Bay Islands.
·637	·685	·641	·654	−·020	85	60	42	62	−2	1·5	3·5	2·5	+0·4	...	3	2	1	7	13	17	14	3	S. 42° W.	S. 20° W.	52	58	111	114	...	...	Rangoon .	
·716	·724	·736	·725	−·051	80	67	68	71	−5	3·5	3·6	3·6	+1·4	...	7	1	1	1	...	...	11	41	N. 46° W.	N. 42° W.	84	85	342*	185	...	...	Diamond Island.	
·686	·724	·719	·710	?	78	62	63	67	?	1·4	1·0	1·2	?	...	43	3	...	...	...	1	1	12	N. 9° W.	?	89	?	397	?	*Nil*	*Nil*	Cocos Island.	
·604	·722	·768	·698	+·015	89	64	64	72	0	2·3	1·1	1·7	−0·4	...	11	14	...	3	3	1	23	7	N. 38° W.	N. 58° W.	43	26	106	91	...	...	Akyab .	
·533	·597	·553	·561	−·024	92	65	50	69	−3	4·5	4·6	4·6	+0·2	40	...	2	3	6	5	3	3	...	S. 18° E.	S. 60° E.	16	22	65*	76	...	...	Silchar .	Assam.
·529	·586	·597	·571	+·027	99	84	68	84	+5	6·9	5·6	6·3	+0·2	14	...	38	2	2	2	3	...	1	N. 51° E.	N. 57° E.	56	59	115*	66	...	...	Sibsagar .	
·511	·542	·478	·509	+·003	87	63	41	64	+3	3·2	3·4	3·3	+0·9	6	...	13	8	4	2	17	10	2	S. 29° W.	S. 81° E.	11	14	146	151	...	...	Dhubri .	
·611	·705	·670	·662	−·025	92	64	58	71	−3	4·0	2·3	3·2	0	...	...	9	3	4	11	16	11	8	S. 50° W.	S. 54° W.	34	20	134*	139	...	...	Chittagong	Bengal and Orissa.
·572	·648	·508	576	−·061	82	62	39	61	−6	3·3	3·1	3·2	+0·1	...	1	1	...	11	10	14	11	14	S. 54° W.	S. 23° W.	45	54	119	114	...	...	Naryangunge	
·561	·610	·430	·534	−·141	80	57	31	56	−14	1·7	1·8	1·8	−0·6	...	4	1	1	1	5	21	19	10	S. 77° W.	S. 32° W.	63	49	111	125	...	...	Calcutta (Alipore).	
·596	·660	?	?	?	84	57	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	0·17	0·14	Do. (Chowringhee.)	
·738	·798	·808	·782	−·040	85	74	69	76	−3	4·2	3·2	3·7	0	...	5	1	...	3	30	18	3	2	S. 21° W.	S. 33° W.	64	60	343	295	...	...	Saugor Island.	
·525	·465	·347	·446	−·087	79	43	24	48	−6	2·7	2·8	2·8	+0·4	6	10	4	2	2	3	6	14	15	N. 57° W.	S. 78° W.	43	43	66*	79	...	...	Burdwan .	Gangetic Plain and Chota Nagpur.
·467	·524	·415	·469	−·043	73	48	29	50	−7	2·3	2·4	2·4	−0·4	8	1	1	1	2	4	16	24	5	S. 72° W.	S. 75° W.	60	44	71	82	...	...	Berhampore	
·729	·738	·795	·754	−·033	95	63	68	75	−7	2·5	2·7	2·6	−0·5	...	1	1	5	8	23	13	9	2	S. 14° W.	S. 38° W.	58	58	256*	268	...	...	False Point	
·641	·585	·460	·562	−·100	85	50	28	54	−8	1·3	1·3	1·3	−1·2	10	16	3	2	3	8	11	4	5	N. 67° W.	S. 16° W.	16	43	71	81	...	...	Cuttack .	
·215	·331	·284	·277	−·012	37	35	25	32	−2	2·4	4·5	3·5	+1·0	5	2	...	1	...	2	5	21	26	N. 71° W.	N. 75° W.	71	61	243	178	...	...	Hazaribagh.	
·430	·427	·348	·402	−·001	70	40	26	45	0	1·5	2·3	1·9	−0·9	...	3	6	4	2	1	3	17	26	N. 52° W.	N. 74° W.	56	48	111*	84	...	...	Patna .	
·487	·475	·403	·455	−·006	82	48	32	54	0	0·8	1·3	1·1	−0·3	1	1	...	5	6	3	11	24	11	S. 78° W.	S. 70° W.	50	27	122	113	...	...	Darbhanga	
·422	·437	·351	·403	+·033	74	41	27	47	+5	2·7	3·0	2·9	+0·9	1	2	1	2	4	3	4	23	22	N. 75° W.	N. 65° W.	60	34	115	74	...	...	Allahabad.	
·420	·411	·324	·385	+·057	68	38	25	44	+10	2·1	2·5	2·3	+0·7	1	...	1	3	2	...	15	30	10	S. 84° W.	S. 83° W.	69	51	92	69	0·14	0·12	Ghazipur.	
·404	·446	·363	·408	+·046	78	44	28	50	+7	3·2	4·3	3·8	+1·0	3	2	3	3	3	3	10	16	19	N. 80° W.	N. 54° W.	48	49	75*	97	...	...	Lucknow.	
·334	·378	·340	·351	?	75	49	38	54	?	3·1	4·5	3·8	+0·3	8	5	...	2	5	12	12	12	4	S. 48° W.	N. 78° W.	39	25	37	55	...	...	Dehra Dun	Upper Sub-Himalayas.
·392	·434	·357	·395	+·064	84	50	31	55	+6	2·2	2·4	2·3	−0·2	15	...	2	...	5	1	14	6	19	N. 89° W.	N. 58° W.	39	23	66	70	...	...	Roorkee .	
·418	·398	·314	·377	+·008	83	43	27	51	+1	2·6	3·6	3·1	+0·5	12	1	1	1	3	1	3	35	5	W.	N. 51° W.	60	44	75	63	...	...	Meerut .	
·394	·460	·397	·417	+·061	79	58	37	58	+9	3·1	4·2	3·7	+0·5	4	14	3	2	13	2	...	8	16	N. 20° W.	N. 10° W.	27	33	72	73	...	...	Lahore .	
·401	·413	·360	·391	+·025	82	49	34	55	+1	4·5	5·6	5·1	+1·1	5	9	5	...	3	5	3	4	28	N. 41° W.	N. 47° W.	50	33	69	46	...	...	Ludhiana .	
·347	·416	·392	·385	+·055	81	67	54	68	+11	5·8	6·4	6·1	+1·2	19	7	7	15	1	3	3	3	4	N. 55° E.	N. 11° E.	24	17	∠ 68*	90	...	...	Peshawar .	Indus Valley and N.-W. Rajputana.
·368	·444	·433	·415	+·025	68	51	38	52	0	2·7	2·9	2·8	+0·3	6	...	37	...	14	...	4	...	1	N. 66° E.	N. 11° W.	56	21	42*	49	...	...	Mooltan .	
?	·322	·300	?	?	?	31	23	?	?	3·6	4·8	4·2	+1·1	4	3	1	7	15	15	11	3	3	S. 11° E.	N. 67° E.	45	26	102*	92	...	...	Jacobabad.	
·501	·588	·682	·591	−·007	78	60	63	67	+1	0·9	1·1	1·0	−1·9	...	...	3	4	2	3	18	30	2	S. 70° W.	S. 69° W.	63	64	275	286	...	...	Kurrachee .	
·342	·341	·292	·325	+·009	66	35	23	41	+3	3·5	4·1	3·8	+0·9	1	1	6	4	1	1	16	15	17	N. 82° W.	N. 24° W.	48	31	82	128	...	...	Jeypore .	
·329	·363	·359	·349	+·011	64	36	29	43	+3	2·5	3·3	2·9	+0·5	8	1	6	1	7	4	11	15	9	S. 74° W.	S. 61° W.	32	28	83	91	...	...	Ajmere .	E. Rajputana, Central India, and Gujarat.
·297	·293	·223	·271	−·047	52	25	16	31	+1	2·1	2·6	2·4	0	...	15	8	5	1	1	6	17	9	N. 37° W.	N. 88° W.	43	35	190	213	...	...	Deesa .	
·409	·392	·324	·375	+·038	76	38	26	47	+8	3·1	3·6	3·4	+0·4	2	4	..	9	2	3	7	28	7	S. 89° W.	N. 63° W.	44	34	46*	55	...	...	Nowgong .	
·363	·405	·336	·368	+·041	62	39	26	43	+5	2·6	3·4	3·0	+0·9	...	...	5	...	3	...	25	...	29	N. 83° W.	N. 70° W.	53	39	115	108	...	...	Agra .	
·462	·314	·387	·388	−·020	76	26	28	43	+2	0·6	2·8	1·7	−0·4	...	11	11	7	6	5	7	10	5	N. 3° E.	S. 88° W.	13	8	269	279	...	...	Belgaum .	Deccan.
·306	·365	·387	·353	+·021	40	25	21	29	−1	0·6	4·4	2·5	−0·1	6	4	7	7	19	6	5	...	8	S. 62° E.	N. 51° E.	29	9	211*	185	...	...	Sholapur .	
·368	·267	·244	·293	−·032	61	20	14	32	+2	1·0	1·9	1·5	−0·9	20	1	...	3	4	...	2	12	18	N. 65° W.	N. 41° W.	38	42	113	199	...	...	Poona .	
·360	·377	·349	·362	+·071	55	30	20	35	+7	1·8	3·4	2·6	+1·0	9	4	7	6	9	3	4	6	14	N. 12° W.	N. 43° W.	11	44	127	108	...	...	Akola .	
·309	·291	·245	·282	−·009	43	25	17	28	0	0·5	2·1	1·3	−0·9	...	10	2	6	6	5	7	2	24	N. 41° W.	N. 28° W.	31	50	173*	180	0·26	0·15	Buldana .	
·308	·328	·270	·302	−·005	49	27	16	31	0	1·9	3·6	2·8	+1·1	...	2	11	...	10	3	10	4	22	N. 55° W.	N. 46° W.	3	48	126	113	...	...	Khandwa .	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 89

Meteorological Province.	Station.	Elevation of barometer cistern above sealevel 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*concld.*	Hoshangabad	...	28·920	28·782	·138	28·846	−·018	29·818	92·8	64·8	28·0	101·1	58·8	42·3	80·9	91·4	78·9	−1·7	57·9	65·8	68·4	64·0
	Nagpur	...	?	?	?	?	?	?	96·3	66·7	29·6	105·2	60·7	44·5	85·4	94·2	81·8	−1·8	57·6	67·3	69·8	64·9
	Nagpur, Sanitary Commissioner's Office.	...	·988	·791	·147	·865	?	·822	96·8	65·9	30·9	105·4	61·3	44·1	85·7	95·3	81·0	?	57·8	65·7	68·3	64·0
	Jubbulpore	...	·610	·483	·127	·542	0	·822	89·3	60·2	29·1	98·0	53·5	44·5	78·9	86·7	74·5	−2·4	57·4	64·7	66·0	62·7
	Saugor	...	·174	·061	·113	·113	+·008	·814	89·0	63·8	25·2	97·8	57·3	40·5	80·8	86·5	76·2	−1·9	55·8	63·0	64·3	61·0
	Raipur	...	·971	·826	·145	·894	+·004	·790	94·8	67·4	27·4	102·9	56·6	46·3	84·9	93·4	81·7	−1·0	58·2	64·8	65·9	63·0
	Sutna	...	·880	·767	·113	·815	−·006	·815	88·7	61·1	27·6	98·5	54·1	44·4	81·2	86·9	74·6	−2·0	56·0	63·7	63·8	61·2
	Hyderabad (Deccan).	...	·256	·117	·139	·183	?	·783	96·0	68·8	27·2	99·9	64·0	35·9	86·6	94·1	82·0	?	62·5	70·1	70·5	67·7
West Coast.	Bombay	...	29·915	29·796	·119	29·850	−·026	·827	86·1	73·9	12·2	89·3	71·0	18·3	81·4	82·8	79·4	+0·6	69·1	73·6	74·3	72·3
	Ratnagiri	...	·829	·705	·124	·761	−·030	·807	87·7	73·2	14·5	90·7	68·1	22·6	84·2	84·9	80·0	+0·3	68·7	74·5	76·1	73·1
	Karwar	...	·910	·783	·127	·840	−·030	·816	88·0	73·0	15·0	89·6	69·6	20·0	83·8	86·1	80·2	0	71·7	75·3	76·8	74·6
	Cochin	...	·934	·817	·117	·870	−·028	·807	92·8	78·3	14·5	94·4	73·7	20·7	87·5	89·2	84·8	+1·6	74·8	78·0	79·0	77·3
South India.	Salem	...	·038	28·861	·177	28·956	−·032	·816	99·3	70·2	29·1	104·4	60·7	43·7	85·6	96·7	82·9	+1·2	67·6	72·7	73·0	71·1
	Mysore	...	27·460	27·310	·150	27·385	?	·770	93·4	67·7	25·7	96·8	62·1	34·7	81·7	91·4	80·0	?	60·5	67·1	65·2	64·3
	Mercara	...	26·307	26·191	·116	26·255	?	?	83·7	62·5	21·2	89·9	57·7	32·2	76·1	80·2	72·3	+0·8	59·6	64·9	66·1	63·6
	Bangalore	...	·976	·845	·131	·913	−·027	·768	91·3	63·8	27·5	94·7	56·2	38·5	81·0	89·3	77·1	+0·1	57·8	65·0	64·2	62·3
	Hassan	...	·911	·777	·134	·846	?	·765	90·7	63·1	27·6	93·5	54·0	39·5	81·4	89·0	76·5	?	59·0	65·8	66·3	63·7
	Chitaldroog	...	27·549	27·414	·135	27·480	?	·753	94·5	70·2	24·3	98·3	64·5	33·8	84·9	92·7	81·9	?	58·1	67·0	66·1	63·7
	Trichinopoly	...	29·709	29·540	·169	29·631	−·030	·814	97·7	71·7	26·0	101·9	65·1	36·8	87·2	95·9	83·1	−0·1	68·3	72·9	72·4	71·2
	Madras	...	·958	·833	·125	·895	−·013	·847	89·3	69·5	19·8	91·2	63·4	27·8	85·1	85·3	78·9	−1·9	?	73·9	74·6	72·9
	Bellary	...	28·458	28·305	·153	28·380	−·007	·763	100·0	71·8	28·2	104·1	63·9	40·2	89·2	97·1	85·2	−0·6	62·7	68·7	70·8	67·4
	Vizagapatam	...	29·934	29·807	·127	29·864	−·013	·833	85·0	77·6	7·4	88·5	74·3	14·2	82·5	83·7	81·0	−2·3	72·3	73·6	74·5	73·5
	Cocanada	...	·945	·803	·142	·874	?	·836	90·7	71·7	19·0	95·8	67·4	28·4	84·8	88·4	80·6	?	69·3	74·2	75·4	73·0
Hill Station, Baluchistan.	Quetta	...	24·638	24·557	·081	24·591	−·027	?	65·6	41·1	24·5	75·6	29·2	46·4	58·1	62·3	52·6	+1·5	37·8	47·8	49·3	45·0
Hill Stations, Northern India.	Leh	11,503	19·706	19·624	·082	19·670	+·006	?	43·9	22·0	21·9	54·1	7·3	46·8	33·2	41·2	32·8	+0·4	20·6	28·3	33·9	27·6
	Srinagar	...	25·008	24·923	·085	24·959	?	?	46·3	34·1	12·2	65·4	22·1	43·3	40·6	44·9	39·9	?	33·3	37·6	39·9	36·9
	Murree	...	23·850	23·819	·031	23·828	−·021	?	58·3	44·7	13·6	69·6	35·2	34·4	52·9	54·3	50·7	+0·6	37·4	44·0	46·4	42·6
	Chamba	3,005	26·945	26·849	·096	26·908	−·023	?	72·1	51·1	21·0	80·3	42·0	38·3	61·9	68·7	59·8	−0·8	48·2	53·6	56·2	52·7
	Kailang	10,087	20·837	20·781	·056	20·820	+·008	?	40·9	22·5	18·4	46·9	13·0	33·9	34·2	37·4	29·9	+0·3	21·2	29·5	32·5	27·7
	Simla (Ridge)	...	23·129	23·083	·046	23·099	−·010	?	57·6	44·9	12·7	66·2	39·1	27·1	52·2	54·5	50·7	+0·9	38·0	42·2	45·0	41·8
	Chakrata	...	·346	·285	·061	·308	−·008	?	63·0	45·4	17·6	70·3	35·1	35·2	57·9	59·6	53·5	+2·0	40·1	47·6	48·5	45·4
	Ranikhet	...	24·125	24·053	·072	24·082	−·003	?	66·6	49·5	17·1	74·2	42·1	32·1	60·5	63·1	57·4	+0·7	43·9	49·7	51·0	48·2
	Katmandu	4,388	?	?	?	?	?	?	77·7	45·7	32·0	86·4	38·8*	47·6	65·7	70·7*	57·9†	−3·5	44·4	56·0	57·9*	52·8*
	Darjeeling	...	22·968	22·889	·079	22·930	−·017	?	55·2	43·1	12·1	61·2	36·6	24·6	50·5	52·0	48·4	−0·4	40·8	47·1	48·0	45·3
	Demagiri	?	?	?	?	?	?	?	86·1	63·2	22·9	89·9	55·3	34·6	78·7	82·5	73·8	+0·5	?	?	?	?
	Tura	3,943	?	?	?	?	?	?	84·3	67·0	17·3	91·2	58·6	32·6	77·6	81·9	75·1	?	?	?	64·2	64·4	?
Hill Stations, Central India.	Mount Abu	...	26·097	26·019	·078	26·052	−·016	?	76·5	60·8	15·7	84·2	53·9	30·3	71·8	74·3	68·1	−1·4	49·7	55·7	56·8	54·1
	Pachmarhi	...	·510	·414	·096	·457	−·005	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?
	Chikalda	3,642	·382	·285	·097	·328	−·025	?	84·9	65·6	19·3	90·6	58·0	32·6	77·4	82·9	76·6	−1·0	54·1	57·9	59·8	57·3
	Makhla							Tem	porarily	closed.												

* Mean of 29 days.

† Mean of 28 days.

II—*continued.*

Stations in India, Burma, etc., for March 1895—continued.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from								Mean wind direction.	Normal mean direction of month.								
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																									%	%						
·399	·450	·410	·419	+·098	66	44	29	46	+13	2·7	3·5	3·1	+1·2	19	...	7	17	2	2	3	8	4	N. 78° E.	N. 55° W.	18	15	67	61	...	...	Hoshangabad.	Deccan—*concld.*
·368	·446	·428	·414	+·077	56	37	27	40	+ 8	2·7	4·1	3·4	+0·9	1	9	15	12	5	5	8	3	4	N. 61° E.	N. 20° W.	27	6	118	108	...	...	Nagpur .	
·385	·379	·358	·374	?	61	32	22	38	?	1·3	2·5	1·9	?	11	12	11	14	3	2	1	5	3	N. 43° E.	?	39	?	35	?	...	...	Nagpur(Sanitary Commissioner's office),	
·440	·436	·383	·419	+·088	84	45	33	54	+16	3·1	3·9	3·5	+1·2	1	7	10	4	8	7	3	7	15	N. 17° W.	N. 69° W.	16	22	58	70	...	...	Jubbulpore.	
·352	·356	·330	·346	+·068	60	36	30	42	+11	2·6	2·9	2·8	+1·4	...	4	5	6	14	7	12	7	7	S. 5° W.	N. 53° W.	19	33	64	78	...	...	Saugor .	
·367	·348	·273	·329	−·039	55	30	18	34	− 3	1·9	2·5	2·2	+0·2	19	8	6	4	...	1	8	10	6	N. 50° W.	N. 79° W.	21	20	133*	118	...	...	Raipur .	
·390	·374	·308	·357	+·106	72	36	27	45	+14	2·3	3·1	2·7	+0·7	1	8	...	3	4	5	1	21	19	N. 66° W.	N. 55° W.	52	39	120*	137	...	...	Sutna .	
·491	·535	·453	·493	?	70	42	28	47	?	0·8	1·4	1·1	?	3	3	8	11	19	10	4	4	...	S. 53° E.	?	47	?	93*	?	...	...	Hyderabad (Deccan).	
·651	·727	·738	·705	−·011	78	68	66	71	− 2	1·3	1·1	1·2	−0·5	...	6	6	5	2	2	2	8	31	N. 37° W.	N. 28° W.	55	55	276	274	...	...	Bombay .	West Coast.
·644	·726	·782	·718	+·011	78	62	65	69	+ 1	1·4	1·3	1·4	+0·8	...	8	...	...	...	...	11	15	28	N. 65° W.	N. 72° W.	76	60	234*	236	...	...	Ratnagiri .	
·762	·765	·797	·775	+·017	94	66	64	75	+ 1	1·5	1·0	1·3	−0·3	...	1	...	...	...	...	9	32	20	N. 80° W.	N. 80° W.	85	70	132	?	...	...	Karwar .	
·820	·832	·856	·836	−·004	85	63	62	70	− 5	1·1	0·6	0·9	−2·0	2	7	4	...	...	...	1	38	10	N. 69° W.	N. 81° W.	74	47	166	?	...	...	Cochin .	
·646	·634	·503	·594	−·043	87	52	29	56	+ 2	1·5	1·7	1·6	−0·7	13	7	19	6	3	6	5	1	2	N. 56° E.	S. 55° E.	31	42	137	129	...	...	Salem .	South India.
·445	·486	·297	·410	?	65	45	20	43	?	1·2	2·8	2·0	?	12	5	10	17	7	4	4	1	2	N. 86° E.	?	39	?	177*	?	...	...	Mysore .	
·475	·489	·490	·485	+·006	83	55	48	62	0	2·0	3·5	2·8	−0·9	24	...	5	3	2	5	6	9	8	S. 82° W.	N. 42° W.	18	18	60	78	...	...	Mercara .	
·413	·436	·315	·388	−·068	69	41	23	45	− 5	0·4	1·3	0·8	−1·8	...	1	12	22	12	9	5	...	1	S. 73° E.	S. 22° E.	58	50	191*	86	...	...	Bangalore .	
·460	·461	·391	·437	?	79	43	28	60	?	1·4	3·8	2·6	?	1	2	15	19	21	2	1	1	...	S. 83° E.	?	69	?	77*	?	...	...	Hassan .	
·336	·445	·312	·364	?	45	37	20	34	?	0·7	3·5	2·1	?	...	4	10	17	11	3	4	5	8	N. 81° E.	?	31	?	157*	?	...	...	Chitaldroog.	
·652	·622	·482	·585	−·086	83	48	28	53	− 5	1·5	1·4	1·5	−1·7	6	9	36	7	4	...	..	...	...	N. 48° E.	S. 86° E.	76	51	83	95	...	...	Trichinopoly.	
?	·686	·716	·733	−·035	?	57	59	74	0	2·2	0·7	1·5	−0·9	...	...	...	15	31	13	3	...	...	S. 43° E.	S. 50° E.	82	81	139	152	...	...	Madras .	
·461	·445	·425	·444	+·056	59	32	24	39	+ 6	0·9	5·4	3·2	+1·0	2	1	9	12	12	17	5	2	2	S. 45° E.	S. 26° E.	45	20	98	110	...	...	Bellary .	
·729	·721	·739	·730	−·015	77	64	63	68	+ 2	1·0	1·6	1·3	−0·6	...	1	1	..	10	18	22	10	...	S. 25° W.	S. 45° W.	68	58	62	68	...	...	Vizagapatam.	
·689	·705	·708	·701	?	88	59	53	67	?	1·1	0·9	1·0	?	...	...	...	4	29	12	12	4	1	S. 16° E.	?	68	?	165*	?	...	...	Cocanada .	
·197	·228	·218	·214	+·006	75	48	40	55	− 1	4·6	5·5	5·1	+0·9	7	1	1	...	5	19	11	11	7	S. 40° W.	S. 65° W.	50	36	107*	107	...	...	Quetta .	Hill Station, Baluchistan.
·103	·118	·140	·120	+·020	85	62	52	66	+ 9	5·8	6·2	6·0	−0·4	26	...	1	...	3	11	12	6	3	S. 37° W.	S. 37° W.	37	18	32	50	...	...	Leh .	Hill Stations, Northern India.
·186	·199	·198	·194	?	92	76	65	78	?	6·4	6·6	6·5	?	29	8	5	...	5	6	1	1	7	N. 4° E.	?	10		75*	?	...	...	Srinagar .	
·150	·198	·236	·195	+·003	53	53	59	55	+ 1	6·3	7·4	6·9	+0·9	6	1	1	4	28	11	3	...	8	S. 33° E.	S. 35° E.	48	28	284*	210	...	...	Murree .	
·307	·318	·310	·312	+·035	81	58	47	62	+ 8	6·1	6·9	6·5	+0·9	31	4	...	1	2	...	...	2	22	N. 40° W.	N. 1° E.	39	19	112*	118	6·17	2·12	Chamba .	
·107	·126	·143	·125	−·002	86	64	64	71	− 1	5·5	6·5	6·0	− 0·3	...	2	...	4	3	2	18	26	7	S. 75° W.	S. 64° W.	63	71	25	32	3·69	1·98	Kailang .	
·160	·168	·202	·177	−·020	54	43	48	49	− 2	4·9	6·2	5·6	+0·7	2	15	14	3	1	2	19	1	3	N. 16° W	S. 42° W.	18	31	171	?	...	...	Simla (Ridge),	
·195	·225	·230	·216	+·021	66	47	46	52	0	3·5	5·3	4·4	+0·4	1	...	4	14	5	2	5	28	3	S. 74° W.	S. 56° W.	23	8	184	138	...	...	Chakrata .	
·230	·246	·251	·242	+·011	66	48	44	53	0	2·9	4·0	3·5	−0·3	9	1	2	4	2	3	11	23	7	S. 80° W.	S. 56° W.	47	44	97	71	...	...	Ranikhet .	
·276†	·341	·337†	·319‡	+·013	88†	55	46†	63‡	+ 2	3·0	2·3	2·7	−1·1	...	...	1	22	...	...	...	32	7	N. 69° W.	N. 74° W.	26	66	30	?	0·27	0·27	Katmandu.	
·234	·290	·296	·273	+·018	84	80	77	80	+ 7	6·8	7·9	7·4	+2·2	4	7	4	2	1	2	16	21	5	S. 89° W.	S. 77° W.	49	43	133	160	...	...	Darjeeling .	
?	?	?	?	?	?	?	?	?	?	?	?	?	?	...	2	7	8	2	3	10	20	10	N. 83° W.	S. 88° W.	32	21	?	?	3·41	1·60	Demagiri .	
?	·442	·407	?	?	?	47	38	?	?	4·4	5·1	4·8	+2·0	...	2	2	...	3	23	32	...	...	S. 24° W.	S. 13° W.	77	69	?	?	1·52	0·62	Tura .	
·232	·261	·264	·252	+·039	45	35	32	37	+ 6	2·2	3·1	2·7	+0·1	...	5	9	3	4	3	16	13	9	N 88° W.	S. 85° W.	29	39	181*	159	...	...	Mount Abu	Hill Stations, Central India.
?	?	?	?	?	?	?	?	?	?	2·6	3·2	2·9	+0·8	2	6	6	8	3	4	5	20	8	N. 67° W.	N. 57° W.	26	36	143*	109	...	...	Pachmarhi.	
·288	·260	·250	·266	−·030	47	29	23	33	0	3·0	4·1	3·6	+1·4	24	4	1	...	9	9	5	1	9	S. 26° W.	N. 52° W.	14	34	163	172	0·48	0·17	Chikalda .	
										Temporarily closed.																					Makhla .	

* Corrected. † Mean of 29 days. ‡ Mean of 27 days.

Table

Abstract of Observations recorded at 10 A.M. and at 4 P.M. at 89

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S.L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, S. India.	Wellington . .	...	24·290	24·214	·076	24·252	−·022	?	75·3	49·5	25·8	79·9	41·8	38·1	70·4	70·8	61·3	−0·9	46·6	55·7	56·1	52·8
Extra India.	Muscat . .	...	29·959	29·880	·079	29·920	?	?	75·6	71·0	4·6	80·2	66·9	13·3	74·2	75·1	73·2	?	63·4	67·3	68·0	66·2
	Aden . . .	...	·879	·758	·121	·807	−·045	29·832	83·6	76·7	6·9	88·5	74·1	14·4	80·1	81·6	79.7	+0·6	73·0	74·7	74·4	74·2
	Perim . . .	...	·748	·625	·123	·675	?	?	85·6	75·7	9·9	87·9	73·4	14·5	81·5	82·2	79·8	?	63·0	75·0	75·3	71·1
	Minicoy . .	...	·959	·844	·115	·892	?	·826	89·0	79·8*	9·2	90·5	75·1	15·4	84·9	86·2	83·9*	?	74·9	77·9	78·3	77·1
	Zanzibar . .	...	·890	·775	·115	·833	?	·832	86·7	79·7	7·0	89·3	74·7	14·6	83·1	86·1	83·1	?	76·1	78·3	78·6	77·7
	Port Victoria (Seychelles).	15	·943	·849	·094	·896	?	·856	83·7	76·8	6·9	85·5	74·5	11·0	81·8	82·3	79·9	?	73·3	76·6	76·7	75·5

* Mean of 21 days.

II—*concluded.*

Stations in India, Burma, etc., for March 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from									Mean wind direction.	Normal mean wind direction of month.							
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																									%	%						
·292	·296	·300	·296	−·038	81	40	40	54	− 5	0·7	2·2	1·5	−1·5	2	1	3	13	36	7	...	...	...	S. 54° E.	S. 43° E.	81	65	64	62	...	...	Wellington.	Hill Station, S. India.
·489	·581	·592	·554	?	64	69	68	67	?	2·7	3·6	3·2	?	...	...	12	7	4	1	...	13	25	N. 29° W.	?	40	?	103	?	...	...	Muscat	Extra India.
·768	·791	·758	·779	+·070	83	77	70	77	+ 5	5·2	0·6	2·9	−0·6	3	...	15	31	8	3	1	...	...	N. 88° E.	N. 83° E.	75	73	46	355	...	...	Aden	
·411	·783	·784	·659	?	46	73	71	63	?	4·9	2·0	3·5	?	4	...	...	24	21	3	1	...	8	S 69° E	?	56	?	279	?	...	...	Perim	
·800	·863	·863	·845	?	78	72	69	74	?	3·6	3·4	3·5	?	3	26	6	3	2	...	...	1	21	N 10° W	?	71	?	124	?	...	...	Minicoy	
·856	·905	·877	·879	?	85	80	71	78	?	5·5	4·8	5·2	?	...	5	11	4	13	9	12	1	7	S. 36° E.	N. 39° E.	18	12	120*	150	...	...	Zanzibar	
·777	·848	·844	·823	?	84	78	77	80	?	7·0	7·0	7·0	?	...	13	10	6	4	...	1	11	17	N. 15° W.	?	47	?	118	?	12·31	3·06	Port Victoria (Seychelles)	

* Corrected.

G. I. C. P. O.—No. 15 Meteor.—28-6-95.—377.

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr., I.—June 94.—5,000
Reg. No. 149, Wr., I.—Apl. 95.—4,500.
Zinco., S. I. O., Calcutta.

Explanation.

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

Reg. No. 155. Wr. I.—June 94.—5,000.
Reg. No. 148. Wr. I.—April 95.—4,500.
Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

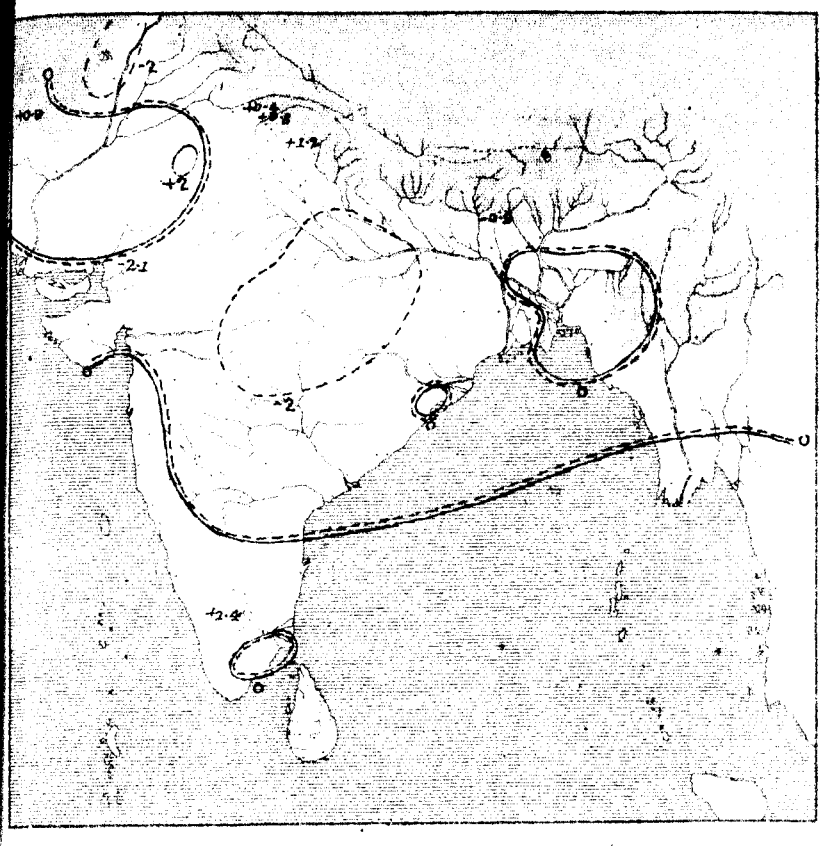
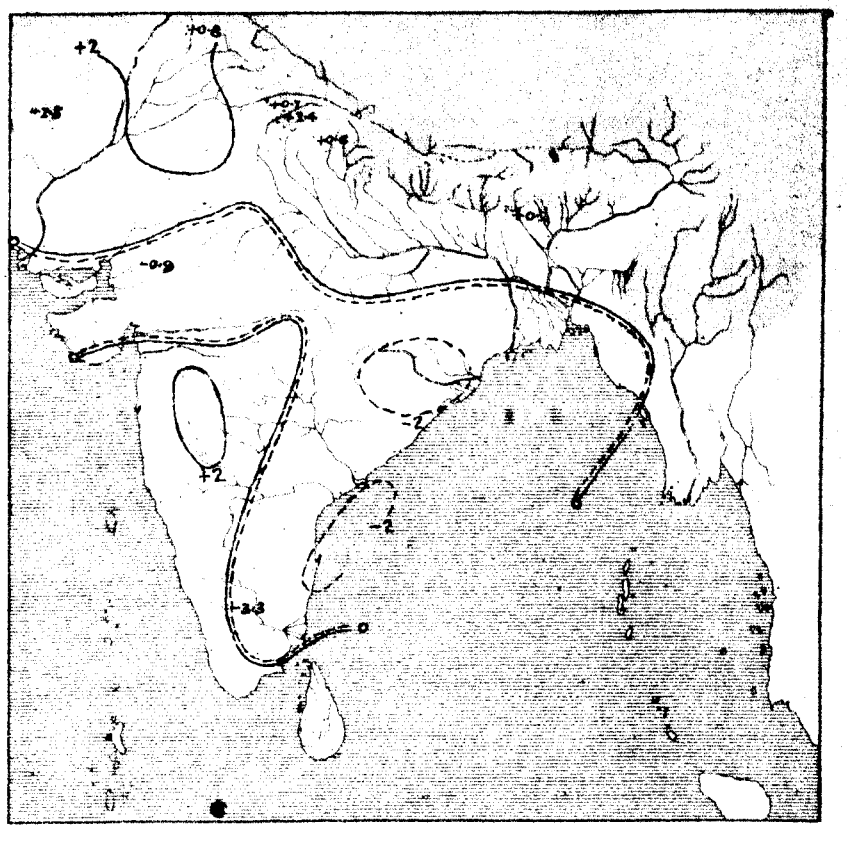


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

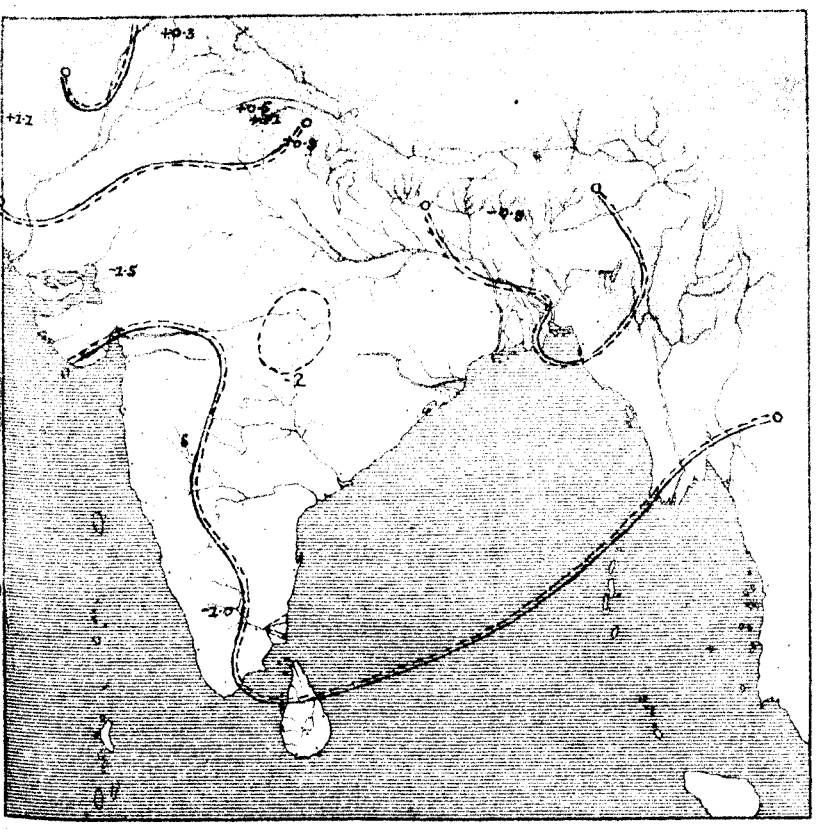
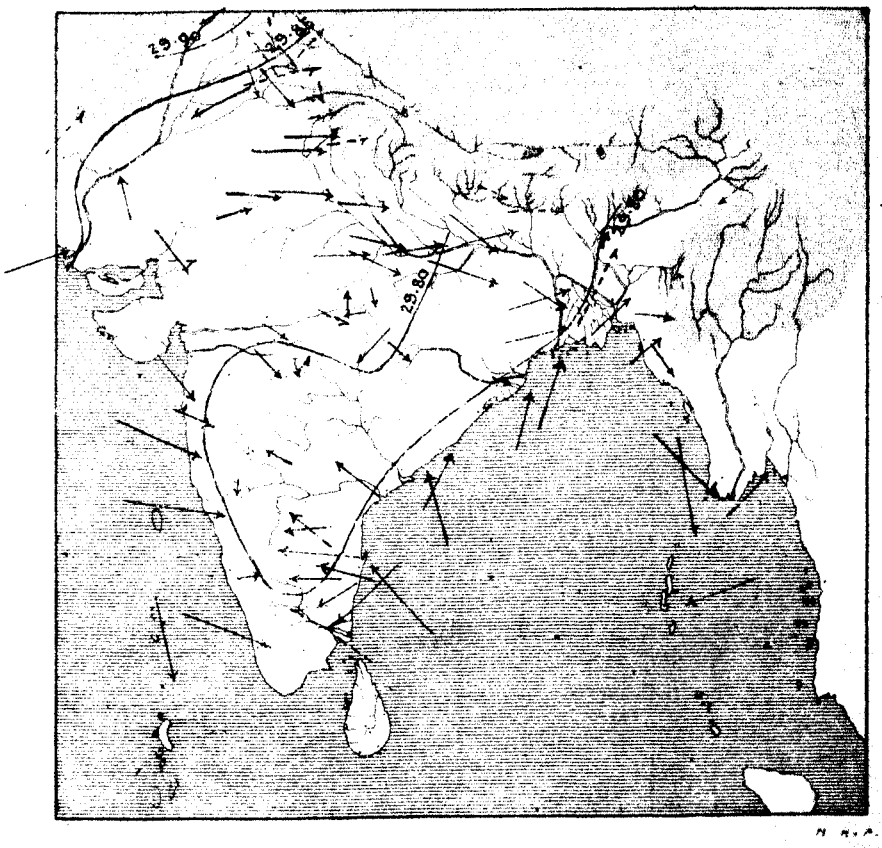


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF MARCH 1895.



Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

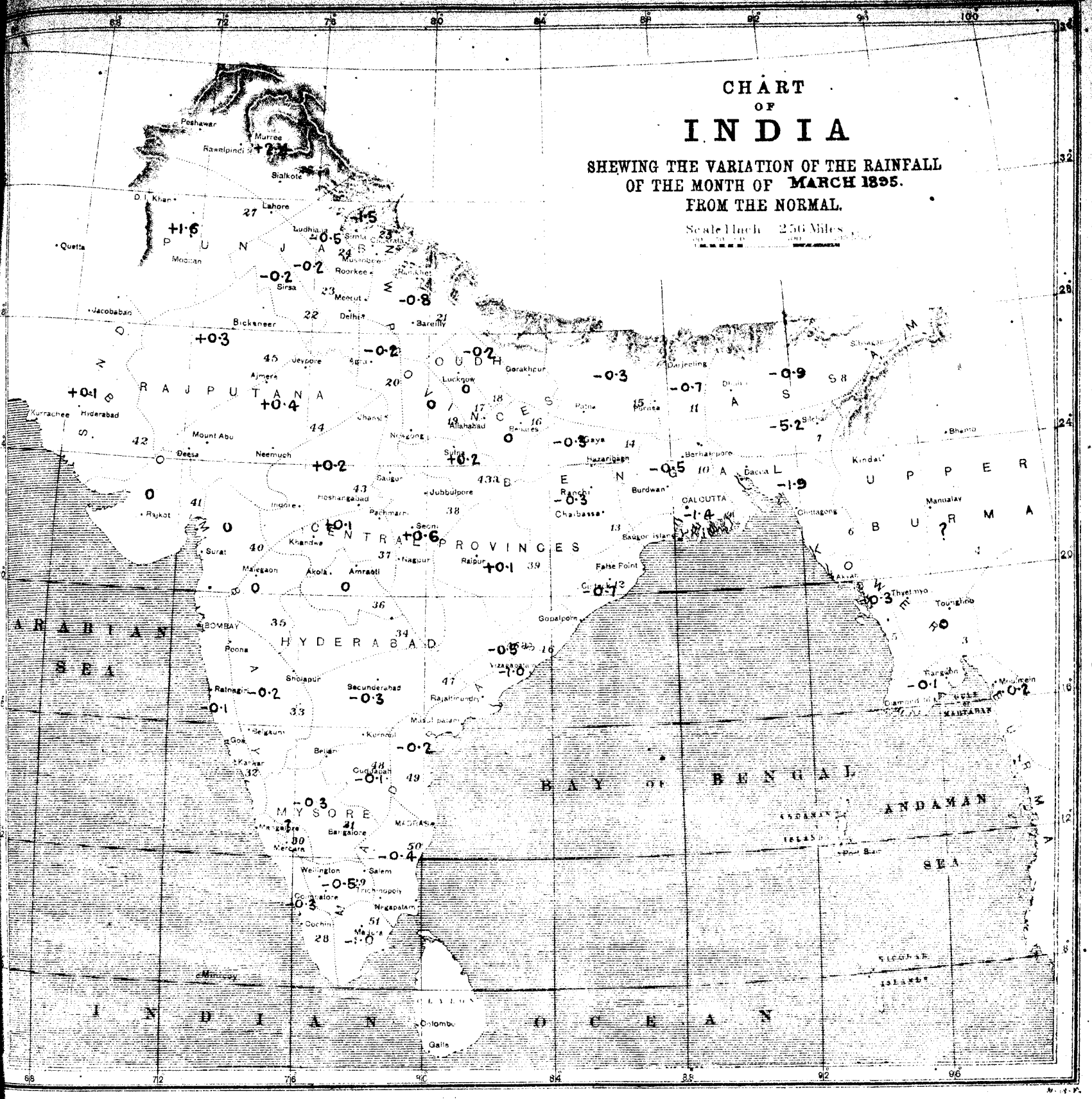
The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{10}$th of an inch being equal to 100 per cent.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Reg. No. 152, Wr., I.—June 95.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.

Zinco, [illegible] alcutta.



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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

...No. 50, Wr. I.—Mar. 95.—5,000.

Litho., S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, APRIL, 1895.

INTRODUCTION.

THIS Review of the weather in India during the month of April 1895 is based on observations taken daily at 8 A.M. at 204 stations and on additional observations taken at 10 A.M. and 4 P.M. at 88 stations. In the rainfall summary the rainfall data of the meteorological observatories and the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the publication of the review, are utilised. A summary of the weather in the Bay of Bengal and the Arabian Sea, derived from information extracted from the logs of vessels entering the ports of Calcutta and Bombay is also given.

Summary of the chief features of the weather in India during the month of April 1895.

April is the second month of the hot-weather period or season in Northern and Central India. The most important meteorological feature of the month is the more or less steady increase of temperature which occurs during the month. At the end of March the area of maximum temperature covers the Central and North Deccan. The mean temperature in that area at that time averages 90°. Temperature increases rapidly during the month in Upper and Central India, and remains practically unchanged in Ceylon and Southern India. Hence the area of maximum temperature is transferred northwards during the month, and at the end of the month includes the North Deccan, the Central Provinces, and the greater part of South Bihar, the North-Western Provinces and Central India.

The increase of temperature in India during the month produces a corresponding change in the distribution of pressure. Pressure falls rapidly in Northern India, and more especially in Upper and Central India, and the area of minimum pressure is usually transferred northwards to North-Western India during the month. Pressure at the end of the month is highest in the coast districts and adjacent sea areas, but the gradients are small except in the neighbourhood of the coast and at the time of greatest heat during the day when steepish gradient obtain over a narrow belt near the coasts. These afternoon gradients are steepest in the west coast districts and the Bengal and Orissa coast districts.

Local sea winds or land and sea breezes prevail in the coast districts. In the interior of Northern India and Burma the winds blow down the river plains and valleys.

The westerly winds of the Gangetic plain are usually of considerable intensity and of high temperature. The air motion over the greater part of the interior occurs chiefly during the day hours, the nights being generally almost calm.

One of the important meteorological features of the month is the hot-weather depression area which usually covers the eastern districts of the Central Provinces and Chota Nagpur. It is almost certainly a product, and not the cause, of the system of converging winds which obtain at this time in North-Eastern India, *viz.*, westerly winds in the Gangetic plain, easterly winds in Assam and North Bengal, and southerly winds in Bengal and Orissa.

The chief disturbances of the month belong almost exclusively to the class of hot-weather storms. They are usually accompanied with thunder and rain or hail in the coast districts and near the hills of Northern and Southern India. In the drier districts of North-Western India they usually give no rain and belong to the class known as dust-storms. Thunderstorms are of most frequent occurrence in Assam and Bengal, more especially the eastern and northern districts, and these provinces hence receive a considerable amount of rain during the month. Southern India and Tenasserim also obtain moderate rain during the month, and the rainfall in these areas appears to be, in part at least, due to brief temporary advances of moist southerly winds from the equatorial belt.

At the commencement of the month the pressure and temperature conditions were practically normal over the greater part of India. Temperature was in very large excess at Quetta (11°) and in moderately large excess in Upper Sind and the South-West Punjab. A hot-weather depression formed in that area during the next 24 hours. It advanced eastwards on the 2nd and 3rd to the foot of the Simla and Mussoorie hills and disappeared during the evening of the 3rd. The disturbance gave numerous thunder-showers on the 2nd, 3rd and 4th in the Punjab and on the 3rd and 4th in Kashmir and the Punjab hill districts.

The disappearance of this depression was followed by the advance of a cool wave across Northern India. The deficiency (or reduction of temperature below the normal), was greatest on the 4th in the Punjab (7° in defect), on the 5th in the North-Western Provinces (7½° in defect) and Central India (6½° in defect), on the 6th in the North-Western Provinces (6° in defect) and the Central Provinces (5° in defect), on the 7th in the Central Provinces (6° in defect) and on the 8th in South Bengal (8° in defect).

Temperature was more or less considerably below the normal on the 7th, 8th and 9th over the whole of India. Pressure had increased at the same time and was in considerable excess in Northern India on the 9th. Very low humidities were recorded in South-West Rajputana, Central India and Berar during the progress of this cold wave across Northern India. The lowest were as follows:—

Days.	Station.	Humidity at 4 P.M.
6th	Deesa	5
7th	Deesa	4
9th	Deesa	4
	Khandwa	4
	Buldana	5
10th	Buldana	3
	Khandwa	4

Temperature increased rapidly on the 9th and 10th in Baluchistan and Upper Sind, and was in considerable excess on the 10th. A depression, the second of the month, formed in that area on the 10th and 11th. It remained stationary and without further development during the next four days and the only noteworthy feature of the meteorology of the depression area was a large and persistent excess of temperature, as is shown by the following data for the three observing stations in it:—

Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April						Mean of period.
	10th.	11th.	12th.	13th.	14th.	15th.	
	°	°	°	°	°	°	°
Quetta	+3·9	+6·8	+8·4	+3·6	+4·3	+9·1	+6·0
Jacobabad	+5·4	+7·5	+8·7	+8·9	+4·6	+8·0	+7·2
Mooltan	+2·4	+8·5	+10·6	+8·6	+5·6	+8·2	+7·3

Thunderstorms occurred in Southern India, the Deccan, Upper Burma, Bengal, Assam and Orissa during this period from the 11th to the 14th, and reduced temperature more or less considerably below the normal in the Peninsula and North-Eastern India as is shown by the following:—

Political Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April				
	11th.	12th.	13th.	14th.	15th.
	°	°	°	°	°
Bengal and Assam	−2·0	−2·5	−5·2	−7·0	−5·4
Madras	−2·0	−1·7	−1·7	−2·6	−3·3
Central Provinces and Berar	−5·0	−2·9	−0·4	+0·1	−2·6

The depression was stationary in Sind from the 10th to the 14th during which fine clear hot weather prevailed over the whole of North-Western and Central India. It began to advance eastwards on the 15th. The pressure changes were large and irregular during the next two or three days and weather more or less disturbed with series of duststorms and thunderstorms in North-Western and Central India. The Punjab received light to moderate rain from thunderstorms on the 16th,

the western districts of the North-Western Provinces on the 17th, and the Central Provinces on the 16th and 17th. These storms reduced temperature largely in the Punjab, Rajputana, the North-Western Provinces and Central Provinces, as is shown by the following data :—

Political Division or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April		Change of mean temperature from the 15th to 17th.
	15th.	17th.	
	°	°	°
Punjab	+5·3	−7·6	−12·9
Sind and Rajputana	+2·3	−5·2	−7·5
North-Western Provinces and Oudh.	−0·8	−6·5	−5·7
Central Provinces and Berar	−2·6	−5·6	−3·0

Temperature was in moderate excess at Quetta during this period.

A rapid increase of temperature occurred during the next two days in Upper India, and on the 19th temperature was again in moderate excess in Baluchistan, Sind and the South-West Punjab. The following shows the change of the temperature conditions in Upper India during the 48 hours preceding 8 A.M. of the 19th :—

Political Division or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April		Change of mean temperature from the 17th to 19th.
	17th.	19th.	
	°	°	°
Punjab	−7·6	−1·9	+5·7
Sind	−1·1	+2·9	+4·0
Rajputana	−8·3	+0·4	+8·7

A hot-weather depression, the third of the month, formed in the Sind area of increased temperature on the 19th and was stationary during the next four days. The following data illustrate the temperature conditions in this stationary low pressure area from the 20th to the 24th :—

Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April				
	20th.	21st.	22nd	23rd.	24th.
	°	°	°	°	°
Quetta	+2·8	+13·7	+6·6	+0·9	−0·5
Mooltan	+4·9	+5·9	+6·7	+7·1	+6·7
Jacobabad	+8·6	+7·8	+9·3	+5·0	+3·5

During this period thunderstorms occurred in Bengal and Southern India and temperature remained below the normal in these areas. It increased rapidly in Burma and Assam where fine dry weather obtained from the 20th to the 23rd. The following shows the contrast between the temperature conditions in Bengal, Burma and Assam during this period :—

Political Division or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April			
	23rd.	22nd	21st.	20th.
	°	°	°	°
Burma	+1·6	+3·0	+2·7	+1·1
Assam	+1·9	+0·2	+4·2	+3·0
Bengal	−1·2	−3·8	−2·2	−3·3

The Sind depression advanced eastwards on the 24th and gave series of duststorms and thunderstorms with light rain in the Punjab on that day.

The chief feature of the last week of the month was a cyclonic storm which formed on the 22nd and 23rd in the centre of the Bay.

Light airs and calms had obtained for some days in that area and moderate to strong west south-westerly humid winds had set in over the south of the Bay and advanced northwards. A shallow depression formed on the 22nd which developed into a cyclonic storm on the 23rd. It travelled northwards on the 24th and 25th recurving slightly to east and increasing in intensity and rate of advance. Its velocity on the 25th probably increased from 10 miles per hour to 25 miles per hour. It was of small extent, but gave winds and squalls of hurricane force on the 25th near the centre. The centre crossed the Arakan coast on the early morning of the 26th, and the strong winds caused much destruction of property and broke down the telegraphic lines. The storm was unable to surmount the Arakan Yoma and broke up during the morning, and weather was fine with moderate winds off the Arakan coast at 10 A.M. The humid winds in the rear of the storm advanced to the head of the Bay and gave almost continuous rain in Assam from the 27th to the end of the month. During this period, *i.e.*, the 27th to the 30th, strong westerly winds prevailed in the Gangetic Plain, and the highest temperatures of the month were generally recorded between the 28th and 30th in Northern and Central India. The following gives the highest temperatures recorded at the five hottest stations :—

Station.	Highest temperature recorded during the month.	Date.
	°	
Jacobabad	115·6	30th
Pachpadra	114·0	30th
Nellore	113·8	30th
Hyderabad	113·7	29th
Sirsa	112·4	28th

Pressure.—The mean pressure of the Indian area was ·013″ above the normal. Pressure was locally in excess in North-Eastern India and North Madras, and in defect over Burma and the remainder of India. The local excess ranged between ·02″ and ·04″ in Bihar, North Bengal and Chota Nagpur. The deficiency was also moderate in amount, ranging between ·02″ and ·04″, in Sind, the South-West Punjab, South-West Rajputana, Cutch, Kathiawar and Gujarat. Pressure was in slight defect at the hill stations in Northern India relatively to the adjacent plains, as is usual when pressure is in excess and temperature below the normal in the plains of Northern India. The following table gives pressure variation data for the eleven meteorological provinces of the Empire:—

Meteorological Province.	Variation of mean monthly 8 A.M. pressure from normal.	Mean pressure anomaly.
	″	″
Burma Coast and Bay Islands	0	−·013
Burma Inland	+·008	−·005
Assam	+·027	+·014
Bengal and Orissa	+·032	+·019
Gangetic Plain and Chota Nagpur	+·036	+·023
Upper Sub-Himalayas	+·026	+·013
Indus Valley and North-West Rajputana	−·011	−·024
East Rajputana, Central India and Gujarat	0	−·013
Deccan	+·010	−·003
West Coast	+·008	−·005
South India	+·008	−·005

Temperature.—The variations of the mean temperature conditions of the month were very broadly marked. The mean maximum or day temperature was normal in the Konkan, Malabar and on the Madras and Burma coasts, and in moderate excess in Baluchistan, Sind, the South-West Punjab, and West Rajputana. The excess was greatest at Quetta (+5°·3), Jacobabad (+3°·9) and Mooltan (+3°·0). The mean day temperature was in defect over the remainder of India. The deficiency was large in the North-Western Provinces, Baghelkhand, Bundelkhand, the Central Provinces, Hyderabad, Chota Nagpur and Bihar, and exceeded 5° at the following stations: Chaibassa (−5°·9), Benares (−5°·8), Sambalpur (−5°·6), Allahabad (−5°·7), Bareilly (−5°·3), Nowgong (−5°·2) and Patna and Gorakhpur (−5°·1).

The mean minimum or night temperature was in slight to moderate excess in Burma and Upper India. The excess was greatest at Mooltan (+3°·9) and Jacobabad (+3°·7). It was in slight to moderate defect over the remainder of India, the deficiency being most marked in South Bengal, Orissa and Chota Nagpur. It was absolutely greatest at Chaibassa (−3°·0) and locally at Chanda (−2°·6) and perhaps Bellary and Cocanada (each −2°·5)

The mean temperature of the month was in slight to moderate excess in Baluchistan, Sind, the West Punjab, Cutch and West Rajputana. The diurnal range was slightly greater than usual in this area as the day temperature was somewhat more in excess than the night temperature. The mean temperature of the month was most largely in excess at Jacobabad (+3°·8) and Mooltan (+3°·5). The mean temperature of the month was normal in the Konkan, Malabar, South Madras and Burma coast districts, and was more or less in defect over nearly the whole of the Peninsula and in Central and North-Eastern India. As the day temperature was in defect to a greater extent than the night temperature, the diurnal range was less than the normal by amounts ranging between 1° and 4° in these areas. The deficiency exceeded 3° over the greater part of the North-Western Provinces, Chota Nagpur, Central Bihar, West Bengal and the eastern districts of the Central Provinces, and was absolutely greatest at Chaibassa (−4°·5) and Sambalpur (−4°·0), and perhaps at Benares (−4°·6). The temperature data at Delhi are vitiated by a recent change of site of the observatory at that station.

The variations at the hill stations were similar in character to those at the adjacent plain stations, but were generally smaller in amount. The mean temperature was in moderate defect at Simla, Chakrata and Ranikhet, and in moderate excess at Quetta (+2°·7).

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

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, April 1895.	Mean minimum temperature, April 1895.	Mean daily temperature, April 1895.
	°	°	°
Burma Coast and Bay Islands	−0·9	−0·9	+0·1
Burma Inland	−3·4	+1·1	−1·2
Assam	−0·4	−1·0	−0·7
Bengal and Orissa	−2·4	−1·9	−2·2
Gangetic Plain and Chota Nagpur.	−4·9	−2·0	−3·5
Upper Sub-Himalayas	−3·4	−0·7	−2·1
Indus Valley and North-West Rajputana.	+1·2	+1·1	+1·2
East Rajputana, Central India and Gujarat.	−1·6	+0·1	−0·7
Deccan	−2·8	−1·2	−2·0
West Coast	+0·1	−0·3	−0·1
South India	−1·8	−0·9	−1·4

Winds.—Winds were very unsteady and somewhat feebler than usual in Bengal and Orissa. Easterly winds obtained more largely than usual in the Gangetic Plain and the mean winds of the month had a strong easterly component at the stations nearest the hills, (*viz.* Ludhiana, Roorkee, Gorakhpur and Darbhanga). Winds were lighter than usual, but very steady in the area of greatest excess of temperature in Upper India, including Sind, Baluchistan and the South-West Punjab. Winds were lighter on the Konkan coast and were more westerly (and less northerly) in the Central Provinces and Deccan. The winds recorded at the Scychelles indicated that the northerly extension of the south-east trades towards the equator was occurring more slowly this year than usual.

Humidity and Cloud.—The mean humidity conditions of the month were normal at Port Blair and in Lower Burma. The air was slightly drier in Assam, Bengal and Orissa, and was more humid than usual in Bihar, the North-Western Provinces, the North and East Punjab, Rajputana, Central India, the Central Provinces, the Deccan and Mysore. The increased humidity was most pronounced in the Gangetic Plain and Baghelkhand, more especially at Jubbulpore (where the relative humidity was 11 in excess) and Akola, Sutna and Roorkee (each 10 in excess). The air was slightly drier in Baluchistan, the South-West Punjab, and the Konkan, Malabar and Madras coast districts. The variations of the humidity conditions from the normal at the hill stations were similar to those of the neighbouring plains stations. Cloud was in moderate excess in Burma, Bengal and the Gangetic Plain, and in slight excess in East Rajputana, Central India and the Central Provinces, and also in Malabar, and the South Deccan. There was even less cloud than usual in the Punjab, Sind, Baluchistan, West Rajputana and North Bombay, and at the hill stations of Murree, Leh and Kailang, but there was a slight excess at the other hill stations in Northern India. The following table gives variation data of the mean aqueous vapour pressure, humidity and cloud amount of the month in ten meteorological provinces of India :—

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.
Burma Coast and Bay Islands .	+·011	+1	+2·4
Assam	−·034	−4	+0·1
Bengal and Orissa . . .	−·057	−3	+1·4
Gangetic Plain and Chota Nagpur.	+·042	+7	+1·5
Upper Sub-Himalayas . .	+·049	+6	+0·4
Indus Valley and North-West Rajputana.	+·035	+1	−0·5
East Rajputana, Central India and Gujarat.	+·057	+5	+0·5
Deccan	+·057	+6	+0·1
West Coast	−·018	−2	+0·5
South India	−·002	+3	+0·2

Rainfall.—The month was more disturbed than usual. Frequent series of thunderstorms occurred in the Deccan and Southern India, chiefly between the 12th and 20th, and in Northern India, more especially on the 3rd and 4th, the 10th to the 16th, and the 20th to the 23rd. Assam and East Bengal received a moderately heavy burst of rain during the last four days of the month, and Burma moderately heavy rain from the 22nd to the 27th, chiefly due to the cyclonic storm of the last week of the month. The rainfall was hence in excess in all divisions except the Indus Valley and North-West Rajputana. The excess was small and of little importance in the drier districts of the interior of Northern and Central India. It was largest in amount in Upper and Central Burma, which received an average of 3·18 inches or 2·93 inches above the normal. The total rainfall of the month was practically normal in Assam and in moderate excess in Bengal (41 per cent.) and Southern India (81 per cent.). The rainfall of the month was hence on the whole favourably distributed, and was most abundant in those districts which usually receive moderate rain in April. The following gives comparative rainfall data for the eleven meteorological provinces :—

Meteorological Province.	Rainfall.		
	Average actual for April 1895.	Average normal for April.	Variation from normal.
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands .	3·85	2·28	+1·70*
Burma Inland . . .	3·18	1·05	+2·93
Assam	10·20	9·57	+0·63
Bengal and Orissa . . .	3·46	2·36	+0·96*
Gangetic Plain and Chota Nagpur.	0·92	0·37	+0·59*
Upper Sub-Himalayas . .	0·80	0·63	+0·17
Indus Valley and North-West Rajputana.	0·44	0·39	−0·02*
East Rajputana, Central India and Gujarat.	0·30	0·07	+0·29*
Deccan	0·85	0·42	+0·51*
West Coast	2·03	1·73	+0·56*
South India	2·19	1·12	+0·91*

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

Atmospheric Pressure.

The mean pressure of the whole of India in April 1895 was ·013″ above the normal of the month. The local conditions were more strongly marked than in the preceding three months, and also differed considerably in character.

Pressure relatively to the general condition was in local excess in North-Eastern India, the East Deccan and North Madras. The anomalies were large, exceeding ·030″, in North Bengal and North Bihar at the stations for which data are given below:—

Station.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Dhubri	+·050	+·037
Jalpaiguri	+·055	+·042
Dinajpur	+·050	+·037
Bogra	+·057	+·044
Purnea	+·050	+·037
Darbhanga	+·042	+·029
Gorakhpur	+·045	+·032

Pressure was in relative defect over the remainder of India. The deficiency was moderate in amount in the South-West Punjab, Sind, Cutch and Kathiawar, and exceeded ·03″ at the following stations in Lower Sind and Cutch:—

Station.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Kurrachee	−·023	−·036
Hyderabad	−·023	−·036
Bhuj	−·018	−·031

Pressure was in slight to moderate defect at the lower hill stations as compared with the plains stations. The following gives the vertical pressure anomalies as determined from six pairs of stations:—

Hill Station.	Variation from normal pressure.	Plain Station.	Variation from normal pressure.	Vertical pressure anomaly (Hill—Plain.)
	″		″	″
Leh	+·022	Lahore	+·010	+·012
Murree	+·012	Peshawar	+·004	+·008
Simla	+·008	Ludhiana	+·021	−·013
Ranikhet	+·019	Bareily	+·040	−·021
Darjeeling	+·019	Dhubri	+·050	−·031
Mount Abu	−·013	Deesa	−·012	−·001

This deficiency of pressure at the hill stations was evidently a result of the decreased temperature and increased pressure at the level of the plains in Northern India, and was greatest at Darjeeling or at the hill station nearest to that part of the plains where pressure was most largely in excess.

Barometric depressions and cyclonic storms of the month.

The month was slightly more disturbed than usual. The chief feature of the normal distribution of pressure in April is a trough of low pressure which stretches from Chota Nagpur west-north-westwards into the South-West Punjab and Upper Sind. Pressure is occasionally lowest at the eastern extremity of the trough, and when this is the case thunderstorms or nor-westers with more or less heavy rain occur in Bengal. Sometimes a low pressure area forms at the western extremity in Upper Sind and West Rajputana or the South-West Punjab due to hot weather actions. These thermal low pressure areas are frequently stationary for several days and either fill up, and in such cases they exercise little or no influence on the weather beyond giving local duststorms, or they advance eastwards to the foot of the Punjab hills when they give thunderstorms with light to moderate local rain in the Punjab and Kashmir and the Punjab hill districts.

In April 1895 the formation of low pressure areas at the western extremity was of more frequent occurence than usual.

Pressure at the commencement of the month was practically normal. It was in slight to moderate excess in Burma and in slight defect in the Indus Valley. It fell slightly to briskly in Upper India during the next 24 hours, and a shallow hot weather depression lay over Sind, the South-West Punjab and West Rajputana on the morning

of the 2nd. It advanced during the next 24 hours into the South-East Punjab on the 3rd and disappeared during the next 24 hours. Baluchistan had light showers on the 1st and 2nd, and the Punjab and Kashmir on the 2nd, 3rd and 4th. Pressure increased very rapidly in the Punjab during the 24 hours preceding 8 A.M. of the 4th and fell briskly to rapidly in North-East India. In consequence of these changes high pressure conditions obtained in the Punjab and a low pressure area lay over Chota Nagpur, Bihar and West Bengal. Showers fell in East Bengal and Orissa during the day. A further large local fall occurred in Assam and North Bengal, and pressure was lowest on the 5th and 6th along the foot of the hills between Roorkee and Dhubri. As usually occurs during this type of pressure distribution moderate to strong westerly winds prevailed in the Gangetic plain.

Weather was slightly disturbed in the Deccan on the 6th and 7th, and numerous local thunderstorms, in some cases with hail, occurred in the south-eastern districts of the Central Provinces, the Deccan and Mysore. Series of thunderstorms gave light to moderate rain on the 10th, 11th and 12th (*i.e.*, during the 24 hours preceding 8 A.M. of these dates) in South Madras.

Pressure gave way briskly to rapidly in Upper India on the 10th and 11th and a depression formed in Sind and West Rajputana. It was well marked on the 11th, when pressure was a tenth of an inch below the normal at Mooltan Jacobabad and Hyderabad.

This, like the preceding depression, formed in the hottest area in India and during a period when temperature was largely in excess in that area. The following gives temperature variation data for stations in the low pressure area from the 10th to the 13th:—

Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April			
	10th.	11th.	12th.	13th.
	°	°	°	°
Quetta	+3·9	+6·8	+8·4	+3·6
Mooltan	+2·4	+8·5	+10·6	+8·6
Jacobabad	+5·4	+7·5	+8·7	+8·9
Hyderabad	+2·5	+3·7	+8·1	+4·7

This depression, which formed in the area of greatest temperature and greatest excess of temperature on the 10th and 11th, was stationary during the next three days. Meanwhile pressure increased in North-Eastern India and Upper Burma and steepish gradients favouring south-east to east winds obtained in Bengal on the 12th, 13th and 14th. Numerous thunderstorms and nor-westers, giving moderate to heavy rain, occurred on these days in Bengal. Pressure increased briskly to rapidly on the 14th in Northern India, modifying the pressure distribution considerably. The depression which had formed on the 10th and 11th in Sind partially filled up on the 14th but was unchanged in position on that day and the 15th. The barometric changes were very irregular during the next 48 hours. The Sind depression advanced eastwards to the foot of the Himalayas and local depressions were also shown in the Central Provinces and Bengal. The Punjab received light to moderate rain from thunderstorms on the 15th and 16th, the Central Provinces on the 16th and the north-western districts of the North-Western Provinces on the 17th (*i.e.*, during the 24 hours preceding 8 A. M. of that date). Conditions were also slightly disturbed in Southern India and Bengal and thundershowers were received in these areas on the 17th and 18th.

Pressure was largely in excess over the whole of Northern and Central India at this time, and was hence remarkably uniform, more especially on the 17th and 18th. Temperature was in moderate excess again in the Sind area, and was more or less considerably in defect over the remainder of India. Pressure fell rapidly in Upper Sind during the next 24 hours, and a low pressure area or hot weather disturbance, the third of the month, lay over Sind the South-West Punjab and West Rajputana on the morning of the 19th. It was unchanged in position during the next four days, and during the whole period the chief feature of the area was excessive temperature.

The following gives variation data for six stations in it from the 19th to the 24th:—

Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April						
	19th.	20th.	21st.	22nd.	23rd.	24th.	Mean of period.
	°	°	°	°	°	°	°
Quetta . . .	+1·5	+2·8	+13·7	+6·6	+0·9	−0·5	+4·2
Mooltan . . .	+2·1	+4·9	+5·9	+6·7	+7·1	+6·7	+5·6
Jacobabad . .	+3·6	+8·6	+7·8	+9·3	+5·0	+3·5	+6·3
Hyderabad . .	+4·0	+1·6	+1·6	+0·5	+0·8	+2·5	+1·8
Bickaneer . . .	+0·9	+0·2	+2·8	+5·5	+4·0	+3·2	+2·8
Deesa . . .	+4·7	+3·7	+2·6	+0·5	+1·9	+4·2	+2·9

No rain of any importance fell in Baluchistan or Upper India during the period from the 19th to the 23rd, and the only marked feature of the depression area was the excessive temperature, greatest on the whole and most persistent at Jacobabad in Upper Sind, the station partially representative of the conditions in the Pat desert. The depression moved eastwards during the next 24 hours, when the North and East Punjab received some light thundershowers. A low pressure area lay over the Central and South Punjab and North Rajputana during the remainder of the month.

The most important feature of the last week of the

month was a cyclonic storm which formed in the Bay on the 22nd and 23rd and advanced to the Arakan coast. 1895 is the third year in succession in which a storm has formed during the last week of April near the Andamans and advanced to Burma. As cyclonic storms are of comparatively rare occurrence in the Bay in the month of April, this repetition is the more noteworthy. The following is a brief history of this storm.

Severe cyclonic storm of the 23rd to the 26th April.—This storm appears to have formed under similar circumstances to the two storms which were generated in the Bay in the last ten days of April 1893 and April 1894. The marine data and the observations at Port Blair show that from the beginning of the month to the 21st normal fine dry weather with light unsteady winds (generally from northerly directions) and a smooth sea obtained in the centre of the Bay. Temperature was considerably in excess in Burma and, as usual in April under these conditions, a shallow depression was shown in Central Burma. It was merely a hot-weather depression of little importance. Moderate to fresh westerly winds were established at the entrance to the Bay in the third week of the month, and weather became squally with much rain. Thus on the 22nd the S. S. *Pekin* in Lat. 6° N. and Long. 86° 54′ E. had west-south-west winds, force 4 to 5, and frequent hard squalls of wind and rain with vivid lightning in the morning, and the S. *Loch Awe* in Lat. 9·° 19′ N. and Long 85° 54′ E. had heavy squalls with west-north-west winds estimated at force 9 (but this is probably much exaggerated).

The following 8 A.M. observations taken at Port Blair show the conditions in the adjacent part of the Bay at this time :—

Date.	8 A.M. pressure reduced to sea-level and constant gravity at Lat. 45°.	Wind		Cloud.	Rainfall during previous 24 hours.	Remarks.
		Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"				Inch.	
19th .	29·864	ESE	4	8	...	Cloudy.
20th .	·834	NE	3	6	...	Cloudy.
21st .	·814	SSE	4	6	...	Cloudy.
22nd .	·732	SSE	8	9	0·06	Threatening.

The mean air movement at Port Blair in April is 4·6 miles per hour. Winds were hence very light from the 19th to the 21st, and pressure had a slight tendency to decrease. The data for the north and west of the Bay and the Madras and Bengal coast stations show that winds were of normal strength and direction during this period. The only abnormal features in the Bay on the 20th, 21st and 22nd were—

(1) Approximately uniform pressure over nearly the whole area with a slight tendency to low pressure in the centre of the Bay.

(2) Light unsteady winds in the east of the Bay near the Andamans.

(3) Moderate to fresh humid and squally westerly winds in the south of the Bay.

The following gives a brief history of the origin and course of the storm :—

23rd April.—Pressure had given way slightly in the Peninsula and Bay and had risen slightly to briskly in Burma. Pressure was more uniform in the Bay than on the 22nd. Fine weather prevailed generally. Thunderstorms had occurred during the previous afternoon in Chota Nagpur and Central Burma. Weather was fine in the north of the Bay. The information for the centre of the Bay is very scanty. The Port Blair observations show that pressure had given way slightly and that winds had increased rapidly in strength. The mean velocity during the previous 24 hours was 17 miles and weather was now showery and threatening. In the south of the Bay winds were moderate to strong, and weather more squally than on the previous day. The following gives information for this part of the Bay, taken from the logs of four ships :—

Hour.	Name of vessel.	8 A.M. Position.		Barometer, corrected.	Wind		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	"			
8	Barque *Chilena.*	9·57	83·58	...	W	6	Overcast ; 4 P.M. squally with rain.
8	S. S. *Pekin*	5·34	82·19	29·836	WSW	5	Cloudy ; 4 A.M. passing hard squalls of wind and rain.
8	S. *Lena* .	10·8	83·49	...	NNW	...	Squally with much rain.
8	S. *Loch Awe*	10·44	85·59	29·761?	SSW	...	Passing showers.

The data indicate a slight tendency to the establishment of a low-pressure area and cyclonic circulation in the centre of the Bay. The winds were irregular both in strength and direction, and hence the storm was only in the initial stage of squally weather.

24th April.—Pressure was unchanged over nearly the whole of India and had risen slightly in Burma, and the low-pressure area in Central Burma had completely disappeared. Numerous light thundershowers had fallen in that area during the previous 24 hours. Pressure had given way slightly at Port Blair. Winds were unchanged in direction (from south-south-east), but had increased slightly in strength, their average velocity during the previous 24 hours being 19 miles per hour.

The marine data establish that a fairly well-defined cyclonic circulation was now established in the centre of the Bay. The following gives 8 A.M. observations taken on board ships nearest to the centre :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	Long. E.	Barometer corrected.	Wind. Direction.	Force.	Weather.
		° ′	° ′	″			
8	S.S. *Evelyn* .	14·26	93·22*	...	SE	4	10 A.M. heavy squalls and rain.
„	S.S. *Sirsa* .	14·15	85·12	29·726	N by W	6	Noon, showery.
„	S.S. *Castle Eden*	13·00	85·16	29·742?	NW	6	Squally.
„	S. *Loch Awe* .	12·6	86·31	29·731?	W by N	6	Overcast; 4 A.M. squally.
„	Barque *Chilena*	10·17	83·48	...	W	6	Squally with rain.

* Noon position.

The whole of the data indicate that the centre of the storm which had formed, was probably in Lat. 13° N. and Long. 89½° to 90° E. There was no ship within 300 miles of the centre at this time, and the marine data hence only indicate the weather in the outer area of the disturbance. The ships in the centre of the Bay all experienced winds increasing in force, a rising sea and more frequent and stronger squalls during the day. This is clearly shown by the log of the S.S. *Evelyn* which was nearest to the centre during the day :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	Long. E.	Wind. Direction.	Force.	Weather.
		° ′	° ′			
4 A.M.	S.S. *Evelyn* . .	...	...	SE	4	Heavy rain-squall.
8 „	Ditto . .	...	...	SE	4	10 A.M. heavy squalls and rain.
Noon	Ditto . .	14·26	93·22	SE	4	
4 P.M.	Ditto . .	...	...	SE	5	
8 „	Ditto . .	...	...	S	5	
Midnight	Ditto . .	...	...	S	6	Squally with heavy rain.

The information hence indicates that the cyclonic storm was formed during the 24 hours preceding 8 A.M. of the 24th, and that it intensified rapidly during the day. Several steamers which encountered the storm on the next day left Rangoon for Calcutta on the morning of the 24th. They all experienced moderate to fresh winds with increasing head sea during the day, but did not meet bad weather until the morning of the 25th. The S.S. *Commilla*, which left Sandoway on the Arakan coast for Rangoon at noon, had moderate breezes with fine cloudy weather during the afternoon and night.

25th April.—Pressure had given way slightly in the Peninsula and Lower Burma and briskly to rapidly in Northern India and Upper Burma. Skies were clouding over in North-Eastern India and Burma, and were overcast in Assam and North Bengal and Central Burma. Light showers had been received in Central Burma, Arakan, Bengal and the Deccan. Winds had shifted to northerly directions at the head of the Bay and to east-south-east at Diamond Island, where they were blowing very strongly.

The following gives 8 A.M. observations taken on board ships in the storm area in the Bay :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	Long. E.	Barometer corrected.	Wind. Direction.	Force.	Weather.
		° ′	° ′	″			
8	S.S. *Evelyn* .	13·20	91·43	...	SW	5	4 A.M. heavy squall and heavy rain with confused high sea.
„	S.S. *Africa* .	16·26	93·0	29·674	Var.	5	Continuous rain with heavy Swell.
„	S.S. *Maharani*	17·30	91·30	·627	SE	7	Squalls of wind and rain with high cross sea.
„	S.S. *Nairung* .	18·31	91·45	·661	SE by E	6	Hard squalls and heavy rain with vivid lightning to SW.
„	S.S. *Ethiopia* .	19·6	90·25	·681	SE by E	7	Heavy rain with high head sea.
„	S.S. *Gaekwar* .	16·44	86·0	·643?	N by E	5	Clearing; 4 A.M. weather unsettled.
„	S.S. *Castle Eden*	15·56	86·08	·652	N by W	5	Cloudy with heavy sea; 4 A.M. squally.
„	S.S. *Bactria* .	13·26	85·23	·661	WNW	3 to 4	Overcast.
„	S.S. *Nevasa* .	11·11	83·52	·657	W	4	Cloudy; 4 P.M passing small rain.
„	S.S. *Evelyn* .	13·20	91·43	...	SW	5	Heavy squalls and heavy rain.

These observations when charted show that there was now a vigorous cyclonic circulation, the centre of which at 8 A.M. was in about Lat. 16° N. and Long. 90° E., established in the Bay. The ships nearest to the centre at 8 A.M. were the *Maharani*, 150 miles to the north-east, and the *Nairung*, 200 miles to the north-east. Both these vessels were advancing westwards in front of the advancing cyclone. They experienced the weight of the storm during the afternoon and evening of the day. The storm centre had marched northwards with a slight easting about 210 miles during the previous 24 hours, but advanced with increasing velocity during the day, and also recurved slightly to east.

The following gives the observations recorded on board the *Maharani* during the day :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
4 A.M.	S.S. *Maharani*.			29·58	E	5	4 A.M. to 6 A.M. continuous rain and squally.
Noon.		18 2	91 10	·55	E	5 to 6	Thick dirty weather with heavy squalls and high cross sea.
2 P.M.				·44			
4 „				·36	E by N	8	Thick weather and heavy rain and very high cross sea.
5 „				·29			
6 „				·18	...	...	Weather becoming rapidly worse and sea increasing.
7 „				·08			
8 „				·93	NE	9	Terrific squalls following each other from NE.
8-30 „				28·86			8-30 to 11 P.M. wind blowing with hurricane force.
9 „				·81			
11-30 P.M.				·89	...		Weather moderating and squalls less frequent.
Midnight.				·98	S	8	Weather clearing; heavy sea.

The course of the S.S. *Maharani* is not given in the copy of her log. She continued during the day to proceed across the northern quadrant of the storm whilst the centre was advancing towards her, and in the evening between 9 P.M. and 11 P.M. it passed a little distance to the east of the vessel. The centre at 10 P.M. was probably in about Lat. 19½ N. or 19½° N. and Long. 91° E. or 91¼° E., and it had hence advanced about 240 miles in a north-north-east direction since 8 A.M. or at a mean rate of about 17 miles per hour.

The S.S. *Nairung* left Akyab on the 24th for Bombay. She was about 200 miles to the north-east of the centre at 8 A.M. She kept in the eastern quadrant during the day, and the centre passed to the west of the vessel during the evening.

The following gives extracts from her log :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
4 A.M.	S.S. *Nairung*			29·58	ESE	5	Strong squalls.
6 „				·61			Passing squalls.
„		18 31	91 45	·66	SE by E	6	Hard squalls, heavy rain and vivid lightning to SW.
Noon.	S.S. *Nairung*	18 16	91 38	·61	SE by E	4 to 6	Continuous hard squalls, heavy rain, and confused high sea.
4 P.M.				·41	S	5 to 7	Heavy squalls and confused sea.
8 „				·26	SSW	8	Hard squalls.
9 „				·19			Full gale and fierce squalls.
10 „				·17			
Midnight.				·25	W	9 to 10	
4 A.M.				·45	WSW	10 to 7	Frequent fierce squalls and sea going down.

The S.S. *Nairung* had the lowest pressure at 10 P.M. and the strongest winds from 9 P.M. to midnight after which the weather began to moderate. The observations give a position for the centre at 10 P.M. approximately the same as that obtained from the data of the S. S. *Maharani*.

The S.S. *Africa*, which left Rangoon for Calcutta on the morning of the 24th, passed through the southern quadrant of the storm on the evening of the 25th. The S.S. *Africa* was nearest to the centre at 6 P.M. to 7 P.M., when her barometer (corrected) stood at 29·27″. She had at that time south-east winds, which blew a full gale, with passing squalls of hurricane force and a heavy confused sea.

The S. S. *Ethiopia* left Calcutta on the 23rd for Rangoon and passed through the western quadrant of the storm. She was nearest to the centre from 4-30 P.M. to 7 P.M. The following is an abstract of her log :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Ethiopia*	19 6	90 25	29·68	SE by E	7	Moderate gale.
Noon.		18 41	90 50	·61	ENE	8	Fresh gale with heavy head sea.
2-30 P.M.				·54	ENE to NE		
3 „				·47	ENE to NE	10	Violent gale with terrific squalls of hurricane force and sea becoming more confused.
4 „				·42	NE	10	Fierce gale, heavy squalls and high confused sea.
6 „				·40	NE by N		Very heavy squalls.
7-30 „					NNE		Wind veering to northward, and weather slightly moderating.
8 „				·42	NNE	7	Moderate gale and hard squalls.
Midnight.				·56	WNW		

The *Ethiopia* was probably nearest to the centre at 7 P.M. The wind veered from NE. at 5 P.M. to N. at 8 P.M., and during the greater part of which time she had squalls of hurricane force. The position of the centre obtained from her data agrees fairly well with that derived from the data of the S.S. *Maharani* and *Nairung*.

26th April.—Pressure had fallen slightly to briskly in North-Western and Central India, where fine clear weather with moderately high temperature held steadily at this time. Numerous thunderstorms had occurred in southern half of the Peninsula and had given moderate and fairly general rain. Pressure had given way very rapidly in Upper and Central Burma and rapidly in Bengal. The 8 A.M. observations show that the cyclonic storm had crossed the Arakan coast and now lay over Arakan and Upper Burma. So far as can be judged from the available information, the storm centre crossed the Arakan coast a little to the north of Akyab about 4 A.M., and it had hence advanced at the rate of about 25 miles per hour during the previous night.

The following gives 8 A.M. observations at stations in the storm area:—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"	"	"				Inches.	
Chittagong.	29·494	—·249	—·330	NW	4	4	0·28	
Akyab .	·564	—·195	—·265	NNW	13	10	4·03	Severe gale of wind.
Minbu .	·395	—·227	?	SE	5	9	1·49	Continuous rain.
Mandalay .	·320	—·231	?	S	7	10	0·05	
Kindat .	·231	—·182	?	N	2	0	1·68	Rainy.

The winds were very irregular in the depression area and indicate that the cyclonic circulation was fast breaking up under the obstructive action of the Arakan Yoma.

The following account of the storm at Akyab is taken from the *Englishman* newspaper:—

"A cyclone began to blow at 11-30 P.M., the weather having been nasty all day. It first began to blow from the NE., and then shifted till it got to SW., at about 2 o'clock in the morning, when with a rapid sinking of the mercury, it veered again to SE. The mercury reached its lowest at 3-30 A.M. The wind then was blowing from SSW., and was about its strongest and shifted to the west, from which quarter it blew till it died out about 5 o'clock just as day was breaking. It was lucky for Akyab that the cyclone lasted for so short a while; an hour or so more would have wrecked most of the houses. Most of the pucca buildings and those wooden buildings with a shingle roof escaped, but scarcely a thatched roof—and 90 per cent. of the houses have this kind of roof—escaped without damage. Many corrugated iron roofs were torn off and carried to a considerable distance. Trees were blown down in every direction, doing great damage to the telegraph wires.

In the harbour there were only four steamers the *Benedick*, *Falloden Hall*, *Caramania* and *Assama*, and four sailing vessels, the full-rigged ship *Yarkand*, the barque *Erwin Rickmers*, and two country brigs, the *Solomon Shah* and the *Karula Amen*. These last are complete wrecks, the *SolomonShah* having capsized and the other, which was laden with paddy, was driven ashore and smashed by the waves. They were both close to shore, and so only one man of their crews was lost. The *Yarkand* and the *Erwin Rickmers* were driven ashore, but not having taken in any cargo were light enough to be floated off next day. The barque and the *Benedick* came into collision during the night. The *Benedick* took the ground but was able to steam off."

The storm began at 2 A.M. at Maungdaw (60 miles north of Akyab), and continued for some hours. Grea damage was done to the buildings in the station. Large trees were uprooted and the telegraphic line to Akyab destroyed. At Lungleh the storm began at 5-45 A.M., and at Demagiri and Fort Tregear in the South Lushai hills it commenced about 6 A.M. At Ramu in the Chittagong hill districts the storm was rather severe and lasted from 2 A.M. to 5 A.M. Very little rain fell during the storm at that station.

The following series of observations were taken by the light-house keeper at the Osyter Island Light house, about 25 miles to the west of Akyab in Lat. 20°5′ N and Long. 92°39′ E:—

Date.	Hours.	Barometer (actual).	Wind.		Weather.
			Direction.	Force	
24th .	Noon	29·72	E	5	Cloudy with rain.
25th .	2 A.M.	·60	E	5	Cloudy.
	Noon	·64	NE	5	Cloudy.
	6·19 P.M.	·50	NE	6	Cloudy with rain.
	8 P.M.	·40	NE	7	Rainy.
	9 P.M.	·00			Cyclone set in.
	11 P.M.	·00			Cyclone continues very bad.
26th .	2 A.M.	·00			Cyclone very strong indeed.
	5 A.M.				Cyclone ceased.
	5·47 A.M.	·30	W	6	Rainy.
	Noon	·52	W	5	Rainy.
	5·50 P.M.	·50	W	2	Fine clear weather.

The observer at Chittagong took a series of observations, of which the following is a summary :—

DATE AND HOUR.	Pressure reduced to sea-level and constant gravity at Lat. 45.	Wind direction.	Rainfall.	Weather.
	in.			
25th 8 P.M. .	29·613	NNE		Fine and clear.
26th 2 A.M. .	·559	NNE	0·19	Overcast ; beginning to be squally ; drizzling rain.
4·45 „ .	·479	NNE		Overcast ; rather squally.
6 „ .	·424	NNE		Overcast ; squally very dark horizon to SSE. and E.
7 „ .	·433	ENE	0·09	Dark threatening horizon to NE., N., SE. and S.
9 „ .	·530	WSW		Weather rapidly clearing up.

The Port Officer, Chittagong, writes: "There was nothing peculiar in the weather until sundown of the 25th, when heavy banks of cumulus cloud began to rise in the south-east. At 8 P.M. the wind became gusty and slight showers of rain began to fall. The barometer began to fall at 10 P.M., when it was 29·90″ and wind NNE. At 3 A.M. had fallen to 29·66." The wind was unchanged in direction and there was continual spitting rain. The barometer stood at 29·58″ at 4 A.M., and the gusts were very hard from north-east. The glass began to rise at 6 A.M. and the weather rapidly cleared, and at 10 A.M. it was a bright sunny day with moderate winds from north and north-west."

The storm broke up very rapidly under the obstructive action of the Arakan Yoma, and almost certainly did not pass across these mountains into Upper Burma as a well-defined cyclonic circulation. The following gives the position of the storm centre and its rate of advance from the 24th to the 26th.

DATE.	HOUR.	POSITION.		Distance passed over during interval.	Average hourly velocity during preceding 24 hours.
		Lat. N	Long. E		
		° ′	° ′	Miles.	Miles per hour.
24th . .	8 A.M.	13 0	89 30		
25th . .	8 A.M.	16 0	90 0	210	9
„ . .	10 P.M.	19 30	90 45	240	17
26th . .	4 A.M.	20 40	92 45	150	25

The preceding statements have indicated that the storm was of very considerable intensity. The storm area proper was apparently of moderate size, not more than 200 miles in diamater. It was the most severe storm that has visited the Arakan district for many years and caused great destruction of property.

The depression filled up very rapidly during the day, and weather improved equally rapidly in the north of the Bay and was fine with moderate south-west winds during the afternoon. The storm broke up so completely during the day, that there was no trace of its existence on the morning of the 27th.

The storm formed under the same general conditions as the storms in the last ten days of April 1893 and of April 1894. It was generated in an area of light winds and calms after the setting in of strongish humid south-westerly winds in the south of the Bay. Unlike the two storms referred to above which formed to the east of the Andamans, it was generated in the centre of the Bay to the south-west of the Andamans. It formed very rapidly on the 22nd and 23rd, and began to advance northwards with a slight easting, at first slowly on the 24th, and then with rapidly increasing velocity on the 25th, on which day it again recurved slightly to the east. Several vessels experienced squalls and winds of hurricane force near the centre. The lowest reported reading of the barometer was 28·81, showing that the depression was upwards of nine-tenths of an inch in the inner storm area. The storm centre crossed the Arakan coast about 4 A.M., when it was advancing with a velocity of about 25 miles per hour.

Pressure was during the remainder of the month more or less considerably in defect in Northern and Central India. The deficiency was greatest along the foot of the hills, and the trough of low pressure was hence much further north than usual. Strong hot westerly winds hence prevailed in the Gangetic Plain and the south-west humid winds brought up in the rear of the storm gave moderately heavy general rain in Assam, East Bengal and Upper Burma during the remainder of the month.

Summary of the reports of the weather and snowfall in the mountain districts to the north and north-west of India.

I.—AFGHAN MOUNTAIN DISTRICTS.

(1) *Dera Ismail Khan.*—No snow.

(2) *Khyber.*—No snow.

(3) *Waziristan.*—During the first ten days of the month some short sharp storms left a thin coating of snow on the upper parts of the Merwattas (10,000 feet). It however completely melted in 3 or 4 hours' sunshine.

Weather was hot but generally characterized by strong day winds, varying greatly in direction, which blew away all heat-haze on two days out of three.

In the shade of the northern slopes of Momir Sar (10,800 feet) in the Merwattas there were on the 21st April only a very few small patches of snow left. In the ravines on the north-east face of Sowor Gul (10,700 feet) there appeared to be a little more snow, these patches being larger or a little thicker.

Kabul.—No snow fell from February to the end of April.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Hazara District.*—Continuous rain fell from the 2nd to the 4th, and showers on the 5th, 6th and 15th. The fall on the 4th and 5th was accompanied by hail. Light falls of snow occurred on the higher ranges during the rain of the 2nd to the 4th. The snowfall of the past winter is said to have been less than the average of previous years.

(2) *Hills adjacent to Murree.*—No snowfall.

(3) *Chamba.*—A storm occurred on the 3rd and 4th April. There was only hail at Kalatop on the outer ranges, and on the inner ranges up to about 6,000 feet or rather higher. But a little snow, about 4 inches in depth at Thanela and 3 inches at Barmour, fell above 6,500 feet. During this storm there appeared to be heavy snow on the higher ranges. Data for Killar Pangi will not be available for a month or rather more.

The Deputy Conservator of Forests, Chamba Division, who sent the preceding information, adds: "The snowfall accumulation appears to be heavy on the inner ranges; but up to 8,000 feet all snow, except remains of drifts, had melted by the 15th. The snow slides formed in the interior are generally smaller than was the case last year.

"The weather has been colder than usual and accumulations of snow have melted more slowly than usual, though there has been fine weather between the storms.

"From enquiries and my own observations, I should say that the past winter more closely resembles that of 1890-91 than any other subsequent winter. The amount of snow appears to have been much about the same as in 1890-91; but the falls began earlier and to begin with, they were particularly heavy on the inner ranges."

(4) *Kulu.*—There were light falls of snow on the 3rd and 4th in both tahsils of the sub-division. The falls were not, however, general and occurred only on the higher ranges. All the passes were open for foot traffic throughout the month.

There was much hot sunshine and the snow melted very rapidly. It was cloudy only on rainy days. Some Lahoulis succeeded in crossing the Rotang Pass with laden sheep and goats.

The following table gives the reported depth of snow on the higher passes of the sub-division at the end of the month and at the corresponding periods of the past three years:—

Tahsil.	Name of pass.	Height above sea-level in feet.	Depth of snow on 25th April				
			1895.	1894.	1893.	1892.	1891.
			Feet.	Feet.	Feet.	Feet.	Feet.
KULU .	Rotang . .	13,000	13	13	13	3	10
	Hamta . .	14,500	4	10	11	2½	?
	Chander Khani .	?	4	9	12	3½	10
PLACH .	Barsai . .	?	4	6	6	2	5
	Bujadhar . .	?	4	8	6	½	4
	Lori Achri . .	?	5	7	5	*Nil*	3
	Pushtari . .	?	1	2	4	...	3
	Bhubhu . .	10,000	3	2	5	...	5
	Majang . .	?	...	...	2	...	0
	Chul . . .	?	3	3	11	...	4
	Sirikand . .	15,000	15	15	30	6	36
	Maghian . .	?	2	4	9	*Nil*	4
	Tikkar . .	?	2	3	6	...	...
	Dundku . .	?	4	5	6	...	7
	Nunu . .	?	...	2	1	...	2
	Jalori . . .	10,500	4	4	6	*Nil*	4
	Raghopur . .	?	4	5	6	...	5
	Lamri . .	?	3	3	7	...	4
	Sakiran . .	?	3	4	7	...	5
	Suphakun . .	?	4	6	15	...	12
	Gargarasan .	17,000	10	8	25	...	12
	Bashleo . .	11,000	4	3	15	...	4
	Plach . .	?	5	4	20	...	7
	Tirath . .	?	8	7	25	...	10

III.—THE NORTH-WESTERN PROVINCES HIMALAYAS.

Kumaon—The following gives the periods and amount of snowfall on selected passes in the three pattis or sub-divisions of the district:—

Name of patti.	Date.	Depth of snow in feet and inches.	
		′	″
MALLA DANPUR . .	7th April . .	0	6
	11th and 12th „ .	0	3
	22nd „ .	0	6
	23rd „ .	0	1
	TOTAL .	1	4
MALLA JOHAR . .	15th April . .	1	0
	29th „ . . .	2	0
	TOTAL .	3	0
MALLA BYANS, CHANDANS AND DARMA.	5th April . .	0	6
	7th „ . .	0	6
	15th „ . .	1	0
	20th „ . .	0	6
	23rd „ . .	0	6
	TOTAL .	3	0

Weather was damp and cloudy throughout the month. The fall of the past winter is considered to be larger in amount than during the winter of 1893-94.

Summary of special storm reports.

The following gives a statement of the chief local storms of which reports were received during the month. These storms were all of the ordinary hot-weather type, *viz.*, thunderstorms or hailstorms in Bengal, the North-Western Provinces, the Deccan and Madras, and dust-storms, in the hottest and driest districts of Northern and Central India, more specially the Punjab and Rajputana.

4th.—Severe thunderstorm and hailstorm at Mussoorie (6 A.M. to 6-30 A.M.).

6th.—Severe hailstorm at Nagpur (3-30 P.M. to 4-40 P.M.). Some of the hailstones penetrated the tiled roof of the office building of the observatory. Temperature fell from 92°·2 at 4 P.M. to 71·0° at 4-40 P.M.

Severe thunderstorm at Hyderabad Deccan. Much damage was done by hail in the neighbourhood of the town. Violent dust-storm at Kurnool (Deccan) from north-east, 4-30 P.M. to 5-40 P.M.

7th.—Violent hailstorm at Raichur from north-north-east at 9 P.M.

11th.—Thunderstorm at Pachpadra.

Thunderstorm at Belgaum.

12th.—Severe thunderstorm at Faridpur. A man was killed by a flash of lightning. Thunderstorm at Pachpadra.

13th.—Duststorm at Jeypore at 5·40 P.M.

Thunderstorm with hail at Teheran (Persia). Severe thunderstorm at False Point. Severe nor'-wester at Gopalpore, 11 P.M. to 11-30 P.M.

14th.—Thunderstorm with hail at Gulbarga from 4·10 P.M. to 4-55 P.M. Rainfall during storm one inch. Thunderstorm with hail at Sutna from 5-35 P.M. to 6-20 P.M. Duststorm at Raipur 5-30 P.M. to 6-30 P.M.

15th.—Thunderstorm with hail at Simla 5 P.M. to 8 P.M. The crops were completely destroyed by the hail in some of the neighbouring villages. Thunderstorm with hail at Mussoorie from 4-45 P.M. to 5-20 P.M. Severe thunderstorm at Nagpur from 6·30 P.M. to 8 P.M.

16th.—Duststorm at Khandwa at 5 A M. Thunderstorm at Secunderabad from 11 A.M. to noon. Thunderstorm at Delhi from 8 A.M. to 10 A.M. Duststorm at Cawnpore from 4 P.M. to 5-30 P.M. Nor'-wester at Calcutta from 6 P.M. to 7-10 P.M. Thunderstorm at Belgaum from 4-10 P.M. to 7 P.M. Thunderstorm at Khandwa at 3-40 P.M.

18th.—Thunderstorm at Mussoorie 7-50 P.M. to 8-25 P.M.

19th.—Duststorm at Allahabad from 9 A.M. to 9-30 A.M. Duststorm at Cawnpore. Duststorm at Jubbulpore from 11 A.M. to 0-30 P.M. Thunderstorm at Teheran (Persia) from north-west at 4 P.M.

20th.—Thunderstorm at Calicut 7-30 P.M. to 7-50 P.M.

21st.—Duststorm at Raipur at 4-30 P.M. Thunderstorm with hail at Cherat from 7 to 7-30 P.M.

22nd.—Duststorm at Jeypore from 5 P.M. to 5-45 P.M.

23rd.—Duststorm at Jeypore at 7 P.M.

24th.—Duststorm at Benares from 3 P.M. to 3-30 P.M. Duststorm with thunder at Cuddapah at 4-30 P.M. Duststorm at Indur (Hyderabad) at 5 P.M. The strongest winds had a velocity of 50 miles per hour. Thunderstorm at Teheran (Persia) at 2-30 P.M.

25th.—Violent thunderstorm at Teheran with hail from 6 P.M. to 7 P.M. The Telegraph Master notes that during a most intense flash of forked lightning a ball of light shot across the sky in a north-west direction lasting some 5 seconds and passed into the Elburz range, leaving a trail of light behind it. The whole was followed by a terrific peal of thunder.

27th.—Violent thunderstorm at Commilla from 3-20 P.M. to 4 P.M. Thunderstorm with heavy rain at Jeypore from 4 to 5 P.M.

30th.—Duststorm at Jask at 11-25 A.M. Thunderstorm with hail at Teheran from 3-20 P.M. to 4-30 P.M.

The following gives a brief summary of the more important hailstorms in Assam, Rajputana and Central India during the month of which reports have been received from the Political Agents or other local authorities :—

1st.—Hailstorm in the Nalbari Tahsil of the Kamrup district which caused slight damage to the tobacco crop. Hailstorm at Bholaganj in the Khasi and Jantia hills. Severe hailstorm in Gauhati. Storm came from north and lasted 10 minutes. The largest hailstones are reported to have varied in size from ½ inch to 2½ inches in diameter.

7th.—Hailstorm in the Balaghat district, Central Provinces. The storm was not severe, but caused slight damage to the mohwa crop over an area of 17,000 acres.

11th.—Severe hailstorm in the Bijni Tahsil of the

Goalpara district which caused serious damage to the standing crops and fruits.

12th.—Hailstorm at Rajnagar in the Sylhet district from noon to 1-30 P.M. The storm came from north. The largest stones weighed one tola. The storm caused slight injury to the crops.

16th.—Hailstorm in the Dewas State. The stones were small and no injury was done to the crop. Hailstorm in the Saddikganj Parganah of Bhopal.

28th.—Hailstorm at Khulna about 4 P.M. The hail-stones were few in number but of enormous size. The Collector writes that he measured one which was 7 inches in circumference. The storm came from north-west.

28th to 30th—Hailstorms in the North Sylhet and Habiganj sub-divisions of the Sylhet district. Slight injury was inflicted on the crops.

29th.—Tornado in the Manikganj sub-division of the Dacca district. The following is a summary of a report on the storm received from the Sub-divisional Officer Baboo Ram Sadan Bhattacharji :—

"On the 29th April a tornado passed through some villages of Thanas Harirampur, Sealo and Manikganj. It is said to have taken place between the hours of 3 and 4 P.M. and lasted for about 5 minutes and was preceded by rain and hail for about 15 minutes. It took its course from the river Padma below Latakhola village and advanced easterly through Latakhola, Jaypur, Mrijakandi, Gopalnagar, Maitakandi, Balia Chak, then westerly through Bhawerdangi, Nizamdangi, then easterly through Shekhergram, Gangadhardi, Chowhuddi, Hemrajpur, Pathankandi, Shekherdangi, Lesraganj Thana, Patgram, Bazar Khaira, Maddya Khaira, and Dakhin Khaira, and then northerly through Ganga Prosad, Harina, Ram Kristapur, Bhawerdangi, then easterly through Kamardoba, Boyra Azamkandi, Boyra Maddyakandi, Audharmanik, Peschur, Lauta, Ijdah, Kachua, Jontrakhola, Baricharah, and Boali in Thana Harirampur, and then to Chur Bainkhuri, including Sibram, Chur Gobindapur and Jagannathpur in Thana Manikganj and Chegarghona and other villages in Thana Nowabganj, covering a distance of 12 miles of Harirampur and 4 miles of Manikganj Thanas in a line of villages close to each other. A few miles of Sealo Thana comprising the villages of Jabra, Durgabari, Baruna Prosad, and Dulandi were also affected. The tornado in the jurisdiction of Sealo Thana blew from the south-west and lasted also for about 5 minutes. It occurred some 16 miles to the north of Harirampur Thana, leaving the space between unaffected. It is said that big hailstones, weighing about a seer or more, also fell at the time at Lesraganj. The tornado blew up big houses and uprooted large trees and bamboo clumps and wounded 135 persons, 24 lives being lost. Property to the value of Rs. 81,306 was destroyed."

Brief summary of the weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—Normal westerly winds prevailed almost throughout the month along the Sind, Kathiawar and Konkan coasts and unsteady northerly to easterly winds in the centre, west and south of the sea. Easterly winds were also experienced during the greater part of the month in the Gulf of Aden. On the other hand, in the Persian Gulf the winds were less westerly than usual. In the extreme south-east of the sea very unsteady and variable winds prevailed during the month. Weather was generally fine throughout the month except in the neighbourhood of West Ceylon where squalls were of frequent occurrence.

The air movement for the whole area ranged from 1·8 to 3·2 and averaged 2·5 for the whole month.

Bay of Bengal.—At the commencement of the month normal south-westerly breezes, force 4 to 6, prevailed along the north and west coasts of the Bay and very light irregular winds over the remainder of the Bay. Winds were most variable in the extreme south of the Bay. Weather was generally fine and clear except in the Straits of Malacca where it was rainy. The average strength of the air movement for the whole of the Bay was 2·8 at 8 A.M. of the 1st.

No change of importance occurred during the next five days in any part of the Bay. On the 6th, however, the pressure conditions over the land became unfavourable for the continuance of local southerly sea winds along the north and west coasts of the Bay. During the period from the 6th to the 10th unsteady northerly winds were experienced along the Bengal, Orissa and Madras coasts. The general air movement ranged from an average of 2·9 on the 3rd to 2·2 on the 10th. An important change occurred in the south-west of the Bay on the 8th where rainy squally weather had set in. The vessels voyaging along

the south and east coasts of Ceylon reported heavy squalls and much rain, thunder and lightning and a moderate sea on the 8th and 9th. Conditions remained unchanged during the next nine days, more or less rainy weather prevailing in the neighbourhood of Ceylon and in the Straits of Malacca and fine weather elsewhere. Winds which had been blowing with an average force of 2·6 during the period from the 11th to the 17th began to fall off in strength, more especially in the centre of the Bay and averaged 2·2 on the 18th, 19th and 20th. Winds were even more unsteady on these three days than usual in April over the centre of the Bay. This feature of the air movement is confirmed by the data of Port Blair where the wind shifted from ENE. at 8 A.M. of the 18th to E. S. E. on the 19th and N. E. on the 20th, and where the average hourly velocity decreased from 6 miles on the 18th to 3 miles on the 20th, the normal velocity in April being 4·6 miles per hour.

An important change took place during the next twenty-four hours in the south of the Bay where fresh to strong westerly winds and squally weather set in. Very unsteady and variable winds continued over the remainder of the Bay. The air movement for the whole of the Bay had risen to 3·4 at 8 A.M. of the 21st, the rise being entirely due to the increased strength of the winds in the south of the Bay. The westerly winds and squally weather extended northwards during the next two days and by the 23rd prevailed as far north as Lat. 15° N. in the eastern half of the Bay. As frequently happens under these conditions a cyclonic storm was generated in the centre of the Bay to the west of the Andamans on the 22nd and 23rd. Winds shifted to SSE. at Port Blair and their average hourly velocity during the 24 hours preceding 8 A.M. of the 23rd increased to 17 miles. Winds were now cyclonic in direction over the whole of the Bay. Weather continued fine in the north of the Bay, but was more or less squally with a moderate to rough sea over the remainder of the Bay. The average wind force at 8 A.M. of the 23rd was 3·5. The storm developed during the next 24 hours and the mean air movement increased to 4·0 at 8 A.M. of the 24th. Winds ranged from 4 to 6 in force in the storm area except in the west quadrant where, as usual, they were light and did not exceed 3 in force. Heavy to hard squalls, gales of wind and a high cross sea prevailed in the eastern half of the Bay on the morning of the 25th. On the other hand, weather continued fine in the western half. The weather became worse in the afternoon and evening when the S.S. *Ethiopia* experienced a "violent gale with terrific squalls of hurricane force," and the S.S. *Maharani* winds of hurricane force in the inner storm area. The storm passed inland on the morning of the 26th and the weather moderated rapidly, and on the morning of the 27th the vessels in the eastern half of the Bay reported only occasional showers. Winds had taken off rapidly in strength, and the strongest winds experienced in the Bay at 8 A.M. of the 27th were of force 5. Their average strength had decreased from 4·5 on the 25th to 3·6 on the 27th. During the remainder of the month moderate to strong southerly winds and fine weather prevailed generally over the Bay and the mean air movement varied between 3·6 on the 27th and 4·1 on the 29th.

As usual in April winds were very unsteady and variable in the equatorial belt throughout the month, though there was a predominance of northerly winds in the first half and of southerly winds in the second half of the month.

Temperature of the Air.

The temperature conditions of the month were more strongly marked than usual.

The mean maximum temperature was normal in the west coast districts and at the Lower Burma coast stations. It was locally in slight excess at Madras (1°·2) and in moderate to largish excess in Baluchistan, Sind, the South-West Punjab, West Rajputana and Cutch. The excess was 3° or upwards at three stations in that area as shown qelow:—

Station.	Mean maximum temperature.		
	Actual April 1895.	Normal April.	Variation of actual from normal.
	°	°	°
Quetta	78·9	73·6	+5·3
Jacobabad	106·0	102·1	+3·9
Mooltan	100·7	97·7	+3·0

The mean day temperature of the month was in defect over the remainder of India. The deficiency was large, exceeding 2°, over Mysore, Central Madras, the greater part of the Deccan, the Central Provinces, Chota Nagpur, West Bengal, Bihar and the North-Western Provinces. The deficiency was more than 5° in amount over a part of that area including Central Bihar, Chota Nagpur, the greater part of the North-Western Provinces and the eastern districts of the Central Provinces. The following table gives comparative data for stations in that area :—

Station.	Mean maximum temperature.		
	Actual, April 1895.	Normal, April.	Variation of actual from normal.
	°	°	°
Sambalpur	99·3	104·9	−5·6
Chaibassa	98·2	104·1	−5·9
Ranchi	92·5	97·5	−5·0
Patna	95·8	100·9	−5·1
Benares	97·7	103·5	−5·8
Allahabad	98·3	104·0	−5·7
Gorakhpur	95·7	100·8	−5·1
Bareilly	94·2	99·5	−5·3
Agra	97·7	102·7	−5·0

The variations of the mean night or minimum temperature were similar in character to those of the day temperature, but smaller in amount. The mean minimum temperature was in slight to moderate excess in Burma, the Punjab, Sind and Rajputana. The excess was greatest at Jacobabad (+3°·7), Mooltan (+3°·9), Lahore (+2°·2) and Ajmere (+2°·1) which hence define the area of greatest excess of night temperature.

The night temperature was in slight to moderate defect over the remainder of India and was over 2° in defect in six small areas shown in Figure 2, Plate II at the end of the Review. The following gives data for the stations at which the deficiency was 2½° or upwards and which hence indicate the areas in which the night temperature was most deficient :—

Station.	Mean minimum temperature.		
	Actual, April 1895.	Normal, April.	Variation of actual from normal.
	°	°	°
Bellary	74·1	76·6	−2·5
Chanda	73·7	76·3	−2·6
Cocanada	76·6	79·1	−2·5
Chaibassa	72·8	75·8	−3·0

The mean temperature of the month was normal or in very slight excess in Lower Burma, the Madras, Malabar and Bombay coast districts and was in slight to considerable excess in Sind, the South-West Punjab, Baluchistan and West Rajputana. The following gives mean temperature data for the stations in this area at which the excess was more than 2° in amount :—

Station.	Mean daily temperature.		
	Actual, April 1895.	Normal, April.	Variation of actual from normal.
	°	°	°
Jacobabad	89·3	85·5	+3·8
Mooltan	86·1	82·6	+3·5
Quetta	62·7	60·0	+2·7

The mean temperature of the month was in slight to considerable defect over the remainder of India and more especially in the Deccan, the Central Provinces, the North-Western Provinces, Bihar, Chota Nagpur and West Bengal, over nearly the whole of which it was more than 2° in amount.

The following gives temperature data for the stations at which the deficiency was more than 3° in amount :—

Province.	Station.	Mean daily temperature.		
		Actual, April 1895.	Normal, April.	Variation of actual from normal.
		°	°	°
North-Western Provinces and Oudh.	Benares	83·3	87·9	−4·6
	Lucknow	82·4	86·8	−4·4
	Gorakhpur	83·1	86·6	−3·5
	Allahabad	84·6	88·1	−3·5
	Agra	85·0	88·2	−3·2
Bihar	Patna	83·6	87·1	−3·5
Chota Nagpur	Chaibassa	85·6	90·1	−4·5
	Ranchi	80·9	84·6	−3·7
	Hazaribagh	81·7	85·3	−3·6
West Bengal	Berhampore	83·8	87·3	−3·5
Central Provinces.	Sambalpur	86·4	90·4	−4·0
	Chanda	88·1	91·7	−3·6
Deccan	Bellary	87·1	90·2	−3·1
	Kurnool	88·3	91·4	−3·1

The following is a summary of the chief features of the mean temperature conditions of the month:—

(1) Temperature was above the normal in Baluchistan, Sind, the South-West Punjab and West Rajputana. The area of greatest excess was defined by the stations of Quetta, Jacobabad and Mooltan. The excess was slightly greater in the day than in the night temperature and hence the mean diurnal range was somewhat larger than usual.

(2) Temperature conditions were practically normal in Lower Burma, South Madras and the Bombay coast districts.

(3) Temperature was more or less in defect in the Deccan, Central India, the Gangetic Plain, Bengal and Assam. The deficiency was large, exceeding 3°, over the greater part of the Madras Deccan, the North-Western Provinces, Chota Nagpur and Central Bihar and in the easterly and southerly districts of the Central Provinces. It was absolutely greatest at Sambalpur, Chaibassa, Benares and Lucknow where it exceeded 4°. The deficiency was more marked in the day than the night temperature and hence the mean diurnal range of temperature was from 1° to 4° less than usual in these districts.

The following gives temperature data of April 1895 for each of the 51 meteorological divisions into which India is divided:—

Province.	Division.	Actual Temperature.					Variation from normal.		
		Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°.	°	°
Burma	Tenasserim	94·4	75·3	84·9	19·2	28·3	−0·9	+1·9	−2·8
	Lower Burma	93·6	77·3	85·5	16·3	25·1	−0·7	+0·9	−1·6
	Central do.	99·1	75·6	87·4	23·5	37·6	−2·4	+0·7	−3·1
	Upper do.	92·4	68·1	80·3	24·3	39·8	−4·3	+1·4	−5·7
	Arakan	90·6	74·6	82·6	16·0	26·1	−1·3	−0·8	−0·5
Bengal and Assam	Eastern Bengal	89·2	70·3	79·7	18·9	32·5	−0·3	−2·0	+1·7
	Assam (Surma)	87·9	68·1	78·1	19·8	31·6	+0·3	−0·8	+1·1
	Do. (Brahmaputra)	84·7	67·5	76·0	17·2	30·2	−0·7	−1·0	+0·3
	Deltaic Bengal	93·4	73·8	83·6	19·7	34·1	−2·8	−2·1	−0·7
	Central do.	95·3	72·3	83·8	23·0	37·8	−4·4	−1·8	−2·6
	North do.	90·4	68·1	79·3	22·2	35·0	−1·2	−0·9	−0·3
	Orissa	91·2	76·2	83·7	15·0	30·9	−3·6	−2·1	−1·5
	Chota Nagpur	93·7	70·7	82·3	23·1	41·6	−5·2	−2·5	−2·7
	Bihar (South)	97·2	72·6	84·9	24·6	38·9	−4·9	−1·3	−3·6
	Do. (North)	94·2	69·6	81·9	24·6	37·0	−3·3	−1·0	−2·3
North-Western Provinces and Oudh.	North-Western Provinces (East)	97·2	70·1	83·7	27·1	44·4	−5·5	−2·1	−3·4
	Oudh (South)	97·5	67·0	82·4	30·5	51·3	−4·8	−3·9	−0·9
	Do. (North)	95·9	68·7	82·3	27·2	43·5	?	?	?
	North-Western Provinces (Central)	97·5	68·6	83·1	28·9	51·1	?	?	?
	Do. do. (West)	99·2	73·9	86·6	25·4	43·2	−4·1	−0·9	−3·2
	Do. do. (Submontane)	92·2	65·5	78·9	26·7	49·0	−4·4	−1·4	−3·0
Punjab	Punjab (South)	97·8	69·5	83·7	28·4	49·6	−2·7	−1·3	−1·4
	Do. (Central)	94·2	65·9	80·6	27·3	47·6	−2·4	+2·2	−0·2
	Do. (Submontane)	94·5	65·9	80·2	28·7	50·7	−3·0	−0·4	−2·6
	Do. (Hill Districts)	69·4	51·9	60·7	17·5	39·4	−1·8	−0·4	−1·4
	Do. (North-West)	88·2	61·7	75·0	26·5	49·0	−1·3	+0·3	−1·6
	Do. (West)	97·5	69·0	83·3	28·6	51·0	+1·8	+2·6	−0·8
Bombay and Malabar Coast Districts (Madras).	Malabar	90·3	77·8	84·1	12·5	20·0	+0·2	−0·4	+0·6
	Madras (South Central)	97·4	73·9	85·7	23·5	34·1	−2·2	−0·7	−1·5
	Coorg	81·8	63·9	72·9	17·9	30·3	−2·7	−0·2	−2·5
	Mysore	91·8	68·7	80·3	23·2	34·3	−2·0	−0·7	−1·3
	Konkan	88·6	77·9	83·3	10·8	17·3	0	−0·1	+0·1
	Bombay Deccan	100·0	70·6	85·2	29·4	38·6	−0·9	−1·0	+0·1
	Hyderabad (North)	99·2	72·8	86·1	26·4	39·0	?	?	?
	Khandesh	101·1	69·1	85·1	32·0	44·3	−0·5	−0·5	0
Central Provinces and Berar.	Berar	103·4	74·6	89·0	28·8	41·7	−2·2	−0·2	−2·0
	Central Provinces (West)	102·3	73·8	88·0	28·5	46·5	−2·7	−0·7	−2·0
	Do. (Central)	99·3	70·8	85·1	28·5	44·2	−3·7	−1·9	−1·8
	Do. (East)	99·8	74·1	87·1	25·7	44·8	−4·8	−2·1	−2·7
Bombay (North)	Gujarat	101·2	73·2	87·2	28·1	41·5	−2·1	+0·7	−2·8
	Kathiawar	94·5	70·3	82·4	24·3	40·7	+0·3	−1·0	+1·3
	Sind	100·1	72·4	86·3	27·8	44·5	+1·7	+1·3	+0·4

Province.	Division.	Actual Temperature.					Variation from normal.		
		Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Rajputana and Central India.	Central India (East)	98·1	70·1	84·2	28·0	47·8	−4·6	−1·0	−3·6
	Rajputana (East), Central India (West)	100·0	70·7	85·4	29·3	47·1	−0·3	+0·6	−0·9
	Do. (West)	104·4	73·0	88·7	31·5	50·9	+1·6	−1·2	+2·8
Madras	East Coast (North)	91·8	77·8	84·8	14·0	28·3	−2·0	−2·2	+0·2
	Hyderabad (South)	99·5	74·7	87·1	24·8	40·0	−4·1	−1·7	−2·4
	Madras (Central)	101·3	76·7	89·0	24·6	35·5	−3·1	−1·8	−1·3
	East Coast (Central)	96·5	77·2	86·9	19·3	40·9	−0·7	+0·2	−0·9
	Do. (South)	95·1	77·7	86·4	17·4	34·0	+0·2	+0·1	+0·1
	Madras (South)	95·5	78·1	86·8	17·4	27·7	−2·4	0	−2·4

At the commencement of the month temperature was in slight excess in the Punjab and Rajputana and in large excess in Baluchistan and normal or in slight defect over the remainder of India. The following gives variation data for the 1st:—

Political Division.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·5	−0·3	+0·1
Bengal and Assam	0	+0·4	+0·2
North-Western Provinces and Oudh.	−0·7	−3·8	−2·3
Punjab	+2·2	+1·2	+1·7
Sind and Rajputana	+1·2	+0·6	+0·9
Central India and Gujarat	−1·5	−4·0	−2·8
Central Provinces and Berar	−0·4	−0·9	−0·7
Bombay	+0·1	+0·2	+0·2
Madras	−1·1	−1·3	−1·2

A depression formed on the 2nd in Sind and advanced eastwards during the next 36 hours to the foot of the hills in Upper India. Baluchistan and the Punjab received numerous thundershowers which cooled the air very considerably in Upper India. The following gives comparative data for the 1st, 2nd, 3rd and 4th:—

Political Province or Division.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of			
	1st.	2nd.	3rd.	4th.
	°	°	°	°
Baluchistan (Quetta)	+10·7	+2·4	−3·7	−4·2
Punjab	+1·7	+2·3	+0·2	−7·1
Sind and Rajputana	+0·9	+1·1	+2·0	−4·5

The deficiency of temperature extended rapidly eastwards, and on the 6th temperature was more or less considerably below the normal over the whole of Northern and Central India. The deficiency was greatest on the 4th in the Punjab (−7°·1), on the 5th in the North-Western Provinces (−7°·3) and Central India (−6°·4), on the 6th in the North-Western Provinces (−5°·9) and Central Provinces (−5°·1), on the 7th in the Central Provinces (−5°·9) and the North-Western Provinces (−5°·8), and on the 8th in South Bengal (−8°·0).

The period from the 5th to the 9th was unusually cool due mainly to the transmission of the cool wave in Upper India initiated by the rainfall of the 2nd and 3rd and in slight part to the occurrence of local thunderstorms with showers of rain and hail.

The following gives variation data for the 9th:—

Political Division or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·2	+2·9	+2·1
Bengal and Assam	−1·3	−4·0	−2·7
North-Western Provinces and Oudh.	−5·6	−7·2	−6·4
Punjab	+0·1	−4·6	−2·3
Sind and Rajputana	+0·6	−5·3	−2·4
Central India and Gujarat	−2·4	−7·5	−5·0
Central Provinces and Berar	−6·1	−5·0	−5·6
Bombay	+0·5	−1·3	−0·4
Madras	−2·9	−0·6	−1·8

Temperature increased briskly and steadily in Upper India and Baluchistan on the 8th, 9th and 10th, and was in considerable excess on the 10th in Baluchistan and Upper Sind. A hot-weather depression formed in that area on the 10th and was stationary until the 15th. During the whole of this period temperature was largely in excess in the depression area, as is shown by the following data giving the variations of the mean daily temperature from the normal at three stations from the 10th to the 15th :—

Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April						
	10th.	11th.	12th.	13th.	14th.	15th.	Mean of period.
	°	°	°	°	°	°	°
Quetta . . .	+3·9	+6·8	+ 8·4	+3·6	+4·3	+9·1	+6·0
Jacobabad . . .	+5·4	+7·5	+ 8·7	+8·9	+4·6	+8·0	+7·2
Mooltan . . .	+2·4	+8·5	+10·6	+8·6	+5·6	+8·2	+7·3

Series of thunderstorms visited Bengal, the Deccan and Southern India during the period, and hence temperature, which was more or less in defect at the commencement of the period in North-Eastern and Central India and the Deccan was considerably to largely in defect throughout the whole of this period in these areas The following gives temperature data for the 11th to the 15th :—

Province or area.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April				
	11th.	12th.	13th.	14th.	15th.
	°	°	°	°	°
Bengal and Assam . .	−2·0	−2·5	−5·2	−7·0	−5·4
Madras . . .	−2·0	−1·7	−1·7	−2·6	−3·3
Central Provinces and Berar.	−5·0	−2·9	−0·4	+0·1	−2·6

The chief feature of the temperature conditions of the period from the 10th to the 15th was the contrast between the excessive temperature of Upper India and the diminished temperature in North-Eastern India, the Deccan and Southern India.

The depression advanced eastwards on the 16th and 17th into the Punjab. The Punjab, the western districts of the North-Western Provinces, Central India and the Central Provinces received series of thundershowers which reduced temperature very largely. The following gives variation data of the mean temperature for the 15th and 17th.

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April	
	15th.	17th.
	°	°
Punjab	+5·3	−7·6
North-Western Provinces and Oudh .	−0·8	−6·5
Sind and Rajputana	+2·3	−5·2
Central India and Gujarat . . .	+0·3	−0·6
Central Provinces and Berar . .	−2·6	−5·6
Bengal and Assam	−5·4	−2·6

Temperature increased very rapidly in Upper India on the 18th and 19th and was again in considerable excess on the 19th. A depression formed in Upper Sind and the South-West Punjab on that day and was stationary during the next four days. Temperature was largely above the normal in that area as is indicated by the following data showing the amount of the excess at the stations in that area during the period from the 19th to the 24th :—

Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April						
	19th.	20th.	21st.	22nd.	23rd.	24th.	Mean of period.
	°	°	°	°	°	°	°
Quetta . . .	+1·5	+2·8	+13·7	+6·6	+0·9	−0·5	+4·2
Mooltan . .	+2·1	+4·9	+ 5·9	+6·7	+7·1	+6·7	+5·6
Jacobabad . .	+3·6	+8·6	+ 7·8	+9·3	+5·0	+3·5	+6·3
Hyderabad . .	+4·0	+1·6	+ 1·6	+0·5	+0·8	+2·5	+1·8

Temperature continued in general defect in North-Eastern India and the Deccan during this period, but increased rather rapidly on the 23rd and 24th, when the cyclonic storm of the last week of the month was forming in the Bay. Its advance across the Arakan coast into Burma was followed by a large reduction of temperature in that area.

The following gives variation data for Burma from the 23rd to the 29th :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April							
	23rd.	24th.	25th.	26th.	27th.	28th.	29th.	Mean of period.
	°	°	°	°	°	°	°	°
Burma .	+1·6	−1·5	−3·4	−3·6	−6·3	−4·5	−2·1	−2·8

The disappearance of the cyclonic storm was followed by the establishment for a brief period of pressure conditions which gave strong hot westerly winds in the Gangetic plain. The highest maximum temperatures of the month were hence registered at the great majority of stations during this period. Temperature increased rapidly in North-Eastern India on the 27th and 28th, and was in moderate excess in Northern and Central India during the remainder of the month.

A noteworthy feature of this period was the excessive temperature in the Madras coast districts due to the prevalence of abnormal westerly winds. The following gives data in illustration :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of April					
	26th.	27th.	28th.	29th.	30th.	Mean of period.
	°	°	°	°	°	°
Punjab	+1·1	+2·1	+3·1	+1·4	+2·0	+1·9
North-Western Provinces and Oudh.	−2·1	−1·2	+2·5	+1·5	−0·5	0
Sind and Rajputana . .	+0·8	+3·8	+3·7	+2·7	+4·0	+3·0
Bengal and Assam . .	−3·0	−0·9	−1·1	−1·3	−0·5	−1·4
Madras	−1·6	−1·6	+0·6	+2·7	+3·9	+0·8

The chief features of the distribution of temperature at the end of the month were excessive temperature in Upper India and the Madras coast districts and moderate to considerable deficiency in Burma, Assam and North Bengal.

The following gives variation data for the last day of the month :—

Political Division or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−3·5	+1·0	−1·3
Bengal and Assam . .	−1·8	+0·9	−0·5
North-Western Provinces and Oudh.	−0·2	−0·7	−0·5
Punjab	+4·6	−0·7	+2·0
Sind	+3·9	+4·0	+4·0
Central India and Gujarat .	+0·6	+0·9	+0·8
Central Provinces and Berar .	+1·0	+2·1	+1·6
Bombay	−0·4	+0·6	+0·1
Madras	+5·0	+2·7	+3·9

The following table gives the variation of the mean temperature week by week during the month. The data are taken from the weekly weather reviews published in the *Gazette of India* :—

Division.	Variation from normal of mean temperature of week ending April				
	6th.	13th.	20th.	27th.	Of whole month.
	°	°	°	°	°
Burma	+0·2	+0·2	+0·3	−1·1	−0·3
Bengal and Assam .	+0·1	−3·1	−3·9	−2·2	−2·3
North-Western Provinces and Oudh.	−2·5	−4·5	−4·0	−3·0	−3·3
Punjab	−1·9	−0·4	−1·3	+1·3	−0·3
Sind and Rajputana .	−1·0	+0·3	+0·4	+2·5	+0·9
Central India and Gujarat	−2·7	−1·8	−0·2	+0·4	−0·8
Central Provinces and Berar.	−0·5	−4·5	−3·8	−1·6	−2·4
Bombay . . .	−0·1	−1·0	−0·8	+0·2	−0·4
Madras . . .	−0·6	−1·6	−3·3	−1·7	−1·5

Winds.

Winds were on the mean of the month stronger than usual at Port Blair and Diamond Island and were of normal steadiness and direction in Lower Burma.

Winds were abnormally unsteady in Bengal, Orissa and Chota Nagpur. The following gives data for four stations in illustration.

Station.	Steadiness.		
	Mean actual percentage, April 1895.	Mean normal percentage, April.	Variation from normal.
Calcutta	52	73	−21
Naraingani	32	60	−28
False Point	67	79	−12
Hazaribagh	20	49	−29

Winds varied irregularly from their mean direction in Bengal. They were generally less westerly (or more easterly) at the coast stations, and more westerly in the interior.

Easterly winds obtained to a larger extent than usual in the Gangetic Plain, more especially in the sub-montane districts. Winds were hence very unsteady in the greater part of the Gangetic Plain, more especially at the western and central stations, as is shown by the following:—

Station.	Wind direction.		Steadiness.		
	Mean actual, April 1895.	Mean normal, April.	Mean actual percentage, April 1895.	Mean normal percentage, April.	Variation from normal.
Ludhiana . .	N 27° E	N 59° W	18	27	− 9
Meerut . . .	N 66° W	N 53° W	12	44	−32
Lucknow . .	N 18° W	N 53° W	18	44	−26
Ghazipur . .	N 59° E	N 82° W	12	43.	−31

On the mean of the month the winds were from westerly directions at the majority of stations; but the mean winds of the following stations near the hills had easterly components:—

Station.	Wind direction.	
	Mean actual, April 1895.	Mean normal, April.
Darbhanga	S 60° E	S 24° E
Roorkee	N 6° E	N 73° W
Ludhiana.	N 27° E	N 59° W

Winds were normal in direction and strength in Central India and Rajputana, but were less steady than usual. Winds were of abnormal steadiness, but were not so strong as usual in Baluchistan, Sind and the South-West Punjab, that is, in the area of greatest excess of temperature and of the origin of the series of three hot weather depressions during the month. The following gives data:—

Station.	Steadiness.			Velocity in miles per diem.		
	Mean actual percentage, April 1895.	Mean normal percentage, April.	Variation from normal.	Mean actual, April 1895.	Mean normal, April.	Percentage variation.
Kurrachee .	87	80	+ 7	313	345	− 9
Jacobabad .	32	18	+14	86	94	− 9
Mooltan . .	57	13	+44	44	59	−25
Quetta . .	47	36	+11	75	101	−26

Winds were of normal steadiness and direction on the west coast, but slightly weaker than usual, *e.g.*:—

Station.	Velocity in miles per diem.		Percentage Variation.
	Mean actual, April 1895.	Mean normal, April.	
Bombay	233	271	−14
Ratnagiri	215	242	−11

Winds were on the average of the month more westerly (or less northerly) than usual in the Central Provinces and the Deccan, and were on the whole stronger, but less steady, more especially at the eastern stations. The mean percentage of steadiness was less than 30 at Nagpur (11 per cent.), Hyderabad-Deccan (12 per cent.), Hoshangabad (10 per cent.), Sholapur (35 per cent.), and Jubbulpore (24 per cent.).

Winds were remarkably unsteady in Mysore and Central Madras. The following gives examples:—

Station.	Steadiness.			Velocity in miles per diem.		
	Mean actual percentage, April 1895.	Mean normal percentage, April.	Variation from normal.	Mean actual, April 1895.	Mean normal, April.	Percentage Variation.
Salem . .	13	37	−24	78	112	− 30
Mysore . .	12	?	?	178	?	?
Bangalore .	8	52	−44	171	85	+101
Chitaldroog .	12	?	?	161	?	?
Bellary . .	12	11	+ 1	120	126	− 5

The air movement was greater than usual in Coorg and Mysore, but was normal in amount in Madras.

The mean winds at the hill stations varied in a very irregular manner from the normal. The mean direction at Murree was S. 9° W., the normal being S. 40° E. Northerly winds were unusually prevalent at Simla, the mean wind direction of the month being N. 69° W. instead of S. 69° W. At Wellington in Southern India winds were much less steady than usual and were from N. 72° E. instead of S. 49° E.

The most noteworthy feature of the air movement was the prevalence of north-east winds at the Seychelles. The following is a comparison of the wind data for April 1895 and April 1894:—

Month.	Mean actual wind direction.	Mean actual wind steadiness, percentage.	Mean wind velocity in miles per diem.
April 1894	S 69° W	13	?
April 1895	N 49° E	15	103

Humidity and Cloud.

The mean humidity conditions of the month were normal in Lower Burma and at Port Blair. The air was on the mean of the month slightly damper in Arakan and was drier in Assam, Bengal and Orissa. The following gives comparative data for this area :—

Division.	Absolute Humidity.			Relative Humidity.		
	Average actual, April 1895.	Average normal, April.	Variation from normal.	Average actual, April 1895.	Average normal, April.	Variation from normal.
	"	"	"	%	%	
Arakan . .	·859	·816	+·043	77	73	+4
Assam . .	·646	·680	−·034	73	77	−4
Bengal . .	·718	·777	−·059	65	69	−3
Orissa . .	·786	·837	−·051	70	74	−4

Humidity was most below the normal at Calcutta and Sibsagar (each 7 in defect).

The air was on the average of the month much damper than usual in Bihar, the North-Western Provinces, the Punjab (except the south-western districts) Rajputana, Central India, the Bombay Deccan and the greater part of the Central Provinces, as is shown by the following mean data :—

Division.	Absolute Humidity.			Relative Humidity.		
	Average actual, April 1895.	Average normal, April.	Variation from normal.	Average actual, April 1895	Average normal, April.	Variation from normal.
	"	"	"	%	%	
Bihar . .	·532	·515	+·017	51	46	+ 5
N.-W. Provinces and Oudh. .	·425	·376	+·049	40	33	+ 7
Punjab . .	·454	·414	+·040	47	45	+ 2
Rajputana .	·416	·358	+·058	35	30	+ 5
Central India .	·348	·249	+·099	32	22	+10
Bombay-Deccan	·428	·428	0	41	37	+ 4
Central Provinces	·398	·346	+·052	34	28	+ 6

The mean humidity of the month was 10 or upwards in excess in this area at Sutna (+ 10), Jubbulpore (+11), Nagpur (+20?), Akola (+10) and Roorkee (+10).

Humidity was also generally in considerable excess at the hill stations in Northern India.

The following gives data for three stations at which the excess was most marked :—

Station.	Absolute Humidity.			Relative Humidity.		
	Average actual, April 1895.	Average normal, April.	Variation from normal.	Average actual, April 1895.	Average normal, April.	Variation from normal.
	"	"	"	%	%	
Chakrata . .	·267	·204	+·063	57	43	+14
Ranikhet . .	·290	·262	+·028	55	44	+11
Leh . .	·115	·105	+·010	47	43	+ 4

The air was slightly drier at Murree and Simla probably due to a greater prevalence of northerly winds than usual. The following gives data for these stations :—

Station.	Absolute Humidity.			Relative Humidity.		
	Average actual, April 1895.	Average normal, April.	Variation from normal.	Average actual, April 1895.	Average normal, April.	Variation from normal.
	"	"	"	%	%	
Murree . .	·234	·232	+·002	46	49	− 3
Simla . .	·229	·244	−·015	50	46	+ 4

Humidity was also in defect in Baluchistan, the South-West Punjab and probably in Sind. The following gives data :—

Station.	Absolute Humidity.			Relative Humidity.		
	Average actual, April 1895.	Average normal, April.	Variation from normal.	Average actual, April 1895.	Average normal, April.	Variation from normal.
	"	"	"	%	%	
Quetta . .	·233	·256	−·023	42	51	−9
Mooltan . .	·459	·454	+·005	39	44	−5

The air was slightly drier than usual in the Konkan, Malabar and Madras coast districts. The mean relative humidity of the month was 4 in defect at Cochin and 3 in defect at Bombay and Madras. It was, on the other hand, in slight to moderate excess in the Madras-Deccan, Mysore and South India. The excess was greatest at the hill station of Wellington (+10) and at Bellary (+10), Bangalore (+6) and Mercara (+5).

The following gives mean data for the eight stations at

which the relative humidity was lowest during the month:—

Station.	Absolute Humidity.		Relative Humidity.	
	Mean daily, April 1895.	Mean 4 P.M., April 1895.	Mean daily, April 1895.	Mean 4 P.M., April 1895.
	"	"	%	%
Buldana	·270	·210	23	12
Khandwa	·323	·278	25	14
Poona	·330	·281	31	15
Akola	·400	·323	32	16
Saugor	·325	·279	29	17
Nowgong	?	·320	?	19
Chikalda	·295	·260	31	20
Deesa	·353	·250	31	12

Humidity percentages of 5 or less were recorded on the following occasions during the month:—

Date.	Station.	Relative Humidity at	
		10 A.M.	4 P.M.
		%	%
6th	Deesa	10	5
7th	Deesa	3	4
9th	Deesa	8	4
	Khandwa	13	4
	Buldana	13	5
10th	Buldana	11	3
	Khandwa	10	4
25th	Deesa	24	5
29th	Sutna	8	5

The lowest humidity percentages of the month were hence observed at Deesa, Buldana and Khandwa between the 6th and 10th.

A feature of some interest in the humidity conditions is the large contrast between the amount of aqueous vapour at different periods of the day at certain stations where land and sea breezes alternate. The amount of vapour in the air is in such cases very much smaller in the early morning when dry land winds obtain than in the afternoon when sea breezes prevail. The following gives the most noteworthy examples in the month of April.

Station.	Mean Absolute Humidity April 1895.	
	Early morning.	4 P.M.
	"	"
Perim	·458	·883
Muscat	·453	·669
Saugor Island	·800	·898
Akyab	·763	·916
Bombay	·738	·816
Port Blair	·873	·960
Cochin	·818	·894

The following is a brief summary of the mean humidity conditions of the month of April 1895:—

(1) Conditions were normal at Port Blair and in Lower Burma.

(2) The air was slightly drier on the mean of the month in Assam, Bengal and Orissa.

(3) Humidity was more or less in excess in Bihar, the North-Western Provinces, the North and East Punjab, Rajputana, Central India, the Central Provinces, the Deccan and Mysore. The excess was on the whole most marked in the Gangetic plain and Baghelkhand.

(4) The air was slightly drier in Baluchistan, the South-West Punjab, the Konkan, Malabar and Madras coast districts.

(5) It was considerably damper at Wellington and at the hill stations in Northern and Central India with the exception of Murree, where the mean humidity percentage was slightly below the normal.

Cloud was in large excess at Port Blair and in Burma, Bengal, Assam and the North-Western Provinces. The following gives comparative data:—

Division or Station.	Mean cloud amount.		
	Actual, April 1895.	Normal, April.	Variation from normal.
Port Blair	6·6	4·1	+2·5
Burma	5·5	3·1	+2·4
Bengal	4·9	3·4	+1·5
Assam	5·3	5·2	+0·1
Orissa	4·3	3·0	+1·3
Chota Nagpur	5·7	2·6	+3·1
Bihar	2·3	1·5	+0·8
North-Western Provinces	2·9	1·8	+1·1

There was on the whole somewhat less cloud than usual

in the Punjab, Sind and West Rajputana. The following data illustrate this feature :—

Division.	Mean cloud Amount.		
	Actual, April 1895.	Normal, April.	Variation from normal.
Punjab	2·7	3·0	−0·3
Sind	1·8	2·4	−0·6
South-West Rajputana	1·0	1·8	−0·8

The mean cloud amount of the month was above the normal to a slight extent in East Rajputana, Central India and the Central Provinces :—

Division.	Mean cloud amount.		
	Actual, April 1895.	Normal, April.	Variation from normal.
East Rajputana	3·3	2·1	+1·2
Central India	2·3	2·1	+0·2
Central Provinces	2·6	2·2	+0·4

Cloud was considerably in defect locally at Bombay, but was in moderate excess at Ratnagiri and Cochin and also at Salem, Bellary and Vizagapatam.

There was less cloud at Leh, Kailang and Murree. Cloud was on the other hand in considerable excess at the Himalayan hill stations from Simla to Darjeeling and also at Pachmarhi, Chikalda and Wellington.

The following gives data for six representative hill stations :—

Station.	Mean cloud amount.		
	Actual, April 1895.	Normal, April.	Variation from normal.
Leh	5·1	6·3	−1·2
Kailang	4·8	6·0	−1·2
Chakrata	5·1	3·6	+1·5
Ranikhet	4·5	3·2	+1·3
Chikalda	3·7	2·3	+1·4
Wellington	6·5	4·5	+2·0

The chief features of the mean distribution of cloud throughout the month were :—

(1) Moderate excess at Port Blair and in Burma, Bengal and the North-Western Provinces.

(2) Slight excess in East Rajputana, Central India and the Central Provinces.

(3) Slight deficiency in the Punjab, Sind, Baluchistan, West Rajputana and North Bombay.

(4) Slight excess in Malabar and the Deccan.

(5) Moderate defect at the hill stations of Leh, Kailang and Murree and slight defect at Mount Abu.

(6) Slight excess at the remaining hill stations in the Eastern and Central Himalayas and Southern India.

(7) The amount of cloud was least at Bombay, where the mean for the month was 0·7.

Rainfall.

The mean rainfall of the month was less than a tenth of inch in amount in Khandesh, Gujarat, Kathiawar, Sind and West Rajputana. It was less than half an inch in amount in Upper and Lower Burma, the North-Western Provinces (excepting the submontane division), the South and West Punjab, Berar, Central India, East Rajputana and the Coromandel coast districts. The following areas received moderate to heavy rain :—

(1) Bengal and Assam.

(2) Malabar.

(3) Mysore, Coorg and South Madras.

The rainfall of the month occurred chiefly during thunderstorms and was hence very irregularly distributed both as to time and locality. The chief periods of disturbed weather and rainfall were as follows :—

1st.—The 2nd to the 4th, when Upper India received light to moderate thundershowers.

2nd.—The 10th to the 22nd, during which Bengal, the Central Provinces, Deccan and Southern India obtained frequent series of thunderstorms.

3rd.—The 25th to the 30th, when Burma, Assam and East Bengal received moderate to heavy rain from the humid winds brought up by the cyclonic storm of the last week of the month.

The following table gives comparative rainfall data of April 1895 for the 52 meteorological divisions of India :—

Province.	Division.	Number of rainy days. Average actual, April 1895.	Number of rainy days. Average normal, April.	Rainfall. Average actual, April 1895.	Rainfall. Average normal, April.	Rainfall. Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	1·62	2·97	−1·35
	Lower Burma*	?	?	0·43	1·37	−0·94
	Central do.*	?	?	0·51	0·87	−0·36
	Upper do.*	?	?	0·36	?	?
	Arakan*	?	?	4·42	1·99	+2·43
Bengal and Assam	Eastern Bengal	5·5	5·4	5·37	4·09	+1·28
	Assam (Surma)*	?	?	12·96	14·74	−1·78
	Do. (Brahmaputra)*	?	?	3·86	7·55	−3·69
	Deltaic Bengal	3·8	3·7	2·23	2·56	−0·33
	Central do.	3·9	2·4	2·12	1·42	+0·70
	North do.	6·7	4·9	4·12	3·41	+0·71
	Orissa	3·3	2·0	2·17	1·25	+0·92
	Chota Nagpur	3·7	1·0	2·01	0·41	+1·60
	Bihar (South)	1·2	0·6	0·56	0·24	+0·32
	Do. (North)	1·6	1·3	0·66	0·83	−0·17
North-Western Provinces and Oudh.	North-Western Provinces (East)	0·4	0·4	0·21	0·14	+0·07
	Oudh (South)	0·8	0·3	0·21	0·12	+0·09
	Do. (North)	1·1	0·4	0·42	0·17	+0·25
	North-Western Provinces (Central)	0·4	0·3	0·14	0·09	+0·05
	Do. do. (West)	1·3	0·4	0·36	0·12	+0·24
	Do. do. (Submontane)	2·2	0·7	0·98	0·41	+0·57
Punjab	Punjab (South)	1·1	0·7	0·38	0·30	+0·08
	Do. (Central)	1·6	0·8	0·59	0·34	+0·25
	Do. (Submontane)	2·1	1·3	0·82	0·62	+0·20
	Do. (Hill Districts)	3·2	3·5	1·41	2·32	−0·91
	Do. (North-West)	3·4	2·2	1·27	1·25	+0·02
	Do. (West)	1·6	1·0	0·49	0·49	0
Bombay and Malabar Coast Districts (Madras).	Malabar	6·6	3·4	5·09	2·27	+2·82
	Madras (South Central)	5·5	2·2	3·58	1·49	+2·09
	Coorg	10·0	?	5·25	?	?
	Mysore*	?	?	3·31	1·39	+1·92
	Konkan	0·9	0·6	0·52	0·29	+0·23
	Bombay Deccan	2·1	1·8	1·11	0·80	+0·31
	Hyderabad (North)	3·6	?	1·39	0·47	+0·92
	Khandesh	0·1	0·3	0·05	0·12	−0·07
Central Provinces and Berar.	Berar*	?	?	0·42	0·23	+0·19
	Central Provinces (West)*	?	?	0·64	0·21	+0·43
	Do. (Central)*	?	?	0·56	0·30	+0·26
	Do. (East)*	?	?	1·06	0·57	+0·49
Bombay (North)	Gujarat	0	0	0·01	0·01	0
	Kathiawar	0	0·1	0	0·08	−0·08
	Sind	0	?	0·01	0·21	−0·20
Rajputana and Central India.	Central India (East)	0·6	?	0·24	0·12	+0·12
	Rajputana (East), Central India (West)	0·6	?	0·16	0·08	+0·08
	Rajputana (West)	0·1	?	0·04	0·06	−0·02
Madras	East Coast (North)	2·5	1·0	1·40	0·49	+0·91
	Do. (do.) (*a*)	6·0	2·4	1·96	0·89	+1·07
	Hyderabad (South)	2·5	?	1·14	0·53	+0·61
	Madras (Central)	2·7	0·9	1·24	0·45	+0·79
	East Coast (Central)	0·7	0·4	0·42	0·19	+0·23
	Do. (South)	2·1	0·9	1·29	0·61	+0·68
	Madras (South)	5·9	2·6	3·92	1·96	+1·96

* Note.—The figures entered against divisions marked with asterisk have been obtained from the weekly telegraphic reports.

Assam obtained rain during three periods. The first was from the 1st to the 5th, when moderate general rain was received over the whole province. The second was from the 12th to the 15th. The fall during this period was general, but nowhere heavy. The third period was from the 24th to the end of the month, when the rainfall was

due to the strongish burst of humid winds, which advanced into East Bengal, Upper Burma and Assam on the breaking up of the Akyab cyclonic storm. The following gives the falls of 5 inches or upwards received during this period :—

DATE.	District.	Station.	Rainfall in past 24 hours.
			Inches.
29th	Cachar . . .	Jatinga Valley . .	6·33
,,	,, . . .	Bikrampur . .	6·18
,,	Sylhet . . .	Karimganj . .	5·29
30th	Cachar . . .	Badarpur . . .	6·14
,,	,, . . .	Silchar . . .	5·02
,,	Sylhet . . .	Lalakhal . . .	6·07
,,	,, . . .	Moulvi Bazar . .	5·22
,,	,, . . .	Langla . . .	5·10

The rainfall was heaviest in the Cachar and Sylhet districts. The second and third weeks of the month were drier than usual in the Assam Valley and the rainfall of the month was hence in moderate defect in the Brahmaputra division and averaged 36 per cent. in excess in the Surma division. The following gives comparative data of the two divisions of the province :—

DIVISION.	NUMBER OF RAINY DAYS.		RAINFALL.		
	Mean actual, 1895.	Variation from normal.	Average actual, April 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches.	
Surma . .	11·2	− 1·2	15·18	+3·98	+36
Brahmaputra .	8·6	− 3·5	4·85	−3·03	−38

There were four periods of more or less general rainfall in Bengal. The following gives a brief statement of the rainfall of these periods :—

1st.—From the 10th to the 14th. Showers were received from the 10th to the 12th in South-West and North Bengal, Orissa and Chota-Nagpur, general and moderate to heavy rain in East Bengal on the 12th and 13th, in South-West and North Bengal on the 13th and 14th, and in Orissa on the 14th. Rainfalls in 24 hours exceeding one inch were recorded at a large number of stations. The following largish amounts were registered during this period :

Date.	District.	Station.	Rainfall in past 24 hours.
			Inches.
13th	Murshidabad . .	Kandi . . .	3·04
,,	,, . .	Patkabari . .	3·00
,,	Tippera . . .	Kasba . . .	4·02

2nd.—The 17th to the 22nd. Series of thunderstorms gave more or less general and frequent rain during this period in South West and North Bengal, North Bihar, Chota Nagpur and Orissa. South Bihar obtained some light showers, chiefly on the 20th. Little or no rain fell in East Bengal during this period. The 18th and 20th were on the whole the days of heaviest and most general rain. The following large falls were registered during this period :—

Date.	District.	Station.	Rainfall in past 24 hours.
			Inches.
18th	Balasore . . .	Akhyapada . .	5·70
20th	Sonthal Parganas .	Moheshpur . .	3·60
,,	Cuttack . . .	Kendrapara . .	4·75

3rd.—The 24th to 26th. The rainfall of this period was almost restricted to South-West and North Bengal and was most general on the 26th. Light local showers were received in North Bihar on the 25th.

4th.—The 28th to the 30th, during which Sikkim and East Bengal received general and moderately heavy rain. The largest falls are given below :—

Date.	District.	Station.	Rainfall in past 24 hours.
			Inches.
28th	Tippera . . .	Brahmanbaria .	4·27
29th	Mymensingh . .	Netrakona . .	3·10
30th	Tippera . . .	Nasirnagar . .	7·10
,,	,, . .	Kasba . . .	4·18
,,	Hill Tippera . .	Agartola . .	4·50
,,	Mymensingh . .	Mymensingh . .	3·65

The rainfall of the month was in slight defect in North Bihar and Deltaic Bengal and in excess in the remaining divisions. The excess was more than an inch in average amount in East Bengal (31 per cent.), and Chota Nagpur which received 2·01 inches, very nearly five times the normal of the month, 0·41 inch. The following table giving

comparative data of the month shows the distribution of the rainfall of the month :—

Division.	Number of rainy days.		Rainfall.		
	Mean actual, April 1895.	Variation from normal.	Average actual, April 1895.	Variation of actual from normal.	Percentage variation from normal.
			Inches.	Inches.	
Bengal, East . .	5·5	+0·1	5·37	+1·28	+ 31
„ North . .	6·7	+1·8	4·12	+0·71	+ 21
„ Deltaic . .	3·8	+0·1	2·23	—0·33	− 13
Central Bengal . .	3·9	+1·5	2·12	+0·70	+ 49
Orissa	3·3	+1·3	2·17	+0·92	+ 74
Chota Nagpur . .	3·7	+2·7	2·01	+1·60	+390
North Bihar . .	1·6	+0·3	0·66	—0·17	− 20
South Bihar . . .	1·2	+0·6	0·56	+0·32	+133

The normal rainfall of the month on the plains of the North-Western Provinces ranges between an average of one and four tenths of an inch. The only period of fairly general rain during the month was the 15th to the 20th, when series of thunderstorms gave light to moderate showers. The showers were heaviest in the submontane districts of Bareilly, Bulandshahr and Bijnor and in the hill districts. The hill districts also obtained showers from the 3rd to the 5th and again from the 23rd to the 25th. The rainfall of the month was larger than usual. The excess averaged ·57 inch in the submontane districts, where it was actually (but not relatively to the normal) greatest. The following gives a summary of the rainfall data of the month for the six divisions of the province :—

Division.	Number of rainy days.		Rainfall.		
	Actual, April 1895.	Variation.	Average actual, April 1895.	Average normal, April.	Variation from normal.
			Inches.	Inches.	Inches.
Oudh, (North) . .	1·1	+0·7	0·42	0·17	+0·25
Do. (South) . .	0·8	+0·5	0·21	0·12	+0·09
N.-W.P. (East) . .	0·4	0	0·21	0·14	+0·07
Do. (Central) . .	0·4	+0·1	0·14	0·09	+0·05
Do. (Submontane) .	2·2	+1·5	0·98	0·41	+0·57
Do. (West) . .	1·3	+0·9	0·36	0·12	+0·24

The Punjab received slightly larger rainfall than usual in April 1895. The first period of showery weather in that area was from the 2nd to the 4th. The northern, north-eastern and hill districts received moderate to heavy showers from thunderstorms during this period. The second period of disturbance was from the 15th to the 17th. The whole province had rain during this period. Raya in the Amritsar district received 2·85 inches on the 16th. The falls were generally moderate and were lightest in the south-eastern districts. The third period of rainfall was from the 22nd to the 24th. Light local showers were received in all districts except Bannu, Karnal, Hissar, Delhi, Dera Ismail Khan, Dera Ghazi Khan and Muzaffargarh. The Peshawar district obtained light showers on the 27th and 28th.

The following gives a summary of the rainfall data of the province for the month :—

Division.	Rainy days.			Rainfall.		
	Actual, April 1895.	Normal, April.	Variation from normal.	Average actual, April 1895.	Average normal, April.	Variation from normal.
				Inches.	Inches.	Inches.
Punjab, South . . .	1·1	0·7	+0·4	0·38	0·30	+0·08
„ Central . . .	1·6	0·8	+0·8	0·59	0·34	+0·25
„ Submontane . .	2·1	1·3	+0·8	0·82	0·62	+0·20
„ Hills . . .	3·2	3·5	−0·3	1·41	2·32	−0·91
„ North-West . .	3·4	2·2	+1·2	1·27	1·25	+0·02
„ West . . .	1·6	1·0	+0·6	0·49	0·49	0

The rainfall of the month was hence normal or in slight excess over the plains districts. It was in moderately large defect in the hill districts, which only received an average of 61 per cent. of the normal fall of the month.

Baluchistan received some light local showers between the 12th and 16th, but the rainfall of the month was in general defect, as is shown by the following data for three stations :—

Station.	Rainfall.		
	Actual, April 1895.	Normal, April.	Variation from normal.
	Inch.	Inches.	Inch.
Kalat	0	0·65	−0·65
Pishin	0·25	1·10	−0·85
Quetta	0·37	1·21	−0·84

Rain fell during three periods in Kashmir, *viz.*, the 2nd to 4th, the 15th to 17th and the 27th and 28th. The total rainfall of the month ranged from 0·06 inch at Leh and 0·08 inch at Skardo to 4·27 inches at Kishtwar.

Some light local showers of no importance were received in Rajputana. They occurred during thunderstorms, which in a few cases were accompanied with hail.

In Central India Bhopal received light showers on the 15th and 16th and Gwalior on the 16th, 17th, 18th and 19th, but the total rainfall of the month was very small, averaging less than a tenth of an inch for the whole area.

The Central Provinces obtained rain during the following periods:—

1st.—The 5th to the 10th, when the eastern and southern districts had moderate showers. Umrer in the Nagpur district received 2·4 inches on the 7th.

2nd.—The 15th to the 17th. Thunderstorms occurred in all districts during this period. The rainfall was heaviest in the southern districts. The largest reported fall was 3·55 inches on the 15th at Umrer in the Nagpur district.

3rd.—The 20th to the 22nd, when the southern districts obtained light thundershowers.

The following gives a summary of the rainfall data of the month:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, April 1895.	Average normal, April.	Average actual, April 1895.	Average normal, April.	Variation from normal.
			Inch.	Inch.	Inch.
Central Provinces (East) .	2·2	1·0	0·89	0·55	+0·34
Do. (Central)	1·7	0·7	0·70	0·29	+0·41
Do. (West)	1·6	0·5	0·79	0·20	+0·59

The rainfall of the month was above the normal in all the divisions and was most largely in excess in the central and western divisions.

The month was practically rainless over the whole of Bombay, with the exception of North Kanara and the South Deccan districts, which received frequent thundershowers between the 12th and 26th. The falls were generally light to moderate in amount, but exceeded an inch in several cases. The heaviest falls were 2·45 inches at Badami, and 2·41 inches at Sindgi in the Bijapur district, 2·2 inches at Haligal in the North Kanara district, and 2·13 inches at Gadag in the Dharwar district. The following gives a statement of the rainfall in the districts of the Bombay Deccan or Karnatak:—

District.	Number of rainy days.			Rainfall.		
	Average actual, April 1895.	Average normal, April.	Variation from normal.	Average actual, April 1895.	Average normal, April.	Variation from normal.
				Inches.	Inches.	Inches.
Dharwar	3·6	2·6	+1·0	1·99	1·21	+0·78
Bijapur	2·6	1·7	+0·9	1·65	0·78	+0·87
Belgaum	4·1	2·5	+1·6	2·25	1·23	+1·02
Satara	1·2	1·5	−0·3	0·46	0·71	−0·25
Sholapur	1·0	0·9	+0·1	0·50	0·38	+0·12

No rain fell in Ahmednagar or the greater part of Poona. The average rainfall in Sind, Khandesh, Cutch, Gujarat and the Konkan (excluding North Kanara) in which no rain fell in April 1895, ranges between *nil* and three-tenths of an inch.

Madras obtained in April 1895, as in April 1894, more, frequent and heavier rain than usual. The rainfall was received chiefly with thunderstorms, and was hence very irregularly distributed. Series of thunderstorms occurred daily from the 10th to the 27th, and were most frequent in the southern districts. The periods of most general rain due to these storms were the 10th and 11th, the 16th to the 21st and the 25th to the 27th. The rainfall was in excess in all divisions, as is shown by the following data:—

Division.	Number of rainy days.			Rainfall.		
	Average actual, April 1895.	Average normal, April.	Variation from normal.	Average actual, April 1895.	Average normal, April.	Variation from normal.
				Inches.	Inches.	Inches.
Malabar	6·6	3·4	+3·2	5·09	2·27	+2·82
Madras (South Central) .	5·5	2·2	+3·3	3·58	1·49	+2·09
East Coast (North) . .	2·5	1·0	+1·5	1·40	0·49	+0·91
Do. (a) . .	6·0	2·4	+3·6	1·96	0·89	+1·07
Madras (Central) . .	2·7	0·9	+1·8	1·24	0·45	+0·79
East Coast (Central) . .	0·7	0·4	+0·3	0·42	0·19	+0·23
Do. (South) . .	2·1	0·9	+1·2	1·29	0·61	+0·68
Madras (South) . . .	5·9	2·6	+3·3	3·92	1·96	+1·96

The following gives comparative data for each of the 22 collectorates of the Presidency :—

District.	Number of rainy days.		Rainfall.		
	Actual, April 1895.	Normal, April.	Average actual, April 1895.	Average normal, April.	Variation from normal.
			Inches.	Inches.	Inches.
Ganjam	3·0	1·6	1·72	0·77	+0·95
Vizagapatam	3·2	1·4	1·52	0·68	+0·84
Godavari	2·0	0·4	1·40	0·25	+1·15
Kistna	1·5	0·4	0·73	0·21	+0·52
Nellore	0·7	0·4	0·42	0·19	+0·23
Chingleput	0·4	0·5	0·17	0·26	−0·09
Madras	0	0·7	0	0·63	−0·63
North Arcot	2·1	0·7	1·39	0·37	+1·02
South Arcot	1·9	0·7	1·22	0·42	+0·80
Tanjore	2·1	1·2	0·79	0·91	−0·12
Trichinopoly	3·6	1·5	3·16	1·18	+1·98
Madura	6·7	2·6	4·00	2·25	+1·75
Tinnevelly	4·9	2·5	3·82	1·58	+2·24
Malabar	8·3	4·4	6·87	3·04	+3·83
South Canara	3·4	2·0	1·94	1·16	+0·78
Salem	4·6	2·0	2·58	1·17	+1·41
Coimbatore	6·9	2·5	5·01	1·87	+3·14
Nilgiris	10·5	5·5	5·57	3·58	+1·99
Cuddapah	1·4	0·7	0·56	0·34	+0·22
Anantapur	3·4	0·9	1·57	0·45	+1·12
Bellary	3·6	1·3	1·66	0·54	+1·12
Kurnool	2·7	0·9	1·34	0·48	+0·86

Travancore, Cochin and Coorg obtained daily rain from the 3rd to the 26th. The falls probably occurred as thundershowers and varied largely and irregularly. Rainfalls exceeding three inches in 24 hours were only recorded on the following occasions :—

Date.	District.	Station.	Rainfall in past 24 hours.
			Inches.
4th	Travancore	Puthanapurem	5·40
12th	Cochin	Trichoor	3·10
13th	,,	Tatamungalum	3·50
23rd	,,	Ernacolum	3·07

The following data for the stations in Coorg and Travancore for which normal rainfall means are available show that the rainfall of the month was in slight to moderate excess :—

District.	Station.	Rainfall.		
		Actual, April 1895.	Normal, April.	Variation from normal.
		Inches.	Inches.	Inches.
Travancore	Trivandrum	5·10	4·58	+0·52
Coorg	Mercara	5·14	2·72	+2·42
Cochin	Cochin	5·09	4·37	+0·72

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1. Burma Coast and Bay Islands.		...	...	0	...	...	...	...	...	...	...	93·4	−0·9	76·3	+0·9	84·9	+0·1	17·1	...	...	...	...	26·1
Bay Islands	Port Blair	61	29·850	?	29·842	29·947	3rd	29·747	25th	·200	83·8	91·6	?	79·2	?	85·4	?	12·4	94·8	9th	74·2	13th	20·6
	Camorta	?	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tenasserim	Mergui	96	29·846	?	29·874	29·930	3rd	29·766	26th	·164	82·3	91·5	?	74·5	?	83·0	?	17·0	95·1	22nd	71·1	3rd	24·0
	Tavoy	26	29·930	?	29·887	30·010	3rd	29·852	25th	·158	80·3	93·6	?	73·7	?	83·7	?	19·9	98·7	24th	70·7	1st	28·0
	Moulmein	94	29·840	+·004	29·871	29·955	1st	29·730	26th	·225	81·2	94·4	+0·1	76·5	+0·7	85·4	+0·4	17·9	98·9	24th	72·3	2 days	26·6
	Toungoo	183	29·707	−·002	29·831	29·821	2nd	29·535	26th	·286	82·0	98·2	−1·9	76·3	+3·0	87·3	+0·6	21·9	105·7	21st	71·2	12th	34·5
Lower Burma	Rangoon	41	29·864	−·012	29·842	29·954	2nd	29·735	26th	·219	80·7	97·8	−0·2	76·7	+0·8	87·3	+0·3	21·1	103·1	21st	73·4	2nd	29·7
	Bassein	27	29·884	+·010	29·846	29·984	3rd	29·731	26th	·253	81·3	96·2	+0·3	75·9	+0·8	86·1	+0·6	20·3	102·7	21st	71·9	12th	30·8
	Diamond Island	41	29·872	−·005	29·848	29·974	2nd	29·726	26th	·248	82·6	86·7	−2·1	79·2	+1·1	83·0	−0·5	7·5	90·1	16th	75·4	24th	14·7
Arakan	Akyab	20	29·886	+·006	29·849	30·007	14th	29·601	26th	·406	80·4	90·6	−1·3	74·6	−0·8	82·6	−1·1	16·0	96·1	22nd	69·1	9th	27·1
2. Burma Inland		...	...	+·008	...	...	...	...	...	...	...	93·6	−3·4	69·8	+1·1	81·7	−1·2	23·9	...	...	...	...	38·3
Central Burma	Thayetmyo	134	29·749	+·008	29·824	29·848	14th	29·541	26th	·307	83·6	100·6	−2·4	76·1	+0·7	88·4	−0·9	24·5	108·1	22nd	70·1	2 days	38·0
	Minbu	?	29·715	?	...	29·830	13th	29·455	26th	·375	81·6	99·1	?	76·7	?	87·9	?	22·4	107·6	22nd	71·1	3 days	36·5
	Yamethin	645	29·225	?	?	29·326	15th	29·008	26th	·318	81·0	97·7	?	74·1	?	85·9	?	23·6	106·7	22nd	68·5	8th	38·2
	Taunggyi	?			Not recorded.						68·9	82·0	?	58·7	?	70·4	?	23·3	87·6	4 days	53·5	8th	34·1
Upper Burma	Mandalay	249	29·614	?	?	29·735	13th	29·376	26th	·359	82·3	98·8	?	75·5	?	87·2	?	23·3	107·1	22nd	69·6	8th	37·5
	Kindat	?	29·519	?	?	29·666	14th	29·283	26th	·383	73·7	92·3	−4·3	67·8	+1·4	80·1	−1·5	24·5	99·8	18th	61·0	8th	38·8
	Lashio	?	27·135	?	?	27·226	15th	26·985	27th	·241	68·2	86·8	?	62·0	?	74·4	?	24·8	93·5	22nd	51·0	3rd	42·5
	Bhamo	?	29·518	?	?	29·649	14th	29·333	26th	·316	73·7	91·8	?	67·2	?	79·5	?	24·6	99·6	18th	59·2	10th	40·4
3. Assam		...	...	+·027	...	...	...	...	...	...	...	85·7	−0·4	67·6	−1·0	76·7	−0·7	18·1	...	...	...	...	30·7
Assam (Surma)	Silchar	104	29·788	+·009	29·847	29·936	14th	29·522	26th	·414	74·2	87·9	+0·3	68·1	−0·8	78·1	−0·3	19·8	95·9	24th	64·3	13th	31·6
Brahmaputra	Sibsagar	333	29·575	+·023	29·874	29·781	14th	29·371	5th	·410	70·4	81·9	−0·7	65·5	−0·9	73·7	−0·8	16·4	91·2	26th	60·1	15th	31·1
	Dhubri	115	29·763	+·050	29·835	29·923	14th	29·541	29th	·382	74·0	87·4	−0·7	69·3*	−1·3*	78·2*	−1·0	18·1	94·9	7th	65·4	2 days	29·5
4. Bengal and Orissa		...	...	+·032	...	...	...	...	...	...	...	92·0	−2·4	72·3	−1·9	82·2	−2·2	19·7	...	...	...	...	34·2
East Bengal	Chittagong	87	29·793	?	29·829	29·929	14th	29·458	26th	·471	78·6	89·7	+1·1	71·6	−1·9	80·7	−0·4	18·1	95·7	9th	64·7	12th	31·0
	Lungleh	?			Not recorded.						69·2	77·6	?	63·2	?	70·4	?	14·4	83·8	21st & 22nd,	51·2	13th	32·6
	Noakhali	43	29·832	?	29·822	29·946	14th	29·552	26th	·394	79·6	89·3	?	71·7	?	80·5	?	17·6	94·7	23rd	62·4	8th	32·3
	Comilla	36	29·834	?	29·818	29·964	15th	29·560	26th	·404	80·2	92·1	?	70·9	?	81·5	?	21·2	97·3	10th	64·9	3 days	32·4
	Sirajganj	49	29·803	?	29·802	29·934	14th	29·537	29th	·397	77·1	92·4	?	69·8	?	81·1	?	22·6	99·7	5th	64·6	8th	35·1
	Narayanganj	26	29·835	+·017	29·810	29·971	15th	29·570	29th	·401	79·1	91·9	−1·3	72·5	−1·8	82·2	−1·6	19·4	96·6	9th	66·2	13th	30·4
	Barisal	13	29·859	+·031	29·817	29·996	15th	29·588	29th	·408	79·9	90·7	−0·5	72·7	−2·2	81·7	−1·4	18·0	94·3	2 days	59·5	8th	34·8
	Mymensingh	59	29·807	+·020	29·818	29·938	14th	29·559	29th	·379	75·9	89·8	−0·6	69·8	−2·0	79·8	−1·3	20·0	95·2	5th	64·6	2 days	30·6
Deltaic Bengal	Faridpur	46	29·824	?	29·819	29·968	15th	29·545	29th	·423	78·4	91·4	?	71·0	?	81·2	?	20·4	97·3	28th	64·0	7th	33·3
	Jessore	33	29·815	+·019	29·795	29·963	14th	29·527	29th	·436	79·6	93·7	−3·6	72·9	−2·2	83·3	−2·9	20·8	99·0	5th	63·9	7th	35·1
	Calcutta	21	29·833	+·032	29·800	29·970	14th	29·561	29th	·409	79·7	92·2	−3·2	73·9	−1·8	83·1	−2·5	18·3	99·4	29th	66·7	8th	32·7
	Saugor Island	25	29·833	+·029	29·802	29·957	14th	29·578	29th	·379	81·9	89·1	−1·7	77·4	−2·4	83·3	−2·1	11·7	92·2	2 days	70·0	8th	22·2
	Krishnagar	47	29·797	?	29·793	29·943	14th	29·517	29th	·426	80·8	96·0	?	72·5	?	84·3	?	23·5	104·7	30th	65·5	8th	39·2
	Midnapore	149	29·702	?	29·799	29·826	14th	29·436	29th	·390	81·0	98·0	?	74·8	?	86·4	?	23·2	112·4	30th	70·2	3 days	42·2

* Mean of 29 days.

I.

in India, Burma, etc., in April 1895.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8A.M.			RAINFALL.									STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.	Mean cloud amount.	Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 30th April 1895.	Normal rainfall for period, 1st March to 30th April.	Variation from normal of period.	Heaviest rainfall during month.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·85	2·28	+1·70	...	...	...	...	1. Burma Coast and Bay Islands.	
6	2	4	3	5	2	2	3	3	6·5	4·9	+ 33	81	·942	6·1	8	?	?	4·22	2·18	+ 2·04	4·36	2·65	+ 1·71	1·39	Port Blair .	BAY ISLANDS.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Camorta.	
...	9	4	3	2	2	3	1	6	2·2	2·1	+ 5	82	·911	3·8	9	?	?	7·42	5·46	+ 1·96	10·29	7·94	+ 2·35	2·15	Mergui .	TENASSERIM.
24	2	1	...	...	...	...	1	1	1·9	?	?	81	·841	0·7	7	?	?	2·85	?	?	3·06	?	?	0·96	Tavoy.	
...	1	3	8	7	9	1	...	1	3·3	3·2	+ 3	79	·841	5·3	6	4·00	+2·00	3·65	2·95	+ 0·70	3·65	3·36	+ 0·29	1·31	Moulmein.	
5	...	1	...	14	7	1	...	2	3·4	4·0	− 15	75	·827	4·1	6	2·82	+3·18	3·42	2·09	+ 1·33	3·42	2·14	+ 1·28	1·25	Toungoo.	
...	...	2	1	1	4	12	9	1	4·8	5·7	− 16	82	·858	3·9	4	2·18	+1·82	2·14	1·83	+ 0·31	2·14	2·11	+ 0·03	0·88	Rangoon .	LOWER BURMA.
5	...	...	1	3	3	1	6	11	6·9	5·1	+ 35	81	·872	3·7	3	2·09	+0·91	1·28	1·48	− 0·20	1·28	1·50	− 0·22	0·66	Bassein.	
...	4	1	2	1	1	2	5	14	11·4	7·2	+ 58	78	·863	6·0	4	1·09	+2·91	4·44	1·16	+ 3·28	4·44	1·17	+ 3·27	3·30	Diamond Island.	
...	14	8	4	1	2	...	...	1	4·7	4·0	+ 18	80	·839	6·7	6	1·00	+5·00	5·26	1·08	+ 4·18	5·26	1·50	+ 3·76	4·03	Akyab .	ARAKAN.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·18	1·05	+2·93	...	...	...	...	2. Burma Inland.	
...	4	1	...	4	11	3	4	3	6·8	7·0	− 31	60	·683	2·5	4	1·09	+2·91	1·69	0·80	+ 0·89	1·69	0·85	+ 0·84	0·89	Thayetmyo	CENTRAL BURMA.
7	3	...	...	13	2	...	...	5	8·1	?	?	58	·621	3·4	3	?	?	1·99	?	?	1·99	?	?	1·49	Minbu.	
7	1	1	...	16	5	...	...	...	5·0	?	?	67	·705	2·1	9	?	?	3·07	?	?	3·07	?	?	0·86	Yamethin.	
10	...	1	...	6	1	12	...	...	1·8	?	?	61	·434	4·1	7	?	?	2·39	?	?	2·39	?	?	0·47	Taunggyi	
...	4	...	1	2	14	5	...	4	7·0	?	?	57	·621	3·5	4	?	?	3·30	?	?	3·33	?	?	2·50	Mandalay .	UPPER BURMA.
25	3	...	...	1	1	...	...	...	1·6	?	?	80	·671	3·7	6	?	?	6·26	1·30	+ 4·96	6·52	2·81	+ 3·71	2·80	Kindat.	
...	7	2	...	1	...	...	1	19	?	?	?	76	·520	5·6	9	?	?	4·51	?	?	4·51	?	?	2·36	Lashio.	
5	7	12	...	2	1	2	...	1	4·2	?	?	74	·614	4·0	5	?	?	2·24	?	?	3·00	?	?	0·68	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10·20	9·57	+0·63	...	...	...	...	3. Assam.	
24	1	2	2	1	...	...	...	...	2·5	3·4	− 26	83	·698	6·4	13	14·55	−1·55	19·97	14·69	+ 5·28	24·45	23·50	+ 0·95	5·00	Silchar .	ASSAM (SURMA).
9	...	18	1	...	...	2	...	...	4·3	2·9	+ 48	90	·673	5·2	9	13·55	−4·55	5·68	9·16	− 3·48	14·01	13·99	+ 0·02	2·70	Sibsagar .	BRAHMAPUTRA.
...	...	14	9	4	...	2	1	...	9·4	8·0	+ 18	75	·626	5·5	10	6·71	+3·29	4·94	4·85	+ 0·09	5·84	7·01	− 1·17	0·86	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·46	2·36	+0·96	...	...	...	...	4. Bengal and Orissa.	
...	2	6	7	7	3	1	...	4	6·3	7·1	− 11	79	·778	5·2	6	4·18	+1·82	4·62	4·21	+ 0·41	4·87	6·77	− 1·90	1·72	Chittagong	EAST BENGAL.
				Not recorded.					?	?	?	72	·504	?	8	?	?	7·23	?	?	9·09	?	?	2·86	Lungleh.	
...	5	8	3	4	4	5	...	1	5·5	?	?	79	·803	4·5	4	4·35	−0·35	5·15	4·23	+ 0·92	5·50	7·78	− 2·28	2·64	Noakhali.	
2	...	...	9	...	18	...	...	1	5·4	?	?	87	·896	4·9	6	6·47	−0·47	7·10	5·20	+ 1·90	7·59	8·96	− 1·37	2·30	Comilla.	
14	2	1	5	4	2	1	1	...	2·5	?	?	75	·695	5·4	4	4·21	−0·21	2·09	2·78	− 0·69	2·75	4·06	− 1·31	0·92	Sirajganj.	
4	2	2	2	6	6	3	1	4	6·1	6·7	− 9	81	·803	6·1	6	6·30	−0·30	7·09	4·81	+ 2·28	7·58	7·92	− 0·34	2·12	Narayanganj	
16	...	2	...	1	7	2	...	2	4·1	?	?	84	·862	5·5	6	4·65	+1·35	5·07	3·24	+ 1·83	6·94	5·96	+ 0·98	2·21	Barisal.	
5	2	1	8	9	1	...	...	4	4·8	?	?	79	·711	4·4	8	5·90	+2·10	9·32	3·89	+ 5·43	10·12	6·13	+ 3·99	3·65	Mymensingh.	
13	4	1	...	2	8	1	1	...	3·5	?	?	85	·831	4·7	9	5·70	+3·30	5·94	3·74	+ 2·20	6·76	6·67	+ 0·09	1·43	Faridpur .	DELTAIC BENGAL.
9	1	...	1	3	9	4	1	2	3·4	4·5	− 24	79	·801	4·6	6	4·82	+1·18	4·07	3·42	+ 0·65	4·02	5·84	− 1·82	1·30	Jessore.	
2	2	1	3	3	9	6	4	...	5·8	7·5	− 23	76	·779	3·7	4	2·73	+1·27	1·76	1·36	+ 0·40	1·94	2·79	− 0·85	0·55	Calcutta.	
...	2	3	1	3	9	9	1	2	16·0	16·7	− 4	79	·865	6·9	2	2·36	−0·36	1·77	0·91	+ 0·86	1·85	2·54	− 0·69	1·37	Saugor Island.	
...	2	1	4	4	9	4	3	3	5·9	?	?	67	·705	3·6	5	3·35	+1·65	2·50	2·49	+ 0·01	2·95	3·97	− 1·02	1·73	Krishnagar.	
2	1	5	...	5	14	2	...	1	6·4	?	?	73	·774	2·4	5	2·85	+2·15	2·18	1·50	+ 0·68	2·45	2·96	− 0·51	0·72	Midnapore.	

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal	Bankura	298	29·530	?	29·780	29·651	15th	29·279	29th	·372	81·1	98·2	?	74·3	?	86·3	?	23·9	110·1	29th & 30th	68·6	8th	41·5
	Raniganj	334	29·508	?	29·793	29·644	14th	29·242	29th	·402	79·6	97·6	?	73·2	?	85·4	?	24·4	107·3	30th	66·3	10th	41·0
	Burdwan	99	29·738	+·025	29·787	29·879	14th	29·457	29th	·422	79·2	96·0	−4·6	74·2	−1·4	85·1	−3·0	21·8	107·7	30th	68·2	8th	39·5
	Naya Dumka	489	29·371†	?	29·821†	29·487	15th	29·086	29th	·401	80·5†	?	?	72·2†	?	?	?	?	103·0	30th	65·2	8th	37·8
	Berhampore	67	29·780	+·038	29·796	29·923	2 days	29·516	29th	·407	78·3	94·7	−5·5	72·9	−1·5	83·8	−3·5	21·8	101·1	28th	65·2	8th	35·9
	Rampur Boalia.	70	29·772	?	29·792	29·921	14th	29·510	29th	·411	78·9	92·9	?	72·0	?	82·5	?	20·9	98·1	28th	62·6	13th	35·5
	Malda‡	72	29·766	?	29·790	29·930	14th	29·511	29th	·419	78·7	95·1	?	70·3	?	82·7	?	24·8	100·0	2nd	64·9	8th	35·1
	Bogra	61	29·793	+·057	29·807	29·935	14th	29·538	29th	·397	77·4	92·6	−3·0	69·5	−2·4	81·1	−2·7	23·1	98·7	5th	62·7	14th	36·0
North Bengal	Dinajpur	123	29·737	+·050	29·816	29·881	14th	29·506	29th	·375	75·7	92·5	−2·1	69·6	−0·8	81·1	−1·5	22·9	99·3	1st	62·3	7th	37·0
	Rangpur	123	29·745	?	29·824	29·894	14th	29·517	29th	·377	75·5	89·8	?	68·2	?	79·0	?	21·6	94·1	7th & 18th,	64·5	17th	29·6
	Jalpaiguri	284	29·595	+·055	29·843	29·749	15th	29·379	2 days	·370	73·9	88·8	−0·2	66·6	−1·0	77·7	−0·6	22·2	94·4	6th	56·1	6th	38·3
Orissa	Balasore	56	29·806	?	29·809	29·941	15th	29·545	29th	·396	79·7	93·0	−4·4	73·8	−2·3	83·4	−3·4	19·2	106·0	30th	67·8	14th	38·2
	False Point	21	29·846	+·025	29·809	29·971	15th	29·614	29th	·357	82·1	88·2	−2·4	75·5	−2·2	81·9	−2·3	12·7	91·5	2 days	68·5	14th	23·0
	Cuttack	80	29·772	+·018	29·795	29·897	15th	29·542	29th	·355	80·8	98·3	−4·0	76·1	−1·9	87·2	−3·0	22·2	112·3	30th	70·2	14th	42·1
	Shortt's Island	?	29·838	?	?	29·955	15th	29·593	29th	·362	82·4	88·2	?	77·5	?	82·8	?	10·7	91·6	27th	64·4	10th	27·2
	Puri	24	29·852	?	29·816	29·967	15th	29·630	29th	·337	81·7	88·1	?	78·0	?	83·1	?	10·1	93·2	26th	69·1	14th	24·1
5. Gangetic Plain and Chota Nagpur.		...	...	+·036	...	...	...	...	...	...	...	95·7	−4·9	70·3	−2·0	83·1	−3·5	25·4	...	...	...	...	41·5
Chota Nagpur	Hazaribagh	2,007	27·820	?	29·779	27·964	15th	27·570	29th	·384	79·1	93·4	−4·8	69·9	−2·3	81·7	−3·6	23·5	103·2	29th	63·7	21st	39·5
	Daltonganj	730?	29·083	?	29·772	29·191	8th	28·818	29th	·373	79·5	96·8	?	70·7	?	80·8	?	20·1	106·5	29th	62·5	11th	44·0
	Ranchi	2,128	27·716	?	29·784	27·829	15th	27·485	29th	·344	78·4	92·5	−5·0	69·3	−2·3	80·9	−3·7	23·2	101·7	29th	60·8	21st	40·9
	Chaibassa	760	29·071	+·035	29·784	29·208	15th	28·814	29th	·394	80·4	98·2‡	−5·9	72·8‡	−3·0	85·6‡	−4·5	25·4	108·5	30th	66·7	14th	41·8
Bihar, South	Gaya	375	29·449	+·033	29·780	29·594	15th	29·157	29th	·437	80·9	98·9	−4·7	73·8?	−0·6?	86·4	−2·7	25·1	107·0	2 days	66·7	2 days	40·3
	Dehri	351	29·460	?	29·767	29·591	15th	29·185	29th	·406	82·3	98·6	?	73·9	?	86·3	?	24·7	108·4	28th	68·0	10th	40·4
	Patna	183	29·644	+·036	29·782	29·797	15th	29·366	29th	·431	80·4	95·8	−5·1	71·4	−1·9	83·6	−3·5	24·4	101·9	28th	62·3	8th	39·6
	Arrah	190	29·637	?	29·781	29·773	15th	29·362	29th	·411	80·0	96·7	?	71·6	?	84·2	?	25·1	103·0	28th	66·1	9th	36·9
	Buxar	239	29·571	?	29·767	29·709	15th	29·293	29th	·416	80·3	95·9	?	72·3	?	84·1	?	23·6	103·5	28th	66·1	25th	37·4
Bihar, North	Purnea	125	29·724	+·050	29·805	29·880	15th	29·486	29th	·391	76·5	94·7	−2·5	68·9‡	−0·7‡	81·8‡	−1·6‡	25·8	99·8	1st	61·8	7th	38·0
	Bhagalpur	160	29·673	?	29·787	29·832	15th	29·411	29th	·421	79·2	94·7	?	70·7	?	82·8	?	24·0	100·5	2nd	65·6	7th	34·9
	Darbhanga	166	29·669	+·042	29·791	29·835	15th	29·403	29th	·432	77·6	92·3	−4·0	70·6	−1·2	81·5	−2·6	21·7	96·2	1st	63·6	2nd	32·6
	Muzaffarpur	178	29·664	?	29·799	29·820	15th	29·418	29th	·402	77·9	92·9	?	69·2	?	81·1	?	23·7	97·2	28th	62·3	9th	34·9
	Motihari	224	29·612	?	29·796	29·778	15th	29·359	29th	·428	79·2	93·8	?	67·3	?	80·6	?	26·5	98·0	1st	54·9	7th	43·1
	Chapra	181	29·643	?	29·779	29·792	15th	29·373	29th	·419	79·9	96·8	?	70·8	?	83·8	?	26·0	103·3	28th	64·9	9th	38·4
N.-W. Provinces (Eastern Districts).	Benares	267	29·546	+·032	29·771	29·685	15th	29·278	29th	·407	78·9	97·7	−5·8	68·9	−3·3	83·3	−4·6	28·8	108·3	28th	60·8	10th	47·5
	Allahabad	309	29·498	+·020	29·763	29·624	17th	29·249	29th	·375	81·5	98·3	−5·7	70·9	−1·2	84·6	−3·5	27·4	109·6	28th	62·4	10th	47·2
N.-W. Provinces (East Sub-montane).	Gorakhpur	256	29·557	+·045	29·775	29·715	15th	29·296	29th	·419	78·4	95·7	−5·1	70·5	−1·9	83·1	−3·5	25·2	101·8	28th	63·3	5th	38·5
Oudh, South	Lucknow	368	29·440	+·031	29·769	29·576	15th	29·171	29th	·405	80·3	97·5	−4·8	67·0‡	−3·9‡	82·4‡	−4·4	30·5	108·3	29th	57·0	9th	51·3
Oudh, North	Bahraich	403	29·418	?	29·783	29·573	15th	29·142	29th	·431	78·5	95·9	?	68·7	?	82·3	?	27·2	104·5	28th	61·0	1st & 8th	43·5
N.-W. Provinces (Central).	Cawnpore	416	29·388	?	29·761	29·525	17th	29·140	29th	·385	81·0	96·9	?	68·6	?	82·8	?	28·3	108·0	28th	58·0	9th	50·0
	Mainpuri	516	29·289	?	29·767	29·415	17th	29·023	29th	·392	80·1	98·1	?	68·6	?	83·4	?	29·5	110·2	28th	58·1	9th & 10th.	52·1

† Mean of 2½ days. ‡ Mean of 29 days.

I—*continued.*

in India, Burma, etc., in April 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.							Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st Mar. to 30th Apl. 1895.	Normal rainfall for period, 1st Mar. to 30th Apl.	Variation from normal of period.			
15	1	1	...	2	5	2	4	...	3·9	P	P	67	·709	3·2	5	2·80	+ 2·20	1·51	1·46	+ 0·05	1·83	2·71	— 0·88	0·53	Bankura .	CENTRAL BENGAL.
16	1	3	4	2	...	1	3	...	2·3	P	P	66	·663	2·6	6	2·15	+ 3·85	3·48	1·26	+ 2·22	3·70	1·91	+ 1·79	1·15	Raniganj.	
5	2	2	2	2	6	6	3	2	4·0	4·8	−17	71	·714	4·0	7	3·09	+ 3·91	2·54	1·54	+ 1·00	2·75	3·27	— 0·52	0·82	Burdwan.	
...	1	1	5	6	3	1	2	5	(a)5·3	P	P	54*	·554*	2·9*	2	2·44	— 0·44	0·93	0·99	— 0·06	1·05	1·69	— 0·64	0·67	Naya Dumka	
4	5	1	6	2	5	5	2	...	4·0	5·2	−23	75	·723	4·6	4	2·45	+ 1·55	0·83	1·29	— 0·46	1·71	2·50	— 0·79	0·28	Berhampore.	
6	4	8	2	3	3	4	...	...	4·8	P	P	74	·731	3·7	3	2·56	+ 0·44	1·81	1·42	+ 0·39	2·66	2·23	+ 0·43	0·97	Rampur Boalia.	
1	1	8	3	5	6	4	...	1	3·7	P	P	68	·665	2·7	1	1·55	— 0·55	0·48	0·94	— 0·46	0·84	1·68	— 0·84	0·38	Malda.†	
8	...	4	...	14	1	2	...	1	3·1	P	P	75	·702	4·9	7	3·50	+ 3·50	2·64	2·21	+ 0·43	3·40	3·03	+ 0·37	0·75	Bogra.	
...	4	14	7	...	1	2	1	1	6·1	P	P	70	·619	4·8	2	2·60	— 0·60	2·70	1·87	+ 0·83	2·88	2·84	+ 0·04	2·05	Dinajpur .	NORTH BENGAL.
...	3	16	6	...	2	2	...	1	3·6	P	P	73	·642	5·3	5	4·40	+ 0·60	3·56	3·14	+ 0·42	4·72	4·44	+ 0·28	1·05	Rangpur.	
2	4	7	7	5	1	1	...	3	4·0	P	P	73	·609	5·1	8	5·79	+ 2·21	4·92	4·08	+ 0·84	5·03	5·88	— 0·85	0·82	Jalpaiguri.	
2	1	3	1	1	7	13	1	1	6·8	P	P	80	·821	3·2	8	3·85	+ 4·15	6·06	2·52	+ 3·54	6·39	3·87	+ 2·52	1·56	Balasore .	ORISSA.
...	3	...	2	1	9	11	2	2	12·3	13·3	− 8	77	·848	6·4	1	1·18	— 0·18	1·04	0·50	+ 0·54	1·07	1·76	— 0·69	1·00	False Point.	
5	2	3	1	2	7	8	2	...	4·5	5·1	−12	75	·800	3·5	2	1·00	+ 1·00	1·42	0·54	+ 0·88	1·48	1·88	— 0·40	1·12	Cuttack.	
1	...	2	...	9	12	2	3	1	17·1	P	P	80	·891	3·7	4	P	P	3·48	P	P	4·24	P	P	1·68	Shortt's Island.	
7	2	1	1	1	2	14	2	...	14·0	P	P	78	·854	4·7	2	0·90	+ 1·10	0·44	0·55	— 0·11	0·50	1·07	— 0·57	0·24	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·92	0·37	+0·59	...	...	...	...	**5. Gangetic Plain and Chota Nagpur.**	
2	...	...	2	3	10	8	3	2	9·6	8·4	+ 14	47	·449	3·5	5	0·73	+ 4·27	2·04	0·25	+ 1·79	2·39	1·21	+ 1·18	0·65	Hazaribagh.	CHOTA NAGPUR.
...	...	3	3	6	4	6	6	2	4·2	?	P	57	·577	3·1	1	P	P	0·12	P	P	0·50	P	P	0·10	Daltonganj.	
5	...	...	...	5	1	11	8	...	8·1	P	P	57†	·541†	2·0	6	1·75	+ 4·25	2·00	0·57	+ 1·43	3·09	1·97	+ 1·12	0·54	Ranchi.	
2	...	1	...	...	4	11	7	5	2·6	P	P	61	·631	2·5	6	1·55	+ 4·45	3·67	0·67	+ 3·00	4·47	1·88	+ 2·59	1·13	Chaibassa.	
...	...	6	10	4	3	5	1	1	5·6	3·8	+ 49	57	·601	2·4	1	0·27	+ 0·73	0·14	0·15	— 0·01	0·50	0·73	— 0·23	0·14	Gaya .	BIHAR, SOUTH.
...	1	2	8	4	4	8	2	1	8·0	P	P	50	·556	2·3	0	0·29	— 0·29	0	0·11	— 0·11	0·28	0·81	— 0·58	0	Dehri.	
...	...	1	20	2	...	...	5	2	6·0	4·4	+ 36	54	·553	1·7	2	0·36	+ 1·64	0·58	0·24	+ 0·34	0·64	0·72	— 0·08	0·32	Patna	
...	1	7	9	7	...	1	4	1	3·8	P	P	56	·581	1·3	2	0·50	+ 1·50	1·51	0·22	+ 1·29	1·57	0·56	+ 1·01	1·21	Arrah.	
...	1	7	14	1	1	1	3	2	5·6	P	P	51	·528	2·2	1	0·40	+ 0·60	0·68	0·17	+ 0·51	0·79	0·45	+ 0·34	0·68	Buxar.	
1	3	11	10	...	...	1	1	3	7·5	3·6	+108	63	·578	3·9	1	1·64	— 0·64	0·28	1·21	— 0·93	0·64	1·70	— 1·06	0·12	Purnea .	BIHAR, NORTH.
1	...	8	9	6	1	2	2	1	5·7	P	P	61	·597	3·4	4	1·35	+ 2·65	2·80	0·77	+ 2·03	2·92	1·10	+ 1·82	1·16	Bhagalpur.	
...	1	2	12	11	...	1	2	1	6·8	5·1	+ 33	61	·571	2·1	3	1·45	+ 1·55	0·68	0·53	+ 0·15	0·75	0·94	— 0·19	0·29	Darbhanga.	
1	...	4	12	8	...	2	2	1	6·7	P	P	68	·655	1·1	0	1·05	— 1·05	0·05	0·58	— 0·53	0·07	1·00	— 0·93	0·05	Muzaffarpur	
1	...	5	13	7	...	2	2	...	5·6	P	P	59	·591	1·9	1	1·35	— 0·35	0·98	0·78	+ 0·20	1·01	1·15	— 0·14	0·92	Motihari.	
...	1	3	15	5	...	1	4	1	6·4	P	P	58	·585	1·8	1	0·65	+ 0·35	0·12	0·28	— 0·16	0·13	0·57	— 0·44	0·12	Chapra.	
10	2	2	6	2	1	2	2	3	4·2	5·0	— 16	59	·587	2·6	1	0·27	+ 0·73	0·24	0·08	+ 0·16	0·55	0·36	+ 0·19	0·24	Benares .	N.-W. PROVINCES (EASTERN DISTRICTS).
5	1	6	5	2	1	1	5	4	5·0	3·2	+ 56	48	·512	2·3	0	0·55	— 0·55	0·01	0·11	— 0·10	0·33	0·43	— 0·10	0·01	Allahabad .	
...	1	1	9	5	6	4	4	...	2·1	4·4	— 52	54	·535	2·4	1	0·73	+ 0·27	0·33	0·43	— 0·10	0·65	0·85	— 0·20	0·30	Gorakhpur	N.-W. PROVINCES (EAST SUB-MONTANE).
6	1	3	6	5	3	2	2	2	2·0	4·4	— 55	51	·532	2·9	2	0·27	+ 1·73	0·54	0·02	+ 0·52	1·09	0·39	+ 0·70	0·25	Lucknow .	OUDH, SOUTH.
7	3	...	7	7	1	...	4	1	4·3	P	P	58	·591	1·3	1	P	P	0·29	0·34	— 0·05	0·39	0·81	— 0·42	0·21	Bahraich .	OUDH, NORTH.
5	2	4	5	5	12	3	3	1	4·2	P	P	51	·535	1·2	0	0·50	−0·50	0·07	0·11	— 0·04	0·41	0·35	+ 0·06	0·07	Cawnpore .	N.-W. PROVINCES (CENTRAL).
17	...	...	4	4	...	3	2	...	1·5	P	P	45	·461	2·6	1	P	P	3·13	0·12	+ 3·01	3·22	0·36	+ 2·86	3·08	Mainpuri.	

(a) Mean of 23 days. * Mean of 24 days. † Mean of 29 days.

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Provinces or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
6. Upper—Sub-Himalayas		...	...	+·026	...	...	...	...	...	...	...	92·7	−3·4	65·7	−0·7	79·2	−2·1	27·0	...	...	...	...	48·6
N.-W. Provinces (Sub-montane).	Bareilly	568	29·234	+·040	29·772	29·361	17th	28·944	29th	·417	77·5	94·2	−5·3	68·2	−0·4	81·2	−2·9	26·0	106·4	29th	58·7	8th	47·7
	Dehra Dun	2,233	27·600	+·021	29·807	27·749?	4th	27·315	29th	·434	69·8	86·6	−3·5	61·9	−2·4	74·3	−3·0	24·7	99·0	29th	53·5	5th & 6th,	45·5
	Roorkee	887	28·909	+·028	29·778	29·069	4th	28·621	29th	·448	74·9	93·4	−4·7	64·5	−2·1	79·0	−3·4	28·9	105·7	29th	53·4	7th	52·3
	Meerut	738	29·054	+·025	29·762	29·167	17th	28·775	29th	·392	77·2	94·6	−3·8	67·2	−0·7	80·9	−2·3	27·4	107·0	28th	56·5	8th	50·5
Punjab, Central.	Delhi	718	29·079	+·020	29·768	29·206	17th	28·837	29th	·369	78·3	91·7	−5·7	70·1	−3·2	82·4	−4·5	24·6	107·0	28th	62·9	9th	44·1
	Lahore	702	29·087	+·019	29·770	29·249	16th	28·841	27th	·408	75·4	94·2	−2·4	66·9	+2·2	80·6	−0·1	27·3	104·8	30th	57·2	8th	47·6
Punjab (Sub-montane).	Umballa	962?	28·873?	?	29·771?	29·018	4th	28·630	29th	·388	74·8	94·4	?	65·4	?	79·9	?	29·0	108·0	28th	55·0	8th	53·0
	Patiala	...	...	...	...	...	...	...	...	Data	not reliable.												
	Ludhiana	812	28·978	+·021	29·768	29·143	16th	28·694	29th	·449	77·1	94·6	−3·0	66·3	−0·4	80·5	−1·7	28·3	105·5	28th	57·2	5th & 6th,	48·3
Punjab, North	Sialkot	830	28·965	+·036	29·776	29·138	16th	28·720	27th	·418	76·9	93·0	−1·9	65·9	−0·1	79·5	−1·0	27·1	104·7	30th	54·2	5th	50·5
	Rawalpindi	(a)1,652	28·134?	?	29·751?	28·279	4th	27·946	30th	·333	71·5	87·4	−0·6	60·4	+0·7	73·9	+0·1	27·0	97·0	30th	50·5	8th	46·5
7. Indus Valley and North-West Rajputana.		...	...	−·011	...	...	...	...	...	...	...	97·9	+1·2	69·3	+1·1	83·6	+1·2	28·6	...	...	...	...	49·0
Punjab, West	Peshawar	1,110	28·732	+·004	29·799	28·868	16th	28·512	27th	·356	71·1	85·1	−1·4	60·9	+0·2	73·0	−0·6	24·2	99·0	30th	50·0	4th	49·0
	Mardan	?	...	...	Not recorded.		...	...	...	...	64·6	87·2	?	59·5	?	73·4	?	27·7	101·0	30th	51·0	8th	50·0
	Khushab	612	29·185?	?	29·773?	29·347	16th	28·952	27th	·395	79·2	94·5	?	68·8	?	81·7	?	25·7	105·8	30th	56·0	8th	49·8
	Montgomery	558	29·225	?	29·751	29·386	17th	28·989	27th	·397	82·9	100·1	?	68·8	?	84·5	?	31·3	108·9	27th	55·5	8th	53·4
	D. I. Khan	573	29·220	−·013	29·774	29·391	16th	29·005	30th	·386	74·9	94·8	+0·6	66·8	+1·2	80·9	+0·9	28·0	107·1	30th	54·7	8th	52·4
	Mooltan	420	29·373	−·008	29·765	29·554	17th	29·144	27th	·410	79·9	100·7	+3·0	71·4	+3·9	86·1	+3·5	29·3	110·4	30th	62·2	4th & 8th,	48·2
	Sirsa	662	29·118	+·004	29·750	29·251	17th	28·911	27th	·340	79·3	100·9	+0·4	68·8	+0·7	84·9	+0·6	32·1	112·4	28th	57·3	8th	55·1
Sind and Cutch.	Jacobabad	186	29·595	−·009	29·742	29·747	17th	29·394	27th	·353	85·9	106·0	+3·9	72·6	+3·7	89·3	+3·8	33·4	115·6	30th	61·0	7th & 8th,	54·6
	Hyderabad	96	29·702	−·023	29·753	29·831	17th	29·559	27th	·272	82·4	104·2	+2·3	72·4	+0·4	88·3	+1·4	31·8	113·7	29th	64·0	7th	49·7
	Kurrachee	49	29·782	−·023	29·783	29·888	17th	29·663	26th	·225	78·7	89·5	0	72·7	+0·2	81·1	+0·2	16·8	94·0	3 days	64·0	9th	30·0
	Bhrj*	395	29·440	−·018	29·789	29·524	4th	29·317	26th	·207	81·4	100·8	+0·6	71·7	+0·6	86·3	+0·6	29·1	107·6	11th	63·9	4th	43·7
Rajputana, West	Bickaneer	753	29·002	?	29·718	29·137	17th	28·828	26th	·309	83·3	102·2	+1·6	74·8	−1·2	88·5	+0·2	27·4	111·0	3 days	63·5	5th	47·5
	Pachpadra	380	29·413	?	29·750	29·569	4th	29·268	27th	·301	82·6	106·6	?	71·1	?	88·9	?	35·5	114·0	30th	59·8	9th	54·2
8. East Rajputana, Central India and Gujarat.		...	...	0	...	...	...	...	...	...	...	99·1	−1·6	71·6	+0·1	85·5	−0·7	27·5	...	...	...	...	44·6
Rajputana, East	Jeypore	1,431	28·398	+·003	29·788	28·522	17th	28·235	12th	·287	81·5	98·8	−1·7	70·5	+1·2	84·7	−0·3	28·3	108·0	28th & 29th,	60·1	8th	47·9
	Sambhar	1,254	28·558	+·003	29·776	28·682	17th	28·409	12th	·273	81·0	98·3	−0·8	70·6	+0·3	84·4	−0·3	27·7	107·0	30th	59·7	7th & 8th,	47·3
	Ajmere	1,611	28·227	−·003	29·796	28·336	17th	28·083	26th	·253	82·2	98·7	+0·1	72·4	+2·1	85·6	+1·1	26·3	106·4	27th	57·7	8th	48·7
	Deesa	466	29·379	−·012	29·802	29·469	4th	29·262	26th	·207	82·3	104·9	+2·0	70·9	−0·1	88·0	+1·0	34·0	111·0	25th	61·6	1st	49·4
Kathiawar	Rajkot	429	29·438	−·009	29·821	29·518	3rd	29·339	26th	·179	81·5	102·5	+0·3	68·1	−1·0	85·3	−0·4	34·4	107·4	24th & 28th,	58·9	5th	48·5
	Veraval	?	29·861	?	29·821	29·947	2nd	29·777	26th	·170	78·8	86·5	?	72·4	?	79·5	?	14·1	98·1	9th	65·3	1st & 6th,	32·8
Central India	Nowgong	757	29·057	+·004	29·772	29·176	17th	28·863	27th	·313	80·8	98·6	−5·2	72·6‡	+0·3	86·5‡	−2·5	26·0	109·1	28th & 29th,	62·5	1st	46·6
	Indore	1,823	28·039	+·006	29·802	28·114	15th	27·940	27th	·174	81·6	98·6	−1·6	68·9	−0·2	83·8	−0·9	29·7	103·1	3 days	59·1	10th	44·0
	Neemuch	1,630	28·224	+·012	29·800	28·323	17th	28·103	26th	·220	83·4	100·4	0	70·7	0	85·6	0	29·7	106·0	6 days	60·8	9th	45·2
Gujarat	Surat	36	29·851	−·010	29·830	29·942	2nd	29·746	26th	·196	82·5	98·0	−2·1	72·5	+0·7	85·3	−0·7	25·5	105·7	19th & 20th,	66·5	6th	39·2
	Ahmedabad	176	29·696	?	29·821	29·779	1st	29·580	26th	·199	82·9	104·4	?	73·8	?	89·1	?	30·6	109·8	20th	66·1	5th	43·7
N.-W. P., West	Agra	555	29·251	+·001	29·767	29·392	17th	29·021	29th	·371	82·0	97·7	−5·0	72·2	−1·3	85·0	−3·2	25·5	108·5	28th & 29th,	64·4	4 days,	44·1
	Jhansi	858	28·967	+·006	29·779	29·094	17th	28·772	27th	·322	84·5	100·7	−3·1	75·5	−0·4	88·1	−1·8	25·2	110·7	28th	68·4	5th & 10th,	42·3

* Mean of 28 days. ‡ Mean of 18 days. (a) Elevation changed to 1,683 feet from 28th April 1895.

I—*continued.*

in India, Burma, etc., in April 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.								Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st January to 28th February 1895.	Normal rainfall for period 1st January to 28th February.	Variation from normal of period.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·80	0·63	+0·17	...	...	...	...	6. Upper—Sub-Himalayas.	
8	...	2	...	13	...	...	2	5	3·2	4·5	−29	48	·451	1·9	1	0·45	+0·55	0·51	0·17	+0·34	0·53	1·11	−0·58	0·40	Bareilly .	N.-W. PROVINCES (SUB-MONTANE).
28	...	...	...	...	...	...	1	1	1·4	2·6	−46	59	·429	3·7	4	1·45	+2·55	1·42	0·53	+0·89	1·67	1·60	+0·07	0·58	Dehra Dun.	
15	1	3	...	8	...	1	...	2	3·4	3·2	+ 6	52	·447	2·7	1	1·18	−0·18	0·21	0·42	−·021	0·50	1·14	−0·64	0·15	Roorkee.	
10	...	...	9	3	...	1	6	1	2·6	2·4	+ 8	49	·449	2·0	2	0·73	+1·27	0·40	0·24	+0·16	0·63	1·01	−0·38	0·25	Meerut.	
5	1	1	7	6	...	1	8	1	4·9	3·9	+26	46	·446	2·7	1	0·64	+0·36	0·44	0·24	+0·20	0·54	0·80	−0·26	0·43	Delhi .	PUNJAB, CENTRAL.
4	6	4	3	9	1	...	1	2	3·1	3·3	− 6	56	·480	2·0	2	1·45	+0·55	1·28	0·46	+0·82	1·91	1·19	+0·72	0·82	Lahore.	
5	...	1	6	9	1	1	1	6	2·1	?	?	61	·524	1·8	2	?	?	0·68	0·53	+0·15	0·80	1·26	−0·46	0·37	Umballa .	PUNJAB (SUB-MONTANE).
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Data	not	reliable.		...	...	...	...	...	...	...	Patiala .	
4	1	4	...	10	4	2	1	4	2·8	2·1	+33	51	·479	3·5	1	1·55	−0·55	0·42	0·85	−0·43	0·75	1·84	−1·09	0·35	Ludhiana.	
11	3	...	12	...	...	...	3	1	2·5	2·3	+ 9	53	·470	2·2	2	2·09	−0·09	1·40	0·91	+0·49	2·73	2·09	+0·64	0·72	Sialkot .	PUNJAB, NORTH.
18	1	...	2	3	...	2	...	4	3·5	2·8	+25	57	·440	2·6	4	3·27	+0·73	1·22	1·95	−0·73	4·92	3·71	+1·21	0·71	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·44	0·39	−0·02	...	...	...	...	7. Indus Valley and North-West Rajputana.	
11	2	2	2	3	3	2	...	5	3·4	4·2	−19	69	·525	2·0	5	3·36	+1·64	2·02	1·84	+0·18	9·55	3·54	+6·01	0·45	Peshawar .	PUNJAB, WEST.
...	...	...	...	Not recorded.			...	...	?	?	?	?	?	?	4	?	?	1·26	?	?	7·36	?	?	0·36	Mardan.	
4	3	7	6	2	1	2	3	2	5·7	?	?	54	·527	1·5	4	1·30	+2·70	0·90	0·62	+0·28	4·22	1·16	+3·06	0·25	Khushab.	
6	2	4	6	8	3	...	1	...	4·4	?	?	41	·440	2·4	1	0·70	+0·30	0·28	0·11	+0·17	0·55	0·52	+0·03	0·23	Montgomery	
15	...	6	2	...	...	...	1	6	2·2	2·4	− 8	65	·558	1·8	1	1·64	−0·64	0·39	0·77	−0·38	4·63	1·40	+3·23	0·39	D. I. Khan.	
7	...	14	2	5	...	2	...	...	1·7	2·5	−32	48	·486	2·2	2	0·36	+1·64	0·25	0·07	+0·18	0·96	0·45	+0·51	0·14	Mooltan.	
7	1	2	5	6	3	3	2	1	5·9	4·0	+48	38	·370	2·8	1	0·64	+0·36	0·43	0·31	+0·12	0·80	0·68	+0·12	0·28	Sirsa.	
9	2	4	8	6	...	1	...	...	3·5	3·9	−10	52	·616	1·1	0	0·27	−0·27	0·04	0·20	−0·16	0·26	0·34	−0·08	0·04	Jacobabad .	SIND AND CUTCH.
2	3	1	...	...	5	18	...	1	13·9	10·2	+36	50	·539	1·7	0	0	0	0	0·04	−0·04	0	0·18	−0·18	0	Hyderabad.	
...	10	...	...	...	...	5	5	10	12·9	14·0	− 8	80	·801	3·5	0	0·45	−0·45	0	0·33	−0·33	0·07	0·56	−0·49	0	Kurrachee.	
...	3	...	1	...	...	7	13	4	13·1	10·9	+20	67	·725	1·4	0	?	?	0	0·18	−0·18	0·10	0·27	−0·17	0	Bhuj.‡	
...	1	6	7	5	4	5	...	2	5·9	4·7	+26	34	·386	3·5	0	?	?	0·09	0·17	−0·08	0·40	0·37	+0·03	0·05	Bickaneer .	RAJPUTANA, WEST.
4	1	1	2	9	5	5	...	3	9·7(*b*)	4·5	+116	60	·688	4·1	0	?	?	0	0·01	−0·01	0·70	0·08	+0·62	0	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·30	0·07	+0·29	...	...	...	...	8. East Rajputana, Central India and Gujarat.	
6	5	5	3	1	...	2	6	2	4·5	5·7	−21	43	·473	3·7	0	0·30	−0·30	0·12	0·09	+0·03	1·44	0·48	+0·96	0·06	Jeypore .	RAJPUTANA, EAST.
4	3	3	6	2	3	1	7	1	7·8	7·0	+11	44	·462	2·6	2	0·30	+1·70	0·57	0·08	+0·49	0·92	0·44	+0·48	0·30	Sambhar.	
8	...	4	...	6	2	8	2	...	5·1	5·0	+ 2	50	·539	2·3	1	0·18	+0·62	0·31	0·06	+0·25	0·63	0·23	+0·40	0·15	Ajmere.	
2	...	3	...	2	2	7	13	1	9·0	9·4	− 4	48	·525	1·0	0	0	0	0	0·01	−0·01	0·36	0·06	+0·30	0	Deesa.	
...	2	2	...	...	...	1	14	11	9·9	11·1	−11	51	·654	0·6	0	0·10	−0·10	0	0·02	−0·02	0·06	0·03	+0·03	0	Rajkot .	KATHIAWAR.
3	8	...	...	...	...	1	10	8	6·9	?	?	74	·727	2·9	0	?	?	0	?	?	0	?	?	0	Veraval.	
9	4	1	2	1	3	3	7	...	2·8	2·8	0	42	·441	2·0	0	0	0	0·03	0·06	−0·03	0·44	0·33	+0·11	0·03	Nowgong .	CENTRAL INDIA.
2	2	1	1	5	1	2	8	8	3·8	4·4	−14	44	·487	1·7	2	0	+2·00	2·26	0·06	+2·20	3·04	0·08	+2·96	2·01	Indore.	
...	4	4	5	3	...	3	10	1	8·7	10·3	−16	33	·376	1·0	1	0·09	+0·91	0·27	0·09	+0·18	0·41	0·17	+0·24	0·17	Neemuch.	
8	1	...	...	...	1	13	4	3	?	8·0	?	66	·744	1·3	0	0	0	0	0·01	−0·01	0	0·01	−0·01	0	Surat .	GUJARAT.
...	4	2	1	...	...	7	1	8	6·9*	?	?	51	·561	1·8	0	?	?	0·01	?	?	0·05	?	?	0·01	Ahmedabad.	†
5	...	2	...	5	...	8	...	10	4·9	4·7	+ 4	41	·447	2·5	1	0·55	+0·45	0·27	0·14	+0·13	0·52	0·45	+0·07	0·24	Agra . .	N.-W. P., WEST.
8	1	1	2	4	3	5	4	2	3·0	4·2	−29	34	·405	1·1	0	0·55	−0·55	0·06	0·13	+0·07	0·22	0·48	−0·26	0·04	Jhansi.	

* Mean of 29 days.

† Wind direction of 23 days.
‡ Do. do. „ 28 „

(*b*) Mean of 24 days.

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
9. Deccan		...	...	+·010	...	...	...	...	...	...	...	100·2	−2·8	72·5	−1·2	86·4	−2·0	27·7	...	...	...	...	42·2
Bombay, Deccan	Belgaum	2,524	27·381	+·006	29·827	27·459	14th	27·293	25th	·166	75·9	95·0	−1·4	66·4	−0·9	80·7	−1·2	28·6	98·2	4 days	62·4	7th	35·8
	Sholapur	1,590	28·283	+·008	29·813	28·398	15th	28·195	25th	·203	83·9	102·5	−2·7	74·2	−0·8	88·4	−1·8	28·3	107·2	25th	68·5	17th	38·7
	Poona	1,840	28·058	−·001?	29·834	28·119	15th	27·982	25th	·137	80·7	102·5	+1·4	68·6	−1·2	85·5	+0·1	33·9	106·5	26th	63·9	3 days	42·6
	Bijapur	1,946	27·947	?	29·818	28·046	15th	27·850	25th	·196	81·6	99·9	?	73·0	?	86·5	?	26·9	103·8	26th	66·5	17th	37·3
Khandesh	Malegaon	1,430	28·442	0	29·812	28·521	17th	28·332	26th	·189	84·9	102·4	−0·5	70·4	−0·5	86·4	−0·5	32·0	106·3	24th	62·9	6th	43·4
	Ahmednagar	2,152	27·747	?	29·817	27·835	15th	27·660	25th	·175	82·4	99·7	?	67·7	?	83·8	?	32·0	104·2	25th	59·0	13th	45·2
Berar	Akola	930	28·917	+·010	29·790	29·034	15th	28·793	26th	·241	84·9	104·4	−1·4	74·0	0	89·7	−0·8	30·2	109·1	28th	65·8	11th	43·3
	Amraoti	1,216	28·622	+·005	29·788	28·732	15th	28·497	27th	·235	82·6	102·5	−2·8	75·1	−0·4	88·8	−1·6	27·4	108·8	30th	68·8	7th	40·0
Central Provinces, West.	Khandwa	1,045	28·810	+·006	29·807	28·926	15th	28·683	26th	·243	84·1	103·7	−0·5	74·6	+0·3	89·2	−0·1	29·1	109·7	24th	62·1	9th	47·6
	Hoshangabad*	1,020	28·828	0	29·808	28·934	17th	28·690	26th	·244	81·5	100·9	−4·1	72·5	−0·8	86·7	−2·5	28·4	107·5	30th	65·8	11th	41·7
	Nagpur	1,025	28·812	+·009	29·789	28·935	15th	28·657	27th	·278	83·4	102·2	−3·6	74·2	−1·7	88·2	−2·7	28·0	111·2	28th	61·1	7th	50·1
Central Provinces, Central.	Chanda	634	29·219	+·028	29·796	29·323	17th	29·076	27th	·247	84·0	102·5	−4·6	73·7	−2·6	88·1	−3·6	28·8	110·9	29th	67·6	10th	43·3
	Seoni	2,033	27·831	+·015	29·789	27·939	15th	27·690	26th	·249	81·9	97·4	−3·9	69·5	−2·1	83·5	−3·0	27·9	105·2	29th	62·0	7th	43·2
	Jubbulpore	1,327	28·508	+·006	29·788	28·607	17th	28·352	27th	·255	81·8	98·6	−3·1	68·8	−1·7	83·8	−2·4	29·8	107·0	28th & 30th.	60·3	9th	46·7
	Saugor	1,762	28·072	?	29·774	28·174	17th	27·939	27th	·235	82·2	98·5	−3·0	71·1	−1·3	84·8	−2·2	27·4	106·9	30th	63·2	9th	43·7
Central Provinces, East.	Raipur	970	28·873	+·024	29·789	28·985	15th	28·696	29th	·289	84·0	100·3	−4·0	74·9	−1·9	87·7	−3·0	25·4	109·5	29th & 30th.	67·2	7th	42·3
	Sutna	1,040	28·766	+·006	29·764	28·880	15th	28·569	27th	·311	83·2	97·6	−4·0	70·1	−0·9	83·9	−2·5	27·5	108·1	28th	61·2	10th	46·9
	Sambalpur	463	29·369	+·031	29·783	29·505	15th	29·153	29th	·352	83·2	99·3	−5·6	73·3	−2·3	86·4	−4·0	26·0	110·5	29th	63·2	12th	47·3
Hyderabad, North.	Aurangabad	?	28·033	?	?	28·124	15th	27·927	25th	·197	85·6	103·0	?	71·4	?	87·2	?	31·6	106·6	25th	63·8	11th	42·8
	Indur	?	...	Not	recorded.	...	...	...	...	...	84·5	100·2	?	74·9	?	87·6	?	25·3	106·8	29th & 30th.	67·6	8th	39·2
	Bidar	?	27·738	?	?	27·865	16th	27·631	27th	·234	80·7	94·5	?	72·2	?	83·4	?	22·3	98·0	3rd, 4th & 28th.	63·1	16th	34·9
Hyderabad, South.	Gulbarga	1,502	28·369	?	29·812	28·459	15th	28·271	25th	·188	81·7	100·4	?	73·4	?	86·9	?	27·0	106·3	29th	61·8	15th	44·5
	Raichur	1,373	28·499	?	29·810	28·600	15th	28·398	25th	·202	83·1	100·2	?	77·3	?	88·8	?	22·9	106·5	30th	67·1	8th	39·4
	Hyderabad (Deccan).	1,690	28·203	0	29·835	28·340	15th	28·073	29th	·267	80·4	98·1	−4·1	73·4	−1·7	85·7	−2·9	24·7	105·4	30th	68·2	15th	37·2
	Secunderabad.	1,787	28·118	?	29·850	28·243	15th	28·001	27th	·242	78·6	98·6	?	72·2	?	85·5	?	26·4	105·7	30th	65·5	15th	40·2
	Khamamet	373	29·515	?	29·832	29·646	15th	29·372	29th	·274	83·2	100·2	?	77·2	?	88·7	?	23·0	111·7	29th & 30th.	72·8	15th	38·9
10. West Coast		...	...	+·008	...	...	...	...	...	...	...	89·4	+0·1	77·8	−0·3	83·6	−0·1	11·5	...	...	...	...	18·5
Konkan	Bombay.	37	29·872	+·005	29·849	29·942	2nd	29·789	25th	·153	81·4	88·5	+0·3	77·1	−0·2	82·8	+0·1	11·4	93·0	20th	74·0	1st & 6th.	19·0
	Ratnagiri	110	29·789	+·013	29·838	29·850	2nd	29·702	25th	·148	82·8	89·6	−0·3	77·5	+0·7	83·6	+0·2	12·1	91·9	2nd	73·9	3 days	18·0
	Mormugao	60	29·850	0	29·845	29·909	3rd	29·768	25th	·141	83·9	89·4	?	78·8	?	84·1	?	10·6	93·0	21st & 22nd.	74·4	4th	18·6
	Goa	23	29·903	+·010	29·810	29·953	3rd	29·820	25th	·133	82·6	86·0	?	79·0*	?	82·5*	?	7·0	88·0	22nd	74·5	1st	13·5
	Karwar	44	29·867	+·011	29·843	29·931	3rd	29·779	25th	·152	81·0	89·7	−0·1	76·9	−0·9	83·3	−0·5	12·8	91·3	22nd & 27th.	74·1	7th & 14th.	17·2
Malabar	Cochin	10	29·898	−·005	29·836	29·971	14th	29·824	25th	·147	82·0	91·9	+0·8	77·8	−0·5	84·9	+0·2	14·1	95·3	11th	70·7	14th	24·6
	Calicut	27	29·886	+·002	29·842	29·952	14th	29·801	25th	·151	82·5	90·7	−0·6	77·4	−0·4	84·1	−0·5	13·3	92·8	2nd	73·0	12th	19·8
	Mangalore	65	29·949	+·007	29·846	29·900	15th	29·769	25th	·131	83·8	91·3	+0·5	78·6	−0·2	85·0	+0·2	12·7	92·8	14th & 24th.	73·9	15th	18·9
	Trivandrum	198	29·705	?	29·834	29·777	14th	29·626	25th	·151	81·5	87·1	?	77·4	?	82·3	?	9·7	90·5	2nd	74·0	18th	16·5
11. South India		...	...	+·003	...	...	...	...	...	...	...	94·5	−1·8	75·1	−0·9	84·8	−1·4	19·5	...	...	...	...	32·9
Madras, South.	Pamban	37	29·867	?	29·830	29·950	14th	29·782	25th	·168	84·6	90·7	?	80·1	?	85·4	?	10·6	92·3	5 days	75·2	20th	17·1
	Tinnevelly	168	29·728	?	29·825	29·807	14th	29·620	26th	·187	83·9	98·0	?	77·8	?	87·9	?	20·2	105·5	30th	70·9	19th	34·6
	Madura	447	29·452	+·003	29·834	29·542	14th	29·346	25th	·196	83·6	97·7	−2·4	76·3	0	87·0	−1·2	21·4	102·0	30th	70·5	27th	31·5

* Mean of 29 days.

I—*continued.*

***in India, Burma, etc., in April 1895*—continued.**

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.			RAINFALL.							Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.	Mean cloud amount.	Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 30th April 1895.	Normal rainfall for period, 1st March to 30th April.	Variation from normal of period.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·85	0·42	+0·51	...	...	...	...	9. Deccan.	
6	3	1	2	3	3	1	5	6	12·6	13·1	− 4	61	·533	1·8	4	3·36	+0·64	2·23	1·72	+0·51	2·23	2·07	+ 0·16	0·72	Belgaum .	BOMBAY, DECCAN.
...	5	...	3	8	3	2	1	8	11·4	8·2	+ 39	42	·482	1·0	1	1·20	−0·20	0·30	0·57	−0·27	0·33	0·91	− 0·58	0·26	Sholapur.	
16	...	...	...	1	...	2	7	4	7·4	9·9	− 25	37	·386	0·5	0	1·09	−1·09	0	0·54	−0·54	0	0·59	− 0·59	0	Poona.	
1	...	...	2	2	...	2	13	10	4·6	P	P	59	·630	1·8	2	1·80	+0·20	0·16	P	P	0·49	P	P	0·27	Bijapur.	
...	2	3	1	1	1	3	9	10	12·6	7·7	+ 64	59	·701	1·2	0	0·18	−0·18	0·04	0·10	− 0·06	0·18	0·13	+ 0·05	0·04	Malegaon .	KHANDESH.
7	9	6	1	1	2	...	...	4	10·4	P	P	53	·580	0·9	0	P	P	0	P	P	0	P	P	0	Ahmednagar.	
3	1	2	3	5	2	2	8	4	6·9	5·4	+ 28	36	·428	1·3	1	0·36	+0·64	0·37	0·16	+ 0·21	0·59	0·71	− 0·12	0·36	Akola .	BERAR.
...	4	4	4	6	1	6	3	2	5·7†	4·4	+ 30	40	·436	1·4	1	0·45	+0·55	0·18	0·25	− 0·07	0·44	0·65	− 0·21	0·13	Amraoti.	
3	2	2	3	1	...	1	4	14	6·9	5·6	+ 23	34	·401	1·5	0	0·18	−0·18	0·08	0·17	− 0·09	0·25	0·30	− 0·05	0·05	Khandwa .	CENTRAL PROVINCES, WEST.
13	1	1	5	...	2	2	4	1	2·0	2·9	− 31	43	·463	2·0	1	0·09	+0·91	0·19	0·16	+ 0·03	0·58	0·39	+ 0·19	0·15	Hoshangabad.*	
7	2	1	4	6	3	2	3	2	7·2	5·3	+ 36	58	·658	2·7	3	0·82	+2·18	1·88	0·34	+ 1·54	2·59	0·95	+ 1·64	1·20	Nagpur.	
5	1	2	2	13	3	...	...	4	3·5	3·8	− 8	50	·577	2·4	6	P	P	2·47	0·38	+ 2·09	3·17	1·87	+ 1·30	0·75	Chanda .	CENTRAL PROVINCES, CENTRAL.
...	...	...	Not recorded.				...	...	P	3·8	P	56	·604	3·1	1	0·45	+0·55	0·31	0·35	− 0·04	0·68	1·05	− 0·37	0·12	Seoni.	
8	1	1	...	1	9	4	3	3	3·4	3·5	− 3	44	·475	1·5	0	0·27	−0·27	0	0·18	− 0·18	1·50	0·69	+ 0·81	0	Jubbulpore.	
3	1	2	5	5	2	7	4	1	3·1	3·7	− 16	35	·392	1·4	1	0·09	+0·91	0·34	0·10	+ 0·24	1·83	0·36	+ 1·47	0·13	Saugor.	
7	1	1	1	2	3	6	6	3	8·4	5·9	+ 42	50	·570	2·2	4	1·00	+3·00	1·25	0·47	+ 0·78	2·14	1·28	+ 0·86	0·50	Raipur .	CENTRAL PROVINCES, EAST.
2	7	1	3	3	5	1	4	4	7·1	6·8	+ 4	35	·395	1·3	1	0·27	+0·73	0·38	0·12	+ 0·26	1·37	0·62	+ 0·75	0·38	Sutna.	
...	1	5	8	5	3	5	...	3	5·3	2·6	+ 104	55	·611	1·8	3	P	P	0·64	0·51	+ 0·13	1·08	1·71	− 0·63	0·16	Sambalpur.	
7	4	4	1	4	2	5	2	1	3·6	P	P	30	·360	0·4	0	P	P	0·08	0·18	− 0·10	0·27	0·24	+ 0·03	0·06	Aurangabad	HYDERABAD, NORTH.
1	1	...	2	4	11	5	3	3	7·9	P	P	63	·743	2·7	4	P	P	2·01	0·31	+ 1·70	2·01	0·58	+ 1·43	0·85	Indur.	
...	2	1	3	3	7	6	6	2	8·3	P	P	65	·675	2·2	8	P	P	3·87	0·83	+ 3·04	3·87	1·17	+ 2·70	1·32	Bidar.	
3	...	2	8	4	4	3	3	3	8·8	P	P	56	·595	2·5	6	P	P	2·46	0·71	+ 1·75	2·46	0·92	+ 1·54	1·00	Gulbarga.	HYDERABAD, SOUTH.
...	2	1	1	3	9	7	3	4	7·4	P	P	53	·597	2·2	1	P	P	0·85	P	P	0·85	P	P	0·85	Raichur.	
8	1	2	2	5	3	1	5	3	4·8	P	P	65	·659	3·2	1	P	P	0·57	0·67	− 0·10	0·98	1·42	−0·44	0·37	Hyderabad (Deccan).	
4	...	1	9	6	...	1	3	6	6·7	5·3	+ 26	60	·588	2·8	5	P	P	1·16	P	P	1·40	P	P	0·30	Secunderabad.	
10	...	...	...	8	11	1	...	...	9·4	P	P	71	·813	2·3	0	P	P	0·05	P	P	0·51	P	P	0·05	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·03	1·73	+0·56	...	...	...	...	10. West Coast.	
...	8	3	3	3	3	2	1	7	9·7	11·3	− 14	74	·807	1·3	0	0	0	0	0·01	− 0·01	0	0·04	− 0·04	0	Bombay.	KONKAN.
2	6	2	...	3	2	2	3	10	6·0	11·1	− 46	70	·778	3·6	0	0·09	−0·09	0·07	0·07	0	0·07	0·08	− 0·01	0·06	Ratnagiri.	
4	11	3	5	2	1	2	...	2	8·1*	P	P	72	·842	3·2	0	P	P	0	P	P	0	P	P	0	Mormugao.	
11	3	5	3	1	...	2	1	4	5·9*	P	P	72	·800	3·5	0	P	P	0	0·07	− 0·07	0	0·07	− 0·07	0	Goa.	
1	11	3	3	...	...	...	6	6	5·6	P	P	78	·817	3·0	1	0·36	+0·64	0·11	0·41	− 0·30	0·11	0·41	− 0·30	0·10	Karwar.	
5	9	14	1	...	...	...	...	1	6·3	P	P	79	·871	4·6	5	5·55	−0·55	7·47	4·37	+ 3·10	7·53	6·81	+ 0·72	2·51	Cochin .	MALABAR.
7	5	4	3	5	1	1	...	4	11·2	P	P	77	·846	6·6	7	3·13	+3·87	5·23	3·17	+ 2·06	5·23	3·69	+ 1·54	2·96	Calicut.	
14	2	2	6	3	1	...	1	1	3·1	3·7	−16	71	·820	4·0	1	1·00	0	0·27	1·13	− 0·86	0·27	1·19	− 0·92	0·13	Mangalore.	
10	8	4	1	...	...	...	...	7	4·7	P	P	80	·869	4·3	11	P	P	5·10	4·58	+ 0·52	5·10	6·15	− 1·05	1·84	Trivandrum.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·19	1·12	+0·91	...	...	...	...	11. South India.	
...	...	6	4	7	4	2	3	4	7·7	P	P	80	·952	3·5	5	1·30	+3·70	2·26	4·13	− 1·87	2·26	4·92	− 2·66	1·45	Pamban .	MADRAS, SOUTH.
...	5	...	1	1	1	6	4	12	5·0	P	P	72	·840	6·3	4	3·40	+0·60	4·01	P	P	4·01	P	P	1·55	Tinnevelly.	
13	3	1	2	4	2	...	...	5	1·2	3·6	− 67	72	·832	2·9	5	1·82	+3·18	4·91	1·88	+ 3·03	4·91	2·49	+2·42	2·86	Madura.	

* Mean of 29 days. † Mean of 27 days.

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras, South Central.	Salem	940	28·993	+·005	29·871	29·092	14th	28·901	25th	·191	82·3	99·3	−1·7	75·4	−0·2	87·4	−1·0	23·9	105·4	30th	69·0	14th	36·4
	Coimbatore	1,348	28·560	+·004	29·855	28·640	14th	28·453	25th	·187	78·5	95·5	−2·6	72·4	−1·2	83·9	−1·9	23·1	100·4	3rd & 6th	68·6	18th	31·8
Cooro	Mercara	3,781	26·301	?	?	26·347	8th	26·225	25th	·122	70·0	81·8	−2·7	63·9	−0·2	72·9	−1·5	17·9	90·0	2nd	59·7	11th	30·3
Mysore	Chitaldroog	2,405	27·519	?	29·832	29·589	15th	27·448	25th & 26th.	·141	78·2	94·1	?	70·5	?	82·3	?	23·6	99·2	2nd	61·4	7th	37·8
	Bangalore	3,021	26·937	−·006	29·842	27·001	15th	26·842	26th	·159	74·9	91·2	−2·0	68·3	−0·9	79·8	−1·5	22·9	95·3	3 days	61·9	13th	33·4
	Hassan	3,091	26·875	?	29·867	26·936	15th	26·778	10th	·158	74·2	89·6	?	66·3	?	77·9	?	23·3	95·7	7th	63·8	3rd	31·9
	Mysore	2,518	27·428	?	29·860	27·489	2nd	27·346	26th	·143	75·6	92·4	?	69·4	?	80·9	?	23·0	96·9	1st & 2nd.	62·0	26th	34·9
Madras, East Coast, South.	Negapatam	31	29·869	−·001	29·829	29·959	14th	29·751	25th	·208	85·2	92·1	−0·5	79·1	+0·4	85·6	−0·1	13·0	106·3	30th	75·7	20th	30·6
	Cuddalore	12	29·886	?	29·827	29·989	3rd	29·758	26th	·231	84·8	93·0	?	77·2	?	85·1	?	15·8	101·3	30th	70·2	1st	31·1
	Trichinopoly	255	29·644	−·003	29·831	29·728	14th	29·530	25th	·198	84·5	101·1	0	77·5	+0·2	89·4	+0·1	23·6	107·2	30th	70·4	25th & 26th.	36·8
	Madras	22	29·881	+·001	29·834	29·983	3rd	29·728	26th	·255	85·1	94·2	+1·2	76·9	−0·2	85·6	+0·5	17·3	108·0	30th	70·5	1st & 2nd.	37·5
Madras, East Coast, Central.	Nellore	71	29·812	?	29·816	29·923	15th	29·683	29th	·240	85·2	98·8	?	76·9	?	87·9	?	21·9	113·8	30th	71·6	1st	42·2
	Masulipatam	15	29·880	+·016	29·830	29·981	15th	29·732	29th	·249	84·8	94·2	−0·7	77·5	+0·2	85·9	−0·3	16·7	111·2	29th	71·6	2nd	39·6
Madras, Central	Cuddapah	433	29·449	?	29·817	29·530	3rd	29·350	25th	·180	87·1	103·2	−1·9	80·1	−0·4	91·7	−1·2	23·1	111·3	30th	76·9	3 days	34·4
	Kurnool	924	28·958	+·013	29·821	29·062	17th	28·847	25th	·215	83·3	100·7	−3·8	75·9	−2·4	88·3	−3·1	24·8	106·3	30th	68·4	3 days	37·9
	Bellary	1,475	28·415	+·016	29·829	28·510	17th	28·329	25th	·181	81·2‡	100·0‡	−3·7‡	74·1‡	−2·5‡	87·1‡	−3·1‡	25·9‡	104·1	3 days	70·0	16th	34·1
Madras, East Coast, North.	Rajahmundry	112	29·797	?	29·846	29·910	14th	29·662	29th	·248	83·0	97·3	−3·1	76·5	−2·2	87·0	−2·7	20·8	108·1	29th	69·5	17th	38·6
	Cocanada	26	29·867	+·021	29·828	29·984	3rd	29·728	29th	·256	83·1	93·1	−1·8	76·6	−2·5	84·9	−2·2	16·5	105·8	29th & 30th.	72·1	3rd	33·7
	Vizagapatam	31	29·861	+·023	29·830	29·976	14th	29·709	29th	·267	82·9	87·7	−1·1	81·4	−1·8	84·6	−1·5	6·3	95·3	29th	79·0	3rd & 9th.	16·3
	Gopalpur	21	29·946	?	29·807	29·948	14th & 15th.	29·635	29th	·313	81·6	88·9	?	76·5	?	82·7	?	12·4	91·7	29th	67·1	14th	24·6
12. Hill Stations		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baluchistan	Shirino	?								Temporarily closed.													
	Kachh	?	...	?	Not recorded.			...	...	...	59·7	74·1	?	42·1	?	58·1	?	32·0	85·0	21st & 30th.	30·0	6th	55·0
	Pishin	...								Observations unreliable.													
	Quetta	5,502	24·646	+·025	?	24·749	9th	24·528	12th	·221	64·8	78·9	+5·3	46·5	+0·1	62·7	+2·7	32·4	86·2	21st	35·8	7th	50·4
	Kalat	?	...		Not recorded.			...	...	...	53·1	79·6	?	33·1	?	56·4	?	46·5	93·3	21st	20·2	7th	73·1
	Chaman	4,311	25·657	?	?	25·759	9th	25·519	27th	·240	74·2	85·1	?	59·3	?	72·2	?	25·8	94·5	21st	46·6	3rd	47·9
Northern India	Leh	11,503	19·746	?	?	19·871	9th	19·532	3rd	·339	39·2	56·1	?	28·7	?	42·4	?	27·4	65·2	24th	20·4	5th	44·8
	Srinagar	5,204	24·908	?	?	25·042	17th	24·781	27th	·261	53·0	69·0	?	46·9	?	58·0	?	22·1	78·8	30th	39·1	5th	39·7
	Astor (Kashmir)†	?	22·396*	?	?	22·530	14th	22·235	27th & 28th.	·295	43·5	59·4	?	37·0	?	48·2	?	22·4	70·7	23rd	28·0	6th & 7th.	42·7
	Gilghit	?	24·744	?	?	24·950	8th	24·570	27th	·380	61·4	75·2	?	55·3	?	65·3	?	19·9	86·3	21st	45·3	4th	41·0
	Cherat	?	25·685	?	?	25·789	15th	25·527	27th	·262	65·6	77·0	?	57·1	?	67·1	?	19·9	85·4	27th	45·7	4th	39·7
	Murree	6,344	23·831	+·012	?	23·944	15th	23·720	27th	·224	57·4	68·4	0	52·6	+0·6	60·5	+0·3	15·8	80·6	30th	35·0	4th	45·6
	Poo	?	...		Not recorded.			...	...	...	?	62·4	?	41·1	?	51·8	?	21·3	72·2	27th	31·8	6th	40·4
	Simla	7,224	23·110	+·008	?	23·233	15th	22·950	29th	·283	56·2	63·2	−3·6	51·1	−1·4	57·2	−2·5	12·1	73·7	28th	41·1	4th	32·6
	Chakrata	6,977	23·333	+·019	?	23·457	15th	23·134	29th	·323	57·5	66·9	−3·6	50·7†	−1·2†	58·7†	−2·4	16·2	79·3	30th	37·1	4th	42·2
	Mussooree	6,705	23·554	?	?	23·676	15th	23·340	29th	·336	58·4	66·9	?	52·3	?	59·6	?	14·6	77·8	30th	39·0	4th	38·8
	Ranikhet	6,069	24·101	+·019	?	24·227	15th	23·871	29th	·356	60·5	70·0	−4·5	54·4	−2·7	62·2	−3·6	15·6	79·5	29th	46·0	4th & 8th.	33·5
	Yatung	10,180?	...		Not recorded.			...	...	...	?	51·0	?	33·3	?	42·1	?	17·7	57·9	17th	24·9	7th	33·0
	Gnatong	?	19·229	?	...	19·343	15th	19·073	29th	·270	35·9	42·7	?	28·3	?	35·5	?	14·4	48·6	15th	19·1	7th	29·5
	Darjeeling	7,421	22·974	+·019	...	23·105	15th	22·786	29th	·319	52·8	59·8	−1·6	46·7	−0·8	53·3	−1·2	13·1	64·1	16th	41·9	13th	22·2
	Gantak	?	24·481	?	...	24·618	20th	24·282	29th	·336	57·7	69·6	?	49·6	?	59·6	?	20·0	75·4	16th	42·9	7th	32·5

* Mean of 17 days. † Mean of 28 days. ‡ Mean of 21 days.

I —*continued.*

in India, Burma, etc., in April 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.									Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 30th April 1895.	Normal rainfall for period, 1st March to 30th April.	Variation from normal of period.			
9	2	7	1	2	1	5	2	1	3·2	5·0	−36	72	·805	4·3	7	2·27	+4·73	2·58	1·58	+ 1·00	2·58	2·46	+ 0·12	0·51	Salem .	MADRAS, SOUTH CENTRAL.
...	...	...	6	4	12	2	6	...	2·3	3·5	−34	80	·786	5·2	6	2·18	+3·82	2·70	1·71	+ 0·99	2·70	2·30	+ 0·40	0·88	Coimbatore.	
10	3	3	4	...	...	...	3	7	5·1	3·8	+34	82	·614	2·5	9	4·70	+4·30	4·68	2·72	+ 1·96	5·54	3·59	+ 1·95	1·38	Mercara .	COORG.
...	1	1	2	2	1	9	12	2	7·7	P	P	65	·630	3·0	4	P	P	3·97	P	P	3·97	?	?	1·99	Chitaldroog.	MYSORE.
1	...	...	...	7	6	9	6	1	7·1	3·5	+103	75	·631	3·3	3	1·18	+1·82	2·65	1·15	+ 1·50	2·65	1·69	+ 0·96	0·94	Bangalore	
...	3	1	4	3	8	8	3	...	3·3	P	P	76	·637	4·0	4	P	P	2·25	P	P	2·25	P	P	0·77	Hassan.	
4	1	1	1	2	4	9	6	2	7·3	P	?	76	·662	4·8	6	P	P	4·91	?	P	4·91	P	P	1·84	Mysore.	
5	1	3	4	7	3	2	5	...	13·1	5·2	+152	74	·894	4·2	1	0·55	+0·45	0·19	0·35	− 0·16	0·19	0·89	− 0·70	0·10	Negapatam	MADRAS, EAST COAST, SOUTH.
...	2	1	2	3	10	1	7	4	2·4	P	P	90	1·086	3·0	1	0·60	+0·40	0·73	?	P	0·73	P	?	0·72	Cuddalore.	
13	1	4	1	2	1	3	4	1	4·2	4·0	+ 5	69	·808	4·0	3	1·27	+1·73	2·67	1·53	+ 1·14	2·67	2·08	+ 0·59	1·23	Trichinopoly.	
1	1	...	...	2	11	9	5	1	8·3	7·9	+ 5	69	·833	4·0	0	0·27	−0·27	0	0·62	− 0·62	0	1·01	− 1·01	0	Madras.	
4	...	...	3	17	1	...	1	4	7·7	P	P	76	·920	6·0	0	0·30	−0·30	0·02	P	P	0·02	P	P	0·02	Nellore .	MADRAS, EAST COAST, CENTRAL.
2	1	3	1	7	11	2	3	...	6·3	8·8	−28	80	·961	5·2	1	0·27	+0·73	0·21	0·15	+ 0·06	0·21	0·27	− 0·06	0·15	Masulipatam.	
...	...	2	9	10	2	2	3	2	P	?	?	55	·711	3·6	0	0·70	−0·70	0·05	0·38	− 0·33	0·05	0·44	− 0·39	0·05	Cuddapah .	MADRAS, CENTRAL.
5	5	...	3	4	3	2	7	1	P	?	?	60	·673	2·9	6	1·33	+4·67	3·10	0·65	+ 2·45	3·13	1·19	+ 1·94	1·11	Kurnool.	
7	5	2	2	1	1	3	4	5	4·9	5·2	− 6	57†	·607†	3·4	4	1·27	+2·73	2·66	0·58	+ 2·08	2·66	0·80	+ 1·86	1·40	Bellary.	
1	4	2	8	3	2	5	2	3	P	P	P	71	·815	5·7	4	0·70	+3·30	3·23	0·39	+ 2·84	3·28	0·82	+ 2·46	1·65	Rajahmundry	MADRAS, EAST COAST, NORTH.
2	1	4	2	4	...	6	7	4	7·8	P	P	73	·833	2·8	2	0·50	+1·50	1·87	0·21	+ 1·66	1·93	0·74	+ 1·19	1·45	Cocanada.	
...	2	...	...	...	1	4	21	2	3·5	3·9	−10	72	·812	4·0	1	0·36	+0·64	0·15	0·49	− 0·34	0·15	0·88	− 0·73	0·15	Vizagapatam.	
1	1	1	2	2	4	15	1	3	18·1	14·5	+25	75	·809	0·7	1	0·78	+0·22	0·56	0·54	+ 0·02	0·76	1·44	− 0·68	0·55	Gopalpur.	
...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	**12. Hill Stations.**	
													Temporarily closed.												Shirino.	BALUCHISTAN.
14	1	...	6	2	1	...	4	2	P	P	P	45	·231	1·1	0	?	?	0·22	P	P	1·71	P	P	0·09	Kachh.	
													Observation unreliable.												Pishin.	
26	...	...	...	1	2	...	1	...	3·0	4·8	−38	46	·286	1·2	2	3·55	−1·55	0·37	1·20	− 0·83	1·60	2·90	− 1·30	0·17	Quetta.	
...	5	...	...	...	25	...	...	...	P	P	P	P	?	?	0	P	P	0	P	P	0·92	?	P	0	Kalat.	
...	1	1	3	4	10	9	2	...	6·2	?	P	33	·274	2·5	1	?	P	0·20	P	P	1·61	P	P	0·12	Chaman.	
...	1	9	1	3	6	1	1	7	3·6	P	P	43	·101	3·7	0	?	P	0·05	P	P	0·46	P	P	0·03	Leh.	NORTHERN INDIA.
7	3	1	2	7	7	...	...	3	6·0	P	P	83	·337	3·5	5	?	P	2·63	P	P	7·79	P	P	0·91	Srinagar.	
2	...	...	...	...	18	10	...	...	7·3	P	P	50	·143	3·7	6	P	P	4·56	P	P	13·78	P	P	2·60	Astor (Kashmir).	
				Not recorded.					P	P	P	49	·265	3·5	2	P	P	0·78	P	P	1·22	P	P	0·44	Gilghit.	
5	12	...	...	1	4	...	1	7	12·7	P	P	49	·297	2·8	6	P	?	2·42	?	?	12·01	P	?	0·77	Cherat.	
3	8	2	...	3	...	2	...	12	9·2	8·7	+ 6	45	·206	3·2	8	6·64	+1·36	3·24	3·40	− 0·16	10·84	7·05	+ 3·79	1·23	Murree.	
17	...	3	3	6	...	...	1	...	P	P	P	P	P	3·3	2	P	P	1·06	P	P	4·04	P	P	0·91	Poo.	
11	4	7	3	...	2	3	...	...	5·0*	2·9	+72	47	·211	3·6	5	4·09	+0·91	2·80	1·90	+ 0·90	4·09	4·14	− 0·05	1·02	Simla.	
1	1	6	10	4	...	1	6	1	7·9	6·1	+30	56	·258	3·9	6	P	P	2·37	1·48	+ 0·89	3·17	3·87	− 0·70	0·7	Chakrata.	
...	...	5	11	2	2	2	4	3	?	P	P	56	·266	3·7	4	1·10	+2·90	2·62	?	?	3·27	?	?	1·19	Mussooree.	
14	...	4	3	1	2	2	1	3	3·6	3·0	+20	56	·287	4·2	6	2·55	+3·45	3·65	1·11	+ 2·54	4·29	3·35	+ 0·94	1·25	Ranikhet.	
				Not recorded.					?	P	P	P	?	?	14	P	P	3·82	P	P	9·17	P	P	0·49	Yatung.	
3	1	2	1	10	2	5	5	1	6·7	P	P	76	·159	6·6	20	?	?	11·49	P	?	19·29	P	P	1·65	Gnatong.	
4	1	4	7	2	2	6	2	2	7·3	8·4	−13	78	·312	5·6	11	6·86	+4·24	4·96	4·53	+ 0·43	6·07	6·16	− 0·09	0·68	Darjeeling.	
...	2	3	1	4	5	3	10	2	2·8	P	P	78	·374	5·2	14	P	P	8·02	P	P	15·51	P	P	2·81	Gantak.	

* Mean of 28 days. † Mean of 21 days.

Table

Abstract of Observations taken at 8 A.M. at 204 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	26·041	−·013	?	26·113	9th	25·958	12th	·155	76·4	85·2	−0·4	69·1	+0·8	77·2	+0·2	16·1	91·2	24th & 25th.	60·9	2nd	30·3
	Pachmarhi	3,528	26·443	0	?	26·524	19th	26·333	26th	·191	78·4	90·1	−2·2	67·3	−2·0	78·7	−2·1	22·8	95·7	28th & 30th.	58·2	10th	37·5
South India	Wellington	6,200	24·268	−·010	?	24·320	14th	22·202	25th	·118	66·6	75·2	−0·7	56·3	+0·3	65·8	−0·2	18·9	79·2	2nd & 30th.	50·2	1st	29·0
13. Extra India	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ceylon	Trincomalee	75	29·806	?	29·808	29·869	15th	29·697	25th	·172	85·9	89·8	?	78·1	?	84·0	?	11·7	95·5	30th	74·5	27th	21·0
	Colombo	40	29·880	−·005	29·845	29·956	2nd	29·814	25th	·142	84·6	90·9	?	75·6	?	83·3	?	15·3	93·0	15th & 30th.	73·0	11th & 21st.	20·0
	Galle	48	29·869	?	29·843	29·942	2nd	29·801	25th	·141	83·0	85·9	?	77·9	?	81·9	?	8·0	88·0	4 days	75·0	15th & 21st.	13·0
Persia	Meshed	3,104				Not recorded.					59·3	?	?	51·1	?	?	?	?	?	...	40·9	4th	?
	Teharan	?	25·948	?	?	26·100	9th	25·795	29th	·305	60·7	73·4	?	51·4	?	62·4	?	22·0	81·3	11th	32·2	26th	49·1
	Ispahan	?	?	?	?	?	?	?	?	?	58·1	72·6	?	47·9	?	60·3	?	24·7	79·5	17th	37·4	20th	42·1
	Bushire	14	29·887	?	29·858	30·035	21st	29·737	25th	·298	75·1	82·8	?	68·8	?	75·8	?	14·0	93·5	17th & 28th.	60·5	3rd	33·0
	Jask	?	29·853	?	?	29·941	9th	29·706	26th	·235	78·4	86·0	?	72·6	?	79·3	?	13·4	97·3	30th	64·0	6th	33·3
Arabia	Muscat*	?	29·857	?	?	29·961	2nd & 3rd.	29·704	27th	·257	80·4	83·4	?	77·9	?	80·7	?	5·5	93·1	29th	70·6	4th	22·5
	Baghdad	?	29·488	?	?	29·763	22nd	29·218	12th	·545	67·5	81·2	?	59·8	?	70·5	?	21·4	90·9	7th	50·9	1st	40·0
	Aden	94	29·853	+·008	29·879	29·923	3rd	29·759	27th	·164	81·1	87·9	− 2·7	77·8	+0·2	82·9	−1·3	10·1	92·3	29th	73·4	5th	18·9
	Perim	?	29·736	?	?	29·815	3rd	29·633	27th	·182	81·8	87·9?	?	78·3†	?	83·1†	?	9·6?	90·5	25th	76·8	5th	13·7
hanistan	Kabul	?			Not recorded.						56·0	74·0†	?	46·7	?	60·3†	?	27·3	83·2	21st	37·4	3rd	45·8
Central Asia	Kashgar	?	25·601	?	?	26·040	8th	25·260	27th	·780	61·7	76·5	?	50·8	?	63·7	?	25·7	88·7	24th	38·7	6th	50·0
Arabian Sea Islands.	Amini Devi	15																					
	Minicoy	10	29·922	?	29·857	29·985	3rd	29·862	25th	·123	84·4	91·4	?	Imperfect		?	?	?	94·8	24th	?	?	?
Africa	Zanzibar	73	29·939	?	29·939	30·026	30th	29·859	6th	·167	79·4	84·2	?	77·7	?	81·0	?	6·5	87·6	15th	73·1	30th	14·5

* Mean of 25 days. † Mean of 28 days.

I—*concluded.*

in India, Burma, etc., in April 1895—concluded.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.								Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 30th April 1895.	Normal rainfall for period, 1st March to 30th April.	Variation from normal of period.			
2	2	3	1	...	...	8	10	4	10·1	7·7	+31	34	·322	0·7	1	0·09	+0·91	0·13	0·06	+ 0·07	0·79	0·18	+ 0·61	0·10	Mount Abu	CENTRAL INDIA.
1	3	1	3	4	1	7	9	1	9·4	5·3	+77	34	·319	1·8	2	0·45	+1·55	0·53	0·23	+ 0·30	2·30	0·55	+ 1·75	0·22	Pachmarhi.	
19	5	...	3	...	1	...	...	2	2·6	2·9	−10	68	·440	4·5	9	4·50	+4·50	3·69	2·78	+ 0·91	3·88	5·59	− 1·71	1·32	Wellington.	SOUTH INDIA.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13. Extra India.	
3	...	4	2	4	1	16	...	...	2·0	?	?	75	·927	3·6	8	?	?	4·27	1·75	+2·52	4·27	2·96	+ 1·31	1·27	Trincomalee	CEYLON.
...	4	1	2	5	2	9	6	1	7·2	5·6	+29	76	·915	5·3	16	?	?	9·34	12·32	−2·98	11·18	16·97	− 5·79	3·15	Colombo.	
5	...	3	4	5	...	...	...	13	5·4	?	?	85	·962	4·0	12	?	?	8·29	9·55	−1·26	13·11	14·28	− 1·17	1·97	Galle.	
				Not	recor	ded.			?	?	?	?	?	6·1	7	?	?	3·06	?	?	6·60	?	?	1·00	Meshed.	PERSIA.
1	1	...	1	2	...	12	7	6	6·9	?	?	87	·426	4·4	4	?	?	0·81	?	?	3·76	?	?	0·23	Teharan.	
23	...	4	...	...	...	3	...	...	4·6	?	?	52	·270	2·6	7	?	?	2·80	?	?	3·61	?	?	0·70	Ispahan.	
...	7	6	4	6	1	2	...	4	7·6	9·1	−17	60	·517	?	1	?	?	0·33	0·68	−0·35	0·62	1·40	− 0·78	0·19	Bushire.	
3	2	...	4	3	1	1	5	11	8·4	?	?	66	·638	2·9	0	?	?	0·02	?	?	0·82	?	?	0·01	Jask.	
...	...	1	5	1	2	1	7	8	3·3	?	?	62	·632	1·8	0	?	?	0	?	?	2·54	?	?	0	Muscat†	ARABIA.
8	5	2	...	4	5	1	1	4	4·9	?	?	66	·441	0·9	2	?	?	0·26	?	?	0·33	?	?	0·14	Baghdad.	
5	...	2	18	4	...	...	...	1	12·0	14·8	−19	74	·782	5·1	0	?	?	0	0·66	−0·66	0	1·82	− 1·82	0	Aden.	
2	...	...	9	11	2	1	2	3	9·2	?	?	80	·868	7·2	0	?	?	0·06	?	?	0·30	?	?	0·06	Perim.	
...	5	...	9	1	1	1	12	1	?	?	?	?	?	0·3	3	?	?	1·92	?	?	7·52	?	?	1·34	Kabul .	AFGHANISTAN.
19	1	3	4	...	...	1	...	1	3·4	?	?	·43	·238	3·0	0	?	?	0·01	?	?	0·01	?	?	0	Kashgar .	CENTRAL ASIA.
																									Amini Devi	ARABIAN SEA ISLANDS.
2	3	2	...	...	...	1	10	12	7·3	?	?	75	·887	4·1	...	?	?	1·65	?	?	2·93	?	?	0·45	Minicoy .	
...	...	...	1	1	12	14	1	1	5·3	?	?	86	·866	6·3	15	?	?	5·68	?	?	10·91	?	?	1·06	Zanzibar .	AFRICA.

† Mean of 25 days.

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.						Temperature of Air.										Temperature, Wet-bulb.			
			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.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·863	29·754	·109	29·802	+·001	29·793	91·6	79·2	12·4	94·8	74·2	20·6	87·6	88·9	83·9	+0·2	76·6	80·8	81·1	79·5
	Rangoon	...	·867	·719	·148	·797	−·006	·774	97·8	76·7	21·1	103·1	73·2	29·9	88·3	91·3	84·5	0	72·7	77·9	78·9	76·5
	Diamond Island	...	·885	·770	·115	·820	−·006	·795	86·8	79·3	7·5	89·9	75·2	14·7	84·6	84·3	81·7	−0·3	75·6	77·9	77·4	77·0
	Cocos Island	111	...	...	...	...	...	Imperfect.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Akyab	...	·900	·781	·119	·838	+·006	·800	90·5	74·6	15·9	96·1	69·1	27·0	86·7	87·0	81·9	−0·9	72·2	79·2	79·7	77·0
Assam.	Silchar	...	·806	·672	·134	·740	+·017	·796	87·5	68·1	19·4	95·9	64·3	31·6	79·5	84·9	77·0	−0·7	66·4	72·5	73·1	70·7
	Sibsagar	...	·587	·436	·151	·510	+·018	·801	82·0	65·5	16·5	91·2	60·1	31·1	75·9	80·9	73·0	−0·1	64·8	70·5	72·5	69·3
	Dhubri	...	·775	·626	·149	·695	+·047	·763	86·9	69·3	17·6	94·9	65·4	29·5	78·8	85·5	76·8	−1·4	65·8	70·4	71·5	69·2
Bengal and Orissa.	Chittagong	...	·805	·691	·114	·742	−·006	·777	89·7	71·7	18·0	95·6	64·7	30·9	84·8	85·5	79·8	−0·7	70·2	75·5	76·0	73·9
	Narayanganj	...	·846	·716	·130	·780	+·024	·748	91·8	72·5	19·3	96·8	66·2	30·6	84·5	87·6	80·8	−1·5	69·5	75·5	74·5	73·2
	Calcutta (Alipore)	...	·839	·701	·138	·768	+·025	·735	92·2	73·9	18·3	99·4	66·6	32·8	85·5	89·9	82·5	−2·3	70·4	75·4	74·8	73·5
	Ditto (Chowringhee).	...	·844	?	?	?	?	?	94·1	74·1	20·0	99·0	67·9	31·1	87·4	?	?	?	70·6	77·2	?	?
	Saugor Island	...	·844	·717	·127	·776	+·020	·746	89·1	77·4	11·7	92·2	69·7	22·5	85·0	85·8	81·6	−1·8	74·0	78·5	78·9	77·1
	Burdwan	...	·751	·607	·144	·677	+·027	·722	96·1	74·1	22·0	107·9	68·2	39·7	85·8	93·3	83·5	−3·7	69·9	74·3	73·4	72·5
	Berhampore	...	·790	·646	·144	·716	+·039	·731	94·6	72·9	21·7	101·3	65·2	36·1	85·9	92·9	82·4	−3·8	67·1	74·6	74·1	71·9
	False Point	...	·855	·730	·125	·791	+·009	·753	88·4	75·4	13·0	91·5	68·7	22·8	85·7	85·4	80·4	−1·6	73·2	77·8	78·3	76·4
	Cuttack	...	·775	·628	·147	·707	+·011	·728	98·8	76·1	22·7	112·3	70·0	42·3	87·9	93·8	84·5	−2·0	72·5	76·4	76·4	75·1
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	27·836	27·719	·117	27·780	+·006	·695	93·6	70·0	23·6	103·1	63·7	39·4	85·8	88·7	81·0	−3·0	56·8	66·5	67·0	63·4
	Patna	...	29·348	29·511	·137	29·578	+·031	·711	95·6	71·4	24·2	101·9	62·3	39·6	86·9	93·0	82·7	−3·9	64·3	71·0	70·7	68·7
	Darbhanga	...	·683	·540	·143	·610	+·038	·728	92·2	70·6	21·6	96·3	63·6	32·7	84·6	91·3	81·0	−3·5	65·7	70·9	71·5	69·4
	Allahabad	...	·512	·377	·135	·440	+·014	·702	98·6	70·9	27·7	109·4	62·3	47·1	90·4	97·6	85·0	−2·6	62·5	69·9	70·3	67·6
	Ghazipur	220	·599	·471	·128	·531	+·028	·701	98·2	72·7	25·5	107·3	64·8	42·5	89·5	95·6	85·3	−1·7	64·3	70·5	70·0	68·3
	Lucknow	...	·455	·323	·132	·387	+·024	·706	97·7	66·9	30·8	108·3	56·8	51·5	88·8	96·1	83·2	−4·2	60·6	70·0	70·4	67·0
Upper Sub-Himalayas.	Dehra Dun	...	27·629	27·522	·107	27·564	+·022	·738	87·0	61·9	25·1	99·5	53·4	46·1	77·4	82·6	74·0	−3·0	56·2	63·9	65·3	61·8
	Roorkee	...	28·930	28·820	·110	28·866	+·031	·708	93·9	64·5	29·4	105·7	53·6	52·1	83·9	91·7	79·2	−2·0	58·9	66·2	67·4	64·2
	Meerut	...	29·080	·961	·119	29·014	+·019	·706	95·0	67·2	27·8	106·8	56·6	50·2	86·8	92·8	81·0	−1·3	61·1	67·7	68·1	65·6
	Lahore	...	·107	29·010	·097	·054	+·010	·726	94·8	66·9	27·9	109·3	57·2	52·1	84·5	93·9	81·0	+1·9	60·4	67·5	69·5	65·8
	Ludhiana	...	?	28·899*	?	?	?	?	95·1	66·3	28·8	107·9	57·1	50·8	86·3	92·7	80·6	−0·8	60·1	68·9	70·2	66·4
Indus Valley and N.-W. Rajputana.	Peshawar	...	28·751	·655	·096	28·698	+·007	·793	85·7	61·0	24·7	99·0	50·0	49·0	78·0	83·7	73·3	+0·5	57·3	66·0	67·5	63·6
	Mooltan	...	29·389	29·286	·103	29·333	−·001	·707	101·3	71·4	29·9	113·9	62·0	51·9	88·4	99·4	86·4	+4·2	61·4	69·9	73·5	68·2
	Jacobabad	...	·602	·471	·131	·532	−·021	·668	106·6	72·5	34·1	118·2	61·1	57·1	96·2	104·5	89·4	+4·3	?	76·8	80·7	?
	Kurrachee	...	·800	·701	·099	·749	−·030	·751	89·7	72·7	17·0	94·2	64·2	30·0	83·9	85·7	79·4	+0·2	69·5	76·7	75·9	74·0
E. Rajputana, C. India and Gujarat.	Jeypore	...	28·415	28·298	·117	28·352	+·003	·729	99·2	70·4	28·8	110·5	59·9	50·6	90·1	96·3	84·7	+0·1	60·2	69·2	70·0	66·5
	Ajmere	...	·236	·118	·118	·170	−·015	·701	99·0	72·4	26·6	107·2	57·9	49·3	90·5	97·5	86·6	+2·0	62·8	69·4	72·4	68·8
	Deesa	...	29·384	29·250	·134	29·312	−·015	·718	105·2	70·9	34·3	111·1	61·5	49·6	92·2	103·5	88·5	+1·2	60·9	69·1	69·0	66·3
	Nowgong	...	·060	28·938	·122	28·994	−·002	·689	99·2	?	?	109·6	?	?	90·5	97·3	?	?	61·1	68·1	68·7	65·9
	Agra	...	·263	29·143	·120	29·194	+·002	·695	98·2	72·2	26·0	108·5	64·0	44·5	91·0	96·3	85·1	−2·9	61·5	68·8	69·3	66·5
Deccan.	Belgaum	...	27·380	27·254	·126	27·320	−·004	·707	95·0	66·4	28·6	98·4	62·2	36·2	85·7	87·5	78·3	−1·0	63·9	67·0	71·0	67·3
	Sholapur	...	28·288	28·130	·158	28·208	+·004	·692	102·7	74·3	28·4	107·7	68·7	39·0	92·0	99·3	87·3	−1·5	63·1	70·0	71·0	67·9
	Poona	...	·053	27·915	·138	27·990	−·001	·713	102·4	68·5	33·9	106·4	63·8	42·6	91·7	98·2	84·9	+0·3	60·1	65·0	67·2	64·1
	Akola	...	·922	28·759	·163	28·835	−·003	·689	104·8	73·9	30·9	109·2	65·8	43·4	93·4	103·3	89·7	−0·6	62·5	71·0	70·9	68·1
	Buldana	2,132	27·744	27·612	·132	27·673	−·010	·675	99·4	74·1	25·3	103·9	66·0	37·9	90·5	97·7	87·1	−0·9	58·6	64·7	64·9	62·8

* Mean of 26 days

II.

at 88 Stations in India, Burma, etc., for the month of April 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·873	·961	·960	·932	0	88	74	71	78	0	6·6	6·6	6·6	+2·5	...	3	8	11	19	8	6	4	1	S 52° E	N 84° E	45	45	156	113	...	...	Port Blair	Burma Coast and Bay Islands.
·750	·819	·824	·798	+·008	82	62	58	67	0	3·8	6·0	4·9	+1·6	...	1	1	1	9	20	16	9	3	S 23° W	S 24° W	62	60	118	136	...	...	Rangoon	
·839	·869	·847	·852	−·006	84	73	72	76	0	6·1	5·7	5·9	+2·9	...	4	1	2	2	3	9	15	24	N 73° W	N 58° W	60	73	299*	168	...	...	Diamond Island	
													Imperfect.																1·56	0·74	Cocos Island.	
·763	·898	·916	·859	+·043	89	71	72	77	+ 4	6·4	5·0	5·7	+2·7	...	10	9	2	4	9	1	20	5	N 61° W	S 75° W	25	40	114	97	...	...	Akyab	
·630	·712	·659	·667	−·052	91	72	57	73	− 3	6·7	7·2	7·0	+1·7	43	1	1	5	4	3	1	1	1	S 57° E	S 86° E	12	21	62*	81	...	...	Silchar	Assam.
·609	·679	·692	·660	−·008	96	76	67	80	− 7	4·8	4·4	4·6	−2·3	19	...	35	...	1	...	4	...	1	N 45° E	N 59° E	52	51	103*	67	...	...	Sibsagar	
·599	·634	·589	·611	−·043	84	66	51	67	− 1	4·6	3·9	4·3	+1·0	3	1	19	18	2	2	4	4	7	N 59° E	N 74° E	42	32	229	192	...	...	Dhubri	
·732	·753	·773	·753	−·065	93	64	64	74	− 3	6·6	5·1	5·9	+1·9	...	3	7	2	8	14	9	9	8	S 34° W	S 12° W	25	37	118*	169	...	...	Chittagong	Bengal and Orissa.
·688	·761	·682	·710	−·097	86	65	54	68	− 5	5·8	6·5	6·2	+2·3	...	3	3	5	10	14	9	7	5	S 8° W	S 4° E	32	60	147	165	...	...	Narayanganj	
·705	·750	·664	·706	−·109	83	61	48	64	− 7	2·8	4·2	3·5	+0·8	...	2	2	7	7	18	17	5	2	S 9° W	S 3° W	52	73	137	175	...	...	Calcutta (Alipore).	
·709	·808	?	?	?	84	62	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	1·31	0·39	Ditto (Chowringhee).	
·800	·890	·898	·863	−·076	94	74	73	77	− 3	6·3	6·5	6·4	+1·9	...	...	2	2	11	29	11	4	1	S 2° W	S 20° W	70	76	382	401	...	...	Saugor Island.	
·680	·700	·556	·645	−·008	80	57	37	58	+ 4	2·4	5·5	4·0	+1·6	4	2	4	6	10	13	10	9	2	S 5° W	S 40° W	33	40	95*	114	...	...	Burdwan	
·591	·708	·596	·632	+·002	73	58	40	57	− 2	3·2	3·9	3·6	+0·4	5	3	4	9	4	13	9	8	5	S 15° W	S 23° W	22	32	92	124	...	...	Berhampore	
·793	·849	·875	·839	−·067	90	70	72	77	− 7	4·4	6·2	5·3	+2·2	1	1	2	4	6	31	11	2	2	S 8° E	S 38° W	67	79	270*	336	...	...	False Point	
·757	·760	·683	·733	−·035	84	58	44	62	0	2·3	4·1	3·2	+0·4	3	6	4	2	6	15	23	1	...	S 17° W	S 17° W	47	62	107	124	...	...	Cuttack	
·303	·413	·393	·370	+·074	42	35	32	36	+ 8	3·7	7·7	5·7	+3·1	2	7	2	6	6	9	7	11	10	S 77° W	N 74° W	20	49	232	201	...	...	Hazaribagh	
·518	·551	·456	·509	+·041	67	44	31	47	+ 6	1·5	3·7	2·6	+0·6	...	1	16	22	1	1	1	6	12	N 46° E	N 38° W	43	27	144*	108	...	...	Patna	Gangetic Plain and Chota Nagpur.
·573	·576	·513	·554	−·007	76	49	36	54	+ 3	1·6	2·4	2·0	+0·9	...	...	5	19	15	3	4	9	5	S 60° E	S 24° E	33	8	163	138	...	...	Darbhanga	
·459	·460	·378	·432	+·042	60	33	22	38	+ 6	2·2	2·6	2·4	+1·0	4	5	8	5	4	1	4	13	16	N 42° W	N 52° W	33	25	123	86	...	...	Allahabad	
·500	·496	·398	·464	+·064	62	36	24	41	+ 9	2·1	3·3	2·7	+1·8	2	...	3	22	4	2	8	10	9	N 59° E	N 82° W	12	43	81	87	0·34	0·24	Ghazipur	
·445	·490	·404	·443	+·037	67	37	24	42	+ 8	2·7	3·9	3·3	+1·3	4	4	8	9	5	3	4	9	14	N 18° W	N 53° W	18	44	50*	106	...	...	Lucknow	
·387	·433	·415	·412	?	70	48	38	52	?	3·6	5·4	4·5	+1·7	6	2	3	3	6	6	15	14	5	S 55° W	N 79° W	38	21	33	62	...	...	Dehra Dun	
·431	·411	·350	·398	+·079	71	36	24	44	+10	2·7	2·4	2·6	+0·5	27	2	9	...	8	...	6	2	6	N 6° E	N 73° W	23	10	83	76	...	...	Roorkee	Upper Sub-Himalayas.
·464	·426	·364	·418	+·019	70	34	25	43	+ 5	2·1	2·7	2·4	+0·4	14	...	1	12	6	...	2	14	11	N 66° W	N 53° W	12	44	63	60	...	...	Meerut	
·445	·451	·400	·432	+·044	68	39	26	44	+ 7	2·4	1·5	2·0	−0·6	3	11	10	3	8	4	1	6	14	N 3° W	N 19° W	28	26	75	80	...	...	Lahore	
·444	·481	·446	·457	+·052	69	39	29	46	+ 2	2·7	3·6	3·2	+0·2	6	5	13	1	12	4	3	2	14	N 27° E	N 59° W	18	27	68	52	...	...	Ludhiana	
·433	·497	·476	·468	+·057	79	53	46	58	+ 4	2·8	5·4	4·1	−0·5	18	6	9	10	4	1	1	6	5	N 38° E	N 9° E	23	24	76*	104	...	...	Peshawar	
·416	·490	·480	·459	+·005	55	37	26	39	− 5	1·8	1·4	1·6	−0·1	11	...	31	3	12	...	2	...	1	N 68° E	N 26° W	57	13	44*	59	...	...	Mooltan	Indus Valley and N.-W. Rajputana.
?	·673	·744	?	?	?	40	33	?	?	1·4	3·2	2·3	−0·4	11	3	4	8	11	12	6	2	3	S 32° E	S 84° E	32	18	86*	94	...	...	Jacobabad	
·685	·825	·764	·758	+·043	85	71	61	72	+ 3	1·4	0·9	1·2	−0·8	...	...	...	...	...	...	20	35	5	S 79° W	S 62° W	87	80	313	345	...	...	Kurrachee	
·401	·460	·414	·425	+·108	53	32	24	36	+ 8	3·3	4·6	4·0	+1·8	1	4	8	6	4	1	6	17	13	N 56° W	N 42° W	32	53	112	133	...	...	Jeypore	
·457	·458	·467	·469	+·078	59	32	26	38	+ 4	2·1	3·0	2·6	+0·6	3	3	6	...	6	4	12	15	11	S 86° W	S 74° W	38	52	127	131	...	...	Ajmere	E. Rajputana, C. India and Gujarat.
·409	·409	·250	·353	−·013	52	28	12	31	+ 3	0·7	1·2	1·0	−0·8	...	5	4	...	1	3	15	25	7	S 88° W	N 89° W	62	53	221	225	...	...	Deesa	
?	·391	·320	?	?	?	28	19	?	?	1·8	3·6	2·7	+0·4	5	2	5	8	3	1	2	26	8	N 71° W	N 76° W	35	54	68*	68	...	...	Nowgong	
·412	·405	·357	·392	+·053	52	28	21	34	+ 6	1·9	2·3	2·1	+0·7	...	...	6	...	10	...	13	...	31	N 63° W	N 84° W	37	44	135*	114	...	...	Agra	
·565	·434	·557	·518	−·001	87	36	44	56	+ 6	0·6	3·4	2·0	−0·6	...	9	6	3	2	3	11	16	6	N 75° W	S 88° W	34	25	302	314	...	...	Belgaum	
·444	·462	·409	·436	+·054	53	31	22	35	+ 6	0·4	5·6	3·0	−0·4	3	7	9	8	14	3	3	...	13	N 59° E	N 18° E	25	14	255*	205	...	...	Sholapur	Deccan.
·419	·289	·281	·330	−·053	60	19	15	31	0	0·5	2·7	1·6	−0·9	8	1	1	2	2	...	3	18	24	N 65° W	N 35° W	60	49	181	232	...	...	Poona	
·418	·460	·323	·400	+·115	50	30	16	32	+10	1·3	3·8	2·6	+0·9	4	6	5	1	8	3	6	9	18	N 59° W	N 48° W	30	57	161	131	...	...	Akola	
·306	·292	·210	·270	−·044	36	20	12	23	− 3	0·5	3·7	2·1	−0·4	2	9	2	1	...	2	4	4	36	N 43° W	N 31° W	72	55	194*	213	0·10	0·09	Buldana	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 88 Stations

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*continued.*	Khandwa	...	28·811	28·658	·153	28·730	−·002	29·698	104·0	74·7	29·3	109·7	62·1	47·6	93·8	101·5	89·7	+0·4	59·4	67·9	68·2	65·2
	Hoshangabad	...	·828	·678	·150	·748	−·017	·698	101·1	72·6	28·5	109·0	65·8	43·2	91·0	100·3	87·6	−1·8	61·5	70·1	70·7	67·4
	Nagpur	...	·810	·659	·151	·730	+·007	·680	102·5	74·3	28·2	112·7	61·1	51·6	92·0	99·9	88·5	−1·8	64·4	76·0	77·1	72·4
	Do. (Sanitary Commr.'s Office)	...	·840	·692	·148	·766	?	·708	103·5	74·4	29·1	111·3	65·9	45·9	92·8	100·4	88·2	?	63·2	70·5	71·6	68·4
	Jubbulpore	...	·509	·364	·145	·432	−·002	·680	99·0	68·9	30·1	107·8	60·1	47·7	90·6	96·3	84·3	−1·9	62·6	69·0	68·0	66·5
	Saugor	...	·083	27·962	·121	·018	−·001	·681	99·1	71·1	28·0	108·4	63·2	45·2	90·8	96·3	85·4	−1·3	58·8	66·5	66·5	63·9
	Raipur	...	·875	28·718	·157	·792	+·010	·674	100·6	75·0	25·6	110·5	67·2	43·3	91·4	98·4	88·0	−2·8	65·4	72·5	72·1	70·0
	Sutna	...	·777	·651	·126	·709	+·003	·685	98·0	70·1	27·9	108·1	61·2	46·9	91·6	96·4	84·4	−2·1	60·1	66·9	66·6	64·5
	Hyderabad (Deccan).	...	·205	·055	·150	·127	?	·719	98·5	73·3	25·2	107·2	68·0	39·2	87·5	95·9	85·3	?	67·9	73·5	73·8	71·7
West Coast.	Bombay	...	29·877	29·759	·118	29·816	+·005	·793	88·5	77·1	11·4	93·0	74·1	18·9	84·0	85·5	82·0	−0·6	72·5	76·4	77·0	75·3
	Ratnagiri	...	·791	·678	·113	·732	+·005	·779	89·5	77·5	12·0	91·9	74·0	17·9	86·7	86·7	82·7	+0·3	72·9	77·0	77·5	75·8
	Karwar	...	·876	·758	·118	·815	+·003	·790	89·7	76·9	12·8	91·3	74·2	17·1	86·4	87·0	82·6	−0·1	74·2	77·0	77·3	76·2
	Cochin	...	·908	·813	·095	·859	+·006	·796	91·9	77·8	14·1	95·1	70·7	24·4	86·6	89·5	84·2	−0·1	74·6	78·8	79·9	77·8
South India.	Salem	...	28·989	28·814	·175	28·911	−·012	·769	99·4	75·4	24·0	105·8	69·1	36·7	88·2	94·5	85·0	−1·0	72·6	76·5	76·3	75·2
	Mysore	...	27·434	27·279	·155	27·357	?	·748	92·5	69·4	23·1	97·1	62·2	34·9	81·4	88·1	79·8	?	65·3	71·2	69·4	68·6
	Mercara	...	26·309	26·196	·113	26·261	+·059	?	81·9	63·9	18·0	90·2	59·9	30·3	73·7	75·5	71·3	−1·6	62·1	67·5	68·5	66·0
	Bangalore	...	·942	·809	·133	·880	−·011	·736	91·4	68·3	23·1	95·8	62·1	33·7	81·3	87·7	78·9	−2·1	64·3	70·2	68·9	67·8
	Hassan	...	·883	·756	·127	·825	?	·747	89·6	66·3	23·3	95·7	63·8	31·9	81·2	86·6	77·2	?	63·7	69·6	70·2	67·8
	Chitaldroog	...	27·519	27·373	·146	27·445	?	·717	94·2	70·5	23·7	99·6	61·5	38·1	84·6	91·9	81·8	?	62·6	70·1	69·3	67·3
	Trichinopoly	...	29·649	29·470	·179	29·569	−·015	·751	101·4	77·6	23·8	107·3	70·3	37·0	91·1	98·0	87·4	+0·4	73·4	76·6	76·5	75·5
	Madras	...	·827	·757	·130	·829	+·006	·780	94·9	77·3	17·6	108·1	70·7	37·4	90·7	88·6	84·8	0	?	78·2	78·5	77·5
	Bellary	...	28·419	28·263	·156	28·340	+·020	·751	99·8	74·1	25·7	104·1	70·0	34·1	88·4	93·4	85·1	−4·3	65·8	71·0	71·7	69·5
	Vizagapatam	...	29·869	29·740	·129	29·802	+·013	·771	87·9	81·0	6·9	95·3	78·8	16·5	85·8	85·6	84·2	−2·1	75·2	76·5	77·6	76·4
	Cocanada	...	·875	·731	·144	·803	?	·765	93·1	76·6	16·5	105·8	72·1	33·7	87·8	89·4	84·0	?	73·3	77·7	77·4	76·1
Hill Station, Baluchistan.	Quetta	...	24·653	24·575	·078	24·606	+·022	?	79·2	46·6	32·6	86·4	36·0	50·4	71·8	75·3	61·9	+3·0	41·5	54·6	55·3	50·5
Hill Stations, Northern India.	Leh	...	19·738	19·648	·090	19·699	+·022	?	56·6	28·7	27·9	66·2	20·4	45·8	46·6	53·0	43·1	+0·3	25·4	35·1	39·0	33·2
	Srinagar	...	24·924	24·838	·086	24·873	?	?	69·3	46·9	22·4	79·6	39·1	40·5	57·7	68·0	57·8	?	45·3	52·1	58·3	51·9
	Murree	...	23·863	23·832	·031	23·839	+·015	?	68·9	52·5	16·4	82·8	34·8	48·0	64·3	64·9	59·7	+1·3	43·0	51·3	52·5	48·9
	Chamba	3,005	26·879	26·794	·085	26·845	−·016	?	81·2	57·0	24·2	95·3	46·2	49·1	70·7	78·1	68·1	−1·4	52·2	58·6	61·1	57·3
	Kailang	10,087	20·837	20·783	·054	20·822	+·014	?	50·9	29·0	21·9	63·4	18·0	45·4	43·0	48·2	39·1	−1·2	26·3	34·3	38·0	32·9
	Simla (Ridge)	...	23·134	23·087	·047	23·103	+·009	?	63·6	51·1	12·5	75·4	41·1	34·3	58·8	60·6	56·6	−2·0	43·3	48·2	49·8	47·1
	Chakrata	...	·353	·287	·066	·312	+·008	?	66·9	50·7	16·2	79·3	36·9	42·4	60·8	63·2	57·8	−1·9	44·7	50·6	52·0	48·1
	Ranikhet	...	24·121	24·051	·070	24·075	+·012	?	70·2	54·3	15·9	79·9	46·0	33·9	65·5	65·1	61·0	−3·7	47·5	53·9	53·7	51·8
	Katmandu	4,388	25·571	25·505	·066	25·536	−·026	?	79·9	52·4	27·5	86·0	44·6	41·4	70·6	72·8	64·2	−2·2	50·6	59·8	60·2	56·8
	Darjeeling	...	22·991	22·904	·087	22·944	+·006	?	59·6	46·7	12·9	64·1	41·9	22·2	55·6	55·7	52·1	−1·6	44·2	51·2	51·0	48·8
	Demagiri	?	?	?	?	?	?	?	89·2	70·0	19·2	95·3	64·2	31·1	83·5	85·2	78·6	−0·1	?	?	?	?
	Tura	3,943	?	?	?	?	?	?	87·0	68·9	18·1	91·8	63·4	28·4	80·3	82·7	76·9	?	?	69·1	69·6	?
Hill Stations, Central India.	Mount Abu	...	26·057	25·976	·081	26·011	−·016	?	85·4	69·1	16·3	91·2	60·9	30·3	79·7	83·6	76·8	+1·0	54·3	61·4	63·7	59·8
	Pachmarhi	...	·456	26·346	·110	·396	−·001	?	90·3	67·3	23·0	96·7	58·0	38·7	82·6	87·7	79·7	−1·6	55·3	61·7	62·7	59·9
	Chikalda	3,642	·333	·225	·108	·274	−·013	?	90·3	70·2	20·1	94·9	60·0	34·9	82·2	88·6	81·3	−1·6	57·0	61·5	62·3	60·3

II—*continued.*

in India, Burma, etc., for the month of April 1895—continued.

Vapour tension.					Humidity.					Cloud.				Wind direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean direction of wind for the month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall of the month.	Heaviest rainfall during the month.		
.327	.363	.278	.323	—.024	37	23	14	25	−2	1·2	3·4	2·3	+0·4	...	2	7	1	3	...	10	3	34	N. 50° W.	N. 49° W.	% 57	% 62	173	140	...	...	Khandwa	
.415	.478	.382	.425	+.083	51	33	20	35	+8	1·5	3·8	2·7	+0·4	17	1	3	10	...	7	5	10	5	S. 52° W.	S. 89° W.	10	32	49	70	...	...	Hoshangabad	Deccan—*continued.*
.488	.704	.656	.615	+.252	58	47	35	47	+20	2·1	5·5	3·8	+0·8	...	8	6	3	8	15	5	6	9	S. 33° W.	N. 63° W.	11	20	174	127	...	...	Nagpur	
.443	.469	.416	.441	P	53	31	23	35	P	1·2	3·4	2·3	P	2	11	4	11	6	8	6	10	2	S. 80° E.	P	5	P	62*	P	...	...	Do. (Sanitary Commr.'s Office)	
.492	.442	.331	.422	+.093	70	31	20	40	+11	1·3	3·3	2·3	+0·1	2	3	7	1	7	9	6	12	13	S. 86° W.	N. 66° W.	24	32	82	81	...	...	Jubbulpore	
.247	.348	.279	.325	+.024	45	24	17	29	+ 3	1·1	2·3	1·7	+0·3	...	3	3	3	3	3	23	10	12	S. 75° W.	N. 73° W.	48	47	77	90	...	...	Saugor	
.500	.547	.433	.494	+.084	59	38	25	41	+ 8	1·8	3·8	2·8	+0·4	10	6	3	2	...	3	14	14	8	N. 88° W.	N. 88° W.	42	35	201*	150	...	...	Raipur	
.400	.358	.286	.348	+.099	54	24	17	32	+10	1·0	2·5	1·8	0	1	10	2	3	3	7	4	12	18	N. 60° W.	N. 60° W.	40	55	160*	168	...	...	Sutna	
.618	.655	.556	.610	P	76	51	34	54	P	1·9	3·6	2·8	P	7	5	4	5	11	9	2	12	5	S. 11° W.	P	12	P	116*	P	...	...	Hyderabad (Deccan)	
.738	.809	.816	.788	—.029	79	69	67	72	−3	0·8	0·5	0·7	−1·5	...	2	2	4	2	3	5	21	21	N. 72° W.	N. 52° W.	57	55	233	271	...	...	Bombay	West Coast.
.752	.800	.823	.792	—.002	79	63	65	69	−1	1·8	3·1	2·5	+1·7	...	3	...	...	...	11	18	17	11	S. 71° W.	N. 76° W.	67	67	215*	242	...	...	Ratnagiri	
.812	.805	.810	.809	—.018	88	64	63	72	−1	2·3	3·7	3·0	+0·7	...	1	...	...	...	...	17	23	19	N. 87° W.	N. 84° W.	82	75	141	P	...	...	Karwar	
.818	.884	.894	.865	—.021	86	70	64	73	−4	4·5	5·2	4·9	+1·1	2	7	6	1	...	...	2	34	8	N. 70° W.	N. 82° W.	77	55	153	P	...	...	Cochin	
.768	.756	.666	.730	—.006	87	57	43	62	+4	4·5	5·9	5·2	+1·6	9	5	9	4	10	4	13	4	2	S. 20° E.	S. 7° W.	13	37	78	112	...	...	Salem	South India.
.576	.637	.490	.565	P	80	59	39	59	P	3·8	6·2	5·0	P	13	3	4	8	9	6	5	6	6	S. 31° E.	P	12	P	178*	P	...	...	Mysore	
.541	.605	.617	.588	—.001	91	74	71	78	+ 5	1·5	5·7	3·6	−1·8	15	5	1	3	...	3	5	22	6	N. 82° W.	N. 70° W.	45	45	124	80	...	...	Mercara	
.560	.612	.490	.554	+.018	81	57	39	59	+ 6	2·6	3·9	3·3	−0·1	2	4	6	8	6	7	10	6	11	S. 62° W.	S. 33° W.	8	52	171*	85	...	...	Bangalore (Fort)	
.560	.592	.551	.568	P	87	56	44	62	P	3·6	6·6	5·1	P	...	4	13	9	3	2	8	13	8	N. 24° W.	P	17	P	78*	P	...	...	Hassan	
.473	.557	.434	.488	P	64	47	30	47	P	2·2	5·3	3·8	P	...	5	10	11	5	3	6	12	8	N. 3° W.	P	12	P	161*	P	...	...	Chitaldroog	
.773	.722	.623	.706	—.018	82	49	35	55	0	2·4	4·2	3·3	−1·2	17	3	17	4	4	2	4	6	3	N. 35° E.	S. 54° E.	22	17	99	99	...	...	Trichinopoly	
P	.800	.841	.848	−.018	P	56	62	71	−3	3·1	2·7	2·9	0	...	1	2	16	28	6	2	3	2	S. 54° E.	S. 40° E.	65	83	182	186	...	...	Madras	
.535	.544	.506	.528	+.039	64	41	35	46	+10	3·2	7·1	5·2	+2·0	5	6	2	8	4	12	5	7	11	S. 63° W.	S. 37° W.	12	11	120	126	...	...	Bellary	
.792	.801	.848	.814	−.025	75	64	68	69	+2	3·2	4·4	3·8	+1·2	...	1	2	1	4	19	22	10	1	S. 32° W.	S. 43° W.	67	64	83	91	...	...	Vizagapatam	
.780	.817	.786	.794	P	85	62	57	68	P	2·4	2·0	2·2	P	...	2	5	8	24	7	11	2	1	S. 35° E.	P	52	P	196*	P	...	...	Cocanada	
.215	.251	.232	.233	−.028	67	32	28	42	− 9	1·4	3·9	2·7	−0·8	18	...	...	...	2	4	7	13	16	N. 88° W.	N. 81° W.	47	36	75*	101	...	...	Quetta	Hill Station, Baluchistan.
.113	.108	.123	.115	+.010	72	37	33	47	+ 4	4·6	5·6	5·1	−1·2	1	3	5	3	2	11	16	13	6	S. 58° W.	S. 54° W.	40	19	85	72	...	...	Leh	
.287	.329	.384	.333	P	88	69	58	72	P	2·5	3·9	3·2	P	8	13	5	5	3	7	4	3	12	N. 16° W.	P	22	P	108*	P	...	...	Srinagar	
.181	.249	.272	.234	+.002	49	43	45	46	− 3	3·8	5·1	4·5	−0·9	4	4	1	...	17	12	11	2	9	S. 9° W.	S. 40° E.	35	16	216*	216	...	...	Murree	
.342	.354	.348	.348	+.035	74	49	39	54	+ 6	4·5	6·2	5·4	−1·1	18	3	...	3	2	...	...	9	25	N. 49° W.	N. 10° W.	50	17	138*	115	2·25	1·43	Chamba	
.123	.127	.144	.131	−.036	76	46	44	55	− 7	4·0	5·6	4·8	−1·2	...	...	...	...	4	6	28	19	3	S. 55° W.	S. 61° W.	77	72	44	51	2·27	1·45	Kailang	
.204	.233	.249	.229	−.015	55	48	48	50	+ 4	4·4	5·3	4·9	+0·7	15	11	8	3	1	3	17	1	1	N. 69° W.	S. 69° W.	8	38	124	?	...	...	Simla (Ridge)	Hill Stations, Northern India.
.238	.268	.277	.267	+.063	65	52	50	57	+14	4·3	5·9	5·2	+1·6	...	...	1	9	3	2	4	36	5	S. 85° W.	S. 68° W.	52	19	194	143	...	...	Chakrata	
.262	.300	.307	.290	+.028	63	49	52	55	+11	4·2	4·7	4·5	+1·3	20	3	2	1	3	4	11	13	3	S. 68° W.	S. 62° W.	33	47	88	84	...	...	Ranikhet	
.354	.392	.378	.376	+.019	88	53	48	63	+4	4·9	6·0	5·5	+1·2	...	1	5	11	8	2	3	19	10	N. 77° W.	N. 83° W.	13	62	30	?	2·81	0·70	Katmandu	
.266	.334	.328	.309	−.014	83	76	73	77	+2	6·5	7·2	6·9	+0·8	1	3	6	7	1	5	19	16	1	S. 59° W.	S. 72° W.	35	49	172	202	...	...	Darjeeling	
P	P	P	P	P	P	P	P	P	P	P	P	P	P	...	6	6	16	4	2	9	14	3	N. 18° E.	S. 36° W.	3	6	P	P	5·41	1·60	Demagiri	
P	.578	.581	P	P	P	58	54	P	P	5·6	6·1	5·9	+2·6	...	6	3	...	2	20	23	4	2	S. 33° W.	S. 5° W.	57	67	P	P	9·44	2·50	Tura	
.357	.340	.367	.321	+.073	36	34	32	34	+ 6	0·9	1·8	1·4	−0·8	1	7	3	...	...	1	24	15	9	S. 86° W.	S. 76° W.	60	53	241*	187	...	...	Mount Abu	Hill Stations, Central India.
.305	.312	.282	.300	+.050	46	29	23	33	+7	1·5	3·4	2·5	+0·4	3	3	5	5	3	3	7	20	11	N. 79° W.	N. 58° W.	38	47	198*	128	...	...	Pachmarhi	
.315	.311	.260	.295	+.019	43	29	20	31	+ 5	2·5	4·8	3·7	+0·4	20	10	...	1	6	3	4	1	15	N. 41° W.	N. 40° W.	23	48	176	192	0·84	0·77	Chikalda	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 88 Stations

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L., and for gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, South India.	Wellington	...	24·276	24·188	·088	24·232	−·007	?	75·2	56·3	18·9	79·4	50·2	29·2	70·7	68·9	64·2	−0·7	54·6	60·8	61·8	59·0
Extra India.	Muscat	...	29·865	29·797	·068	29·831	?	?	83·6	77·9	5·7	90·9	70·6	20·3	82·0	82·9	80·6	?	65·1	71·7	72·6	69·8
	Aden	...	·858	·740	·118	·790	+·004	29·815	88·1	77·8	10·3	92·5	73·3	19·2	83·3	85·7	82·3	−0·4	71·7	75·6	74·2	73·8
	Perim	...	·749	·631	·118	·681	?	?	88·1	78·3	9·8	90·5	76·8	13·7	84·1	85·2	82·5	?	65·5	77·8	78·4	73·9
	Minicoy	...	·936	·830	·106	·876	?	·811	91·5	?	?	94·8	?	?	87·6	87·6	?	?	76·1	79·4	79·2	78·2
	Zanzibar	...	·945	·829	·116	·887	?	·886	84·0	77·7	6·3	87·6	73·1	14·5	81·2	83·0	80·6	?	75·6	76·8	76·7	76·4
	Port Victoria (Seychelles).	15	·957	·865	·092	·911	?	·871	94·6	76·5	8·1	86·0	74·0	12·0	82·9	83·7	80·4	?	73·1	76·7	76·8	75·5

II—*concluded.*

in India, Burma, etc., for the month of April 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·413	·132	·480	·441	+·049	90	58	69	73	+10	5·3	7·6	6·5	+2·0	7	14	6	8	17	3	...	...	5	N. 72° E.	S. 49° E.	37	68	61	64	...	...	Wellington	Hill Station South India.
·453	·647	·669	·590	?	48	60	60	56	?	1·9	2·8	2·4	?	...	5	9	10	1	...	2	4	19	N. 5° W.	?	46	?	82	?	...	...	Muscat	Extra India.
·700	·784	·699	·728	−·053	73	69	57	66	−4	4·3	1·6	3·0	+0·3	1	1	6	31	10	5	6	...	...	S. 74° E.	N. 81° E.	67	61	357	373	...	...	Aden	
·458	·872	·883	·738	?	47	74	73	65	?	5·5	4·2	4·9	?	5	1	...	14	25	3	3	3	6	S. 52° E.	?	47	?	218	?	...	...	Perim	
?	·895	·883	?	?	?	69	68	?	?	3·8	4·5	4·2	?	4	8	5	1	...	...	2	15	25	N. 47° W.	?	67	?	176	?	...	...	Minicoy	
·859	·866	·835	·853	?	90	81	74	82	?	5·4	6·9	6·2	?	...	...	...	...	14	31	12	...	...	S. 2° E.	S. 12° W.	86	64	129	155	...	...	Zanzibar	
·768	·839	·830	·812	?	81	75	72	77	?	5·4	5·3	5·4	?	...	6	8	5	16	5	1	3	16	N. 49° E.	?	15	?	103	?	3·75	2·30	Port Victoria (Seychelles).	

G. I. C. P. O.—No. 28 Meteor.—6-6-95.—377.

CHART OF INDIA

SHEWING THE MEAN 8 A.M. DISTRIBUTION OF PRESSURE AND WIND DIRECTIONS IN THE MONTH OF **APRIL 1895.**

Scale of Miles 250

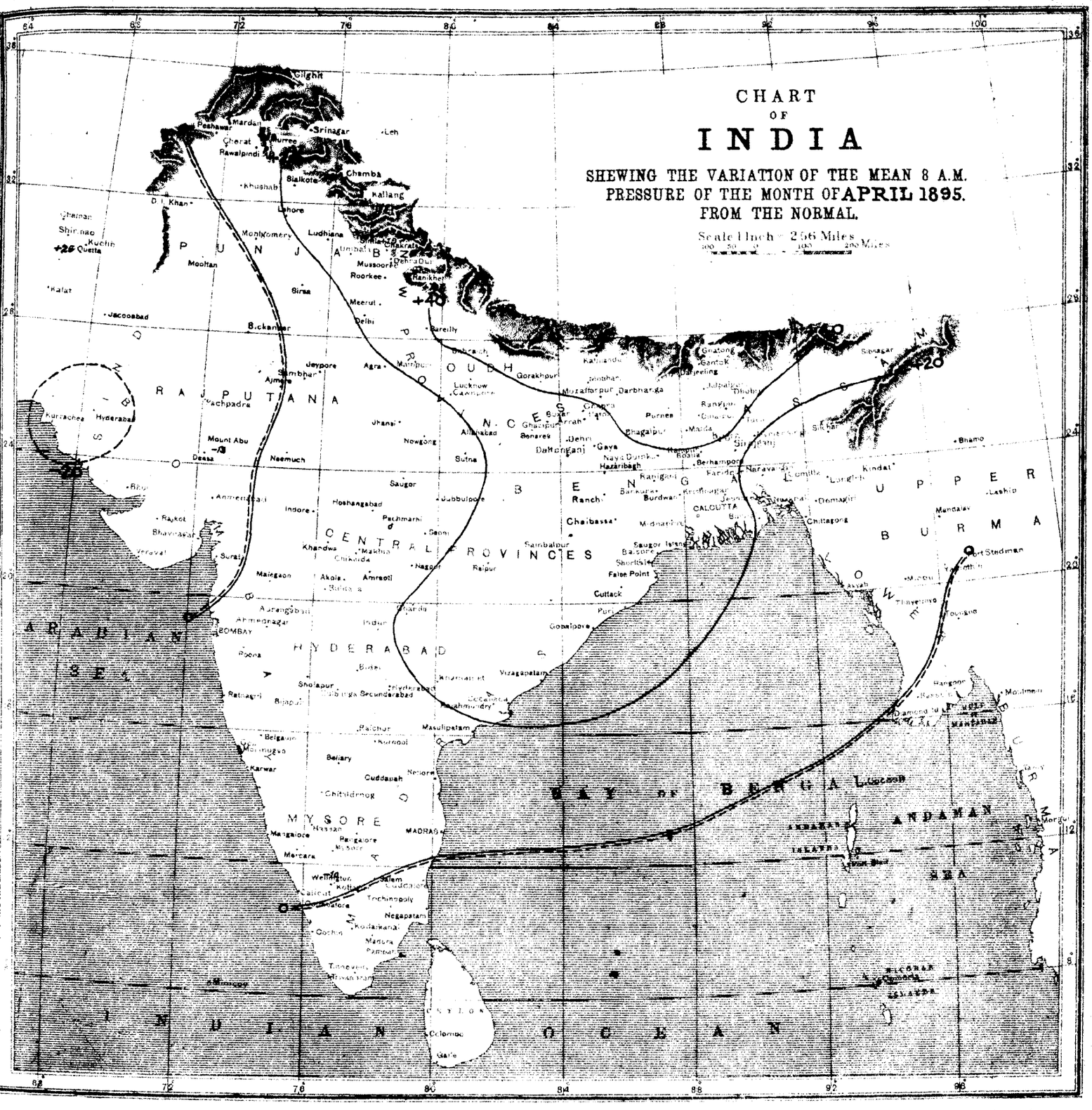
Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr., I.—June 95.—6,000.
Reg. No. 149, Wr., I.—Apl. 95—4,500.
Zinco., S. I. O., Calcutta.



Explanation.

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

Reg. No. 155, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.

Zinco. S. I. O., Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

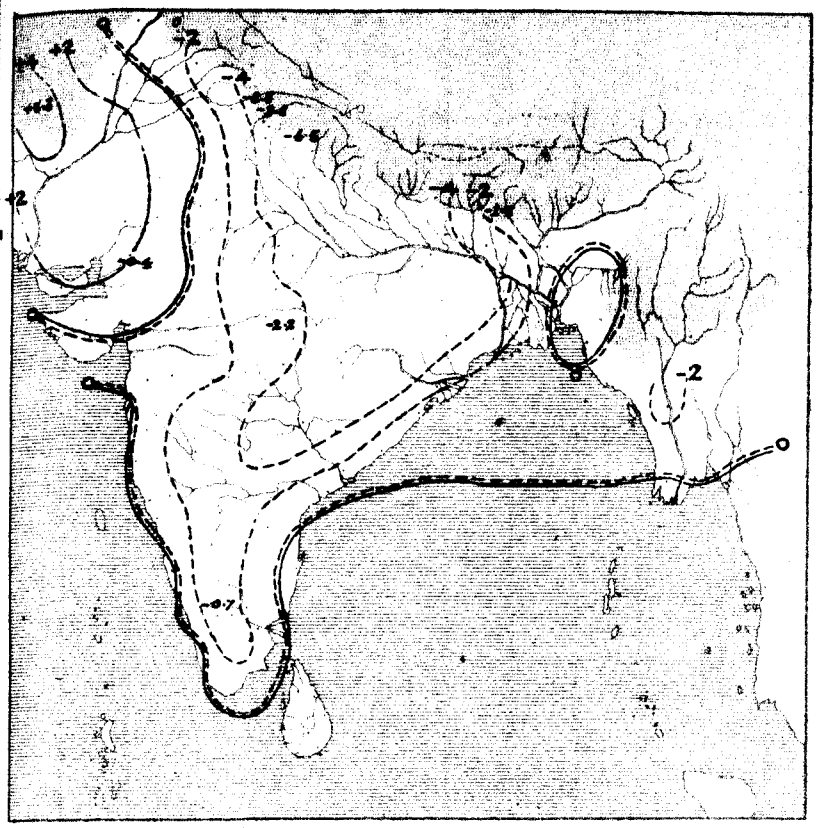
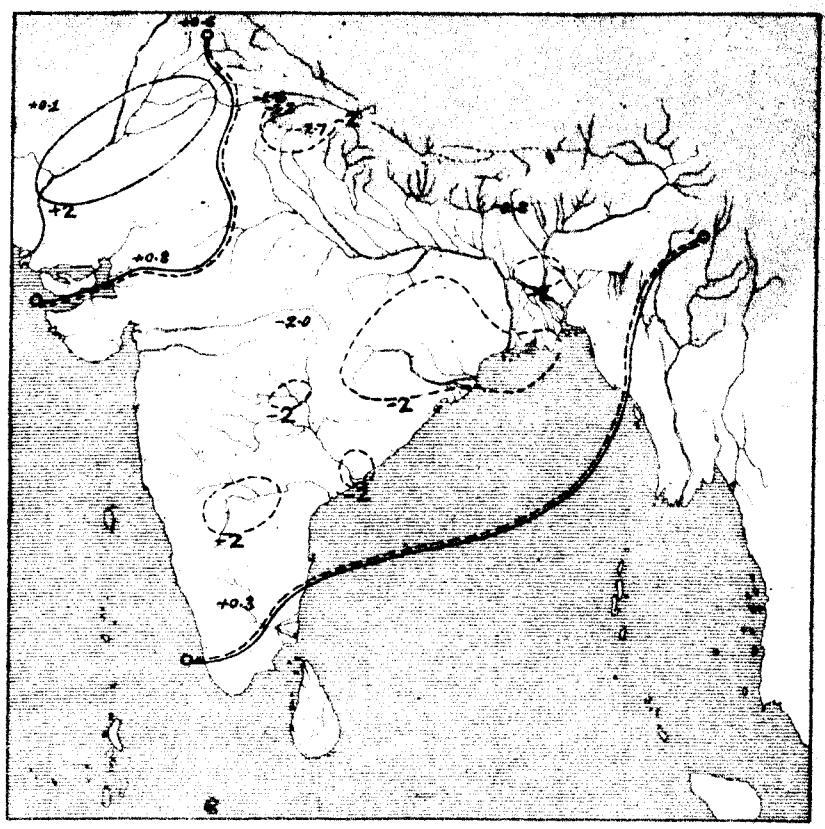


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

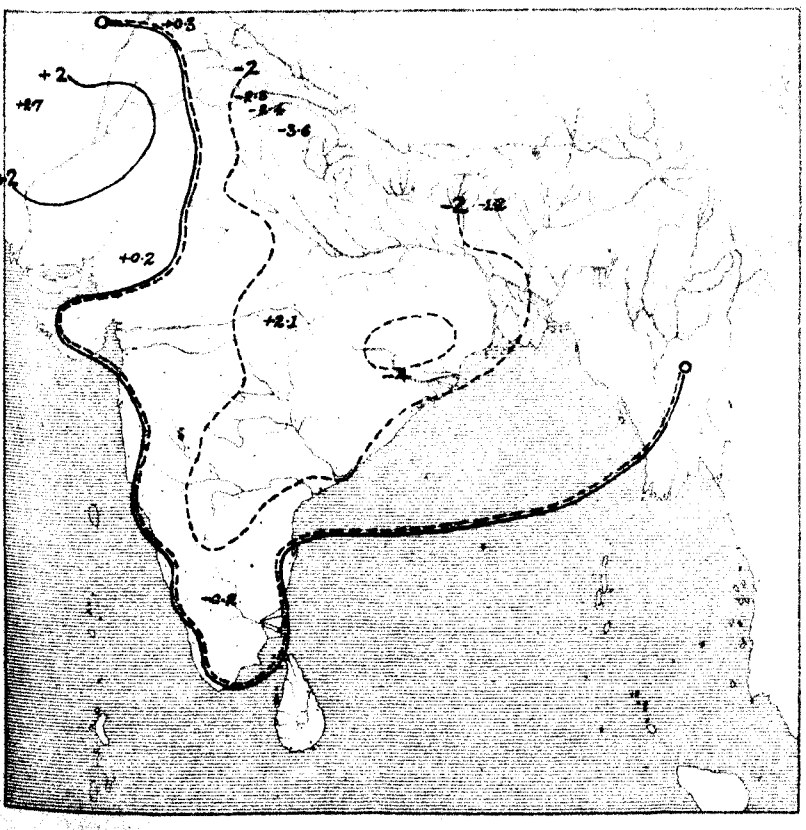
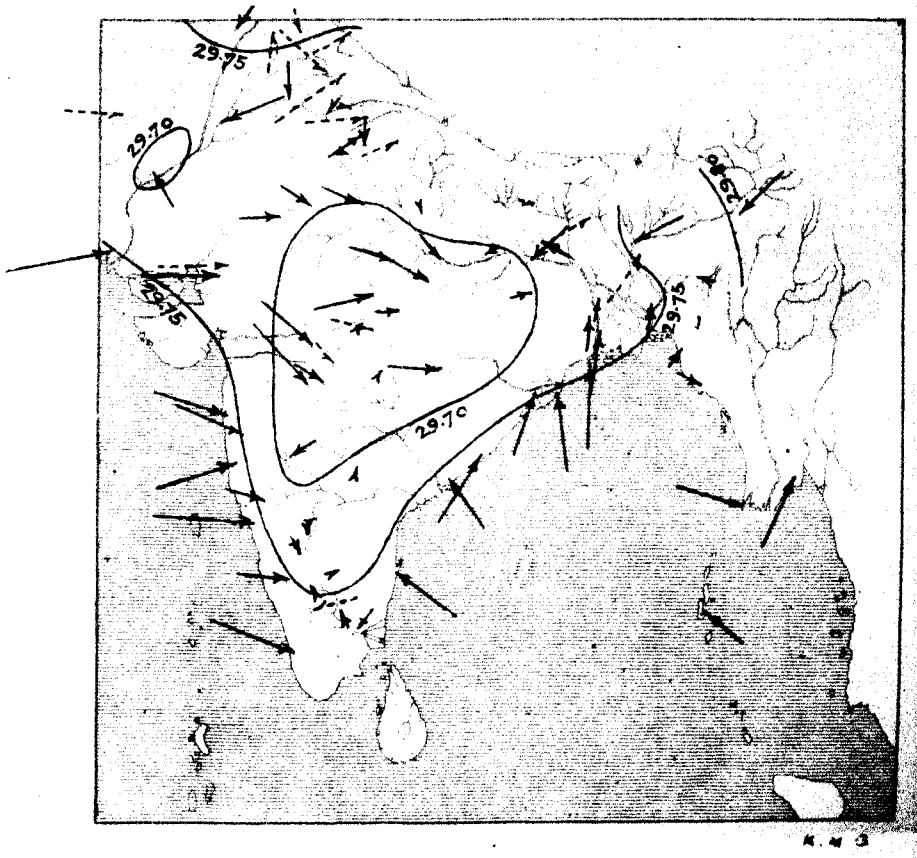


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF **APRIL 1895.**



Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{20}$th of an inch being equal to 100 per cent.

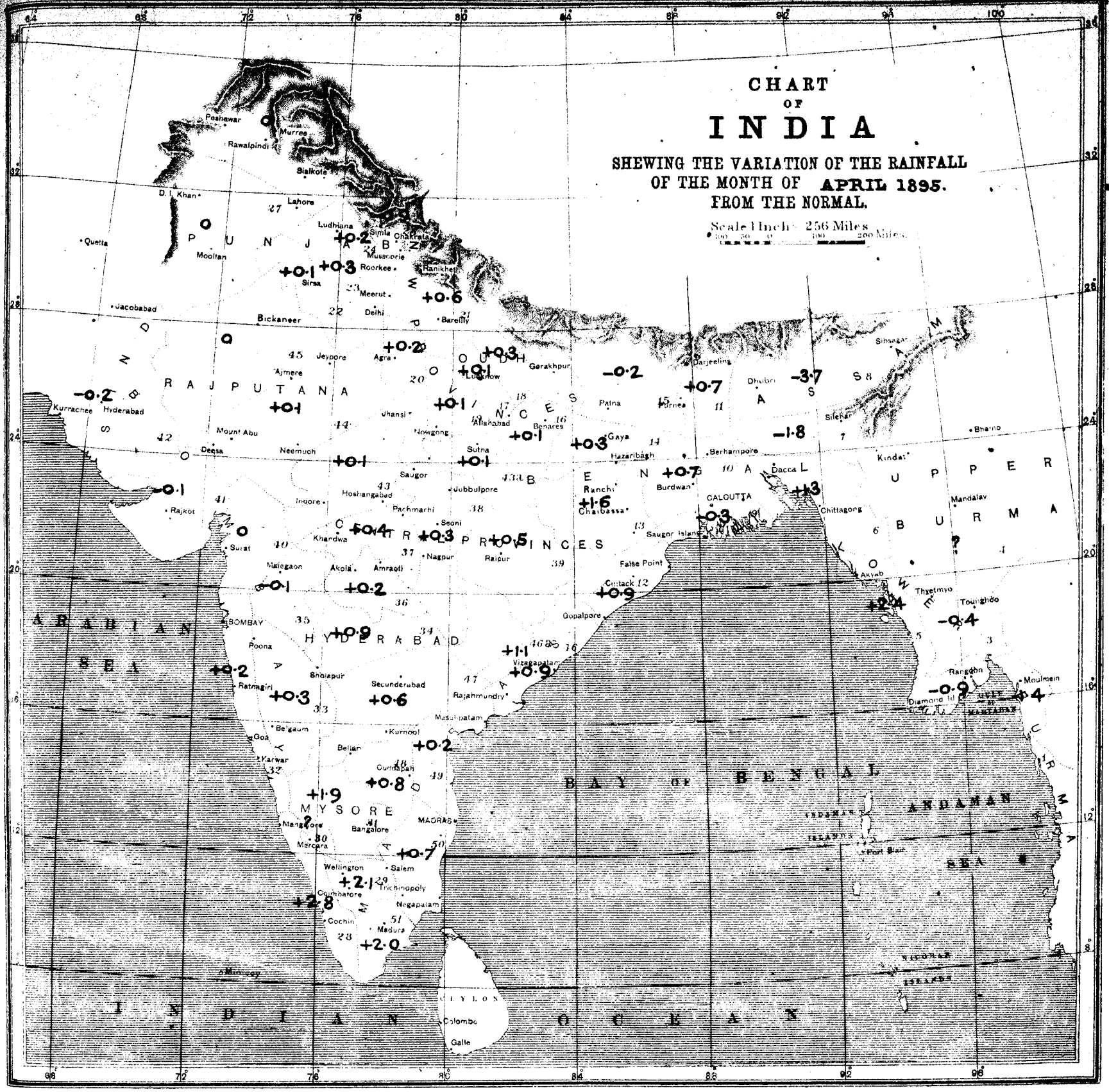
Sing. No. 135, Wr., I.—June 94.—6,000.
Sing. No. 749, Wr., I.—Apl. 95.—4,500.
Sinco., I. C., Calcutta.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Reg. No. 155. Wr., I.—June 94.—6,000.
Reg. No. 143, Wr., I.—Apl. 95.—4,500.

Zinco., S. I. O., Calcutta.



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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg. No. 89, Wr., I.—Mar. 96.—5,000.

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INTRODUCTION.

THIS Review of the weather in India during the month of May 1895 is based on observations taken daily at 8 A.M. at 206 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 87 stations. In the rainfall summary, the rainfall data of the meteorological observatories and the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the publication of the Review, are utilized. A summary of the weather in the Bay of Bengal and the Arabian Sea, derived from information extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given.

Summary of the chief features of the weather in India during the month of May 1895.

May is usually the last month of the hot weather season in India, and completes the temperature and pressure conditions essential to the establishment of the south-west monsoon. The area of maximum temperature at the commencement of the month usually includes the Central Provinces, Berar, and the southern districts of the North-Western Provinces. As temperature in May generally increases more rapidly in North-Western India than elsewhere, the area of maximum temperature (or the thermal focus as it has been termed) is usually transferred to Sind, the South-West Punjab and West Rajputana before the third week of the month. That area generally continues to be the area of maximum temperature in India during the rains, (*i. e.*, until the third or fourth week of September). The maximum temperature of the year in India is usually observed in that area in the last week of May, or the first week of June.

Pressure is usually slightly lower on the average in Northern than in Southern India at the commencement of the month. It decreases rapidly in Upper India during the month, and the total range or difference of pressure between the Equatorial Belt and Upper India increases and establishes the baric gradients necessary for the extension of the south-east trade winds across the Equator and their continuance northwards into India as south-west monsoon winds.

This change takes place, it should be remembered, not by the concentration and intensification of the indraught to the hot area in Upper India, but by the advance of a vast mass of humid air impelled northwards by its own momentum and energy, and by pressure "a tergo."

Usually one or more advances of strongish humid winds, probably from the Equatorial Belt, occur in May, and give moderate to heavy rain to Ceylon, Malabar and Tenasserim, but the great permanent advance, which forms the setting in of the south-west monsoon proper, does not generally commence until the end of May or beginning of June.

Over the whole of North-Western, Central and Northern India (with the exception of Bengal and Assam), the air in May is very dry, the temperature excessive, and the skies clouded with dust raised by the strong hot land winds, which usually prevail during the day at this period. The heat is occasionally mitigated for brief intervals by thunderstorms or duststorms. These hot weather storms occur during periods of slight barometric disturbance, and

occasionally give very heavy rain, chiefly in Bengal and Assam, and in and near the hills in Bihar, the North-Western Provinces and the Punjab. Hence Assam and Bengal (more especially the northern and eastern districts) usually receive a large amount of rain, the average fall of the month in Bengal and Assam ranging from 4 inches in West Bengal to 52 inches at Cherra Poonji in the Khasia Hills and averaging 10 inches for the whole area.

At the commencement of the month pressure was in considerable defect in Upper India and in considerable excess in North-East India. Shallow depressions lay over the West Punjab and Chota Nagpur and Baghelkhand, and were unchanged in position and character from the 1st to the 4th. Series of thunderstorms occurred during this period in Bengal, Assam and Bihar, which reduced temperature largely below the normal. Temperature was in moderate to considerable excess and the air excessively dry in North-West and Central India. The lowest humidities of the month were recorded during this period in Rajputana, Central India, Berar and the Central Provinces, the most noteworthy being 2 per cent. at Nowgong and 4 per cent. at Pachmarhi and Deesa on the 4th.

The Upper India hot weather depression was practically unchanged in position from the 4th to the 7th, and the Chota Nagpur depression shifted westwards into the Central Provinces. Dry weather prevailed during this period in Bengal and Assam; but Southern India, Mysore and the Madras Deccan received heavy thundershowers, chiefly on the 6th. The general character of the pressure distribution was unchanged in India during the next three days. A shallow hot weather depression formed in Central Burma and determined showery weather in that area on the 8th, 9th and 10th, when the depression filled up.

Temperature had increased more rapidly than usual in Northern India and was, during the period from the 5th to the 10th, in large excess in Baluchistan, the Punjab, Upper Sind and Rajputana. The following gives mean variation data for this period in that area of excessive temperature :—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY					
	5th.	6th.	7th.	8th.	9th.	10th.
	°	°	°	°	°	°
Baluchistan .	+3·5	+3·9	+6·9	+5·5	+6·5	+6·7
Punjab . .	+3·3	+2·1	+3·7	+5·6	+5·5	+7·7
Upper Sind .	+5·1	+4·8	+5·6	+7·7	+9·5	+7·8
Rajputana .	+2·5	+2·2	+2·8	+4·1	+5·9	+7·4

No large change of pressure conditions occurred during the next four days, *i.e.*, from the 11th to 14th. Shallow hot weather depression continued to be shown in the South-West Punjab and in Baghelkhand and the adjacent districts of the Central Provinces. Very dry hot weather held steadily in North-West and Central India.

Series of thunderstorms visited Bengal, Burma and South India, and gave light to moderate rain. Temperature was in general excess over nearly the whole of India and was most largely above the normal in the Punjab, Upper Sind, Rajputana, Central India and the North-Western Provinces. The following gives variation data for this period :—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY.			
	11th.	12th.	13th.	14th.
	°	°	°	°
Punjab	+8·7	+8·5	+7·7	+4·4
Rajputana	+7·6	+8·5	+7·8	+5·1
Upper Sind	+7·4	+7·6	+4·1	+5·1
Central India	+5·7	+5·6	+5·6	+4·3
North-Western Provinces . .	+5·7	+3·7	+3·3	+0·6

Pressure during the period from the 1st to the 15th had been steadily on excess in North-Eastern India and normal or in slight defect in Western India. Large changes occurred on the 16th and 17th, which modified very considerably the pressure distribution. Pressure fell rapidly in Northern India relatively to the Peninsula and was more or less considerably in defect in Northern India during the remainder of the month and in moderate to large excess in the Peninsula. The trough of low pressure shifted northwards to the foot of the hills and steep gradients for westerly winds obtained in Northern and Central India. The shallow depression in Upper India filled up.

The period from the 18th to the 25th was hence marked by very high temperatures and great dryness in Northern and Central India (and more especially in the Gangetic Plain and Bengal) and also in the coast districts of Madras The following gives temperature variation data in illustration :—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY.							
	18th.	19th.	20th.	21st.	22nd.	23rd.	24th.	25th.
	°	°	°	°	°	°	°	°
Punjab . .	+6·3	+4·4	+4·4	+6·5	+7·2	+9·6	+10·6	+10·4
N.-W. Provinces	+3·7	+3·6	+2·9	+5·8	+7·0	+6·6	+ 4·4	+ 3·6
Bihar . .	+3·2	+2·3	+3·7	+5·8	+5·8	+1·3	+ 1·6	— 1·2
Chota Nagpur .	+2·3	+2·6	+4·3	+5·2	+7·8	+4·0	+ 3·1	+ 6·2
Bengal . .	+2·1	+2·8	+3·7	+4·7	+3·3	—0·4	0	— 0·9
Madras coast districts.	+4·3	+4·6	+4·3	+6·2	+5·3	+4·0	+ 3·2	— 1·2

The highest day temperatures of the month and year were registered on the 24th and 25th in Upper Sind and the Punjab.

The following gives the highest recorded at the four hottest stations in India:—

STATION.	Highest temperature recorded during 24 hours preceding 8 A.M. of date.	Date.
	°	°
Jacobabad	123·0	25th.
Mooltan	120·5	24th.
Montgomery	121·9	Do.
Sirsa	121·1	Do.

Burma received moderate to heavy rain, chiefly accompanying thunderstorms, from the 17th to the 21st, and East and North Bengal and Assam series of thunderstorms on the 22nd and following days. The rainfall reduced temperature temporarily to a large extent in the affected areas.

A depression due to hot weather actions formed in the Punjab on the 23rd. It advanced eastwards to the foot of the hills during the next 48 hours and gave series of dust-storms in the Punjab plains and some thundershowers in the hills.

Large changes of pressure occurred on the 25th and 26th, which intensified the low pressure conditions existing in Northern India. The trough of low pressure lay along the foot of the hills in the North-Western Provinces and Bihar and steep gradients obtained for westerly winds.

Very strong hot winds hence prevailed in the Gangetic Plain from the 26th to the 29th. They extended across Chota Nagpur into West Bengal. This period was hence characterized by excessive temperature in Bihar, West Bengal and Chota Nagpur. Temperature also continued in moderate to large excess in North-Western India. The following gives variation data for this period:—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY.			
	26th.	27th.	28th.	29th.
	°	°	°	°
West Bengal	+1·0	+5·4	+10·8	+10·5
Chota Nagpur	+8·4	+11·3	+11·7	+11·5
South Bihar	+2·5	+7·2	+12·1	+8·4
N.-W. Provinces	+4·5	+5·2	+7·9	+9·7
Punjab	+5·2	+5·1	+7·1	+8·8

The air was also abnormally dry during this period in Orissa, West Bengal and Chota Nagpur. Thus Cuttack registered a humidity percentage of 11 at 4 P.M. of the 28th, and Burdwan of 14 at 4 P.M. of the 27th.

Assam, Burma, Malabar and South Madras obtained numerous thundershowers during this period. The whole period was one of excessive temperature and dryness in Northern and Central India and the Madras coast districts.

Pressure increased in Northern India on the 29th and the following days, and the trough of low pressure was transferred southwards. Bengal had numerous series of thunderstorms during the last three days of the month, and easterly winds extended across Bihar into the eastern districts of the North-Western Provinces, causing a considerable reduction of temperature.

Weather was showery in Malabar at the end of the month; but there was no indication of the commencement of the south-west monsoon on the West Ceylon or Malabar coast.

The chief abnormal features of the meteorology of the month were—

1st.—Considerable delay in the commencement of the south-west monsoon rains of the month in the West Ceylon and Malabar coast districts; where they usually begin in the third or fourth week of May.

2nd.—Persistent excessive temperature during the whole month in Upper Sind, the Punjab and Rajputana.

3rd.—Very strongly marked hot weather conditions (of great dryness and excessive temperature) in the Gangetic Plain and Chota Nagpur during the second half of the month. Abnormally dry hot winds prevailed in Bihar and the eastern districts of the North-Western Provinces during the greater part of the period.

4th.—Excessive temperature in the Madras coast districts (more especially in the Circars) during the last fortnight of the month.

Pressure.—The mean pressure of the Indian area for the month of May was ·007″ below the normal. Pressure was relatively to the general condition in local defect to the north of a line stretching through Central Sind to Ajmere, Nagpur, Vizagapatam, and Moulmein. The deficiency was more than ·02″ in the Punjab, North-Western Provinces, Bihar, Chota Nagpur, and West Bengal, and was absolutely greatest in the West Punjab at Mooltan (—·048″) and the eastern districts of the North-Western Provinces at Allahabad (—·040″). Pressure was in local excess to the south of the line defined above. The excess was large in amount in the Konkan and Kathiawar and

was greatest at Ratnagiri (+·052″), Karwar (+·049″), Goa (+.048) ,Rajkot (+·044″), and Bombay (+·043″).

These local variations are such as invariably accompany strongly marked hot weather conditions in Northern India. Similar abnormal conditions obtained in May 1894.

Also as usually happens when temperature is largely above the normal in Northern India, pressure at the hill stations was in large excess relatively to the neighbouring plains or the vertical pressure anomalies were positive and large in amount.

The following gives a summary of the pressure variation data of the eleven meteorological provinces of India :—

METEOROLOGICAL PROVINCE.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Burma Coast and Bay Islands	−·005	+·002
Burma Inland	−·009	−·002
Assam	−·026	−·019
Bengal and Orissa	−·030	−·023
Gangetic Plain and Chota Nagpur	−·032	−·025
Upper Sub-Himalayas	−·035	−·028
Indus Valley and North-West Rajputana	−·013	−·006
East Rajputana, Central India and Gujarat	+·002	+·009
Deccan	0	+·007
West Coast	+·035	+·042
South India	+·012	+·019

Temperature.—The month of May was characterized by very strongly marked hot weather conditions in India, and more especially in North-Western India, where the temperature was excessive and more or less considerably above the normal throughout the whole month.

The mean maximum or day temperature was in slight to considerable defect in Burma (due to more frequent rain than usual). The deficiency was most marked at the interior stations of Kindat (−5·8°) and Thayetmyo (−4·0°). It was also in slight defect in Lower Sind and Cutch and was above the normal over the remainder of India. The excess was more than 2° in amount over nearly the whole of North-Western and Central India and in the Madras coast districts, and ranged between 4° and 10° in Upper Sind, the Punjab, and North Rajputana, and was absolutely greatest at Mooltan (+9·6°), Sirsa (+7·9°), Rawalpindi (+7·9°), Jacobabad (+6·9°), and Lahore (+6·7°), which define the area of greatest excess of day temperature.

The mean minimum or night temperature was in slight defect in Lower Sind, Cutch and Kathiawar, and in excess in Burma and the remainder of India. It was more than 2° above the normal in Northern and Central India and more than 4° in the Punjab, Upper Sind, North Rajputana, Bundelkhand and Baghelkhand. The increased night temperature was most strongly exhibited at Lahore (7·5° in excess), Rawalpindi (6·2° in excess), and Sirsa (6·0° in excess).

The mean temperature of the month was in slight to moderate defect in Burma. The deficiency was largest at Kindat (—2·3°) and at Thayetmyo (—1·9°). The mean temperature of the month was also in slight defect in Sind, Cutch and Kathiawar due to the prevalence of stronger westerly sea winds than usual.

Temperature was in excess over the remainder of India. The excess was small in the Peninsula, Assam, North Bihar, North and East Bengal and Orissa, and was less than 2° in amount. The excess ranged between 4° and 8° in the Punjab, Upper Sind and North Rajputana. The following gives data for the stations in that area at which the excess was 5° or upwards :—

STATION.	MEAN DAILY TEMPERATURE.		
	Actual, May 1895.	Normal, May.	Variation of actual from normal.
	°	°	°
Mooltan	98·0	90·3	+7·7
Rawalpindi	89·5	82·4	+7·1
Lahore	94·6	87·5	+7·1
Sirsa	98·1	91·1	+7·0
Peshawar	89·8	83·6	+6·2
Ludhiana	93·9	88·9	+5·0
Jacobabad	99·2	93·6	+5·6

Temperature was as largely in excess at the hill stations in Upper India as in the adjacent plains, as is shown by the following data :—

STATION.	MEAN DAILY TEMPERATURE.		
	Actual, May 1895.	Normal, May.	Variation of actual from normal.
	°	°	°
Leh	53·5	47·5	+6·0
Murree	75·4	67·3	+8·1
Simla	69·2	64·5	+4·7
Chakrata	71·1	66·0	+5·1
Ranikhet	72·0	68·2	+3·8

The highest temperatures of the month were recorded on the 24th and 25th in North-Western India. The following gives the highest day temperatures recorded at the four hottest stations in Upper India: Jacobabad 123·0°, Montgomery, 121·9°, Sirsa, 121·1°, and Mooltan 120·5°.

These temperatures are as high as have been previously recorded at these stations, thus indicating that the year was one of the hottest on record in Upper India.

The following gives data for the districts in which the mean temperature of the month exceeded 95°:—

District.	Mean temperature of month.	Mean maximum or day temperature of the month.
	°	°
Upper Sind	99·2	117·3
North-Western Provinces, West	97·8	109·6
Rajputana, West	96·8	112·1
Punjab, South	96·6	111·1
„ West	96·2	111·8
Central India, East	95·7	108·2
Central Provinces, East	95·5	108·2
„ „ West	95·4	108·9

The following table gives comparative temperature variation data of the month for the eleven meteorological provinces:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, May 1895.	Mean minimum temperature, May 1895.	Mean daily temperature, May 1895.
	°	°	°
Burma Coast and Bay Islands	−1·5	+0·6	−0·5
Burma Inland	−4·9	+0·7	−2·1
Assam	+1·3	+1·8	+1·5
Bengal and Orissa	+0·8	+1·8	+1·3
Gangetic Plain and Chota Nagpur.	+0·7	+2·9	+1·8
Upper Sub-Himalayas	+4·5	+4·4	+4·4
Indus Valley and North-West Rajputana.	+4·8	+3·0	+3·9
East Rajputana, Central India and Gujarat.	+2·1	+2·6	+2·4
Deccan	+1·6	+1·9	+1·7
West Coast	+0·6	+1·3	+1·0
South India	+1·3	+0·6	+1·0

Winds.—The chief feature of the air movement was he strength of the winds during the second half of the month. The strongly marked hot weather conditions gave unusually vigorous hot day winds in the Gangetic Plain and strong local sea winds on the Bengal and North Bombay coasts. The mean winds of the month were hence generally stronger and steadier than usual, more especially in the Gangetic Plain, Rajputana and Central India. The following gives data showing the strength of the mean winds of the month in different parts of India and their variation from the normal:—

Division.	Mean velocity in miles per diem.		
	Actual, May 1895.	Normal, May.	Percentage variation.
Burma	152	123	+24
Bengal	198	184	+ 8
Assam	94	104	−10
Bihar	171	132	+30
Chota Nagpur	258	210	+23
North-Western Provinces and Oudh.	119	90	+32
Punjab	78	80	− 3
Sind	271	264	+ 3
Rajputana	268	220	+22
Central India	179	140	+28
Central Provinces	191	148	+29
Berar	279	246	+13

The mean direction of the air movement did not differ much from the normal. Westerly winds prevailed to a much greater extent than usual in Chota Nagpur and West Bengal and hence gave a very strongly marked westerly component to the mean wind directions of the month.

Humidity and Cloud.—The mean humidity of the month was somewhat above the normal in Burma and Assam and slightly below it in Bengal. The mean temperature conditions differed little from the normal in Bihar, the North-Western Provinces, Rajputana, Central India and the Central Provinces. The month was much drier than usual in the Punjab (especially the northern and western districts) and in Baluchistan and the Punjab and Kashmir hills. The mean humidity percentage of the month was 16 below the normal at Murree, 12 below it at Peshawar, 10 at Kailang, and 9 at Quetta. The mean relative and absolute humidities were both in slight to moderate defect in the west coast districts and Madras. The deficiency was most marked at Wellington, where the mean of the month was 7 in defect, and at Trichinopoly where it was 6 in defect.

The mean cloud amount of the month was in large excess at Port Blair, Burma, and Chota Nagpur and in

moderate excess in Bengal. It was, on the other hand, slightly below the normal in Rajputana, the North-Western Provinces, Central India and the Peninsula. Skies were unusually free from cloud in the Punjab and Kashmir Himalayas.

The following table gives variation data of the mean aqueous vapour pressure, mean humidity, and mean cloud amount of ten meteorological provinces for the month of May 1895 :—

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.
	"		
Burma Coast and Bay Islands .	+·024	+4	+1·8
Assam	+·059	+1	+0·1
Bengal and Orissa . . .	+·016	−3	+0·7
Gangetic Plain and Chota Nagpur.	+·057	+2	+0·2
Upper Sub-Himalayas . .	+·053	−2	−1·3
Indus Valley and North-West Rajputana.	−·015	−6	−0·5
East Rajputana, Central India and Gujarat.	+·040	0	−0·6
Deccan	+·046	+1	−0·6
West Coast	−·016	−3	−0·3
South India	−·010	−2	−0·8

Rainfall.—The rainfall of the month was due to feeble hot weather disturbances, which gave series of thunderstorms, chiefly in Burma, Bengal, Assam and Southern India. The chief periods of rainfall due tothese disturbances were the 1st to the 6th, the 11th to the 15th, the 17th to the 21st, and the 23rd to the 30th. Burma received more frequent rain than usual, and the rainfall of the month was in moderate to considerable excess in that area. It was on the other hand below the normal over the whole of India. The deficiency was very marked in the West Coast districts where it was due to the delay in the establishment of the monsoon. That division received an average of only 2·12 inches, barely one-third of the normal fall of the month. The rainfall of the month was in slight to moderate defect in West Bengal, Bihar, Chota Nagpur and South India. Practically no rain fell in Baluchistan, the greater part of the Punjab, Sind, Rajputana, Central India, the North-Western Provinces (excepting the sub-montane and eastern districts), Gujarat, Kathiawar and Cutch. The month was also abnormally dry in the hill districts of Upper India.

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

Meteorological Province.	Rainfall.		
	Mean actual for May 1895.*	Mean normal for May.*	Variation from normal.*
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands .	14·51	11 80	+1·54
Burma Inland . . .	8·43	4·62	+1·53
Assam	11·39	15·01	−1·55
Bengal and Orissa . . .	6·39	6·95	−0·85
Gangetic Plain and Chota Nagpur.	1·53	1·98	−0·42
Upper Sub-Himalayas . .	0·23	1·09	−0 87
Indus Valley and North-West Rajputana.	0·03	0·47	−0·45
East Rajputana, Central India, and Gujarat.	0·01	0·50	−0·50
Deccan	0·49	0·99	−0·66
West Coast	2·12	6·04	−3·69
South India	2·15	2·69	−0·78

Atmospheric Pressure.

The mean 8 A.M. pressure of the whole Indian area in May 1895 was ·007″ below the normal of the month. The local pressure conditions or anomalies were very similar to those of May 1894. Pressure was, relatively to the general condition, in defect (or the pressure anomalies were negative) to the north of a curved line through Central Sind, Ajmere, Nagpur, Vizagapatam, Bassein and Moulmein, over the greater part of which area they exceeded ·02″ in amount. The negative anomalies were more than 0·03″ at the following stations in the Punjab and North-Western Provinces :—

Station.	8 A.M. Pressure.	
	Variation from normal.	Anomaly.
	"	"
Mooltan	−·055	−·048
Rawalpindi	−·043	−·036
Lahore	−·045	−·038
Ludhiana	−·045	−·038
Agra	−·041	−·034
Allahabad	−·047	−·040
Sirsa	−·040	−·033

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

Pressure was in relative excess to the south of the curved line defined above. The positive anomalies exceeded ·02″ in the western half of the Peninsula and were over ·04″ at the following stations in that area :—

Station.	8 A.M. Pressure.	
	Variation from normal.	Anomaly.
	″	″
Rajkot	+·037	+·044
Bombay	+·036	+·043
Ratnagiri	+·045	+·052
Goa	+·041	+·048
Karwar	+·042	+·049

The abnormal features of the pressure distribution were such as invariably accompany very strongly marked hot weather conditions in Northern India in the month of May and were hence chiefly related to the large excess of temperature in that area.

Pressure was in slight excess at the Himalayan hill stations, and hence the vertical anomalies were positive and large in amount. The following gives data for six pairs of stations :—

Hill Station.	Variation from normal pressure.	Plain Station.	Variation from normal pressure.	Vertical pressure anomaly (Hill—Plain).
	″		″	″
Leh	+·051	Lahore	−·058	+·109
Murree	+·014	Rawalpindi	−·043	+·057
Simla	+·015	Ludhiana	−·045	+·060
Chakrata	+·026?	Roorkee	−·033	+·059
Ranikhet	+·006	Bareilly	−·027	+·033
Quetta	+·043	Jacobabad	−·020	+·063

The following is a summary of the abnormal features of the pressure conditions of the month :—

(1) Pressure was in slight general defect in the Indian area.

(2) Pressure was, relatively to the general condition, in moderate to large defect in Northern India, the deficiency being most marked in the Punjab and locally at Allahabad in the North-Western Provinces (hence probably representing a tendency to relatively low pressure in the eastern districts of that province).

(3) Pressure was in local excess in the Peninsula and North Bombay, the excess being greatest in the west coast districts from Kathiawar to Karwar (in which it ranged between ·04″ and ·05″).

(4) Pressure was in considerable excess at the hill stations in Northern India relatively to the adjacent plains stations. The relative excess of pressure was greatest at the Punjab stations (more especially Leh, the most elevated).

Barometric depressions of the month.

The pressure changes, from day to day, in the month of May are usually large and frequently very irregular, in consequence of the intensity of the theremal actions of the period, and of the character of the local disturbances and storms of the month.

The chief feature of the pressure distribution in May is a trough or belt of low pressure which usually runs from Chota Nagpur west-north-westwards to Sind or the South-West Punjab. It is occasionally transferred to the foot of the hills in the North-Western Provinces or Bihar, and the hot winds in the Gangetic Plain usually have their strongest development during the prevalence of this type of distribution of pressure. Occasionally low pressure areas form at the eastern and western extremities of this trough, due mainly to thermal actions, and these low pressure areas modify to some extent the winds in Northern India and determine periods of thunderstorms in North-Eastern India or of duststorms in Upper India.

Low pressure areas also occasionally form in Central Burma. These disturbances usually give rise to thundershowers for short periods of one to three days in that area and then fill up.

At the commencement of the month of May 1895, the trough of low pressure ran from Chota Nagpur to the Central Punjab and shallow depressions were shown at its extremities in Chota Nagpur and the Punjab. The Chota Nagpur depression was transferred slightly westwards on the 2nd and 3rd into the eastern districts of the Central Provinces. Series of thunderstorms occurred on the 1st, 2nd, 3rd and 4th to the north and north-east of the Chota Nagpur depression in Bengal, Assam and Bihar. The storms were most numerous on the 4th, (*i.e.*, during the 24 hours preceding 8 A.M. of that date,) and gave general rain to the whole of Bengal, Assam, Bihar and Burma.

The Upper India depression was unchanged in position on the 5th, 6th and 7th. A rapid fall of pressure occurred during this period in North-Eastern India and Burma, and the depression in the north-eastern districts of the Central Provinces decreased in importance.

A few thundershowers of little importance were received in Bengal during this period from the 5th to the 7th. Weather was on the other hand slightly disturbed in the southern half of the Peninsula, and some heavy showers were received in Mysore, the Madras Deccan and the Circars on the 6th.

A shallow depression appeared in Central Burma on the 7th and was stationary until the 9th, when it filled up after giving some series of thunderstorms to Upper and Central Burma.

During the period from the 7th to the 10th the trough of low pressure was not very strongly marked. It was slightly deeper at its extremity in the West Punjab and Upper Sind than elsewhere, and the Upper India hot weather depression was practically unchanged in position during the whole of the period from the 1st to the 10th. The pressure distribution did not at this time differ to any important extent from the normal, pressure being generally in slight excess in Northern India and in slight defect in the Peninsula on the 8th, 9th, and 10th.

Fine dry hot weather with lighter winds than usual obtained in India during this period.

Pressure increased in North-Eastern India on the 10th and 11th, but was unchanged in North-Western India, and the chief features from the 10th to the 14th were shallow depressions in the South-West Punjab and in Baghelkhand, and the north-eastern districts of the Central Provinces. Numerous local thunderstorms occurred in the Deccan, the Circars, South India, Burma and Bengal during this period from the 10th to the 14th.

Pressure increased on the 15th and 16th over the greater part of India, but most rapidly in the west coast districts. Steep gradients for westerly winds in the western half of the Peninsula were hence established on the 15th, and the trough of low pressure was gradually transferred northwards and was in the submontane districts of the North-Western Provinces on the 18th and following days. Pressure was now very largely in defect in North India, and the steep gradients favoured the prevalence for some days of very strong hot day winds in the Gangetic Plain. Heavy rain, chiefly accompanying thunderstorms, commenced in Burma on the 17th, and continued until the 21st. The rainfall was very heavy on the 20th and 21st and was followed on the latter day by a sharp rise of pressure.

The trough of low pressure on the 22nd and 23rd stretched along the foot of the hills from Rawalpindi to Gorakhpur, and strong hot day winds continued in the Gangetic Plain. East and North Bengal and Assam received heavy rain from thunderstorms on these days.

A deepish hot weather depression formed in the Punjab on the 24th, and at the same time the eastern half of the trough of low pressure was tranferred southwards, in consequence of a local rise of pressure in the submontane districts of North-Eastern India, and occupied its normal position on the morning of the 24th. The Punjab depression advanced eastwards to the foot of the Simla hills during the next 48 hours and gave some duststorms and thunderstorms in Upper India on the 24th and 25th. Bengal, Assam and Upper Burma received numerous thundershowers on the 25th and 26th.

A rapid fall of pressure occurred on the 26th in Northern India, greatest along the foot of the hills. The trough of low pressure was, hence, on the 27th again transferred to the submontane districts of the North-Western Provinces and Bihar and was practically unchanged in position until the 29th. Very steep gradients obtained in the Peninsula, Bengal and the north of the Bay during this period, and strong hot westerly day winds prevailed in the Gangetic Plain on the 27th, 28th and 29th. Assam and North Bengal received moderate to heavy thundershowers during this period. 44 inches of rain fell at Cherra Poonji between the 27th and the 30th, the first heavy burst of rain at that station in 1895.

Pressure increased in the submontane districts of Northern India, relatively to the remainder of India, on the 30th and 31st, and the trough of low pressure was again transferred southwards. A shallow low pressure area was shown in the Punjab on the 31st. Bengal, Burma and Malabar obtained numerous showers on the last two days of the month.

Summary of the reports of the weather and snowfall in the mountain districts to the north and north-west of India.

I.—AFGHAN MOUNTAINS.

(1) *Hills west of Dera Ismail Khan.*—The reports received from the Deputy Commissioner, Dera Ismail Khan, and the Political Officer, Khyber Pass, state that no snow fell on these mountains in May, and that the month was unusually dry.

II.—HIMALAYAS.

(A)—*The Punjab and Kashmir Himalayas.*

(1) *Lahoul.*—The Reverend A. W. Heyde, Superin-

tendent of the Kailang Observatory, has sent the following statement of the precipitation at Kailang and on the neighbouring mountains in April and May :—

"Snow to the depth of 12 inches fell at Kailang on the 3rd April, and rain on the 4th, 11th, 16th, and 28th April and also on the 13th, 17th, 25th, 26th, and 30th of May. The total precipitation of the two months was 4·34 inches. Snow fell on the higher elevations on each of these dates. The passes in the main range (the Bara-la-cha pass and others) were practicable for foot passengers at the end of May, and traders with beasts of burden are now (15th June) beginning to cross them."

(2) *Chamba.*—The Deputy Conservator of Forests, Chamba, has sent the following statement of the snowfall at Kilar (elevation 8,600 feet) in Pangi in the Chamba valley during the winter of 1894-95 :—

Month.	Number of days on which snow fell.	Total fall during month.		Depth of snow accumulation at end of month.	
		Feet.	Inch.	Feet.	Inch.
November	4	1	6	...	...
December	10	9	5	3	9
January	8	4	0	3	2
February	5	2	6	3	3
March	8	2	10	...	5
April	1	1	3	...	...
Total	36	21	6	...	...

The season was more cloudy and much colder than usual. The snowfall was much heavier on the higher elevations above Kilar than at Kilar itself. The snowfall of the season was on the whole normal in amount. It was heavier than usual at the commencement of the season and very light at the close.

(3) *Kulu.*—The following report of the snowfall in this district, in May 1895, has been received from the Assistant Commissioner :—

"There was a very slight fall of snow on the Chandar Khani Pass (14,500 feet) in Kulu Tahsil on the 13th May. There were no falls on any other passes of the Kulu and Plach Tahsils during the month. There was a great deal of hot sunshine during the month. The Rotang and Hamta passes were open for foot traffic throughout the month. The following table shows the reported depth of snow on the higher passes of the sub-division at the end of the month :—

Name of Tahsil.	Pass.	Depth of snow in feet during the month.	Name of Tahsil.	Pass.	Depth of snow in feet during the month.
Kulu.	Rotang	6	Plach	Sirikhand	10
	Hamta	3		Tirath	2
	Chanderkhani	3		Gargarasan	2
	Barsai	2		Plach	1
	Bojadhar	2			
	Lohri Achri	1½			

(B)—*North-Western Provinces Himalayas.*

(1) *Kumaon.*—The following gives the periods and amount of snowfall on selected passes in the three pattis or sub-divisions of the district :—

Name of patti.	Date.	Depth of snow in feet and inches.	
		ft.	ins.
Malla Danpur	1st May	0	6
	12th ,,	0	6
Total	.....	1	0
Malla Johar	12th May	1	0
	13th ,,	0	6
Total	.....	1	6
Mallas Byans, Chandans, and Darma	2nd May	0	6
Total	.....	0	6

Weather was damp and cloudy as usual, but warm before and after the snowstorms. The fall is considered to be greater than during the winter of the previous year.

Summary of the snowfall data of the cold weather season, 1894-95.—The following summary is taken from a memorandum on the snowfall and meteorology of the cold weather period 1894-95, published in the *Gazette of India* of the 8th June 1893 :—

The winter commenced earlier than usual in the Western Himalayas. The first heavy fall in the middle or lower ranges occurred in the last week of November. The weather was very unsettled throughout December and January, and frequent storms gave more or less heavy snow during these two months. A large and sudden change occurred in the first week of February, when fine weather set in and continued throughout the month, and

until the first or second week of March. This period was chiefly remarkable for the high temperature which prevailed in Baluchistan and Upper India, more especially Sind and the West Punjab. Weather was unsettled in the last three weeks of March, and light to moderate snow fell during that period in the Western Himalayas. It was somewhat disturbed during the first three weeks of April, and numerous hot weather storms occurred in all parts of India. They were most frequent and severe in Southern India, the Deccan and North-Eastern India, and only slightly affected the Punjab and Kashmir Himalayas. Snow fell on the higher ranges, but the total amount during the month was small, and probably less than the normal fall. Fine, dry, and unusually hot sunny weather prevailed in the Upper India hill districts during the latter part of April and in May, and the snow melted with unusual rapidity.

The first noteworthy feature of the cold-weather season of 1894-95 was the very early commencement of the winter snowfall, and the second its excessive amount in December and January. A third noteworthy feature was that the snowfall was restricted to higher elevations than usual, and did not fall below 4,000 or 5,000 feet in the outer ranges. In this respect the precipitation resembled that of 1893-94. The snowfall of the season was heaviest in the Kashmir and Punjab Himalayas, and was undoubtedly much heavier than usual in December and January. It was very heavy in the interior ranges, but the heavy snowfall did not extend into the Upper Indus valley and the Karakoram range, as it did in 1894. This is confirmed by the facts that no snow fell at Kashgar during the season, and that the fall at Leh was very small. It is noteworthy, however, that the season was one of the coldest that has ever been experienced at Leh and Kailang, resembling in this respect the winter of 1892-93.

The snowfall in the Baluchistan and Afghan mountains and plateau was undoubtedly much less than usual. It was received chiefly in December and January on the higher elevations, and little or no snow fell on the plateau below 5,000 feet. It melted very rapidly during the month of February, and practically disappeared before the end of that month. The winter snowfall in that area exercised little or no influence on the meteorology of India in March. The meteorological data received from a number of stations on the Indo-European Telegraph line in Persia indicate that the precipitation in the plateau of Iran was small in amount in December and January, probably less than the normal. There was almost certainly no snow accumulation, except on the highest ranges, in Baluchistan, Afghanistan and Persia at the end of March, and there was no large extension of snow-clad plateau surface throughout the whole winter.

It is hence almost certain that there was less snow than usual during the past winter in Persia, Baluchistan, Afghanistan, and probably Turkistan, Thibet, and Cental Asia, and that the winter ceased unusually early and was very mild throughout.

There were frequent heavy falls of snow in the Punjab and Kashmir Himalayas on the middle and higher ranges during the months of December and January; and there was hence a moderate to large excess of snow in the beginning of February. Occasional heavy falls were also received in March and the first week of April, but the weather was, on the whole, much drier and finer than usual in April and May, and the snow hence (except perhaps on the higher ranges) melted more rapidly than usual. The result is that at the end of May the excessive accumulation of December and January had almost entirely disappeared. The snow line was somewhat higher than usual at the end of May in the Punjab Himalayas.

The winter was characterised by similar features in Kumaon. Snow commenced to fall very early and was heavy in December and January; but from March to May the fall was comparatively light. The snowfall of the season was hence probably, on the whole, slightly greater than in the preceding winter, but, as it fell chiefly in the beginning of the season, the accumulation at the end of May was smaller than in May 1894.

The fall in the Sikkim and the Assam Himalayas was, so far as can be judged from the limited information, less than that of the preceding winter, and probably normal or in slight defect.

Summary of special storm reports.

The following gives the chief local storms of which eports were received during the month. These storms were all of the ordinary hot weather type, *viz.*, thunderstorms or hailstorms in Bengal, the North-Western Provinces, the Deccan and Madras; and duststorms in the hottest and driest districts of Northern and Central India, more especially the Punjab and Rajputana. They were, apparently, of slight to moderate intensity, and in no case do they appear to have caused much damage to property. The following is a brief statement of the local storms of which reports have been received from observers :—

2nd.—Severe hailstorm at Mussoorie from 2-25 P.M. to 3-30 P.M. It came from north.

3rd.—Hail storm at Mussoorie. The storm came from north and lasted from 3-40 P.M. to 4-30 P.M. Severe thunderstorm at False

Point with heavy rain from 10-30 P.M. to 11-30 P.M. Heavy duststorm at Allahabad from 1-35 A.M. to 2-12 A.M. No rain fell during the storm.

4th.—Severe duststorm at Allahabad from 6-20 P.M. to 8 P.M.

5th.—Duststorms at Raipur at 4-45 P.M. and Khandwa at 4 P.M. Duststorm at Hoshangabad at 3-20 P.M.

Duststorm at Benares at 7-26 A.M. The storm came down from north.

Duststorm at Cuddapah at 2-15 P.M.

6th.—Duststorm at Khandwa at 3-15 P.M.

Severe duststorm at Amraoti at 4-20 P.M., lasting 15 minutes.

7th.—Duststorm at Faridpur at 5-30 P.M.

8th.—Duststorm at Cherat. The storm came from west and lasted from 3-10 P.M. to 4-40 P.M. The strongest winds registered by the anemometer were of velocity 40·5 miles per hour.

11th.—Severe duststorm at Sutna. The storm came down from north at 6 P.M.

Severe thunderstorm at Gulbarga from 6-50 P.M. to 7-5 P.M.

Duststorm at Cawnpore from 2-55 P.M. to 3-20 P.M. Temperature fell from 106° at the beginning of storm to 89·5° at the end of it.

Duststorm at Allahabad. The storm came down from north-west and lasted from 4-7 P.M. to 5 P.M. Temperature fell from 108·9° to 88·5° during the storm.

Duststorm at Benares. The storm came from north-west and lasted from 5-30 P.M. to 6-25 P.M.

13th.—Hailstorm at Mussoorie. Storm came from north, lasting from 4 P.M. to 4-40 P.M. Duststorm at Cawnpore at 7-20 P.M.

14th.—Duststorm at Allahabad at 5-15 A.M.

Thunderstorm at Raipur at 4-15 P.M.

15th.—Duststorm at Pachpadra at 8 P.M.

Duststorms at Allahabad (5-30 P.M.), Benares (5-25 P.M.), and Ajmere (4-20 P.M.).

Violent duststorm at Jacobabad during the night. The storm came from north-west.

16th.—Thunderstorm at Jeypore at 1-45 P.M. to 2-30 P.M.

Thunderstorm at Pachpadra at 6 P.M.

19th.—Duststorm at Sutna at 3-40 P.M. Duststorm at Peshawar at 6-50 P.M.

Duststorm at Cherat from 4-27 P.M. to 7-20 P.M. The strongest winds from south-west had a velocity of 30 miles per hour.

20th.—Severe duststorm with very violent winds from north at Cherat. The gale lasted from 4-40 A.M. to about 8-30 A.M., and the strongest winds recorded by the anemometer were of average velocity of 60 miles per hour from 4-40 A.M. to 5-15 A.M.

21st.—Duststorm at Raipur at midnight.

22nd.—Severe duststorm at Amraoti. The storm lasted from 2-30 P.M. to 3 P.M.

24th.—Duststorm at Nagpur at 4-10 P.M. Temperature fell from 109° at 4 P.M. to 82° at 4-30 P.M.

25th.—Severe thunderstorm at Faridpur, during which many trees were blown down by the force of the wind. The storm began at 3-30 P.M.

Duststorm at Pachpadra at 9 P.M.

The Light house-keeper, Shortt's Island, reports that the steamer *Curlew* experienced a terrific squall from north-west about 20 miles to the north-north-east of that island at about 9 P.M.

28th.—Duststorm at Pachpadra and Bareilly.

31st.—Duststorm at Bareilly at 5-25 P.M. and at Cawnpore at 7-20 P.M.

The following reports of hailstorms in Assam, Ganjam and the Deccan have been received from district officers:—

3rd.—Thunderstorm and hailstorm at Velalla village, Cuddapah district, between 3 and 4 P.M. The storm inflicted no damage on the crops.

Hailstorm at Amilepalli, Cuddapah district, which caused slight damage to the paddy crop.

5th.—Thunderstorm and hailstorm at Padwa and Pottanghi in the Vizagapatam district.

8th.—Hailstorm at Gunjong in the North Cachar Hills. The storm came from south-west and lasted 15 minutes and did some damage to the fruit trees.

9th.—Thunderstorm and hailstorm at Koraput in the Vizagapatam district.

Brief summary of the weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—Moderate to strong normal north-westerly winds prevailed throughout the month along the Indian and Baluchistan coasts, except for a brief period from the 10th to the 13th, when abnormal south-westerly winds were experienced along the Bombay coast. In the centre and west of the sea winds were very unsteady and irregular during the first fortnight of the month; but were normal in direction (from between south and west) during

the second-half. In the Gulf of Aden also winds were very unsteady, though chiefly from normal easterly directions. In the south the winds were more northerly (and less westerly) than usual.

Weather was fine during nearly the whole of the month in the west, centre and south of the sea, while in the south-east showers and squalls (with lightning and thunder) were of frequent occurrence during the last three weeks of the month.

The general strength of the winds for the whole of the sea averaged 2·7 and ranged between 2·3 and 3·2 during the greater part of the month.

Bay of Bengal.—Normal south-westerly winds and fine weather prevailed over the whole of the Bay during the first four days of the month, except along the Burma coast where winds were very unsteady in direction. The mean air movement ranged from 3·3 on the 1st to 3·6 on the 4th. Winds decreased rapidly during the next 24 hours, and on the morning of the 5th averaged 2·3 or 1·3 less than on the previous day. Winds remained unchanged in strength during the next five days, and on the morning of the 10th were of the same average strength as on the 5th, *viz.*, 2·3. Weather was squally and showery during the period in the centre, south and east, and fine elsewhere. The air movement increased steadily during the next seven days, and on the 18th the general strength for the whole area was 4·1 or 1·8 greater than on the 10th. No change occurred in the air movement during the next three days, moderate to strong south-westerly winds blowing generally over the Bay. Winds were, during the whole of this period from the 11th to the 21st, strongest in the south, east and centre of the Bay, where winds of force 6 to 7 were recorded and weather was more or less disturbed, several vessels reporting heavy to hard squalls and a heavy high sea. The average hourly velocity of winds at Port Blair—fairly representative of the conditions in the centre of the Bay—rose from 8 miles on the 10th to 23 miles on the 20th. Winds decreased rather briskly in force on the 21st and averaged 3·5 on the 22nd. Weather also improved considerably and was again generally fine. The rapid falling off of the air movement is shown strikingly by the data of Port Blair, where the wind velocity decreased from an average of 23 miles an hour on the 20th to 10 miles an hour on the 23rd. The air movement increased rapidly again, and on the morning of the 27th averaged 5·1. Unusually steep gradients (the pressure difference between the head and south of the Bay amounting to ·4″ of an inch) prevailed over the Bay on this day. Winds of force 6 to 9 were experienced by vessels during this period. The increase of the air movement was, however, only temporary, as winds began to fall off again, and on the 31st averaged only 3·1 in force or 2·0 less than on the 27th, when they were strongest. Except in the east where showers were of occasional occurrence, weather was practically fine from the 22nd to the end of the month, more especially on the days when the winds were strongest. On the other hand a heavy high sea was reported to be running during this period.

Conditions were fairly normal in the eastern half of the equatorial belt, but were very abnormal in the western half, where winds were very light and unsteady, northerly winds alternating with southerly breezes. So far as can be judged from the scanty data available for this area, the regular south-east trade winds of the season did not extend northwards as a regular wind system as far as Lat. 4°S. during this month. The presence of these abnormal conditions in the western half of the belt is shown by the fact that at least 50 per cent. of the winds recorded were from some northerly quarter, while in the corresponding periods of 1894 and 1893, only 10 and 15 per cent., respectively, of the winds were from that quarter.

In the eastern half of the belt the winds, though normal in direction, were exceptionally feeble.

Temperature of the air.

May 1895 was characterized by higher temperature than usual over the whole of India and by lower temperature in Burma, due to frequent heavy rain. The hot-weather conditions were in fact very strongly marked in India, and more especially in the Punjab and, as usually happens under these conditions, the night temperature was almost as largely above the normal as the day temperature.

The mean maximum or day temperature of the month was above the normal over the whole of India, with the exception of the Sind and Cutch coast districts where the strong sea winds of the period depressed temperature slightly below the normal. The excess was more than 2° in amount in Central Bengal, the Madras coast districts, and in the Punjab, Upper Sind, Rajputana, Central India, the south-western districts of the North-Western Provinces and north-eastern districts of the Central Provinces.

It was more than 5° in amount in the area defined by the following stations :—

Station.	Mean maximum temperapure.		
	Actual, May 1895.	Normal, May.	Variation of actual from normal.
	°	°	°
Mooltan	114·0	104·4	+9·6
Sirsa	114·1	106·2	+7·9
Rawalpindi	105·1	97·2	+7·9
Jacobabad	117·3	110·4	+6·9
Lahore	109·5	102·8	+6·7
Peshawar	104·4	97·8	+6·6
Bickaneer	112·4	106·4	+6·0
Sialkot	108·3	102·4	+5·9
Dera Ismail Khan	109·1	103·3	+5·8

The area of greatest excess of day temperature hence included Upper Sind, North-West Rajputana and the Punjab (except the south-east districts). The excess was absolutely greatest at Mooltan for which it averaged 9·6°.

The excess was nearly as large in amount at the adjacent hill stations of Murree (+8·°5), Quetta (+5 °2), Simla (+4·°8) and Chakrata (+5·°1).

The mean maximum or day temperature was in moderate to considerable defect in Burma, more especially at the inland stations of Kindat (−5·°8), Thayetmyo (−4·°0) and Toungoo (−2·°3).

The mean minimum or night temperature was in slight defect in Lower Sind, Cutch and Kathiawar, and was in excess over the remainder of India, the excess being more than 2° in amount in Upper Sind, the Punjab, Rajputana, Central India, the North-Western Provinces, the greater part of West Bengal and the north-eastern districts of the Central Provinces. The mean minimum temperature was most largely in excess in Upper Sind and the Punjab. The following gives data for the stations at which the excess was greatest :—

Station.	Mean minimum temperature.		
	Actual, May 1895.	Normal, May.	Variation of actual from normal.
	°	°	°
Lahore	79·7	72·2	+7·5
Rawalpindi	73·8	67·6	+6·2
Sirsa	82·0	76·0	+6·0
Peshawar	75·1	69·4	+5·7
Mooltan	81·7	75·9	+5·8
Ludhiana	79·2	73·8	+5·4
Jeypore	81·4	76·2	+5·2
Jhansi	87·5	82·3	+5·2
Sutna	83·3	78·1	+5·2
Murree	66·4	58·8	+7·6
Simla	62·0	57·4	+4·6
Chakrata	60·8	55·8	+5·0
Mussooree	62·3	57·2	+5·1

The mean temperature of the month was slightly below the normal in the coast districts of Sind, Cutch and Kathiawar, due to the prevalence of stronger sea winds than usual throughout the month. It was also in slight to moderate defect over Burma, the amount of the deficiency increasing from the coast districts to the interior. The deficiency was greatest at Kindat (—2·°3) and Thayetmyo (—1·°9). The mean temperature of the month was in slight to moderate excess in the Peninsula, Bengal and Assam, and was in considerable to large excess in the Punjab, Upper Sind, Rajputana and the western districts of the North-Western Provinces. The following gives comparative data for all stations at which the excess was more than 4° in amount :—

Station.	Mean daily temperature.		
	Actual, May 1895.	Normal, May.	Variation of actual from normal.
	°	°	°
Mooltan	98·0	90·3	+7·7
Lahore	94·6	87·5	+7·1
Rawalpindi	89·5	82·4	+7·1
Sirsa	98·1	91·1	+7·0
Peshawar	89·8	83·6	+6·2
Jacobabad	99·2	93·6	+5·6
Ludhiana	93·9	88·9	+5·0
Dera Ismail Khan	93·5	88·7	+4·8
Jeypore	95·5	90·9	+4·6
Bickaneer	98·6	94·2	+4·4
Meerut	92·6	88·4	+4·2
Jhansi	99·1	94·9	+4·2
Ajmere	94·6	90·5	+4·1

The excess was hence absolutely greatest at Mooltan, Lahore, Rawalpindi and Sirsa, at which it ranged between 7° and 8°.

The mean temperature of the month was also largely above the normal at the hill stations in the Western Himalayas as is shown by the following data :—

STATION.	MEAN DAILY TEMPERATURE.		
	Actual, May 1895.	Normal, May.	Variation of actual from normal.
	°	°	°
Murree	75·4	67·3	+8·1
Simla	69·2	64·5	+4·7
Chakrata	71·1	66·0	+5·1
Mussooree	70·9	66·5	+4·4
Ranikhet	72·0	68·2	+3·8

The following is a brief summary of the chief features of the mean temperature conditions of the month :—

(1) Slight to moderate deficiency in the day temperature, and slight deficiency in the mean temperature over the whole of Burma due to more frequent rain than usual.

(2) Slight deficiency in both the day and night temperatures, and hence also in the mean temperature, of the Sind, Cutch and Kathiawar coast districts.

(3) Slight to moderate excess in the day and night temperatures, and hence also in the mean temperature, in the Peninsula, Bengal and Assam.

(4) Considerable to large excess of temperature in Upper Sind, the Punjab, Rajputana and the western districts of the North-Western Provinces and Baghelkhand. The excess was slightly more marked in the day than the night temperature.

(5) The greatest excess of temperature was exhibited in the Punjab, Upper Sind and North-West Rajputana and the month of May 1895 was in the case of several stations in that area hotter than the corresponding month of the previous 20 years. The area of greatest excess of temperature included the Punjab, where it was on the mean of that area greater than in the corresponding months of the past 16 years, as is shown by the following comparison :—

	VARIATION OF MEAN TEMPERATURE FROM THE NORMAL IN THE MONTH OF MAY																
	1895.	1894.	1893.	1892.	1891.	1890.	1889.	1888.	1887.	1886.	1885.	1884.	1883.	1882.	1881.	1880.	1879.
	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°	°
Punjab	+6·0	+3·9	+1·4	+5·8	−1·4	+2·6	+0·1	+2·7	+5·4	+0·7	−8·1	+1·7	+0·7	+0·2	+1·7	+3·5	+3·0

The following table gives comparative data for 51 meteorological areas or districts into which India is divided :—

PROVINCE.	DIVISION.	ACTUAL TEMPERATURE.					VARIATION FROM NORMAL OF MONTH OF MEAN.		
		Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Diurnal range.
		°	°	°	°	°	°	°	°
BURMA . . .	Tenasserim	89·1	75·6	82·3	13·5	23·9	−1·9	+0·3	−2·2
	Lower Burma	89·7	78·3	84·0	11·5	21·6	−1·4	+0·7	−2·1
	Central do.	95·1	76·9	86·0	18·2	33·2	−4·0	+0·2	−4·2
	Upper do.	90·8	73·3	82·1	17·5	31·8	−5·8	+1·2	−7·0
	Arakan	89·5	78·9	84·2	10·6	20·1	−1·0	+1·1	−2·1
BENGAL AND ASSAM	Eastern Bengal	88·1	74·5	81·3	13·6	26·3	+0·1	+1·2	−1·1
	Assam (Surma)	90·7	73·0	81·9	17·8	32·7	+1·0	+1·4	−0·4
	Do. (Brahmaputra) . . .	87·5	74·1	80·8	13·4	28·4	+1·4	+2·0	−0·6
	Deltaic Bengal	95·9	78·6	87·3	17·3	34·4	+1·1	+1·7	−0·6
	Central do.	98·5	78·3	88·4	20·2	38·8	+1·5	+1·9	−0·4
	North do.	89·0	74·7	81·9	14·2	28·8	−0·3	+2·3	−2·6
	Orissa	94·4	81·4	87·9	13·0	34·2	+1·3	+2·1	−0·8
	Chota Nagpur	102·1	79·3	90·7	22·9	43·2	+1·1	+3·0	−1·9
	Bihar (South)	102·8	80·7	91·7	22·1	43·7	+0·7	+3·1	−2·4
	Do. (North)	96·3	77·2	86·8	19·0	37·3	−1·0	+2·2	−3·2
NORTH-WESTERN PROVINCES AND OUDH.	North-Western Provinces (East) .	104·3	80·4	92·3	24·0	43·7	+0·6	+2·4	−1·8
	Oudh (South)	106·1	82·4	94·2	23·7	39·9	+2·0	+5·7	−3·7
	Do. (North)	101·3	77·7	89·5	23·6	47·6	?	?	?
	North-Western Provinces (Central) .	107·2	81·6	94·4	25·6	41·9	?	?	?
	Do. do. (West) .	109·6	85·9	97·8	23·8	39·1	+2·6	+4·4	−1·8
	Do. do. (Submontane)	103·1	77·0	90·0	26·1	44·3	+3·0	+3·4	−0·4

Province.	Division.	Actual Temperature.					Variation from normal of month or mean.		
		Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Diurnal range.
		°	°	°	°	°	°	°	°
Punjab	Punjab (South)	111·1	82·1	96·6	29·0	50·2	+5·8	+4·5	+1·3
	Do. (Central)	109·5	79·7	94·6	29·8	46·2	+6·7	+7·5	−0·8
	Do. (Submontane)	107·6	79·6	93·7	28·0	46·6	+4·5	+5·4	−0·9
	Do. (Hill Districts)	84·0	63·6	73·8	20·3	38·3	+6·7	+6·1	+0·6
	Do. (North-West)	105·7	73·6	89·3	31·2	47·8	+6·8	+6·0	+0·8
	Do. (West)	111·8	80·5	96·2	31·3	50·9	+7·7	+4·8	+2·9
Bombay and Malabar Coast Districts (Madras).	Malabar	89·8	79·0	84·4	10·8	17·0	+1·1	+1·3	−0·2
	Madras (South Central)	97·5	75·0	86·3	22·5	32·4	+0·7	+0·5	+0·2
	Coorg	79·9	64·8	72·4	15·1	22·8	−1·0	+0·3	−1·3
	Mysore	91·2	68·8	80·0	22·4	35·2	+0·1	−0·1	+0·2
	Konkan	89·2	80·9	85·1	8·5	12·6	0	+1·2	−1·1
	Bombay Deccan	100·1	72·8	86·5	27·3	40·0	+0·9	+0·7	+0·2
	Hyderabad (North)	103·1	78·2	90·6	24·9	33·9	?	?	?
	Khandesh	103·8	74·0	88·9	29·8	42·4	+1·6	+1·5	+0·1
Central Provinces and Berar.	Berar	108·5	81·2	94·9	27·3	37·4	+1·4	+1·3	+0·1
	Central Provinces (West)	108·9	81·9	95·4	27·0	39·4	+1·5	+1·6	−0·1
	Do. (Central)	107·9	81·0	94·5	26·9	39·6	+2·4	+2·5	−0·1
	Do. (East)	108·2	82·7	95·5	25·5	42·6	+1·8	+1·7	+0·1
Bombay (North)	Gujarat	101·8	78·7	90·3	23·1	37·7	−2·0	+1·0	−3·0
	Kathiawar	96·2	76·4	86·3	19·8	30·7	+0·4	−0·5	+0·9
	Sind	104·6	78·3	91·5	26·3	39·1	+1·7	+0·7	+1·0
Rajputana and Central India.	Central India (East)	108·2	83·0	95·7	25·2	41·3	+2·2	+4·4	−2·2
	Rajputana (East), Central India (West)	107·2	79·6	93·4	27·7	43·0	+3·0	+2·7	+0·3
	Do. (West)	112·1	81·6	96·8	30·5	45·2	+6·0	+2·7	+3·3
Madras	East Coast (North)	96·8	82·8	89·8	14·0	32·0	+2·3	+0·7	+1·6
	Hyderabad (South)	105·0	79·6	92·4	25·2	37·8	+1·1	+2·1	−1·0
	Madras (Central)	104·1	81·8	93·5	23·5	40·8	+0·5	−0·2	+0·7
	East Coast (Central)	104·0	81·8	92·7	22·2	42·2	+2·6	+0·3	+2·3
	Do. (South)	101·2	81·0	91·1	20·2	34·3	+2·8	+1·2	+1·6
	Madras (South)	97·9	80·7	89·3	17·2	25·7	+0·2	+1·7	−1·5

At the commencement of the month temperature was more or less in excess over the whole of India with the exception of Burma, Assam, Bihar and North and Central Bengal. The excess was very marked in the Punjab, Upper Sind and Rajputana. The following gives variation data for the 24 hours preceding 8 A.M. of the 1st:—

Area.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−4·0	+1·4	−1·3
Bengal and Assam	−2·8	+0·2	−1·3
N.-W. Provinces and Oudh	+0·5	+1·5	+1·0
Punjab	+8·2	+6·5	+7·4
Sind and Rajputana	+5·3	+5·6	+5·5
Central India and Gujarat	+1·4	+0·3	+0·9
Central Provinces and Berar	+2·4	+2·2	+2·3
Bombay	−0·3	+0·5	+0·1
Madras	+3·9	+2·2	+3·1

Weather was showery in Bengal from the 1st to the 4th, in Madras from the 4th to the 6th and in the Bombay Deccan on the 6th and 7th. The showery weather caused a large temporary reduction of temperature in the areas affected; but during the whole of this period from the 1st to the 7th temperature was steadily in moderate to large excess in North-Western India. The following gives mean daily variation data for this area of increased temperature:—

Area.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of May						
	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.
	°	°	°	°	°	°	°
Quetta (Baluchistan)	+ 3·6	+1·0	+1·4	+3·1	+3·5	+3·9	+6·9
Punjab	+ 7·4	+6·2	+2·7	+1·4	+3·3	+2·1	+3·7
Upper Sind	+10·8	+6·9	+1·0	+2·0	+5·1	+4·8	+5·6
Rajputana	+ 6·7	+5·5	+1·7	+1·8	+2·5	+2·2	+2·8

Temperature increased very rapidly in Assam from the 4th to the 7th and averaged 5°·6 above the normal in that

province on the 7th. On the other hand, temperature fell in the Madras Presidency from 1° above the normal on the 4th to 3° below it on the 6th and 2½° below it on the 7th. Dry weather obtained generally in India from the 7th to the 12th, whilst Burma had frequent showers. Temperature was in general excess during this period over nearly the whole of India. The excess was greatest in the dry area in North-Western India. The following gives daily variation data for that area from the 8th to the 12th:—

AREA.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY					Mean of period.
	8th.	9th.	10th.	11th.	12th.	
	°	°	°	°	°	°
Quetta (Baluchistan) . .	+5·5	+6·5	+6·7	+5·7	+4·6	+5·8
Punjab	+5·6	+5·5	+7·7	+8·7	+8·5	+7·2
Upper Sind	+7·7	+9·5	+7·8	+7·4	+7·6	+8·0
Rajputana	+4·1	+5·9	+7·4	+7·6	+8·5	+6·7

The mean temperature of this period hence averaged 7° above the normal in the area including Baluchistan, the Punjab, Upper Sind and Rajputana. The preceding data also show that during this period the excess was steadily greatest in Upper Sind and the Punjab, and that it increased from an average of 5·°6 on the 8th to 8·°7 on the 11th in the latter area.

The following gives corresponding data for Burma, where temperature was reduced to a moderate amount below the normal by the showery weather of the period:—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY					Mean of period.
	8th.	9th.	10th.	11th.	12th.	
	°	°	°	°	°	°
Burma	−0·3	−1·1	−2·2	−1·3	−1·7	−1·3

The following table gives mean variation data for the 24 hours preceding 8 A.M. of the 12th, showing the temperature conditions prevailing in this period over India:—

AREA.	VARIATION FROM NORMAL OF		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	− 3·5	+0·1	−1·7
Bengal and Assam	+ 0·7	+3·0	+1·9
N.-W. Provinces and Oudh . .	+ 5·2	+2·2	+3·7
Punjab	+10·6	+6·4	+8·5
Sind and Rajputana	+ 7·3	+4·9	+6·1
Central India and Gujarat . .	+ 5·8	+4·9	+5·4
Central Provinces and Berar . .	+ 2·7	+5·8	+4·3
Bombay	+ 2·5	+3·2	+2·9
Madras	− 0·2	−0·7	−0·5

Weather was again slightly disturbed during the next four days. The Bombay Deccan received numerous thunder showers on the 12th and the Madras Presidency from the 12th to the 15th. North Bengal obtained heavy rain from series of thunderstorms and the remainder of Bengal light occasional showers from the 13th to the 16th.

During these periods of showery weather temperature was reduced considerably in the areas affected. In North-Western and Central India, temperature continued steadily above the normal. The following gives data for this period:—

AREA.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY					Mean of period.
	13th.	14th.	15th.	16th.	17th.	
	°	°	°	°	°	°
Quetta (Baluchistan) . .	+2·5	+1·7	+2·2	+3·6	+2·0	+2·4
Punjab	+7·7	+4·4	+5·2	+6·0	+5·5	+5·8
Upper Sind	+4·1	+5·1	+5·7	+3·5	+2·5	+4·2
Rajputana	+7·8	+5·1	+4·3	+3·7	+1·0	+4·4
Central India and Gujarat .	+3·9	+3·3	+1·6	+0·2	+0·1	+1·8
North-Western Provinces and Oudh.	+3·3	+0·6	+2·0	+2·3	+3·7	+2·4

Hence as during the previous fortnight temperature was steadily most largely in excess in the Punjab during this period.

During the next week from the 18th to the 25th, the trough of low pressure lay near the hills in Northern India and unusually steep gradients favouring westerly winds obtained. Very hot dry weather with unusually strong westerly winds prevailed over the whole of the interior,

and the hot dry winds in the Gangetic Plain were very strong during this period. The following gives temperature variation data, day by day, for this period :—

AREA.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY.							
	18th.	19th.	20th.	21st.	22nd.	23rd.	24th.	25th.
	°	°	°	°	°	°	°	°
Burma . . .	−1·6	−2·6	−3·8	−3·9	−2·9	0	− 0·1	+ 0·2
Bengal and Assam .	+2·3	+2·6	+4·0	+5·2	+4·5	+0·3	+ 0·5	— 0·1
North-Western Provinces and Oudh.	+3·7	+3·6	+2·9	+5·8	+7·0	+6·6	+ 4·4	+ 3·6
Punjab . . .	+6·3	+4·4	+4·4	+6·5	+7·2	+9·6	+10·6	+10·4
Sind and Rajputana .	−0·4	+0·5	+1·5	+2·9	+5·0	+6·1	+ 5 3	+ 5·9
Central India and Gujarat.	−0·6	−0·8	−0·9	+0·8	+2·4	+3·0	+ 3·0	+ 1·7
Central Provinces and Berar.	+0·8	−0·4	−0·3	+0·9	+3·3	+4·4	+ 3·6	+ 3·6
Bombay . . .	−0·6	−1·2	−1·0	−0·7	+0·1	+1·2	+ 0·7	+ 1·5
Madras . . .	+2·3	+2·3	+2·1	+3·2	+2 9	+3·2	+ 3·3	+ 1·4

The chief features of this period of strongly marked hot weather conditions were :—

(1.) Temperature was steadily in considerable defect in Burma due to frequent rain.

(2.) Temperature was in large excess over the whole of Northern India from the 20th to the 25th, and the excess was throughout the whole period greatest in the Punjab and increased in amount from the 19th to the 24th, on which day it averaged 10½° for that area.

(3.) Temperature was throughout the whole period in considerable to largish excess in Madras, and, as is usually the case when strong westerly winds prevail in May in the Deccan, the excess was most marked at the Coromandel coast stations. The following gives data for three stations from the 20th to the 24th :—

STATION.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY				
	20th.	21st.	22nd.	23rd.	24th.
	°	°	°	°	°
Cocanada . . .	+5·4	+8·6	+7·8	+6·9	+6·1
Madras . . .	+5·1	+6 5	+4·8	+1·4	+1·7
Negapatam . . .	+4·6	+3·7	+2·5	+1·4	−1·0

The 24th and 25th were the hottest days of the year in North-Western India. The following gives the highest maximum temperatures registered on these days and their variations from the normal maximum day temperatures of the period :—

DATE.	STATION.	Maximum temperature.	Variation from normal.
		°	°
24th.	Montgomery	121·9	?
,,	Sirsa	121·1	+15·3
,,	Mooltan	120·5	+16·0
,,	Jacobabad	119·0	+ 8·0
,,	Bickaneer	118·3	+12 6
,,	Murree	93·2	+16·2
25th.	Jacobabad	123·0	+11·0
,,	Sirsa	120·1	+13·8
,,	Montgomery	119·4	?
,,	Mooltan	119·0	+13·9

From the 26th to the 28th the trough of low pressure lay at the foot of the hills from Sialkot to North Bihar, and strong dry hot winds prevailed in the Gangetic Plain. Temperature increased considerably in Chota Nagpur, South Bihar and the North-Western Provinces, and was even more largely in excess in those areas than in Upper India, as is shown by the following :—

AREA.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY			
	26th.	27th.	28th.	29th.
	°	°	°	°
Baluchistan (Quetta) . . .	−0·8	+ 2·1	+ 2·7	+ 1·9
Punjab	+5·2	+ 5·1	+ 7·1	+ 8·8
Upper Sind	+3·5	+ 2 9	+ 7·0	+ 6·2
Rajputana	+7·0	+ 5·1	+ 3·5	0
N.-W. Provinces & Oudh . .	+4 5	+ 5·2	+ 7·9	+ 9·7
Chota Nagpur	+8·4	+11·3	+11·7	+11·5
South Bihar	+2·5	+ 7·2	+12·1	+ 8·4

The temperature conditions of the period from the 25th to the 30th were very similar to those which obtained during the period from the 22nd to the 28th May 1894, when the trough of low pressure also lay along the foot of the hills in the North-Western Provinces and Bihar and steep gradients for westerly winds obtained in Northern and Central India. The following states the most abnormal features of the temperature conditions during this period from the 25th to the 31st May 1895 :—

(1) Excessively high temperature in West Bengal, Bihar, and Chota Nagpur and diminished temperature in Assam and East Bengal. These features were almost as strongly exhibited in the night as in the day temperature. The following statement gives the greatest excess and deficiency in these two areas for each day during the period :—

Date.	Area of increased temperature, West Bengal, Chota Nagpur and Bihar.		Area of decreased temperature, East Bengal and Assam.	
	Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date.	Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date.
		°		°
25th	Chaibassa . .	+ 7·8	Silchar . .	−3·0
26th	Ranchi . .	+ 9·4	Bogra . .	−8·6
,,	Chaibassa . .	+ 9·3	Dacca . .	−7·1
27th	Chaibassa . .	+12·6	Dinajpur . .	−4·5
,,	Ranchi . .	+12·0		
28th	Ranchi . .	+12·6	Silchar . .	−6·2
	Balasore . .	+12·1		
29th	Chaibassa . .	+11·9	Silchar . .	−8·0
,	Ranchi . .	+11·8	Sibsagar . .	−6·7
30th	Chaibassa . .	+11·1	Silchar . .	−7·3
,,	Balasore . .	+14·6?	Dhubri . .	−5·7
31st	Cuttack . .	+10·0	Dacca . .	−6·8
	Chaibassa . .	+ 8·2		

(2) Excessive temperature in North-Western India, more especially in Upper Sind and the Punjab. The following gives the greatest excess on each day from the 25th to the 31st in that area for comparison with the data of the hot area in West Bengal, Orissa and Chota Nagpur :—

Date.	Station.	Actual mean temperature of 24 hours preceding 8 A.M. of date.	Variation from normal.
		°	°
25th	Peshawar	99·7	+14·3
26th	Sirsa	100·5	+ 8·4
27th	Delhi	100·2	+ 7·3
28th	Peshawar	96·9	+ 9·5
29th	Peshawar	100·7	+12·7
30th	Delhi	101·2	+ 7·6
31st	Sirsa	100·1	+ 5·3

(3) Much higher temperature than usual in the Madras coast districts from the 27th to the 31st. Temperature was on the other hand practically normal or in slight defect in the Deccan districts, Hyderabad and Mysore. The following gives data in illustration of the excessive temperature in the coast districts :—

Date.	Station.	Actual mean temperature of 24 hours preceding 8 A.M. of date.	Variation from normal.
		°	°
27th	Cocanada	97·0	+6·3
28th	Cocanada	96·7	+6·2
,,	Masulipatam . . .	98·5	+6·7
29th	Cocanada	98·8	+8·0
,,	Masulipatam . . .	98·9	+7·5
,,	Madras	95·0	+4·5
30th	Cocanada	99·8	+9·4
,,	Masulipatam . . .	99·4	+7·9
,,	Madras	94·8	+4·4
31st	Cocanada	99·0	+8·9
,,	Masulipatam . . .	98·4	+7·1
,,	Madras	93·3	+3·0

As in the last week of May 1894, the excessive temperature was most marked at the stations in the deltas of the Godavari and Kistna, to which the descending westerly winds from the interior of the Deccan have freer access than to the stations to the north or south.

The following table gives the mean maximum, the mean minimum and mean temperature of the areas of excessive temperature during the last week of the month :—

Provinces.	Mean maximum temperature of the 24 hours preceding 8 A.M. of date.						
	23rd.	24th.	25th.	27th.	28th.	29th.	30th.
	°	°	°	°	°	°	°
Punjab . . .	115·4	115·2	113·1	112·7	114·6	114·6	110·4
Upper Sind . .	122·0	119·0	123·0	120·5	123·0	122·0	118·0
Rajputana . .	112·8	114·2	113·7	112·1	111·7	108·0	105·7
N.-W. Provinces .	110·7	106·3	105·4	110·0	112·5	112·0	107·6
Bihar . . .	100·6	99·5	96·7	96·8	106·5	105·6	97·5
Chota Nagpur . .	107·8	102·8	105·5	108·8	110·0	109·8	107·5
Madras Coast. . .	103·8	102·4	95·9	99·9	102·5	105·8	104·7

PROVINCE.	MEAN MINIMUM TEMPERATURE OF THE 24 HOURS PRECEDING 8 A.M. OF DATE.						
	23rd.	24th.	25th.	27th.	28th.	29th.	30th.
	°	°	°	°	°	°	°
Punjab	81·6	84·1	85·9	78·1	80·5	86·7	81·2
Upper Sind	88·5	85·0	84·0	77·1	83·5	83·5	82·5
Rajputana	87·6	87·7	87·6	84·4	82·3	79·7	81·1
N.-W. Provinces	84·5	83·4	83·9	83·0	86·2	89·1	83·9
Bihar	80·1	81·4	78·1	81·1	84·1	82·1	78·9
Chota Nagpur	78·1	79·1	80·3	86·0	85·8	87·0	84·1
Madras Coast	83·4	83·4	81·9	83·5	84·4	84·6	84·0

PROVINCE.	MEAN DAILY TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF DATE.						
	°	°	°	°	°	°	°
Punjab	98·5	99·7	99·5	95·4	97·6	100·7	95·8
Upper Sind	105·3	102·0	103·5	98·8	103·3	102·8	100·3
Rajputana	100·2	101·0	100·7	98·3	97·0	93·9	93·4
N.-W. Provinces	97·6	94·9	94·7	96·5	99·4	100·6	95·8
Bihar	90·4	90·5	87·4	89·0	95·3	93·9	88·2
Chota Nagpur	93·0	91·0	92·9	97·4	97·9	98·4	95·8
Madras Coast	93·6	92·9	88·9	91·7	93·5	95·2	94·4

During this period, from the 25th to the 30th, Burma, Assam and North and East Bengal had numerous series of thunderstorms which reduced temperature below the normal, as is shown by the following:—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF MAY			
	26th.	27th.	28th.	29th.
	°	°	°	°
Burma	−0·4	+0·3	+0·3	0
Assam	−1·9	−4·4	−3·7	−6·0
East Bengal	−5·6	+2·2	+4·3	+3·1
North Bengal	−5·7	−2·7	+2·3	+0·2

There was hence a very sharp contrast between the temperature conditions in East Bengal and Assam and those of West Bengal and Chota Nagpur.

The trough of low pressure shifted southwards during the last two days of the month, and easterly winds extended up the Gangetic Plain and reduced temperature considerably, so that at the end of the month the variations were small, except in the Madras coast districts, where temperature due to the influence of the prevailing westerly winds continued largely in excess. The following gives mean variation data for the 31st:—

AREA.	VARIATION FROM NORMAL OF		
	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
	°	°	°
Burma	−0·1	−2·0	−1·1
Bengal and Assam	+1·1	+0·4	+0·8
N.-W. Provinces and Oudh	+3·7	−0·1	+1·8
Punjab	+3·4	+2·4	+2·9
Sind and Rajputana	−1·0	0	−0·5
Central India and Gujarat	−3·0	−1·5	−2·3
Central Provinces and Berar	+1·4	−0·7	+0·4
Bombay	+0·9	−0·2	+0·4
Madras	+4·5	+1·8	+3·2

The hottest periods of the month were from the 23rd to the 25th in Upper India, and the 27th to the 30th in the North-Western Provinces, Bihar, Chota Nagpur and the Madras coast districts.

The following gives data of the highest maximum temperatures recorded in those areas of greatest excess of temperature and the highest temperatures previously recorded at the same stations for comparison:—

STATION.	Highest maximum temperature recorded in May 1895.	Date on which recorded.	Highest maximum temperature recorded in May previous to 1895.	Year in which recorded.
	°		°	
Jacobabad	123·0	25th and 28th	123·0	1888
Montgomery	121·9	24th	118·9	1892
Sirsa	121·1	24th	118·3	1888
Mooltan	120·5	24th	120·3	1890
Pachpadra	119·7	11th	123·1	1886
Khushab	118·4	24th	119·1	1892
Bickaneer	118·3	24th	117·4	1879
Lahore	117·3	24th	120·3	1879
Delhi	116·0	23rd	116·6	1883 and 1884
Bankura	116·1	28th and 29th	117·1	1894
Balasore	116·0	30th	111·0	1894

STATION.	Highest maximum temperature recorded in May 1895.	Date on which recorded.	Highest maximum temperature recorded in May previous to 1895.	Year in which recorded.
	°		°	
Cuttack . . .	115·9	29th	114·4	1888
Midnapur . . .	115·4	29th	117·4	1894
Raniganj . . .	115·3	28th and 29th	115·5	1889
Rajahmundry . .	113·1	29th and 30th	116·1	1892
Masulipatam . .	112·7	23rd, 29th and 30th	114·7	1892 and 1894
Cocanada . . .	111·9	30th	112·4	1892
Madras . . .	109·0	19th and 21st	109·4	1894

The following gives the variations of the mean daily temperature from the normal, week by week, during the month in nine of the larger provinces or political divisions of the Empire :—

DIVISION.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF WEEK ENDING.					
	4th May.	11th May.	18th May.	25th May.	1st June.	For whole month.
	°	°	°	°	°	°
Burma	−1·4	−0·7	−1·1	−1·9	0	−0·9
Bengal and Assam . .	−1·5	+1·0	+2·0	+2·4	+2·0	+1·4
North-Western Provinces and Oudh.	+0·5	+0·2	+2·8	+4·8	+4·9	+2·8
Punjab	+3·5	+5·2	+6·2	+7·6	+5·2	+6·0
Sind and Rajputana . .	+3·2	+3·9	+3·0	+3·9	+1·5	+3·2
Central India and Gujarat .	+1·5	+2·1	+2·0	+1·3	+0·2	+1·5
Central Provinces and Berar .	+1·8	+1·1	+1·8	+2·2	+2·1	+1·9
Bombay	+0·6	+1·2	+0·7	+0·1	+1·1	+0·9
Madras	+2·3	−0·8	−0·3	+2·6	+2·7	+1·2

Winds.

Winds were more steady and stronger than usual at Port Blair and the Burma stations. They were on the average of the month more westerly at Port Blair and Rangoon, and less westerly at Diamond Island and Akyab. Winds were somewhat steadier and stronger than usual in Bengal and Orissa. The following gives data for four stations :—

STATION.	VELOCITY IN MILES PER DIEM.			STEADINESS.		
	Mean actual May 1895.	Normal, May.	Percentage variation.	Actual percentage, May 1895.	Normal percentage, May.	Variation.
False Point . . .	355	324	+10	85	71	+14
Saugor Island . . .	464	367	+26	90	69	+21
Calcutta	149	172	−13	67	66	+ 1
Chittagong . . .	174	153	+14	40	38	+ 2

As might be expected from the abnormal pressure features of the last ten days of the month, winds were more westerly than usual over the whole of Bengal and Orissa, with the exception of Saugor Island and False Point, where winds almost invariably show an opposite deflection to that of the inland stations. The following data illustrate this :—

STATION.	WIND DIRECTION.		
	Mean, May 1895.	Norma May.	Variation westerly.
False Point	S 1° E	S 31° W	−32°
Saugor Island	S 6° W	S 12° W	− 6°
Cuttack	S 14° W	S 5° W	+ 9°
Chittagong	S 27° W	S	+27°
Calcutta	S 5° W	S 11° E	+16°
Burdwan	S 10° W	S 9° E	+19°

Winds were largely above their normal strength in Bihar, Chota Nagpur and the North-Western Provinces, and were also remarkably steady. This is shown most

clearly by the following data for four representative stations :—

Province.	Steadiness.			Velocity in miles per diem.		
	Actual percentage May 1895.	Normal percentage, May.	Variation.	Mean actual, May 1895.	Normal, May.	Variation from normal.
Hazaribagh	14	15	− 1	258	210	+ 48
Patna	71	38	+33	166	118	+ 48
Allahabad	40	20	+20	202	99	+103
Agra	39	30	+ 9	186	139	+ 47

Easterly winds frequently extend in May across the northern districts of Bihar into the eastern districts of the North-Western Provinces, and give a well-marked easterly component to the wind direction. In the present month this influence extended westwards as far as Bihar, the sub-montane districts of the North-Western Provinces, and to North and Central Oudh. The following gives data for stations in these areas, and also for Hazaribagh and Sutna :—

Station.	Wind direction.		Steadiness.		
	Mean, May 1895.	Normal, May.	Actual percentage May 1895.	Normal percentage, May.	Variation.
Darbhanga	S 73° E	S 86° E	74	59	+15
Patna	N 64° E	N 54° E	71	38	+33
Allahabad	N 1° W	N 8° E	40	20	+20
Lucknow	N 40° E	N 15° E	24	15	+ 9
Hazaribagh	S 83° W	S 77° W	14	15	− 1
Sutna	N 75° W	N 50° W	43	52	− 9

Winds were on the whole normal in strength and steadiness in the Punjab and Sind, and present no unusual features.

The following gives comparative wind data of the various provinces of Northern India for the month :—

Province.	Steadiness.			Velocity in miles per diem.		
	Actual percentage, May 1895.	Normal percentage May.	Variation.	Mean actual, May 1895.	Normal, May.	Variation from normal.
Bengal	60	54	+ 6	198	184	+14
Orissa	69	66	+ 3	239	225	+14
Bihar	73	49	+24	171	132	+39
Chota Nagpur	14	15	− 1	258	210	+48
North-Western Provinces	30	17	+13	119	90	+29
Punjab	13	25	−12	78	80	− 2

Winds were much stronger and steadier, and more directly from the west in Rajputana and Central India. The following data for three stations illustrate these features :—

Station.	Velocity in miles per diem.			Wind direction.		
	Mean actual, May 1895.	Normal, May.	Percentage variation.	Mean, May 1895.	Normal, May.	Variation westerly.
Ajmere	281	181	+ 55	S 88° W	S 60° W	+28°
Deesa	341	321	+ 6	S 83° W	S 55° W	+28°
Nowgong	116	81	+43	N 71° W	N 70° W	+ 1°

The mean air movement of the month was larger in amount and steadier in character in Berar, the Central Provinces and the Deccan. The data of the following stations illustrate these features :—

Station.	Velocity in miles per diem.			Wind direction.		
	Mean actual, May 1895.	Normal, May.	Percentage variation.	Mean, May 1895.	Normal, May.	Variation westerly.
Akola	306	208	+47	N 56° W	N 51° W	+ 5°
Nagpur	253	168	+51	S 74° W	N 41° W	
Poona	360	337	+ 7	N 84° W	N 55° W	+29°
Bellary	193	200	− 4	N 67° W	N 76° W	− 9°

The increased air movement in this area was hence most strongly shown in Berar and the Central Provinces.

Winds were steadier, but not quite so strong as usual at the west coast stations. The variations were small and of no significance. Winds were slightly more northerly than usual at Ratnagiri, Karwar and Cochin. They were somewhat stronger than usual in Southern India so far as that area is represented by the stations of Trichinopoly and Madras. They were more variable in direction than usual at Madras, where the mean percentage of steadiness was only 43 as compared with the normal 66. The following gives data for these three stations :—

Station.	Velocity in miles per diem.			Steadiness.		
	Mean actual, May 1895.	Normal, May.	Percentage variation.	Actual percentage May 1895.	Normal percentage, May.	Variation.
Madras	231	220	+5	43	66	−23
Trichinopoly	180	145	+24	70	59	+11
Salem	77	100	−23	34	61	−27

The air movement of the month was unusually vigorous at all the hill stations in Northern and Central India, and was also much steadier than usual. Winds were normal in direction at Chakrata and Ranikhet, but contained an abnormal northerly component at Murree and Simla. The following gives data showing the increased velocity of the air motion at the hill stations :—

STATION.	VELOCITY IN MILES PER DIEM.		
	Mean Actual, May 1895.	Normal, May.	Percentage variation.
Murree	236	193	+22
Chakrata	226	147	+54
Ranikhet	109	87	+25
Mount Abu	343	231	+48
Pachmarhi	286	164	+74

Humidity and Cloud.

The air contained slightly more aqueous vapour than usual in Burma and Assam, and humidity was hence above the normal in these areas to a moderate extent. The mean humidity percentage of the month was 7 in excess at Akyab, 6 at Rangoon and 5 at Diamond Island.

The mean absolute humidity of the month varied slightly and irregularly from the normal in Bengal, but the relative humidity was in moderate defect due to the increased temperature of the month in that area. The decrease was largest at Calcutta (7 in defect) and at Berhampore and False Point (each 4 in defect).

The mean absolute humidity of the month was in moderate excess, and the relative humidity in slight to considerable excess in the North-Western Provinces and Bihar due to the occasional extension of easterly winds into these areas during the month.

The following gives comparative data for these areas :—

PROVINCE.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Average actual, May 1895.	Normal, May.	Variation, from normal.	Average actual, May 1895.	Normal, May.	Variation from normal.
	"	"	"	%	%	
Burma	·917	·883	+·034	81	75	+6
Assam	·847	·788	+·059	82	81	+1
Bengal	·892	·874	+·018	73	75	−2
Bihar	·778	·722	+·056	62	57	+5
Orissa	·908	·897	+·011	71	74	−3
Chota Nagpur	·513	·472	+·041	41	40	+1
North-Western Provinces.	·563	·497	+·066	39	38	+1

The mean humidity percentage of the month was considerably to largely below the normal (mainly due to the excessive temperature of the period) in the Punjab and the adjacent hill districts.

The following gives data for five stations :—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Actual, May 1895.	Normal, May.	Variation from normal.	Actual, May 1895.	Normal, May.	Variation from normal.
	"	"	"	%	%	
Peshawar	·366	·425	−·059	28	40	−12
Mooltan	·601	·579	+·022	34	42	−8
Murree	·229	·261	−·032	28	44	−16
Kailang	·168	·178	−·010	46	56	−10
Simla	·282	·286	−·004	42	47	−5

The decreased humidity was hence most strongly shown at the most northerly stations of the Punjab, *viz.*, Peshawar and Murree. This feature of decreased humidity was almost as marked at the elevated station of Kailang in the Western Himalayas as at Murree and Peshawar.

The variations of the hygrometric conditions of the month from the normal were generally small in amount in the remainder of India. The air was slightly less dry than usual in Rajputana, Mysore, Hyderabad and the Bombay Deccan, but was drier in the west coast districts and Madras. The variations of the mean relative humidity of the month from the normal in these areas were 5 or upwards at Trichinopoly (6 in defect) and Karwar and Salem (each 5 in defect). The following gives comparative data :—

AREA.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Average actual, May 1895.	Normal, May.	Variation from normal.	Average actual, May 1895.	Normal, May.	Variation from normal.
	"	"	"	°	°	°
Rajputana	·534	·551	−·017	37	36	+1
Central India	·442	·381	+·061	29	30	−1
Bombay Deccan	·529	·524	+·005	48	46	+2
West Coast	·848	·864	−·016	71	74	−3
Madras	·809	·822	−·013	62	65	−3
Mysore	·613	·592	+·021	63	62	+1
Hyderabad Deccan.	·581	·518	+·063	41	39	+2

The mean humidity of the month was 9 below the normal at Quetta (representative of Baluchistan) and 7 in defect at the hill station of Wellington in Southern India.

The following gives a list of the stations at which the mean humidity of the month was below 30 per cent., showing the driest areas in India during the month :—

Station.	Relative humidity.	
	Mean daily, May 1895.	Mean 16 hours, May 1891.
Murree	28	27
Peshawar	28	19
Saugor	25	16
Nowgong	28	14
Jubbulpore	28	17
Pachmarhi	29	18
Sutna	29	15

Hence the area of greatest dryness of the air included the stations of Saugor, Jubbulpore, Sutna and Nowgong, *i.e.*, the north-eastern districts of the Central Provinces, Bundelkhand, and Baghelkhand.

The driest period of the month in North-Western India was from the 2nd to the 4th, and the following remarkably low humidities were recorded during this period :—

Date.	Hour.	Station.	Humidity percentage.
2nd.	4 P.M.	Buldana	5
3rd.	,,	Nowgong	5
4th.	,,	Ditto.	2
,,	,,	Deesa	4
,,	,,	Pachmarhi	4
,,	,,	Akola	5

Very low humidities were registered in Chota Nagpur, Bihar, West Bengal and Orissa during the period from the 25th to the 28th, when dry hot westerly winds extended to these areas from the Gangetic Plain. The following gives the most noteworthy :—

Date.	Hour.	Station.	Humidity percentage.
26th.	4 P.M.	Hazaribagh	10
27th.	,,	Burdwan	14
,,	,,	Hazaribagh	15
	,,	Patna	15
27th.	4 P.M.	Berhampore	17
28th.	,,	Cuttack	11
,,	,,	Hazaribagh	15
,,	10 A.M. and 4 P.M.	Patna	16
,,	4 P.M.	Burdwan	19

It was pointed out in last month's review that very large variations of the amount of aqueous vapour present in the air frequently occur at stations in Bengal due to the alternating influence of the dry land winds of Northern India and the local sea winds of the north of the Bay. The following gives three examples in May :—

Station.	Date.	Amount of aqueous vapour.		
		Early morning.	10 A.M.	4 P.M.
		"	"	"
Burdwan	27th	·905	·793	·365
	28th	·720	·655	·474
Berhampore	27th	1·012	·907	·427
	28th	·788	·849	·775
Cuttack	28th	·968	·701	·338
	29th	·903	·557	·652

The chief features of the mean humidity conditions of the month were as follows : —

(*a*) The air was slightly damper and contained more aqueous vapour than usual in Burma and Assam.

(*b*) The air was somewhat drier in Bengal, more especially at Calcutta, where humidity was 7 in defect.

(*c*) The humidity variations were small and somewhat irregular in the North-Western Provinces, Rajputana, Central India and the Central Provinces.

(*d*) The air was abnormally dry in the Punjab, more especially in the northern and western districts, the Punjab hill districts and Baluchistan. The mean relative humidity of the month was most largely in defect at Murree (—16), Peshawar (—12) and Kailang (—10).

(*e*). Humidity was in defect to a moderate extent in the west coast districts and Madras.

(*f*). The driest area in India (as estimated by the mean humidity percentage) included the north-eastern districts of the Central Provinces, Bundelkhand, and Baghelkhand.

Cloud was in large excess at Port Blair and in Burma

and Chota Nagpur, and in moderate excess in Bengal. The following gives comparative data:—

STATION OR PROVINCE.	MEAN CLOUD AMOUNT.		
	Actual, May 1895.	Normal, May.	Variation from normal.
Port Blair	8·0	6·3	+1·7
Burma	7·6	5·8	+1·8
Assam	6·3	6·2	+0·1
Chota Nagpur	6·0	3·4	+2·6
Bengal	5·8	4·9	+0·9

There was slightly less cloud than usual in Rajputana, the North-Western Provinces, Central India, the Central Provinces and the peninsula generally. The following gives mean data for these areas:—

PROVINCE.	MEAN CLOUD AMOUNT.		
	Average actual, May 1895.	Average normal, May.	Variation from normal.
North-Western Provinces	1·0	1·8	—0·8
Rajputana	1·3	1·7	—0·4
Central India	1·4	2·8	—1·4
Central Provinces	2·3	2·8	—0·5
Mysore	3·9	4·4	—0·5
Bombay Deccan	3·3	3·5	—0·2
Madras	3·9	4·6	—0·7

Skies were unusually free from cloud in the Punjab, and the mean cloud amount of the month was in large defect in that area and at the hill stations in Upper India. The following gives data:—

PROVINCE OR STATION.	MEAN CLOUD AMOUNT.		
	Average actual, May 1895.	Average normal, May.	Variation from normal.
Punjab	0·8	2·1	—1·3
Leh	4·5	6·4	—1·9
Kailang	4·0	6·2	—2·2
Murree	1·8	4·3	—2·5
Simla	2·1	3·9	—1·8
Ranikhet	2·1	3·6	—1·5

The data for Leh and Kailang indicate that cloud was even more largely in defect in the interior of the Himalayas than in the plains of Northern India.

The mean cloud amount of the month was less than 1·0 at the stations for which data are given below:—

STATION.	MEAN CLOUD AMOUNT.		
	Actual, May 1895.	Normal, May.	Varition from normal.
Muscat	0	?	?
Mooltan	0	1·1	—1·1
Jacobabad	0·5	1·2	—0·7
Ajmere	0·6	1·6	—1·0
Agra	0·7	1·2	—0·5
Sutna	0·7	2·3	—1·6
Mount Abu	0·8	1·6	—0·8
Ludhiana	0·6	2·2	—1·6
Meerut	0·6	1·8	—1·2
Roorkee	0·6	1·8	—1·2
Lahore	0·7	2·3	—1·6
Allahabad	0·9	1·6	—0·7

Skies were hence, so far as is indicated by the observations, absolutely free from cloud throughout the whole month at Mooltan and Muscat.

The following is a summary of the chief features of the distribution of cloud during the month:—

(1) Cloud was in large excess in Burma and Chota Nagpur, and in moderate excess in Bengal.

(2) Cloud was in slight defect in the North-Western Provinces, Rajputana, Central India, the Central Provinces and the Deccan.

(3) The mean cloud amount of the month was largely below the normal in the Punjab and the Kashmir and Punjab Himalayan area.

Rainfall.

The rainfall of the month of May is usually small in amount and of little economic importance over by far the greater part of the country, including the Punjab, Rajputana, the North-Western Provinces, Central India, Berar, the Central Provinces, the North Deccan and North Bombay. Moderate to heavy rain is usually received in three areas:

1st.—Bengal and Assam.

2nd.—Lower Burma and Tenasserim.

3rd.—Southern India more especially Malabar.

The rainfall in the first of these areas is due to thundershowers which are heaviest and most frequent in East Bengal and Assam and the northern districts of North Bengal. The average rainfall of the month in Bengal proper ranges from 4 inches in the western districts to 11 inches at Mymensingh in East Bengal, and 15 inches at Kuch Bihar in North Bengal. In Assam it ranges from 9 inches in the Central Assam valley districts to 52 inches at Cherrapunji.

In the second and third areas the rainfall in the earlier part of the month is usually due to thundershowers, and in the latter part to the advance of south-west monsoon winds, which usually begin to give rain in Malabar and Tenasserim in the third or fourth week of May. The average rainfall in Malabar in May is 7 inches, and in Tenasserim about 20 inches.

The rainfall of the month of May 1895 was below the normal over the whole of India with the exception of Tenasserim, North and East Bengal, Assam and the north coast districts of Madras. The rainfall of the month averaged less than a tenth of an inch, and was hence actually or practically *nil*, in Baluchistan, Sind, Kathiawar, Gujarat, Central India, Rajputana, the central and western districts of the North-Western Provinces and the Punjab, except the submontane and hill districts. The rainfall in the remaining districts occurred chiefly during thunderstorms, and was even more irregularly distributed than usual. In Upper India the periods of disturbance and thunderstorms were the 3rd and 4th, the 11th to 14th, and the 23rd to 25th. In Bengal they were from the 1st to the 4th, the 13th to the 16th, and the 23rd to the 26th. In Madras and the Deccan the chief periods were the 4th to the 6th, the 11th to the 15th and the 24th to the 30th.

The following table gives comparative rainfall data for the 51 meteorological divisions of India.

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, May 1895.	Average normal, May.	Average actual, May 1895.	Average normal, May.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	27·69	21·73	+5·96
	Lower Burma*	?	?	10·03	12·53	−2·50
	Central do.*	?	?	7·03	7·64	−0·61
	Upper do.*	?	?	7·85	?	?
	Arakan*	?	?	10·17	21·39	−11·22
Bengal and Assam	Eastern Bengal	11·1	10·9	11·90	9·45	+2·45
	Assam (Surma)*	?	?	24·85	22·84	+2·01
	Do. (Brahmaputra)*	?	?	11·87	11·74	+0·13
	Deltaic Bengal	5·6	8·0	5·75	6·20	−0·45
	Central do.	4·6	6·9	3·22	5·02	−1·80
	North do.	12·2	10·7	11·14	10·12	+1·02
	Orissa	2·8	5·7	1·69	3·88	−2·19
	Chota Nagpur	3·0	4·2	1·78	2·33	−0·55
	Bihar (South)	1·7	2·9	1·03	1·86	−0·83
	Do. (North)	4·1	4·1	2·85	3·13	−0·28
North-Western Provinces and Oudh.	North-Western Provinces (East)	0·8	1·0	0·51	0·51	0
	Do. do. (Sub-montane)	2·0	2·3	0·93	1·35	−0·42
	Oudh (South)	0·3	1·2	0·17	0·57	−0·40
	Do. (North)	2·0	1·8	1·27	0·95	+0·32
	North-Western Provinces (Central)	0·2	1·0	0·05	0·40	−0·35
	Do. do. (West)	0·2	1·1	0·04	0·41	−0·37
Punjab	Punjab (South)	0·4	1·1	0·08	0·48	−0·40
	Do. (Central)	0·3	1·5	0·07	0·65	−0·58
	Do. (Sub-montane)	0·5	1·9	0·21	0·85	−0·64
	Do. (Hill Districts)	1·3	5·3	0·60	2·66	−2·06
	Do. (North-West)	0·3	1·9	0·08	0·95	−0·87
	Do. (West)	0·2	1·3	0·10	0·63	−0·53

NOTE.—The figures entered against divisions marked with asterisk have been obtained from the Weekly Telegraphic Reports.

PROVINCE.	DIVISION.	NUMBER OF RAINY DAYS. Average actual, May. 1895.	NUMBER OF RAINY DAYS. Average normal, May.	RAINFALL. Average actual, May 1895.	RAINFALL. Average normal, May.	RAINFALL. Variation from normal.
				Inches.	Inches.	Inches.
BOMBAY AND MALABAR COAST DISTRICTS (MADRAS).	Malabar	4·7	8·2	2·99	7·17	—4·18
	Madras (South Central)	4·3	5·9	3·06	4·03	—0·97
	Coorg	4·6	?	2·03	?	?
	Mysore*	?	?	2·77	3·51	—0·74
	Konkan	0·4	2·4	0·14	1·72	—1·58
	Bombay Deccan	2·0	3·5	1·06	1·82	—0·76
	Khandesh	0·3	1·7	0·13	1·07	—0·94
CENTRAL PROVINCES AND BERAR.	Berar*	?	?	0·21	0·66	—0·45
	Central Provinces (West)*	?	?	0·10	0·68	—0·58
	Do. do. (Central)*	?	?	0·10	0·68	—0·58
	Do. do. (East)*	?	?	0·35	1·06	—0·71
BOMBAY (NORTH)	Gujarat	0	0·5	0	0·30	—0·30
	Kathiawar	0	0·4	0	0·24	—0·24
	Sind	0	?	0	0·11	—0·11
RAJPUTANA AND CENTRAL INDIA.	Central India (East)	0·1	?	0·02	0·42	—0·40
	Rajputana (East) Central India (West)	0·1	?	0·03	0·58	—0·55
	Rajputana (West)	0·3	?	0·08	0·50	—0·42
MADRAS	East Coast (North)	3·1	3·4	2·22	2·29	—0·07
	Ditto. (do.) (*a*)	7·5	5·3	5·36	2·98	+2·38
	Hyderabad (South)*	?	?	0·23	2·19	—1·96
	Madras (Central)	3·1	3·0	1·68	1·89	—0·21
	East Coast (Central)	2·4	1·8	1·66	1·66	0
	Ditto. (South)	2·6	3·4	1·61	3·22	—1·61
	Madras (South)	2·8	3·4	1·66	2·10	—0·44

* NOTE.—The figures entered against divisions marked with an asterisk have been obtained from the Weekly Telegraphic Reports.

Burma received frequent showers during the month, the rainfall occurred under similar conditions to those of May 1894, but was not so heavy as in that month.

The chief periods of rainfall were the 7th to the 10th, the 17th to the 21st, and the 26th to the end of the month. The following comparative statement of the rainfall of the month is based on the weekly rainfall telegrams received from district officers in that province:—

DIVISION	RAINFALL. Average actual May, 1895.	RAINFALL. Average normal, May.	RAINFALL. Variation from normal.
	Inches.	Inches.	Inches.
Tenasserim	27·69	21·73	+5·96
Lower Burma	10·03	12·53	—2·50
Central „	7·03	7·64	—0·61
Upper „	7·85	?	?
Arakan „	10·17	21·39	—11·22

The rainfall of the month was hence in largish excess (27 per cent.) in Tenasserim and probably in moderate excess in Upper Burma. It was in slight defect in Central Burma (8 per cent.) and in large defect in Arakan which only received an average of 48 per cent. of its normal amount.

Assam obtained moderate daily rain from the 12th to the 17th and again from the 20th to the 25th. Heavy rain fell during the next week, Cherra Poonji received 7·5 inches on the 27th, 13·07 inches on the 28th, 10·65 inches on the 29th and 12·80 inches on the 30th, giving a total of 44·02 inches in 96 hours.

The following gives comparative data for the two divisions of the province:—

DIVISION.	NUMBER OF RAINY DAYS. Average actual, May 1895.	NUMBER OF RAINY DAYS. Variation from normal.	RAINFALL. Average actual, May 1895.	RAINFALL. Variation from normal.	RAINFALL. Percentage variation from normal.
			Inches.	Inches.	
Assam (Surma)	?	?	24·85	22·84	+9
„ (Brahmaputra)	?	?	11·87	11·74	+1

There were three periods of showery weather in Bengal during the month. The first period was from the 1st to the 6th. Bengal received heavy thundershowers on the 2nd and 4th, and Bihar, Orissa, and Chota Nagpur moderate showers on the 3rd, 4th, 5th, and 6th. The following large falls in 24 hours were recorded in Bengal during this period:—

District.	Station.	Date.	Heaviest rainfall during previous 24 hours preceding 8A.M. of date.
			Inches.
Backergunge . .	Bauphal . . .	2nd	7·85
,, . .	Doulat Khan . .	,,	5·47
,, . .	Pirojpur . . .	,,	4·41
Khulna . . .	Khulna . . .	,,	4·94
Jessore . . .	Magura . . .	,,	4·25

The second period was from the 13th to the 20th. Sikkim and Kuch Bihar received heavy daily rain during this period. The largest falls in 24 hours were 6 inches at Fulbari and 5·8 inches at Mathabhanga on the 17th.

Local thundershowers were received in the remainder of Bengal, Bihar, Orissa, and Chota-Nagpur; but the falls were light and sporadic.

The third period of rainfall extended from the 22nd to the 31st. South-West Bengal obtained moderately heavy and general rain on the 23rd, 25th and 26th. North and East Bengal received almost daily heavy rainfall from series of thunderstorms during this period. The following gives the most noteworthy falls in 24 hours during this period:—

District.	Station.	Date.	Heaviest rainfall during previous 24 hours preceding 8 A.M. of date.
			Inches.
Jalpaiguri . . .	Debiganj . . .	24th.	5·63
Tippera . . .	Kasba . .	25th.	5·30
Darjeeling . . .	Buxa . . .	28th.	12·82

Bihar received light thundershowers on the 25th and 31st.

Little or no rain fell during this period in Orissa and Chota-Nagpur.

The rainfall of the month was even more irregularly distributed than usual in May. It was in considerable excess in East Bengal (26 per cent.) and in slight excess in North Bengal (10 per cent.) It was practically normal in Deltaic Bengal and North Bihar and was in moderate defect in Chota-Nagpur (24 per cent.) and in large defect in Orissa (56 per cent.) and Central Bengal (36 per cent).

The following gives comparative data of the rainfall of the month for the eight divisions:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, May 1895.	Variation from normal.	Average actual, May 1895.	Variation of actual from normal.	Percentage variation from normal.
			Inches.	Inches.	
Bengal East . . .	11·1	+0·2	11·90	+2·45	+26
,, North . . .	12·2	+1·5	11·14	+1·02	+10
,, Deltaic . .	5·6	—2·4	5·75	—0·45	— 7
,, Central . .	4·6	—2·3	3·22	—1·80	—36
Orissa	2·8	—2·9	1·69	—2·19	—56
Chota-Nagpur . . .	3·0	—1·2	1·78	—0·55	—24
North Bihar . . .	4·1	0	2·85	—0·28	— 9
South Bihar . . .	1·7	—1·2	1·03	—0·83	—45

The submontane and hill districts of the North-Western Provinces had light to moderate showers from the 3rd and 4th and the 11th to the 14th and the hill districts from the 23rd to the 26th. Over the greater part of the province the rainfall of the month was less than an inch. No rain fell during the month over nearly the whole of the western and central districts. The following gives a summary of the rainfall data of the month:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, May 1895.	Variation from normal.	Average actual, May 1895.	Average normal, May.	Variation from normal.
			Inches.	Inches.	Inch.
Oudh, North . . .	2·0	+0·2	1·27	0·95	+0·32
Do. South . . .	0·3	—0·9	0·17	0·57	—0·40
N.-W. P. (East) . .	0·8	—0·2	0·51	0·51	0
Do. (Central) . .	0·2	—0·8	0·05	0·40	—0·35
Do. (West) . .	0·2	—0·9	0·04	0·41	—0·37
Do. (Submontane) .	2·0	—0·3	0·93	1·35	—0·42

The Punjab hill and submontane districts received local thunder showers on the 13th and 14th, the 25th and 26th and the 30th and 31st. The month was unusually dry in the hill districts which received an average of only ·6 inch, barely a fifth of the normal average rainfall of the month. The month was actually or practically rainless over the remainder of the province.

No rain fell in Baluchistan, Rajputana and Central India during the month.

Berar and the Central Provinces received light local thundershowers of little importance, chiefly on the 13th and the 23rd, 24th and 25th. The average rainfall of the whole area was barely two-tenths of an inch and was considerably below the normal as is shown by the following state ment :—

DIVISION.	NUMBER OF RAINY DAYS.		RAINFALL.		
	Average actual, May 1895.	Variation from normal.	Average actual, May 1895.	Variation from normal.	Percentage variation.
Berar	0·7	?	0·23	?	.
Central Provinces (East) .	0·8	—0·8	0·26	—0·59	—69
Ditto (Central)	0·3	—1·0	0·10	—0·47	—82
Ditto (West) .	0·4	—0·6	0·10	—0·38	—79

No rain fell in the Sind, Gujarat and Kathiawar divisions of the Bombay Presidency. The North Kanara district in the Konkan obtained some light showers of little importance in the last week of the month. The South Deccan districts or Karnatak received thundershowers which gave light and fairly general rain, on the 6th, 7th, 12th, 25th, 26th and 31st. South Khandesh obtained light showers on the 25th and 26th. The following gives comparative data for the Deccan districts :—

DISTRICT.	RAINFALL		
	Average actual, May 1895.	Average normal, May.	Variation from normal.
	Inches.	Inches.	Inches.
Dharwar	1·46	2·78	—1·32
Bijapur	2·06	1·21	+0·85
Belgaum	1·42	2·16	—0·74
Satara	0·70	1·56	—0·86
Sholapur	0·22	1·23	—1·01
Poona	0·33	1·30	—0·97
Ahmednagar	0·35	1·05	—0·70

In the Madras Presidency occasional rain was received, chiefly accompanying thunderstorms. In consequence of the delay in the establishment of the monsoon proper to the beginning of the second week of June, the Malabar coast districts only obtained light to moderate thundershowers during the month The chief periods of feeble disturbance and hence of series of thunderstorms in the Madras Presidency, were as follows :—

1st.—The 4th to the 6th. The northern coast districts obtained frequent thundershowers during this period.

2nd.—The 11th to the 17th. The rainfall was heavy in the southern and Coromandel coast districts.

3rd.—The 25th to the 30th. The southern coast districts and the southern and Deccan or central districts obtained moderate rain from local thunderstorms during this period.

The rainfall of the month was in large defect in Malabar. It obtained an average of only 2·99 inches, 4·18 inches less than the normal of the month. The rainfall of the months was also in large defect in the East Coast South (or the Coromandel coast) districts, which obtained an average of 1·61 inches or 50 per cent below the normal. It was practically normal in the central coast districts and in slight defect in Central Madras (11 per cent.) and in moderate defect in South Madras (21 per cent.) and in South Central Madras (24 per cent.).

The following gives comparative data for each of the 22 collectorates of the presidency :—

DISTRICT.	NUMBER OF RAINY DAYS.		RAINFALL.		
	Average actual, May 1895.	Average normal, May.	Average actual, May 1895.	Average normal, May.	Variation from normal.
			Inches	Inches.	Inches.
Ganjam . . .	3·0	4·1	2·48	2·57	—0·09
Vizagapatam . .	4·4	4·2	2·78	2·70	+0·08
Godavari . . .	2·0	2·8	1·60	2 00	—0·40
Kistna	3·0	2·6	2·26	1·73	+0·53
Nellore	2·4	1·8	1·66	1·66	0
Chingleput . . .	1·4	2·1	0·90	2·56	—1·66
Madras . . .	1·0	1·1	0·94	2·21	—1·27
North Arcot . . .	4·5	3·5	2·21	2·95	—0·74
South Arcot . . .	1·9	3·4	0·94	3·30	—2 36
Tanjore . . .	2·0	3·5	1·53	3·34	—1·81
Trichinopoly . . .	3·1	4·6	2·22	4·02	—1 80
Madura	3·1	3·8	1·95	2·33	—0·38
Tinnevelly . . .	2·3	2·9	1·22	1·79	—0·57
Malabar . . .	5 1	9·0	3·59	8·39	—4·80
South Canara . .	4·1	7·1	1·92	5·40	—3·48
Salem	5·1	6·2	3·42	4·31	—0·89
Coimbatore . . .	3·5	5 5	2·76	3·69	—0·93
Nilgiris	6·5	9·8	3·24	6·31	—3·07
Cuddapah . . .	3·7	2·8	2 01	1·92	+0·09
Anantapur . . .	2·9	3·2	1·56	2·39	—0 83
Bellary	2·9	3·5	1·81	1·94	—0·13
Kurnool	2·6	2·2	1·28	1·19	+ ·09

Table

Abstract of Observations taken at 8 A.M. at 206

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.									Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.		Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
I.—Burma Coast and Bay Islands.		...	...	−·005	...	...	...	...	...	...		...	89·2	−1·5	77·2	+0·6	83·2	−0·5	12·0	...	...	...	...	21·9
Bay Islands	Port Blair	61	29·803	?	29·795	29·885	4th	29·628	18th	·257		83·1	87·9	?	78·9	?	83·5	?	9·0	92·0	4th	75·3	15th	16·7
	Camorta	?	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...
Tenasserim	Mergui	96	29·818	?	29·846	29·906	1st	29·699	18th	·207		80·4	87·3	?	75·1	?	81·2	?	12·2	97·9	27th	73·1	18th & 26th	24·8
	Tavoy	26	29·885	?	29·842	29·950	4th	29·763	18th	·187		79·3	86·6	?	74·7	?	80·7	?	11·9	93·2	6th	72·7	9th	20·5
	Moulmein	94	29·774	+·006	29·805	29·886	4th	29·569	19th	·317		79·7	88·5	−1·5	75·7	0	82·1	−0·8	12·8	97·0	5th	73·3	2 days	23·7
	Toungoo	183	29·637	−·008	29·762	29·767	4th	29·384	19th	·383		82·1	93·9	−2·3	76·7	+0·3	85·3	−1·0	17·2	99·7	2 days	73·2	4 days	26·5
Lower Burma	Rangoon	41	29·801	−·013	29·779	29·928	4th	29·548	19th	·380		80·6	90·7	−1·8	77·1	−0·1	83·9	−1·0	13·6	98·6	3 days	72·9	22nd & 31st	25·7
	Bassein	27	29·810	−·003	29·775	29·937	4th	29·569	19th	·368		81·6	90·6	−1·4	77·2	+0·3	83·9	−0·6	13·4	96·2	1st	71·9	31st	24·3
	Diamond Island.	41	29·798	−·004	29·774	29·920	4th	29·573	19th	·347		83·9	87·9	−1·1	80·5	+2·0	84·2	+0·5	7·4	90·6	9th	75·9	2 days	14·7
Arakan	Akyab	20	29·787	−·009	29·750	29·964	4th	29·555	19th	·409		83·3	89·5	−1·0	78·9	+1·1	84·2	+0·1	10·6	93·2	12th	73·1	3rd	20·1
II.—Burma Inland		...	...	−·009	...	...	...	...	...	...		...	91·0	−4·9	73·3	+0·7	82·2	−2·1	17·7	...	...	...	...	32·2
Central Burma	Thayetmyo	134	29·675	−·009	29·750	29·824	4th	29·445	19th	·379		82·9	95·4	−4·0	77·7	+0·2	86·6	−1·9	17·7	102·1	3 days	72·1	28th	30·0
	Minbu	?	29·637	...	...	29·803	4th	29·401	19th	·402		82·5	95·5	?	78·1	?	86·8	?	17·4	103·1	8th	72·6	28th	30·5
	Yamethin	645	29·156	...	...	29·307	4th	29·928	19th	·379		81·2	94·3	?	74·8	?	84·6	?	19·5	110·2	5th	71·0	2 days	39·2
	Taunggyi	?	...	...	...	...	...	...	...	...		68·5	79·6	?	63·0	?	71·3	?	16·6	89·1	27th	58·0	3rd	31·1
Upper Burma	Mandalay	249	29·535	?	...	29·706	4th	29·339	20th	·367		82·6	96·3	?	77·9	?	87·1	?	18·4	104·1	2 days	71·1	1st	33·0
	Kindat	?	29·418	?	...	29·599	4th	29·243	20th	·356		79·2	89·9	−5·8	74·7	+1·2	82·3	−2·3	15·2	97·8	8th	66·5	1st	31·3
	Lashio	?	27·059	?	...	27·196	5th	26·891	20th	·305		73·1	86·2	?	67·1	?	76·9	?	19·1	92·0	8th	61·0	2nd	31·0
	Bhamo	?	29·408	?	...	29·575	1st	29·233	20th	·342		78·2	90·6	?	73·3	?	82·0	?	17·3	99·1	11th	67·3	1st	31·8
III.—Assam		...	...	−·026	...	...	...	...	...	...		...	89·1	+1·3	73·5	+1·8	81·3	+1·5	15·6	...	...	...	...	30·6
Assam (Surma)	Silchar	104	29·684	−·021	29·740	29·960	4th	29·465	19th	·435		78·7	89·0	+1·0	73·5	+1·4	81·3	+1·2	15·5	96·1	20th	67·3	2 days	28·8
	Dapoota	?	29·486	?	29·728	29·721	5th	29·268	27th	·453		79·8	92·4	?	72·4	?	82·4	?	20·0	98·5	11th	62·0	2nd	36·5
Brahmaputra	Sibsagar	333	29·447	−·033	29·738	29·667	5th	29·241	27th	·426		78·3	88·3	+2·0	73·2*	+1·7	80·7*	+1·9*	15·1	95·2	20th	63·0	1st	32·2
	Dhubri	115	29·642	−·023	29·713	29·869	5th	29·409	27th	·460		77·9	86·7	+0·8	74·7*	+1·9	80·6*	+1·3*	12·0	94·2	2 days	69·3	1st	24·9
IV.—Bengal and Orissa		...	...	−·030	...	...	...	...	...	...		...	93·6	+0·8	77·5	+1·8	85·6	+1·3	16·0	...	...	...	...	32·8
East Bengal	Chittagong	87	29·682	−·026	29·717	29·854	5th	29·472	19th	·382		81·2	88·3	+0·3	75·2	+0·1	81·8	+0·2	13·1	92·7	18th	70·1	1st	22·6
	Lungleh	?	...	?	...	...	...	...	...	...		70·3	77·1	?	64·3*	?	70·7*	?	12·8	81·0	5th	50·6	1st	30·4
	Noakhali	43	29·712	?	29·701	29·398	5th	29·528	20th	·370		82·5	88·3	?	75·8	?	82·1	?	12·5	92·0	18th	68·8	30th	23·2
	Comilla	36	29·723	?	29·707	29·907	5th	29·530	20th	·377		81·3	90·1	?	75·5	?	82·8	?	14·6	95·8	20th	69·3	1st	26·5
	Sirajganj	49	29·676	?	29·675	29·884	5th	29·426	28th	·458		80·4	90·8	?	75·1	?	83·0	?	15·7	99·8	20th	69·7	1st	30·1
	Narayanganj	26	29·715	−·029	29·690	29·925	5th	29·516	27th	·409		82·2	90·5	−0·3	77·3	+1·8	83·9	+0·8	13·2	96·1	2 days	70·7	31st	25·4
	Barisal	13	29·730	?	29·688	29·921	5th	29·542	20th	·379		84·0	90·7	−0·4	77·5	+0·9	84·1	+0·3	13·2	95·8	20th	71·4	26th	24·4
	Mymensingh	59	29·693	−·024	29·704	29·894	5th	29·476	27th	·418		80·1	88·9	+0·6	75·6	+2·1	82·3	+1·4	13·3	96·2	20th	68·1	1st	28·1
Deltaic Bengal	Faridpur	46	29·700	?	29·693	29·922	5th	29·489	27th	·433		82·2	91·8	?	75·5	?	83·6	?	16·3	98·3	20th & 21st	68·9	26th & 31st	29·4
	Jessore	33	29·685	−·033	29·665	29·911	5th	29·479	28th	·432		83·6	94·8	+0·6	77·1	+0·7	85·9	+0·7	17·7	101·5	2 days	70·9	26th	30·6
	Calcutta	21	29·686	−·031	29·652	29·914	5th	29·486	28th	·428		85·4	96·0	+2·5	79·2	+2·3	87·6	+2·4	16·8	107·0	21st	70·2	4th	36·8
	Saugor Island	25	29·687	−·030	29·656	29·881	5th	29·515	20th	·366		86·5	91·7	+0·2	82·7	+2·2	87·2	+1·2	9·0	95·2	2 days	70·5	4th	24·7
	Krishnagar	47	29·657	?	29·652	29·874	5th	29·430	28th	·444		84·6	98·3	?	77·5	?	88·0	?	20·8	110·2	22nd	71·2	25th	39·0
	Midnapore	149	29·555	?	29·650	29·755	5th	29·358	28th	·397		86·3	102·7	?	79·8	?	91·3	?	22·9	115·4	29th	69·7	4th	45·7

* Mean of 30 days.

I.

Stations in India, Burma, etc., in May 1895.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st May 1895.	Normal rainfall for period, from 1st March to 31st May.	Variation from normal of period, from 1st March to 31st May.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14·51	11·80	+1·54	...	...	...	...	I.—Burma Coast and Bay Islands.	
1	...	...	...	...	4	14	11	1	12·0	7·3	+64	85	·963	7·9	11	P	P	16·25	15·74	+ 0·51	20·61	18·39	+ 2·22	4·55	Port Blair .	Bay Islands.
													Not received.												Camorta .	
...	5	1	...	1	4	5	6	9	1·2	2·1	−43	90	·933	5·6	20	P	P	24·24	16·86	+ 7·38	34·53	24·80	+ 9·73	4·54	Mergui .	Tenasserim.
23	...	...	...	...	2	4	...	2	1·5	P	P	89	·888	7·5	24	P	P	23·87	P	P	26·93	P	P	3·68	Tavoy.	
...	1	4	7	9	2	2	2	4	3·3	3·1	+ 6	87	·876	9·0	22	15·45	+6·55	23·59	17·45	+ 6·14	27·24	20·81	+ 6·43	2·67	Moulmein.	
1	...	...	...	16	13	...	...	1	3·8	3·9	− 3	82	·913	7·3	11	9·36	+1·64	6·99	5·77	+ 1·22	10·41	7·91	+ 2·50	1·10	Toungoo.	
...	1	...	...	2	6	13	8	1	3·9	5·0	−22	90	·935	7·5	13	12·27	+0·73	13·96	9·42	+ 4·54	16·10	11·53	+ 4·57	3·21	Rangoon .	Lower Burma.
8	...	1	2	2	6	8	3	1	4·8	4·5	+ 7	85	·929	5·5	14	11·18	+2·82	8·83	8·33	+ 0·50	10·11	9·83	+ 0·28	1·63	Bassein.	
1	3	1	...	...	2	17	4	3	8·8	7·0	+26	77	·894	7·8	11	10·18	+0·82	7·46	8·55	− 1·09	11·90	9·72	+ 2·18	1·58	Diamond Island.	
...	9	3	6	2	6	3	...	2	4·5	3·5	+29	87	·996	6·9	8	10·09	−2·09	5·44	12·30	− 6·86	10·70	13·80	− 3·10	1·18	Akyab .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·43	4·62	+1·53	...	...	...	...	II.—Burma Inland.	
...	2	1	1	6	18	2	...	1	6·9	7·3	− 5	75	·841	5·3	9	6·64	+2·36	7·18	3·72	+ 3·46	8·87	4·57	+ 4·30	2·62	Thayetmyo .	Central Burma.
3	...	1	...	20	4	2	...	1	9·0	P	P	76	·804	3·9	9	P	P	10·60	P	P	12·50	P	?	3·05	Minbu.	
1	1	...	...	18	10	...	...	1	7·4	P	P	78	·834	1·8	12	P	P	6·46	P	P	9·53	P	?	0·86	Yamethin.	
11	...	...	...	9	2	8	...	1	0·6	P	P	80	·555	6·7	14	P	P	8·97	P	P	11·36	P	?	1·32	Taunggyi .	
1	3	3	...	10	7	7	...	...	9·2	P	P	78	·873	3·8	8	P	P	10·82	P	P	14·15	P	?	3·11	Mandalay .	Upper Burma.
27	1	...	...	1	1	...	...	1	1·1	P	P	86	·864	7·1	13	P	P	5·11	5·52	− 0·41	11·63	8·33	+ 3·30	1·30	Kindat.	
...	...	...	...	...	...	...	...	...	...	P	P	85	·702	5·1	11	P	P	7·31	P	P	11·82	P	P	1·30	Lashio.	
13	4	7	...	1	2	3	...	1	3·0	P	P	85	·820	5·9	16	P	P	10·96	P	P	13·96	P	P	2·14	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11·39	15·01	−1·55	...	...	...	...	III.—Assam.	
27	...	...	2	2	...	...	...	...	2·4	3·4	−29	85	·840	7·4	16	17·27	−1·27	14·70	18·63	− 3·93	39·11	42·13	− 3·02	3·57	Silchar .	Assam (Surma).
...	2	5	13	2	2	3	...	4	...	?	?	84	·858	4·3	8	P	P	5·15	P	P	8·09	P	?	1·12	Dapoota.	
12	0	8	2	4	1	3	1	...	3·3	2·9	+14	89	·867	6·6	9	16·91	−7·91	12·54	12·22	+ 0·32	26·55	26·21	+ 0·34	5·07	Sibsagar .	Brahmaputra.
5	2	12	9	...	...	1	1	1	7·3	7·0	+ 4	88	·848	8·2	14	15·13	−1·13	13·15	14·19	− 1·04	18·99	21·20	− 2·21	3·33	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6·39	6·95	−0·85	...	...	...	...	IV.—Bengal and Orissa.	
2	...	5	2	14	6	1	...	1	7·4	6·4	+14	85	·917	6·7	13	10·31	+2·09	13·09	10·14	+ 2·95	17·96	16·91	+ 1·05	2·42	Chittagong .	East Bengal.
...	...	...	...	...	...	...	...	...	...	P	P	86	·642	...	17	P	P	18·92	P	P	28·01	P	P	2·87	Lungleh.	
...	1	3	5	8	6	4	2	2	6·5	P	P	86	·956	5·4	12	10·00	+2·00	15·39	9·82	+ 5·57	20·89	17·60	+ 3·29	2·54	Noakhali.	
...	1	...	9	6	14	1	...	...	6·7	P	P	91	·986	6·1	10	11·47	−1·47	12·59	10·35	+ 2·24	20·18	19·31	+ 0·87	4·27	Comilla.	
17	...	1	6	3	4	...	...	...	1·9	P	P	85	·888	6·7	11	9·95	+1·05	7·66	7·27	+ 0·39	10·41	11·33	− 0·92	1·73	Sirajganj.	
3	...	1	4	11	6	3	2	1	6·6	6·2	+ 6	85	·941	7·3	10	10·55	−0·55	10·68	9·21	+ 1·47	18·26	17·13	+ 1·13	3·14.	Narayanganj.	
12	...	...	...	2	14	3	...	...	4·5	P	P	89	1·037	7·1	11	10·00	+1·00	9·80	8·03	+ 1·77	16·74	13·99	+ 2·75	2·17	Barisal.	
2	...	7	15	6	1	...	...	...	5·0	P	P	86	·886	6·0	13	13·05	−0·05	9·28	11·03	− 1·75	19·40	17·16	+ 2·24	2·11	Mymensingh.	
8	...	...	4	3	13	1	1	1	5·3	P	P	88	·973	5·5	6	10·70	−4·70	10·70	8·90	+ 1·80	17·46	15·57	+ 1·89	3·18	Faridpur .	Deltaic Bengal.
7	...	...	2	4	16	1	...	1	4·6	4·9	− 6	84	·977	6·0	10	9·18	+0·82	6·50	7·62	− 1·12	10·52	13·46	− 2·94	1·54	Jessore.	
2	...	...	1	4	11	13	...	...	6·3	7·1	−11	79	·972	4·1	4	7·82	−3·82	2·41	6·12	− 3·71	4·35	8·91	− 4·56	0·98	Calcutta.	
...	1	...	...	2	17	10	1	...	19·4	15·3	+27	81	1·031	7·0	4	7·09	−3·09	3·64	5·19	− 1·55	5·49	7·73	− 2·24	1·80	Saugor Island.	
...	...	1	4	5	16	3	1	1	7·0	P	P	76	·898	4·5	6	7·55	−1·55	5·35	5·83	− 0·48	8·30	9·80	− 1·50	1·44	Krishnagar.	
1	...	2	...	5	20	3	...	...	7·9	P	P	75	·940	2·1	6	7·05	−1·05	4·12	5·13	− 1·01	6·57	8·09	−1·52	1·58	Midnapore.	

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal.	Bankura	298	29·393	P	29·637	29·605	5th	29·195	28th	·410	86·8	103·2	P	80·5	P	91·9	P	22·7	116·1	28th & 29th.	70·6	4th	45·5
	Raniganj	334	29·358	P	29·637	29·585	5th	29·144	28th	·441	85·9	102·7	P	79·9	P	91·3	P	22·8	115·3	28th & 29th.	70·9	4th	44·4
	Burdwan	99	29·595	−·040	29·640	29·806	5th	29·369	28th	·437	84·8	99·6	+2·4	79·9	+2·7	89·8	+2·6	19·7	112·3	2 days	72·2	4th	40·1
	Naya Dumka	489	29·222	P	29·644	29·434	5th	28·969	28th	·465	85·8	99·3	P	78·9	P	89·1	P	20·4	111·9	28th & 29th.	72·3	4th	39·6
	Berhampore	67	29·640	−·028	29·655	29·865	5th	29·390	28th	·475	83·2	98·1	+2·4	78·1	+2·1	88·1	+2·3	20·0	110·4	28th	72·3	2 days	38·1
	Rampur Boalia.	70	29·635	P	29·654	29·860	5th	29·383	28th	·477	83·3	95·1	P	76·8	P	85·9	P	18·3	105·0	29th	69·1	31st	35·9
	Malda*	72	29·636	P	29·660	29·855	5th	29·388	27th	·467	83·6	97·8	P	77·2	P	87·5	P	20·6	106·1	21st	70·0	4th	36·1
	Bogra	61	29·664	P	29·677	29·873	5th	29·430	27th	·443	81·8	92·0	−0·2	75·0	+0·8	83·5	+0·3	17·0	99·2	20th	68·2	1st	31·0
North Bengal	Dinajpur	123	29·613	P	29·690	29·844	5th	29·373	27th	·471	79·7	90·4	−0·7	75·8	+2·1	83·1	+0·7	14·6	102·3	20th	68·3	4th	34·0
	Rangpur	123	29·623	P	29·701	29·835	5th	29·379	27th	·456	80·0	88·8	P	74·9	P	81·9	P	13·9	94·8	20th	69·2	8th	25·6
	Jalpaiguri	284	29·473	P	29·717	29·699	5th	29·236	27th	·463	77·8	87·7	+0·1	73·5	+2·4	80·6	+1·3	14·2	94·9	8th	68·1	2 days	26·8
Orissa	Balasore	56	29·652	P	29·653	29·857	5th	29·473	29th	·384	86·6	98·2	+2·6	79·8	+1·9	89·0	+2·3	18·4	116·0	30th	70·4	4th	45·6
	False Point	21	29·699	−·021	29·662	29·864	6th	29·521	20th	·343	86·0	91·0	−0·1	81·3	+2·1	86·1	+1·0	9·7	108·5	21st	70·1	4th	38·4
	Cuttack	80	29·622	−·033	29·644	29·799	4th	29·459	19th	·340	86·3	102·9	+1·5	81·8	+2·3	92·3	+1·9	21·1	115·9	29th	71·2	4th	41·7
	Shortt's Island	P	29·676*	P	P	29·876	6th	29·508	20th & 29th.	·368	85·8*	90·4*	P	82·3*	P	86·4*	P	8·1	99·0	21st	72·4	4th	26·6
	Puri	24	29·703		29·667	29·865	4th	29·532	19th	·333	84·8	89·6	P	82·0	P	85·8	P	7·6	94·7	21st	76·1	4th & 13th.	18·6
V.—Gangetic Plain and Chota Nagpur.		...	...	−·032	...	...	...	...	...	...	...	101·6	+0·7	79·5	+2·9	90·5	+1·8	22·1	...	...	...	...	41·7
Chota Nagpur	Hazaribagh	2,007	27·695	−·028	29·613	27·874	6th	27·549	28th	·325	85·5	99·1	+0·8	77·6	+3·3	88·4	+2·1	21·5	108·6	28th	66·8	7th	41·8
	Daltonganj	730?	28·939	P	29·611	29·146	6th	28·782	27th	·364	88·7	105·5	P	81·1	P	93·3	P	24·4	114·2	29th	69·5	7th	44·7
	Ranchi	2,128	27·592	P	29·620	27·766	4th	27·448	26th	·318	85·2	98·8	+0·8	77·5	+3·6	88·1	+2·2	21·3	106·8	29th	64·9	6th	41·9
	Chaibassa	760	28·922	−·020	29·620	29·138	5th	28·753	28th	·385	87·6	105·1	+1·7	80·9	+2·1	93·0	+1·9	24·2	115·7	30th	71·5	7th	44·2
Bihar (South)	Gaya	375	29·290	−·030	29·612	29·546	4th	29·079	28th	·467	90·1	105·1	+1·0	82·7	+4·6	93·9	−2·8	22·4	113·1	28th	73·8	6th	39·3
	Dehri	351*	29·301	P	29·600	29·559	4th	29·092	28th	·467	90·2	105·2	P	81·6	P	93·4	P	23·6	113·5	28th & 29th.	69·5	6th	44·0
	Patna	183	29·488	−·037	29·622	29·751	4th	29·249	28th	·502	84·9	99·9	+0·3	78·8	+1·6	89·3	+1·0	21·1	110·0	2 days	70·2	6th	39·8
	Arrah	190	29·479	P	29·619	29·705	6th	29·251	28th	·454	86·5	102·0	P	80·1	P	91·1	P	21·9	112·4	28th	64·0	6th	48·4
	Buxar	239	29·408	P	29·599?	29·628	6th	29·185	28th	·443	87·4	101·6	P	80·3	P	91·0	P	21·3	111·4	28th	64·4	6th	47·0
Bihar (North)	Purnea	125	29·590	−·022	29·669	29·816	5th	29·342	28th	·474	81·6	94·5	0	76·1	+2·5	85·3	+1·3	18·4	101·8	23th	67·2	2 days	34·6
	Bhagalpur	160	29·524	P	29·636?	29·749	5th	29·276	28th	·473	83·9	97·8	P	77·6	P	87·7	P	20·2	107·3	21st & 22nd.	69·6	4th & 6th.	37·7
	Darbhanga	166	29·526	−·035	29·646	29·785	4th	29·272	28th	·513	82·7	94·4	−1·0	77·6	+1·8	86·0	+0·4	16·8	101·5	21st	68·5	3rd	33·0
	Muzaffarpur	178	29·520	P	29·652	29·754	4th	29·286	28th	·468	82·6	95·4	P	77·0	P	86·2	P	18·4	103·7	29th	66·3	4th	37·4
	Motihari	224	29·463	P	29·643	29·686	4th	29·208	28th	·478	84·5	95·5	P	76·7	P	86·1	P	18·8	102·5	21st	64·8	3rd	37·7
	Chapra	181	29·484	P	29·618	29·705	6th	29·252	28th	·453	84·7	99·9	P	78·4	P	89·2	P	21·5	109·2	28th	65·6	6th	43·6
N.-W. P. (Eastern Districts).	Benares	267	29·384	−·035	29·602	29·597	6th	29·189	28th	·408	88·0	105·2	+0·6	80·6	+2·1	92·9	+1·4	24·6	114·3	28th	68·6	6th	45·7
	Allahabad	309	29·330	−·047	29·583	29·535	6th	29·150	28th	·385	91·4	107·0	+0·8	82·2	+3·5	94·6	+2·2	24·8	114·7	23rd	71·8	6th	42·9
N.-W. P. (East Submontane).	Gorakhpur	256	29·410	−·030	29·622	29·637	4th	29·166	27th	·471	85·4	100·8	+0·3	78·3	+1·6	89·5	+1·0	22·5	110·3	28th	67·7	3rd	42·6
Oudh (South)	Lucknow	368	29·279	−·035	29·599	29·487	6th	29·066	28th	·421	90·4	106·1	+2·0	82·4	+5·7	94·2	+3·9	23·7	114·3	23rd & 29th.	74·4	3rd	39·9
Oudh (North)	Bahraich	403	29·257	P	29·615	29·470	6th	29·024	28th	·446	86·9	101·3	P	77·7	P	89·5	P	23·6	110·6	28th	63·0	4th	47·6
N.-W. Provinces (Central).	Cawnpore	416	29·228	P	29·590	29·420	6th	29·047	28th	·373	90·8	106·0	P	80·9	P	93·4	P	25·1	114·1	23rd	73·5	6th & 7th.	40·6
	Mainpuri	516	29·128	P	29·591	29·330	6th	28·939	28th	·391	91·0	108·4	P	82·3	?	95·4	P	26·1	116·2	28th	73·0	6th	43·2

* Mean of 30 days. † Mean of 29 days.

I—*continued.*

in India, Burma, etc., in May 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st May 1895.	Normal rainfall for period from 1st March to 31st May.	Variation from normal of period, from 1st March to 31st May.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
11	1	1	3	5	4	2	4	...	4·4	P	P	71	·889	3·2	4	8·45	−4·45	2·76	3·87	− 1·11	4·59	6·58	− 1·99	1·22	Bankura .	Central Bengal.
19	...	2	3	2	3	2	...	...	2·1	P	P	70	·852	2·8	2	5·50	−3·50	1·55	3·13	− 1·58	5·25	5·04	+ 0·21	0·79	Raniganj.	
1	2	1	...	4	12	10	1	...	5·6	5·5	+2	75	·902	5·3	6	7·18	−1·18	5·40	6·97	— 1·57	8·15	10·24	− 2·09	3·23	Burdwan.	
...	...	1	9	12	7	...	...	2	7·0	P	P	66	·806	2·7	5	5·22	−0·22	2·28	3·48	− 1·20	3·33	5·17	− 1·84	0·80	Naya Dumka.	
...	...	1	7	4	13	5	1	...	4·3	5·5	−22	81	·926	5·0	4	8·64	−4·64	1·77	6·05	— 4·28	3·48	8·55	− 5·07	0·65	Berhampore.	
3	...	2	4	12	6	4	...	...	5·9	P	P	82	·939	4·3	3	7·90	−4·90	3·77	5·44	— 1·67	6·43	7·67	— 1·24	2·15	Rampur Boalia.	
1	3	3	2	5	8	6	...	1	3·6	P	P	78	·906	4·9	4	5·65	−1·65	1·64	4·13	− 2·49	2·48	5·81	− 3·33	0·76	Malda.*	
8	...	1	1	17	1	2	1	...	2·1	P	P	84	·912	5·0	9	9·30	−0·30	7·42	8·37	— 0·95	10·82	11·40	− 0·58	2·74	Bogra.	
3	...	10	11	5	1	1	...	...	6·3	P	P	83	·847	6·7	7	7·60	−0·60	5·57	7·22	— 1·65	8·45	10·06	− 1·61	1·40	Dinajpur .	North Bengal.
2	2	12	5	5	4	1	...	...	2·6	P	P	84	·872	6·8	7	10·40	−3·40	3·57	10·22	− 6·65	8·29	14·66	− 6·37	0·80	Rangpur.	
5	3	9	9	4	1	...	...	...	3·1	P	?	86	·817	7·7	16	12·00	+4·00	18·32	11·96	+ 6·36	23·35	17·84	+ 5·51	2·61	Jalpaiguri.	
1	...	...	...	...	12	18	...	...	9·1	P	P	77	·960	3·4	1	8·50	−7·50	1·70	4·97	− 3·27	8·09	8·84	— 0·75	1·70	Balasore .	Orissa.
...	...	...	...	3	19	7	2	...	14·8	12·6	+17	78	·982	6·5	1	5·20	−4·20	1·48	6·60	− 5·12	2·55	8·36	− 5·81	1·39	False Point.	
5	...	...	...	4	9	12	1	...	5·2	5·1	+ 2	73	·923	4·8	3	6·09	−3·09	1·80	4·93	− 3·13	3·28	6·81	— 3·53	1·14	Cuttack.	
1	...	...	...	1	14	13	...	1	15·8*	P	P	81†	1·007†	4·5†	2	P	P	2·02	P	P	6·26	P	P	1·27	Shortt's Island	
2	...	...	...	1	3	23	2	...	16·5	P	P	85	1·026	5·0	1	3·45	− 2·45	0·49	2·58	− 2·09	0·99	3·65	− 2·66	0·48	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·53	1·98	—0·42	...	...	...	...	**V.—Gangetic Plain and Chota Nagpur.**	
0	0	0	3	3	13	5	5	2	10·8	8·8	+23	53	·612	5·3	3	4·73	−1·73	2·39	2·64	− 0·25	4·78	3·85	+ 0·93	1·17	Hazaribagh.	Chota Nagpur.
...	5	7	1	5	3	4	6	...	9·2	P	P	70	·940	2·9	3	P	P	0·96	P	P	1·46	P	P	0·55	Daltonganj.	
3	1	0	0	2	2	10	11	2	9·9	P	P	59	·663	2·5	4	5·00	−1·00	2·47	2·98	− 0·51	5·56	4·95	+ 0·61	1·22	Ranchi.	
4	1	1	0	0	2	13	9	1	2·2	P	P	64	·809	3·0	2	6·11	−4·11	0·95	4·17	− 3·22	5·42	6·05	− 0·63	0·46	Chaibasa.	
...	1	7	6	5	3	5	4	...	6·8	3·9	+74	57	·797	2·0	1	2·45	−1·45	0·38	1·50	− 1·12	0·88	1·93	— 1·05	0·35	Gaya . .	Bihar (South).
...	...	3	11	5	1	6	3	1	11·3	P	P	53	·714	2·6	2	1·57	+0·43	0·97	1·42	− 0·45	1·20	2·23	− 1·03	0·81	Dehri.†	
...	...	8	20	1	...	...	1	1	7·0	4·8	+46	67	·804	2·4	2	3·18	−1·18	0·77	2·24	− 1·47	1·41	2·96	− 1·55	0·65	Patna.	
...	3	9	12	3	1	...	2	1	4·8	P	P	64	·796	2·0	1	2·60	−1·60	0·71	1·80	− 1·09	2·28	2·36	− 0·08	0·71	Arrah.	
...	...	3	19	2	...	1	5	1	6·8	P	P	55	·701	1·4	1	2·15	−1·15	0·23	1·03	— 0·80	1·02	1·48	− 0·46	0·18	Buxar.	
...	2	7	21	1	...	...	...	...	6·8	3·4	+100	76	·829	6·2	7	5·45	+1·55	4·51	5·08	− 0·57	5·15	6·78	− 1·63	1·62	Purnea .	Bihar (North).
1	1	9	9	8	3	...	...	...	6·3	P	P	72	·838	4·1	2	4·15	−2·15	1·22	2·59	− 1·37	4·14	3·69	+ 0·45	0·70	Bhagalpur.	
...	...	3	16	10	1	...	1	...	7·4	5·9	+25	75	·826	3·4	5	4·73	+0·27	2·46	3·20	− 0·74	3·21	4·14	— 0·93	0·65	Darbhanga.	
1	...	2	14	13	...	...	...	1	7·4	P	P	79	·887	2·3	5	5·35	+1·65	4·96	2·72	+ 2·24	5·03	3·72	+ 1·31	2·84	Muzaffarpur.	
1	...	9	16	5	...	...	...	...	5·4	P	P	69	·828	2·6	6	4·25	+1·75	5·22	2·50	+ 2·72	6·23	3·65	+ 2·58	1·43	Motihari.	
...	1	1	20	8	...	...	...	1	7·2	P	P	69	·820	2·8	2	2·20	−0·20	1·79	1·52	+ 0·27	1·92	2·09	− 0·17	1·03	Chapra.	
4	2	1	13	3	1	...	7	...	6·6	5·2	+27	55	·716	1·3	0	1·45	−1·45	0·04	0·72	− 0·68	0·59	1·08	− 0·49	0·04	Benares .	N.-W. P. (Eastern Districts).
1	...	6	10	2	1	...	7	4	8·5	3·8	+124	46	·653	0·9	0	1·18	−1·18	0·05	0·39	− 0·34	0·38	0·82	− 0·44	0·05	Allahabad.	
2	3	2	14	6	3	...	...	1	2·7	3·9	−31	66	·811	1·5	3	2·64	+0·36	0·79	1·37	− 0·58	1·44	2·22	− 0·78	0·39	Gorakhpur .	N.-W. P. (East Submontane).
0	1	4	8	5	4	3	3	3	3·7	4·3	−14	51	·712	0·6	0	1·91	−1·91	0·05	1·10	− 1·05	1·14	1·49	− 0·35	0·05	Lucknow .	Oudh (South).
2	0	1	9	14	3	...	...	2	4·2	P	P	62	·794	0·2	4	P	P	2·72	1·42	+ 1·30	3·11	2·23	+ 0·88	1·45	Bahraich .	Oudh (North).
...	1	...	8	7	4	1	5	5	6·7	P	P	51	·722	0·1	0	1·1	−1·1	0	0·56	− 0·56	0·41	0·91	− 0·50	0	Cawnpore .	N.-W. Provinces (Central).
6	...	2	6	4	1	3	8	1	2·5	P	P	51‡	·678‡	0·8	0	P	P	0	0·66	− 0·66	3·22	1·02	+ 2·20	0	Mainpuri.	

* Mean of 29 days. † Mean of 30 days. ‡ Mean of 25 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
VI.—Upper Sub-Himalayas		...	...	−·035	...	...	...	...	...	...	...	105·8	+4·5	79·1	+4·4	91·8	+4·4	27·5	...	...	...	...	45·2
N.-W. Provinces (Submontane).	Bareilly .	568	29·078	−·027	29·601	29·315	6th	28·834	28th	·481	87·7	103·8	+1·3	79·0	+3·6	91·4	+2·5	24·8	113·4	29th	68·7	14th	44·7
	Dehra Dun .	2,233	27·475	−·033	29·626	27·686	6th	27·249	28th	·437	81·0	97·2	+3·5	72·9	+3·0	85·1	+3·3	24·3	106·0	29th	64·0	4th	42·0
	Roorkee .	887	28·758	−·033	29·596	28·986	6th	28·521	28th	·465	88·0	105·1	+3·0	76·8	+2·8	91·0	+2·9	28·3	113·2	22nd	66·7	3rd	46·5
	Meerut .	738	28·898	−·033	29·587	29·128	6th	28·707	27th	·421	88·8	106·1	+4·2	79·1	+4·1	92·6	+4·2	27·0	113·9	22nd	70·0	3rd	43·9
Punjab (Central)	Delhi . .	718	28·922	−·030	29·589	29·122	6th	28·761	28th	·361	90·2	108·0	+3·7	82·1	+2·9	95·1	+3·3	25·9	116·0	23rd	71·4	4th	44·6
	Lahore .	702	28·900	−·045	29·559	29·095	5th	28·724	28th	·371	89·3	109·5	+6·7	79·7	+7·5	94·6	+7·1	29·8	117·3	24th	71·1	4th	46·2
Punjab (Submontane).	Umballa .	962?	28·718	?	29·585	28·939	6th	28·507	28th	·432	87·7	106·8	?	80·0	?	93·4	?	26·8	114·9	22nd	70·0	14th	44·9
	Patiala .	?	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Ludhiana .	812	28·808	−·045	29·572	29·016	5th	28·620	28th	·396	90·4	108·4	+4·5	79·2	+5·4	93·9	+5·0	29·2	116·8	24th	68·5	3rd	48·3
Punjab (North) .	Sialkot .	830	28·794	−·029	29·574	28·999	5th	28·590	28th	·409	91·6	108·3	+5·9	...	...	...	...	...	115·9	28th	...	...	...
	Rawalpindi	1,683	27·976	−·043	29·591	28·151	5th	27·786	28th	·365	89·8	105·1	+7·9	73·8	+6·2	89·5	+7·1	31·3	111·5	24th	66·2	19th	45·3
VII.—Indus Valley and N.-W. Rajputana.		...	...	−·013	...	...	...	...	...	...	...	108·7	+4·8	79·0	+3·0	93·9	+3·9	29·7	...	...	...	...	46·5
Punjab (West) .	Peshawar .	1,110	28·568	−·029	29·590	28·720	8th	28·362	28th	·358	88·7	104·4	+6·6	75·1	+5·7	89·8	+6·2	29·3	114·0	24th	66·0	5th	48·0
	Mardan .	?	...	...	...	...	...	...	...	...	85·2	105·1	?	72·0	?	88·5	?	33·1	112·1	24th	62·0	4th	50·1
	Khushab .	612	28·996	?	29·560	29·161	6th	28·783	29th	·378	95·5	110·4	?	81·0	?	95·7	?	29·4	118·4	24th	71·0	2nd	47·4
	Montgomery	558	29·036	?	29·544	29·215	5th	28·861	28th	·354	96·0	113·6	?	81·3	?	97·5	?	32·3	121·9	24th	66·0	4th	55·9
	D. I. Khan .	573	?	?	?	?	?	?	?	?	91·2	109·1	+5·8	77·9	+3·7	93·5	+4·8	31·2	116·1	29th	65·8	4th	50·3
	Mooltan .	420	29·180	−·055	29·559	29·326	5th	29·015	28th	·311	92·1	114·0	+9·6	81·7	+5·8	98·0	+7·7	32·3	120·5	24th	70·6	3rd	49·9
	Sirsa . .	662	28·955	−·040	29·562	29·121	5th	28·795	28th	·326	93·7	114·1	+7·9	82·0	+6·0	98·1	+7·0	32·1	121·1	24th	65·3	6th	55·8
Sind and Cutch .	Jacobabad .	186	29·443	−·020	29·585	29·600	2nd	29·301	28th	·299	94·6	117·3	+6·9	81·1	+4·2	99·2	+5·6	36·2	123·0	25th & 28th.	70·6	4th	52·4
	Hyderabad .	96	29·600	+·015	29·648	29·709	2nd	29·496	19th	·213	86·7	108·3	+1·5	78·0	−0·4	93·1	+0·6	30·3	115·7	11th	73·5	5th & 6th.	42·2
	Kurrachee .	49	29·701	+·016	29·702	29·785	2nd	29·608	29th	·177	83·5	91·6	−1·3	78·0	−0·5	84·9	−0·9	13·6	96·0	11th	72·8	3rd	23·2
	Bhuj . .	395	29·377	+·022	29·722	29·469	1st	29·306	13th	·163	85·3	101·3	−0·2	76·2	−0·5	88·8	−0·4	25·1	110·1	12th	71·4	5th & 10th.	38·7
Rajputana (West)	Bickaneer .	753	28·871	?	29·564	28·980	5th	28·757	28th	·223	93·0	112·4	+6·0	84·9	+2·7	98·6	+4·4	27·5	118·3	24th	78·0	5th & 18th.	40·3
	Pachpadra .	380	29·322	?	29·655	29·434	6th	29·234	20th	·200	86·5	111·7	?	78·3	?	95·0	?	33·4	119·7	11th	69·7	3rd	50·0
VIII.—East Rajputana, Central India and Gujarat.		...	...	+·002	...	...	...	...	...	...	...	105·2	+2·1	80·1	+2·6	92·7	+2·4	25·0	...	...	...	...	39·6
Rajputana (East)	Jeypore .	1,431	28·278	−·013	29·639	28·373	5th	28·191	27th	·182	89·9	109·5	+4·0	81·4	+5·2	95·5	+4·6	28·1	115·5	12th	68·5	4th	47·0
	Sambhar .	1,254	28·437	−·012	29·626	28·537	5th	28·338	28th	·199	90·5	107·8	+3·5	82·4	+4·3	95·1	+3·9	25·4	113·0	24th	70·5	3rd & 4th.	42·5
	Ajmere .	1,611	28·122	−·001	29·663	28·209	5th	28·025	28th	·184	89·1	107·1	+3·9	82·0	+4·3	94·6	+4·1	25·1	113·4	12th	71·6	3rd	41·8
	Deesa . .	466	29·319	+·029	29·738	29·406	1st	29·251	13th.	·155	84·8	108·7	+2·5	76·1	−1·4	92·4	+0·6	32·6	117·4	11th	72·5	3 days	44·9
Kathiawar .	Rajkot .	429	29·383	+·037	29·762	29·484	1st	29·306	14th	·178	90·3	105·8	+0·4	74·7	−0·5	90·3	−0·1	31·1	111·4	14th	69·3	6th	42·1
	Veraval .	?	29·823	?	29·785	29·880	4th	29·755	12th	·125	82·2	86·5	?	78·0	?	82·2	?	8·5	91·6	12th	72·3	6th	19·3
Central India .	Nowgong .	757	28·915	−·023	29·608	29·047	6th	28·812	28th	·235	92·3	108·9	+1·6	82·7	+3·6	95·9	+2·6	26·2	115·6	24th	73·0	1st	42·6
	Indore .	1,823	27·970	+·021	29·714	28·062	1st	27·895	13th	·167	85·5	103·9	+1·5	77·0	+1·6	90·4	+1·6	26·9	111·5	13th	69·6	4th	41·9
	Neemuch .	1,630	28·141	+·030	29·701	28·230	1st	28·066	14th	·164	87·4	106·3	+2·4	78·4	+2·0	92·4	+2·2	27·9	112·2	12th & 13th.	72·6	4th	39·6
Gujarat . .	Surat . .	36	29·813	+·027	29·792	29·891	1st	29·729	14th	·162	85·3	96·2	−2·0	78·6	+1·0	87·4	−0·5	17·6	108·1	11th	72·0	2nd	36·1
	Ahmedabad.	176	29·648*	?	29·772*	29·735	1st	29·573	14th	·162	85·7*	107·4*	?	78·8*	?	93·1*	?	28·6	114·3	11th	75·0	1st & 7th.	39·2
N.-W. P. (West) .	Agra . .	555	29·096	−·041	29·598	29·272	6th	28·941	28th	·331	93·0	108·5	+1·8	84·2	+3·5	96·4	+2·7	24·3	115·5	26th & 28th.	76·7	7th	38·8
	Jhansi .	858	28·821	−·029	29·611	28·953	6th	28·708	28th	·245	94·5	110·7	+3·3	87·5	+5·2	99·1	+4·2	23·2	117·2	26th	78·9	6th	39·3

* Mean of 30 days. † Mean of 25 days. ‡ Mean of 29 days.

I—*continued.*

in India, Burma, etc., in May 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.									Heaviest rainfall during month.	Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st May 1895.	Normal rainfall for period, from 1st March to 31st May.	Variation from normal of period, from 1st March to 31st May 1895.			
...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	0·23	1·09	−0·87	...	...	...	...	VI.—Upper Sub-Himalayas.	
3	1	1	...	18	1	1	...	6	4·5	5·2	− 13	46	·593	0·8	1	2·27	−1·27	0·33	0·84	− 0·51	0·86	1·95	− 1·09	0·33	Bareilly .	N.-W. Provinces (Submontane).
30	...	...	...	...	1	...	...	...	1·4	2·5	− 44	51	·560	1·4	3	4·09	−1·09	1·14	1·95	− 0·81	2·81	3·55	− 0·74	0·60	Dehra Dun.	
6	...	2	3	14	1	...	3	2	5·2	3·7	+ 41	41	·541	0·7	1	2·00	−1·00	0·10	0·86	− 0·76	0·60	2·00	− 1·40	0·10	Roorkee.	
3	...	1	11	6	...	3	7	...	3·5	2·6	+ 35	41	·554	0·2	0	1·64	−1·64	0·13	0·69	− 0·56	0·76	1·70	− 0·94	0·08	Meerut.	
1	...	1	4	9	3	1	11	1	6·5	4·5	+ 44	30	·544	0·3	1	1·64	−0·64	0·15	0·78	− 0·63	0·69	1·58	− 0·89	0·15	Delhi .	Punjab (Central).
5	5	7	5	5	1	1	...	2	3·4	3·3	+ 3	40	·548	0·9	0	2·00	−2·00	0	1·03	− 1·03	1·91	2·22	− 0·31	0	Lahore.	
6	...	1	8	9	...	2	1	4	3·3	P	P	49	·639	0·7	1	P	P	0·16	0·97	− 0·81	0·96	2·23	− 1·27	0·10	Umballa .	Punjab (Submontane).
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Patiala.	
9	...	1	...	13	3	...	...	5	2·6	2·2	+ 18	41	·585	0·3	1	1·91	−0·91	0·17	0·78	− 0·61	0·92	2·62	− 1·70	0·17	Ludhiana.	
9	4	2	13	1	...	...	1	1	3·3	2·5	+ 32	33	·431	0·3	0	2·73	−2·73	0	1·23	− 1·23	2·73	3·32	− 0·59	0	Sialkot .	Punjab (North).
17	1	...	4	3	...	1	...	5	3·9	2·8	+ 39	28	·397	1·0	0	3·00	−3·00	0·09	1·80	− 1·71	5·01	5·51	− 0·50	0·09	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	0·47	−0·45	...	...	...	...	VII.—Indus Valley and N.-W. Rajputana.	
14	3	2	1	2	3	...	3	3	5·6	4·8	+ 17	33	·441	0·8	0	2·09	−2·09	0·03	0·75	− 0·72	9·58	4·29	+ 5·29	0·03	Peshawar	Punjab (West).
...	...	...	...	...	...	...	...	...	...	P	P	...	...	...	1	P	P	0·10	P	P	7·46	P	P	0·10	Mardan.	
2	3	10	7	4	1	2	1	1	6·2	P	P	33	·549	0·2	1	1·00	0	0·11	0·41	− 0·30	4·33	1·57	+ 2·76	0·10	Khushab.	
3	2	3	3	3	8	5	3	1	5·9	P	P	34	·579	0·8	0	1·10	−1·10	0	0·45	− 0·45	0·64	0·97	− 0·33	0	Montgomery.	
15	2	4	3	1	...	...	3	3	3·2	2·3	+ 39	53	·741	0	0	0·82	−0·82	0	0·40	− 0·40	4·63	1·80	+ 2·83	0	D. I. Khan.	
9	...	5	2	4	...	8	1	2	1·4	2·9	− 52	42	·624	0·3	0	0·82	−0·82	0	0·42	− 0·42	0·96	0·87	+ 0·09	0	Mooltan.	
1	1	...	2	6	4	2	13	2	9·5	4·8	+ 98	29	·459	0·9	0	1·82	−1·82	0	0·81	− 0·81	0·80	1·49	− 0·69	0	Sirsa.	
12	1	...	4	6	3	1	2	2	5·7	4·7	+ 18	57	·942	0·5	0	0·45	−0·45	0	0·10	− 0·10	0·26	0·44	− 0·18	0	Jacobabad .	Sind and Cutch.
...	...	...	...	...	...	31	...	...	21·9	12·7	+ 72	54	·677	0·3	0	0·45	−0·45	0	0·25	− 0·25	0	0·43	− 0·43	0	Hyderabad.	
...	...	...	...	...	...	12	16	3	16·9	17·5	− 4	78	·907	4·7	0	0	0	0	0	0	0·07	0·56	− 0·49	0	Kurrachee.	
...	...	...	...	...	...	10	17	4	20·7	15·4	+ 34	70	·862	0·8	0	P	P	0	0·13	− 0·13	0·10	0·40	− 0·30	0	Bhuj.	
...	...	...	2	1	9	16	2	1	8·9	6·5	+ 37	34	·506	0·8	0	P	P	0	1·08	− 1·08	0·40	1·45	− 1·05	0	Bickaneer .	Rajputana (West).
1	...	...	...	9	8	11	1	1	13·1*	8·8	+ 49	63	·781	3·6	1	P	P	0·15	0·83	− 0·68	0·85	0·91	− 0·06	0·15	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·01	0·50	−0·50	...	...	...	...	VIII.—East Rajputana, Central India and Gujarat.	
3	2	3	1	...	...	1	16	5	7·6	6·9	+ 10	44	·619	1·1	0	1·20	−1·20	0·01	0·45	− 0·44	1·45	0·93	+ 0·52	0·01	Jeypore .	Rajputana (East).
...	2	...	1	2	1	1	22	2	12·8*	9·9	+ 29	46	·658	1·3	0	1·27	−1·27	0·06	0·80	− 0·74	0·98	1·24	− 0·26	0·06	Sambhar.	
...	1	...	...	...	1	8	19	2	11·3	7·1	+ 59	42	·566	0·7	0	2·09	−2·09	0	0·75	− 0·75	0·63	0·98	− 0·35	0	Ajmere.	
...	2	...	...	...	...	16	10	3	14·2	13·4	+ 6	59	·685	2·7	0	0·55	−0·55	0	0·25	− 0·25	0·36	0·31	+ 0·05	0	Deesa.	
...	...	...	...	...	...	5	19	7	14·7	14·6	+ 1	67	·793	1·9	0	0·36	−0·36	0	0·25	− 0·25	0·06	0·28	− 0·22	0	Rajkot .	Kathiawar.
2	2	...	...	...	...	5	18	4	9·9	P	P	71	·882	4·5	0	P	P	0	P	P	0	P	P	0	Veraval.	
4	1	5	5	...	...	...	16	...	5·0	3·4	+ 47	35	·531	0·9	0	1·09	−1·09	0	0·42	− 0·42	0·44	0·75	− 0·31	0	Nowgong .	Central India.
...	2	...	...	...	...	4	11	14	7·0	6·1	+ 15	52	·632	0·9	0	1·36	−1·36	0	0·75	− 0·75	3·04	0·83	+ 2·21	0	Indore.	
...	1	2	...	...	...	10	15	3	12·2	12·4	− 2	48	·603	1·0	0	1·18	−1·18	0	0·59	− 0·59	0·41	0·76	− 0·35	0	Neemuch.	
2	...	1	1	1	1	12	13	...	...	12·7	...	71	·865	4·1	0	0·45	−0·45	0	0·19	− 0·19	0	0·20	− 0·20	0	Surat . .	Gujarat.
...	1	1	...	...	...	14	5	2	8·2†	P	P	60†	·752†	3·7*	0	P	P	0	P	P	0·05	P	P	0	Ahmedabad.‡	
1	...	2	..	9	1	15	...	3	6·6	5·9	+ 12	39	·604	0·6	0	1·91	−1·91	0	0·60	− 0·60	0·52	1·05	− 0·53	0	Agra . .	N.-W. P. (West).
4	4	1	1	2	5	4	3	7	5·3	4·8	+ 10	34	·547	0·3	0	1·36	−1·36	0	0·49	− 0·49	0·22	0·97	− 0·75	0	Jhansi.	

* Mean of 30 days. † Mean of 29 days. ‡ Wind observation of 23 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
IX.—Deccan	...	...	...	0	...	...	...	...	...	...	...	105·4	+1·6	79·0	+1·9	92·2	+1·7	26·4	...	...	...	...	38·9
Bombay (Deccan)	Belgaum	2,524	27·357	+·029	29·801	27·417	4th	27·274	14th	·143	76·1	92·7	−0·4	68·1	+0·2	80·4	−0·1	24·6	101·2	3rd & 4th.	63·4	1st	37·8
	Sholapur	1,590	28·249	+·025	29·769	28·299	4th	28·166	14th	·133	84·1	105·5	+1·2	77·1	+1·1	91·3	+1·2	28·4	110·2	2nd & 3rd.	69·0	19th	41·2
	Poona	1,840	28·024	+·023	29·795	28·071	1st	27·951	14th	·120	81·6	100·3	+1·8	72·6	+0·7	86·5	+1·3	27·7	109·1	11th	68·3	5th	40·8
	Bijapur	1,946	27·912	P	29·784	27·955	6th	27·828	14th	·127	80·7	101·9	P	73·4	P	87·7	P	28·5	107·3	4th	67·0	26th	40·3
Khandesh	Malegaon	1,430	28·384	P	29·746	28·457	1st	28·316	14th	·141	87·1	105·3	+1·6	76·2	+1·5	90·8	+1·6	29·1	110·8	11th	70·7	3rd	40·1
	Ahmednagar	2,152	27·699	P	29·760	27·756	1st	27·618	14th	·138	83·7	102·2	P	71·8	P	87·0	P	30·4	107·2	12th	62·5	16th	44·7
Berar	Akola	930	28·839	+·007	29·700	28·912	6th	28·735	14th	·177	88·7	108·4	+1·3	81·4	+0·8	95·0	+1·1	27·0	113·5	12th	75·8	24th & 25th.	37·7
	Amraoti	1,215	28·545	+·012	29·694	28·635	6th	28·452	14th	·183	88·6	108·6	+1·4	81·0	+1·8	94·8	+1·6	27·6	113·3	13th	76·3	6th	37·0
Central Provinces (West).	Khandwa	1,044	28·735	+·021	29·724	28·822	1st	28·643	14th	·179	86·8	107·7	+1·7	81·8	+1·6	94·8	+1·7	25·9	113·7	12th & 13th.	76·6	4th	37·1
	Hoshangabad	1,020	28·722	−·012	29·682	28·823	1st	28·627	13th	·196	89·4	108·4	+0·9	81·3	+1·6	94·8	+1·3	27·1	113·6	26th	74·7	3 days.	38·9
	Nagpur	1,025	28·691	−·010	29·647	28·805	6th	28·595	14th	·210	92·5	110·5	+1·8	82·6	+1·5	96·6	+1·7	27·9	114·2	23rd	72·1	4th	42·1
Central Provinces (Central).	Chanda	634	29·106	+·014	29·670	29·228	6th	28·995	14th	·233	92·0	110·5	+1·2	82·8	+1·4	96·6	+1·3	27·7	114·9	26th	73·0	6th	41·9
	Seoni	2,033	27·721	−·004	29·636	27·832	6th	27·631	14th	·201	91·2	105·8	+2·6	78·2	+1·6	92·0	+2·1	27·6	110·3	27th	70·1	6th	40·2
	Jubbulpore	1,327	28·367	−·031	29·620	28·478	6th	28·300	13th & 14th.	·178	90·5	107·8	+2·9	81·0	+2·6	93·4	+2·8	26·8	112·5	26th	73·6	4th & 5th	38·9
	Saugor	1,762	27·963	−·007	29·634	28·059	5th	27·887	14th	·172	89·5	107·4	+2·7	82·1	+4·5	94·8	+3·6	25·3	113·4	24th	76·1	5th	37·3
Central Provinces (East).	Raipur	970	28·742	−·008	29·637	28·897	6th	28·638	19th	·259	92·7	108·8	+2·2	83·2	+2·0	96·0	+2·1	25·6	113·0	27th	68·2	6th	44·8
	Sutna	1,040	28·617	−·035	29·591	28·752	6th	28·515	28th	·237	93·1	107·4	+2·7	83·3	+5·2	95·4	+4·0	24·1	113·1	24th	73·1	1st & 6th	40·0
	Sambalpur	463	29·215	−·028	29·619	29·402	4th	29·074	19th	·328	91·3	107·6	+1·3	82·2	+1·3	94·9	+1·3	25·4	115·0	28th	74·7	5th	40·3
Hyderabad (North).	Aurangabad	P	27·975	P	P	28·030	1st	27·890	14th	·140	86·4	105 4	P	74·7	P	90·1	P	30·7	111·0	11th	68·9	24th	42·1
	Indur	P	...	P	P	Not recorded.		...	...	...	89·7	106·2	P	82·7	P	94·4	P	23·5	108·6	3 days	77·0	7th	31·6
	Bidar	P	27·665	P	P	27·722	5th	27·574	14th	·148	84·1	97·7	P	77·1	P	87·4	P	20·6	99·3	19th	71·2	7th	28·1
Hyderabad (South).	Gulbarga	1,502	28·320	P	29·753	28·386	6th	28·216	14th	·170	84·2	105·1	P	77·5	P	91·3	P	27·6	109·8	4th	71·3	20th	38·5
	Raichur	1,378	28·449	P	29·753	28·514	5th	28·349	14th	·165	85·1	104·3	P	79·9	P	92·1	P	24·4	110·9	3rd	75·1	18th & 19th.	35·8
	Hyderabad (Deccan).	1,690	28·123	+·011	29·728	28·215	5th	28·017	14th	·198	87·4	104·0	+1·1	80·0	+2·1	92·0	+1·6	24·0	108·4	3 days	74·2	6th	34·2
	Secunderabad	1,787	28·032	P	29·734	28·115	5th	27·924	14th	·191	85·7	105·5	P	78·8	P	92·2	P	26·7	109·8	4th	72·9	6th	36·9
	Khamamet	373	29·402	P	29·714	29·547	5th	29·284	18th	·263	89·5	106·2	P	82·8	P	94·6	P	23·4	113·7	1st	70·3	6th	43·4
X.—West Coast	...	...	...	+·035	...	...	...	...	...	...	...	89·6	+0·6	80·1	+1·3	84·8	+1·0	9·4	...	...	...	...	14·5
Konkan	Bombay	37	29·849	+·036	29·826	29·916	1st	29·778	14th	·138	84·0	90·3	+0·3	80·6	+0·2	85·5	+0·3	9·7	92·0	20th	78·5	3 days.	13·5
	Ratnagiri	110	29·773	+·045	29·820	29·852	4th	29·700	14th	·152	85·0	90·9	...	80·4	+1·4	85·7	+1·2	10·5	91·9	4 days	77·9	3rd	14 0
	Mormagao	60	29·835	P	29·829	29·910	4th	29·754	14th	·156	84·9	85·0	P	81·3	P	85·2	P	7·7	91·0	12th & 27th.	78·4	6th & 20th.	12·6
	Goa	23	29·881	+·041	29·818	29·963	4th	29·800	14th	·163	83·5*	86·6†	P	81·2†	P	83·9†	P	5·4	87·5	4 days.	79·0	3 days.	8·5
	Karwar	44	29·853	+·042	29·829	29·919	4th	29·777	14th	·142	83·2	89·4	−0·3	81·2	+2·0	85·3	+0·9	8·2	90·8	3 days.	76·4	20th	14·4
Malabar	Cochin	10	29·895	+·027	29·833	29·935	30th	29·838	15th	·097	82·2	90·6	+1·4	78·5	+1·3	84·6	+1·4	12·1	93·3	4th	73·7	16th	19·6
	Calicut	27	29·871	+·025	29·827	29·911	4th	29·800	14th	·111	83·5	90·9	+1·1	78·5	+1·2	84·7	+1·2	12·4	93·4	10th	73·0	21st	20·4
	Mangalore	65	29·837	+·031	29·834	29·871	4th	29·768	14th	·103	84·0	90·7	+0·9	79·9	+1·5	85·3	+1·2	10·8	91·8	6 days.	75·4	13th	16·4
	Trivandrum	198	29·707	P	29·835	29·754	4th	29·639	14th	·115	81·7	86·8	P	79·1	P	83·0	P	7·7	88·5	11th & 12th.	77·0	30th	11·5
XI.—South India	...	...	...	+·012	...	...	...	...	...	...	...	97·6	+1·3	77·9	+0·6	87·7	+1·0	19·5	...	...	...	...	33·5
Madras (South)	Pamban	37	29·825	P	29·788	29·895	27th	29·737	14th	·158	85·7	91·1	P	82·2	P	86·7	P	8·9	93·8	21st	76·2	6th	17·6
	Tinnevelly	168	29·700?	P	29·796?	29·757	5th	29·645	14th	·112	87·8	102·2	P	81·3	P	91·8	P	20·9	103·9	1st & 2nd.	75·4	6th	28·5
	Madura	447	29·400	+·013	29·779	29·474	4th	29·310	15th	·164	86·9	100·4	+0·2	78·5	+1·7	89·5	+1·0	21·9	103·0	29th	72·0	10th	31·0

* Mean of 30 days.

† Mean of 29 days.

I—*continued.*

in India, Burma, etc., in May 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.								Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st May 1895.	Normal rainfall for period, from 1st March to 31st May.	Variation from normal of period, from 1st March to 31st May 1895.	Heaviest rainfall during month.		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·49	0·99	−0·66	...	...	...	...	**IX.—Deccan.**	
1	1	...	...	...	...	7	16	6	19·2*	18·1	+ 6	68	·605	3·9	2	4·36	−2·36	0·46	2·62	− 2·16	2·68	4·69	− 2·01	0·20	Belgaum .	Bombay (Deccan).
...	...	...	...	...	...	4	5	22	14·6	10·0	+ 46	47	·546	2·9	0	2·18	−2·18	0·11	1·15	− 1·04	0·44	2·06	− 1·42	0·04	Sholapur.	
...	...	...	...	1	...	4	21	5	15·0	14·2	+ 6	52	·559	2·8	0	2·00	−2·00	0	1·65	− 1·65	0	2·24	− 2·24	0	Poona.	
...	...	...	1	...	...	5	15	10	9·2	P	P	60	·623	4·2	4	3·10	+0·90	3·22	P	P	3·71	P	P	2·08	Bijapur.	
...	3	...	...	...	...	4	16	8	20·5	10·4	+ 97	80	1·006	2·1	0	1·27	−1·27	0	0·95	− 0·95	0·18	1·08	− 0·90	0	Malegaon .	Khandesh.
1	7	2	...	1	1	1	7	11	16·8	P	P	58	·660	1·9	0	P	P	0	P	P	0	P	P	0	Ahmednagar.	
...	...	...	...	...	...	2	14	15	12·9	8·6	+ 50	43	·563	2·0	1	0·91	+0·09	0·26	0·48	− 0·22	0·85	1·19	− 0·34	0·26	Akola .	Berar.
...	2	...	...	2	1	5	12	9	8·6	6·0	+ 43	42	·562	1·9	1	1·73	−0·73	0·42	0·75	− 0·33	0·86	1·40	− 0·54	0·30	Amraoti.	
...	...	...	...	...	...	2	16	13	12·9	9·1	+ 42	46	·569	1·2	0	1·09	−1·09	0·02	0·45	− 0·43	0·27	0·75	− 0·48	0·02	Khandwa .	Central Provinces (West).
5	...	...	...	...	...	9	17	...	3·5	3·8	− 8	41	·577	0·7	0	1·18	−1·18	0	0·73	− 0·73	0·58	1·12	− 0·54	0	Hoshangabad.	
3	...	1	2	2	2	5	8	8	10·4	7·0	+ 48	46	·700	3·1	2	2·09	−0·09	0·75	0·80	− 0·05	3·34	1·75	+ 1·59	0·37	Nagpur.	
2	...	...	...	6	4	1	13	5	5·7	4·9	+ 16	35	·537	2·6	1	P	P	0·37	0·89	− 0·52	3·54	2·76	+ 0·78	0·37	Chanda .	Central Provinces (Central).
...	...	...	...	...	...	...	...	...	...	4·6	...	36	·532	2·5	1	2·36	−1·36	0·15	0·76	− 0·61	0·83	1·81	− 0·98	0·13	Seoni.	
...	1	...	...	3	5	5	10	7	5·2	4·5	+ 16	33	·470	0·2	0	1·45	−1·45	0·04	0·71	− 0·67	1·54	1·40	+ 0·14	0·04	Jubbulpore.	
3	...	1	...	2	1	13	5	6	4·6	4·4	+ 5	35	·481	0·5	0	1·27	−1·27	0	0·69	− 0·69	1·76	1·05	+ 0·71	0	Saugor.	
2	2	...	2	...	2	8	11	4	10·2	7·4	+ 38	43	·642	2·6	2	2·91	−0·91	0·72	1·04	− 0·32	2·86	2·32	+ 0·54	0·29	Raipur .	Central Provinces (East).
1	6	1	4	2	1	...	13	3	10·1	8·1	+ 25	34	·514	0·4	0	1·64	−1·64	0·01	0·39	− 0·38	1·41	1·01	+ 0·40	0·01	Sutna.	
...	2	...	5	4	7	11	...	...	5·8	3·0	+ 93	49	·569	2·9	1	P	P	0·37	2·05	− 1·68	1·45	3·76	− 2·31	0·16	Sambalpur.	
3	2	1	...	...	1	3	12	9	5·3	P	P	43*	·518*	1·9	1	P	P	0·61	0·75	− 0·14	0·88	0·99	− 0·11	0·61	Aurangabad.	Hyderabad (North).
1	4	...	...	1	1	4	4	16	11·4	P	P	51	·704	2·8	0	P	P	0·03	0·33	− 0·30	2·04	0·91	+ 1·13	0·03	Indur.	
...	6	...	...	...	1	5	11	8	9·7	P	P	49	·565	2·7	2	P	?	0·90	1·07	− 0·17	4·77	2·24	+ 2·53	0·60	Bidar.	
...	4	1	...	...	1	7	7	11	12·6	P	P	61	·703	3·5	2	P	P	1·26	1·39	− 0·13	3·72	2·31	+ 1·41	0·90	Gulbarga .	Hyderabad (South).
...	2	...	...	...	2	6	13	8	10·2	P	P	51	·615	2·5	0	P	P	0·01	P	P	0·89	P	P	0·04	Raichur.	
3	1	1	...	2	1	1	18	4	7·1	P	P	48	·617	2·8	1	P	P	0·41	1·15	− 0·71	1·42	2·57	− 1·15	0·38	Hyderabad (Deccan).	
1	1	...	...	1	2	9	11	6	9·3	7·4	+ 26	46	·572	0·2	1	P	P	0·39	P	P	1·79	P	P	0·27	Secunderabad	
8	...	...	...	6	5	3	4	5	9·2	P	P	60	·822	1·0	4	P	P	2·20	P	P	2·71	P	P	1·56	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·12	6·04	−3·69	..	...	...	...	**X.—West Coast.**	
...	2	...	...	1	1	9	13	5	9·2	9·9	− 7	72	·851	3·5	0	1·00	−1·00	0·08	0·94	− 0·86	0·08	0·98	− 0·90	0·04	Bombay .	Konkan.
...	6	4	...	...	...	6	2	13	7·1	11·2	− 37	69	·833	4·7	0	1·64	−1·64	0·15	1·89	− 1·74	0·22	1·97	− 1·75	0·07	Ratnagiri.	
2	8	...	...	...	...	2	3	16	10·2	P	P	74	·895	4·0	1	P	P	0·28	P	P	0·28	P	P	0·20	Mormagao.	
2	10	...	...	...	...	2	5	12	7·3	P	P	71*	·824*	6·4	0	P	P	0·01	2·81	− 2·80	0·01	2·88	− 2·87	0·01	Goa.	
...	9	...	...	...	...	5	2	15	6·9	P	P	74	·833	3·8	2	4·09	−2·09	0·75	3·85	− 3·10	0·86	4·26	− 3·40	0·40	Karwar.	
3	7	13	2	1	1	1	1	2	6·8	2·2	+209	82	·906	4·5	10	13·45	−3·45	9·91	13·30	− 3·39	17·44	20·11	− 2·67	3·36	Cochin .	Malabar.
9	9	1	...	3	2	...	...	7	14·5	P	P	77	·873	5·1	7	9·00	−2·00	5·42	8·05	− 2·63	10·65	11·74	− 1·09	2·22	Calicut.	
13	3	1	4	3	1	1	1	4	3·7	4·6	− 20	72	·846	5·6	3	6·80	−3·80	0·88	7·67	− 6·79	1·15	8·86	− 7·71	0·41	Mangalore.	
4	11	4	...	...	...	...	1	11	6·1	P	P	82	·892	5·7	5	P	P	1·60	9·80	− 8·20	6·70	15·95	− 9·25	0·49	Trivandrum.	
...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	2·15	2·69	−0·78	...	...	...	...	**XI.—South India.**	
...	...	...	...	...	17	12	2	...	14·8	P	P	80	·984	3·1	0	2·30	−2·30	0	2·21	− 2·21	2·26	7·13	− 4·87	0	Pamban. .	Madras (South).
...	2	1	2	2	3	8	4	9	5·9	P	P	64	·852	4·6	3	3·80	−0·80	0·74	P	P	4·75	P	P	0·45	Tinnevelly.	
3	6	1	...	...	...	...	2	19	2·1	3·7	− 43	64	·818	1·2	4	4·00	0	2·16	2·87	− 0·71	7·07	5·36	+ 1·71	0·79	Madura.	

* Mean of 30 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras (South Central).	Salem	940	28·947	+·021	29·821	28·996	5th	28·875	14th	·121	83·8	99·6	+0·8	76·6	+1·1	88·1	+1·0	23·0	106·5	3rd	71·0	9th	35·5
	Coimbatore	1,348	28·522	+·022	29·809	28·582	4th	28·445	14th	·137	80·4	95·3	+0·5	73·4	−0·1	84·4	+0·2	21·9	98·4	25th	67·6	21st	30·8
Coorg	Mercara	3,781	26·246	?	?	26·321	4th	26·160	14th	·161	69·4	79·9	−1·0	64·8	+0·3	72·4	−0·4	15·1	83·5	2nd	60·7	21st	22·8
Mysore	Chitaldroog	2,405	27·488	?	29·803	27·530	22nd	27·402	14th	·128	77·0	93·7	?	70·1	?	81·9	?	23·6	100·2	3rd	59·4	6th	40·8
	Bangalore Fort.	3,021	26·909	+·021	29·809	26·962	5th	26·833	14th	·129	75·1	91·3	+0·1	69·0	−0·1	80·2	0	22·3	98·8	2nd	63·8	6th	35·0
	Hassan	3,091	26·858	?	29·841	26·890	23rd	26·790	14th	·100	74·4	87·6	?	66·8	?	77·2	?	20·8	95·1	2nd	62·4	20th	32·7
	Mysore	2,518	27·407	?	29·837	27·445	5th	27·343	14th	·102	75·5	92·2	?	69·4	?	80·8	?	22·8	96·4	25th	64·0	21st	32·4
Madras (East Coast, South).	Negapatam	31	29·807	+·011	29·766	29·870	4th	29·710	14th	·160	87·9	99·6	+3·5	81·4	+1·2	90·4	+2·4	18·2	107·3	17th	74·7	17th	32·6
	Cuddalore	12	29·808	?	29·749	29·882	6th	29·698	18th	·184	88·4	101·2	?	81·0	?	91·1	?	20·2	109·4	19th & 20th.	73·2	5th	36·2
	Trichinopoly	255	29·588	+·008	29·773	29·650	4th	29·506	14th & 18th.	·144	86·8	103·6	+2·5	79·8	+1·5	91·7	+2·0	23·8	107·2	1st	73·4	12th	33·8
	Madras	22	29·791	+·002	29·744	29·883	6th	29·670	18th	·213	88·0	100·4	+2·5	81·7	+0·9	91·1	+1·7	18·7	109·0	19th & 21st.	74·5	15th	34·5
Madras (East Coast, Central).	Nellore	71	29·715	?	29·718	29·830	5th	29·600	17th	·230	90·0	105·8	?	82·1	?	94·0	?	23·7	112·8	1st	71·6	13th	41·2
	Masulipatam	15	29·765	+·009	29·714	29·929	5th	29·626	18th	·303	89·1	102·1	+2·6	81·4§	+0·3§	91·4§	+1·5	20·7	112·7	3 days	69·6	13th	43·1
Madras (Central)	Cuddapah	433	29·394	?	29·760	29·466	5th	29·302	14th	·164	89·3	105·5	+0·4	82·5	−0·9	94·0	−0·3	23·0	112·3	3rd	67·5	15th	44·8
	Kurnool	923	28·904	+·015	29·758	28·978	5th	28·807	14th	·171	86·8	105·0	+0·7	81·0	+0·6	93·0	+0·7	24·0	109·8	3 days	73·0	13th	36·8
	Bellary	1,475	28·376	+·030	29·780	28·439	6th	28·276	14th	·163	83·2 (a)	101·7‡	+0·4‡	?	?	?	?	?	104·7	23rd & 24th.	...	...	...
Madras (East Coast, North).	Rajahmundry	112	29·667	+·008	29·714	29·830	5th	29·503	19th	·327	88·3	104·6	+2·0	82·7	+1·4	93·7	+1·7	21·9	113·1	29th & 30th.	74·1	13th	39·0
	Cocanada	26	29·742	+·004	29·703	29·899	5th	29·561	19th.	·338	87·8	100·9	+4·0	82·8	+0·6	91·9	+2·3	18·1	111·9	30th	71·6	13th	40·3
	Vizagapatam	31	29·727	−·007	29·696	29·878	5th	29·553	19th	·325	86·6	91·2	+0·9	85·1	+0·1	88·2	+0·5	6·1	99·3	31st	81·6	3 days	17·7
	Gopalpur	21	29·696	?	?	29·874	4th	29·534	19th	·340	84·2	90·5	?	80·5	? *	85·5	?	10·0	102·2	22nd	71·1	5th	31·1
XII.—Hill Stations.																							
Baluchistan	Shirino	?	...	...	...	...	...	...	...	...	...	... (a)	...	... (a)	...	...	...	...	...	...	...	...	...
	Kachh	?	23·903	?	...	24·000	3 days	23·879	19 h	·121	71·2	87·9	?	52·1	?	70·0	?	35·8	92·0	3 days	44·0	4th	48·0
	Pishin	...	...	...	...	...	...	...	...	...	...	98·5	?	45·7	?	72·1	?	52·8	105·1	24th	34·9	10th	70·2
	Quetta	5,502	24·620	+·043	?	24·756	2nd	24·490	19th	·266	72·9	88·1	+5·2	52·6	+0·6	70·4	+2·9	35·5	91·0	3 days	46·4	4th	45·2
	Kalat	?	...	?	...	...	...	...	...	...	61·3	89·0	?	39·3	?	64·1	?	49·7	95·5	8th	26·8	2nd	68·7
	Chaman	4,311	25·620	?	?	25·790	2nd	25·474	19th	·316	84·6	96·5	?	67·2	?	81·9	?	29·3	101·0	3 days	55·1	1st & 2nd.	45·9
Northern India	Leh	11,503	19·782	?	...	19·948	4th	19·655	19th	·293	51·0	68·9	?	39·4	?	54·2	?	29·5	77·1	23rd	30·5	4th	46·6
	Srinagar	5,204	24·864	?	?	24·988	4th	24·732	28th	·256	62·4	80·3	?	54·2	?	67·3	?	26·1	87·8	24th	46·7	4th	41·1
	Astor (Kashmir)	?	22·360	?	?	22·530	5th	22·225	28th	·305	56·0	71·6	?	46·8	?	59·2	?	24·8	80·2	29th	41·0	3rd	39·2
	Gilghit	?	24·702	?	?	24·950	4th	24·520	28th	·430	72·4	90·2	?	65·0	?	77·6	?	25·2	98·6	24th & 25th	57·5	19th	41·1
	Cherat	?	25·595	?	?	25·732	5th	25·426	28th	·306	79·7	94·7	?	71·9	?	83·3	?	22·8	103·0	24th	63·7	5th	39·3
	Murree	6,344	23·796	+·014	?	23·916	6th	23·684	28th	·232	72·7	84·4	+8·5	66·4	+7·6	75·4	+8·1	18·0	93·2	24th	51·6	19th	41·6
	Poo	?	...	?	...	...	...	...	...	...	...	74·8	?	51·5	?	63·2	?	23·3	82·4	23rd	43·8	3rd	38·6
	Simla	7,224	23·086	+·015	?	23·194	5th	22·974	28th	·220	67·4	76·4	+4·8	62·0	+4·6	69·2	+4·7	14·4	83·4	23rd	50·6	14th	32·8
	Chakrata	6,977	23·295?	+·026?	?	23·417	5th	23·153	27th & 28th.	·264	67·6	79·6*	+5·1*	60·8‖	+5·0‖	71·1¶	+5·1	18·8	87·8	29th	47·2	4th	40·6
	Mussooree	6,705	23·512	?	?	23·640	5th	23·361	28th	·279	68·7	79·3	+3·7	62·3	+5·1	70·9	+4·[illegible]	17·0	87·8	29th	50·0	4th	37·8
	Ranikhet	6,069	24·047	+·006	?	24·186	5th	23·883	28th	·303	69·9	80·9†	+3·9†	63·0	+3·6	72·0†	+3·8	17·9	88·1	29th & 30th.	51·5	4th	36·6
	Yatung	10,480?	...	?	...	...	...	...	...	...	...	58·6	?	42·5	?	50·6	?	16·1	63·0	10th & 17th.	32·9	1st	30·1
	Gnatong	?	19·247	?	...	19·356	11th	19·105	27th	·251	44·8	52·2	?	38·0	?	45·1	?	14·2	56·9	2 days	30·1	5th	26·8
	Darjeeling	7,421	22·944	+·002	...	23·083	5th	22·767	27th	·316	58·0	63·8	+1·1	54·3	+3·6	59·1	+2·4	9·5	68·1	22nd	48·7	5th	19·4
	Gantak	?	24·496	?	?	24·678	4th	24·304	20th	·374	64·1	73·8	?	55·7	?	64·7	?	18·1	82·0	26th	50·3	5th	31·7

(a) Uncorrected readings. † Mean of 30 days. * Mean of 21 days. ‖ Mean of 29 days. ¶ Mean of 19 days. § Mean of 28 days. ‡ Mean of 17 days.

I—*continued.*

in India, Burma, etc., in May 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.								Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st May 1895.	Normal rainfall for period, 1st March to 31st May.	Variation from normal of period, from 1st March to 31st May.	Heaviest rainfall during month.		
6	...	1	...	4	6	9	4	1	3·4	4·4	− 23	67	·787	2·8	8	8·61	−0·64	4·92	5·20	− 0·28	7·50	7·66	− 0·16	1·63	Salem	Madras (South Central).
...	...	...	...	3	18	10	...	...	3·7	5·3	− 30	78	·808	3·6	2	6·45	−4·45	1·34	2·61	− 1·27	4·04	4·91	− 0·87	0·28	Coimbatore.	
2	6	...	...	...	...	...	10	13	7·8	5·3	+ 47	82	·598	4·4	4	10·00	−6·00	1·82	6·59	− 4·77	7·36	10·18	− 2·82	0·60	Mercara	Coorg.
...	...	1	...	...	...	11	16	3	11·2	P	P	69	·645	4·7	5	P	P	7·87	P	P	11·84	P	P	3·55	Chitaldroog	Mysore.
...	1	...	...	...	...	8	19	3	8·3	5·5	+ 51	75	·664	4·0	5	7·55	−2·55	3·90	4·02	− 0·12	6·55	5·71	+ 0·84	1·51	Bangalore Fort.	
...	...	...	1	...	...	7	16	7	5·1	P	P	74	·627	5·0	5	P	P	5·19	P	P	7·44	P	P	1·77	Hassan.	
1	...	...	...	...	1	13	13	3	10·5	P	P	76	·664	4·3	6	P	P	2·21	P	P	7·12	P	P	0·42	Mysore.	
1	...	...	...	1	6	16	6	1	11·5	7·4	+ 55	65	·851	4·3	2	2·18	−0·18	0·89	1·94	− 1·05	1·08	2·83	− 1·75	0·47	Negapatam	Madras (East Coast, South).
...	...	...	...	...	8	10	7	6	2·6	P	P	69	·924	1·7	0	1·50	−1·50	0·09	P	P	0·82	P	P	0·09	Cuddalore.	
...	...	...	...	...	...	17	12	2	7·5	6·0	+ 25	62	·784	2·5	4	3·91	+0·09	2·67	3·04	− 0·37	5·34	5·12	+ 0·22	0·97	Trichinopoly.	
...	1	1	...	...	9	12	7	1	9·5	9·2	+ 3	65	·864	3·5	1	1·45	−0·45	0·94	2·12	− 1·18	0·94	3·13	− 2·19	0·91	Madras.	
3	...	...	1	5	4	1	8	9	9·6	P	P	65	·899	4·0	1	2·10	−1·10	0·86	P	P	0·88	P	P	0·76	Nellore	Madras (East Coast, Central).
...	2	...	...	4	12	4	4	5	10·0	8·9	+ 12	79	1·080	4·9	2	2·73	−0·73	0·86	1·55	− 0·69	1·07	1·82	− 0·75	0·55	Masulipatam	
...	1	...	1	3	...	3	11	12	...	P	P	53	·724	3·8	4	3·40	+0·60	3·98	1·60	+ 2·38	4·03	2·04	+ 1·99	1·80	Cuddapah	Madras (Central).
3	3	...	1	...	1	4	12	7	...	P	P	55	·705	3·2	2	2·67	−0·67	0·61	1·16	− 0·55	3·74	2·35	+ 1·39	0·44	Kurnool.	
6	...	...	...	1	...	2	14	8	7·9	8·4	− 6	62*	·708*	4·6	3	3·36	−0·36	2·91	1·70	+ 1·21	5·57	2·50	+ 3·07	1·15	Bellary.	
1	1	2	1	1	3	12	6	4	...	...	...	64	·861	5·9	2	4·20	−2·20	0·22	2·75	− 2·53	3·50	3·69	− 0·19	0·10	Rajahmundry	Madras (East Coast, North).
...	3	...	2	2	5	10	5	4	9·0	P	P	71	·931	3·4	2	3·60	−1·60	0·77	1·22	− 0·45	2·70	1·96	+ 0·74	0·63	Cocanada.	
...	...	...	...	...	...	7	23	1	3·8	3·8	0	71	·895	6·1	3	4·36	−1·36	2·65	2·62	+ 0·03	2·80	3·50	− 0·70	1·15	Vizagapatam.	
3	1	...	...	...	9	17	...	1	21·8	13·3	+ 64	82	·964	1·7	2	3·44	−1·44	1·93	2·55	− 0·62	2·69	3·99	− 1·30	1·35	Gopalpur.	
																									XII.—Hill Stations.	
																									Shirine	Baluchistan.
11	2	1	...	1	1	...	10	5	...	P	P	35	·268	0·2	0	P	P	0	P	P	1·71	P	P	0	Kachh.	
...	...	...	...	...	...	...	...	...	...	P	P	...	...	...	0	P	P	0	P	P	0	P	?	0	Pishin.	
28	1	...	...	...	...	...	2	...	2·2	4·7	− 53	43	·349	0·5	0	1·18	−1·18	0	0·41	− 0·41	1·60	3·31	− 1·71	0	Quetta.	
...	12	...	...	...	19	...	...	...	...	?	?	...	...	...	0	?	?	0	P	P	0·92	P	P	0	Kalat.	
...	1	1	3	3	8	11	3	1	5·7	P	P	17	·198	0·6	0	P	P	0	P	P	1·61	P	P	0	Chaman.	
...	...	2	5	4	10	9	...	1	3·9	3·2	+ 22	45	·168	3·0	1	P	P	0·14	P	P	0·60	P	P	0·12	Leh.	Northern India.
6	1	3	5	9	4	2	1	...	6·7	P	P	80	·457	1·8	2	P	P	1·55	P	P	9·48	P	P	1·10	Srinagar	
3	2	...	...	3	15	8	...	...	6·1	P	P	45	·201	2·7	2	P	P	0·81	P	P	14·59	P	P	0·42	Astor (Kashmir).	
...	...	...	...	...	...	...	...	...	...	P	P	43	·337	2·9	0	P	P	0·18	P	P	1·40	P	P	0·08	Gilghit.	
5	15	...	...	...	3	...	4	4	14·4	P	P	27	·282	1·5	0	P	P	0·03	P	P	12·04	P	P	0·03	Cherat.	
7	4	3	4	2	...	1	...	10	9·9	8·3	+ 19	29	·228	1·3	2	5·55	−3·55	0·44	3·50	− 3·06	11·28	10·55	+ 0·73	0·34	Murree.	
21	...	1	2	5	1	...	...	1	...	?	?	...	...	1·0	0	P	P	0	P	P	4·04	P	P	0	Poo.	
4	7	12	2	...	3	3	...	...	6·5	2·9	+124	44	·287	1·2	1	6·18	−5·18	1·32	3·64	− 2·32	5·41	7·78	− 2·37	1·24	Simla.	
1	...	4	5	1	1	4	14	1	9·4	6·0	+ 57	50	·330	1·6	3	P	?	1·13	2·62	− 1·49	4·30	6·49	− 2·19	0·57	Chakrata.	
...	...	4	11	4	...	1	7	4	...	12·3	?	52	·354	1·6	4	4·55	−0·55	1·41	P	P	4·68	P	P	0·84	Mussooree.	
13	1	...	1	...	...	5	8	3	4·7	3·3	+ 42	57	·405	2·5	6	6·00	0	1·36	2·71	− 1·35	5·65	6·06	− 0·41	0·34	Ranikhet.	
...	...	...	...	...	...	...	...	...	...	P	P	...	...	...	17	P	P	3·87	P	P	13·04	P	P	0·43	Yatung.	
8	1	1	...	8	4	1	4	4	4·3	P	P	88	·262	7·5	23	P	P	12·96	P	P	32·25	P	P	1·22	Gnatong.	
4	1	2	3	2	3	8	5	3	4·9	6·2	− 21	94†	·457†	8·3	18	13·29	+4·71	14·41	8·74	+ 5·67	20·48	14·90	+ 5·58	3·53	Darjeeling.	
...	2	...	...	2	2	9	10	6	3·0	P	P	87	·522	5·5	18	P	P	19·78	P	P	35·29	P	P	2·84	Gantak.	

† Mean of 30 days.

*Mean of 17 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	25·994	+·019	...	26·068	4th	25·901	19th	·167	79·1	89·3	+0·7	71·9	+1·0	80·7	+0·9	17·4	97·2	11th	63·4	31st	33·8
	Pachmarhi	3,528	26·369	+·009	...	26·453	1st	26·299	19th	·154	83·1	97·0	+2·4	75·9	+1·4	86·5	+1·9	21·1	101·7	13th	67·2	5th	34·5
South India	Wellington	6,200	24·253	+·018	...	24·298	4th	24·187	14th	·111	70·2	77·4	+1·8	58·3	0	67·9	+0·9	19·1	82·7	3rd	53·7	21st & 22nd.	29·0
XIII.—Extra India.																							
Ceylon	Trincomalee	75	29·766	?	29·768	29·832	26th	29·651	15th	·181	86·8	93·4	?	79·6	?	86·5	?	13·8	96·0	3rd & 4th	75·0	6th	21·0
	Colombo	40	29·885	+·031	29·850	29·937	28th	29·802	14th	·135	84·3	89·4	?	78·8	?	81·1	?	10·6	93·5	2nd	74·5	16th	19·0
	Galle	48	29·881	?	29·855	29·940	6th	29·811	14th	·126	82·8	85·4	?	80·4	?	82·9	?	5·0	88·0	26th	76·0	11th	12·0
Persia	Meshed	3,104	..	...	...	Not recorded		...	...	...	69·8	?	?	56·3	?	?	?	?	?	...	44·9	1st	?
	Teheran	?	25·959	?	?	26·075	10th & 22nd.	25·800	18th	·275	72·0	?	?	?	?	?	?	?	?	?	?	?	?
	Ishpahan	?	?	?	?	?	...	?	...	?	71·7*	84·8	?	55·2	?	70·0	?	29·6	91·3	29th	49·3	6th	42·0
	Bushire	14	29·810	?	29·781	29·985	1st	29·689	25th	·296	79·6	84·8	?	74·5	?	79·6	?	10·3	89·6	30th	67·6	1st	22·0
	Jask	?	29·750	?	...	29·896	2nd	29·592	14th & 19th.	·304	84·5	91·4	?	77·5	?	84·1	?	13·9	99·9	13th	72.2	6th	27·7
Arabia	Muscat	?	29·750	?	...	29·910	1st	29·592	19th	·318	87·7	90·9	?	85·6	?	88·3	?	5·3	99·5	20th	81·6	2nd	17·9
	Baghdad	?	29·472	?	...	29·721	5th	29·311	2nd	·410	75·6	89·7	?	66·9	?	78·3	?	22·8	99·5	25th & 28th.	56·9	6th	42·6
	Aden	94	29·791	+·021	29·816	29·863	5th	29·718	20th	·145	85·2	93·6	−0·1	80·3	−0·4	87·0	−0·3	13·3	97·8	27th	76·4	11th	21·4
	Perim	?	29·684*	?	...	29·777	5th	29·597	30th	·180	85·7*	92·8*	?	81·7†	?	87·0†	?	11·1	100·1	31st	78·0	1st	22·1
Afghanistan	Kabul	?	...	?	...	...	...	...	...	...	68·6	85·4	?	54·7	?	70·1	?	30·7	92·1	7th	45·4	2nd	46·7
Central Asia	Kashgar	?	25·607	?	?	25·820	3rd	25·330	28th	·490	70·1	83·3	?	60·4	?	71·8	?	22·9	94·3	7th & 30th	47·3	2nd	47·0
Arabian Sea Islands, Africa	Minicoy	10	29·929	...	29·863	29·977	4th	29·854	14th	·123	841	901	?	‡82·2	?	‡85·9	?	9·9	93·9	5th	76·3	21st	17·6
	Zanzibar	73	30·015	?	30·015	30·124	30th	29·935	7th	·189	81·5	82·4	?	76·2	?	79·3	?	6·2	85·5	8th	73·4	31st	12·1

* Mean of 30 days.

† Mean of 25 days.

‡ Mean of 20 days.

—concluded.

in India, Burma, etc., in May 1895—concluded.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.									Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st March to 31st May 1895.	Normal rainfall for period, 1st March to 31st May.	Variation from normal of period, from 1st March to 31st May.	Heaviest rainfall during month.		
...	2	1	...	2	...	12	6	8	14·1	9·4	+ 50	35	·313	0·7	0	1·45	−1·45	0·01	1·18	−1·17	0·80	1·36	− 0·56	0·01	Mount Abu.	Central India.
2	1	...	1	1	...	6	18	2	13·9	6·8	+104	36	·399	1·2	0	2·9	−2·09	0	0·66	−0·66	2·30	1·21	+ 1·09	0	Pachmarhi.	
21	6	1	...	...	...	1	...	2	3·3	3·0	+ 10	57	·423	4·1	4	8·78	−4·78	4·10	3·95	+0·15	7·98	9·54	− 1·56	2·26	Wellington.	South India.
																									XIII.—Extra India.	
...	...	...	...	...	1	30	...	...	8·5	?	?	72	·919	2·9	4	?	?	1·59	2·46	−0·87	5·86	5·42	+ 0·44	0·92	Trincomalee.	Ceylon.
...	...	...	...	3	2	19	6	1	10·8	8·5	+27	78	·922	7·1	10	?	?	9·94	11·79	−1·85	21·12	28·76	− 7·64	3·28	Colombo.	
2	...	...	...	...	...	...	7	22	9·1	?	?	89	1·000	3·7	10	?	?	6·08	11·84	−5·76	19·19	26·12	− 6·93	1·91	Galle.	
			No	re	cord	ed.			?	?	?	?	?	2·2	0	?	?	0·10	?	?	6·70	?	?	0·08	Meshed.	Persia.
26	...	1	...	...	1	2	...	1	4·7	?	?	36	·277	1·3	0	?	?	0·05	?	?	3·81	?	?	0·05	Teheran.	
...	4	1	...	1	...	14	3	8	4·8	?	?	79*	·626*	1·1	0	?	?	0	?	?	3·61	?	?	0	Ispahan.	
...	5	3	2	2	...	1	...	18	11·1	8·9	+25	61	·621	0	0	?	?	0	?	?	0·62	?	?	0	Bushire.	
3	2	...	4	9	2	1	3	7	7·7	?	?	68	·797	0·7	0	?	?	0	?	?	0·82	?	?	0	Jask.	
...	2	4	6	1	1	1	5	11	3·5	?	?	67	·868	0	0	?	?	0	?	?	2·54	?	?	0	Muscat.	Arabia.
6	12	3	1	...	1	...	1	7	4·1	?	?	54	·489	0	1	?	?	0·30	?	?	0·63	?	?	0·30	Baghdad.	
2	...	6	17	...	3	3	...	...	9·7	10·6	−8	71	·854	2·9	0	?	?	0	0·21	−0·21	0	2·03	− 2·03	0	Aden.	
5	...	2	7	13	1	2	...	...	9·3†	?	?	74*	·914*	2·8	0	?	?	0	?	?	0·31	?	?	0	Perim.	
...	6	1	12	2	1	2	6	1	...	?	?	...	...	0	0	?	?	0	?	?	7·52	?	?	0	Kabul.	Afghanistan.
20	4	2	1	...	1	...	1	2	4·4	?	?	39	·279	2·3	1	?	?	0·12	?	?	0·13	?	?	0·12	Kashgar.	Central As.
...	1	...	...	...	...	3	15	12	12·5	?	?	75	·912	4·8	8	?	?	4·20	?	?	7·13	?	?	1·43	Minicoy.	Arabian Sea Islands.
...	...	...	...	16	15	...	...	...	6·6	?	?	86	·815	6·0	13	?	?	7·71	?	?	18·62	?	?	1·92	Zanzibar.	Africa.

* Mean of 30 days. † Mean of 29 days.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 87

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·816	29·724	·092	29·768	+·016	29·759	87·9	78·9	9·0	92·0	75·3	16·7	85·3	84·6	82·3	+ 0·1	76·7	80·4	79·6	78·9
	Rangoon	...	·809	·694	·115	·756	−·002	·733	90·4	77·1	13·3	98·5	72·9	25·6	84·1	84·7	81·5	− 1·5	74·9	79·2	78·9	77·7
	Diamond Island	...	·818	·719	·099	·767	−·001	·742	87·8	80·5	7·3	90·5	75·8	14·7	85·4	84·7	83·1	0	76·4	78·9	78·5	77·9
	Cocos Island	111							Imperfect.													
	Akyab	...	·799	·694	·105	·750	−·001	·713	89·4	78·5	10·9	93·2	73·2	18·1	86·5	86·8	83·2	− 0·1	76·3	81·8	81·6	79·9
Assam.	Silchar	...	·686	·557	·129	·622	−·028	·676	89·3	73·5	15·8	96·1	67·3	28·8	82·4	86·7	80·5	+ 1·0	72·5	77·1	78·3	76·0
	Sibsagar	...	·450	·303	·147	·376	−·050	·661	88·7	73·1	15·6	95·0	63·2	31·8	82·1	87·1	79·9	+ 2·6	72·5	77·4	79·8	76·5
	Dhubri	...	·617	·518	·129	·578	−·025	·646	86·9	74·9	12·0	94·4	69·3	25·1	80·6	84·9	79·0	+ 1·4	73·2	76·5	77·8	75·8
Bengal and Orissa.	Chittagong	...	·696	·580	·116	·639	−·033	·673	88·1	75·3	12·8	92·7	70·2	22·5	84·8	85·6	81·0	− 0·1	74·1	72·9	79·7	77·7
	Naryangunge	...	·723	·612	·111	·670	−·025	·637	90·3	77·3	13·0	96·3	70·8	25·5	85·2	87·6	83·4	+ 0·8	74·4	79·7	79·9	78·0
	Calcutta (Alipore)	...	·690	·577	·113	·635	−·026	·601	96·2	79·1	17·1	107·2	70·2	37·0	90·1	93·0	87·3	+ 2·2	76·0	80·8	80·0	78·9
	Do. (Chowringhee).	...	·697	?	?	?	?	?	93·4	79·3	19·1	108·4	70·3	38·1	92·0	?	?	?	76·6	82·8	?	?
	Saugor Island	...	·698	·594	·104	·648	−·023	·617	91·8	82·6	9·2	95·3	70·7	24·6	89·0	89·6	86·4	+ 1·3	79·1	82·9	82·7	81·6
	Burdwan	...	·601	·462	·139	·535	−·040	·578	99·8	79·9	19·9	112·8	72·4	40·4	90·1	97·0	88·3	+ 2·3	75·3	79·8	79·2	78·1
	Berhampore	...	·644	·517	·127	·584	−·019	·598	98·3	78·0	20·3	110·4	72·2	38·2	89·8	93·9	86·2	+ 1·7	73·9	80·5	79·7	78·0
	False Point	...	·708	·605	·103	·659	−·019	·621	91·0	81·3	9·7	108·5	70·1	38·4	88·6	87·9	85·1	+ 1·4	78·3	82·2	81·9	80·8
	Cuttack	...	·622	·501	·121	·572	−·037	·592	103·2	81·7	21·5	115·8	74·2	41·6	92·6	98·7	89·9	+ 2·2	77·1	80·5	80·0	76·1
Ganoetic Plain and Chota Nagpur.	Hazaribagh	...	27·707	27·604	·103	27·660	−·027	·544	99·0	77·6	21·4	108·6	66·3	42·3	91·5	95·0	87·2	+ 2·0	64·7	72·6	72·6	68·9
	Patna	...	29·490	29·369	·121	29·428	−·040	·558	100·2	78·8	21·4	110·0	70·4	39·6	91·1	98·1	88·6	+ 1·4	73·6	77·4	77·4	76·1
	Darbhanga	...	·538	·406	·132	·470	−·034	·586	94·8	77·6	17·2	102·0	68·5	33·5	87·3	93·7	85·5	+ 1·0	74·2	78·4	79·3	77·3
	Allahabad	...	·340	·221	·119	·281	−·043	·536	107·0	82·3	24·7	114·7	71·6	43·1	98·6	106·4	95·0	+ 3·1	70·4	76·7	76·5	74·5
	Ghazipur	220	·439	·327	·112	·382	−·031	·549	103·5	82·0	21·5	112·7	68·9	43·8	94·4	101·3	92·1	+ 2·5	72·0	76·8	76·6	75·1
	Lucknow	...	·294	·170	·124	·228	−·045	·542	106·3	82·4	23·9	114·5	74·4	40·1	97·3	104·2	94·4	+ 3·6	68·9	77·0	77·9	74·6
Indus Valley and Upper Sub-Himalayas.	Dehra Dun	...	27·493	27·396	·097	27·435	−·034	·552	97·5	72·9	24·6	106·4	64·1	42·3	88·4	94·6	84·8	+ 2·4	63·4	70·7	72·0	68·7
	Roorkee	...	28·764	28·644	·120	28·698	−·043	·516	105·1	76·8	28·3	113·7	66·6	47·1	95·2	103·5	90·9	+ 3·3	67·2	73·1	74·7	71·7
	Meerut	...	·906	·788	·118	·839	−·044	·513	106·1	79·2	26·9	113·7	70·2	43·5	96·2	103·7	92·4	+ 4·2	68·9	74·0	73·1	72·0
	Lahore	...	·911	·817	·094	·857	−·050	·503	109·5	79·6	29·9	117·1	71·1	46·0	98·4	108·6	94·6	+ 7·6	66·0	74·3	76·0	72·1
	Ludhiana	...	·816	·712	·104	·757	−·056	·500	108·5	79·3	29·2	116·8	68·5	48·3	98·5	105·8	93·5	+ 5·8	68·1	75·3	76·2	73·2
	Peshawar	...	·570	·464	·106	·510	−·039	·560	104·8	75·2	29·6	114·0	66·0	48·0	96·8	102·5	89·7	+ 7·0	60·9	69·1	71·1	67·0
	Mooltan	...	29·192	29·100	·092	29·139	−·050	·506	114·2	81·7	32·5	120·7	70·6	50·1	99·8	111·7	97·7	+ 7·7	66·8	77·9	81·7	75·5
	Jacobabad	...	·455	·337	·118	·389	−·022	·521	117·2	81·1	36·2	123·2	70·6	52·6	105·5	115·4	99·0	+ 5·6	70·2	?	?	?
	Kurrachee	...	·720	·641	·079	·679	+·028	·680	91·6	78·1	13·5	96·1	73·0	23·1	88·1	88·0	83·0	− 0·9	75·3	80·1	78·6	78·0
E. Rajputana, C. India, and Gujarat.	Jeypore	...	28·231	28·178	·103	28·229	−·016	·575	109·4	81·4	28·0	115·5	68·4	47·1	98·6	107·0	95·0	+ 4·7	68·2	74·4	75·9	72·8
	Ajmere	...	·128	·020	·108	·072	−·010	·578	107·0	82·0	25·0	113·4	71·5	41·9	96·2	105·5	94·2	+ 4·6	69·3	73·8	76·0	73·0
	Deesa	...	29·319	29·183	·136	29·250	+·022	·652	108·6	76·1	32·5	117·2	72·4	44·8	92·8	107·0	91·7	+ 0·6	69·1	73·6	73·0	71·9
	Nowgong	...	28·914	28·803	·111	28·859	−·029	·535	109·0	82·6	26·4	115·5	73·0	42·5	100·2	107·2	95·8	+ 2·6	68·4	73·7	72·6	71·5
	Agra	...	29·101	·985	·116	29·034	−·045	·523	108·6	84·2	24·4	115·6	76·7	38·9	100·3	106·3	96·2	+ 3·5	70·4	76·2	75·4	74·1
Deccan.	Belgaum	...	27·363	27·253	·110	27·312	+·021	·707	92·7	68·1	24·6	101·2	63·6	37·6	83·5	86·2	77·6	0	66·3	69·2	72·2	69·2
	Sholapur	...	28·243	28·038	·155	28·167	+·017	·643	105·4	77·1	28·3	110·1	69·0	41·1	92·7	103·7	90·4	+ 1·2	66·4	71·3	72·6	70·1
	Poona	...	·020	27·910	·110	27·973	+·027	·702	100·3	72·4	27·9	108·9	68·2	40·7	90·7	95·5	85·3	+ 0·9	66·4	70·0	71·8	69·4
	Akola	...	·839	28·685	·154	28·761	+·002	·607	106·5	81·4	27·1	113·9	75·9	38·0	96·5	107·2	94·9	+ 1·2	67·4	74·0	73·1	71·5
	Buldana	2,132	27·686	27·566	·120	27·625	+·008	·617	102·3	77·6	24·7	109·1	71·5	37·6	90·7	100·8	89·9	+ 1·2	63·3	69·4	68·1	66·8
	Khandwa	...	28·734	28·592	·142	28·682	+·017	·624	107·5	81·8	25·7	113·9	76·6	37·3	94·5	105·4	94·0	+ 1·6	66·7	72·6	71·4	70·2

II.

Stations in India, Burma, etc., for May 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.												Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province or District.
														Number of winds from																			
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																										%	%						
·889	·975	·944	·936	−·006	90	80	80	83	−1	8·2	7·8	8·0	+1·7	...	...	...	...	2	7	22	25	6	S. 66° W.	S. 34° W.	77	48	291	166	...	...	Port Blair .	Burma Coast and Bay Islands.
·837	·927	·910	·891	+·023	90	80	77	83	+6	7·7	8·3	8·0	+1·3	...	1	...	...	4	13	26	15	2	S. 46° W.	S. 19° W.	74	59	94	119	...	...	Rangoon .	
·861	·904	·893	·886	−·012	82	74	75	77	+5	7·9	8·0	8·0	+2·5	...	2	2	...	5	3	28	14	8	S. 63° W.	S. 76° W.	63	45	252*	162	...	...	Diamond Island, Cocos Island.	
														Imperfect.																			
·881	1·027	1·012	·974	+·091	91	81	79	84	+7	6·8	6·9	6·9	+1·6	...	3	2	16	3	16	4	12	6	S. 2° E.	S. 33° W.	19	31	109	88	...	...	Akyab .	
·787	·867	·861	·838	+·044	95	79	69	81	+1	7·6	6·9	7·3	+1·1	43	1	1	4	1	1	1	6	4	N. 61° W.	N. 75° E.	8	10	50*	79	...	...	Silchar .	Assam.
·792	·876	·920	·862	+·078	97	81	72	83	+1	6·0	4·4	5·2	−2·6	22	...	24	1	4	1	10	...	...	N. 66° E.	N. 56° E.	24	37	80*	66	...	...	Sibsagar .	
·797	·859	·863	·841	+·054	92	83	72	82	+2	7·1	5·6	6·4	+1·8	10	4	11	15	4	2	10	5	1	N. 87° E.	N. 70° E.	20	21	151	168	...	...	Dhubri .	
·831	·935	·938	·901	+·038	95	78	76	83	+3	7·5	4·8	6·2	+1·1	...	1	3	4	10	13	15	9	7	S. 27° W.	S	40	38	174*	153	...	...	Chittagong	Bengal and Orissa.
·820	·944	·923	·896	+·009	87	78	71	79	−1	7·3	7·1	7·2	+1·9	...	...	2	6	19	24	7	4	...	S. 16° E.	S. 19° E.	69	60	157	149	...	...	Naryangunge	
·860	·928	·856	·881	−·015	86	65	56	69	−7	4·4	4·0	4·2	−0·2	...	...	3	3	10	25	17	3	1	S. 5° W.	S. 11° E.	67	66	149	172	...	...	Calcutta (Alipore).	
·887	1·002	P	P	P	88	67	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	2·87	1·15	Do. (Chowringhee.)	
·953	1·046	1·028	1·009	+·024	85	76	74	78	−2	7·1	5·9	6·5	+1·0	...	...	...	...	7	41	13	1	...	S. 6° W.	S. 12° W.	90	69	464	367	...	...	Saugor Island,	
·820	·876	·765	·821	+·008	80	63	46	63	−3	4·7	5·0	4·9	+0·9	...	4	2	2	11	21	15	6	1	S. 10° W.	S. 9° E.	55	52	136*	131	...	...	Burdwan .	
·784	·921	·827	·844	+·042	82	66	54	67	−4	4·6	6·9	5·8	+0·6	...	...	5	23	6	12	10	3	3	S. 47° E.	S. 36° E.	40	37	105	132	...	...	Berhampore	
·833	1·013	1·012	·986	+·025	87	74	76	79	−4	5·7	5·4	5·6	+1·1	...	...	...	1	11	39	9	2	...	S. 1° E.	S. 31° W.	85	71	355*	324	...	...	False Point	
·873	·895	·802	·829	−·003	81	61	47	62	−2	3·1	3·6	3·4	−0·5	1	5	3	1	7	23	18	2	2	S. 14° W.	S. 5° W.	53	61	123	125	...	...	Cuttack .	
·453	·572	·522	·513	+·041	49	40	35	41	+1	4·6	7·3	6·0	+2·6	1	9	2	7	7	10	4	13	9	S. 83° W.	N. 77° W.	14	15	258	210	...	...	Hazaribagh.	
·763	·759	·668	·730	+·045	78	53	38	56	+1	2·2	2·7	2·5	−0·2	...	...	24	25	5	...	...	...	8	N. 64° E.	N. 54° E.	71	38	166*	118	...	...	Patna .	Gangetic Plain and Chota Nagpur.
·808	·855	·813	·825	+·067	85	66	52	68	+8	2·6	1·7	2·2	+0·2	...	...	6	28	22	2	1	2	1	S. 73° E.	S. 86° E.	74	59	176	145	...	...	Darbhanga	
·588	·629	·513	·577	+·049	55	35	23	38	0	0·6	1·2	0·9	−0·7	1	7	12	12	2	1	...	10	17	N. 1° W.	N. 8° E.	40	20	202	99	...	...	Allahabad.	
·657	·694	·584	·645	+·088	61	44	30	45	+5	0·7	1·2	1·0	−0·3	...	1	4	31	3	...	3	12	8	N. 72° E.	N. 10° W.	27	9	110	82	1·96	1·64	Ghazipur.	
·528	·657	·603	·596	+·054	49	39	29	39	−2	0·8	1·9	1·4	−0·5	...	4	14	13	6	3	4	7	11	N. 40° E.	N. 15° E.	24	15	92*	102	...	...	Lucknow.	
·479	·537	·524	·514	P	58	40	32	44	P	1·5	2·0	1·8	−1·0	5	2	2	2	12	15	15	7	2	S. 14° W.	S. 76° W.	48	17	35	59	...	...	Dehra Dun	
·543	·524	·479	·515	+·100	59	32	23	38	+3	0·7	0·4	0·6	−1·2	13	2	2	6	12	1	16	3	7	S. 16° W.	S. 68° W.	21	6	119	88	...	...	Roorkee .	Upper Sub-Himalayas.
·575	·547	·407	·509	+·006	58	32	19	37	−4	0·2	0·9	0·6	−1·2	9	...	3	12	8	1	5	20	4	S. 52° W.	N. 32° W.	13	24	88	63	...	...	Meerut .	
·461	·526	·462	·483	+·048	45	29	19	31	−2	0·7	0·7	0·7	−1·6	2	13	6	9	7	4	1	9	11	N. 3° E.	N. 7° E.	24	21	79	79	...	...	Lahore .	
·542	·568	·506	·539	+·058	54	32	24	37	−5	0·1	1·1	0·6	−1·6	11	1	6	...	17	6	2	4	15	S. 3° E.	N. 57° W.	6	10	64	56	...	...	Ludhiana .	
·361	·367	·370	·366	−·059	43	21	19	28	−12	0·7	3·1	1·9	−1·0	13	5	11	3	7	2	2	8	11	N. 7° W.	N. 16° E.	19	32	131*	118	...	...	Peshawar .	
·462	·664	·677	·601	+·022	43	35	25	34	−8	0	0	0	−1·1	4	1	21	...	9	...	21	1	5	S. 45° E.	S. 35° W.	4	35	36*	68	...	...	Mooltan .	Indus Valley and N.-W. Rajputana.
·616	P	P	?	?	58	?	?	P	P	0·5	0·5	0·5	−0·7	13	4	1	5	9	11	6	6	7	S. 15° W.	S. 61° E.	19	17	128*	107	...	...	Jacobabad.	
·843	·920	·854	·872	−·009	88	69	65	74	+1	3·2	2·6	2·9	+0·9	...	...	...	...	...	...	29	30	3	S. 71° W.	S. 60° W.	90	85	414	420	...	...	Kurrachee .	
·535	·548	·496	·526	+·101	49	30	21	33	+2	0·7	2·3	1·5	−0·5	...	2	3	2	1	...	1	36	15	N. 73° W.	N. 50° W.	76	50	183	159	...	...	Jeypore .	
·565	·556	·546	·550	+·032	52	34	24	36	−2	0·2	1·0	0·6	−1·0	1	1	...	...	...	1	10	41	8	S. 88° W.	S. 60° W.	85	63	281	181	...	...	Ajmere .	E. Rajputana, Central India, and Gujarat.
·627	·569	·358	·518	−·066	70	38	16	41	+2	1·1	2·2	1·7	+0·2	...	½	...	...	...	...	19	34	7	S. 83° W.	S. 55° W.	85	76	341	321	...	...	Deesa .	
·507	·477	·339	·441	+·034	46	25	14	28	−3	0·8	3·2	2·0	−1·1	...	...	9	4	1	1	1	36	10	N. 71° W.	N. 70° W.	55	44	116*	81	...	...	Nowgong .	
·554	·586	·467	·538	+·097	48	30	20	33	+2	0·4	0·9	0·7	−0·5	...	...	6	...	9	...	16	1	36	N. 71° W.	N. 72° W.	39	30	186*	139	...	...	Agra .	
·625	·536	·616	·592	−·004	91	48	49	63	+3	3·7	2·9	3·3	−0·2	...	3	1	...	...	1	17	29	11	S. 88° W.	S. 88° W.	77	73	464	435	...	...	Belgaum .	Deccan.
·518	·502	·412	·477	+·013	56	38	19	36	0	2·0	5·2	3·6	−0·4	...	6	4	...	...	...	8	13	31	N. 56° W.	N. 41° W.	72	46	327*	242	...	...	Sholapur .	
·579	·485	·487	·517	+·007	73	35	29	46	+3	2·8	2·9	2·9	−0·1	...	...	1	...	...	...	5	43	12	N. 84° W.	N. 55° W.	90	66	360	337	...	...	Poona .	
·488	·539	·357	·462	+·064	46	32	15	31	+4	1·5	3·1	2·3	0	...	8	1	...	...	...	2	22	22	N. 56° W.	N. 51° W.	83	72	306	208	...	...	Akola.	
·404	·453	·782	·380	−·062	44	32	15	30	−5	0·6	1·9	1·3	−1·4	...	8	...	...	...	...	2	5	47	N. 45° W.	N. 58° W.	50	51	252	284	*Nil*	*Nil*	Buldana .	
·473	·531	·346	·450	−·036	44	34	16	31	−3	0·9	2·7	1·8	−0·5	...	...	...	...	1	2	5	8	46	N. 59° W.	N. 61° W.	82	69	320	225	...	...	Khandwa .	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 87

Meteorological Province.	Station.	Elevation of barometer 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*contd.*	Hoshangabad	...	28·725	28·583	·142	28·653	−·021	29·588	108·2	81·3	26·9	113·4	74·1	38·7	97·2	107·1	94·4	+1·3	67·5	75·1	75·7	72·8
	Nagpur	...	·694	·558	·136	·625	−·009	·558	110·3	82·5	27·8	114·2	72·1	42·1	99·6	106·8	95·9	+1·7	68·0	79·3	80·8	76·1
	Nagpur (Sanitary Commissioner's Office).	...	·723	·593	·130	·658	P	·583	111·0	83·7	27·3	114·9	72·9	42·0	100·5	107·5	96·5	P	66·5	74·8	74·6	72·0
	Jubbulpore	...	·368	·239	·129	·303	−·039	·524	107·7	80·6	27·1	112·3	73·4	38·9	98·3	105·4	93·5	+2·6	64·9	72·5	72·2	69·9
	Saugor	...	27·967	27·854	·113	27·910	−·005	·539	107·4	82·1	25·3	113·4	76·1	37·3	98·6	105·5	94·2	+4·6	64·4	71·7	71·6	69·2
	Raipur	...	28·745	28·605	·140	28·674	−·008	·537	108·8	83·1	25·7	113·0	68·2	44·8	99·7	106·6	95·7	+2·2	69·7	77·4	77·6	74·9
	Sutna	...	·631	·513	·118	·572	−·028	·526	107·1	83·0	24·1	113·1	73·1	40·0	100·1	105·8	94·8	+3·7	67·8	73·1	71·8	70·8
	Hyderabad (Deccan).	...	·121	27·984	·137	·053	P	·621	104·0	80·0	24·0	108·7	74·2	34·5	94·2	101·6	91·4	P	69·8	74·2	75·1	73·0
West Coast.	Bombay	...	29·856	29·758	·098	29·805	+·039	·782	90·3	80·6	9·7	91·8	78·3	13·5	86·2	86·9	84·5	−0·2	75·2	78·0	78·4	77·2
	Ratnagiri	...	·778	·683	·095	·728	+·039	·775	90·9	80·4	10·5	91·8	78·1	13·7	88·0	88·0	84·8	+0·5	75·2	78·1	78·4	77·2
	Karwar	...	·866	·768	·098	·815	+·042	·790	89·5	81·3	8·2	90·8	76·5	14·3	86·6	87·2	84·7	+0·9	76·0	77·5	77·7	77·1
	Cochin	...	·904	·829	·075	·865	+·031	·802	90·5	78·5	12·0	93·2	73·7	19·5	85·9	88·2	83·9	+1·3	76·2	79·2	80·0	78·5
South India.	Salem	...	28·942	28·792	·150	28·879	0	·734	99·6	76·6	23·0	106·2	71·2	35·0	89·1	95·7	85·7	+1·1	72·7	76·3	76·9	75·3
	Mysore	...	27·411	27·280	·131	27·346	P	·733	92·2	69·4	22·8	96·7	64·1	32·6	81·7	89·1	80·0	P	66·7	71·2	71·0	69·6
	Mercara	...	26·260	26·164	·096	26·224	?	P	80·0	65·0	15·0	85·3	60·7	24·6	73·6	75·8	71·5	0	63·1	67·1	68·6	66·3
	Bangalore	...	·915	·792	·123	·861	+·013	·709	91·3	69·0	22·3	99·0	64·0	35·0	81·4	89·4	79·7	+0·6	65·9	71·6	71·7	69·7
	Hassan	...	·860	·760	·100	·817	P	·752	87·4	66·7	20·7	95·1	62·4	32·7	80·9	82·8	75·9	P	63·4	69·8	71·2	68·1
	Chitaldroog	...	27·492	27·358	·134	27·426	P	·699	93·7	70·1	23·6	100·4	59·3	41·1	82·7	92·8	81·7	P	64·9	71·1	71·1	69·0
	Trichinopoly	...	29·595	29·437	·158	29·528	−·007	·707	103·5	79·8	23·7	106·9	73·5	33·4	92·8	100·4	89·5	+2·3	73·3	76·9	77·7	76·0
	Madras	...	·791	·672	·119	·741	+·006	·691	100·4	81·6	18·8	109·1	74·4	34·7	91·2	92·0	88·8	+1·6	P	79·9	81·0	79·8
	Bellary	...	28·379	28·225	·154	28·303	+·026	P						Imperfect.						Imperfect.		
	Vizagapatam	...	29·733	29·617	·116	29·674	−·012	·642	91·1	85·1	6·0	99·1	81·5	17·6	88·8	89·2	87·6	−0·4	78·7	80·1	80·7	79·8
	Cocanada	...	·741	·598	·143	·670	P	·631	101·3	82·8	18·5	111·7	71·4	40·3	92·8	97·8	91·2	P	77·9	80·2	82·0	80·0
Hill Station, Baluchistan.	Quetta	...	24·627	24·549	·078	24·579	+·038	P	88·2	52·4	35·8	91·7	44·1	47·6	80·8	84·5	69·4	+2·7	44·9	57·9	58·8	53·9
Hill Stations, Northern India.	Leh	11,503	19·771	19·676	·095	19·735	+·051	P	68·9	39·4	29·5	77·1	30·5	46·6	58·8	65·0	53·5	+6·0	30·2	45·1	49·2	41·4
	Srinagar	...	24·872	24·781	·091	24·816	P	P	80·4	54·2	26·2	88·0	46·6	41·4	66·8	78·7	66·9	P	52·1	61·1	68·5	60·6
	Murree	...	23·819	23·791	·028	23·797	+·012	P	84·5	66·3	18·2	93·3	51·7	41·6	77·9	80·3	74·8	+8·5	49·2	57·3	58·2	54·9
	Chamba	3,005	26·757	26·666	·091	26·724	P	P	96·5	67·1	29·4	105·2	61·9	43·3	83·9	93·4	80·7	+5·7	58·1	64·4	66·6	63·0
	Kailang	10,087	20·823	20·774	·049	20·810	+·029	P	67·7	39·3	28·4	77·8	35·0	42·8	57·5	63·9	52·3	+5·0	35·3	43·8	46·2	41·8
	Simla (Ridge)	...	23·101	23·059	·042	23·071	+·014	P	76·4	61·7	14·7	83·4	50·6	32·8	70·5	73·6	68·8	+5·2	50·5	55·5	57·2	54·4
	Chakrata	...	·300	·252	·048	·264	+·002	P	79·7*	60·8	18·9	88·0	47·2	40·8	71·6	73·8	?	?	51·6	57·9	58·9	56·1
	Ranikhet	...	24·058	·992	·066	24·013	−.003	P	80·9	63·0	17·9	88·2	51·5	36·7	74·6	76·9	71·4	+3·9	55·3	61·1	62·1	59·5
	Katmandu	4,388	25·465	25·404	·061	25·431	−·077	P	83·8	63·7†	20·1	90·0	55·3	34·7	77·5	79·4	73·0†	+2·7	62·1	67·7	68·3	65·9
	Darjeeling	...	22·959	22·880	·079	22·914	0	P	64·0	54·3	9·7	68·0	48·7	19·3	60·0	61·8	58·7	+2·8	53·1	58·4	59·4	57·2
	Demagiri	P	P	P	P	P	P	P	90·1	75·1	15·0	95·4	67·0	28·4	84·4	86·4	81·7	+1·7	P	P	P	P
	Tura	3,943	P	P	P	P	P	P	86·2	74·7	11·5	92·1	67·7	24·4	81·6	84·0	79·9	P	P	75·1	76·4	P
Hill Stations, Central India.	Mount Abu	...	26·006	25·942	·064	25·973	+·016	P	89·3	72·2	17·1	97·2	63·4	33·8	82·4	88·1	80·4	+0·8	56·7	62·9	66·3	62·0
	Pachmarhi	...	·380	26·282	·098	26·330	+·008	P	96·8	75·9	20·9	101·7	67·0	34·7	88·6	94·5	85·9	+1·8	60·5	65·9	65·6	64·0
	Chikalda	3,642	·274	·184	·090	·228	+·009	P	94·4	73·3	21·1	100·0	67·9	32·1	84·4	93·6	83·7	+0·9	61·6	65·5	66·0	64·4
	Makhla	P																				

* Mean of 21 days.

† Mean of 2 days.

II—*continued.*

Stations in India, Burma, etc., for May 1895—continued.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from																	
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal direction of wind of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·509	·601	·499	·536	+·079	47	35	21	34	+ 3	0·6	3·5	2·1	−0·4	10	...	...	...	...	3	22	26	1	S. 67° W.	W	74	54	94	93	...	...	Hoshangabad.	Deccan—*contd.*
·513	·754	·731	·666	+·238	46	40	32	39	+11	2·8	5·2	4·0	+0·1	...	4	2	2	4	6	16	19	9	S. 74° W.	N. 41° W.	52	44	253	168	...	...	Nagpur .	
·441	·545	·447	·478	P	38	28	19	29	P	1·3	3·6	2·5	P	1	13	1	2	5	7	7	22	4	N. 87° W.	P	38	P	94*	P	...	...	Nagpur(Sanitary Commissioner's Office).	
·426	·477	·377	·427	+·022	40	26	17	28	− 2	0·1	2·0	1·1	−2·0	...	3	3	1	2	2	6	22	23	N. 71° W.	N. 62° W.	64	44	124	104	...	...	Jubbulpore.	
·392	·444	·352	·396	+·031	35	24	16	25	− 3	0·5	2·3	1·4	−0·5	...	4	2	...	3	1	24	21	7	S. 76° W.	N. 87° W.	66	60	109	105	...	...	Saugor .	
·551	·643	·562	·585	+·114	50	35	25	37	+ 4	2·1	4·6	3·4	+0·1	7	3	...	...	...	1	14	27	10	S. 89° W.	N. 78° W.	71	39	214*	190	...	...	Raipur .	
·492	·488	·345	·442	+·087	45	26	15	29	+ 2	0	1·4	0·7	−1·6	...	13	1	5	2	3	1	22	15	N. 75° W.	N. 50° W.	43	52	242*	198	...	...	Sutna .	
·606	·596	·542	·581	P	59	38	27	41	P	1·7	4·5	3·1	P	4	6	6	2	3	1·	3	24	13	N. 62° W.	P	49	P	170*	P	...	...	Hyderabad (Deccan).	
·804	·855	·857	·839	−·042	77	68	67	71	− 3	2·9	2·6	2·8	−1·1	...	...	...	...	1	2	9	39	11	S. 89° W.	N. 82° W.	84	67	220	248	...	...	Bombay .	West Coast.
·807	·829	·843	·826	+·001	78	63	64	68	− 1	3·9	4·5	4·2	+2·4	...	1	...	...	...	...	5	23	33	N. 67° W.	N. 73° W.	87	64	244*	255	...	...	Ratnagiri .	
·829	·822	·824	·825	−·028	78	65	64	69	− 5	2·9	3·1	3·0	−0·2	...	...	...	...	...	...	11	6	45	N. 62° W.	N. 69° W.	84	81	165	P	...	...	Karwar .	
·875	·910	·916	·900	+·007	89	74	69	77	− 4	3·2	3·7	3·5	−2·2	2	3	3	1	...	...	2	38	13	N. 75° W.	W	76	49	160	P	...	...	Cochin .	
·755	·735	·674	·721	−·048	82	54	41	59	− 5	2·7	5·6	4·2	−0·4	18	1	1	1	8	9	12	7	5	S. 33° W.	S. 50° W.	34	61	77	100	...	...	Salem .	South India.
·624	·636	·530	·597	P	87	59	39	62	P	3·8	5·1	4·5	P	8	1	1	1	4	3	11	27	6	S. 78° W.	P	56	P	254*	P	...	...	Mysore .	
·558	·593	·614	·588	−·027	90	72	69	77	− 3	3·7	6·5	5·1	−1·6	5	3	...	...	...	1	1	31	21	N. 71° W.	N. 68° W.	79	65	185	113	...	...	Mercara .	
·602	·662	·573	·613	+·021	85	62	42	63	+ 1	2·4	5·3	3·9	−0·5	1	3	3	1	1	3	10	31	9	N. 89° W.	S. 71° W.	65	72	197*	133	...	...	Bangalore	
·550	·601	·633	·595	P	84	57	57	66	P	3·7	5·7	4·7	P	...	1	...	2	...	1	16	31	11	S. 86° W.	P	77	P	122	P	...	...	Hassan .	
·552	·618	·495	·555	P	75	55	32	54	P	3·3	3·9	3·6	P	...	2	1	1	...	1	8	27	22	N. 76° W.	P	77	P	229*	P	...	...	Chitaldroog.	
·734	·713	·644	·697	−·041	72	47	34	51	− 6	2·0	3·7	2·9	−2·6	4	...	...	1	4	3	27	19	4	S. 59° W.	S. 82° W.	70	59	180	145	...	...	Trichinopoly.	
P	·834	·914	·898	+·028	P	53	62	67	− 2	2·4	3·0	2·7	−1·2	...	1	...	5	22	12	7	9	6	S. 5° E.‡	S. 15° E.	‡43	66	231	220	...	...	Madras .	
...	...	...	...	...	...	...	...	...	...	3·9	6·4	5·2	+0·4	6	4	...	2	...	1	6	18	25	N. 67° W.	N. 76° W.	66	52	193	200	...	...	Bellary .	
·891	·921	·940	·918	+·010	74	68	68	70	+ 1	4·5	4·4	4·5	+0·4	...	...	2	...	6	14	21	19	...	S. 41° W.	S. 41° W.	69	60	91	86	...	...	Vizagapatam.	
·897	·863	·887	·882	P	80	57	52	63	P	2·5	2·0	2·3	P	...	...	1	2	15	9	20	12	3	S. 26° W.	P	55	P	216*	P	..	...	Cocanada .	
·223	·243	·232	·233	−·047	56	23	20	33	− 9	0·5	2·5	1·5	+0·6	25	3	...	...	...	...	5	16	13	N. 73° W.	N. 69° W.	48	51	52*	106	...	...	Quetta .	Hill Station, Baluchistan.
·095	·190	·231	·172	+·049	39	38	37	38	− 2	3·6	5·3	4·5	−1·9	1	3	2	4	4	10	15	18	5	S. 57° W.	S. 72° W.	45	25	93	75	...	...	Leh . .	Hill Stations, Northern India.
·370	·477	·586	·478	P	87	73	61	74	P	1·5	3·3	2·4	P	...	7	13	9	14	7	3	3	6	N. 86° E.	P	31	P	124*	P	...	...	Srinagar .	
·173	·256	·258	·229	−·032	28	27	27	28	−16	1·1	2·5	1·8	−2·5	8	7	2	2	8	7	6	9	13	N. 87° W.	S. 18° E.	22	13	236*	193	...	...	Murree .	
·380	·380	·347	·369	+·031	58	33	23	38	− 6	2·4	4·0	3·2	−1·3	14	7	1	...	2	...	...	8	30	N. 45° W.	N. 16° W.	63	14	157*	119	1·72	0·73	Chamba .	
·174	·170	·160	·168	−·010	73	38	29	46	−10	2·4	5·5	4·0	−2·2	1...	...	...	1	4	12	27	12	6	S. 47° W.	S. 61° W.	69	70	64	54	2·50	0·65	Kailang .	
·253	·289	·300	·282	−·004	48	40	37	42	− 5	1·6	2·6	2·1	−1·8	1	17	16	1	...	2	8	4	9	N. 7° W.	S. 66° W.	49	51	156	P	...	...	Simla (Ridge).	
·293	·340	·349	·330	+·056	58	45	43	49	0	2·1	3·8	3·0	−0·7	1	...	...	2	1	...	8	44	6	S. 86° W.	S. 63° W.	52	29	226	147	...	...	Chakrata .	
·361	·400	·404	·388	+·063	64	48	45	52	+ 1	2·0	2·1	2·1	−1·5	14	2	2	2	2	4	9	25	2	S. 77° W.	S. 63° W.	47	46	109	87	...	...	Ranikhet .	
·550	·571	·568	·559	+·074	92	60	57	69	+ 1	6·1	6·7	6·4	+1·1	...	...	1	6	...	1	3	46	5	N. 88° W.	S. 86° W.	72	64	36	P	4·36	1·15	Katmandu .	
·394	·477	·483	·455	+·056	93	92	87	91	+ 4	9·1	8·5	8·8	+1·5	9	1	3	2	2	5	14	23	2	S. 68° W.	S. 79° W.	51	46	117	149	...	...	Darjeeling .	
P	P	P	P	P	P	P	P	P	P	P	P	P	P	...	...	2	34	5	...	4	14	3	S. 82° E.	S. 11° E.	32	6	P	P	17·83	3·17	Demagiri .	
P	·796	·822	P	P	P	74	71	P	P	7·4	7·3	7·4	+2·5	...	2	3	4	2	26	19	3	3	S. 18° W.	S. 4° W.	58	58	P	P	10·84	2·20	Tura . .	
·284	·352	·397	·344	+·003	39	34	31	35	0	0·8	0·8	0·8	−0·8	...	5	1	...	...	2	33	13	8	S. 71° W.	S. 62° W.	71	70	343*	231	...	...	Mount Abu	Hill Stations, Central India.
·355	·379	·297	·343	−·012	40	29	18	29	− 3	0·9	2·8	1·9	−0·9	...	3	3		...	...	11	33	10	N. 84° W.	N. 55° W.	71	62	286*	164	...	...	Pachmarhi.	
·416	·413	·322	·384	+·016	51	36	21	36	+ 1	2·0	4·2	3·1	+0·4	13	15	...	...	...	2.	...	5	27	N. 37° W.	N. 37° W.	64	63	276	226	0·03	0·03	Chikalda .	
																														Makhla .	

* Corrected.

‡ The arrow shewing the resultant wind direction of Madras in Plate III being wrongly printed, should be corrected according to the values given in Table II.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 87

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S.L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, S. India.	Wellington . .	...	24·256	24·180	·076	24·218	+·015	P	77·4	58·3	19·1	82·7	53·5	29·2	74·0	71·4	66·4	+0·6	54·4	61·3	61·6	59·1
Extra India.	Muscat . .	...	29·762	29·692	·070	29·727	P	P	90·6	85·6	5·0	99·5	81·6	17·9	88·8	89·3	87·8	P	71·8	79·2	80·2	77·1
	Aden . . .	...	·803	·690	·113	·744	+·026	29·768	93·9	80·3	13·6	98·9	76·3	22·6	88·2	89·7	86·1	+0·3	74·7	78·7	78·8	77·4
	Perim . . .	...	·701	·583	·118	·640	P	P	93·4	81·7	11·7	100·3	78·0	22·3	88·8	90·3	86·7	?	66·6	79·6	80·0	75·4
	Minicoy . .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Zanzibar . .	...	30·021	·931	·090	·976	P	·975	82·5	76·2	6·3	85·3	73·4	11·9	78·8	81·9	79·2	P	73·8	74·8	75·5	74·7
	Port Victoria (Seychelles).	15	29·971	·894	·077	·933	P	·893	85·0	77·5	7·5	86·4	75·4	11·0	83·1	83·9	81·0	P	74·0	77·4	77·6	76·3

II—*concluded.*

Stations in India, Burma, etc., for May 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from																		
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·386	·412	·449	·416	−·026	80	49	59	63	− 7	4·5	7·5	6·0	+0·3	9	17	3	3	14	8	1	...	7	N. 60° E.	N. 88° E.	18	24	74	70	...	...	Wellington.	Hill Station, S. India.
·607	·875	·914	·800	?	50	66	67	61	?	0	0	0	?	...	2	14	16	2	1	...	4	23	N. 16° E.	?	42	?	82	?	...	...	Muscat	Extra India.
·792	·857	·840	·830	−·020	77	64	60	67	− 2	1·7	0·2	1·0	−0·9	...	2	10	21	3	13	12	1	...	S. 57° E.	S. 67° E.	40	40	264	257	...	...	Aden	
·459	·892	·886	·747	?	42	66	63	57	?	1·3	3·3	2·3	?	4	...	1	10	31	5	5	...	4	S 44° E	?	63	?	232	?	...	...	Perim	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Minicoy	
·804	·812	·799	·805	?	89	82	74	82	?	5·2	6·1	5·7	?	...	...	1	...	16	31	12	...	...	S. 4° E.	S 17° W	84	69	170*	179	...	...	Zanzibar	
·796	·865	·862	·841	?	84	76	74	78	?	5·5	5·6	5·6	?	...	2	2	9	21	5	1	3	19	S. 66° E.	?	14	?	121	?	6·62	2·10	Port Victoria (Seychelles)	

G. I. C. P. O.—No. 37 Meteor.—23-8-95.—377.

LITHO. BY J. N. MUNDLE

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr. I.—June 94—5,000.
Reg. No. 142, Wt., I.—Apl. 95—4,500.
Zinco., S. I. O., Calcutta.

Explanation

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

Reg. No. 150, Wr., 1.—June 94.—5,000.
Reg. No. 149, Wr., 1.—April 95.—4,500.
Zinco. [illegible], Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

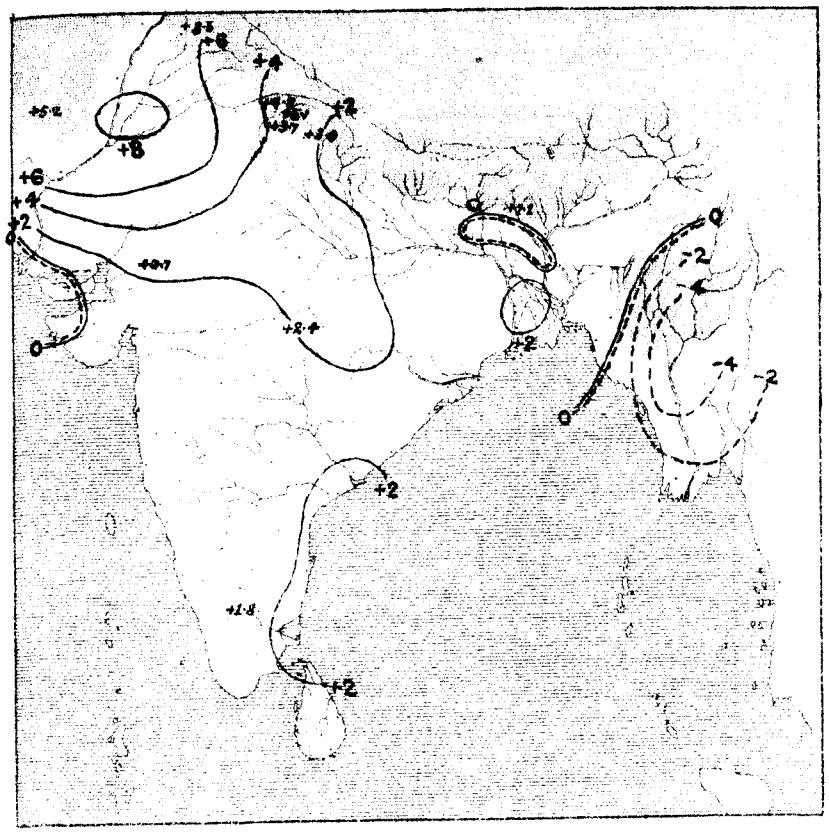
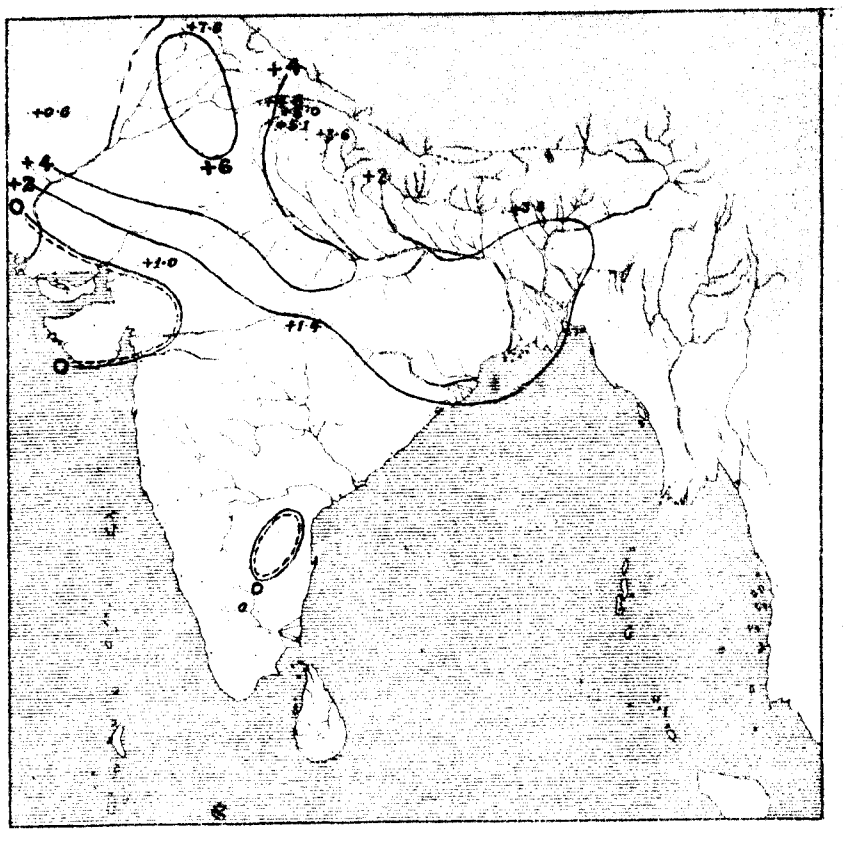


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

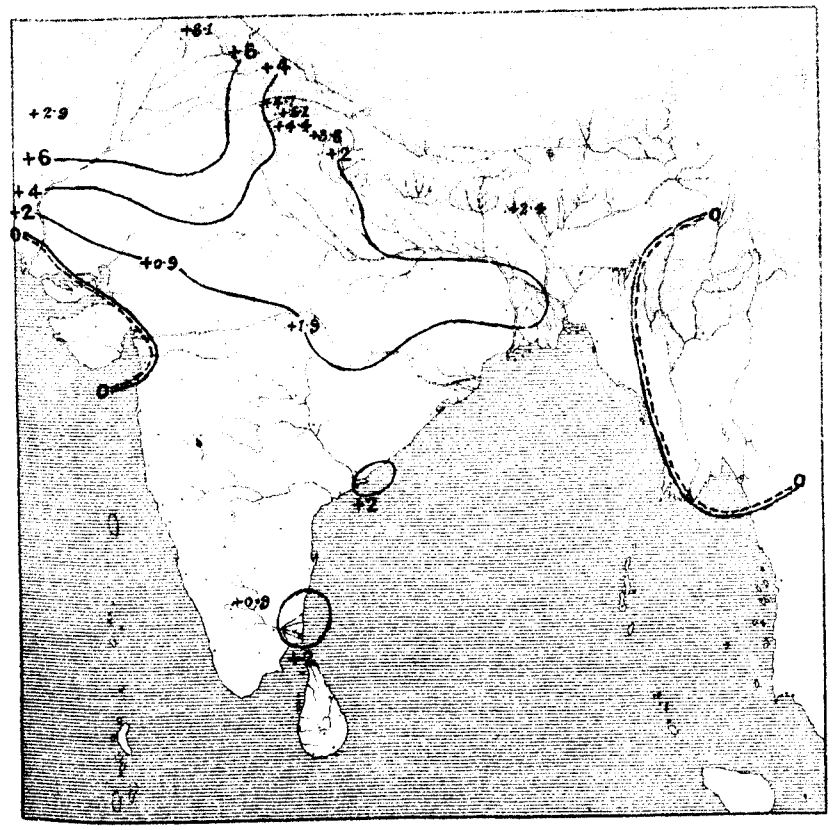
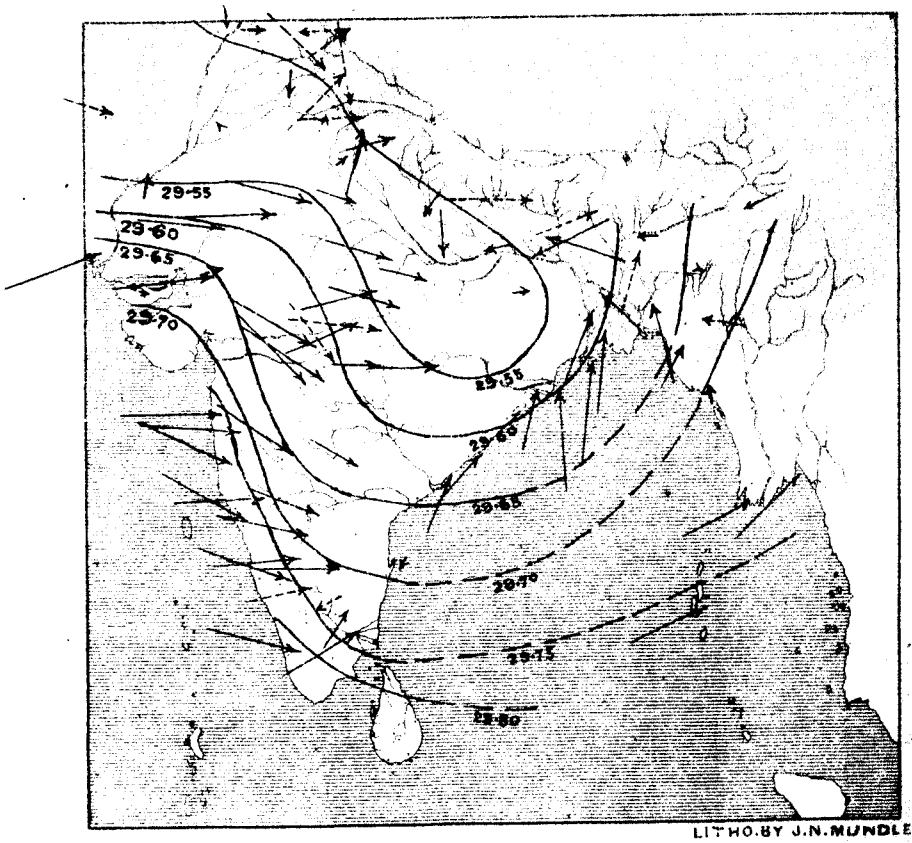


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF MAY 1895.



LITHO. BY J.N. MUNDLE.

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{8}$th of an inch being equal to 100 per cent.

Reg. No. 155. Wr. I.—June 94.—6,000.

Zinco.. & I. O., Calcutta.

Explanation.

The Chart shows the distribution of the raiufall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Reg. No. 155, Wr., I.—June 94.—6,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.

Zinco., S. I. O., Calcutta.

LITHO. BY J.N. MUNDLE.

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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg. No. 69. Wx., I.—Mar. 96.—5,000.

Litho., S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, JUNE, 1895.

INTRODUCTION.

THIS Review of the weather in India during the month of June 1895 is based on observations taken daily at 8 A.M. at 205 stations, and on additional observations taken at 10 A.M. and 4 P.M at 89 stations. In the rainfall summary, the rainfall data of the meteorological observatories and the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the publication of the Review, are utilized. A summary of the weather in the Bay of Bengal and the Arabian Sea, derived from information extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given.

Summary of the chief features of the weather in India during the month of June 1895.

The most important feature of the meteorology of the month (and also of the year) is the advance of the south-west monsoon currents over the Arabian Sea and the Bay of Bengal into India and their establishment in the latter area. Brief and partial advances of these currents occur occasionally in the month of May, but it is not until the last week of May or the first and second weeks of June that the great advance occurs which culminates in the establishment of the "rainy season" in Central and Northern India.

Judging solely from the land observations, there are very considerable differences from year to year in the character of the advance of the monsoon currents over the Indian Sea towards Northern India. The manner of advance of the currents over India depends very largely upon the pressure and other weather conditions prevailing at the time in India, and hence differs largely from one year to another.

Temperature is usually excessive in the whole of Upper and Central India at the commencement of the month. The advance of the monsoon currents over the interior increases humidity rapidly and brings up much cloud and is followed by frequent rain showers ; hence temperature falls rapidly with their advance, and the area of excessive temperature retreats northwards to Upper Sind, the West Punjab and North-West Rajputana. The highest maximum temperatures of the year in that area are hence occasionally recorded in June or July.

The change from great heat and dryness of the air to moderate heat, excessive humidity and frequent rain is usually not completed over Northern India until the third or fourth week of June, by which time the south-west monsoon currents usually penetrate into the East and North Punjab.

There is always much disturbance and squally weather in front of the advancing monsoon. This squally weather, if conditions are favourable, may develop into a cyclonic storm. Hence cyclonic storms frequently accom-

pany the great advance of the monsoon currents in the Arabian Sea and Bay of Bengal.

After the south-west monsoon currents are fully established in Northern India, small cyclonic storms form at short intervals in the Bay of Bengal or in Bengal. These storms constitute one of the more important and characteristic features of the rains. In June and July they usually march in a west or west-north-west direction along the trough of low pressure which generally stretches from Orissa to Sind or the South-West Punjab, and which in its eastern half separates the area in which easterly winds from the Bay of Bengal prevail from the area in which westerly winds from the Bombay coast obtain. These storms not only give heavy rain to the areas they traverse, but draw rain away for the time being from other districts to concentrate it on the comparatively narrow belt over which they pass. They are hence one of the most important of the causes of the irregular distribution of the monsoon rainfall.

Weather at the commencement of the month was exceedingly hot and dry in North-Western India. The highest temperatures of the month were recorded in that area during the first week. The most noteworthy were:—

STATION.	Highest maximum temperature recorded in June 1895.	Date.
	°	
Jacobabad	117·6	2nd
Montgomery.	116·4	7th
Sirsa	114·6	1st and 2nd
Mooltan	112·4	1st and 14th

These temperatures are however by no means exceptional for June in Upper India. The lowest humidity percentages registered during this period were 7 per cent. at Peshawar and 9 per cent. at Sutna in the plains of India and 6 per cent. at Leh and Quetta.

The pressure conditions did not differ to any important extent from the normal during the first six days of the month. The trough of low pressure ran from the South-west Punjab to Chota Nagpur. Weather was slightly disturbed in Bengal and Assam and series of thunderstorms occurred in that area which gave fairly general rain to the whole of Bengal and Assam. Orissa and Chota Nagpur received some light local showers of little importance during this period.

Pressure steadily increased from the 6th to the 12th in Northern India and decreased slightly in Southern India. In consequence of these changes pressure was very largely in excess on the 8th and following days in Northern India, more especially the submontane districts, and was in slight to moderate defect in Southern India. The pressure differences or gradients were hence remarkably feeble during this period, and more especially on the 10th, 11th and 12th.

Weather was feebly disturbed during this period. Southern India and the South Deccan had thundershowers on the 6th. The South-East Punjab and adjacent hills were visited on the 7th by a series of thunderstorms of considerable intensity which were followed by a large local increase of pressure. Local thunderstorms occurred over a large area on the 9th and 10th, including the greater part of the Peninsula and Central India. Weather was more disturbed on the 11th and series of thunderstorms visited Bengal, the North-Western Provinces, the East Punjab, Central India, the Central Provinces and South Madras.

Meanwhile important changes were in progress in the Arabian Sea, of which the observations at the coast stations gave as yet no indication. South-west humid winds had set in over the greater part of the south and west of the Arabian Sea and were increasing steadily in their extension and intensity, and weather was squally with frequent rain in that area on the 8th and following days. The advance of these winds to the west coast was apparently made from the west and not from the south, as is usually the case. The whole of the Bombay coast from Bombay southwards, received moderate rain on the 12th. The rainfall increased in intensity in the west coast districts and was very heavy from the 14th to the 22nd. During this period the districts of Malabar and South Canara received an average total rainfall of very nearly 30 inches and the Konkan districts of North Canara, Ratnagiri and Kolaba an average of 18 inches.

The influence of these humid winds rapidly extended over the North Deccan and Central and Upper India. Showery weather with numerous thunderstorms prevailed in the Central Provinces, Central India, the East Punjab, and North-Western Provinces on the 13th and following days, but the rainfall was more or less sporadic in consequence of the formation of a feeble cyclonic storm between the Bombay and Kathiawar coasts on the 13th and 14th. It drifted very slowly north-westwards off the Kathiawar and Sind coasts on the 15th and two following days, and thence passed as a residual depression westwards along the Mekran coast, affecting Jask and Muscat slightly on the 21st and 22nd.

During this period from the 14th to the 18th the monsoon winds in the northern half of the Arabian Sea were largely drawn into the cyclonic disturbance and whirl, but on the 19th this influence ceased and normal monsoon winds set in along the whole west coast. The progress of the monsoon in the Arabian Sea and Western India from the 12th to the 18th was accompanied by a slow rise of pressure in Southern India and a steady moderate decrease in Northern India, so that on the 17th and 18th normal pressure conditions were established in Northern India. Gradients increased in the Bay during this period

and were steep on the 18th. Monsoon winds hence extended northwards over the centre and east of the Bay, and as almost invariably happens during the advance of the monsoon current in the Bay a cyclonic storm was generated in the north-west of the Bay. It was initiated on the 18th and 19th and crossed the Orissa coast on the afternoon of that day and advanced rather rapidly along a west-by-north track. The centre was to the north of Raipur at 8 A.M. of the 20th and in about Lat. 25°30′N. and Long. 77°0′ E. in Central India on the 21st. It was absorbed in the Sind and South-West Punjab area of low pressure during the next 24 hours. The storm gave a heavy burst of rain to the Central Provinces and Central India on the 20th and 21st and the humid winds in its rear moderate rain in the Gangetic Plain.

Conditions were slightly unsettled in South Bengal during the next three days from the 21st to the 24th, shown by the presence of a shallow low pressure area in South-West Bengal and the prevalence of squally weather at the head of the Bay. Winds fell off to some extent along the west coast on the 24th and 25th, and the rainfall in Western India was moderate in amount during the remainder of the month.

Light, unsteady winds prevailed in South Bengal and the north-west of the Bay on the 25th and 26th. Strong monsoon winds continued in the centre and east of the Bay. These conditions were favourable to the formation of a cyclonic whirl in the north-west angle of the Bay. The first indications of the existence of the storm which was now forming in the Bay were exhibited on the 26th. It increased rather rapidly in intensity and was a well-developed cyclonic storm on the morning of the 28th. The centre crossed the Orissa coast near Balasore about 3 P.M. of that day and advanced more slowly than the previous disturbance in a north-west direction. It passed through Chota Nagpur on the 29th, the eastern districts of the North-Western Provinces on the 30th, and the central districts of the North-Western Provinces on the 1st and filled up in Rohilkhand during the night of the 1st. This storm gave general rain over nearly the whole of Northern India and heavy rain to the districts through which it passed, more especially to Orissa, Chota Nagpur and the south-eastern, central and submontane districts of the North-Western Provinces.

The Bengal current was hence blowing strongly at the end of the month, whilst the Bombay current was feeble and giving little rain except in the coast districts.

Pressure.—Pressure was on the average of the month ·019″ in excess over the Indian area. It was relatively in slight excess in Northern India, more especially in the submontane districts from Peshawar to Dhubri, where the local excess ranged between ·02″ and ·04″. It was in local defect relatively to the general condition in Burma and the Peninsula. The deficiency was greatest in the coast districts from Kurrachee to Colombo, where it averaged ·03″.

Pressure was in small excess or the vertical pressure anomalies were negative at the hill stations in Northern India relatively to the neighbouring plains. The abnormal features of the pressure distribution were opposite in character to those of May 1895.

The following table gives the mean pressure variation and anomalies of the eleven meteorological provinces:—

Meteorological Provinces.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Burma Coast and Bay Islands	−·001	−·020
Burma Inland	+·007	−·012
Assam	+·031	+·012
Bengal and Orissa	+·029	+·010
Gangetic Plain and Chota Nagpur	+·039	+·020
Upper Sub-Himalayas	+·053	+·034
Indus Valley and North-West Rajputana	+·018	−·001
East Rajputana, Central India and Gujarat	+·014	−·005
Deccan	+·004	−·015
West Coast	−·013	−·032
South India	+·006	−·013

Temperature.—The temperature conditions of the month were determined by the considerable delay in the advance of the Bombay current and by the rapid and early extension of the monsoon currents over the whole of India in the third week of the month and the distribution of rainfall in the third and fourth weeks of the month.

Both the night and day temperatures and hence also the mean temperature of the month were in excess in three areas. The first included Burma, Bengal and Assam. The mean day temperature was from 2° to 4° above the normal in Assam and North Bengal, and the mean temperature was more than 2° in excess at Dhubri (+2·5°), Jalpaiguri (+2·2°) and Silchar (+2·1°).

The second area included the whole of the Peninsula with the exception of the Circars. Both the day and night temperatures were in moderate to considerable excess in the west and south districts of this area. The excess in the day temperature was greatest at Salem (+3°·6), Mercara (+2°·8), Cochin (+2°·6) and Karwar (+2°·5), and in the night temperature it was greatest at Karwar (+3°·3) and Salem (+3°·2). The mean temperature was 2°·5 or more above the normal at Salem (+3°·4), Karwar

(+2°·9), Negapatam (+2°·5) and perhaps Calicut (where the shed was blown down in a severe squall on the 16th).

The third area included Baluchistan, Sind, the South West Punjab and part of Rajputana. The increase of temperature was less marked in this area than in the preceding areas. The mean temperature of the month was 2°·3 above the normal at Quetta and 2°·1 above it at Jacobabad.

Both the day and night temperatures were below the normal over the remainder of India; but the deficiency was small, except in the North-Western Provinces and the East Punjab. The following gives variation data for stations in that area, at which the mean temperature was 3° or more below the normal:—

Station.	Variation from normal of		
	Mean maximum temperature, June 1895.	Mean minimum temperature, June 1895.	Mean daily temperature, June 1895.
	°	°	°
Ludhiana	−6·7	−0·1	−3·4
Roorkee	−5·6	−1·7	−3·7
Meerut	−6·1	−2·8	−4·5
Delhi	−6·8	−2·9	−4·9
Agra	−5·1	−3·2	−4·2
Bareilly	−6·0	−1·9	−4·0
Jhansi	−3·9	−2·2	−3·1

The coolest area was hence defined by the stations of Agra, Delhi, Meerut and Bareilly.

The mean temperature of the hill stations in Upper India was also lower than usual, but to a slighter extent than at the adjacent plain stations. Thus the mean temperature of Simla for the month was 2°·6 in defect and of Murree 2°·2 in defect.

A noteworthy feature was the excessive temperature at the high level stations of Leh and Kailang. The mean temperature of the month at Leh was 5°·7 above the normal and at Kailang 2°·8 above it.

The highest temperatures of the month were recorded in North-Western India during the first week of the month; but were not so high as are frequently recorded in June. The highest temperatures were 117°·6 at Jacobabad on the 2nd and 116°·4 at Montgomery on the 7th.

The following table gives temperature variation data of the month for the eleven meteorological provinces of India:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, June 1895.	Mean minimum temperature, June 1895.	Mean daily temperature, June, 1895.
	°	°	°
Burma Coast and Bay Islands	+0·9	+1·0	+1·0
Burma Inland	+0·2	+0·8	+0·5
Assam	+2·6	+0·7	+1·7
Bengal and Orissa	+0·3	−0·1	+0·1
Gangetic Plain and Chota Nagpur.	−1·0	−0·3	−0·7
Upper Sub-Himalayas	−4·9	−0·6	−2·8
Indus Valley and North-West Rajputana.	−0·2	+1·2	+0·5
East Rajputana, Central India and Gujarat.	−1·6	−0·7	−1·2
Deccan	−0·3	+0·4	0
West Coast	+2·5	+2·2	+2·4
South India	+0·8	+1·0	+1·0

Winds.—were on the mean on the months slightly stronger at Port Blair and the Burma coast stations, but were somewhat feebler than usual at Chittagong, Saugor Island and False Point. They were much more westerly than usual at Port Blair and the Lower Burma coast stations. Winds were, on the other hand, much more easterly than usual in Bengal, the deflection averaging about 30° on the mean of all the stations in Lower and Central Bengal. The Bay current was hence (as in June 1894) determined much more largely westwards up the Gangetic Plain than usual. Winds were stronger in the Gangetic Plain, and were also steadier than usual.

The Bombay monsoon current set in over the west coast districts on the 12th and following days. It blew strongly across the coast from the 18th to the 25th, and fell below its normal strength during the last four or five days of the month. The mean strength of the winds at the coast stations was hence slightly below the normal. Winds were more westerly than usual at the coast stations and also at the majority of stations in the Deccan and Central India.

Humidity and cloud.—Aqueous vapour was in slight excess in Burma and Assam; but in consequence of increased temperature the air was slightly drier than usual in Assam. The mean humidity of the month was 5 in defect at Dhubri and 7 at Silchar. In Bengal and Bihar the humidity, relative as well as absolute, was lower than usual. The deficiency in the relative humidity was most marked at Darbhanga (8 in defect), Dacca (6 in defect) and Berhampore (7 in defect). There was a large excess of aqueous vapour in the air in the North-Western Provinces, the Punjab, Rajputana, Central India, the north and east districts of the Central Provinces and the Upper India hill districts, and humidity ranged between 10 and 20 in excess over the whole of that area.

The excess was greatest at Meerut (20) and Chakrata (17). The air was slightly drier than usual at Leh and in Baluchistan and also over nearly the whole of the Peninsula. The variations of the mean humidity percentages were small in these areas, and were less than 5 in amount, except at Trichinopoly and Cochin. The variations of the humidity conditions from the normal in India were very similar to those which obtained in June 1894.

Cloud was in moderate excess at Port Blair and in slight excess in Burma. There was, on the other hand, a slight to moderate deficiency in Bengal and Assam. Cloud was largely above the normal over the whole of North-Western and Central India, Berar and the Central Provinces, and the excess ranged between 2 and 3 at the majority of stations in that area. The excess was almost as marked at the Upper India hill stations, more especially Ranikhet (+2·6) and Simla (+2·4).

There was less cloud than usual on the mean of the month in the west coast districts and South and Central Madras, but the deficiency was nowhere large.

The following table gives variation data of the mean aqueous vapour pressure, mean humidity and mean cloud amount of ten meteorological provinces for the month of June 1895:—

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour pressure, June 1895.	Mean humidity, June 1895.	Mean cloud amount, June 1895.
	"		
Burma Coast and Bay Islands	+·031	− 1	+0·9
Assam	+·029	− 4	−1·4
Bengal and Orissa	−·009	− 2	−0·1
Gangetic Plain and Chota Nagpur.	+·013	+ 1	+0·7
Upper Sub-Himalayas	+·154	+17	+1·8
Indus Valley and North-West Rajputana.	+·081	+ 5	+0·8
East Rajputana, Central India and Gujarat.	+·073	+ 9	+0·6
Deccan	+·026	+ 3	+0·7
West Coast	+·017	− 3	−0·6
South India	−·006	− 3	+0·1

Rainfall.—The establishment of the Bombay branch of the monsoon current was upwards of a week later than usual. The wave of rainfall accompanying its establishment instead of advancing slowly northwards along the west coast commenced almost simultaneously over the whole of the west coast and advanced with unusual rapidity across the Central Provinces, Central India and Rajputana to Upper India. The circumstances of the advance of the Bombay current in June 1895 were very similar to those of its advance in June 1894, and the rainfall in June 1895, as in June 1894, was below the normal in Southern India (excluding Mysore), the Madras Deccan, Hyderabad, and the Konkan. The deficiency was large relatively to the normal in the districts of North and South Arcot and Tanjore in South Madras, and was moderate to small in amount in the remainder of the area. The rainfall was very heavy in Malabar during the first advance of the monsoon, and the total rainfall of the month was in slight excess in that area, as was also the case in Mysore. The rainfall of the month was normal in Gujarat, Khandesh and Sind, and in slight excess in Kathiawar.

The total rainfall of the month was normal in amount in Tenasserim and Lower Burma, but in considerable defect in Central Burma and in large defect in Arakan. It was in general defect in Bengal and Assam, the deficiency being very large in the Brahmaputra or Assam valley (41 per cent.), North Bengal (55 per cent) and East Bengal (52 per cent). It was, on the other hand, in large excess in Orissa (127 per cent.) and normal in Chota Nagpur and South Bihar, and in slight defect in North Bihar. The rainfall of the month was in moderate to large excess in the North-Western Provinces and the Punjab. The central and western districts of the North-Western Provinces obtained practically double the normal fall of the month. The north-western, western and the hill districts of the Punjab also received upwards of twice their normal amount.

The Central Provinces and Central India received much heavier rain than usual, chiefly due to the excessive precipitation they obtained from the second storm of the month (that of the 19th to the 21st). The rainfall in the Central Provinces averaged about 74 per cent. in excess. The chief feature of the month was the excessive rainfall in Orissa, the Central Provinces, Central India, the North-Western Provinces and the Punjab, and the scanty rainfall in Arakan, Upper and Central Burma, Assam and the greater part of Bengal.

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

Meteorological Province.	Rainfall.		
	Mean actual for June 1895.	Mean normal for June.	Variation from normal.*
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands	23·85	25·98	−2·71
Burma Inland	7·94	10·20	−0·69
Assam	9 89	20·50	−9·96
Bengal and Orissa	10·75	13·07	−2·90
Gangetic Plain and Chota Nagpur.	6·62	6·74	−0·07
Upper Sub-Himalayas	9·05	3·83	+5·38
Indus Valley and North-West Rajputana.	2·00	0·89	+0·94
East Rajputana, Central India and Gujarat.	4·81	4·32	+0·61
Deccan	8·56	6·89	+2·71
West Coast	23·82	28·45	−4·09
South India	3·77	3·20	−0·31

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

Atmospheric Pressure.

The mean pressure of the Indian area averaged ·019″ above the normal. As it was ·007″ below it in themonth of May,there was hence a rise of ·026″relatively to thenormal pressure conditions of the period, from May to June 1895.

Pressure was, relatively to the general condition, in local excess in Northern India, or to the north of a line joining Jacobabad, Sutna, Chaibassa and Barisal.

The relative excess was greatest in the submontane districts, and exceeded ·030″ at the following stations:—

Station.	8 A.M. Pressure.	
	Variation from normal.	Anomaly.
	″	″
Peshawar	+·053	+·034
Sialkot	+·071	+·052
Lahore	+·056	+·037
Ludhiana	+·053	+·034
Roorkee	+·054	+·035
Bareilly	+·057	+·038
Purnea	+·055	+·036
Motihari	+·058	+·039
Jalpaiguri	+·050	+·031
Dinajpur	+·050	+·031
Bogra	+·052	+·033

The local excess was hence on the whole most marked in the East Punjab.

Pressure was in relative defect in Burma and the Peninsula and Central India. The deficiency was largest in the west coast districts and was more than ·030″ in amount at the stations for which data are given below:—

Station.	8 A.M. Pressure.	
	Variation from normal.	Anomaly.
	″	″
Kurrachee	−·028	−·047
Bhuj	−·013	−·032
Surat	−·012	−·031
Mangalore	−·016	−·035
Calicut	−·016	−·035
Cochin	−·021	−·040
Colombo	−·012	−·031

Pressure was in excess at the lower hill stations in Northern India, but to a smaller extent than at the neighbouring plain stations. It was, on the other hand, in slight defect at the most elevated station (Leh). The vertical pressure anomalies were hence negative, and increased in amount with elevation, as is shown by the following data for six pairs of stations:—

Hill Station.	Variation from normal pressure.	Plain Station.	Variation from normal pressure.	Vertical pressure anomaly (Hill−Plain).
	″		″	″
Quetta	+·015	Jacobabad	+·025	−·010
Murree	+·027	Peshawar	+·053	−·026
Leh	−·012	Lahore	+·050	−·062
Simla	+·029	Ludhiana	+·053	−·024
Darjeeling	+·031	Dhubri	+·047	−·016
Mount Abu	−·011	Deesa	+·002	−·013

It may be noted that the pressure anomalies in June 1895 were, as is almost invariably the case in June, inverse in character to those of the preceding month. The anomalies of June 1895 resemble those of June 1894 almost as strikingly as those of May 1895 resemble those of the corresponding month of 1894.

The following gives a summary of the chief abnormal features of the pressure distribution:—

(1) Pressure was in excess in the Indian area by amounts averaging ·019″.

(2) Pressure was in relative excess in Northern India. The excess was most marked in the submontane districts, in which it ranged between ·02″ and ·04″ in amount.

(3) Pressure was in relative defect in the Peninsula and Burma. The deficiency was greatest in the west coast districts from Kurrachee to Colombo, where it averaged ·03″ in amount.

(4) Pressure was relatively in defect or the vertical pressure anomalies were negative in the Himalayan area and Northern India.

Barometric depressions and cyclonic storms of the month.

The distribution of pressure on the 1st differed little from the normal except in Gujarat, Kathiawar and Central India, where pressure was in moderate local excess. The trough of low pressure stretched from Chota

Nagpur to the West Punjab. Weather was showery in Burma and Bengal and dry elsewhere. The pressure changes during the next five days tended to diminish the gradients by giving increased pressure in Northern India. On the morning of the 6th pressure was in considerable to large excess in Northern India, and was normal in Southern India and Lower Burma.

Fine weather with increasing temperature prevailed for a short period in Bengal. During the next five days, *i.e.*, from the 7th to the 12th, pressure continued to increase in Northern relative to Southern India, and the gradients became apparently less and less favourable to the advance of the monsoon currents. Weather was feebly disturbed during this period, series of thunderstorms occurring in Southern India on the afternoon of the 5th, in the South-East Punjab and the adjacent hills and in Orissa on the 6th and 7th, in the Deccan on the 9th, and in Berar, the Central Provinces and Central India on the 10th, and in the North-Western Provinces on the 11th. Burma and Bengal had almost daily series of thunderstorms during this period of feeble local disturbance, extending from the 6th to the 11th. The most noteworthy feature of this period was the almost entire absence of rain in the west coast districts. Thus the total rain at Cochin from the 4th to the 11th was 2·94 inches, at Calicut 0·07 inch, at Karwar *nil* and at Bombay 0·14 inch. Practically no rain fell during the whole week in the west coast districts except on the South Malabar and Travancore coasts.

The pressure conditions which prevailed on the 11th were very remarkable. Pressure was very uniform over nearly the whole area. It was in considerable defect in Ceylon and the Malabar coast districts, and in large excess in Northern India, by amounts ranging from ·15 inch to ·21 inch in the submontane districts of the Punjab, North-Western Provinces and Bihar. The following gives the actual mean pressure and its variation from the normal for each of the larger provinces on that date :—

Province.	8 A.M. Pressure.	
	Mean actual, 11th June 1895.	Variation from normal.
	"	"
Punjab	29·623	+·140
North-Western Provinces and Oudh . . .	29·701	+·179
Bengal and Assam	29·703	+·138
Rajputana	29·622	+·099
Central India	29·679	+·103
Central Provinces	29·670	+·100
Bombay	29·707	—·004
Madras	29·700	+·007

During this period, from the 5th to the 11th, in which the conditions in India had apparently become more and more unfavourable to the advance of the monsoon, the monsoon currents were being gradually established in the Arabian Sea. Strong south-westerly winds, force 5 and 6, were experienced to the north of the Equator in Long. 50°E on the 5th and 6th by three vessels and by the S. S. *Fort Salisbury* on the 9th and 10th. No marked increase of strength in the winds ove. the south of the Arabian Sea appears to have occurred during this period from the 1st to the 9th. Winds were light and variable from the 1st to the 9th in the northern half of the Arabian Sea. Squally rainy weather was, however, extending northwards, and on the 10th the S. S. *Clyde* had rain squalls and south-south-west winds in Lat. 15° 38′ N. and Long. 58° 29′ E., and on the 11th (in Lat. 14° 25′ N. and Long. 53°E. at 8 A.M.) she had incessant rain with strong winds throughout the morning. Southerly winds prevailed over the whole of the southern half of the Arabian Sea on the 12th, and were increasing steadily in intensity. The S. S. *Linlithgow* in Lat. 12° 15′N. and Long. 56° E. at 8 A.M. had south-west winds of force 9 and a high sea, the S. S. *Uruguay* in Lat. 10° 16′N. and Long. 59°E. at the same hour had south-west winds of force 5 to 7, frequent squalls and heavy rain during the day, and the S. S. *Fort Salisbury*, which had advanced to Lat. 9° 46′N. and Long. 60°E., had west-south-west winds of force 6 and squally weather.

Hence, during this period from about the 9th to the 12th, a rapid change had occurred over the greater part of the Arabian Sea due to the advance northwards of strong and increasing winds, giving more or less rainy and squally weather.

Rain commenced to fall in the west coast districts on the 12th. The following gives a statement of rainfall on that day and the following six days at several stations on the west coast :—

Station.	Actual rainfall of 24 hours preceding 8 A.M. of date.							
	12th.	13th.	14th.	15th.	16th.	17th.	18th.	Total of period.
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Cochin . .	0·58	2·94	2·39	0·65	1·72	3·22	0·64	12·14
Calicut . .	0·85	2·48	3·28	0·95	3·96	3·70	0·89	16·11
Mangalore .	1·00	1·40	4·61	4·52	3·88	2·42	0·86	18·69
Karwar . .	0·84	*Nil*	2·86	3·29	1·68	2·63	2·01	13·31
Ratnagiri .	0·37	0·32	0·25	1·97	3·78	2·60	2·52	11·81
Bombay . .	0·24	1·03	0·47	2·12	1·18	1·48	0·51	7·03

The period from the 12th to the 18th was hence one of steady and heavy rain in the west coast districts, the area of heaviest rainfall being gradually transferred northwards. The most important feature of the advance of this humid wave was the formation of a depression and cyclonic storm off the Bombay and Kathiawar coasts. The following gives a brief history of this storm :—

Cyclonic storm of the 13th to the 18th June in the Arabian Sea.—As already pointed out, pressure was remarkably uniform for the season on the 11th and 12th in India. The first indication of the approaching monsoon was shown by the clouding over of the skies in the west coast districts on the 9th and 10th. On the 11th they were generally overcast, and thunderstorms occurred during the day, which gave light to moderate general rain in the coast districts south of Bombay. Pressure was very uniform on the 12th, the difference or range of pressure between Bombay and Colombo being ·06″.

13th June.—Pressure had increased slightly off the Malabar coast and had fallen briskly in the Konkan and slightly in Northern India, and gradients were increasing. South-west winds of force 4 to 6 with more or less heavy rain were experienced by vessels to the south of Lat. 16° N. Winds were irregular to the north of Lat. 16°N. off the Kathiawar coast, indicating a tendency to the establishment of a cyclonic circulation ; but it was as yet very imperfectly developed. The S. S. *Linlithgow*, in Lat. 11° 28′ N. and Long. 59° 45′ E. at 8 A.M., had blinding showers during the day ; the S. S. *Uruguay*, in Lat. 13° 39′ N. and Long. 62° 10′ E. at 8 A. M., had south-west winds of force 5 and squalls with heavy rain ; the S. S. *Knight Commander*, in Lat. 16° 28′ N. and Long. 61° E., had variable winds, force 4, and heavy rain, and the S. S. *Idar*, in Lat. 18° 20′ N. and Long. 70° 32′ E., had east-south-east winds, force 4, and squally weather.

The preceding data hence show that there was an area of squally weather and variable winds off the Konkan coast between Lat. 16° N. and Lat. 20° N. in which there was a well marked tendency to cyclonic air movement.

14th June.—The barometer continued to rise in Southern India and to fall in Northern India, thus emphasizing the gradients favouring the establishment of the monsoon. Conditions were unchanged in the west coast districts, heavy rain falling in Malabar and moderate rain in the Konkan. Weather was more disturbed in the the Central Provinces, Rajputana, Central India and the South-East Punjab, and numerous series of thunderstorms and dust-storms had occurred in these areas, giving in some cases heavy rain. Thus Bareilly had received 3·83 inches and Umballa the same amount.

The following gives 8 A.M. data for the sea area to the west of the Konkan coast :—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S.S. *Dictator* .	11 31	60 41	29·632	SW	7	4 A.M., hard squalls and light rain with high sea.
S.S. *Clan Drummond.*	13 47	56 50	·615	SW	7	Overcast and very high sea.
S.S. *Culna* .	18 05	72 42	·657	S	5	Squally looking. 4 A.M., heavy rain squalls.
S.S. *Kola* . .	Bombay*		·627	SSE	6	Overcast.
S.S. *Aska* . .	Bombay*		·619	SE	6	4 A.M., squally with rain.
S.S. *Kt. Commander.*	17 32	65 17	...	NE	4	4 A.M., overcast.
S.S. *Kapurthala*	21 17	69 09*	29·571	N	2	Light rain squall.

*Noon position.

The preceding data establish that weather was more squally than on the previous day to the west of the Bombay coast. The strongest winds as yet experienced were of force 6 to 7, and the cyclonic circulation was more regularly developed than on the preceding day.

The centre of the imperfectly developed cyclonic storm was in about Lat. 18° N. and Long. 70° E. at 8 A.M. of the 14th.

June 15th.—Pressure had given way briskly to rapidly in North-Western and Central India and was steady in South India, and gradients had hence continued to increase in steepness. Series of thunderstorms had given light showers in the Central Provinces, Central India and Rajputana, and heavy rain had fallen in the west coast districts. The winds on the Konkan, Bombay and Kathiawar coasts were very strong, and their directions indicated the existence of a low pressure area to the west of the Kathiawar coast.

The following gives 8 A.M. meteorological observations recorded on board ships in the storm area :—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S.S. *Dictator* .	10 47	65 3	29·682	SSW	7	Hard squalls with rain and very high sea.
S.S. *Paraguay* .	14 20*	66 28	...	WSW	4	Heavy rain.
S.S. *Culna* .	15 59	73 19	·688	SW	4	Overcast and heavy sea ; 4 A.M., heavy rain.

* Noon position.

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S.S. *Fort Salisbury.*	18 1	71 17	·613	SW	4	Overcast; 4 A.M heavy showers.
S.S. *Kt. Commander.*	18 22	69 37	...	SW	4	Hign south swell
S.S. *Mikado* .	17 20	63 59	...	NW	5	Squally with rain.
S.S. *Thames* .	18 24	67 45	·573	Var	2	Rainy.

The preceding data indicate that weather was squally with strong winds, much rain, and a heavy to very high sea in the area of depression. The storm centre was probably in about Lat. 19°N. and Long. 69°4′E., but it is very doubtful whether the winds in the storm area, although cyclonic in direction, were stronger in force than 7 or 8 (*i.e.*, a moderate gale).

16th June.—Pressure had given way somewhat irregularly over the whole of India, and was now normal in Northern India, and in considerable defect in the east of the Bay and Burma, and in large defect in Kathiawar and Gujarat and the storm area in the Arabian Sea. Heavy rain had again fallen in the west coast districts, and moderate to heavy rain in the Gangetie Plain and Bengal, and showers in the Central Provinces. Normal westerly winds obtained in the west coast districts to the south of Ratnagiri; but the wind directions at Bombay, Veraval and Bhuj indicated the continued existence of the low-pressure area off the Kathiawar coast. The following gives 8 A.M. data of the storm area:—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S.S. *Castlemoor*	12 57	74 15	...	W	9	Heavy showers.
S.S. *Pindari* .	12 56	55 42	29·594	SW	9	Heavy confused sea.
S.S. *Entre Rios*	16 55*	68 7	..	WSW	5 to 6	Heavy rain.
S.S. *Clan Drummond.*	15 58	64 23	29 595	WSW	8	Overcast. Noon, heavy squalls with rain.
S.S. *Mikado* .	17 35	67 38	...	W by S	6	Heavy rain.
S.S. *Alecto* .	20 25	70 21	...	SW	5	Heavy rain.
S.S. *Chilka* .	22 28*	68 14	29·383	NW byN	2	Cloudy. Midnight, rainy with frequent heavy thunder and lightning all round.

*Noon position.

The centre of the depression at 8 A.M. was between the S.S. *Alecto* and the S.S *Chilka* probably in about Lat. 21½°N. and Long. 68½ or 69°E. The data indicate that the storm was, as hitherto, of slight intensity, and that the winds near the centre were of force 4 to 9. The strongest winds were experienced in the centre and south of the sea area, where the monsoon was now blowing very strongly.

17th June.—Pressure had again decreased over the whole of India. Showery weather continued in Bengal and the Gangetic Plain. Moderate to heavy rain had again fallen in the west coast districts; but little or no rain had been received in the interior of the Peninsula.

A large depression, in which pressure was about a quarter of an inch below the normal, lay off the Kathiawar and Sind coasts. The following observations define its position:—

(*1*) *Land observations.*

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average velocity in miles per hour.			
	″	″	″				Inch.	
Veraval .	29·330	−·045	?	SE	37	9	0·24	Sea very rough.
Bhuj . .	·353	−·067	−·205	ESE	17	9	...	Wind variable.
Kurrachee .	·328	−·056	−·195	NE	13	2	...	

(*2*) *Sea observations.*

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	′	″			
S.S. *Mikado* .	17 44	71 4	...	WSW	6	Heavy squalls of wind and rain and heavy sea.
S.S. *Hermann*	22 30*	67 45	29·365?	NE	4	Overcast.
S.S. *Dumra* .	22 44	68 27	·188?	NE	4	Heavy clouds to west. 4 A.M., heavy passing squalls of wind and rain.

* Noon position.

The centre of the disturbance was now probably in about Lat. 22° N. and Long. 68¼° E., and was drifting very slowly parallel to the Kathiawar coast. The disturbance was much feebler than on the 16th. Very strong south-west winds of force 6 to 9 obtained over the centre and south of the Arabian Sea.

18th June.—Pressure had increased briskly in Kathiawar and Sind, and the depression filled up rapidly during the day. It was of little importance at 8 A.M., and ceased to influence the winds and weather in Kathiawar after the morning of this day. The winds at Bombay shifted to west during the day, and normal monsoon winds obtained on the 19th and during the following week at the west coast stations.

The disturbance originated in the usual manner in front of the advancing monsoon, but was throughout feeble. It formed on the 13th and 14th off the Konkan coast, and drifted slowly north-westwards off the Kathiawar coast, and partially filled up on the 18th and 19th on approaching the Mekran coast. The residual depression probably advanced westwards along the coast, as Jask had very low pressure on the 20th and 21st and Muscat on the 21st and 22nd. It gave some cloud and a slight increase of wind force to these stations.

The following statement gives the position of the centre and its rate of advance on each date from the 14th to the 17th :—

Date.	Hour.	Position.		Distance passed over during interval.	Average velocity in miles per hour.
		Lat. N.	Long. E.		
		° ′	° ′	Miles.	
14th . .	8 A.M.	18 0	70 0	...	
15th . .	,,	19 0	69 15	85	3½
16th . .	,,	21 30	68 30	174	7¼
17th . .	,,	22 0	68 15	37	1½

Cyclonic storm of the 19th to the 21st June.—The storm formed in the Bay of Bengal in front of the advancing monsoon. Moderate to fresh monsoon winds prevailed in that area to the south of Lat. 16° N. on the 14th and three following days, and gradually extended their influence northwards during this period. Winds were light and unsteady at the head of the Bay, and weather was cloudy with occasional squalls. Weather was more squally in the centre of the Bay on the 18th. Light unsteady winds continued in the north of the Bay, and winds shifted to north on the Bengal and Orissa coasts.

On the morning of the 18th a shallow low-pressure area was shown in the north-west of the Bay. Weather was now very squally with thick heavy rain and strong winds off the Arakan and Pegu coasts.

The following gives a summary of the available data for the storm area taken from the logs of ships :—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	″			
8 A.M.	S.S. *Karagola*	20 10	92 34	29·450	SE	5	Cloudy. Noon heavy rain.
10 A.M.	F. L.V. *Torch*	Eastern	channel	·448	NNE	5	Passing heavy rain showers; Decided cyclonic appearance in the weather.
8 A.M.	S.S. *Chelydra.*	20 36	88 42	·435	N	2	Slight sea. Noon, heavy rain.
,,	S.S. *Rothenfels.*	20 24	87 43	·450	W		
,,	S. *County of Selkirk.*	20 2	87 5	·414	S	2	Threatening. 4 P.M. dirty squally.
,,	S.S. *Lalpoora*	17 56	86 50	·409	WNW	4	Overcast and slight sea 4 P.M. dull and rainy.

The winds were hence as yet light in the area of depression, but weather was squally with heavy rain over nearly the whole of the Bay area to the south of the depression.

19th June.—Pressure had increased over nearly the whole of India, but had fallen briskly in the area of depression in the north west of the Bay, where there was now a well-marked disturbance and cyclonic storm. Weather was showery in Bengal, and moderately heavy rain was falling in Lower Burma. Moderate rain had also fallen in the Deccan and Central Provinces.

The following gives 8 A.M. meteorological observations taken on board ships in the storm area :—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer corrected	Wind.		Weath
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	″			
8 A.M.	S.S. *Karagola*	16 50	94 0	29·660	S	6	High sea; 4 A.M. heavy squalls of rain.
,,	S.S *Commilla*	19 23	93 15	·598	ESE	4	Heavy rain squalls.
,,	S.S. *Canara*	19 19	90 18	·511	SSW	9	Threatening with heavy rain and high sea.
,,	S.S. *Nuddea*	21 6	88 2	·373	NE		Frequent rain squalls.
,,	S.S. *Lalpoora*	21 3	87 57	·383	Calm	0 to 2	Rain showers.
,,	S. *County of Selkirk.*	21 0	87 44	?	SSW	7	
10 A.M.	F. L.V. *Torch*	Eastern	Channel	·405	ESE	5	Passing heavy rain squalls during day Heavy SSE sea.

The preceding data show that the disturbance was unchanged in general character. Strong winds with very squally weather obtained to the south and east of the central depression, whilst in and to the north-west of the depression, light unsteady winds prevailed. The central

depression was in about Lat. 20¾° N. and Long 88° E. The S.S. *Lalpoora*, which was only a few miles from the centre at 8 A.M., had at that hour light variable airs and calms. Skies were overcast in Bengal and Bihar, and heavy rain was falling in Orissa.

20th June.—Pressure had increased briskly to rapidly in the north of the Bay and had fallen briskly in the Central Provinces and Chota Nagpur, to which the storm had been rapidly transferred during the previous 24 hours. The following gives 8 A.M. observations in the storm area:—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average velocity in miles per hour.			
	"	"	"				Inches.	
Raipur .	29·396	—·067	—·177	SW	7	10	4·02	Raining.
Sambalpur	·395	—·008	—·137	S	8	10	2·86	Distant lightning.
Benares .	·453	—·071	—·057	E	12	10	...	Gale of wind.
Sutna .	·410	—·071	—·114	ENE	10	10	0·85	
Jubbulpore	·374	—·098	—·184	NNE	3	10	0·52	Raining.
Nagpur .	·421	—·040	—·182	W	12	10	2·37	Distant lightning.

The data indicate that the centre of the depression was in about Lat. 22½° N. and Long. 82°E. Moderate rain had fallen in Orissa and Bengal, and heavy rain in the Central Provinces.

21st June.—The depression had again advanced rather rapidly by a curved track, and lay over South-East Rajputana and Central India on the morning of the 21st.

The following data indicate its position at 8 A.M. :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average velocity in miles per hour.			
	"	"	"				Inches.	
Saugor .	29·428	+·011	—·136	WSW	5	8	1·50	
Jhansi .	·383	—·083	—·160	SE	10	7	1·04	
Agra .	·434	—·074	—·091	SE	13	9	0·01	Gale of wind.
Jeypore .	·427	—·077	—·128	NE	11	9	0·06	Ditto.
Ajmere .	·406	—·089	—·156	NE	10	8	...	
Neemuch .	·400	—·098	—·187	W	8	10	3·30	Raining.

The centre of the storm was in Lat. 25½° N. and Long. 77½° E. at 8 A.M.

Winds were feeble in the central depression, but were strong in the Central Provinces. Very heavy rain had fallen in the western and central districts of the Central Provinces through which the storm had passed. Hoshangabad had received 7·04 inches, Pachmarhi 5·64 inches, and Indore 5·00 inches.

A shallow depression, due apparently to heavy local rainfall, was shown in South-West Bengal on this day.

22nd June.—Pressure had increased rapidly in Central India, Rajputana and the Central Provinces, and briskly in Sind and the Punjab, and there was no trace of the depression shown on the chart of the 22nd. It had hence probably been absorbed into the permanent low-pressure area of the rains in Upper India. Moderate rain had been received in Rajputana and light showers in Lower Sind, due to the indraught during the previous 24 hours to the depression.

The storm formed in the north-west angle of the Bay in front of the first advance of monsoon winds in the north of the Bay. It developed rather slowly on the 17th and 18th, and was of moderate intensity on the 19th, when it began to advance in a west-by-north direction. It marched with an average velocity of about 16 miles per hour during its progress across Northern India, and hence the rainfall during the latter part of its existence was small in amount.

The following gives data of the position of the centre and its line of march from the 19th to the 21st :—

Date.	Hour.	Position.		Distance passed over during interval.	Average velocity in miles per hour.
		Lat. N.	Long. E.		
		° ′	° ′	Miles.	
19th . . .	8 A.M.	20 45	88 0	"	"
20th . . .	"	22 30	82 0	397	16½
21st . . .	"	25 30	77 30	347	14½

The storm gave a moderate burst of rain to Bengal and Bihar. The chief feature of the storm was the heavy rain it gave to the greater part of the Central Provinces and Central India.

Cyclonic storm of the 28th to the 30th June.—It has been stated above that a very shallow depression was shown in South-West Bengal on the morning of the 21st, the formation of which was probably due to local heavy rainfall This depression was very persistent during the next four days, and shifted slightly in position from day

to day. Strong monsoon winds with squally weather obtained during the whole of this period in the north of the Bay. Thus the S.S. *Arratoon Apcar*, in Lat. 18°37′ N. and Long. 89°54′E.,at8 A.M. of the 22nd, had westerly winds force 9 and incessant rain throughout the day, and the S.S. *Nerbudda*, in Lat. 20°57′N. and Long. 88° 38′E., had west winds, force 7, and squally weather. The S.S. *Bhundara*, approaching Saugor Island on the afternoon of the 23rd, had west winds, force 6, and heavy rain squalls. Similar weather was also experienced on the 24th and 25th by several vessels.

Moderate to heavy general rain fell in South-West Bengal and Orissa on the 21st, 22nd and 23rd, during which the shallow depression was unchanged in position. The rainfall was light on the 24th and 25th, and the depression shifted slightly southwards and was, as shown chiefly by the wind directions, central on these days in the north-west angle of the Bay instead of South-West Bengal (near Midnapore) as hitherto.

It was very feebly marked on the morning of the 26th. Practically no rain had fallen over Bengal during the previous 24 hours. Skies were only partially clouded and weather was fine with light winds. Strong south-west winds, force 4 to 7, held steadily over the Bay to the south of Lat. 19° or 20° N.

The following data show the character of the weather in the north-west angle of the Bay over which the central depression now lay :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. N.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		°	° ′	″			
8 A.M.	S.S. *City of Cambridge.*	20 46	87 48	29·432	NE	4	Clear.
″	S.S. *Malacca*.	21 8	87 45	·443	W	3	Cloudy.
″	S.S. *Maharani*	21 8	89 35	·436	Var.	2	Fine and clear.
″	F.L.V. *Torch* .	eastern	Chan-	·442	ENE	4	Light southerly swell and light easterly breeze. During the day a cyclonic appearance in the weather.
10 A.M.		nel.					

Fine weather with light unsteady winds hence obtained in the north-west angle of the Bay. The Captain of the F.L.V. *Torch* notes that weather assumed a threatening and cyclonic appearance during the day.

The Light-house keeper at Shortt's Island describes the weather on the 26th off the North Orissa coast in the following terms :—"During the whole of the 26th light and very variable airs prevailed. The wind at 2 A.M. was west and working through NE and S all around the compass gradually and slowly to SW. The atmosphere was clear, but not of the same great transparency as in the previous storm. Distant thunder was heard to north from noon to 4 P.M., and distant lightning was observed in the evening to N, NNE, SW and W. The prevailing clouds during the day were small detached masses of cumulus and pallio-cumulus, which increased in bulk quickly after 10 P.M., and at midnight the sky was quite overcast."

These remarks indicate clearly the growth of the disturbance during the evening of this day.

27th June.—Pressure had given way briskly to rapidly in the north-west of the Bay and the depression in that area had developed considerably. The following observations at the coast stations indicate its position at 8 A.M.:—

Station.	Pressure. 8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A.M.	Wind. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	Remarks.
	″	″	″				Ins.	
Saugor Island	29·386	—·058	—·169	NE	8	10	1·19	
Balasore. .	·400	—·059	—·138	NNE	5	8	1·55	
Shortt'sIsland	·389	—·067	?	E	10	6	4·94	Cloudy.
False Point .	·358	—·105	—·198	NW	9	9	1·83	Wind variable.
Puri . .	·405	—·069	?	W	13	10	7·89	

These observations indicate that a depression of moderate intensity, the centre of which was in about Lat. 20¾° N. and Long. 88°¼E., lay over the north-west angle of the Bay.

South-west winds of force 5 to 7 with squally showery weather continued in the centre and east of the Bay. Weather was more disturbed in the north-west of the Bay and winds were increasing in force as is shown by the following data :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Chyebassa*	20 38	87 24	29·330	E	5	Overcast; 4 A.M., heavy rain.
10 A.M.	F.L.V. *Torch**	Eastern Channel.	n Cha-	·350	E	4	High cross swell from S.E. and S., and passing rain showers during day; wind and sea increasing during afternoon fast.
8 A.M.	S.S. *Mombassa*	13 49	84 36	·603	SW	7	Occasional very heavy rain squalls.
″	S.S. *Shahjehan*	12 4	87 55	·644	SW by S	7	High sea.

The Captain of the F.L.V. *Torch* notes that the weather was squally and unsettled with a high southerly swell and much lightning to the south.

The report of the Light-house-keeper, Shortt's Island, shows that the disturbance increased rapidly in severity and intensity during the day. He says:—

"The wind remained in the early morning at SW, very light; at 0-10 A.M., rain began to fall and poured down in torrents accompanied by violent thunder and vivid lightning until 3 A.M. At 3·30 A.M. the wind suddenly shifted round to N by W, then to 9 A.M. gradually working through N to E, weather keeping fine. At 10 A.M., the wind backed to NE, at which point it remained all day, and from this hour till midnight frequent light rain squalls prevailed. These squalls, though black when appearing above the horizon and apparently heavily charged with wind and rain, when nearing the Island appeared to split, and the bulk passed by each side of the observatory. I only registered 0·04 inch of rain throughout the day. After each squall passed the clouds broke and almost entirely disappeared. Very vivid lightning was observed to NNE, N and NW from sunset to 11 P.M."

28th June.—The only important feature in the meteorology of India was the depression in the north-west angle of the Bay. Pressure had again given way rapidly and was upwards of three-tenths of an inch below the normal in the central depression. Heavy rain was now falling in Orissa and South-West Bengal, and light showers over the remainder of Bengal. Moderate to heavy rain, due to the Bombay current, had been received during the previous 24 hours in the East Punjab, Central Provinces, Bundelkhand and Bagelkhand, and showers in the Gangetic Plain.

The following observations at the coast stations define the position of the storm at 8 A.M.:—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average velocity in miles per hour.			
	"	"	"				Inches.	
F.L.V. *Torch**	29·248	—·182	?	SSE	6†	10	?	Sea very high and confused; continuous blinding heavy rain.
Saugor Island	·249	—·137	—·301	E	15	10	0·24	Squally.
Balasore .	·271	—·129	—·265	NE	6	8	1·79	Wind variable.
Shortt's Island	·221	—·168	?	NNW	12	9	0·33	Squally
False Point .	·270	—·088	—·279	WSW	11	10	1·17	Raining.
Puri	·374	—·031	?	W	23	10	4·83	

* 10 A.M. observations. † Force in Beaufort scale.

These observations indicate that the storm was practically unchanged in position since 8 A.M. of the previous day, and that it was central in about Lat. 21°N, and Long. 87½°E. at that hour.

Additional observations taken at the coast stations indicate that the storm continued to advance north-westward (more exactly N.54°W.) during the day. The following gives these additional observations:—

Station.	Hour.	Barometer reduced to sea-level and constant gravity at Lat. 45°.	Wind.		Cloud.	Rainfall.	Remarks.
			Direction at 8 A.M.	Average velocity in miles per hour.			
		"				Inches.	
Balasore .	2 P.M.	29·173	NNW	8	7	...	Dull weather; cloud increasing slowly; wind variable.
" .	8 "	·216	SSW	11	7	2·26	Frequent showers; weather stormy towards the east; wind becoming more southerly.
Saugor Island.	11 A.M.	·192	ENE	20	9	...	Sea rough; fine weather; rain squalls all round.
" .	*Noon.	·174	ESE	22	9	...	Sea rough with heavy swell; drizzling rain accompanying puffs of wind.
" .	†1 P.M.	·159	SE	25	10	...	Overcast with thin sleet; sea getting very rough; rain accompained by strong puffs of wind.
" .	1-30 P.M.	·155	SE	...	9	...	Wind increasing in force, and becoming rather violent; sea very rough.
" .	2-30 "	·148	SSE	...	9	...	Rain squalls, with strong winds; sea very rough.
" .	3 "	·144	S	...	10	...	Drizzling rain; weather stormy with heavy rain squalls; sea very rough with heavy swells.
" .	4-30 "	·191	S	...	10	...	Rain squalls with violent winds, sea very rough; wind varying between SSE and SSW, and sky stormy between ESE and W.

The Balasore observer notes that the barometer was lowest at 3 P.M., and that the wind shifted very suddenly and blew strongly from the southerly direction shortly after that hour.

These observations hence indicate clearly that the centre crossed the North Orissa coast a little to the east of Balasore about 3 P.M. of the 28th.

The only information of the weather in the north-west angle of the Bay is given by the Captain of the F. L. V. *Torch* and the Lighthouse-keeper, Shortt's Island.

The following is the account of the weather as experienced by the F. L. V. *Torch* stationed at the Eastern Channel :—

"On the morning of the 28th there was a moderate S.E. breeze, but sky looking very wild and threatening to the southward, and the sea very high and quick from that quarter. I unbent all awnings, battened down hatches, fore and aft, and ranged both coir cables.

"At 10 A.M. the wind chopped into the south in a heavy rain squall and increased in force very rapidly; by noon it was blowing a fierce gale, force 10, with blinding rain squalls, continuous, and sea very high and confused. This lasted up to 4 P.M., when the wind abated a little, but not the sea. From 4 P.M. on the 28th to 4 A.M. on the 29th it blew steadily a fresh gale from S.S.W. with continuous heavy rain squalls and very high confused sea. After 4 A.M. the weather commenced to moderate, and by noon it had settled into a strong breeze. The lowest reading of our barometer was 29·354" at 11 A.M. on the 28th."

The following gives the remarks in the storm report received from Shortt's Island :—

"*June 28th.*—From 0 to 1 A.M. the clouds remained low down, but after this hour began to rise to the northward gradually till the sky was completely overcast at 2 A.M., when a rather sharp squall occurred, during which the wind shifted to north, at which point it remained. Squalls after this were very frequent and increasing in strength, but with fine bright intervals. Began taking two hourly readings of the barometer only from 2 A.M. to 8 A.M., and one hourly reading of all instruments after the latter hour. From 8 to 12 A.M., squalls were lighter and less frequent, and while looking brighter to the north-east, dense masses of very black clouds gathering from WNW. through west and south to east. At 0-10 P.M., it became very dark and wind hauled to west. At this time there was a heavy confused sea to the north-east and wind light. At 0-40 P.M., wind suddenly increased from force 2 to force 6 (Beaufort's scale), and light rain began to fall. Soon after this violent squalls with rain began, during which the wind shifted to south-west. From 1 to 2 P.M., fresh gale and rain continuous. 2 to 3 P.M., moderate gale; rainless; weather looking a trifle brighter. From 3 to 4 P.M., very little rain, and stopping at 4 P.M., but scud driving fast. 4 to 5 P.M., no change, except that the clouds broke for about 10 minutes to the eastward, but rapidly filled up again. 5 to 6 P.M., gale continuous with small rain; looking very dirty to SSW and S. 6 to 8 P.M., strong gale, small driving rain. 7 P.M., wind shifted a point (SW by S); barometer rising slowly and pumping slightly. 8 to 10 P.M., squalls again prevail; some very violent rain heavier and incessant. Wind hauled another point (SSW) sometime between 9 and 10 P.M. 10 to 11 P.M., strong gale, hard driving rain. 11 P.M. to midnight, wind moderated slightly and middle clouds breaking, but lower clouds looking very black and dirty, especially from WSW to SSW."

29th June.—The only important pressure changes were those due to the advance of the storm. Pressure had increased rapidly in the north-west of the Bay, South Bengal and Orissa, and had fallen briskly to rapidly in Chota Nagpur to which the storm had advanced. The following data show its position at 8 A.M. :—

Station.	Pressure. 8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A.M.	Wind. Average velocity in miles per hour	Cloud.	Rainfall.	Remarks.
	"	"	"				Inches.	
Balasore .	29·371	+·100	—·165	S	15	8	2·94	Gale of wind.
Midnapur .	·359	+·037	—·188	SE	12	10	0·20	Overcast.
Burdwan .	·385	+·036	—·167	SE	21	10	0·57	Gale of wind.
Hazaribagh .	·309	—·082	—·237	ENE	18	10	1·08	Gale of wind.
Ranchi .	·298	—·061	—·237	NE	19	10	1·16	Showery.
Chaibassa .	·227	—·102	—·299	S	6	10	1·92	Continuous rain for upwards of 24 hours.
Sambalpur .	·322	—·056	—·241	SW	9	10	3·60	Continuous rain.

The monsoon current had fallen off considerably on the Bombay coast during the previous three days, and was now very light and giving only occasional showers in the west coast districts.

Strong monsoon winds obtained over the north of the Bay. Weather improved during the day as is shown by the following extract from the report of the Lighthouse-keeper, Shortt's Island :—

"*June 20th.*—0 to 2 A.M., weather still squally, wind at times very strong, the break in the clouds having filled up again. 2 to 4 A.M., clouds again broke, no rain and force of wind moderated somewhat. 4 to 5 A.M., blowing a violent gale, the anemometer registering 69 miles during this hour. 5 to 6 A.M., clouds breaking to the SW and overhead and weather looking brighter; no rain, but still blowing very hard. 6 to 8 A.M., alternately overcast and bright, wind strong. 8 to 10 A.M., weather again squally, barometer falling and pumping considerably. 10 A.M. to noon, wind still very strong, sky alternately overcast and partially clouded, and the weather inclined to settle, though looking dirty to the west. Noon to 2 P.M., strong breeze, weather fine. After this the clouds broke generally and at 8 P.M. weather fine and clear with a fresh SSW breeze; barometer normal."

The storm centre at 8 A.M. was in Lat 22¾°N. and Long. 85½°E. or about 10 miles to the north-west of Chaibassa, where pressure was three-tenths of an inch below the normal. The storm was well defined, and with a vigorous circulation, the great majority of stations in the depression reporting strong winds and gales. Heavy rain had fallen in Orissa, Chota Nagpur and South-West Bengal, and

light showers over the remainder of the province. The following gives the most noteworthy falls during the previous 24 hours :—

District.	Station.	Heaviest rainfall in 24 hours.
		Inches.
Cuttack	Kendrapara . . .	6·20
„	Cuttack	5·40
„	Salipur	4·75
„	Banki	4·10
Puri	Pipli	4·75
„	Ranpur	4·50
Balasore	Akhayapada . . .	4·40
Orissa Tributary Mahals . .	Baramba	5·00

30th June.—The storm had continued to advance in a north-west direction during the previous 24 hours, and was at 8 A.M. in the eastern districts of the North-Western Provinces where pressure had given way rapidly. Pressure had risen very rapidly in Orissa and Chota Nagpur, and was now two-tenths of an inch below the normal in the central depression. Strong easterly winds prevailed in Bihar and strong monsoon winds in South Bengal and the north of the Bay. The following observations define the position of the storm at 8 A.M. :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average velocity in miles per hour.			
	"	"	"				Inches	
Patna .	29·409	+·012	—·145	ESE	18	8	0·22	Duststorm with rain.
Benares .	·323	—·102	—·207	NE	9	10	0·96	Showery.
Allahabad .	·322	—·122	—·205	ENE	8	10	2·87	Continuous rain.
Sutna .	·402	—·082	—·146	W	16	10	2·70	Nor'- wester with rain.
Jubbulpore .	·458	—·019	—·117	WSW	3	10	0·36	Raining.
Daltonganj .	·334	—·061	?	SW	11	10	0·53	Overcast.
Dehri .	·332	—·036	—·204	SSW	4	10	0·29	Overcast.

The storm at 8 A.M. was central in about Lat. 25°N. and Long. 82°E. Heavy rain had fallen in the south eastern and central districts of the North-Western Provinces and in Baghelkhand, and light to moderate rain in Bengal and Bihar. The following gives the most noteworthy rainfalls in the North-Western Provinces :—

District.	Station.	Rainfall.
		Inches.
Banda . .	Mau	7·80
	Karwi	7·56
Hamirpur . .	Badausa	6·05
	Maudha	6·16

1st July.—The cyclonic storm had advanced more slowly than hitherto during the previous 24 hours and covered the central districts of the North-Western Provinces on the morning of the 1st. The centre at 8 A.M. was a little to the north of Cawnpore in about Lat. 27°N. and Long. 80½°E. The following gives 8 A.M. observations taken at stations in the storm area at that hour :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average velocity in miles per hour.			
	"	"	"				Inches.	
Nowgong .	29·514	+·081	—·030	W	7	10	1·68	
Allahabad .	·508	+·186	—·021	SSW	8	10	0·69	
Lucknow .	·444	+·053	—·087	ESE	6	10	0·34	Showery.
Cawnpore	·447	+·069	?	W	6	10	0·16	
Mainpuri .	·459	—·030	?	Calm	1	10	3·00	Continuous rain.
Bareilly .	·466	—·022	—·064	SE	8	10	1·41	Showery.
Agra . .	·468	+ 004	—·063	NW	5	10	1·12	

The storm was now filling up quickly and the depression was less than a tenth of an inch in amount in the central area. Moderate to heavy rain had fallen in the western and central districts of the North-Western Provinces. But little or no rain had fallen elsewhere except in Burma and the west coast districts.

2nd July.—The depression in the North-Western Provinces had filled up during the previous 24 hours. It had probably continued to advance north-westwards as very heavy local rain had fallen in Rohilkhand and the adjacent hill districts. For example, Roorkee registered 6·69 inches for the 24 hours preceding 8 A.M. of the 2nd, Chakrata 5·22 inches, Meerut 4·2 inches, Mussoore 3·22 inches, and Dehra 2·4 inches.

The storm under discussion formed in the north-west angle of the Bay under the combination of conditions which most

frequently precede the generation of storms during the rains.

The disappearance of the previous storm was followed by a rise of pressure in the Gangetic Plain and Central India. Light unsteady winds set in over Bengal whilst strong monsoon winds continued in the Bay. A whirl was set up in the north-west angle of the Bay on the 27th and 28th. It increased rapidly in intensity on the 29th and advanced north-westwards across Orissa, Chota Nagpur and the North-Western Provinces during the next three days, and finally filled up near the foot of the hills in Rohilkhand. The following gives its path and rate of motion :—

Date.	Hour.	Position.		Distance passed over during interval.	Average velocity in miles per hour.
		Lat. N.	Long. E.		
		° ′	° ′	Miles.	
28th June . .		21 0	87 30	...	...
29th ,, . .		22 45	85 30	172	7⅛
30th ,, . .		25 0	82 0	270	11¼
1st July . .		27 0	80 30	166	7

The storm was of moderate intensity and gave stormy cyclonic winds on the 29th and 30th, but was chiefly noteworthy for the heavy burst of rainfall which accompanied its march, more espcially in Orissa and the North Western Provinces. The following gives a statement illustrating this feature :—

Division.	Average actual rainfall during 24 hours preceding 8 A.M. of						Total of period.
	27th June 1895.	28th June 1895.	29th June 1895.	30th June 1895.	1st July 1895.	2nd July 1895.	
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Orissa . . .	2·99	3·08	2·48	0·09	0·06	0·08	8·78
Chota Nagpur . .	0·68	0·77	1·01	0·32	0·09	0·09	2·96
South-West Bengal .	0·10	0 16	0·70	0·35	0·08	0·15	2·54
Bihar	0·55	0·39	0·28	0·18	0·05	0·07	1·52
North-Western Provinces and Oudh	0·53	0·48	0·56	1·40	1·37	0·60	4·94

Summary of the Reports of the Weather and Snowfall in the Mountain Districts to the north and north-west of India.

The information relating to the snowfall in the Himalayan area is always small for June, as it is very unusual for heavy snow to fall even on the higher ranges in that month. No information has been received from these districts for the present month (June 1895).

Summary of special storm reports.

As stated in the pressure section two cyclonic storms formed during the month at the head of the Bay and in South Bengal. The special storm observations taken by certain observers during the passage of the storms across their stations have been utilized in the history of these storms given in the pressure section. A number of local disturbances also occurred during the month, of which reports have been sent in from various observing stations and the principal facts with reference to them are detailed below. The majority of these local disturbances were duststorms and thunderstorms such as almost invariably accompany the advance and establishment of the south-west monsoon over the drier districts of Northern and Central India.

2nd.—Duststorms at Dehli (2-45 P.M. to 6 P.M.) and at Sirsa (6 P.M. to 8 P.M.).

3rd.—Duststorm at Sirsa at 5-30 P.M.

5th.—Duststorms at Delhi at 2-45 P.M. and Sirsa at 7-25 P.M. Thunderstorm with hail at Belgaum from 4 P.M. to 5-15 P.M.

Thunderstorm at Poona (5-45 P.M. to 6-25 P.M.).

6th.—Thunderstorm with heavy rain (3·3 inches) at Mussooree.

7th.—Severe thunderstorm at Poona (7-30 to 8-30 P.M.). Thunderstorm at Jeypore. Duststorm at Peshawar (6-55 to 7-45 P.M). Strongest winds were of velocity 47 miles per hour.

Severe duststorm at Cherat from 5-15 to 8-25 P.M. The winds were strongest between 6-2 P.M. and 6-30 P.M., during which 31·3 miles were registered, giving a velocity of nearly 70 miles per hour.

9th.—Violent thunderstorm at Poona (6-35 P.M. to 7-10 P.M.). Rainfall during storm 1·24 inches.
Thunderstorm at Khandwa at 3 P.M. and at Chikalda at 4-55 P.M.
Severe thunderstorm at Nagpur at 7-10 P.M.

10th.—Severe thunderstorm at Mussooree (9 to 9-25 P.M.).

11th.—Duststorm at Cherat during night.

12th.—Thunderstorm at Pachpadra at 4 P.M.
Thunderstorm at Allahabad at 7-30 P M.

13th.—Duststorm at Sirsa at 4-20 P.M.
Thunderstorm at Pachpadra at 7 P.M. and at Jeypore during afternoon.
Violent duststorm at Jacobabad from 6·30 P.M. to 7 P.M.
Thunderstorm at Allahabad at 6 P.M.

14th.—Duststorms with thunder at Sirsa (4·34 P.M.), Peshawar (5-20 P.M.) and Cherat (5-20 P.M.). The strongest winds at Cherat, as estimated by the anemometer, had a velocity of 57 miles per hour.
Duststorm at Jacobabad at 2 A.M.
Thunderstorm at Allahabad from 11-35 A.M. to 0-30 P.M. during which 2·38 inches of rain fell.

15th.—Thunderstorm at Simla. 0·83 inches of rain fell in 12 minutes.

18th.—Thunderstorm at Pachpadra from 3-45 P.M. to 4-30 P.M.

21st.—Thunderstorm at Ahmedabad.

23rd.—Severe thunderstorm at Mussooree (9 P.M.) from south-east with rain.

24th.—Duststorm at Sirsa at 5-5 P.M.

27th.—Duststorm at Sirsa at 3-10 P.M.

Reports of the following local storms were received from district officers:—

6th.—Hailstorm at Alattur in the Palghat Taluq, Malabar district. The storm occurred about 4 P.M. The stones were small and of the size of tamarind seeds.

9th.—Severe hailstorm at Jowai in the Khasi Hills. Very strong winds accompanied the storm. Large trees were uprooted and the native houses more or less damaged.

14th.—Hailstorm at Anakapalle in the Vizagapatam district.

Brief summary of the weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—At the commencement of the month light to moderate normal westerly winds obtained along the Konkan, Kathiawar and Sind coasts, and exceedingly unsteady and irregular winds over the remainder of the Arabian Sea and in the Gulf of Aden and the Persian Gulf. Weather was generally fine and clear. The mean intensity of the air movement, as determined from the data of 26 vessels, was 2·6 at 8 A.M. of the 1st. Conditions were, on the other hand, normal in the Equatorial region to the south of the Arabian Sea, moderate south-easterly winds prevailing in the south of the Belt and south-westerly winds in the north. Thus the S.S. *Cachar* in Lat. 7°16′S. and Long. 43½°E. at 8 A.M. of the 2nd had south-east winds and the S.S. *Madura* in the neighbourhood of the line in Long. 55½°E. at the same hour experienced south-south-west winds. Winds increased in force in the Equatorial region and advanced northwards along the African coast during the next four days. Thus the S.S. *Cachar* in Lat. 8°30′N. and Long. 49°E. at 8 A.M. of the 6th experienced south-west winds of force 6. With the extension of the humid winds weather became showery over the south and west of the sea, while it continued fine and clear over the north of the sea, where winds were still variable. The air movement for the whole of the sea averaged 3·7 at 8 A.M. of the 6th. The monsoon current continued to advance northwards during the next four days, and on the morning of the 10th rainy squally weather prevailed as far north as Lat. 15°N. To the north of this parallel conditions remained unchanged. The mean strength of the winds was 2·9 on the 9th and 2·6 on the 10th. Winds, however, increased very rapidly, more especially in the centre and south during the day, and on the morning of the 11th the mean wind force had increased to 3·7. The strongest winds reported at 8 A.M. of the 11th were of force 8 in Lat. 12°N. and Long. 65°E. Several vessels on this day experienced heavy rain and a very high and rough sea, and one vessel, *viz.*, the S.S. *Clyde*, in Lat. 14½°N. and Long. 53°E., had incessant rain. On the 12th monsoon winds and weather obtained over the centre and south of the sea, the winds over this region ranging from 4 to 9 in force. In front of the advancing current in the eastern half of the sea, on the other hand, there existed an area of light irregular winds. Thus the S.S. *Idar* in Lat. 17½°N. and Long. 66°E. at 8 A.M. of the 12th reported a calm and the S.S. *Java* in Lat. 19°44′N. and Long. 71°42′E. at the same hour an easterly wind. As frequently happens a storm was generated in this area in front of the advancing current during the next 48 hours. It marched north-westwards along the North Bombay and Mekran coasts during the next six days and disappeared at the entrance to the Persian Gulf on the 21st. Abnormal south-easterly winds (part of the cyclonic circula-

tion around the storm) prevailed along the North Konkan and Kathiawar coasts from the 14th to the 19th, when the storm passing away westwards they reverted to their normal monsoon directions. During this period weather in the north-east of the Sea was very disturbed with strong gales, "blinding rain" and a "heavy mountainous" sea. The strongest winds reported during this period were of force 9 and the mean wind force for the whole area ranged between 3·7 on the 11th and 5·4 on the 17th, 18th and 19th. The influence of the storm did not extend to the Persian Gulf, where weather continued fine. With the disappearance of the storm the winds fell off rather rapidly in force and on the morning of the 23rd averaged only 4·1. They, however, increased again in force and on the 26th averaged 4·8. No important change occurred during the remainder of the month, a strong monsoon blowing generally.

It will be seen from the preceding account of the weather in the Arabian Sea that on the whole conditions were fairly normal in that area during the month, the only important abnormal feature being the manner of advance of the monsoon current, which marched to the west coast from the west instead of from the south, as is normally the case.

Bay of Bengal.—Normal south-west winds, force 2 to 5, and fine weather prevailed generally over the Bay during the first four days of the month. Winds became unsteady and irregular in the north and centre of the Bay on the 5th and continued so until the 12th. Over the remainder of the Bay winds were fairly normal in direction during this period and weather was generally fine, except in the extreme south-east and south-west, where showers were of occasional occurrence. The mean wind force for the whole area at 8 A.M. of the 12th, as recorded on board 21 vessels, was 3·3. Winds began to intensify in the south of the Bay on the 13th, and on the 14th several vessels in that area reported winds of force 6 and a high sea. The air movement continued to increase during the next three days, and on the morning of the 17th winds of force 4 to 7 and squally weather prevailed over the Bay as far north as Lat. 16° N. Weather was most disturbed near the Burma coast where the S.S. *Pentakota* and *Shahjehan* experienced hard squalls and heavy rain at 8 A.M. of the 17th. To the north of Lat. 16°N. the winds were very light and unsteady, mostly from easterly directions, and weather fine to cloudy. The general strength of the winds over the Bay had increased from 3·3 on the 15th to 4·1 on the 17th. This increase in the strength of the monsoon current is shown clearly by the wind data of Port Blair, where the average hourly wind velocity rose from 10 miles on the 15th to 17 miles on the 16th and 17th. As is usually the case, a storm formed in front of the advancing monsoon winds and in consequence winds shifted round to northerly directions in the north-west of the Bay, and on the morning of the 18th a fairly regular cyclonic circulation was exhibited over that region. Winds increased again in force during the next 24 hours and weather became further unsettled with "thick rain," "heavy squalls" and a "high sea", particularly in the eastern half of the north of the Bay. Thus the S.S *Canara* in Lat. 19¼° N. and Long 90¼° E. at 8 A.M. of the 19th experienced strong south-westerly gales (force 9). The mean wind force on this day was 4·9. The storm passed inland during the afternoon and the winds began to take off in force, more especially in the south and east of the Bay. On the 21st the strongest winds reported were of force 6, while in the south of the Bay several vessels experienced winds of force 2. Weather was fine in the south, but unsettled over the remainder of the Bay, particularly in the north-west, where the S. S. *Arratoon Apcar* had heavy squalls and incessant rain. The mean wind force had decreased to 4·2. Winds increased again during the next three days, and on the 24th the general wind force averaged 4·7. Winds shifted to easterly directions in the north-west of Bay on this day and a storm began to form. It intensified during the next three days and passed inland on the 28th. It occasioned very rough weather over the northern half of the Bay, but the strongest winds reported during its existence over the sea did not exceed 8 in force. The wind force for the Bay averaged 5·2 on the 27th and 6·1 on the 28th. Winds decreased rapidly during the next 24 hours, and on the 29th averaged 4·8 or 1·3 less than on the preceding day. Weather also improved rapidly, and at 8 A.M. of the 30th was cloudy with light to moderate winds over the northern half of the Bay and showery with moderate to strong winds in the southern half. The average strength of the winds was only 4·3.

Temperature of the air.

The mean temperature conditions of the month were chiefly determined, firstly, by the prolonged delay in the establishment of the south-west monsoon on the west coast, and, secondly, by the rapid advance of the monsoon currents after their establishment in the coast districts to the Gangetic Plain and Central and Upper India.

The mean maximum or day temperature of the month was above the normal in three areas, *viz.*:—

(1) Burma, Assam and Bengal;
(2) the Peninsula, south of Lat. 20° N., excluding the Circars; and
(3) Baluchistan, Sind and the greater part of Rajputana.

In the first of these areas the excess was generally less than 2° in amount; but was above 2° at the stations for which data are given in the following table :—

Station.	Mean maximum temperature.		
	Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Silchar	92·5	88·7	+3·8
Dhubri	89·0	85·6	+3·4
Darbhanga	95·2	92·3	+2·9
Jalpaiguri	90·1	87·5	+2·6
Mymensingh	89·3	87·2	+2·1
Chittagong	88·3	86·2	+2·1

The variations in the second area were more than 2° in amount at the great majority of stations in Malabar, the Konkan and South Madras, as is shown by the following data :—

Station.	Mean maximum temperature.		
	Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Salem	97·9	94·3	+3·6
Cuddapah	101·5	98·7	+2·8
Mercara	74·9	72·1	+2·8
Cochin	87·1	84·5	+2·6
Karwar	87·4	84·9	+2·5
Negapatam	98·9	96·6	+2·3
Poona	90·7	88·5	+2·2
Mangalore	86·5	84·4	+2·1
Ratnagiri	88·2	86·2	+2·0

Higher maximum temperatures were registered at several of these stations than have been recorded during the past 20 years. The following gives the most noteworthy cases :—

Station.	Highest maximum temperature recorded in June 1895.	Highest maximum temperature recorded in June previous to 1895.	Year in which recorded.
	°	°	
Salem	105·4	104·4	1894
Cochin	92·3	91·8	1878
Karwar	93·3	92·8	1878
Bombay	94·0	93·9	1892

The excess in the third area was small in amount and was greatest at Hyderabad and Quetta (each 1°·5).

The maximum temperature was more or less in defect over the remainder of India. The deficiency was large and marked in the North-Western Provinces and the East Punjab, ranging between 2° and 7° in amount. It exceeded 5° in amount at the stations for which comparative data are given below :—

Station.	Mean maximum temperature.		
	Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Delhi	97·4	104·2	—6·8
Ludhiana	99·1	105·8	—6·7
Meerut	95·3	101·4	—6·1
Bareilly	94·7	100·7	—6·0
Roorkee	95·8	101·4	—5·6
Agra	99·7	104·8	—5·1

The area of the greatest deficiency of day temperature hence included the western districts of the North-Western Provinces and the south-eastern districts of the Punjab.

The day temperature was almost as largely in defect at the hill stations in Upper India as at the neighbouring plains stations. The following gives three examples :—

Station.	Mean maximum temperature.		
	Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Murree	77·9	82·0	—4·1
Simla	71·1	75·3	—4·2
Ranikhet	75·6	78·0	—2·4

The variations of the mean minimum or night temperature were generally similar in character or distribution to those of the maximum temperature. This is the usual rule in the hot weather and rains.

The mean night temperature was above the normal

1st.—In Burma and Bengal. The variations were small in amount in this area.

2nd.—In the Peninsula (excluding the Circars). The

increase in the night temperature exceeded 2° in two areas, for which data are given below:—

	Station.	Mean minimum temperature. Actual, June 1895.	Normal, June.	Variation of actual from normal.
		°	°	°
1st area	Salem	76·7	73·5	+3·2
	Negapatam	81·5	78·9	+2·6
	Cochin	76·4	74·4	+2·0
	Calicut	77·7	74·4	+3·3
2nd area	Karwar	79·0	75·7	+3·3
	Ratnagiri	79·1	76·7	+2·4
	Sholapur	75·3	72·6	+2·7
	Hyderabad (Deccan)	76·9	74·0	+2·9

3rd.—In Baluchistan, Sind, Rajputana and the Central and West Punjab. The excess was considerable over the greater part of this area and was more than 2° in amount at the stations for which comparative data are given below:—

Station.	Mean minimum temperature. Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Jacobabad	87·6	83·5	+4·1
Lahore	83·2	79·8	+3·4
Quetta	62·2	59·2	+3·0
Mooltan	85·1	82·3	+2·8
Rawalpindi	77·0	74·7	+2·3

The mean night temperature of the month was below the normal over the remainder of India. The deficiency was small in amount over the greater part of this area, but exceeded 2° in a small area, including the stations of Agra, Jhansi, Delhi and Meerut. The following gives data:—

Station.	Mean minimum temperature. Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Agra	81·6	84·8	−3·2
Jhansi	81·7	83·9	−2·2
Delhi	80·5	83·4	−2·9
Meerut	78·0	80·8	−2·8

The mean temperature of the month was above the normal in three areas, *viz.*,—

(1) Burma, Bengal and Assam.
(2) The Peninsula, south of Lat. 21°N., excepting the Circars.
(3) Sind, Baluchistan, the South-West Punjab and West and Central Rajputana.

In the first of these areas the mean temperature differed from the normal generally by small amounts. The excess was more than 2° at Dhubri (2°·5), Silchar (2°·1) and perhaps Jalpaiguri (2°·2). It was also generally small in amount in the third area, but was over 2° at Quetta (2°·3) and Jacobabad (2°·1).

The mean temperature was more than 2° above the normal over a considerable part of the Peninsula, defined by the stations for which data are given below:—

Station.	Mean daily temperature. Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Salem	87·3	83·9	+3·4
Karwar	83·2	80·3	+2·9
Cuddapah	91·7	89·3	+2·4
Cochin	81·8	79·5	+2·3
Sholapur	85·7	83·5	+2·2
Ratnagiri	83·7	81·5	+2·2
Mercara	69·5	67·6	+1·9
Calicut	83·4?	79·2	+4·2?
Negapatam	90·2	87·7	+2·5

The mean temperature of the month was more or less below the normal over the remainder of India. The deficiency was considerable, ranging between 2° and 5°, over the North Western Provinces, Bundelkhand and the East Punjab. It was 3° and over at the stations for which comparative data are given below:—

Station.	Mean daily temperature. Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Delhi	89·0	93·9	−4·9
Meerut	86·7	91·2	−4·5
Agra	90·7	94·9	−4·2
Bareilly	86·4	90·4	−4·0
Roorkee	86·5	90·2	−3·7
Ludhiana	89·6	93·0	−3·4
Jhansi	90·5	93·6	−3·1

The mean temperature of the month was in slight to moderate defect at the lower hill stations in Upper India, but was in large excess at the higher hill stations of Leh and Kailang. The following data illustrate this contrast:—

STATION.	MEAN DAILY TEMPERATURE.		
	Actual, June 1895.	Normal, June.	Variation of actual from normal.
	°	°	°
Leh	61·1	55·4	+5·7
Kailang	57·8	55·0	+2·8
Murree	71·0	73·2	—2·2
Simla	65·4	68·0	—2·6
Ranikhet	69·0	70·6	—1·6

The chief abnormal features of the temperature conditions of the month were as follows:—

1st.—A slight to moderate excess of temperature, both by day and night, in Burma, Bengal and Assam, greatest in Assam and North Bengal.

2nd.—A slight to moderate excess of temperature, both by day and night in the Peninsula, most marked in the west coast districts.

3rd.—A slight to moderate excess of temperature in Baluchistan, Sind, the South-West Punjab and West Raj putana, greatest in Baluchistan.

4th.—A moderate to largish deficiency of temperature, both by day and night, in the North-Western Provinces and the East Punjab, most marked in the western districts of the North-Western Provinces.

5th.—A large excess of temperature at the high level stations in the Western Himalayas (Leh and Kailang) and a slight to moderate deficiency at the low level stations from Murree to Ranikhet.

The following table gives temperature data for the 51 meteorological divisions of the Empire:—

PROVINCE.	DIVISION.	ACTUAL TEMPERATURE.					VARIATION FROM NORMAL OF MONTH OF		
		Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Diurnal range.
		°	°	°	°	°	°	°	°
BURMA	Tenasserim	87·0	75·5	81·3	11·5	19·9	+1·0	+1·0	0
	Lower Burma	86·6	77·4	82·0	9·1	16·1	+0·6	+1·3	−0·7
	Central do.	88·1	73·5	80·8	14·6	21·4	+0·5	+1·2	−0·7
	Upper do.	90·4	74·8	82·6	15·6	23·9	−0·1	+0·4	−0·5
	Arakan	86·7	77·8	82·3	8·9	17·5	+0·8	−0·1	+0·9
BENGAL AND ASSAM	Eastern Bengal	87·6	76·1	81·8	11·5	21·6	+1·4	+0·5	+0·9
	Assam (Surma)	93·2	76·3	84·8	17·0	28·1	+3·8	+0·4	+3·4
	Do. (Brahmaputra)	89·7	77·4	83·6	12·4	24·7	+2·1	+0·9	+1·2
	Deltaic Bengal	90·9	78·5	84·7	12·4	23·5	−0·4	−0·9	+0·5
	Central do.	93·5	78·0	85·7	15·5	30·0	+0·6	−0·4	+1·0
	North do.	90·6	77·1	83·9	13·5	24·3	+2·2	+1·2	+1·0
	Orissa	90·3	79·4	84·9	10·9	29·1	−1·8	−0·8	−1·0
	Chota Nagpur	94·4	77·3	85·9	17·1	38·0	−1·0	−0·7	−0·3
	Bihar (South)	98·0	80·4	89·0	17·2	34·2	−0·1	+0·6	−0·7
	Do. (North)	95·1	79·0	87·0	16·2	29·0	+2·2	+1·4	+0·8
NORTH-WESTERN PROVINCES AND OUDH.	North-Western Provinces (East)	97·6	80·1	88·9	17·5	34·9	−2·7	−1·5	−1·2
	Oudh (South)	97·7	80·3	90·1	17·4	37·5	−3·8	−0·7	−3·1
	Do. (North)	94·5	78·4	86·5	16·1	32·5	P	P	P
	North-Western Provinces (Central)	99·1	80·1	89·6	19·0	35·1	P	P	P
	Do. do. (West)	99·5	81·7	90·6	17·9	34·8	−4·5	−2·7	−1·8
	Do. do. (Submontane)	93·8	76·6	85·2	17·2	33·9	−5·5	−2·0	−3·5
PUNJAB	Punjab (South)	101·4	81·7	91·6	19·7	37·5	−4·0	−1·5	−2·5
	Do. (Central)	102·7	83·2	92·9	19·5	38·2	−2·9	+3·4	−6·3
	Do. (Submontane)	77·9	79·1	88·5	18·9	36·4	−6·7	−0·1	−6·6
	Do. (Hill Districts)	81·3	64·2	72·7	17·1	35·2	−4·2	−0·6	−3·6
	Do. (North-West)	102·4	78·8	90·6	23·6	42·8	−2·8	+1·4	−4·2
	Do. (West)	106·1	83·0	94·5	23·1	42·0	−0·7	+1·7	−2·4

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Mean daily.	Mean daily range.	Absolute range.	Variation from normal of month of Maximum.	Minimum.	Diurnal range.
		°	°	°	°	°	°	°	°
Bombay and Malabar Coast Districts (Madras).	Malabar	86·7	76·7	81·7	10·0	25·6	+3·3	+2·2	+1·1
	Madras (South Central)	95·1	74·8	84·9	20·3	31·9	+3·0	+2·2	+0·8
	Coorg	74·9	64·5	69·7	10·4	24·3	+2·8	+1·3	+1·5
	Mysore	84·4	68·3	76·4	16·1	29·9	+1·4	+1·3	+0·1
	Konkan	87·2	79·2	83·2	8·0	18·4	+1·8	+2·1	−0·3
	Bombay Deccan	90·1	72·2	81·2	17·9	34·1	+1·8	+1·1	+0·7
	Hyderabad (North)	93·5	73·0	83·3	20·5	35·9	P	P	P
	Khandesh	92·5	73·7	83·1	18·8	36·4	+0·5	−0·3	+0·8
Central Provinces and Berar.	Berar	97·1	77·6	87·4	19·6	36·5	−0·1	+0·8	−0·9
	Central Provinces (West)	96·8	78·8	87·8	18·0	35·7	−1·0	+0·4	−1·4
	Do. (Central)	95·4	77·2	86·4	18·2	37·8	−1·3	−0·3	−1·0
	Do. (East)	96·0	79·3	87·7	16·7	39·4	−1·1	−0·3	−0·8
Bombay (North)	Gujarat	96·4	79·8	88·1	16·6	29·2	−0·5	0	−0·5
	Kathiawar	92·8	78·8	85·8	14·0	21·2	−0·8	−0·8	0
	Sind	102·1	83·1	92·6	19·0	33·4	+0·7	+1·4	−0·7
Rajputana and Central India.	Central India (East)	97·8	79·5	88·7	18·3	37·8	−2·9	−2·4	−0·5
	Rajputana (East), Central India (West)	99·3	79·5	89·5	19·8	33·7	−0·5	+0·5	0
	Do. (West)	105·4	82·8	94·2	22·7	36·3	0	−0·1	+0·1
Madras	East Coast (North)	91·1	80·4	85·8	10·7	27·8	−1·7	−1·0	−0·7
	Hyderabad (South)	95·2	76·6	85·9	18·5	39·0	+0·8	+2·9	−2·1
	Madras (Central)	97·5	78·4	88·0	19·1	37·0	+1·2	+1·2	0
	East Coast (Central)	99·5	82·1	90·8	17·4	33·9	−1·0	+0·8	−1·8
	Do. (South)	99·6	81·1	90·4	18·6	27·9	+1·8	+1·9	−0·1
	Madras (South)	95·4	79·7	87·6	15·7	24·2	−0·5	+1·4	−1·9

Weather was showery at the commencement of the month in Burma, Bengal and Assam, but was very dry in Malabar and South India in consequence of the delay in the establishment of the monsoon rains. Temperature was hence in general excess (except in Bengal, Central India and Gujarat). The following gives variation data for the 1st which illustrate the temperature conditions that obtained during the first week of the month :—

Political area or Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−0·6	+0·8	+0·1
Bengal and Assam	+0·5	−0·7	−0·1
N.-W. Provinces and Oudh	+1·6	+0·1	+0·9
Punjab	+4·1	+1·2	+2·7
Sind and Rajputana	−0·2	+0·4	+0·1
Central India and Gujarat	−1·2	−0·6	−0·9
Central Provinces and Berar	+1·7	+0·8	+1·3
Bombay	+3·3	+1·6	+2·5
Madras	+5·6	+3·0	+4·3

Series of thunderstorms visited the South-East Punjab and the western districts of the North-Western Provinces and caused a large temporary reduction of temperature in that area on the 8th. Scattered thunder showers occurred in the Peninsula, Central India, Bengal and Burma on the 8th, 9th, 10th and 11th, giving rise to largish local changes of temperature. The first general rain in the west coast districts due to the advancing monsoon current occurred on the 12th. The following variation data for the 10th illustrate the temperature conditions obtaining in India immediately before the advance of the south-west monsoon in 1895 :—

Political area or Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·8	+1·6	+1·7
Bengal and Assam	+1·9	+0·5	+1·2
N.-W. Provinces and Oudh	+1·7	−0·4	+0·7
Punjab	+1·3	+6·4	+3·9
Sind and Rajputana	+0·5	+2·1	+1·3
Central India and Gujarat	+3·9	+1·0	+2·5
Central Provinces and Berar	+7·1	−0·5	+3·3
Bombay	+6·1	+2·1	+4·1
Madras	+0·6	+1·3	+1·0

The humid current in the Arabian Sea gave rise to a feeble storm off the Bombay and Kathiawar coasts, which delayed the full establishment of the monsoon in India until the 19th. The monsoon winds advanced from the Bombay coast with unusual rapidity during the third week of the month into North-Western and Central India (*i.e.*, East Rajputana, the North-Western Provinces and the East Punjab) and temperature was hence reduced considerably below the normal. Temperature, on the other hand, increased slightly in Bengal, where the monsoon was slightly delayed.

The following gives mean temperature variation data of the 14th, 16th and 18th for these areas:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of June		
	14th.	16th.	18th.
	°	°	°
Punjab	−4·3	−4·5	−7·4
N.-W. Provinces and Oudh	−5·4	−5·9	−4·4
Sind and Rajputana	−0·6	0	+4·8
Central India and Gujarat	−1·6	−2·8	−1·0
Central Provinces and Berar	−1·4	−2·2	−0·3
Bengal and Assam	+2·7	+0·2	+0·2
Burma	+2·1	+2·4	+1·0

The Bombay current held steadily during the next week and gave general and moderately heavy rain in North-Western and Central India and the North Deccan. The advancing current in the Bay gave rise to a small cyclonic storm on the 19th and 20th. This storm during its westward advance gave the first burst of the south-west monsoon rains to North-Eastern India.

The following data of the variations of temperature from the normal for the 24 hours preceding 8 A.M. of the 21st, 23rd and 25th illustrate the conditions obtaining during this period:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of June		
	21st.	23rd.	25th.
	°	°	°
Burma	−0·3	+0·9	+0·5
Bengal and Assam	−1·2	−1·4	+0·2
N.-W. Provinces and Oudh	−3·9	−2·0	−3·8
Punjab	−0·1	+1·4	+2·3
Sind and Rajputana	+4·0	+1·8	+0·5
Central India and Gujarat	−4·2	−3·9	−2·4
Central Provinces and Berar	−7·4	−3·5	−5·8
Bombay	−3·4	−0·6	−0·5
Madras	−2·4	−0·1	−3·2

The Bombay current fell off in strength on the 26th and 27th and was somewhat feeble during the remainder of the month. The Bengal current was also unsteady in the Gangetic Plain from the 26th to the 29th during which a storm was forming in the north-west angle of the Bay. It crossed the coast on the afternoon of the 28th and advanced north-westwards into the North-Western Provinces, giving a heavy burst of rain to North-Eastern India on the 29th and 30th.

Rainfall was more or less general on these days in Northern India, but was scanty in the peninsula. Temperature was at the end of the month in large defect in Northern India and in slight to moderate excess in the peninsula. The following gives variation data for the 24 hours preceding 8 A.M. of the 31st:—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	− 0·2	+2·2	+1·0
Bengal and Assam	− 1·8	−1·0	−1·4
N.-W. Provinces and Oudh	− 4·5	−3·8	−4·2
Punjab	−12·4	−6·7	−9·6
Sind and Rajputana	+ 0·4	−0·6	−0·1
Central India and Gujarat	− 0·8	−2·4	−1·6
Central Provinces and Berar	− 1·4	+0·9	−0·3
Bombay	+ 2·0	+1·9	+2·0
Madras	+ 1·2	+2·3	+1·8

The following table gives the variations of the mean temperature week by week during the month:—

Division.	Variation from normal of mean temperature for week ending				
	8th.	15th.	22nd.	29th.	For whole month.
	°	°	°	°	°
Burma	+0·4	+2·2	+0·4	+0·7	+0·9
Bengal and Assam	−0·3	+1·6	−0·1	+0·5	+0·3
N.-W. Provinces and Oudh.	−0·6	−4·2	−4·7	−3·3	−3·1
Punjab	+2·6	−1·1	−2·5	−2·7	−1·1
Sind and Rajputana	+0·6	−0·1	+2·6	+1·0	+0·8
Central India and Gujarat	+0·6	−0·3	−1·9	−2·7	−1·1
Central Provinces and Berar.	+4·3	+0·4	−3·0	−3·6	−0·4
Bombay	+4·3	+2·5	−1·6	+0·6	+1·7
Madras	+2·9	+1·5	−0·7	−0·5	+0·9

Winds.

Winds were stronger on the average of the month at Port Blair and Diamond Island, but were weaker and also less steady at the head of the Bay, as represented by the stations of Chittagong, Saugor Island and False Point.

The following gives data for the three last-named stations :—

STATION.	VELOCITY IN MILES PER DIEM.			STEADINESS.		
	Mean actual, June 1895.	Normal, June.	Variation.	Actual percentage, June 1895.	Normal percentage, June.	Variation.
Chittagong .	162	166	— 4	50	56	— 6
Saugor Island .	330	350	—20	55	69	—14
False Point .	287	288	— 1	52	63	—11

The most noteworthy feature of the mean air movement of the month in Bengal was the increased easting (or diminished westing) of the winds.

The following gives data for five stations in illustration :—

STATION.	WIND DIRECTION		
	Mean, June 1895.	Normal, June.	Increased easting.
	°	°	°
Saugor Island . . .	S 6 E	S 15 W	+21
Narayanganj . . .	S 56 E	S 16 E	+40
Calcutta	S 45 E	S 4 E	+41
Burdwan	S 50 E	S 20 E	+30
Berhampore	S 56 E	S 33 E	+23

This shift of wind direction indicated a strong set of the air movement away from North and East Bengal and Assam to the Gangetic Plain.

Winds had an unusually strong westerly set at Port Blair and in Lower Burma, as is shown by the following data :—

STATION.	WIND DIRECTION.		
	Mean actual, June 1895.	Mean normal, June.	Increased westing.
	°	°	°
Port Blair	S 69 W	S 38 W	+31
Rangoon	S 44 W	S 19 W	+25
Diamond Island . . .	S 54 W	S 32 W	+22

Winds were, on the whole, slightly less steady and also weaker than usual in Bengal, but were on the mean of the month abnormally steady and strong in Bihar, Chota Nagpur and the North-Western Provinces. The following table gives comparative data :—

DIVISION.	VELOCITY IN MILES PER DIEM.		
	Mean actual, June 1895.	Normal, June.	Variation.
Bengal	171	181	—10
Chota Nagpur . . .	251	213	+38
Bihar	187	123	+64
N.-W. Provinces and Oudh .	100	90	+10

The Bombay or Arabian Sea current blew strongly across the west coast from the 18th to the 25th. The winds at the west coast stations were on the average of the whole month generally below their normal strength, as is shown by the following data :—

STATION.	VELOCITY IN MILES PER DIEM.		
	Mean actual, June 1895.	Normal, June.	Percentage variation.
Cochin	187	?	?
Karwar	208	?	?
Ratnagiri	302	278	+ 9
Bombay	362	389	— 8
Kurrachee	389	447	—13

The average intensity of the winds varied somewhat irregularly from the normal in the Deccan, Central Provinces, Berar, Central India and Rajputana, but winds were, on the whole, slightly weaker than the normal. The following gives data in illustration :—

PROVINCE.	VELOCITY IN MILES PER DIEM			
	Mean actual, June 1895.	Normal, June.	Variation from normal.	Percentage variation.
Bombay Deccan . .	379	414	—35	— 8
Madras Deccan . .	187	190	— 3	— 2
Central Provinces . .	172	166	+ 6	+ 4
Berar	239	234	+ 5	+ 2
Central India . . .	134	174	—40	—23
Rajputana . . .	238	263	—25	—10

Winds were on the average of the month more westerly than usual at the west coast stations as is shown by the following :—

Station.	Wind direction. Actual, June 1895.	Normal, June.	Westerly deflection.
	°	°	°
Bombay	S 73 W	S 63 W	+10
Ratnagiri	S 80 W	S 53 W	+27
Karwar	S 75 W	S 76 W	− 1
Cochin	N 77 W	S 75 W	−28

The same feature is exhibited by the wind directions of the inland stations directly under the influence of the Bombay current, of which the following gives a few examples :—

Station.	Wind direction. Actual, June 1895.	Normal, June.	Increased westing.
	°	°	°
Deesa	S 51 W	S 36 W	+15
Ajmere	S 77 W	S 61 W	+16
Sholapur	N 89 W	N 86 W	+ 3
Belgaum	S 77 W	S 73 W	+ 4
Mercara	S 85 W	N 81 W	...
Madras	S 38 W	S 36 W	+ 2

The mean wind direction at Wellington was very unusual. It was S 32° W, the normal being N 88° W. A similar but much smaller deflection was shown at Pachmarhi, where the mean wind direction was S 83° W, the normal being N 71° W.

Winds were stronger and steadier at the Himalayan stations, more especially at the more westerly stations, as, for example, Murree, where the mean percentage of steadiness was 50 or 38 above the normal.

The mean wind direction of the month at Zanzibar was S 6° E and at the Seychelles S 11° E. Winds were very steady at the former station, but were less steady at the latter station than they were in June 1894, and hence the lower air current in the western half of the equatorial belt was probably somewhat less steady than usual during the greater part, if not the whole, of the month.

Humidity and Cloud.

The mean amount of aqueous vapour present in the air, as measured by its pressure, was slightly greater than usual in Burma and Assam. The relative humidity was, on the other hand, below the normal, more especially in Assam, due to the temperature being considerably above the normal. Thus the mean humidity percentage was 7 in defect at Silchar and 5 at Dhubri.

The air was, on the mean of the month, drier than usual over nearly the whole of Bengal and Bihar. The mean humidity percentage of the month was 8 below the normal at Darbhanga, 7 at Berhampore and 6 at Narayanganj.

The following gives mean data for Burma and North-Eastern India :—

Province.	Absolute humidity. Average actual, June 1895.	Normal, June.	Variation from normal.	Relative humidity. Average actual, June 1895.	Normal, June.	Variation from normal.
	"	"	"	%	%	%
Burma . . .	·937	·903	+·034	87	87	0
Assam . . .	·935	·906	+·029	82	86	−4
Bengal . . .	·935	·947	−·012	81	84	−3
Orissa . . .	·927	·930	−·003	80	78	+2
Chota Nagpur	·703	·685	+·018	66	65	+1
Bihar . .	·873	·894	−·021	69	74	−5

South-west monsoon conditions were established unusually early in the month in the North-Western Provinces, the Punjab, Rajputana and Central India, and the mean aqueous vapour pressure and relative humidity were very largely in excess in these areas as well as at the Himalayan stations.

The following gives comparative data for these areas in illustration :—

Province.	Absolute humidity. Average actual, June 1895.	Normal, June.	Variation from normal.	Relative humidity. Average actual, June 1895.	Normal, June.	Variation from normal.
	"	"	"	%	%	%
Central India .	·754	·677	+·077	64	50	+14
Rajputana . .	·751	·694	+·057	57	51	+ 6
North-Western Provinces and Oudh.	·811	·689	+·122	66	51	+15
Punjab . .	·753	·624	+·129	53	42	+11

The mean humidity percentage was from 10 to 20 above the normal over the whole of that area. The excess was absolutely greatest at Meerut (+20), Chakrata (+17), Chamba, Roorkee and Lahore (each +16). The air was, on the other hand, slightly drier at Leh and Darjeeling and also at Quetta, representative of Baluchistan.

There was a slight excess of vapour in the air in Sind and a moderate to largish excess in the northern and eastern districts of the Central Provinces. The mean humidity at Saugor was 10 above the normal, and at Jubbulpore 9 in excess.

Humidity was more or less below the normal over the whole of the Peninsula, in great part due to the delay in the establishment of monsoon conditions on the west coast. The following gives comparative data for five representative stations:—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Average actual, June 1895.	Normal, June.	Variation from normal.	Average actual, June 1895.	Normal, June.	Variation from normal.
	"	"	"	%	%	%
Bombay . .	·902	·927	—·025	80	82	—2
Cochin . .	·879	·854	+·025	83	88	—5
Bangalore .	·620	·617	+·003	72	74	—2
Madras . .	·818	·799	+·019	60	64	—4
Trichinopoly .	·675	·712	—·037	51	57	—6

The chief abnormal features of the mean hygrometric conditions of the month were as follows:—

(1) Deficiency of aqueous vapour to a moderate extent in Bengal and Bihar.

(2) Large excess of aqueous vapour in the northern and eastern districts of the Central Provinces, the North-Western Provinces, Rajputana, Central India, Sind and the Punjab, over the greater part of which humidity was from 10 to 20 above the normal.

(3) General moderate deficiency of aqueous vapour and decreased humidity in the Peninsula.

(4) Large increase of humidity at the hill stations in Upper India and a slight deficiency in Baluchistan and at Leh in Thibet.

The mean cloud amount of the month was in slight to moderate excess at Port Blair and in Burma. It was, on the other hand, below the normal of the month (generally to a slight extent) in Bengal, Assam and Bihar.

The following table gives comparative data for Burma and North-Eastern India:—

DIVISION.	MEAN CLOUD AMOUNT.		
	Actual, June 1895.	Normal, June.	Variation from normal.
Burma	8·6	7·9	+0·7
Assam	6·4	7·8	−1·4
Bengal	7·3	7·6	—0·3
Bihar	5·4	5·5	—0·1
Orissa	7·1	6·8	+0·3

Cloud was in moderate to large excess in the North-Western Provinces, the Punjab, Sind, Central India, Berar, the Central Provinces and Chota Nagpur, that is, over the area characterized by large excess of aqueous vapour in North-Western and Central India. The following gives comparative data for this area:—

PROVINCE.	MEAN CLOUD AMOUNT.		
	Actual, June 1895.	Normal, June.	Variation from normal.
North-Western Provinces and Oudh .	5·8	3·9	+1·9
Punjab	3·3	2·3	+1·0
Sind	3·3	2·5	+0·8
Rajputana	4·4	4·3	+0·1
Central India	5·9	5·3	+0·6
Berar	7·5	6·4	+1·1
Central Provinces	6·7	6·0	+0·7
Chota Nagpur	8·4	7·3	+1·1

The excess was greatest both absolutely and relatively to the normal amount in the East Punjab and the western districts of the North-Western Provinces, and was almost as largely in excess at the hill stations in Upper India as in the adjacent plains. The excess was most marked at Ranikhet (+2·6), Meerut (+2·6), Ludhiana (+2·5), Simla (+2·4), Agra and Dehra (each +2·3), Roorkee (+2·1) and Murree (+1·8). The cloud estimate for Chakrata is very low, but this is due to a recent change of observers.

The mean cloud amount of the month was below the normal in the west coast districts and Southern India. The deficiency was large at Trichinopoly (−2·6), Madras (−1·0), Bombay (−1·2) and Cochin (−1·1).

The variations of the cloud distribution from the normal hence ran parallel with the abnormal features of the humidity conditions of the month.

The chief features of the mean distribution of cloud of the month were—

(1) Moderate excess in Burma.

(2) Slight to moderate deficiency in Bengal, Assam and Bihar.

(3) Moderate to large excess in Orissa, Chota Nagpur, the North-Western Provinces, the Punjab, Sind, Central India, Berar and the Central Provinces.

(4) Slight to moderate deficiency in the west coast districts and South and Central Madras.

(5) Slight deficiency in Thibet.

Rainfall.

The conditions, under which the south-west monsoon rains of 1895 were initiated, have been stated in the previous sections of this Review.

The Malabar coast districts received light showers daily from the 1st to the 11th of June. General rain commenced simultaneously in the coast districts south of Surat on the 12th, and increased in intensity for some days. The Malabar coast districts received a very heavy burst of rain from the 12th to the 21st, and the Konkan a moderately heavy burst from the 14th to the 22nd or 23rd.

The Deccan and Central Provinces and Central India began to receive monsoon showers on the 11th and 12th, and the Central Provinces and Central India obtained a very heavy burst of rain from the 20th to the 25th, following the passage of the second cyclonic storm of the month through them. The humid winds of the Bombay current advanced with unusual rapidity across East Rajputana into the North-Western Provinces and the Punjab, and these areas received their first burst of monsoon rains from the Bombay current on the 12th and following days.

The Bombay current blew strongly from the 18th to the 25th, and gave heavy and general rain during that period to Western, Central and Upper India. It was feeble during the remainder of the month, and West Rajputana, Berar, Khandesh and the Deccan had fine dry weather, whilst the coast districts received light to moderate showers.

Burma received light to moderate daily rain in the first fortnight of the month. Bengal and Assam, more especially the north and east districts, obtained general rain from thundershowers on the 9th and 10th, but the first fortnight of the month was much drier than usual.

The monsoon current in the Bay strengthened and advanced over the north of the Bay on the 14th and following days, and, as usual, a cyclonic storm formed in front of the advance in the north-west of the Bay. It crossed the Orissa coast and advanced rapidly in a west-north-west direction to Rajputana. Its advance determined the commencement of the monsoon rains proper in North-Eastern India. Bengal continued to receive moderately heavy rain for three or four days (from the 22nd to the 25th) following the disappearance of this storm. Fine weather with light local showers prevailed in that area during the next three days, whilst a storm was forming in the north-west angle of the Bay. It advanced slowly north-westwards into the North-Western Provinces, and gave a heavy downpour in Orissa, the eastern districts of the Central Provinces, Central India and the North-Western Provinces, and moderately heavy rain in West Bengal, Chota Nagpur and Bihar.

The dates of the commencement of the monsoon rains in 1895 in the different provinces of India are as follows :—

	Date of commencement of the monsoon rains.
Malabar	12th
Konkan	12th
Kathiawar	21st
Central Provinces	14th
Central India	12th
Rajputana	12th
Bengal	13th and 16th
Chota Nagpur	19th
Bihar	16th
North-Western Provinces	14th
Punjab	14th to 25th

The distribution of the rainfall of the month was largely determined—

1st.—by the delay in the establishment of the monsoon currents, more especially the Bombay branch

2nd.—by the relative weakness of the Bengal current, compared with the Bombay current;

3rd.—by the unusually rapid advance of both currents towards Upper India to which they were more strongly determined than usual, due to the general meteorological conditions of the period ;

4th.—by the tracks of the three cyclonic storms of the month.

The conditions were similar to those which obtained in June 1894, with the exception that the monsoon currents were not so strong in June 1895 as in that month. The general character of the distribution of the rainfall in these two months in India was hence very similar. The chief features in June 1895 were—

(1) Large deficiency in Arakan, Assam, East and North Bengal and perhaps Upper Burma.

(2) Moderate to large excess in Orissa, the Central Provinces, Central India, the North-Western Provinces and the Punjab.

(3) Moderate deficiency in South and Central Madras, Hyderabad, the South Deccan and Berar.

(4) Rainfall practically normal in amount or in slight to moderate defect over the remainder of India.

The following table gives comparative rainfall data of June 1895 of the 51 meteorological districts of India. In the case of Bengal, the North-Western Provinces, the Punjab, Rajputana, Central India, Bombay, Madras, the Central Provinces, Berar and Coorg the monthly rainfall statements published by the respective Local Governments were received in time to be utilized in the preparation of this table, and hence the variations in the meteoro-

logical districts of those provinces given in the last column of that Table and in Plate V are based on the whole of the available information. In the case of the remaining provinces the averages were derived from the data of the weekly rainfall telegrams for the period sent by the district officers in those provinces.

The following table gives comparative rainfall data of June 1895 for the 51 meteorological divisions of India :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, June 1895.	Average normal, June.	Average actual, June 1895.	Average normal, June.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	41·58	40·49	+1·09
	Lower Burma*	?	?	20·66	19·09	+1·57
	Central do.*	?	?	11·29	15·50	−4·21
	Upper do.*	?	?	6·12	?	?
	Arakan*	?	?	26·99	52·70	−25·71
Bengal and Assam	Eastern Bengal	12·9	16·9	9·05	18·96	−9·91
	Assam (Surma)*	?	?	14·70	37·57	−22·87
	Do. (Brahmaputra)*	?	?	9·82	15·71	−5·89
	Deltaic Bengal	13·3	12·8	8·71	10·62	−1·91
	Central do.	10·9	12·0	6·80	10·20	−3·40
	North do.	11·6	17·2	10·91	24·43	−13·52
	Orissa	13·9	10·0	20·08	8·85	+11·23
	Chota Nagpur	12·9	10·7	9·95	8·25	+1·70
	Bihar (South)	7·6	7·3	4·98	5·75	−0·77
	Do. (North)	7·8	9·0	6·27	8·61	−2·34
North-Western Provinces and Oudh.	North-Western Provinces (East)	8·1	5·1	6·17	4·29	+1·88
	Oudh (South)	6·4	4·6	6·25	4·39	+1·86
	Do. (North)	9·4	5·6	9·01	4·93	+4·08
	North-Western Provinces (Central)	8·5	4·2	8·11	3·47	+4·64
	Do. do. (West)	7·7	3·7	5·87	2·74	+3·13
	Do. do. (Submontane)	10·3	6·0	10·16	5·56	+4·60
Punjab	Punjab (South)	4·6	2·0	2·55	1·40	+1·15
	Do. (Central)	5·0	2·7	3·44	2·18	+1·26
	Do. (Submontane)	8·5	3·2	4·21	2·84	+1·37
	Do. (Hill Districts)	13·2	6·9	11·74	4·78	+6·96
	Do. (North-West)	4·4	1·9	3·69	1·34	+2·35
	Do. (West)	2·8	1·2	1·79	0·64	+1·15
Bombay and Malabar Coast Districts (Madras).	Malabar	23·6	24·8	39·37	37·30	+2·07
	Madras (South Central)	3·1	3·8	1·74	2·03	−0·29
	Coorg	22·7	?	29·03	?	?
	Mysore*	?	?	5·38	4·87	+0·51
	Konkan	17·7	19·2	23·96	27·15	−3·19
	Bombay Deccan	10·4	8·2	5·81	5·75	+0·06
	Khandesh	8·3	7·6	5·59	5·69	−0·10
Central Provinces and Berar.	Berar	9·3	?	6·37	?	?
	Central Provinces (West)	11·5	8·8	11·77	7·49	+4·28
	Do. (Central)	14·0	9·1	13·23	8·22	+5·01
	Do. (East)	14·0	9·0	16·47	8·19	+8·28
Bombay (North)	Gujarat	8·6	6·7	6·19	6·26	−0·07
	Kathiawar	6·4	3·6	3·78	3·26	+0·52
	Sind	0·9	?	0·21	0·21	0
Rajputana and Central India.	Central India (East)	9·6	?	8·40	5·88	+2·52
	Rajputana (East), Central India (West)	4·4	?	2·68	3·07	−0·39
	Rajputana (West)	1·8	?	1·01	1·57	−0·56
Madras	East Coast (North)	9·1	6·7	7·90	4·90	+3·00
	Do. (do.) (*a*)	17·0	11·1	15·83	10·41	+5·42
	Hyderabad (South)*	?	?	3·76	4·52	−0·76
	Madras (Central)	4·6	4·6	2·24	2·63	−0·39
	East Coast (Central)	3·0	3·1	1·58	1·65	−0·07
	Do. (South)	1·5	3·8	0·84	2·27	−1·43
	Madras (South)	1·8	2·2	0·81	1·06	−0·25

* NOTE.—The figures entered against divisions marked with an asterisk have been obtained from the Weekly Telegraphic Reports.

Assam received moderate to heavy rain during the first week of the month. The rainfall during this period was light in the Assam Valley and moderately heavy in Cachar. A break followed, lasting in the Brahmaputra Valley districts until the 16th. Cachar obtained light occasional showers from the 10th to the 15th. Daily showers were received in all districts from the 16th to the end of the month.

The rainfall of the month was more or less considerably in defect over the whole province. The deficiency was most marked in the central districts of the Assam Valley.

The following gives comparative data for the two divisions of the province :—

Division.	Number of rainy days.		Rainfall.		
	Average actual, June 1895.	Variation from normal.	Average actual, June 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches.	
Assam (Surma) .	17·4	−2·9	14·74	−8·52	−37
,, (Brahmaputra) .	11·3	−5·8	9·38	−6·46	−41

The abnormal character of the rainfall in Assam is shown even more clearly by the data for Cherra Poonjee than by the preceding means. Cherra Poonjee received 1·98 inches during the first week of the month, 0·35 inch in the second week, 6·83 inches in the third week and 2·15 inches only during the fourth week terminating on the 29th. It obtained in the month of June 1895 a total rainfall of barely 14 inches or 16 per cent. of the normal fall of the month (87 inches).

The rainfall of the month in Bengal was very unequally distributed, chiefly due to the character and line of march of the cyclonic storms of the month.

Weather was unsettled with numerous thunderstorms in Bengal during the first six days of the month. The rainfall due to these storms was heavy and general in Bengal (more especially in North Bengal), but was light and scattered in Orissa and Chota Nagpur. Practically no rain fell during that period in Bihar with the exception of the Sonthal Parganas.

Fine weather with local sporadic showers obtained from the 6th to the 14th, after which rainy weather set in over the province and held more or less steadily during the remainder of the month.

A cyclonic storm, which formed in the north-west angle of the Bay, initiated the monsoon rains proper in Orissa and Bengal. Orissa obtained heavy rain from this storm on the 18th, 19th and 20th. Bengal received moderate rain during the same period, and Bihar light to moderate rain. After the storm broke up in Rajputana on the 21st, general rainy weather continued in Bengal, lasting until the 24th. The rainfall during this period was heavy in South-West Bengal, Orissa and Chota Nagpur, light to moderate in East and North Bengal, and light and scattered in Bihar. A brief interval of fine weather and light showers followed from the 25th to the 27th during which the second cyclonic storm of the month was generated. This crossed the Orissa coast on the 28th and passed through Chota Nagpur on the 29th and the south-east districts of South Bihar and the eastern districts of the North-Western Provinces on the 30th. The rainfall accompanying this storm was much heavier and more concentrated than that of the previous storm. Hence Orissa, Chota Nagpur, South Bihar and the western districts of South-West Bengal received a very heavy burst of rain during the advance of the storm from the 28th to the 30th, and East and North Bengal obtained only light to moderate local showers. The following gives the most noteworthy falls in 24 hours during the period from the 27th to the 30th :—

District.	Station.	Date.	Heaviest rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Cuttack . . .	Kendrapara . . .	27th	5·11
Puri	Puri	,,	7·89
	Gop	,,	8·35
	Ranpur . . .	,,	8·49
Orissa Tributary Mahals	Bishpara . . .	,,	5·10
Cuttack . . .	Cuttack . . .	28th	5·74
	Dharmasala . .	,,	7·34
	Pal Lahera . . .	,,	7·08
	Cuttack . . .	29th	5·40
	Kendrapara . . .	,,	6·20

The rainfall was excessive in Orissa during this storm.

Orissa hence obtained a total rainfall during the month, considerably in excess of its normal, as is shown by the following statement for the three Collectorates.

Division.	Actual, June 1895.	Normal, June.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Puri	22·17	7·89	+ 14·28	+181
Cuttack	22·02	9·12	+ 12·90	+141
Balasore	17·51	8·25	+ 9·26	+112

Orissa hence received from two to three times the normal fall of the month.

The rainfall of the month did not differ to any important extent from the normal in Chota Nagpur, Bihar and the greater part of South-West Bengal. It was, on the other hand, in large defect in North Bengal and the greater part of East Bengal. The following gives comparative data for all districts, in which the deficiency averaged more than 50 per cent :—

District.	Rainfall.			
	Average actual, June 1895.	Average normal, June.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Jalpaiguri	7·66	29·12	—21·46	—74
Rangpur	7·36	21·49	—14·13	—66
Kuch Bihar	11·43	32·75	—21·32	—65
Mymensingh	6·57	17·42	—10·85	—62
Darbhanga	3·13	8·00	— 4·87	—61
Tipperah	7·21	17·21	—10·00	—58
Faridpur	5·60	12·61	— 7·01	—56
Backergunge	8·23	18·66	—10·43	—56
Bogra	6·14	13·11	— 6·97	—53
Dacca	6·20	12·91	— 6·71	—52
Dinajpur	6·43	13·25	— 6·82	—51

The areas of greatest deficiency of rainfall were hence Jalpaiguri, Rangpur and Kuch Bihar in North Bengal and Tipperah, Backergunge and Faridpur in East Bengal.

The following table gives comparative data for the eight meteorological divisions into which the province is divided, and shows the general character of the distribution of the rainfall of the month :—

Division.	Number of rainy days.		Rainfall.		
	Average actual, June 1895.	Variation from normal.	Average actual, June 1895.	Variation from normal.	Percentage variation.
			Inches.	Inches.	
Bengal, East	12·9	—4·0	9·05	— 9·91	— 52
,, North	11·6	—5·6	10·91	—13·52	— 55
,, Deltaic	13·3	+0·5	8·71	— 1·91	— 18
,, Central	10·9	—1·1	6·80	— 3·40	— 33
Orissa	13·9	+3·9	20·08	+11·23	+127
Chota Nagpur	12·9	+2·2	9·95	+ 1·70	+ 21
North Bihar	7·8	—1·2	6·27	— 2·34	— 27
South Bihar	7·6	+0·3	4·98	— 0·77	— 13

Little or no rain fell in the North-Western Provinces during the first ten days of the month except in the hill districts and Rohilkhand in which series of thunderstorms on the 6th and 7th gave some heavy showers.

The greater part of the province obtained moderate rain on the 12th and three following days. The rainfall during this period was lightest in the eastern and south-western districts. Light local showers were received from the 16th to the 20th. The disappearance of the second cyclonic storm of the month in Rajputana was followed by a strong influx of humid winds into the province which gave general and heavy rain from the 21st to the 27th. The rainfall during this period was however very light in some parts of Oudh and in the south-western districts of the North-Western Provinces, including Agra, Muttra, Aligarh and Bulandshahr. The Muzaffarnagar, Saharanpur and Dehra Dun districts received very heavy downpours on the 24th and 25th. The following gives the most noteworthy falls :—

District.	Station.	Date.	Heaviest rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Saharanpur	Naiashahr	24th	7·50
,,	Kalsia	,,	5·00
,,	Salimpur	,,	5·00
,,	Muhammadpur	25th	8·50
,,	Saharanpur	,,	5·60
Muzaffarnagar	Jaoli-Jansath	,,	7·10
Dehra Dun	Chakrata	,,	5·01

The hill districts and Rohilkhand continued to receive moderate to heavy daily rain until the end of the month. The rainfall was very irregularly distributed and local in character over the remainder of the province during the period from the 26th to the 29th. The third cyclonic storm of the month began to affect the south-eastern districts of the province on that day. General rain was received over the greater part of the province during the next 24 hours. The rainfall was very heavy in the south-eastern districts and more especially in the Banda, Fateh-

pur and Hamirpur districts, in which the following large amounts were registered at 8 A.M. of the 30th :—

District.	Station.	Heaviest rainfall during 24 hours preceding 8 A.M. of the 30th.
		Inches.
Banda	Mau	7·80
„	Karwi	7·56
„	Badausa . . .	6·05
„	Banda . . .	5·78
„	Kamasin . . .	5·27
Hamirpur	Maudha . . .	6·16
Fatehpur	Ghazipur . . .	5·90

The following gives a comparative statement of the rainfall of the month for the six meteorological divisions :—

Division.	Number of rainy days.		Rainfall.		
	Average actual, June 1895.	Variation from normal.	Average actual, June 1895.	Average normal, June.	Percentage variation.
			Inches.	Inches.	
Oudh, North . . .	9·4	+3·8	9·01	4·93	+ 83
„ South . . .	6·4	+1·8	6·25	4·39	+ 42
N.-W. P. (East) . .	8·1	+3·0	6·17	4·29	+ 44
„ (Central) . .	8·5	+4·3	8·11	3·47	+114
„ (Submontane) .	10·3	+4·3	10·16	5·56	+ 83
„ (West) . .	7·7	+4·0	5·87	2·74	+114

The rainfall of the month was in moderate excess in the eastern division of the North-Western Provinces and in South Oudh, and was more or less largely in excess in the remaining divisions. The excess was absolutely greatest in the west and central divisions and relatively greatest in the west and central divisions in each of which it averaged 114 per cent. in amount.

The rainfall was very irregularly distributed. It was in very large excess in the districts for which comparative data are given below :—

District.	Rainfall.			Percentage variation.
	Average actual, June 1895.	Average normal, June.	Variation from normal.	
	Inches.	Inches.	Inches.	
Banda	12·12	4·19	+ 7·93	+189
Fatehpur . . .	10·17	3·72	+ 6·45	+173
Hamirpur . . .	12·03	4·20	+ 7·83	+186
Jhansi	8·15	3·82	+ 4·33	+113
Meerut	10·00	2·46	+ 7·54	+307
Moradabad . . .	10·58	4·27	+ 6·31	+148
Muzaffarnagar . .	11·11	3·10	+ 8·01	+258
Saharanpur . . .	13·41	4·23	+ 9·18	+217

Kamasin in the Banda district received a total of 29·30 inches, very nearly seven times the total normal fall of the month (4·22 inches).

The following gives comparative data for the four districts in which the rainfall was normal or in slight defect :—

District.	Rainfall.			Percentage variation.
	Average actual, June 1895.	Average normal, June.	Variation from normal.	
	Inches.	Inches.	Inch.	
Partabgarh . . .	5·07	4·35	+0·72	+17
Unao	4·10	4·21	—0·11	— 3
Ghazipur . . .	3·99	3·92	+0·07	+ 2
Benares	3·78	4·36	—0·58	—13

The Punjab received more favourable rain than usual in June. There were three periods of disturbance and of more or less general precipitation.

The first period was from the 3rd to the 8th, when the south, central, submontane and hill districts received light thundershowers.

The second period extended from the 12th to the 18th. The Bombay current began to give rain in the west coast districts on the 12th, and gave rise to a storm which drifted slowly north-westwards off the Sind and Kathiawar coasts during this period. The feeble influx of humid winds into the interior of North-Western India during this period gave numerous series of duststorms and thunderstorms. The rainfall during this period was fairly general in the submontane and hill districts of the Punjab

and was light and sporadic over the remainder of the Province. The heaviest falls in 24 hours during this period were as follows :—

District.	Station.	Date.	Heaviest rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Rawalpindi	Murree	11th	3·56
Hazara	Abbottabad	,,	3·45
Kangra	Kangra	,,	3·08
,,	Hamirpur	12th	3·42
Gurdaspur	Pathankot	,,	3·00
Umballa	Umballa	13th	4·12
Bannu	Isa Khel	17th	3·09
Gurdaspur	Gurdaspur	18th	5·00

The third period of rainfall extended from the 24th to the end of the month. General and moderate to heavy rain was received during this period in the whole province excepting the south-western districts. The following gives the most noteworthy falls in 24 hours during this period :—

District.	Station.	Date.	Heaviest rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Umballa	Dadupur	25th	7·10
,,	Jagadhari	,,	5·93
,,	Umballa	,,	3·40
Kangra	Palampur	,,	6·82
Simla	Simla	,,	3·60
,,	Kasauli	,,	3·00
Hazara	Haripur	26th	5·42
Rawalpindi	Kahuta	,,	4·40
,,	Rawalpindi	,,	3·25
Jullundur	Phillour	,,	3·52
Ludhiana	Ludhiana	,,	3·17
Umballa	Jagadhari	,,	3·15
Gurdaspur	Sibri	,,	3·14
Kangra	Palampur	26th	3·12
Peshawar	Lahore (Utman Kolak)	,,	3·15
Umballa	Pipli	28th	3·14
Patiala State	Jodhpur	,,	3·04
Dera Ismail Khan	Kulachee	29th	3·31
Delhi	Mahrauli	,,	3·20
Jhind State	Safidan	30th	3·10

The heaviest falls were hence restricted to the hill and submontane districts.

The following gives a comparative statement of the rainfall of the month in the six divisions of the province :—

Division.	Number of rainy days.			Rainfall.		
	Average actual, June, 1895.	Average normal, June.	Variation from normal.	Average actual, June 1895.	Average normal, June.	Variation from normal.
				Inches.	Inches.	Inches.
Punjab, South	4·6	2·0	+2·6	2·55	1·40	+1·15
,, Central	5·0	2·7	+2·3	3·44	2·18	+1·26
,, Submontane	8·5	3·2	+5·3	4·21	2·84	+1·37
,, Hills	13·2	6·9	+6·3	11·74	4·78	+6·96
,, North-West	4·4	1·9	+2·5	3·69	1·34	+2·35
,, West	2·8	1·2	+1·6	1·79	0·64	+1·15

The rainfall of the month was hence above the normal over the whole province. The excess was greatest, absolutely in the hill districts and north-west division, and relatively to the normal in the west division (180 per cent. in excess), the north-west division (176 per cent. in excess), and the hills division (146 per cent. in excess).

British Baluchistan received light sporadic showers from the 12th to the 14th, the 22nd to the 24th, and on the 29th and 30th, but the total falls were not large. It is, however, probable that the rainfall of the month was considerably larger than usual. Thus Quetta obtained a total of 0·76 inch, the normal fall being only a tenth of an inch.

The rainfall of the month was scanty over the greater part of Rajputana, and occurred chiefly as local showers during two periods of slight disturbance. The first period was from the 12th to the 16th, corresponding with the

first monsoon rains of North-Western India brought up by humid winds from the west coast. The second period was from the 25th to the end of the month. The rainfall during this period occurred chiefly in the eastern and central states. The following gives comparative data for the larger states:—

STATE.	RAINFALL.			
	Average actual, June, 1895.	Average normal June.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Jodhpore	1·00	1·63	—0·63	—39
Jeypore	1·51	2·54	—1·03	—41
Ajmere	1·71	2·18	—0·47	—22
Bhurtpore	3·02	1·83	+1·19	+65
Ulwar	1·93	3·36	—1·43	—43
Kotah	3·59	3·34	+0·25	+ 7
Kerowlee	1·55	2·91	—1·36	—47
Oodeypore	7·38	3·49	+3·89	+111
Dholpur	4·23	?	?	?
Sirohee	4·54	3·51	+1·03	+29

Central India was rainless from the 1st to the 10th. It obtained almost daily rain from the 10th to the 26th or 27th in the western states and until the end of the month in Bundelkhand, Baghelkhand and Gwalior. The passage of the first cyclonic storm generated in the Bay through Central India gave a heavy burst of rain, more especially to the western states. The following large amounts were registered during this period :—

STATE.	STATION.	Date.	Heaviest rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Bhopal	Asta	20th	5·22
Ditto	Shujaulpur	"	5·07
Gwalior	Agar	"	5·62
Bhopal	Sehore	21st	6·26
Ditto	Narsinghgarh	"	5·25
Indore	Indore	"	5·00

Bundelkhand and Baghelkhand had heavy falls of rain on the 29th and 30th during the passage of the second cyclonic storm through Chota Nagpur and the eastern districts of the North-Western Provinces. The largest fall of the month in this area was 7·39 inches on the 30th at Tyonthar in Rewah.

The following table gives comparative data for the larger divisions or states :—

STATE.	RAINFALL.			
	Average actual, June, 1895.	Average normal June.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Rewah	14·72	7·13	+7·59	+106
Bundelkhand	10·62	4·84	+5·78	+119
Gwalior	5·25	4·59	+0·66	+ 14
Bhopal	8·41	6·62	+1·79	+ 27
Indore	7·50	6·79	+0·71	+ 10
Rutlam	3·90	5·64	—1·74	— 31
Nagode	13·49	4·92	+8·57	+174
Maihar	15·01	6·13	+8·88	+145

The rainfall of the month was hence in large excess over the eastern half of this area.

In the Central Provinces light occasional showers fell in all districts from the 9th to the 15th. During the remainder of the month more or less heavy general rain was received daily.

Very heavy falls occurred in the eastern and northern districts on the 20th and following days, due in part to the indraught to the first storm of the monsoon season which formed in the Bay and advanced westwards.

The following gives the most noteworthy falls in 24 hours :—

DISTRICT.	STATION.	Date.	Heaviest rainfall during 24 hours preceding 8 A.M. of date.
			Inches.
Balaghat	Behir	20th	5·84
Ditto	Burha	"	5·20
Wardha	Wardha	"	5·15
Hoshangabad	Hoshangabad	21st	7·04
Ditto	Pachmarhi	"	5·64
Chanda	Armori	24th	7·70
Raipur	Dhamtari	"	5·56
Bilaspur	Bilaspur	"	5·30
Sambalpur	Bargarh	"	5·20
Bhandara	Sakoli	25th	9·79
Ditto	Bhandara	"	7·10
Ditto	Tirora	"	6·17
Nagpur	Ramtek	"	7·06
Hoshangabad	Sohagpur	"	6·90
Damoh	Tejgarh	27th	5·43
Sambalpur	Bargarh	29th	7·88

The rainfall was hence exceptionally heavy in the Bhandara district on the 25th.

The following is a comparative statement of the total rainfall of the month :—

Division.	Number of rainy days.		Rainfall.		
	Average actual, June, 1895.	Variation from normal.	Average actual, June, 1895.	Variation from normal.	Percentage variation.
			Inches.	Inches.	
Central Provinces (East).	14·0	+5·0	16·47	+8·28	+101
Ditto (Central)	14·0	+4·9	13·23	+5·01	+ 61
Ditto (West) .	11·5	+2·7	11·77	+4·28	+ 57

The rainfall of the month was hence in large general excess, the amount relatively to the normal (*i.e.*, expressed as a percentage) diminishing from the eastern to the western districts. The rainfall in the most westerly district, *viz.*, Nimar averaged 6·45 inches or only 6 per cent. in excess of the normal rainfall of the month (6·09 inches).

Berar obtained daily rain from the 9th to the 25th, after which a break set in lasting to the end of the month. The falls were generally light and the only days on which heavy general rain was received were the 20th and 21st. It obtained an average total rainfall of 6·37 inches, 0·69 inches or 10 per cent. below the normal precipitation of the month.

The coast districts of Bombay, with the exception of North Canara, were rainless during the first ten days of the month. The first general rain due to the monsoon was received on the 12th, and daily rain fell during the remainder of the month. The first and heaviest burst extended from the 14th to the 21st. The following gives data showing the mean rainfall in the Konkan coast districts day by day during this period :—

District.	Average actual rainfall during 24 hours preceding 8 A.M. of date.								Total of period.
	14th.	15th.	16th.	17th.	18th.	19th.	20th.	21st.	
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
North Canara .	1·97	1·62	1·37	2·06	2·44	4·67	1·71	1·28	17·72
Ratnagiri . .	0·74	2·26	3·28	3·45	2·65	3·08	3·64	1·79	20·90
Kolaba . .	0·17	1·75	1·09	1·42	0·84	1·45	3·84	4·76	15·32
Thana . .	0·06	0·77	0·77	0·48	0·47	1·27	2·42	3·94	10·18

The rainfall was, on the whole, not so heavy as occasionally accompanies the burst of the monsoon on the west coast. The only reported fall in 24 hours exceeding 10 inches was 11·48 inches at Mandangad in the Ratnagiri district.

The Deccan districts received frequent general showers during the first ten days of the month and moderate rain during the remainder of the month, the largest amounts being received in the districts nearest to the hills. The period of most general rainfall was from the 16th to the 25th. The following gives comparative data for the four districts in this area :—

District.	Rainfall.		
	Average actual, June, 1895.	Average normal, June.	Variation from normal.
	Inches	Inches.	Inches.
Dharwar	5·46	3·54	+1·92
Bijapur	1·94	3·59	—1·65
Belgaum	8·25	8·24	+0·01
Poona	6·44	7·84	—1·40

Khandesh and Gujarat were practically rainless during the first ten days of the month. They obtained moderate and fairly general rain between the 10th and the 25th, the chief periods of rain being the 10th, the 12th to the 15th, and 19th to the 23rd. Kathiawar and Cutch had some light showers between the 13th and 19th, but general rain did not commence in that area until the 21st, and the rainfall was moderate in amount during the remainder of the month.

The following table gives a comparative statement of the rainfall of the month in the six divisions of the Bombay Presidency :—

Division.	Number of rainy days.		Rainfall.		
	Average actual, June, 1895.	Variation from normal.	Average actual, June, 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches.	
Konkan . . .	17·7	—1·5	23·96	—3·19	—12
Bombay Deccan . .	10·4	+2·2	5·81	+0·06	+ 1
Khandesh . . .	8·3	+0·7	5·59	—0·10	— 2
Gujarat	8·6	+1·9	6·19	—0·07	— 1
Kathiawar . . .	6·4	+2·8	3·78	+0·52	+16
Sind	0·9	?	0·21	0	0

The preceding statement establishes that the rainfall of the month was in slight defect (12 per cent.) in the Konkan and was normal in the Deccan, Khandesh, Gujarat and Sind. It was in slight excess in Kathiawar, averaging about 16 per cent. in amount.

The rainfall in the Madras Presidency was even more unequally distributed than usual.

The Malabar coast districts received some light showers from the 1st to the 11th. The average total rainfall of the Malabar district for this period was only 1·08 inches, and of the South Canara district 1·19 inches.

The monsoon rains proper commenced on the 12th, and held steadily during the remainder of the month. The following gives the average daily rainfall in these districts from the 14th to the 23rd (a period of ten days) :—

Date.	Rainfall.	
	Malabar.	South Canara.
	Inches.	Inches.
14th	3·99	3·55
15th	1·31	3·60
16th	3·33	3·72
17th	2·48	2·71
18th	1·55	2·58
19th	7·23	4·94
20th	3·65	2·40
21st	2·12	2·14
22nd	1·54	1·38
23rd	1·54	2·48
Total	28·74	29·50

giving an average daily fall of nearly three inches in those two districts during this period. The heaviest falls in 24 hours were 11·9 inches at Tellicherry and 10·66 inches at Badagara, both on the 19th. The data illustrate clearly the character of the rainfall accompanying the monsoon proper in the west coast districts, as distinguished from the rainfall in May due to local thunderstorms. Although the monsoon rains commenced on the Malabar Coast nearly a fortnight later than usual, the rainfall of the month in the Malabar division was in slight excess, *viz.*, 2·07 inches, or 6 per cent. above the normal (37·3 inches).

The southern and south-central divisions of Madras received occasional showers, local in character, chiefly from the 11th to 13th and the 19th to the 22nd. The east coast, south and central, and the Deccan districts obtained occasional showers which gave fairly general rain, more especially on the 6th, the 10th to the 12th, the 19th and 20th and the 24th and 25th. The rainfall of the month was scanty in all these districts and below the small normal of the month. The deficiency was most marked in the Tanjore, Chingleput and North and South Arcot districts.

The northern coast districts received frequent general rain, more especially on the 8th and 9th, the 17th to the 20th, and the 23rd to the 29th. The rainfall of the second and third periods occurred during the initiation and development of the two cyclonic storms of the month in the north of the Bay. The Ganjam district received an average of 1·73 inches on the 23rd and 2·12 inches on the 24th, and the Vizagapatam district an average of 2·36 inches on these two days. The rainfall of the month was in considerable excess in this division, and more especially in the Ganjam and Vizagapatam districts. The following gives comparative data for the 22 Collectorates of the Presidency :—

District.	Number of rainy days.		Rainfall.		
	Average actual, June, 1895.	Average normal, June.	Average actual, June, 1895.	Average normal, June.	Variation from normal.
			Inches.	Inches.	Inches.
Ganjam	12·6	6·8	13·42	5·08	+8·34
Vizagapatam	11·6	8·1	9·85	5·91	+3·94
Godavari	5·9	5·9	3·76	4·54	−0·78
Kistna	5·2	5·9	3·93	4·23	−0·30
Nellore	3·0	3·1	1·58	1·65	−0·07
Chingleput	1·9	4·8	0·83	3·10	−2·27
Madras	3·0	4·7	0·90	2·07	−1·17
North Arcot	2·7	4·5	1·46	2·86	−1·40
South Arcot	1·1	4·0	0·74	2·16	−1·42
Tanjore	0·6	3·2	0·37	1·97	−1·60
Trichinopoly	1·6	2·1	0·97	1·21	−0·24
Madura	1·5	2·3	0·83	1·21	−0·38
Tinnevelly	2·1	2·0	0·78	0·87	−0·09
Malabar	20·9	23·9	38·47	32·01	+6·46
South Canara	20·6	26·2	40·99	44·96	−3·97
Salem	2·7	4·4	1·75	2·54	−0·79
Coimbatore	3·7	3·0	1·74	1·42	+0·32
Nilgiris	12·4	13·8	13·79	10·64	+3·15
Cuddapah	3·5	4·4	1·43	2·30	−0·87
Anantapur	4·7	4·4	1·79	2·32	−0·53
Bellary	5·3	5·2	3·64	2·89	+0·75
Kurnool	5·3	5·5	2·32	3·08	−0·76

Table

Abstract of Observations taken at 8 A.M. at 205

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
I.—Burma Coast and Bay Islands.		...	...	−·001	...	...	...	...	...	...	...	86·8	+0·9	76·7	+1·0	81·8	+1·0	10·1	...	...	...	...	18·0
Bay Island .	Port Blair .	61	29·761	?	29·752	29·841	4th	29·618	16th	·223	81·7	86·9	?	78·3	?	82·6	?	8·6	91·1	5th	74·5	24th	16·6
	Camorta .	...	...	...	...	...	...	...	...	Not	received.	...	...	...	...	...	...	...	...	...	...	...	...
Tenasserim .	Mergui .	96	29·778	?	29·806	29·875	20th	29·671	16th	·204	80·9	87·1	?	75·5	?	81·3	?	11·6	90·6	14th	73·1	4th & 20th.	17·5
	Tavoy .	26	29·847	?	29·804	29·968	19th	29·720	16th	·248	78·8	85·4	?	75·0	?	80·2	?	10·4	90·7	11th	72·7	19th	18·0
	Moulmein .	94	29·734	+·007	29·766	29·835	20th	29·582	17th	·253	78·4	85·3	+1·0	75·3	+0·8	80·3	+0·9	10·0	96·0	12th	71·3	5th	24·7
	Toungoo .	183	29·587	−·007	29·712	29·684	4th	29·440	17th	·244	80·4	90·3	+1·9	76·3	+1·1	83·3	+1·5	14·0	93·7	11th	74·2	27th	19·5
Lower Burma .	Rangoon .	41	29·753	−·007	29·731	29·846	20th	29·577	17th	·269	79·4	86·9	+0·7	76·7	+0·3	81·8	+0·5	10·2	91·2	2 days	73·4	20th	17·8
	Bassein .	27	29·757	?	29·719	29·847	4th	29·561	17th	·286	80·3	87·0	+0·9	76·6	+0·4	81·8	+0·7	10·4	92·2	6th	74·8	5 days	17·4
	Diamond Island,	41	29·739	−·007	29·715	29·834	4th	29·539	17th	·295	83·0	85·8	+0·3	79·0	+3·2	82·4	+1·8	6·8	87·6	2 days	74·4	2nd	13·2
Arakan .	Akyab .	20	29·712	+·011	29·675	29·834	4th	29·554	18th	·280	81·6	86·7	+0·8	77·8	−0·1	82·3	+0·4	8·9	90·2	2 days	72·7	20th	17·5
II.—Burma Inland.		...	...	+·007	...	...	...	...	...	...	...	89·2	+0·2	74·2	+0·8	81·7	+0·5	15·1	...	...	...	...	22·6
Central Burma .	Thayetmyo .	134	29·618	+·007	29·694	29·720	4th	29·472	17th	·248	81·5	91·5	+0·5	77·6	+1·2	84·6	+0·9	13·9	95·6	12th	75·6	22nd	20·0
	Minbu .	?	29·591	?	?	29·711	4th	29·462	17th	·252	81·3	91·2	?	77·4	?	84·3	?	13·8	94·6	24th	74·6	1st	20·0
	Yamethin .	?	29·110	?	?	29·207	4th	28·981	17th	·226	80·1	92·2	?	75·2	?	83·7	?	17·0	97·2	18th	73·5	3rd	23·7
	Taunggyi .	?	?	?	?	?	...	?	...	?	67·7	77·4	?	63·8	?	70·6	?	13·6	82·2	24th	60·5	5th	21·7
Upper Burma .	Mandalay .	248	29·492	?	29·688	29·615	4th	29·388	17th	·227	83·0	93·6	?	78·2	?	85·9	?	15·4	96·5	25th	75·6	14th	20·9
	Kindat .	?	29·360	?	?	29·496	4th	29·235	18th	·261	80·3	90·5	−0·1	76·6	+0·4	83·6	+0·2	13·9	97·3	14th	73·0	8th	24·3
	Lashio .	?	27·021	?	?	27·148	4th	26·920	17th	·228	74·3	85·5	?	68·9	?	77·2	?	16·6	89·5	2 days	64·0	4th	25·5
	Bhamo .	?	29·360	?	?	29·483	4th	29·239	17th	·244	80·4	92·0	?	75·5	?	83·8	?	16·5	97·1	13th	72·3	3 days	24·8
III.—Assam.		...	...	+·031	...	...	...	...	...	...	...	91·5	+2·6	76·8	+0·7	84·2	+1·7	14·7	...	...	...	...	26·4
Assam (Surma) .	Silchar .	104	29·609	+·024	29·664	29·747	5th	29·450	27th	·297	81·8	92·5	+3·8	76·5	+0·4	84·5	+2·1	16·0	99·6	20th	71·3	4th	28·3
	Dapoota .	?	29·419	?	29·660	29·577	5th	29·285	27th	·292	81·9	93·9	?	76·0	?	85·0	?	17·9	99·6	14th	71·7	5th	27·9
Brahmaputra .	Sibsagar .	333	29·376	+·021	29·665	29·542	4th	29·225	28th	·317	81·0	90·4	+0·7	76·7	+0·1	83·6	+0·4	13·7	96·7	14th	71·0	5th	25·7
	Dhubri .	115	29·576	+·047	29·646	29·702	5th	29·442	28th	·260	81·6	89·0	+3·4	78·0	+1·6	83·5	+2·5	11·0	95·2	14th	71·6	4th	23·6
IV.—Bengal and Orissa.		..	...	+·029	...	...	...	...	...	...	...	90·5	+0·3	77·7	−0·1	84·1	+0·1	12·8	...	...	...	...	25·8
East Bengal .	Chittagong .	87	29·605	+·007	29·640	29·721	4th	29·438	27th	·283	81·2	88·3	+2·1	76·7	+0·2	82·5	+1·2	11·6	92·7	19th	71·1	1st	21·6
	Lungleh .	?	?	?	?	?	?	?	?	?	71·3	77·5	?	67·4	?	72·4	?	10·1	80·8	19th	61·6	4th	19·2
	Noakhali .	43	29·647	+·018	29·637	29·790	4th	29·493	28th	·297	81·7	86·7	?	76·7	?	81·7	?	10·0	90·0	27th	72·3	13th	17·7
	Comilla .	36	29·650	+·027	29·633	29·787	4th	29·489	28th	·298	81·8	89·9	?	76·4	?	83·2	?	13·5	94·3	19th	70·8	4th	23·5
	Sirajganj .	49	29·615	+·027	29·614	29·744	10th	29·456	28th	·288	81·5	89·5	?	76·9	?	83·2	?	12·6	93·3	15th	71·2	4th	22·1
	Narayanganj	26	29·649	+·030	29·624	29·783	4th	29·472	28th	·311	82·4	89·6	+0·6	78·7	+0·4	84·2	+0·5	10·9	94·1	19th	69·2	3rd	24·9
	Barisal .	13	29·658	+·031	29·616	29·784	4th	29·467	28th	·31	83·1	89·6	+0·6	78·4	+0·6	84·0	+0·6	11·2	93·8	13th	72·9	1st	20·9
	Mymensingh	59	29·630	+·039	29·640	29·769	10th	29·474	28th	·29	82·1	89·3	+2·1	77·2	+0·7	83·3	+1·4	12·1	93·2	19th	69·6	3rd	23·6
Deltaic Bengal .	Faridpur .	46	29·635	+·034	29·629	29·762	5th	29·463	28th	·29	82·8	89·7	?	77·8	?	83·8	?	11·9	93·8	3rd	70·9	3rd	22·9
	Jessore .	33	29·615	+·024	29·594	29·751	9th	29·399	28th	·35	84·1	91·6	0	78·5	−0·4	85·1	−0·2	13·1	97·5	3rd	73·4	5th	24·1
	Calcutta .	21	29·608	+·024	29·575	29·752	5th	29·347	28th	·40	83·4	90·4	−0·9	77·8	−1·0	84·1	−1·0	12·6	96·9	1st	72·7	1st	24·2
	Saugor Island	25	29·592	+·010	29·561	29·756	5th	29·281	28th	·475	84·3	90·3	−0·9	80·6	−1·3	85·4	−0·9	9·7	93·7	2 days	76·5	21st	17·2
	Krishnagar .	47	29·593	+·027	29·588	29·746	8th	29·374	28th	·372	?	?	?	?	?	?	?	?	?	?	?	?	?
	Midnapore .	149	29·483	+·021	29·575	29·632	9th	29·227	28th	·405	82·7	92·4	?	77·9	?	85·2	?	14·5	102·3	1st	73·1	6th	29·2

I—*continued.*

stations in India, Burma, etc., in June 1895.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days	Normal number of rainy days.	Variation.	Rainfall of month	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th June 1895.	Normal rainfall for period 1st June to 30th June.	Variation from normal of period, 1st June to 30th June.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	23·85	25·98	−2·71	...	...	...	...	I.—Burma Coast and Bay Islands.	
1	...	...	...	...	3	11	10	5	11·4	10·0	+ 14	88	·956	8·5	16	?	?	26·44	18·79	+7·65	26·44	18·79	+ 7·65	4·55	Port Blair .	Bay Islands.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Camorta .	
...	5	...	...	1	1	5	9	9	1·5	1·9	− 21	87	·918	5·2	19	?	?	23·31	31·44	−8·13	23·31	31·44	− 8·13	3·49	Mergui. .	Tenasserim.
23	...	...	...	...	2	2	1	2	1·6	?	?	91	·902	7·0	22	?	?	28·35	?	?	28·35	?	?	4·61	Tavoy.	
...	...	...	3	7	5	9	4	1	3·6	3·4	+ 6	92	·892	8·9	26	27·00	−1·00	31·82	35·72	−3·90	31·82	35·72	− 3·90	4·58	Moulmein.	
5	...	...	1	15	8	1	...	...	3·7	4·8	− 23	89	·942	8·1	16	20·91	−4·91	12·05	14·61	−2·56	12·05	14·61	− 2·56	1·88	Toungoo.	
...	1	...	...	2	6	9	10	2	4·5	5·3	− 15	93	·934	8·7	22	23·27	−1·27	23·07	17·51	+5·56	23·07	17·51	+ 5·56	4·99	Rangoon .	Lower Burma.
4	...	...	3	4	11	6	2	...	5·2	4·0	+ 30	92	·951	6·8	21	21·84	−3·82	21·83	22·56	−0·73	21·83	22·56	− 0·73	3·21	Bassein.	
3	...	1	...	1	4	14	3	4	10·6	8·5	+ 25	81	·910	8·9	18	21·73	−3·73	17·01	23·20	−6·19	17·01	23·20	− 6·19	4·46	Diamond Island.	
...	1	4	9	5	9	1	...	1	4·3	3·9	+ 10	92	·999	8·2	23	23·09	−0·09	30·59	43·99	−13·40	30·59	43·99	−13·40	3·56	Akyab. .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7·94	10·20	−0·69	...	...	...	...	II. Burma Inland.	
...	...	...	...	6	19	2	1	2	7·4	8·2	− 9	82	·847	6·7	12	15·00	−3·00	4·11	6·94	−2·83	4·11	6·94	− 2·83	0·64	Thayetmyo .	Central Burma.
2	...	...	3	20	4	...	1	...	7·0	?	?	84	·967	3·8	7	?	?	6·13	?	?	6·13	?	?	1·40	Minbu.	
3	...	...	...	20	6	1	...	...	8·0	?	?	81	·847	2·3	6	?	?	3·00	?	?	3·00	?	?	0·84	Yamethin.	
9	...	...	...	11	4	5	...	...	?	?	?	89	·609	8·4	20	?	?	12·47	?	?	12·47	?	?	1·95	Taunggyi.	
1	2	1	...	9	7	9	...	1	7·6	?	?	77	·866	6·5	6	?	?	7·38	?	?	7·38	?	?	3·13	Mandalay .	Upper Burma.
21	...	...	1	4	...	1	...	3	1·2	?	?	90	·926	7·3	17	?	?	14·91	13·46	+1·45	14·91	13·46	+ 1·45	1·95	Kindat.	
			Not recorded.						?	?	?	85	·715	6·9	11	?	?	7·99	?	?	7·99	?	?	1·74	Lashio.	
14	3	3	1	3	2	4	...	...	2·0	?	?	87	·899	5·6	15	?	?	7·51	?	?	7·51	?	?	1·40	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9·89	20·50	−9·96	...	...	...	...	III.—Assam.	
30	...	...	...	...	...	...	...	...	2·1	3·1	− 32	86	·935	7·8	15	19·91	−4·91	13·62	21·67	−8·05	13·62	21·67	− 8·05	3·08	Silchar .	Assam (Surma).
1	1	3	11	3	3	1	6	1	?	?	?	89	·971	5·8	9	?	?	7·92	?	?	7·92	?	?	2·73	Dapoota.	
7	1	15	1	1	...	3	2	...	3·5	2·6	+ 35	90	·955	7·3	14	16·27	−2·27	12·94	13·40	−0·46	12·94	13·40	− 0·46	3·35	Sibsagar .	Brahmaputra.
2	3	5	10	3	1	5	1	...	4·9	4·9	0	86	·928	5·4	9	17·25	−8·25	5·08	26·44	−21·36	5·08	26·44	−21·36	1·19	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10·75	13·07	−2·90	...	...	...	...	IV.—Bengal and Orissa.	
...	...	4	6	13	6	...	1	...	6·7	6·9	− 3	85	·908	7·8	10	16·18	−6·18	14·01	22·14	−8·13	14·01	22·14	− 8·13	3·50	Chittagong .	East Bengal.
			Not recorded.						?	?	?	90	·693	?	22	?	?	20·46	?	?	20·46	?	?	3·10	Lungleh.	
...	...	2	8	16	1	1	1	1	6·0	?	?	87	·947	5·1	20	18·15	+1·85	14·98	26·07	−11·09	14·98	26·07	−11·09	2·96	Noakhali.	
...	...	...	16	2	10	2	...	...	5·8	?	?	92	·996	6·2	15	17·35	−2·35	7·72	19·13	−11·41	7·72	19·13	−11·41	1·19	Comilla.	
15	1	...	10	3	...	1	...	...	1·6	?	?	88	·943	7·9	13	12·55	+0·45	7·01	11·40	−4·39	7·01	11·40	− 4·39	2·03	Sirajganj.	
2	...	...	7	14	4	2	1	...	7·7	7·2	+ 7	88	·973	8·0	11	13·64	−2·64	5·54	13·22	−7·68	5·54	13·22	− 7·68	1·60	Narayanganj.	
12	...	3	5	6	4	...	...	...	3·5	?	?	86	·976	8·6	16	17·15	−1·15	7·51	15·74	−8·23	7·51	15·74	− 8·23	2·45	Barisal.	
...	...	3	12	12	1	...	1	1	5·3	?	?	84	·924	5·6	13	18·25	−5·25	9·33	18·52	−9·19	9·33	18·52	− 9·19	2·98	Mymensingh.	
3	1	...	4	15	5	1	1	...	4·4	?	?	88	·992	5·7	10	14·40	−4·40	5·22	12·49	−7·27	5·22	12·49	− 7·27	1·04	Faridpur .	Deltaic Bengal.
5	...	1	2	13	7	1	1	...	6·0	4·9	+ 22	86	1·004	6·3	11	14·55	−3·55	7·38	12·72	−5·34	7·38	12·72	− 5·34	2·44	Jessore.	
2	...	2	15	5	3	2	1	...	5·2	6·2	− 16	85	·972	6·5	16	12·00	+4·00	11·82	10·91	+0·91	11·82	10·91	+ 0·91	1·53	Calcutta.	
..	1	4	6	2	9	6	2	...	15·7	14·6	+ 8	86	1·017	8·5	16	11·64	+4·36	12·90	9·92	+2·98	12·90	9·92	+ 2·98	3·10	Saugor Island.	
1	...	...	11	8	8	1	1	...	6·7	?	?	?	?	6·1	14	11·95	+2·05	5·83	8·81	−2·98	5·83	8·81	− 2·98	0·79	Krishnagar.	
4	2	8	1	5	9	..	...	1	6·1	?	?	86	·962	5·2	15	10·80	+4·20	10·40	8·82	+1·58	10·40	8·82	+ 1·58	2·40	Midnapore.	

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar cistern above sea level in feet.	Pressure 8 A.M. in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal.	Bankura*	298	29·317	+·034	29·564	29·461	5th	29·098	29th	·366	82·6	94·0	?	77·5	?	85·7	?	16·5	106·1	1st	69·6	3rd	36·5
	Raniganj	334	29·297	?	29·577	29·441	6th & 8th.	29·077	29th	·367	82·9	95·4	?	78·1	?	86·8	?	17·3	106·3	1st	71·9	6th	34·4
	Burdwan	99	29·527	+·038	29·573	29·672	8th	29·303	28th	·369	83·3	93·2	−0·9	78·3	−1·2	85·8	−1·1	14·9	101·2	1st	72·2	6th	29·0
	Naya Dumka	489	29·144	?	29·587	29·310	9th	28·948	29th	·362	82·8	93·4	?	78·0	?	85·8	?	15·4	101·5	3rd	68·8	5th	32·7
	Berhampore	67	29·582	+·041	29·597	29·723	8th	29·391	28th	·333	82·6	93·5	+0·9	78·4	−0·1	86·0	+0·4	15·1	99·1	2 days	73·3	5th	25·8
	Rampore Boalia.	70	29·580	+·046	29·599	29·715	8th	29·400	28th	·315	83·5	90·9	?	78·1	?	84·5	?	12·8	96·1	3rd	69·1	4th	27·0
	Maida*	72	?	?	?	?	?	?	?	?	83·9	93·1	?	78·5	?	87·3	?	17·6	104·1	13th	72·5	5th	31·6
	Bogra	61	29·603	+·052	29·616	29·747	10th	29·418	28th	·299	82·8	91·1	+1·8	77·0	0	84·0	+0·9	14·1	95·2	14th & 15th	72·2	3rd & 5th	23·0
North Bengal	Dinajpur	123	29·554	+·050	29·631	29·709	10th	29·407	28th	·302	81·8	91·0	+1·8	77·7	+0·7	84·3	+1·3	13·3	96·3	14th	70·7	2nd	25·6
	Rangpur	123	29·560	+·041	29·637	29·090	10th	29·418	28th	·272	82·6	90·7	?	77·1	?	83·9	?	13·6	93·8	4 days	71·7	3 days	22·1
	Jalpaiguri	284	29·413	+·050	29·654	29·546	10th	29·277	28th	·269	81·7	90·1	+2·6	76·5	+1·7	83·4	+2·2	13·6	95·9	14th	70·6	5th	25·3
Orissa	Balasore	56	29·565	+·019	29·567	29·718	5th	29·269	28th	·449	83·0	90·9	−1·7	77·6	−1·0	84·3	−1·1	13·3	102·0	4th	71·4	7th	30·6
	False Point.	21	29·603	+·006	29·565	29·762	5th	29·308	28th	·454	83·2	89·2	−1·6	79·6	−0·6	84·6	−1·1	9·6	98·0	2 days	71·6	7th	26·4
	Cuttack	80	29·533	+·001	29·555	29·664	2 days	29·287	28th	·377	82·7	93·7	−2·2	79·4	−0·8	86·6	−1·5	14·3	111·3	1st	72·7	23rd	38·6
	Shortt's Island.	?	29·583	?	?	29·754	5th	29·221	28th	·533	83·8	89·2	?	80·7	?	85·0	?	8·5	96·2	17th	73·4	7th	22·8
	Puri	24	29·614	?	29·578	29·753	4th	29·410	28th	·343	83·2	88·5	?	79·8	?	84·2	?	8·7	99·7	16th	72·6	29th	27·1
V.—Gangetic Plain and Chota Nagpur.		...	...	+·039	...	...	...	...	...	...	...	96·4	−1·0	79·2	−0·3	87·8	−0·7	17·1	...	...	...	...	33·7
Chota Nagpur	Hazaribagh	2,007	27·627	+·017	29·555	27·771	8th	27·373	29th	·398	81·1	92·5	0	75·6	−0·3	84·1	−0·2	16·9	106·6	4th & 5th	70·3	30th	36·3
	Daltonganj	730?	28·884	?	29·558	29·023	10th	28·649	30th	·374	86·3	99·2	?	81·1	?	90·2	?	18·1	112·7	4th	73·0	30th	39·7
	Ranchi	2,128	27·501?	?	29·548?	27·675	8th	27·235	29th	·440	79·3	90·1	−1·7	74·3	−0·4	82·2	−1·1	15·8	106·3	5th	70·4	6th	35·9
	Chaibassa	760	28·842	+·021	29·545	28·996	8th	28·528	29th	·468	82·8	95·7	−1·3	78·2	−1·3	87·0	−1·3	17·5	112·1	4th	72·0	17th	40·1
Bihar, South	Gaya	375	29·236	+·035	29·562	29·384	8th	29·027	29th	·357	86·2	99·4	−0·5	80·9	+1·4	90·2	+0·5	18·5	111·6	4th	69·8	6th	41·8
	Dehri*	351	29·239	?	29·539	29·374	8th	29·027	30th	·347	87·1	99·5	?	?	?	?	?	?	112·5	4th	?	?	?
	Patna	183	29·433	+·029	29·567	29·581	10th	29·264	29th	·317	85·6	96·9	+0·3	79·9	−0·2	88·4	+0·1	17·0	105·5	14th	74·7	5th	30·8
	Arrah	190	29·431	?	29·571	29·570	10th	29·250	30th	·320	85·6	97·7	?	80·6	?	89·1	?	17·1	107·4	3 days	75·5	30th	31·9
	Buxar	239	29·366	?	29·557	29·514	10th	29·126	30th	·388	85·5	96·5	?	80·2	?	88·4	?	16·3	107·5	2nd	75·3	17th & 18th	32·2
Bihar, North	Purnea	125	29·536	+·055	29·614	29·679	5th	29·372	28th	·307	83·3	93·8	+1·5	78·6	+1·7	86·1	+1·6	15·2	102·3	14th	73·2	3rd	29·1
	Bhagalpur	160	29·470	+·049	29·581	29·611	5th	29·294	28th	·317	84·6	96·0	?	79·0	?	87·5	?	17·0	104·3	15th	71·6	5th	32·7
	Darbhanga	166	29·475	+·042	29·593	29·613	10th	29·315	28th	·298	84·9	95·2	+2·9	80·1	+1·1	87·7	+2·0	15·1	101·0	14th	75·5	4th	25·5
	Muzaffarpur	178	29·461	?	29·591	29·620	10th	29·296	28th	·324	84·2	95·0	?	78·6	?	86·8	?	16·4	101·2	14th	74·2	5th	27·0
	Motihari	224	29·417	+·058	29·597	29·562	10th	29·249	30th	·313	83·6	93·7	?	77·7	?	85·7	?	16·0	101·0	10th	71·8	5th	29·2
	Chapra	181	29·436	+·045	29·568	29·581	10th	29·266	30th	·315	85·2	97·0	?	79·7	?	88·3	?	17·3	105·8	2nd & 4th.	75·6	5th & 30th	30·2
N.-W. Provinces (Eastern Districts).	Benares	267	29·336	+·040	29·554	29·462	8th	29·102	30th	·360	†85·5	98·1	−2·9	80·5	−1·8	89·3	−2·4	17·6	112·3	4th	76·5	16th & 29th	35·8
	Allahabad	309	29·283	+·023	29·542	29·408	8th	29·061	30th	·347	87·4	99·2	−3·2	81·2	−1·7	90·2	−2·5	18·0	110·6	3 days	74·3	15th	36·3
N.-W. Provinces (East Sub-Montane).	Gorakhpur	256	29·363	+·049	29·575	29·528	10th	29·163	30th	·365	83·6	95·7	−2·0	78·7	−1·1	87·2	−1·6	17·0	106·8	10th	74·2	5th & 11th	32·6
Oudh, South	Lucknow	368	29·238	+·044	29·563	29·383	7th	29·068	30th	·315	85·2	97·7	−3·8	‡80·3	‡−0·7	‡90·1	−2·3	17·4	110·3	2nd & 4th.	72·8	30th	37·5
Oudh, North	Bahraich	403	29·222?	?	29·584?	29·356	7th	29·070	30th	·286	81·0	94·5	?	78·4	?	86·5	?	16·1	106·5	10th	74·0	3 days	32·5
N.-W. Provinces (Central).	Cawnpore	416	29·133	?	29·517	29·315	11th	29·010	30th	·305	86·5	99·0	?	80·5	?	89·8	?	18·5	109·5	10th	75·5	30th	34·0
	Mainpuri	516	29·084	?	29·550	29·220	8th	28·943	17th	·277	86·0	99·1	?	79·6	?	89·4	?	19·5	110·2	3rd	74·0	2nd	36·2

* Mean of 29 days. † Mean of 22 days. ‡ Mean of 17 days.

I—*continued.*

in India, Burma, etc., in June, 1895—continued.

Wind Direction. Number of Winds from								Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.							Heaviest rainfall during month.	Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th June 1895.	Normal rainfall for period 1st June to 30th June.	Variation from normal of period, 1st June to 30th June.			
11	...	1	10	6	1	...	...	...	3·6	?	?	82	·914	6·7	10	12·40	−2·40	8·68	9·35	−0·67	8·68	9·35	−0·67	2·38	Bankura* .	Central Bengal.
12	...	...	9	4	4	1	...	...	2·8	?	?	81	·909	5·5	11	11·30	−0·30	7·03	8·38	−1·35	7·03	8·38	−1·35	1·54	Raniganj.	
...	3	3	3	12	6	2	1	...	5·1	4·9	+ 4	81	·929	6·7	13	11·27	+1·73	11·39	8·73	+2·66	11·39	8·73	+2·66	1·63	Burdwan.	
...	1	3	11	8	6	1	...	...	8·8	?	?	78	·876	6·0	12	11·89	+0·11	6·98	8·86	−1·88	6·98	8·86	−1·88	1·62	Naya Dumka.	
...	...	...	15	5	8	2	...	...	4·3	5·5	−22	86	·958	6·5	9	10·64	−1·64	6·45	9·22	−2·77	6·45	9·22	−2·77	2·84	Berhampore.	
3	...	2	8	12	3	2	...	...	5·5	?	?	87	1·008	4·4	13	12·10	+0·90	7·00	9·65	−2·65	7·00	9·65	−2·65	2·06	Rampore Boalia.	
...	1	1	2	15	9	1	...	...	3·5	?	?	82	·955	5·4	8	11·80	−3·80	3·74	11·14	−7·40	3·74	11·14	−7·40	1·12	Malda.*	
11	...	...	5	13	...	...	1	...	2·5	?	?	83	·939	5·2	9	14·53	−5·53	4·94	13·86	−8·92	4·94	13·86	−8·92	1·30	Bogra.	
...	...	2	19	6	3	...	...	...	6·4	?	?	85	·924	5·5	9	14·00	−5·00	8·18	15·80	−7·62	8·18	15·80	−7·62	2·20	Dinajpur .	North Bengal.
1	1	5	10	5	5	2	1	...	2·4	?	?	83	·925	5·3	10	15·35	−5·35	5·96	19·51	−13·55	5·96	19·51	−13·55	3·11	Rangpur.	
7	2	4	6	8	3	...	...	...	2·8	?	?	84	·904	7·5	13	19·40	−6·40	8·74	28·00	−19·26	8·74	28·00	−19·26	3·29	Jalpaiguri.	
5	2	5	1	...	4	11	2	...	7·1	?	?	86	·967	5·1	16	10·35	+5·65	21·51	8·34	+13·17	21·51	8·34	+13·17	3·12	Balasore .	Orissa.
...	2	1	...	2	7	6	10	2	12·5	11·5	+ 9	86	·974	8·2	13	8·60	+4·40	18·94	7·96	+10·98	18·94	7·96	+10·98	4·71	False Point.	
6	...	2	1	1	1	12	7	...	4·5	4·0	+12	81	·904	7·4	16	11·00	+5·00	23·10	9·30	+13·80	23·10	9·30	+13·80	5·37	Cuttack.	
2	1	1	3	8	10	5	...	...	13·0	?	?	85	·985	6·7	13	?	?	17·16	?	?	17·16	?	?	4·94	Shortt's Island.	
5	2	...	...	...	...	13	9	1	14·3	?	?	86	·980	6·9	8	8·25	−0·25	22·48	7·98	+14·50	22·48	7·98	+14·50	7·89	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6·62	6·74	−0·07	...	...	...	...	V.—Gangetic Plain and Chota Nagpur.	
...	4	2	5	5	9	2	1	2	10·5	8·9	+18	73	·754	6·7	14	10·09	+3·91	8·81	8·01	+0·80	8·81	8·01	+0·80	1·20	Hazaribagh.	Chota Nagpur.
...	3	1	7	3	7	2	6	1	8·3	?	?	79	·989	5·5	8	?	?	5·65	?	?	5·65	?	?	1·47	Daltonganj.	
3	1	4	5	4	1	7	4	1	9·6	?	?	79	·779	5·5	15	12·40	+2·60	10·78	8·25	+2·53	10·78	8·25	+ 2·53	1·71	Ranchi.	
11	3	2	1	1	2	4	4	2	1·9	?	?	78	·871	5·4	13	11·55	+1·45	10·98	8·15	+2·83	10·98	8·15	+2·83	1·92	Chaibassa.	
...	1	5	9	6	3	3	2	1	6·2	3·4	+82	70	·859	4·4	12	6·82	+5·18	5·66	7·10	−1·44	5·66	7·10	−1·44	1·42	Gaya. .	Bihar, South.
2	...	1	10	7	3	1	3	2	11·0	?	?	69	·867	5·9	7	6·71	+ 0·29	3·24	4·65	−1·41	3·24	4·65	−1·41	1·06	Dehri.*	
1	...	7	16	4	...	2	...	...	8·0	4·2	+90	74	·897	5·1	9	7·09	+1·91	8·52	7·54	+0·98	8·52	7·54	+0·98	3·46	Patna.	
...	1	6	12	9	1	...	...	1	3·6	?	?	79	·963	4·3	11	7·35	+3·65	5·25	5·95	−0·70	5·25	5·95	− 0·70	1·36	Arrah.	
2	1	5	16	2	1	...	3	...	7·1	?	?	72	·865	5·6	9	7·55	+1·45	4·32	4·96	−0·64	4·32	4·96	−0·64	1·21	Buxar.	
1	1	6	12	8	2	...	...	...	6·4	3·3	+94	80	·910	6·1	8	11·00	−3·00	4·76	11·07	−6·31	4·76	11·07	−6·31	1·11	Purnea .	Bihar, North.
3	...	11	8	7	1	...	...	...	6·0	?	?	76	·901	5·1	9	9·30	−0·30	3·73	7·71	−3·98	3·73	7·71	−3·98	1·60	Bhagalpur.	
...	...	2	12	13	2	...	1	...	7·5	5·7	+32	76	·898	4·1	5	9·45	−4·45	1·29	9·02	−7·73	1·29	9·02	−7·73	0·36	Darbhanga.	
2	...	4	14	10	...	...	...	...	6·9	?	?	82	·958	3·8	7	8·15	−1·15	5·19	7·53	−2·34	5·19	7·53	−2·34	1·79	Muzaffarpur.	
3	...	10	13	3	...	...	...	1	4·3	?	?	79	·909	4·5	10	8·91	+1·06	7·85	7·89	−0·04	7·85	7·89	−0·04	2·23	Motihari.	
...	1	2	18	7	...	1	1	...	6·7	?	?	77	·919	6·3	9	6·90	+2·10	5·00	6·02	−1·02	5·00	6·02	−1·02	1·74	Chapra.	
8	...	7	11	...	1	...	1	2	5·4	5·1	+ 6	73	·888	6·0	7	4·64	+2·36	5·67	5·13	+0·54	5·67	5·13	+ 0·54	2·18	Benares .	N.-W. Provinces (Eastern Districts).
1	2	8	8	1	1	3	4	2	7·2	3·8	+89	69	·874	5·9	8	4·73	+3·27	8·37	5·69	+2·68	8·37	5·69	+ 2·68	2·87	Allahabad.	
1	4	2	17	3	3	...	...	...	2·7	3·6	−25	77	·885	5·7	15	7·00	+8·00	11·49	9·68	+1·81	11·49	9·68	+1·81	2·73	Gorakhpur .	N.-W. Provinces (East Submontane).
2	...	5	12	4	3	2	1	1	3·6	4·2	−14	76	·906	6·6	11	5·64	+5·36	12·24	5·43	+6·81	12·24	5·43	+6·81	4·14	Lucknow .	Oudh, South.
6	...	2	10	9	2	...	...	1	4·1	?	?	76	·876	3·9	13	?	?	7·81	5·64	+2·17	7·81	5·64	+ 2·17	1·42	Bahraich .	Oudh, North.
5	...	3	10	8	1	2	1	...	5·0	?	?	60	·906	5·1	3	4·3	−1·3	2·26	3·09	−0·83	2·26	3·09	−0·83	1·24	Cawnpore .	N.-W. Provinces (Central).
19	...	1	5	2	2	...	1	...	1·3	?	?	†79?	·964	6·3	8	?	?	6·81	3·00	+3·81	6·81	3·00	+3·81	2·15	Mainpuri.	

* Mean of 29 days.

† Mean of 26 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
VI.—Upper Sub-Himalayas		...	...	+·053	...	...	...	...	...	...	...	97·4	−4·9	78·6	−0·6	88·0	−2·8	18·8	...	...	...	...	36·4
N.-W. Provinces (Sub-montane).	Bareilly	568	29·045	+·057	29·573	29·188	7th	28·913	17th	·275	83·8	94·7	−6·0	78·0	−1·9	86·4	−4·0	16·7	107·4	1st	73·6	7th & 14th	33·8
	Dehra Dun	2,233	27·443	+·041	29·604	27·577	7th	27·328	27th	·249	77·4	89·2	−4·2	73·2	−1·4	81·2	−2·8	16·0	97·5	3 days	67·0	28th	30·5
	Roorkee	887	28·728	+·054	29·583	28·881	7th	28·608	27th	·273	83·4	95·8	−5·6	77·2	−1·7	86·5	−3·7	18·6	106·7	2nd	70·1	7th	36·6
	Meerut	738	28·865	+·049	29·562	29·011	7th	28·749	16th	·262	83·0	95·3	−6·1	78·0	−2·8	86·7	−4·5	17·3	106·5	2nd	72·0	7th	34·5
Punjab, Central.	Delhi	718	28·883	+·049	29·555	29·035	8th	28·745	16th	·290	86·2	97·4	−6·8	80·5	−2·9	89·0	−4·9	16·9	109·0	2nd	74·9	8th & 14th.	34·1
	Lahore	702	28·876	+·056	29·535	29·053	8th	28·745	28th	·308	88·6	102·7	−2·9	83·2	+3·4	92·9	+0·3	19·5	112·3	2nd	74·1	30th	38·2
Punjab (Sub-montane).	Umballa	962?	28·685	?	29·561	28·826	8th	28·572	29th	·254	83·2	97·2	?	78·4	?	87·8	?	18·8	110·4	1st	71·5	4th	38·9
	Patiala*	?	28·774	?	?	28·936	7th	28·658	28th	·278	85·5	97·5	?	78·7	?	88·1	?	18·8	107·4	2nd	74·0	8th & 29th	33·4
	Ludhiana	812	28·782	+·053	29·551	28·951	8th	28·657	27th	·294	86·8	99·1	−6·7	80·1	−0·1	89·6	−3·4	19·0	110·9	2nd	74·1	25th	36·8
Punjab, North	Sialkot	830	28·769	+·071	29·556	28·943	8th	28·635	28th	·308	87·0	101·2	−4·4	80·1	0	90·7	−2·2	21·1	111·8	2nd	70·1	15th	41·7
	Rawalpindi	1,683	27·932	+·045	29·559	28·103	8th	27·807	24th	·296	85·4	100·9	−1·8	77·0	+2·3	89·0	+0·3	23·9	110·5	25th	68·7	30th	41·8
VII.—Indus Valley and North-West Rajputana.		...	...	+·018	...	...	...	...	...	...	...	104·3	−0·2	82·3	+1·2	93·3	+0·5	21·9	...	...	...	...	38·7
Punjab, West	Peshawar	1,110	28·496	+·053	29·519	28·647	8th	28·331	24th	·316	87·3	103·4	−2·1	78·4	+1·8	90·9	−0·2	25·0	113·5	2nd	70·4	14th	43·1
	Mardan	?	?	?	?	?	?	?	?	?	87·5	103·9	?	79·5	?	91·7	?	24·4	113·5	9th & 25th	68·8	1st	44·7
	Khushab	612	28·950	?	29·521	29·138	8th	28·830	27th	·308	88·6	104·0	?	82·0?	?	93·1†	?	22·0	113·9	7th	70·0	14th	43·9
	Montgomery	558	28·989	?	29·500	29·155	8th	28·876	28th	·279	91·4	107·2	?	83·5	?	95·3	?	23·7	116·4	7th	72·0	18th & 30th	44·4
	D. I. Khan	573	28·971?	+·031?	29·505?	29·130	8th	28·840	24th	·290	88·9	105·9	−1·8	81·3	+0·7	93·6	−0·6	24·6	114·1	22nd & 8th.	72·8	28th & 29th	41·3
	Mooltan	420	29·114	+·029	29·492	29·251	8th	28·989	27th	·262	91·5	107·1	+0·4	85·1	+2·6	96·1	+1·6	22·0	112·4	1st & 14th	74·1	14th	38·3
	Sirsa	662	28·911	+·034	29·525	29·066	8th	28·786	29th	·280	89·4	105·3	−1·2	82·8	−0·1	94·1	−0·7	22·5	114·6	1st & 2nd	73·8	30th	40·8
Sind and Cutch	Jacobabad	186	29·343	+·025	29·484	29·520	9th	29·186	28th	·334	93·9	112·0	+0·1	87·6	+4·1	99·8	+2·1	24·4	117·6	2nd	78·6	30th	39·0
	Hyderabad	96	29·458	+·012	29·503	29·613	9th	29·291	21st	·322	88·7	104·7	+1·5	82·5	+1·0	93·6	+1·3	22·2	114·2	20th	79·5	1st	34·7
	Kurrachee	49	29·520	−·028	29·519	29·697	9th	29·314	21st	·383	86·8	94·6	+1·2	82·7	+0·7	88·7	+1·0	11·9	110·6	19th	79·2	1st	31·4
	Bhuj	395?	29·223	−·013	29·566?	29·395	5th	29·011	17th	·384	85·4	97·0	−0·2	79·4	−0·4	88·2	−0·3	17·6	105·5	20th	76·9	23rd	28·6
Rajputana, West	Bickaneer	753?	28·804	?	29·499?	28·958	8th	28·662	28th	·296	91·2	106·0	0	84·8	−0·1	95·5	−0·1	21·2	111·0	11th & 14th	76·0	16th	35·0
	Pachpadra	380	29·203	?	29·535	29·417	8th	28·990	21st	·427	86·3	104·8	?	80·7	?	92·8	?	24·1	114·7	20th	77·1	1st	37·6
VIII.—East Rajputana, Central India and Gujarat.		...	...	+·014	...	...	...	...	...	...	...	97·8	−1·6	79·7	−0·7	88·8	−1·2	18·1	...	...	...	...	31·5
Rajputana, East.	Jeypore	1,431	28·202	+·020	29·569	28·338	8th	28·053	21st	·285	86·2	101·3	−1·5	80·4	+0·3	90·8	−0·6	20·9	110·5	2nd	75·9	14th	34·6
	Sambhar	1,254	28·356	+·017	29·549	28·494	8th	28·211	21st	·283	87·6	101·9	+0·2	82·0	+0·4	92·0	+0·3	19·9	108·0	2nd	75·4	14th	32·6
	Ajmere	1,611	28·028	+·010	29·573	28·168	8th	27·865	21st	·303	86·4	101·1	+0·8	82·0	+2·0	91·6	+1·4	19·1	106·9	11th	76·6	16th	30·3
	Deesa	466	29·179	+·002	29·596	29·329	9th	28·944	21st	·385	84·5	100·4	−1·2	79·6	−0·9	90·1	−1·1	20·8	108·9	13th	76·0	2nd & 5th	32·9
Kathiawar	Rajkot	429	29·222	−·010	29·599	29·382	5th	28·988	17th	·394	85·4	99·2	−0·8	76·6	−0·8	87·9	−0·8	22·6	105·9	4th & 5th	73·3	13th	32·6
	Veraval	?	29·648	?	29·608	29·829	5th	29·370	17th	·459	83·5	86·4	?	81·0	?	83·7	?	5·4	89·1	3rd & 4th	79·3	13th & 25th.	9·8
Central India	Nowgong	757	28·854	+·021	29·557	28·993	8th	28·708	21st	·285	85·6	98·3	−4·2	78·9	−3·8	88·6	−4·0	19·4	110·1	2nd & 3rd	73·0	30th	37·1
	Indore	1,823	27·869	+·018	29·622	27·988	4th	27·675	21st	·313	81·2	94·6	+0·4	75·9	+1·0	85·3	+0·7	18·7	107·5	10th	71·6	21st & 26th	35·9
	Neemuch	1,630	28·041	+·031	29·609	28·171	4th	27·826	21st	·345	82·9	96·7	−1·7	77·2	·0	87·0	−0·9	19·5	108·1	10th	72·1	22nd	36·0
Gujarat	Surat	36	29·658	−·012	29·637	29·812	5th	29·428	17th	·384	84·8	93·2	−0·5	79·2	0	86·2	−0·3	14·0	103·7	12th	76·0	20th	27·7
	Ahmedabad	176	29·499	?	29·623	29·657	2nd	29·280	21st	·377	85·6	99·5	?	80·4	?	90·0	?	19·1	106·8	4th	76·1	26th & 30th.	30·7
N.-W. P., West	Agra	555	29·042	+·042	29·547	29·202	8th	28·909	17th	·293	88·4	99·7	−5·1	81·6	−3·2	90·7	−4·2	18·1	109·5	2nd	76·3	29th & 30th.	33·2
	Jhansi	858	28·756	+·018	29·556	28·911	8th	28·610	17th	·301	87·5	99·3	−3·9	81·7	−2·2	90·5	−3·1	17·6	111·7	3rd	75·4	14th	36·3

* Wind points for 27 days.

† Mean of 29 days.

I.—*continued.*

in India, Burma, etc., in June 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.							Heaviest rainfall during month.	Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th June 1895.	Normal rainfall for period, 1st June to 30th June.	Variation from normal of period, 1st June to 30th June.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9·05	3·83	+5·38	...	...	...	...	VI.—Upper Sub-Himalayas.	
7	...	5	...	17	...	...	1	...	3·9	4·9	− 20	73	·831	4·9	9	4·91	+ 4·09	11·25	5·67	+ 5·58	11·25	5·67	+ 5·58	3·83	Bareilly .	N.-W. Provinces (Sub-montane).
25	...	...	2	2	1	...	...	...	1·6†	1·6	0	78	·727	7·1	14	8·91	+ 5·09	15·60	9·25	+ 6·35	15·60	9·25	+ 6·35	3·36	Dehra Dun.	
15	...	...	...	13	1	1	...	...	3·6	3·9	− 8	71	·794	5·8	10	5·64	+ 4·36	11·62	4·71	+ 6·91	11·62	4·71	+ 6·91	4·69	Roorkee.	
11	...	4	9	4	...	1	1	...	2·4	2·6	− 8	74	·823	6·5	12	3·64	+ 8·36	13·02	2·44	+10·58	13·02	2·44	+10·58	3·50	Meerut.	
6	1	1	14	5	...	2	1	...	6·5	4·9	+ 33	67	·821	5·9	9	4·00	+ 5·00	3·10	3·35	− 0·25	3·10	3·35	− 0·25	0·61	Delhi .	Punjab, Central.
2	1	...	7	14	1	...	2	3	5·3	3·5	+ 51	61	·814	2·9	2	2·73	− 0·73	1·49	1·84	− 0·35	1·49	1·84	− 0·35	1·18	Lahore.	
11	...	...	8	10	1	...	...	...	2·2	?	?	73	·835	4·9	12	?	?	13·74	3·83	+ 9·91	13·74	3·83	+ 9·91	3·83	Umballa .	Punjab (Sub-montane).
7	...	13	...	1	...	6	...	...	5·4†	?	?	71	·862	4·9†	13	?	?	7·46	?	?	7·46	?	?	2·40	Patiala* .	
10	...	4	...	10	5	...	1	...	3·2	2·4	+ 33	66	·822	6·1	9	3·64	+ 5·36	9·22	2·41	− 6·81	9·22	2·41	+ 6·81	3·54	Ludhiana.	
4	3	2	15	2	3	...	1	...	3·8	2·4	+ 58	60	·739	3·3	8	3·73	+ 4·27	5·94	2·08	+ 2·86	5·94	3·08	+ 2·86	2·36	Sialkot .	Punjab (North).
9	...	...	2	16	2	1	...	...	3·3	2·6	+ 27	57	·676	4·3	9	3·55	+ 5·45	7·06	1·71	+ 5·35	7·06	1·71	+ 5·35	4·74	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·00	0·89	+0·94	...	...	...	...	VII.—Indus Valley and North-West Rajputana.	
9	8	5	1	2	1	...	...	4	3·9	4·3	− 9	53	·687	3·2	1	0·73	+ 0·27	0·40	0·35	+ 0·05	0·40	0·35	+ 0·05	0·40	Peshawar .	Punjab, West.
			Not recorded.						?	?	?	?	?	?	4	?	?	4·07	?	?	4·07	?	?	3·50	Mardan.	
...	2	8	11	4	1	2	1	1	7·4	?	?	59	·781	2·6	3	1·20	+ 1·80	3·56	0·70	+ 2·86	3·56	0·70	+ 2·86	2·65	Khushab.	
1	...	1	5	8	5	6	3	1	8·9	?	?	56	·796	3·2	4	2·00	+ 2·00	5·37	1·29	+ 4·08	5·37	1·29	+ 4·08	2·63	Montgomery.	
12	2	...	11	2	...	1	1	1	5·0	2·4	+108	67	·897	2·0	3	0·91	+ 2·09	2·40	0·54	+ 1·86	2·40	0·54	+ 1·86	1·74	D. I. Khan.	
4	...	7	2	5	1	9	1	1	2·6	3·8	− 32	59	·855	2·3	1	1·45	− 0·45	1·84	0·59	+ 1·25	1·84	0·59	+ 1·25	1·75	Mooltan.	
...	...	2	7	8	1	3	8	1	7·9	5·2	+ 52	57	·781	5·0	4	3·18	+ 0·82	1·10	1·91	− 0·81	1·10	1·91	− 0·81	0·45	Sirsa.	
8	...	...	6	10	5	...	1	...	6·6	4·7	+ 40	66	1·053	1·0	1	0·09	+ 0·01	0·11	0·12	− 0·01	0·11	0·12	− 0·01	0·11	Jacobabad .	Sind and Cutch.
1	...	2	1	1	5	20	...	...	21·8	15·2	+ 43	64	·805	3·4	2	0·45	+ 1·55	0·38	0·33	+ 0·05	0·38	0·33	+ 0·05	0·24	Hyderabad.	
...	1	2	...	2	2	9	10	4	16·6	18·5	− 10	77	·984	5·6	3	0·18	+ 2·82	0·75	0·52	+ 0·23	0·75	0·52	+ 0·23	0·32	Kurrachee.	
...	...	1	2	3	4	9	10	1	19·1	16·1	+ 19	76	·940	3·2	2	?	?	1·69	1·94	− 0·25	1·69	1·94	− 0·25	0·97	Bhuj.	
1	...	2	2	1	9	12	2	1	8·6	7·8	+ 10	54	·772	4·0	1	?	?	2·17	1·66	+ 0·51	2·17	1·66	+ 0·51	1·98	Bickaneer .	Rajputana, West.
...	...	1	10	9	10	...	...	...	13·2	12·0	+ 10	82	1·025	7·7	2	?	?	2·17	0·69	+ 1·48	2·17	0·69	+ 1·48	1·12	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4·81	4·32	+0·61	...	...	...	...	VIII.—East Rajputana, Central India and Gujarat.	
2	1	4	3	2	1	3	12	2	5·7	7·3	− 22	63	·804	5·0	6	3·70	+ 2·30	1·82	2·49	− 0·67	1·82	2·49	− 0·67	0·62	Jeypore .	Rajputana, East.
6	...	1	3	1	1	1	16	1	7·3	11·2	− 35	61	·794	4·5	3	3·10	− 0·10	1·27	1·40	− 0·13	1·27	1·40	− 0·13	0·84	Sambhar.	
1	...	2	3	2	...	8	12	2	9·4	8·3	+ 13	61	·762	3·3	2	3·73	− 1·73	0·99	2·28	− 1·29	0·99	2·28	− 1·29	0·50	Ajmere.	
...	...	...	...	1	6	13	7	3	14·9	16·8	− 11	72	·851	4·9	6	2·18	+ 3·82	3·69	2·16	+ 1·53	3·69	2·16	+ 1·53	1·89	Deesa.	
1	...	1	2	3	...	5	14	4	12·7	15·6	− 19	72	·873	4·1	7	5·27	+ 1·73	1·80‡	4·73	− 2·93	1·80	4·73	− 2·93	0·40	Rajkot .	Kathiawar.
3	1	...	1	3	2	8	11	1	14·1	?	?	84	·962	7·4	7	?	?	2·50	?	?	2·50	?	?	0·68	Veraval.	
7	2	1	1	...	1	2	16	...	3·4	4·4	− 23	67	·788	6·2	13	5·91	+ 7·09	11·13	5·83	+ 5·30	11·13	5·83	+ 5·30	2·93	Nowgong .	Central India.
...	2	...	...	...	1	7	12	8	5·0	7·0	− 29	73	·766	5·5	9	8·27	+ 0·73	7·50	6·79	+ 0·71	7·50	6·79	+ 0·71	5·00	Indore.	
1	2	...	...	2	...	12	11	2	13·2	14·2	− 7	73	·829	4·6	8	5·09	+ 2·91	8·01	4·27	+ 3·74	8·01	4·27	+3·74	3·30	Neemuch.	
6	...	...	1	3	3	8	6	3	?	15·6	?	76	·900	5·8	8	8·18	− 0·18	5·30	10·12	− 4·82	5·30	10·12	− 4·82	2·50	Surat . .	Gujarat.
...	1	...	...	3	3	14	5	4	8·2	?	?	72	·875	7·0	9	?	?	5·86	?	?	5·86	?	?	1·77	Ahmedabad.	
1	...	5	...	9	...	10	...	5	5·5	5·7	− 4	64	·837	4·7	6	3·64	+ 2·36	4·37	2·54	+ 1·83	4·37	2·54	+ 1·83	2·23	Agra . .	N.-W. P., West.
1	2	4	1	2	1	7	4	8	4·5	5·8	− 22	63	·779	3·7	10	6·09	+ 3·91	8·31	4·89	+ 3·42	8·31	4·89	+ 3·42	3·14	Jhansi.	

* Mean of 26 days.

† Mean of 29 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
IX. Deccan		...	...	+·004	...	...	...	...	...		...	94·5	−0·3	76·2	+0·4	85·4	0	18·3	...	...	...	...	36·9
Bombay, Deccan	Belgaum	2,524	27·267	0	29·717	27·362	23rd	27·092	18th	·270	72·9	82·3	+1·6	69·0	+1·2	75·7	+1·4	13·3	95·2	2nd*	65·8	2nd	29·4
	Sholapur	1,590	28·160	−·007	29·685	28·253	4th	27·998	18th	·255	81·3	96·0	+1·7	75·3	+2·7	85·7	+2·2	20·7	107·2	3rd	70·5	20th	36·7
	Poona	1,840	27·909	−·003	29·688	28·025	4th	27·724	17th	·301	77·3	90·7	+2·2	72·1	−0·5	81·4	+0·9	18·6	105·0	6th	66·9	10th	38·1
	Bijapur	1,946	27·825	?	29·703	27·925	23rd	27·661	18th	·264	77·8	91·4	?	72·5	?	82·0	?	18·9	101·3	3rd & 5th,	69·0	3 days	32·3
Khandesh	Malegaon	1,430	28·279	−·002	29·682	28·408	4th	28·100	21st	·308	81·0	95·0	+0·5	74·5	−0·3	84·8	+0·1	20·5	105·8	4th	67·8	7th	38·0
	Ahmednagar	2,152	27·599	?	29·674	27·710	4th	27·440	17th	·270	78·3	90·0	?	72·9	?	81·4	?	17·1	103·2	2nd	68·4	1st	34·8
Berar	Akola	930	28·743	−·006	29·614	28·859	10th	28·583	18th	·276	82·9	97·3	−0·2	78·0	+0·7	87·7	+0·3	19·3	109·1	3rd	73·2	26th	35·9
	Amraoti	1,215	28·455	+·003	29·616	28·576	4th	28·296	18th	·280	81·8	96·9	+0·1	77·1	+0·9	87·0	+0·5	19·8	109·4	2nd & 4th,	72·3	21st & 25th	37·1
Central Provinces, West.	Khandwa	1,044	28·633	+·008	29·625	28·756	4th	28·465	17th	·291	83·8	96·9	−0·5	79·3	+1·2	88·1	+0·4	17·6	107·2	4 days	74·1	26th & 26th	33·1
	Hoshangabad	1,020	28·634	−·001	29·603	28·758	4th	28·468	17th	·290	83·6	96·4	−1·7	78·0	−1·0	87·2	−1·4	18·4	109·5	4th	72·7	11th	36·8
	Nagpur	1,025	28·620	0	29·588	28·725	4th	28·442	20th	·283	84·1	97·0	−0·8	79·0	+0·9	88·0	+0·1	18·0	111·2	3rd & 4th,	74·1	4 days	37·1
Central Provinces, Central.	Chanda	634	29·029	+·005	29·599	29·132	10th	28·878	19th	·254	85·3	98·5	+0·8	79·7	+0·4	89·1	+0·6	18·8	112·4	4th	72·0	24th	40·4
	Seoni	2,033	27·633	+·007	29·580	27·757	4th	27·444	20th	·313	81·7	92·5	−1·1	74·7	−0·6	83·7	−0·9	17·8	107·2	2nd	70·1	27th	37·1
	Jubbulpore	1,327	28·285	−·008	29·552	28·403	4th	28·083	21st	·320	83·3	95·3	−1·4	77·0	−1·3	86·2	−1·4	18·3	109·5	6th	71·6	28th	37·9
	Saugor	1,762	27·885	+·021	29·574	28·062	4th	27·728	21st	·274	82·4	95·3	−3·3	77·4	+0·3	86·4	−1·5	17·9	107·9	5th & 6th	72·1	16th	35·8
Central Provinces, East.	Raipur	970	28·600	+·009	29·569	28·778	10th	28·475	20th	·303	84·0	95·3	−1·3	78·8	+0·6	87·1	−0·4	16·5	112·5	4th & 6th	72·1	29th	40·4
	Sutna	1,040	28·562	+·025	29·548	28·689	8th	28·395	30th	·294	86·2	97·2	−1·6	80·1	−0·9	88·7	−1·3	17·1	109·6	3rd & 5th	71·1	30th	38·5
	Sambalpur	463	29·136	+·007	29·545	29·263	8th	28·907	29th	·356	84·8	96·6	−0·8	79·8	−1·1	88·2	−1·0	16·8	112·5	1st	74·2	30th	38·3
Hyderabad, North.	Aurangabad	?	27·878	?	?	27·998	4th	27·711	18th	·287	80·6	93·5	?	73·0	?	83·3	?	20·5	105·9	6th	70·0	24th	35·9
	Indur	?	...	...	...	...	...	...	Not	received.	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bidar	?	27·582	?	?	27·687	6th	27·437	18th	·250	78·3	91·5	?	73·4	?	82·4	?	18·1	101·8	5th	68·2	21st	33·6
Hyderabad, South.	Gulbarga	1,502	28·283	?	29·726	28·392	10th	28·141	19th	·251	80·2	95·2	?	74·8	?	85·0	?	20·4	105·3	2nd	61·5	22nd	43·8
	Raichur	1,378	28·377	?	29·690	28·484	23rd	28·200	18th	·284	80·5	94·8	?	76·4	?	85·6	?	18·4	106·5	2nd & 4th,	72·1	26th	34·4
	Hyderabad (Deccan), Secunderabad	1,690	28·049	+·007	29·670	28·144	6th	27·910	19th	·234	80·8	94·2	+0·8	76·9	+2·9	85·6	+1·9	17·3	107·4	5th & 6th,	71·2	20th	36·2
		1,787	27·966	?	25·684	28·051	6th	27·815	19th	·236	79·8	95·3	?	75·4	?	85·4	?	19·9	108·8	2nd	68·4	10th	40·4
	Khamamet	373	29·343	?	29·658	29·421	9th	29·179	19th	·242	84·0	96·4	?	79·7	?	88·1	?	16·7	112·7	2nd	72·3	11th	40·4
X. West Coast		...	...	−·013	...	...	...	...	...	...	...	86·9	+2·5	78·1	+2·2	82·5	+2·4	8·9	...	...	...	...	18·7
Konkan	Bombay	37	29·703	−·009	29·679	29·827	5th	29·481	17th	·346	82·8	88·2	+0·9	79·9	+0·6	84·0	+0·8	8·3	94·0	8th	75·0	20th & 21st	19·0
	Ratnagiri	110	29·654	−·007	29·702	29·764	6th	29·487	18th	·277	83·1	88·2	+2·0	79·1	+2·4	83·7	+2·2	9·1	94·4	8th	73·4	20th	21·0
	Mormugao	60	29·733	?	29·728	29·835	23rd	29·554	18th	·281	82·6	87·1	?	78·5	?	82·8	?	8·6	91·0	2nd & 14th,	73·4	17th & 19th	17·6
	Goa	199	29·580	−·008	29·715	29·689	23rd	29·400	18th	·289	81·9*	84·9	?	79·3	?	82·1	?	5·6	90·5	2nd	75·0	18th	15·5
	Karwar	44	29·759	−·011	29·735	29·870	23rd	29·565	18th	·305	81·7	87·4	+2·5	79·0	+3·3	83·2	+2·9	8·4	93·3	2nd	74·5	17th	18·8
Malabar	Cochin	10	29·856	−·021	29·795	29·962	23rd	29·767	12th	·195	79·6	87·1	+2·6	76·4	+2·0	81·8	+2·3	10·7	92·3	6th	73·2	20th	19·1
	Calicut	27	29·827	−·016	29·783	29·938	23rd	29·730	12th & 18th.	·208	82·5†	89·1†	+5·1†	77·7†	+3·3†	83·4†	+4·2	11·4	93·4	9th	72·1	16th	21·3
	Mangalore	65	29·771	−·016	29·768	29·912	23rd	29·644	12th & 18th.	·268	80·2	86·5	+2·1	76·2	+1·4	81·4	+1·8	10·3	92·8	4th	72·4	24th	20·4
	Trivandrum	198	29·673	?	29·803	29·768	25th	29·598	12th	·170	78·8	83·9	?	76·4	?	80·2	?	7·5	89·0	7th	73·0	20th	16·0
XI. South India		...	...	+·006	...	...	...	...	...	...	...	93·2	+0·8	77·0	+1·0	85·1	+1·0	16·2	...	...	...	...	29·6
Madras, South	Pamban	37	29·790	?	29·754	29·865	23rd	29·691	18th	·174	84·6	90·4	?	81·4	?	85·9	?	9·0	93·3	1st	79·7	21st	13·6
	Tinnevelly	168	29·669	?	29·765	29·762	23rd	29·568	18th	·194	86·2	97·8	?	79·7	?	88·8	?	18·1	104·5	1st	73·4	9th	31·1
	Madura	447	29·365	+·001	29·744	29·456	23rd	29·279	18th	·177	85·3	98·1	−0·5	78·1	+1·4	88·1	+0·5	20·0	102·0	2nd & 6th.	74·0	20th	28·0

* Mean of 29 days.

† Mean of 18 days.

I—*continued.*

in India, Burma, etc., in June 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE	S.	SW.	W.	NW.	Wind Velocity: Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M.: Mean humidity.	Mean vapour tension	Mean cloud amount.	Rainfall: Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th June 1895.	Normal rainfall for period, 1st June to 30th June.	Variation from normal of period 1st June to 30th June.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·33	7·01	+2·40	...	...	...	...	**IX.—Deccan.**	
5	1	...	...	...	2	9	11	2	20·3	24·3	− 16	87	·698	8·6	21	12·27	+ 8·73	9·56	6·59	+ 2·97	9·56	6·59	+ 2·97	0·88	Belgaum .	Bombay Deccan.
...	...	1	1	...	1	12	6	9	17·0	12·2	+ 39	62	·646	8·0	2	7·82	− 5·82	0·63	5·01	− 4·38	0·63	5·01	− 4·38	0·29	Sholapur.	
...	1	...	...	...	1	13	11	4	11·4	16·0	− 29	77	·716	7·7	9	7·18	+ 1·82	7·00	4·73	+ 2·27	7·00	4·73	+ 2·27	1·64	Poona.	
2	...	1	2	...	...	10	13	2	7·3	?	?	72	·685	8·2	4	6·30	− 2·30	2·10	?	?	2·10	?	?	1·54	Bijapur.	
1	2	1	...	...	3	9	11	3	17·1	11·9	+ 44	75	·785	6·5	9	7·82	+ 1·18	4·82	4·72	+ 0·10	4·82	4·72	+ 0·10	1·39	Malegaon .	Khandesh.
...	6	2	...	...	3	8	6	5	16·3	?	?	73	·688	7·7	8	?	?	4·98	?	?	4·98	?	?	1·30	Ahmednagar.	
1	...	...	...	...	1	6	13	9	9·7	8·9	+ 9	71	·777	6·1	8	8·55	− 0·55	6·04	5·47	+ 0·57	6·04	5·47	+ 0·57	1·68	Akola .	Berar.
...	...	1	...	1	...	6	17	5	8·2	7·4	+ 11	72	·756	6·1	9	10·36	− 1·36	7·14	6·84	+ 0·30	7·14	6·84	+ 0·30	1·90	Amraoti.	
...	...	...	...	...	1	5	14	10	10·1	9·2	+ 10	67	·757	4·7	8	7·91	+ 0·09	6·34	6·05	+ 0·29	6·34	6·05	+ 0·29	3·68	Khandwa .	Central Provinces, West.
5	...	1	...	...	1	12	11	...	2·4	4·6	− 48	71	·786	6·1	10	10·09	− 0·09	16·55	8·20	+ 8·35	16·55	8·20	+ 8·35	7·04	Hoshangabad.	
10	2	...	..	...	...	5	8	5	9·2*	7·6	+ 21	73	·811	7·2	12	12·73	−0·73	11·32	8·74	+ 2·58	11·32	8·74	+ 2·58	4·09	Nagpur.	
2	...	...	...	...	...	12	15	1	5·2	6·3	− 17	60	·683	7·3	12	?	?	5·68	7·85	− 2·17	5·68	7·85	− 2·17	1·76	Chanda .	Central Provinces, Central.
			Not	rec	orded.				?	5·7	?	71	·727	6·0	19	13·00	+ 6·00	11·74	10·57	+ 1·17	11·74	10·57	+ 1·17	2·80	Seoni .	
...	1	1	1	4	3	5	9	6	4·0	5·3	− 25	68	·728	5·6	16	11·18	+ 4·82	17·55	9·10	+ 8·45	17·55	9·10	+ 8·45	3·18	Jubbulpore.	
3	1	1	1	...	2	11	9	2	5·6	5·2	+ 8	69	·726	5·3	11	9·73	+ 1·27	11·88	7·40	+ 4·48	11·88	7·40	+ 4·48	3·25	Saugor.	
4	1	...	...	1	1	13	9	1	11·0	8·7	+ 26	74	·809	6·4	17	11·55	+ 5·45	18·56	8·92	+ 9·64	18·56	8·92	+ 9·64	4·02	Raipur .	Central Provinces, East).
4	2	2	5	2	5	1	4	5	7·7	9·6	− 20	64	·747	4·9	12	5·91	+ 6·09	18·12	6·54	+11·58	18·12	6·54	+11·58	5·50	Sutna.	
...	2	3	1	4	7	10	...	3	6·4	3·4	+ 88	73	·844	6·5	12	?	?	16·69	11·13	+ 5·56	16·69	11·13	+ 5·56	3·60	Sambalpur.	
8	1	...	...	...	3	9	7	2	6·8	?	?	68	·695	7·2	8	?	?	7·57	6·34	+ 1·23	7·57	6·34	+ 1·23	1·45	Aurangabad	Hyderabad, North.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4·60	...	...	4·60	...	...	Indur.	
...	6	...	1	...	...	11	9	3	12·9	?	?	75	·705	6·2	6	?	?	2·81	6·30	− 3·49	2·81	6·30	− 3·49	1·42	Bidar.	
1	1	1	...	2	10	7	3	5	13·9	?	?	72	·738	8·5	5	?	?	3·24	4·82	− 1·58	3·24	4·82	− 1·58	1·82	Gulbarga .	Hyderabad, South.
...	1	...	...	...	3	11	10	5	12·9	?	?	69	·713	6·6	4	?	?	2·16	?	?	2·16	?	?	1·26	Raichur.	
1	...	1	1	...	...	2	24	1	8·8	?	?	70	·722	7·4	5	?	?	4·92	4·85	+ 0·07	4·92	4·85	+ 0·07	3·02	Hyderabad (Division).	
...	...	1	1	...	...	7	16	5	10·2	12·3	− 17	68	·683	5·7	5	?	?	3·49	?	?	3·49	?	?	1·12	Secunderabad	
4	...	2	...	5	2	4	11	2	8·6	?	?	73	·848	3·8	10	?	?	7·40	?	?	7·40	?	?	2·70	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23·82	28·45	−4·09	...	...	...	...	**X.—West Coast.**	
...	2	2	1	2	4	7	5	7	15·0	16·2	− 7	83	·935	7·1	14	14·82	− 0·82	17·83	19·37	− 1·54	17·83	19·37	− 1·54	3·92	Bombay .	Konkan.
1	4	1	...	4	2	10	2	6	7·9	12·0	− 34	81	·908	7·3	17	21·45	− 4·45	21·65	31·26	− 9·61	21·65	31·26	−9·61	3·78	Ratnagiri.	
...	7	1	1	...	3	2	6	10	12·6	?	?	84	·937	7·0	17	?	?	19·46	?	?	19·46	?	?	4·20	Mormugao.	
4	...	...	...	...	5	8	4	9	11·8	?	?	81*	·890*	8·6	16	?	?	14·22	30·09	−15·87	14·22	30·09	−15·87	3·58	Goa.	
1	8	...	...	1	1	14	2	3	8·7	?	?	82	·876	6·7	16	24·36	− 8·36	23·06	37·24	−14·18	23·06	37·24	−14·18	4·03	Karwar.	
9	5	9	1	1	...	...	5	...	8·5	2·1	+305	86	·884	6·5	21	24·80	− 3·80	28·03	28·41	− 0·38	28·03	28·41	− 0·38	3·22	Cochin .	Malabar.
10	1	3	1	1	3	3	5	3	12·9†	?	?	82‡	·902‡	7·6	17	25·00	− 8·00	38·57	33·22	+ 5·35	38·57	33·22	+ 5·35	8·29	Calicut.	
7	1	1	4	2	2	2	8	3	4·0	3·7	+ 8	85	·890	7·5	22	25·60	− 3·60	37·76	35·03	+ 2·73	37·76	35·03	+ 2·73	5·31	Mangalore.	
8	10	2	...	...	...	...	2	18	(a)6·2	?	?	88	·869	7·3	16	?	?	13·77	12·95	+ 0·82	13·77	12·95	+ 0·82	2·50	Trivandrum.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·77	3·20	−0·31	...	...	...	...	**XI.—South India.**	
...	...	...	...	10	13	7	...	...	14·8	?	?	80	·958	3·2	0	0·30	− 0·30	0	0·04	− 0·04	0	0·04	− 0·04	0	Pamban .	Madras, South.
...	2	2	2	2	1	3	6	12	7·8	?	?	63	·793	6·4	0	1·6	− 1·6	0·08	?	?	0·08	?	?	0·08	Tinnevelly.	
9	2	1	1	1	2	6	3	5	2·4	4·8	− 50	67	·816	3·2	3	2·00	+ 1·00	0·50	1·50	− 1·00	0·50	1·50	− 1·00	0·17	Madura.	

* Mean of 28 days. † Mean of 27 days. ‡ Mean of 18 days. (a) Mean of 26 days.

Table

Abstract of Observations taken at 8 A.M. at 205 stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure 8 A.M. in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean Maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras, South Central.	Salem .	940	28·895	−·007	29·769	28·993	23rd	28·771	18th	·222	82·6	97·9	+3·6	76·7	+3·2	87·3	+3·4	21·2	105·4	5th	73·0	20th	32·4
	Coimbatore	1,348	28·475	−·003	29·762	28·578	23rd	28·364	18th	·214	80·0	92·2	+2·3	72·8	+1·2	82·5	+1·8	19·4	100·9	3rd	69·6	3 days	31·3
Coorg . . .	Mercara .	3,781	26·165	+·007	?	26·259	23rd	26·032	18th	·227	67·5	74·4	+2·3	64·5	+1·3	69·5	+1·9	9·9	85·5	1st	61·2	19th	24·3
Mysore . .	Chitaldroog	2,405	27·414	?	29·733	27·515	23rd	27·263	18th	·252	75·0	85·6	?	69·4	?	77·5	?	16·2	96·7	4th	63·9	6th	32·8
	Bangalore Fort.*	3,021	26·846	−·013	29·752	26·935	23rd	26·719	18th	·216	73·0	86·0	+1·4	67·9	+1·3	77·0	+1·4	18·1	93·8	5th	64·8	22nd	29·0
	Hassan .	3,091	26·793	?	29·782	26·890	23rd	26·657	18th	·233	72·4	80·6	?	66·8	?	73·7	?	13·8	92·5	5th	65·0	25th	27·5
	Mysore .	2,517	27·346	?	29·776	27·448	23rd	27·228	18th	·220	74·4	85·2	?	69·0	?	77·2	?	16·2	96·4	5th	66·0	22nd	30·4
Madras, East-Coast, South.	Negapatam	31	29·772	+·002	29·731	29·850	23rd	29·652	18th	·198	86·8	98·9	+2·3	81·5	+2·6	90·2	+2·5	17·4	103·7	27th	79·8	4 days	23·9
	Cuddalore .	12	29·773	?	29·714	29·859	23rd	29·641	18th	·218	83·7	99·7	?	81·2	?	90·5	?	18·5	106·4	17th	78·2	22nd	28·2
	Trichinopoly	255	29·551	−·005	29·735	29·654	23rd	29·423	18th	·231	85·2	100·4	+1·9	79·4	+1·4	89·9	+1·7	21·0	105·2	6th	74·9	7th	30·3
	Madras .	22	29·753	+·003	29·705	29·834	22nd	29·629	18th	·205	87·5	99·5	+1·2	82·1	+1·8	90·8	+1·5	17·4	106·5	15th	77·5	25th	29·0
Madras, East-Coast, Central.	Nellore .	71	29·667	?	29·670	29·761	23rd	29·542	18th	·219	89·6	102·4	?	83·2	?	92·8	?	19·2	110·3	2nd	79·1	25th	31·2
	Masulipatam	15	29·710	+·024	29·659	29·797	8th	29·564	19th	·233	86·3	96·5	−1·0	80·9	+0·8	88·7	−0·1	15·6	111·7	1st	75·1	20th	36·6
Madras, Central	Cuddapah .	433	29·330	?	29·696	29·435	23rd	29·199	18th	·236	88·1	101·5	+2·8	81·9	+1·9	91·7	+2·4	19·6	109·8	4th	69·6	21st	40·2
	Kurnool .	923	28·831	−·011	29·691	28·940	23rd	28·695	18th	·245	82·9	96·9	+1·3	77·3	+1·1	87·8	+1·2	19·6	108·8	2nd	68·9	13th	39·9
	Bellary .	1,475	28·305	+·002	29·716	28·405	23rd	28·163	18th	·242	81·4	94·2	−0·4	76·0‡	+0·5	85·1	+0·1	18·2	104·2	2nd & 4th	73·4	19th & 25th*	30·8
Madras, East-Coast, North	Rajahmundry	112	29·605	+·030	29·653	29·698	8th	29·443	19th	·255	83·5	94·3	−3·0	79·5	−0·6	87·0	−1·8	14·8	113·1	1st	73·1	12th	40·0
	Cocanada .	26	29·671	+·023	29·632	29·782	6th	29·499	19th	·283	84·7	94·0	−0·1	80·3	−0·6	87·2	−0·4	13·7	107·8	1st	72·5	23rd	35·3
	Vizagapatam	31	29·646	+·025	29·616	29·767	6th	29·489	19th	·278	84·2	87·9	−2·1	83·0	−1·9	85·4	−2·0	4·9	93·8	1st	78·1	28th	15·7
	Gopalpur .	21	29·613	?	29·574	29·752	6th	29·447	19th	·305	81·7	88·0	?	78·8	?	83·4	?	9·2	94·7	16th	74·6	24th & 28th.	20·1
XII.—Hill Stations.																							
Baluchistan .	Shirinoo .	?	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kachh Fort*	?	§23·795	?	?	23·889	8th & 9th	23·665	17th	·224	76·0	92·2	?	59·1	?	75·6	?	33·1	99·0	8th	45·0	27th	54·0
	Pishin .	?			Observations not recorded.						?	102·2	?	55·4	?	78·8	?	46·8	106·1	11th & 12th.	44·9	29th	61·2
	Quetta .	5,502	24·492	+·015	?	24·614	9th	24·373	17th	·241	77·5	92·1	+1·5	62·2	+3·0	77·1	+2·3	29·9	96·1	11th	51·4	29th	44·7
	Kalat .	?				Not recorded.					70·6	93·7	?	47·9	?	70·8	?	45·8	99·3	20th	37·0	27th	62·3
	Chaman .	4,311	25·473	?	?	25·587	9th	25·349	17th	·238	87·3	101·9	?	74·2	?	88·1	?	27·7	107·0	24th	63·6	28th	43·4
Northern India.	Leh . .	11,503	19·672	?	?	19·803	9th	19·523	16th	·280	56·6	75·5	?	49·2	?	62·4	?	26·3	85·2	25th	43·7	30th	41·5
	Srinagar .	5,204	24·758	?	?	24·888	8th	24·658	27th	·230	68·2	83·9	?	60·9	?	72·4	?	23·0	93·4	25th	53·2	30th	40·2
	Astor (Kashmir).	?	22·194	?	?	22·300	4 days	22·055	27th	·245	63·2	79·3	?	54·8	?	67·0	?	24·5	90·2	24th	44·5	30th	45·7
	Gilghit .	?	24·470	?	?	24·630	3rd	24·340	25th	·290	80·0§	95·7	?	72·1	?	83·9	?	23·6	107·6	25th	57·1	30th	50·5
	Cherat .	?	25·539	?	?	25·690	8th	25·418	27th	·272	79·1	92·2	?	71·9	?	82·1	?	20·3	103·5	7th	59·2	14th	44·3
	Murree .	6,344	23·747	+·027	?	23·875	9th	23·614	26th	·261	68·1	77·9	−4·1	64·1	−0·3	71·0	−2·2	13·8	87·7	1st & 7th	56·1	14th	31·6
	Poo . .	?				Not recorded.					?	76·2	?	58·8	?	67·5	?	17·4	85·2	6th	49·7	1st	35·5
	Simla .	7,224	23·035	+·029	?	23·155	8th	22·922	28th	·233	63·6	71·1	−4·2	59·7	−0·9	65·4	−2·6	11·4	79·3	2nd	54·8	29th	24·5
	Chakrata .	6,977	23·251	+·054	?	23·368	8th	23·140	16th & 17th	·228	64·4	73·2	−1·7	59·4	−0·6	66·3	−1·2	13·8	80·3	6th	54·3	4th	26·0
	Mussooree .	6,705	23·466	?	?	23·580	9th	23·354	16th	·226	65·2	73·0	−3·0	60·7	+0·2	66·9	−1·4	12·3	80·8	1st & 2nd	56·9	3 days	23·9
	Ranikhet .	6,069	24·008	+·052	?	24·127	8th	23·896	17th & 28th	·231	67·6	75·6	−2·4	62·3	−0·8	69·0	−1·6	13·3	80·5	4th	56·0	2nd	24·5
	Yatung .	10,480	?	?	?	?	?	?	?	?	?	61·6	?	46·7	?	54·1	?	14·9	69·5	25th	40·4	3 days	29·1
	Gnatong .	?	19·263	?	?	19·345	2 days	19·183	17th	·162	48·4	55·6	?	41·6	?	48·6	?	14·0	62·8	13th	34·6	4th	28·2
	Darjeeling .	7,421	22·917	+·031	?	23·021	10th	22·828	28th	·193	61·3	65·7	+0·5‖	56·6	+1·3‖	61·2	+0·9‖	9·1	69·1	2 days	52·2‖	6th	16·9
	Gantak‡ .	?	24·430	?	?	24·580	11th	24·276	28th	·304	65·7	76·3*	?	58·1	?	67·3*	?	18·2	83·2	26th	51·0	3rd	32·2

* Mean of 29 days.

‡ Mean of 27 days.

I—*continued.*

in India, Burma, etc., in June 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean Humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th June 1895.	Normal rainfall for period, 1st June to 30th June.	Variation from normal of period, 1st June to 30th June.	Haviest rainfall during month.	Station.	Meteorological Province or District.
3	...	...	1	4	11	10	1	...	4·0	4·9	−18	70	·794	4·6	1	6·00	−5·00	0·91	3·68	−2·77	0·91	3·68	−2·77	0·55	Salem . .	Madras, South Central.
...	...	...	...	1	7	11	11	...	6·2	7·7	−19	74	·701	6·0	5	4·55	+0·45	2·99	1·43	+1·56	2·99	1·43	+1·56	1·79	Coimbatore.	
7	5	...	...	...	...	8	10	...	9·0	9·0	0	91	·619	7·6	24	25·00	−1·00	30·85	25·71	+5·14	30·85	25·71	+5·14	6·82	Mercara .	Coorg.
...	...	...	...	...	2	13	12	3	11·3	?	?	78	·682	8·1	10	?	?	4·75	?	?	4·75	?	?	0·77	Chitaldroog .	Mysore.
...	...	1	...	...	...	17	11	1	10·9	8·4	+30	80	·655	5·7	9	5·91	+3·09	1·67	3·45	−1·78	1·67	3·45	−1·78	0·28	Bangalore Fort.	
...	...	...	...	...	...	8	18	4	4·9	?	?	81	·640	7·9	11	?	?	4·41	?	?	4·41	?	?	0·86	Hassan.	
1	1	...	1	...	1	14	9	3	12·9	?	?	80	·679	7·1	9	?	?	4·77	?	?	4·77	?	?	1·78	Mysore.	
...	...	...	...	...	4	12	14	...	10·2	8·3	+23	64	·816	4·4	0	3·09	−3·09	0·03	1·74	−1·71	0·03	1·74	−1·71	0·03	Negapatam .	Madras, East-Coast, South.
...	...	...	...	...	9	11	8	2	2·8	?	?	65	·839	4·0	1	3·3	−2·3	0·30	?	?	0·30	?	?	0·15	Cuddalore.	
2	...	...	...	1	4	16	6	1	10·7	9·2	+16	62	·752	4·9	2	2·00	0	0·45	1·62	−1·17	0·45	1·62	−1·17	0·26	Trichinopoly.	
...	...	...	...	...	6	12	10	2	9·9	9·0	+10	59	·771	5·6	3	4·18	−1·18	0·90	2·11	−1·21	0·90	2·11	−1·21	0·37	Madras.	
...	...	...	...	3	6	4	10	7	10·5	?	?	57	·792	6·8	1	3·10	−2·10	0·23	?	?	0·23	?	?	0·13	Nellore .	Madras, East Coast, Central.
2	1	...	1	...	4	3	10	9	10·4	9·4	+11	73	·921	7·2	3	7·00	−4·00	1·42	5·52	−4·10	1·42	5·52	−4·10	0·85	Masulipatam.	
...	1	...	...	...	...	12	12	5	?	?	?	55	·728	6·2	2	5·50	−3·50	0·74	4·11	−3·37	0·74	4·11	−3·37	0·51	Cuddapah .	Madras, Central.
7	...	...	...	...	3	6	10	4	?	?	?	65	·732	7·5	7	5·50	+1·50	3·04	3·95	−0·91	3·04	3·95	−0·91	1·23	Kurnool.	
3	1	...	...	...	...	8	14	4	8·3	10·5	−21	62	·664	8·0	4	3·64	+0·36	2·31	1·85	+0·46	2·31	1·85	+0·46	0·97	Bellary.	
2	1	...	...	...	2	3	22	...	?	?	?	73	·848	7·7	9	6·60	+2·40	6·24	5·79	+0·45	6·24	5·79	+0·45	2·48	Rajahmundry	Madras, East-Coast, North.
...	...	1	...	1	1	12	14	1	8·7	?	?	73	·877	7·4	5	6·00	−1·00	1·76	5·37	−3·61	1·76	5·37	−3·61	0·73	Cocanada.	
...	1	...	...	...	...	7	18	4	3·7	3·8	−3	77	·902	8·7	9	6·64	+2·36	6·37	3·49	+2·88	6·37	3·49	+2·88	2·20	Vizagapatam	
1	1	...	...	2	6	14	3	3	15·5	11·6	34	86	·927	4·9	14	7·44	+6·56	11·99	6·09	+5·90	11·99	6·09	+5·90	3·53	Gopalpur.	
XII.—Hill Stations.																										
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Shirino.	
5	2	4	8	3	1	1	3	2	?	?	?	42	·388	0·6	0	?	?	0·10	?	?	0·10	?	?	0·08	Kachh Fort*	Baluchistan.
Observations not recorded.												?	?	?	...	?	?	0·10	?	?	0·10	?	?	0·10	Pishin.	
17	...	1	...	2	6	2	1	1	3·0	4·7	−36	52	·495	0·6	2	0·36	+1·64	0·76	0·12	+0·64	0·76	0·12	+0·64	0·64	Quetta.	
...	5	...	1	...	23	1	...	...	?	?	?	?	?	?	0	?	?	0·03	?	?	0·03	?	?	0·03	Kalat.	
...	...	1	1	2	5	12	7	2	7·9	?	?	30	·393	0·3	0	?	?	0	?	?	0	?	?	0	Chaman.	
...	1	7	3	2	3	8	6	...	3·0	2·4	+25	44	·204	4·2	0	?	?	0·04	?	?	0·04	?	?	0·04	Leh . .	Northern India.
8	3	2	...	11	2	1	1	2	5·3	?	?	80	·570	3·4	5	?	?	2·10	?	?	2·10	?	?	0·96	Srinagar.	
4	1	2	...	2	13	6	2	...	5·8	?	?	53	·312	3·2	3	?	?	0·56	?	?	0·56	?	?	0·20	Astor (Kashmir).	
Not recorded.									?	?	?	41‖	·393‖	3·1	1	?	?	0·36	?	?	0·36	?	?	0·20	Gilghit.	
6	5	...	...	14	4	...	...	1	11·2	?	?	58	·555	4·6	2	?	?	0·59	?	?	0·59	?	?	0·29	Cherat.	
5	2	...	1	15	1	1	1	4	8·6	6·6	+30	63	·430	5·6	11	4·55	+6·45	9·52	2·87	+6·65	9·52	2·87	+ 6·65	3·43	Murree.	
23	...	1	2	3	...	...	...	...	?	?	?	?	?	6·1	0	?	?	0·17	?	?	0·17	?	?	0·06	Poo.†	
6	4	7	2	3	7	1	...	...	3·9	2·3	+70	80	·465	7·7	19	10·00	+9·00	16·87	6·79	+10·08	16·87	6·79	+10·08	3·60	Simla.	
5	...	1	9	3	...	1	8	3	7·4	5·7	+30	82	·491	4·3	14	?	?	19·91	6·91	+13·00	19·91	6·91	+13·00	5·01	Chakrata.	
...	2	2	13	4	1	2	3	3	?	10·9	?	84	·517	7·4	18	10·20	+7·80	22·55	8·70	+13·85	22·55	8·70	+13·85	4·31	Mussooree.	
20	1	...	4	...	1	3	1	...	3·0	3·2	−6	81	·539	8·0	14	9·12	+4·88	8·51	5·94	+2·57	8·51	5·94	+2·57	2·31	Ranikhet.	
Not recorded.									?	?	?	?	?	?	22	?	?	7·61	?	?	7·61	?	?	1·02	Yatung.	
2	...	3	...	9	4	...	4	6	4·8	?	?	87	·297	7·1	26	?	?	22·56	?	?	22·56	?	?	2·55	Gnatong.	
3	1	9	8	4	1	4	...	...	4·5	4·7	−4	93	·507	8·0	18	19·71	−1·71	22·50	24·58	−2·08	22·50	24·58	−2·08	3·88	Darjeeling.	
...	...	...	1	...	4	6	13	3	2·8	?	?	92*	·585*	5·5¶	23	?	?	20·46	?	?	20·46	?	?	3·16	Gantak.‡	

† Wind points for 29 days. ‡ Wind points for 27 days. ‖ Mean of 25 days. ¶ Mean of 22 days.

Table

Abstract of Observations taken at 8 A.M. at 205 stations

Meteorological Province or District.	Stations.	Elevation of bar-cistern above sea-level in feet.	Pressure 8 A.M. in inches.								Temperature of air.											
			Mean actual pressure (reduced to 32°)	Variation from normal.	Mean pressure reduced to sea-level and to constant gravity of 45° Lat.	Highest pressure recorded during month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India.	Mount Abu.	3,945	25·857	−·011	?	26·012	9th	25·667	21st	·345	73·9	81·9	−1·4	68·2	+0·2	75·1	−0·6	13·7	88·7	10th	64·2	6th	24·5
	Pachmarhi .	3,528	26·264	+·013	?	26·411	4th	26·087	20th	·324	75·9	85·5	0	72·2	+0·5	78·9	+0·3	13·3	98·2	10th	67·2	4 days.	31·0
South India .	Wellington .	6,200	24·187	−·006	?	24·256	23rd	24·070	18th	·180	66·7	73·8	+2·0	57·2	−1·0	65·6	+0·5	16·6	80·2	5th	52·7	17th	27·5
XIII.—Extra India.																							
Ceylon . .	Trincomalee	75	29·730	?	29·782	29·819	23rd	29·610	18th	·209	86·6	93·1	?	79·7	?	86·4	?	13·4	98·0	1st	78·0	3rd	20·0
	Colombo .	40	29·852	−·012	29·818	29·943	23rd	29·760	12th	·183	83·8	87·8	?	77·6	?	82·7	?	10·2	90·0	5th & 12th.	73·5	14th	16·5
	Galle . .	48	29·850	?	29·824	29·928	23rd	29·748	17th	·180	82·4	84·7	?	79·0	?	81·9	?	5·7	87·0	8th & 9th.	75·0	19th	12·0
Persia . .	Meshed .	3,104			Not recorded.						79·2	?	?	62·2	?	?	?	?	?	...	55·8	26th	?
	Teheran .	?	†25·859	?	?	25·950	6th	25·700	18th	·250	†81·6	†96·0	?	68·3†	?	82·6†	?	26·7	100·8†	11th	56·2†	23rd & 24th.	44·6
	Ispahan .	?			Not recorded.					?	78·3	95·6	?	62·5	?	79·1	?	33·1	99·8	4th	57·9	12th	41·9
	Bushire* .	14	29·573	?	29·543	29·724	2nd	29·455	22nd	·269	85·7	90·5	?	80·6	?	85·6	?	9·9	101·0	11th	76·9	7th & 27th.	24·1
	Jask . .	?	29·558	?	?	29·696	10th	29·368	21st	·328	90·1	96·3	?	84·4	?	90·4	?	11·9	104·2	29th	79·2	25th	25·0
Arabia . .	Muscat .	?	29·555	?	?	29·694	9th	29·385	22nd	·309	91·4	94·2	?	89·5	?	91·8	?	4·7	99·5	3rd	86·5	16th	13·0
	Baghdad .	?								Imperfect.													
	Aden . .	94	29·636	−·025	29·660	29·726	28th	29·519	12th	·207	87·8	96·5	+2·5	83·8	+0·8	90·2	+1·7	12·7	101·8	15th & 20th.	76·4	14th	25·4
	Perim . .	?	?29·571	?	?	29·651	28th	29·466	12th	·185	87·5	94·3	?	83·5‡	?	88·8‡	?	10·8	101·1	29th	81·4	25th	19·7
Afghanistan .	Kabul . .	?	?	?	?	?	?	?	?	?	76·7	90·5	?	59·0	?	74·8	?	31·5	100·1	9th	51·8	3rd	48·3
Central Asia .	Kashgar .	?	25·529	?	?	25·780	1st	25·280	24th	·500	74·6	90·0	?	63·0	?	76·9*	?	26·7	99·5	6th	52·3	19th	47·2
Arabian Sea Islands.	Amini Devi.	15	...	...	...	...	...	...	...	...	...	...	...	...	?	...	...	...	...	...	...	...	...
	Minicoy .	10	*29·871	?	*29·806	29·982	23rd	29·792	13th & 18th.	·190	*82·2	86·7	?	79·3‡	?	82·7‡	?	7·4	90·7	6th & 8th.	75·1	21st	15·6
Africa . .	Zanzibar .	73	30·102	?	30·103	30·179	19th	30·029	12th	·150	74·9	81·3	?	74·0	?	77·6	?	7·3	82·9	9th & 16th.	72·3	25th	10·6

† Aneroid uncorrected and mean of 26 days. ‡ Mean of 22 days.

I—*concluded.*

in India, Burma, etc., in June 1895—concluded.

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.	Normal.	Percentage variation.	Hygrometry, 8 A.M.: Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall: Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th June 1895.	Normal rainfall for period 1st June to 30th June.	Variation from normal of period 1st June to 30th June.	Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
...	3	3	2	2	...	17	1	2	12·7	10·1	+26	70	·568	4·8	9	6·70	+2·30	6·32	6,13	+0·19	6·32	6·13	+0·19	1·82	Mount Abu.	CENTRAL INDIA.
3	1	...	1	1	...	5	16	3	12·8	7·7	+66	69	·589	5·9	14	11·64	+2·36	18·88	9·80	+9·08	18·88	9·80	+9·08	5·64	Pachmarhi.	
13	1	...	1	...	1	11	3	...	4·2	5·1	−18	69	·455	5·6	6	7·22	−1·22	4·14	3·73	+0·41	4·14	3·73	+0·41	1·24	Wellington .	SOUTH INDIA.
																									XIII.—Extra India.	
1	...	...	...	...	2	27	...	...	10·7	?	?	73	·930	3·7	0	?	?	0·03	1·21	−1·18	0·03	1·21	−1·18	0·03	Trincomalee	CEYLON.
...	...	...	...	...	2	14	12	2	10·1	10·2	−1	80	·939	6·3	12	?	?	14·07	7·24	+6·83	14·07	7·24	+6·83	2·70	Colombo .	
2	...	1	...	...	...	...	5	22	9·8	?	?	91	1·008	3·9	7	?	?	4·57	4·73	−0·16	4·57	4·73	−0·16	1·83	Galle . .	
			Not	rec	orde	d.			?	?	?	?	?	1·1	0	?	?	0	?	?	0	?	?	0	Meshed .	PERSIA.
25	...	...	...	...	1	...	..	...	3·8†	?	?	32†	·338†	0·3†	0	?	?	0	?	?	0	?	?	0	Teheran,**	
...	3	3	...	1	1	6	7	9	3·4	?	?	74	·719	0·3	0	?	?	0	?	?	0	?	?	0	Ispahan.	
...	...	2	1	2	2	1	2	19	11·8	10·8	+9	62‡	·766§	0	0	?	?	0	0	0	0	0	0	0	Bushire,*	
2	1	...	4	9	1	1	3	9	15·5	?	?	65	·904	1·8	0	?	?	0	?	?	0	?	?	0	Jask.	
...	2	3	9	2	...	...	6	8	4·0	?	?	68	1·000	2·1	0	?	?	0	?	?	0	?	?	0	Muscat.	ARABIA.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	Imper	fect.	...	...	...	...	...	...	...	...	...	Baghdad.	
1	...	3	11	2	1	11	...	1	10·8*	7·6	+42	70	·911	3·2	0	?	?	0·04	0·01	+0·03	0·04	0·01	*+0·03	0·04	Aden.	
...	6	...	1	...	...	...	17	6	13·8	?	?	73	945	5·2	0	?	?	0	?	?	0	?	?	0	Perim.	
...	6	2	13	1	2	3	3	...	?	?	?	?	?	1·3	1	?	?	1·00	?	?	1·00	?	?	1·00	Kabul .	AFGHANISTAN.
27	1	1	...	...	1	...	...	...	4·1	?	?	42	·346	2·1	1	?	?	0·43	?	?	0·43	?	?	0·29	Kashgar .	CENTRAL ASIA.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Amini Devi .	ARABIAN SEA ISLANDS.
2	...	...	...	...	1	10	13	3	19·3	?	?	84*	·917*	6·6	14	?	?	8·53	?	?	8·53	?	?	2·50	Minicoy.	
...	...	...	1	17	12	...	...	...	8·5	?	?	84	·730	4·8	0	?	?	0·12	?	?	0·12	?	?	0·09	Zanzibar .	AFRICA.

** Wind points for 26 days. * Mean of 29 days, † Mean of 26 days. ‡ Mean of 24 days. § Mean of 28 days

Table

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

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·769	29·685	·084	29·723	−·002	29·715	86·7	78·3	8·4	91·1	74·5	16·6	84·1	84·4	81·4	+0·6	76·3	79·8	79·8	78·6
	Rangoon	...	·766	·674	·092	·730	−·008	·708	86·9	76·6	10·3	91·3	73·2	18·1	82·2	82·4	79·9	+0·6	75·1	79·3	79·1	77·8
	Diamond Island	...	·753	·669	·084	·707	−·017	·683	85·9	79·0	6·9	87·6	74·5	13·1	83·9	83·3	81·3	+2·1	75·9	79·1	78·4	77·8
	Cocos Island	111	·730	·659	·071	·691	?	·684	89·0	78·6	10·4	92·8	73·7	19·1	85·2	86·0	82·6	?	75·5	80·1	80·1	78·6
	Akyab	...	·723	·636	·087	·683	+·006	·645	86·4	77·7	8·7	90·2	72·6	17·6	84·2	84·0	81·2	−0·1	76·0	81·5	81·3	79·6
Assam.	Silchar	...	·610	·478	·132	·554	+·015	·608	92·6	76·7	15·9	99·8	71·5	28·3	86·0	90·7	83·8	+2·2	75·4	79·8	81·1	78·8
	Sibsagar	...	·380	·252	·128	·318	+·011	·602	90·5	76·7	13·8	96·8	70·8	26·0	83·8	89·1	82·5	+1·0	75·9	80·0	82·4	79·4
	Dhubri	...	·584	·459	·125	·531	+·031	·598	88·9	77·7	11·2	95·0	71·3	23·7	83·9	86·4	81·9	+2·6	76·1	79·3	80·3	78·6
Bengal and Orissa.	Chittagong	...	·614	·514	·100	·570	+·003	·604	88·5	76·7	11·8	92·5	71·3	21·2	84·8	85·3	81·5	+1·0	75·2	79·7	80·2	78·4
	Narayanganj	...	·654	·543	·111	·606	+·032	·573	89·9	78·7	11·2	93·9	69·3	24·6	85·3	87·3	84·0	+0·9	76·1	80·5	80·8	79·1
	Calcutta (Alipore)	...	·611	·511	·100	·567	+·021	·534	90·1	77·7	12·4	95·3	72·8	22·5	86·6	86·3	83·6	−1·1	76·1	80·6	80·1	78·9
	Do. (Chowringhee)	...	·595	?	?	?	?	?	89·5	75·3	14·2	97·4	72·4	25·0	84·9	?	?	?	74·1	79·4	?	?
	Saugor Island	...	·602	·504	·098	·559	+·011	·528	90·1	80·6	9·5	93·7	76·5	17·2	86·9	87·2	84·1	−0·7	77·8	82·1	81·9	80·6
	Burdwan	...	·529	·417	·112	·480	+·018	·525	92·8	78·3	14·5	99·0	72·2	26·8	86·7	88·4	83·8	−1·5	76·4	80·1	80·1	78·9
	Berhampore	...	·580	·470	·110	·532	+·046	·546	93·2	78·4	14·8	99·1	73·3	25·8	87·4	90·1	84·9	+0·1	75·9	80·4	80·8	79·0
	False Point	...	·610	·514	·096	·566	+·002	·528	89·1	79·6	9·5	97·9	71·4	26·5	86·0	86·1	83·3	−0·7	77·7	80·7	80·5	79·7
	Cuttack	...	·537	·424	·113	·490	−·005	·510	93·0	79·4	13·6	107·9	72·8	35·1	86·4	88·2	84·2	−1·6	76·2	79·2	79·8	78·4
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	27·631	27·536	·095	27·584	+·007	·499	91·8	75·6	16·2	106·7	70·4	36·3	85·6	86·4	82·0	−0·2	69·7	74·7	75·0	73·1
	Patna	...	29·438	29·318	·120	29·384	+·031	·515	96·3	80·0	16·3	105·5	74·5	31·0	89·5	94·1	86·4	−0·4	76·8	79·7	79·5	78·7
	Darbhanga	...	·479	·351	·128	·421	+·038	·531	94·8	80·1	14·7	101·0	75·7	25·3	89·3	93·7	86·1	+1·5	76·9	79·7	80·3	78·9
	Allahabad	...	·289	·174	·115	·234	+·032	·492	98·3	80·8	17·5	110·7	74·3	36·4	91·4	95·5	88·3	−2·6	75·7	79·8	80·0	78·5
	Ghazipur	220	·389	·280	·109	·338	+·044	·507	96·7	81·9	14·8	110·2	76·8	33·4	90·3	93·1	87·7	+0·1	76·8	79·8	79·5	78·7
	Lucknow	...	·243	·129	·114	·184	+·033	·503	96·9	?	?	110·3	?	?	89·3	93·5	?	?	73·9	79·6	80·4	78·0
Upper Sub-Himalayas.	Dehra Dun	...	27·455	27·373	·082	27·404	+·048	·552	88·4	73·3	15·1	97·9	67·2	30·7	81·6	84·3	80·0	−3·9	69·2	73·1	74·6	72·3
	Roorkee	...	28·739	28·632	·107	28·681	+·064	·514	95·0	77·1	17·9	106·7	70·1	36·6	86·7	92·1	85·6	−4·2	73·0	76·7	78·3	76·0
	Meerut	...	·873	·772	·101	·814	+·055	·501	94·6	78·0	16·6	106·3	72·2	34·1	87·9	90·7	85·6	−4·9	75·0	77·9	78·4	77·1
	Lahore	...	·880	·771	·109	·820	+·050	·472	102·2	83·1	19·1	112·1	73·9	38·2	93·7	100·2	91·8	+0·8	74·9	79·6	80·4	78·3
	Ludhiana	...	·790	·683	·107	·731	+·051	·487	98·6	80·0	18·6	110·9	74·2	36·7	90·6	96·0	88·5	−2·9	74·4	78·1	79·2	77·3
Indus Valley and N.-W. Rajputana.	Peshawar	...	·493	·369	·124	·425	+·044	·475	103·1	78·5	24·6	113·5	70·4	43·1	93·9	101·6	90·0	+0·4	69·4	75·5	75·9	73·5
	Mooltan	...	29·122	29·035	·087	29·073	+·036	·443	106·6	85·0	21·6	112·2	74·1	38·1	96·1	105·2	95·1	+1·0	74·7	81·6	83·6	80·0
	Jacobabad	...	·347	·216	·131	·275	+·018	·409	111·5	87·6	23·9	117·7	78·7	39·0	101·1	109·8	98·7	+1·9	?	?	?	?
	Kurrachee	...	·536	·461	·075	·499	−·017	·499	94·7	82·6	12·1	110·6	79·3	31·3	90·6	90·9	87·4	+0·5	78·8	83·4	83·4	81·9
E. Rajputana, Central India, and Gujarat.	Jeypore	...	28·209	28·101	·108	28·155	+·024	·512	101·0	80·3	20·7	110·4	75·9	34·5	92·0	97·0	89·6	−1·1	74·1	77·5	78·1	76·6
	Ajmere	...	·031	27·925	·106	27·984	+·002	·501	101·0	81·9	19·1	106·9	76·5	30·4	91·9	98·6	90·11	+1·8	74·2	77·3	78·2	76·6
	Deesa	...	29·177	29·055	·122	29·121	−·002	·528	100·1	79·4	20·7	109·0	75·8	33·2	89·5	96·8	88·3	−1·7	75·1	77·4	77·3	76·6
	Nowgong	...	28·854	28·753	·101	28·808	+·026	·501	97·2	78·9	18·3	110·1	73·0	37·1	90·4	92·1	86·5	−4·6	73·9	77·8	77·8	76·5
	Agra	...	29·046	·939	·107	·986	+·032	·484	98·9	81·6	17·3	109·9	76·1	33·8	93·0	95·1	89·6	−5·0	75·0	79·6	79·1	77·9
Deccan.	Belgaum	...	27·273	27·190	·083	27·235	−·014	·666	81·7	68·9	12·8	95·3	65·8	29·5	76·2	76·0	73·4	+1·0	67·1	71·0	70·4	69·5
	Sholapur	...	28·158	28·041	·117	28·109	−·008	·607	95·8	75·4	20·4	107·1	70·6	36·5	86·9	91·4	83·5	+1·9	69·5	72·3	72·3	71·4
	Poona	...	27·910	27·822	·088	27·873	−·003	·627	90·0	72·1	17·9	104·8	66·7	38·1	82·0	84·9	79·5	+0·2	69·1	72·6	72·5	71·4
	Akola	...	28·749	28·625	·124	28·692	+·002	·554	97·1	78·1	19·0	109·2	73·1	36·1	88·3	93·3	85·7	+0·2	72·4	76·6	77·0	75·3
	Buldana	2,132	27·593	27·489	·104	27·546	+·006	·567	92·1	73·9	18·2	103·6	69·3	34·3	84·5	88·8	81·3	+0·7	68·2	72·7	72·7	71·2
	Khandwa	...	28·633	28·513	·120	28·578	+·010	·553	96·5	79·3	17·2	108·9	68·1	40·8	88·6	93·0	86·8	+0·4	71·6	76·1	75·6	74·4

II.

89 Stations in India, Burma, etc., for June 1895.

Vapour Tension.					Humidity.				Cloud.				Wind Direction. Number of winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·880	·965	·958	·934	+·021	91	83	81	85	−1	8·7	8·2	8·5	+1·3	...	1	...	...	1	5	23	24	6	S. 69° W.	S. 38° W.	78	82	275	227	...	...	Port Blair	Burma Coast and Bay Islands.
·851	·965	·955	·924	+·022	93	88	87	89	0	8·4	9·2	8·8	+0·1	...	1	1	...	3	15	23	15	2	S. 44° W.	S. 19° W.	72	71	113	130	...	...	Rangoon	
·856	·931	·915	·900	+·010	86	80	80	82	−5	8·7	9·1	8·9	+1·1	1	...	...	...	4	2	38	8	7	S. 54° W.	S. 32° W.	77	75	278*	207	...	...	Diamond Island, Cocos Island	
·844	·959	·951	·918	?	86	79	77	80	?	7·7	7·4	7·6	?	...	...	...	...	...	25	31	3	...	S. 28° W.	?	89	?	?	?	11·88	3·26		
·876	1·044	1·034	·986	+·070	92	89	89	90	+4	8·5	7·8	8·2	+0·9	...	1	1	14	8	27	2	7	...	S. 20° E.	S. 2° E.	57	58	121	96	...	...	Akyab	
·865	·939	·937	·914	+·007	94	76	65	78	−7	7·2	6·8	7·0	−0·8	43	1	1	2	1	1	...	8	3	S. 72° W.	N. 58° E.	12	9	50*	72	...	...	Silchar	Assam.
·890	·978	1·023	·964	+·047	96	84	75	85	+1	7·1	5·1	6·1	−2·3	11	1	23	2	6	1	13	1	2	N. 69° E.	S. 77° E.	20	11	94*	62	...	...	Sibsagar	
·884	·943	·959	·928	+·032	93	81	76	83	−5	5·8	6·5	6·2	−1·1	8	3	7	12	4	5	12	6	3	S. 28° E.	S. 84° E.	12	23	118	116	...	...	Dhubri	
·856	·949	·964	·923	+·075	93	80	80	84	−2	7·7	6·7	7·2	−0·3	...	...	3	5	17	15	12	3	5	S. 8° E.	S. 31° E.	50	56	162*	166	...	...	Chittagong	Bengal and Orissa.
·871	·979	·967	·939	−·032	89	80	75	81	−6	8·1	6·9	7·5	−0·1	...	...	2	8	28	15	4	2	1	S. 56° E.	S. 16° E.	72	75	186	172	...	...	Narayanganj	
·884	·964	·944	·931	−·040	93	76	76	82	−1	6·5	7·1	6·8	−0·3	1	...	5	17	16	13	7	1	...	S. 45° E.	S. 4° E.	60	59	124	146	...	...	Calcutta (Alipore),	
·872	·989	?	?	?	91	75	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	13·06	1·66	Do. (Chowringhee,)	
·920	1·033	1·018	·991	−·035	88	81	79	83	0	8·6	8·5	8·6	+1·1	...	1	4	7	8	25	10	4	1	S. 6° E.	S. 15° W.	55	69	330	350	...	...	Saugor Island	
·889	·938	·919	·915	−·014	91	74	69	78	+1	7·2	7·1	7·2	−0·1	...	4	9	11	15	15	6	...	...	S. 50° E.	S. 20° E.	52	58	121*	118	...	...	Burdwan	
·865	·946	·928	·913	−·023	89	73	67	76	−7	5·4	7·4	6·4	−1·8	1	1	4	24	12	14	4	...	...	S. 56° E.	S. 33° E.	65	48	105	133	...	...	Berhampore	
·928	·981	·970	·962	−·008	92	79	78	83	0	7·9	7·9	7·9	+1·0	...	2	1	1	10	21	10	10	5	S. 22° W.	S. 45° W.	52	63	287*	288	...	...	False Point	
·863	·904	·908	·892	+·002	86	72	70	76	+3	6·1	6·5	6·3	−0·4	5	2	4	4	2	13	17	11	2	S. 39° W.	S. 31° W.	43	53	105	96	...	...	Cuttack	
·657	·727	·725	·703	+·018	75	63	61	66	+1	7·7	9·1	8·4	+1·1	...	3	8	21	10	7	3	5	3	S. 78° E.	S. 36° W.	42	19	251	213	...	...	Hazaribagh	Ganogtic Plain and Chota Nagpur.
·882	·881	·821	·865	−·009	86	64	53	68	−1	5·3	5·8	5·6	−0·5	...	2	16	27	6	4	2	2	1	S. 83° E.	N. 73° E.	65	45	191*	106	...	...	Patna	
·885	·886	·867	·880	−·033	86	65	55	69	−8	5·3	4·8	5·1	+0·4	1	...	4	26	25	3	...	...	1	S. 69° E.	S. 89° E.	82	71	183	139	...	...	Darbhanga	
·826	·865	·820	·837.	+·074	79	62	54	65	+10	5·4	5·7	5·6	+1·0	...	5	15	13	3	3	4	7	10	N. 31° E.	N. 2° E.	28	12	174	102	...	...	Allahabad	
·857	·878	·828	·854	+·076	79	64	57	67	+9	4·8	4·6	4·7	+0·4	6	0	5	30	4	1	5	5	4	S 88° E.	N. 74° E.	42	12	96	73	...	...	Ghazipur	
?	·883	·863	?	?	?	66	59	?	?	6·2	5·8	6·0	+1·3	...	4	13	13	9	6	8	4	3	S. 81° E.	N. 151° E.	28	17	91*	102	...	...	Lucknow	
·666	·709	·737	·704	?	82	68	65	72	?	6·0	7·0	6·5	+2·3	11	2	4	9	15	8	4	4	3	S. 43° E.	S. 66° W.	33	12	37	39	...	...	Dehra Dun	
·763	·787	·786	·779	+·142	82	64	55	67	+16	5·8	4·6	5·2	+2·1	27	1	6	5	8	2	9	1	1	S. 40° E.	S. 4° E.	17	11	84	94	...	...	Roorkee	Upper Sub-Himalayas.
·834	·826	·809	·823	+·138	87	64	58	70	+20	5·8	5·7	5·8	+2·6	16	1	8	15	13	...	2	3	2	S. 84° E.	N. 26° W.	40	22	57	64	...	...	Meerut	
·759	·827	·772	·786	+·178	67	53	42	54	+16	3·0	2·8	2·9	−0·3	...	8	4	20	11	6	3	6	2	S. 81° E.	N. 19° W.	35	11	124	85	...	...	Lahore	
·782	·800	·774	·789	+·156	77	58	49	62	+15	5·6	5·5	5·6	+2·5	8	1	9	1	30	6	3	...	2	S. 50° E.	N. 74° W.	55	10	75	60	...	...	Ludhiana	
·614	·655	·576	·611	+·102	63	42	29	45	+8	2·6	3·2	2·9	+0·9	5	3	20	9	7	3	5	5	3	N. 66° E.	N. 44° E.	32	32	113*	112	...	...	Peshawar	Indus Valley and N.W. Rajputana.
·725	·886	·862	·824	+·080	61	52	39	51	+3	1·8	1·7	1·8	+0·9	4	...	17	1	14	2	18	1	3	S. 34° E.	S. 25° W.	22	33	67*	87	...	...	Mooltan	
?	?	?	?	?	?	?	?	?	?	1·0	0·6	0·8	0	9	...	1	10	23	12	3	1	1	S. 39° E.	S. 31° E.	62	46	155*	117	...	...	Jacobabad	
·935	1·052	1·044	1·011	+·062	84	74	72	77	+3	5·3	6·3	5·8	+1·5	...	2	...	1	7	10	26	10	4	S. 42° W.	S. 5° W.	63	85	389	447	...	...	Kurrachee	
·771	·760	·727	·753	+·083	74	51	44	56	+6	4·8	6·1	5·5	+1·2	1	2	13	2	3	3	7	21	8	N. 69° W.	N. 30° W.	32	47	130	178	...	...	Jeypore	E. Rajputana, Central India, and Gujarat.
·752	·759	·711	·741	+·059	69	51	40	54	+3	2·9	3·9	3·4	0	2	2	5	2	5	2	14	23	5	S. 77° W.	S. 61° W.	47	68	226	208	...	...	Ajmere	
·815	·784	·678	·759	+·028	82	58	43	61	+9	3·7	4·6	4·2	−0·8	...	1	...	1	6	7	26	15	4	S. 51° W.	S. 36° W.	67	72	359	403	...	...	Deesa	
·778	·789	·764	·777	+·060	80	60	57	66	+14	5·3	7·4	6·4	+0·5	5	8	1	7	1	3	...	29	6	N. 70° W	N. 72° W.	43	43	80*	107	...	...	Nowgong	
·784	·841	·778	·804	+·134	73	57	50	60	+15	5·6	6·0	5·8	+2·3	...	...	12	...	18	...	12	...	18	0	N. 60° W.	0	28	158*	138	..	...	Agra	
·643	·695	·676	·671	+·007	91	78	77	82	0	7·9	8·9	8·4	+0·5	...	3	1	...	1	1	19	23	4	S. 77° W.	S. 73° W.	72	86	473	583	...	...	Belgaum	Deccan.
·650	·612	·554	·606	−·018	75	49	39	54	−6	7·6	8·7	8·2	+1·0	...	3	3	...	1	...	21	16	16	N. 89° W.	N. 86° W.	65	66	388*	293	...	...	Sholapur	
·676	·685	·646	·669	−·016	86	65	57	69	−1	7·5	8·0	7·8	+0·3	...	2	...	1	...	2	25	23	7	S. 74° W.	S. 79° W.	77	73	275	375	...	...	Poona	
·721	·759	·711	·730	+·045	77	58	49	62	+4	6·0	7·8	6·9	+0·4	5	5	1	...	...	1	10	16	22	N. 71° W.	N. 71° W.	67	71	229	215	...	...	Akola	
·620	·657	·603	·627	−·048	75	57	48	60	−6	7·9	8·2	8·1	+1·8	1	1	...	...	...	1	15	13	29	N. 78° W.	N. 75° W.	75	65	248*	253	4·12	0·84	Buldana	
·690	·738	·669	·699	−·018	73	57	48	59	−1	5·3	7·2	6·3	+0·2	...	...	...	...	3	2	11	7	37	N. 70° W.	N. 77° W.	68	71	243	228	...	...	Khandwa	

* Corrected.

Table

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

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of air.										Temperature, Wet-bulb			
			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.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*contd.*	Hosangabad	...	28·638	28·520	·118	28·581	−·002	29·538	95·7	78·0	17·7	109·3	72·7	36·6	88·1	92·5	85·8	−1·9	72·4	77·5	77·8	75·9
	Nagpur	...	·626	·515	·111	·576	+·006	·531	96·4	79·1	17·3	111·2	74·1	37·1	88·8	91·9	85·7	−0·1	70·8	77·8	79·4	76·0
	Do. (Sanitary Commr.'s Office).	...	·651	·544	·107	·598	?	·544	97·5	78·8	18·7	112·0	73·0	39·0	89·8	92·4	86·9	?	71·9	76·8	77·3	75·3
	Jubbulpore	...	·291	·189	·102	·245	−·001	·497	94·3	77·0	17·3	109·4	71·4	38·0	87·8	88·5	84·0	−2·1	72·1	75·7	75·7	74·5
	Saugor	...	27·892	27·787	·105	27·845	+·022	·512	94·5	77·4	17·1	107·9	72·3	35·6	86·9	90·5	84·8	−0·9	70·2	75·0	75·6	73·6
	Raipur	...	28·665	28·549	·116	28·612	+·009	·498	94·5	78·8	15·7	112·3	72·0	40·3	87·8	91·7	85·1	−0·6	73·1	77·6	78·7	76·5
	Sutna	...	·565	·460	·105	·517	+·027	·492	96·2	80·1	16·1	109·6	70·9	38·7	90·4	91·1	86·5	−2·9	72·7	76·7	76·1	75·2
West Coast.	Hyderabad (Deccan.)	...	·051	27·936	·115	·001	?	·595	94·2	76·9	17·3	107·7	71·3	36·4	85·8	91·1	84·8	?	71·2	74·0	75·3	73·5
	Bombay	...	29·708	29·622	·086	29·664	−·005	·641	88·0	79·8	8·2	93·8	75·1	18·7	84·6	85·1	83·4	+0·2	76·0	79·4	79·3	78·2
	Ratnagiri	...	·660	·579	·081	·618	−·014	·664	88·1	79·1	9·0	94·3	73·3	21·0	84·9	84·6	82·9	+2·0	75·7	79·0	79·0	77·9
	Karwar	...	·772	·691	·081	·730	−·017	·706	87·0	79·0	8·0	93·2	74·5	18·7	84·2	84·4	82·5	+2·8	75·2	78·1	78·4	77·3
	Cochin	...	·871	·803	·068	·836	−·019	·773	86·8	76·2	10·6	92·1	73·1	19·0	83·2	84·0	81·1	+1·8	74·4	78·3	78·6	77·1
South India.	Salem	...	28·890	28·769	·121	28·843	−·022	·701	97·9	76·6	21·3	105·5	73·1	32·4	88·6	91·7	85·1	+2·7	73·3	77·7	77·5	76·2
	Mysore	...	27·354	27·262	·092	27·308	?	·718	84·9	69·0	15·9	96·5	65·9	30·6	78·4	80·9	76·0	?	67·3	71·0	70·3	69·5
	Mercara	...	26·177	26·106	·071	26·155	−·003	?	73·5	64·5	9·0	82·4	61·1	21·3	69·7	68·8	67·9	+1·3	63·1	66·6	66·9	65·5
	Bangalore	...	·847	·759	·088	·814	−·019	·690	85·7	67·9	17·8	94·0	64·7	29·3	78·5	80·8	75·6	+0·9	66·0	70·0	69·8	68·6
	Hassan	...	·800	·724	·076	·773	?	·734	80·2	66·8	13·4	92·5	65·0	27·5	76·2	76·8	72·7	?	63·2	69·0	68·7	67·0
	Chitaldroog	...	27·418	27·329	·089	27·383	?	·686	85·3	69·4	15·9	96·8	64·2	32·6	79·0	80·7	76·2	?	65·9	71·5	71·3	69·6
	Trichinopoly	...	29·554	29·418	·136	29·499	−·017	·679	100·2	79·5	20·7	105·4	75·1	30·3	91·5	96·8	88·4	+1·8	72·9	75·8	76·0	74·9
	Madras	...	·750	·636	·114	·703	+·002	·652	99·4	82·1	17·3	106·6	77·4	29·2	92·6	92·7	88·6	+1·4	?	78·0	79·3	77·8
	Bellary	...	28·309	28·196	·113	28·262	−·004	·652	93·9	76·0	17·9	104·2	73·4	30·8	84·4	90·5	83·2	+0·3	66·3	72·6	73·4	70·8
	Vizagapatam	...	29·651	29·552	·099	29·606	+·014	·574	87·7	83·0	4·7	92·0	78·4	13·6	85·6	86·1	85·0	−2·6	77·3	78·9	78·8	78·3
	Cocanada	...	·677	·566	·111	·622	?	·582	93·7	80·3	13·4	100·2	72·7	27·5	88·2	90·5	86·2	?	75·8	78·4	79·5	77·9
Hill Stations, Baluchistan.	Quetta	...	24·493	24·407	·086	24·443	+·011	?	92·0	62·2	29·8	96·1	51·2	44·9	83·9	87·6	76·0	+1·6	54·1	64·6	62·3	60·3
Hill Stations, Northern India.	Leh	...	11,503	19·668	19·574	·094	19·627	−·012	?	75·7	49·2	26·5	85·2	43·7	41·5	64·3	71·8	61·1	+5·7	38·7	48·7	53·1	46·9
	Srinagar	...	24·764	24·674	·090	24·712	?	?	83·4	60·9	22·5	93·3	53·4	39·9	71·7	81·7	71·7	?	58·9	67·1	72·7	66·2
	Murree	...	23·764	23·721	·043	23·735	+·019	?	77·4	64·0	13·4	87·7	56·3	31·4	72·1	74·6	70·5	−2·3	56·0	62·1	63·7	60·6
	Chamba	...	3,005	26·703	26·613	·090	26·670	+·028	?	88·5	70·1	18·4	96·9	62·3	34·6	80·8	85·5	78·0	−2·1	65·4	69·7	71·3	68·8
	Kailang	...	10,087	20·733	20·673	·060	20·715	+·005	?	70·5	47·7	22·8	79·7	40·1	39·6	63·0	67·5	57·8	+2·8	44·7	51·9	52·9	49·8
	Simla (Ridge)	...	...	23·049	22·998	·051	23·017	+·027	?	70·7	59·4	11·3	79·3	54·8	24·5	65·2	67·6	64·8	−2·7	55·7	60·1	61·9	59·2
	Chakrata	...	...	·261	23·204	·057	·226	+·044	?	72·7	59·4	13·3	80·3	54·3	26·0	66·2	69·0	65·7	−1·0	57·3	61·6	63·4	60·7
	Ranikhet	...	...	24·016	·950	·066	·971	+·042	?	75·0	62·3	12·7	80·6	56·2	24·4	70·6	70·6	68·1	−2·3	59·9	65·0	64·6	63·2
	Katmandu	...	4,388	25·421	25·360	·061	25·388	−·012	?	84·0	66·4	17·6	90·2	59·5	30·7	78·6	77·6	73·6	−1·5	65·3	70·3	70·2	68·6
	Darjeeling	...	...	22·926	22·859	·067	22·891	+·032	?	65·7	56·7	9·0	69·1	52·1	17·0	63·0	63·0	60·5	+0·7	56·0	61·6	61·7	59·9
	Demagri	...	?	?	?	?	?	?	?	90·2	76·6	13·6	94·1	71·2	22·9	85·3	86·6	82·5	+2·4	?	?	?	?
	Tura	...	3,943	?	?	?	?	?	?	87·3	76·4	10·9	94·4	71·4	23·0	82·0	84·2	81·1	?	?	76·6	77·6	?
Hill Stations, Central India.	Mount Abu	...	...	25·870	25·807	·063	25·843	−·019	?	81·6	68·1	13·5	88·7	64·2	24·5	76·7	79·3	74·3	−1·3	63·1	68·2	69·5	66·9
	Pachmarhi	...	...	26·277	26·189	·088	26·238	+·008	?	84·9	72·2	12·7	98·2	67·2	31·0	78·8	81·4	77·5	−0·7	64·6	68·7	69·4	67·5
	Chikalda	...	3,642	·183	·104	·079	·148	+·020	?	83·2	68·9	14·3	95·5	64·5	31·0	75·7	79·8	75·0	−0·4	65·1	68·8	69·7	67·9
	Makhla	...	?	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

II—*continued.*

at 89 Stations in India, Burma, etc., for June 1895—continued.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from																	
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·732	·809	·770	·770	+·026	78	65	56	66	+ 6	5·6	7·5	6·6	+0·6	12	...	1	...	...	2	23	22	...	S. 65° W.	S. 88° W.	68	71	55	114	...	...	Hoshangabad	Deccan—*contd.*
·658	·817	·847	·774	+·061	68	64	61	64	+ 3	7·0	8·3	7·7	+0·5	1	7	2	1	1	5	13	18	8	S. 88° W.	N. 76° W.	48	52	228	183	...	...	Nagpur	
·701	·761	·749	·737	?	74	59	54	62	?	6·2	7·7	7·0	?	5	10	...	...	2	13	4	25	1	S. 77° W.	?	47	?	71*	?	...	...	Do. (Sanitary Commr's Office).	
·727	·741	·728	·732	+·045	80	62	62	68	+ 9	5·5	7·6	6·6	+0·2	4	5	5	2	3	5	9	16	11	N. 83° W.	N. 80° W.	38	54	101	126	...	...	Jubbulpore	
·657	·723	·698	·690	+·078	71	62	54	62	+10	5·9	6·6	6·3	+2·1	1	2	4	...	1	2	22	23	5	S. 76° W.	S. 82° W.	67	63	136	126	...	...	Saugor	
·743	·813	·809	·788	+·061	78	68	62	69	+ 7	6·1	7·6	6·9	+0·4	8	3	1	...	...	2	23	17	6	S. 74° W.	S. 74° W.	63	66	270*	220	...	...	Raipur	
·717	·751	·722	·730	+·094	72	58	56	62	+13	4·6	6·1	5·4	+0·7	1	10	4	8	...	9	3	9	16	N. 41° W.	N. 59° W.	30	50	188*	241	...	...	Sutna	
·695	·696	·681	·691	?	76	59	50	62	?	6·6	7·2	6·9	?	3	3	3	2	2	2	1	35	9	N. 79° W.	?	62	?	212*	?	...	...	Hyderabad (Deccan.)	
·848	·936	·923	·902	—·025	84	79	77	80	− 2	6·6	6·8	6·7	−1·2	...	1	1	1	3	8	17	15	14	S. 73° W.	S. 63° W.	59	66	362	389	...	...	Bombay	West Coast.
·847	·907	·920	·890	+·043	85	77	78	80	0	6·8	7·1	7·0	+0·4	...	4	1	...	...	6	23	10	16	S. 80° W.	S. 53° W.	62	66	302	278	...	...	Ratnagiri	
·826	·883	·894	·868	+·026	83	76	76	78	− 6	6·0	7·7	6·9	−0·3	...	2	...	...	...	1	35	4	18	S. 75° W.	S. 76° W.	72	76	208	?	...	...	Karwar	
·830	·897	·911	·879	+·025	92	80	78	83	− 5	5·6	7·3	6·5	−1·1	6	7	4	...	...	...	5	35	3	N. 77° W.	S. 75° W.	64	42	187	?	...	...	Cochin	
·780	·807	·755	·780	+·016	85	60	52	66	− 4	5·1	7·7	6·4	+0·6	7	2	1	1	7	12	22	4	4	S. 30° W.	S. 58° W.	52	82	98	113	...	...	Salem	South India.
·650	·667	·607	·641	?	91	69	61	74	?	7·2	8·9	8·1	?	9	1	1	1	1	1	20	23	3	S. 71° W.	?	64	?	312*	?	...	...	Mysore	
·564	·622	·640	·609	+·008	92	86	91	90	− 3	8·1	9·3	8·7	−0·7	8	2	...	...	1	1	15	24	9	S. 85° W.	N. 81° W.	68	86	219	196	...	...	Mercara	
·620	·638	·664	·620	+·003	91	66	59	72	− 2	5·7	7·9	6·8	+1·0	2	2	1	...	1	4	28	20	2	S. 63° W.	S. 71° W	73	90	264*	202	...	...	Bangalore	
·540	·628	·611	·593	?	82	71	69	74	?	7·3	8·7	8·0	?	...	...	...	1	1	...	18	32	8	S. 81° W.	?	82	?	121*	?	...	...	Hassan	
·596	·679	·652	·642	?	83	68	64	72	?	7·1	8·2	7·7	?	1	1	1	...	...	4	23	25	5	S. 71° W.	?	78	?	237*	?	...	...	Chitaldroog	
·725	·681	·619	·675	−·037	72	46	36	51	− 6	3·9	5·3	4·6	−2·6	3	...	...	3	3	9	25	16	1	S. 47° W.	N. 87° W.	67	84	254	228	...	...	Trichinopoly	
?	·757	·821	·818	+·019	?	50	55	60	− 4	5·1	5·6	5·4	−1·0	1	...	...	2	11	9	17	18	2	S. 38° W.	S. 36° W	59	58	233	213	...	...	Madras	
·529	·637	·612	·593	−·065	59	52	44	52	− 6	8·0	9·3	8·7	+1·2	4	2	1	1	...	...	15	31	6	S. 85° W.	S. 86° W.	75	80	199	256	...	...	Bellary	
·863	·906	·916	·895	+·013	77	73	73	74	+ 6	8·1	7·9	8·0	+2·0	...	...	...	...	1	9	17	31	2	S. 65° W.	S. 58° W.	80	63	91	87	...	..	Vizagapatam	
·833	·843	·862	·846	?	81	64	61	68	?	6·6	6·4	6·5	?	...	4	...	1	5	8	16	20	6	S. 65° W.	?	57	?	213*	?	...	...	Cocanada	
·349	·415	·302	·355	−·020	60	35	23	39	− 3	0·5	2·2	1·4	+0·4	21	2	...	...	2	5	8	13	9	S. 81° W.	N. 69° W.	40	43	67*	101	...	...	Quetta	Hill Station, Baluchistan.
·151	·215	·247	·204	+·035	42	36	32	37	−1	4·8	4·8	4·8	−0·2	1	3	5	4	3	8	12	22	2	S. 65° W.	S. 84° W.	42	26	73	57	...	...	Leh	Hill Stations, Northern India.
·480	·615	·713	·603	?	89	79	66	78	?	3·4	4·5	4·0	?	...	4	4	1	21	5	10	2	13	S. 2° E.	?	18	?	111*	?	...	...	Srinagar	
·368	·461	·480	·436	+·075	63	61	58	60	+14	5·4	5·7	5·6	+1·8	5	1	1	6	26	10	4	...	7	S. 36° E.	S. 2° W.	50	12	209*	158	...	...	Murree	
·578	·600	·602	·594	+·129	78	59	51	63	+16	5·3	6·8	6·1	+1·8	14	6	2	...	4	...	2	4	28	N. 43° W.	N. 27° W.	52	25	135*	123	5·46	1·65	Chamba	
·273	·295	·276	·281	+·045	82	52	42	58	+5	5·0	5·8	5·4	−0·2	...	5	...	...	...	13	17	14	11	S. 70° W.	S. 66° W.	60	67	63	47	1·05	0·23	Kailang	
·408	·471	·498	·459	+·046	80	77	75	77	+14	8·8	7·8	8·3	+2·4	8	11	9	2	1	11	12	1	3	S. 70° W.	S. 76° W.	5	40	94	?	...	...	Simla (Ridge)	
·454	·510	·529	·497	+·091	89	79	77	82	+17	4·5	5·7	5·1	0	1	1	2	10	2	1	11	26	6	S. 82° W.	S. 73° W.	42	50	173	140	...	...	Chakrata	
·494	·563	·549	·535	+·075	88	76	75	79	+15	8·4	7·6	8·0	+2·6	31	3	...	2	...	2	4	16	2	S. 89° W.	S. 65° W.	30	49	76*	83	...	...	Ranikhet	
·604	·648	·654	·632	+·006	93	67	69	76	+1	6·5	7·1	6·8	+1·1	...	...	...	23	...	1	1	26	9	N. 66° W.	S. 87° W.	18	53	33	?	10·76	2·60	Katmandu	
·442	·534	·539	·507	+·016	95	92	93	94	−1	9·0	9·2	9·1	+0·4	9	3	12	10	7	2	4	12	...	N. 79° E.	S. 88° E.	15	5	121	113	...	...	Darjeeling	
?	?	?	?	?	?	?	?	?	?	?	?	?	?	...	...	1	38	2	...	...	18	1	E.	S. 29° E.	35	23	?	?	13·09	3·70	Demagri	
?	·857	·870	?	?	?	78	74	?	?	7·5	7·4	7·5	+0·7	...	7	...	2	1	26	22	2	...	S. 23° W.	S. 3° W.	63	57	?	?	11·49	2·54	Tura	
·529	·599	·608	·579	+·011	77	68	64	70	+3	4·9	5·3	5·1	−0·2	1	4	7	2	4	4	35	2	1	S. 39° W.	S. 42° W.	47	74	309*	242	...	...	Mount Abu	Hill Stations, Central India.
·523	·588	·582	·564	−·033	69	65	61	65	−1	6·3	7·7	7·0	+0·4	10	2	...	2	...	2	11	28	5	S. 83° W.	N. 71° W.	63	63	268*	185	...	...	Pachmarhi	
·578	·627	·613	·606	+·009	83	74	65	74	+2	6·9	7·6	7·3	+0·5	19	13	...	...	...	3	1	8	16	N. 44° W	N. 45° W.	48	62	228	233	10·93	4·13	Chikalda	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Makhla	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 89

Meteorological Province.	Station.	Elevation of bar-cistern above sea-levelin feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			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.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, S. India.	Wellington . .	...	24·196	24·133	·063	24·164	−·001	?	73·6	57·3	16·3	80·3	52·9	27·4	68·7	68·1	64·1	+0·3	55·1	60·3	60·5	58·6
Extra India.	Muscat . .	...	29·550	29·484	·066	29·517	?	?	94·2	89·5	4·7	99·5	86·5	13·0	92·6	92·2	91·3	?	78·3	83·5	84·1	81·9
	Aden . . .	...	·645	·529	·116	·583	−·019	29·606	96·3	83·8	12·5	101·9	76·5	25·4	91·0	93·1	89·3	+1·7	75·7	80·8	79·2	78·6
	Perim . . .	...	? ·576	? ·469	·107	? ·519	?	?	94·4	83·6	10·8	101·6	81·6	20·0	90·1	91·5	88·1	?	67·4	80·8	80·5	76·2
	Minicoy . .	...	·884	·805	·079	·841	?	·776	86·6	79·3	7·3	90·7	75·1	15·6	84·0	83·5	82·4	?	75·7	78·9	78·6	77·7
	Zanzibar . .	...	30·112	30·016	·096	30·064	+·029	1·064	81·3	74·0	7·3	82·9	72·3	10·6	76·6	80·7	77·5	+0·1	70·2	71·8	72·0	71·4
	Port Victoria (Seychelles).	15	29·979	29·900	·079	29·940	?	·900	81·2	76·7	4·5	83·2	73·8	9·4	79·7	79·9	78·6	?	71·5	74·5	74·3	73·4

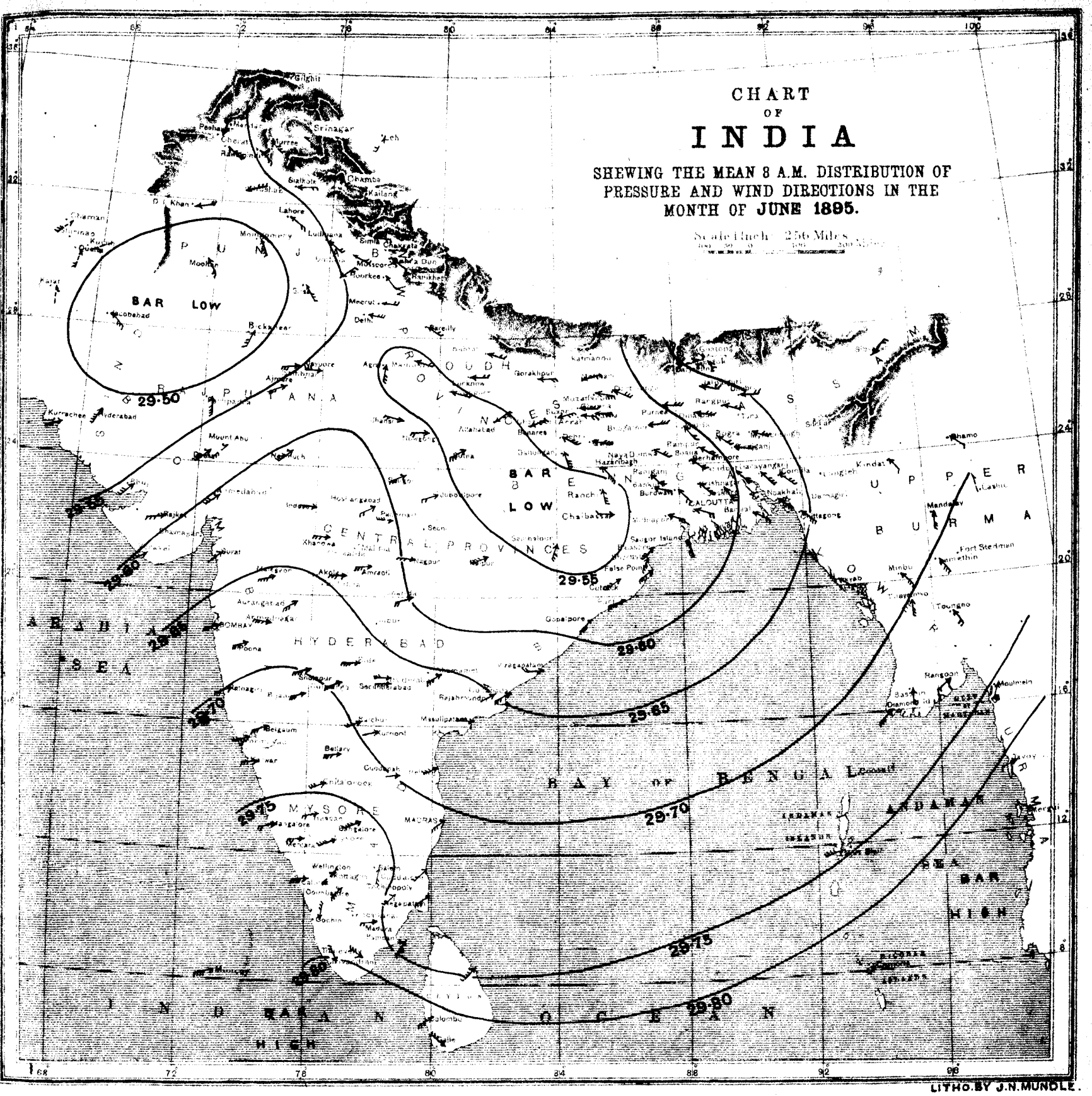
II—*concluded.*

Stations in India, Burma, etc., for June 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rain-fall for the month.	Heaviest rainfall during the month.		
·414	·435	·455	·435	−·005	88	63	67	73	−2	7·2	8·3	7·8	+0·3	6	1	3	2	9	6	23	8	2	S. 32° W.	N. 88° W.	47	52	105	123	...	...	Wellington.	Hill Station, S. India.
·828	1·029	1·064	·974	?	60	68	71	66	?	1·1	1·0	1·1	?	...	4	9	11	...	1	...	3	32	N. 14° W.	?	55	?	97	?	...	...	Muscat.	
·782	·919	·807	·836	−·025	66	63	51	60	+2	1·9	2·1	2·0	+0·8	...	1	1	12	5	16	25	...	...	S. 2° W.	S. 2° E.	59	68	254	209	...	...	Aden.	
·465	·929	·894	·773	?	40	66	61	57	?	4·2	5·4	4·8	?	4	...	17	2	4	1	1	...	31	N. 11° W.	?	50	?	323	?	...	...	Perim	
·832	·923	·913	·889	?	83	79	80	81	?	6·6	6·9	6·8	?	4	2	...	...	...	1	14	29	8	S 86° W	?	78	?	463	?	...	...	Minicoy.	Extra India.
·692	·719	·670	·693	−·015	82	79	64	75	−2	3·4	3·9	3·7	−1·1	...	...	...	...	15	38	6	...	1	S. 6° E.	S. 10° W.	87	73	201*	198	...	...	Zanzibar.	
·702	·784	·777	·754	?	76	78	76	77	?	7·1	6·8	7·0	?	...	...	1	...	25	22	3	7	2	S. 11° E.	?	68	?	287	?	8·20	2·26	Port Victoria (Seychelles).	

* Corrected.

G. I. C. P. O.—No. 48 Meteor.—9-10-95.—400.



LITHO. BY J.N. MUNDLE.

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr., I.—June 96—5,000
Reg. No. 168, Wr., I.—Apl. 96—4,500.
Times., S. I. O., Calcutta.

LITHO. BY J.N. MUNDLE.

Explanation.

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

Reg. No. 150, Wr. I.—June 84.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.
Simco, N. I. C., Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

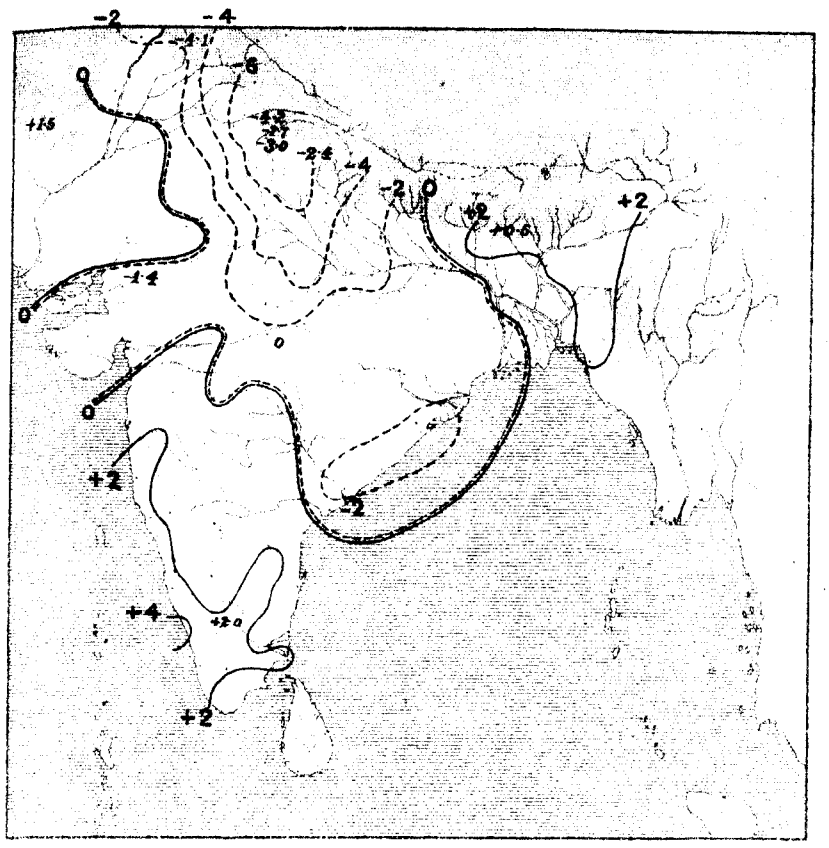
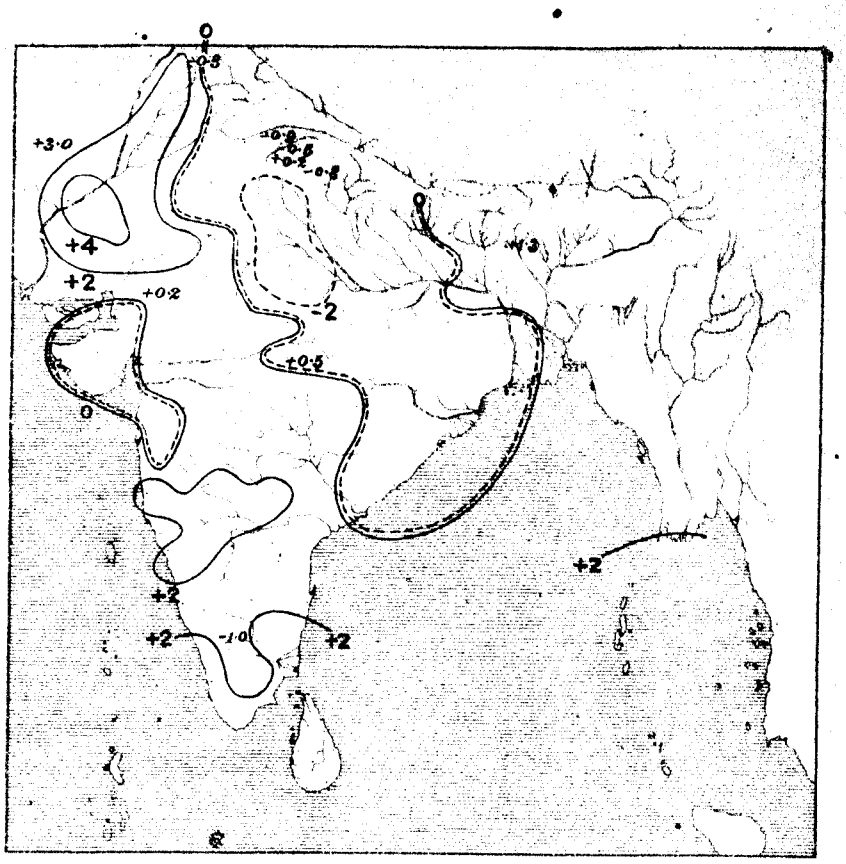


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

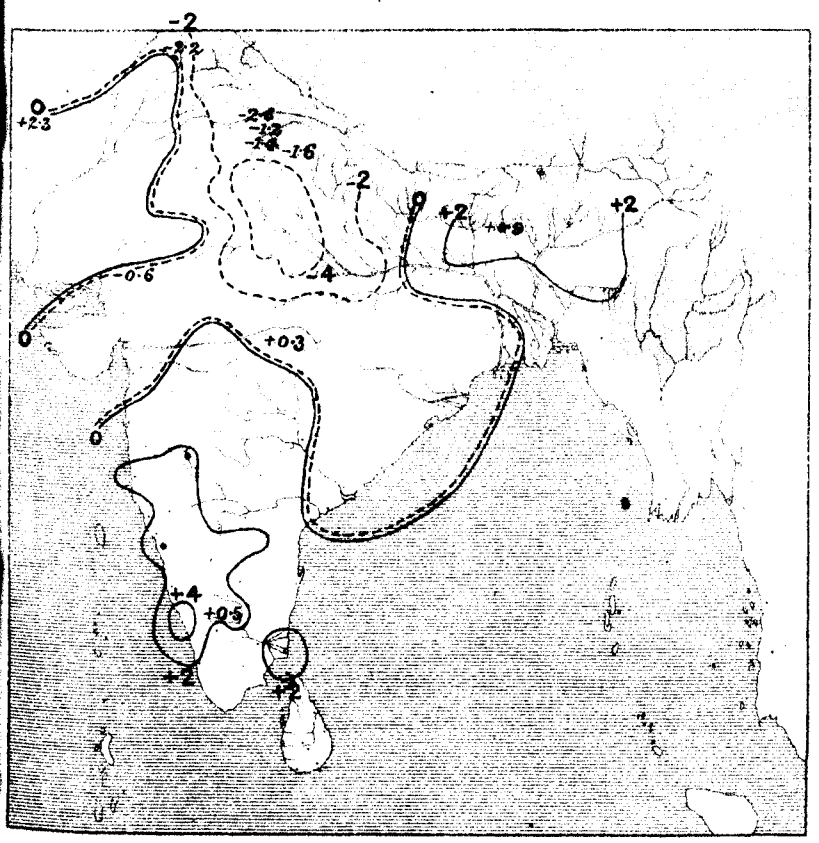
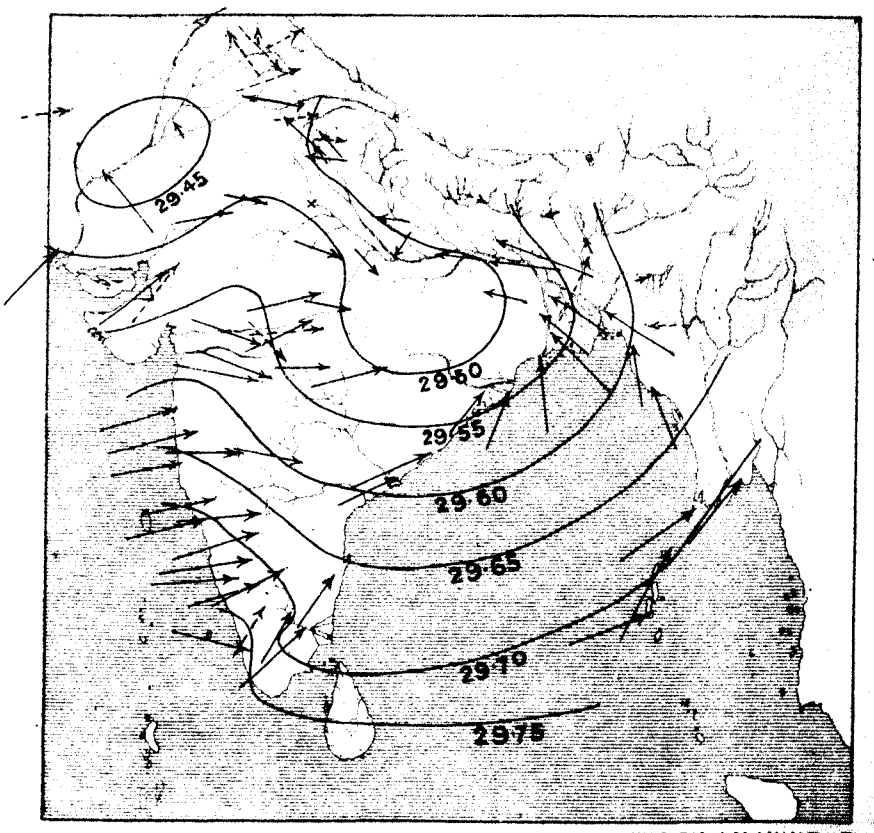


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF JUNE 1895.



LITHO. BY J.N. MUNDLE.

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{20}$th of an inch being equal to 100 per cent.

Reg No 155. Wr., I.—June 94.—6,000.
Reg No 149, Wr., I.—Apl 95.—1,500

Zinco., S. I. O., Calcutta.

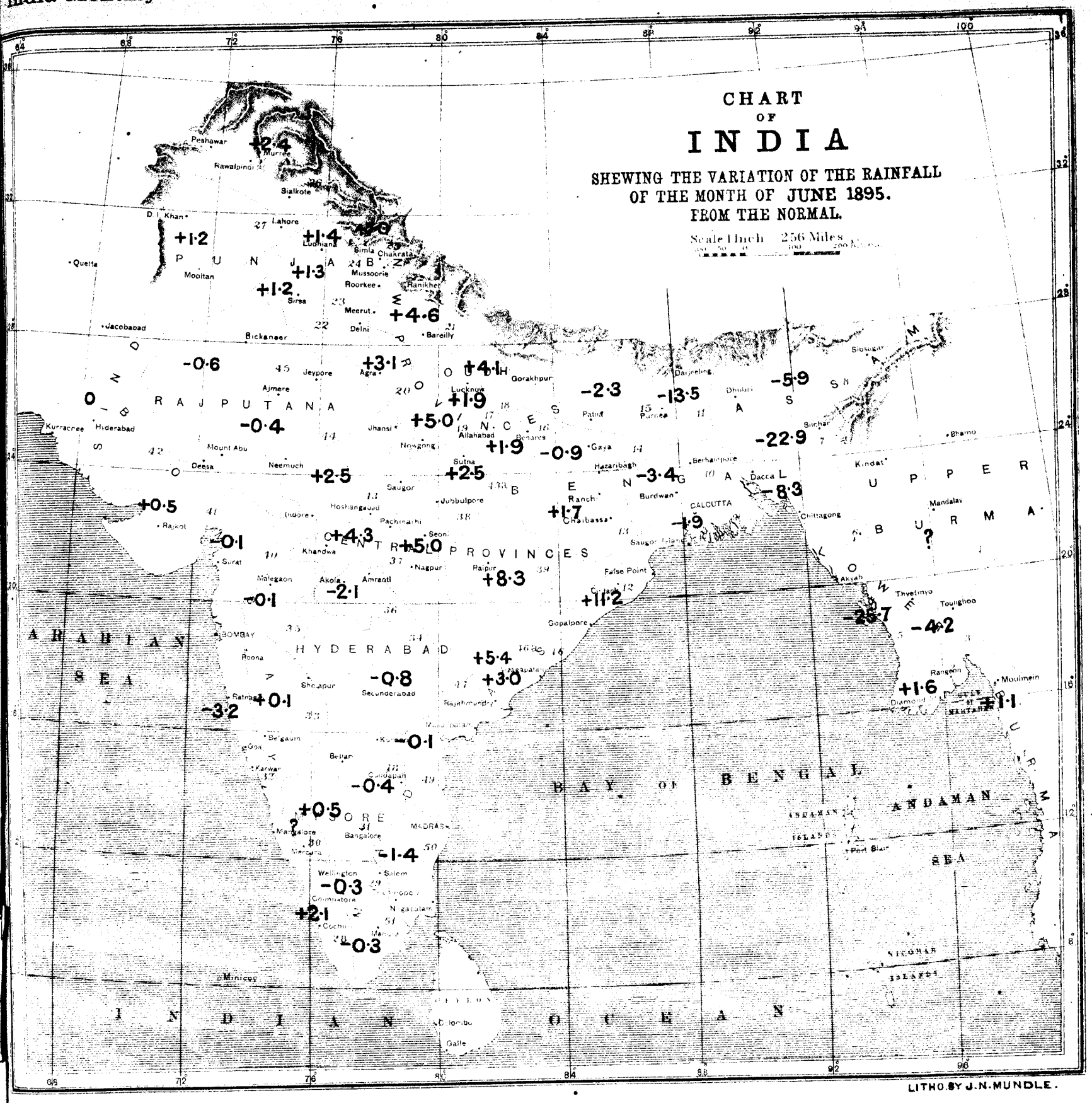
LITHO. BY J. N. MUNDLE.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Reg. No. 155, Wr. I.—June 94.—6,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.

Zinco., S. G. O., Calcutta.



LITHO. BY J. N. MUNDLE.

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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg. No. 60, Wr., I.—Mar. 95.—5,000.

Litho., S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

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INTRODUCTION.

THIS Review of the Weather in India during the month of July 1895 is based on observations taken daily at 8 A.M. at 205 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 86 stations. In the rainfall summary the rainfall data of the meteorological observatories and the weekly rainfall telegrams received during the month from district officers throughout India, and the rainfall statements of the month published by the provincial Governments that had been received up to the date of the publication of the Review, are utilized. A summary of the weather in the Bay of Bengal and the Arabian Sea, derived from information extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given.

Summary of the chief features of the Weather in India during the month of July, 1895.

The south-west monsoon circulation is usually fully established over nearly the whole of India before the end of June, and prevails with great steadiness during the whole of July. If the monsoon currents are feebler than usual, the rains may be considerably delayed in North-Western and Central India, and not be fully established until the middle or end of July.

The month is hence usually a period of frequent, and in some districts of almost constant, rainfall, and of comparative uniformity of temperature and of high humidity over the greater part of the country. The only areas in which the rainfall is small in amount, and in which hot weather conditions continue in a somewhat mitigated form, are Sind, North-West Rajputana and the West Punjab.

The distribution of rainfall during the month depends largely upon the relative strength of the two branches of the monsoon current. The Bombay branch advances usually in an easterly direction across the Peninsula, and in a north-easterly direction across Central India and Rajputana towards the East Punjab. The Bay of Bengal branch of the current in part advances over Burma and in part crosses the Bengal coast, and is deflected westwards up the Gangetic valley towards the Punjab. The goal of both branches of the monsoon current would hence appear to be the Punjab. But the greater part of the ascensional motion, which is the continuation of the horizontal movements, takes place in the Deccan, Central India and the Gangetic plain, as well as in the coast districts, all of which receive more or less general and heavy rain during the month. It is only when at least one branch of the monsoon current is blowing strongly that humid winds advance into the Punjab and give fairly general rain, chiefly in the eastern districts.

Between the two areas in which the two branches of the monsoon circulation exclusively prevail is a long narrow belt of country which forms a kind of debatable ground between the two currents and in which there is much interaction. In this belt pressure is somewhat lower than it is either further to the north or to the south, and hence it forms a trough of low pressure. The trough in July usually stretches from Orissa through Chota Nagpur to Upper Sind or the South-West Punjab.

An important feature of the meteorology of the month is the occasional formation of shallow cyclonic storms in the north of the Bay of Bengal or South Bengal. They usually advance in a west to west-north-west direction along the trough of low pressure. These cyclonic whirls draw into them the humid winds advancing across the coasts of India, and discharge their moisture as more or less heavy cyclonic rainfall over the areas they traverse. They hence tend to make the rainfall distribution of the month more irregular in Northern and Central India than it would otherwise be. On the other hand, their advance westwards is always accompanied with, and followed by, a strong influx of humid winds across the Bengal coast. Hence they give rise at the same time to more or less general rain over Northern India.

The Bombay and Bengal currents were both below their normal strength at the commencement of the month. A storm, which had formed in the Bay of Bengal in the last week of the previous month, was filling up in the western districts of the North-Western Provinces on the 1st. It gave very heavy rain in those districts on the 1st and 2nd. Weather was fine and dry over the remainder of India with the exception of the coast districts, where it was showery. The disappearance of this storm was followed by a break in the rains in North-Western and Central India, which, except for thunder-showers in the Punjab on the 9th and 10th, lasted over the whole area until the 14th or 15th. Excessively heavy rain fell on the 6th and five following days in the Jalpaiguri, the Kuch Bihar and Darjeeling districts of North Bengal, and in the Goalpara and Khasi Hill districts of Assam. The Goalpara district received an average of 29·16 inches during this period and Kuch Bihar of 35 inches. Cherrapunji obtained a total of 60·33 inches, the heaviest fall in one day being 20·95 inches.

Southern India received numerous showers on the 6th, 7th and 8th, and temperature was in consequence in slight to moderate defect in that area and North-East India, and was more or less considerably in excess over the remainder of India from the 5th to the 8th. A series of thunder-storms on the 9th and 10th in the Punjab reduced temperature very considerably from the 9th to the 12th.

The Bombay current began again to increase in strength on the 9th and 10th, and the west coast districts received a general and heavy burst of rain from the 10th to the 15th. Light local showers fell during this period in the Central Provinces and Central India; but there was no general extension of the humid current into the interior of India, as a shallow and feeble depression had formed over Kathiawar, Cutch and the Gulf of Cambay. This filled up on the 13th. During this period, from the 11th to the 14th, a more or less complete break in the rains prevailed over the whole of Northern and Central India. Temperature consequently increased and was above the normal, except in Assam and Southern India, where showery or rainy weather continued. The following gives the variations of the mean temperature from the normal in the area of greatest excess:—

Political area or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	12th July.	13th July.	14th July.	15th July.	16th July.
	°	°	°	°	°
Central Provinces and Berar.	+3·2	+3·9	+5·5	+4·5	+3·9
Central India and Gujarat	+1·2	+3·7	+4·9	+4·4	+4·7
Sind and Rajputana .	+1·9	+3·5	+6·4	+6·0	+5·9
Punjab	−3·2	−0·7	+1·5	+4·5	+2·6

The highest day temperatures of the month were registered during this period in Sind. The absolute maximum of the month, 118°, was registered at Jacobabad on the 16th.

Ordinary monsoon winds prevailed on the west coast on the 15th and following days. Rain fell in somewhat larger amounts in the Central Provinces and Central India. The pressure conditions were abnormal, pressure being in considerable to large excess across the head of the Peninsula, and in defect in the sub-montane districts of Northern India, more especially in the Punjab. The trough of low pressure hence lay much further north than usual. Winds were now light at the head of the Bay, but strong squally monsoon winds prevailed in the centre. As usual, under these circumstances a cyclonic whirl began to form in the north-west of the Bay. The depression was generated off the Orissa and Ganjam coasts on the 17th and 18th. It began to move north-westwards on the 18th, and crossed the North Orissa coast on the afternoon of the 19th. It was throughout this period a feeble storm, the strongest winds experienced by vessels in the storm area being only of force 6 and 7, and the strongest monsoon winds in the centre and south of the Bay of force 4 to 8. The storm advanced along a more northerly track than is usual in July, and passed through Chota Nagpur on the 20th into Central Bihar on the 21st. It filled up during the day in Bihar. The storm gave a moderate burst of rain to Orissa, Chota Nagpur, Bihar and West Bengal.

Showery weather continued during this period in the Central Provinces and Central India and part of the North-

Western Provinces, whilst the break in the rains held fairly steadily in Upper India.

A large fall of pressure occurred on the 21st, 22nd and 23rd, which largely modified the pressure distribution and gave very steep gradients over the whole land and sea areas. The range of pressure on the 22nd exceeded six-tenths of an inch.

Strong monsoon winds hence prevailed at the head of the Bay on the 22nd and following days, and were determined more to the eastward than usual. Bengal, Bihar and Assam received heavy continuous rain from the 22nd to the 25th. A shallow rain-formed depression appeared in West Bengal and Chota Nagpur and remained almost stationary in position with its centre near Hazaribagh on the 24th and 25th. It filled up and disappeared on the 26th.

Temperature was steadily in excess during this period in Upper India, and the highest temperatures of the month in the South-East and South-West Punjab were registered on the 22nd and 23rd. The most noteworthy were 112°·4 at Mooltan on the 21st, 112°·4 at Montgomery on the 22nd, and 110°·1 at Dera Ismail Khan on the 21st and 22nd.

The humid current from the Bombay coast extended again on the 23rd to the East Punjab, and showers were received in that area on that day, and the Central Provinces, Central India, the North-Western Provinces, the East Punjab and Rajputana received light to moderate rain from the 23rd to the 26th. The full effect of the steep gradients prevailing in the Indian area began to be shown on the 27th, on which day parts of the Central Provinces received very heavy rain.

The trough of low pressure had been transferred slowly southwards during the period from the 22nd to the 26th. The rainfall in Bengal diminished rapidly on the 27th, and light winds with fine to showery weather set in temporarily on the 28th. A cyclonic whirl formed rapidly in the north-west angle on the 28th and 29th. The centre crossed the coast near Balasore on the afternoon of the 30th, and the storm drifted slowly along the trough of low pressure. It passed through Chota Nagpur on the 31st and entered the North-Western Provinces on the 1st August. The storm filled up on the afternoon and evening of the 2nd August in the western districts of that area. It gave moderately heavy rain to Orissa from the 29th to the 31st, and to Chota Nagpur on the 30th and 31st.

Moderate to heavy general rain was received in the Central Provinces, Central India, East Rajputana and the South-East Punjab during the period from the 28th to the end of the month, during which period the Bombay current had its full extension to the Punjab.

Pressure.—The mean pressure of the Indian land area for the month averaged ·022″ higher than the normal. Pressure was in very slight defect, relatively to the general conditions, in the East Punjab, North-Western Provinces, Bihar, Bengal, Assam, Burma and Southern India, and in local excess over the remainder of India and in Baluchistan. The only marked feature was a local excess of pressure in the area, defined by the following stations :—

STATION.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Neemuch	+·067	+·045
Saugor	+·044	+·022
Indore	+·053	+·031
Khandwa	+·045	+·023
Deesa	+·046	+·024
Hyderabad (Sind)	+·049	+·027

This feature was very persistent during the present monsoon, and was very prominent in July.

Pressure was in slight excess at the majority of the hill stations in Upper India relatively to the plains, or the vertical pressure anomalies were positive. They were small in amount and of little importance.

The following table gives the mean pressure variations and anomalies of the eleven meteorological provinces :—

METEOROLOGICAL PROVINCES.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Burma Coast and Bay Islands	+·011	−·011
Burma Inland	+·007	−·015
Assam	+·019	−·003
Bengal and Orissa	+·018	+·004
Gangetic Plain and Chota Nagpur	+·014	−·008
Upper Sub-Himalayas	+·013	−·009
Indus Valley and North-West Rajputana	+·028	+·006
East Rajputana, Central India and Gujarat	+·037	+·015
Deccan	+·030	+·008
West Coast	+·019	−·003
South India	+·017	−·005

Temperature.—The mean temperature conditions were as usual determined by the character of the rainfall distribution. The rainfall of the month was normal in Southern India, and in moderate to large excess in Assam, North Bengal and Bihar. It was in defect elsewhere, the deficiency increasing in percentage amount northwards and westwards to Upper India, where it was greatest. The maximum or day temperature was below the normal in the areas of normal or increased rainfall, but the deficiency was less than 2°, except at the following stations:—Sibsagar (—2°·8), Dhubri (—2°·7), Salem (—2°·7) and Madras (—2°·1). The mean maximum temperature was more than 2° above the normal in Rajputana, Sind, Central India, Berar and the Central Provinces, and also in Central Burma. The excess was absolutely greatest in Central Rajputana, at Sambhar (+6°·6), Jeypore (+5°·2) and Ajmere (+3°·8) and was also larger than 3°·5, at Sirsa (3°·9), Lahore (3°·7) and Kurrachee (3°·6) and perhaps Amraoti (3°·6).

The mean night temperature was slightly below the normal in the sub-montane districts of Northern India and the greater part of the Peninsula to the south of Lat. 18° N., and in slight excess over the remainder of India. The variations were less than 2° at all stations, except Quetta (—3°·6), Lucknow (—2°·7) and perhaps Saugor (+2°·3)

The mean temperature of the month was in slight to moderate defect in Baluchistan, the sub-montane districts of Northern India and the Peninsula south of Lat. 17° N., and in excess over the remainder of India. The deficiency exceeded 2°, at Quetta (—2°·3) and Dhubri (—2°·1). The chief feature of the mean temperature conditions was the increased temperature over Rajputana and the South and Central Punjab. The excess was more than 3° at the following stations:—Sambhar (+4°·5), Jeypore (+3° 4), and Lahore (+3°·2). The mean temperature of the month at the Upper India Hill stations was practically normal.

The following table gives temperature variation data of the month for the eleven meteorological provinces of India:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, July 1895.	Mean minimum temperature, July 1895.	Mean daily temperature, July 1895.
	°	°	°
Burma Coast and Bay Islands	+1·6	+1·3	+1·5
Burma Inland . . .	+1·2	+0·9	+1·0
Assam	—2·2	—1·0	—1·6
Bengal and Orissa . . .	+0·4	+0·4	+0·4
Gangetic Plain and Chota Nagpur.	+0·3	—0·4	0
Upper Sub-Himalayas . .	+1·0	—0·2	+0·4
Indus Valley and North-West Rajputana.	+2·3	+0·7	+1·4
East Rajputana, Central India and Gujarat.	+3·0	+0·8	+1·9
Deccan	+2·3	+0·8	+1·5
West Coast	—0·7	+0·1	—0·3
South India	—1·0	—0·3	—0·7

Winds.—The Bay current was stronger than usual, judging from the mean velocity of the winds at the coast stations. Winds were somewhat more westerly than usual at Port Blair and the Burma coast stations. They were much more westerly on the mean of the month than usual in the interior of Bengal, due to the diversion of the Bay current to a larger extent than usual towards Assam and East and North Bengal. Winds were very light and remarkably unsteady in the western half of the North-Western Provinces.

The Bombay current was not so vigorous as usual. It was very weak from the 1st to the 9th, and was only above its normal strength during the last week of the month. Winds were more westerly than usual in Central India and Rajputana, and more northerly (or less southerly) in the Central Provinces. Winds were stronger in Southern India on the average of the month, and somewhat more directly from the west than usual.

Humidity and Cloud.—The air was slightly drier in Burma and South Bengal, but was damper in Assam and North Bengal. The aqueous vapour pressure and humidity were both more or less considerably below the normal in the North-Western Provinces, the Punjab, Rajputana, Central India, and the western districts of the Central Provinces. The deficiency was most marked in Central and East Rajputana and the adjacent districts of the North-Western Provinces and the South-East Punjab. The mean humidity percentage was 10 below the normal at Jeypore, 9 at Agra and 8 at Lahore. The air was slightly less damp than usual in the west coast districts and the Deccan.

Cloud was in slight to moderate excess in Burma, Bengal, Assam, Bihar and Chota Nagpur. The excess was greatest in Assam (+0·9) and Bihar (+0·7). It was in more or less considerable defect in the North-Western Provinces, Punjab, Sind, Rajputana and Central India, and in slight to moderate defect in the Central Provinces and Deccan. The deficiency was greatest in Sind (—1·6) and Rajputana (—1·5). Cloud was in considerable to largish excess in Southern India, more

especially at Bangalore (+2·6), Salem (+2·4), Wellington (+1·8) and Cochin (+1·6).

The following table gives variation data of the mean aqueous vapour pressure, mean humidity and mean cloud amount of ten meteorological provinces for the month of July 1895:—

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.
	"	%	
Burma Coast and Bay Islands	+·026	−1	+0·6
Assam	−·007	+4	+0·9
Bengal and Orissa	−·002	−2	+0·3
Gangetic Plain and Chota Nagpur	−·012	−1	+0·3
Upper Sub-Himalayas	−·045	−5	−1·7
Indus Valley and North-West Rajputana.	−·019	−4	−1·0
East Rajputana, Central India and Gujarat.	−·017	−5	−1·2
Deccan	+·011	−1	−0·3
West Coast	−·018	−1	+0·5
South India	−·017	0	+1·0

Rainfall.—The Bombay current was weak during the first part of the month, and a break in the rains obtained in North-Western India from the 2nd to the end of the second week of the month. Assam and the northern districts of North Bengal received a very heavy and almost continuous downpour from the 5th to the 11th. The Bombay current strengthened on the 9th and 10th, and the Central Provinces and Central India received moderate rain from the 11th to the 22nd. A feeble cyclonic storm which formed in the Bay on the 18th and passed into Bihar gave moderate rain to North-Eastern India from the 19th to the 21st. The Bay current strengthened on the 22nd and gave moderately heavy and general rain in Bengal from the 22nd to the 25th. The Bombay current also increased in intensity and extended to its usual limits in the Punjab on the 22nd and 23rd, and nearly the whole of North-Western and Central India and the North Deccan received favourable rain during the last week of the month. The second cyclonic storm of the month gave moderate rain to Orissa and Chota Nagpur on the 30th and 31st. The rainfall of the month was in large excess in Assam and North Bengal, and in moderate excess in Bihar and normal in Chota Nagpur. It was largely in defect over the whole of Burma, and also in the southern districts of Bengal, including Hooghly, 24-Parganas, Calcutta, Howrah and Dacca, in all of which it was about 50 per cent. or upwards in defect. It was in moderate defect in the North-Western Provinces and Central India, and in large defect in Rajputana, Sind and the Punjab, the relative deficiency increasing in percentage amount northwards and westwards. The rainfall of the month was in slight to moderate defect in the Central Provinces, Berar, the Bombay Deccan and Konkan, and was practically normal in Southern India, but in moderate excess in Malabar.

The following gives comparative rainfall data of the eleven meteorological provinces of the Empire:—

Meteorological Province.	Rainfall.		
	Average actual, July 1895.	Average normal, July.	Variation from normal. *
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands	23·71	29·51	−7·11
Burma Inland	6·78	9·46	−1·58
Assam	29·41	16·54	+16·76
Bengal and Orissa	12·73	14·05	−1·37
Gangetic Plain and Chota Nagpur.	12·60	12·17	+0·60
Upper Sub-Himalayas	6·78	12·18	−5·02
Indus Valley and North-West Rajputana.	1·65	3·23	−1·54
East Rajputana, Central India and Gujarat.	8·17	11·28	−2·90
Deccan	9·03	12·37	−3·05
West Coast	33·03	28·67	+2·73
South India	5·20	6·23	−0·14

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

Atmospheric Pressure.

The mean pressure of the Indian land area averaged ·022″ in excess of the normal.

Relatively to this general condition pressure was in slight local defect in the East Punjab, the North-Western Provinces, Bihar, Bengal (except the south-western districts), Assam and Burma, and also in the Peninsula to the south of Lat. 15° N. The negative pressure anomalies were less than ·02″ in amount at all stations in these areas, except perhaps Patna (—·022″).

Pressure was in local excess over the remainder of

India and in Baluchistan. The excess was more than ·02″ over an area defined by the following stations :—

Station.	Variation of 8 A.M. pressure from normal.	Pressure anomaly.
	″	″
Neemuch	+·067	+·045
Indore	+·053	+·031
Saugor	+·044	+·022
Khandwa	+·045	+·023
Deesa	+·046	+·024
Hyderabad	+·049	+·027

This area, including the greater part of Central India and South-West Rajputana, was hence characterized by a persistent excess of pressure, and this feature is in fact the only important abnormal feature of the pressure distribution during the present monsoon rains.

The mean pressure of the month at the hill stations in Northern India was generally in slight excess, but by variable amounts. The vertical pressure anomalies of the month were generally small in amount and were negative in the case of Leh, Quetta, Murree and Darjeeling, and positive in the case of Simla, Chakrata, Ranikhet and Kailang.

Hill Station.	Variation of pressure from normal (*a*).	Neighbouring plains station.	Variation of pressure from normal (*b*).	Vertical pressure anomaly or (*a*)—(*b*).
	″		″	″
Leh	−·016	Lahore	+·009	−·025
Murree	+·004	Rawalpindi	+·021	−·017
Simla	+·022	Ludhiana	+·008	+·014
Kailang	+·024	Lahore	+·009	+·015
Chakrata	+·027	Roorkee	+·003	+·024
Ranikhet	+·015	Bareilly	+·012	+·003
Darjeeling	−·016	Dhubri	+·017	−·033
Quetta	+·028	Jacobabad	+·032	−·004

Barometric depressions and cyclonic storms of the month.

In last month's review a complete account was given of the cyclonic storm which formed in the north-west angle of the Bay on the 27th and 28th, and which advanced across Chota Nagpur on the 29th, into the North-Western Provinces on the 30th and filled up in Rohilkhand on the evening of the 1st July. A brisk to rapid increase of pressure occurred over the whole of North-Western India on the 1st, and on the morning of the 2nd pressure was above the normal over the whole of India, except North and East Bengal, Assam and Burma. It was in considerable defect in Lower Burma, and in considerable excess in Central India, Berar, North Bombay and South-West Rajputana. The trough of low pressure lay much further north than usual on the 3rd and following days, and rain practically ceased on the 3rd in North-Western and Central India for some time. Bengal and Assam received general rain on the 4th and following six days, and Burma, the west coast districts and South Madras light to moderate showers. The chief abnormal feature of the pressure distribution during this period was the northerly displacement of the trough of low pressure to the foot of the hills from Bihar to the East Punjab.

The Bengal current was hence mainly determined to North and East Bengal and Assam and a large portion of that area received excessively heavy rain. The following gives the largest falls in 24 hours (exceeding 10 inches in amount) :—

District.	Station.	Date.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
Khasi and Jaintia Hills	Mauphlang	7th	12·00
Kuch Bihar	Dinhatta	8th	10·80
Goalpara	Marnai	,,	10·30
Khasi and Jaintia Hills	Jowai	,,	10·99
,,	Mauphlang	,,	16·30
,,	Cherra Punji	9th	20·95
Goalpara	Bijni	,,	19·15
Darjeeling	Buxa	,,	15·23
Khasi and Jaintia Hills	Jowai	,,	13·30
,,	Mauphlang	,,	13·00
Goalpara	Kachugaon	,,	10·53
Khasi and Jaintia Hills	Cherra Punji	10th	15·60
Goalpara	Dhubri	,,	11·11

The character and extent of this heavy burst of rainfall are shown more fully by the following statement :—

Division.	District.	Average actual rainfall in 24 hours preceding 8 A.M. of						Total of six days.
		6th.	7th.	8th.	9th.	10th.	11th.	
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Assam	Goalpara	0·79	4·00	5·79	7·82	7·10	3·66	29·16
	Khasi and Jaintia Hills.	1·89	7·57	11·73	13·36	9·08	2·92	46·55
North Bengal.	Jalpaiguri	1·62	3·08	3·77	4·50	5·25	3·67	21·89
	Darjeeling	2·28	2·56	2·28	4·22	4·80	1·07	17·21
	Kuch Bihar	0·54	6·13	6·76	4·91	7·35	4·31	35·00
	Rangpur	0·53	3·31	2·79	1·72	1·31	0·29	9·95

The Punjab received moderate rain, chiefly from thunderstorms, on the 9th and 10th, followed by a considerable increase of pressure. On the morning of the 10th pressure was above the normal over the whole of Northern and Central India, the excess being greatest in Bengal and the Punjab. Pressure was in defect in Southern India, a condition which in the rains frequently precedes an increasing monsoon current.

The rainfall in the West Coast districts was light on the 8th and 9th. Heavy rain set in on the 10th and continued for some days. The following mean data of the Konkan districts for the 9th and three following days illustrate the character of this burst of rain :—

District.	Average actual rainfall in 24 hours preceding 8 A.M. of				Total of period.
	9th.	10th.	11th.	12th.	
	Inches.	Inches.	Inches.	Inches.	Inches.
South Kanara	2·20	2·68	3·10	2·65	10·63
North Kanara	0·41	1·79	3·72	1·74	7·66
Savantvadi	1·51	7·18	5·02	3·11	16·82
Ratnagiri	1·11	2·44	3·15	2·29	8·97
Kolaba	0·40	0·62	2·24	0·62	3·88

The changes during the next three or four days were similar to those which accompanied the first and permanent advance of the monsoon in June, but on a much smaller scale. Winds shifted round to south-east directions at the Bombay coast stations on the 10th and 11th, and a very shallow depression formed over Kathiawar and the sea area to the south on the 11th and 12th. It passed north-westwards on the 13th and lay off the Kathiawar and Sind coasts and disappeared during the next 24 hours, winds at the same time shifting round to normal westerly directions on the Bombay and Kathiawar coasts.

Humid winds extended across Khandesh, Berar, Central India and the Central Provinces on the 10th and following three days, and numerous showers, more or less local in character, were received in these districts during this period.

Pressure had been largely in excess over the whole of Northern India during this period from the 10th to the 13th. A rapid fall occurred during the next two days, which largely modified the pressure distribution. The following statement illustrates the pressure changes which occurred during this period :—

Political area or Province.	Pressure,			
	Mean variation from normal at 8 A.M. of the 13th.	Mean change during 24 hours preceding 8 AM of the 14th.	Mean change during 24 hours preceding 8 A.M. of the 15th.	Mean variation from normal at 8 A.M. of the 15th.
	"	"	"	"
Burma	+·091	−·034	−·025	+·033
Bengal and Assam	+·141	−·063	−·037	+·046
North-Western Provinces and Oudh.	+·160	−·127	−·055	−·018
Punjab	+·177	−·136	−·127	−·065
Sind and Rajputana	+·156	−·066	−·078	+·020
Central India and Gujarat	+·131	−·031	−·040	+·039
Central Provinces and Berar.	+·129	−·067	−·011	+·048
Bombay	+·051	−·031	−·016	+·010
Madras	+·049	−·019	−·026	+·003

The variations of pressure on the 15th were generally small except in South-West Bengal and Orissa (where pressure was in considerable excess) and in the Punjab (where it was in moderate to considerable defect). Steeper gradients than usual now obtained for the Bombay current and humid winds and rainy weather were gradually re-established over nearly the whole of North-Western and Central India.

Whilst these changes were in progress, conditions became disturbed in the north-west of the Bay and a small cyclonic whirl was generated which formed the chief feature of the meteorology of the next five days in North-Eastern India. The following gives a brief account of this storm.

Feeble cyclonic storm of the 17th to the 21st July.—As already stated, pressure was in considerable excess in South-West Bengal and the north-west angle of the Bay on the 14th and 15th, and was in slight defect in

the south of the Bay. South-westerly winds obtained on the 16th over the whole Bay. Winds of force 4 to 6 were experienced by several vessels in the south and centre of the Bay, and two vessels reported winds of force 7 and 8. Winds were light and variable in the north-west of the Bay. The usual conditions preceding the formation of cyclonic whirls in the north of the Bay in the rains were hence now present.

Winds of force 4 to 8 were again reported by vessels in the southern half of the Bay on the 17th. Weather was unchanged and was generally fine, but cloudy. Further to the north weather was squally, and rain was falling in increasing amounts and extending northwards. Thus the S.S. *Baroda* in Lat. 14°58′ N. and Long. 83° E at 8 A.M. and proceeding north-eastwards had heavy rain and strong squalls during the day. The S.S. *Trocas*, about 200 miles to the north-east of the *Baroda*, had "much rain" during the day. Winds were light and unsteady in the morning on the Bengal and Orissa coasts and variable in the evening.

18th July.—Pressure had given way briskly in the north-west of the Bay and a shallow depression now lay off the Ganjam and Orissa coasts. The following gives 8 A.M. observations taken on board vessels in the north of the Bay :—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	″			
8 A.M.	S. S. *Dalmatia*.	16 22	86 16	29·567	WS W	5	Heavy sea. Squally. 8 P.M. constant heavy rain.
,,	S. S. *Baroda* .	17 18	86 21	·549	W	6	High sea.
,,	S. S. *Maharani*.	18 21	91 30	·607	S W	5 to 6	Rough sea. Fine, 4 P.M. squalls at times.
,,	S. S. *Trocas* .	20 1	86 58	? ·492	N E	2 to 4	Fine, 4 P.M. squally.
10 A.M.	F. L. V. *Torch* .	Eastern channel.		? ·504	E S E	4	Passing rain squalls.
,,	F.L.V. *Hesperus*.	Intermediate Station.		·539	E	4	

The data establish that winds were now cyclonic in direction in the area of depression. Winds had shifted to east and north-east on the Bengal and Orissa coasts. The centre of the depression and cyclonic circulation at 8 A.M. was in about Lat. 20° N and Long. 88° E. Weather was squally with much rain in the south-eastern half of the depression. Moderate to strong monsoon winds prevailed in the centre and south of the Bay. Winds were light in the north-west angle of the Bay. At Saugor Island winds were variable and weather fine with occasional showers in the afternoon. It became threatening with increasing winds during the night.

The following gives the weather as experienced by the F. L. V. *Torch* and *Hesperus* :—

F. L. V. *Torch*.—A long heavy southerly swell, passing rain squalls.

F. L. V. *Hesperus* 11-30 A.M. to 6-30 P.M.; light rain. 6-30 P.M. to midnight, squalls froms outh-east, force 4 to 6, at long intervals.

The Bombay monsoon current was now deflected more largely eastwards and was giving general rain in Berar, Central India and the Central Provinces. Little or no rain was falling in Upper India.

19th July.—Pressure had increased over the whole of North-Eastern India and the Bay, except in and near the storm area. The storm had advanced slightly in a north-westerly direction and was central a little to the east of Balasore as is shown by the following data :—

Station or Ship.	Position.		Pressure.			Wind.		Cloud.	Rainfall.	Remarks.
	Lat N.	Long. E.	8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	° ′	°	″	″	″				Ins	
Saugor Island .			29·494	−·044	−·024	SSE	18	8	0·79	Sea rough.
Balasore .			·469	−·086	−·013	NNW	7	7	1·15	
False Point .			·496	−·011	−·048	SW	11	8	0·84	
S.S. *Dalmatia* .	20 6	87 33	P ·567	...	..	SW	4*	.*	...	Passing showers.
S.S. *Baroda* .	20 34	87 47	·509	...	...	SSW	3*	...	...	
S.S. *Maharani*.	20 37	88 39	·493	...	...	SW	6*	...	...	Passing squalls and rough sea.
S.S. *Trocas* .	21 48	88 2	...	...	...	VAR	6*	...	...	Squally with rain.
F. L. V. *Torch*†	Eastern Channel.		P·475	−·029	...	S	6*	...	...	Passing rain squalls all day.
F. L. V. *Hesperus*†	Intermediate Station.		·486	−·053	...	S	7*	...	...	Noon to 4 P.M. passing rain.

* 10 A.M. observation.
† Force in Beaufort scale

The centre of the disturbance was in about Lat. 21½° N. and Long. 87° E at 8 A.M. The strongest winds in the central area (in which pressure was less than a tenth of an inch below the normal) were only of force 6 to 7. Weather was squally with frequent rain.

The weather during the day is thus described by the Captain of the F. L. V. *Hesperus* :—6 A.M; moderate south sea. 8 A.M.; southerly wind of force 6 to 7. Noon to 4 P.M.; passing rain. 6-30 P.M.; fine looking, generally with a moderate sea.

The storm was hence of very feeble intensity, although the cyclonic circulation was well-marked. Moderate rain had fallen in Orissa and light showers in Bengal.

The Bombay monsoon current had again given rain chiefly in the Peninsula, and some heavy falls had been received in Berar and the Central Provinces. Weather was fine with clear or lightly clouded skies in Upper India.

20th July.—The barometric changes of the previous 24 hours were mainly due to the advance of the cyclonic storm which was at 8 A.M., in Chota Nagpur. The following observations define its position at that hour :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Weather.
	8 A.M., reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"	"	"				In.	
Chaibassa .	29·544	+·035	+·072	SW	3	10	0·39	Overcast.
Ranchi .	·530	—·022	+·036	SW	10	9	0·44	Showery.
Hazaribagh .	·527	—·056	+·005	ESE	10	10	0·24	Showery.
Dehri . .	·526	—·046	+·050	ENE	18	10	...	Gloomy.
Daltonganj .	·538	—·030	?	NW	5	8	0·18	Cloudy.

The centre at 8 A.M. was probably in Lat. 24° N. and Long. 85¼° E. a little to the west of Hazaribagh. Winds were moderate in the storm area and light to moderate rain had fallen in Bengal, Chota Nagpur and South Bihar.

Rain had again fallen in large amounts in the west coast during the previous 24 hours, but less rain had been received in the Deccan, Berar and the Central Provinces than on the previous day.

21st July.—The feeble cyclonic storm had recurved slightly and advanced northwards into South Bihar during the previous 24 hours. The following observations show its position and character at 8 A.M.—

Station.	Pressure.			Wind.		Cloud.	Rainfall.
	8 A.M., reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.		
	"	"	"				Inch.
Hazaribagh . .	29·510	—·017	—·007	WSW	9	10	0·18
Purnea . . .	·516	—·081	+·008	Calm	3	10	0·75
Darbhanga . .	·499	—·075	—·020	ENE	9	10	0·12
Patna . . .	·450	—·097	—·065	ENE	6	10	0·41
Buxar . . .	·489	—·066	+·020	N	6	9	...
Dehri . . .	·508	—·018	+·038	WSW	6	10	0·09
Gaya . . .	·493	—·043	—·022	SW	4	10	0·13

The centre was a little to the south of Patna in Lat. 25½° N. and Long. 85° E. at 8 A.M. Winds were now very light in the storm area, and the rainfall was considerably less in amount than on the previous day. The storm filled up during the day.

The storm formed under the usual conditions of storm generation in the north of the Bay during the rains. Moderate to strong monsoon winds prevailed at the time of its initiation in the south and centre of the Bay, whilst light and variable winds set in over the north-west of the Bay due to the pressure and other changes in North-Eastern India. Rain fell in increasing amounts in the south of the area of variable winds and extended northwards, and a feeble whirl was set up by the indraught thus caused in the north-west of the Bay. The strongest winds in the central area or in the Bay did not exceed 8. The storm advanced in a north-westerly direction determined by the peculiar pressure conditions obtaining at the time, the chief of these being a large excess of pressure in the North Deccan and Central Provinces, in consequence of which the trough of low pressure lay along the foot of the hills in the North-Western Provinces, and stretched in a south-east direction from Bihar to Orissa.

The following is a statement of the position and rate of motion of the storm centre from the 18th to the 21st :—

Date.	Position of centre at 8 A.M.		Distance travelled in past 24 hours.	Average hourly velocity during preceding 24 hours.
	Lat. N.	Long. E.		
	° ′	° ′	Miles.	Miles.
18th . . .	20 0	88 0	...	...
19th . . .	21 30	87 0	130	5½
20th . . .	24 0	85 15	210	9
21st . . .	25 30	85 0	110	4½

It may be noted that the storm gave only a moderate burst of rain to the districts through which it passed, as is shown by the following :—

Division.	Average actual rainfall in 24 hours preceding 8 A.M. of date.					Total of period.
	18th.	19th.	20th.	21st.	22nd.	
	Inch.	Inches.	Inch.	Inch.	Inches.	Inches.
Orissa . .	0·50	1·24	0·52	0·24	0·75	3·25
South-West Bengal.	0·16	0·18	0·37	0·17	0·31	1·19
Chota Nagpur .	0·34	0·44	0·44	0·38	1·27	2·87
South Bihar .	0·40	0·13	0·19	0·54	1·20	2·46
North Bihar .	0·16	0·06	0·22	0·39	1·50	2·33

Pressure had given way rapidly on the 20th and 21st in North-Western India, and was on the morning of the 22nd in moderate to considerable defect in the Punjab and in moderate excess in the Peninsula. Unusually steep gradients (the steepest during the month) hence obtained on the 22nd and 23rd. Moderate rain fell over the greater part of the Peninsula and in Central and Northern India, except the Punjab, Sind and Rajputana, which only received scattered showers. Steep gradients continued until the end of the month, and strong monsoon winds blew steadily across the west coast during this period.

The increased gradients in the Indian area on the 22nd and 23rd were accompanied by the strengthening of the monsoon current in the Bay. The disappearance of the storm in Bihar on the 21st was hence followed by a strong influx of humid winds into Bengal. North and Central Bengal obtained a heavy downpour on the 22nd, and there was shown a slight tendency to the establishment of a shallow depression in Central Bengal. Heavy rain fell over the whole province, more especially in East Bengal and Bihar, and a shallow and a well-marked depression and cyclonic circulation was shown in Central Bengal on the 23rd.

General and heavy rain continued in Bengal and Bihar on the 24th and 25th. The feeble rain-formed depression, which was central near Bhagalpur on the 23rd, was displaced westwards during the next 24 hours and was central a little to the east of Hazaribagh on the 24th and 25th. It shifted slightly to the west during the next 24 hours and filled up on the 27th. The following gives a summary of the rainfall data of Bengal for this period from the 22nd to the 27th :—

Division.	Average actual rainfall in 24 hours preceding 8 A.M. of						Total of period.
	22nd.	23rd.	24th.	25th.	26th.	27th.	
	Inches.	Inches.	Inch.	Inch.	Inch.	Inch.	Inches.
Orissa . . .	0·50	0·84	0·82	0·16	0·07	0·19	2·58
Bengal (East) . .	1·23	1·48	0·80	0·32	0·23	0·15	4·21
„ (North) .	2·00	0·59	0·52	0·31	0·24	0·73	4·39
„ (South-West)	0·16	1·05	0·49	0·15	0·17	0·10	2·12
Bihar (South) . .	0·40	2·43	0·54	0·64	0·84	0·34	5·19
„ (North) .	0·16	1·07	0·89	0·43	0·21	0·61	3·37
Chota Nagpur .	0·34	0·66	0·86	0·42	0·40	0·49	3·17

The depression was hence evidently due to the heavy localized rainfall in Bengal, and was nearly stationary during its existence. The trough of low pressure, which lay much further north than usual for some days preceding the 23rd, was during the next four days gradually displaced southwards and occupied its normal position on the 27th.

This change was immediately followed by the occurrence of a heavy burst of rain in the Central Provinces. The following large amounts were registered on the 27th and 28th :—

District.	Station.	Date.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
Chanda . . .	Brahmapuri . .	27th .	7·76
Nagpur . . .	Nagpur . . .	„ .	7·45
Wardha . . .	Wardha . . .	„ .	5·70
Hoshangabad . .	Seoni . . .	28th .	5·78
Ditto . .	Pachmarhi . . .	„ .	5·19

The Central Provinces and Hyderabad continued to receive favourable rain during the remainder of the month.

During the 27th winds fell off rapidly in the north-west of the Bay and the trough of low pressure extended on the morning of the 28th across the Orissa coast into the north-west of the Bay, a condition frequently followed by the formation of a cyclonic whirl, as occurred in the present case. The following gives a history of this storm of the 28th July to the 2nd August.

Cyclonic storm of the 28th July to the 2nd August.—Pressure on the 28th was normal in Southern India and the south of the Bay. It was in large defect in the Punjab, in moderate to considerable defect in the north of the Bay, and normal in North Bengal and Assam. As already stated, the eastern extremity of the trough of low pressure had extended south-eastwards across the Orissa coast into the north-west of the Bay. Heavy general rain had fallen during the previous 24 hours in the Central Provinces, Central India, the North-Western Provinces and the South-East Punjab, and light scattered showers in Bengal and Bihar.

The following data extracted from the logs of vessels show the character of the weather in the Bay on the morning of the 28th :—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer, corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	″			
8 A.M.	S.S. *Rewa* .	Madras		29·714	...	...	Midnight, passing rain squalls and lightning in N.E.
„	S.S. *Gaekwar*	11 40	84 1	·730	SW	4	Overcast.
„	S.S. *Katoria* .	Calcutta		·512	...	...	Midnight, heavy rain squalls.

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Lindula* .	16 28	93 0	29·640	SW	6	Considerable sea; very heavy squalls of wind and rain.
,,	S.S. *Maharani*	Chittagong		·545	...	...	8 P.M. squally.
,,	S.S. *Fasilka* .	16 4	86 2	·607	W by S	4	Dull cloudy.
,,	S.S. *Nadir* .	19 12	85 32	·481	NW	2	Moderate sea, fine and clear.
,,	S.S. *Karagola*	22 12	91 36	·546	S	...	Fine and clear; noon, thick misty rain.
10 A.M.	F. L. V. *Torch*	Eastern Channel.		·458	Var.	1	Unsettled with south swell.
,,	F. L. V. *Hesperus*.	Intermediate station.		·471	Calm	0	8 A.M. to noon, little rain.

Pressure gave way briskly at the head of the Bay during the next 24 hours, and the eastern extremity of the trough of low pressure had extended nearly to the Arakan coast. South-westerly winds continued over the north of the Bay, and winds were shifting to north-easterly directions in South Bengal. The following data indicate the weather in the north of the Bay on the morning of the 29th :—

Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long E.	Barometer, corrected.	Wind. Direction.	Wind. Force.	Weather.
	° ′	° ′	″			
S.S. *Nadir* .	21 12	87 45	29·451	SW	3	Heavy rain with moderate sea.
S.S. *Fasilka* .	20 50	87 45	·471	SW	4	Dull, cloudy.
S.S. *Karagola* .	Saugor light.		·466	Var.	...	Noon, thick misty rain.
S.S. *Maharani* .	20 1	92 2	·526	SSE	3	Passing showers.
S.S. *Lindula* .	19 19	89 44	·484	SW	2	Occasional drizzling rain.
S.S. *Katoria* .	19 11	86 29	·489	SW	4	Rainy with head sea.
F. L. V. *Torch** .	Eastern Channel.		·442	W	4	1 A.M. to noon, passing showers.
F.L.V. *Hesperus**	Intermediate station.		·418	WSW	1	5 A.M. to 10 P.M, passing showers.

* 10 A.M. observations.

The information given by the vessels indicates clearly that moderate to heavy rain was falling over the whole of the north-west of the Bay, and that moderate to strong south-west winds prevailed in that area, except in the immediate neighbourhood of the Bengal coast.

The following account of the weather experienced by the F. L. V. *Hesperus* shows more clearly the character of the weather in the north-west angle of the Bay :—

"Moderate rain till 5 A.M. 5 A.M. to 10 P.M., passing showers. 11 P.M. to midnight, moderate rain and slight south-west swell. Much continuous lightning after sunset."

Moderate rain had fallen during the previous day in the Central Provinces, North-Western Provinces and South-East Punjab and local showers in the Deccan. Light local showers had fallen in some parts of Bengal. Skies were overcast in South Bengal and lightly clouded in North Bengal and Bihar.

30th July.—Pressure had again given way briskly in the north of the Bay and a well-marked depression was now shown in the north-west angle, the centre of which was a little to the south-west of Saugor Island. The following gives 8 A.M. observations at the coast stations in the central depression :—

Station.	Pressure. 8 A.M., reduced to sea-level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A.M.	Wind. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.
	″	″	″				Inches.
Saugor Island . .	29·369	—·098	—·164	ENE	7	10	0·22
Balasore . . .	·395	—·088	—·151	NNE	4	7	0·15
Shortt's Island . .	...	—·079	?	W	11	10	0·25
False Point . .	·382	—·091	—·174	W	9	10	1·09
Puri . . .	·432	—·062	?	W	9	9	0·26

These observations indicate that winds were now cyclonic in direction in the north-west angle of the Bay, but were by no means strong. This is confirmed by the following Marine data :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer, corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Colaba* .	9 2	89 10	29·795	SW	6	Strong sea, cloudy.
,,	S.S. *Nerbudda*	16 28	96 20	·739	...	...	
,,	S.S. *Barrister*	16 9	86 17	·538	SW	4	Heavy sea, squally.
,,	S.S. *Maharani*	17 10	92 12	·595	SW by W	6 to 7	High S.W. sea. Dirty, squally.
,,	S.S. *Gaekwar* .	19 25	87 31	·420	W	5	Frequent thick rain squalls.
10 A.M.	F. L. V. *Torch*	Eastern Channel.		·333	S	4	Passing showers.
,,	F. L. V. *Hesperus*.	Intermediate station.		·358	SE	1	High south swell. Midnight, light occasional squalls.

The preceding data indicate that in the centre and south of the Bay south-west winds of force 5 and 6 prevailed, and that in the north-west of the Bay winds of only force 1 to 4 were experienced by the Light vessels at the entrance to the Hooghly and others in the eastern and southern quadrants of the central depression. The storm was hence of feeble intensity. It was at 8 A.M. central in about Lat. 21¼°N. and Long. 87½°E.

Moderate rain had been received during the previous 24 hours in South Bengal and Orissa. The extra observations received indicate that the storm began to advance west-north-westwards during the day, and that the centre crossed the coast near Balasore in the evening.

31st July.—The storm had advanced into the southern districts of Chota Nagpur. Pressure had increased briskly to rapidly in the north of the Bay, but was unchanged in Chota Nagpur, thus indicating that the depression had commenced to fill up. The following 8 A.M. observations define its position and character :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Weather.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"	"	"				Inches.	
Balasore .	29·450	+·055	−·096	SSW	6	7	0·63	
Burdwan .	·436	+·001	−·100	SE	6	9	0·45	Thunderstorm.
Bankura .	·400	−·019	−·131	E	3	10	1·14	
Ranchi .	·438	−·003	−·104	ENE	9	10	1·08	Continuous rain.
Chaibassa .	·404	−·003	−·130	Calm	2	10	1·43	
Sambalpur .	·437	+·020	−·121	SW	7	10	3·55	

The depression at 8 A.M. was hence central near Chaibassa in Lat. 22¼°N. and Long. 85°E. Pressure was an eighth of an inch below the normal at Chaibassa near the centre. Moderate general rain had fallen in Orissa, Chota Nagpur and South-West Bengal.

1st August.—Pressure had risen rapidly in the north of the Bay, Bengal and Bihar, and slightly in the North-Western Provinces and East Punjab. The depression was now in the eastern districts of the North-Western Provinces and Bundelkhand, as is shown by the following data :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Weather.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"	"	"				Inches.	
Jubbulpore .	29·520	+·031	−·052	WNW	8	10	1·24	Drizzling.
Daltonganj .	·478	+·033	?	SW	22	5	0·52	
Dehri . .	·448	0	−·076	ENE	20	0	0·22	
Benares .	·466	+·002	−·053	E	7	9	0·13	
Allahabad .	·465	+·010	−·052	ENE	8	8	0·43	Showery.

The observations indicate that the centre was in about Lat. 24°N. and Long. 81¾° or 82°E. Pressure was probably not more than ·075″ below the normal near the centre. The depression was hence now of very slight intensity. Moderate rain had fallen in the Central Provinces, the eastern districts of the North-Western Provinces and Central India, and light to moderate general rain in Bengal.

2nd August.—The depression had continued to advance in a west-north-westerly direction during the previous 24 hours, and was at 8 A.M. central near Cawnpore in Lat. 25°N. and Long. 80¼°E. as is shown by the following observations :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Weather.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"	"	"				Inches.	
Nowgong .	29·543	+·047	+ 004	WSW	2	10	2·94	
Sutna. .	·570	+·109	+·031	WSW	8	10	0·95	
Allahabad .	·540	+·075	+·023	SSE	7	10	1·35	Showery.
Lucknow .	·517	+·015	+·001	ENE	...	10	0·32	Showery.
Cawnpore .	·485	—·001	?	E	6	8	0·14	Showery.
Agra . .	·525	+·024	+·003	SE	4	10	0·96	Raining.
Jhansi .	·537	+·034	+·005	SW	3	8	1·68	Continuous rain for upwards of 12 hours.

Winds were now light in the storm area and the rainfall light to moderate in amount. The storm filled up during the day and its disappearance was followed by the extension of humid winds from the Bay to Rajputana and the Punjab, which received favourable general rain during the next 24 hours.

The following gives data of the position and rate of movement of the storm centre from the 30th July to the 2nd August:—

Date.	Position of centre at 8 A.M.		Distance passed over during interval.	Average hourly rate of motion.
	Lat. N.	Long. E.		
	° ′	° ′	Miles.	Miles.
30th July. . .	21 15	87 30		
31st „ . . .	22 15	85 10	175	7
1st August . .	24 0	81 45	250	10½
2nd. „ . . .	26 0	80 15	160	6⅔

Summary of the reports of the weather and snowfall in the mountain districts to the north and north-west of India.

No reports have been received for the months of June and July 1895 for any district, except Lahoul and Almora.

Lahoul.—The Reverend A. W. Heyde, who has been for many years Superintendent of the observatory at Kailang, writing on the 24th July says:

"The weather in Lahoul from the beginning of July has been strikingly cold. Whenever a little rain has fallen at Kailang, snow has always fallen on the higher hills, falling as low as 13,000 feet, which at this time of year is of very rare occurrence. There was little snow during the winter in Lanoul, and hence this cold is so much the more unusual. Dr. Hutchison who came from Chamba by way of Pangi arrived at Kailang four days ago. He had some rain on the way, and noticed that along his route the higher hills were being covered with fresh snow, such as he had never seen during his residence of twenty years in these parts. The glaciers round about Kailang, which usually begin to melt at the end of June, and give water for irrigating the fields, did not begin to melt until quite the middle of July, evidently on account of the prevailing cold. High and cold winds from the west prevail in the afternoon. Skies are nearly always clear at nights at present, but are heavily clouded in the day time."

Almora District.—According to the report for the period 15th May to 15th July, received from the Commissioner of the Kumaon Division, about a foot of snow fell on the higher passes of Malla Danpur, and 3 feet on those of Malla Johar during the period. No snow is reported to have been received in Mallas Byans, Chandans and Darma. The weather during the period was damper, and more cloudy than usual, and the snowfall on the higher elevations is believed to be somewhat greater than in the preceding year.

Summary of the snowfall information.—The reports are very few in number. As no reports have been received from officers on the North-West Frontier, it is almost certain no snow has fallen on the higher elevations in Afghanistan. The Kailang and Almora reports indicate that there has been somewhat more snow than usual on the higher elevations in the North-Western Himalayas. It is, however, almost certain there has been no heavy general and extensive snowfall such as occurred in June and July 1880. This is confirmed by the appearance of the snows as seen from Simla, and the unusually low water in the Indus.

It was stated in the memorandum published in the *Gazette of India* of June 8th, 1895, that, although the snowfall of the early winter months was considerably heavier than usual, it melted much more rapidly than usual in April and May, and hence in the beginning of June the snow accumulation was probably somewhat less than the normal. As the months of June and July have been characterised by an unusual amount of fine dry sunny weather, it is certain that the accumulation on the higher elevations (notwithstanding the occasional snowstorms in July), is considerably below the normal for the period.

Summary of special storm reports.

Ths following gives a statement of the chief local storms, of which reports were received during the month:—

9th.—Duststorm and thunderstorm at Teheran (7-30 to 9 P.M.). Thunderstorm at Jeypore (10 P.M.).

10th.—Thunderstorm at Allahabad at 8 P.M. to 10 P.M.

11th.—Thunderstorm at Pachpadra at 3 P.M.

12th.—Duststorms at Sirsa from north-west (5-50 to 6-20 P.M.) and at Bhuj from north-east (1 A.M.).

* Thunderstorm at Allahabad (6 P.M.).

13th.—Thunderstorm at Allahabad (3-50 P.M.). Duststorm at Sirsa (1-10 and 4-25 P.M.).

15th.—Violent thunderstorm at Allahabad at 1 A.M. to 2-30 A.M.

Duststorm at Sirsa (4-25 P.M.). Thunderstorm at Lahore at 4-20 P.M. to 6 P.M. Thunderstorm at Bhuj.

17th.—Thunderstorm at Cawnpore from 5-55 to 6-20 P.M.

Thunderstorm and rain squall at Cherat from 1·30 to 2-15 P.M. 0·61 inch rain fell in ten minutes from 1-30 to 1-40 P.M.

18th.—Thunderstorm at Allahabad at 11 A.M. and again at 4 P.M. Thunderstorm at Bhuj.

19th.—Violent duststorm at Jacobabad from 7-30 P.M. to 9-30 P.M. Storm came from west.

20th.—Thunderstorm at Pachpadra. The storm came down from north-east, beginning at 3 P.M.

The following account of an earthquake in Persia has been received from the observer at Teheran: "A shock of earthquake occurred in Teheran at 2-6 A.M. (local time) on the morning of the 9th July, lasting fully 45 seconds. In the city no visible damage was done but several describe a rocking sensation of the rooms. From telegraphic enquiries I made it seems an earthquake occurred at this time at Kuchan which place has twice been destroyed through this means, the last time some few months ago The shock at Meshed lasted fully one minute, thence all along the line to Shahrud (half way between Teheran and Meshed) whence it seems to have branched into two directions as a shock was felt at Astrabad and another at Teheran simultaneously."

Brief summary of the weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—At the beginning of the month normal south-west winds prevailed generally over the Arabian Sea and weather was cloudy, except in the neighbourhood of the west coast, where it was rainy with frequent squalls. Winds were, as is ordinarily the case, strongest (force 6 to 9) in the centre and around Socotra and thence decreased in all directions, and were lightest in the south-east, where the S.S. *Clan Macpherson* in Lat. 8¼° N. and Long. 72¾°E. experienced south-west winds of force 2. At 8 A.M. of the 1st the mean wind force, as recorded on board 22 vessels, was 4·6. In the Gulf of Aden winds were rather unsteady, while in the Persian Gulf ordinary north-west winds of the period prevailed. Weather was fine in both these areas. Winds decreased generally during the next 24 hours (except in the west), at the same time becoming more northerly along the Bombay coast. The mean wind force on the morning of the 2nd had fallen to 4·1. The shift in the direction of the winds along the Bombay coast was accompanied with a rapid improvement in the weather.

The monsoon current continued to decrease in intensity during the next four days and on the morning of the 6th its mean strength was 0·9 less than on the 1st. Winds however increased rather rapidly during the day and on the morning of the 7th were blowing with a mean force of 4·2. A further increase occurred in the air movement over the west and centre of the sea where winds of force 6 to 9 obtained on the morning of the 8th. On the other hand winds decreased along the Konkan and Malabar coasts and became light and unsteady Notwithstanding this decrease the mean force at 8 A.M. of the 8th was 4·4. Weather continued fine in the north and west, whilst over the centre, as well as over the area of unsteady winds in the east of the sea, it had become squally with heavy rain. The squalls were most frequent to the south-west of the Kathiawar coast. Thus the S.S *Patna* in Lat. 17° N. and Long. 67¼° E. at 8 A.M. of the 8th, experienced westerly winds of force 6 with squalls of wind and rain and a heavy sea. No important change occurred during the next three days, except that the conditions became still more disturbed in the east and centre of the sea and especially to the south-west of Kathiawar. The wind force at 8 A.M. of the 11th averaged 4·1. During the next 24 hours a low pressure area was developed over the Gulf of Cambay and Kathiawar, and hence winds shifted round to south-easterly directions along the Konkan coast and weather became even more unsettled in that area and over the centre of the sea. The S.S. *Oriental* in Lat. 17½° N. and Long. 67° E. at 8 A.M. of the 12th reported continuous heavy rain. The influence of the depression was restricted to a small area and did not extend to the west of the sea where winds were decreasing and did not exceed 6 in force. The general strength of the current decreased to 3·7 at 8 A.M. of the 12th. On the 13th winds were cyclonic in direction in the north-east of the sea. As on the preceding day, the winds in the depression area were not strong and varied in force from 2 to 5. The low pressure area filled up during the day, and on the morning of the 14th ordinary monsoon winds pravailed generally, except in the south-east, where the winds were light and variable. No change occurred during the next 48 hours. Winds, however, began to increase rapidly in force, more especially in the west and centre of the sea, and on the morning of the 17th were 1·0 stronger than on the 15th and 16th. A fresh to strong monsoon prevailed generally over the sea during the next four days. It was strongest on the 19th, when it blew with a

mean force of 5·0. Winds of force 8 to 10 were experienced during this period in the centre and west of the sea.

During the remainder of the month moderate to strong monsoon winds and weather continued to prevail generally and the mean wind force ranged between 3·8 and 4·9.

Bay of Bengal.—Ordinary monsoon winds and weather prevailed generally over the Bay during the first seven days of the month. The winds varied in force from 2 to 6 and were throughout the period strongest in the south of the Bay, more especially near the Ceylon coast and the Nicobars where weather also was most unsettled, several vessels reporting winds of force 6, heavy to hard squalls and a rough sea. The mean intensity of the winds ranged from 3·8 on the 1st to 4·2 on the 6th and 4·1 on the 7th. Winds decreased rapidly in strength during the day in all parts of the Bay (excepting the extreme north) and on the morning of the 8th were blowing with a mean force of only 3·2. The monsoon current over the Bay continued to fall off in strength during the next five days, and on the morning of the 13th, the day on which it was feeblest, its average strength had decreased to 2·9. As is usually the case, when the current is weak, unsteady variable winds and fine weather prevailed during the period from the 8th to the 13th, over the Bay with the exception of the south where a strong monsoon continued. The current in the south of the Bay strengthened rapidly during the 14th and 15th, and squally weather extended northwards up the Bay. On the morning of the 16th strong squally monsoon winds obtained as far north as Lat. 16°N. Thus the S.S. *Congella* in Lat. 13½° N. and Long. 85°E. experienced at 8 A.M. heavy squalls of wind and rain, and the S.S. *Trocas* in Lat. 15° N. and Long. 82¼° E. at the same hour had incessant rain. To the north of Lat. 16° N. light variable winds and fine weather held steadily. The mean intensity of the winds increased to 4·0 on the 15th and 16th.

An important change took place during the next 24 hours. As is ordinarily the case, a feeble storm was generated in the area of light variable winds in the north of the Bay, and in consequence the winds shifted round to northerly directions on the Orissa coasts. The storm developed slowly during the next 48 hours and passed inland across the North Orissa coast on the afternoon of the 19th. It was throughout of feeble intensity and occasioned only passing squalls. The strongest winds experienced in the storm area on the 18th and 19th did not exceed 7 in force. The mean wind force for the Bay at 8 A.M. of the 19th was 4·1, only 0·1 greater than on the 15th and 16th. With the passage inland of the storm, conditions improved very rapidly in the north of the Bay, and on the morning of the 20th light breezes prevailed in that region. Weather was generally fine with occasional light showers except near the Burma coast where heavy rain squalls were experienced. The mean wind force fell to 3·3 at 8 A.M. of the 20th.

A very important change occurred in the pressure conditions over India and the Bay during the next 48 hours which resulted in the establishment of unusually steep gradients over the Bay. The air movement hence increased rapidly and largely in intensity and weather became unsettled over nearly the whole of the Bay. These conditions lasted until the 26th. During this period from the 21st to the 26th winds of force 5 to 10, fierce squalls, heavy rain and a rough sea were experienced over a large part of the Bay and the mean wind force ranged from 4·3 up to 4·8. This increase in the strength of the monsoon current is shown clearly by the data of Port Blair where the average hourly wind velocity rose from 14 miles on the 21st to 25 miles on the 25th. Winds decreased rapidly in force in the north of the Bay on the 27th, but continued strong in the centre and south. Light variable airs were experienced to the north of Lat. 19° N. on the morning of the 28th. In the centre, south and east of the Bay a strong monsoon was blowing, several vessels reporting winds of force 6, a considerable sea and very heavy squalls with thick rain. The air movement averaged 4·1. As usually happens under this combination of conditions in the rains, a storm formed in the north of the Bay during the next 24 hours. It intensified slightly during the next 24 hours and crossed the coast on the 30th. Winds were cyclonic in direction in the north-west of the Bay on the 29th and 30th. Weather was squally in the storm area but, as in the previous case, the storm was a shallow depression and hence its influence did not extend to the south of the Bay, where weather was fine with light to moderate winds. The strongest winds in the storm area were of force 8 experienced by the S.S. *Chanda* at 8 A.M. on the 31st in Lat. 19°38'N. and Long. 87°33'E. At the end of the month ordinary monsoon winds and weather prevailed generally over the Bay except in the south where weather was fine.

The wind force averaged 4·3 on the 31st and ranged between 4·1 and 4·3 during the period from the 27th to the 30th when the storm was developing in the north-west of the Bay.

It will be seen from the preceding account of the weather in the Indian seas that the monsoon current was stronger in the second than the first half of the month. So far as can be judged from the data available for these regions, the monsoon current was, on the mean of the month as strong in the present month as during the corresponding period of 1894. Of the two branches of the current the Arabian Sea branch was slightly stronger than the Bay branch.

The data for the Equatorial region are, as is generally

the case, too scanty to enable any exact estimate to be formed of the character of the south-east trades. They, however, bear out the inference drawn from the data for the Arabian Sea and Bay of Bengal that the monsoon current was weak and unsteady during the first half of the month. This is further confirmed by the wind data of Seychelles, where the average hourly velocity ranged from 13 miles on the 1st to 7 miles on the 6th.

It may be noted that on the mean of the month the air movement at Seychelles did not differ to any extent from that of July 1894, while the total rainfall of the month was 1·68 inches, as compared with 2·33 inches, in July 1894.

Temperature of the air.

The variations of the mean temperature conditions of the month from the normal were mainly determined by the long break in the rains in the first fortnight of the month, and by the occurrence of more frequent and heavier rain than usual during the month, but more especially the first half of the month, in Assam and North Bengal and the southern half of the Peninsula (*i.e.*, south of Lat. 16° N.).

The mean maximum or day temperature of the month was below the normal in two areas, *viz.*, Assam, North Bengal and North Bihar and in Southern India. The deficiency was generally small in amount, but exceeded 2° at Sibsagar (—2°·8) and Dhubri (—2°·7 in the first area and at Salem (—2°·7) and Madras (—2°·1) in the second area.

The mean day temperature was in excess over the remainder of India. The excess ranged between 2° and 7° in the South-East Punjab, Sind, Rajputna, Central India, Berar, the Central Provinces and the North Deccan. It was more than 3° in amount at the following stations, which define the area of greatest excess of day temperature during the month (*viz.*, Lower Sind, Cutch, East Rajputana, the South-East Punjab, Berar and the more westerly and southerly districts of the Central Provinces) :—

Station.	Mean maximum temperature.		
	Actual, July 1895.	Normal, July.	Variation of actual from normal.
	°	°	
Sambhar	98·5	91·9	+6·6
Jeypore	97·0	91·8	+5·2
Bickaneer	104·1	100·1	+4·0
Ajmere	94·7	90·9	+3·8
Sirsa	103·9	100·0	+3·9
Lahore	102 3	98·6	+3·7
Kurrachee	93·7	90·1	+3·6
Bhuj	93·2	90·1	+3·1
Agra	96·4	92·9	+3·5
Amraoti	90·3	86·7	+3·6
Chanda	91·0	87·6	+3·4
Khandwa	90·1	87·0	+3·1

The variations of the night or minimum temperature were generally similar in character to, but smaller in amount than, those of the day temperature. The night temperature was below the normal in Assam, North-Bengal, Bihar and the submontane districts of the North-Western Provinces and the Punjab and also over nearly the whole of the Peninsula to the south of Lat. 18° N. The variations were less than 2°, except in the case of the stations, for which data are given below :—

Station.	Mean minimum temperature.		
	Actual, July 1895.	Normal, July.	Variation of actual from normal.
	°	°	°
Quetta	61·7	65·3	−3·6
Lahore	83·0	80·4	+2·6
Sambhar	80·4	78·0	+2·4
Saugor	75·8	73·5	+2·3
Lucknow	76·6	79·3	−2·7
Diamond Island	78·4	75·0	+3·4

The variations of the two last stations are larger than they should be, as judged by comparison with the neighbouring stations and are probably due to changes recently made in the position of the sheds, in which the thermometers are exposed.

The variations of the mean temperature of the month from the normal were similar in character to those of the maximum temperature, but smaller in amount. The mean temperature of the month was below the normal in Baluchistan, the West Punjab, the submontane districts of the North-Western Provinces, North Bengal, North Bihar and Assam and also in the Peninsula south of Lat. 16°N. The deficiency was 2° or over in the Assam

Valley and Baluchistan, as is shown by the following data :—

Province.	Station.	Mean daily temperature.		
		Actual, July 1895.	Normal, July.	Variation of actual from normal.
		°	°	°
Assam Valley	Dhubri	80·9	83·0	−2·1
	Sibsagar	82·5	84·5	−2·0
Baluchistan	Quetta	76·7	79·0	−2·3

The mean temperature of the month was above the normal over the remainder of India and in Burma. The excess was 2° or more than 2° in three areas, for which data are given :—

Area.	Station.	Mean daily temperature.		
		Actual, July 1895.	Normal, July.	Variation of actual from normal.
		°	°	°
First area.	Lahore	92·7	89·5	+3·2
	Sirsa	93·3	90·7	+2·6
	Sambhar	89·4	84·9	+4·5
	Jeypore	87·7	84·3	+3·4
	Ajmere	86·7	83·8	+2·9
	Saugor	81·6	79·2	+2·4
Second area	Amraoti	82·5	79·9	+2·6
	Khandwa	83·1	81·0	+2·1
Third area	Kurrachee	87·9	85·3	+2·6
	Bhuj	86·1	84·1	+2·0

The chief features of the mean temperature conditions of the month were as follows :—

1st.—Increased temperature both by day and night in Burma, slightly larger at the inland than at the coast stations.

2nd.—Diminished temperature both by day and night in Assam, North Bengal, Bihar and the submontane districts of the North-Western Provinces. The deficiency was most marked in the Assam Valley, where the mean temperature of the month averaged 2° below the normal.

3rd.—Diminished temperature both by day and night in the Peninsula south of Lat. 17°N. The deficiency was generally small in amount and was greatest at Madras, where the mean temperature of the month was 1°·6 lower than the normal.

4th.—Increased temperature over the remainder of India. The excess was very marked in the day temperature over a portion of this area, including the South Punjab, Rajputana, Lower Sind, and some parts of Berar and the western districts of the Central Provinces. It was on the whole greatest in Central Rajputana. The mean temperature of the month was 4°·5 above the normal at Sambhar and 3°·4 above at Jeypore.

The following table gives temperature data for the 51 meteorological divisions of the Empire :—

Province.	Division.	Actual Temperature.					Variation from normal of		
		Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	86·0	74·6	80·3	11·5	18·8	+2·5	+1·0	+1·5
	Lower Burma	85·5	77·1	81·3	8·4	14·6	+0·7	+1·6	−0·9
	Central do.	91·5	76·6	84·1	14·9	20·7	+2·1	+1·1	+1·0
	Upper do.	89·0	75·2	82·2	13·8	20·8	+0·2	+0·6	−0·4
	Arakan	86·8	78·2	82·5	8·6	16·6	+2·2	+0·8	+1·4
Bengal and Assam	Eastern Bengal	85·1	77·0	81·5	9·1	15·0	+0·6	+0·7	−0·1
	Assam (Surma)	89·4	76·6	83·0	12·8	21·7	−1·2	−0·4	−0·8
	Do. (Brahmaputra)	86·4	77·0	81·7	9·4	18·8	−2·8	−1·4	−1·4
	Deltaic Bengal	89·8	79·2	84·5	10·6	17·3	+1·2	+0·4	+0·8
	Central do.	89·9	78·5	84·2	11·3	20·6	+0·4	0	+0·4
	North do.	87·6	77·4	82·5	10·1	18·3	−1·3	−0·4	−0·9
	Orissa	89·0	79·8	84·5	9·2	20·7	+0·6	+0·7	−0·1
	Chota Nagpur	87·6	75·6	81·6	11·9	21·9	+0·8	+0·5	+0·3
	Bihar (South)	91·0	78·8	85·0	12·2	23·4	+0·4	−0·4	+0·8
	Do. (North)	89·7	78·9	84·3	10·8	21·8	−0·9	+0·1	−1·0

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Variation from normal. Maximum.	Minimum	Daily range.
		°	°	°	°	°	°	°	°
North-Western Provinces and Oudh.	North-Western Provinces (East)	91·6	78·7	85·2	12·9	22·6	+0·4	−0·7	+1·1
	Oudh (South)	92·8	76·6	84·7	16·2	27·0	+0·8	−2·7	+3·5
	Do. (North)	91·1	77·5	84·3	13·6	24·4	?	?	?
	North-Western Provinces (Central)	94·3	79·2	86·8	15·1	30·1	?	?	?
	Do. do. (West)	94·9	80·1	87·5	14·8	27·0	+3·1	+0·8	+2·3
	Do. do. (Submontane)	90·8	76·7	83·8	14·1	28·1	+0·3	−0·9	+1·2
Punjab	Punjab (South)	100·0	81·4	90·7	18·6	34·0	+3·0	+0·5	+2·5
	Do. (Central)	102·3	83·0	92·7	19·3	34·2	+3·7	+2·6	+1·1
	Do. (Submontane)	95·6	79·0	87·3	16·6	33·6	−0·5	−0·4	−0·1
	Do. (Hill Districts)	80·2	63·6	72·0	16·5	32·3	−0·5	−0·7	+0·2
	Do. (North-West)	100·5	78·2	89·4	22·2	40·4	+0·8	−0·3	+1·1
	Do. (West)	104·4	82·8	93·6	21·7	38·6	+0·9	+0·2	+0·7
Bombay and Malabar Coast Districts (Madras).	Malabar	81·4	73·6	77·5	7·9	14·7	−1·1	−0·6	−0·5
	Madras (South Central)	88·2	71·2	79·8	17·0	24·9	−2·0	−0·3	−1·7
	Coorg	67·2	61·9	64·6	5·3	10·3	−1·5	−0·3	−1·2
	Mysore	79·4	66·2	72·8	13·2	21·4	−1·6	0	−1·6
	Konkan	82·5	76·3	79·5	6·1	13·1	−0·3	+0·8	−1·1
	Bombay Deccan	84·3	69·5	76·9	14·8	24·4	+1·4	−0·1	+1·5
	Hyderabad (North)	87·4	71·4	79·4	16·0	25·8	?	?	?
	Khandesh	87·1	71·8	79·5	15·4	24·6	+2·5	+0·6	+1·9
Central Provinces and Berar.	Berar	90·5	74·7	82·6	15·8	25·8	+3·1	+1·1	+2·0
	Central Provinces (West)	89·3	75·7	82·5	13·7	24·3	+2·6	+0·8	+1·8
	Do. (Central)	87·9	74·9	81·4	13·1	24·6	+2·5	+0·9	+1·6
	Do. (East)	88·7	76·7	82·7	12·0	22·3	+2·0	+0·7	+1·3
Bombay (North)	Gujarat	90·3	77·9	84·1	12·4	20·9	+0·7	+0·1	+0·6
	Kathiawar	87·9	77·5	82·7	10·4	18·5	+1·4	−0·3	+1·7
	Sind	99·4	82·0	90·7	17·5	30·6	+2·8	+1·2	+1·6
Rajputana and Central India.	Central India (East)	90·4	78·0	84·3	12·4	23·0	+2·0	+0·7	+1·3
	Rajputana (East), Central India (West)	93·3	77·2	85·2	16·2	27·6	+3·8	+1·3	+2·5
	Do. (West)	103·1	81·7	92·4	21·5	31·3	+4·0	?	?
Madras	East Coast (North)	88·5	78·8	83·7	9·7	29·5	+0·3	−0·5	+0·8
	Hyderabad (South)	89·1	73·1	81·1	16·0	28·5	+1·5	+1·9	−0·4
	Madras (Central)	90·6	74·7	82·7	15·8	28·9	−1·2	−0·6	−0·6
	East Coast (Central)	92·4	78·0	85·2	14·4	31·9	−1·1	−0·9	−0·2
	Do. (South)	94·9	77·7	86·4	17·2	31·7	−0·8	0	−0·8
	Madras (South)	93·0	78·5	85·8	14·4	22·2	−1·8	+0·9	−2·7

At the commencement of the month Northern and Central India was receiving fairly general and in some parts heavy rain. The rainfall was, on the other hand, very scanty in the Peninsula. Temperature was hence more or less in defect in Northern India and in excess in the Peninsula. The following gives variation data for the 24 hours preceding 8 A.M. of the 1st, illustrating the conditions obtaining at the beginning of the month :—

Political area or Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·6	+1·4	+1·0
Bengal and Assam	−0·4	−0·4	−0·4
N.-W. Provinces and Oudh	−10·8	−4·9	−7·9
Punjab	−7·1	−5·8	−6·5
Sind and Rajputana	+0·8	−0·6	+0·1
Central India and Gujarat	−2·9	−1·8	−2·4
Central Provinces and Berar	−2·3	−0·6	−1·5
Bombay	+1·8	+1·8	+1·8
Madras	+3·1	+1·8	+2·5

The rainfall diminished in amount in North-Western and Central India during the next two days, and between the 2nd and 4th a break set in over that area, which lasted until the 15th or 16th. Temperature hence increased rapidly during this interval and was in general excess on the 4th, as is shown by the following variation statement :—

Political area or Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−0·6	+1·0	+0·2
Bengal and Assam	+3·9	+0·8	+2·4
N.-W. Provinces and Oudh	+2·6	+1·8	+2·2
Punjab	+2·6	+4·0	+3·3
Sind and Rajputana	+3·8	+0·9	+2·4
Central India and Gujarat	+3·6	+0·8	+2·2
Central Provinces and Berar	+5·9	+2·2	+4·1
Bombay	+3·7	+1·0	+2·4
Madras	+6·4	+2·6	+4·5

The temperature was during the first five days of the month in excess in Madras and the Deccan, and more especially at the coast stations, where strongish westerly winds were blowing with unusual steadiness. The highest day temperatures in Southern India during the month were recorded during this period. The following gives data in illustration :—

Station.	Highest maximum temperature recorded in July 1895.	Date on which recorded.
	°	
Cuddalore	105·4	3rd.
Nellore	105·3	2nd and 4th.
Masulipatam	103·7	2nd and 3rd.
Madras	103·5	1st.
Trichinopoly	103·1	4th.

It will thus be seen that the highest day temperatures were registered at the coast stations and not in the interior, as is frequently the case during the period from May to September in the southern half of the Peninsula.

The break in the rains held steadily over by far the greater part of India from the 4th to the 8th ; but Assam and Bengal, more especially the northern districts, and also Southern India received daily moderate to heavy rain, which reduced temperature considerably below the normal, as is shown by the following :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date.			
	5th July.	6th July.	7th July.	8th July.
	°	°	°	°
Assam	+1·7	+0·2	−2·9	−4·2
Bengal	−0·6	−0·4	−0·4	−0·8
Madras	+1·6	−0·7	+1·0	−3·1

The Punjab received numerous local thundershowers on the 9th, 10th, and 11th. Temperature hence decreased largely on the 9th and was more or less below the normal from the 9th to the 12th, as was also the case in North Bengal, Assam and Southern India, which continued to receive daily showers. The following gives the variations of the mean temperature from the normal in those three areas of rainfall and diminished temperature from the 9th to the 12th :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date			
	9th July.	10th July.	11th July.	12th July.
	°	°	°	°
Punjab	−2·9	−5·4	−6·5	−3·2
Assam	−3·9	−4·7	−2·9	−2·6
Bengal	−0·6	−0·3	+0·2	+1·1
Madras	−1·6	+1·0	−1·2	−0·3

The following variation data of the 12th illustrate the temperature conditions obtaining in India before the termination of the break in the rains :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+3·3	+2·2	+2·8
Bengal and Assam	+0·5	+0·7	+0·6
N.-W. Provinces and Oudh	+2·3	−0·2	+1·1
Punjab	−2·7	−3·7	−3·2
Sind and Rajputana	+2·8	+0·9	+1·9
Central India and Gujarat	+3·5	−1·1	+1·2
Central Provinces and Berar	+4·2	+2·1	+3·2
Bombay	−0·8	−1·3	−1·1
Madras	−0·6	+0·1	−0·3

Temperature increased generally on the 13th and 14th. The monsoon current had strengthened on the west coast on the 10th and following days, and rain fell in increasing amounts in the coast districts from the 10th to the 15th, and also gradually extended into the interior, and on the 18th and 19th was again fairly general over the interior of India with the exception of Sind, Rajputana and the West Punjab. The following variation data of the mean temperature illustrate the changes accompanying the progress of this wave of moisture and rainfall :—

Political area or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date				
	14th July.	16th July.	18th July.	20th July.	22nd July.
	°	°	°	°	°
Burma	+2·6	+0·8	+0·4	+1·4	+0·4
Bengal and Assam	+0·8	+0·5	−0·2	−0·6	−0·9
N.-W. Provinces and Oudh	+1·9	+2·1	+2·0	+1·0	+0·7
Punjab	+1·5	+2·6	+1·1	+4·2	+2·7
Sind and Rajputana	+6·4	+5·9	+3·3	+3·8	+3·6
Central India and Gujarat	+4·9	+4·7	+0·1	+1·3	0
Central Provinces and Berar	+5·5	+3·9	+0·9	+0·6	+0·1
Bombay	+0·7	+0·2	−2·1	−1·8	+1·1
Madras	−0·8	−0·7	−3·9	−2·6	+0·1

The chief features of this period were, 1st, the continued low temperature in Southern India and, 2nd, the persistent large excess of temperature in the rainless districts of North-Western India.

The highest temperatures of the month in India were recorded at Jacobabad in Sind during this period. The absolute maximum was 118° recorded on the 16th.

With the extension of the humid currents again to Upper India rain ceased in Southern India and temperature increased on the 25th and 26th and was normal or in slight excess during the remainder of the month.

More or less general rain fell during the last week of the month in Northern and Central India and the North Deccan, excepting the greater part of the Punjab, Rajputana and Sind. Temperature was hence excessive in this rainless area, as is shown by the following data:—

Political area or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date					
	25th July.	26th July.	27th July.	28th July.	29th July.	30th July.
	°	°	°	°	°	°
Punjab . . .	+1·0	+4·6	+6·8	+5·0	+0·2	+0·2
Sind and Rajputana .	+2·9	+4·6	+4·6	+3·7	+2·4	+0·3

Very high day temperatures were experienced during this period in the Punjab. The following gives the highest maximum temperatures recorded during the month at the hottest stations in the Punjab and the date of their occurrence:—

Station.	Highest maximum temperature recorded in July 1895.	Date on which recorded.
Mardan	112·9	28th.
Montgomery	112·4	22nd.
Mooltan	112·4	21st.
Peshawar	110·5	28th.
Rawalpindi	107·5	27th.
Sialkot	106·7	27th.

The temperature conditions at the end of the month were practically normal over the whole of India, as is shown by the variation data of the 31st:—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·5	−0·8	−0·2
Bengal and Assam . . .	0	+0·4	+0·2
N.-W. Provinces and Oudh .	−0·6	−0·3	−0·5
Punjab	−0·2	+2·8	+1·3
Sind and Rajputana . .	−2·1	+0·7	−0·7
Central India and Gujarat .	+1·8	+0·4	+1·1
Central Provinces and Berar .	−3·3	−1·0	−2·2
Bombay	−0·3	+0·8	+0·3
Madras	−2·4	0	−1·2

The following gives the variation of the mean temperature week by week during the month and for the whole month:—

Division.	Variation from normal of mean temperature of week ending					
	6th July.	13th July.	20th July.	27th July.	3rd August.	For whole month.
	°	°	°	°		°
Burma . . .	+1·7	+2·6	+1·0	+0·7	−0·6	+1·3
Bengal and Assam .	+0·5	−0·2	+0·2	−0·7	−0·1	+0·1
N.-W. Provinces and Oudh.	−2·0	+1·8	+1·5	−0·3	−1·4	+0·1
Punjab . . .	−1·1	−2·0	+2·2	+2·5	+1·5	+0·9
Sind and Rajputana .	+1·5	+1·8	+4·5	+3·7	+1·1	+2·8
Central India and Gujarat.	+0·7	+2·6	+2·1	+0·4	−0·3	+1·6
Central Provinces and Berar.	+2·3	+3·9	+2·5	−0·1	−2·3	+1·6
Bombay . . .	+1·9	−0·2	−0·9	+0·6	−0·1	+0·2
Madras . . .	+2·5	−0·6	−2·2	−1·1	−0·4	−0·5

Winds.

The Bay monsoon current in the centre and north of the Bay was stronger than usual, as is established by the following data :—

Station.	Velocity in miles per diem.		
	Mean actual, July 1895.	Normal, July.	Variation from normal.
Port Blair	349	254	+95
Diamond Island	347	210	+137
Akyab	121	96	+25
Saugor Island	392	341	+51
False Point	270	268	+2

Winds were normal in strength in the interior of Bengal and Orissa. They were slightly stronger in Central Bihar, Chota Nagpur and the eastern districts of the North-Western Provinces. The following gives comparative data of the strength of the winds in those areas in July :—

Province.	Velocity in miles per diem.			
	Mean actual, July 1895.	Normal, July.	Variation from normal.	Percentage variation from normal.
Bengal	185	172	+13	+8
Assam	86	77	+9	+12
Bihar	120	107	+13	+12
Chota Nagpur	224	203	+21	+10
Orissa	176	174	+2	+1
N.-W. Provinces and Oudh	88	77	+11	+14

Hence the Bengal current, so far as is indicated by the strength of the winds in its usual area of extension in July, was stronger than usual, more especially in the centre and north-east of the Bay and in East Bengal.

Winds were more westerly than usual at Port Blair and the Burma coast stations. The following gives data for two stations :—

Station.	Wind Direction.		
	Mean actual, July 1895.	Normal July.	Westerly deflection.
	°	°	°
Port Blair	S 58 W	S 44 W	+14
Diamond Island	S 42 W	S 41 W	+1

As might be expected from the abnormal features of the pressure distribution and of the rainfall of the month, winds were more westerly or less easterly in the interior of Bengal, indicating a greater set of the current to East and North Bengal and Assam. This is fully shown by the following data :—

Station.	Wind Direction.		
	Mean actual, July 1895.	Normal, July.	Increased westing or decreased easting.
Chittagong	S 3° E	S 40° E	37
Narayanganj	S 10 E	S 19 E	9
Calcutta	S 11 W	S 11 E	22
Burdwan	S 11 W	S 26 E	37
Berhampore	S 7 E	S 41 E	34

The data indicate a mean deflection of the winds of the month of about 30°.

It has been frequently pointed out in the monthly reviews that the deflection of the mean winds of the month at False Point and Saugor Island is almost invariably opposite to that of stations in the interior of Bengal. The present month is a noteworthy example of this inverse relation, which is at once seen by comparing the data of the following with those of the preceding table :—

Station.	Wind direction.		
	Mean actual, July 1895.	Normal, July.	Decreased westing.
	°	°	°
False Point	S 27 W	S 59 W	32
Saugor Island	S 6 W	S 24 W	18

No satisfactory explanation of this inverse relation has as yet been suggested.

Winds were approximately normal in direction and steadiness in Bihar and the eastern districts of the North-Western Provinces. They were exceedingly unsteady

in the western districts of the North-Western Provinces and the East Punjab as shown by the following:—

Station.	Velocity in miles per diem.			Steadiness.		
	Mean actual, July 1895.	Normal, July.	Percentage variation.	Actual percentage July 1895.	Normal, percentage July.	Variation from normal.
Lucknow . .	?	94	?	5	18	−13
Roorkee . .	?	71	?	8	33	−25
Meerut . .	43	57	−25	6	23	−17
Ludhiana	63	49	+29	13	25	−12
Lahore . .	93	80	+16	14	34	−20
Peshawar .	97	111	−13	31	50	−19

The Bombay current was on the mean of the month slightly weaker and less steady than usual. The following gives data for three stations:—

Station.	Velocity in miles per diem.		
	Mean actual, July 1895.	Normal, July.	Percentage variation, from normal.
Kurrachee	407	436	− 7
Bombay	415	456	− 9
Ratnagiri	277	313	−12

The data of the following inland stations at which the exposure of the anemometer is peculiarly favourable confirm the inferences drawn from the data of the coast stations:—

Station.	Velocity in miles per diem.			
	Mean actual, July 1895.	Normal, July.	Variation from normal.	Percentage variation, from normal.
Belgaum . . .	577	669	− 92	−14
Poona	289	400	−111	−28

The following gives comparative data of the velocity of the air movement in the districts usually under the sole influence of the Bombay current:—

Division.	Velocity in miles per diem.		
	Mean actual, July 1895.	Normal, July.	Variation from normal.
West Coast	346	385	−39
Deccan	416	456	−40
Berar	184	211	−27
Central Provinces . . .	172	172	0
Central India . . .	138	166	−28
Rajputana	234	220	+14
Sind	276	281	− 5

Winds were somewhat more westerly and less southerly in and near the west coast districts as is shown by the following data:—

Station.	Wind direction.		
	Mean actual, July 1895.	Mean normal, July.	Westerly deflection.
	°	°	°
Kurrachee	S 65 W	S 62 W	+ 3
Bombay	S 64 W	S 75 W	−11
Ratnagiri	S 64 W	S 55 W	+ 9
Karwar	S 86 W	S 74 W	+12
Belgaum	S 76 W	S 70 W	+ 6

In the Deccan the mean winds were on the whole slightly less westerly than usual, but the differences were small and apparently of little significance.

In Central India and Rajputana, winds were much more westerly than usual. The following gives three examples:—

Station.	Wind direction.		
	Mean actual, July 1895.	Mean normal, July.	Westerly deflection.
	°	°	°
Deesa	S 46 W	S 40 W	6
Jeypore	N 89 W	N 58 W	31
Agra	S 89 W	N 63 E	...

Winds in Southern India were on the whole stronger and more westerly than usual. The following data illustrate these features:—

Station.	Velocity in miles perdiem.			Wind direction.		
	Mean actual, July 1895.	Mean normal July.	Variation from normal.	Mean actual, July 1895.	Mean normal, July.	Westerly deflection.
				°	°	°
Mercara . .	269	247	+22	N 83 W	N 79 W	+ 4
Bangalore .	276	206	+70	S 77 W	S 71 W	+ 6
Trichinopoly .	278	239	+39	S 77 W	N 87 W	−10
Madras . .	152	195	−43	S 71 W	S 46 W	+25
Wellington .	136	127	+ 9	S 70 W	N 82 W	−12

The winds of the month at the hill stations in Northern India were much stronger than usual. The following are examples :—

Station.	Velocity in miles per diem.		
	Mean actual, July 1895.	Mean normal, July.	Percentage variation from normal.
Darjeeling	126	63	+63
Ranikhet	116	51	+65
Chakrata	179	118	+61
Murree	177	137	+40

The increased air movement extended as far into the interior as Leh and Kailang at which stations the mean winds were about 20 per cent. stronger than usual.

The mean wind direction at Zanzibar was S 6° E (slightly more easterly than usual) and at the Seychelles S 36° E. or 14° more easterly than the mean winds in July 1894. Winds were steadier at both stations in July 1895 than in July 1894.

The following extract from a letter written by the Port Officer, Mahe, Seychelles, is interesting for the light it throws on the delay in the establishment of the monsoon in June :—

"The weather from May to the end of July inclusive was very unusual and up to the 1st August, except for short periods, the south-east trades have been very feeble compared with previous years, and on an average the winds have been more southerly in fact, and the weather we have had during the month of June was similar to what we generally get in Seychelles in the latter part of April or during May. I was under the impression that the monsoon with accompanying rains would arrive on the coast of India very late this year."

The following summarizes the chief features of the air movement over India during the month :—

(1) The Bay monsoon current was almost certainly stronger on the average of the whole month than usual.

(2) Winds were slightly stronger and more westerly than usual at Port Blair and the Burma coast stations.

(3) Winds were stronger in Bengal and more westerly than usual at the inland stations, indicating that the monsoon current was determined more largely than usual to Assam and North and East Bengal.

(4) Winds were unsteady in the western half of the Gangetic Plain and East Punjab.

(5) The Bombay monsoon current was somewhat below its normal strength.

(6) Winds were slightly stronger in Southern India and more westerly than usual.

(7) Winds were more westerly than usual in Rajputana and Central India.

(8) Winds were considerably stronger at the hill stations more especially at Darjeeling, Ranikhet and Chakrata.

(9) The axis of the trough of low pressure lay on the average of the month somewhat further north than usual, stretching from Chota Nagpur to Upper Sind and the South-West Punjab.

Humidity and Cloud.

The amount of aqueous vapour present in the air was practically normal in Burma and at Port Blair. The relative humidity was in slight defect due to the increased temperature in that area. The deficiency was largest at Diamond Island (—5). The amount of vapour in the air was normal in Assam and East Bengal, but the air was somewhat damper than usual in consequence of the decreased temperature. The mean humidity of the month was most largely above the normal at Sibsagar and Dhubri (each 5 in excess).

The air on the mean of the month contained less aqueous vapour than the nornal over the whole of Northern and Central India. The deficiency was small in amount at stations near the Bengal coast and increased up the Gangetic valley to the Punjab, where it was large. The relative humidity was hence considerably below the normal, due in part to the actual defect of vapour, and in part to the increased temperature. The mean humidity percentage of the month was most largely in defect in this area at Jeypore (—10), Agra (—9), Lahore (—8) and Ludhiana (—7). The deficiency was as largely marked at the Upper India hill stations and in Thibet and Baluchistan. The mean humidity of the month was, for example, 9 in defect at Quetta, 7 in defect at Murree and Simla, and 6 in defect at Leh and Chamba.

The following gives comparative data for this large area of decreased humidity during the month :—

Area.	Absolute humidity.			Relative humidity.		
	Average actual, July 1895.	Average normal, July.	Variation from normal.	Average actual, July 1895.	Average normal, July.	Variation from normal.
	"	"	"	%	%	
Bengal . .	·955	·964	—·009	84	87	—3
Bihar . .	·959	·965	—·006	83	82	+1
Chota Nagpur	·799	·818	—·019	83	85	—2
North-Western Provinces and Oudh.	·884	·911	—·027	74	77	—3
Punjab . .	·775	·836	—·061	55	61	—6
Rajputana .	·814	·822	—·008	68	73	—5
Central India .	·875	·854	+·021	78	80	—2

The mean amount of aqueous vapour present in the air (as measured by its pressure) differed little from the normal in the Deccan, Berar, the Central Provinces and West Coast districts. Humidity was generally below the normal in these areas, chiefly as a result of the increased temperature of the month. The deficiency was largest at Khandwa, Buldana and Bellary, where it was, however, only 4 in amount. The mean humidity at Pachmarhi for the month was 6 below the normal and at Chikalda 3 below. The following table gives comparative data :—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, July 1895.	Average normal, July.	Variation from normal.	Average actual, July 1895.	Average normal, July.	Variation from normal.
	"	"	"	%	%	
Berar . .	·740	·741	−·001	76	78	−2
CentralProvinces	·826	·807	+·019	79	80	−1
Deccan . .	·671	·675	−·004	78	79	−1
West Coast .	·841	·859	−·018	86	87	−1

Humidity was, on the other hand, in slight excess in Mysore and South Madras, but the variations were small and of little significance.

The chief feature of the hygrometric conditions of the month was the decreased humidity over nearly the whole of India, due in part to an actual decrease in the amount of aqueous vapour in consequence of the weakness of the monsoon currents, and in part to increased temperature, an indirect result of the same cause.

The chief local abnormal features of the humidity conditions of the month were as follows :—

(1) Slightly decreased humidity in Burma.

(2) Slight excess of humidity in Assam.

(3) General deficiency over the whole of Northern and Central India—slight to moderate in amount. The deficiency was most marked in East Rajputana and the adjacent districts of the North-Western Provinces. It was also large in amount in the Upper India hill districts.

(4) Slight deficiency in the north and centre of the Peninsula, including the West Coast districts. The deficiency in this area was largest in Berar.

The variations of the mean cloud amount from the normal differed considerably in character from those of the absolute and relative humidities.

There was more cloud than usual in Burma, Assam, Bengal, Bihar and Chota Nagpur. The excess was greatest in absolute amount at Dhubri (+1·6), Chittagong (+1·4) and Port Blair (+1·2). The following table gives comparative data :—

Division.	Mean cloud amount.		
	Average actual, July 1895.	Average normal, July.	Variation from normal.
Burma	8·9	8·5	+0·4
Assam	8·7	7·8	+0·9
Bengal	8·7	8·2	+0·5
Bihar	7·9	7·2	+0·7
Chota Nagpur . . .	9·6	9·1	+0·5

Cloud was, on the other hand, slightly below the normal in Orissa. There was a considerable to large deficiency in the amount at all stations in the North-Western Provinces, the Punjab (except Peshawar), Rajputana, Central India, and the eastern and northern districts of the Central Provinces. The deficiency was 2 or more in amount at Meerut (—2·1), Lahore (—2·0), Kurrachee (—2·8) and Deesa (—2·1). Relatively to the normal amount the deficiency was greatest at Lahore (45 per cent.) and Kurrachee (39 per cent). Comparative data for the month for the above area are given in the following table :—

Province.	Mean cloud amount.		
	Average actual, July 1895.	Average normal, July.	Variation from normal.
North-Western Provinces and Oudh.	6·3	7·2	−0·9
Punjab	2·8	3·9	−1·1
Sind	3·2	4·8	−1·6
Rajputana	5·8	7·3	−1·5
Central India	7·0	7·9	−0·9
Central Provinces . . .	7·5	8·0	−0·5

The amount of cloud was also less than usual at the Upper India hill stations and at Quetta, but was normal at the high level stations of Leh and Kailang. The deficiency was greatest at Ranikhet (—1·5) and Murree (—1·1). It may be noted that the present observer at Chakrata has a very different standard for cloud measurement from the previous observer, and hence the means of his observations are not comparable with the means derived from previous observations, or with other observers at the hill stations in Northern India.

Cloud was on the average of the month generally in excess in the Peninsula. The excess was large at Bangalore (+2·6), Salem (+2·4), Wellington (+1·8) and Cochin (+1·6).

The following gives the chief features of the mean cloud distribution of the month :—

(1) Cloud was in slight to moderate excess in Burma,

Bengal,, Assam, Bihar and Chota Nagpur, and in slight defect in Orissa.

(2) Cloud was in moderate to large defect in the North-Western Provinces, the Punjab, Sind, Rajputana, Central India, and in the northern and eastern districts of the Central Provinces. The deficiency was greatest in the East Punjab, Lower Sind and South-West Rajputana.

(3) Cloud was in excess in the Peninsula. The excess was small in the North Deccan and increased southwards, and was large at the more southern stations, more especially those in Mysore, Coorg and Malabar.

Rainfall.

The distribution of rainfall of the month is shown in Plate IV. It should be noted that the distribution there given is derived from the rainfall data of the meteorological stations in Table I, excluding those classified in that table as hill stations. It hence represents the distribution at the ordinary level of the plains of India and not of any of the hill districts, which it would not be possible to represent in such a chart. Plate V gives the variations of the rainfall of each of the 51 meteorological divisions from the normal.

The Bombay branch of the monsoon current was weaker than usual, more especially during the first fortnight of the month, and a break in the rains hence obtained in North-Western India during that period, and the rain was more or less scanty throughout the whole month in Sind, the Punjab and Rajputana. The Bengal current, judging from the mean strength of the winds at the coast stations, was stronger than usual, but was unsteady. Both currents, but more especially the Bombay current, appeared to have a less "rain-discharging capacity" than usual, and in this respect contrasted strikingly with the character of the currents in the corresponding month of 1894.

The third storm of the preceding month broke up in the north-western districts of the North-Western Provinces on the 2nd of the month, and the North-Western Provinces, more especially the western and submontane districts, received heavy rain on the 1st and 2nd. The Bombay current was very weak at the beginning of the month, and was giving light to moderate rain only in the West Coast districts and Southern India. The Bengal current was on the 4th and following days chiefly directed to Bengal and Assam and the northern districts of Bengal, and the eastern districts of Assam, including the Khasi hills, received an excessively heavy downpour from the 5th to the 11th.

The rainfall in Bengal now fell off in amount and occurred chiefly as light local showers from the 12th to the 18th, and the partial break in the rains hence extended over the whole of Northern and Central India. The current on the West Coast strengthened on the 9th and 10th, and the coast districts received heavy rain on the 10th and following five days. The humid current extended into the interior and began to give general rain to the Central Provinces and Deccan on the 16th and 17th.

A storm formed in the north-west of the Bay on the 18th and 19th. It advanced in a north-westerly direction into Bihar on the 21st, where it broke up during the day. The storm gave moderate rain to Bengal, Chota Nagpur and Bihar from the 20th to the 22nd.

Pressure gave way rapidly in Upper India on the 22nd and 23rd, and steep gradients were established and continued during the remainder of the month. The Bombay current gave rain in increasing amounts to the interior of North-Western and Central India, and the Central Provinces, Central India, Rajputana and the East Punjab received moderate to heavy rain from the 26th to the end of the month.

The Bengal current also increased in volume and gave general and moderately heavy rain to North-Eastern India from the 22nd to the 26th. It fell off for a short period on the 27th and 28th, whilst a storm formed in the north-west angle of the Bay. The storm passed west-north-westwards through Orissa and Chota Nagpur into the North-Western Provinces, where it filled up on the 2nd of August. It gave a general but moderate burst of rain to the whole of Orissa, Chota Nagpur and the North-Western Provinces.

The rainfall of the month was hence very light over the whole of North-Western and Central India during the first half of the month, and was only normal in character during the last week. Assam and North Bengal and also Southern India received heavier rain than usual. The rainfall of the month was more or less in defect in the following areas:—

(1) Burma.

(2) South Bengal and Orissa.

(3) The North-Western Provinces, the Punjab, Rajputana and Sind. The deficiency increased in relative amount westwards, and the north-west districts of the Punjab received only 43 per cent. of the normal, and Sind 24 per cent.

(4) Berar and the Central Provinces. The deficiency in this area averaged about 33 per cent.

(5) Mysore, the Bombay Deccan, and Hyderabad.

It was in large excess in Assam and North Bengal, in slight to moderate excess in Bihar and in Malabar and the Circars. It was practically normal in the remainder of India, but somewhat irregularly distributed.

The following table gives mean actual, mean normal

and variation rainfall data for the 51 meteorological divisions or districts into which India is divided, in the same form as in the previous months, and has been prepared in exactly the same manner as hitherto:—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, July 1895.	Average normal, July.	Average actual, July 1895.	Average normal, July.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	33·63	47·07	−13·44
	Lower Burma*	?	?	19·05	23·01	−3·96
	Central do*	?	?	10·71	12·09	−1·38
	Upper do.*	?	?	4·61	?	?
	Arakan*	?	?	36·25	48·02	−11·77
Bengal and Assam	Eastern Bengal	19·0	19·1	15·02	17·24	−2·22
	Assam (Surma)*	?	?	48·84	30·80	+18·04
	Do. (Brahmaputra)*	?	?	23·00	15·20	+7·80
	Deltaic Bengal	12·5	16·7	7·41	12·05	−4·64
	Central do.	14·2	16·2	10·71	12·05	−1·34
	North do.	21·2	17·6	34·07	20·60	+13·47
	Orissa	12·8	14·9	10·36	12·50	−2·14
	Chota Nagpur	16·3	17·9	13·52	13·67	−0·15
	Bihar (South)	13·8	14·5	13·68	11·87	+1·81
	Do. (North)	15·6	14·0	15·58	12·18	+3·40
North-Western Provinces and Oudh.	North-Western Provinces (East)	13·4	13·3	11·54	11·83	−0·29
	Oudh (South)	10·8	12·3	11·06	10·75	+0·31
	Do. (North)	12·8	12·1	10·44	11·69	−1·25
	North-Western Provinces (Central)	9·5	12·0	8·48	11·53	−3·05
	Do. do. (West)	7·7	10·7	7·03	9·94	−2·91
	Do. do. (Sub-montane)	11·9	13·6	12·74	14·63	−1·89
Punjab	Punjab (South)	3·9	4·7	2·12	4·27	−2·15
	Do. (Central)	5·3	6·7	4·04	6·62	−2·58
	Do. (Sub-montane)	4·8	8·5	3·16	9·35	−6·19
	Do. (Hill Districts)	11·8	15·1	11·84	16·68	−4·84
	Do. (North-West)	3·8	5·8	2·26	5·29	−3·03
	Do. (West)	2·5	2·9	1·55	2·45	−0·90
Bombay and Malabar Coast Districts (Madras).	Malabar	28·8	26·8	40·92	34·42	+6·50
	Madras (South Central)	4·8	3·9	2·05	2·36	−0·31
	Coorg	26·4	?	22·22	?	?
	Mysore*	?	?	4·33	7·44	−3·11
	Konkan	27·7	26·9	37·71	39·96	−2·25
	Bombay Deccan	10·3	12·5	6·73	9·29	−2·56
	Khandesh	12·1	11·1	8·07	7·67	+0·40
Central Provinces and Berar.	Berar*	?	?	6·58	11·39	−4·81
	Central Provinces (West)*	?	?	8·91	12 58	−3·67
	Do. do. (Central)*	?	?	11·39	18·17	−6·78
	Do. do. (East)*	?	?	12·15	15·63	−3·48
Bombay (North)	Gujarat	14·6	17·1	13·42	19·54	−6·12
	Kathiawar	11·1	11·5	8·87	12·39	−3·52
	Sind	0·6	?	0·44	1·86	−1·42
Rajputana and Central India.	Central India (East)	11·7	?	8·05	14·89	−6·84
	Rajputana (East) Central India (West)	8·2	?	6·65	9·88	−3·23
	Rajputana (West)	3·6	?	2·75	3·33	−0·58
Madras	East Coast (North)	12·9	9·9	9·31	6·74	+2·57
	Ditto (do.) (*a*)	16·5	19·7	15·66	15·38	+0 28
	Hyderabad (South)*	?	?	4·64	4·89	−0·25
	Madras (Central)	8·0	6·2	3·25	3·15	+0·10
	East Coast (Central)	5·3	4·9	2·10	2·45	−0·35
	Ditto. (South)	5·9	4·7	3·59	3·00	+0·59
	Madras (South)	1·3	2·1	0·49	1·08	−0·59

* NOTE.—The figures entered against divisions marked with an asterisk have been obtained from the Weekly Telegraphic Reports.

Burma obtained almost daily rain in the coast districts. Occasional rain was also received in Central and Upper Burma, but the only periods of general rain over the province were the 16th and 17th, the 23rd and 24th and the 30th and 31st. The rainfall of the month was in large defect in the whole province as is shown by the following statement:—

Division.	Rainfall.		
	Average actual, July 1895.	Average normal, July.	Variation from normal.
	Inches.	Inches.	Inches.
Tenasserim	33·63	47·07	−13·44
Lower Burma	19·05	23·01	− 3·96
Central Burma	10·71	12·09	− 1·38
Upper Burma	4·61	?	?
Arakan	36·25	48·02	−11·77

The rainfall of the month was very irregularly distributed in Bengal. There were three periods of fairly general rain of which the following is a brief statement:—

1st.—From the 4th to the 9th or 10th. The current in the Gangetic Plain fell off in strength with the disappearance of the cyclonic storm of June 27th to 2nd July and was determined chiefly to Assam and Bengal, more especially the northern districts. The whole province received general rain during this period, but the chief feature was the excessive downpour in the northern districts. The Jalpaiguri district received an average total of 21·89 inches, Kuch Bihar of 35·00 inches, Rangpur of 9·95 inches, and Darjeeling of 17·21 inches between the 6th and 11th.

2nd.—From the 19th to the 24th. East Bengal and Bihar obtained frequent local showers from the 11th to the 19th, North Bengal moderate to heavy rain, and South Bengal and Orissa light occasional showers. The first storm of the month crossed the Orissa coast on the 19th and passed north-westwards into North Bihar. The whole province received moderate rain during the existence of the storm from the 19th to the 21st and moderate to heavy rain from strong monsoon winds from the 22nd to the 25th. Heavy downpours were recorded in some parts of East Bengal and Bihar during this period, for example Buxar registered 9·11 inches on the 23rd and Monaharpur 8·37 inches. The Shahabad district obtained an average total of 4·17 inches on the 23rd, and the Chittagong district an average total of 10·44 inches from the 21st to the 23rd.

3rd.—From the 29th to the 31st. Showery weather prevailed from the 24th to the 27th, but the falls of rain were generally light. A storm formed on the 27th and 28th and crossed the Orissa coast on the 30th advancing west-north-westwards. This storm gave moderately heavy rain to Orissa on the 29th, 30th and 31st, to Chota Nagpur on the 30th and 31st, and light to moderate rain on the 30th and 31st over the remainder of the province.

The following gives a summary of the rainfall data of the month for the eight divisions of the province:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, July 1895.	Variation from normal.	Average actual, July 1895.	Variation of actual from normal.	Percentage variation from normal.
			Inches.	Inches.	
Bengal East . .	19·0	−0·1	15·02	− 2·22	−13
„ North . .	21·2	+3·6	34·07	+13·47	+65
„ Deltaic . .	12·5	−4·2	7·41	− 4·64	−39
Central Bengal . .	14·2	−2·0	10·71	− 1·34	−11
Orissa . . .	12·8	−2·1	10·36	− 2·14	−17
Chota Nagpur . .	16·3	−1·6	13·52	− 0·15	− 1
North Bihar . .	15·6	+1·6	15·58	+ 3·40	+28
South Bihar . .	13·8	−0·7	13·68	+ 1·81	+15

The preceding data show that the total rainfall averaged 65 per cent. in excess in North Bengal and 21 per cent. in excess in Bihar. It was normal in Chota Nagpur and averaged 17 per cent. in defect in Orissa, 13 per cent. in East Bengal and 39 per cent. in Deltaic Bengal.

The following gives data for the districts in which the rainfall was more than 50 per cent. in excess:—

District.	Rainfall.			
	Average actual, July 1895	Average normal, July.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches	
Kuch Bihar	52·16	20·09	+32·07	+160
Jalpaiguri	48 90	25·66	+23·24	+ 91
Purnea	28·77	15·47	+13·30	+ 86
Rangpur	25·31	13·90	+11·41	+ 82
Muzaffarpur	19·22	11·26	+ 7·96	+ 71

The centre of the excessive precipitation (which extended over the eastern districts of the Assam valley) was Kuch Bihar.

The following gives corresponding data for all districts in which the rainfall was more than 40 per cent. in defect:—

District.	Rainfall.			
	Average actual, July 1895.	Average normal, July.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Calcutta	4·53	13·44	−8·91	−66
Howrah	6·63	13·13	−6·50	−50
24-Parganas	6·69	13·15	−6·46	−49
Dacca	7·12	13·84	−6·72	−49
Hooghly	6·56	12·71	−6·15	−48
Tippera	8·58	15·27	−6·69	−44
Backergunge	10·63	18·78	−8·15	−43
Khulna	7·77	13·45	−5·68	−42

The area of most deficient rainfall hence included the districts immediately to the north of the Sunderbunds.

The month was even more rainy than usual in Assam. Little rain fell during the first five days of the month; but from the 6th to the end of the month more or less general rain fell in all parts of the province. The chief feature of the rainfall was an excessively heavy burst in the Goalpara district and Khasi and Jaintia hills during the period, from the 7th to the 11th. The following gives data for the daily rainfall during this period at several stations:—

District.	Station.	Rainfall in 24 hours preceding 8 A.M. of date.					Total of period.
		7th.	8th.	9th.	10th.	11th.	
		Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Goalpara	Bijni	4·40	9·76	19·15	7·73	9·00	50·04
	Dhubri	4·15	4·24	3·55	11·11	2·06	25·11
	Kachugaon	4·74	4·78	10·53	7·07	4·90	32·02
	Marnai	5·25	10·30	8·40	7·00	2·05	33·00
Khasi and Jantia Hills.	Cherra Punji	4·70	8·50	20·95	15·60	6·08	55·83
	Jowai	9·84	10·99	13·30	8·54	3·89	46·56
	Mauphlang	12·00	16·30	13·00	8·50	1·30	51·10

The rainfall in the Goalpara district was very excessive. The station of Bijni in the Assam plain received upwards of 50 inches in five days, as large as the average of the fall during the same period at the three stations in the Khasi hills, which are noteworthy for the heavy downpours they receive under favourable conditions in the rains.

The following gives comparative data for the two divisions of the province, from which it will be seen that the Assam valley received 51 per cent. and Assam-Surma nearly 60 per cent. more than the normal:—

Division.	Rainfall.		
	Average actual, July 1895.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	
Assam: Surma	48·84	+18·04	+59
Assam: Brahmaputra	23·00	+ 7·80	+51

General rain fell in the North-Western Provinces on the 1st and 2nd during the last stages of the existence of the third storm of the month of June. Large amounts were received in Rohilkhand. The following gives the most noteworthy falls in 24 hours on the 1st and 2nd July:—

District.	Station.	Date.	Heaviest fall in 24 hours preceeding 8 A.M. of date.
			Inches.
Moradabad	Bilhari	1st	7·12
	Thakurdwara	"	5·04
Badaun	Bisauli	"	6·77
Muzaffarnagar	Bhainswal	"	8·10
	Muzaffarnagar	"	6·35
Saharanpur	Salimpur	"	8·30
	Naiashahr	"	8·20
	Kalsia	"	7·60
	Muhammadpur	"	6·07
	Jarauda	"	5·80
	Nakur	2nd	11·50
	Saharanpur	"	10·50
	Roorkee	"	6·60
	Deoband	"	6·42
	Hardwar	"	5·80
Bareilly	Aonla	"	7·06

The rainfall was hence exceptionally heavy in the Saharanpur district.

A break in the rains set in on the 3rd and lasted until the 20th. Light sporadic showers were received in different parts of the province during this period; but the total rainfall was insignificant. General rain recommenced on the 20th or 21st and held steadily during the remainder of the month. Moderate general rain fell almost daily in all districts. The rainfall during this period was scanty in the Jalaun, Mainpuri, Etah and Jhansi districts.

The following is a summary of the raintall data of the province, published in the *N.-W. P. and Oudh Gazette*:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, July 1895.	Variation.	Aevrage actual. July 1895.	Average normal, July.	Percentage variation from normal.
			Inches.	Inches.	
Oudh North . .	12·8	+0·7	10·44	11·69	—11
Do. South . .	10·8	—1·5	11·06	10·75	+3
N.-W. P. (East) . .	13·4	+0·1	11·54	11·83	—2
Do. (Central) .	9·5	—2·5	8·48	11·53	—26
Do. (Submontane)	11·9	—1·7	12·74	14·63	—13
Do. (West) . .	7·7	—3·0	7·03	9·94	—29

The preceding data show that the rainfall was normal in the eastern division and Oudh South. It was more than 20 per cent. below the normal in two divisions, *viz.*, the west division (29 per cent.) and the central division (26 per cent.)

The distribution of the rainfall was even more irregular than usual, one station in the Jhansi district, which has an average total of 11·69 inches, had an actual total fall of only 0·41 inch. The rainfall of the month was more or less in excess in the districts for which data are given below:—

District.	Rainfall.			
	Average actual, July 1895.	Average normal, July.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Saharanpur	14·13	11·65	+2·48	+21
Muzaffarnagar	13·62	9·12	+4·50	+49
Bijnor	17·96	13·13	+4·83	+37
Meerut	12·21	8·63	+3·58	+41

It was, on the other hand, in large defect (more than 32 per cent.) in the districts for which data are given below:—

District.	Rainfall.			
	Average actual, July 1895.	Average normal, July.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Bulandshahr	3·28	8·45	—5·17	—61
Agra	5·59	9·74	—4·15	—43
Muttra	5·30	9·08	—3·78	—42
Jhansi	7·57	12·99	—5·42	—42
Gorakhpur	7·72	13·10	—5·38	—41
Hamirpur	7·42	12·46	—5·04	—40
Etah	6·12	9·62	—3·50	—36
Jalaun	8·04	12·18	—4·14	—34

The rainfall in the Punjab was scanty, due to the occurrence of prolonged breaks affecting the whole province. Practically no rain fell during the first week of the month. Weather was showery from the 8th to the 11th; but the falls were nowhere heavy. They were lightest in the Gujarat, Sialkot and Peshawar districts. Another break then set in, lasting until the 20th. Showers were received during the next four days chiefly in the south and south-east districts, where the rainfall of this period was moderate in amount. It was very scanty in the northern and western districts, and was *nil* in the Mooltan, Muzaffargarh, and Dera Ghazi Khan districts.

This showery period was followed by another short and partial break, lasting until the 28th, when showery weather set in again and lasted until the end of the month. The rainfall of this period was very irregularly distributed and was generally small in amount, but was heavy in the Gurgaon, Rohtak, Delhi, Karnal, Umballa, Kangra and Simla districts. The following large falls during this period were recorded:—

District.	Station.	Date.	Heaviest fall in 24 hours preceding 8 A.M. of date.
			Inches.
Kangra . . .	Dharmsala . .	28th	7·18
	Palampur . .	,,	6·65
	Kangra . . .	,,	5·35
Simla . . .	Simla . . .	,,	5·06

The rainfall of the month was in general defect, as is shown by the following comparative statement:—

Division.	No. of rainy days.			Rainfall.			
	Average actual, July 1895.	Average normal, July.	Variation from normal.	Average actual, July 1895.	Average normal, July.	Variation from normal.	Percentage variation from normal.
				Inches.	Inches.	Inches.	
Punjab, South . .	3·9	4·7	−0·8	2·12	4·27	−2·15	−50
„ Central . .	5·3	6·7	−1·4	4·04	6·62	−2·58	−39
„ Submontane .	4·8	8·5	−3·7	3·16	9·35	−6·19	−66
„ Hills . .	11·8	15·1	−3·3	11·84	16·68	−4·84	−29
„ North-West .	3·8	5·8	−2·0	2·26	5·29	−3·03	−57
„ West . .	2·5	2·9	−0·4	1·55	2·45	−0·90	−37

The deficiency was hence large relatively to the normal in all divisions. It averaged less than 30 per cent. in one division only, *viz.*, the hills, and exceeded 50 per cent. in the submontane division (66 per cent. in defect) and the north-west division (57 per cent. in defect).

No rain fell over by far the greater part of British Baluchistan. Thundershowers were received along the railway line between Sibi and Harnai during the period from the 9th to the 12th and again from the 16th to the 19th.

Kashmir received light rain during two periods, *viz.*, from the 7th to the 12th and again from the 27th to the 30th. The rainfall was much lighter than usual.

The only periods of general rain in Rajputana were from the 9th to 12th, the 17th to the 20th and the 27th to the end of the month. The falls were light during the first two periods; but heavy downpours were received in the Eastern States during the third period. The following amounts exceeding 4 inches were received during this period:—

State.	Station.	Date.	Heavies rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
Jeypore . . .	Dausa . . .	28th	4·12
Ulwar	Rajgarh . . .	29th	4·60
	Bansur . . .	...	4·00
Bhurtpore . .	Kaman . . .	...	4·07
Ajmere . .	Ajmere . . .	30th	4·55
	Goela . . .	...	4·60
Jeypore . . .	Sri Madhopur . .	...	7·00

The following is a comparative statement of the rainfall of the month in the larger States:—

State.	Rainfall.			
	Average actual, July 1895.	Average normal, July.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Jodhpore . . .	2·62	3·46	−0·84	−24
Jeypore . . .	6·60	9·13	−2·53	−28
Ulwar	5·39	10·26	−4·87	−47
Bhurtpore . . .	6·19	8·88	−2·69	−30
Dholpur . . .	6·06	?	?	?
Kotah	8·97	9·88	−0·91	− 9
Ajmere-Merwara . .	6·31	7·17	−0·86	−12
Oodeypore . . .	5·55	9·74	−4·19	−43
Sirohee	8·38	11·52	−3·14	−27

Central India had more frequent rain than Rajputana. The chief periods of general rainfall were the 10th to the 12th, the 16th to the 21st and the 26th to the end of the month. The daily falls were generally moderate in amount and in only two instances did the rainfall in 24 hours exceed 4 inches. The following gives comparative data for the more important States:—

State or Division.	Rainfall.			
	Average actual, July 1895.	Average normal, July.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches	
Indore	8·56	10·23	−1·67	−16
Rutlam	8·07	11·30	−3·23	−29
Bhopal Agency . .	8·54	18·12	−9·58	−53
Gwalior	7·06	11·08	−4·02	−36
Nagode	4·69	17·16	−12·47	−73
Maihar	10·34	16·46	−6·12	−37
Rewah	10·28	18·37	−8·09	−44
Bundelkhand . . .	8·59	15·70	−7·11	−45

Little or no rain fell in the Central Provinces from the 1st to the 9th. Light to moderate rain was received from the 10th to the 25th, and heavy rain during the remainder of the month. The rainfall was very heavy in the southern and eastern districts on the 27th and 28th, and more especially in the Wardha, Nagpur and Chanda districts, and on the 30th and 31st in the Raipur, Sambalpur and Bilaspur

districts. Berar received rain during the same periods, but the falls, more especially from the 25th to the end of the month, were light in that area. The following gives comparative data for Berar and the Central Provinces:—

Division.	Rainfall.		
	Average actual, July 1895.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	
Central Provinces (East) .	12·15	−3·48	−22
Ditto (Central) .	11·39	−6·78	−38
Ditto (West) .	8·91	−3·67	−29
Berar	6·58	−4·81	−42

The rains held steadily in the Bombay coast districts during the month but there were only two periods of heavy downpour. The first was from the 9th to the 12th. The following gives mean rainfall data for the period in these districts:—

District.	Average actual rainfall in 24 hours preceding 8 A.M. of				Total of period.
	9th.	10th.	11th.	12th.	
	Inches.	Inches	Inches.	Inches.	Inches.
North Kanara . .	0·41	1·80	3·72	1·74	7·67
Ratnagiri . . .	1·11	2·44	3·15	2·27	8·97
Colaba	0·40	0·26	2·24	0·62	3·88
Thana	0·64	0·77	1·76	0·38	3·55

The second period was from the 16th to the 21st. The following gives mean data for this period:—

District.	Average actual rainfall in 24 hours preceding 8 A.M. of						Total of period.
	16th.	17th.	18th.	19th.	20th.	21st.	
	Inches.	Inches	Inches.	Inches.	Inches.	Inches.	Inches.
North Kanara . .	0·88	0·80	1·77	2·62	2·66	1·02	9·75
Ratnagiri . .	2·57	1·86	3·57	4·59	1·68	0·83	15·10
Colaba . . .	1·79	2·86	4·78	2·55	2·32	0·50	14·80
Thana . . .	3·96	2·64	3·83	2·18	1·33	0·55	14·49

The average total rainfall of the month in the Konkan division was in slight defect. The largest falls in 24 hours were 8·7 inches on the 10th at Kundal in the Savantvadi district and 8·47 inches at Kumta in the North Kanara district on the 11th. The falls at the hill stations were by no means so heavy, as frequently occur in the height of the monsoon. The total rainfall of the month, for example, at Matheran was only 56·38 inches, 28·40 inches below the normal of the month.

The Deccan districts received light to moderate showers chiefly during three periods, *viz.*, from the 8th to the 12th, the 17th to the 20th and the 25th to the end of the month. The rainfall was very irregularly distributed, but was generally in defect in the Dharwar, Belgaum, Satara and Poona districts, and in excess in the Ahmednagar, Sholapur and Nasik districts, as is shown by the following data:—

District.	Rainfall.		
	Average actual, July 1895.	Average normal, July.	Variation from normal.
	Inches.	Inches.	Inches.
Dharwar	3·39	4·80	−1·41
Belgaum	7·64	15·53	−7·89
Satara	10·31	12·92	−2·61
Poona	7·46	15·38	−7·92
Ahmednagar	4·83	3·60	+1·23
Sholapur	4·90	3·67	+1·23
Nasik	12·43	11·19	+1·24

The deficiency was hence large in the Poona and Belgaum districts, slightly exceeding 50 per cent.

Gujarat and Kathiawar obtained light occasional showers of little importance from the 1st to the 15th and moderate daily rain from the 16th to the 25th and from the 29th to the 31st. The daily amounts were generally moderate, but amounts exceeding 4 inches were registered at some stations in the Surat and Ahmedabad districts, the largest being 9·18 inches at Balsar in Surat on the 17th and 7·61 inches at Viramgam in Ahmedabad on the 19th. The following is a statement of the rainfall data of the six divisions of the presidency:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, July 1895.	Variation from normal.	Average actual, July 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches.	
Konkan . . .	27·7	+0·8	37·71	−2·25	−6
Bombay Deccan . .	10·3	−2·2	6·73	−2·56	−28
Khandesh . . .	12·1	+1·0	8·07	+0·40	+5
Gujarat	14·6	−2·5	13·42	−6·12	−31
Kathiawar . . .	11·1	−0·4	8·87	−3·52	−28
Sind	0·6	?	0·44	−1·42	−76

The Malabar coast districts of the Madras Presidency obtained daily rain throughout the month. The rainfall was very heavy from the 1st to the 5th, the 8th to the 14th, the 19th and 20th and the 30th and 31st. Daily averages exceeding 4 inches were received in the Malabar district on the 1st (4·54 inches) and in the South Canara district on the 5th (4·26 inches) and 20th (4·21 inches). The largest amount registered for 24 hours was 7·75 inches on the 1st at Vayitri in Malabar. The rainfall of the month was in moderate excess, averaging 3 per cent.

The southern districts, including Tinnevelly, Madura and Trichinopoly, received some light local showers, chiefly on the 22nd and 23rd; but the rainfall was very slight and considerably below the small normal of the period.

The Coromandel coast districts obtained more frequent rain than usual, the chief periods being from the 4th to the 8th, the 13th to the 19th and the 22nd and 23rd. The rainfall of the month was hence in moderate to considerable excess, more especially in Chingleput, Madras and North and South Arcot. The northern coast districts received general rain from the 16th to the 19th, the 22nd to the 24th and the 29th to the 31st, the first and third periods coinciding with the formation of the two cyclonic storms of the month. The rainfall of the month was in large excess n the Godavari and Kistna districts and in slight to moderate excess in Vizagapatam and Ganjam.

The Deccan districts obtained rain chiefly during three short periods, *viz.*, the 5th to the 8th, the 18th and 19th and the 27th to the 30th. The rainfall was irregularly distributed, but was generally normal or in slight excess.

The following table gives a summary of the rainfall data for each district or Collectorate of the Presidency :—

District.	No. of rainy days.		Rainfall.		
	Average actual, July 1895.	Average normal, July.	Average actual, July 1895.	Average normal, July.	Variation from normal.
			Inches.	Inches.	Inches.
Ganjam	11·3	10·1	8·92	7·06	+1·86
Vizagapatam	13·5	12·3	9·36	8·58	+0·78
Godavari	14·7	8·9	10·30	6·13	+4·17
Kistna	11·5	8·3	8·96	5·30	+3·66
Nellore	5·3	4·9	2·10	2·45	−0·35
Chingleput	10·3	6·3	5·91	3·70	+2·21
Madras	11·0	6·9	5·43	3·78	+1·65
North Arcot	7·4	5·1	4·49	3·06	+1·43
South Arcot	7·6	5·0	4·61	3·37	+1·24
Tanjore	4·0	3·9	2·13	2·53	−0·40
Trichinopoly	2·2	2·9	1·51	2·35	−0·84
Madura	1·8	2·4	0·73	1·37	−0·64
Tinnevelly	0·6	1·6	0·20	0·69	−0·49
Malabar	27·8	25·6	29·90	29·02	+0·88
South Canara	30·4	28·4	60·50	42·23	+18·27
Salem	6·1	4·5	2·72	2·97	−0·25
Coimbatore	2·8	3·3	1·09	1·64	−0·55
Nilgiris	14·7	16·1	9·92	13·56	−3·64
Cuddapah	7·6	5·6	3·52	2·95	+0·57
Anantapur	6·0	4·9	2·32	2·32	0
Bellary	9·0	6·4	3·74	2·62	+1·12
Kurnool	9·5	7·2	3·35	4·47	−1·12

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1. Burma Coast and Bay Islands.		...	...	+·011	...	...	...	...	...	...	...	85·9	+1·6	76·2	+1·3	81·0	+1·5	9·7	...	...	...	...	16·5
Bay Islands	Port Blair	61	29·770	?	29·762	29·843	20th	29·734	11th	·109	81·3	85·8	?	78·0	?	81·9	?	7·8	87·9	20th	74·6	16th	13·3
	Camorta									Not received.													
Tenasserim	Mergui	96	29·788	?	29·816	29·848	31st	29·688	1st	·160	78·1	85·2	?	73·9	?	79·5	?	11·3	90·3	1st	70·9	22nd	19·4
	Tavoy	26	29·866	?	29·823	29·921	31st	29·788	2nd	·133	77·4	84·7	?	73·5	?	79·1	?	11·2	89·7	8th	71·7	2 days	18·0
	Moulmein	94	29·746	+·016	29·778	29·824	19th	29·654	2nd	·170	77·5	84·7	+2·0	75·0	+1·1	79·9	+1·6	9·7	90·0	9th	71·8	31st	18·2
	Toungoo	183	29·603	+·009	29·729	29·673	13th	29·520	2 days	·153	79·0	89·4	+3·0	75·8	+0·9	82·6	+2·0	13·6	92·7	2 days	73·2	4th	19·5
Lower Burma	Rangoon	41	29·767	+·007	29·745	29·843	19th	29·677	2nd	·166	78·9	85·7	+0·7	76·5	+0·8	81·2	+0·8	9·2	89·7	20th	73·9	2 days	15·8
	Bassein	27	29·763	+·006	29·726	29·843	19th	29·656	27th	·187	79·7	85·9	+1·1	76·3	+0·6	81·1	+0·9	9·6	89·7	2 days	73·8	30th & 31st.	15·9
	Diamond Island	41	29·748	?	29·724	29·821	19th	29·683	27th	·138	81·7	84·8	+0·3	78·4	+3·4	81·6	+1·9	6·4	87·1	6th	74·9	31st	12·2
Arakan	Akyab	20	29·710	+·017	29·673	29·816	13th	29·598	2 days	·218	81·0	86·8	+2·2	78·2	+0·8	82·5	+1·5	8·6	90·2	11th	73·6	22nd	16·6
2. Burma Inland		...	...	+·007	...	...	...	...	...	...	...	90·1	+1·2	75·8	+0·9	83·0	+1·0	14·2	...	...	...	...	20·8
Central Burma.	Thayetmyo	134	29·620	+·007	29·696	29·695	19th	29·535	2nd	·160	80·6	90·9	+2·1	77·2	+1·1	84·1	+1·6	13·7	95·6	2nd	76·1	6 days	19·5
	Minbu	?	29·587	?	?	29·667	14th	29·499	28th	·168	80·6	91·9	?	77·6	?	84·8	?	14·3	96·6	3rd	76·1	2 days	20·5
	Yamethin	645	29·111	?	29·705	29·198	19th	29·014	28th	·184	80·4	91·7	?	75·1	?	83 4	?	16·6	95·7	11th	73·5	2 days	22·2
	Taunggyi	?			Not recorded.						64·4	77·6	?	63·2	?	70·4	?	14·4	81·2	27th	57·5	30th	23·7
Upper Burma	Mandalay	249	29·480	?	29·677	29·568	19th	29·387	3rd	·181	83·5	96·1	?	80·0	?	88·1	?	16·1	100·1	30th	77·1	16th	23·0
	Kindat	?	29·330	?	?	29·427	12th	29·253	3rd	·174	79·4	89·4	+0·2	77·1	+0·6	83·3	+0·4	12·3	94·3	3rd	74·5	17th	19·8
	Lashio	?	26·998	?	?	27·089	12th	26·936	2nd	·153	73·2	82·6	?	69·2	?	75·9	?	13·4	86·5	12th	67·0	4 days	19·5
	Bhamo	?	29·333	?	?	29·408	19th	29·244	3rd	·164	77·6	87·9	?	74·6	?	81·3	?	13·3	93·1	27th	72·3	18th	20·8
3. Assam		...	...	+·019	...	...	...	...	...	...	...	87·9	−2·2	76·8	−1·0	82·3	−1·6	11·1	...	...	...	...	20·2
Assam (Surma)	Silchar	104	29·588	+·021	29·644	29·708	12th	29·469	24th	·239	80·2	88·8	−1·2	76·7	−0·4	82·8	−0·8	12·1	95·6	31st	73·3	10th	22·3
	Dapoota	?	29·368	?	29·610	29·451	19th	29·274	24th	·177	79·6	89·9	?	76·5	?	83·1	?	13·4	95·0	4th	74·0	10th	21·0
Brahmaputra	Sibsagar	333	29·336	?	29·625	29·430	12th	29·252	23rd	·178	79·7	88·0	−2·8	76·9	−1·2	82·5	−2·0	11·1	94·2	3rd	75·0	3 days	19·2
	Dhubri	115	29·524	+·017	29·593	29·644	12th	29·407	24th	·237	79·5	84·7	−2·7	77·1	−1·5	80·9	−2·1	7·6	92·2	3rd	73·8	15th	18·4
4. Bengal and Orissa		...	...	+·018	...	...	...	...	...	...	...	88·9	+0·4	78·7	+0·4	83·8	+0·4	10·2	...	...	...	...	18·4
East Bengal	Chittagong	87	29·592	+·010	29·627	29·714	13th	29·455	30th	·259	80·9	86·7	+1·2	77·4	+1·0	82·0	+1·1	9·3	89·2	3rd	75·1	3 days	14·1
	Lungleh	?			Not recorded.						70·1	75·8	?	67·4	?	71·6	?	8·4	78·9	3rd & 17th	65·1	20th	13·8
	Noakhali	43	29·621	?	29·611	29·749	13th	29·489	30th	·260	81·8	86·1	?	78·2	?	82·2	?	7·9	88·5	3 days	75·3	22nd	13·2
	Comilla	36	29·623	?	29·607	29·745	13th	29·491	24th	·254	81·2	88·4	?	77·4	?	82·9	?	11·0	91·3	4 days	75·8	2nd & 22nd	15·5
	Sirajganj	49	29·573	?	29·572	29·702	12th	29·442	23rd	·260	81·4	87·8	?	78·5	?	83·1	?	9·3	91·8	3rd	74·7	9th	17·1
	Narayanganj	26	29·618	+·016	29·592	29·748	13th	29·477	24th	·271	82·6	88·4	+0·1	79·7	+0·5	84·1	+0·3	8·7	92·6	2nd	77·2	2 days	15·4
	Barisal	13	29·634	?	29·592	29·771	13th	29·489	30th	·282	83·0	88·4	+1·8	79·3	+1·2	83·9	+1·5	9·1	91·8	15th	75·9	1st	15·9
	Mymensingh	59	29·587	?	29·597	29·709	12th	29·465	2 days	·244	81·5	86·9	−0·6	78·0	0	82·4	−0·3	8·9	89·7	5th	74·6	10th	15·1
Deltaic Bengal.	Faridpur	46	29·601	?	29·595	29·738	13th	29·468	24th	·270	82·6	88·3	?	78·9	?	83·6	?	9·4	92·3	2nd	76·9	2nd	15·4
	Jessore	33	29·586	+·010	29·566	29·734	13th	29·448	30th	·286	83·6	90·9	+1·5	79·0	−0·1	85·0	+0·7	11·9	96·0	16th	76·9	23rd	19·1
	Calcutta	21	29·596	+·025	29·563	29·739	13th	29·446	30th	·293	82·6	88·9	+0·9	78·8	+0·4	83·9	+0·7	10·1	91·9	2 days	75·7	2 days	16·2
	Saugor Island	25	29·589	+·024	29·558	29·729	13th	29·402	30th	·327	84·0	89·0	+1·2	81·4	+1·0	85·2	+1·1	7·6	92·2	15th	78·0	23rd	14·2
	Krishnagar	47	29·564	?	29·559	29·720	13th	29·435	30th	·285	82·9	90·5	?	78·6	?	84·6	?	11·9	94·3	3rd	75·7	9th	18·6
	Midnapore	149	29·468	?	29·563	29·609	13th	29·322	30th	·287	82·7	90·9	?	78·5	?	84·7	?	12·4	95·3	2nd & 4th.	75·1	10th	20·2

I.

in India, Burma, etc., in July 1895.

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.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st July 1895.	Normal rainfall for period, from 1st June to 31st July.	Variation from normal of period from 1st June to 31st July.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23·71	29·51	—7·11	...	...	...	...	**1. Burma Coast and Bay Islands.**	
1	...	...	...	...	3	14	12	1	14·6	11·0	+ 33	85	·910	8·2	18	?	?	14·22	15·98	− 1·76	40·46	34·77	+ 5·69	3·83	Port Blair .	Bay Islands.
													Not	recei v	ed.										Camorta.	
..	3	1	1	...	5	8	8	5	1·5	1·8	− 17	92	·891	5·8	21	?	?	24·31	31·99	− 7·68	47·62	63·43	−15·81	3·45	Mergui .	Tenasserim.
23	2	...	...	...	...	3	...	3	1·6	?	?	91	·864	7·7	26	?	?	34·18	?	?	62·53	?	?	5·60	Tavoy.	
...	...	2	...	9	10	6	2	2	4·0	3·8	+ 5	91	·853	8·9	24	27·75	−3·75	36·06	45·82	− 9·76	67·88	81·54	−13·66	5·68	Moulmein.	
3	...	...	2	19	6	1	...	...	4·4	4·8	− 8	90	·917	8·2	16	25·09	−9·09	9·66	17·91	− 8·25	21·71	32·52	−10·81	1·58	Toungoo.	
...	...	...	...	1	8	15	5	2	4·2	5·5	− 24	93	·922	8·5	26	25·36	+0·64	18·24	21·68	− 3·44	41·31	39·19	+ 2·12	2·25	Rangoon .	Lower Burma.
2	...	...	...	8	10	7	2	2	5·3	4·0	+ 33	92	·940	7·5	27	27·00	0	22·34	24·88	− 2·54	44·17	47·44	− 3·27	2·20	Bassein.	
...	...	...	1	1	5	20	3	1	11·9	8·9	+ 34	83	·892	9·1	21	24·00	−3·00	16·48	26·28	− 9·80	33·49	49·48	−15·99	2·32	Diamond Island.	
...	2	1	8	4	13	2	...	1	4·5	3·8	+ 18	93	·988	8·9	25	27·55	−2·55	37·90	51·54	−13·64	68·49	95·53	−27·04	4·79	Akyab .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6·78	9·46	—1·58	...	...	...	...	**2. Burma Inland.**	
...	...	...	...	7	22	2	...	...	8·4	6·7	+ 25	83	·868	9·3	9	15·91	−6·91	3·22	6·83	− 3·61	7·33	13·77	− 6·44	0·69	Thayetmyo	Central Burma.
...	...	...	2	22	7	...	...	...	4·3	?	?	84	·888	5·4	4	?	?	2·66	?	?	8·79	?	?	0·95	Minbu.	
...	...	...	1	20	10	...	...	...	11·3	?	?	79	·824	1·6	6	?	?	2·26	?	?	5·26	?	?	1·01	Yamethin.	
...	...	...	1	20	10	...	...	...	?	?	?	87	·591	8·7	14	?	?	5·64	?	?	18·11	?	?	1·11	Taunggy.	
5	...	...	...	9	2	15	...	...	12·5	?	?	70	·801	7·5	1	?	?	0·35	?	?	7·73	?	?	0·13	Mandalay .	Upper Burma.
...	...	...	...	11	13	7	...	...	1·4	?	?	93	·957	8·6	15	?	?	12·53	12·08	+ 0·45	27·44	25·54	+ 1·90	2·48	Kindat.	
24	...	...	1	...	1	4	...	1																		
			Not	rec	ore d.				?	?	?	86	·694	8·1	19	?	?	11·32	?	?	19·31	?	?	1·90	Lashio.	
16	...	6	...	1	...	1	1	6	1·7	?	?	95	·900	9·0	27	?	?	16·27	?	?	23·78	?	?	1·88	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29·41	16·54	+16·76	...	...	...	...	**3. Assam.**	
31	...	...	...	...	...	...	...	...	1·4	3·1	− 55	91	·937	9·1	27	21·45	+ 5·55	17·50	19·12	− 1·62	31·12	40·79	− 9·67	2·53	Silchar .	Assam (Surma).
...	...	2	7	1	3	2	14	2	?	?	?	90	·912	9·4	23	?	?	17·72	?	?	25·64	?	?	2·57	Dapoota.	
4	...	4	5	3	4	9	2	...	3·8	2·8	+ 36	94	·953	9·6	26	18·73	+7·27	30·86	16·18	+14·68	34·80	29·58	+ 5·22	7·46	Sibsagar .	Brahmaputra.
6	...	10	6	1	2	5	1	...	4·8	3·9	+ 23	93	·935	8·8	21	13·75	+7·25	51·55	14·33	+37·22	56·63	40·77	+15·86	11·11	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12·73	14·05	−1·37	...	...	...	...	**4. Bengal and Orissa.**	
...	...	...	4	20	6	...	...	1	7·8	7·2	+ 8	88	·924	8·5	17	19·64	−2·64	20·78	19·17	+ 1·61	34·77	41·31	− 6·54	4·74	Chittagong	East Bengal.
			N	rec	orded.				?	?	?	94	·690	?	29	?	?	19·69	?	?	40·15	?	?	2·73	Lungleh.	
...	...	...	5	11	8	6	...	1	5·5	?	?	90	·974	6·0	23	22·60	+0·40	17·05	23·97	− 6·92	32·03	50·04	−18·01	2·42	Noakhali.	
...	...	...	8	10	13	...	...	...	6·8	?	?	95	1·004	8·3	14	18·65	−4·65	9·15	16·98	− 7·83	16·87	36 11	−19·24	2·07	Comilla.	
12	...	...	3	5	10	1	...	...	2·5	?	?	91	·974	9·7	15	13·50	+1·50	8 58	10·97	− 2·39	15·59	22·37	− 6·78	2·23	Sirajganj.	
...	...	...	3	10	12	4	2	...	8·8	7·3	+ 21	89	·995	9·0	15	15·73	−0·73	6·26	12·33	− 6·07	11·80	25·55	−13·75	0·92	Narayanganj	
16	...	...	1	4	8	2	...	...	4·1	?	?	89	1·016	9·7	17	21·00	−4·00	8·77	15·98	− 7·21	16·28	31·72	−15·44	1·55	Barisal.	
...	...	1	6	12	9	3	...	...	5·7	?	?	90	·973	8·2	24	18·20	+5·80	22·55	14·49	+ 8·06	31·88	33·01	− 1·13	3·93	Mymensingh.	
5	...	...	3	6	17	...	...	...	4·3	?	?	91	1·023	7·0	21	16·75	+4·25	13·05	11·85	+ 1·80	18·87	24·34	− 5·47	1·57	Faridpur .	Deltaic Beng l.
5	...	...	1	8	15	1	1	...	3·4	4·6	− 26	88	1·015	7·6	14	18·18	−4·18	5·18	11·58	− 6·40	12·56	24·30	−11·74	1·20	Jessore.	
...	...	1	3	6	12	7	2	...	4·5	5·3	− 15	87	·971	8·0	12	20·00	−8·00	4·53	12·14	− 7·61	16·55	23·05	− 6·50	1·30	Calcutta.	
...	1	1	2	2	11	9	3	2	16·3	14·2	+ 15	86	1·003	8·9	13	17·36	−4·36	6·75	15·45	− 8·70	19·65	25·57	− 5·92	1·00	Saugor Island.	
...	...	...	4	6	15	1	3	2	5·8	?	?	82	·929	7·7	16	15·75	+0·25	7·99	10·14	− 2·15	13·82	18·95	− 5·13	1·28	Krishnagar.	
2	...	4	...	2	18	5	...	...	4·8	?	?	85	·952	4·2	17	16·20	+0·80	9·30	12·54	− 3·24	19·70	21·36	− 1·66	2·68	Midnapore.	

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal	Bankura	298	29·292	?	29·539	29·437	12th	29·153	31st	·284	81·8	90·5	?	77·8	?	84·2	?	12·7	97·1	4th	72·6	10th	24·5
	Raniganj	334	29·274	?	29·554	29·415	12th	29·145	31st	·270	81·8	91·1	?	78·2	?	84·7	?	12·9	97·2	4th	74·4	9th & 10th.	22·8
	Burdwan	99	29·508	+·018	29·554	29·642	2 days	29·380	24th	·262	82·7	91·0	+0·8	79·2	−0·2	85·1	+0·3	11·8	95·2	4th	75·7	9th	19·5
	Naya Dumka	489	29·103	?	29·547	29·235	12th	28·962	24th	·273	81·8	89·1	?	77·6	?	83·4	?	11·5	94·0	14th	73·8	9th	20·2
	Berhampore	67	29·541	+·012	29·556	29·679	13th	29·392	23rd	·287	81·9	89·4	0	78·8	+0·1	84·1	+0·1	10·6	93·2	2nd	74·3	9th	16·9
	Rampur Boalia.	70	29·535	?	29·554	29·673	12th	29·390	23rd	·283	82·9	88·5	?	79·1	?	83·8	?	9·4	92·1	3rd & 13th.	74·1	9th	18·0
	Malda	72			Not	recorded.					82·4	90·5	?	79·2	?	84·9	?	11·3	96·6	2nd	75·0	9th	21·6
	Bogra	61	29·559	?	29·572	29·683	12th	29·428	23rd	·255	82·3	88·8	+0·3	78·4	+0·2	83·6	+0·3	10·4	93·2	2 days	74·2	10th	19·0
North Bengal	Dinajpur	123	29·497	+·013	29·574	29·621	12th	29·376	23rd	·345	80·8	88·2	−0·9	78·2	−0·7	83·2	−0·8	10·0	92·3	13th	74·2	17th	18·1
	Rangpur	123	29·505	?	29·582	29·627	12th	29·381	23rd	·246	81·0	87·8	?	77·6	?	82·7	?	10·2	92·8	3rd	73·7	17th	19·1
	Jalpaiguri	284	29·351	+·017	29·593	29·465	12th	29·244	24th	·221	79·0	86·7	−1·6	76·5	−0·1	81·6	−0·9	10·2	91·4	3 days	73·6	10th	17·8
Orissa	Balasore	56	29·564	+·037	29·566	29·710	13th	29·394	30th	·316	82·4	89·1	+0·7	78·7	+0·4	84·0	+0·6	10·4	94·0	4th	75·3	23rd	18·7
	False Point	21	29·607	+·018	29·570	29·748	13th	29·421	30th	·327	83·0	88·5	+0·9	79·4	+1·0	84·0	+1·0	9·1	95·0	3rd	73·1	4th	21·9
	Cuttack	80	29·542	+·021	29·565	29·674	13th	29·385	30th.	·289	82·5	90·1	+0·3	79·2	+0·7	84·7	+0·5	10·9	96·2	17th	75·2	5th	21·0
	Shortt's Island	?	29·590	?	?	29·732	13th	29·414	30th	·318	83·9*	89·0	·?	81·0	?	85·0	?	8·0	96·2	3rd	70·4	5th	25·8
	Puri	20	29·617	?	29·577	29·740	13th	29·468	30th	·272	84·0	88·5	?	80·8	?	84·7	?	7·7	92·7	17th	76·6	5th	16·1
5. Gangetic Plain and Chota Nagpur.		...	...	+·014	...	...	...	...	...	...	...	90·5	+0·3	78·1	−0·4	84·3	0	12·4	...	...	...	...	23·4
Chota Nagpur	Hazaribagh	2,007	27·608	+·010	29·550	27·743	13th	27·463	24th	·280	76·8	85·1	+0·6	74·0	+0·5	79·6	+0·6	11·1	90·7	4th	70·3	5th	20·4
	Ranchi	730?	27·466?	?	29·524?	27·591	13th	27·325	24th	·266	75·9	84·3	+0·6	72·9	+0·4	78·6	+0·5	11·4	90·2	4th	69·4	5th	20·8
	Daltonganj	2,128	28·874	?	29·554	29·012	13th	28·749	24th	·263	81·5	90·3	?	77·8	?	84·1	?	12·5	98·3	5th	74·0	1st	24·3
	Chaibassa	760	28·810	+·026	29·546	28·988	13th	28·698	31st	·290	81·0	90·5	+1·3	77·8	+0·5	84·2	+0·9	12·7	94·9	14th	73·0	5th	21·9
Bihar, South	Gaya	375	29·213	+·013	29·540	29·347	13th	29·062	24th	·285	82·1	91·9	+0·5	78·4	−0·2	85·2	+0·2	13·5	98·5	4th	74·3	2 days	24·2
	Dehri	351	29·224	?	29·527	29·358	13th	29·087	24th	·271	83·0	90·8	?	?	?	?	?	?	97·3	4th	?	...	?
	Patna	183	29·397	0	29·531	29·526	13th	29·251	24th	·275	83·0	90·6	+0·3	79·2	−0·5	84·9	−0·1	11·4	96·5	4th	74·7	5th	21·8
	Arrah	190	29·397	?	29·537	29·530	13th	29·239	24th	·291	82·7	91·4	?	79·1	?	85·3	?	12·3	96·9	17th	72·0	6th	24·9
	Buxar	239	29·339	?	29·531	29·471	13th	29·174	24th	·297	83·0	90·3	?	78·6	?	84·5	?	11·7	96·5	3 days	73·8	6th	22·7
Bihar, North	Purnea	125	29·475	+·008	29·553	29·598	12th	29·341	24th	·257	81·8	88·7	−1·5	78·9*	+0·4	83·8*	−0·6	9·8	93·7	13th	74·7	10th	19·0
	Bhagalpur	160	29·418	?	29·529	29·555	12th	29·277	24th	·278	83·4	90·2	?	79·2	?	84·7	?	11·0	96·7	3rd	75·6	10th	21·1
	Darbhanga	166	29·424	+·005	29·543	29·548	12th	29·278	24th	·270	81·9	89·0	−0·3	79·6	−0·2	84·3	−0·3	9·4	96·5	3rd	75·0	9th	21·5
	Muzaffarpur	178	29·408	?	29·539	29·528	12th & 13th.	29·263	24th	·265	81·7	89·7	?	78·7	?	84·2	?	11·0	96·7	4th	73·2	16th	23·5
	Motihari	224	29·368	?	29·548	29·503	13th	29·235	24th	·268	82·1	89·4	?	77·8	?	83·6	?	11·6	96·0	4th	71·3	9th	24·7
	Chapra	181	29·397	?	29·530	29·526	13th	29·245	24th	·281	82·9	91·3	?	79·1	?	85·2	?	12·2	96·3	4th	75·1	6th	21·2
N.-W. Provinces (Eastern Districts).	Benares	267	29·314	+·027	29·524	29·443	13th	29·203	24th	·240	82·6	91·9	+0·5	79·0	−0·6	85·5	−0·1	12·9	97·8	3 days	74·5	1st	23·3
	Allahabad	309	29·265	+·020	29·526	29·396	13th	29·173	30th	·223	83·9	92·6	+1·2	79·4	+0·1	86·0	+0·7	13·2	99·6	13th	75·3	24th	24·3
N.-W. Provinces (East Sub-montane).	Gorakhpur	256	29·321	+·019	29·534	29·459	13th	29·211	24th	·248	82·4	90·3	−0·6	77·8	−1·7	84·1	−1·2	12·5	94·1	3 days	74·1	10th	20·3
Oudh, South	Lucknow	368	29·200	+·015	29·524	29·350	13th	29·116	1st	·234	83·3	92·8	+0·8	76·6	−2·7	84·7	−1·0	16·2	99·3	16th	72·3	23rd	27·0
Oudh, North	Bahraich	403	29·175	?	29·537	29·319	13th	29·082	24th	·237	81·7	91·1	?	77·5	?	84·3	?	13·6	97·4	5th	73·0	8th	24·4
N.-W. Provinces (Central).	Cawnpore	416	29·153	?	29·519	29·290	13th	29·076	1st & 30th.	·214	84·1	93·7	?	79·2	?	86·5	?	14·5	101·4	9th	72·0	24th	29·4
	Mainpuri	516	29·054	?	29·523	29 201	13th	28·984	4 days	·217	84·0	94·9	?	79·2	?	87·1	?	15·7	103·3	16th	72·6	13th	30 7

* Mean of 30 days.

I—*continued.*

in India, Burma, etc., in July 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.			RAINFALL.												STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.	Mean cloud amount.	Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st July 1895.	Normal rainfall for period, 1st June to 31st July.	Variation from normal of period from 1st June to 31st July.	Heaviest rainfall during month.		
16	...	...	5	2	3	1	4	...	2·0	?	?	86	·927	7·4	18	17·45	+ 0·55	17·41	12·47	+ 4·94	26·09	21·82	+ 4·27	3·37	Bankura .	CENTRAL BENGAL.
15	...	...	5	2	2	4	...	3	2·7	?	?	87	·943	6·6	14	16·85	— 2·85	7·44	13·72	— 6·28	14·47	22·10	— 7·63	1·68	Raniganj.	
1	...	1	2	4	11	7	1	4	4·3	4·3	0	85	·918	8·6	12	16·82	— 4·82	8·47	12·65	— 4·18	19·86	21·38	— 1·52	3·00	Burdwan.	
...	...	...	6	5	6	9	2	3	5·8	?	?	84	·916	8·2	19	18·50	+ 0·50	12·69	13·44	— 0·75	19·67	22·30	— 2·63	3·35	Naya Dumka	
...	...	...	5	7	10	7	2	...	4·6	5·0	— 8	91	·990	9·1	14	16·27	— 2·27	7·88	11·06	— 3·18	14·31	20·28	— 5·97	2·08	Berhampore.	
7	...	...	3	8	10	3	...	...	6·8	?	?	90	1·021	6·9	14	14·85	— 0·85	8·68	11·67	— 2·99	15·68	21·32	— 5·64	1·63	Rampur Boalia.	
1	...	1	1	13	6	8	1	...	2·6	?	?	90	·993	7·0	16	15·00	+ 1·00	14·52	11·41	+ 3·11	18·26	22·55	— 4·29	2·64	Malda.	
6	...	...	...	16	4	3	2	...	4·3	?	?	89	·965	7·5	19	15·25	+ 3·75	12·72	13·53	— 0·81	17·66	27·49	— 9·83	2·08	Bogra.	
5	...	2	10	5	6	3	...	...	4·0	?	?	92	·968	8·8	18	15·70	+ 2·30	17·59	14·41	+ 3·18	25·77	30·21	— 4·44	5·10	Dinajpur .	NORTH BENGAL.
2	...	3	9	6	7	2	1	1	2·9	?	?	90	·958	8·2	18	14·75	+ 3·25	20·06	16·48	+ 3·58	26·02	35·99	— 9·97	3·65	Rangpur.	
5	...	5	10	7	3	1	...	...	2·8	?	?	93	·917	8·8	25	19·35	+ 5·65	47·47	28·22	+19·25	56·21	56·22	— 0·01	7·45	Jalpaiguri.	
4	1	1	1	...	6	17	1	...	6·2	?	?	87	·974	5·2	18	15·55	+ 2·45	10·84	12·60	— 1·76	32·35	20·94	+11·41	2·23	Balasore .	ORISSA.
...	1	1	...	2	5	10	10	2	11·1	10·5	+ 6	85	·964	7·8	13	15·20	— 2·20	6·31	11·79	— 5·48	25·23	19·75	+ 5·48	1·09	False Point.	
3	...	1	3	4	2	8	9	1	3·4	3·2	+ 6	83	·916	6·7	14	16·09	— 2·09	11·50	11·98	— 0·48	34·40	21·28	+13·12	1·76	Cuttack.	
...	...	1	...	1	10	13	6	...	15·2	?	?	85	·982	7·0	10	?	?	7·03	?	?	24·19	?	?	2·44	Shortt's Island.	
6	3	1	...	...	5	10	6	...	10·0	?	?	84	·985	5·9	11	13·45	— 2·45	11·04	10·39	+ 0·65	33·52	18·37	+15·15	2·79	Puri.	
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12·65	12·17	+0·60	...	...	...	...	5. Gangetic Plain and Chota Nagpur.	
...	2	1	3	3	12	2	3	5	9·3	8·4	+ 11	87	·804	8·8	21	18·64	+ 2·36	12·57	14·12	— 1·55	21·38	22·13	— 0·75	2·51	Hazaribagh.	CHOTA NAGPUR.
2	1	4	2	1	1	12	3	5	8·3	?	?	90	·806	7·4	19	19·45	— 0·45	17·87	13·91	+ 3·96	28·65	22·16	+ 6·49	3·71	Daltonganj.	
...	1	1	4	3	9	6	5	2	6·2	?	?	88	·945	6·0	16	?	?	10·06	?	?	15·71	?	?	2·35	Ranchi.	
7	1	...	1	1	4	7	8	2	1·7	?	?	86	·914	8·2	14	17·15	— 3·15	14·33	13·63	+ 0·70	25·31	21·78	+ 3·53	3·42	Chaibassa.	
7	...	3	7	...	1	8	5	...	4·3	2·9	+ 48	84	·917	7·3	18	16·00	+ 2·00	10·18	13·26	— 3·08	15·87	20·36	— 4·49	1·69	Gaya .	BIHAR, SOUTH.
1	1	1	6	2	2	10	4	4	7·9	?	?	84	·943	7·8	13	15·38	— 2·38	18·60	11·25	+ 7·35	21·84	15·90	+ 5·94	4·46	Dehri.	
2	...	6	12	1	3	2	3	2	5·2	3·6	+ 44	84	·944	8·3	14	15·00	— 1·00	11·39	12·66	— 1·27	20·91	20·20	+ 0·71	3·85	Patna	
...	1	3	8	5	4	3	5	2	3·8	?	?	89	·991	7·0	16	14·94	+ 1·06	10·32	11·03	— 0·71	15·57	16·98	— 1·41	2·04	Arrah.	
4	3	2	9	1	2	3	7	...	4·6	?	?	85	·958	7·6	12	14·50	— 2·50	17·08	11·07	+ 6·01	21·40	16·03	+ 5·37	9·11	Buxar.	
6	...	4	10	4	4	2	1	...	5·0	2·9	+ 72	88	·961	8·2	21	17·09	+ 3·91	20·23	15·01	+ 5·22	24·99	26·08	— 1·09	3·86	Purnea .	BIHAR, NORTH.
2	1	2	6	5	6	6	3	...	4·1	?	?	86	·976	7·9	18	15·40	+ 2·60	14·34	11·16	+ 3·18	18·07	18·87	— 0·80	3·73	Bhagalpur.	
3	1	3	11	7	2	1	1	2	4·7	5·0	— 6	89	·973	7·8	21	13·55	+ 7·45	13·28	12·40	+ 0·88	14·61	21·42	— 6·81	1·87	Darbhanga.	
3	...	4	13	8	...	1	1	1	4·1	?	?	91	·989	6·0	14	14·00	0	16·98	11·81	+ 5·17	22·17	19·34	+ 2·83	4·51	Muzaffarpur	
6	...	10	10	1	...	...	2	2	3·7	?	?	86	·945	6·5	14	11·29	+ 2·71	22·64	10·45	+12·19	30·49	18·34	+12·15	4·69	Motihari.	
6	...	3	11	4	1	3	1	2	4·6	?	?	88	·980	9·5	14	14·15	— 0·15	8·25	12·30	— 4·05	13·25	18·32	— 5·07	2·15	Chapra.	
10	1	1	4	4	...	2	7	2	4·4	4·8	— 8	85	·952	7·9	13	14·27	— 1·27	8·57	10·74	— 2·17	14·24	15·87	— 1·63	1·67	Benares .	N.-W. PROVINCES (EASTERN DISTRICTS).
...	4	4	4	...	4	8	5	2	5·6	4·0	+ 40	83	·956	7·8	14	14·18	— 0·18	8·17	12·33	— 4·16	16·54	18·02	— 1·48	1·42	Allahabad .	
3	5	3	2	4	6	2	2	4	1·5	2·8	— 46	84	·934	6·0	21	13·91	+ 7·09	9·13	13·67	— 4·54	20·62	23·35	— 2·73	1·41	Gorakhpur	N.-W. PROVINCES (EAST SUB-MONTANE).
...	2	5	6	3	1	6	5	3	?	3·9	?	83	·947	7·2	11	13·64	— 2·64	6·27	11·25	— 4·98	18·51	16·68	+ 1·83	1·30	Lucknow .	OUDH, SOUTH.
11	2	2	8	6	2	...	...	...	2·4	?	?	87	·957	4·0	13	?	?	12·58	12·49	+ 0·09	20·39	18·13	+ 2·26	2·57	Bahraich .	OUDH, NORTH.
6	3	...	4	3	1	2	10	2	4·7	?	?	79	·924	5·1	10	12·1	— 2·1	9·24	9·99	— 0·75	11·50	13·08	— 1·58	2·59	Cawnpore .	N.-W. PROVINCES (CENTRAL).
19	...	...	3	1	...	2	6	...	0·8	?	?	79	·919	6·2	5	?	?	6·17	11·07	— 4·90	12·98	14·07	— 1·09	3·00	Mainpuri.	

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
6. Upper—Sub-Himalayas		...	...	+·013	...	...	...	...	...	...	...	95·1	+1·0	78·5	−0·2	86·8	+0·4	16·6	...	...	...	...	31·9
N.-W. Provinces (Sub-montane).	Bareilly	568	28·991	+·012	29·519	29·156	13th	28·894	24th	·262	82·2	92·1	+0·4	78·5	−0·2	85·3	+0·1	13·6	104·9	10th	74·6	2nd	30·3
	Dehra Dun	2,233	27·392	+·008	29·556	27·544	13th	27·288	23rd	·256	75·8	85·3	0	72·6	−1·6	79·0	−0·8	12·7	91·0	16th	67·5	2nd	23·5
	Roorkee	887	28·675	+·003	29·523	28·835	13th	28·564	24th	·271	80·9	92·1	+0·1	77·1	−1·0	84·6	−0·5	15·0	99·2	15th	70·1	2nd & 23rd.	29·1
	Meerut	738	28·812	+·007	29·507	28·973	13th	28·726	24th	·247	83·5	93·6	+0·7	78·7	−0·9	86·2	−0·1	14·9	101·0	15th & 16th.	71·5	24th	29·5
Punjab, Central.	Delhi	718	28·840	+·017	29·513	28·994	13th	28·750	24th	·244	85·0	96·0	+2·0	80·2	−0·3	88·1	+0·9	15·8	103·5	9th & 15th.	73·4	2nd	30·1
	Lahore	702	28·826	+·015	29·484	29·004	13th	28·699	27th	·305	88.6	102·3	+3·7	83·0	+2·6	92·7	+3·2	19·3	109·3	15th & 16th.	75·1	10th	34·2
Punjab (Sub-montane).	Umballa	962?	28·631?	?	29·506?	28·808	13th	28·496	23rd	·312	82·3	94·7	?	78·5	?	86·7	?	16·2	103·0	15th	69·0	23rd	34·0
	Patiala	...	28·733*	?	?	28·875	13th	28·625	27th	·250	84·5*	94·8*	?	78·9*	?	86·7*	?	15·9	103·2	15th	72·0	24th	31·2
	Ludhiana	812	28·732	+·008	29·501	28·885	13th	28·610	23rd	·275	85·5	97·4	−0·5	79·6	−0·4	88·5	−0.5	17·8	107·0	16th	71·5	24th	35·5
Punjab, North	Sialkot	830	28·717	+·027	29·506	28·877	13th	28·591	27th	·286	85·5	98·8	+1·2	79·9	+0·7	89·4	+1·0	18·9	106·7	27th	72·6	8th	34·1
	Rawalpindi	1,652	27·882	+ ·021	29·507	28·060	13th	27·740	27th	·320	81·6	98·8	+1·4	76·2	−0·5	87·5	+0·5	22·6	107·5	27th	67·7	12th	39·8
7. Indus Valley and North-West Rajputana.		...	...	+·028	...	...	...	...	...	...	...	102·3	+2·3	81·7	+0·7	92·0	+1·4	20·6	...	...	...	...	35·7
Punjab, West	Peshawar	1,110	28·448	+·033	29·470	28·646	13th	28·284	23rd	·362	87·0	102·5	−0·2	78·1	−1·1	90·3	−0·7	24·4	110·5	28th	68·9	11th & 12th.	41·6
	Mardan	?				Not	recorded.				86·3	101·7	?	78·7	?	90·2	?	23·0	112·9	28th	67·0	11th	45·9
	Khushab	612	28·895	?	29·465	29·094	13th	28·756	23rd	·338	88·4	103·3	?	82·0	?	92·7	?	21·3	110·4	9th & 17th.	70·5	9th	39·9
	Montgomery	558	28·952	?	29·463	29·134	13th	28·838	27th	·296	91·2	105·7	?	83·4	?	94·6	?	22·3	112·4	22nd	73·0	11th	39·4
	D. I. Khan	573	28·923?	?	29·456?	29·128	13th	28·764	23rd	·364	88·2	103·5	−0·1	81·0	−1·2	92·2	−0·7	22·5	110·1	21st & 22nd.	70·8	10th	39·3
	Mooltan	420	29·086	+·022	29·466	29·286	13th	28·541	23rd	·345	89·5	105·1	+1·9	84·6	+1·6	94·9	+1·8	20·5	112·4	21st	76·6	1st	35·8
	Sirsa	662	28·871	+·013	29·485	29·009	13th	28·760	23rd	·249	88·2	103·9	+3·9	82·6	+1·3	93·3	+2·6	21·3	111·1	16th	73·3	16th & 22nd	37·8
Sind and Cutch	Jacobabad	186	29·317	+·032	29·459	29·520	13th	29·167	23rd	·353	91·1	109·7	+2·3	85·1	+1·2	97·4	+1·8	24·6	118·0	16th	80·6	11th	37·4
	Hyderabad	96	29·457	+·049	29·503	29·586	13th	29·334	26th	·252	87·5	101·0	+2·2	81·8	+1·3	91·4	+1·8	19·2	108·7	13th	78·5	19th & 20th.	30·2
	Kurrachee	49	29·535	+·025	29·534	29·633	3rd	29·422	29th	·211	86·0	93·7	+3·6	82·0	+1·5	87·9	+2·6	11·7	104·8	14th	78·7	30th & 31st.	26·1
	Bhuj*	395	29·220	+·025	29·565	29·325	3rd	29·133	29th	·198	83·4	93·2	+3·1	78·9	+0·8	86·1	+2·0	14·3	101·5	16th	72·9	12th	28·6
Rajputana, West	Bickaneer	753	28·786	?	29·486	28·953	13th	28·663	30th	·290	88·5	104·1	+4·0	83·0	?	93·6	?	21·1	109·0	15th	78·5	2nd & 10th.	30·5
	Pachpadra	380	29·207	?	29·539	29·334	3rd	29·107	30th	·227	85·4	102·1	?	80·3	?	91·2	?	21·8	108·7	12th	76·6	21st & 31st.	32·1
8. East Rajputana, Central India and Gujarat.		...	...	+·037	...	...	...	...	...	...	...	92·1	+3·0	77·8	+0·8	85·0	+1·9	14·3	...	...	...	...	24·8
Rajputana, East	Jeypore	1,431	28·187	+·038	29·561	28·291	13th	28·081	30th	·210	83·6	97·0	+5·2	78·5	+1·6	87·7	+3·4	18·5	102·5	16th	74·0	10th	28·5
	Sambhar	1,254	28·342	+·037	29·541	28·452	13th	28·214	30th	·238	84·7	98·5	+6·6	80·4	+2·4	89·4	+4·5	18·1	104·0	16th	72·9	10th	31·1
	Ajmere	1,611	28·021	+·040	29·577	28·116	13th	27·902	30th	·214	82·4	94·7	+3·8	78·6	+1·9	86·7	+2·9	16·1	100·9	10th	74·6	30th	26·3
	Deesa	466	29·178	+·046	29·597	29·285	3rd	29·080	30th	·205	81·9	93·7	+2·4	77·9	+0·4	85·8	+1·4	15·8	101·4	12th	73·5	12th	27·9
Kathiawar	Rajkot	429	29·230	+·034	29·609	29·339	3rd	29·153	30th	·186	82·0	91·5	+1·4	75·3	−0·3	83·4	+0·6	16·2	100·4	3rd	73·7	4 days	26·7
	Veraval	?	29·664	?	29·624	29·773	3rd	29·580	19th	·193	81·6	84·2	?	79·6	?	82·0	?	4·6	87·6	2nd & 3rd.	77·3	19th & 20th.	10·3
Central India	Nowgong	757	28·849	+·034	29·557	28·973	13th	28·766	28th	·207	82 2	91·7	+1·7	77·9	−0·1	84·8	+0·8	13·8	97·5	8th & 10th.	73·0	25th	24·5
	Indore	1,823	27·871	+·053	29·639	27·950	3rd	27·784	30th	·166	76·7	86·9	+2·9	73·2	+0·9	80·1	+1·9	13·7	94·2	14th	70·6	27th	23·6
	Neemuch	1,630	28·041	+·067	29·621	28·123	13th	27·935	30th	·185	78·7	89·0	+2·1	74·3	+0·5	81·7	+1·3	14·7	97·8	15th	69·6	29th	28·2
Gujarat	Surat	36	29·664	+·026	29·643	29·770	3rd	29·531	30th	·189	81·4	87·7	+0·7	77·3	+0·1	82·6	+0·4	10·4	92·1	14th	75·0	2nd & 16th.	17·1
	Ahmedabad	176	29·501	?	29·625	29·609	3rd	29·402	30th	·207	82·5	92·8	?	78·4	?	85·6	?	14·4	99·7	16th	75·1	19th	24·6
N.-W. P., West	Agra	555	29·010	+·005	29·517	29·163	13th	28·937	24th & 30th	·226	86·1	96·4	+3·5	80·5	+0·3	88·5	+1·9	15·9	104·5	15th	75·3	1st	29·2
	Jhansi	58	28·745	+·031	29·552	28·870	13th	28·668	28th	·202	83·4	93·3	+2·6	79·6	+1·2	86·5	+1·9	13·7	100·1	3 days	75·4	1st	24·7

* Mean of 30 days.

I—*continued.*

in India, Burma, etc., in July 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.							Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st July 1895.	Normal rainfall for period, 1st June to 31st July.	Variation from normal of period.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6·78	12·18	−5·02	...	...	...	...	6. Upper—Sub-Himalayas.	
12	...	...	1	13	...	1	2	2	2·3	4·1	−44	84	·923	5·1	11	13·45	−2·45	9·55	16·18	−6·63	20·80	21·85	−1·05	3·74	Bareilly .	N.-W. PROVINCES (SUB-MONTANE).
29	...	...	...	1	...	...	1	...	0·8(*b*)	1·2	−33	88	·787	7·4	18	21·27	−3·27	16·19	29·25	−13·06	31·79	38·50	−6·71	2·49	Dehra Dun.	
15	1	1	3	5	3	1	1	1	2·6	2·9	−10	84	·882	5·8	10	11·82	−1·82	15·24	12·45	+2·79	26·86	17·16	+9·70	6·69	Roorkee.	
14	2	1	...	7	...	1	6	...	1·9	2·3	−17	77	·869	5·6	8	10·18	−2·18	12·59	9·54	+3·05	25·61	11·98	+13·63	4·20	Meerut.	
4	2	1	2	4	4	1	9	4	5·3	4·5	+18	70	·835	5·5	9	8·64	+0·36	5·79	9·22	−3·43	8·89	12·57	−3·68	1·26	Delhi .	PUNJAB, CENTRAL.
4	1	3	2	8	5	1	3	4	3·8	3·3	+15	61	·813	2·4	4	6·45	−2·45	1·16	6·67	−5·51	2·65	8·51	−5·86	0·50	Lahore.	
15	...	...	6	8	...	...	1	1	1·3	?	?	83	·920	4·9	4	?	?	3·83	10·86	−7·03	17·57	14·69	+2·88	2·56	Umballa .	PUNJAB (SUB-MONTANE).
12	2	4	...	3	4	5	...	...	3·5(*b*)	?	?	78*	·917*	4·1*	3	?	?	3·00	?	?	10·46	?	?	1·97	Patiala .	
12	...	...	...	12	3	1	1	2	2·5	2·0	+25	71	·863	5·7	5	9·36	−4·36	2·24	10·33	−8·09	11·46	12·74	−1·28	0·91	Ludhiana.	
12	...	...	...	12	3	1	1	2	2·5	2·0	+25	71	·863	5·7	5	9·36	−4·36	2·24	10·33	−8·09	11·46	12·74	−1·28	0·91	Ludhiana.	
6	2	1	15	2	4	1	...	...	3·3	2·5	+32	67	·816	3·1	6	8·45	−2·45	2·07	8·52	−6·45	8·01	11·60	−3·59	0·74	Sialkot .	PUNJAB, NORTH.
8	...	2	8	12	1	...	...	...	3·4	2·1	+62	64	·765	2·7	5	8·64	−3·64	2·91	8·75	−5·84	9·97	10·46	−0·49	1·27	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·65	3·23	−1·54	...	...	...	...	7. Indus Valley and North-West Rajputana.	
6	7	6	1	1	...	1	1	8	4·0	4·4	−9	55	·716	2·3	0	1·91	−1·91	0	1·79	−1·79	0·40	2·14	−1·74	0	Peshawar .	PUNJAB, WEST.
				Not	recorded.				?	?	?	?	?	?	2	?	?	0·95	?	?	5·02	?	?	0·80	Mardan.	
...	2	13	9	2	3	...	2	...	6·0	?	?	62	·825	2·0	4	3·20	+0·80	3·98	2·86	+1·12	7·54	3·56	+3·98	2·43	Khushab.	
2	3	1	1	4	6	12	2	...	6·9	?	?	55	·786	2·1	4	3·60	+0·40	1·51	3·06	−1·55	6·88	4·35	+2·53	0·55	Montgomery	
14	1	6	7	1	1	...	...	1	4·3	2·4	+79	68	·901	1·5	3	3·64	−0·64	1·01	2·87	−1·86	3·41	3·41	0	0·43	D. I. Khan.	
1	1	6	...	9	1	11	1	1	2·7	3·4	−21	61	·841	1·5	0	2·82	−2·82	0·16	2·94	−2·78	2·00	3·53	−1·53	0·07	Mooltan.	
...	...	...	3	8	3	3	14	...	9·6	4·8	+100	61	·802	3·7	4	5·55	−1·55	2·45	4·58	−2·13	3·55	6·49	−2·94	1·25	Sirsa.	
...	...	...	3	14	8	1	...	...	5·8	5·3	+ 9	68	·985	2·3	0	1·45	−1·45	0	1·28	−1·28	0·11	1·40	−1·29	0	Jacobabad .	SIND AND CUTCH.
...	...	...	3	14	8	1	...	...	5·8	5·3	+ 9	68	·985	2·3	0	1·45	−1·45	0	1·28	−1·28	0·11	1·40	−1·29	0	Jacobabad .	SIND AND CUTCH.
2	...	1	...	...	...	26	2	...	23·2	13·9	+67	61	·784	3·6	0	3·18	−3·18	0·09	2·67	−2·58	0·47	3·00	−2·53	0·04	Hyderabad.	
...	...	1	2	...	...	12	12	4	16·9	17·8	− 5	76	·948	6·9	0	3·64	−3·64	0·13	3·47	−3·34	0·88	3·99	−3·11	0·08	Kurrachee.	
1	...	1	...	...	2	11	13	2	19·0	16·6	+14	79	·907	6·1	6	?	?	7·99	6·94	+1·05	9·68	8·88	+0·80	4·95	Bhuj.‡	
1	1	1	1	...	9	17	1	...	8·9	6·7	+33	60	·803	3·5	4	?	?	1·63	3·67	−2·04	3·80	5·33	−1·53	0·95	Bickaneer .	RAJPUTANA, WEST.
2	...	..	...	11	8	9	1	...	17·5	9·8	+79	82	1·000	9·4	5	?	?	1·30	2·64	−1·34	3·47	3·33	+0·14	0·50	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·17	11·28	−2·90	...	...	...	...	8. East Rajputana, Central India, and Gujarat.	
3	1	2	1	...	...	3	18	3	5·2	6·2	−16	73	·834	5·6	8	12·90	−4·90	8·71	9·37	−0·66	10·53	11·86	−1·33	2·32	Jeypore .	RAJPUTANA, EAST.
8	1	...	...	1	...	1	20	...	7·3	9·1	−20	68	·808	4·8	6	10·20	−4·20	4·87	7·83	−2·96	6·14	9·23	−3·09	2·27	Sambhar.	
2	...	1	...	...	...	6	20	2	9·5	6·9	+38	76	·833	4·3	7	10·27	−3·27	10·78	7·29	+3·49	11·77	9·57	+2·20	4·55	Ajmere.	
...	1	...	...	1	7	16	6	...	14·4	14·5	− 1	79	·859	7·3	10	10·73	−0·73	4·61	10·99	−6·38	8·30	13·15	−4·85	2·12	Deesa.	
2	...	...	1	...	1	8	17	2	13·2	14·5	− 9	80	·876	6·8	15	12·91	+2·09	12·42	13·46	−1·04	14·22	18·19	−3·97	3·81	Rajkot .	KATHIAWAR.
1	1	...	...	...	1	11	17	...	15·9	?	?	87	·936	8·7	14	?	?	4·93	?	?	7·43	?	?	1·25	Veraval.	
5	...	...	1	...	1	...	24	...	3·5	4·2	−17	79	·875	7·3	10	15·73	−5·73	8·74	14·41	−5·67	19·87	20·24	−0·37	1·77	Nowgong .	CENTRAL INDIA.
2	...	1	...	...	1	4	17	6	4·4	6·8	−35	86	·791	8·2	12	13·73	−1·73	8·56	8·51	+0·05	16·06	15·30	+0·76	2·08	Indore.	
2	...	1	...	1	1	14	11	1	13·8	12·2	+13	83	·813	6·1	9	11·73	−2·73	8·19	9·89	−1·70	16·20	14·16	+2·04	2·51	Neemuch.	
2	...	1	...	1	1	14	11	1	13·8	12·2	+13	83	·813	6·1	9	11·73	−2·73	8·19	9·89	−1·70	16·20	14·16	+2·04	2·51	Surat .	GUJARAT.
...	...	...	...	1	3	9	17	1	?	15·7	?	87	·938	7·5	18	16·45	+1·55	13·25	18·28	−5·03	18·55	28·40	−9·85	2·25	Ahmedabad.	†
1	..	...	...	1	4	20	5	...	6·4	?	?	81	·894	8·4	9	?	?	9·06	?	?	14·92	?	?	2·49	Agra . .	N.-W. P., WEST.
...	...	...	...	4	...	18	...	9	5·7	5·0	+14	70	·869	5·3	8	13·00	−5·00	5·39	11·50	−6·11	9·76	14·04	−4·28	1·36	Jhansi.	
2	...	1	1	2	...	10	12	3	4·7	4·1	+15	76	·865	4·2	10	14·36	−4·36	6·72	12·60	−5·88	15·03	17·49	−2·46	2·00		

* Mean of 30 days.

† Wind direction of 23 days.
‡ Do. do. „ 28 „

(*b*) Mean of 29 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
9. Deccan		...	...	+·030	...	...	...	...	...	...	...	87·9	+2·3	73·4	+0·8	80·7	+1·5	14·5	...	...	...	...	25·2
Bombay, Deccan	Belgaum	2,524	27·289	+·025	29·756	27·345	3rd	27·233	12th	·112	69·9	75·5	−0·1	66·9	0	71·2	−0·1	8·6	82·2	5th	65·3	8th	16·9
	Sholapur	1,590	28·183	+·025	29·721	28·244	3rd	28·120	30th	·124	77·3	91·0	+2·2	71·2	−0·1	81·1	+1·1	19·8	99·7	2nd	69·0	3 days	30·7
	Poona	1,840	27·923	+·027	29·709	28·003	3rd	27·849	19th	·154	75·2	84·0	+2·2	70·5	−0·2	77·3	+1·0	13·5	90·0	4th	68·9	12th & 20th.	21·1
	Bijapur	1,946	27·849	?	29·742	27·901	3rd	27·786	19th	·115	74·0	86·5	?	69·4	?	78·0	?	17·1	95·7	4th	67·0	13th	28·7
Khandesh	Malegaon	1,430	28·285	+·032	29·633	28·371	3rd	28·212	30th	·159	78·8	89·3	+2·5	73·6	+0·6	81·4	+1·6	15·7	95·4	5th & 10th.	71·7	25th	23·7
	Ahmednagar	2,152	27·612	?	29·703	27·688	3rd	27·531	12th	·157	74·8	84·9	?	69·3	?	77·5	?	15·0	91·8	4th	66·4	4th	25·4
Berar	Akola	930	28·760	+·025	29·683	28·824	2nd	28·693	30th	·131	79·5	90·6	+2·5	74·6	+0·6	82·6	+1·6	16·0	97·4	4 days	71·7	19th & 21st.	25·7
	Amraoti	1,215	28·435?	+·028?	29·636?	28·529	2nd	28·386	28th	·143	77·5	90·3	+3·6	74·7	+1·5	82·5	+2·6	15·6	96·7	6th	70·8	28th	25·9
Central Provinces, West.	Khandwa	1,044	28·645	+·045	29·644	28·719	3rd	28·572	30th	·147	79·4	90·1	+3·1	76·0	+1·1	83·1	+2·1	14·1	96·7	10th & 14th.	72·6	31st	24·1
	Hoshangabad*	1,020	28·643	+·032	29·621	28·718	13th	28·557	28th	·161	79·2	88·2	+2·1	75·5	+0·6	81·9	+1·4	12·7	95·4	14th	71·7	28th	23·7
	Nagpur	1,025	28·635	+·027	29·614	28·703	13th	28·562	28th	·141	79·4	89·7	+2·5	75·5	+0·8	82·6	+1·7	11·2	97·3	4th	72·1	28th	25·2
Central Provinces, Central.	Chanda	634	29·043	+·021	29·620	29·115	2nd	28·991	27th	·124	80·2	91·0	+3·4	75·9	+0·4	83·5	+1·9	15·1	98·9	3 days	71·5	9th	27·4
	Seoni	2,033	27·642	+·034	29·606	27·740	13th	27·552	28th	·188	76·8	85·6	+2·1	72·5	+0·1	79·1	+1·1	13·1	96·2	3rd	70·1	28th	26·1
	Jubbulpore	1,327	28·295	+·022	29·573	28·391	13th	28·200	27th	·191	78·6	87·7	+2·1	75·2	+0·6	81·5	+1·4	12·5	94·5	9th	71·6	28th	22·9
	Saugor	1,762	27·881	+·041	29·581	27·986	13th	27·781	28th	·205	78·2	87·4	+2·4	75·8	+2·3	81·6	+2·4	11·6	95·7	10th	73·6	1st & 23th.	22·1
Central Provinces, East.	Raipur	970	28·672	+·033	29·591	28·775	13th	28·571	30th	·204	79·3	87·8	+1·8	75·7	+1·1	81·8	+1·5	12·1	95·4	4th	72·1	28th	23·3
	Sutna	1,040	28·552	+·030	29·515	28·683	13th	28·461	28th	·222	81·8	89·1	+2·3	78·1	+1·4	83·7	+1·9	11·0	95·5	9th & 10th.	74·1	11th & 25th.	21·4
	Sambalpur	463	29·113	+·027	29·557	29·219	13th	29·007	30th	·212	81·6	89·5	+2·2	77·6	+0·2	83·6	+1·2	11·9	95·5	4th	74·2	7th	21·3
Hyderabad, North.	Aurangabad	?	27·835†	?	?	27·910	6th	27·820	30th & 31st	·120	73·3	87·7	?	70·9	?	79·3	?	16·8	95·4	5th	69·3	22nd	26·1
	Indur	?				Not recorded.					77·3	88·5	?	73·7	?	81·1	?	14·8	95·6	5th	70·9	29th	25·7
	Bidar	?	27·600	?	?	27·665	2nd	27·515	30th	·120	73·6	83·1	?	69·6	?	77·8	?	16·5	93·0	2nd & 3rd.	67·4	17th & 18th.	25·6
Hyderabad, South.	Gulbarga	1,502	28·231	?	29·733	28·350	4th	28·211	28th	·139	76·1	90·3	?	71·8	?	81·0	?	18·5	98·2	4th	69·3	18th	28·9
	Raichur	1,373	28·409	?	29·734	28·467	21st	28·365	30th	·102	76·4	89·2	?	72·8	?	81·0	?	16·4	98·1	3rd	70·1	3 days	28·0
	Hyderabad (Deccan).	1,690	28·035	+·037	29·703	28·127	2nd	28·010	28th	·117	75·8	87·7	+1·5	73·0	+1·9	80·4	+1·7	14·7	96·4	3rd	69·2	19th	27·2
	Secunderabad.	1,737	27·971	?	29·707	28·034	2nd	27·923	27th	·111	75·0	88·6	?	71·8	?	80·2	?	16·8	99·2	2nd	68·4	19th	30·8
	Khamamet	373	29·353	?	29·671	29·419	21st	29·300	28th	·119	79·3	89·7	?	76·1	?	82·8	?	13·6	100·4	4th	72·8	29th	27·6
10. West Coast		...	...	+·019	...	...	...	...	...	...	...	82·0	−0·7	75·1	+0·1	78·6	−0·3	6·9	...	...	...	...	13·8
Konkan	Bombay	37	29·726	+·025	29·703	29·814	3rd	29·651	19th	·163	80·5	84·9	+0·7	77·8	+0·5	81·4	+0·6	7·1	89·0	3 days	74·5	11th	14·5
	Ratnagiri	110	29·690	+·028	29·738	29·754	3rd	29·610	12th	·144	79·5	83·4	−0·3	75·9	+0·6	79·7	+0·2	7·5	87·4	3rd & 4th.	73·4	12th & 18th.	14·0
	Mormugao	60	29·780	?	29·775	29·827	2nd	29·712	11th	·115	78·7	82·1	?	75·4	?	78·8	?	6·7	86·0	1st	72·4	8th	13·6
	Goa	199	29·628	+·026	29·765	29·675	23th	29·551	11th	·114	78·4	80·3	?	76·8	?	78·6†	?	3·5	84·0	3rd & 5th.	74·0	6 days	10·0
	Karwar	44	29·810	+·025	29·786	29·815	26th	29·753	11th	·106	77·8	81·7	−1·3	75·8	+1·2	78·8	−0·1	5·9	85·7	7th	72·5	17th	13·2
Malabar	Cochin	11	29·910	+·012	29·848	29·942	2nd	29·859	12th	·083	76·2	82·6	−0·7	73·4	−0·5	78·0	−0·6	9·4	85·7	22nd	71·2	10th	14·5
	Calicut	27	29·878	+·009	29·834	29·909	25th	29·829	15th	·080	75·9*	81·3*	−0·9*	73·3‡	−0·4‡	77·3‡	−0·7	8·0	85·8	25th	72·0	4 days	13·8
	Mangalore	65	29·824	+·011	29·821	29·866	3rd	29·772	11th	·094	76·2	80·8	−1·9	73·2	−0·9	77·0	−1·4	7·6	85·3	1st	70·0	17th	15·3
	Trivandrum	198	29·718	?	29·848	29·772	2nd	29·672	9th	·100	76·1	80·7	?	74·3	?	77·6	?	6·4	82·5	3 days	72·5	1st & 10th.	10·0
11. South India		...	...	+·017	...	...	...	...	...	...	...	88·3	−1·0	74·4	−0·3	81·4	−0·7	13·9	...	...	...	...	25·0
Madras, South.	Pamban	37	29·816	?	29·780	29·878	22nd	29·773	11th	·105	82·9	89·1	?	79·8	?	84·5	?	9·3	92·3	2nd & 5th.	77·2	20th	15·1
	Tinnevelly	168	29·696	?	29·793	29·749	22nd	29·647	9th	·102	83·6	94·3	?	78·8	?	86·6	?	15·5	99·3	23rd	74·9	27th	24·4
	Madura	447	29·391	+·013	29·775	29·449	22nd	29·343	10th	·106	83·4	95·5	−1·8	77·0	+0·9	86·3	−0·5	18·5	101·0	4th	74·0	5th & 22nd.	27·0

* Mean of 26 days. † Mean of 30 days. ‡ Mean of 25 days.

I—*continued.*

in India, Burma, etc., in July 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.							Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st July 1895.	Normal rainfall for period, 1st June to 31st July.	Variation from normal of period.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9·03	12·37	−3·05	...	...	...	...	9. Deccan.	
...	...	...	...	...	...	10	20	1	22·9*	27·9	− 18	93	·681	9·2	22	22·91	- 0·91	11·37	15·37	−4·00	20·93	21·96	- 1·03	2·25	Belgaum .	BOMBAY, DECCAN.
...	...	...	...	...	3	11	12	5	16·8	12·3	+ 37	72	·676	7·0	9	9·45	−0·45	7·13	4·29	+2·84	7·76	9·30	− 1·54	2·71	Sholapur.	
1	...	...	...	...	1	8	20	1	12·0	16·9	− 29	81	·707	8·4	13	12·73	+0·27	5·47	6·87	−1·40	12·47	11·60	+ 0·87	0·93	Poona.	
...	...	...	...	...	...	14	16	1	9·9	P	P	83	·701	7·5	5	6·40	−1·40	3·24	P	P	5·34	P	P	1·10	Bijapur.	
1	...	...	...	1	...	9	16	4	19·5	11·8	+ 65	81	·783	7·5	7	8·55	−1·55	3·16	4·75	− 1·59	7·98	9·47	−1·49	1·15	Malegaon .	KHANDESH.
5	...	...	...	...	2	14	8	2	19·8	P	P	82	·703	7·8	7	P	P	5·03	P	P	10·01	P	P	1·45	Ahmednagar.	
...	...	1	...	...	...	5	17	8	8·4	8·4	0	80	·797	6·9	10	13·18	−3·18	9·59	10·81	− 1·22	15·63	16·28	− 0·65	4·04	Akola .	BERAR.
...	...	1	1	1	...	12	12	4	9·7	7·6	+ 28	85	·795	6·4	6	12·73	−6·73	5·05	10·62	− 5·57	12·19	17·46	− 5·27	2·18	Amraoti.	
...	...	...	1	...	1	3	20	6	9·6	8·4	+ 14	79	·788	7·1	13	11·91	+1·09	6·47	8·82	− 2·35	12·81	14·87	− 2·06	1·72	Khandwa .	CENTRAL PROVINCES, WEST.
2	...	...	1	...	...	15	13	...	4·5	4·5	0	86	·868	7·4	12	17·27	−5·27	8·97	17·59	− 8·62	25·52	25·79	− 0·27	1·88	Hoshangabad.*	
6	...	...	...	...	1	10	11	3	8·7	7·9	+ 10	85	·854	7·3	15	17·64	−2·64	19·07	14·73	+ 4·34	30·39	23·47	+ 6·92	7·45	Nagpur.	
2	...	...	...	...	...	16	13	...	5·6	6·2	− 10	76	·782	7·8	12	P	P	10·22	18·88	− 8·66	15·90	26·73	−10·83	1·73	Chanda .	CENTRAL PROVINCES, CENTRAL.
				Not	recorded.				P	6·2	P	88	·815	6·7	16	18·64	−2·64	8·79	18·15	− 9·36	20·53	28·72	− 8·19	1·05	Seoni.	
...	...	...	...	2	4	6	12	7	3·6	5·0	− 28	86	·841	6·4	17	19·27	−2·27	13·47	20·80	− 7·33	31·02	29·90	+ 1·12	2·87	Jubbulpore.	
3	...	...	...	...	3	11	12	2	5·9	5·1	+ 16	86	·825	6·2	14	15·64	−1·64	16·15	15·10	+ 1·05	28·03	22·50	+ 5·53	4·56	Saugor.	
5	...	...	2	...	...	18	6	...	10·3	11·6	− 11	87	·861	7·4	11	16·36	−5·36	8·60	16·47	− 7·87	27·16	25·39	+ 1·77	1·80	Raipur .	CENTRAL PROVINCES, EAST.
1	2	...	2	1	3	7	11	4	8·1	9·4	− 14	80	·858	6·9	9	15·73	−6·73	9·03	15·17	− 6·14	27·15	21·71	+ 5·44	3·96	Sutna.	
...	...	...	2	5	4	20	...	...	5·4	3·6	+ 50	83	·900	7·0	17	P	P	16·16	22·16	− 6·00	32·85	33·29	− 0·44	3·55	Sambalpur.	
2	...	...	...	...	2	13	12	2	6·8	P	P	82	·742	8·7	14	P	P	10·07	7·37	+ 2·70	17·64	13·71	+ 3·93	2·48	Aurangabad	HYDERABAD, NORTH.
...	...	...	...	...	1	8	15	7	13·2†	P	P	81	·758	8·3	15	P	P	9·42	10·64	− 1·22	12·67	15·24	− 2·57	1·73	Indur.	
...	...	...	...	...	...	9	18	4	12·0	P	P	89	·738	7·1	16	P	P	8·51	9·29	− 0·78	11·32	15·59	− 4·27	1·54	Bidar.	
...	...	...	...	...	1	12	13	5	16·6	P	P	80	·716	6·8	8	P	P	5·67	4·89	+ 0·78	8·91	9·71	− 0·80	1·90	Gulbarga.	HYDERABAD, SOUTH.
...	...	...	...	...	1	12	16	2	12·5	P	P	77	·701	7·0	9	P	P	5·67	P	P	7·83	P	P	2·31	Raichur.	
...	...	...	...	...	...	...	26	5	9·7	P	P	81	·722	7·5	9	P	P	5·57	6·90	− 1·33	10·49	11·75	−1·26	1·56	Hyderabad (Deccan).	
...	...	...	...	...	...	4	21	6	12·5	13·3	− 6	76	·666	7·6	12	P	P	6·93	P	P	10·42	P	P	2·08	Secunderabad,	
12	...	...	...	...	...	3	12	4	6·7	P	P	82	·843	4·5	15	P	P	15·77	P	P	23·17	P	P	3·05	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	33·03	28·67	+2·73	...	...	...	...	10. West Coast.	
...	...	...	...	3	4	9	15	...	17·2	19·1	− 10	86	·906	8·6	23	21·91	+1·09	17·97	27·17	− 9·20	35·80	46·54	−10·74	3·70	Bombay.	KONKAN.
...	1	...	...	1	2	18	4	5	10·0	13·7	− 27	88	·878	8·5	30	26·36	+3·64	37·45	35·51	+ 1·94	59·10	66·77	− 7·67	4·39	Ratnagiri.	
...	1	...	...	...	...	...	5	25	13·0	P	P	91	·896	8·1	29	P	P	46·04	P	P	65·50	P	P	5·79	Mormugao.	
2	1	...	...	...	...	4	23	1	12·6	P	P	90	·869	9·9	28	P	P	36·16	33·70	+ 2·46	50·38	63·79	−13·41	4·62	Goa.	
2	4	2	...	...	...	12	8	3	5·7	P	P	88	·831	8·3	29	27·45	+1·55	53·17	38·97	+14·20	76·23	76·21	+ 0·02	7·37	Karwar.	
15	3	3	1	1	...	...	6	2	4·8	2·0	+140	88	·806	8·4	25	23·91	+1·09	18·93	21·51	− 2·58	46·98	49·92	− 2·96	3·13	Cochin .	MALABAR.
8	5	5	4	2	2	...	1	4	9·6	P	P	92‡	·814‡	9·5	28	26·63	+1·37	24·82	29·35	− 4·53	63·39	62·57	+ 0·82	4·53	Calicut.	
8	3	1	2	...	1	3	6	7	2·8	3·2	− 13	93	·837	9·5	31	28·10	+2·90	57·17	36·09	+21·08	94·93	71·12	+23·81	4·82	Mangalore.	
5	13	...	...	...	...	...	...	13	P	P	P	87	·783	9·2	13	P	P	5·53	7·08	− 1·55	19·30	20·03	− 0·73	1·09	Trivandrum.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5·20	6·23	−0·14	...	...	...	...	11. South India.	
3	1	...	...	...	1	18	8	...	13·0	P	P	77	·874	3·4	0	1·30	−1·30	0	0·71	− 0·71	0	0·75	− 0·75	0	Pamban .	MADRAS, SOUTH.
...	2	...	...	...	...	4	11	14	9·6	P	P	59	·691	8·1	0	0·90	−0·90	0	P	P	0·08	P	P	0	Tinnevelly.	
4	3	...	1	...	...		5	12	1·9	4·6	− 59	62	·722	6·2	1	1·45	−0·45	1·29	2·28	− 0·99	1·79	3·78	−1·99	1·23	Madura.	

* Mean of 28 days. † Mean of 30 days. ‡ Mean of 26 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras, South Central.	Salem	940	28·928	+·012	29·814	28·966	22nd	28·885	12th & 15th.	·081	77·0	89·8	−2·7	72·6	+0·3	81·2	−1·2	17·2	97·9	3rd	70·0	17th	27·9
	Coimbatore	1,348	28·503	+·011	29·804	28·549	21st	28·456	12th	·093	75·1	86·6	−1·3	69·8	−0·9	78·3	−1·1	16·8	89·4	25th & 26th.	67·6	14th	21·8
Coorg	Mercara	3,781	26·184	+·014	?	26·214	6th	26·130	12th	·084	63·5	67·2	−1·5	61·9	−0·3	64·6	−0·9	5·3	71·0	22nd	59·2	8th	11·8
Mysore	Chitaldroog	2,405	27·438	?	29·776	27·491	2nd	27·388	11th	·103	71·3	80·5	?	67·6	?	74·0	?	12·9	87·6	4th	65·9	4 days	21·7
	Bangalore	3,021	26·871	+·008	29·803	26·911	2nd	26·824	12th	·087	68·9	80·2	−1·6	65·6	0	72·9	−0·8	14·6	88·3	3rd & 4th.	62·8	23rd	25·5
	Hassan	3,091	26·817	?	29·827	26·854	2nd	26·765	12th	·089	69·2	75·5	?	64·9	?	70·2	?	10·6	79·8	5th	63·0	8th	16·8
	Mysore	2,518	27·377	?	29·826	27·411	2nd	27·320	11th	·091	71·0	81·2	?	66·7	?	74·0	?	14·5	86·4	7th	65·0	3 days	21·4
Madras, East Coast, South.	Negapatam	31	29·800	+·014	29·760	29·856	22nd	29·755	4th	·101	83·0	95·2	+0·2	78·2	+0·4	86·7	+0·3	17·0	102·2	3 days	72·7	23rd	29·5
	Cuddalore	12	29·806	?	29·747	29·859	22nd	29·756	10th	·103	82·0	94·7	?	77·2	?	86·0	?	17·5	105·4	3rd	71·7	22nd	33·7
	Trichinopoly	255	29·578	+·005	29·766	29·630	21st & 22nd.	29·530	9th	·100	81·9	96·3	−0·6	77·9	+0·6	87·2	0	18·4	103·1	4th	74·4	23rd	28·7
	Madras	22	29·781	+·013	29·734	29·834	22nd	29·727	4th	·107	82·2	93·5	−2·1	77·5	−1·0	85·6	−1·6	16·0	103·5	1st	73·5	3 days	30·0
Madras, East Coast, Central.	Nellore	71	29·701	?	29·705	29·762	21st	29·655	9th	·107	82·9	93·9	?	78·9	?	86·4	?	15·0	105·3	2nd & 4th.	73·1	19th	32·2
	Masulipatam	15	29·723	+·021	29·673	29·801	21st	29·676	10th	·125	80·8	90·9	−1·1	77·1	−0·9	84·0	−1·0	13·8	103·7	2nd & 3rd.	72·1	18th	31·6
Madras, Central	Cuddapah	433	29·366	?	29·740	29·423	21st	29·329	11th	·094	80·9	92·5	−1·4	76·4	−1·0	84·5	−1·2	16·1	103·2	2nd	71·1	19th	32·1
	Kurnool	923	28·869	+·025	29·739	28·929	21st	28·823	30th	·106	78·0	89·8	−0·7	73·7	−0·6	81·7	−0·7	16·1	98·7	1st & 4th.	70·4	19th	28·3
	Bellary	1,475	28·338	+·028	29·759	28·389	2nd	28·290	10th	·099	78·1	89·4	−1·5	74·1	−0·2	81·8	−0·9	15·3	97·2	3rd & 4th.	70·9	9th & 18th.	26·3
Madras, East Coast, North.	Rajahmundry	112	29·610	+·030	29·659	29·691	21st	29·560	28th	·131	79·9	89·1	+0·2	76·5	−0·8	82·8	−0·3	12·6	99·0	4th	71·0	24th	28·0
	Cocanada	26	29·674	+·022	29·635	29·768	21st	29·623	28th	·145	80·6	89·2	+1·0	77·9	−0·2	83·6	+0·4	11·3	101·3	4th	73·0	13th & 19th.	28·3
	Vizagapatam	31	29·644	+·018	29·613	29·724	21st	29·568	29th	·156	83·0	87·1	−0·4	82·0	−0·4	84·6	−0·4	5·1	91·8	5th	77·1	19th	14·7
	Gopalpur	21	29·615	?	29·576	29·735	13th	29·495	30th	·240	82·8	88·5	?	78·8	?	83·7	?	9·7	92·7	17th	75·1	5th & 31st.	17·6
12. Hill Stations		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baluchistan	Shirino	?																					
	Kachh		23·741*	?	?	23·900	13th	23·590	23rd	·310	77·9*	90·0*	?	60·3†	?	75·2†	?	29·7	96·0	6th & 7th.	44·0	16th	52·0
	Pishin	?			Not recorded.							102·9	?	55·6	?	79·3	?	47·3	109·1	6th.	49·9	2nd	59·2
	Quetta	5,502	24·453	+·028	...	24·599	13th	24·341	23rd	·258	76·3	91·6	−1·0	61·7	−3·6	76·7	−2·3	29·9	96·6	6th	55·9	5th & 16th,	40·7
	Kalat	?			Not recorded.						71·3	94·2	?	47·1	?	70·7	?	47·1	98·5	20th	43·0	1st & 28th.	55·5
	Chaman	4,311	25·439	?	?	25·590	13th	25·321	23rd	·269	86·1	100·1	?	73·0	?	86·6	?	27·1	107·0	7th	67·6	12th	39·4
Northern India	Leh	11,503	19·627	?	?	19·748	13th	19·550	24th	·198	57·6	77·6	?	50·2	?	63·9	?	27·4	87·2	28th	43·4	12th	43·8
	Srinagar	5,204	24·695	?	?	24·911	13th	24·572	28th	·339	69·0	82·6	?	61·8	?	72·2	?	20·8	92·4	28th	54·7	12th	37·7
	Astor (Kashmir)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gilgit	?	24·488	?	?	24·700	13th	24·340	29th & 30th.	·360	77·4	93·1	?	70·4*	?	81·8*	?	22·7	106·6	4th & 5th &	59·3	1st	47·3
	Cherat	?	25·493	?	?	25·664	13th	25·355	23rd	·309	78·4	92·5	?	70·9	?	81·8	?	21·6	102·5	28th.	58·2	11th	44·3
	Murree	6,344	23·700	+·004	?	23·835	13th	23·580	23rd	·255	66·6	76·7	−0·5	62·4	−0·3	69·6	−0·4	14·3	84·1	27th	55·1	12th & 22nd,	29·0
	Poo	?			Not recorded.						...	76·6	?	57·1	?	66·9	?	19·5	84·0	27th	49·9	2nd	34·1
	Simla	7,224	22·994	+·022	?	23·116	13th	22·892	23rd	·224	62·6	68·9	−0·4	59·6	−1·0	64·3	−0·7	9·3	73·4	6th	55·2	9th	18·2
	Chakrata	6,977	23·197	+·027	?	23·329	13th	23·090	23rd	·239	63·3	69·9	0	59·7	−0·4	64·8	−0·2	10·2	73·7	5th & 18th.	55·3	2nd	18·4
	Mussooree	6,705	23·418	?	?	23·540	13th	23·326	23rd	·214	63·7	69·9	0	60·3	−0·1	65·1	−0·1	9·6	74·3	16th	55·4	2nd	18·9
	Ranikhet	6,069	23·954	+·015	?	24·078	13th	23·846	23rd	·232	67·0	75·1	+1·4	62·8	0	69·0	+0·7	12·3	78·5	3 days	60·5	1st	18·0
	Yatung	10,180?			Not recorded.						?	61·0	?	49·4	?	55·2	?	11·6	67·0	4th	45·4	1st & 29th,	21·6
	Gnatong	?	19·224	?	?	19·307	20th	19·160	23rd	·147	50·0	56·5	?	44·2	?	50·4	?	12·3	63·3	3rd	41·6	29th	21·7
	Darjeeling	7,421	22·861	−·016	?	22·945	12th	22·778	24th	·167	60·5	65·1	−1·7	57·6	+0·2	61·4	−0·8	7·5	68·1	3 days	54·7	18th	13·4
	Gantok	?	24·365	?	?	24·488	18th	24·263	15th & 25th	·225	65·1	74·5*	?	58·2	?	66·3*	?	16·3	82·0	31st	50·0	12th	32·0

* Mean of 30 days. † Mean of 29 days.

I —*continued.*

in India, Burma, etc., in July 1895—continued.

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.	Normal.	Percentage variation.	Hygrometry, 8 A.M.: Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall: Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st July 1895.	Normal rainfall for period, from 1st June to 31st July.	Variation from normal of period, from 1st June to 31st July.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
10	...	...	...	4	10	6	1	...	2·1	4·7	−55	80	·745	8·1	13	6·91	+6·09	5·12	3·96	+ 1·16	6·03	7·64	− 1·61	0·79	Salem .	Madras, South Central.
...	...	1	...	...	3	17	5	5	6·8	8·2	−17	85	·746	6·7	1	4·36	−3·36	0·26	1·23	− 0·97	3·25	2·66	+ 0·59	0·11	Coimbatore.	
...	...	...	...	...	...	4	19	8	11·2	11·3	− 1	97	·575	10·0	31	29·30	+1·70	31·66	42·50	−10·84	62·51	68·21	− 5·70	5·90	Mercara .	Coorg.
...	...	...	...	...	...	9	19	3	13·4	?	?	84	·651	9·7	11	?	?	3·04	?	?	7·79	?	?	0·48	Chitaldroog.	Mysore.
...	...	...	...	...	...	14	16	1	11·4	8·6	+33	86	·613	9·3	10	9·00	+1·00	4·09	4·59	− 0·50	5·76	8·04	− 2·28	1·37	Bangalore.	
...	...	...	...	...	...	4	22	5	5·1	?	?	86	·610	9·7	6	?	?	3·07	?	?	7·48	?	?	0·73	Hassan.	
...	...	...	...	...	...	15	15	1	14·3	?	?	83	·633	9·1	6	?	?	2·13	?	?	6·90	?	?	0·68	Mysore.	
2	...	...	...	..	...	5	18	6	9·3	7·1	+31	74	·839	7·5	4	3·61	+0·36	2·60	2·27	+ 0·33	2·63	4·01	− 1·38	1·72	Negapatam	Madras, East Coast, South.
...	1	...	...	...	3	8	15	4	1·8	?	?	81	·889	5·9	8	5·6	+2·4	3·59	?	?	3·89	?	?	1·39	Cuddalore.	
1	...	...	...	...	...	9	19	2	11·5	9·9	+16	63	·681	8·0	2	2·18	−0·18	1·77	1·50	+ 0·27	2·22	3·12	− 0·90	1·57	Trichinopoly.	
1	...	...	...	...	1	10	14	5	6·4	8·3	−23	71	·778	8·4	11	7·00	+4·00	5·43	3·87	+ 1·56	6·33	5·98	+ 0·35	0·86	Madras.	
1	...	...	...	...	2	...	11	17	9·5	?	?	70	·779	9·2	6	4·70	+1·30	4·09	?	?	4·32	?	?	2·60	Nellore .	Madras, East Coast, Central.
1	...	...	...	...	...	2	12	16	8·0	9·7	−18	81	·848	8·5	13	9·36	+3·64	8·85	5·69	+ 3·16	10·27	11·21	− 0·94	2·75	Masulipatam.	
1	...	...	...	...	...	6	19	6	?	?	?	72	·752	8·9	12	6·00	+6·00	4·34	3·90	+ 0·44	5·08	8·01	− 2·93	0·64	Cuddapah .	Madras, Central.
...	...	...	...	...	...	6	19	6	?	?	?	75	·719	9·1	14	9·83	+4·17	5·71	4·91	+ 0·80	8·75	8·86	− 0·11	0·78	Kurnool.	
2	...	...	...	...	1	4	19	5	?	?	?	75	·719	9·1	14	9·83	+4·17	5·71	4·91	+ 0·80	8·75	8·86	− 0·11	0·78	Bellary.	
1	...	...	...	...	...	5	23	2	10·8	11·6	− 7	66	·640	9·0	7	3·91	+3·09	1·91	1·98	− 0·04	4·25	3·83	+ 0·42	0·75	Bellary.	
2	...	...	1	...	...	...	27	1	?	?	?	82	·850	8·0	20	10·10	+9·90	13·22	7·22	+ 6·00	19·46	13·01	+ 6·45	1·84	Rajahmundry	Madras, East Coast, North.
...	1	...	...	...	...	9	16	5	8·5	?	?	81	·844	6·8	12	10·00	+2·00	8·82	6·67	+ 2·15	10·58	12·04	− 1·46	1·30	Cocanada.	
...	1	...	...	...	1	2	22	5	3·2	4·0	−20	78	·887	7·0	6	10·18	−4·18	2·05	5·09	− 3·04	8·42	8·58	− 0·16	0·58	Vizagapatam.	
2	4	1	1	1	6	13	2	1	11·5	11·3	+ 2	84	938	3·0	9	11·33	−2·33	6·44	7·59	− 1·15	18·43	13·68	+ 4·75	2·19	Gopalpur.	
...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12. Hill Stations.	
																									Shirino.	Baluchistan.
...	...	1	8	2	1	2	12	4	6·7†	?	?	43*	·405*	0·4*	1	?	?	0·17	?	?	0·27	?	?	0·17	Kachh. ‡	
				Not recorded.					?	?	?	?	?	?	0	?	?	0	?	?	0·10	?	?	0	Pishin.	
26	...	...	...	2	1	1	1	...	2·4	5·1	−53	55	·506	0·4	0	1·36	−1·36	0	1·21	− 1·21	0·76	1·33	− 0·57	0	Quetta,	
...	4	...	1	...	25	1	...	...	?	?	?	?	?	...	0	?	?	0	?	?	0·03	?	?	0	Kalat,	
...	...	1	1	4	6	11	6	2	8·1	?	?	33	·422	0	0	?	?	0	?	?	0	?	?	0	Chaman,	
...	1	4	1	1	6	8	8	2	2·5	1·9	+32	51	·239	4·1	0	?	?	0·20	?	?	0·24	?	?	0·08	Leh,	Northern India.
7	2	1	3	10	4	1	2	1	5·7	?	?	84	·610	3·4	5	?	?	1·24	?	?	3·34	?	?	0·36	Srinagar,	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor (Kashmir).	
				Not recorded.		?	?		?	?	?	48	·432	3·5	1	?	?	0·33	?	?	...	?	?	0·12	Gilgit,	
11	6	1	...	10	2	...	...	1	9·0	?	?	58	·568	2·6	3	?	?	1·68	?	?	2·27	?	?	1·01	Cherat,	
7	4	3	2	3	2	1	...	9	7·5	5·7	+32	71	·464	4·4	9	12·00	−3·00	11·94	11·25	+ 0·69	21·46	14·12	+ 7·34	4·25	Murree.	
20	...	...	8	...	...	1	2	...	?	?	?	?	?	6·3	2	?	?	0·96	?	?	1·13	?	?	0·49	Poo.	
3	11	4	2	1	4	4	...	2	4·6	1·6	+188	84	·477	7·9	16	19·27	−3·27	14·31	17·55	− 3·24	31·18	24·34	+ 6·84	5·06	Simla.	
2	1	1	7	1	2	3	11	3	8·1	4·6	+76	87	·507	3·9	17	?	?	18·30	19·42	− 1·12	38·21	26·33	+11·88	5·22	Chakrata,	
...	2	...	5	4	1	2	5	12	?	8·7	?	92	·541	7·7	18	21·91	−3·91	20·40	29·49	− 9·09	42·95	38·19	+ 4·76	7·24	Mussooree.	
9	...	1	1	...	...	3	13	4	4·3	2·1	+105	84	·550	7·0	10	19·18	−9·18	8·66	13·28	− 4·62	17·17	19·22	− 2·05	3·17	Raniknet,	
				Not recorded.					?	?	?	?	?	?	24	?	?	8·84	?	?	16·45	?	?	1·03	Yatung.	
3	...	...	1	8	2	2	3	12	4·1	?	?	93	·336	8·3	31	?	?	29·54	?	?	51·26	?	?	2·51	Gnatong,	
11	2	3	5	3	...	3	3	1	5·2	2·6	+100	97	·517	9·4	29	24·43	+4·57	29·78	35·16	− 5·38	52·13	59·74	− 7·61	2·67	Darjeeling.	
...	2	2	1	...	4	4	15	3	1·1	?	?	97	·603	9·1	27	?	?	25·43	?	?	45·89	?	?	2·64	Gantok,	

* Mean of 30 days. † Mean of 29 days. ‡ Wind observations of 30 days.

Table

Abstract of Observations taken at 8 A.M. at 205 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	25·850	+·028	?	25·930	3rd	25·751	30th	·179	68°5	75°4	+0°8	66°0	+0°4	70°7	+0°6	9°4	81°2	13th	63°8	26th & 27th.	17°4
	Pachmarhi	3,528	26·256	+·037	?	26·344	13th	26·165	30th	·179	71°2	77°6	+2·3	68°8	+1°0	73·2	+1°7	8°8	83°7	14th & 15th.	65°7	28th	18°0
South India	Wellington	6,200	24·190	—·005	?	24·282	22nd	24·136	9th	·096	63°4	70°2	—0°6	57°9	—0°2	64°1	—0°4	12°3	73°7	3rd & 4th.	55·1	18th & 28th.	18°6
13. Extra India.																							
Ceylon	Trincomalee	75	29·757	?	29·760	29·811	23rd	29·718	4th & 10th.	·093	84°0	91°3	?	78°0	?	84°6	?	13°3	96°0	3rd	75°5	9th	20°5
	Colombo	40	29·889	+·010	29·854	29·933	22nd	29·852	6th & 10th.	·081	82°0	85°9	?	77°1	?	81°5	?	8°8	88°5	1st	73·5	12th	15°0
	Galle	48	29·853	?	29·827	29·926	23rd	29·839	10th	·087	80°0	82°2	?	77°3	?	79°8	?	4·9	84°0	1st & 23rd.	75°0	10th	9°0
Persia	Meshed	3,104				Not recorded.					81°2	?	?	64°1	?	?	?	?	?	?	56°8	1st	?
	Teharan	?	25·807	?	?	25·900	4 days	25·700	4 days	·200	81°4	97°2	?	71°0	?	84·1	?	26°2	104°4	16th	62·9	24th	41°5
	Ispahan	?				Not recorded.					81°0	98°0	?	65°8	?	81·9	?	32°2	102°1	7th	62°5	2nd	39°6
	Bushire	14	29·505	?	29·474	29·637	13th	29·397	24th	·240	90°3	95°8	?	84·1	?	89·9	?	11·7	105·5	19th	76·9	10th	28°6
	Jask	?	29·563	?	?	29·680	14th	29·421	29th	·259	89°2	94·6	?	85·0	?	89·8	?	9·6	98·5	30th	80·2	2nd	18·3
Arabia	Muscat	?	29·536	?	?	29·669	13th	29·429	30th	·240	86·7	88·9‖	?	84·9	?	86·9	?	4·0	94·9	1st	79·3	22nd	15·6
	Baghdad	?							Observations imperfect.														
	Aden	94	29·636	+·010	29·660	29·713	8th	29·556	25th	·157	86·1	93·7	+1·2	82·0	+0·2	87·9	+1·0	11·7	97·8	26th	78·8	27th	19·0
	Perim	?	29·550	?	?	29·619	1st	29·450	12th	·169	89·1	96·8	?	84·9*	?	90·9*	?	11·9	101·5	1st	80·7	19th	20·8
Afghanistan	Kabul	?				Not recorded.					76·1	90·0	?	59·7	?	74·9	?	30·3	99·1	30th	50·4	12th	48·7
Central Asia	Kashgar	?	25·491	?	?	25·620	13th	25·310	9th	·310	76·0	86·5	?	65·2	?	75·8	?	21·3	96·1	7th	57·1	1st	39·0
Arabian Sea Islands.	Amini Devi	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Minicoy	10	29·927	?	29·862	29·971	3rd	29·873	11th	·098	79·8	84·6	?	77·2	?	80·6	?	7·4	88·5	19th	74·6	20th	13·9
Africa	Zanzibar	73	30·113	?	30·114	30·168	24th	30·053	16th	·115	74·0	89·3	?	72·6	?	76·5	?	7·7	81·9	28th	70·7	13th	11·2

* Mean of 29 days.

I—*concluded.*

in India, Burma, etc., in July 1895—concluded.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.								Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st July 1895.	Normal rainfall for period, from 1st June to 31st July.	Variation from normal of period.			
1	...	3	...	1	...	23	2	1	13·6	10·5	+30	95	·661	8·3	14	16·73	−2·73	17·93	24·42	− 6·49	24·25	30·55	− 6·30	5·03	Mount Abu	CENTRAL INDIA.
...	...	...	...	...	1	8	20	2	13·5	9·5	+42	87	·664	7·3	18	23·09	−5·09	18·12	26·69	− 8·57	37·00	36·49	+ 0·51	5·19	Pachmarhi.	
1	1	...	...	1	3	13	6	6	5·5	5·8	− 5	68	·404	8·9	6	6·75	−0·75	2·80	3·75	− 0·95	6·94	7·48	− 0·54	0·78	Wellington.	SOUTH INDIA.
																									13. Extra India.	
...	...	...	...	...	...	31	...	...	11·3	P	P	76	·886	4·4	5	P	P	2·70	1·98	+0·72	2·73	3·73	− 1·00	1·40	Trincomalee	CEYLON.
...	...	...	...	...	...	15	14	2	9·4	9·0	+ 4	75	·829	5·4	3	P	P	0·55	5·55	−5·00	14·62	12·79	+ 1·83	0·23	Colombo.	
2	...	...	...	...	...	...	...	29	8·8	P	P	93	·956	4·7	13	P	P	3·89	5·46	−1·57	8·46	13·48	− 5·02	0·55	Galle.	
							Not	recor	ded.					0·6	0	?	P	0	P	P	0	?	P	0	Meshed.	PERSIA.
26	...	...	...	...	1	4	...	...	3	P	P	41	·428	0·9	...	...	...	...	...	...	...	...	...	...	Teharan.	
3	4	2	1	2	...	5	5	9	4·0	P	P	68	·719	1·2	0	P	P	0	P	P	0	P	P	0	Ispahan.	
...	...	6	2	3	3	2	...	15	9·0	9·2	− 2	62	·884	0	0	P	P	0	0	0	0	0	0	0	Bushire.	
...	...	...	13	15	2	...	1	...	16·0	P	P	73	1·004	2·9	0	P	P	0	P	P	0	P	P	0	Jask.	
...	1	8	17	1	...	...	...	4	4·1	P	P	81	1·026	2·8	0	P	P	0	P	P	0	P	P	0	Muscat .	ARABIA.
											Obser	vation	s imp	erfect.											Baghdad.	
3	...	...	4	1	6	15	2	...	12·5*	9·4	+33	69	·861	4·0	0	P	P	0·03	0	+0·03	0·07	0·01	+ 0·06	0·03	Aden.	
1	2	1	1	...	P	11	6	9	14·0	P	P	62	·850	4·3	0	P	P	0	P	P	0	P	P	0	Perim.	
...	6	...	16	1	2	1	5	...	P	P	P	P	P	0	1	P	P	0·50	P	P	1·50	P	P	0·50	Kabul .	AFGHANISTAN.
29	1	1	...	...	...	...	...	...	4·0	P	P	46	·397	4·6	3	P	P	1·18	P	P	1·61	P	P	0·40	Kashgar .	CENTRAL ASIA.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Amini Devi	ARABIAN SEA ISLANDS.
...	...	...	...	...	...	5	23	3	2·0	P	P	84	·851	P	21	P	P	8·69	P	P	17·22	P	P	1·30	Minicoy .	
...	...	...	...	1	18	11	1	...	7	P	P	87	·728	5·6	4	P	P	1·72	P	P	1·94	P	P	0·55	Zanzibar .	AFRICA.

* Mean of 30 days.

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.						Temperature of Air.										Temperature, Wet-bulb.			
			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.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·777	29·707	·070	29·749	+·003	29·741	85·8	78·0	7·8	87·9	74·6	13·3	83·4	83·9	80·9	+0·7	75·3	78·6	79·0	77·6
	Rangoon	...	·776	·696	·080	·742	+·005	·720	85·5	76·6	8·9	89·6	74·1	15·5	81·0	80·2	79·0	+0·9	74·8	78·4	78·0	77·1
	Diamond Island	...	·758	·688	·070	·730	—·008	·706	84·6	78·5	6·1	86·9	74·7	12·2	82·5	82·4	80·6	+2·3	75·6	78·1	77·9	77·2
	Cocos Island	111	·682	·621	·061	·659	P	·700	86·7	78·2	8·5	91·2	74·1	17·1	83·7	83·9	81·2	P	75·1	79·1	78·9	77·7
	Akyab	...	·723	·640	·083	·685	+·013	·647	86·2	78·2	8·0	90·2	73·9	16·3	83·3	84·0	81·2	+1·2	76·3	81·1	81·5	79·6
Assam.	Silchar	...	·591	·488	·103	·549	+·023	·604	88·8	76·7	12·1	95·6	73·5	22·1	83·1	83·7	81·2	−1·0	75·8	79·1	79·1	78·0
	Sibsagar	...	·343	·237	·106	·292	+·006	·578	87·8	76·9	10·9	94·0	74·8	19·2	81·8	86·4	81·4	−1·8	76·0	79·2	81·4	78·9
	Dhubri	...	·533	·434	·099	·492	+·009	·560	84·3	77·1	7·2	92·1	73·6	18·5	80·4	82·5	79·7	−1·9	76·1	78·2	79·3	77·9
Bengal and Orissa.	Chittagong	...	·600	·515	·085	·565	+·006	·599	86·6	77·4	9·2	89·4	75·0	14·4	83·5	83·5	80·8	+0·8	76·1	79·2	79·6	78·3
	Narayanganj	...	·620	·531	·089	·585	+·020	·553	88·4	79·7	8·7	92·7	77·1	15·6	84·5	85·5	83·6	+0·4	77·2	80·6	81·0	79·6
	Calcutta (Alipore)	...	·600	·510	·090	·561	+·023	·528	88·7	79·0	9·7	92·0	75·7	16·3	85·0	86·1	83·8	+0·8	77·5	80·1	80·1	79·3
	Ditto (Chowringhee).	...	·601	P	P	P	P	P	91·0	79·1	11·9	95·8	76·0	19·8	86·5	P	P	P	78·0	81·9	P	P
	Saugor Island	...	·600	·515	·085	·564	+·027	·532	88·9	81·5	7·4	92·0	78·0	14·0	85·9	86·9	84·2	+1·4	78·3	81·8	81·9	80·7
	Burdwan	...	·516	·417	·099	·474	+·019	·519	90·9	79·2	11·7	95·2	75·5	19·7	85·5	88·0	83·8	−0·1	77·3	79·8	80·5	79·2
	Berhampore	...	·546	·455	·091	·508	+·020	·522	89·3	78·8	10·5	93·1	74·1	19·0	85·2	86·6	82·9	−0·5	76·8	81·1	81·1	79·7
	False Point	...	·619	·531	·088	·580	+·013	·542	88·5	79·3	9·2	95·1	72·9	22·2	85·7	85·8	82·8	+1·0	77·2	80·3	80·5	79·3
	Cuttack	...	·549	·454	·095	·511	+·016	·532	90·0	79·2	10·8	96·4	75·4	21·0	85·2	87·6	83·5	+1·0	77·4	79·3	80·3	79·0
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	27·619	27·537	·082	27·586	+·017	·513	85·1	74·0	11·1	90·8	70·2	20·6	79·8	81·0	78·2	0	72·0	75·3	75·4	74·2
	Patna	...	29·404	29·301	·103	29·359	+·004	·491	90·7	79·2	11·5	96·5	74·8	21·7	86·1	87·7	83·5	−0·7	77·3	80·5	80·6	79·5
	Darbhanga	...	·434	·332	·102	·389	+·009	·507	89·0	79·5	9·5	96·5	74·8	21·7	84·5	86·6	83·0	−0·9	77·8	80·3	81·3	79·8
	Allahabad	...	·277	·173	·104	·227	+·018	·487	92·8	79·6	13·2	99·5	75·4	24·1	86·6	90·3	85·3	+0·8	76·9	80·3	81·5	79·6
	Lucknow	...	·209	·109	·100	·162	+·006	·481	93·0	76·6	16·4	99·3	72·3	27·0	87·0	90·4	83·9	−1·7	74·8	80·4	81·4	78·9
Upper Sub-Himalayas.	Dehra Dun	...	27·402	27·316	·086	27·352	+·002	·504	85·7	72·6	13·1	91·2	67·5	23·7	79·4	82·6	78·1	−1·6	70·2	74·7	76·2	73·7
	Roorkee	...	28·681	28·585	·099	28·632	+·010	·467	92·4	77·1	15·3	99·3	70·1	29·2	84·7	90·7	84·0	−0·6	74·6	78·3	79·9	77·6
	Meerut	...	·820	·725	·095	·770	+·003	·456	93·6	78·7	14·9	101·1	71·8	29·3	87·2	91·9	85·8	+0·4	76·2	78·5	79·7	78·1
	Lahore	...	·830	·736	·094	·782	+·009	·426	102·4	83·0	19·4	109·2	75·3	33·9	93·3	101·2	92·0	+4·0	75·3	79·2	79·7	78·1
	Ludhiana	...	·744	·649	·095	·695	+·011	·451	97·3	79·8	17·5	107·0	71·7	35·3	89·5	96·2	87·9	+0·6	75·6	78·7	79·5	77·9
Indus Valley and N.-W. Rajputana.	Peshawar	...	·150	·343	·107	·396	+·037	·447	102·6	78·3	24·3	110·8	68·9	41·9	93·5	99·5	89·3	−0·3	70·5	76·7	76·6	74·6
	Mooltan	...	29·092	29·007	·085	29·049	+·027	·419	105·5	84·6	20·9	112·2	76·6	35·6	94·3	104·2	94·3	+2·4	75·6	81·2	83·4	80·1
	Jacobabad	...	·320	·196	·124	·257	+·024	·391	109·7	85·1	24·6	118·0	80·9	37·1	98·7	107·7	96·5	+2·0	77·5	P	P	P
	Kurrachee	...	·541	·479	·062	·515	+·032	·515	93·5	82·0	11·5	105·0	78·7	26·3	89·9	90·1	86·4	+2·5	78·0	82·1	82·0	80·7
E. Rajputana, C. India and Gujarat.	Jeypore	...	28·192	28·097	·095	28·145	+·027	·499	96·4	78·5	17·9	102·3	74·0	28·3	88·3	93·0	86·0	+2·4	74·8	78·0	78·9	77·2
	Ajmere	...	·028	27·933	·095	27·976	+·027	·511	93·9	78·5	15·4	100·9	74·6	26·3	86·2	91·2	84·5	+2·6	74·0	77·7	78·4	76·7
	Deesa	...	29·180	29·074	·106	29·129	+·038	·541	93·3	77·8	15·5	101·4	73·3	28·1	85·6	91·0	84·9	+1·1	75·2	77·2	77·6	76·6
	Nowgong	...	28·849	28·756	·093	28·804	+·028	·503	91·9	77·9	14·0	97·6	73·0	24·6	85·6	88·5	83·6	+1·0	75·8	79·0	79·7	78·2
	Agra	...	29·018	·918	·100	·966	+·008	·467	96·6	80·5	16·1	104·5	75·3	29·2	90·4	92·5	88·1	+1·2	75·5	79·9	79·4	78·3
Deccan.	Belgaum	...	27·299	27·235	·064	27·267	+·016	·719	75·4	66·8	8·6	82·1	65·1	17·0	72·4	71·9	70·0	−0·1	65·9	69·7	69·1	68·2
	Sholapur	...	28·181	28·063	·118	28·131	+·010	·642	90·6	71·3	19·3	99·6	68·9	30·7	82·1	87·6	79·2	+1·3	68·9	72·1	72·8	71·2
	Poona	...	27·927	27·858	·069	27·894	+·020	·666	83·7	70·5	13·2	90·0	68·9	21·1	78·4	79·5	75·8	+0·8	68·5	72·0	72·1	70·9
	Akola	...	28·766	28·652	·114	28·709	+·018	·581	90·1	74·7	15·4	97·7	71·9	25·8	83·6	86·7	81·5	+1·3	72·9	76·2	76·3	75·1
	Buldana	2,132	27·603	27·510	·093	27·556	+·027	·604	85·2	70·8	14·4	92·9	69·3	23·6	79·1	81·8	77·1	+0·9	68·8	72·2	72·7	71·3

II.

at 86 Stations in India, Burma, etc., for July 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·844	·916	·928	·896	0	88	80	80	83	− 2	8·3	8·4	8·4	+1·2	0	0	0	0	1	8	28	24	1	S 58° W	S 44° W	84	89	349	254	...	...	Port Blair	Burma Coast and Bay Islands.
·842	·940	·934	·905	+·020	92	89	90	90	0	8·6	9·3	9·0	+0·1	0	1	1	0	6	20	23	9	2	S 30° W	S 31° W	69	73	98	131	...	...	Rangoon	
·849	·907	·899	·885	+·008	87	82	81	83	− 5	9·0	9·0	9·0	+1·2	0	0	0	1	5	5	43	6	2	S 42° W	S 41° W	81	80	347*	210	...	...	Diamond Island	
·833	·932	·923	·896	?	86	81	79	82	?	7·0	8·3	7·7	?	0	0	0	0	7	29	25	0	0	S 14° W	?	90	?	?	?	7·47	1·81	Cocos Island.	
·885	1·034	1·049	·989	+·076	92	91	90	91	+ 2	8·6	8·5	8·6	0	0	0	0	3	6	46	4	3	0	S 2° E	S 4° E	85	68	121	96	..	...	Akyab	
·880	·943	·934	·919	−·013	95	83	81	86	+ 1	9·0	9·0	9·0	+1·1	45	1	0	1	2	1	2	6	4	W	N 6° W	13	3	31*	72	...	...	Silchar	Assam.
·888	·968	1·010	·955	+·006	96	89	81	89	+ 5	9·4	7·8	8·6	+0·1	5	0	14	5	6	5	25	2	0	S 2° W	S 18° W	27	15	93*	65	...	...	Sibsagar	
·889	·941	·969	·930	−·015	95	91	86	91	+ 5	9·1	7·8	8·5	+1·6	14	4	10	13	1	2	13	3	2	N 85° E	S 70° E	11	22	135	94	...	...	Dhubri	
·884	·944	·959	·929	+·017	94	82	84	87	0	8·7	9·2	9·0	+1·4	0	0	0	2	18	25	15	2	0	S 3° E	S 40° E	77	63	189*	172	...	...	Chittagong	Bengal and Orissa.
·901	·994	·995	·963	−·017	89	84	82	85	− 2	9·0	8·7	8·9	+1·0	0	0	2	4	18	24	13	1	0	S 10° E	S 19° E	72	80	213	173	...	...	Narayanganj	
·927	·963	·950	·947	−·026	93	80	76	83	− 4	7·4	8·4	7·9	−0·3	0	0	2	4	8	21	25	2	0	S 11° W	S11° E	71	65	107	123	...	...	Calcutta (Alipore).	
·947	1·030	?	?	?	95	82	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	4·15	0·78	Ditto (Chowringhee).	
·928	1·035	1·022	·995	−·007	96	83	80	83	− 3	9·2	8·6	8·9	+0·9	0	1	1	4	11	23	17	5	0	S 6° W	S 24° W	66	59	392	341	...	...	Saugor Island.	
·912	·943	·941	·932	−·023	91	77	71	80	− 3	8·7	8·9	8·8	+0·5	1	1	1	7	7	20	17	4	4	S 11° W	S 26° E	53	47	103*	100	...	...	Burdwan	
·895	1·011	·987	·954	+·002	91	83	79	84	− 3	8·0	8·8	8·4	−0·4	5	0	0	13	9	14	17	3	1	S 7° E	S 41° E	52	51	108	121	...	...	Berhampore	
·909	·962	·976	·949	+·012	91	78	79	83	− 2	7·7	8·0	7·9	−0·2	0	0	1	3	12	12	18	14	2	S 27° W	S 59° W	56	64	270*	268	...	...	False Point	
·920	·920	·935	·925	+·025	92	76	72	80	0	6·8	7·1	7·0	−0·7	4	1	2	4	5	8	21	16	1	S 44° W	S 44° W	52	52	82	79	...	...	Cuttack	
·762	·822	·813	·799	−·019	90	81	77	83	− 2	9·4	9·9	9·6	+0·5	2	3	2	10	3	16	4	7	15	S 19° W	S 16° E	34	19	224	203	...	...	Hazaribagh	Gangetic Plain and Chota Nagpur.
·915	·969	·950	·945	−·015	92	78	73	81	− 1	8·2	8·7	8·5	+0·4	1	1	11	14	12	4	4	7	8	S 86° E	N 85° E	24	41	126*	91	...	...	Patna	
·932	·985	1·000	·972	+·003	92	84	79	85	+ 2	7·6	6·7	7·2	+0·9	4	1	6	22	20	2	2	4	1	S 71° E	S 82° E	58	58	113	123	...	...	Darbhanga	
·889	·950	·957	·932	−·023	88	75	69	77	− 5	7·7	7·8	7·8	0	0	2	6	8	2	2	9	15	18	N 66° W	N 84° E	35	7	130	102	...	...	Allahabad	
·841	·951	·953	·915	−·007	91	75	68	78	+ 1	7·3	7·6	7·5	−0·2	0	3	10	8	8	5	8	12	8	S 79° W	N 85° E	5	18	?	94	...	...	Lucknow	
·713	·805	·826	·781	?	89	80	74	81	?	6·8	6·7	6·8	−1·0	28	2	1	1	10	4	8	6	2	S 20° W	S 37° W	21	10	16	29	...	...	Dehra Dun	
·828	·889	·881	·866	−·008	89	75	62	75	− 2	5·2	4·0	4·6	−1·9	30	1	4	8	5	1	6	1	6	S 81° E	S 39° E	8	33	63	71	...	...	Roorkee	
·874	·861	·853	·863	−·026	89	68	58	72	− 2	4·9	4·8	4·9	−2·1	26	3	3	2	11	0	0	12	5	N 77° W	S 86° E	6	23	43	57	...	...	Meerut	Upper Sub-Himalayas.
·776	·809	·728	·771	−·094	69	53	37	53	− 8	2·6	2·2	2·4	−2·0	?	?	?	?	?	?	?	?	?	?	S 84° E	?	34	93	80	...	...	Lahore	
·835	·839	·787	·820	−·052	82	61	47	63	− 7	4·8	4·4	4·6	−1·5	15	3	7	0	18	3	4	5	7	S 41° E	S 46° E	13	25	63	49	...	...	Ludhiana	
·653	·712	·632	·666	−·061	67	46	34	49	− 4	1·6	4·1	2·9	+0·2	4	8	16	12	4	2	8	3	5	N 48° E	N 50° E	31	50	97*	111	...	...	Peshawar	
·770	·890	·866	·842	−·035	65	55	40	53	− 6	1·2	1·4	1·3	−0·9	1	0	9	0	15	0	31	0	3	S 19° W	S 25° W	45	33	67*	75	...	...	Mooltan	Indus Valley and N.-W. Rajputana.
·842	?	?	?	?	70	?	?	?	?	1·6	2·1	1·9	−0·4	8	0	1	3	35	13	2	0	0	S 35° E	S 45° E	76	56	144*	125	...	...	Jacobabad	
·908	·992	·984	·961	+·043	83	71	70	75	− 3	4·7	4·0	4·4	−2·8	0	1	0	1	1	1	32	23	3	S 65° W	S 62° W	82	83	407	436	...	...	Kurrachee	
·816	·829	·812	·819	−·032	83	62	54	66	−10	5·6	7·1	6·4	−1·1	0	2	5	4	2	1	10	32	6	N 89° W	N 58° W	55	27	123	141	...	...	Jeypore	
·784	·848	·811	·814	+·026	81	68	59	69	− 2	4·3	5·4	4·9	−1·3	3	2	2	1	2	0	12	34	6	S 87° W	S 62° W	69	64	231	173	...	...	Ajmere	E. Rajputana, C. India and Gujarat.
·841	·821	·767	·809	−·019	88	67	55	70	− 4	7·0	5·0	6·0	−2·1	0	0	0	3	3	8	32	14	2	S 46° W	S 40° W	73	75	349	317	...	...	Deesa	
·867	·902	·895	·888	+·014	91	74	68	78	− 1	7·0	7·7	7·4	−1·2	3	2	2	8	0	1	3	40	3	N 86° W	S 78° W	56	40	85*	99	...	...	Nowgong	
·819	·880	·828	·842	−·073	79	63	56	66	− 9	5·7	6·6	6·2	−0·4	0	0	6	0	7	1	23	0	25	S 89° W	N 63° E	40	13	163*	119	...	...	Agra	
·827	·693	·678	·666	−·003	95	87	87	90	+ 1	9·5	9·0	9·3	+0·3	0	0	0	0	0	0	20	30	4	S 76° W	S 70° W	89	90	577	669	...	...	Belgaum	
·677	·663	·621	·654	−·005	89	61	49	66	− 2	8·5	8·8	8·7	+0·4	0	0	0	0	0	1	28	24	9	S 74° W	S 80° W	84	81	382*	300	...	...	Sholapur	Deccan.
·673	·707	·696	·692	−·005	90	73	70	78	− 2	8·4	8·8	8·6	−0·4	1	0	0	0	0	0	20	41	0	S 76° W	S 79° W	92	85	289	400	...	...	Poona	
·787	·807	·768	·787	+·021	92	71	63	76	0	7·7	8·0	7·9	−0·7	6	0	1	3	35	13	2	0	0	S 35° E	N 74° W	76	77	202	200	...	...	Akola	
·679	·708	·693	·693	−·022	90	72	66	76	− 4	9·0	9·0	9·0	+0·9	3	3	0	0	0	0	7	19	30	N 67° W	N 82° W	79	73	165	221	9·95	2·25	Buldana	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 86 Stations

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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*continued.*	Khandwa	...	28·648	28·543	·105	28·596	+·036	29·583	89·6	76·0	13·6	96·7	72·6	24·1	82·3	87·1	81·8	+2·1	72·7	75·5	75·9	74·1
	Hoshangabad	...	·653	·550	·103	·602	+·024	·569	88·1	75·6	12·5	95·8	71·7	24·1	82·2	85·3	80·8	+1·3	73·9	77·8	78·6	76·8
	Nagpur	...	·644	·537	·107	·591	+·030	·559	89·5	75·5	14·0	97·5	72·3	25·2	82·9	85·2	81·4	+1·4	72·3	77·4	77·6	75·8
	Do. (Sanitary Commr.'s Office)	...	·665	·560	·105	·613	?	·570	90·1	75·6	14·5	96·7	72·0	24·7	83·6	86·0	81·8	?	72·8	76·9	77·1	75·6
	Jubbulpore	...	·303	·207	·096	·255	+·022	·521	87·8	75·1	12·7	94·5	71·6	22·9	81·4	83·6	80·0	+0·9	72·9	76·5	77·0	75·5
	Saugor	...	27·889	27·799	·090	27·844	+·043	·530	87·7	75·6	12·1	96·0	73·6	22·4	81·7	84·5	80·4	+2·8	72·3	76·6	77·2	75·4
	Raipur	...	28·681	28·591	·090	28·636	+·037	·535	87·5	75·7	11·8	95·6	72·0	23·6	82·5	84·9	80·9	+1·3	73·3	77·2	77·6	76·0
	Sutna	...	·565	·467	·098	·517	+·031	·501	89·4	78·1	11·3	95·5	74·1	21·4	84·5	86·7	82·8	+1·4	75·0	78·1	78·4	77·2
	Hyderabad (Deccan).	...	·071	27·961	·110	·021	?	·637	87·0	73·0	14·0	96·5	69·2	27·3	79·4	84·8	79·5	?	70·2	72·9	75·0	72·7
West Coast.	Bombay	...	29·734	29·667	·067	29·699	+·031	·676	84·7	77·7	7·0	89·0	74·6	14·4	81·6	82·4	81·1	+0·2	74·6	77·9	78·1	76·9
	Ratnagiri	...	·701	·638	·063	·667	+·023	·715	83·3	75·8	7·4	87·3	73·1	14·2	80·4	80·0	79·2	−0·4	73·5	77·3	76·9	75·9
	Karwar	...	·827	·760	·067	·791	+·027	·767	81·5	75·6	5·9	85·9	72·7	13·2	79·2	79·2	78·5	0	72·5	75·7	75·5	74·6
	Cochin	...	·920	·864	·056	·890	+·019	·828	82·7	73·3	9·4	85·3	71·0	14·3	79·0	79·4	77·7	−0·8	72·0	75·4	75·5	74·3
South India.	Salem	...	28·928	28·822	·106	28·887	+·005	·759	89·8	72·6	17·2	97·8	70·0	27·8	82·0	85·1	79·2	−1·4	70·6	74·3	74·6	73·2
	Mysore	...	27·386	27·309	·077	27·348	?	·780	81·1	66·8	14·3	86·3	64·9	21·4	75·4	76·8	72·9	?	65·5	68·6	68·9	67·7
	Mercara	...	26·199	26·138	·061	26·181	+·017	?	67·2	61·9	5·3	71·2	59·3	11·9	64·6	64·1	63·8	−1·1	61·1	63·8	63·4	62·8
	Bangalore	...	·876	·788	·088	·843	+·001	·747	80·2	65·6	14·6	88·3	63·0	25·3	73·6	77·0	72·1	−0·6	64·3	67·7	68·6	66·9
	Hassan	...	·826	·765	·061	·807	?	·797	75·3	64·9	10·4	79·8	63·0	16·8	72·5	71·6	69·2	?	61·4	67·4	66·8	65·2
	Chitaldroog	...	27·444	27·364	·080	27·413	?	·739	80·1	67·6	12·5	87·7	65·9	21·8	74·8	76·3	72·9	?	64·8	69·2	69·6	67·9
	Trichinopoly	...	29·583	29·467	·116	29·537	+·007	·720	96·3	78·0	18·3	103·1	74·6	28·5	88·4	92·4	85·4	0	70·2	73·7	75·0	73·0
	Madras	...	·786	·678	·108	·743	+·021	·693	93·3	77·5	15·8	102·9	73·6	29·3	86·3	89·1	83·8	−1·5	?	76·1	77·5	76·1
	Bellary	...	28·343	28·237	·106	28·299	+·023	·701	89·2	74·1	15·1	97·2	70·9	26·3	82·0	85·9	79·8	−0·8	67·9	70·7	71·4	70·0
	Vizagapatam	...	29·647	29·555	·092	29·607	+·014	·576	86·9	82·1	4·8	91·7	77·0	14·7	84·6	86·0	84·4	−0·7	77·2	78·4	79·0	78·2
	Cocanada	...	·679	·584	·095	·632	?	·593	88·8	77·9	10·9	101·6	73·0	28·6	83·4	86·4	82·7	?	74·9	77·1	78·2	76·7
Hill Station, Baluchistan.	Quetta	...	24·452	24·376	·076	24·412	+·029	?	91·8	61·7	30·1	96·8	56·0	40·8	83·6	89·2	76·1	−2·1	53·6	64·5	63·3	60·5
Hill Stations, Northern India.	Leh	11,503	19·615	19·528	·087	19·580	−·016	?	78·0	50·2	27·8	87·2	43·4	43·8	65·1	74·2	62·0	+0·6	39·5	51·0	54·0	48·2
	Srinagar	...	24·704	24·624	·080	24·662	?	?	83·3	61·7	21·6	92·4	54·5	37·9	72·4	81·5	72·0	?	60·1	67·1	73·4	66·9
	Murree	...	23·720	23·692	·028	23·704	+·011	?	76·6	62·6	14·0	84·0	54·9	29·1	70·9	74·0	69·2	+0·2	56·5	63·9	65·2	61·9
	Chamba	3,005	26·653	26·589	·064	26·626	+·021	?	86·7	70·0	16·7	92·0	65·8	26·2	79·8	83·1	77·0	−1·1	66·9	71·6	73·1	70·5
	Kailang	10,087	20·701	20·639	·062	20·675	+·024	?	70·7	48·5	22·2	80·2	42·1	38·1	63·0	67·7	58·5	−3·0	46·1	54·4	54·4	51·6
	Simla (Ridge)	...	23·006	22·963	·043	22·982	+·016	?	68·9	59·6	9·3	73·4	55·2	18·2	64·5	66·5	63·8	−0·6	56·8	60·8	62·2	60·0
	Chakrata	...	·208	23·157	·051	23·181	+·022	?	70·0	59·6	10·4	73·7	55·1	18·6	65·6	66·9	64·2	−0·3	57·9	62·7	64·3	61·6
	Ranikhet	...	·963	·902	·061	·925	+·007	?	75·1	62·8	12·3	78·4	60·7	17·7	70·2	71·9	68·4	+0·3	61·3	65·0	66·1	64·1
	Katmandu	4,388	25·381	25·231	·050	25·358	−·034	?	51·6	68·0	13·6	86·3	66·2	20·1	76·2	77·0	73·7	−2·3	66·7	70·5	71·5	69·6
	Darjeeling	...	22·874	22·814	·060	22·846	−·015	?	65·0	57·6	7·4	68·3	54·9	13·4	61·9	63·0	60·8	−0·2	57·5	61·0	62·2	60·2
Hill Stations, Central India.	Mount Abu	...	25·860	25·795	·065	25·829	+·016	?	75·1	65·9	9·2	81·4	63·7	17·7	70·7	73·8	70·2	+0·6	65·0	68·3	69·9	67·7
	Pachmarhi	...	26·271	26·192	·079	26·232	+·040	?	77·5	68·7	8·8	83·7	65·7	18·0	73·2	74·8	73·0	+1·5	66·2	69·2	69·9	68·4
	Chikalda	3,642	·181	·109	·072	·145	+·043	?	75·4	66·2	9·2	82·6	63·6	19·0	70·2	74·1	70·9	+1·1	65·5	68·2	69·7	67·3

II—*continued.*

in India, Burma, etc., for July 1895—continued.

Vapour tension.					Humidity.					Cloud.				Wind direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
·762	·799	·758	·773	—·008	85	73	61	73	−4	7·8	8·4	8·1	+0·2	0	0	2	0	1	2	6	36	15	N 84° W	N 83° W	% 79	% 80	228	210	...	...	Khandwa	Deccan—*continued.*
·817	·900	·895	·871	+·039	92	82	75	83	0	7·9	8·4	8·2	0	9	0	0	1	0	2	20	30	0	S 70° W	S 76° W	74	77	106	110	...	...	Hoshangabad	
·753	·874	·853	·827	+·015	85	78	72	78	− 2	7·5	8·5	8·0	−0·7	2	1	3	2	1	4	17	27	5	S 75° W	N 88° W	63	69	210	189	...	...	Nagpur	
·775	·842	·821	·813	?	88	74	67	76	?	6·6	7·7	7·2	?	13	5	1	1	0	6	16	20	0	S 69° W	?	52	?	57*	?	...	...	Do (Sanitary Commr.'s Office)	
·782	·854	·850	·839	+·012	90	81	75	82	0	6·4	7·7	7·0	−1·7	0	3	2	2	1	5	8	27	14	N 86° W	N 87° W	63	65	87	117	...	...	Jubbulpore	
·754	·853	·846	·818	+·017	85	79	73	79	0	5·8	6·8	6·3	−0·1	0	0	0	1	0	3	34	18	6	S 63° W	S 72° W	82	70	143	123	...	...	Saugor	
·792	·865	·852	·836	+·009	89	78	72	80	− 2	7·4	7·6	7·5	−0·9	12	1	0	0	0	0	27	21	1	S 67° W	S 68° W	71	77	257*	280	...	...	Raipur	
·832	·882	·869	·861	+·027	87	75	69	77	− 2	6·5	6·5	6·5	−0·6	1	4	2	5	4	3	3	21	19	N 68° W	N 81° W	47	45	190*	232	...	...	Sutna	
·707	·731	·747	·728	?	87	73	64	75	?	7·9	8·0	7·9	?	3	1	0	0	0	0	0	50	7	N 84° W	?	89	?	236*	?	...	...	Hyderabad (Deccan)	
·824	·909	·905	·879	−·032	86	84	82	84	−3	8·5	8·7	8·6	−0·5	0	0	0	0	1	7	22	32	0	S 64° W	S 75° W	84	84	415	456	...	...	Bombay	West Coast.
·799	·898	·887	·860	+·002	89	87	87	87	+2	8·1	8·3	8·5	+0·9	0	1	0	0	0	3	37	12	9	S 64° W	S 55° W	80	77	277*	313	...	...	Ratnagiri	
·758	·845	·834	·812	−·018	85	85	84	85	−2	7·8	8·1	7·9	+0·2	1	9	1	0	0	0	25	19	7	S 86° W	S 74° W	66	80	139	?	...	...	Karwar	
·769	·832	·832	·811	−·025	94	84	83	87	−1	8·9	8·9	8·9	+1·6	16	2	3	0	0	0	2	27	12	N 72° W	S 88° W	60	51	114	?	...	...	Cochin	
·724	·747	·717	·729	−·025	90	68	61	73	+2	7·8	9·2	8·5	+2·4	24	1	1	0	5	12	15	3	1	S 23° W	S 59° W	42	82	50	106	...	...	Salem	
·614	·617	·608	·613	?	93	70	67	77	?	9·5	9·2	9·4	?	0	0	0	0	0	0	22	34	6	S 78° W	?	89	?	341*	?	...	...	Mysore	South India.
·530	·586	·577	·564	−·015	95	95	93	95	− 1	10·0	10·0	10·0	+0·2	0	1	0	0	0	0	8	37	16	N 83° W	N 79° W	87	91	269	247	...	...	Mercara	
·588	·610	·606	·601	—·006	93	74	67	78	+ 1	8·8	9·2	9·0	+2·6	0	0	0	0	0	0	23	34	5	S 77° W	S 71° W	89	91	276*	206	...	...	Bangalore	
·506	·612	·603	·574	?	82	77	78	79	?	9·5	9·6	9·6	?	0	0	0	0	0	0	7	45	10	N 88° W	?	92	?	126*	?	...	...	Hassan	
·581	·645	·613	·623	?	85	75	72	77	?	9·4	9·4	9·4	?	0	0	0	0	0	0	22	31	9	S 80° W	?	87	?	282*	?	...	...	Chitaldroug	
·636	·637	·632	·635	−·063	66	48	42	52	− 6	6·8	7·8	7·3	−0·3	1	0	0	0	1	0	19	38	3	S 77° W	N 87° W	87	81	278	239	...	...	Trichinopoly	
?	·763	·790	·800	+·016	?	61	58	69	+2	8·2	8·0	8·1	+1·0	1	1	2	2	3	4	20	21	8	S 71° W	S 46° W	60	65	152	195	...	...	Madras	
·606	·610	·587	·601	—·061	72	56	48	59	− 4	9·2	9·6	9·4	+1·2	1	0	0	0	0	0	9	47	5	S 88° W	S 88° W	90	89	260	281	...	...	Bellary	
·874	·893	·898	·888	+·036	79	75	72	75	+ 4	6·5	6·9	6·7	−0·2	0	1	0	0	3	10	13	30	5	S 68° W	S 74° W	71	74	78	94	...	...	Vizagapatam	
·827	·847	·855	·843	?	87	75	69	77	?	6·5	6·7	6·6	?	0	2	2	2	3	3	18	26	6	S 75° W	?	63	?	203*	?	...	...	Cocanada	
·331	·408	·314	·351	−·110	60	35	23	39	− 9	0·3	0·8	0·6	−0·9	31	2	0	0	2	3	6	11	7	S 85° W	W	31	34	60*	107	...	...	Quetta	Hill Station, Baluchistan.
·161	·255	·247	·221	−·028	43	42	30	38	− 6	5·0	5·3	5·1	0	0	1	4	5	1	8	20	21	2	S 58° W	S 80° W	53	36	59	48	...	...	Leh	Hill Stations, Northern India.
·508	·609	·743	·620	?	92	77	69	79	?	2·9	4·4	3·7	?	15	8	7	0	14	5	3	1	9	N 67° E	?	10	?	103*	?	...	...	Srinagar	
·400	·527	·537	·488	−·037	70	70	64	68	− 7	5·3	5·2	5·3	−1·1	9	2	5	1	20	8	6	4	7	S 19° E	S 15° E	27	14	177*	137	...	...	Murree	
·627	·684	·707	·673	−·065	85	67	64	72	− 6	5·6	6·6	6·1	−0·8	25	6	1	0	1	0	1	5	23	N 44° W	N 39° W	48	35	117*	97	3·81	1·15	Chamba	
·293	·353	·311	·319	−·046	85	61	47	64	− 1	6·6	6·5	6·6	+0·2	0	2	0	0	0	12	12	24	12	S 76° W	S 83° W	68	63	54	44	0·42	0·17	Kailang	
·436	·498	·519	·484	−·061	85	82	80	82	− 7	8·4	8·1	8·3	−0·6	5	27	11	1	0	6	4	2	6	N 1° W	S 63° W	48	25	112	?	...	...	Simla (Ridge)	
·467	·541	·579	·529	+·019	91	86	88	88	− 4	3·6	3·0	3·3	−5·5	0	0	0	7	1	1	6	44	3	S 85° W	S 71° W	69	42	179	118	...	...	Chakrata	
·527	·565	·582	·558	—·023	92	77	75	81	− 5	6·8	7·6	7·2	−1·5	18	2	1	0	0	4	12	21	4	S 78° W	S 65° W	52	25	116*	51	...	...	Ranikhet	
·645	·683	·708	·679	−·018	94	76	77	82	+3	6·8	7·7	7·3	+0·9	1	1	2	26	4	1	2	23	2	S 70° E	S 75° W	8	38	19	?	17·13	1·82	Katmandu	
·473	·532	·553	·519	0	98	95	95	96	+1	9·8	9·7	9·8	+1·0	11	2	3	16	3	1	14	10	2	S 8° W	N 88° E	13	43	126	63	...	...	Darjeeling	
·611	·666	·687	·655	+·027	95	89	83	89	+ 1	8·3	7·0	7·6	−1·2	0	2	3	2	3	3	45	4	0	S 42° W	S 49° W	71	66	314	265	...	...	Mount Abu	Hill Stations, Central India.
·626	·670	·677	·658	−·014	91	82	79	84	−6	7·7	8·2	8·0	−0·8	10	1	0	0	0	0	9	41	1	S 84° W	N 80° W	77	75	287*	227	...	...	Pachmarhi	
623	·671	·678	·657	+·003	96	91	81	89	−3	8·9	8·3	8·6	−0·5	13	18	2	0	0	0	0	5	24	N 29° W	N 57° W	67	68	240	230	13·92	2·16	Chikalda	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 86 Stations

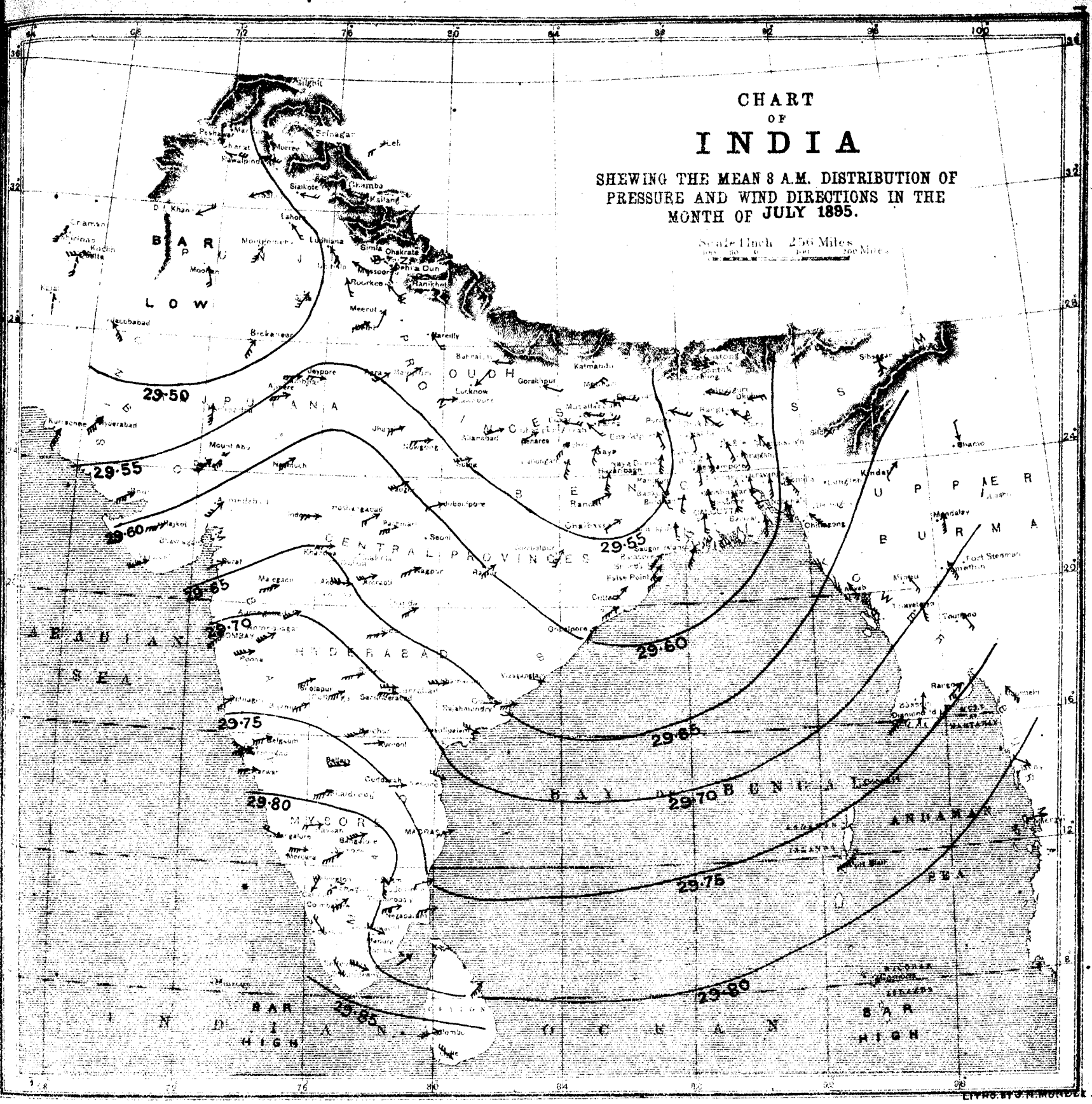
Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, South India.	Wellington	...	24·200	24·145	·055	24·172	+·004	?	70°0	57°9	12°1	73°6	55°0	18°6	66°6	65°2	62°8	−0·4	54°4	59°1	58°5	57°3
Extra India.	Muscat	...	29·544	29·475	·069	29·510	?	?	88°5	84·9	3·6	93·9	79·3	14·6	87·7	87·5	86·5	?	79·9	82·9	83·3	82·0
	Aden	...	·643	·512	·131	·575	+·017	29·598	93·0	82·0	11·0	97·7	78·8	18·9	89·5	90·9	87·0	+1·1	74·3	78·7	76·6	76·5
	Perim	...	·551	·442	·109	·494	?	?	96·7	84·9	11·8	101·2	80·7	20·5	92·4	93·0	89·8	?	67·0	79·4	80·3	75·6
	Minicoy	...	...	...	...	...	...	...	84·6	77·1	7·5	88·5	74·6	13·9	81·5	81·9	80·0	?	73·6	76·8	76·9	75·8
	Zanzibar	...	30·127	30·029	·098	30·078	?	30·078	80·4	72·6	7·8	82·2	70·7	11·5	75·4	79·7	76·3	?	69·6	71·8	71·3	70·9
	Port Victoria (Seychelles)	15	·036	29·963	·073	·000	?	29·960	79·4	74·7	4·7	80·5	69·7	10·8	78·1	78·7	76·9	?	69·4	72·3	72·6	71·4

II—*concluded.*

in India, Burma, etc., for July 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Provinces.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·387	·426	·422	·412	−·011	80	65	68	71	−2	9·2	9·9	9·5	+1·8	3	5	0	0	2	4	27	12	9	S 70° W	N 82° W	61	69	136	127	...	...	Wellington	Hill Station South India.
·959	1·064	1·087	1·033	?	80	81	83	81	?	2·1	1·1	1·6	?	0	2	26	20	3	0	1	2	8	N 54° E	?	64	?	100	?	...	...	Muscat	Extra India.
·738	·836	·723	·766	−·042	69	61	50	60	−6	3·1	2·7	2·9	+0·6	2	0	0	2	16	20	22	0	0	S 3° W	S 11° E	76	73	290	250	...	...	Aden	
·423	·831	·862	·705	?	36	55	57	49	?	2·7	1·3	3·5	?	0	4	4	2	1	1	8	9	33	N 55° W	?	64	?	349	?	...	...	Perim	
·737	·862	·858	·819	?	83	80	79	81	?	6·8	7·1	7·0	?	0	0	0	0	0	0	10	47	5	S 87° W	?	93	?	485	?	...	...	Minicoy	
·684	·731	·657	·691	?	86	83	65	78	?	4·7	2·7	3·7	?	0	0	0	0	20	30	11	0	1	S 6° E	S 2° W	84	64	160	191	...	...	Zanzibar	
·648	·717	·721	·695	?	75	75	73	74	?	5·5	4·7	5·1	?	1	0	0	3	43	13	2	0	0	S 26° E	?	89	?	279	?	1·68	0·95	Port Victoria (Seychelles).	

G. I. C. P. O.—No. 58 Meteor.—12-11-95.—377.



Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 136, Wr., I.—June 94—5,000.
Reg. No. 148, Wr., I.—Apl. 95—4,500.
Zinco., S. I. O., Calcutta.

LITHO. BY J.N. MUNDLE

Explanation

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

Reg. No. 165, Wr., I.—June 94.—8,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.
Zinco [illegible] Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

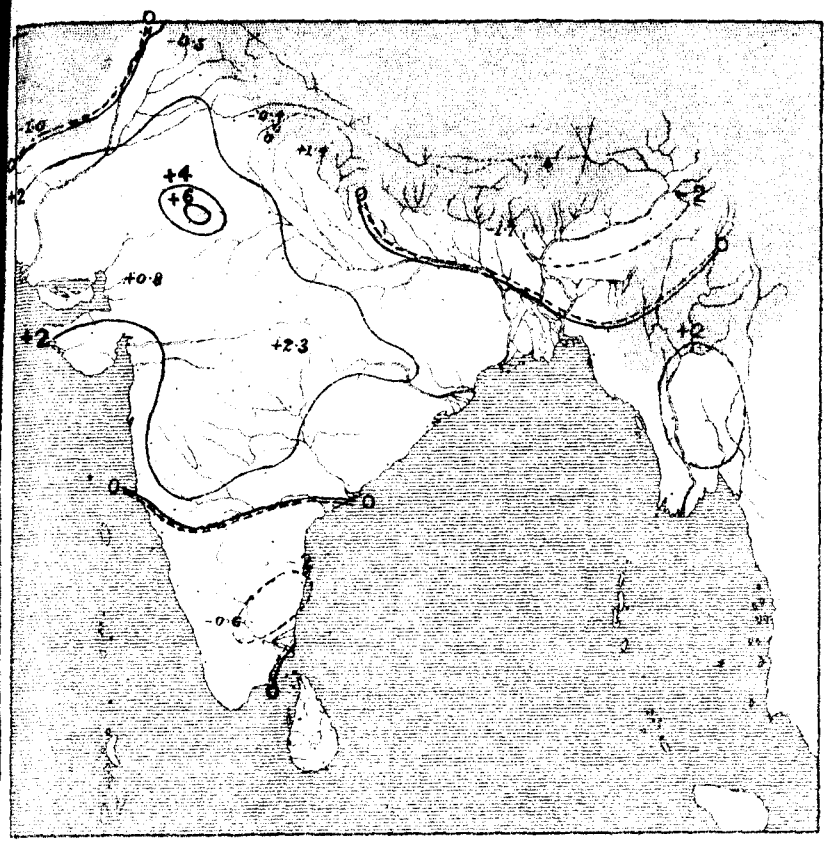
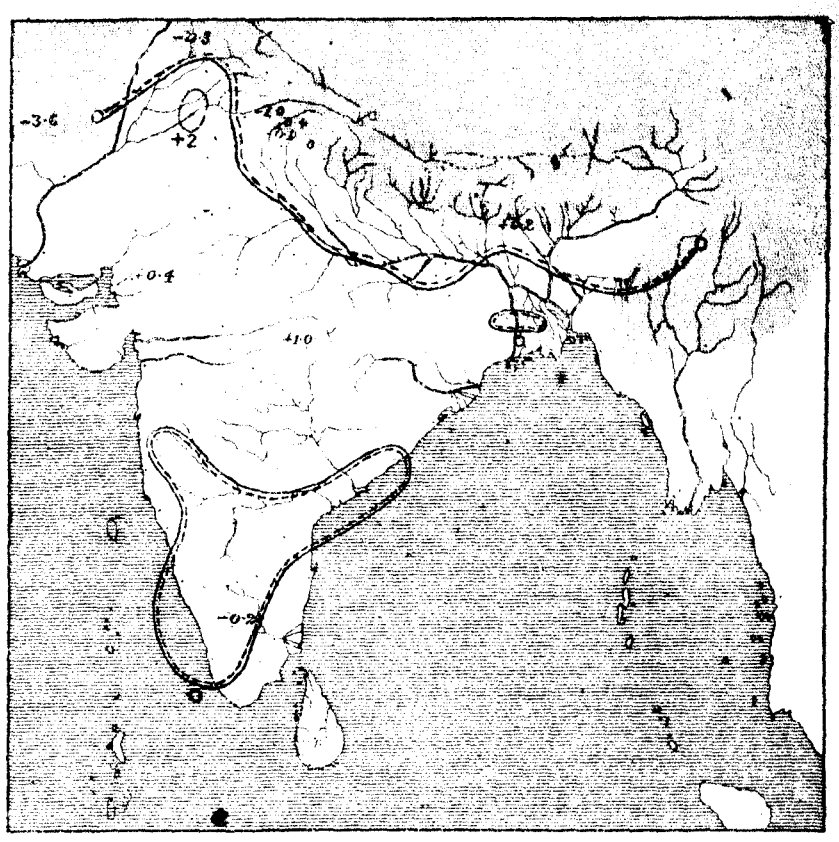


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

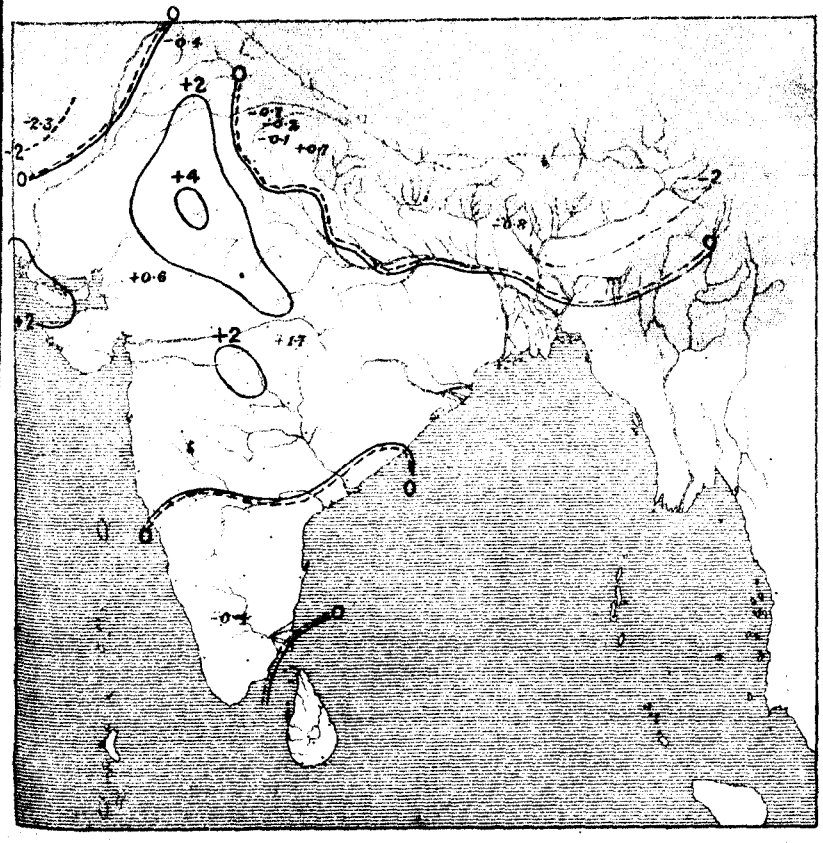
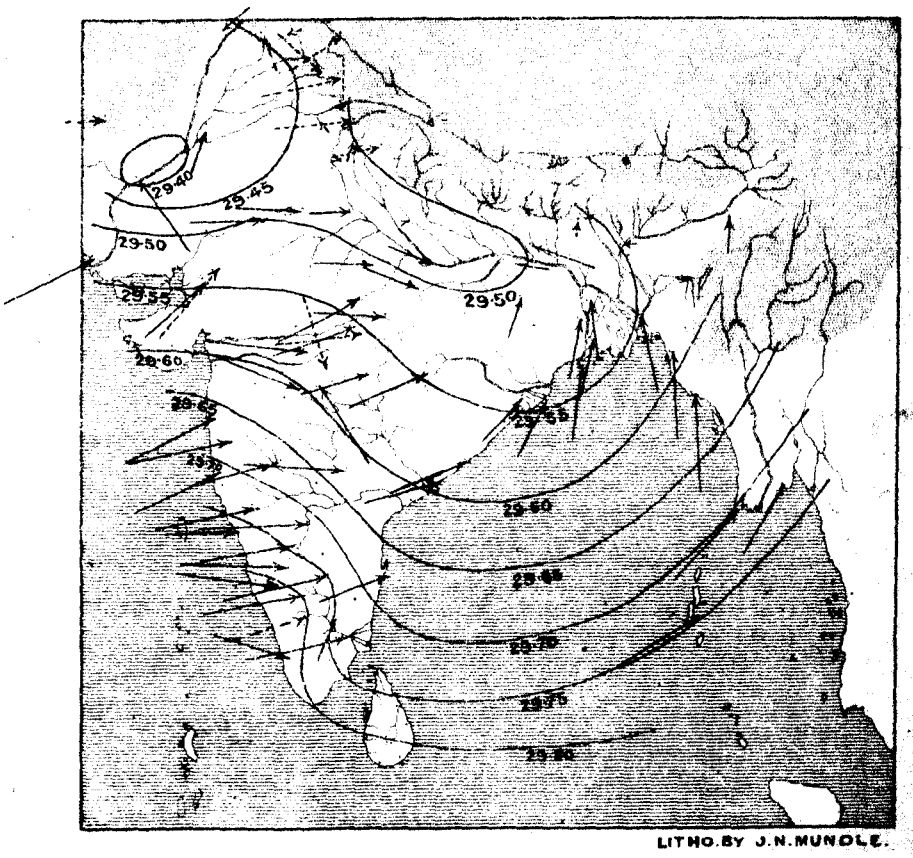


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF JULY 1895.



LITHO. BY J.N. MUNDLE.

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{20}$th of an inch being equal to 100 per cent.

Reg. No. 155, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—1,500.

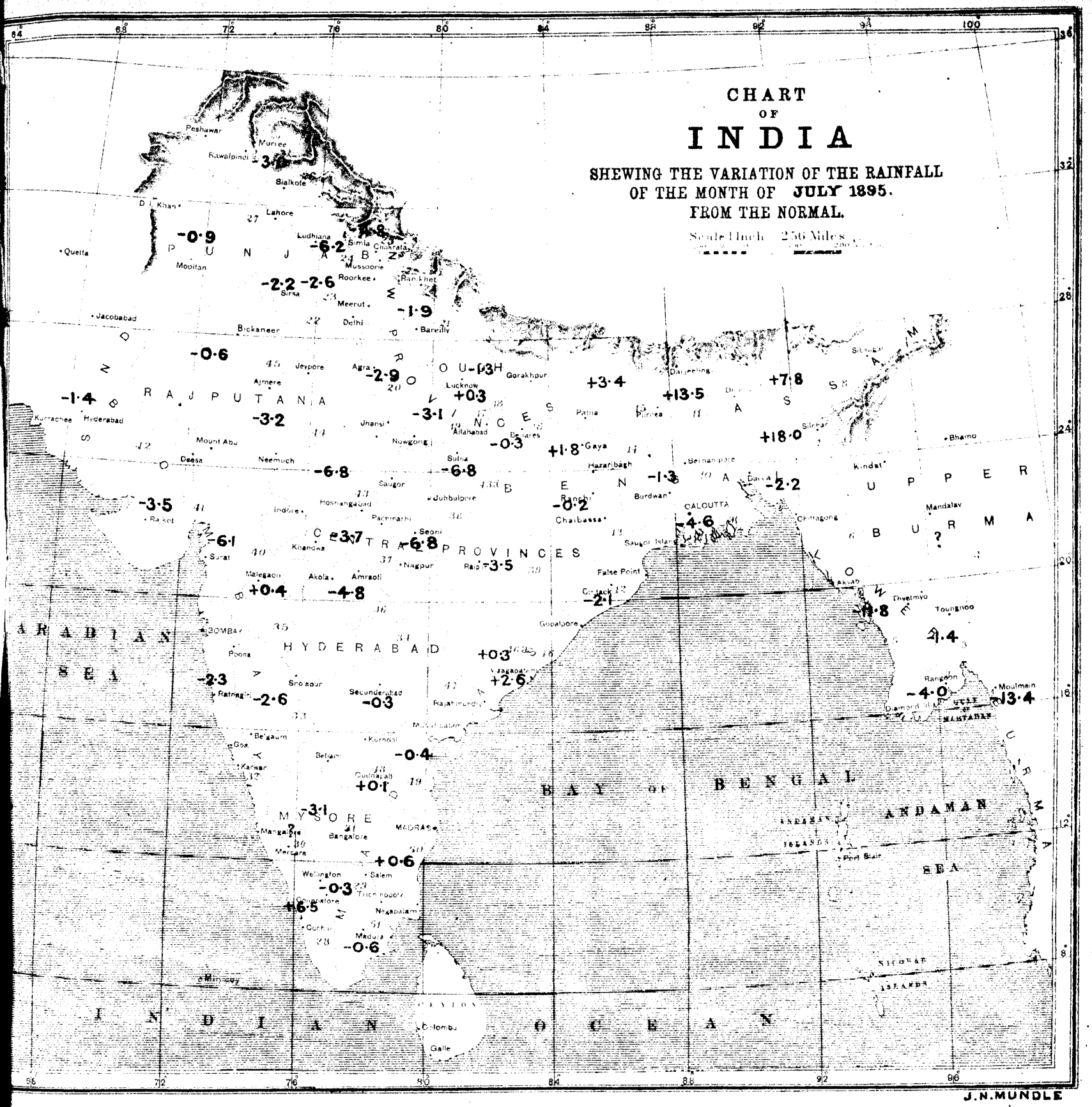
Zinco., S. I. O., Calcutta.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Zinco... alcutta.

Reg. No. 155, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.



J.N.MUNDLE

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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg. No. 69, Wr., L.—Mar. 96.—5,000.

Litho., S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, AUGUST, 1895.

INTRODUCTION.

THIS Review of the weather in India during the month of August 1895 is based on observations taken daily at 8 A.M. at 207 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 85 stations. In the rainfall summary the rainfall data of the meteorological observatories and the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the publication of the Review, are utilized. A summary of the weather in the Bay of Bengal and the Arabian Sea, derived from information extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given.

Summary of the chief features of the weather in India during the month of August 1895.

The meteorological conditions of the month of August are very similar to those of July. The monsoon currents usually prevail with considerable steadiness throughout the month, and give general rain in practically all districts. August is sometimes the month of the greatest extension of the monsoon currents, and some parts of Upper India usually obtain more rain in August than in July. On the whole, the monsoon current blowing in August is generally not so strong as in July, and there are also more frequent breaks in the rains in August than in July. Hence the rainfall in India is usually smaller in amount in August than in July.

The variations in the rainfall of August in different years are in part due to variations in the strength of the current from year to year, and in part to the occurrence and line of advance of small cyclonic storms which generally form in the Bay of Bengal, and then march west-north-westwards towards Central and Upper India. These small storms usually pass along the trough of low pressure, which is an important feature in the meteorology of the south-west monsoon period. This trough of low pressure in August generally runs from Orissa in a west-north-westerly direction towards the south of the Punjab or Sind, but its position varies from year to year, and hence the direction of advance of these cyclonic storms also varies.

At the commencement of the month a cyclonic storm which had formed in the Bay on the 29th and 30th of July and advanced in a west-north-westerly direction on the last day of July, lay over the eastern districts of the North-West Provinces and Bundelkhand. The Bombay current was slightly stronger than usual, and moderate rain was falling in the west coast districts and north of the Peninsula. The storm advanced into the central districts of the North-Western Provinces on the 2nd and completely filled up during the next 24 hours. The North-Western Provinces hence obtained moderately heavy rain on the 1st and 2nd and the Punjab moderate rain on the 3rd, 4th and 5th.

Temperature was generally normal or in slight to moderate defect during this period, but was excessive in Sind and the West Punjab. The following gives data:—

Station or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	1st.	2nd.	3rd.	4th.	5th.
	°	°	°	°	°
Sind	+4·1	+2·4	+2·6	+2·2	+2·4
West Punjab . . .	+5·4	+4·9	+1·9	+0·1	−0·9

A cyclonic storm began to form in the north of the Bay on the 5th. Moderate to strong steady moonsoon winds held at this time over the south and centre of the Bay. The storm was of moderate intensity on the morning of the 6th, winds of force 5 to 8 being experienced to the east and south of the centre.

The storm began to move westwards and the centre crossed the Orissa coast about 8 A.M. of the 7th. The storm advanced with unusual rapidity during the remainder of its existence and the centre was in the Central Provinces a little to the north of Jubbulpore on the morning of the 8th and to the east of Deesa on the morning of the 9th. The storm broke up during the next 24 hours in Sind and the Baluchistan highlands. It marched too rapidly to give very heavy rain to the districts through which it passed. Orissa, the Central Provinces and South-West Rajputana obtained a moderately heavy burst of rain from the 7th to the 9th and Sind and Baluchistan heavy thundershowers on the 9th and two following days. The indraught to the storm area increased the strength of the Bombay current and heavy rain fell in the west coast districts and moderate rain in the Bombay-Deccan from the 7th to the 10th or 11th.

Temperature continued in slight to moderate defect over India generally during the existence of this storm. The rainfall in Sind and Baluchistan caused a very large temporary reduction of temperature in those areas as is shown by the following data:—

Station or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	9th.	10th.	11th.	12th.	13th.
	°	°	°	°	°
Quetta	−0·5	−4·9	−3·2	−5·3	−4·4
Sind	+1·8	−1·5	−7·1	−4·1	−1·6
West Punjab .	−5·3	−3·1	−4·7	−1·2	+1·7

The permanent low pressure area of the monsoon period which was in Sind on the 11th, was transferred northwards to the North Punjab. On the 12th a strongish influx of humid winds advanced across Rajputana to the hills in Upper India and gave heavy rain in the hill and submontane districts of the Punjab and North-Western Provinces on the 13th and 14th. Falls exceeding five inches in 24 hours were recorded at several stations.

Meanwhile a shallow depression had formed in the north-west of the Bay on the 10th and 11th. It failed to develop and was throughout a diffused and feeble disturbance. It advanced north-westwards into the Central Provinces on the 13th and then northwards through Chota-Nagpur into Bihar on the 14th, and apparently filled up in Bihar during the next 24 hours. The Central Provinces, Chota-Nagpur and Bihar obtained moderate rain during its advance on the 13th and 14th.

Fine dry weather set in over Rajputana on the 11th and 12th and a break in the rains commenced in that area, which lasted until the 25th or 26th. The Bombay current fell off in strength at the same time and was somewhat feebler than usual during the remainder of the month.

The breaking up of the second disturbance of the month on the 14th was followed by the transfer of the trough of low pressure to the submontane districts of Northern India. As usual under this distribution of pressure, Bengal, more especially the northern districts, received moderate to heavy general rain. The rainfall, on the other hand, diminished in the Gangetic Plain, Central India and the North Deccan and the break in the rains extended from Rajputana to Central India and the Central Provinces on the 16th. Temperature hence increased rapidly over the interior and was in moderate excess in Northern and Central India from the 19th to the 27th.

Rain almost ceased in Bengal on the 22nd and the break in the rains extended over the whole of Northern and Central India and the North Deccan on that day. A shallow depression began to form on the 22nd in the north of the Bay. It intensified slightly on the 23rd and 24th; but, like the second depression of the month, it failed to pass beyond the stage of diffused and irregular disturbance. It crossed the Ganjam and Orissa coasts during the night of the 25th and drifted northwards through the eastern districts of the Central Provinces into Chota-Nagpur, where it filled up on the 28th.

The Bombay monsoon current increased to some extent on the 23rd and 24th and rainfall again extended into the interior, terminating for a period the break in North-Western and Central India. The disturbance described above gave moderate rain during its advance to the Central Provinces and Bengal. Its disappearance on the 28th was followed by the extension of moderate humid currents over the whole of Northern India and moderate general rain fell during the remainder of the month. Temperature was hence again reduced in the interior and was below the normal to a moderate extent from the 29th to the end of the month.

Pressure.—The mean pressure of the Indian land area was ·013″ below the normal. Pressure was in slight local excess in North Bengal, Upper Sind, North Punjab, Rajputana, Central India, Central Provinces, Khandesh, the Deccan and Konkan and in defect over the remainder of the country. The pressure anomalies were in all cases small and less than ·02″, except at Peshawar (+·020) and perhaps at Neemuch, where pressure was locally ·026″ in excess. The means for that station are, however, not satisfactory in consequence of the observations of previous years not having been carefully taken.

Temperature.—The mean temperature conditions of the month varied to a comparatively small extent from the normal.

The mean maximum temperature was in slight defect in the submontane and hill districts of Northern India and over the greater part of the Peninsula except the west coast districts and in excess elsewhere. The variations were less than 2° in amount for all stations except Secunderabad (3°·6 in defect) Dera Ismail Khan (2°·3 in defect) and Ajmere, Ludhiana, Sibsagar and Masulipatam (each 2°·0 in defect).

The mean minimum or night temperature of the month was slightly above the normal over the whole of India except Assam, the eastern districts of the Central Provinces, Ganjam, Circars, the North-Western Provinces, West Punjab and Baluchistan. The variations were very small and generally less than 0°·5 in amount. The mean for the month was 3°·1 below the normal for Quetta, the only large departure from the normal.

The mean temperature of the month was also generally in excess. It was in defect in Baluchistan, West Punjab, Assam and the submontane districts of the North-Western Provinces and in the eastern half of the Peninsula. The variations were in the great majority of cases small and less than 0°·5 in amount. They exceeded 1° at the following stations:—Sibsagar (1°·3 in defect), Masulipatam (1°·3 in defect), Hyderabad (1°·4 in defect), Sirsa (1°·8 in excess), Bickaneer (1°·3 in excess), Quetta (2°·3 in defect) and perhaps Dera Ismail Khan (2°·2 in defect).

The following table gives comparative temperature variation data of the month for the eleven meteorological provinces:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, August 1895.	Mean minimum temperature, August 1895.	Mean daily temperature, August 1895.
	°	°	°
Burma Coast and Bay Islands	0	+0·4	+0·2
Burma Inland	−0·4	+0·5	+0·1
Assam	−1·0	−0·2	−0·6
Bengal and Orissa	+0·1	+0·2	+0·2
Gangetic Plain and Chota-Nagpur	0	−0·1	+0·1
Upper Sub-Himalayas	−0·7	0	−0·4
Indus Valley and North-West Rajputana.	+0·2	+0·1	+0·1
East Rajputana, Central India and Gujarat.	−0·1	0	0
Deccan	+0·1	+0·1	+0·1
West Coast	+0·4	+0·6	+0·5
South India	−0·4	−0·1	−0·3

Winds.—Winds were on the mean of the month considerably more westerly than usual at Port Blair and on the Burma coast.

The Bay current as estimated by the strength of the winds at the coast stations was slightly stronger than usual. Winds were more easterly in Bengal, due chiefly to the influence of the three depressions of the month. Winds were very irregular in direction in Chota-Nagpur, South Bihar and the eastern districts of the North-Western Provinces. The trough of low pressure lay slightly more to the south than usual at its eastern extremity and more to the north than usual in the western half.

The Bombay current was strong during the first hal of the month and somewhat feeble during the last fortnight, but on the mean of the month it was practically normal. Winds were unusually strong at the hill stations in Rajputana and the Central Provinces. Winds were, it may be noted, more easterly than usual at Zanzibar and the Seychelles.

Humidity and cloud.—The air was somewhat drier than usual in Bengal, Chota-Nagpur and the eastern districts of the North-Western Provinces and slightly damper in Assam, Orissa, Arakan, the central and western districts of the North-Western Provinces, the Punjab, Sind, Rajputana and Central India. The variations were however small in amount in all cases. The mean relative humidity of the month was 5 in excess at Ajmere and 4 at Lahore, Kurrachee and Jacobabad, these being the largest variations.

Humidity was very slightly below the average in the west coast districts, Berar, the Madras Deccan and South Madras and was above it in the Bombay Deccan and the Madras coast districts.

Cloud was in excess over nearly the whole of Burma and Northern India. The excess was large at Port Blair and the Burma and Bengal coast stations and slight to moderate in the interior. The cloud amount was in slight defect in Rajputana and Central India. It was larger

than usual over the whole of the Peninsula with the exception of the Bombay Deccan and west coast (where it was very slightly below the normal). The excess was large locally at Salem (+1·8), Bangalore (+1·7), Vizagapatam (+1·6) and Bellary (+1·3) or over South Madras and Mysore. The following table gives variation data of the mean aqueous vapour pressure, humidity and cloud amount of the month in ten meteorological provinces of India:—

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.
	"		
Burma Coast and Bay Islands	+·010	0	+1·3
Assam	+·007	+1	0
Bengal and Orissa	−·009	−1	+0·5
Gangetic Plain and Chota-Nagpur	−·009	0	+0·8
Upper Sub-Himalayas	+·002	+3	+0·4
Indus Valley and North-West Rajputana.	+·038	+3	+0·2
East Rajputana, Central India and Gujarat.	+·005	+1	0
Deccan	+·008	0	0
West Coast	−·007	−3	+0·2
South India	−·003	0	+0·9

Rainfall.—The distribution of the rainfall was mainly determined by the character and track of the cyclonic disturbances of the month. The whole of Northern and Central India and the North Deccan received more or less general rain from the 1st to the 10th, partly due to the prevalence of strong monsoon currents and partly to the cyclonic storm which filled up in the North-Western Provinces on the 2nd and the storm which advanced rapidly across the head of the Peninsula from the 7th to 10th.

The third disturbance of the month which advanced through Orissa, the Central Provinces and Chota-Nagpur gave moderate rain to those areas and was followed by a northward shift of the trough of low pressure associated with moderately heavy rain in Bengal from the 13th to the 19th. A break in the rains which commenced in Rajputana on the 11th and extended to the Punjab, Central India, the Central Provinces and the North-Western Provinces on the 17th, lasted until the 24th or 25th during which period Southern India received moderate rain. The last disturbance of the month followed the same track as the preceding one and gave moderate rain. The break in the rains terminated on the 24th and 25th in the interior and light to moderate rain fell generally in Northern and Central India during the remainder of the month.

The month was characterized by an unusual absence of cyclonic downpours. The rainfall was practically normal in amount and was well distributed. The total rainfall of the month was in slight to moderate excess in Burma, Assam, the Punjab, Sind and Southern India, including the Madras coast districts. It was in moderate defect in South and Central Bengal, Chota-Nagpur, Rajputana, Central India, Khandesh, the Bombay-Deccan and Berar and was practically normal over the remainder of India. The deficiency was on the whole greatest in some parts of Bengal and the Bombay-Deccan and exceeded 33 per cent. in the following districts in those two areas:—Bijapur, Sholapur, Burdwan, Birbhum, Bankura, Howrah, Nadia, Murshidabad, Hazaribagh, Palamau, Manbhum and Singhbhum.

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

Meteorological Province.	Rainfall.		
	Average actual, August 1895.	Average normal, August.	Variation from normal.*
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands	30·51	25·86	+2·90
Burma Inland	8·86	9·78	+1·86
Assam	16·35	16·48	+0·70
Bengal and Orissa	12·53	13·58	—1·51
Gangetic Plain and Chota-Nagpur.	10·77	11·63	—0·70
Upper Sub-Himalayas	12·82	11·86	+0·91
Indus Valley and North-West Rajputana.	3·98	2·43	+1·42
East Rajputana, Central India, and Gujarat.	7·99	8·98	—1·23
Deccan	8·28	9·91	—0·73
West Coast	13·36	17·00	—3·75
South India	6·09	6·33	+0·82

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

Atmospheric Pressure.

The mean pressure of the whole Indian land area was 013″ below the normal. The local variations from this general condition were very small, thus showing that the relative distribution of pressure differed very little from the normal. Pressure was in slight relative excess or the pressure anomalies were positive in North Bengal, the

North Punjab, Upper Sind, Rajputana, Central India, the Central Provinces, Berar, the Deccan and the Bombay coast districts and in slight defect over the remainder of India. The following table gives variation data for the eleven meteorological divisions of the Empire:—

METEOROLOGICAL PROVINCE.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	"	"
Burma Coast and Bay Islands	—·026	—·013
Burma Inland	—·029	—·016
Assam	—·014	—·001
Bengal and Orissa	—·018	—·005
Gangetic Plain and Chota-Nagpur	—·016	—·003
Upper Sub-Himalayas	—·017	—·004
Indus Valley and North-West Rajputana	—·013	0
East Rajputana, Central India and Gujarat	—·010	+·003
Deccan	—·008	+·005
West Coast	—·008	+·005
South India	—·013	0

The pressure anomalies were less than ·020″ at all stations with the exception of Neemuch (+·026″) and Peshawar (+·020″). The only important effect of the local or relative variations of pressure was to displace the mean position of the western half of the trough of low pressure further north than usual and the eastern half further south and the axis of the trough hence ran from Hazaribagh through Allahabad, Cawnpore, Lucknow, Meerut, Lahore and Dera Ismail Khan.

The variations of the mean pressure of the month at the hill stations were almost identical in every case with those of the neighbouring plain stations. The following gives data in illustration:—

HILL STATION.	Variation of pressure from normal. (a)	NEIGHBOURING PLAIN STATION.	Variation of pressure from normal. (b)	Vertical pressure anomaly or (a)—(b).
	"		"	"
Leh	—·025	Lahore	—·018	—·007
Murree	—·016	Rawalpindi	—·007	—·009
Simla	—·005	Ludhiana	—·017	+·012
Chakrata	—·015	Roorkee	—·020	+·005
Ranikhet	—·006	Bareilly	?—·009	?+·003
Darjeeling	—·021	Dhubri	—·004	—·017
Quetta	—·011	Jacobabad	—·012	+·001
Mount Abu	—·029	Deesa	—·017	—·012
Wellington	—·015	Coimbatore	—·009	—·006

Barometric depressions and cyclonic storms of the month.

At the commencement of the month a feeble cyclonic storm which had advanced from the north-west of the Bay lay over the eastern and central districts of the North-Western Provinces. It filled up in that area on the afternoon and evening of the 2nd. An account of the storm up to its disappearance was given in the weather review for the preceding month.

The Central Provinces, North-Western Provinces, East Punjab and East Rajputana obtained moderate general rain for three or four days after the breaking up of the previous storm, due mainly to indraught from the west coast. The pressure changes on the 3rd were of little importance, but on the 4th pressure gave way briskly to rapidly over the whole of Northern India and the north of the Bay with the result that on the morning of the 5th pressure was in slight to moderate defect in the north of the Bay and was normal in the Peninsula, Upper India and Burma. This was the first stage in the formation of a depression and cyclonic storm which was the chief feature of the weather of the next week.

Cyclonic storm of the 5th to the 10th August.—This storm was initiated in the north-west of the Bay on the 5th. The weather in the Bay on the morning of that day is indicated by the following summary of observations taken on board vessels:—

HOUR.	NAME OF VESSEL.	8. A M. POSITION. Lat. N.	8. A M. POSITION. Long. E.	Barometer corrected.	WIND. Direction.	WIND. Force.	WEATHER.
		° ′	° ′	"			
8 A.M.	S.S. *Herat*	5 25	81 41	29·86	SW	5	Cloudy.
"	S.S. *Purnea*	9 31	97 29	·85	WSW	5	Fine.
"	S.S. *Megna*	12 47	84 37	·69	SSW	5	Passing clouds.
"	S.S. *Chupra*	14 33*	96 7	·77	WSW	5	Passing rain squalls.
"	S. S. *Karagola.*	16 24	93 6	·68	SW	6	Heavy sea. 4 A.M., heavy rain.
"	S.S. *Khandalla.*	19 02	84 52	·52	WSW	2	Fine.
"	S.S. *Nerbudda.*	19 56	89 28	·52	Var.	6	Squally.
10 A.M.	F. L. V. *Torch.*	Eastern Channel.		·54	Calm	0	Sea smooth, and overcast.
"	F. L. V. *Hesperus.*	Intermediate station.		·54	Calm	0	Cloudy.

* Noon position.

The preceding data show that over the south and centre of the Bay south-west monsoon winds of force 5 to 6 prevailed. Weather was cloudy but fine in the south and squally in the centre, more especially near the Arakan and Burma coasts. It was fine with light winds in the north-west angle where winds were more easterly than usual. Weather was also fine with light winds and moderate cloud in Bengal. Little or no rain had fallen over that area during the previous 24 hours. Strong westerly winds were blowing in the Central Provinces and North Deccan and the Bombay coast districts.

6th August.—Pressure had given way briskly over the western half of the Bay and the greater part of India, but was now rising in Assam and Burma. A shallow depression was shown in the north-west of the Bay off the Orissa coast in which pressure was from one-sixth to one-seventh of an inch below the normal. Weather was unchanged in the south and centre of the Bay and had become squally with increasing winds in the north of the Bay. The following gives 8 A.M. meteorological data for that area :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	Long. E.	Barometer corrected.	Wind. Direction.	Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Booldana*	16 32	86 21	29·51	SW	4	Fresh squalls and thick rain.
,,	S.S. *Caledonia.*	19 58	86 56	...	WSW	...	Showery.
,,	S.S. *Commilla*	20 00	93 02	·61	SSW	8	Heavy south swell and raining.
,,	S.S. *Persia*.	19 46	87 15	·44	NE	3 to 4	Frequent hard showers.
,,	S.S. *Moshtari*	19 44	86 44	·42	NNW	3	Showery.
10 A.M	F.L.V. *Torch*.	Eastern Channel.		·48	NE	2	Cyclonic.
,,	F.L.V. *Hesperus.*	Intermediate station.		·49	ENE	4	

Winds were cyclonic in direction in the depression area but the cyclonic circulation was as yet imperfectly developed. Fine weather with easterly winds obtained in South and Central Bengal.

The weather at Shortts' Island at the entrance to the Dhamra river during the period from the 3rd to the 6th is thus described by the Light-housekeeper :—

"During the 3rd, 4th and 5th August light variable south-east and southerly airs and calms prevailed. The atmosphere was hot and sultry and very clear with lightning from sunset to early morning. On the 6th the wind at 8 A.M. was north-westerly, after which it gradually hauled completely round the compass through north, west, south, east to north-west at 6 P.M. At sunset the clouds to the west and north-east became of a dirty red colour, a mass of pallio-cumulus stretching from south-south-west to west-north-west being very conspicuous. Occasional light squalls prevailed from the north-east to south-west between 11 A.M. and 4 P.M. and from 5-30 to 7 P.M., and heavy rain fell, the wind being north-west, fresh. After this until midnight the weather kept fine, but threatening looking to the south and the wind backed to west. Vivid lightning was observed to the north-north-east."

7th August.—Pressure had again given way briskly in the north-west angle of the Bay and the depression was now clearly marked. Its position at 8 A.M. is indicated by the following observations taken at the coast stations :—

Station.	Pressure. 8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Wind. Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	Weather.
	″	″	″				Inches.	
Saugor Island	29·361	—·084	—·200	SE	11	10	0·14	Sea rough.
Balasore	·367	—·073	—·207	Calm	4	5	1·33	
Shortt's Island.	...	—·069	?	SW	13	9	3·62	Strong wind.
False Point	29·322	—·099	—·244	W	11	10	3·70	Squally.

The central depression hence lay over the north-west angle of the Bay at 8 A.M. and the centre was probably crossing the coast near Balasore at that hour.

The disturbance was of slight intensity as is shown by the following data extracted from the logs of vessels :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	Long E.	Barometer, corrected.	Wind. Direction.	Force	Weather.
		° ′	′	″			
8 A.M.	S. *Indore.*	17 48	86 30		W	7	Heavy sea and very heavy rain.
,,	S.S. *Mohammadi.*	18 24	85 25	29·47	WSW	7	High confused sea and heavy squalls of rain.
,,	S.S. *Booldana.*	19 50	87 54	·45	SW	4	Cloudy. Occasional rain squalls.
,,	S.S *Maharani*	21 28	90 05	·48	S	4 to 5	Passing rain squalls.
,,	S.S. *Clan Fraser.*	19 48	87 28	·45	SW	4	Showery.
,,	S.S. *Canara.*	19 10	90 20	·54	SW	6	Strong south swell and frequent heavy rain squalls.
,,	F.L.V. *Torch.*	Eastern Channel.		·41	SSE	6	Heavy sea and over cast.
,,	F.L.V. *Hesperus.*	Intermediate station.		·42	S	5	Squally with rain.

The strongest winds in the north of the Bay were only of force 6 and 7. Hard squalls were experienced by several vessels at considerable distances to the east and south-east of the centre.

The weather at Shortt's Island on the 7th is thus described by Mr. Tasker, Light-housekeeper.

"On the 7th the weather remained fine until 2-30 A M., the wind keeping light at west and heavy masses of black clouds gathering from south to west. At 2-50 A. M. light rain began to fall and the wind shifted to south-west, bringing up heavy rain, which continued until 7 A.M., gradually decreasing to a light drizzle at 8 A.M., though the weather had still a rather threatening appearance, more especially to the south. Between 10 and 11 A. M. light rain squalls began from south-west, the wind shifting, while they prevailed, to west-south-west and increasing in force. From 1 to 2 P. M. the wind shifted to south-south-west, blowing a fresh gale with heavy rain and barometer keeping steady. From 2 to 4 P. M. hard rain squalls began from S.S.W. At 4-30 P. M. clouds broke to N.N.E., but came up rapidly again and squalls began again shortly afterwards. At 6 P. M. the weather looked worse and very bad to S.S.E. and E, a heavy sea breaking on the eastern reef. From 6 to 8 P.M. still squally, but moderating, rain light. At the latter hour the clouds overhead broke and stars shone and looked brighter to the N.N.E., barometer rising. From 8 to 10 P. M. no squalls, but weather still looking bad to S.S.W., S. and S.E., and sky nearly entirely overcast. From 10 P. M. to midnight clouds cleared away from S.W. through W. and N. to N.E.; but over the remainder of the horizon dense black clouds remained, wind south-south-west and decreasing."

Skies had clouded over again in Bengal and weather was showery. Heavy rain had fallen in Orissa and in parts of the Central Provinces during the previous 24 hours.

8th August.—Pressure had increased very rapidly in the north-west of the Bay and had fallen slightly in the Central Provinces to which the depression was now transferred. The following observations indicate its position at 8 A.M.:—

Station.	Pressure. 8 A. M. reduced to sea-level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A. M.	Wind. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.
	"	"	"				Inches.
Jubbulpore . . .	29·368	—·046	—·28	WNW	3	8	2·12
Sutna	413	—·006	·141	ENE	11	8	0·22
Nowgong . . .	430	—·012	·126	NE	2	7	0·72
Saugo	406	—·025	—·181	ENE	3	10	0·24

The centre of the depression was at 8 A. M. between Jubbulpore and Sutna and had travelled nearly 480 miles during the previous 24 hours.

Winds had strengthened on the west coast and heavy rain had fallen in the west coast districts, moderately heavy rain in the Central Provinces and light to moderate rain in Bengal.

9th August.—Pressure had increased rapidly in the Central Provinces and fallen slightly to briskly in Rajputana. The storm was now in South-West Rajputana, and central near Deesa, as is shown by the following 8 A.M. observations:—

Station.	Pressure. 8 A. M reduced to sea-level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A.M.	Wind. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	Weather
	"	"	"				Inches	
Rajkot .	29·445	—·022	—·172	NW	10	10	1·35	Raining.
Ahmedabad.	424	—·025	?	SSW	3	10	9·10	Thunder storm.
Mount Abu .	25·698	—·019	—·146	SE	11	8	0·39	
Deesa .	29·400	—·052	—·195	NNE	7	3	0·13	

The centre was at 8 A. M. to the east of Deesa in Lat. 24°15′ N. and Long. 72°45′ E. and had advanced about 450 miles during the previous 24 hours.

Heavy rain had again fallen in the west coast districts and in Kathiawar and Gujarat, to the south of the central storm area. Bengal and the Central Provinces had also received moderate general rain.

10th August.—The depression had almost filled up during the previous 24 hours and a shallow low pressure area now covered the whole of Sind and Western Rajputana. There was no definite centre of disturbance, but strong westerly humid winds continued to blow across the Sind and Kathiawar coasts during the next three days, and gave showery weather with frequent thunderstorms in Baluchistan, Sind and Rajputana.

The storm formed rapidly on the 5th and 6th in the north-west angle of the Bay and crossed the Orissa coast on the morning of the 7th. It advanced with unusual rapidity along a westerly track to West Rajputana and Sind where it broke up on the 9th and 10th.

The following gives data of the position and rate of advance of the centre from the 6th to the 9th:—

Date.	Hour.	Position of centre. Lat. N.	Position of centre. Long E.	Distance in preceding 24 hours.	Average hourly velocity during preceding 24 hours.
		° ′	° ′	Miles	Miles.
6th	8 A. M.	20 0	88 0		
7th	,,	21 15	86 50	110	4½
8th	,,	24 0	79 50	480	20
9th	,,	24 15	72 45	450	19

Pressure decreased rapidly in Lower Burma on the 9th and the 10th in the north of the Bay and on the morning of the 11th a shallow diffused depression lay over the latter area. Moderate to strong monsoon winds prevailed in the south and centre and irregular winds in the north-

of the Bay. The light vessels at the entrance to the Hooghly had light easterly airs (force 1 to 2) and much lightning, and the majority of the vessels to the north of Lat. 18° N. reported showery weather. The depression shifted slightly westwards during the next 24 hours and lay off the Orissa and Ganjam coasts. On the 11th and 12th cloudy showery weather prevailed in the low pressure area and the disturbance was exceedingly feeble. It was transferred into the eastern districts of the Central Provinces and Chota Nagpur on the 13th and into Bihar on the 14th, where it filled up during the next 24 hours.

The disturbance was hence feeble and diffused throughout. The Deccan received a moderate burst of rain on the 11th and 12th, and Bengal somewhat heavy rain on the 14th and following days.

Whilst this low pressure area was in existence, the permanent low pressure area in Upper India had shifted from Sind on the 11th to the Punjab on the 13th.

A strong influx of humid winds was, as frequently occurs under such conditions, directed towards the hills in Upper India, and very heavy rain fell on the 13th and 14th in the submontane districts of the Punjab and North-Western Provinces.

The changes of pressure on the 15th and 16th transferred the trough of low pressure to the submontane districts of Northern India, and a partial break in the rains set in over the Gangetic Plain, lasting from the 16th to the 21st, during which interval Bengal obtained moderate daily rain. The Bombay current had also fallen off rapidly in strength at the commencement of the period and a break in the rains obtained in the Konkan, Bombay Deccan and Central Provinces during the same period as in Northern India.

The changes of pressure were small on the 20th and 21st. The gradients were somewhat steeper than usual in the Bay, and pressure, which was generally in defect, was considerably below the normal in the north of the Bay. Pressure fell slightly in that area on the 22nd and a shallow depression was shown in the north-west of the Bay on the morning of the 23rd. It intensified slightly during the next 24 hours but failed to develop further, and was throughout a feeble disturbance with a light and somewhat irregular cyclonic circulation. It was transferred to the eastern and south-eastern districts of the Central Provinces on the 26th and to the north-eastern districts of the Central Provinces and the adjacent districts of Chota Nagpur on the 27th, and apparently filled up in that area on the 28th.

Winds increased slightly on the Bombay coast on the 23rd and 24th, and light to moderate showers fell in the west coast districts and in the North-Western and Central Provinces during the remainder of the month.

The trough of low pressure lay somewhat further north than usual during the last three days of the month. Moderate rain fell during this period in Bengal and the Gangetic Plain.

Summary of the reports of the weather and snowfall in the Mountain Districts to the North and North-West of India.

Snowfall is of very rare occurrence in August. The only snowfall report received for the month is from the Commissioner of Kumaun, which is given below :—

Almora.—There were light falls of snow in Malla Johar from the 8th to the 14th. The total fall during the period on the passes of Utadhura and Ralamdhura measured 2 feet.

No snow fell in Mallas Danpur, Byans Chandans and Darma.

The fall in Malla Johar is considered to be heavier than during August 1894.

Weather was colder than usual in the area of snowfall during the month and warmer over the remainder of the district.

Summary of special Storm Reports.

The following gives a statement of the chief local storms of which reports were received during the month :—

1st.—Thunderstorm at Jeypore from 4 P.M. to 5 P.M.

8th.—Violent duststorm at Jacobabad from east-north-east. The storm lasted from 4-20 P.M. to 4-50 P.M. Average wind velocity from 4-30 P.M. to 4-40 P.M. 61·5 miles per hour.

11th.—Severe thunderstorm at Salem from 8 P.M. to 9 P.M.

12th.—Severe thunderstorm with heavy rain at Salem from 3-40 P.M. to 4-45 P.M. Rainfall during storm 1·88 inches.

14th.—Duststorm at Cherat at 3 A.M. 0·41 inch rain fell in 15 minutes.

27th.—Thunderstorm at Jeypore from 2 P.M. to 3 P.M.

28th.—Duststorm at Sirsa from the north at 1-34 P.M. Storm lasted 20 minutes.

Brief summary of the weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—At the beginning of the month ordinary south-west monsoon winds of force 4 to 7 prevailed generally over the north, centre, west and south of the Arabian Sea, and weather was cloudy and showery over that area. Over the east of the sea, however, the winds were rather more westerly than usual, while in the extreme south-east light unsteady winds obtained. Squalls were of frequent occurrence in the neighbourhood of the west coast, but over the area of unsteady winds in the south-east the weather was fine. A moderate to heavy sea was running generally. The mean intensity of the air movement, as recorded on board 30 vessels, was 3·8 at 8 A.M. of the 1st. No important change occurred during the next three days, except that winds became normal in direction in the east of the sea. The general wind force at 8 A.M. of the 4th was only 0·1 less than on the 1st. Normal winds set in over the extreme south-east of the sea during the day, so that on the morning of the 5th ordinary monsoon winds prevailed over the whole of the sea area. The air movement began to increase generally over the sea, more especially over the west and centre, and averaged 4·8 at 8 A.M. of the 6th. The S.S. *Purulia* in Lat. 16½°N. and Long. 61°E. at 8 A.M. of this day experienced south-west gales of force 9 and a high sea. Conditions remained unchanged during the next 24 hours. Important changes were in progress over the land. The first cyclonic storm of the month, which formed over the Bay on the 5th and 6th and passed inland across the Orissa coast on the morning of the 7th, marched across the head of the Peninsula to South-West Rajputana and Sind during the next four days. The air movement increased in strength during this period along the Konkan, Kathiawar and Sind coasts, where winds of force 6 to 7, hard squalls, heavy rain and a high sea were experienced. Weather was, on the other hand, unaffected during this period over the remainder of the sea where winds continued to fall off steadily in strength. The mean wind force for the whole area averaged 4 2 from the 8th to the 11th or 0·6 less than on the 6th and 7th.

A moderate monsoon prevailed generally until the 15th, on which day the mean intensity of the winds was 4·3. The monsoon current decreased rather rapidly in strength during the next 48 hours, and on the morning of the 17th it was blowing with an average force of only 3·3. No change of importance occurred during the next three days. On the 21st the current began to rise again in force and averaged 3·9 in strength during the period from the 21st to the 26th. There was, however, during this period a tendency for the winds to become unsteady in direction which became marked during the last five days of the month when very unsteady light winds prevailed over the Arabian Sea. This feature of the air movement is strikingly exhibited by the conditions prevailing on the 31st—a day typical of the period—when at least 75 per cent. of the winds recorded over the Arabian Sea (except along the Indian coast where light south winds prevailed) were described as light variable breezes.

This period of unsteadiness was also marked by unusual feebleness of the current, the mean wind force not exceeding 3·1.

Bay of Bengal.—At the commencement of the month ordinary monsoon conditions obtained generally over the Bay. The winds were strongest in the north-west of the sea off the Ganjam and Orissa coasts, where they ranged in force between 5 and 6. From this region they decreased in all directions and were of force 1 to 5 in the extreme south of the Bay, where they were lightest. The mean intensity of the winds as derived from the data of 24 vessels was 4·3 at 8 A.M. of the 1st. Winds decreased rapidly in force during the next 24 hours, and on the morning of the 2nd averaged 1·0 less than on the previous day. The decrease was most marked in the north of the Bay where, for example, the S.S. *Umzinto* (not more than 50 miles to the south-east of False Point) experienced a calm at 8 AM. There was in fact on this day a strong tendency for the winds to become light and unsteady in the north of the Bay. The changes of conditions during the next 48 hours were such as emphasised this tendency, so that on the morning of the 4th all the vessels in that area to the north of Lat. 19°N. reported light variable airs and fine weather. To the south of Lat. 19°N. moderate to strong monsoon winds and a moderate sea prevailed. Weather was cloudy with passing showers in the south of the Bay and more or less rainy and squally over the area comprised between the parallels of 18° and 8°N. The mean wind force was 3·6 at 8 A.M. of the 4th. Winds strengthened considerably during the day, more especially off the Circars coast, and on the morning of the 5th were blowing with an average force of 4·5. Weather had become further disturbed over the centre, west and east of the sea. Thus the S. S. *Booldana* in Lat. 13½° N. and Long 85¼°E. at 8 A.M. experienced squally weather with constant rain at noon, and the S. S. *Persia* about 200 miles to the north at the same hour had squalls with hard rain. The strongest winds experienced in the morning were of force 7 in Lat. 16° N. and Long. 83°E. In the north-west of the Bay weather was fine with light variable airs and calms. As invariably happens under such combination of conditions a depression was developed over the area of light unsteady winds in the north-west of the

Bay during the day, and in consequence on the morning of the 6th winds in that region exhibited an irregular cyclonic circulation. The strongest winds reported on the 6th were of force 8 near the Arakan coast. Weather was fine over the south of the Bay and had become showery in the north of the Bay, while over the intervening region it was very unsettled with heavy squalls and much rain. Cyclonic winds and weather prevailed generally over the Bay (except in the extreme south where weather continued fine) during the next 24 hours. The mean wind force at 8 A.M. of the 7th had risen to 5·1. With the passage inland of the storm conditions improved rapidly, so much so that on the morning of the 8th the S. *Lynton*, about 50 miles to the south-east of False Point at 8 A.M., experienced winds of force 2. The mean intensity of the winds at 8 A.M. of the 8th was only 3·9 as compared with 5·1 on the previous day. The improvement in the weather continued during the next 24 hours, and on the morning of the 9th the majority of vessels reported cloudy weather with occasional showers. The average strength of the winds at 8 A.M. of the 9th was 3·6. Important changes occurred over the Bay during the next 48 hours. A shallow low pressure area apparently passed out into the Bay from Burma, and hence conditions became again disturbed over the north of the Bay. On the morning of the 11th an irregular cyclonic circulation was established in the north of the Bay. The depression, however, failed to develop and passed inland as an extensive shallow low pressure area on the 13th. The strongest winds in the depression area did not exceed 7 in force, and the mean wind force for the Bay averaged only 3·9 from the 11th to the 14th.

A decreasing monsoon prevailed generally on the 15th, 16th and 17th, the mean intensity of the winds for the whole of the Bay diminishing from 4·0 on the 14th to 3·0 on the 17th. This decrease of the monsoon current was, however, only temporary as winds began to increase again in the south and centre of the Bay. Two vessels out of the five in the south of the Bay between the meridians of 82° E. and 92°E. at 8 A.M. of the 18th experienced winds of force 6 and one of force 7. The mean strength of the current had increased to 3·8. Weather was much disturbed with heavy rain and hard squalls over the area of strong winds in the south of the Bay. Over the remainder of the Bay light to moderate winds and fine to showery weather obtained. Winds increased further in force in all parts of the Bay during the day, and on the morning of the 19th were blowing with an average strength of 4·3. The disturbed conditions had advanced northwards up the centre of the Bay, thick rain and frequent squalls prevailing as far north as Lat. 19° or 20°N. There was a strong tendency during the next six days, to the formation of a storm in the north of the Bay in front of the disturbed weather, but as on the previous occasion it failed to develop. Very unsteady winds obtained in the north of the Bay on the 21st and 22nd and more or less cyclonic winds during the next four days. During the period from the 23rd to the 26th the weather was more or less rainy and squally in the north of the Bay, but the strongest winds experienced did not exceed 6 in force.

The lightness of the winds in the depression area is clearly shown by the data of the F. L. V. *Torch* stationed at the Eastern Channel. She experienced winds of force 1 on the 23rd and of force 3 on the 24th, 25th and 26th.

No important change occurred during the remainder of the month, ordinary monsoon conditions prevailing generally. The mean wind force ranged between 4·1 and 2·9.

It will be seen from the preceding account of the weather that on the whole conditions were fairly normal both in the Bay and the Arabian Sea. The only abnormal feature was the unsteadiness of the current in the Bay of Bengal. In fact over this area the current fluctuated considerably in strength from day to day, the range being as much as 2·2.

A comparison of the mean wind data of the present month with those of the corresponding month of 1894 shows that the monsoon current was slightly stronger (0·1 in the case of the Arabian Sea and 0·3 in the case of the Bay), although slightly below the normal strength of the month.

Owing to the paucity of the information it is not possible to form an exact estimate of the character of the South-east Trades in the Equatorial Belt. The data available, however, indicate that the Trade winds were fairly steady and strong during the greater part of the month. This was especially the case during two well defined periods, *viz.*, the 13th to the 17th and the 24th to the end of the month, when strong squally winds prevailed over the whole of that region. This is fully confirmed by the wind data for the Seychelles, where the average hourly velocity rose from 10 to 17 miles during the first period and from 12 to 16 miles during the second period.

Temperature of the Air.

The variations of the mean temperature conditions of the month from the normal were in no case large in amount. The mean maximum or day temperature was below the normal in the submontane districts of Northern India and over the greater part of the peninsula (excepting the west coast districts), and was in excess

over the remainder of the area. The variations at the great majority of stations were less than 1° in amount. They were 2° or over at the stations for which comparative data are given below :—

Province.	Station.	Mean maximum temperature.		
		Actual, August 1895.	Normal, August.	Variation of actual from normal.
		°	°	°
Punjab	Dera Ismail Khan	99·2	101·5	—2·3
	Ludhiana	93·3	95·3	—2·0
Madras	Masulipatam	89·3	91·3	—2·0
Hyderabad Deccan	Hyderabad	82·5	86·1	—3·6
Central India	Sutna	87·9	85·7	+2·2

The mean minimum or night temperature was above the normal over nearly the whole area with the exception of Baluchistan, the West Punjab, the North-Western Provinces, the eastern districts of the Central Provinces, Ganjam, the Circars and Assam. The variations were small in amount except at Quetta (—3°·1) and Dera Ismail Khan (—2°·1). The variation at Vizagapatam also exceeded 2°, but was probably due to recent change of site of the observatory at this station, and not to actual decrease of temperature.

The mean temperature of the month was in slight excess over the whole of India with the exception of Assam, the eastern half of Rajputana, the North-Western Provinces, the eastern half of the peninsula, the West Punjab and Baluchistan.

The variations at the great majority of cases were less than 1°. The following gives comparative data for stations at which the mean temperature of the month varied more than 1° from the normal :—

Province.	Station.	Mean daily temperature.		
		Actual, August 1895.	Normal, August.	Variation of actual from normal.
Baluchistan	Quetta	74°·0	76°·3	—2°·3
Punjab	Dera Ismail Khan	89·1	91·3	—2·2
	Sirsa	90·3	88·5	+1·8
Assam	Sibsagar	82·6	83·9	—1·3
Madras	Vizagapatam	83·5	85·1	—1·6
	Masulipatam	83·2	84·5	—1·3
Hyderabad Deccan	Hyderabad	77·1	78·5	—1·4
Oudh	Lucknow	83·0	84·6	—1·6
Bombay	Karwar	79·2	78·1	+1·1
Rajputana	Bickaneer	89·6	88·3	+1·3
Central India	Sutna	82·2	80·7	+1·5

The mean temperature of the month was below the normal to a slight extent at the hill stations in Northern India and in slight excess at Pachmarhi and Wellington The following gives data and also shows that the variations in some cases differed considerably from those of the neighbouring plain stations :—

Hill station.	Variation of mean daily temperature from normal.	Neighbouring Plain Station.	Variation of mean daily temperature from normal.
Leh	+1°·2	Lahore	+0°·6
Murree	—0·1	Rawalpindi	+0·3
Chakrata	—1·5	Roorkee	—0·5
Darjeeling	—0·4	Dhubri	—0·9
Mount Abu	—1·1	Deesa	+0·1
Quetta	—2·3	Jacobabad	—0·1
Wellington	+0·6	Coimbatore	+0·3
Pachmarhi	+0·1	Hoshangabad	—0·1

The following table gives temperature data for each of the 51 meteorological divisions into which India is divided :—

Province.	Division.	Actual Temperature.					Variation from normal.		
		Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	84·0	73·8	78·8	10·2	17·2	+0·3	+0·2	+0·1
	Lower Burma	84·3	76·3	80·3	8·0	13·5	—0·3	+0·8	—1·1
	Central do.	90·4	76·0	83·2	14·4	21·2	+0·9	+0·7	+0·2
	Upper do.	88·5	75·0	81·8	13·6	23·0	—1·6	+0·3	—1·9
	Arakan	84·7	77·0	80·9	7·7	15·0	+0·3	—0·2	+0·5

Province.	Division.	Actual Temperature.					Variation from normal.		
		Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Bengal and Assam	Eastern Bengal	85·2	76·3	80·8	8·9	15·5	+0·2	+0·4	−0·2
	Assam (Surma)	90·5	76·6	83·6	13·9	21·1	+0·7	0	+0·7
	Do. (Brahmaputra)	86·4	77·7	82·1	8·7	16·8	−1·8	−0·4	−1·4
	Deltaic Bengal	88·2	78·6	83·4	9·6	16·5	+0·1	−0·1	+0·2
	Central do.	88·9	78·6	83·8	10·3	16·8	+0·5	+0·4	+0·1
	North do.	88·3	78·1	83·2	10·3	17·7	+0·1	+0·7	−0·6
	Orissa	87·6	78·5	83·1	9·1	17·4	−0·2	−0·2	0
	Chota Nagpur	86·4	75·2	80·8	11·2	18·4	+0·5	+0·7	−0·2
	Bihar (South)	89·5	78·7	84·2	10·9	18·7	−0·1	−0·3	+0·2
	Do. (North)	89·0	78·8	83·9	10·2	17·0	−0·4	+0·8	−1·2
North-Western Provinces and Oudh.	North-Western Provinces (East)	89·9	78·2	84·1	11·8	20·8	+0·1	−0·6	+0·7
	Oudh (South)	90·0	78·0	84·0	12·0	20·5	−0·6	−0·5	−0·6
	Do. (North)	88·9	78·0	83·5	10·9	21·9	?	?	?
	North-Western Provinces (Central)	90·3	78·5	84·4	11·9	22·1	?	?	?
	Do. do. (West)	90·3	77·7	84·0	12·6	22·5	+0·8	0	+0·8
	Do. do. (Submontane)	88·2	76·2	82·2	12·0	21·4	−0·7	−0·5	−0·2
Punjab	Punjab (South)	95·7	79·9	87·8	15·8	29·7	+1·1	+0·6	+0·5
	Do. (Central)	95·2	80·7	88·0	14·5	30·7	−0·8	+1·8	−2·6
	Do. (Submontane)	91·5	78·0	84·8	13·5	26·7	−2·0	0	−2·0
	Do. (Hill Districts)	77·6	62·8	70·2	14·9	28·4	−0·7	−0·2	−0·5
	Do. (North-West)	95·6	77·1	86·4	18·5	34·1	−0·5	0	−0·5
	Do. (West)	99·5	80·5	90·0	19·0	36·0	−1·4	−1·1	−0·3
Bombay and Malabar Coast Districts (Madras).	Malabar	83·1	74·5	78·9	8·6	14·6	+0·6	+0·4	+0·2
	Madras (South Central)	90·2	71·8	81·0	18·4	26·4	+0·3	+0·6	−0·3
	Coorg	69·3	62·7	66·0	6·6	12·8	−1·2	+0·6	−1·8
	Mysore	80·6	66·2	73·4	14·4	21·6	−0·6	+0·3	−0·9
	Konkan	82·9	76·4	79·6	6·5	11·4	+0·2	+1·1	−0·9
	Bombay Deccan	83·2	68·5	75·9	14·7	21·8	+0·1	−0·4	+0·5
	Hyderabad (North)	84·1	70·1	77·1	14·0	22·7	?	?	?
	Khandesh	85·7	69·9	77·8	15·8	26·3	+1·3	+0·1	+1·2
Central Provinces and Berar.	Berar	87·5	73·1	80·3	14·4	23·3	+0·7	+0·3	+0·4
	Central Provinces (West)	86·0	74·4	80·2	11·5	20·5	−0·1	+0·4	−0·5
	Do. (Central)	85·2	73·5	79·4	11·7	21·1	+0·4	+0·2	+0·2
	Do. (East)	86·2	75·7	80·9	10·5	18·5	−0·7	−0·5	−0·2
Bombay (North)	Gujarat	88·0	76·6	82·3	11·4	16·6	0	+0·3	−0·3
	Kathiawar	86·1	75·8	81·0	10·3	16·7	+0·6	−0·6	+1·2
	Sind	93·9	78·9	86·5	15·0	24·6	+0·2	+0·3	−0·1
Rajputana and Central India.	Central India (East)	88·3	76·3	82·3	12·0	18·7	+1·3	+0·1	+1·2
	Rajputana (East), Central India (West)	86·5	74·1	80·3	12·4	22·0	−0·5	+0·1	−0·6
	Do. (West)	96·7	78·9	87·7	17·9	29·5	+2·1	+0·5	+1·6
Madras	East Coast (North)	87·8	78·4	83·1	9·4	18·6	−0·5	−1·0	+0·5
	Hyderabad (South)	85·4	72·2	78·8	13·3	22·3	−3·6	+0·8	−4·4
	Madras (Central)	90·7	74·4	82·6	16·3	25·4	−0·2	−0·1	−0·1
	East Coast (Central)	91·9	77·8	84·8	14·1	25·6	−2·0	−0·5	−1·5
	Do. (South)	94·4	76·8	85·6	17·6	27·6	+0·1	−0·1	+0·2
	Madras (South)	94·1	78·1	86·1	16·0	25·3	−0·9	+0·2	−1·1

The following is a brief sketch of the larger changes of the temperature conditions in India during the month.

Temperature was in general defect at the beginning of the month, except in Upper India and South Madras. It was, for example, 7° in excess at Mooltan, 6° at Dera Ismail Khan and 5° at Jacobabad during the 24 hours preceding 8 A.M. of the 1st.

The following table gives comparative data for the 24

hours preceding 8 A.M. of the 1st, which indicate the temperature conditions obtaining at the commencement of the month :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	—2·8	0	—1·4
Bengal and Assam	—1·7	—0·6	—1·2
North-Western Provinces and Oudh	0	+0·1	+0·1
Punjab	+3·1	+2·9	+3·0
Sind and Rajputana	0	+1·7	+0·9
Central India and Gujarat	—1·2	—0·4	—0·8
Central Provinces and Berar	—5·4	—2·4	—3·9
Bombay	—2·4	+0·7	—0·9
Madras	—1·1	+0·4	—0·4

Rainfall was general in Northern and Central India from the 1st to the 6th and extended to the West Punjab on the 5th and 6th, reducing temperature considerably below the normal in that area.

The following gives variation data for the 5th :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·8	0	+0·4
Bengal and Assam	+0·1	+0·3	+0·2
North-Western Provinces and Oudh	—1·0	—1·1	—1·1
Punjab	—6·3	—3·1	—4·7
Sind and Rajputana	—0·6	+1·2	+0·3
Central India and Gujarat	+1·7	+0·5	+1·1
Central Provinces and Berar	+0·2	+0·6	+0·4
Bombay	—0·2	+0·2	0
Madras	—2·8	—1·3	—2·1

A cyclonic storm formed in the north-west of the Bay on the 5th and 6th and drifted westwards during the next four days to Sind to which it gave moderate showers on the 9th and following two days, reducing temperature in that area largely below the normal from the 10th to the 14th as is shown by the following data :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date.				
	10th.	11th.	12th.	13th.	14th.
	°	°	°	°	°
Sind	—1·5	—7·1	—4·1	—1·6	—1·6
Baluchistan (Quetta)	—4·9	—3·2	—5·3	—4·4	—4·2

Temperature increased rather rapidly in North-Eastern and Central India after the passage of the storm and was in moderate excess from the 11th to the 13th. The following gives variation data for the 12th in illustration :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·6	—0·2	+0·2
Bengal and Assam	+3·5	+1·7	+2·6
N.-W. Provinces and Oudh	+0·2	+0·9	+0·6
Punjab	+0·7	+2·4	+1·6
Sind and Rajputana	—4·6	—0·3	—2·5
Central India and Gujarat	—0·7	+0·3	—0·2
Central Provinces and Berar	—0·4	+1·1	+0·4
Bombay	+1·2	+1·4	+1·3
Madras	—3·0	—0·7	—1·9

A feeble cyclonic storm crossed the Orissa coast on the 13th, and its passage was followed by moderate rain for some days in Northern India. Temperature was hence generally in moderate defect from the 15th to the 19th in Northern India and in excess in Southern India. The following gives variation data for the 17th, a day typical of this period :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·8	+1·5	+1·7
Bengal and Assam	—2·3	—1·0	—1·7
N.-W. Provinces and Oudh	—2·6	—2·6	—2·6
Punjab	—3·1	—2·6	—2·9
Sind and Rajputana	—1·7	0	—0·9
Central India and Gujarat	—0·1	—0·1	—0·1
Central Provinces and Berar	+0·4	—0·3	+0·1
Bombay	+1·1	+1·2	+1·2
Madras	+1·8	+1·4	+1·6

During the next four days rainfall was restricted to Bengal, Lower Burma and Southern India, and hence temperature was in general excess in Northern and Central India and in defect in Southern India.

The following data for the 23rd illustrate the conditions during this period :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−1·3	+0·4	−0·5
Bengal and Assam	−0·5	+0·1	−0·2
N.-W. Provinces and Oudh	+5·0	+0·5	+2·8
Punjab	+5·8	+2·9	+4·4
Sind and Rajputana	+2·3	+0·3	+1·3
Central India and Gujarat	+4·2	+0·4	+2·3
Central Provinces and Berar	+5·1	+0·7	+2·9
Bombay	+1·9	0	+1·0
Madras	+1·3	+0·4	+0·9

Rainfall extended into the interior of India again on the 26th, but was light to moderate in amount and sporadic in character, and hence the temperature variations were irregular. Heavy general rain fell on the 29th in Northern India and reduced temperature again largely below the normal, as is shown by the following variation data of the 24th hours preceding 8 A.M. of the 30th :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·1	+0·9	+0·5
Bengal and Assam	−0·3	+0·1	−0·1
N.-W. Provinces and Oudh	−2·1	−2·1	−2·1
Punjab	−7·5	−3·8	−5·7
Sind and Rajputana	−2·3	+0·1	−1·1
Central India and Gujarat	−1·3	−1·0	−1·2
Central Provinces and Berar	−3·1	−0·9	−2·0
Bombay	+1·7	−0·3	+0·7
Madras	+2·0	+0·2	+1·1

The following table gives variation data of the mean temperature, week by week, during the month and of the whole month.

The data are taken from the weekly weather reviews published in the *Gazette of India* :—

Political area or Province.	Variation from normal of mean temperature of week ending				
	10th August.	17th August.	24th August.	31st August.	For whole month.
	°	°	°	°	°
Burma	+0·1	+0·5	+0·4	0	+0·2
Bengal and Assam	−0·2	+0·5	+0·2	+0·3	+0·1
North-Western Provinces and Oudh.	−1·1	−1·3	+1·6	−0·5	−0·4
Punjab	−2·9	−0·3	+2·0	−0·3	−0·2
Sind and Rajputana	−0·5	+0·6	+1·0	+0·5	+0·1
Central India and Gujarat	−0·4	+0·1	+1·9	+0·2	+0·2
Central Provinces and Berar.	+0·3	−0·2	+1·1	+0·3	+0·1
Bombay	0	−1·9	+0·8	+0·7	+0·4
Madras	−1·4	+0·1	−0·1	+0·1	−0·3

Winds.

Winds were stronger and more westerly than usual at Port Blair and the Burma Coast stations. This is shown by the following statement :—

Station.	Wind direction.		
	Mean actual, August 1895.	Normal, August.	Westerly deflection.
Port Blair	S 71° W	S 43° W	+28°
Diamond Island	S 53° W	S 44° W	+9°
Akyab	S 4° W	S 1° E	+5°

The westerly deflection of the winds was very large at Port Blair and indicates the persistence of abnormal conditions during the month in the centre and probably the south of the Bay.

The monsoon current was approximately normal in strength in Bengal and the Gangetic Plain. The following gives data in illustration :—

Area.	Velocity in miles per diem.			
	Mean actual, August 1895.	Mean normal, August.	Variation from normal.	Percentage variation.
Bengal Coast	269	269	0	0
Bengal Inland	87	102	−15	−15
Bihar	139	97	+42	+43
Chota Nagpur	191	180	+11	+6
North-Western Provinces and Oudh.	100	90	+10	+11

The variations of the mean wind directions of the month from the normal were somewhat irregular in Bengal.

Winds were on the whole more easterly at the inland stations and less westerly at the coast stations. The following gives data for four stations:—

	Station.	Wind direction. Mean actual, August 1895.	Mean normal, August.	Decreased westing or increased easting.
Coast	Saugor Island	S 9° W	S 17° W	8°
Coast	False Point	S 39° W	S 57° W	18°
Interior	Narayanganj	S 25° E	S 14° E	11°
Interior	Calcutta	S 18° E	S 17° E	1°
Interior	Burdwan	S 46° E	S 27° E	19°

The mean position of the trough of low pressure during the month was somewhat further south than usual in its eastern half and further north in its western half. The axis stretched from Chota Nagpur in a west-north-westerly direction to the Central Punjab. The following gives data showing the unsteadiness and variability of the winds at the stations nearest to the axis :—

Station.	Wind direction. Mean actual, August 1895.	Mean normal, August.	Steadiness. Actual percentage, August 1895.	Normal percentage, August.	Variation from normal.
Hazaribagh	N 62° E	S 50° W	14	7	+7
Allahabad	N 37° W	N 40° E	23	4	+19
Lucknow	N 73° E	S 77° E	11	12	—1
Meerut	S 36° E	N 80° E	14	5	+9
Lahore	N 81° E	S 83° E	23	27	—4
Mooltan	S 21° E	S 19° W	23	22	+1

Northerly winds prevailed to an unusual extent in South Bihar, Chota Nagpur and the south-eastern districts of the North-Western Provinces, and the mean wind directions at all stations in that area had a northerly component. The following gives mean wind direction data for four stations:—

Station.	Wind direction. Mean actual, August 1895.	Mean normal, August.
Hazaribagh	N 62° E	S 50° W
Patna	N 78° E	S 19° E
Allahabad	N 37° W	N 40° E
Lucknow	N 73° E	S 77° E

The Bombay monsoon current was of normal strength, as judged by the mean velocity of the winds at the west coast and interior stations.

The following table gives the mean daily wind velocity at ten stations :—

Station.	Velocity in miles per diem. Mean actual, August 1895.	Mean normal, August.	Variation from normal.	Percentage variation.
Coast.				
Kurrachee	361	409	—48	—12
Bombay	356	384	—28	—7
Ratnagiri	244	242	+2	+1
Interior.				
Deesa	245	288	—43	—15
Sholapur	310	279	+31	+11
Belgaum	505	497	+8	+2
Akola	221	194	+27	+14
Khandwa	234	192	+42	+22
Nagpur	192	144	+48	+33
Bellary	250	262	—12	—5

The preceding table gives data for stations under the sole influence of the Bombay current during the month. The data establish that the current was slightly weaker at the coast stations and slightly stronger at the interior stations. The data for all the hill stations in Central India show that the winds at those stations were considerably above their normal strength during the month, *e.g* :—

Hill station.	Velocity in miles per diem. Mean actual, August 1895.	Mean normal, August.	Variation from normal.	Percentage variation.
Mount Abu	287	254	+33	+13
Pachmarhi	295	179	+116	+65
Chikalda	282	256	+26	+10
Mercara	243	199	+44	+22
Wellington	78	87	—9	—10

What relation these opposite variations in the strength of the winds at the coast stations and hill stations bear to abnormal features in the monsoon current can as yet only be conjectured.

The mean wind directions at the west coast stations and in the Deccan and the Central Provinces differed little from the normal. They were, as might be expected from the conditions of the month, slightly less westerly

and more northerly than usual The following data for four stations illustrate this feature :—

Station.	Wind direction.	
	Mean actual, August 1895.	Mean normal, August.
Karwar	N 78° W	W
Ratnagiri	S 52° W	S 63° W
Kurrachee	S 65° W	S 63° W
Deesa	S 64° W	S 47° W

Winds were steadier than usual in South and Central Madras and differed little from the normal in direction, except at Madras, where the mean wind direction of the month was S 70° W, the normal being S 40° W.

It is interesting to note in connection with the meteorology of the month in India that winds were steadier than usual at Zanzibar and were also somewhat more easterly than usual at the Seychelles and Zanzibar.

Humidity and Cloud.

The air was very slightly drier than usual at Port Blair and in Burma. It was, on the other hand, damper in Arakan and the Assam valley. The mean humidity percentage of the month was 3 above the normal at Akyab and Sibsagar and 2 at Dhubri.

The mean absolute and relative humidities were both in slight defect generally in Bengal, Bihar, Chota Nagpur and the eastern districts of the North-Western Provinces. The variations were, however, small in amount, the largest being a deficiency of 3 in the humidity percentages of Allahabad, Berhampore and Burdwan.

The air on the mean of the month was damper than usual in the central and western districts of the North-Western Provinces, Punjab, Sind, Rajputana and Central India. The excess was nowhere large and was greatest at the stations for which data are given below :—

Station.	Absolute humidity.			Relative humidity.		
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Average actual, August 1895.	Average normal, August.	Variation from normal.
	"	"	"	%	%	
Ajmere	·827	·779	+·048	81	76	+5
Lahore	·853	·867	−·014	68	64	+4
Jacobabad	·884	·815	+·069	61	57	+4
Kurrachee	·928	·853	+·075	82	78	+4

The following table gives comparative data, illustrating the humidity conditions of the month in Northern and Central India —

Division.	Absolute humidity.			Relative humidity.		
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Average, actual, August. 1895.	Average normal, August.	Variation from normal.
	"	"	"	%	%	
Burma	·905	·890	+·015	89	89	0
Assam	·937	·930	+·007	87	86	+1
Bengal	·942	·956	−·014	85	87	−2
Orissa	·928	·920	+·008	85	83	+2
Chota Nagpur	·786	·802	−·016	83	85	−2
Bihar	·957	·959	−·002	84	83	+1
North-Western Provinces.	·893	·898	−·005	79	78	+1
Punjab	·849	·850	−·001	67	65	+2
Sind	·906	·834	+·072	72	68	+4
Rajputana	·802	·797	+·005	77	76	+1
Central India	·870	·843	+·027	82	79	+3

The mean humidity conditions of the month varied somewhat irregularly from the normal in the Central Provinces and Berar. The air was on the whole drier than usual in Berar and the western districts of the Central Provinces represented by Khandwa, and slightly damper in the central and eastern districts.

Humidity was in defect at the west coast stations, mainly due to increased temperature. Thus at Karwar, the mean humidity of the month was 5 below the normal and at Bombay 3. It was in large defect at Bellary and in slight defect at Salem and Trichinopoly, and hence probably over the whole of the interior of the Madras Presidency. It was, on the other hand, in slight excess at the coast stations.

The following gives comparative data for the different divisions of the Peninsula :—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Average actual, August 1895.	Average normal, August.	Variation from normal.
	"	"	"	%	%	
Central Provinces	·808	·798	+·010	82	81	+1
Berar . .	·726	·724	+·002	76	79	—3
Bombay Deccan	·665	·664	+·001	80	79	+1
Madras Deccan	·604	·638	—·034	68	71	—3
West Coast .	·842	·849	—·007	84	87	—3
Madras Coast .	·875	·840	+·035	77	71	+6
South Madras .	·721	·740	—·009	67	68	—1

The driest stations in the plains of India during the month of August 1895, as measured by the relative humidity, were :—Bellary (57 per cent.), Trichinopoly (60 per cent), and Jacobabad and Peshawar (each 61 per cent).

The air was drier than usual at Quetta in Baluchistan and the Western Himalayan stations. The deficiency was very marked at Leh, where the mean relative humidity of the month was 6 below the normal. It was, on the other hand, in slight excess at the hill stations in the North-Western Provinces and Sikkim and at Mount Abu.

It is noteworthy that humidity was largely in defect at Aden and in moderate excess at Zanzibar.

Cloud.—The variations of the distribution of cloud from the normal differed largely from those of the humidity conditions.

There was more cloud than usual at Port Blair and in Burma and the whole of Northern India. The increase was small in amount at the majority of stations, but exceeded 1 at Port Blair (+2·2), Diamond Island (+1·8), Saugor Island (+1·8), Jacobabad (+1·2), and Chittagong, Hazaribagh and Darbhanga (each +1·1)

The following gives comparative cloud data for the different divisions of Northern and Central India :—

Division.	Mean cloud amount.		
	Average Actual, August 1895.	Average normal, August.	Variation from normal.
Burma	9·1	8·1	+1·0
Assam	8·0	8·0	0
Bengal	8·5	8·0	+0·5
Orissa	8·1	7·6	+0·5
Chota Nagpur	9·9	8·8	+1·1
Bihar	8·2	7·1	+1·1
North-Western Provinces . . .	7·2	6·9	+0·3
Punjab	4·3	3·6	+0·7
Sind	4·4	4·6	—0·2
Rajputana	7·1	7·2	—0·1
Central India	7·5	7·7	—0·2

There was also more cloud than usual over the whole of the peninsula with the exception of the Bombay Deccan and west coast. The excess was more than 1 in amount a Salem (+1·8), Bangalore (+1·7), Vizagapatam (+16), and Bellary (+1·3).

The following gives comparative data for the chief divisions of the Peninsula :—

Division.	Mean cloud amount.		
	Average actual, August 1895.	Average normal, August.	Variation from normal.
Central Provinces	7·8	7·6	+0·2
Berar	8·0	7·9	+0·1
Bombay Deccan	8·4	8·5	—0·1
Madras Deccan	8·5	7·0	+1·5
West Coast	7·6	7·8	—0·2
Madras Coast	7·6	6·5	+1·1
South Madras	7·3	6·8	+0·5

The mean amount of cloud at Quetta during the month was 1·2 or 0·2 less than the normal. Cloud was, on the other hand, in slight excess at the Indian hill stations. The excess was greatest at Wellington (+1·2) and Darjeeling (+1·0).

The mean cloud estimate of the month was 0·8 in excess at Aden and 0·6 in defect at Zanzibar, the variations there being opposite in character to those of the aqueous vapour pressure and humidity conditions.

Rainfall.

The rainfall in August is generally heavy over the greater part of India, for the rain-bearing currents which are fully established in July are maintained throughout the whole of August, though their strength in August is usually not so great as in July. In August also there is a greater probability of the occurrence of more or less prolonged breaks in the rains, so that on the whole the rainfall in August is usually lighter than in July. The average distribution of the precipitation in August is, however, very similar to that in July. The areas of heaviest rainfall are the west coast districts of the Peninsula, Arakan, Lower Pegu, Tenasserim, Assam, the Sikkim-Himalayas, South-East Bengal and parts of Central Bengal and of the Central Provinces. On the other hand the rainfall is light and scanty in Central Burma, the southern districts of Madras, including Tinnevelly, Madura and parts of Coimbatore and Salem, Upper Sind and the West Punjab. The normal rainfall in August varies from average amounts of thirty-eight inches in Tenasserim and thirty-two inches in Arakan to about two inches in Sind, the West Punjab and South Madras.

The distribution of the rainfall of the month was mainly dependent on the following factors:—

(1) The Bengal current was moderately strong throughout the whole month.

(2) The Bombay current was strong during the first fortnight but feeble during the last fortnight of the month.

(3) The character of the disturbances of the month. The first storm of the month travelled with unusual rapidity, and hence gave only a moderate burst of rain to the tracts through which it passed. The two remaining storms of the month were feeble, diffused disturbances, and the accompanying rainfall was hence moderate in amount and widely spread.

The chief periods of most general rainfall were as follows:—

1st.—From the 1st to the 3rd. Northern and Central India obtained moderately heavy rain during the later stages of the storm of the last week of July.

2nd.—From the 7th to the 14th. The whole of Northern and Central India received moderate to heavy rain during the existence of the first storm and for a short period after its disappearance. The rainfall was very heavy in the submontane and hill districts of the Punjab and North-Western Provinces on the 13th and 14th.

3rd.—From the 15th to the 20th, during which the Deccan, Central Provinces and North-Eastern India received moderate rain due to the second disturbance of the month.

4th.—From the 24th to the end of the month. Moderate general rain fell over the greater part of Central India, North Deccan and North India during the existence of the third storm of the month and for some days after its disappearance.

Southern India obtained moderate rain in the interval between the second and third disturbances.

The preceding remarks have stated the chief periods during which the rainfall of the month occurred. Its actual distribution and variation from the normal are fully exhibited in Plates VI and V. The following give a summary of the most important features of the rainfall of the month:—

(1) Rainfall was in slight to moderately large excess over Arakan and Tenasserim, and in slight defect in Lower and Central Burma.

(2) It was in slight defect in Cachar, in moderate defect in South and Central Bengal and Chota Nagpur, normal in Assam, North and East Bengal and South Bihar, and in moderate excess in Orissa and North Bihar.

(3) It was in slight defect in the eastern and central districts of the North-Western Provinces, in light to moderate excess in the submontane and hill districts of the North-Western Provinces and the Punjab, and in slight to moderate excess over nearly the whole of the remainder of the Punjab, except the central districts.

(4) It was in moderate defect in Rajputana and Central India and also in Berar, the Bombay and Madras Deccan and Mysore.

(5) It was in largish excess in Sind.

(6) It was in moderate excess in South-Central and East Madras and in slight defect in Malabar.

The following table gives comparative rainfall data of the month for the 51 meteorological divisions of India. In the majority of these divisions the data are based on the rainfall statements of the month published by the Provincial Governments; but in the cases of Burma, Assam, Berar, Mysore, and Hyderabad for which the statements were not received in time, the data are derived from the weekly telegrams received from District Officers in those provinces:—

Province.	Division.	Number of rainy days. Average actual, August 1895.	Number of rainy days. Average normal, August.	Rainfall. Average actual, August 1895.	Rainfall. Average normal, August.	Rainfall. Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	44·77	37·23	+7·54
	Lower Burma*	?	?	20·30	20·61	−0·31
	Central do.*	?	?	11·84	12·94	−1·10
	Upper do.*	?	?	6·26	?	?
	Arakan*	?	?	33·57	31·55	+2·02
Bengal and Assam	Eastern Bengal	19·0	18·4	16·37	16·67	−0·30
	Assam (Surma)*	?	?	29·49	31·55	−2·06
	Do. (Brahmaputra)*	?	?	14·18	13·88	+0·30
	Deltaic Bengal	15·3	16·3	8·99	12·70	−3·71
	Central do.	14·4	15·8	8·56	12·14	−3·58
	North do.	17·7	17·5	19·29	19·10	+0·19
	Orissa	14·3	15·4	13·68	11·41	+2·27
	Chota Nagpur	16·5	17·7	11·06	14·99	−3·93
	Bihar (South)	14·9	13·1	10·86	11·19	−0·33
	Do. (North)	15·7	13·7	14·56	11·56	+3·00
North-Western Provinces and Oudh.	North-Western Provinces (East)	12·4	12·5	9·35	10·79	−1·44
	Oudh (South)	11·1	11·9	9·21	10·47	−1·26
	Do. (North)	12·2	11·7	10·30	10·44	−0·14
	North-Western Provinces (Central)	11·5	11·5	9·27	10·37	−1·10
	Do. do. (West)	10·3	10·4	9·14	8·69	+0·45
	Do. do. (Submontane)	14·4	12·4	15·95	12·82	+3·13
Punjab	Punjab (South)	5·6	4·3	4·50	3·44	+1·06
	Do. (Central)	6·8	6·2	4·72	5·27	−0·55
	Do. (Submontane)	10·7	8·1	10·38	8·33	+2·05
	Do. (Hill Districts)	16·9	15·5	19·40	17·56	+1·84
	Do. (North-West)	7·3	6·0	7·14	5·61	+1·53
	Do. (West)	4·9	2·7	3·59	2·10	+1·49
Bombay and Malabar Coast Districts (Madras).	Malabar	23·0	21·8	17·40	20·13	−2·73
	Madras (South Central)	7·2	5·6	5·33	3·49	+1·84
	Coorg	23·5	?	16·44	?	?
	Mysore*	?	?	4·26	5·30	−1·04
	Konkan	26·1	23·8	24·63	24·15	+0·48
	Bombay Deccan	8·4	10·0	5·25	6·27	−1·02
	Khandesh	8·2	8·6	4·47	5·99	−1·52
	Berar*	?	?	5·14	6·95	−1·81
Central Provinces and Berar.	Central Provinces (West)	12·1	12·8	11·68	9·87	+1·81
	Do. (Central)	15·0	14·1	13·92	12·87	+1·05
	Do. (East)	15·6	12·9	15·82	17·53	−1·71
Bombay (North)	Gujarat	14·0	13·5	9·08	9·28	−0·20
	Kathiawar	8·7	7·4	6·55	6·28	+0·27
	Sind	3·4	?	4·25	2·13	+2·12
Rajputana and Central India.	Central India (East)	11·9	?	9·29	12·42	−3·13
	Rajputana (East), Central India (West)	9·4	?	8·21	9·73	−1·52
	Rajputana (West)	5·0	?	3·81	4·48	−0·67
Madras	East Coast (North)	14·2	10·1	10·54	7·18	+3·36
	Do. (do.) (a)	22·0	17·7	13·86	12·75	+1·11
	Hyderabad (South)*	?	?	7·49	5·81	+1·68
	Madras (Central)	5·9	6·0	2·78	4·35	−1·57
	East Coast (Central)	5·2	5·2	3·35	3·06	+0·29
	Do. (South)	8·0	7·4	6·49	5·16	+1·33
	Madras (South)	4·5	3·3	2·48	2·02	+0·46

* NOTE.—The figures entered against divisions marked with an asterisk have been obtained from the Weekly Telegraphic Reports.

Arakan, Tenasserim, Lower and Central Burma obtained almost daily rain during the month. Occasional rain was also received in Upper Burma, but the only period of general rain over the province was the 23rd to the 28th.

The following gives a summary of the rainfall data of the province published in the *Burma Gazette*:—

Division.	Rainy Days. Actual, August 1895.	Rainy Days. Normal, August.	Rainfall in inches. Average actual, August 1895.	Rainfall in inches. Average normal, August.	Rainfall in inches. Variation from normal.
Tenasserim	28·5	?	42·07	37·23	+4·84
Lower Burma	26·1	?	19·26	20·61	−1·35
Central Burma	18·0	?	9·50	12·94	−3·44
Upper Burma	8·8	?	6·62	?	?
Arakan	26·8	?	33·33	31·55	+1·78

Assam received light to moderate showers during the first ten days of the month. General and moderate to heavy rain fell during the period from the 12th to the 22nd. Cherra Poonjee registered 10·20 inches on the 15th, 8·8 inches on the 16th, 8·95 inches on the 17th and 8·55 inches on the 18th, giving a total of 36·5 inches in four days. During the remainder of the month moderate daily rain fell in Cachar and showers in the Assam Valley.

The following table gives a summary of the rainfall data of the province published in the *Assam Gazette*:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, August 1895.	Average normal August.	Average actual, August 1895.	Average normal, August.	Variation from normal.
			Inches.	Inches.	Inches.
Assam (Surma) . .	23·5	21·1	20·46	20·73	—0·27
Do. (Brahmaputra) .	16·6	15·4	14·74	13·86	+0·88

The month was in the province of Bengal characterized by frequent and moderate rain. There were three periods of fairly general rain. The first extended from the 1st to 10th. The rainfall was most general from the 7th to the 9th, and was heaviest in Orissa and South-West Bengal. The Rangpur, Bogra and Pubna districts of North Bengal obtained very light showers during this period.

The second period was from the 13th to the 19th. Excessive rain fell on the 14th and 16th in Sikkim and the more northerly districts of North Bengal. The following gives the more noteworthy falls:—

Date.	District.	Station.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
14th . . .	Darjeeling . . .	Buxa .	7·21
,, . . .	Do. . . .	Kurseong .	7·16
16th . .	Do. . . .	Buxa .	11·65
,, . .	Jalpaiguri . . .	Jalpaiguri .	8·14

Bihar obtained general and heavy rain during the period, from the 15th to the 17th.

The third period extended from the 22nd to the 30th. The rainfall during this period was much more irregularly distributed than during the previous two periods, and was only light to moderate in amount. The districts of Rangpur, Bogra and Pubna in North Bengal, and the Dacca and Faridpur districts in East Bengal, and South Bihar obtained only light occasional showers during this period.

The following table gives comparative data for the eight divisions of the province:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, August 1895.	Variation from normal.	Average actual, August 1895.	Variation of actual from normal.	Percentage variation from normal.
			Inches.	Inches.	
Bengal, East .	19·0	+0·6	16·37	−0·30	− 2
Do. North .	17·7	+0·2	19·29	+0·19	+ 1
Do. Deltaic .	15·3	−1·0	8·99	−3·71	−29
Do. Central .	14·4	−1·4	8·56	−3·58	−29
Orissa . . .	14·3	−1·1	13·68	+2·27	+20
Chota Nagpur .	16·5	−1·2	11·06	−3·93	−26
North Bihar .	15·7	+2·0	14·56	+3·00	+26
South Bihar .	14·9	+1·8	10·86	−0·33	− 3

The preceding data indicate that the rainfall of the month was in moderate excess in Orissa and North Bihar, and was practically normal in South Bihar and North and East Bengal. It was, on the other hand, in moderate to considerable defectin Deltaic and Central Bengal and Chota Nagpur (about 30 per cent. in each division).

As already pointed out, the rainfall for the month was very irregularly distributed. The following gives comparative data for those districts in which it was more than 30 per cent. in defect:—

Division.	District.	Rainfall.			
		Average actual, August 1895.	Average normal, August.	Variation from normal.	Percentage variation from normal.
		Inches.	Inches.	Inches.	
South-West Bengal.	Burdwan . .	7·49	12·36	−4·87	−39
	Birbhum .	5·74	13·67	−7·93	−58
	Bankura . .	8·45	13·78	−5·33	−39
	Howrah . .	8·60	14·28	−5·68	−40
	Nadia . .	7·56	12·19	−4·63	−38
	Murshidabad .	6·71	11·79	−5·08	−43
Chota Nagpur	Hazaribagh .	8·08	13·07	−4·99	−38
	Palamau . .	7·34	11·56	−4·22	−37
	Manbhum .	7·09	12·87	−5·78	−45
	Singhbhum .	8·73	13·83	−5·10	−37

Rain fell in the North-Western Provinces during three well defined periods, *viz.*, from the 1st to the 9th, the 12th to the 18th, and the 25th to the 31st.

The rainfall of the first period was moderate in amount. It was heaviest in the south-eastern districts and was light and sporadic in Oudh and the submontane districts of the North-Western Provinces, more especially Saharanpur Muzaffarnagar, Pilibhit and Shahjehanpur. The heaviest falls of this period occurred chiefly during the advance of the cyclonic storm of the 7th to the 10th across Central India and South-West Rajputana.

The breaking up of that storm was followed by an advance of humid winds to the East Punjab and the North-Western Provinces, and very heavy rain was in consequence received in the submontane districts, more especially Dehra Dun, Saharanpur and Muzaffarnagar on the 12th, 13th, 14th, 15th and 16th. The whole province received more or less general rain daily from the 12th to the 18th; but the chief feature of this period was the heavy

precipitation in the submontane and hill districts. The following gives the largest falls in 24 hours :—

DATE.	DISTRICT.	STATION.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
12th	Muzaffarnagar . .	Jaoli Jansath . .	8·95
„	Dehra Dun . .	Raipur . . .	10·10
13th	Ditto . .	Rajpur . . .	8·60
„	Ditto . .	Dehra (Leper Asylum)	8·23
15th	Garhwal . . .	Kotdwara . . .	10·10
16th	Naini Tal . . .	Haldwani . . .	8·00

An almost complete break obtained from the 19th to the 24th. The third period of rainfall extended from the 25th to the 30th. The rainfall was general and light to moderate over the greater part of the province. It was heaviest in the Bareilly, Dehra Dun, Almora and Naini Tal districts and was light in Oudh and the western districts.

The following table summarizes the rainfall data of the month :—

DIVISION.	NUMBER OF RAINY DAYS.		RAINFALL.		
	Average actual, August 1895.	Variation from normal.	Average actual, August 1895.	Average normal, August.	Percentage variation from normal.
			Inches.	Inches.	
Oudh, North . . .	12·2	+0·5	10·30	−0·14	− 1
Do. South . . .	11·1	−0·8	9·21	−1·26	−12
N.-W. Provinces (East) .	12·4	−0·1	9·35	−1·44	−13
Ditto (Central)	11·5	0	9·27	−1·10	−11
Ditto (Submontane.)	14·4	+2·0	15·95	+3·13	+24
Ditto (West) .	10·3	−0·1	9·14	+0·45	+ 5

The variations of the mean rainfall of the month from the normal were nowhere large. It was in slight to moderate defect in the eastern and central districts of the North-Western Provinces and in South Oudh, more especially in the districts for which data are given below :—

DISTRICT.	RAINFALL			
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Hardoi	6·88	10·06	−3·18	−32
Benares	7·02	10·84	−3·82	−35
Mirzapur . . .	9·68	11·63	−1·95	−17
Cawnpore . . .	7·74	9·89	−2·15	−22
Farrukhabad . . .	6·43	9·96	−3·53	−35

There was considerable irregularity in the distribution of rainfall in certain districts.

The mean rainfall of the month was practically normal in North Oudh and the western districts of the North-Western Provinces, and in moderate to largish excess in the submontane and hill districts, more especially those for which data are given below :—

DISTRICT.	RAINFALL.			
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Dehra Dun	34·22	26·97	+7·25	+27
Saharanpur	15·49	10·65	+4·84	+45
Muzaffarnagar	10·75	8·08	+2·67	+33
Bareilly	13·51	10·01	+3·50	+35
Garhwal	18·84	13·09	+5·75	+44

The rainfall of the month in the Punjab was larger than usual over nearly the whole of the province. The following is a brief account of the three periods of rainfall :—

1st.—From the 1st to the 10th, during which frequent showers fell in all districts. The falls were generally moderate, the heaviest being 4·42 inches at Gurdaspur. The south-western districts, including Mooltan, Muzaffargarh and Dera Ghazi Khan had moderately heavy rain on the 8th, 9th and 10th.

2nd.—From the 13th to the 17th. Heavy rain fell in the hill and submontane districts during this period. The following large amounts in 24 hours were recorded :—

DATE.	DISTRICT.	STATION.	Rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
13th	Kangra . .	Palampur . .	7·94
14th	„ . .	Dharmsala .	6·45
15th	„ . .	Kangra . .	6·59

Little or no rain fell in the south-western or southern districts during this period, and only light to moderate rain in the central and northern districts.

3rd.—From the 28th to the 31st. The southern, submontane and hill districts received heavy rain, the central and northern divisions moderate showers, and the south-western

districts local sporadic showers. Falls in 24 hours exceeding four inches were recorded at stations in the Ferozepore, Gurgaon, Umballa and Amritsar districts.

The number of rainy days was larger than usual, and the rainfall was favourably distributed, as is shown by the following statement:—

Division.	Rainy days.			Rainfall.		
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Average actual, August 1895.	Average normal, August.	Variation from normal.
				Inches.	Inches.	Inches.
Punjab, South .	5·6	4·3	+1·3	4·50	3·44	+1·06
Do. Central .	6·8	6·2	+0·6	4·72	5·27	−0·55
Do. Submontane	10·7	8·1	+2·6	10·38	8·33	+2·05
Do. Hills . .	16·9	15·5	+1·4	19·40	17·56	+1·84
Do. North-West	7·3	6·0	+1·3	7·14	5·61	+1·53
Do. West . .	4·9	2·7	+2·2	3·59	2·10	+1·49

The preceding statement indicates that the rainfall of the month was in slight defect in the central division and in moderate to largish excess relatively to the normal in the remaining five divisions.

British Baluchistan received numerous showers from the 8th to the 12th. Some of the falls accompanied thunderstorms and were very heavy. The more noteworthy were the following:—

Date.	District.	Station.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
7th	Baluchistan .	Spintangi .	1·80
8th	,, .	Harnai . .	1·87
11th	,, .	Nuttal . .	3·60
,, ...	,, .	Bellput . .	2·28
,, ...	,, .	Temple Dera .	2·20
,, ...	,, .	Rindli . .	1·50

The rainfall of the month was hence largely in excess.

Rajputana (except the Jeysulmere State) obtained almost daily rain during the period from the 1st to the 10th. The passage of the first cyclonic storm of the month gave moderately heavy rain in the southern and south-western districts. The heaviest fall was 4·10 inches at Bandikui on the 7th. An almost complete break obtained from the 10th to the 26th or 27th. Moderate showers fell on the 28th, 29th and 30th in all districts. The following gives comparative data of the rainfall of the month for the larger states:—

State.	Rainfall.			
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Jeysulmere	1·65	2·39	−0·74	−31
Jodhpur	3·99	4·87	−0·88	−18
Bickaneer	5·20	3·47	+1·73	+50
Ajmere	7·50	6·75	+0·75	+11
Oodeypore	6·24	8·68	−2·44	−28
Jeypore	8·59	9·44	−0·85	− 9
Ulwar	5·47	10·57	−5·10	−48
Bhurtpur	6·21	8·29	−2·08	−25
Dholpur	7·38	?	?	?
Kerowlee	9·62	11·06	−1·44	−13
Kotah	12·81	10·49	+2·32	−22

Central India received moderate and general rain from the 1st to the 10th and sporadic showers from the 11th to the 17th. The break in the rains, which commenced in Rajputana on the 10th, extended to Central India on the 18th where it continued until the 25th. Moderate and favourably distributed rain fell during the last five days of the month. The rainfall of the month was generally below the normal, but not to a serious extent. The deficiency averaged 3 inches for the whole area, or 25 per cent. below the normal of the normal of the month. The following gives comparative data for the larger states or divisions:—

State.	Rainfall.			
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Bhopal	9·80	12·85	−3·05	−24
Gwalior	7·55	10·38	−2·83	−27
Rewah	13·16	14·93	−1·77	−12
Bundelkhand . . .	10·76	13·70	−2·94	−21

In the Central Provinces and Berar moderate to heavy rain was received from the 1st to the 9th, the heaviest falls occurring on the 7th and 8th during the passage of the first cyclonic storm of the month. It advanced too rapidly to give excessive falls, and the largest amounts in 24 hours were as follows :—

DATE.	DISTRICT.	STATION.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
7th . . .	Bilaspur . .	Bilaspur . .	6·38
,, . . .	Balaghat . .	Burha . .	4·11
8th . . .	Raipur . .	Simga . . .	5·25
,, . . .	Chanda . .	Brahmapuri . .	4·16

A short break set in on the 10th, and was followed by moderately heavy rain from the 13th to the 15th in the western districts and showers in the eastern and central districts of the Central Provinces.

Fine weather with little or no rain obtained from the 17th to the 22nd. The whole province received moderately heavy rain during the remainder of the month from the feeble disturbance of the period. The following gives amounts exceeding 4 inches in 24 hours received during this period :—

DATE.	DISTRICT.	STATION.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
26th . . .	Betul . . .	Multai . .	7·95
,, . . .	Nagpur . .	Nagpur . .	7·90
,, . . .	Betul . . .	Badnur . .	6·18
,, . . .	Wardha . .	Henganghat .	4·77
28th . . .	Sambalpur . .	Raigarh . .	5·34

The following is a summary of the rainfall data of the Central Provinces and of Berar for the month :—

DIVISION.	NUMBER OF RAINY DAYS.		RAINFALL.		
	Average actual, August 1895.	Variation from normal.	Average actual, August 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches	
Central Provinces (East) .	15·6	+2·7	15·82	—1·71	—10
Do. (Central)	15·0	+0·9	13·92	+1·05	+ 8
Do. (West) .	12·1	—0·7	11·68	+1·81	+18
Berar	8·8	?	5·11	?	?

The number of rainy days was somewhat larger than usual, and the rainfall was in slight to moderate excess in the western and central districts and in slight defect (averaging 10 per cent.) in the eastern districts. The rainfall of the month was hence favourable and well distributed. Berar received an average of 5·11 inches, 1·81 inches, or about 26 per cent. less than the normal.

The Konkan Division of the Bombay Presidency received general rain daily throughout the month. There was only one period of very heavy rain during the month, *viz.*, from the 5th to the 10th. The following amounts exceeding 7 inches in 24 hours were registered during this period :—

DATE.	DISTRICT.	STATION.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
7th	Kolaba . . .	Matheran . . .	8·20
,,	Satara . . .	Malcolmpeth . .	9·20
8th	North Kanara . .	Yellapur . . .	7·30
,,	Kolaba . .	Matheran . . .	8·59
		Mahad . . .	7·80
,,	Thana . . .	Dahanu . . .	9·08
,,	Satara . . .	Malcolmpeth . .	7·72
9th	Do. . . .	Do. . . .	7·10

The mean rainfall of the month of this division was almost identical with the normal (differing from it by only 2 per cent.).

The Deccan division, including the Dharwar, Bijapur, Belgaum, Sholapur, and Poona districts, obtained occasional showers during the month and a general moderate burst of rain from the 7th to the 9th. The rainfall was hence below the normal, by amounts averaging 16 per cent. for the whole division. The following comparative data for the districts in this division show that the rainfall was very largely in defect in the Bijapur and Sholapur districts :—

DIVISION.	RAINFALL.			
	Average actual, August	Average normal, August.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Dharwar . . .	3·32	4·10	−0·78	−19
Belgaum . . .	6·04	7·36	−1·32	−18
Bijapur . . .	1·08	5·19	−4·11	−79
Sholapur . . .	1·56	5·37	−3·81	−71
Poona	6·07	8·82	−2·75	−31

The Nasik and Khandesh districts obtained light to moderate daily rain from the 1st to the 10th and frequent showers during the remainder of the month. The rainfall, however, was very irregularly distributed. Thus Malegaon received only 0·79 inch or barely one-fifth of the normal (4·09 inches), whilst the neighbouring station of Nandgaon registered over 4 inches. The rainfall in the Ahmednagar district was scanty, occurring chiefly as light occasional local showers. The total for the month was hence considerably in defect, the deficiency averaging 65 per cent. for Ahmednagar and 25 per cent. for the whole division of Khandesh.

Gujarat and Kathiawar obtained daily rain during the first fortnight of the month and occasional showers in the last fortnight. Heavy rain was received over the greater part of Gujarat on the 9th during the passage of the first storm of the month through South-West Rajputana and Lower Sind. The following were the most noteworthy falls in 24 hours:—

Date.	District.	Station.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
8th	Surat	Balsar	7·20
9th	Ahmedabad	Ahmedabad	8·06
„	Panch Mahals	Kalol	6·31
„	Kaira	Nadlad	6·75
„		Matar	5·80
„		Kaira	5·65
„	Kathiawar	Junagad	5·96

The rainfall of the month was practically normal in these two divisions, averaging 2 per cent. in defect in Gujarat and 4 per cent. in excess in Kathiawar.

Sind received heavy rain from the 9th to the 11th. Sehwan registered 4·77 inches and Hala 4·87 inches on the 11th. The average fall of the month in that province was 4·25 inches, double the normal precipitation of the month.

The following is a statement of the rainfall data of the six divisions of the Presidency:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, August 1895.	Variation from normal.	Average actual, August 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches.	
Konkan	26·1	+2·3	24·63	+0·48	+ 2
Bombay Deccan	8·4	−1·6	5·25	−1·02	− 16
Khandesh	8·2	−0·4	4·47	−1·52	− 25
Gujarat	14·0	+0·5	9·08	−0·20	− 2
Kathiawar	8·7	+1·3	6·55	+0·27	+ 4
Sind	3·4	?	4·25	+2·12	+100

The Malabar coast districts of Madras obtained general rain from the 1st to the 15th, from the 21st to the 26th and on the 31st, and local showers on the remaining days of the month. The falls were generally lighter than usual, and the only days of heavy general rain were the 9th and 10th. The Malabar district received an average of 3·35 inches on the 9th and the South Canara district of 2·04 inches on the 9th and 2·15 inches on the 10th. The mean rainfall of the Malabar division was 17·40 inches, 2·73 inches, or 14 per cent. below the normal amount for the month.

The rainfall over the remainder of the Madras Presidency, with the exception of the Deccan districts, was more favourable than usual.

The south and south-central division obtained frequent showers, chiefly during the last fortnight of the month. Moderately heavy general rain fell on the 11th, 19th and 30th. The rainfall averaged about 20 per cent. above the normal in these two divisions. The Coromandel Coast districts (including the divisions of East Coast South, and East Coast, Central) received fairly general rain on the 4th and 5th, the 11th and 19th, and 21st and 29th and 30th. The following gives mean district rainfalls exceeding one inch:—

Date.	District.	Average rainfall of 24 hours preceding 8 A.M. of date in district.	Heaviest rainfall in district.
		Inches.	Inches.
12th	Kistna	1·17	2·28
16th	Tanjore	1·24	3·35
19th	Trichinopoly	1·07	2·55
21st	North Arcot	1·35	2·50
25th	Godavari	1·66	5·00
29th	Tanjore	1·04	2·14
30th	Do.	1·14	4·85
„	Trichinopoly	1·35	3·06

The Central or Deccan districts obtained occasional local showers, but the rainfall was largely in defect. It averaged only 2·78 inches or 1·57 inches (36 per cent.) below the normal of the month in that division. The deficiency was greatest in the Anantapur district, in which barely one-third of the normal fall was registered.

The northern coast districts had frequent general and moderately heavy rain. The chief periods were from the 6th to the 8th, the 11th to 13th, the 19th to the 21st and the 24th to 28th. They received a total average of 12·20 inches, or 22 per cent. in excess of the normal.

The following gives a summary of the rainfall data for the eight divisions of the Presidency :—

Division.	Rainfall.			
	Average actual, August 1895.	Average normal, August.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Madras, East Coast (North) .	10·54	7·18	+3·36	+47
Do. ditto . .	13·86	12·75	+1·11	+ 9
Do. Central	2·78	4·35	—1·57	—36
Do. East Coast (Central) .	3·35	3·06	+0·29	+ 9
Do. ditto (South) . .	6·49	5·16	+1·33	+26
Do. South	2·48	2·02	+0·46	+23
Do. South Central . . .	5·33	3·49	+1·84	+53
Malabar	17·40	20·13	—2·73	—14

The following table gives a comparative statement of the rainfall in each collectorate of the Presidency, and shows more fully than the previous table the distribution of the rainfall of the month :—

District.	Number of rainy days.		Rainfall.			Percentage variation from normal.
	Average actual, August 1895.	Average normal, August.	Average actual, August 1895.	Average normal, August.	Variation from normal.	
			Inches.	Inches.	Inches.	
Ganjam .	16·2	11·1	11·54	7·69	+3·85	+50
Vizagapatam .	17·4	12·5	13·69	9·26	+4·43	+48
Godavari . .	11·4	8·3	8·18	5·77	+2·41	+40
Kistna . .	10·7	8·6	7·25	5·84	+1·41	+24
Nellore . .	5·2	5·2	3·35	3·06	+0·29	+ 9
Chingleput .	8·9	8·3	5·78	5·12	+0·66	+13
Madras .	12·0	8·2	4·36	4·48	—0·12	— 3
North Arcot .	6·1	7·6	4·44	5·43	—0·99	—18
South Arcot .	7·6	8·2	6·56	6·04	+0·52	+ 9
Tanjore . .	9·3	6·6	8·42	4·61	+3·81	+83
Trichinopoly .	7·2	5·9	6·43	4·34	+2·09	+48
Madura . .	6·7	4·3	3·85	2·75	+1·10	+40
Tinnevelly .	1·7	2·0	0·79	1·02	—0·23	—23
Malabar . .	19·9	19·6	13·81	16·45	—2·64	—16
South Canara .	28·6	24·8	23·79	25·43	—1·64	— 6
Salem . .	7·7	6·9	6·43	4·58	+1·85	+40
Coimbatore .	6·6	4·0	3·73	2·19	+1·54	+70
Nilgiris . . .	15·5	14·5	9·40	9·10	+0·30	+ 3
Cuddapah .	6·1	6·2	3·24	4·37	—1·13	—26
Anantapur .	3·2	5·7	1·43	3·98	—2·55	—64
Bellary . .	7·1	6·4	2·74	3·67	—0·93	—25
Kurnool .	7·3	4·9	3·52	5·38	—1·86	—35

The following table shows that there is a striking contrast in the rate at which the monsoon rainfall decreases in advancing into the interior in the Western and Eastern Himalayas. It gives rainfall data of the month for six stations from Simla to Leh in the Punjab Himalayas, and also for the same number of similarly situated stations in the Sikkim Himalayas :—

Punjab Himalayas.				Sikkim Himalayas.			
Station.	Rainfall.			Station.	Rainfall.		
	Average actual, August 1895.	Average normal, August.	Variation from normal.		Average actual, August 1895.	Average normal, August.	Variation from normal.
	Inches.	Inches.	Inches.		Inches.	Inches.	Inches.
Simla . .	17·36	18·05	—0·69	Buxa .	59·42	42·05	+17·37
Kotgarh .	8·31	13·54	—5·23	Kurseong .	46·08	?	?
Kilba . .	3·35	4·28	—0·93	Darjeeling .	30·59	25·45	+5·14
Kailong .	1·49	1·32	+0·17	Guntok .	20·47	?	?
Poo . .	0·50	?	?	Gnatong .	21·63	?	?
Leh . .	0·57	0·55	+0·02	Yatung .	7·05	?	?

Table

Abstract of Observations taken at 8 A.M. at 207

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.									Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
I.—Burma Coast and Bay Islands.		...	...	−·026	...	...	...	...	...	...	...	84·2	0	75·4	+0·4	79·7	+0·2	8·8	...	...	...	...	15·4
Bay Islands	Port Blair	61	29·770	?	29·762	29·837	29th	29·716	23rd	·121	80·3	84·4	?	77·3	?	80·9	?	7·1	87·2	15th	73·3	3rd	13·9
	Camorta	?								Not received.													
Tenasserim	Mergui	96	29·807	?	29·835	29·909	4th	29·698	31st	·211	77·0	*83·5	?	73·0	?	77·8*	?	10·5	88·6	19th	71·4	2nd	17·2
	Tavoy	26	29·855	?	29·812	29·906	4th	29·774	31st	·132	76·4	82·3	?	73·1	?	77·7	?	9·2	87·2	17th	70·7	8th	16·5
	Moulmein	94	29·735	−·021	29·767	29·801	1st	29·658	20th	·143	76·6	82·7	−0·5	74·2	+0·3	78·5	−0·1	8·5	87·0	11th	72·3	3 days	14·7
	Toungoo	183	29·593	−·025	29·719	29·659	1st	29·487	10th	·172	78·2	87·3	+1·0	74·9	0	81·1	+0·5	12·4	92·7	24th	72·2	6th	20·5
Lower Burma	Rangoon	41	29·758	−·030	29·736	29·826	29th	29·653	10th	·173	78·2	85·1	+0·2	75·9	+0·2	80·5	+0·2	9·2	89·7	31st	73·9	2 days	15·8
	Bassein	27	29·764	−·026	29·726	29·853	29th	29·660	11th	·193	78·4	84·3	−0·1	75·7	+0·1	80·0	0	8·6	88·2	18th	73·8	19th	14·4
	Diamond Island.	41	29·751	−·028	29·727	29·822	29th	29·662	11th	·160	80·2	83·4	−1·0	77·2	+2·0	80·3	+0·5	6·2	85·6	6 days	75·4	4 days	10·2
Arakan	Akyab	20	29·716	−·024	29·679	29·814	29th	29·581	11th	·233	80·0	84·7	+0·3	77·0	−0·2	80·9	+0·1	7·7	90·2	12th	75·2	7 days	15·0
II.—Burma Inland		...	...	−·029	...	...	...	...	...	...	...	87·7	−0·4	73·9	+0·5	80·8	+0·1	13·8	...	...	...	...	22·1
Central Burma	Thayetmyo	134	29·620	−·029	29·696	29·696	29th	29·526	11th	·170	80·6	89·7	+0·9	76·7	+0·7	83·2	+0·8	13·0	92·1	3 days	74·6	14th	17·5
	Minbu	?	29·581	?	?	29·662	29th	29·488	20th	·174	79·8	90·6	?	77·1	?	83·9	?	13·5	95·6	11th	75·1	28th	20·5
	Yamethin	645	29·105	?	29·700	29·197	29th	29·001	20th	·196	78·4	91·0	?	74·2	?	82·6	?	16·8	97·7	11th	72·0	3 days	25·7
	Taunggyi	?	?	?	?	?	?	?	?	?	66·8	76·3	?	63·2	?	69·8	?	13·1	81·7	11th	60·5	31st	21·2
Upper Burma	Mandalay	249	29·493	?	29·689	29·574	29th	29·409	20th	·165	83·1	95·3	?	79·1	?	87·2	?	16·2	101·1	2 days	74·6	28th	26·5
	Kindat	?	29·348	?	?	29·445	29th	29·263	20th	·182	78·6	87·2	−1·6	76·4	+0·3	81·8	−0·7	10·8	92·3	11th	74·0	2 days	18·3
	Lashio	?	27·009	?	?	27·108	10th	26·923	20th	·185	73·5	82·9	?	68·6	?	75·8	?	14·3	90·5	11th	64·5	28th	26·0
	Bhamo	?	29·343	?	?	29·419	29th	29·277	20th	·142	78·3	88·6	?	75·7	?	82·2	?	12·9	95·1	2 days	73·8	4 days	21·3
III.—Assam		...	...	−·014	...	...	...	...	...	...	...	88·4	−1·0	77·1	−0·2	82·8	−0·6	11·3	...	...	...	...	18·9
Assam (Surma)	Silchar	104	29·606	−·010	29·663	29·715	29th	29·515	11th	·200	79·9	89·9	+0·7	76·7	0	83·3	+0·4	13·2	95·6	12th	74·3	4th	21·3
	Dapoota	?	29·404	?	29·646	29·496	29th	29·343	5th & 17th.	·153	80·4	91·0	?	76·5	?	83·8	?	14·5	95·3	28th	74·5	23rd	20·8
Brahmaputra	Sibsagar	333	29·361	−·023	29·651	29·468	29th	29·290	13th	·178	79·5	87·8	−2·0	77·3	−0·5	82·6	−1·3	10·5	93·2	28th	74·0	7th	19·2
	Dhubri	115	29·559	−·009	29·628	29·662	29th	29·490	15th	·172	80·0	84·9	−1·6	78·0	−0·2	81·5	−0·9	6·9	89·2	12th	74·8	17th	14·4
IV.—Bengal and Orissa		...	...	−·018	...	...	...	...	...	...	...	87·5	+0·1	77·9	+0·2	82·7	+0·2	9·6	...	...	...	...	16·6
East Bengal	Chittagong	87	29·608	−·031	29·643	29·712	29th	29·503	6th	·209	80·2	86·4	+1·2	76·4	+0·4	81·4	+0·8	10·0	90·7	12th	74·1	28th	16·6
	Lungleh	?	?	?	?	?	?	?	?	?	69·2	75·5	?	66·4	?	70·9	?	9·1	79·1	12th	64·7	18th	14·4
	Noakhali	43	29·641	?	29·631	29·725	29th	29·554	6th	·171	80·6	85·1	?	77·3	?	81·2	?	7·8	89·5	12th	75·3	8th & 9th	14·2
	Comilla	36	29·645	?	29·629	29·751	29th	29·561	6th	·190	80·0	87·2	?	76·5	?	81·9	?	10·7	92·3	12th	74·8	3 days	17·5
	Sirajganj	49	29·602	?	29·601	29·702	29th	29·527	6th	·175	80·8	86·5	?	78·3	?	82·4	?	8·2	90·8	12th	75·7	2nd	15·1
	Narayanganj	26	29·640	−·014	29·614	29·746	29th	29·560	6th	·186	81·7	86·8	−0·9	79·3	+0·4	83·1	−0·3	7·5	90·6	12th	77·2	4 days.	13·4
	Barisal	13	29·654	−·003	29·612	29·754	29th	29·557	6th	·197	81·5	87·0	+0·7	78·5	+0·6	82·7	+0·7	8·5	91·8	12th	76·4	18th	15·4
	Mymensingh	59	29·613	−·013	29·623	29·706	29th	29·545	20th	·161	80·9	86·9	−0·3	77·9	+0·3	82·4	0	9·0	92·2	12th	74·6	20th	17·6
Deltaic Bengal	Faridpur	46	29·622	?	29·616	29·716	29th	29·529	6th	·187	81·4	86·2	?	78·9	?	82·6	?	7·3	89·8	12th	76·4	9th & 17th	13·4
	Jessore	33	29·609	−·022	29·589	29·678	29th	29·507	7th	·171	82·5	89·0	+0·3	78·4	−0·3	83·7	0	10·6	92·5	3 days	75·9	2 days.	16·6
	Calcutta	21	29·612	−·017	29·579	29·691	29th	29·458	7th	·233	81·3	87·0	−0·1	77·9	−0·2	82·5	−0·2	9·1	91·4	20th	74·2	19th	17·2
	Saugor Island	25	29·598	−·031	29·567	29·680	27th	29·393	7th	·287	82·2	87·4	+0·2	79·9	+0·3	83·7	+0·3	7·5	90·7	25th	75·5	8th	15·2
	Krishnagar	47	29·589	?	29·584	29·660	26th	29·468	7th	·192	81·9	89·6	?	78·2	?	83·9	?	11·4	93·3	12th & 20th.	76·2	9th	17·1
	Midnapore	149	29·484	?	29·579	29·550	27th	29·302	7th	·248	81·9	89·7	?	78·2	?	84·0	?	11·5	94·8	20th	75·1	16th	19·7

* Mean of 30 days.

I.

Stations in India, Burma, etc., in August 1895.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	S.E.	S.	S.W.	W.	N.W.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st August 1895.	Normal rainfall for period, from 1st June to 31st August.	Variation from normal of period, from 1st June to 31st August.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	30·51	25·86	+2·90	...	...	...	...	I.—Burma Coast and Bay Islands.	
...	...	...	...	...	2	15	13	1	12·8	9·6	+33	88	·912	9·0	21	?	?	17·71	15·20	+ 2·51	58·17	49·97	+ 8·20	3·25	Port Blair .	Bay Islands.
													Not r	eceive	d.										Camorta .	
...	5	...	...	...	2	6	8	10	1·7	1·6	+ 6	94	·873	5·9	28	?	?	39·69	28·85	+10·84	87·31	92·28	— 4·97	3·59	Mergui .	Tenasserim.
22	...	1	...	...	...	6	1	1	1·5	?	?	93	·856	9·1	28	?	?	44·52	?	?	107·65	?	?	6·98	Tavoy.	
...	...	1	4	6	7	9	2	2	3·1	3·2	— 3	94	·853	8·9	30	26·18	+3·82	42·08	38·96	+ 3·12	109·96	120·50	−10·54	6·21	Moulmein.	
4	...	...	1	20	5	1	...	...	3·5	3·9	−10	92	·901	9·1	24	23·91	+0·09	16·83	18·50	— 1·67	38·54	51·02	−12·48	2·33	Toungoo.	
...	...	1	...	...	6	12	9	3	4·0	4·7	−15	93	·900	8·9	24	22·73	+1·27	17·17	18·19	— 1·02	58·48	57·38	+ 1·10	2·78	Rangoon .	Lower Burma.
4	...	...	1	2	17	4	1	2	5·0	3·4	+47	93	·915	7·7	28	25·27	+2·73	17·59	23·25	— 5·66	61·76	70·69	— 8·93	2·44	Bassein.	
1	...	...	...	...	2	21	4	3	10·8	6·7	+61	86	·892	9·3	26	22·10	+3·90	31·47	22·69	+ 8·78	64·96	72·17	− 7·21	5·56	Diamond Island.	
1	...	2	8	5	13	2	...	...	3·8	3·2	+19	94	·964	8·9	25	26·09	−1·09	47·52	41·26	+ 6·26	116·01	136·79	−20·78	6·64	Akyab .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·86	9·78	+1·86	...	...	...	...	II.—Burma Inland.	
...	...	...	...	11	19	1	...	...	6·6	5·9	+12	83	·863	9·6	15	12·36	+2·64	5·78	6·57	— 0·79	13·11	20·34	− 7·23	0·81	Thayetmyo .	Central Burma.
...	...	...	5	17	7	1	1	...	12·9	?	?	84	·866	5·3	11	?	?	5·31	?	?	14·10	?	?	1·09	Minbu.	
...	...	...	1	16	14	...	...	...	9·5	?	?	85	·817	3·0	7	?	?	5·57	?	?	10·83	?	?	1·47	Yamethin.	
5	...	2	...	10	3	11	...	...	...	?	?	91	·600	8·2	18	?	?	13·41	?	?	31·52	?	?	2·37	Taunggyi.	
1	...	...	...	10	12	8	...	...	11·0	?	?	73	·817	7·3	6	?	?	2·92	?	?	10·65	?	?	1·55	Mandalay .	Upper Burma.
27	...	...	...	1	1	2	...	...	0·9	?	?	94	·922	8·6	17	?	?	17·49	12·98	+ 4·51	44·93	38·52	+ 6·41	2·37	Kindat.	
...	...	...	...	...	...	...	...	...	?	?	?	87	·722	6·6	14	?	?	9·28	?	?	28·59	?	?	1·91	Lashio.	
24	...	3	...	...	...	...	3	1	1·2	?	?	93	·902	7·8	16	?	?	11·08	?	?	34·86	?	?	2·11	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16·35	16·48	+0·70	...	...	...	...	III.—Assam.	
31	...	...	...	...	...	...	...	...	1·2	3·0	−60	91	·925	9·2	22	22·00	0	23·09	20·56	+ 2·53	54·21	61·35	− 7·14	3·15	Silchar .	Assam (Surma),
...	...	...	...	...	...	...	...	...	?	?	?	88	·912	8·0	18	?	?	13·85	?	?	39·49	?	?	3·20	Dapoota.	
6	...	10	4	3	1	7	...	...	3·8	2·7	+41	95	·956	8·7	16	16·91	−0·91	15·92	14·93	+ 0·99	50·72	44·51	+ 6·21	2·55	Sibsagar .	Brahmaputra.
3	2	14	4	3	1	3	1	...	4·3	3·2	+34	91	·937	8·8	15	13·50	+1·50	12·53	13·95	— 1·42	69·16	54·72	+14·44	2·16	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	12·53	13·58	−1·51	...	...	...	...	IV.—Bengal and Orissa.	
...	...	3	6	15	6	1	1	...	6·8	6·1	+12	88	·914	8·2	14	17·27	−3·27	12·31	16·76	− 4·45	47·08	58·07	−10·99	2·37	Chittagong .	East Bengal.
...	...	...	...	...	...	...	...	...	?	?	?	95	·679	?	26	?	?	26·43	?	?	66·58	?	?	3·62	Lungleh.	
...	...	...	8	14	5	3	1	...	6·0	?	?	91	·951	6·1	22	22·15	−0·15	26·36	25·33	+ 1·03	58·39	75·37	−16·98	4·43	Noakhali.	
...	...	...	4	5	22	...	...	...	6·0	?	?	94	·963	7·8	16	18·06	−2·06	15·24	17·65	− 2·41	32·11	53·76	−21·65	3·80	Comilla.	
14	...	...	4	10	1	2	...	...	1·0	?	?	92	·965	9·3	16	13·20	+2·80	10·07	11·23	− 1·16	25·66	33·60	− 7·94	2·13	Sirajganj.	
...	...	...	5	14	9	1	2	...	9·0	6·0	+50	90	·974	9·0	13	17·36	−4·36	9·60	11·57	− 1·97	21·36	37·12	−15·76	1·64	Narayanganj.	
20	...	1	...	4	3	3	...	...	3·1	?	?	90	·970	9·3	24	19·15	+4·85	12·82	12·48	+ 0·34	29·10	44·20	−15·10	4·00	Barisal.	
...	1	2	7	15	5	1	...	...	5·4	?	?	90	·946	7·8	14	19·20	−5·20	15·05	13·96	+ 1·09	46·93	46·97	− 0·04	3·41	Mymensingh.	
8	...	...	1	15	6	1	...	...	3·2	?	?	92	·993	7·6	21	15·95	+5·05	9·90	12·57	— 2·67	28·77	36·91	− 8·14	2·13	Faridpur .	Deltaic Bengal.
5	...	...	3	12	8	2	1	...	4·0	4·1	— 2	89	·992	7·7	19	18·18	+0·82	8·78	10·38	— 1·60	21·34	34·68	−13·34	1·20	Jessore.	
4	...	1	7	8	7	3	1	...	3·5	5·3	−34	90	·963	8·2	20	18·91	+1·09	11·84	12·90	— 1·06	28·39	35·95	− 7·56	1·92	Calcutta.	
...	...	3	4	3	5	11	3	2	13·5	12·4	+ 9	90	·988	9·7	17	17·82	−0·82	10·47	16·55	− 6·08	30·12	42·12	−12·00	1·88	Saugor Island.	
...	...	...	8	11	7	1	3	1	5·0	?	?	84	·920	7·8	13	14·40	−1·40	5·68	11·23	— 5·55	19·50	30·18	−10·68	1·80	Krishnagar.	
3	5	3	1	6	9	4	...	...	4·2	?	?	87	·949	3·9	14	16·35	−2·35	8·50	12·53	— 4·03	28·20	33·89	− 5·69	1·35	Midnapore.	

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal.	Bankura	298	29·308	?	29·556	29·373	29th	29·173	7th	·200	81·6	88·9	?	77·9	?	83·5	?	11·0	94·1	11th	75·6	8th & 29th.	18·5
	Raniganj	334	29·298	?	29·580	29·368	25th	29·158	7th	·210	81·1	89·1	?	77·9	?	83·5	?	11·2	93·2	20th & 21st.	75·9	17th	17·3
	Burdwan	99	29·532	−·022	29·578	29·609	29th	29·394	7th	·215	82·1	90·1	+0·9	79·0	+0·1	84·6	+0·5	11·1	94·2	11th	76·7	2 days	17·5
	Naya Dumka	489	29·133	?	29·577	29·206	27th	29·026	7th	·180	81·4	88·2	?	77·7	?	83·0	?	10·5	92·0	12th & 21st.	75·8	8th & 29th.	16·2
	Berhampore	67	29·570	−·019	29·585	29·646	26th	29·470	7th	·176	81·7	88·7	+0·2	78·7	+0·2	83·7	+0·2	10·0	92·2	12th	77·3	29th	14·9
	Rampur Boalia.	70	29·567	?	29·586	29·646	26th & 29th.	29·477	7th	·169	82·9	88·3	?	79·3	?	83·8	?	9·0	92·1	12th	75·6	18th	16·5
	Malda*	72	?	?	?	?	?	?	?	?	82·3	89·7	?	79·4	?	84·6	?	10·3	95·1	11th	77·0	17th	18·1
	Bogra	61	29·590	−·001	29·603	29·697	29th	29·513	20th	·184	82·4	88·4	+0·5	78·8	+0·8	83·6	+0·7	9·6	92·2	12th	77·2	2 days	15·0
North Bengal	Dinajpur	123	25·530	−·008	29·607	29·632	29th	29·454	15th	·178	80·9	88·6	−0·1	73·8	+0·4	83·7	+0·2	9·8	92·8	12th	75·2	17th	17·6
	Rangpur	123	29·538	?	29·615	29·642	29th	29·457	20th	·185	81·5	88·3	?	78·4	?	83·4	?	9·9	92·3	12th	74·7	17th	17·6
	Jalpaiguri	284	29·392	+·001	29·634	29·502	29th	29·321	2 days	·181	79·7	88·1	+0·3	77·0	+0·9	82·6	+0·6	11·1	92·4	12th	74·6	16th	17·8
Orissa	Balasore	48	29·575	?	29·569	29·649	9th	29·365	7th	·284	81·8	87·6	+0·3	77·9	+0·1	82·8	+0·2	9·7	92·9	11th	74·8	16th	18·1
	False Point	21	29·610	−·029	29·573	29·688	9th	29·410	7th	·278	81·5	86·7	−0·3	77·6	−0·6	82·1	−0·5	9·1	91·5	11th	74·1	3 days	17·4
	Cuttack	80	29·543	−·036	29·566	29·625	30th	29·356	7th	·269	80·8	88·6	−0·7	78·2	0	83·4	−0·4	10·4	93·2	2 days	75·2	2 days	18·0
	Shortt's Island	?	29·599	?	?	29·680	17th & 19th.	29·372	7th	·308	82·6	87·6*	?	79·8	?	83·7*	?	7·8	92·4	11th	76·6	7th	15·8
	Puri	20	29·617	?	29·581	29·757	30th	29·464	7th	·237	82·0	87·6	?	79·2	?	83·4	?	8·4	92·2	31st	74·6	8th	17·6
V.—Gangetic Plain and Chota Nagpur.		...	...	−·016	...	...	...	...	...	...	...	88·9	0	77·9	−0·1	83·4	+0·1	11·0	...	...	...	...	19·0
Chota Nagpur	Hazaribagh	2,007	27·629	−·020	29·577	27·695	10th	27·491	7th	·204	76·0	84·0	+0·4	73·6	+0·7	78·8	+0·6	10·4	87·2	20th	71·3	29th	15·9
	Ranchi	2,128	27·519	−·007	29·581	27·578	10th	27·365	7th	·213	76·0	83·5	+0·6	72·8	+0·8	78·2	+0·7	10·7	87·7	20th	70·4	7th	17·3
	Daltonganj	730?	28·880	?	29·561	28·963	10th	28·763	6th	·200	81·0	89·0	?	77·4	?	83·2	?	11·6	94·3	23rd	74·6	16th	19·7
	Chaibassa	760	28·855	−·012	29·561	28·916	9th	28·672	7th	·244	80·5	89·1	+0·5	77·1	+0·5	83·1	+0·5	12·0	93·4	20th	72·8	21st	20·6
Bihar (South)	Gaya†	375	29·242	−·012	29·570	29·314	26th	29·131	7th	·183	81·4	90·7	+0·6	78·4	−0·1	84·5	+0·3	12·3	95·0	4th	75·8	3 days	19·2
	Dehri	351	29·250	?	29·553	29·316	23rd	29·141	7th	·175	82·8	89·4	?	?	?	?	?	?	93·8	22nd	?	?	?
	Patna	183	29·434	−·019	29·569	29·521	26th	29·349	7th	·172	82·5	88·5	−0·8	79·1	−0·4	83·8	−0·6	9·4	92·5	20th	75·2	23rd	17·3
	Arrah	190	29·426	?	29·568	29·508	26th	29·329	6th	·179	82·3	90·2*	?	79·3	?	84·8*	?	10·9	94·4	22nd	76·0	23rd & 24th.	18·4
	Buxar	239	29·370	?	29·564	29·439	23rd & 27th.	29·267	6th	·172	82·1	88·9	?	78·1	?	83·5	?	10·8	93·5	22nd	73·8	2nd	19·7
Bihar (North)	Purnea	125	29·516	−·007	29·595	29·611	26th	29·440	6th	·171	81·6	88·7	−0·5	78·9	+1·0	83·8	+0·3	9·8	91·7	12th	76·2	17th	15·5
	Bhagalpur	160	29·458	?	29·570	29·548	26th	29·362	6th	·186	82·8	88·9	?	79·0	?	84·0	?	9·9	92·7	12th & 21st.	77·2	3 days	15·5
	Darbhanga	166	29·458	−·024	29·577	29·559	26th	29·377	6th	·182	81·7	88·1	−0·3	79·6	+0·5	83·9	+0·1	8·5	92·0	21st	77·4	6th	14·6
	Muzaffarpur	178	29·444	?	29·576	29·536	26th	29·361	7th	·175	81·3	89·5	?	78·6	?	84·1	?	10·9	94·2	21st	75·2	23rd	19·0
	Motihari	224	29·402	?	29·583	29·495	26th	29·316	6th	·179	81·9	89·4	?	77·8	?	83·6	?	11·6	93·5	11th & 21st.	74·9	23rd	18·6
	Chapra	181	29·428	?	29·562	29·513	26th	29·343	6th	·170	81·9	89·2	?	78·9	?	84·1	?	10·3	94·3	22nd	75·6	23rd	18·7
N.-W. P. (Eastern Districts).	Benares	267	29·339	−·012	29·560	29·402	28th	29·228	7th	·174	82·0	89·9	+0·2	78·2	−0·6	84·1	−0·2	11·7	95·3	22nd & 23rd.	74·0	23rd	21·3
	Allahabad	309	29·288	−·022	29·551	29·359	18th	29·174	8th	·185	83·0	90·6	+0·8	76·6	+0·1	84·7	+0·9	12·0	96·1	29th	76·3	3 days	19·8
N.-W. P. (East Submontane).	Gorakhpur	256	29·352	−·013	29·566	29·440	29th	29·251	6th	·189	81·6	89·3	−0·8	77·7	−1·2	83·5	−1·0	11·6	94·9	22nd	73·7	17th	21·2
Oudh (South)	Lucknow	370	29·224	−·025	29·550	29·313	27th	29·117	6th	·196	81·9	90·0	−0·6	78·0	−0·5	84·0	−0·6	12·0	95·8	24th	75·3	31st	20·5
Oudh (North)	Bahraich	403	29·200	?	29·561	29·300	27th	29·082	6th	·218	81·9	88·9	?	78·0	?	83·5	?	10·9	93·9	22nd & 23rd.	72·0	26th	21·9
N.-W. Provinces (Central).	Cawnpore	416	29·176	?	29·544	29·260	27th	29·067	6th	·193	82·2	90·6	?	78·5	?	84·6	?	12·1	97·4	23rd	74·5	29th	22·9
	Mainpuri	516	29·075	?	29·547	29·166	27th	28·976	6th	·190	82·1	90·0	?	78·4	?	84·2	?	11·6	96·8	24th	75·5	31st	21·3

* Mean of 30 days.

† Mean of 28 days.

i—*continued.*

in India, Burma, etc., in August 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.								Heaviest rainfall during month.	Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st August 1895.	Normal rainfall for period from 1st June to 31st August.	Variation from normal of period, from 1st June to 31st August.			
21	...	...	8	1	1	...	...	...	1·6	P	P	88	·948	6·4	14	17·70	−3·70	6·74	14·35	− 7·61	32·83	36·17	− 3·34	2·40	Bankura .	Central Bengal.
14	...	2	6	4	...	4	...	1	2·1	P	P	90	·964	6·7	13	16·85	−3·85	12·45	13·60	− 1·15	26·92	35·70	− 8·78	2·61	Raniganj.	
9	...	3	8	4	3	4	...	...	3·3	3·6	−8	86	·942	8.1	10	18·09	−8·09	4·87	11·26	− 6·39	24·73	32·64	− 7·91	1·19	Burdwan.	
2	...	1	9	9	5	1	2	2	5·0	P	P	86	·922	8·3	16	18·63	−2·63	7·73	13·35	− 5·62	27·40	35·65	− 8·25	1·14	Naya Dumka.	
1	...	...	10	9	6	4	1	...	4·3	4·2	+2	91	·985	8·7	15	16·73	−1·73	5·88	11·43	− 5·55	20·19	31·71	−11·52	1·78	Berhampore.	
9	...	1	4	11	3	3	...	...	4·9	P	P	89	1·004	6·9	14	15·45	−1·45	8·98	12·05	− 3·07	24·66	33·37	− 8·71	2·01	Rampur Boalia	
1	...	2	...	17	6	3	1	...	2·5	P	P	90	·995	7·0	16	14·35	+1·65	11·47	9·95	+ 1·52	29·73	32·50	− 2·77	2·80	Malda.*	
4	...	..	2	21	4	...	...	...	4·3	P	P	88	·979	6·5	18	15·85	+2·15	10·07	11·80	− 1·73	27·73	39·29	−11·56	1·42	Bogra.	
7	...	1	14	4	3	1	1	...	3·3	P	P	91	·962	8·8	22	16·25	+5·75	14·04	12·48	+ 1·56	39·57	42·69	− 3·12	2·52	Dinajpur .	North Bengal.
4	...	6	8	7	3	3	...	...	1·8	P	P	90	·966	7·9	16	13·10	+2·90	9·33	12·66	− 2·73	35·35	48·05	−12·70	1·81	Rangpur.	
7	2	6	10	6	...	...	...	...	2·5	P	?	92	·931	9·2	24	18·80	+5·20	29·76	24·94	+ 4·82	85·97	81·16	+ 4·81	4·31	Jalpaiguri.	
11	1	3	...	...	5	8	3	...	4·3	P	P	87	·957	4·7	14	16·70	−2·70	7·89	12·38	− 4·49	40·24	33·32	+ 6·92	1·95	Balasore .	Orissa.
...	...	1	...	3	6	6	12	3	9·0	9·5	−5	89	·957	8·2	13	16·09	−3·09	17·91	12·77	+ 5·14	43·14	32·52	+10·62	3·70	False Point.	
9	...	...	2	1	1	8	8	2	2·8	2·6	+ 8	87	·908	7·7	19	16·18	+2·82	18·92	13·50	+5·42	53·32	34·78	+18·54	4·24	Cuttack.	
...	1	1	1	3	4	15	3	3	12·8	P	P	86	·956	6·7	13	P	P	11·39	P	P	35·58	P	P	3·62	Shortt's Island	
13	2	1	...	1	...	6	4	4	8·5	P	P	86	·941	7·2	11	13·25	−2·25	15·41	9·24	+ 6·17	48·93	27·61	+21·32	5·16	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10·77	11·63	−0·70	...	...	...	...	**V.—Gangetic Plain and Chota Nagpur.**	
2	1	...	6	4	5	1	6	6	8·0	7·5	+7	88	·795	9·9	20	18·27	+1·73	8·02	12·94	− 4·92	29·40	35·07	−5·67	1·37	Hazaribagh.	Chota Nagpur.
4	1	6	4	1	1	3	3	6	7·7	P	P	89	·791	7·0	19	17·85	+1·15	11·46	13·88	− 2·42	40·11	36·04	+ 4·07	1·68	Ranchi.†	
...	3	2	4	1	6	9	5	1	3·3	P	P	84	·912	4·7	12	P	P	7·34	P	P	23·05	P	P	2·18	Daltonganj.	
7	1	4	1	1	1	7	7	2	1·5	P	P	86	·901	8·5	18	17·20	+0·80	8·73	13·25	− 4·52	34·04	35·03	− 0·99	1·07	Chaibassa.	
4	...	5	8	1	2	7	3	...	4·5	2·6	+73	84	·905	7·4	12	13·73	−1·73	9·87	13·54	− 3·67	25·74	33·90	− 8·16	2·02	Gaya . .	Bihar (South).
11	...	2	6	2	...	4	5	1	8·1	P	P	84	·941	8·4	13	13·14	−0·14	8·99	12·78	− 3·79	30·83	28·68	+ 2·15	2·46	Dehri.	
...	...	7	13	3	...	3	5	...	6·4	3·2	+100	85	·947	9·4	15	13·73	+1·27	12·55	12·65	− 0·10	32·48	32·85	− 0·37	2·23	Patna.	
...	...	7	7	6	1	5	4	1	3·3	P	P	88	·977	6·6	15	12·55	+2·45	11·54	10·93	+ 0·61	27·11	27·91	− 0·80	3·42	Arrah.	
...	1	3	15	1	1	3	5	2	5·2	P	P	87	·946	7·6	15	12·60	+2·40	16·31	10·22	+ 6·09	37·71	26·25	+11·46	4·36	Buxar.	
2	1	8	16	1	1	...	1	1	4·4	2·3	+91	89	·962	8·7	18	17·64	+0·36	8·94	12·44	− 3·50	33·93	40·52	− 6·59	1·82	Purnea .	Bihar (North).
2	...	3	7	12	2	3	2	...	4·1	P	P	87	·974	8·0	15	13·70	+1·30	13·76	10·15	+ 3·61	31·83	29·02	+ 2·81	2·61	Bhagalpur.	
2	...	3	12	11	...	1	1	1	5·5	4·4	+25	90	·970	7·4	19	14·27	+4·73	11·86	13·54	− 1·68	26·47	34·96	− 8·49	2·23	Darbhanga.	
5	...	4	11	8	...	1	1	1	4·4	P	P	92	·987	5·8	16	13·25	+2·75	10·09	10·34	− 0·25	32·26	29·68	+ 2·58	4·01	Muzaffarpur.	
5	...	13	11	1	...	...	...	1	4·1	P	P	87	·953	6·6	20	12·22	+7·78	14·45	11·53	+ 2·92	44·94	29·87	+15·07	3·81	Motihari.	
1	...	1	15	6	...	1	5	2	5·2	P	P	89	·970	8·3	17	12·25	+4·75	12·18	9·91	+ 2·27	25·43	28·23	− 2·80	2·20	Chapra.	
8	...	1	8	1	1	2	9	1	4·5	4·2	+7	87	·963	8·1	13	14·27	−1·27	6·57	11·83	− 5·26	20·81	27·70	− 6·89	1·39	Benares .	N.-W. P. (Eastern Districts).
...	1	2	7	1	2	3	10	5	6·4	3·5	+83	84	·945	8·2	12	13·91	−1·91	5·49	11·10	− 5·61	22·03	29·12	− 7·09	1·35	Allahabad.	
1	5	4	6	4	6	2	2	1	1·9	2·3	−17	87	·940	6·8	16	13·55	+2·45	18·01	11·93	+ 6·08	38·63	35·28	+ 3·35	3·21	Gorakhpur .	N.-W. P. (East Submontane).
4	1	2	7	2	2	5	4	4	P	3·0	P	87	·948	7·7	16	12·36	+3·64	9·38	11·78	− 2·40	27·89	28·46	− 0·57	1·38	Lucknow .	Oudh (South).
7	...	1	8	10	...	1	1	3	2·4	P	P	86	·943	4·0	14	P	P	13·35	9·50	+ 3·85	33·74	27·13	+ 6·61	2·96	Bahraich .	Oudh (North).
4	...	...	10	1	2	...	13	1	5·1	P	P	85	·930	5·6	9	11·7	−2·7	8·35	10·21	− 1·86	19·85	23·29	− 3·44	2·38	Cawnpore .	N.-W. Provinces (Central).
21	...	...	3	1	2	1	3	...	0·6	P	P	83	·916	6.2	12	P	P	9·61	9·84	− 0·23	22·59	23·91	− 1·32	2·42	Mainpuri.	

* Mean of 30 days.

† Winds for 29 days.

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
VI.—Upper Sub-Himalayas		...	...	−·017	...	...	...	...	...	...	...	90·9	−0·7	77·3	0	84·2	−0·4	13·6	...	...	...	...	26·1
N.-W. Provinces (Submontane).	Bareilly .	568	29·028	?	29·558	29·125	27th	28·914	6th	·211	80·7	88·9	−1·1	77·8	−0·2	83·4	−0·7	11·1	94·3	23rd & 24th.	74·6	26th	19·7
	Dehra Dun .	2,233	27·411	−·023	29·580	29·519	27th	27·306	6th	·213	75·2	83·5	−0·4	72·5	−0·7	78·0	−0·6	11·0	90·0	23rd	69·0	30th	21·0
	Roorkee .	887	28·702	−·026	29·551	28·814	27th	28·591	6th	·223	80·4	90·2	−0·5	76·6	−0·4	83·4	−0·5	13·6	94·7	22nd	72·1	30th	22·6
	Meerut .	738	28·845	−·022	29·545	28·957	27th	28·734	6th	·223	81·3	90·0	−0·6	77·8	−0·5	83·9	−0·6	12·2	96·0	24th	73·9	17th	22·1
Punjab (Central)	Delhi . .	718	28·865	−·020	29·541	28·968	27th	28·751	6th	·217	82·6	91·8	+0·2	78·6	−0·5	85·2	−0·2	13·2	101·0	23rd	71·9	5th	29·1
	Lahore .	702	28·866	−·013	29·530	28·967	27th	28·745	12th	·222	84·4	95·2	−0·8	80·7	+1·8	88·0	+0·5	14·5	103·8	26th	73·1	30th	30·7
Punjab (Submontane).	Umballa .	962?	28·661	?	29·541	28·773	27th	28·542	6th	·231	80·4	90·5	?	77·4	?	84·0	?	13·1	97·0	13th	71·0	18th	26·0
	Patiala .	?	*28·762	?	?	28·885	27th	28·633	6th	·252	*82·1	*90·7	?	77·9*	?	84·3	?	12·8	98·0	23rd	73·0	17th & 18th.	25·0
	Ludhiana .	812	28·765	−·022	29·538	28·888	27th	28·638	12th	·250	83·2	93·3	−2·0	78·7	0	86·1	−1·0	14·6	101·5	25th	72·5	30th	29·0
Punjab (North) .	Sialkot .	830	28·757	0	29·554	28·883	27th	28·630	6th	·253	81·7	92·3	−1·7	77·6	+0·3	85·0	−0·7	14·7	100·7	3 days	70·1	28th	30·6
	Rawalpindi	1,683	27·918	−·007	29·556	28·017	29th	27·792	13th	·225	81·1	93·9	+0·4	75·2	+0·1	84·6	+0·3	18·7	100·0	14th	68·7	8th & 31st.	31·3
VII.—Indus Valley and N.-W. Rajputana.		...	...	−·013	...	...	...	...	...	...	...	97·1	+0·2	79·4	+0·1	88·3	+0·1	17·7	...	...	...	...	31·2
Punjab (West) .	Peshawar .	1,110	28·488	+·007	29·518	28·614	29th	28·331	13th	·283	83·6	98·7	−0·3	77·5	−0·3	88·1	−0·3	21·2	106·0	2nd	70·4	28th	35·6
	Mardan .	?	?	?	?	?	?	?	?	?	†82·7	97·6	?	78·2	?	87·9	?	19·4	106·8	14th	68·0	16th	38·8
	Khushab .	612	28·943	?	29·518	29·062	30th	28·803	13th	·259	85·0	98·2	?	80·3	?	89·3	?	17·9	105·3	2nd	73·0	17th	32·3
	Montgomery	558	28·995	?	29·510	29·085	29th	28·882	6th	·203	87·6	100·7	?	80·8	?	90·8	?	19·9	109·4	2nd	73·0	6th	36·4
	D. I. Khan .	573	28·962?	−·023?	29·498	29·081	30th	28·809	13th	·272	84·9	99·2	−2·3	79·0	−2·1	89·1	−2·2	20·2	109·1	1st & 2nd.	69·8	7th	39·3
	Mooltan .	420	29·123	−·017	29·506	29·244	29th	29·009	6th	·235	86·1	99 8	−0·5	82·0	0	90·9	−0·3	17·8	110·9	2nd	75·1	18th	35·8
	Sirsa . .	662	28·901	−·025	29·521	29·002	27th	28·780	6th	·222	85·2	99·5	+2·0	81·1	+1·6	90·3	+1·8	18·4	106·6	22nd	76·3	30th	30·3
Sind and Cutch .	Jacobabad .	186	29·361	+·003	29·509	29·481	26th	29·225	6th	·256	86·5	102·6	−1·0	82·2	+0·9	92·4	−0·1	20·4	111·8	2nd	77·1	11th	34·7
	Hyderabad .	96	29·482	+·001	29·531	29·597	31st	29·354	6th	·243	83·1	95·7	+0·4	78·6	+0·1	87·2	+0·3	17·1	103·7	21st	73·5	10th	30·2
	Kurrachee .	49	29·561	−·025	29·561	29·697	31st	29·443	7th	·254	82·2	83·4	+0·7	78·8	+0·4	83·6	+0·6	9·6	91·0	5 days	75·8	9th	15·2
	Bhuj . .	395	29·245	−·021	29·593	29·361	31st	29·070	9th	·291	80·1	89·0	+0·5	76·1	−0·1	82·6	+0·2	12·9	92·5	3 days	74·4	11th	18·1
Rajputana (West)	Bickaneer .	753	28·808	?	29·514	28·885	19th	28·703	6th	·182	85·1	98·4	+2·1	80·9	+0·5	89·6	+1·3	17·5	104·6	28th	74·5	29th & 30th.	30·1
	Pachpadra .	380	29·248	?	29·583	29·348	31st	29·035	9th	·313	81·5	95·0	?	76·8	?	85·8	?	18·2	103·5	27th	74·6	4 days	28·9
VIII.—East Rajputana, Central India and Gujarat.		...	...	−·009	...	...	...	...	...	...	...	87·4	−0·1	75·5	0	81·5	0	11·9	...	...	...	...	20·1
Rajputana (East)	Jeypore .	1,431	28·203	−·010	29·590	28·273	19th	28·063	9th	·210	78·9	89·2	−0·7	74·9	−0·1	82·1	−0·4	14·3	97·5	27th	72·5	18th	25·0
	Sambhar .	1,254	28·362	−·009	29·574	28·432	19th	28·234	9th	·198	79·6	88·5‡	−0·7‡	76·1	+0·3	82·3‡	−0·2	12·4	96·0	27th	72·4	29th	23·6
	Ajmere .	1,611	28·037	−·007	29·610	28·114	19th	27·837	9th	·227	77·2	85·5	−2·0	75·2	+0·7	80·4	−0·7	10·3	92·9	28th	72·6	2nd	20·3
	Deesa . .	466	29·197	−·012	29·619	29·309	31st	28·985	9th	·324	79·0	88·5	+0·2	75·4	0	82·0	+0·1	13·1	95·8	27th	72·5	20th & 31st.	23·3
Kathiawar .	Rajkot .	429	29·254	−·016	29·635	29·362	31st	29·065	9th	·297	80·6	89·3	+0·6	73·9	−0·6	81·6	0	15·4	93·4	21st & 22nd.	69·8	31st	23·6
	Veraval .	?	29·692	?	29·652	29·803	31st	29·515	8th & 9th.	·288	79·6	82·8	?	77·6	?	80·3	?	5·2	84·6	19th	74·8	9th	9·8
Central India .	Nowgong .	757	28·866	−·010	29·578	28·944	18th	28·722	8th	·222	79·7	88·7	+0·4	77·1	+0·4	82·9	+ ·4	11·6	93·0	3 days	75·0	4 days	18·0
	Indore .	1,823	27·882	+·003	29·661	27·962	18th	27·672	8th	·290	73·7	83·2	+0·6	71·0	−0·2	77·2	+0.	12·2	88·8	27th	68·1	21st	20·7
	Neemuch .	1,630	28·053	+·013	29·643	28·139	19th	27·870	9th	·269	75·7	83·9	−0·6	71·9	−0·4	77·9	−0·5	12·0	88·8	22nd	69·6	21st	19·2
Gujarat . .	Surat . .	36	29·683	−·018	29·662	29·793	31st	29·478	8th	·315	79·8	86·9,	0	76·5	+0·3	81·7	+0·2	10·4	89·6	22nd	74·0	31st	15·6
	Ahmedabad.	176	29·517	?	29·642	29·633	31st	29·299	9th	·334	80·1	89·1	?	76·7	?	82.	?	12·4	92·2	20th & 27th.	74·6	9th	17·6
N.-W. P. (West) .	Agra . .	555	29·033	−·025	29·545	29·126	27th	28·934	6th	·192	82·3	91·2	+0·8	78·3	−0·3	84·8	+0·3	12·9	99·0	24th	74·8	29th	24·2
	Jhansi .	858	28·764	−·010	29·576	28·838	19th	28·636	8th	·202	80·4	89·3	+0·8	77·0	+0·3	83·2	+0·6	12·3	95·1	23rd & 24th.	74·4	17th & 18th.	20·7

* Mean of 30 days. † Mean of 29 days. ‡ Mean of 28 days.

I—*continued.*

in India, Burma, etc., in August 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st August 1895.	Normal rainfall for period, from 1st June to 31st August.	Variation from normal of period, from 1st June to 31st August 1895.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12·82	11·86	+0·91	...	...	...	...	VI.—Upper Sub-Himalayas.	
10	...	3	1	8	...	1	2	6	2·7	3·6	− 25	85	·896	6·2	13	12·18	+0·82	12·13	14·51	− 2·38	32·93	36·36	− 3·43	3·55	Bareilly .	N.-W. Provinces (Submontane).
29	...	...	...	1	1	...	...	...	0·6	1·1	− 45	91	·802	8·4	20	21·30	−1·30	37·67	30·00	+ 7·67	69·46	68·50	+ 0·96	8·20	Dehra Dun.	
14	...	...	3	10	1	1	2	...	2·5	2·5	0	86	·889	6·9	11	11·64	−0·64	11·16	13·59	− 2·43	38·02	30·75	+ 7·27	6·12	Roorkee.	
18	...	...	6	1	...	5	1	...	1·6	2·1	− 24	81	·855	6·6	10	11·36	−1·36	13·52	10·59	+ 2·93	39·13	22·57	+16·56	3·55	Meerut.	
5	...	...	9	3	...	2	11	1	5·4	4·1	+ 32	76	·845	7·2	10	9·82	+0·18	4·14	9·35	− 5·21	13·03	21·92	− 8·89	1·20	Delhi .	Punjab (Central).
6	4	3	4	5	2	2	5	...	3·3	2·9	+ 14	74	·863	4·8	11	6·45	+4·55	4·64	5·83	− 1·19	7·29	14·34	− 7·05	1·19	Lahore.	
13	...	...	6	7	...	1	1	3	1·4	?	?	88	·907	4·9	13	?	?	12·66	7·75	+ 4·91	30·23	22·44	+ 7·79	4·40	Umballa .	Punjab (Submontane).
9	5	9	2	...	2	2	...	1	3·5†	?	?	86*	·939*	5·4*	10	?	?	13·29	?	?	23·75	?	?	3·67	Patiala.‡	
7	...	...	...	14	4	2	4	...	2·9	1·4	+107	79	·895	6·6	10	7·82	+2·18	7·12	6·94	+ 0·18	18·58	19·68	− 1·10	1·65	Ludhiana.	
12	3	1	11	1	1	...	2	...	2·3	2·3	0	83	·838	5·0	13	9·27	+3·73	14·29	10·87	+ 3·42	22·30	22·47	− 0·17	3·55	Sialkot .	Punjab (North).
14	...	6	3	3	3	1	1	...	2·1	1·6	+ 31	78	·831	5·3	10	9·91	+0·09	10·40	9·16	+ 1·24	20·37	19·62	+ 0·75	4·86	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·98	2·43	+1·42	...	...	...	...	VII.—Indus Valley and N.-W. Rajputana.	
12	7	1	4	2	...	...	1	4	4·0	4·0	0	70	·805	3·9	2	1·82	+0·18	1·84	2·70	− 0·86	2·24	4·84	− 2·60	1·56	Peshawar	Punjab (West).
			Not recorded.						?	?	?	?	?	?	7	?	?	5·64	?	?	10·66	?	?	1·72	Mardan.	
5	1	8	12	1	1	2	1	...	5·3	?	?	75	·892	3·4	4	2·70	+1·30	3·04	2·01	+ 1·03	10·58	5·57	+ 5·01	2·15	Khushab.	
2	4	1	3	1	6	11	3	...	7·5	?	?	66	·842	3·9	7	3·20	+3·80	4·93	2·34	+ 2·59	11·81	6 69	+ 5·12	1·81	Montgomery.	
17	1	2	9	...	1	...	1	...	2·3	2·1	+ 10	79	·948	1·5	4	2·27	+1·73	3·39	1·43	+ 1·96	6·80	4·84	+ 1·96	1·46	D. I. Khan.	
2	2	3	2	10	1	9	1	1	3·5	3·2	+ 9	72	·881	2·6	7	2·00	+5·00	6·69	1·58	+ 5·11	8·69	5·11	+ 3·58	2·10	Mooltan.	
...	...	...	6	7	...	3	14	1	9·5	4·6	+107	69	·832	5·2	4	5·55	−1·55	2·80	4·11	− 1·31	6·35	10·60	− 4·25	1·00	Sirsa.	
4	2	1	1	14	8	1	...	...	4·4	4·0	+ 10	73	·920	3·3	3	1·64	+1·36	1·92	1·27	+ 0·65	2·03	2·67	− 0·64	0·88	Jacobabad .	Sind and Cutch.
...	1	...	...	...	2	26	2	...	21·6	13·8	+ 57	69	·770	4·2	3	3·36	−0·36	5·12	2·51	+ 2·61	5·59	5·51	+ 0·08	3·27	Hyderabad.	
...	...	...	...	...	2	16	10	3	14·6	17·2	− 15	84	·914	7·3	3	2·36	+0·64	3·21	1·55	+ 1·66	4·09	5·54	− 1·45	2·45	Kurrachee.	
...	1	...	...	...	...	12	15	3	16·3	14·9	+ 9	83	·858	6·2	4	?	?	2·19	2·70	− 0·51	11·87	11·58	+ 0·29	1·11	Bhuj.	
...	...	1	1	1	8	15	3	2	7·6	6·2	+ 23	66	·790	5·5	7	?	?	5·20	3·12	+ 2·08	9·00	8·45	+ 0·55	2·12	Bickaneer .	Rajputana (West).
...	...	...	...	8	7	15	...	1	16·5	9·7	+ 70	87	·939	8·7	5	?	?	5·76	3·78	+ 1·98	9·23	7·11	+ 2·12	3·20	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7·99	8·98	−1·23	...	...	...	...	VIII.—East Rajputana, Central India and Gujarat.	
1	1	2	...	1	1	8	12	5	4·7	5·5	− 15	81	·806	7·5	14	11·50	+2·50	10·66	10·07	+ 0·59	21·19	21·93	− 0·74	2·75	Jeypore .	Rajputana (East).
2	...	1	1	...	1	1	23	2	5·1	8·1	− 37	80	·815	7·1	9	10·50	−1·50	8·30	7·88	+ 0·42	14·44	17·11	− 2·67	2·51	Sambhar.	
1	...	1	1	1	...	6	19	2	7·5	5·5	+ 36	86	·809	6·6	11	9·82	+1·18	11·34	7·63	+ 3·71	23·11	17·20	+ 5·91	2·50	Ajmere.	
...	1	1	...	...	3	18	8	...	10·1	12·0	− 16	82	·820	8·2	11	10·09	+0·91	5·46	7·60	− 2·14	13·76	20·75	− 6·99	1·67	Deesa.	
...	...	...	...	...	...	6	21	4	12·3	11·6	+ 6	79	·822	6·8	6	7·82	−1·82	2·57	4·98	− 2·41	16·79	23·17	− 6·38	1·35	Rajkot .	Kathiawar.
4	...	...	...	1	...	6	19	1	11·2	?	?	87	·883	7·7	7	?	?	4·97	?	?	12·40	?	?	3·52	Veraval.	
3	2	1	1	...	1	2	20	1	2·8	3·4	− 18	84	·855	7·8	13	14·09	−1·09	12·35	14·23	− 1·88	32·22	34·47	− 2·25	2·94	Nowgong .	Central India.
3	...	...	...	...	1	8	14	5	3·3	6·1	− 46	91	·757	9·4	7	10·45	−3·45	3·19	7·83	− 4·64	19·25	23·13	− 3·88	0·75	Indore.	
...	1	...	...	...	...	11	18	1	12·7	11·9	+ 7	87	·776	7·3	7	11·00	−4·00	6·07	10·55	− 4·48	22·27	24·71	− 2·44	1·90	Neemuch.	
...	...	...	...	...	1	9	18	3	?	13·6	?	89	·903	7·6	14	12·82	+1·18	5·27	7·89	− 2·62	23·82	36·29	−12·47	1·22	Surat .	Gujarat.
...	...	...	...	...	2	20	6	3	5·7	?	?	86	·869	8·6	11	?	?	13·70	?	?	28·62	?	?	9·10	Ahmedabad.	
2	...	2	...	7	...	19	...	1	4·9	4·4	+ 11	80	·882	6·7	11	10·73	+0·27	9·11	7·67	+ 1·44	18·87	21·71	− 2·84	1·94	Agra .	N.-W. P. (West).
	2	2	1	1	...	10	10	3	4·1	3·9	+ 5	83	·862	4·8	14	14·45	−0·45	10·94	12·50	− 1·56	25·97	29·99	− 4·02	3·11	Jhansi .	

* Mean of 30 days. † Mean of 29 days. ‡ Wind observation of 30 days.

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
IX.—Deccan	...	...	...	−·008	...	...	...	...	...	...	...	85·3	+0·1	72·2	+0·1	78·7	+0·1	13·1	...	...	...	...	21·8
Bombay (Deccan)	Belgaum	2,524	27·292	−·006	29·761	27·388	30th	27·166	8th	·222	69·7	75·9	−0·2	66·0	−0·2	71·0	−0·2	9·9	81·2	21st	64·8	8 days	16·4
	Sholapur	1,590	28·191	−·004	29·734	28·281	31st	28·040	8th	·241	75·9	89·0	+0·6	70·0	−0·4	79·5	+0·1	19·0	94·8	31st	68·0	4 days	26·8
	Poona	1,810	27·937	−·007	29·730	28·026	31st	27·771	8th	·255	73·3	81·5	−0·2	69·0	−0·5	75·3	−0·4	12·5	86·0	21st	66·4	31st	19·6
	Bijapur	1,946	27·851	?	29·743	27·938	30th	27·717	8th	·221	74·1	86·2	?	69·0	?	77·6	?	17·2	91·2	21st & 25th.	67·0	7 days	24·2
Khandesh	Malegaon	1,430	28·299	−·007	29·681	28·407	31st	28·104	8th	·303	78·2	87·4	+1·3	71·5	+0·1	79·5	+0·7	15·9	92·9	21st	68·7	23rd & 30th.	24·2
	Ahmednagar	2,152	27·621	?	29·714	27·713	31st	27·455	8th	·258	74·2	83·9	?	68·3	?	76·1	?	15·6	89·8	23rd	61·5	19th	28·3
Berar	Akola	930	28·776	−·009	29·659	28·868	31st	28·585	8th	·283	77·9	88·2	+1·1	73·5	+0·3	80·8	+0·7	14·7	93·9	31st	71·7	1st	22·2
	Amraoti	1,215	28·475	−·010	29·652	28·587	18th	28·330	8th	·257	75·7	86·7	+0·2	72·7	+0·2	79·7	+0·2	14·0	91·7	22nd & 23rd.	67·3	1st	24·4
Central Provinces (West).	Khandwa	1,044	28·658	+·003	29·663	28·739	31st	28·457	8th	·282	77·1	85·7	0	74·1	+0·3	79·9	+0·2	11·6	90·2	23rd & 25th.	72·1	1st	18·1
	Hoshangabad	1,020	28·658	−·009	29·641	28·748	18th	28·444	8th	·304	76·7	84·8	−0·4	74·1	+0·3	79·5	−0·1	10·7	90·3	23rd	70·7	1st	19·6
	Nagpur	1,025	28·648	−·009	29·631	28·738	30th	28·468	8th	·270	77·5	87·4	0	75·1	+0·5	81·2	+0·3	12·3	94·8	23rd	71·1	1st	23·7
Central Provinces (Central).	Chanda	634	29·063	−·008	29·643	29·171	30th	28·891	8th	·280	78·6	87·6	−0·2	74·8	−0·3	81·2	−0·3	12·8	92·9	3 days	70·0	6th	22·9
	Seoni	2,033	27·651	−·002	29·623	27·734	19th	27·418	8th	·286	75·0	83·8	+0·6	71·1	−0·6	77·5	0	12·7	91·2	22nd	68·6	2nd	22·6
	Jubbulpore	1,327	28·305	−·023	29·587	28·390	18th	28·096	8th	·291	77·1	85·6	+0·8	74·2	+0·2	79·9	+0·5	11·4	90·9	23rd	70·6	2nd	20·3
	Saugor	1,762	27·895	+·004	29·609	27·980	18th & 19th.	27·701	8th	·279	75·4	83·8	+0·3	74·0	+1·4	78·9	+0·9	9·8	89·3	23rd	70·7	2nd	18·6
Central Provinces (East).	Raipur	970	28·683	−·009	29·605	28·781	30th	28·501	8th	·280	77·9	85·5	−0·7	74·8	−0·1	80·1	−0·4	10·7	91·3	22nd	71·6	2nd	19·7
	Sutna	1,040	28·569	−·018	29·566	28·654	18th	28·418	8th	·236	80·3	87·9	+2·2	76·5	+0·8	82·2	+1·5	11·4	91·5	5 days	73·1	3 days	18·4
	Sambalpur	463	29·158	−·028	29·571	29·241	30th	28·982	7th	·259	79·9	86·8	−0·7	76·5	−0·8	81·6	−0·8	10·3	91·5	22nd	74·2	31st	17·3
Hyderabad (North).	Aurangabad	?	27·898	?	?	28·014	31st	27·735	9th	·279	76·0	85·3	?	68·7	?	77·1	?	16·6	89·8	29th	66·0	19th	23·8
	Indur	?	?	?	?	?	?	?	?	?	76·1	84·9	?	72·8	?	78·9	?	12·1	90·7	23rd	68·5	13th	22·2
	Bidar	?	27·608	?	?	27·695	31st	27·464	8th	·231	72·2	82·0	?	68·7	?	75·4	?	13·3	89·3	31st	67·2	3 days	22·1
Hyderabad (South).	Gulbarga	1,502	28·273	?	29·729	28·361	31st	28·134	8th	·227	75·5	87·5	?	71·0	?	79·2	?	16·5	94·5	22nd	68·2	31st	26·3
	Raichur	1,378	28·413	?	29·739	28·498	31st	28·301	8th	·197	76·0	86·7	?	71·9	?	79·3	?	14·8	92·1	31st	70·1	26th	22·0
	Hyderabad (Deccan).	1,690	28·070	+·002	29·713	28·164	30th	27·950	8th	·214	74·4	82·5	−3·6	71·6	+0·8	77·1	−1·4	10·9	88·9	31st	69·7	3 days	19·2
	Secunderabad	1,787	27·982	?	29·722	28·067	30th	27·862	8th	·205	73·6	83·3	?	70·6	?	77·0	?	12·7	91·6	31st	68·9	3 days	22·7
	Khamamet	373	29·356	?	29·674	29·443	30th	29·240	12th	·203	79·1	87·1	?	75·7	?	81·4	?	11·4	93·0	31st	71·8	13th	21·2
X.—West Coast	...	...	...	−·008	...	...	...	...	...	...	...	83·0	+0·4	75·4	+0·6	79·2	+0·5	7·5	...	...	...	...	12·6
Konkan	Bombay	37	29·744	−·008	29·721	29·838	31st	29·540	8th	·298	79·3	83·8	−0·1	76·8	+0·1	80·3	0	7·0	86·5	19th	74·0	30th	12·5
	Ratnagiri	110	29·705	+·004	29·753	29·794	30th	29·550	8th	·244	79·7	83·9	+0·5	76·2	+1·4	80·1	+1·0	7·7	85·9	22nd & 25th.	73·4	8th	12·5
	Mormugao	60	29·782	?	29·777	29·872	30th	29·655	8th	·217	79·3	83·0	?	75·8	?	79·4	?	7·2	85·0	18th	73·4	8th	11·6
	Goa	199	29·632	−·001	29·769	29·726	30th	29·498	8th	·228	78·9	81·2	?	77·2	?	79·2	?	4·0	82·5	19th	75·0	8th & 9th.	7·5
	Karwar	44	29·811	−·001	29·787	29·903	30th	29·705	8th	·198	77·8	82·4	+0·3	74·9	+0·8	78·6	+0·5	7·5	84·2	3 days.	72·9	9th	11·3
Malabar	Cochin	11	29·891	−·015	29·829	29·964	31st	29·851	8th & 20th.	·113	77·7	81·1	+0·9	74·4	+0·3	79·3	+0·6	9·7	86·7	3rd	71·2	9th	15·5
	Calicut	27	29·860	−·018	29·816	29·941	30th	29·797	8th	·144	77·7	83·2	+0·5	74·3	+0·6	78·8	+0·6	8·9	86·3	31st	69·5	9th	16·8
	Mangalore	65	29·811	−·019	29·809	29·896	30th	29·721	8th	·175	77·5	82·8	+0·4	74·1	+0·3	78·5	+0·4	8·7	85·3	8th	71·4	25th	13·9
	Trivandrum	198	29·696	?	29·826	29·790	30th	29·641	11th	·149	77·7	82·2	?	75·3	?	78·8	?	6·9	85·5	11th	73·5	9th	12·0
XI.—South India	...	...	...	−·013	...	...	...	...	...	...	...	88·6	−0·4	74·1	−0·1	81·4	−0·3	14·5	...	...	...	...	23·5
Madras (South)	Pamban	37	29·799	?	29·763	29·880	31st	29·738	12th	·142	83·4	89·0	?	79·0	?	84·0	?	10·0	93·3	14th	75·5	16th	17·8
	Tinnevelly	168	29·683?	?	29·779?	29·767	30th	29·621	12th?	·146	85·2	*97·6	?	79·6	?	*88·5	?	18·0	102·1	16th	75·9	7th	26·5
	Madura	447	29·380	−·017	29·762	29·485	30th	29·317	12th	·168	81·8	95·7	−0·9	75·7	+0·2	85·7	−0·4	20·0	101·5	11th	70·0	11th	31·5

* Mean of 30 days.

I—*continued.*

in India, Burma, etc., in August 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity: Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M.: Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall: Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st August 1895.	Normal rainfall for period, from 1st June to 31st August.	Variation from normal of period, from 1st June to 31st August 1895.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·28	9·91	−0·73	...	...	...	...	IX.—Deccan.	
...	...	...	...	...	...	4	25	2	20·9	20·7	+ 1	92	·667	8·8	18	17·61	+0·36	10·27	8·74	+ 1·53	31·20	30·70	+ 0·50	2·63	Belgaum .	Bombay (Deccan).
...	...	...	...	...	...	12	10	9	13·8	11·0	+ 25	76	·676	7·4	6	11·27	−5·27	2·45	7·39	− 4·94	10·21	16·69	− 6·48	1·38	Sholapur.	
...	...	...	...	...	...	12	16	3	8·7	14·0	− 38	85	·698	8·7	6	7·82	−1·82	3·39	3·22	+ 0·17	15·86	14·82	+ 1·04	0·89	Poona.	
...	...	...	...	...	...	11	17	3	11·2	?	?	80	·676	7·2	4	7·00	−3·00	0·78	?	?	6·12	?	?	0·25	Bijapur.	
...	...	...	...	...	...	9	18	4	17·6	10·0	+ 76	75	·715	7·0	4	6·91	−2·91	0·79	4·07	− 3·28	8·77	13·54	− 4·77	0·14	Malegaon .	Khandesh.
...	...	...	...	...	...	14	14	3	19·8	?	?	83	·705	8·0	1	?	?	0·89	?	?	10·90	?	?	0·80	Ahmednagar.	
...	...	...	...	...	...	5	17	9	9·0	7·9	+ 14	81	·764	6·1	6	9·73	−3·73	3·07	7·44	− 4·37	18·70	23·72	− 5·02	1·35	Akola .	Berar.
...	...	...	...	...	...	12	11	8	8·9	6·1	+ 46	86	·763	6·8	11	9·73	+1·27	7·68	6·80	+ 0·88	19·87	24·26	− 4·39	2·28	Amraoti.	
...	...	...	...	...	...	5	25	1	9·7	7·6	+ 28	82	·761	7·0	6	9·91	−3·91	4·01	7·14	− 3·13	16·82	22·01	− 5·19	1·79	Khandwa .	Central Provinces (West).
1	...	...	...	...	...	19	11	...	4·1	3·4	+ 21	89	·826	8·6	16	15·09	+0·91	10·26	14·52	− 4·26	35·78	40·31	− 4·53	1·76	Hoshangabad.	
17	1	...	...	...	1	2	7	3	8·0	6·0	+ 33	87	·818	8·2	14	12·82	+1·18	18·76	10·25	+ 8·51	49·15	33·72	+15·43	7·90	Nagpur.	
2	...	...	...	...	1	17	10	1	4·9	5·4	− 9	80	·783	8·1	16	?	?	12·38	13·87	− 1·49	28·28	40·60	−12·32	2·96	Chanda .	Central Provinces (Central).
				Not	recorded.				7	4·8	?	90	·792	6·3	16	17·73	−1·73	12·48	12·90	− 0·42	33·01	41·62	− 8·61	2·66	Seoni.	
...	1	...	1	...	2	6	15	6	3·9	4·6	− 15	90	·834	6·7	14	16·00	−2·00	18·42	16·12	+ 2·30	49·44	46·02	+ 3·42	6·31	Jubbulpore.	
5	1	...	1	...	2	9	12	1	4·5	4·3	+ 5	92	·804	7·3	15	14·55	+0·45	10·13	13·53	− 3·40	38·16	36·03	+ 2·13	1·87	Saugor.	
3	1	...	1	...	1	14	10	1	10·3	7·3	+ 41	90	·850	8·3	18	14·45	+3·55	12·16	12·66	− 0·50	39·32	38·05	+ 1·27	3·10	Raipur .	Central Provinces (East).
2	4	1	3	...	2	3	16	...	7·6	7·9	− 4	84	·852	6·7	13	13·45	−0·45	11·32	12·07	− 0·75	38·47	33·78	+ 4·69	2·40	Sutna.	
...	2	...	2	...	10	14	1	2	5·4	3·0	+ 80	87	·889	8·2	22	?	?	19·59	17·09	+ 2·50	52·44	50·38	+ 2·06	2·74	Sambalpur.	
1	...	...	...	...	5	11	8	6	6·1	?	?	80	·713	8·1	6	?	?	4·12	5·56	− 1·44	21·76 (a)	19·27	+ 2·49	1·52	Aurangabad.	Hyderabad (North).
...	...	...	...	...	...	6	15	10	11·8	?	?	82	·738	8·0	14	?	?	11·39	10·19	+ 1·20	20·81 (a)	25·43	− 4·62	3·30	Indur.	
...	3	...	...	...	...	9	15	4	10·1	?	?	88	·679	6·0	15	?	?	7·74	9·85	− 2·11	19·06	25·44	− 6·38	1·40	Bidar.	
...	...	...	...	...	...	7	13	11	12·9	?	?	79	·701	6·3	6	?	?	4·00	6·43	− 2·43	12·91	16·14	− 3·23	2·40	Gulbarga .	Hyderabad (South).
...	1	...	...	...	...	6	17	7	10·2	?	?	79	·704	5·1	9	?	?	4·06	?	?	11·89	?	?	1·43	Raichur.	
...	...	...	...	...	...	...	22	9	7·8	?	?	85	·724	7·3	12	?	?	8·31	8·17	+ 0·14	18·80	19·92	− 1·12	1·66	Hyderabad (Deccan).	
...	...	...	...	...	...	3	21	7	9·9	10·0	− 1	81	·650	7·0	14	?	?	8·29	?	?	18·71	?	?	1·76	Secunderabad	
13	...	...	...	...	1	5	8	4	6·9	?	?	85	·854	4·5	11	?	?	8·62	?	?	31·79	?	?	2·18	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13·36	17·00	−3·75	...	...	...	...	X.—West Coast.	
...	...	...	...	2	1	11	16	1	15·0	15·8	− 5	87	·881	8·5	21	19·64	+1·36	15·86	11·43	+ 4·43	51·66	57·97	− 6·31	4·29	Bombay .	Konkan.
...	...	1	...	2	7	15	6	...	10·1	10·3	− 2	86	·869	7·8	22	24·36	−2·36	15·15	24·65	− 9·50	74·25	91·42	−17·17	4·82	Ratnagiri.	
2	2	...	...	...	...	...	1	26	11·6	?	?	89	·898	6·5	23	?	?	14·25	?	?	79·75	?	?	3·57	Mormagao.	
6	2	3	...	...	...	1	14	5	11·4	?	?	90	·885	8·7	25	?	?	10·58	20·32	− 9·74	60·96	84·11	−23·15	1·50	Goa.	
2	5	2	...	...	...	7	9	6	5·4	?	?	88	·836	6·3	25	23·36	+1·64	20·30	24·45	− 4·15	96·53	100·66	− 4·13	2·87	Karwar.	
19	1	3	...	...	...	1	3	4	4·2	?	?	89	·852	7·3	22	17·91	+4·09	10·10	13·31	− 3·21	57·06	63·23	− 6·17	1·93	Cochin .	Malabar.
5	7	5	1	...	...	2	2	9	10·0	?	?	90	·846	6·9	19	17·88	+1·12	13·74	15·82	− 2·08	77·13	78·39	− 1·26	3·97	Calicut.	
12	2	1	2	1	...	2	5	6	2·5	2·9	− 14	91	·864	8·5	30	23·90	+6·10	18·64	21·13	− 2·49	113·57	92·25	+21·32	2·10	Mangalore.	
1	26	...	...	...	...	...	...	4	?	?	?	85	·813	7·0	7	?	?	1·66	4·91	− 3·25	20·96	24·94	− 3·98	0·27	Trivandrum.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6·09	6·33	+0·82	...	...	...	...	XI.—South India.	
4	...	...	...	...	2	16	7	2	10·8	?	?	77	·878	3·1	4	0·30	+3·70	1·19	0·23	+ 0·96	1·19	0·98	+ 0·21	0·58	Pamban. .	Madras (South).
...	1	...	...	...	...	2	10	18	8·3	?	?	58	·707	5·9	0	1·0	−1·0	0·04	?	?	0·12	?	?	0·04	Tinnevelly.	
3	6	...	...	...	...	1	1	20	2·1	3·7	− 43	67	·731	5·4	9	5·36	+3·64	5·52	4·00	+ 1·52	17·31	7·78	− 0·47	1·37	Madura.	

(a) Rainfall for July and August only.

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras (South Central).	Salem	940	28·920	−·013	29·805	28·993	31st	28·853	12th	·140	77·7	91·6	+0·2	72·8	+1·0	82·2	+0·6	18·8	97·4	18th	70·0	13th	27·4
	Coimbatore	1,348	28·499	−·009	29·799	28·585	30th	28·431	12th	·154	75·4	88·7	+0·3	70·8	+0·2	79·8	+0·3	17·9	93·4	20th	68·1	9th	25·3
Coorg	Mercara	3,781	26·169	−·009	?	26·251	30th	26·103	8th	·148	64·0	69·3	−1·2	62·7	+0·6	66·0	−0·3	6·6	73·5	18th	60·7	25th & 26th.	12·8
Mysore	Chitaldroog	2,405	27·443	?	29·776	27·512	30th & 31st.	27·355	8th	·157	71·7	81·1	?	67·7	?	74·4	?	13·4	86·1	19th	66·9	9 days	19·2
	Bangalore	3,021	26·864	−·017	29·794	26·935	30th	26·802	8th	·133	66·0	81·1	+0·6	65·8	+0·3	73·5	−0·2	15·3	85·8	18th	63·8	6th	22·0
	Hassan	3,091	26·812	?	29·818	26·889	30th	26·735	8th	·154	69·6	77·1	?	64·5	?	70·8	?	12·6	81·4	19th	62·5	24th	18·9
	Mysore	2,518	27·369	?	29·815	27·432	31st	27·306	8th	·126	71·6	83·1	?	66·9	?	75·0	?	16·2	90·9	19th	64·5	4th	26·4
Madras (East Coast, South).	Negapatam	31	29·793	−·012	29·753	29·885	30th	29·729	12th	·157	82·0	94·2	+1·2	77·0	0	85·6	+0·6	17·2	99·8	2nd	72·7	11th & 19th.	27·1
	Cuddalore	12	29·795	?	29·736	29·887	31st	29·729	7th	·158	82·2	94·7	?	76·6	?	85·7	?	18·1	99·3	3 days	71·2	30th	28·1
	Trichinopoly	255	29·568	−·021	29·756	29·657	31st	29·499	12th	·158	80·9	95·6	−0·4	76·6	+0·3	86·1	−0·1	19·0	102·6	11th	72·9	19th & 30th.	29·7
	Madras	22	29·774	−·018	29·727	29·851	31st	29·712	7th	·139	81·3	93·0	−0·6	76·9	−0·5	85·0	−0·6	16·1	99·0	31st	73·5	4th	25·5
Madras (East Coast, Central).	Nellore	71	29·698	?	29·702	29·775	31st	29·622	7th	·153	83·2	94·4	?	78·4	?	86·4	?	16·0	100·8	19th	73·1	19th	27·7
	Masulipatam	15	29·725	−·014	29·675	29·813	30th	29·648	7th	·165	81·1	89·3	−2·0	77·1	−0·5	83·2	−1·3	12·2	95·6	19th	72·1	5th	23·5
Madras (Central)	Cuddapah	433	29·368	?	29·741	29·454	31st	29·281	7th	·173	81·3	93·6	+0·9	76·6	+0·1	85·1	+0·5	17·0	100·2	17th	72·7	19th	27·5
	Kurnool	923	28·869	−·013	29·740	28·961	30th	28·765	8th	·196	77·3	89·1	0	73·2	−0·3	81·2	−0·2	15·9	95·2	31st	70·4	14th	24·8
	Bellary	1,475	28·338	+·001	29·760	28·430	31st	28·237	8th	·193	77·8	89·4	−1·4	73·4	+0·1	81·4	−0·7	16·0	93·7	19th	69·9	21st	23·8
Madras (East Coast, North).	Rajahmundry	112	29·612	−·005	29·662	29·709	30th	29·503	12th	·206	80·7	88·0	−1·4	77·3	+0·1	82·7	−0·7	10·7	95·0	19th	74·1	13th & 25th	20·9
	Cocanada	26	29·678	−·011	29·639	29·785	30th	29·563	12th	·222	80·9	88·7	+0·4	78·2	−0·2	83·5	+0·1	10·5	95·2	19th	74·5	8th & 25th.	20·7
	Vizagapatam	31	29·643	−·023	29·612	29·755	30th	29·521	7th	·234	81·7	87·1	−0·4	79·8	−2·8	83·5	−1·6	7·3	93·3	24th & 28th.	76·1	22nd	17·2
	Gopalpur	21	29·617	?	29·578	29·716	30th	29·488	6th & 7th.	·228	81·2	87·2	?	78·1		82·7	?	9·1	90·7	12th	75·1	8th & 12th.	15·6
XII.—Hill Stations.																							
Baluchistan	Shirino	?	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kachh	?	23·727	?	?	23·820	27th	23·630	6th	·190	73·6	87·6	?	56·7	?	72·2	?	30·9	94·5	2nd	43·5	29th	51·0
	Pishin				Not recorded.						?	100·8	?	51·0	?	75·9	?	49·8	107·1	3rd	37·9	30th	69·2
	Quetta	5,502	24·465	−·010	?	24·583	27th	24·369	6th	·214	72·7	89·1	−1·5	58·8	−3·1	74·0	−2·3	30·3	95·6	4th	46·9	28th	48·7
	Kalat	?				Not recorded.					63·7	91·5	?	44·9	?	68·2	?	46·6	98·1	14th	33·2	29th	64·9
	Chaman	4,311	25·465	?	?	25·614	27th	25·358	6th	·256	81·6	96·7	?	69·4	?	83·1	?	27·3	107·0	3rd	56·1	28th	50·9
Northern India	Leh	11,503	19·643	?	?	19·715	10th	19·531	6th	·184	57·9	77·9	?	50·1	?	64·0	?	27·8	86·2	2nd	39·8	18th	46·4
	Srinagar	5,204	24·695	?	?	24·804	29th	24·583	13th	·221	69·1	83·7	?	62·1	?	72·9	?	21·6	93·9	3rd	55·2	18th	38·7
	Astor (Kashmir)	?	?	...	...	...	...	...	...	...	...	...	?	...	...	...	...	...	...	...	...	...	...
	Gilghit	?	24·476	?	?	24·580	27th	24·340	15th	·240	77·9	93·7	?	71·5	?	82·6	?	22·2	107·6	3rd	62·1	8th	45·5
	Cherat	?	25·515	?	?	25·609	27th	25·411	6th	·198	74·6	86·7	?	68·5	?	77·6	?	18·2	95·4	23rd	60·2	8th	35·2
	Murree	6,344	23·718	−·016	?	23·812	27th	23·616	6th	·196	64·7	73·5	−0·6	61·5	+0·5	67·5	−0·1	12·0	80·6	2nd	54·6	31st	26·0
	Poo	?	?	?	?	?	?	?	?	?	?	78·5	?	58·3	?	68·4	?	20·2	84·4	12th	51·9	18th	32·5
	Simla	7,224	23·000	−·015	?	23·084	27th	22·910	6th	·174	61·4	66·6	−0·8	58·9	−0·8	62·8	−0·8	7·7	69·4	23rd	55·9	18th	13·5
	Chakrata	6,977	23·208	−·004	?	23·297	27th	23·112	6th	·185	61·8	66·6‡	−2·7‡	59·6‡	+0·2‡	63·1‡	−1·5	7·0	71·2	11th	55·8	18th	15·4
	Mussooree	6,705	23·426	?	?	23·518	27th	23·336	6th	·182	63·1	67·9	−0·9	60·2	+0·5	64·1	−0·2	7·7	71·8	9th	57·4	18th	14·4
	Ranikhet	6,069	23·971	−·006	?	24·068	27th	23·876	6th	·192	65·6	71·9	−0·5	61·9	−0·1	67·0	−0·3	10·0	78·5	23rd	59·0	30th	19·5
	Yatung	10,480?	?	?	?	?	?	?	?	?	?	61·4	?	49·0	?	55·2	?	12·4	65·0	6 days	44·4	8th	20·6
	Gnatong†	?	19·245	?	?	19·303	9th	19·196	5th	·107	49·4	56·7	?	43·6	?	50·2	?	13·1	61·9	3 days	40·1	2 days	21·8
	Darjeeling	7,421	22·897	−·016	?	22·977	29th	22·833	5th	·144	60·1	64·7	−1·3	57·2	+0·5	61·0	−0·4	7·5	68·1	28th	55·2	30th	12·9
	Gantak	?	24·402	?	...	24·486	3rd	24·350	20th	·136	65·7	75·1	?	58·0	?	66·5	?	17·1	82·0	19th	55·9	8th	26·1

† Mean of 28 days. ‡ Mean of 18 days.

I—*continued.*

in India, Burma, etc., in August 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.								Heaviest rainfall during month.	Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st August: 1895.	Normal rainfall for period from 1st June to 31st August.	Variation from normal of period from 1st June to 31st August.			
9	...	1	...	3	10	7	...	1	1·8	4·2	− 57	82	·786	7·5	16	11·78	+4·22	13·56	7·66	+ 5·90	19·59	15·30	+ 4·29	2·20	Salem	Madras (South Central).
...	...	...	...	...	8	22	1	...	4·5	7·4	− 39	86	·767	5·4	2	2·91	−0·91	1·51	1·19	+ 0·32	4·76	3·85	+ 0·91	0·24	Coimbatore.	
...	...	...	...	...	...	1	14	16	10·2	8·9	+ 15	96	·586	9·9	29	26·30	+2·70	26·80	26·25	+ 0·55	89·31	94·46	− 5·15	3·40	Mercara	Coorg.
...	...	...	...	...	...	7	20	4	12·2	?	?	83	·650	8·9	5	?	?	1·90	?	?	9·69	?	?	0·89	Chitaldroog	Mysore.
...	...	...	...	...	...	9	17	5	9·1	7·6	+ 20	87	·622	9·2	10	10·73	−0·73	6·29	5·80	+ 0·49	12·05	13·84	− 1·79	2·15	Bangalore.	
...	...	...	...	...	...	9	17	5	9·1	7·6	+ 20	87	·622	9·2	10	10·73	−0·73	6·29	5·80	+ 0·49	12·05	13·84	− 1·79	2·15	Bangalore.	
...	...	...	...	...	...	2	21	7	4·0	?	?	84	·611	8·7	11	?	?	3·58	?	?	11·06	?	?	0·67	Hassan.	
1	...	...	..	...	...	2	21	7	4·0	?	?	84	·611	8·7	11	?	?	3·58	?	?	11·06	?	?	0·67	Hassan.	
...	...	...	...	...	...	14	13	4	12·2	?	?	82	·631	8·0	8	?	?	3·20	?	?	10·10	?	?	1·29	Mysore.	
...	...	...	...	...	...	14	13	4	12·2	?	?	82	·631	8·0	8	?	?	3·20	?	?	10·10	?	?	1·29	Mysore.	
4	...	...	...	...	...	13	11	3	8·0	5·7	+ 40	77	·843	5·6	9	5·91	+3·09	5·65	3·84	+ 1·81	8·28	7·85	+ 0·43	1·40	Negapatam	Madras (East Coast, South).
...	1	...	...	...	2	10	13	5	1·8	?	?	84	·935	4·9	7	8·0	−1·0	4·63	?	?	8·52	?	?	2·75	Cuddalore.	
2	...	...	...	...	1	7	16	5	6·8	8·2	− 17	71	·749	8·0	10	5·36	+4·64	8·62	4·67	+ 3·95	10·84	7·79	+ 3·05	2·05	Trichinopoly.	
2	...	...	...	...	8	9	11	1	5·2	7·3	− 29	77	·831	7·9	12	8·27	+3·73	4·33	4·56	− 0·23	10·66	10·54	+ 0·12	0·88	Madras.	
4	...	...	...	...	1	1	12	13	8·1	?	?	72	·814	9·2	6	5·50	+0·50	5·29	?	?	9·61	?	?	2·10	Nellore	Madras (East Coast, Central).
...	...	...	...	...	...	2	12	17	7·5	7·8	− 4	83	·879	7·6	11	9·00	+2·00	8·33	7·04	+ 1·29	18·60	18·25	+ 0·35	1·62	Masulipatam	
...	...	...	...	...	...	11	15	5	?	?	?	73	·772	7·5	8	7·90	+0·10	4·47	6·38	− 1·91	9·55	14·39	− 4·84	1·29	Cuddapah	Madras (Central).
3	...	...	...	...	...	7	12	9	?	?	?	77	·715	7·2	9	9·33	−0·33	4·06	5·85	− 1·79	12·81	14·71	− 1·90	0·86	Kurnool.	
1	...	...	...	...	...	4	22	4	10·5	10·7	− 2	67	·638	7·8	4	4·55	−0·55	1·83	2·58	− 0·75	6·08	6·41	− 0·33	0·69	Bellary.	
1	...	...	...	...	...	6	21	...	?	?	?	81	·862	7·6	11	9·10	+1·90	8·03	7·35	+ 0·68	27·49	20·36	+ 7·13	2·58	Rajahmundry	Madras (East Coast, North).
1	...	...	...	...	...	6	21	...	?	?	?	81	·862	7·6	11	9·10	+1·90	8·03	7·35	+ 0·68	27·49	20·36	+ 7·13	2·58	Cocanada.	
...	...	...	...	...	1	13	16	1	8·2	?	?	81	·861	7·0	10	9·10	+0·90	4·45	5·71	− 1·26	15·03	17·75	− 2·72	1·94	Vizagapatam	
...	1	...	...	...	...	2	24	4	3·4	2·9	+ 17	83	·894	8·1	9	10·64	−1·64	8·75	5·89	+ 2·86	17·17	14·47	+ 2·70	4·00	Gopalpur.	
4	3	...	...	...	4	12	3	5	10·8	9·1	+ 19	87	·919	4·9	10	11·44	−1·44	8·09	8·56	− 0·47	26·52	22·24	+ 4·28	2·15	Gopalpur.	
																									XII.—Hill Stations.	
																									Shirino	Baluchistan.
2	1	3	5	5	...	3	2	10	5·5	?	?	44	·364	0·7	2	?	?	0·31	?	?	0·58	?	?	0·16	Kachh.	
							Not	rccord	ed.						2	?	?	1·38	?	?	1·48	?	?	1·18	Pishin.	
21	...	...	...	1	3	4	1	1	2·1	4·5	− 53	63	·509	1·1	1	0·91	+0·09	0·87	0·70	+ 0·17	1·63	2·03	− 0·40	0·83	Quetta.	
...	6	...	...	...	25	...	...	...	?	?	?	?	?	?	1	?	?	0·29	?	?	0·32	?	?	0·27	Kalat.	
...	1	1	2	5	4	13	3	2	6·8	?	?	31	·339	0·6	0	?	?	0	?	?	0	?	?	0	Chaman.	
...	3	7	1	...	9	2	5	4	2·3	1·6	+ 44	58	·277	4·0	3	?	?	0·57	?	?	0·81	?	?	0·26	Leh.	Northern India.
8	...	1	2	8	8	...	...	4	5·6	?	?	88	·640	5·5	7	?	?	1·65	?	?	4·99	?	?	0·28	Srinagar	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor (Kashmir).	
...	...	...	...	...	...	...	...	...	?	?	?	53	·497	4·7	3	?	?	0·36	?	?	1·05	?	?	0·12	Gilghit.	
14	4	...	...	4	8	1	...	...	7·9	?	?	76	·642	4·2	6	?	?	3·12	?	?	5·39	?	?	1·08	Cherat.	
5	2	1	1	5	...	3	2	12	7·2	4·8	+ 50	84	·523	6·6	12	15·64	−3·64	12·01	14·28	− 2·27	33·47	28·40	+ 5·07	3·22	Murree.	
22	...	...	4	2	1	...	1	1	?	?	?	?	?	5·4	1	?	?	0·50	?	?	1·63	?	?	0·29	Poo.	
4	11	5	...	4	4	1	1	1	4·4	1·6	+175	91	·493	8·5	18	19·45	−1·45	17·36	17·98	− 0·62	48·54	42·32	+ 6·22	3·20	Simla.	
...	1	2	14	1	2	1	10	...	4·9	4·3	+ 14	92†	·511†	8·2	24	?	?	20·91	18·59	+ 2·32	59·12	44·92	+14·20	2·77	Chakrata.	
...	1	3	11	1	1	2	7	5	?	8·1	?	98	·565	8·1	25	22·18	+2·82	39·95	30·90	+ 9·05	82·90	69·09	+13·81	7·40	Mussooree.	
14	...	...	4	1	1	3	6	2	3·0	1·9	+ 58	90	·561	7·5	22	17·82	+4·18	21·77	13·91	+ 7·86	38·94	33·13	+ 5·81	4·87	Ranikhet.	
...	...	...	...	...	...	...	...	...	?	?	?	?	?	?	20	?	?	7·05	?	?	23·50	?	?	1·36	Yatung.	
7	..	...	1	8	2	1	2	7	3·8	?	?	93	·328	8·3	25	?	?	21·63	?	?	72·89	?	?	3·39	Gnatong.	
4	3	5	11	4	...	1	1	2	2·7	3·4	− 21	97	·509	9·7	24	24·43	−0·43	30·59	27·58	+ 3·01	82·72	87·32	− 4·60	3·85	Darjeeling.	
...	4	...	...	1	2	3	18	3	1·9*	?	?	93	·589	9·0	26	?	?	20·47	?	?	66·36	?	?	3·30	Gantak.	

* Mean of 25 days.

† Mean of 18 days.

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	25·849	−·019	?	25·937	31st	25·698	9th	·239	65·3	70·6	−1·3	63·6	−0·8	67·1	−1·1	7·0	74·1	9th	60·9	19th	13·2
	Pachmarhi	3,528	26·265	−·010	?	26·391	23rd	26·069	8th	·322	68·9	74·9	+0·2	67·0	0	71·0	+0·1	7·9	80·7	23rd	64·2	2nd	16·5
South India	Wellington	6,200	24·188	−·015	?	24·262	30th	24·131	12th	·131	63·8	71·9	+1·1	57·2	0	64·6	+0·6	14·7	76·2	6th	52·7	10th & 17th.	23·5
XIII.—Extra India.																							
Ceylon	Trincomalee	75	29·745	?	29·747	29·862	30th	29·691	12th	·168	84·4	91·7	?	77·3	?	84·5	?	14·4	96·0	14th	71·0	12th	25·0
	Colombo	40	29·859	−·027	29·825	29·967	30th	29·791	11th	·176	83·6	87·3	?	78·3	?	82·8	?	9·0	89·0	11th & 17th	75·5	9th	13·5
	Galle	48	29·850	?	29·824	29·932	31st	29·802	11th	·130	80·5	83·0	?	78·0	?	80·5	?	5·0	84·5	1st & 10th	74·5	19th	10·0
Persia	Meshed	3,104				Not recorded					75·4	?	?	60·1	?	?	?	?	?	?	51·9	27th	?
	Teheran	?	25·815	?	?	26·000	29th	25·650	19th	·350	81·4	94·7	?	70·7	?	82·7	?	24·0	102·8	14th	61·0	27th	41·8
	Ishpahan	?	?	?	?	?	...	?	?	?	77·1	95·0	?	61·8	?	78·4	?	33·2	100·8	19th	52·4	29th	48·4
	Bushire	14	29·520	?	29·489	29·693	28th	29·391	6th	·302	92·2	97·3	?	85·3	?	91·3	?	12·0	102·0	16th	79·9	3 days	22·1
	Jask	?	29·581	?	...	29·737	27th	29·382	7th	·355	86·5	92·4	?	82·4	?	87·4	?	10·0	100·9	31st	79·1	30th	21·8
Arabia	Muscat	?	29·571	?	...	29·719	27th & 28th	29·439	6th	·280	84·5	86·3	?	82·8	?	84·6	?	3·5	90·5	31st	79·3	2nd	11·2
	Baghdad	?	29·183	?	?	29·314	28th	29·024	8th	·290	87·3	107·7	?	79·2	?	93·4	?	28·5	113·1	13th	73·4	20th	39·7
	Aden	94	29·623	−·027	29·647	29·712	30th	29·501	9th	·211	85·6	93·4	+1·5	81·3	+0·8	87·4	+1·2	12·1	98·3	23rd	76·9	26th	21·4
	Perim	?	29·537	?	...	29·600	31st	29·446	9th & 10th.	·154	89·2	97·0	?	84·8	?	90·9	?	12·2	100·5	20th	79·8	8th	20·7
Afghanistan	Kabul	?				Not recorded.				?	72·5	91·7	?	59·6	?	75·6	?	32·1	103·1	1st	50·6	17th	52·5
Central Asia	Kashgar	?	25·512	?	?	25·770	30th	25·380	4th	·390	75·4	87·6*	?	64·4	?	76·0*	?	23·2	104·3	3rd	57·7	18th	36·6
Arabian Sea Islands.	Amini Devi	15	29·881	?	29·827	30·002	30th	29·791	8th	·211	81·1	86·7	?	77·8	?	82·3	?	8·9	89·0	4th	75·1	1st	13·9
	Minicoy	10	29·913	?	98·818	29·994	31st	29·859	8th	·135	81·2	86·6	?	79·9	?	83·1§	?	6·7	90·1	3rd & 10th	76·6	22nd	13·5
Africa	Zanzibar	73	30·066	?	30·067	30·142	24th	30·010	10th	·132	74·7	81·1	?	73·4	?	77·3	?	7·7	84·2	17th	71·4	22nd	12·8

* Mean of 30 days.

§ Mean of 26 days.

I—*concluded.*

in India, Burma, etc., in August 1895—concluded.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 31st August 1895.	Normal rainfall for period from 1st June to 31st August.	Variation from normal of period from 1st June to 31st August.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	1	1	...	2	1	23	3	...	12·0	10·8	+ 11	97	·605	8·5	21	18·50	+2·50	24·56	22·39	+2·17	48·81	52·94	− 4·13	4·46	Mount Abu.	Central India.
...	...	...	1	...	...	2	27	1	14·1	7·5	+ 88	91	·643	8·4	19	21·18	−2·18	21·43	19·74	+1·69	58·43	56·23	+ 2·20	6·06	Pachmarhi.	
12	3	2	...	1	1	7	3	2	3·2	3·8	− 16	71	·428	6·8	10	10·89	−0·89	2·97	4·19	−1·22	9·91	11·67	− 1·76	0·94	Wellington .	South India.
																									XIII.—Extra India.	
...	...	...	...	...	...	31	...	...	8·2	?	?	75	·889	3·3	10	?	?	6·31	4·61	+1·70	9·04	8·34	+ 0·70	2·28	Trincomalee.	Ceylon.
...	...	...	...	...	...	19	11	1	9·4	8·7	+ 8	74	·853	5·7	2	?	?	0·92	4·19	−3·27	15·54	16·98	− 1·44	0·40	Colombo .	
3	...	...	...	...	...	...	2	26	8·9	?	?	94	·976	4·7	13	?	?	6·34	5·25	+1·09	14·80	18·73	− 3·93	1·19	Galle .	
?	?	?	?	?	?	?	?	?	?	?	?	?	?	0·9	0	?	?	0	?	?	0	?	?	?	Meshed .	Persia.
28‡	...	1	...	...	...	...	...	1	2·7†	?	?	35*	·367*	0·9*	1	?	?	0·28	?	?	?	?	?	0·28	Teheran.	
...	3	2	2	1	...	10	4	9	4·5	?	?	69	·651	0·7	0	?	?	0	?	?	0	?	?	?	Ispahan.	
...	1	7	4	5	3	2	3	6	6·5	7·8	−17	66	·990	?	0	?	?	0	0	0	0	0	0	0	Bushire.	
1	1	1	19	8	1	...	...	...	15·7	?	?	75	·941	5·0	0	?	?	0	?	?	0	?	?	0	Jask.	
...	1	5	18	2	1	1	1	2	4·1	?	?	84	·997	2·0	0	?	?	0	?	?	0	?	?	0	Muscat .	Arabia.
9	9	2	7	1	7	7	1	9	3·1	?	?	40	·511	0·1	0	?	?	0	?	?	?	?	?	?	Baghdad.	
7	0	1	1	...	12	8	2	...	10·9*	10·8	+1	71	·870	4·2	0	?	?	0·02	0·21	−0·19	0·09	0·22	− 0·13	0·02	Aden.	
1	2	6	1	1	...	9	10	1	11·9	?	?	60	·824	3·5	0	?	?	0·02	?	?	0·02	?	?	0·02	Perim.	
7	5	1	15	2	1	7	7	7	?	?	?	?	?	0	1	?	?	0·50	?	?	2·00	?	?	0·50	Kabul .	Afghanistan.
30	1	...	...	...	...	...	...	...	4·2	?	?	44§	·379§	3·7*	2	?	?	0·92	?	?	2·53	?	?	0·63	Kashgar .	Central Asia.
...	...	...	...	...	...	11	19	1	19·6‖	?	?	86	·914	6·8	3	?	?	1·56	?	?	29·37	?	?	0·65	Amini Devi .	Arabian Sea Islands.
...	...	...	...	...	...	4	20	7	17·7	?	?	81	·865	5·2	7	?	?	2·18	?	?	19·40	?	?	0·59	Minicoy.	
...	...	...	...	2	22	7	...	...	6·4	?	?	88	·760	5·6	2	?	?	0·64	?	?	2·48	?	?	0·20	Zanzibar .	

* Mean of 30 days. † Mean of 29 days. ‖ „ „ 19 „ ‡ Wind observations of 30 days. § Mean of 28 days.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85

Meteorological Province.	Station.	Elevation of barometer 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·780	29·700	·080	29·736	−·012	29·728	84·3	77·3	7·0	87·2	73·3	13·9	82·0	81·9	79·8	− 0·1	74·9	78·3	78·0	77·1
	Rangoon	...	·769	·680	·089	·731	−·026	·709	85·2	75·9	9·3	89·7	74·0	15·7	80·6	80·3	78·7	+ 0·4	74·3	77·9	77·4	76·5
	Diamond Island	...	·765	·677	·088	·717	−·032	·693	83·3	77·2	6·1	85·6	75·2	10·4	80·9	80·9	79·3	+ 0·8	75·2	77·2	77·3	76·6
	Cocos Island	111	·687	·617	·070	·647	?	·688	85·4	77·0	8·4	88·6	74·2	14·4	81·9	82·0	79·9	?	74·6	78·3	78·1	77·0
	Akyab	...	·733	·644	·089	·693	−·019	·656	84·3	77·0	7·8	90·2	75·1	15·1	81·9	82·6	80·0	− 0·3	75·3	80·1	80·3	78·6
Assam.	Silchar	...	·613	·486	·127	·558	−·017	·612	89·8	76·7	13·1	95·3	74·4	20·9	83·4	87·0	82·8	+ 0·4	75·8	79·2	80·2	78·4
	Sibsagar	...	·371	·241	·130	·306	−·026	·593	88·0	77·3	10·7	93·4	73·8	19·6	82·5	86·5	81·4	− 1·1	76·4	79·3	81·2	79·0
	Dhubri	...	·579	·468	·111	·529	−·004	·598	85·0	78·0	7·0	88·4	74·8	13·6	81·9	83·2	80·2	− 0·4	76·8	79·0	79·5	78·4
Bengal and Orissa.	Chittagong	...	·620	·518	·102	·576	−·029	·611	86·5	76·4	10·1	90·8	74·0	16·8	83·1	83·0	80·2	+ 0·5	75·2	78·8	79·0	77·7
	Naryangunge	...	·651	·547	·104	·605	−·011	·573	87·1	79·3	7·8	90·9	77·1	13·8	83·6	84·6	82·8	+ 0·1	76·7	80·0	80·4	79·0
	Calcutta (Alipore)	...	·623	·527	·096	·580	−·016	·547	87·1	77·9	9·2	91·4	74·0	17·4	83·8	83·8	82·3	− 0·1	76·8	79·6	79·8	78·7
	Saugor Island	...	·612	·522	·090	·572	−·029	·541	87·5	79·9	7·6	90·6	75·4	15·2	84·2	85·4	82·8	+ 0·4	77·6	80·3	81·0	79·8
	Burdwan	...	·540	·437	·103	·496	−·019	·541	90·2	78·9	11·3	94·4	76·5	17·9	85·2	85·8	83·1	− 0·3	76·8	79·7	79·4	78·6
	Berhampore	...	·576	·474	·102	·532	−·018	·547	88·7	78·7	10·0	92·2	77·1	15·1	85·0	86·2	82·7	+ 0·2	76·8	80·6	80·6	79·3
	False Point	...	·623	·532	·091	·583	−·030	·545	86·7	77·6	9·1	91·5	74·1	17·4	84·2	84·8	81·3	− 0·2	76·7	79·4	80·1	78·7
	Cuttack	...	·554	·459	·095	·514	−·037	·535	88·8	78·2	10·6	93·2	75·0	18·2	83·4	85·1	82·2	− 0·4	76·7	78·6	79·4	78·2
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	27·644	27·552	·092	27·600	−·020	·530	84·1	73·7	10·4	87·0	71·5	15·5	79·3	80·7	77·6	+ 0·4	71·7	74·6	75·1	73·8
	Patna	...	29·440	29·330	·110	29·390	−·027	·523	88·4	79·1	9·3	92·5	75·2	17·3	84·8	85·9	82·6	− 1·0	77·3	79·9	80·2	79·1
	Darbhanga	...	·471	·359	·112	·420	−·017	·538	88·0	79·6	8·4	92·0	77·5	14·5	83·6	87·0	83·0	+ 0·2	77·8	80·0	81·4	79·7
	Allahabad	...	·301	·195	·106	·252	−·023	·511	90·4	78·6	11·8	96·0	76·1	19·9	85·6	88·3	83·4	+ 0·1	76·4	79·9	80·6	78·9
	Lucknow	...	·236	·141	·095	·190	−·031	·511	89·8	78·0	11·8	95·8	75·5	20·3	85·0	87·1	83·1	− 0·9	74·6	79·9	80·2	78·2
Indus Valley and Upper Sub-Himalayas.	Dehra Dun	...	27·435	27·358	·077	27·390	−·016	·551	83·8	72·4	11·4	90·3	69·0	21·3	78·5	80·1	76·7	− 0·9	70·9	74·4	75·5	73·6
	Roorkee	...	28·718	28·625	·093	28·668	−·020	·506	90·5	76·6	13·9	94·7	71·9	22·8	83·6	88·3	82·4	− 0·9	74·6	77·9	79·8	77·4
	Meerut	...	·861	·774	·087	·811	−·022	·504	90·1	77·7	12·4	95·9	73·9	22·0	84·4	87·2	83·0	− 1·0	75·9	77·8	79·1	77·6
	Lahore	...	·878	·792	·086	·828	−·018	·483	91·9	80·7	11·2	103·9	73·3	30·6	87·7	92·9	87·0	+ 0·6	76·0	78·6	80·1	78·3
	Ludhiana	...	·781	·693	·088	·731	−·017	·495	93·2	78·7	14·5	101·4	72·7	28·7	87·4	90·2	84·8	− 1·3	76·3	79·2	79·4	78·3
	Peshawar	...	·491	·377	·114	·427	−·001	·487	98·3	77·6	20·7	106·0	70·8	35·2	89·1	96·4	87·2	− 0·1	72·8	77·6	78·5	76·3
	Mooltan	...	29·132	29·053	·079	29·086	−·011	·461	99·4	82·0	17·4	110·8	75·1	35·7	90·4	97·5	89·9	+ 0·2	76·3	80·8	83·1	80·1
	Jacobabad	...	·375	·259	·116	·310	−·008	·448	102·4	82·2	20·2	111·7	77·1	34·6	92·9	100·8	91·6	+ 0·2	76·5	81·8	82·8	80·3
	Kurrachee	...	·571	·522	·049	·549	−·022	·550	88·2	78·8	9·4	91·1	75·8	15·3	84·3	85·7	82·6	+ 0·7	75·5	79·9	80·7	78·7
E, Rajputana, C. India, and Gujarat.	Jeypore	...	28·215	28·132	·083	28·173	−·013	·540	89·4	74·9	14·5	97·3	72·4	24·9	82·7	86·7	80·8	− 0·5	73·0	75·5	76·6	77·0
	Ajmere	...	·050	27·965	·085	·005	−·015	·560	85·6	75·2	10·4	92·9	72·6	20·3	80·2	84·8	79·7	0	72·4	76·0	77·9	75·4
	Deesa	...	29·205	29·111	·094	29·156	−·017	·572	88·7	75·4	13·3	95·7	72·4	23·3	82·7	87·1	81·5	0	73·8	75·5	76·0	75·1
	Nowgong	...	28·864	28·779	·085	28·823	−·017	·527	88·6	77·0	11·6	93·0	74·9	18·1	83·3	85·4	81·7	− 0·1	75·3	77·8	78·7	77·3
	Agra	...	29·047	·956	·091	·999	−·029	·505	91·2	78·3	12·9	99·0	74·8	24·2	86·0	88·3	84·5	− 0·4	75·9	78·7	79·5	78·0
Deccan.	Belgaum	...	27·301	27·227	·074	27·264	−·011	·715	76·3	66·0	10·3	81·1	64·8	16·3	72·4	72·3	69·5	− 0·1	65·5	69·2	69·3	68·0
	Sholapur	...	28·188	28·072	·116	28·137	−·016	·654	89·3	70·0	19·3	94·8	68·0	26·8	81·1	85·5	78·2	0	68·1	71·7	72·4	70·7
	Poona	...	27·943	27·871	·072	27·908	−·007	·688	81·7	69·1	12·6	86·0	66·4	19·6	76·4	76·9	73·2	− 0·4	67·6	71·2	71·0	69·9
	Akola	...	28·783	28·663	·120	28·721	−·018	·595	88·7	73·5	15·2	93·7	71·7	22·0	81·9	87·6	81·1	+ 1·4	72·1	75·0	76·8	74·6
	Buldana	2,132	27·616	27·516	·100	27·564	−·010	·615	83·1	69·1	14·0	87·7	66·8	20·9	77·4	82·0	76·1	+ 0·7	67·3	71·1	72·8	70·4
	Khandwa	...	28·666	28·558	·108	28·610	−·006	·603	86·1	74·1	12·0	90·5	72·1	18·4	80·0	84·5	79·1	+ 0·7	71·3	74·1	75·1	73·5

II.

Stations in India, Burma, etc., for August 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.													Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province or District.
														Number of winds from																				
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
·835	·920	·907	·887	−·007	89	95	84	86	0	9·2	9·3	9·3	+2·2	1	...	1	...	...	3	25	27	5	S. 71° W.	S. 43° W.	% 81	% 82	326	228	...	...	Port Blair .	Burma Coast and Bay Islands.
·828	·923	·905	·885	−·004	93	88	88	90	−1	9·0	9·0	9·0	+0·1	...	1	...	...	2	14	23	17	5	S. 53° W.	S. 34° W.	72	66	93	113	...	...	Rangoon .	
·848	·886	·888	·874	−·002	91	84	84	86	−2	9·3	9·3	9·3	+1·8	...	...	...	...	...	4	45	9	4	S. 53° W.	S. 44° W.	89	78	285*	164	...	...	Diamond Island,	
·826	·922	·914	·897	?	89	84	84	86	?	8·6	8·9	8·8	?	...	...	...	...	...	18	42	...	...	S. 77° W.	?	94	?	?	?	11·87	2·66	Cocos Island.	
·856	1·007	1·008	·957	+·051	92	92	90	91	+3	9·1	9·0	9·1	+1·0	...	...	...	3	6	40	7	4	2	S. 4° W.	S. 1° E.	77	62	97	81	...	...	Akyab .	
·879	·943	·941	·921	0	95	83	74	84	−1	8·5	8·1	8·3	+0·4	55	1	...	...	...	...	1	3	2	N. 74° W.	S. 63° W.	8	7	29*	69	...	...	Silchar .	Assam.
·900	·961	·994	952	+·009	96	86	79	87	+3	8·5	6·6	7·6	−0·9	11	...	21	1	6	1	21	1	...	S. 39° E.	S. 80° W.	11	12	89*	63	...	...	Sibsagar .	
·905	·953	·960	·939	+·013	94	87	85	89	+2	8·8	7·2	8·0	+0·6	14	2	13	9	4	2	14	3	1	S. 69° E.	S. 57° E.	13	20	97	78	...	...	Dhubri .	
·860	·933	·928	·910	+·006	94	82	83	86	−2	8·7	8·3	8·5	+1·1	...	...	2	1	20	18	17	2	2	S. 2° E.	S. 32° E.	66	55	162*	146	...	...	Chittagong .	Bengal and Orissa.
·885	·973	·981	·946	−·025	88	85	82	85	−2	8·7	7·7	8·2	+0·4	...	...	...	5	28	25	3	1	...	S. 25° E.	S. 14° E.	84	72	214	151	...	...	Naryangunge	
·908	·955	·965	·943	−·025	95	83	84	87	−1	8·1	8·7	8·4	+0·2	3	...	2	13	12	15	10	6	1	S. 18° E.	S. 17° E.	48	57	84	122	...	...	Calcutta (Alipore).	
·915	1·007	1·001	·974	−·019	90	86	82	86	−1	9·6	9·1	9·4	+1·8	...	1	1	4	10	22	19	3	2	S. 9° W.	S. 17° W.	64	54	317	299	...	...	Saugor Island,	
·906	·944	·925	·925	−·022	90	78	75	81	−3	8·5	8·9	8·7	+0·4	6	2	5	15	15	9	6	4	2	S. 46° E.	S. 27° E.	39	48	77*	84	...	...	Burdwan .	
·899	·988	·971	·953	+·001	91	82	78	84	−3	7·9	8·0	8·0	−0·8	2	1	1	14	17	14	8	4	1	S. 29° E.	S. 40° E.	55	45	101*	101	...	...	Berhampore	
·910	·913	·968	·940	+·008	96	81	81	86	+1	8·0	8·2	8·1	+0·3	...	...	...	4	9	12	16	16	5	S. 39° W.	S. 57° W.	53	53	220*	238	...	...	False Point	
·899	·917	·928	·915	+·008	93	80	77	83	+2	7·6	8·3	8·0	+0·7	5	3	3	4	4	4	20	14	5	S. 61° W.	S. 44° W.	42	45	67	62	...	...	Cuttack .	
·755	·801	·801	·786	−·016	91	80	77	83	−2	9·9	9·9	9·9	+1·1	2	6	3	17	7	6	3	5	13	N. 62° E.	S. 50° W.	14	7	191	180	...	...	Hazaribagh.	Gangetic Plain and Chota Nagpur.
·916	·958	·955	·913	−·012	92	80	77	83	0	9·3	8·9	9·1	+1·0	2	4	12	19	7	4	3	7	...	N. 78° E.	S. 19° E	34	34	149*	83	...	...	Patna .	
·933	·978	·998	·970	+·009	92	85	78	85	+1	7·7	6·7	7·2	+1·1	...	...	2	23	24	2	4	5	2	S. 59° E.	S. 82° E.	61	60	129	110	...	...	Darbhanga	
·881	·947	·941	·923	−·021	90	78	71	80	−3	8·2	8·6	8·4	+0·9	1	2	8	14	1	2	4	17	13	N. 37° W.	N. 40° E.	23	4	153	93	...	...	Allahabad.	
·812	·952	·941	·902	−·010	84	79	74	79	0	7·6	7·3	7·5	0	1	3	10	10	12	3	5	8	10	N. 73° E.	S. 77° E.	11	12	?	72	...	...	Lucknow.	
·739	·802	·826	·789	?	93	83	81	86	?	7·6	8·0	7·8	+0·3	21	3	...	2	12	5	7	10	2	S. 22° W.	S. 43° W.	26	10	17	26	...	...	Dehra Dun	Upper Sub-Himalayas.
·831	·883	·909	·874	+·013	91	77	68	79	+2	6·6	5·7	6·2	0	25	...	2	6	12	...	6	7	4	S. 12° E.	S. 36° E.	14	27	69	60	...	...	Roorkee .	
·875	·869	·887	·877	+·003	92	74	70	79	+3	6·8	5·7	6·3	−0·1	26	...	1	16	3	...	8	8	...	S. 36° E.	N. 80° E.	14	5	39	50	...	...	Meerut .	
·839	·862	·859	·853	−·014	80	67	58	68	+4	4·7	4·5	4·6	+0·9	3	7	4	23	2	7	3	9	4	N. 81° E	S. 83° E.	23	27	77	69	...	...	Lahore .	
·879	·890	·858	·876	+·004	89	69	63	74	+2	6·4	6·7	6·6	+1·0	4	1	9	...	22	7	5	5	9	S. 22° E.	S 66° E.	21	10	70	34	...	...	Ludhiana .	
·752	·795	·752	·766	−·010	79	59	45	61	0	3·1	3·9	3·5	+0·7	2	4	21	12	7	...	8	5	3	N. 62° E.	N. 40° E.	35	55	96*	94	...	...	Peshawar .	
·833	·926	·939	·899	+·016	77	66	54	66	+2	2·6	2·4	2·5	+0·3	2	...	16	...	17	1	21	...	5	S. 21° E.	S. 19° W.	23	22	81*	70	...	...	Mooltan .	Indus Valley and N.-W. Rajputana.
·838	·936	·878	·881	+·069	77	61	46	61	+4	3·4	3·6	3·5	+1·2	11	1	2	1	38	5	2	...	2	S. 42° E.	S. 50° E.	64	54	105*	94	...	...	Jacobabad.	
·840	·965	·981	·928	+·075	85	82	80	82	+4	5·7	4·8	5·3	−1·5	...	...	...	...	...	1	34	24	3	S. 65° W.	S. 63° W.	89	84	361	409	...	...	Kurrachee .	
·793	·799	·791	·794	−·020	91	72	64	76	−2	7·9	8·0	8·0	+0·8	3	3	3	2	1	1	14	25	10	N. 89° W.	N. 58° W.	60	40	115	127	...	...	Jeypore .	E. Rajputana, Central India, and Gujarat.
·763	·848	·870	·827	+·048	87	82	73	81	+5	6·3	5·8	6·1	−0·1	...	...	2	2	1	...	14	39	4	S. 48° W.	S. 70° W.	61	56	185	138	...	...	Ajmere .	
·813	·787	·751	·784	−·013	92	70	59	74	−1	8·0	6·1	7·1	−0·9	...	1	2	...	...	3	31	24	1	S. 64° W.	S. 47° W.	81	72	245	288	...	...	Deesa .	
·857	·882	·895	·878	+·020	92	78	74	81	+1	8·2	8·5	8·4	0	2	4	3	4	1	1	2	40	5	N. 81° W.	S. 82° W.	63	38	65*	81	...	...	Nowgong .	
·867	·887	·889	·881	−·015	89	72	68	76	0	6·6	6·9	6·8	+0·4	...	...	5	...	15	...	25	...	17	S. 51° W.	S. 22° E.	32	10	139*	157	...	...	Agra .	
·623	·675	·681	·660	+·005	97	85	86	89	0	8·0	8·5	8·3	−0·2	...	...	...	...	...	...	21	34	5	S. 78° W.	S. 79° W.	89	89	505	497	...	...	Belgaum .	Deccan.
·666	·662	·633	·654	−·002	91	63	54	69	0	7·7	8·6	8·2	−0·1	...	1	...	...	...	...	20	17	24	N. 85° W	N. 89° W.	78	79	310*	279	...	...	Sholapur .	
·657	·702	·685	·681	−·001	92	78	75	82	+3	8·5	8·7	8·6	−0·1	...	...	...	...	...	...	19	37	3	S. 78° W	S. 84° W.	91	82	203	340	...	...	Poona .	
·772	·777	·777	·776	+·029	94	72	60	75	0	7·8	7·5	7·7	−0·5	2	2	...	...	...	...	4	32	22	N. 74° W	N. 71° W.	85	80	221	194	...	...	Akola.	
·648	·685	·694	·676	−·025	91	73	64	76	−5	8·3	8·0	8·2	+0·6	...	1	...	...	...	1	6	26	28	N. 73° W	N. 65° W.	84	72	168	199	5·01	1·12	Buldana .	
·744	·770	·755	·756	−·007	87	75	64	75	−3	8·2	8·4	8·3	+0·9	...	...	...	...	1	...	10	18	33	S. 72° W.	N 80° W.	79	80	234	192	...	...	Khandwa .	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85

Meteorological Province.	Station.	Elevation of barometer 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*contd.*	Hoshangabad	...	28·667	28·562	·105	28·613	−·013	29·585	85·2	74·1	11·1	90·3	70·7	19·6	79·6	83·3	78·6	+0·2	72·9	75·7	77·0	75·2
	Nagpur	...	·656	·556	·100	·604	−·008	·576	87·4	75·1	12·3	94·9	71·1	23·8	81·0	83·5	80·6	+0·3	71·9	76·0	77·1	75·0
	Nagpur (Sanitary Commissioner's Office).	...	·680	·571	·109	·626	P	·588	88·0	74·8	13·2	95·1	71·4	23·7	81·6	84·1	80·6	P	72·4	75·7	76·9	P
	Jubbulpore	...	·316	28·214	·102	28·263	−·031	·533	85·6	74·2	11·4	90·7	70·6	20·1	80·0	81·7	73·3	+0·3	72·3	75·7	76·2	74·7
	Saugor	...	27·902	27·806	·096	27·852	−·008	·549	83·9	73·9	10·0	89·7	70·7	19·0	78·7	81·7	77·7	+1·2	71·5	75·4	76·2	74·4
	Raipur	...	28·693	28·588	·105	28·639	−·013	·540	85·9	74·8	11·1	91·5	71·6	19·9	80·6	82·9	79·9	−0·1	73·0	76·3	76·9	75·4
	Sutna	...	·578	·477	·101	·529	−·021	·516	87·7	76·5	11·2	91·7	73·1	18·6	83·2	84·7	80·9	+0·7	74·6	77·6	77·7	76·6
	Hyderabad (Deccan).	...	·078	27·968	·110	·027	P	·652	82·6	71·5	11·1	89·2	69·5	19·7	77·5	81·3	76·8	P	69·5	72·5	73·9	72·0
West Coast.	Bombay	...	29·751	29·677	·074	29·711	−·016	·688	83·9	76·7	7·2	86·4	74·0	12·4	80·8	81·4	79·8	−0·1	73·8	77·1	77·2	76·0
	Ratnagiri	...	·719	·618	·071	·683	+·003	·728	83·9	76·2	7·7	85·9	73·5	12·4	81·3	81·3	79·5	+0·7	73·6	77·2	77·1	76·0
	Karwar	...	·825	·747	·077	·786	+·002	·759	82·6	74·9	7·7	84·2	73·1	11·1	79·8	80·5	78·3	+0·5	73·1	75·8	76·0	75·0
	Cochin	...	·899	·829	·070	·861	−·015	·799	81·2	74·4	9·8	86·8	71·2	15·6	80·5	81·3	78·7	0	73·2	76·6	76·8	75·5
South India.	Salem	...	28·920	28·786	·134	28·867	−·021	·735	91·6	72·8	18·8	97·2	70·1	27·1	82·8	88·3	80·2	+0·6	71·3	75·1	76·0	74·1
	Mysore	...	27·375	27·276	·099	27·326	P	·748	83·3	66·8	16·5	90·8	64·7	26·1	76·8	78·8	73·9	P	65·8	69·4	69·9	68·4
	Mercara	...	26·181	26·108	·073	26·159	−·013	P	69·4	62·6	6·8	73·3	60·7	12·6	66·0	65·4	65·0	−0·5	61·9	64·5	64·4	63·6
	Bangalore	...	·871	·768	·103	·832	−·024	·728	81·3	65·9	15·4	85·7	64·0	21·7	73·8	78·9	73·0	+0·1	64·9	68·2	69·6	67·6
	Hassan	...	·818	·740	·078	·791	P	·773	77·2	64·5	12·7	81·4	62·5	18·9	73·1	73·5	69·9	P	61·7	67·6	68·1	65·8
	Chitaldroog	...	27·445	27·348	·097	27·406	P	·725	81·5	67·6	13·9	85·9	66·9	19·0	75·3	78·1	73·7	P	64·9	69·4	70·1	68·1
	Trichinopoly	...	29·575	29·440	·135	29·522	−·022	·704	95·4	76·7	18·7	102·8	72·9	29·9	87·0	92·9	84·2	+0·4	71·7	75·5	76·4	74·5
	Madras	...	·778	·663	·115	·730	−·017	·680	92·8	76·7	16·1	98·8	73·2	25·6	85·9	88·1	83·3	−0·9	P	77·1	78·4	77·1
	Bellary	...	28·343	28·223	·120	28·292	−·007	·693	89·4	73·4	16·0	93·7	69·9	23·8	82·2	87·3	80·4	−0·6	66·9	70·8	71·8	69·8
	Vizagapatam	...	29·649	29·545	·104	29·602	−·032	·571	87·4	79·7	7·7	95·0	75·9	19·1	84·0	84·9	P	P	76·3	78·7	79·2	78·0
	Cocanada	...	·684	·582	·102	·633	P	·595	88·8	78·2	10·6	95·2	74·3	20·9	84·0	86·8	83·0	P	75·5	77·3	78·0	76·9
Hill Station, Baluchistan.	Quetta	...	24·467	24·388	·079	24·426	−·011	P	88·9	58·8	30·1	95·6	46·8	48·8	80·1	84·6	72·8	−2·7	52·7	62·6	63·2	59·5
Hill Stations, Northern India.	Leh	11,503	19·636	19·545	·091	19·600	−·025	P	77·4	50·2	27·2	86·2	40·0	46·2	66·1	73·0	62·4	+1·5	40·3	52·4	54·9	49·2
	Srinagar	...	24·704	24·616	·088	24·658	P	P	83·3	62·2	21·1	93·9	55·2	38·7	73·6	81·9	72·4	P	61·2	68·6	74·2	68·0
	Murree	...	23·736	23·699	·037	23·716	−·025	P	73·4	61·5	11·9	80·5	54·5	26·0	69·1	70·3	66·8	−0·1	58·3	64·5	66·0	62·9
	Chamba	3,005	26·681	26·614	·067	26·649	−·011	P	81·7	69·5	12·2	86·5	62·3	24·2	76·6	79·6	74·5	−1·5	67·9	71·7	73·5	71·0
	Kailang	10,087	20·699	20·635	·064	20·669	+·004	P	72·1	49·8	22·3	81·7	41·6	40·1	64·7	66·7	59·0	−1·6	47·5	55·3	55·0	52·6
	Simla (Ridge)	...	23·016	22·971	·045	22·992	−·005	P	66·6	58·8	7·8	69·4	55·9	13·5	63·1	63·9	62·1	−1·0	57·5	61·0	62·1	60·2
	Chakrata	...	·222	23·171	·051	23·194	−·015	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
	Ranikhet	...	·925	·920	·065	·938	−·018	P	72·0	61·9	10·1	78·3	59·0	19·3	67·9	68·9	66·3	−0·6	61·0	64·7	65·8	63·8
	Katmandu	4,388	25·418	25·357	·061	25·391	−·047	P	82·2	68·3	13·9	86·8	65·5	21·3	76·9	77·1	74·0	−1·5	66·9	71·0	71·7	69·9
	Darjeeling	...	22·909	22·841	·068	22·878	−·021	P	64·8	57·2	7·6	68·3	55·4	12·9	62·1	62·5	60·4	−0·2	57·1	61·5	61·7	60·1
Hill Stations, Central India.	Mount Abu	...	25·864	25·803	·061	25·833	−·029	P	70·7	63·6	7·1	74·1	60·7	13·4	66·8	69·2	66·8	−1·2	63·0	65·8	67·2	65·3
	Pachmarhi	...	26·282	26·200	·082	26·239	−·005	P	75·1	66·9	8·2	80·5	64·4	16·1	70·7	73·1	69·8	+0·2	66·3	67·9	69·1	67·8
	Chikalda	3,642	·185	·109	·076	·147	+·006	·733	72·5	64·5	8·0	77·6	61·4	16·2	67·8	71·4	67·5	−0·2	64·1	66·6	68·6	66·5
	Makhia	P																				

II—*continued.*

Stations in India, Burma, etc., for August 1895—continued.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from																	
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
·796	·843	·851	·830	+·020	95	84	75	85	+ 1	8·6	7·8	8·2	+0·6	3	...	...	...	...	...	38	20	1	S. 61° W.	S. 79° W.	87	73	100	85	...	...	Hoshangabad.	Deccan—*contd.*
·743	·838	·852	·811	+·016	85	79	75	80	+ 1	7·9	8·3	8·1	−0·4	2	4	2	...	1	2	11	21	19	N. 78° W.	N. 76° W.	66	62	192	144	...	...	Nagpur .	
·764	·815	·836	·805	?	89	76	72	79	?	7·5	7·8	7·7	?	11	2	2	1	1	4	10	23	5	S. 81° W.	?	53	?	50*	?	...	...	Nagpur(Sanitary Commissioner's Office),	
·771	·835	·835	·814	+·006	91	82	78	84	+ 2	6·6	7·3	7·0	−1·3	...	4	1	...	1	2	10	24	20	N. 78° W.	N. 84° W.	72	64	94	107	...	...	Jubbulpore.	
·745	·810	·837	·807	+·022	89	86	78	84	+ 1	7·2	6·9	7·1	+1·0	...	2	2	2	...	1	28	17	10	S. 76° W.	S. 78° W.	68	66	106	104	...	...	Saugor .	
·790	·856	·843	·830	+·004	92	82	76	83	+ 1	8·3	8·1	8·2	+0·3	10	2	2	2	...	...	15	22	9	S. 89° W.	S. 76° W.	58	64	239*	187	...	...	Raipur .	
·835	·876	·862	·858	+·029	92	77	73	81	+ 2	6·1	6·8	6·5	−0·4	...	6	3	6	2	2	4	26	13	N. 69° W.	N. 70° W.	50	39	179*	191	...	...	Sutna .	
·698	·735	·747	·727	?	90	78	71	80	?	7·8	8·1	8·0	?	2	3	1	...	...	...	2	38	16	N. 75° W.	?	84	?	188*	?	...	...	Hyderabad (Deccan).	
·797	·882	·881	·853	−·028	87	84	82	84	− 3	8·6	8·9	8·8	0	...	..	...	...	1	...	21	38	2	S. 75° W.	S. 81° W.	89	81	356	384	...	...	Bombay .	West Coast.
·796	·881	·875	·851	+·004	88	82	82	84	− 1	7·7	7·9	7·8	+0·8	...	...	...	...	...	13	30	14	5	S. 52° W.	S. 63° W.	80	61	244*	242	...	...	Ratnagiri .	
·792	·840	·839	·824	−·009	91	83	81	85	− 3	6·2	6·6	6·4	−0·7	6	...	...	...	...	...	13	17	26	N. 78° W.	W	73	79	132	?	...	...	Karwar .	
·803	·866	·864	·844	+·013	94	83	81	86	− 1	6·1	8·2	7·2	+0·8	11	2	1	...	...	...	2	23	22	N. 67° W.	N. 85° W.	69	59	103	?	...	...	Cochin .	
·749	·771	·729	·750	−·012	93	69	56	73	− 1	7·1	8·4	7·8	+1·8	22	1	1	...	3	11	17	4	3	S. 36° W.	S. 60° W.	42	80	46	94	...	...	Salem .	South India.
·624	·630	·624	·626	?	95	69	64	76	?	8·6	8·6	8·6	?	...	1	...	...	...	...	15	33	13	S. 89° W.	?	85	?	289*	?	...	...	Mysore .	
·547	·592	·596	·578	−·002	95	93	95	94	0	9·4	9·8	9·6	+0·2	...	2	...	...	...	...	2	35	23	N. 73° W.	N. 73° W.	89	88	243	199	...	...	Mercara .	
·606	·627	·616	·616	+·008	95	75	63	78	+ 1	8·6	7·4	8·0	+1·7	...	1	...	...	...	...	19	31	11	S. 85° W.	S. 78° W.	84	91	219*	181	...	...	Bangalore	
·518	·612	·625	·585	?	85	75	76	79	?	9·0	8·9	9·0	?	...	...	...	...	...	...	4	39	19	N. 79° W.	?	90	?	96*	?	...	...	Hassan .	
·583	·644	·637	·621	?	86	73	67	75	?	8·3	8·8	8·6	?	...	...	...	...	...	...	15	34	13	S. 88° W.	?	87	?	255*	?	...	...	Chitaldroog.	
·711	·731	·691	·711	−·005	78	57	46	60	− 1	6·6	6·9	6·8	−0·8	2	1	...	...	1	2	15	34	7	S. 81° W.	N. 80° W.	79	82	160	198	...	...	Trichinopoly.	
?	·815	·843	·851	+·045	?	66	64	74	+ 3	7·2	6·9	7·1	+0·6	1	2	2	7	4	13	26	6	...	S. 70° W.	S. 40° W.	53	58	126	172	...	...	Madras .	
·579	·610	·585	·591	−·076	70	55	46	57	− 7	8·6	9·1	8·9	+1·3	1	...	...	...	...	...	6	45	10	N. 87° W.	N. 86° W.	90	87	250	262	...	...	Bellary .	
·864	·911	·923	·898	+·024	85	78	77	80	+ 8	7·5	8·6	8·1	+1·6	...	...	...	...	...	1	14	44	3	S. 82° W.	S. 74° W.	91	64	81	70	...	...	Vizagapatam.	
·849	·850	·845	·848	?	88	73	67	76	?	7·0	6·6	6·8	?	...	...	...	...	...	...	23	31	8	S. 79° W.	?	87	?	198*	?	...	...	Cocanada .	
·348	·394	·364	·369	−·025	67	37	31	45	− 1	1·0	1·3	1·2	−0·2	34	1	1	...	1	2	6	11	6	S. 87° W.	N. 78° W.	29	42	49*	97	...	...	Quetta .	Hill Station, Baluchistan.
·170	·277	·284	·244	−·020	46	45	38	43	− 6	4·7	5·4	5·1	0	2	2	3	2	2	14	21	12	4	S. 45° W.	S. 72° W.	55	31	54	38	0·57	0·26	Leh .	Hill Stations, Northern India.
·534	·654	·770	·653	?	94	79	70	81	?	4·6	3·9	4·3	?	19	6	2	1	11	12	1	1	9	S. 17° E.	?	11	?	104*	?	...	...	Srinagar .	
·459	·563	·598	·540	−·015	83	80	81	81	− 1	7·6	6·5	7·1	+0·6	9	5	2	3	12	7	8	3	13	S. 42° W.	S. 4° E.	11	12	177*	119	...	...	Murree .	
·669	·724	·757	·717	−·025	92	79	75	82	− 1	7·1	7·5	7·3	+0·3	27	6	...	...	1	...	...	1	27	N. 38° W.	N. 33° W.	50	33	93*	81	9·75	2·33	Chamba .	
·313	·359	·334	·335	−·027	87	59	53	66	− 2	6·7	6·5	6·6	+0·2	...	5	1	...	2	17	14	18	5	S. 57° W.	S. 80° W.	56	61	46	35	1·49	0·43	Kailang .	
·463	·518	·541	·507	−·028	93	89	91	91	0	9·1	9·7	9·4	+0·7	10	24	9	2	2	12	1	...	...	N. 30° E.	S. 77° W.	31	28	101	?	...	...	Simla (Ridge),	
?	?	?	?	?	?	?	?	?	?	?	?	?	?	...	1	1	7	1	1	1	47	3	S. 87° W.	S. 73° W.	79	43	118	103	...	...	Chakrata .	
·530	·580	·605	·572	+·002	95	85	86	89	+ 2	8·6	8·5	8·6	0	26	1	2	1	...	4	8	16	4	S. 78° W.	S. 59° W.	37	33	81*	51	...	...	Ranikhet .	
·648	·691	·717	·685	+·011	94	75	77	82	+ 2	6·9	7·6	7·2	+1·4	..	1	...	31	2	...	...	18	10	N. 48° E.	S. 79° W.	16	26	19	?	11·89	1·67	Katmandu.	
·466	·542	·542	·517	+·012	98	97	95	97	+ 3	9·8	9·5	9·7	+1·0	14	...	14	15	7	2	1	5	2	N. 81° E.	N. 84° E.	38	32	65	81	...	...	Darjeeling .	
·571	·624	·645	·613	+·010	97	95	90	94	+ 4	9·5	7·9	8·7	+0·1	1	1	2	...	3	2	47	4	2	S. 46° W.	S. 58° W.	78	72	287*	254	...	...	Mount Abu	Hill Stations, Central India.
·641	·652	·668	·654	−·008	97	87	82	89	− 1	9·1	8·5	8·8	+0·3	...	...	...	...	...	...	7	51	4	S. 88° W.	N. 80° W.	95	72	295*	179	...	...	Pachmarhi.	
·595	·642	·670	·636	−·007	98	94	87	93	− 1	9·2	8·0	8·6	−0·3	10	23	...	...	...	...	1	3	25	N. 28° W.	N. 41° W.	73	72	282	256	15·83	2·26	Chikalda .	
																															Makhla .	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S.L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, S. India.	Wellington . .	...	24·196	24·124	·072	24·160	−·015	?	72·0	57·2	14·8	76·1	52·7	23·4	67·8	66·3	63·2	+0·6	54·6	60·5	60·3	58·5
Extra India.	Muscat . .	...	29·582	29·508	·074	29·545	?	?	86·2	82·8	3·4	90·3	78·9	11·4	85·4	85·3	84·3	?	78·2	80·8	80·9	80·0
	Aden . . .	...	·632	·503	·129	·565	−·024	29·588	93·4	81·4	12·0	98·1	77·1	21·0	89·5	90·7	86·7	+1·7	73·4	78·5	76·7	76·2
	Perim . . .	...	·538	·414	·124	·473	?	?	97·0	84·8	12·2	100·5	79·8	20·7	92·1	93·2	90·0	?	66·7	79·4	79·9	75·3
	Minicoy . .	...	·922	·837	·085	·875	?	·810	86·6	79·9	6·7	90·1	76·6	13·5	83·5	83·7	82·7	?	75·3	77·7	77·7	76·9
	Zanzibar . .	...	30·074	·973	·101	30·024	−·033	30·024	81·2	73·4	7·8	84·2	71·4	12·8	76·3	80·5	77·2	+0·6	70·2	72·8	72·9	72·0
	Port Victoria (Seychelles).	15	·002	·920	·082	29·961	?	29·921	79·7	76·0	3·7	80·7	72·3	8·4	78·4	79·2	77·7	?	70·1	72·8	73·1	72·0

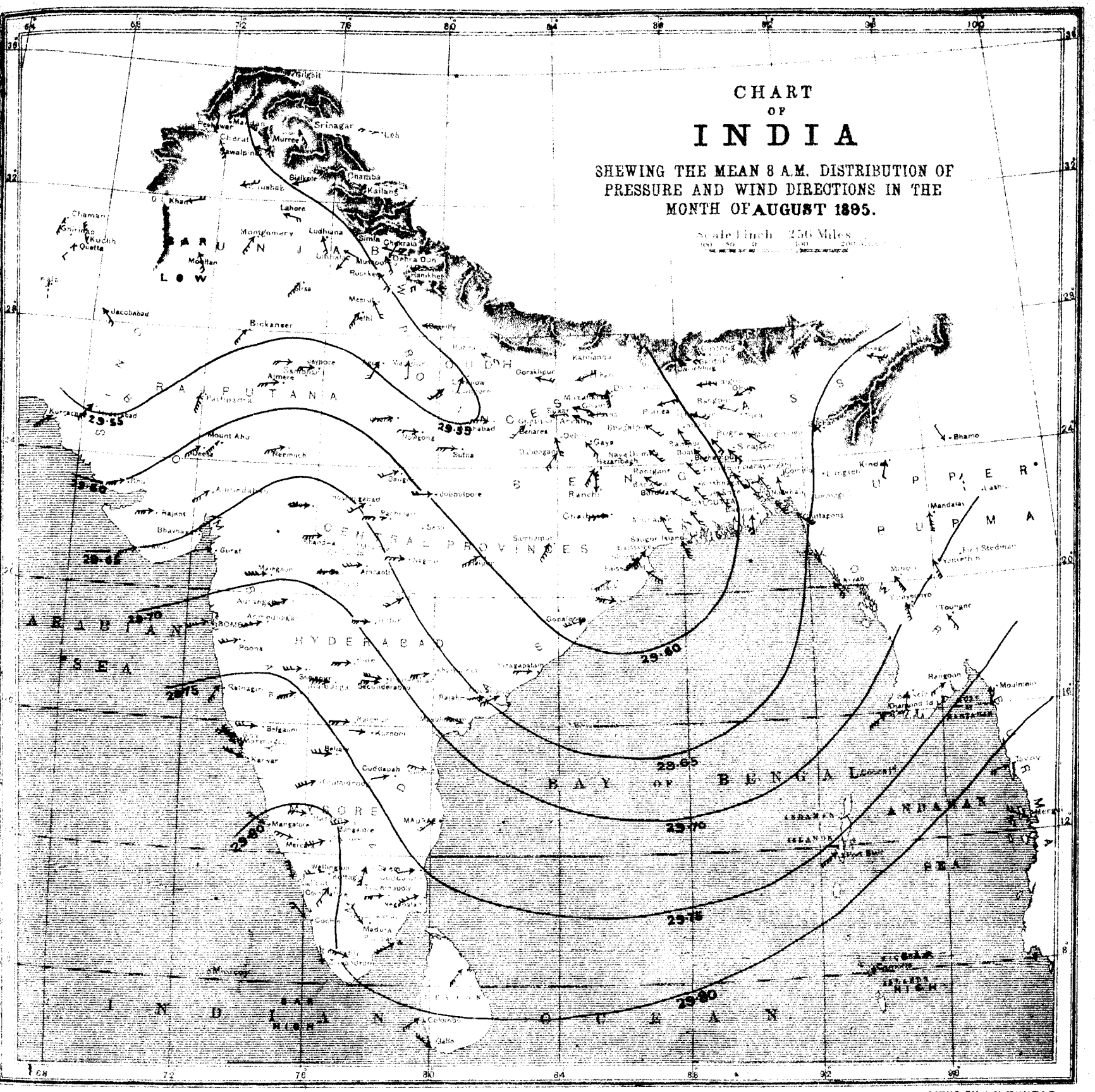
II—*concluded.*

Stations in India, Burma, etc., for August 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.												Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from									Mean wind direction.	Normal mean wind direction of month.									
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																									%	%						
·402	·452	·461	·433	−·001	86	67	72	75	− 2	8·0	9·5	8·8	+1·2	4	6	...	...	1	6	21	8	16	S 83° W	S. 81° W.	55	46	78	87	...	...	Wellington.	Hill Station, S. India.
·910	·992	·997	·966	?	81	81	82	81	?	1·9	2·1	2·0	?	...	1	21	25	4	1	...	1	9	S. 63° E.	?	64	?	98	?	...	...	Muscat	Extra India.
·718	·831	·734	·761	−·036	67	60	51	59	− 7	3·0	1·9	2·5	+0·8	2	...	...	1	8	32	19	...	...	S. 8° W.	S. 12° E.	84	69	269	268	...	...	Aden	
·416	·830	·814	·697	?	35	55	54	48	?	2·2	3·9	3·1	?	1	3	12	1	1	1	3	11	29	N. 40° W.	?	60	?	286	?	...	...	Perim	
·820	·873	·868	·854	?	80	76	75	77	?	4·9	6·1	5·5	?	...	1	...	...	...	...	8	36	17	N. 76° W.	?	89	?	426	?	...	...	Minicoy	
·697	·756	·708	·720	+·030	85	84	68	79	+ 3	4·3	3·8	4·1	−0·6	...	2	...	...	24	28	8	...	...	S. 13° E.	S 6° W	81	59	153*	153	...	...	Zanzibar	
·661	·734	·736	·710	?	74	76	74	75	?	6·4	6·4	6·4	?	...	...	...	...	48	11	3	...	...	S. 34° E.	?	92	?	328	?	3·50	1·35	Port Victoria (Seychelles)	

* Corrected.

G. I. C. P. O.—No. 72 Meteor.—8-1-96.—377.



LITHO. BY J. N. MUNDLE.

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr., I.—June 94.—5,000
Reg. No. 149, Wr., I.—Apl. 95—4,500.
Zinco., S. I. O., Calcutta.

LITHO. BY J. N. MUNDLE.

Explanation.

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

Reg. No. 150, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—April 95.—4,500.
Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

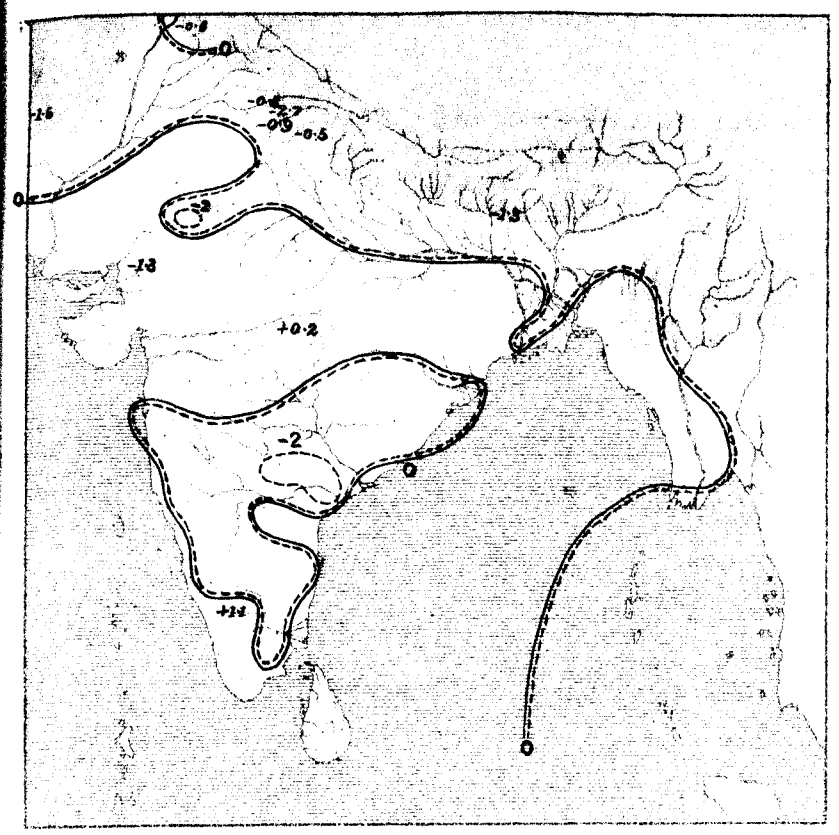
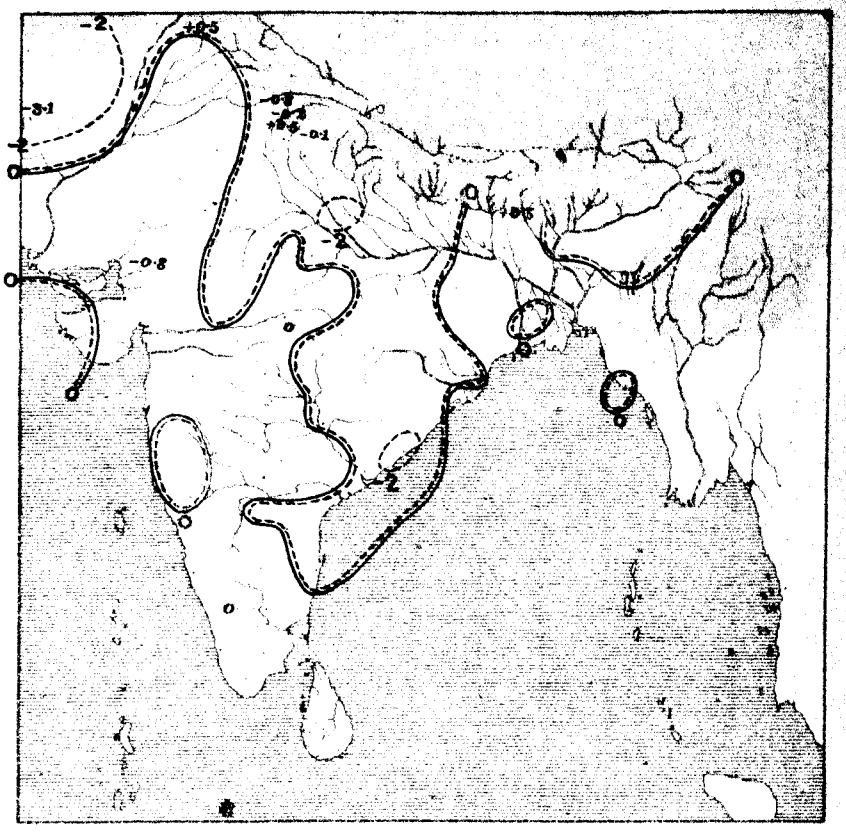


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

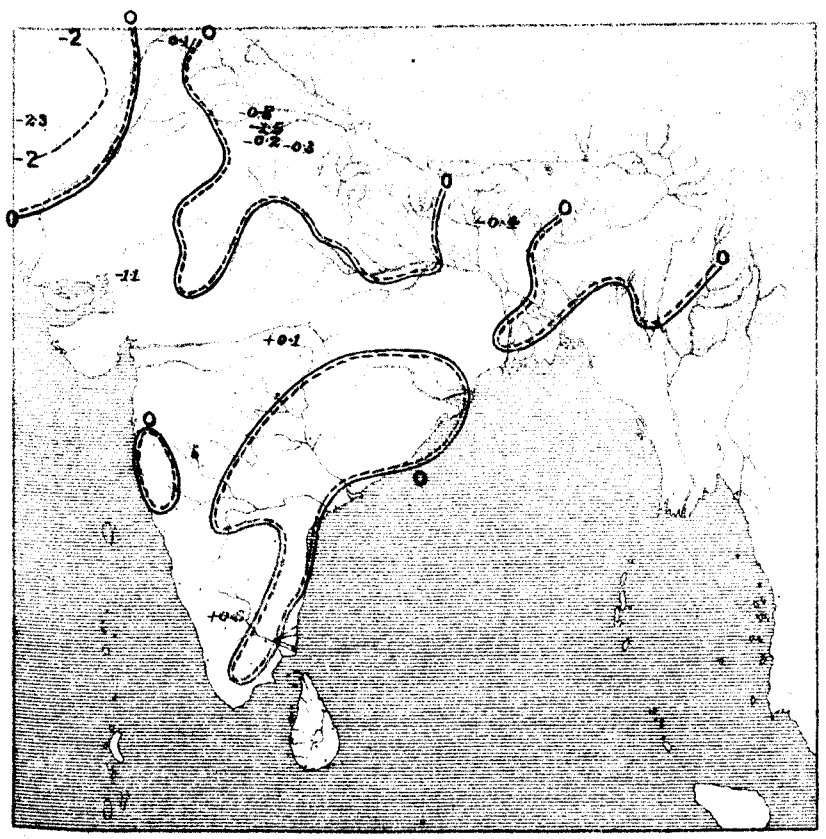
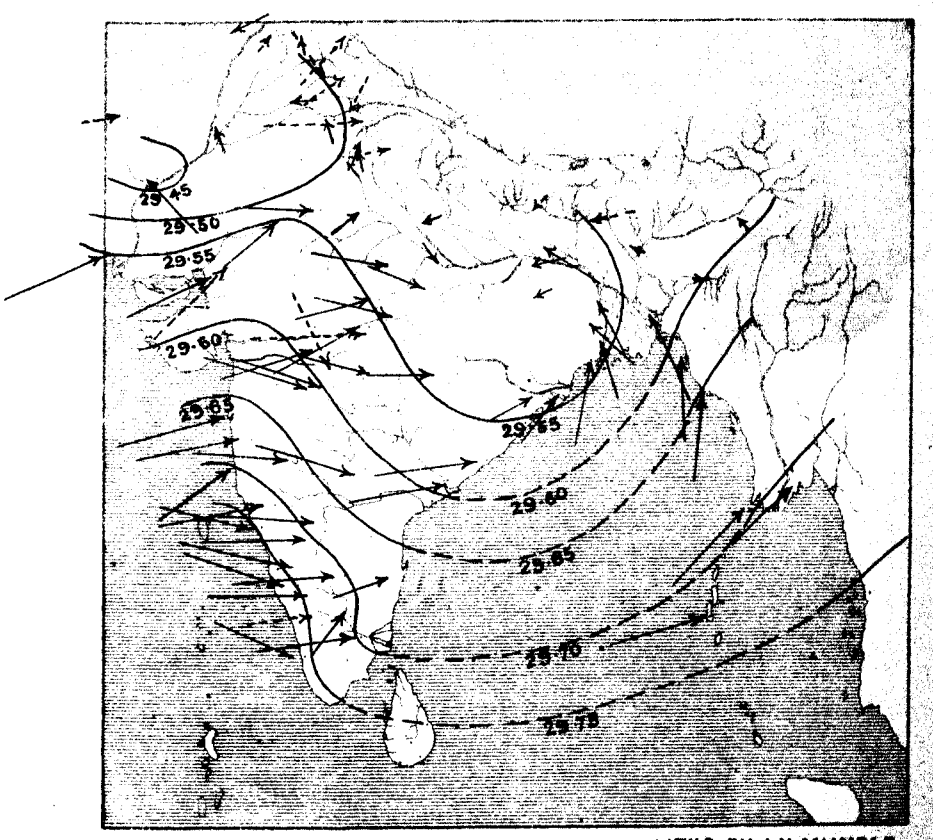


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF AUGUST 1895.

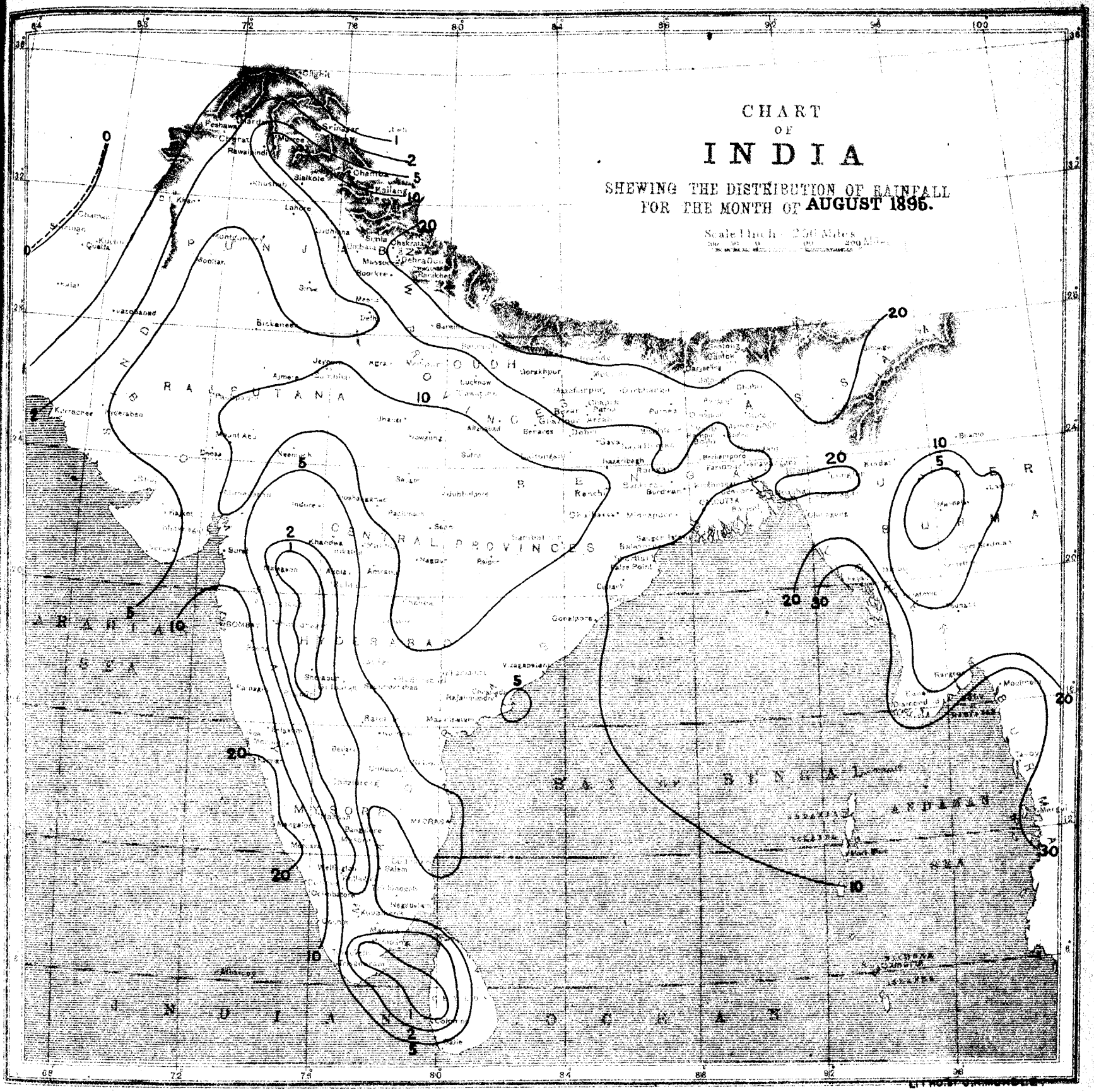


LITHO. BY J.N.MUNDLE.

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken

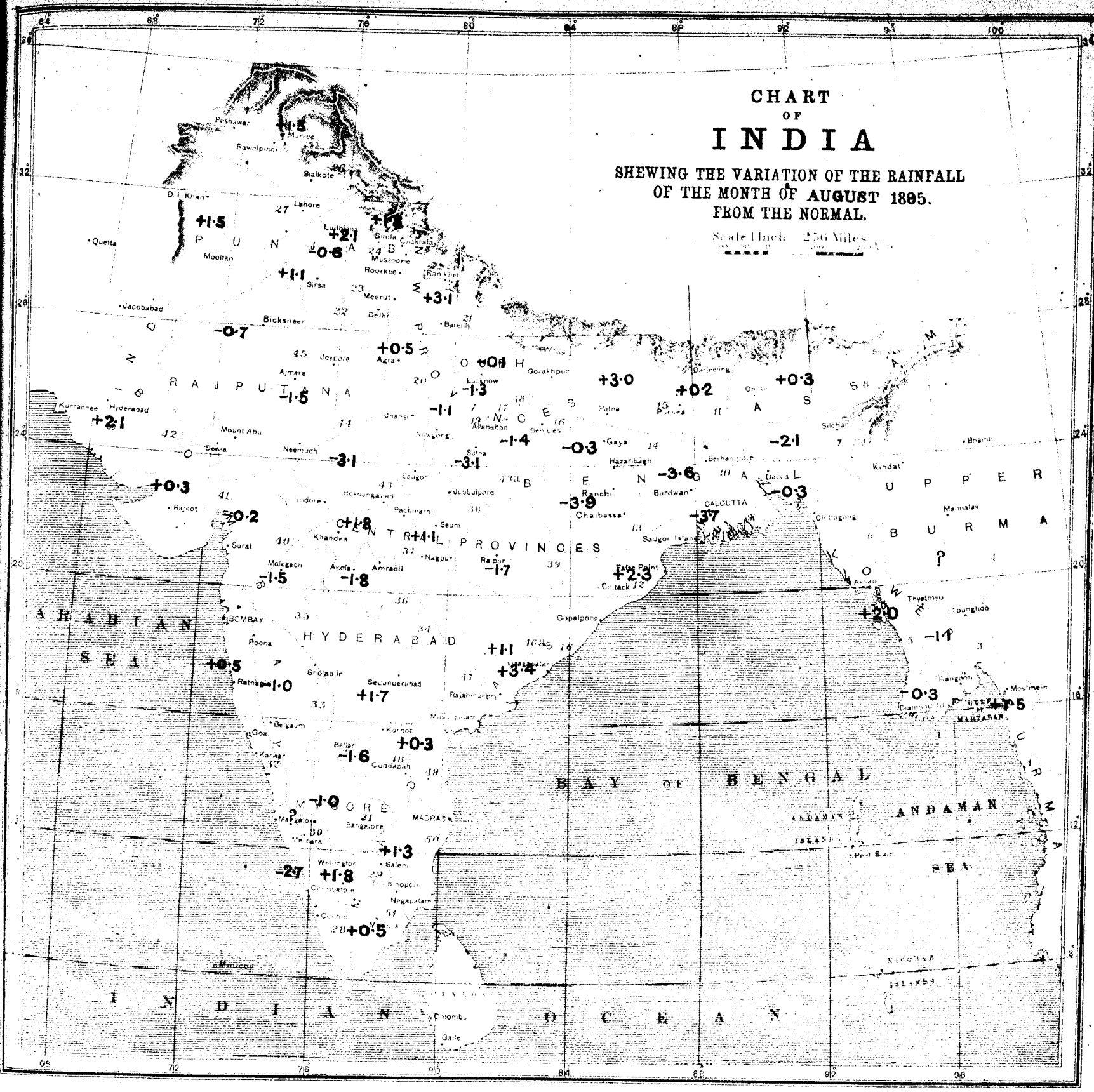
The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value



Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Reg. No. 165, Wr., I.—June 95.—5,000.
Reg. No. 149, Wr., I.—April 95.—4,500.
Zimco., N. I. Co., Calcutta.



LITHO. BY J.N.MUNDLE.

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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg. No. 59. Wr., L.—Mar. 95.—5,000.

Litho., S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, SEPTEMBER, 1895.

INTRODUCTION.

This Review of the weather in India during the month of September 1895 is based on observations taken daily at 8 A.M. at 206 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 85 stations. The rainfall summary is based on the rainfall data of the meteorological observatories and on the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the publication of the Review. A summary of the weather in the Bay of Bengal and the Arabian Sea, based on information extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given.

Summary of the chief features of the weather in India during the month of September 1895.

The principal meteorological features of the month of September in normal years are the retreat of the south-west monsoon from Upper India and the occasional occurrence of more or less severe cyclonic storms over the Bay of Bengal. The time of the withdrawal of the monsoon currents from Upper India apparently depends largely on the general strength of the monsoon during the whole period of its prevalence, but usually occurs during the third or fourth week of the month. The withdrawal from Central and Upper India of the Bombay and Bengal branches of the south-west monsoon air currents occurs fairly simultaneously, and is followed by fine dry weather in that region, but Bengal and Burma continue to receive moderate general rain from the Bay current, and the Konkan, Malabar, the Deccan and Southern India from the Arabian Sea current. As mentioned above, the cyclonic storms of this period are sometimes of considerable severity, and give heavy and general rainfall. Their course is, as a rule, west-north-west from the north of the Bay across the Orissa coast and the central parts of the country, and they are frequently remarkable for their long vitality, and for their tendency to recurve in the Central Provinces or Central India from west to north.

The following gives a brief account of the more important features of the meteorology of India during the month:—

At the commencement of the month temperature was unusually low in Baluchistan. Skies were clear in Upper India, where the rains practically ceased at the end of August. The Bombay current gave moderate rain to Central India and the North-Western Provinces from the 1st to the 3rd, when skies cleared and dry weather set in for a period.

The pressure changes of the 1st and 2nd in the Bay and North-Eastern India gave rise to the formation of a closed area of low pressure in the north and centre of that area. Light variable winds prevailed in that area on

the 1st and 2nd, whilst moderate to strong monsoon winds continued in the south of the Bay.

A cyclonic whirl formed on the 3rd and 4th in the centre of the low pressure area. It advanced on the 5th in a westerly direction towards the coast of the Circars, which it crossed near Cocanada about 5 P.M. and probably to the south of that station. The storm was of small diameter, but of considerable intensity, and gave a remarkably heavy downpour to the Godavari and Kistna districts on the 5th (registered on the morning of the 6th). The storm passed through Hyderabad on the 6th, the centre being a little north of Khamamet at 8 A.M. It then advanced through the Sholapur and Poona districts into Khandesh on the 7th and filled up rapidly during the day. It apparently broke up on the night of the 7th under the obstructive action of the transverse hill ranges in Khandesh and Gujarat.

The storm gave a very heavy downpour to the central districts of Hyderabad and to the Sholapur, Poona, Ahmednagar, and Khandesh districts of Bombay. The rivers came down in heavy flood and carried away many of the railway bridges, suspending traffic for some time.

Pressure increased locally in Western and Central India after the breaking up of the storm, and the trough of low pressure was hence transferred northwards to the submontane districts of the North-Western Provinces and Punjab on the 9th and was unchanged in position from that date to the 12th. Bengal, Assam and Burma received moderate rain during this period, whilst little or none fell in North-Western India and the Peninsula. A largish increase of pressure in Northern India on the 11th and 12th modified the pressure distribution, and a marked tendency was again shown to the establishment of a low pressure area in the north and centre of the Bay. The Peninsula received moderate rain on the 14th and 15th in the earlier stages of the depression. On the 16th, the depression began to concentrate and a small and somewhat feeble whirl was in existence in the Bay on that morning. The storm marched in a northerly direction up the Bay on the 17th and 18th, and crossed the North Orissa coast on the evening of that day. It was a much larger and shallower depression than the previous one, and was a storm of moderate intensity. It advanced through Chota Nagpur on the 19th into the eastern districts of the North-Western Provinces on the 20th, on the evening of which day it broke up near the hills. The storm gave a moderate burst of rain to Burma on the 17th and 18th, and to Bengal, Orissa, Chota Nagpur, Bihar and the eastern districts of the North-Western Provinces from the 18th to the 21st.

The Peninsula received light to moderate and fairly general rain during the next three days after the disappearance of the previous storm. Pressure increased considerably in Northern India relatively to the Bay and Southern India on the 24th and 25th, and a shallow low pressure area was again shown in the centre and north of the Bay area on the morning of the 26th. Light variable airs obtained in that area on the 27th and 28th, whilst moderate to strong south-west winds held steadily in the south of the Bay. A cyclonic whirl began to form on the 27th, and on the 29th it commenced to advance northwards and was approaching the head of the Bay at the end of the month. Showery weather obtained in Southern India and the Deccan from the 27th to the 30th, during the formation and advance of the storm. The rains practically ceased in Central India, the Central Provinces and the eastern districts of the North-Western Provinces on the 21st September on the breaking up of the second storm of the month and in the western districts of the North-Western Provinces on the 3rd.

Pressure.—The mean pressure of the Indian land area was ·017″ higher than the normal. Pressure was, relatively to the general condition, in defect in the southern half of the Peninsula, Burma, Bengal and Assam, and in excess over the remainder of India. The local deficiency exceeded ·03″ at Madras (—·031″), Trichinopoly (—·034″), Negapatam (—·032″) and Calicut (—·031″), and perhaps Bassein (—·036″). The local increase of pressure was more than ·02″ in amount in Sind, Cutch, Kathiawar, South-West Rajputana and the western states of Central India. The excess was greatest at Neemuch (+·040″), Jacobabad (+·036″) and Deesa (+·030″). The abnormal features of the mean distribution of the month are such as usually accompany the early withdrawal of the monsoon current from Upper India.

The pressure anomalies at the Upper India hill stations were positive, but small in amounts.

Temperature.—The mean day temperature of the month was in slight defect in Assam and in the Deccan and Circars, and was more or less above the normal over the remainder of India. The excess was more than 2° in amount over the greater part of Central and Northern India (with the exception of the submontane districts). It was more than 3° in amount at Sirsa (+5°·4), Deesa (+4°·9), Jeypore and Sambhar (each +3°·9), Delhi (+3°·6), Lahore (+3°·3), Raipur (+3°·2), and Bickaneer (+3°·1) and hence chiefly in the South-East Punjab and Rajputana.

The mean minimum or night temperature of the month was lower than usual in Baluchistan, the Indus Valley, the North-Western Provinces and the Deccan. The deficiency was large at Quetta (—4°·8) and probably over the whole of Baluchistan and moderate at Dera Ismail Khan (—2°·9). The excess of the mean minimum temperature of the month in the remainder of India was generally small in amount and exceeded 2° only at Lahore (+2°·9), Sirsa (+2°·5) and Saugor and Karwar (+2°·1).

The mean temperature of the month was below the

normal at Quetta and in the Indus Valley and some parts of the Deccan and North-Western Provinces and Upper Assam and Upper Burma. The deficiency at Quetta was 2°·4 in amount. Temperature was in excess over the remainder of India; but the variations were small, except in the South-East Punjab and Rajputana. The largest variations were for Sirsa (+4°·0), Lahore (+3°·1), Sambhar (+2°·6) and Saugor and Jeypore (+2°·5).

The variations of the temperature conditions from the normal were hence not marked. The most important was a moderate deficiency in Baluchistan and a moderate to considerable excess in the South-East Punjab and Rajputana.

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

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, September 1895.	Mean minimum temperature, September 1895.	Mean daily temperature, September 1895.
	°	°	°
Burma Coast and Bay Islands.	+0·9	+1·1	+1·0
Burma Inland . . .	−0·5	+0·9	+0·3
Assam	−0·4	0	−0·2
Bengal and Orissa . .	+1·4	+0·8	+1·1
Gangetic Plain and Chota Nagpur	+1·5	+0·1	+0·8
Upper Sub-Himalayas . .	+2·4	+0·4	+1·4
Indus Valley and North-West Rajputana	+1·7	−0·9	+0·4
East Rajputana, Central India and Gujarat . . .	+3·0	+0·4	+1·7
Deccan	+1·5	+0·7	+1·1
West Coast	+0·4	+0·8	+0·6
South India	−0·1	+0·3	+0·1

Winds.—Winds were much more westerly and stronger than usual at Port Blair and Diamond Island. They were also much less easterly or more westerly in Bengal, Bihar and Chota Nagpur, thus showing the weakness of the monsoon current in North-Eastern India. Dry westerly winds prevailed in Upper India during the month and the area of greatest unsteadiness and variability of the air movement, usually in the North-Western Provinces in September, was in Bihar in September 1895. Westerly winds with an unusual amount of northing prevailed on the Konkan coast and in Rajputana, Central India and the Deccan. The chief abnormal features of the air movement were hence broadly marked and due to the very early withdrawal of the Bombay current from North-Western India and to the early establishment of land winds in North-Western India.

Humidity and Cloud.—The mean humidity conditions of the month were normal in Burma and Assam; but over the whole of Northern and Central India the air was much drier than usual. The abnormal dryness was most marked in Rajputana and at the hill stations of Upper India. The humidity was most largely in defect at Deesa (—12), Jeypore (—11) and Leh and Murree (each —10). The air was on the whole slightly damper in the Deccan, and drier in the Konkan and South Madras; but the variations were much smaller than in Northern India.

There was more cloud than usual in Burma, Cachar, East Bengal and the Deccan. Over the remainder of India the mean cloud-amount of the month was below the normal, the deficiency being most marked in Rajputana and the Gangetic Plain.

The following table gives variation data of the mean aqueous vapour pressure, humidity and cloud-amount of the month in ten meteorological provinces of India :—

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud-amount.
	"		
Burma Coast and Bay Islands .	+·025	0	+0·8
Assam	+·014	0	—0·5
Bengal and Orissa . . .	—·002	—4	—0·1
Gangetic Plain and Chota Nagpur.	—·015	—4	—0·7
Upper Sub-Himalayas . .	—·044	—6	—1·0
Indus Valley and North-West Rajputana.	—·005	—1	—0·3
East Rajputana, Central India and Gujarat.	—·039	—7	—1·0
Deccan	+·011	0	0
West Coast	—·005	—2	+0·3
South India	—·002	—1	+0·6

Rainfall.—The Bombay current was very weak during the month and retreated from the Punjab and West Rajputana unusually early at the commencement of the month, and these areas received little or no rain during the month. The distribution of the rainfall of the month was mainly determined by the cyclonic disturbances of the month. The northern half of the Peninsula obtained heavy rain from the first storm and North-Eastern India from the

second and third storms. East Rajputana, Central India and the eastern half of the North-Western Provinces obtained little or no rain after the 21st. Southern India obtained moderately heavy and general rain in the intervals between the first and second and second and third storms. The rainfall of the month was largely in defect over the whole of North-Western and Central India and the Central Provinces and in moderately large defect in South and Central Bengal. It was normal in the Assam Valley, Arakan and Orissa, and in slight defect in Bihar and the eastern districts of the North-Western Provinces. It was locally in large excess in North Oudh. The fall was normal in Central Burma and in slight excess in Lower Burma and Tenasserim. It was in slight to moderate excess in the Madras Presidency and Mysore and in largish excess in Hyderabad, the Bombay Deccan and Khandesh, but in moderate defect in the west coast districts of the Konkan and in the Malabar division.

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

Meteorological Province.	Rainfall, Average actual, September 1895.	Average normal, September.	Variation from normal. *
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands	20·48	20·02	—0·89
Burma Inland	8·73	9·48	—1·38
Assam	16·61	12·42	+7·94?
Bengal and Orissa	9·31	11·08	—2·47
Gangetic Plain and Chota Nagpur.	6·44	7·75	—1·18
Upper Sub-Himalayas	1·02	5·39	—4·27
Indus Valley and North-West Rajputana.	0·24	0·96	—0·80
East Rajputana, Central India and Gujarat.	1·81	5·39	—3·48
Deccan	7·60	7·99	—1·14?
West Coast	4·73	9·64	—4·63
South India	6·59	5·29	+1·94

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

Atmospheric Pressure.

The mean pressure of the Indian land area for the month of September 1895 was ·017″ higher than usual.

Pressure was, relatively to the general condition, in defect, or the pressure anomalies were negative, in the Peninsula south of Lat. 17° N., and in Bengal, Assam, Burma, the Bay of Bengal, the greater part of the Punjab, and the adjacent districts of the North-Western Provinces. The anomalies were more than ·020″ in amount in Lower Burma and the Peninsula to the south of Lat. 15° N. and exceeded ·030″ at the stations for which data are given below :—

Station.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Bassein	—·019	—·036
Trichinopoly	—·017	—·034
Negapatam	—·015	—·032
Madras	—·014	—·031
Calicut	—·014	—·031

Pressure was in local excess generally in the remainder of the Indian area. The positive anomalies were more than ·02″ in Baluchistan, Sind, South-West Rajputana, Cutch, Kathiawar, the western states of Central India and a small portion of the central districts of the Central Provinces, defined by the stations of Seoni and Raipur.

They were ·030″ and upwards in amount for the stations named below :—

Station.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Jacobabad	+·053	+·036
Neemuch	+·057	+·040
Deesa	+·047	+·030

The increased pressure in Western India, not only absolutely, but more especially relatively to the south of the Peninsula, was directly related to the early withdrawal of the monsoon currents from Upper India.

The variations of pressure from the normal at the hill stations differed little from those at the plain stations, and the vertical pressure anomalies were hence small and of little importance. The following gives data for six pairs of stations :—

Hill Station.	Variation of pressure from normal. (a)	Neighbouring Plains Station.	Variation of pressure from normal (b)	Vertical pressure anomaly. (a)—(b)
	″		″	″
Quetta	+·040	Jacobabad	+·053	—·013
Murree	+·022	Peshawar	+·033	—·011
Leh	+·018	Lahore	+·014	+·004
Simla	+·026	Ludhiana	+·014	+·012
Darjeeling	—·013	Dhubri	+·006	—·019
Mount Abu	+·033	Deesa	+·047	—·014

Barometric Depressions and Cyclonic storms of the month.

At the commencement of the month steep gradients for westerly winds obtained in the Peninsula and moderately steep gradients for southerly winds in the Bay. The trough of low pressure lay further north than usual in the Gangetic Plain and thence stretched south-eastwards into the north-west angle of the Bay. Winds were more westerly than usual in the centre and south of the Bay, ranging in force between 2 and 5. Weather was generally fine, but cloudy with occasional showers in the west coast districts, Bengal, Bihar, Chota Nagpur and the North-Western Provinces. A brisk to rapid rise of pressure occurred during the next 24 hours in North-Eastern India and Burma and a low pressure area lay over the north of the Bay on the morning of the 2nd.

The following data extracted from the logs of vessels indicate the character of the weather in this area :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Pundua*	16 7	93 46	29·65	SE by S		Moderate sea. 6 A.M. squally with rain.
,,	S.S. *Vadala* .	13 58	85 2	·64	WSW	5	Heavy sea, and overcast.
,,	S.S. *Algeria*	16 3	86 18	·58	SW	5	Rough sea. 4 A.M. squally with heavy rain and lightning to W.
,,	S.S. *Clan Maclean.*	17 52	86 33	·59	N	4	S.W. swell and clear. 4 P.M. passing showers.
,,	S.S. *Pentakota*	20 10	89 24	·62	NE	4	Cloudy.
,,	S.S. *Nowshera*	False	Point.	·64	SW	4	
,,	S.S. *Shahzada*	21 50	91 58	·70	NNE	2	Fine and clear.
,,	F. L. V. *Torch*	Eastern Channel.		·65	E	3	High swell and cloudy.
,,	F. L. V. *Hesperus.*	Intermediate Station.		·66	SE	2	Moderate S. E. swell and cloudy.

The preceding data establish that winds were light and irregular in the north of the Bay, more especially in the north-west. Winds were also more irregular and variable in the south of the Bay and weather more showery than on the previous day. The data also prove that there was no regular cyclonic circulation established as yet in the area of low pressure. Showers had again fallen in the same districts in India as on the previous day, whilst finer and drier weather than usual prevailed in Upper and Central India.

Pressure increased briskly in Lower Burma and briskly to rapidly in Upper India during the next 24 hours and ncreased slightly in the Peninsula and was steady in Bengal. The low pressure area in the Bay was unchanged in position on the morning of the 3rd, but steeper gradients obtained in the south-east of the Bay. The following marine data establish that a cyclonic circulation was now in existence in the low pressure area :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Nuddea* .	16 32	83 22	29·66	NW	5	Overcast, 4 A.M. light rain.
,,	S.S. *Musician*	15 44	86 22	?	WSW	6 to 4	Moderate sea and frequent heavy rain squalls.
,,	S.S. *Karagola*	16 15	94 20	·72	SW	4	Heavy S. W. sea and cloudy.
,,	S.S. *Algeria* .	19 56	87 33	·63	ENE	3	Moderate sea and clear. Noon, heavy rain.
,,	F. L. V. *Torch*	Eastern Channel		·69	NE	2	High swell and cloudy.
,,	F. L. V. *Hesperus.*	Intermediate Station.		·69	ENE	3	Moderate S. E. swell and cloudy. Light showers from noon to 4 P.M.

The data indicate that a moderate cyclonic circulation was now established in the north and centre of the Bay, and this is confirmed by the data of the land stations. The centre of the circulation at 8 A.M. was some little distance to the north of the S.S. *Musician* (proceeding up the Bay to the Hooghly). This is fully shown by the follow-

ing statement of the weather she experienced during the day :—

Hour.	Name of Vessel.	8 A.M. Position.		Wind.		Weather.
		Lat. N.	Long. E.	Direction.	Force.	
		° ′	° ′			
4 A.M.	S.S. *Musician*			WNW	6	Very heavy squalls of wind and rain and sea rough.
8 „	„ .	15 44	86 22	WSW	6to 4	Frequent heavy rain squalls and moderate sea.
Noon.	„ .	16 28	86 40	WSW	6to 4	D itto ditto.
4 P.M.	„ .			NNE	4	Squally and confused sea.
8 „	„ .			NE by N	5	Frequent rain squalls and confused sea.
Mid-night.	„ .			NE	5	Clear weather and rough sea.

The storm was evidently as yet of very moderate intensity, as the *Musician* in proceeding across it near the centre in the eastern quadrant experienced winds of force 4 to 6.

Winds had strengthened in the south of the Bay and were now of force 4 to 6 and weather was again more squally than hitherto. Weather cleared up during the day in Bengal and the Gangetic Plain and fine clear dry weather set in for some days.

The depression now developed rapidly into a severe cyclonic storm of which the following gives a history :

Cyclonic Storm of the 3rd to the 7th September.—It has been shown, so far as is possible from the data, that the changing pressure conditions accompanying variations in the rainfall distribution at this time had given rise to a low pressure area on the 2nd in the Bay, and that a cyclonic circulation with increasing monsoon winds to the south was developed during the next 24 hours in the centre of that area in about Lat. 16° N. and Long. 86° to 88° E.

The meteorological conditions of the Indian land area on the morning of the 4th were as follows :—

(1) Pressure was considerably in excess of the normal in Gujarat, Kathiawar, South-West Rajputana, Sind and Baluchistan, a condition evidently related to the early withdrawal of the monsoon currents from Upper India at the end of August.

(2) Pressure was practically normal in the Peninsula and Burma and slightly in excess in Bengal, where it averaged 3°.

(3) Temperature was generally in excess, by amounts averaging 1°, the excess being most marked in Bengal, where it averaged 3°.

(4) Fine dry weather prevailed over the whole of Northern and Central India and the north of the Peninsula.

(5) Light winds and a feeble monsoon obtained on the west coast.

(6) Strong winds prevailed in the south of the Bay, indicating the existence of a vigorous humid current.

The meteorological data for the coast stations show that the low pressure area was almost unchanged in position on the 4th and did not indicate any large development. No vessel contributing data was near the centre on this day, and hence it is not possible to trace the growth of the storm.

The following available 8 A.M. data extracted from the logs of vessels show the character of the weather in the outskirts of the depression :—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	″			
8 A.M.	S.S. *Wing Sang.*	15 9	92 47	29·74	SW	4	Moderate sea and overcast.
„	S.S. *Commilla*	17 41	93 39	·70	SSW	5	S.W. swell and fine. Noon, cloudy.
„	S.S. *Katoria*.	19 13	90 28	·67	S	5	Head sea and passing squalls, 4 P. M. heavy squall of wind and rain.
„	S.S. *Musician*	19 45	87 53		E by N	4	Moderate sea and passing rain squalls.
„	S.S. *Shahzada*	21 11	88 51	·66	S	2	Fine and clear.
„	F. L. V. *Torch*	Eastern Channel.		·65	E	3	High swell and squally.
„	F. L. V. *Hesperus.*	Intermediate Station.		·64	ESE	4	Slight S. E. swell and cloudy.

The preceding data throw no light on the development of the storm, but indicate that the centre of the cyclonic circulation was in about Lat. 16½° N. and Long. 87° E. As on the 3rd, winds of force 5 and 6 prevailed generally in the south and south-east of the Bay and weather was very squally in the east and south-east.

5th September.—The pressure changes were small during the previous 24 hours over the whole of India with the exception of the coast districts of Madras between Vizagapatam and Nellore, where pressure had igven way briskly to rapidly, the fall being greatest at Cocanada.

The data hence indicate that there was a deepish depression off the Circars coast and that it was advancing towards the deltas of the Kistna and Godavari rivers.

There is no marine information available for the storm area, the nearest vessels contributing data (with one ex-

ception) being at distances of 300 and 400 miles from the centre during the day.

The following summary indicates the general character of the weather in the Bay outside the storm area:—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Miike Maru.*	5 39	84 13	29·85	WSW	6	Heavy head sea.
„	S.S. *Scindia*	13 52	92 33	·74	SW	4	Considerable S.W. swell.
„	S.S. *Ethiopia*	16 31	93 5	·76	SW	4	Fine.
„	S.S. *Wing Sang.*	18 36	90 1	·66	SSW	4	Moderate sea and cloudy.
„	F. L. V. *Torch*	Eastern Channel.		·69	SE	4	High swell and cloudy.
„	F. L. V. *Hesperus.*	Intermediate Station.		·68	S	3	High S. swell and cloudy.

The centre of the storm at 8 A.M. was probably less than 100 miles to the east of Cocanada in Lat. 16° 45′ N. and Long. 84° E.

Heavy rain had fallen in the Circars and moderate rain in Lower Burma and Arakan. Elsewhere fine dry weather continued.

A series of observations taken by the observer at Cocanada on the 5th are given below:—

Hour.	Barometer corrected to 32° to constant gravity at Lat. 45° and to sea level.	Wind. Direction.	Wind. Force, Beaufort scale 1 to 12.	Humidity.	Rainfall.	Weather.
	″			%	Inch.	
2 A.M.	29·449	NW	2	87	0·58	Sea rough and distant lightning.
6 „	·425	NE	6	91	...	Sea rough, strong wind with heavy rain.
7 „	·440	NNW	...	..	...	Swell from NE.
8 „	·449	NW	4	91	0·46	Sea rough and hard squalls.
9 „	·422	NW	5	...	...	Hard squalls.
10 „	·453	NW	5	83	0·04	Drizzling.
Noon	·364	NNW	...	78	...	Do.
1 P.M.	·328	NNW to NNE	...	...	...	Do.
1-30 P.M.	·310	NNW to NNE	6	..	...	Hard squalls and sea rough.
2 „	·279	N	7	95	0·30	Fierce squalls.
2-30 „	·256	N to NNW	...	..	...	Do.
3 „	·240	N to NNW	...	..	...	Do.
3-30 „	·213	NNE	...	95	...	Do.
4 „	·189	NNE	...	91	0·29	Do.
4-15 „	·151	NNE	11	...	...	Stormy.
4-35 „	·127	NNE to N	11	...	...	Do.
5 „	·115	NNE to N	11	...	...	Do.
5-15 „	·119	NNE to N	3	...	...	
5-30 „	·113	E	5	...	...	Wind shifted from E. to S. E. for 5 minutes when there was a full and then freshened.
5-50 „	·150	SSW	...	..	...	Stormy with fierce squalls.
6 „	·164	SSW	...	...	...	Do.
6-30 „	·218	SSW	...	...	...	Do.
7-15 „	·303	SSW	...	...	...	Do.
8 „	·389	S	6	87	0·24	
10 „	·476	S	5	...	...	

The observer notes that the anemometer could not be reached during the storm and that the danger signal hoisted at the Port Flag Signal was blown away.

The preceding data indicate that the storm centre passed across the coast at or near Cocanada about 5·30 P.M. when, as is stated in the official report of the Port Officer, "there was a perfect lull for five minutes, after which the wind, which was previously at east, shifted to south-east, blowing a fresh breeze, and at 5·50 P.M. to south-south-west, blowing with great force and in fierce squalls."

The British India Company's Steamer the S.S. *Nowshera,* which arrived about noon at Cocanada from Bimlipatam, rode out the storm in the Bay. Her account of the storm is very meagre, but agrees in all material points with that of the observer, and states that "squalls of wind and rain of hurricane force were experienced during the afternoon."

The following gives, for comparison, observations taken at Cocanada and Vizagapatam at the same hours during the 4th and 5th. They show roughly the gradients in the

storm area and throw some light upon the probable position of the storm centre during the day.

Date.	Hour.	COCANADA. Barometer corrected to 32°, to constant gravity at Lat. 45° and to sea-level.	COCANADA. Wind. Direction.	COCANADA. Wind. Force, Beaufort's scale 1 to 12.	COCANADA. Humidity.	COCANADA. Rainfall.	VIZAGAPATAM. Barometer corrected to 32°, to constant gravity at Lat. 45° and to sea-level.	VIZAGAPATAM. Wind. Direction.	VIZAGAPATAM. Wind. Velocity in miles per hour.	VIZAGAPATAM. Humidity.	VIZAGAPATAM. Rainfall.
		"			%	Inch.	"			%	Inch.
4th	2 A.M.	29·590	WSW	2	83	*Nil.*	29·583	W	2	95	0·95*
	2 P.M. 4 P.M.	·526	W	3	73	*Nil.*	·503	NW	3	65	0
	8 P.M.	·528	W	2	85	0·05	·523	W	2	91	0·35
5th	2 A.M.	29·449	NW	2	87	0·58	·416	NW	3	75	0
	8 A.M.	·449	NW	4	91	0·46	·498	NE	...	87	0
	10 A.M.	·453	NW	5	83	0·04	·527	NE	...	83	0
	2 P.M.	·279	N	7	95	0·30	·453	NNE	9	89	0·05
	4 P.M.	·189	NNE	7	91	0·29	·449	NE	...	96	0·12
	8 P.M.	·389	S	6	87	0·24	·546	NW	9	93	0·20

* Since 8 P.M. of the 3rd.

A comparison of the Cocanada and Vizagapatam observations indicates that the centre at 8 A.M. was very probably in about Lat. 16¾° N. and Long. 84 °E. or nearly 100 miles east of Cocanada, and it had hence advanced during the previous 24 hours at a rate of 8½ miles per hour.

The Port Officer, Masulipatam, describes the weather at that port on the 5th as follows:—"Rain commenced to fall about midnight of the 4th and increased till 6 A.M. of the 5th, and between that hour and 10 A.M. the rain fell in terrific torrents with lightning and thunder. Wind was then about west-north-west and of force 5. About 10 A.M. the rain ceased, disclosing forked lightning to the south-east and the wind increased, working up to a force of 10 within an hour, and blowing in gusts from west-north-west, west and west-south-west and occasionally backing. During the day the weather was overcast with light rain. The wind slightly diminished during the day and backed somewhat, but about 10 P.M. hauled again to the west-south-west with increased force, after which the wind began to abate, and the morning of the 6th broke fine and cloudy, but cleared towards noon."

6th September.—The preceding discussion has established that the storm centre crossed the coast at Cocanada about 5 P.M. on the 5th.

The 8 A.M. observations of the 6th show that the depression had recurved slightly and had passed through the gap in the East Ghats, through which the Kistna and Godavari rivers find their way to the Bay, into the eastern districts of the Nizam's dominions, and was at that hour central a little to the north of Khamamet in about Lat. 17¾° N. and Long. 80¼° E.

The following gives 8 A.M. observations of stations in the storm area:—

Station.	Pressure. 8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A.M.	Wind. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	Weather.
	"	"	"				Inches.	
Rajahmundry.	29·627	+·111	—·080	S	...	9	2·96	
Chanda .	29·533	—·121	—·170	NE	6	8	0·70	Thunderstorm.
Nagpur .	29·578	—·086	—·112	NE	8	5	0·30	Squally.
Hyderabad (Deccan).	·559	—·138	—·196	W	12	10	1·78	Continuous rain.
Khamamet .	·474	—·127	?	NW	19	10	4·09	Gale of wind.
Kurnool .	·658	—·083	—·139	NW	...	10	0·29	Fresh wind

The observations indicate that the storm had commenced to fill up and the depression at the centre was now probably less than a quarter of an inch in amount.

The storm in its passage through the Kistna and Godavari districts had given excessively heavy rain. The following gives the largest amounts registered at 8 A.M.:—

District.	Station.	Date.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
Godavari	Amalapuram	6th	20·00
	Tanuku	"	12·50
	Narsapuram	"	12·31
	Razole	"	10·60
	Pentapad	"	10·60
	Kottapeta	"	10·15
	Ellore	"	10·01
Kistna	Dachepalle	"	9·79
	Bezwada	"	9·59
	Gannavaram	"	9·20
	Nandigama	"	9·00

The 4 P.M. observations recorded at Hyderabad (Deccan) indicate that the storm centre at that hour was passing westwards at a considerable distance to the north of that station. The fall of pressure between 10 A.M. and 4 P.M. was however less than the normal change due to the diurnal oscillation, thus again showing that the depression, although still very marked, was slowly filling up.

7th September.—Pressure had increased rapidly in Hyderabad and the Circars and had fallen briskly in Khandesh

and the Bombay Deccan, to which the storm was now transferred. The following data indicate its position at 8 A.M.:—

STATION.	PRESSURE.			WIND.				WEATHER.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	
	"	"	"				Inches.	
Poona .	29·683	—·059	—·118	W	16	10	4·21	
Bijapur .	·724	—·014	?	WSW	17	10	·63	
Sholapur .	·690	—·001	—·110	SW	20	10	6·69	
Akola .	·616	+·010	—·107	E	9	10	0·40	Showery.
Malegaon .	·619	—·044	—·132	N	16	10	0·47	
Ahmednagar	·613	—·093	?	N	13	10	3·95	Raining.

The depression had filled up very considerably and was now of moderate importance. The centre of the storm was to the north of Sholapur and east of Ahmednagar in Lat. 19¾° N. and Long. 75¾° E. The circulation was less regular than during the previous two days.

Excessively heavy rain had fallen over the area covered by the advancing storm during the previous 24 hours in Hyderabad and the Bombay Deccan. The following gives the more noteworthy falls in the Hyderabad and Bombay Deccan districts and Khandesh:—

DISTRICT.	STATION.	Date.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
HYDERABAD DECCAN .	Nanded . . .	6th	6·60
	Dharasher . .	7th	9·73
	Pandharpur . .	,,	9·90
SHOLAPUR . .	Karmala . . .	,,	9·11
	Sangola . . .	,,	7·64
	Sholapur . . .	,,	6·69
	Madha . . .	,,	6·36
	Barsi . . .	,,	6·05
BIJAPUR . . .	Indi	,,	8·50
	Bijapur . . .	,,	5·30
POONA . . .	Sirur . . .	,,	6·73
	Baramati . . .	,,	6·24
	Indapur . . .	,,	5·37
AHMEDNAGAR . .	Jamkhed . . .	,,	8·02
	Shrigonda . . .	,,	6·00
KHANDESH . .	Parola . . .	,,	7·60
	Pachora . . .	,,	7·00

The heavy rainfall had given rise to high floods which had carried away several bridges on the Great Indian Peninsula Railway, suspending traffic for some time.

The westerly advance of the storm towards the west coast had produced a considerable increase in the winds on the 6th and 7th and gave heavy rain in the Kolaba and Thana districts. The weather at Bombay on the 5th, 6th, and 7th is thus described:—"On the 5th the sky was overcast and the weather was dark and gloomy. At about noon on the 6th pallio-cumulus clouds were seen to move slowly from north and north-west and wind began to increase slightly. At 11 P.M. rain began to fall and wind increased in force and was fresh to strong. The weather now became squally and heavy rain fell till about 5 P.M. on the 7th. Pallio-cumulus clouds moved rapidly from the north-west from 4 A.M. to 9 A.M. of the 8th, when they began to come from west and west-south-west. Heavy showers continued to fall at intervals during the night of the 7th, and the weather cleared on the morning of the 8th."

The following heavy falls were registered on the 7th and 8th in the Konkan coast districts:—

DISTRICT.	STATION.	Date.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
RATNAGIRI . .	Khed . . .	7th	5·18
KOLABA . .	Mahad . . .	,,	6·52
	Mangaon . .	,,	6·38
	Matheran . .	,,	6·18
	Pen . . .	,,	5·15
	Uran . . .	8th	6·39
	Panvel . . .	,,	6·00
THANA . . .	Kurla . . .	,,	8·80
	Bhiwndi . . .	,,	7·40
	Thana . . .	,,	7·37
	Bassein . . .	,,	6·48
	Kalyan . . .	,,	5·00

Temperature was more or less considerably in excess over the whole of Northern India and was largely in defect in the area in the north of the Peninsula covered by the storm during the previous two days.

Pressure, it may be noted, was on the morning of the 7th lower in the low pressure area of the south-west monsoon period in Upper India than in the storm area.

The following gives 8 A.M. observations in the Upper India low pressure area :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.
	8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.		
	"	"	"				
Bickaneer . .	29·588	—·022	?	W	6	4	*Nil.*
Montgomery . .	·600	+·005	?	SSW	5	1	*Nil.*
Khushab . .	·606	+·017	?	ENE	5	0	*Nil.*
D. I. Khan . .	·565	—·011	—·058	ENE	8	0	*Nil.*
Mooltan . .	·590	+·003	—·040	SSE	4	0	*Nil.*
Sambhar . .	·658	—·001	0	calm	4	4	*Nil.*

Fine, clear and unusually dry weather prevailed in that area.

The storm advanced northwards during the day, filling up at the same time and was of little importance in the evening. The following data indicate its position and character at 4 P.M. :—

Hour.	Station.	Pressure.			Wind.		Cloud.	Rainfall.	Weather.
		4 P.M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles from 10 to 16 hours.			
		"	"	"					
4 P.M.	Poona .	29·653	+·002	—·056	WNW	14	10	0·45	Overcast.
	Sholapur	·630	+·070	—·012	SW	15	7	*Nil.*	Cloudy.
	Buldana.	·503	+·025	—·107	SE	8	10	0·11	Overcast.
	Akola .	·512	+·051	—·093	SSE	14	7	*Nil.*	Cloudy.
	Khandwa	·492	—·002	—·093	SE	8	5	0·59	Cloudy with thunder.

The depression was now small in amount and winds feeble in the storm area. The centre of the circulation was in about Lat. 20° N. and Long. 75°40′ E.

8th September.—Pressure had increased briskly to rapidly in the Deccan and Bombay Presidency and fallen in the Punjab. The storm depression had filled up, and at the same time the permanent low pressure area in Upper India had become somewhat more marked and steep gradients for westerly to southerly winds prevailed in the Peninsula and Southern India. Strong winds hence obtained on the west coast from Ratnagiri to Kurrachee. Light to moderate rain had fallen in Bombay and heavy rain in Burma, Assam, and some parts of Bengal. Elsewhere little or no rain had fallen.

The storm hence broke up in North Bombay during the afternoon and night of the 7th, probably under the obstructive action of the lines of hills running east and west across Khandesh and Gujarat.

The storm under discussion originated in the centre of the Bay under conditions imperfectly shown by the available data, but almost certainly identical with those which obtain during the origin of the more intense cyclonic storms of the October transition period. It advanced almost due west to the deltas of the Godavari and Kistna and curved slightly to north and passed through the central districts of the Hyderabad State into the northern districts of the Bombay Deccan. Finally, when approaching the West Ghats, it curved round to north and passed through Khandesh and probably broke up under the influence of the transverse ranges in Gujarat. The following gives data of the march of the storm:—

Date	Position of centre at 8 A.M.		Distance passed over during interval.	Average hourly rate of motion.
	Lat. N.	Long. E.		
	° ′	° ′	Miles.	Miles.
4th	16 30	87 0	...	...
5th	16 45	84 0	200	8½
6th	17 50	80 15	250	10½
7th	19 45	75 40	340	14½

The storm was of considerable intensity, and like all concentrated cyclonic storms in India, it gave excessive rain to the districts through which it passed. The rainfall was especially heavy in the Gadavari and Kistna districts of Madras, the Sholapur district of Bombay and the Hyderabad, Ibrahimpatam, Warangal, Medak, Bidar, Naldurg, Nanded and Gulbarga districts of the Hyderabad State. The following account of the damage inflicted by the floods on the Great Indian Peninsula and Nizam's railways is extracted from the Bombay newspapers :—

"The south-eastern district of the Great Indian Peninsula Railway between Dhond and Wadi suffered severely from the cyclonic storm and heavy floods of the 6th and 7th. Rain had been much wanted for district crops for some time and showers commenced on the 5th. The weather suddenly changed and the rainfall became excessive, as is shown by the information from Sholapur, where 17 inches fell in 24 hours, 10 inches being registered in 7 hours. High winds of a cyclonic character accompanied the storm and great destruction was done to railway and other property. In the Deccan no fewer than four bridges were damaged or carried away and repairs to them will entail a large cost. Between Dhond and Pakni at mileage 268 near Mohal, the Seena masonry bridge, 12 spans 40 feet each, was half carried away, no less than 6 spans having been thrown over by the force of the swollen torrent, and close by at mileage 261 the line was also breached. The

Seena bridge was carried away at 2 o'clock on the 7th; but others were swept away or damaged during the preceding night. At mileage 318 the Bari bridge, which is a comparatively new structure, was completely swept away; it was massive and built of masonry with iron girders and consisted of 20 spans of 30 feet and covered the width of the river 600 feet. The storm water rising to 30 feet is said to have wrecked it. The Beneseru bridge, which consists of six spans 60 feet each, and the Marijee embankment near Ghangapur were greatly damaged by being scoured away by the swiftly flowing river; but hopes are entertained that the flood piers and girders of the bridge are intact. A good deal of damage has been done to villages throughout the Deccan, the flood being described as the worst known during the last 20 years.

"The breaches on the Nizam's State Railway extend from Kondapili to Bezwada, a distance of 11 miles. For several miles the line is suspended five feet in the air, the whole of the embankment and the earthwork being completely washed away. In other places the line resembles a switchback railway more than anything else, and five miles from Bezwada it looks like a long cork-screw thrown on the ground."

Pressure increased briskly to rapidly in the Bombay Presidency and Central India on the 8th, and on the morning of the 9th the trough of low pressure lay further north than usual in the submontane districts of the Punjab and North-Western Provinces. This condition (with diminishing gradients) continued during the next three days, and Bengal, Assam and Burma, as usual under these conditions, obtained general and moderately heavy rain from the 9th to the 11th. A brisk local increase of pressure in Northern India on the 11th and 12th transferred the trough southward and largely modified the distribution of pressure. The chief feature on the 12th and 13th was a very shallow low pressure area covering the north and centre of the Bay. The pressure conditions were very similar to those which obtained on the 1st and 2nd. A storm was again initiated in the Bay. It formed the chief feature of the moteorology of the third week of the month.

On the 13th weather was showery over the greater part of Central India and the Deccan and in Bengal and Burma, but the rainfall was generally light and sporadic. Pressure was more or less in excess over the whole of Northern and Central India and the North Deccan, the excess being greatest in Sind, Kathiawar, Gujarat, South-West Rajputana and the western states of Central India.

Winds were moderate to strong (force 4 to 6) in the south of the Bay, but were light in the centre and north of the Bay where variable winds and calms obtained. Weather was fine with occasional showers and a smooth sea.

Pressure decreased slightly in Southern India and briskly in Northern India during the next 24 hours. The Peninsula obtained light to moderate general rain. Fine dry weather held generally in Northern India. Light irregular winds continued in the north and centre of the Bay, and moderate to strong south-west winds in the extreme south. The character of the air movement and weather in the Bay is shown fully by the following summary of the observations taken on board vessels at 8 A.M. of the 14th:—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		°	°	"			
8 A.M.	S.S. *Umballa* .	11 34	89 8	29·74	Var.	5	Heavy rain squall.
,,	S. *Alcides* . .	14 18	88 57	...	W	2	Showery.
,,	S.S. *Wing Sang* .	16 5	92 8	·72	SW	3	Sea smooth. Cloudy. 8 P.M. squally and rainy.
,,	S.S. *Maharani* .	16 27	93 54	...	NNW	...	Fine, noon, squally with rain.
,,	S. *Oranasia* . .	16 50	88 32	·73	Var.	1	Rainy.
,,	S.S. *Shahsada* .	18 50	90 29	·73	SSE	...	Fine and clear. Midnight, overcast.
,,	S.S. *Borneo* . .	18 8	87 02	·73	WNW	2 to 0	4 A.M. cloudy.
,,	S.S. *Falls of Bracklime.*	19 17	86 30	...	W	4	Fine.
,,	S. S. *Rajputana* .	20 18	87 0	·74	W	2	Sea smooth and fine.
,,	F. L. V. *Torch* .	Eastern Channel.		·72	W	3	Long south-east swell and cloudy.
,,	F. L. V. *Hesperus* .	Intermediate Station.		·71	W	3	Thunder to east.

The most important facts established by these observations are that winds were light and very irregular in direction in the north and centre of the Bay, and that there was no cyclonic air movement on the large scale in any part of it.

15th September.—The pressure changes were small except in the north of the Bay where pressure had given way briskly, thus bringing the low pressure area into slightly greater prominence. Light to moderate showers had fallen during the previous 24 hours over the greater part of the Peninsula and in Burma, and heavy rain in Tenasserim.

The information for the Bay, contributed by vessels, is much smaller in amount than for the previous 24 hours, but indicates clearly that light irregular winds continued over the whole of the north and centre of the Bay. Winds in the south of the Bay ranged between 4 and 6 in force and weather was squally with heavy rain in some parts.

16th September.—Pressure had again given way briskly in the north of the Bay and in Bengal, and was unchanged or increasing in the Peninsula. The low pressure area in the Bay was hence more prominent than on the 14th and 15th and steepish gradients now obtained in the south of the Bay. Rainfall was also light and sporadic in the Peninsula and fine dry weather with clear or lightly clouded skies held steadily in Northern and Central India. Heavy rain had again fallen in Tenasserim and was extending northwards into Lower Burma.

The marine data show that an area of nearly uniform and low pressure extended over the whole of the Bay to the north of latitude 14°N. in which winds were very light and irregular. The following gives data in illustration :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		°	°	"			
8 AM.	S.S. *Fusilka* . .	15 7	85 51	29·59	W	2	Cloudy, and 4 A.M. squally.
,,	S.S. *Nerbudda* .	16 27	93 17	·57	NW	4	S. W. swell. Frequent squalls of wind and rain.
,,	S S. *Alcides* . .	16 59	89 51	...	NW	1	Fine, 8 P.M. occasional rain squalls.
,,	S.S. *Pentakota* .	18 36	91 0	·55	NE	2	Drizzling rain.
,,	S. *Oranasia* . .	18 29	89 18	·58	Var.	4	Heavy rain.
,,	S.S. *Hensada* .	19 53	*86 41	·58	NNW	2	4 P.M. squally-looking.
,,	S.S *Maharani* .	22 0	91 45	·58	Var.		Fine.
,,	F.L.V. *Torch*. .	Eastern Channel.		·59	NW	2	Long S.SE. swell and cloudy.
,,	F.L.V. *Hesperus* .	Intermediate Station.		·59	NW	3	S. E. swell. Distant thunder from W. N. W. and N.

* Noon position.

Steep gradients, on the other hand, obtained over the Bay to the south of Lat. 14° N. Strong south-west or west winds and squally weather were hence experienced by vessels in that area, as is shown by the following data:—

Hour.	Name of vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	"			
8 A M	S.S. *Benalder*	5 40	81 32	29·84	W	5	4 A.M. squally.
,,	S.S. *Bhundara.*	5 57	80 20	·82	W	5	Moderate sea. Very heavy rain squalls.
,,	S.S. *Nowshera.*	6 50	81 51	·83	SW	5	8 P.M. cloudy.
,,	S.S. *Umballa*	9 13	86 31	·76	SW	7	Heavy head sea.
,,	S.S. *Culna*	15 42	95 08	·62	WSW	6	Moderate sea. Overcast with rain ; 4 A.M. heavy rain.
,,	S.S. *Shahzada.*	16 20	96 10	·66	...	...	Continuous heavy rain.

The preceding data show that winds had increased in the south of the Bay, and that these strong humid winds were pressing northwards, more especially in the eastern half, and were giving very squally weather and heavy rain.

The anemometric data of Port Blair indicate clearly the increase in the strength of the winds in the south of the Bay. The following gives data :—

Date.	Port Blair. Wind direction at 8 A M.	Port Blair. Mean velocity per hour during previous 24 hours.
		Miles.
13th	W.N.W.	6
14th	W.S.W.	10
15th	W.S.W.	20
16th	W.S.W.	24

The average velocity of the wind at Port Blair in September is 9 miles per hour. A cyclonic circulation and storm formed in the centre of this low pressure area in the Bay during the day of which the following gives an account.

Cyclonic storm of the 17th to the 20th September.—The conditions obtaining in the Bay on the 16th were such as usually immediately precede and accompany the formation of a cyclonic storm. Pressure increased over the Indian area during the next 24 hours, briskly in Burma and slightly in the south of the Bay and in India. It fell, on the other hand, in the low pressure area in the north of the Bay. Moderate to heavy rain had been recorded during the previous 24 hours in Tenasserim and Burma and skies were clouding over in Bengal. Showers had also fallen in the Central Provinces and the west coast districts.

The following gives the chief features of the pressure distribution which apparently determined the march of the cyclonic storm :—

(1) Pressure was in excess in North-Western India and the isobars ran north and south in the Peninsula and Western India.

(2) The trough of low pressure ran north from the centre of the Bay into North Bengal and North Bihar and hence occupied a position it frequently holds when the south-west monsoon rains have ceased in North-Western India.and have not set in fully in the Peninsula.

A well-defined depression and cyclonic circulation, the centre of which was in about Lat. 19° N. and Long. 89° to

89½°E., lay over the north of the Bay. The following gives data for this area :—

Hour.	Name of vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Pentakota.*	16 2	94 2	29·65	SSW	6	S. W. sea and heavy squalls.
,,	S. *Alcides*	17 37	90 23	...	WNW	2	Occasional rain squalls.
,,	S.S. *Fazilka*	18 32	87 20	·54	N	4	Sea smooth and dull overcast 4 A.M., lightning to NE.
,,	S. *Oranasia*	19 22	88 58	·53	NE	...	10 A.M., squally.
,,	S.S. *Nerbudda.*	19 18	89 40	·53	NNE	4	Squally and heavy showers.
,,	S.S. *Nadir*	19 19	85 35	·58	NNW	...	8A.M. Fine and clear, 8 P.M. showery.
,,	S.S. *Commilla.*	21 42	88 40	·52	N	2	8 A.M. Heavy overcast. Noon, heavy rain squalls.
,,	S.S. *Roma* .	19 14	87 20*	·53	W	...	Heavy south swell and occasional showers.
,,	S.S. *Culna* .	16 41	93 6	·64	SW	6	High sea, squally and rainy.
,,	F.L.V. *Torch*	Eastern Channel.		·56	SE (?)	4	Squally with thunder and lightning.
,,	F.L.V. *Hesperus.*	Intermediate Station.		·54	NNE	2	Threatening.

* Noon position.

The data show that winds were light to moderate in force in the depression at 8 A.M. Strong winds with very squally weather obtained off the South Arakan coast and moderate to strong winds in the south of the Bay with improving weather.

18th September.—Pressure had increased briskly to rapidly in the Punjab and also in Burma, Assam and East Bengal and was practically unchanged in the Peninsula. The chief effect of the changes was to slightly displace the trough of low pressure which now ran in a north-north-west direction into Bihar.

Moderate to heavy rain had fallen in Burma and South Bengal. Skies were overcast generally in Burma, Bengal and Bihar.

The depression in the Bay had developed slightly during the previous day and advanced northwards and was approaching the West Bengal and North Orissa coasts at 8 A.M. The following data define its position at that hour :—

Hour.	Name of vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 AM.	S.S. *Roma*	16 35	86 12	29·60	SW	5	Heavy rain.
,,	S.S. *Johannisberger.*	17 37	85 2	·62	W	3	.....
,,	S S *Culna* .	18 53	90 25	·60	SW	5	Moderate high sea and squally with rain.
,,	S.S. *Ethiopia*	19 46	89 50	·56	SW	4	Fine. Noon, squalls and heavy rain from S.W.
,,	S. *Alcides* .	19 36	89 56	...	SW	4	Rainy.
,,	S.S. *Maharani.*	21 8	90 03	·55	S	...	Passing rain squalls.
,,	S. *Oranasia*	20 4	88 52	·55?	Var.	1 to 0	Fine. 8 P.M. heavy rain squalls.
,,	F.L.V. *Torch*	Eastern Channel.		·52	NE	5	Cyclonic winds and squally.
,,	F.L.V. *Hesperus.*	Intermediate Station.		·52	N	6	Moderate sea and drizzling.

The data indicate that the centre was near the position of the *Oranasia* at 8 A.M., *i.e.*, in about Lat. 20¼°N. and Long. 88½° E. and had moved about 100 miles in a north-north-west direction during the previous 24 hours.

The additional observations recorded at the coast stations of the Bay indicate that the centre crossed the Orissa coast to the east of Balasore between 8 P.M. of this day and 2 A.M. of the 19th. The following gives observations taken at 8 P.M. at the coast stations in the storm area :—

Hour.	Station.	Barometer reduced to 32°; to constant gravity at Lat. 45° and to sea level.	Wind. Direction.	Wind. Velocity in miles per hour.	Remarks.
		″			
8 P.M.	Puri . .	29·590	W	35	Stormy.
	False Point .	29·510	SW	14	Continuous rain.
	Balasore .	29·506	NW	8	Frequent showers.
	Saugor Island	29·434	E	10	Drizzling rain.

The wind at Balasore shifted from N. W. at 8 P.M. to S.W. at 2 A.M. of the 19th. Weather at Saugor Island was cloudy with occasional showers and wind from east at 8 P.M. Winds shifted to south at 2 A.M. and were then increasing rapidly in strength and the sea was rising.

The preceding discussion has hence shown that the cyclonic storm which began to form on the 16th and 17th was of slight to moderate intensity on the 18th. It advanced slowly north-north-westwards recurving to north-west on the 18th, and probably crossed the Orissa coast near Balasore about midnight. Weather was squally with moderately strong winds in the north of the Bay, but the winds actually reported by vessels in the storm area were only of force 6 and 7.

The following account of the weather experienced on the Orissa coast on the 17th and 18th has been received from the Port Officers of Puri and False Point.

Puri.—"Weather was stormy with heavy rain, also accompanied with strong wind blowing in squalls at intervals of 2 to 3 minutes and looked very threatening as if a cyclone were passing close by. Frequent flashes of distant lightning were seen in the east-south-east direction with dense cloud over the horizon. The sea continued to be slight and became rough only after the weather cleared."

False Point.—"18th noon, moderate winds, overcast sky and dark gloomy weather with a few drops of rain; 4 P.M. fresh breeze with showers of rain; 8 P.M. continuous rain. Midnight, strong wind and continuous rain."

September 19th.—Pressure had increased briskly to rapidly in Arakan, Burma and East Bengal, again modifying the direction and position of the trough of low pressure which now ran west-north-westwards to the eastern districts of the North-Western Provinces.

Pressure had fallen locally in Chota Nagpur to which the storm was now transferred. The following gives 8 A.M. data of the storm area:—

Station.	Pressure. 8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A.M.	Wind. Average velocity in miles during past 24 hours.	Cloud.	Rainfall.	Weather.
	"	"	"				Inches	
Balasore	29·562	—·027	—·130	SW	8	8	2·38	
Midnapore	29·557	—·042	—·156	S	7	10	0·46	
Burdwan	29·581	—·040	—·113	SE	10	10	1·93	Continuous rain.
Bankura	29·532	—·076	—·163	E	4	10	3·86	
Hazaribagh	29·557	—·111	—·145	N	17	10	2·98	Gale of wind.
Ranchi	29·496	—·139	—·217	NNE	10	10	3·49	Continuous rain.
Chaibassa	29·443	—·155	—·247	WSW	4	10	2·98	
Sambalpur	29·582	—·040	—·098	W	7	10	2·27	

The centre of the storm was hence to the north of Chaibassa in about Lat. 23°N. and Long. 86°E. and had hence advanced about 260 miles in a north-north-westerly direction during the previous 24 hours. The depression at the centre was about a quarter of an inch and the storm was hence of moderate intensity.

Moderate to heavy rain had fallen in Orissa, Chota Nagpur and West Bengal. The following gives the heaviest rainfalls of the previous 24 hours:—

District.	Station.	Date.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
Puri	Ranpur	19th	6·06
	Puri	"	5·26
	Kurmala	"	5·10
Lohardaga	Silli	"	4·10
Manbhum	Jhalda	"	4·97
Orissa Tributary Mahals.	Kunjabangar	"	4·82

The rainfall, although general, was by no means excessive and the storm, as judged by the rainfall as well as by the intensity of the gradients and accompanying winds, was hence moderate.

20th September.—During the previous 24 hours pressure had risen briskly to very rapidly in Bengal and had fallen rapidly in the eastern districts of the North Western Provinces to which the storm was now transferred. The following observations define its position and character at 8 A.M.:—

Station.	Pressure. 8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A.M.	Wind. Average velocity in miles during past 24 hours.	Cloud.	Rainfall.	Weather.
	"	"	"				Inches	
Daltonganj	29·664	+·020	?	S	10	10	3·08	Overcast.
Dehri	·586	—·072	—·123	S	42	9	3·40	Cloudy.
Patna	·652	—·030	—·043	SE	17	10	2·56	Overcast.
Gorakhpur	·552	—·178	—·140	NNE	7	10	4·84	Continuous rain for upwards of 12 hours.
Benares	·482	—·225	—·204	W	10	10	4·95	Ditto.
Allahabad	·570	—·134	—·121	NNW	11	10	1·82	Gale of wind.

The centre of the storm at 8 A.M. was a little to the north-east of Benares in about Lat. 25¾° N. and Long. 83¼° E.

Moderate to heavy general rain had been received in Bihar, Chota Nagpur and the eastern districts of the North-Western Provinces, and light to moderate rain in Bengal.

The rainfall was, as hitherto, widely-spread, and the only falls in the storm area exceeding 5 inches registered on the 20th were :—

District.	Station.	Date.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
Benares . . .	Chandauli . .	20th . .	5·68
Do. . . .	Benares . .	,, .	5·20
Fyzabad . . .	Akbarpur . .	,, .	5·20
Do. . . .	Tanda . . .	,, .	5·20
Mirzapore . .	Chunar . .	,, .	5·06

The storm filled up very rapidly during the day on approaching the hills, so that on the morning of the 21st there was no trace of its existence, uniform pressure obtaining over the whole of North-Eastern India and the north of the Bay.

The storm formed under similar conditions in the Bay to those of the first storm of the month. Its formation and growth were largely determined by the changes of pressure external to the storm area, more especially in Burma, Assam and East Bengal. The northerly direction of its path was undoubtedly due to the excess of pressure established in Western India on the breaking up of the previous storm which continued for some days afterwards and shifted the trough of low pressure from its normal position to a position in which the axis stretched in a north-north-westerly direction from the centre of the Bay.

The following gives the position and motion of the storm centre from the 16th to the 20th :

Date.	Position of centre at 8 A.M.		Distance passed over during interval.	Average hourly rate of motion.
	Lat. N.	Long. E.		
	° ′	° ′	Miles.	Miles.
16th	18 0	90 10	...	...
17th	19 0	89 30	70	3
18th	20 15	88 30	100	4
19th	23 0	86 0	260	11
20th	25 45	83 15	250	10½

The storm gave a moderately heavy burst of rain to Bengal, Orissa, Chota Nagpur, Bihar and the eastern districts of the North-Western Provinces.

Pressure increased very rapidly in Bihar and the eastern districts of the North-Western Provinces on the 20th, and, as already stated, was very uniform in North-Eastern India and the north of the Bay on the morning of the 21st.

Pressure decreased in North-Eastern India and increased in Western India on the 21st, and moderate gradients for westerly winds obtained in the Peninsula during the next three days. Light to moderate showers were received in that area during this period.

On the 24th and 25th pressure increased in Northern India and the north of the Bay. The chief results of these changes were to establish an area of uniform and low pressure on the 26th in the Bay. A storm gradually formed in this area during the next three days which gave stormy weather and very heavy rain at the head of the Bay and in Bengal from the 30th September to the 3rd October. The following gives a brief sketch of the origin and formation of the storm :—

Cyclonic storm of the 28th September to 2nd October.—On the 26th light easterly winds obtained at the head of the Bay and moderate to strong south-west winds in the south, where weather was showery and squally.

September 27th.—Pressure had decreased slightly in the Bay and the Peninsula and risen slightly in the sub-montane districts of Upper India. The depression in the Bay, as shown by the data of the coast stations, was somewhat more strongly pronounced than on the 26th. Showers had fallen in the southern half of the Peninsula, where skies were partially clouded at 8 A.M. Skies were lightly clouded or clear over the whole of Northern and Central India and weather was fine and dry. Temperature was generally above the normal, but the variations were nowhere large.

The marine data show that there was a tendency to the establishment of a cyclonic circulation in the Bay.

The following gives data :—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		°	°	″			
8 A.M.	S.S. *Falls of Inversnaid*	7 13	85 13	29·84	SW	5	
,,	S. *John Devie*	12 14	85 59	·74	NW	2	Squally.
,,	S.S. *Lismore*	11 19	83 50	·74	NW	2	Showery.
,,	R. I. M. S. *Warren Hastings.*	13 23	83 38*	·74	SW by W	2	Fine and clear. 8 P.M. rainy.
,,	S.S. *Africa* .	16 14	93 28	·75	ESE	2 to 4	Fine.
,,	S.S. *Shahsada*	18 48	90 30	·75	NE	...	Cloudy. 4 A.M. squally-looking.

* Noon position.

Hour.	Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	″			
8 A.M.	S.S. *Wardha*	17 21	86 27	·74	ENE	2	Passing showers.
,,	S.S. *Landaura.*	19 58	87 30	·75	E by N	2	Fine, noon, occasional squalls.
,,	S.S. *Katoria*	21 14	90 20	·76	E	2	Passing clouds.
,,	F. L. V. *Torch*	Eastern channel.		·77	NE	2	Long SSE swell and cloudy.
,,	F. L. V. *Hesperus.*	Intermediate station.		·77	E	1	Cloudy. Light airs.

The data show that over the whole of the Bay, with the exception of the entrance, winds were very light, the great majority of vessels recording them as of strength 1 and 2. Monsoon humid winds of force 4 and 5, on the other hand, obtained in the extreme south of the Bay.

28th September—The pressure changes were generally small in amount. The only important one was a brisk fall in the centre of the Bay, emphasizing slightly the low pressure area which lay over that part of the Bay. Local showers had fallen in Southern India and some parts of Bengal, Assam and Upper Burma; but the weather conditions in the land area were unchanged.

South-west winds of force 4 to 6 held steadily in the south of the Bay, where weather was cloudy and showery.

The following gives information of the low pressure area in the centre of the Bay :—

Hour.	Name of Vessel	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	″			
8 A.M.	S. *John Devie*	13 20	86 27	29·67	WNW	4	Squally with incessant rain.
,,	R. I. M. S. *Warren Hastings.*	13 55	87 33	·64	Var.	2	Rainy.
,,	S.S. *Umkusi*	15 41	86 27	·67	NE	5	8 A. M. Sea smooth and weather fine, 4 P.M. squally.
,,	S.S. *Lismore*	15 4	85 12	·66	NNE	5	Cloudy. 4 A.M. rain squalls.

The preceding data hence indicate that a cyclonic circulation, in which weather was squally with much rain, was now established in the centre of the Bay. The centre of the depression and cyclonic air movement was in about Lat. 14½° N. and Long. 87° E.

Fine weather with light north-easterly winds, force 1 to 2, continued at the head of the Bay.

29th September.—The pressure changes were again generally small. Pressure had increased briskly to rapidly in Tenasserim, accentuating the gradients to the south-east of the depression. This accompanied a considerable increase in the strength of the winds in the south-east of the Bay, as is shown by the following data for Port Blair :—

Date.	Wind.	
	Direction at 8 A.M.	Average hourly velocity.
		Miles.
26th	W. N. W.	8
27th	W. N. W.	11
28th	W. S. W.	14
29th	W. S. W.	16

Showers had fallen in the southern half of the Peninsula and in North and East Bengal.

The data for localizing the position of the storm on the 29th in the Bay are very scanty. The following gives a summary of the available data :—

Hour.	Name of Vessel.	8 A.M. Position		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	″			
8 A.M	S.S. *Loodiana*	11 48	84 29	29·74	W	6	Sea rising and continuous rain and frequent heavy squalls.
,,	S. *John Devie*	14 11	87 8	·72	Var.	2	Cloudy. Noon heavy rain.
,,	R. I. M. S. *Warren Hastings.*	14 49	91 54	·71	E	3	8 A.M. Overcast. Noon passing squalls.
,,	S.S. *Nerbudda.*	19 17	90 0	·72	NE	4	8 A. M. Fine. Midnight, heavy rain squalls.
,,	S.S. *Umkusi*	19 33	87 45	·75	NE	4	Fine.
,,	S.S. *Lismore*	18 46	86 30	·72	NE	5	Clear.
,,	S.S. *Baria* .	19 8	85 47	·73	NE	3 to 5	Fine.
,,	F. L. V. *Torch*	Eastern Channel.		·76	NE	2	Long S. S. E. swell and showery.
,,	F. L. V. *Hesperus.*	Intermediate station.		·77	NNE	2	Squally, with thunder and lightning.

The data do not enable the position of the centre to be determined; but it was probably to the north of the S. *John Devie* at 8 A.M. in about Lat. 15° N. and Long. 87° E. Squally weather was extending northwards up the east of the Bay. Light north-easterly winds with fine weather continued at the head of the Bay.

30th. September.—Pressure had increased over the whole of the Indian land area, briskly to rapidly in Burma and Tenasserim thus further increasing the gradients to the south-east of the depression in the Bay, and slightly to briskly elsewhere. Showers had again fallen in North Bengal and the southern half of the Peninsula and heavy rain had commenced to fall on the Burma coast.

The marine data are again scanty and do not enable the position of the storm at 8 A.M. to be determined with certainty. The following gives a summary of the available data:—

Hour.	Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
		Lat. N.	Long. E.		Direction.	Force.	
		° ′	° ′	° ′			
8 A.M.	S.S. *British Isles.*	11 22	86 22	29·78	SSW	6	Moderate sea and cloudy. Midnight, squally.
,,	S.S. *Dictator*	13 4	84 56	·72	SSW	...	High confused sea, hard squalls and heavy showers.
,,	S.S. *Loodiana*	14 55	85 42	·69	SW	5	Heavy S.S.W. swell and dull rainy.
,,	S. *John Devie*	15 37	87 50	·73	SSW	6	Overcast. Noon, squally.
8 A.M.	S.S. *Nerbudda.*	16 52	89 41	29·73	SSW	4	Passing squalls, 4 A.M. heavy squalls and rain.
,,	S.S. *Pundua*	17 3	92 44	·81	SW	2	Beam sea squalls and light rain.
,,	S.S. *Chindwara.*	19 53	86 24	·74	NNW	5	Passing squalls of wind and rain.
,,	S.S. *Lismore*	21 8	87 40	·76	E by N	...	Noon, heavy squalls and rain.
,,	S.S. *Nadir* .	21 15	87 50	·77	SE	4	Midnight, heavy squalls and blinding rain.
,,	F. L. V. *Torch*	Eastern Channel.		·77	E	4	Unsettled with thunder and lightning.
,,	F. L. V. *Hesperus.*	Intermediate station.		·78	NE	4	Moderate S.E. swell and cloudy.

The data establish that weather was now more or less squally over the north and centre of the Bay and that south-west winds of force 5 to 6 prevailed generally as far north as Lat. 17° N. The centre of the cyclonic storm which was now established in the Bay, was probably in about Lat. 17½° N. and Long. 87½° E. and it was hence advancing northwards with a slight easterly tendency. The history of the storm will be continued in the October review.

Summary of the Reports of the Weather and Snowfall in the Mountain Districts to the north and north-west of India.

Lahoul.—The Rev. Mr. Heyde, Superintendent of the Kailang Observatory, has forwarded the following report of the weather in Lahoul during the month:—

"On several days of this month we had snow on the higher hills around us; but yesterday (the 19th of September) the fall of snow was particularly heavy upwards from 12,000 feet and it looks as if more would fall. This season until now has been a curiously changeful one—when hot, exceedingly so—and sudden low readings of the thermometers and much more wind at times than usual. At present one is inclined to think that we may have an early winter like last year."

Summary of special storm reports.

The number of local storms during the month was not large. Duststorms are of occasional occurrence in September in Sind and the South-West Punjab and thunderstorms in Upper India when the monsoon current is withdrawing from that area.

The following gives a statement of the chief local storms, of which reports were received during the month:—

2nd.—Severe thunderstorm at Cherat with heavy rain. 0·45 inch fell in 15 minutes.

8th.—Thunderstorm at Ahmedabad with heavy rain.

13th.—Thunderstorm at Khandwa with rain.

15th.—Thunderstorm at Jeypore from 2-35 P.M. to 3-20 P.M.

17th.—Thunderstorm at Jeypore from 5-10 P.M. to 5-30 P.M. Severe duststorm at Sirsa from 5-54 P.M to 6-34 P.M. Storm came from west. 12·8 miles of wind were registered in 20 minutes by the anemometer. Severe thunderstorm at Cherat with heavy rain and very strong winds, which blew down the anemometer.

26th.—Thunderstorm at Simla at 2-50 P.M. Thunderstorm with hail at Jeypore. Storm lasted from 2-40 P.M. to 6 P.M. 7 miles of wind were registered by the anemometer in 5 minutes (from 2-55 P.M. to 3 P.M.).

30th.—Thunderstorm at Poona from 5-25 P.M. to 5-40 P.M.

Brief Summary of the Weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—Light to moderate ordinary monsoon winds prevailed generally over the Arabian Sea during the first three days of the month. Weather was fine over the whole area, except along the Bombay coast, where it was showery. The mean intensity of the winds ranged from 3·5 on the 1st to 2·9 on the 3rd. A significant change occurred during the next 48 hours, which completely altered the conditions prevailing during the preceding three days. Unsteady winds set in generally over the Arabian Sea on the morning of the 5th and continued almost uninterruptedly throughout the remainder of the month. Weather also remained fine except along the Bombay coast, where it was more or less showery. This was especially the case on the 7th, 8th and 9th when heavy rain fell along the Konkan coast due to conditions over the land.

The air movement was feebler than usual throughout the period, the mean force of the winds ranging between 3·5 and 2·2.

Bay of Bengal.—At the commencement of the month moderate to strong south-west winds (slightly more westerly than usual) and showery weather prevailed over the southern half of the Bay (to the south of 16°N.)and light unsteady winds and fine weather over the remaining half of the Bay, conditions which usually precede the generation of a cyclonic storm. The general strength of the winds over the Bay averaged 3·4 at 8 A.M. of the 1st. Winds strengthened slightly during the day and the weather became further disturbed over the centre of the Bay. Thus the S. S. *Algeria* in Lat. 16°N. and Long. 86¼°E. at 8 A.M. of the 2nd experienced squalls and heavy rain with lightning and a rough sea in the early morning. A gale prevailed at Port Blair, a station representative of the conditions over the centre of the Bay, the hourly velocity during the preceding 48 hours averaging 24 miles at that station. These conditions resulted in the initiation of an irregular cyclonic circulation during the next 24 hours in the north and centre of the Bay. On the 3rd, the influence of the depression was extending rapidly and determining the air movement over the whole of the Bay. The depression intensified considerably during the next 48 hours and marched in a westerly direction towards the coast of the Circars which it crossed in the afternoon on the 5th. It occasioned fierce squalls of wind and rain and a heavy sea over the greater part of the Bay, but did not affect the air movement to any extent outside the storm area. This is clearly established by the wind force for the whole of the Bay area which averaged 4·0 on the 3rd, 4·3 on the 4th, and 3·5 on the 5th. In the storm area, on the other hand, the air movement was exceedingly vigorous, the strongest winds actually experienced being of force 11 on the 5th. With the advance inland of the storm, the winds returned to their normal directions and the weather improved very rapidly over the Bay, and was fine over the whole of the Bay on the morning of the 6th, only one vessel out of the 21 in the various parts of the Bay reporting showery weather.

The changes during the next five days were rather important. The current continued to fall off steadily in strength, and on the morning of the 11th was only half as strong as on the 4th. This feebleness of the current is strikingly shown by the data of Port Blair where the average hourly velocity decreased from 20 miles on the 4th to 3 miles on the 10th. Weather was fine during the whole of this period. The monsoon current began to rise again in force, and on the morning of the 13th winds of force 6 to 7 with much rain and a high sea prevailed in the extreme south of the Bay. Thus the S.S. *Benalder* about 150 miles to the south of the Nicobars at 8 A.M. of the 13th, experienced westerly winds of force 6, a high sea and constant rain, and the S. S. *Asphodel* in Lat. 7° N. and Long. 8·5°E. south-west winds of force 7 and a very high head sea. To the north of Lat. 12°N. winds had, on the other hand, become very unsteady, several vessels reporting variable winds and calms at 8 A.M of the 13th. Weather continued fine over this area with occasional showers. The winds increased further in strength in the south of the Bay during the next 48 hours and advanced northwards. On the morning of the

15th moderate to strong winds and rainy squally weather obtained as far north as Lat. 16°N. To the north of Lat. 16°N. light unsteady winds and fine to showery weather still held. The mean intensity of the winds at 8 A.M. of the 15th was 3·6.

A storm was generated over the area of light variable winds during the day. It marched northwards during the next 48 hours, developing at the same time. Unsettled squally weather was experienced on these days over the north and centre of the Bay. Over the south of the Bay the weather was fine. The storm passed inland about midnight of the 18th. Weather moderated during the next 48 hours and on the morning of the 20th was generally fine with light to strong monsoon winds. The storm was throughout of slight to moderate intensity, and hence the strongest winds experienced in the storm area were only of force 6 to 7. The wind force for all parts of the Bay averaged 3·4 at 8 A.M. of the 20th as compared with 4·1 on the two previous days.

The distribution of pressure altered rapidly during the next 24 hours, the pressure becoming very uniform over the north and centre of the Bay. Winds hence decreased in strength and became very unsteady over that region. Over the south of the Bay, on the other hand, a fresh monsoon prevailed. These conditions lasted until the 25th, on the morning of which day fresh monsoon winds, heavy rain squalls and a high sea prevailed over the south of the Bay and light variable winds and fine to showery weather and a smooth sea over the remainder of the sea. The air movement at 8 A.M. averaged 2·9 in force. No significant change occurred during the day beyond a slight increase in the air movement in the south of the Bay. Winds however began to rise generally over the Bay, more especially in the centre, and on the morning of the 27th their average strength had increased to 3·4. There was on this day a distinct tendency shown to the formation of a depression over the centre of the sea to the west of the Andamans. It developed during the next three days, and on the morning of the 30th a well defined depression and cyclonic circulation existed over the Bay. Winds had increased generally in force and averaged 4·6 or 1·4 greater than on the 28th. The strongest winds experienced on that day were of force 6. Weather was generally unsettled with hard squalls, blinding rain and a high confused sea.

It will be seen from the above summary of the weather in the Indian seas that conditions were abnormal over that area during the greater part of the month. The monsoon current retreated much earlier than usual in the first week of the month from the north of Arabian Sea and was feeble throughout the month. The Bengal current, although practically normal in strength, was very unsteady and did not extend as far north as usual in September. This is fully borne out by the more southerly origin of the storms of the month and their greater frequency.

There is very limited information for the Equatorial Belt. The data for the Seychelles and Zanzibar show that conditions were practically normal in the western half of that region. The only noteworthy feature was the excessive rainfall at Zanzibar which received a total of 5·6 inches during the month as compared with 0·66 inch during the corresponding period of 1894.

Temperature of the air.

The mean temperature conditions of the month varied to a larger extent from the normal than is usually the case in September, due chiefly to the early termination of the rains in North-Western India.

The mean maximum or day temperature of the month was above the normal over the whole of India with the exception of Upper Assam (and perhaps Upper Burma) and the Deccan and South Central Madras. The deficiency in these areas was generally small in amount, but exceeded 1° at Madura and Sholapur (−1°·2), Masulipatam (−1°·3), and Sibsagar and perhaps Kindat (−1°·8 each).

The normal means for Kindat are not very reliable in consequence of the doubtful character of the earlier observations for some years at that station.

The mean maximum temperature of the month was more than 2° above the normal over the greater part of Northern and Central India. The following gives data for this area :—

Province.	Mean maximum temperature.		
	Actual, September 1895.	Normal, September.	Variation of actual from normal.
	°	°	°
Punjab	99·0	96·3	+2·7
Rajputana	97·6	93·6	+4·0
Cutch	94·1	91·7	+2·4
Kathiawar	93·6	91·0	+2·6
Central India	89·8	87·6	+2·2
Chota-Nagpur	88·2	85·4	+2·8
Central Provinces	89·7	87·5	+2·2

The excess was more than 4° in amount at Sirsa (+5°·4) and Deesa (+4°·9).

The day temperature was also in excess at the hill

stations in Northern and Central India but by considerably smaller amounts than at the neighbouring plain stations.

The mean minimum or night temperature of the month was generally above the normal. It was locally in slight defect in Upper Assam, the North-Western Provinces, West Punjab, Sind, Cutch, Kathiawar, West Rajputana and Baluchistan and the greater part of the Deccan. The variations were much smaller, as a rule, than those of the day temperature, but exceeded 2° at the stations for which comparative data are given below :—

Province.	Station.	Mean minimum temperature.		
		Actual, September 1895.	Normal, September.	Variation of actual from normal.
		°	°	°
Baluchistan	Quetta	45·6	50·4	—4·8
Punjab	D. I. Khan	72·2	75·1	—2·9
	Lahore	75·9	73·0	+2·9
	Sirsa	77·5	75·0	+2·5
Central Provinces	Saugor	73·2	71·1	+2·1
Bombay	Karwar	75·6?	73·5	+2·1?

The variation for Diamond Island given in Table I is doubtful.

The mean temperature of the month was above the normal over the whole of India with the exception of three areas, *viz.*, Upper Assam and perhaps Upper Burma, Baluchistan and the Indus valley districts and the greater part of the Deccan. The deficiency was large at Quetta (—2°·4) and probably over the whole of Baluchistan and Afghanistan. The mean temperature was more than 2° above the normal locally at Raipur (+2°·3) and Ranchi (+2°·2) and also in an area in North-Western India including the stations for which data are given below :—

Province.	Station.	Mean daily temperature.		
		Actual, September 1895.	Normal, September.	Variation of actual from normal.
		°	°	°
Punjab	Sirsa	90 6	86·6	+4·0
	Lahore	87·9	84·8	+3·1
	Sialkot	86·7	84·4	+2·3
	Delhi	86·9	84·6	+2·3
Rajputana	Jeypore	85·2	82·7	+2·5
	Sambhar	85·4	82·8	+2·6
	Deesa	85·3	83·0	+2·3
North-Western Provinces.	Jhansi	85·4	83·1	+2·3
Central Provinces	Saugor	81·1	78·6	+2·5

The chief features of the mean temperature conditions of the month were hence as follows :—

(1) Increased day and night temperatures over nearly the whole of Northern and Central India. The increase was most strongly shown in an area including the South-East Punjab and Rajputana in which the mean temperature of the month was from 2° to 4° higher than the normal.

(2) Decreased temperature both by day and night in the Indus valley and Baluchistan, the deficiency being largest at Quetta.

(3) Decreased day and night temperatures to a slight extent in Upper Assam and Upper Burma and over the greater part of the Deccan.

The temperature conditions were chiefly related to the character and distribution of the rainfall of the month in India.

The following table gives complete mean temperature data of the month for the 51 meteorological areas into which India is divided :—

Province.	Division.	Actual Temperature.					Variation from normal of		
		Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	86·2	74·7	80·5	11·5	19·1	+1·2	+0·9	+0·3
	Lower Burma	86·0	77·1	81·6	8·9	15·0	+0·8	+1·5	—0·7
	Central do.	90·7	76·2	83·5	14·5	21·2	+0·9	+1·0	—0·1
	Upper do.	88·4	73·8	81·1	14·6	25·0	—1·8	+0·8	—2·6
	Arakan	87·4	78·0	82·7	9·4	16·0	+0·8	0	+0·8
Bengal and Assam	Eastern Bengal	88·1	78·0	83·1	10·0	18·7	+0·7	+1·0	—0·3
	Assam (Surma)	90·2	75·6	82·9	14·7	23·4	+0·5	—0·1	+0·6
	Do. (Brahmaputra)	86·4	76·8	81·7	9·6	19·1	—0·8	+0·1	—0·9
	Deltaic Bengal	90 3	79·0	84·7	11·3	19·0	+1·9	+0·9	+1·0
	Central do.	90·5	78·4	84·5	12·2	19·3	+1·3	+0·8	+0·5
	North do.	88·8	77·3	83·1	11·5	20·7	+1·0	+0·8	+0·2
	Orissa	90·4	79·1	84·8	11·3	19·7	+2·1	+0·7	+1·4
	Chota Nagpur	89·2	74·5	81·8	14·8	22·2	+2·8	+1·0	+1·8
	Bihar (South)	91·7	78·1	84·8	13·5	21·2	+1·0	—0·2	+1·2
	Do. (North)	90·0	78·2	84·1	11·8	19·1	+0·8	+1·0	—0·2

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Variation from normal of Maximum.	Minimum	Daily range.
		°	°	°	°	°	°	°	°
North-Western Provinces and Oudh.	North-Western Provinces (East)	91·9	76·7	84·3	15·2	25·2	+1·2	−0·7	+1·9
	Do. do. (Submontane)	91·1	73·1	82·1	18·0	29·9	+1·7	−0·4	+2·1
	Oudh (South)	92·1	75·9	84·0	16·2	28·5	+0·4	−0·4	+0·8
	Do. (North)	90·2	76·3	83·2	13·9	22·4	?	?	?
	North-Western Provinces (Central)	93·4	76·0	84·7	17·4	30·9	?	?	?
	Do. do. (West)	94·6	76·8	85·8	17·8	28·2	+3·1	+1·1	+2·0
Punjab	Punjab (South)	99·9	77·5	88·8	22·4	34·5	+4·5	+1·7	+2·8
	Do. (Central)	100·0	75·9	87·9	24·1	36·2	+3·3	+2·9	+0·4
	Do. (Submontane)	95·3	73·9	84·6	21·4	34·3	+2·6	0	+2·6
	Do. (Hill Districts)	77·3	58·7	68·0	18·7	33·3	+0·3	+0·8	−0·5
	Do. (North-West)	97·1	70·6	83·9	26·5	38·4	+2·0	+0·4	+1·6
	Do. (West)	102·1	74·5	88·4	27·6	40·7	+1·6	−2·3	+3·9
Bombay and Malabar Coast Districts (Madras).	Malabar	84·3	74·9	79·6	9·4	13·8	+0·8	+0·7	+0·1
	Madras (South Central)	90·9	71·8	81·3	19·1	25·9	+0·4	+0·9	−0·5
	Coorg	72·4	62·7	67·6	9·7	17·3	0	+1·0	−1·0
	Mysore	83·0	66·0	74·5	17·1	25·4	+0·7	+0·7	0
	Konkan	83·1	75·7	79·4	7·5	13·0	0	+0·8	−0·8
	Bombay Deccan	83·6	68·0	75·9	15·6	26·0	−0·2	−0·2	0
	Hyderabad (North)	86·0	70·8	78·4	15·3	24·9	?	?	?
	Khandesh	85·6	69·6	77·6	16·0	25·8	−0·1	+1·0	−1·1
Central Provinces and Berar.	Berar	90·3	72·9	81·6	17·4	24·6	+2·3	+0·9	+1·4
	Central Provinces (West)	89·3	73·9	81·6	15·4	23·8	+1·2	+0·7	+0·5
	Do. (Central)	89·3	73·1	81·2	16·2	25·3	+2·5	+0·9	+1·6
	Do. (East)	91·2	76·8	84·0	14·4	20·8	+2·9	+0·9	+2·0
Bombay (North)	Gujarat	92·0	75·9	84·0	16·1	26·7	+1·8	+0·1	+1·7
	Kathiawar	89·1	73·1	81·2	16·0	29·4	+2·6	−1·4	+4·0
	Sind	95·9	74·7	85·4	21·2	30·5	+0·8	−1·3	+2·1
Rajputana and Central India.	Central India (East)	91·4	75·3	83·3	16·2	28·5	+2·6	+0·7	+1·9
	Rajputana (East), Central India (West)	92·9	72·8	82·9	20·0	31·4	+3·4	+0·5	+2·9
	Do. (West)	100·8	76·9	88·9	23·9	37·7	+3·1	−0·2	+3·3
Madras	East Coast (North)	89·4	77·9	83·7	11·5	20·5	−0·2	+0·4	−0·6
	Hyderabad (South)	87·0	72·4	79·8	14·6	25·1	−0·8	+1·8	−2·6
	Madras (Central)	90·5	73·7	82·1	16·8	26·7	−0·3	−0·2	−0·1
	East Coast (Central)	92·6	78·0	85·3	14·6	26·3	−1·3	+0·2	−1·5
	Do. (South)	93·5	76·0	84·8	17·4	27·5	+0·3	0	+0·3
	Madras (South)	94·0	77·6	85·8	16·3	24·9	−1·2	−0·2	−1·0

The following gives a brief summary of the temperature conditions in India during the month. As usual in the rains they were determined by the occurrence and distribution of the rainfall during the month.

Temperature at the commencement of the month was above the normal in North-Eastern India, the Peninsula and Burma and below it in North-Western and Central India and Baluchistan. The following gives variation data for the 24 hours preceding 8 A.M. of the 1st :—

Political area or Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+3·2	+1·7	+2·5
Bengal and Assam	+1·6	+1·8	+1·7
N.-W. Provinces and Oudh	−1·5	−0·7	−1·1
Punjab	−2·7	+0·1	−1·3
Sind and Rajputana	−1·9	−0·9	−1·4
Central India and Gujarat	−1·7	−2·6	−2·2
Central Provinces and Berar	+0·2	−0·7	−0·3
Bombay	+1·2	−1·2	0
Madras	+2·3	+1·1	+1·7

Similar conditions continued until the 4th when temperature began to rise with the cessation of rainfall in Upper India. The storm which formed in the Bay on the 4th and 5th and crossed the Peninsula on the 6th and 7th, caused a large temporary reduction of temperature. The ollowing variation data for the 7th illustrate the condiions obtaining during the period from the 5th to the 9th :—

Political area or Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+2·0	+2·4	+2·2
Bengal and Assam	+0·9	+1·9	+1·4
N.-W. Provinces and Oudh	+1·9	+1·6	+1·8
Punjab	+5·2	+2·5	+3·9
Sind and Rajputana	+2·9	0	+1·5
Central India and Gujarat	+5·1	+2·3	+3·7
Central Provinces and Berar	+2·8	+0·7	+1·8
Bombay	−3·8	−0·3	−2·1
Madras	−2·4	−0·7	−1·6

Temperature increased rapidly on the 9th and 10th in the Peninsula and was above the normal from the 11th to the 13th. Moderate to heavy rain fell in North-Eastern India from the 10th to the 13th and temperature was in consequence in considerable defect in that area. The following table gives data for the 12th in illustration of the contrast between the diminished temperature in North-Eastern India and the excess over the remainder of India :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·8	+1·4	+1·6
Bengal and Assam	−0·9	−1·1	−1·0
N.-W. Provinces and Oudh	+3·3	−0·9	+1·2
Punjab	+3·2	+0·8	+2·0
Sind and Rajputana	+1·2	−0·1	+0·6
Central India and Gujarat	+1·0	−0·5	+0·3
Central Provinces and Berar	+3·5	+1·3	+2·4
Bombay	+1·1	+0·8	+1·0
Madras	+2·6	−0·2	+1·2

The Peninsula received occasional showers and Burma light to moderate rain during the period from the 14th to the 18th, during which the second storm of the month was forming and advancing northwards. Temperature was hence in moderate excess in Northern and Central India during this period and in slight to moderate defect in Burma and the Peninsula. The most noteworthy feature of this period (the third week of the month) was the abnormally low temperature in Baluchistan as represented by Quetta. The following gives mean temperature variation data of that station for the period the 15th to the 20th :—

Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date.					
	15th.	16th.	17th.	18th.	19th.	20th.
	°	°	°	°	°	°
Quetta	+0·3	−5·7	−4·6	−6·3	−7·7	−8·0

The passage of the storm through North-Eastern India on the 19th and 20th was accompanied by a large decrease of temperature. The following temperature variation data for the 19th illustrate the temperature conditions obtaining in India during the progress of the storm :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−3·2	+0·5	−1·4
Bengal and Assam	−3·0	−1·2	−2·1
N.-W. Provinces and Oudh	+4·2	+0·3	+2·3
Punjab	+0·3	+0·2	+0·3
Sind and Rajputana	+1·2	−0·2	+0·5
Central India and Gujarat	+3·7	+0·5	+2·1
Central Provinces and Berar	+1·7	+1·5	+1·6
Bombay	+0·7	+0·8	+0·8
Madras	+0·6	+1·6	+1·1

Temperature increased rapidly in North-Eastern India on the 21st and 22nd and fell considerably in the Peninsula, which again received moderate rain. Hence from the 22nd to the 25th temperature was in general excess, except in Madras and Baluchistan. The following gives temperature variation data for the 23rd :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+2·9	+2·1	+2·5
Bengal and Assam	+1·9	+1·1	+1·5
N.-W. Provinces and Oudh	+2·5	−2·0	+0·3
Punjab	+1·9	−2·8	−0·5
Sind and Rajputana	+2·0	−2·2	−0·1
Central India and Gujarat	+2·2	+1·1	+1·7
Central Provinces and Berar	+1·8	+1·1	+1·5
Bombay	−0·1	+1·0	+0·5
Madras	−2·9	−1·3	−2·1

Another depression and storm now began to form in the Bay. Fine dry weather prevailed generally in the land area from the 25th to the 28th, except in Lower Burma and Southern India, and temperature was hence in moderate general excess. The storm began to affect the coast districts of Bengal and North Madras on the 28th, where temperature hence fell below the normal, whilst it continued in moderate to considerable excess over the

remainder of India. These conditions are illustrated by the variation data of the 30th given below :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−2·3	+0·1	−1·1
Bengal and Assam	−0·8	−0·2	−0·5
N.-W. Provinces and Oudh	+3·2	+1·9	+2·6
Punjab	+3·5	+1·9	+2·7
Sind and Rajputana	+3·3	−0·2	+1·6
Central India and Gujarat	+5·4	+0·8	+3·1
Central Provinces and Berar	+1·4	+1·2	+1·3
Bombay	+2·2	+1·4	+1·8
Madras	−4·7	−0·9	−2·8

The following table gives the variation of the mean temperature week by week and also for the month. The data are taken from the weekly weather reviews published in the *Gazette of India*:—

Political area or Province.	Variation from normal of mean temperature for week ending September				
	7th.	14th.	21st.	28th.	Whole month.
	°	°	°	°	°
Burma	+1·7	+1·0	−0·5	+1·6	+0·7
Bengal and Assam	+2·0	−0·3	+0·3	+2·2	+1·0
N.-W. Provinces and Oudh	−0·3	+1·1	+1·1	+0·2	+0·6
Punjab	+1·7	+2·6	+1·0	+0·7	+1·5
Sind and Rajputana	+0·6	+1·6	+0·6	−0·1	+0·9
Central India and Gujarat	+0·9	+1·0	+1·6	+1·4	+1·3
Central Provinces and Berar.	+1·2	+1·3	+1·9	+1·6	+1·5
Bombay	−0·1	+0·4	+0·2	+0·7	+0·4
Madras	+0·3	+0·9	−0·3	−0·5	+0·1

Winds.

The mean winds of the month at Port Blair and Diamond Island were in September, as in August, much more westerly than usual. They were considerably stronger, but less steady. The following gives data :—

Station.	Velocity in miles per diem.			Wind Direction.	
	Mean Actual, September 1895.	Mean normal, September.	Percentage variation from normal.	Mean actual, September. 1895.	Mean normal, September.
Port Blair	285	214	+33	S80°W	S43°W
Diamond Island	276	155	+78	N54°W	S39°W

Winds were on the whole stronger, but less steady than usual in Bengal. The most noteworthy feature of the air movement was the abnormal westing of the winds, as is shown by the following data :—

Station.	Wind Direction.		
	Mean actual, September 1895.	Mean normal September.	Increased westing.
Chittagong	S25°W	S29°E	+54°
Calcutta	S43°W	S27°E	+70°
Burdwan	S6°W	S31°E	+37°
Saugor Island	S23°W	S4°W	+19°

Winds were, on the other hand, more easterly than usual at False Point.

The air movement was least steady and most variable in Chota Nagpur and Bihar instead of in the North-Western Provinces, as is usually the case in September. The following gives data for this area :—

Division.	Station.	Wind Direction.		Steadiness.		
		Mean actual, September 1895.	Mean normal, September.	Actual percentage, September 1895.	Normal percentage, September.	Variation from normal.
				%	%	
Bengal	Calcutta	S43°W	S27°E	16	43	−27
	Burdwan	S6°W	S31°E	13	38	−25
Chota Nagpur	Hazaribagh	N45°W	S64°E	18	21	−3
Bihar	Patna	S50°W	S77°E	3	42	−39
North-Western Provinces	Allahabad.	N62°W	N42°E	26	11	+15

Patna was hence the centre of this area of variable and light winds.

Winds were more westerly than usual in the North-Western Provinces and East Punjab, and were, as might be expected from the abnormally early withdrawal of the monsoon winds from Upper India, somewhat steadier, but not so strong as usual.

The following table gives comparative data of the mean air movement of the month in Burma and Northern India:—

STATION OR PROVINCE.	VELOCITY IN MILES PER DIEM.		
	Mean actual, September 1895.	Mean normal, September.	Percentage variation.
Port Blair	285	214	+33
Burma	181	123	+47
Bengal	130	121	+ 7
Orissa	141	127	+11
Bihar	86	84	+ 2
Chota Nagpur . . .	173	169	+ 2
North-Western Provinces .	57	61	− 7
East Punjab	49	40	+23

Winds were practically normal in direction and strength in Sind. In Rajputana and Central India the mean winds of the month contained a strongish northerly element, which in some cases replaced a normal southerly component. The following gives data for two stations, at which the northerly deflection was most marked:—

STATION.	WIND DIRECTION.		
	Mean actual, September 1895.	Mean normal, September.	Northerly deflection.
			°
Deesa	N68°W	S65°W	47
Ajmere	N45°W	S80°W	55

Winds were also more northerly and less westerly in Berar, the Central Provinces and Deccan. They were on the whole slightly weaker than usual, but were of normal steadiness. The following gives five examples illustrating the northerly deflection of the air movement in this area:—

STATION.	WIND DIRECTION.		
	Mean actual, September 1895.	Mean normal, September.	Northerly deflection.
Khandwa	N38°W	N69°W	31°
Sholapur	N41°W	N73°W	32°
Nagpur	N25°W	N54°W	29°
Raipur	N36°W	S69°W	75°
Chikalda	N6°W	N22°W	16°

The mean winds of the month were also more northerly than usual at the west coast stations and the deflection was as marked as in the Deccan area, as is shown by the following:—

STATION.	WIND DIRECTION		
	Mean actual, September 1895.	Mean normal, September.	Northerly deflection.
Bombay	N67°W	S89°W	24°
Ratnagiri	N64°W	S88°W	28°
Karwar	N62°W	N86°W	24°

The data show that the mean deflection was almost the same in amount at these stations and averaged 25°. Winds were considerably below their normal strength (about 25 per cent.) at Bombay and Ratnagiri.

Westerly winds of great steadiness held throughout the month in Mysore and Southern India generally.

The following table gives comparative data of the strength of the air movement in Western and Southern India:—

PROVINCE.	VELOCITY IN MILES PER DIEM.		
	Mean actual, September 1895.	Mean normal, September.	Percentage variation from normal.
Rajputana	134	147	− 9
Central India . . .	84	106	−21
Central Provinces . . .	127	104	+22
Berar	146	170	−14
West Coast	174	231	−25
Deccan	234	250	− 6
East Coast	88	102	−14

Winds were slightly stronger and on the whole steadier than usual at the Upper India hill stations; but their mean directions varied very irregularly from the normal, as is shown by the following two examples:—

STATION.	WIND DIRECTION.	
	Mean actual, September 1895.	Mean normal, September.
Murree	S34°W	S52°E
Simla	N 7°E	S78°W

Winds were very unsteady at Darjeeling and their mean direction was from N 18° W, the normal being S 72° E.

Winds were even steadier than usual at Zanzibar and the Seychelles and were on the mean of the month practically normal in direction, as is shown by the following:—

Station.	Wind Direction.		Velocity in miles per diem.		Steadiness.	
	Mean actual, September 1895.	Mean normal, September.	Mean actual, September 1895.	Mean normal, September.	Actual percentage, September 1895.	Normal, percentage September.
					%	%
Zanzibar .	S16°W	S12°W	122	118	53	46
Seychelles .	S39°E	S40°E*	297	277*	95	94*

* Means of September 1894.

Humidity and Cloud.

The mean humidity conditions differed very slightly from the normal at Port Blair and in Burma and Assam. The mean aqueous vapour pressure was very slightly higher than usual, whilst the mean humidity percentage was in equally slight defect due to the increased temperature.

Over the whole of Northern and Central India, including Bengal, the Gangetic Plain, Punjab, Rajputana, Central India and the northern districts of the Central Provinces both the absolute and relative humidities were either normal or in defect. The deficiency increased from the coast districts into the interior and was absolutely greatest in Rajputana, the South-East Punjab, and the Punjab Himalayas. The following gives comparative data for this area of increased dryness of the air in September:—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, September 1895.	Average normal, September.	Variation from normal.	Average actual, September 1895.	Average normal, September.	Variation from normal.
	"	"	"	%	%	
Bengal . . .	·940	·946	—·006	81	86	—5
Chota Nagpur .	·717	·760	—·043	72	81	—9
Bihar . .	·923	·926	—·003	79	82	—3
N.-W. Provinces .	·786	·807	—·021	68	72	—4
Punjab . . .	·641	·713	—·072	52	59	—7
Rajputana . .	·646	·697	—·051	57	65	—8
Central India . .	·795	·778	+·017	72	73	—1
Central Provinces (North).	·753	·748	+·005	74	77	—3

The mean humidity of the month in this area was most largely in defect at Deesa (—12), Jeypore (—11), Ludhiana (—9), and at the hill stations of Leh and Murree (each —10). The increased dryness was of course due to the abnormally early withdrawal of the humid monsoon currents from Upper India in the first week of the month.

The mean humidity conditions of the month varied slightly, but somewhat irregularly from the normal in the Peninsula. On the whole the air contained somewhat less vapour and was drier than usual. Thus the mean humidity percentage of the month was 6 below the normal at Bellary, 4 at Karwar, 3 at Saugor and Mercara and 1 at Wellington.

The following table gives comparative data for the different divisions of the Peninsula:—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, September 1895.	Average normal, September.	Variation from normal.	Average actual, September 1895.	Average normal, September.	Variation from normal.
	"	"	"	%	%	
West Coast . .	·834	·839	—·005	84	86	—2
Central Provinces .	·781	·765	+·016	75	77	—2
Bombay Deccan .	·667	·679	—·012	79	77	+2
Madras Deccan .	·606	·634	—·028	68	71	—3
Do. Coast . .	·880	·847	+·033	76	73	+3
Do. South .	·732	·743	—·011	68	69	—1

As already stated the air was unusually dry at the Himalayan hill stations. The following gives data for three stations:—

Station.	Absolute humidity.			Relative humidity.		
	Average actual, September 1895.	Average normal, September.	Variation from normal.	Average actual, September 1895.	Average normal, September.	Variation from normal.
	"	"	"	%	%	
Leh . . .	·147	·165	—·018	31	41	—10
Murree . . .	·369	·415	—·046	54	64	—10
Simla . . .	·389	·446	—·057	71	78	—7

The chief features of the humidity conditions of the month were—

(1) Slightly decreased humidity in Burma and Assam.

(2) Large deficiency of aqueous vapour and abnormal dryness of the air in Northern and Central India and the northern districts of the Central Provinces and in the Western Himalayas.

(3) Slight deficiency of aqueous vapour at the majority of stations in the Peninsula where in consequence of the increased temperature the humidity was below the normal to a slight extent.

Cloud.—As the larger variations of the humidity conditions and cloud amount were due to the same causes, *viz.*, the weakness of the monsoon currents and their very early withdrawal from Upper India, they were similar in general character over the greater part of India.

There was somewhat more cloud than usual at Port Blair and in Lower Burma, Arakan, East Bengal and Cachar. The following gives data for a representative station in each area:—

Station.	Mean cloud amount.		
	Average actual, September 1895.	Average normal, September.	Variation from normal.
Port Blair	8·4	7·0	+1·4
Diamond Island	8·4	6·9	+1·5
Akyab	7·4	7·0	+0·4
Narayanganj	7·8	6·8	+1·0
Silchar	7·4	7·1	+0·3

There was less cloud than usual over nearly the whole of Northern and Central India, as is shown by the following comparative data:—

Division.	Mean cloud amount.		
	Average actual, September 1895.	Average normal, September.	Variation from normal.
Assam	6·7	7·2	−0·5
Bengal	7·0	7·4	−0·4
Bihar	5·3	6·3	−1·0
Chota Nagpur	7·7	7·9	−0·2
North-Western Provinces	3·4	4·4	−1·0
Punjab	1·3	1·7	−0·4
Rajputana	2·6	3·8	−1·2
Central India	4·5	5·4	−0·9

The deficiency was in actual amount greatest at Sibsagar (−1·8), Berhampore (−1·5) and Meerut (−1·7).

The cloud amount was generally somewhat larger than usual in the Deccan, Konkan and the North Madras coast districts. The excess was large at Khandwa (+1·6), Bellary (+1·5), and Vizagapatam (+1·2). The variations were, on the other hand, irregular in Southern India. Thus the mean cloud was 1·6 in excess at Bangalore, 1·2 in defect at Trichinopoly, 0·9 in excess at Wellington and 0·3 in defect at Mercara.

The following gives comparative data for the Peninsula:—

Division.	Mean cloud amount.		
	Average actual, September 1895.	Average normal, September.	Variation from normal.
Berar	7·0	6·4	+0·6
Central Provinces	5·7	5·9	−0·2
Deccan	8·1	7·4	+0·7
West Coast	6·4	6·1	+0·3
East Coast	6·4	5·9	+0·5
Southern India	6·4	6·2	+0·2

There was less cloud than usual at the hill stations in Upper and Central India. The deficiency was most marked at Mount Abu (−1·6) and Murree (−1·2).

Rainfall.

The Bombay monsoon current was unusually weak during the month. It withdrew from the Punjab and North-West Rajputana at the end of August and these areas received practically no rain in September. The western districts of the North-Western Provinces, the south-east districts of Rajputana and the greater part of Central India received moderate rain during the first fortnight of the month, when the monsoon current withdrew and dry weather set in. The rains of 1895 hence terminated unusually early over the whole of North-Western India.

The Bay current was approximately of normal strength, but was very unsteady and the distribution of the rainfall

of the month was largely dependent upon the character and tracks of three cyclonic storms, which formed in that area during the month.

The following gives a very brief statement of the periods of most general rainfall:—

1st.—From the 5th to the 8th, when the Deccan, Khandesh and Berar received heavy to excessive rain from the first cyclonic storm of the month.

2nd.—From the 9th to the 11th. Bengal and Assam obtained a moderately heavy burst of rain during this period.

3rd.—From the 14th to the 16th, immediately prior to the formation of the second storm. The Deccan and Southern India had light to moderate rain during this period.

4th.—From the 18th to the 21st, during which Burma and North-Eastern India received moderately heavy rain from the second storm of the month.

5th.—From the 21st to the 27th, during which Southern India received frequent light to moderate showers.

6th.—The 29th and 30th, when Burma and Bengal began to obtain rain from the third cyclonic storm of the month. Southern India and the Deccan also received numerous light showers during this period.

The rainfall of the month was in more or less general defect over nearly the whole of Northern and Central India, Berar, the Central Provinces and the Konkan and Malabar divisions (*i.e.*, the west coast districts), and was normal or in excess over the Deccan, the Madras coast districts, South India, Tenasserim and Lower Burma.

The deficiency averaged more than 75 per cent. in the following divisions:—Punjab South (98 per cent.), Sind and Punjab Submontane (96 per cent.), Rajputana West and Punjab Central (each 88 per cent.), Punjab North-West (83 per cent.), Punjab West (78 per cent.), and Kathiawar, and East Rajputana (each 76 per cent.). It ranged between 75 and 50 per cent. in the North-Western Provinces West Punjab Hills, Central Provinces, Gujarat, Central India and Malabar, and between 50 and 30 per cent. in Deltaic Bengal, Chota Nagpur, the Central and Submontane divisions of the North-Western Provinces and the Konkan.

The excess was between 25 and 50 per cent. in Khandesh, the South Central, East-Coast North, and Central and Central divisions of Madras, and was more than 50 per cent. in South Hyderabad (94 per cent.), the Bombay Deccan (76 per cent.) and the East-Coast South division of Madras (57 per cent.).

The following table gives comparative rainfall data of the month for the 51 meteorological divisions of India:—

Province.	Division.	Number of rainy days		Rainfall.		
		Average actual, September 1895.	Average normal, September.	Average actual, September 1895.	Average normal, September.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	24·91	23·17	+1·74
	Lower Burma*	?	?	15·30	13·03	+2·27
	Central do*	?	?	8·27	8·68	−0·41
	Upper do.*	?	?	8·25	?	?
	Arakan*	?	?	17·52	19·61	−2·09
Bengal and Assam	Eastern Bengal	11·7	13·8	10·79	12·48	−1·69
	Assam (Surma)*	?	?	19·39	23·53	−4·14
	Do. (Brahmaputra)*	?	?	10·68	10·27	+0·41
	Deltaic Bengal	8·3	11·8	5·43	8·92	−3·49
	Central do.	8·5	12·2	6·99	9·97	−2·98
	North do.	12·3	13·5	13·52	16·07	−2·55
	Orissa	10·4	12·3	9·38	10·25	−0·87
	Chota Nagpur	6·0	12·7	6·00	8·59	−2·59
	Bihar (South)	6·5	9·5	5·55	7·15	−1·60
	Do. (North)	8·3	9·7	8·85	9·64	−0·79
North-Western Provinces and Oudh.	North-Western Provinces (East)	4·9	8·6	5·50	6·89	−1·39
	Oudh (South)	5·7	7·4	6·22	6·52	−0·30
	Do. (North)	6·6	2·5	7·24	2·45	+4·79
	North-Western Provinces (Central)	3·3	6·5	2·83	5·53	−2·70
	Do. do. (West)	2·6	5·3	1·99	4·80	−2·81
	Do. do. (Submontane)	4·8	6·8	4·31	7·34	−3·03
Punjab	Punjab (South)	0·1	2·5	0·03	1·99	−1·96
	Do. (Central)	0·8	3·3	0·41	3·54	−3·13
	Do. (Submontane)	0·3	3·8	0·14	3·93	−3·79
	Do. (Hill Districts)	4·1	7·4	2·74	6·40	−3·66
	Do. (North-West)	1·1	2·7	0·39	2·27	−1·88
	Do. (West)	0·4	8·5	0·17	0·79	−0·62
Bombay and Malabar Coast Districts (Madras).	Malabar	10·3	14·4	4·69	10·20	−5·51
	Madras (South Central)	8·4	6·3	6·49	4·32	+2·17
	Coorg	10·3	?	4·55	?	?
	Mysore*	?	?	5·08	4·94	+0·14
	Konkan	13·8	16·8	9·91	14·97	−5·06
	Bombay Deccan	10·1	8·4	9·05	5·48	+4·17
	Khandesh	10·8	9·2	9·52	7·07	+2·45

* Note.—The figures entered against divisions marked with an asterisk have been obtained from the Weekly Telegraphic Reports.

Province.	Division.	Number of rainy days. Average actual, September 1895.	Number of rainy days. Average normal, September.	Rainfall. Average actual, September 1895.	Rainfall. Average normal, September.	Rainfall. Variation from normal.
				Inches.	Inches.	Inches.
Central Provinces and Berar.	Berar*	?	?	5·32	6·41	−1·09
	Central Provinces (West)	7·7	9·5	4·36	8·80	−4·44
	Do. do. (Central)	5·3	9·7	2·78	7·95	−5·17
	Do. do. (East)	5·1	9·5	3·06	7·62	−4·56
Bombay (North)	Gujarat	4·2	8·3	3·13	8·03	−4·90
	Kathiawar	2·0	4·4	1·14	4·70	−3·56
	Sind	0·1	?	0·02	0·49	−0·47
Rajputana and Central India.	Central India (East)	5·2	?	2·98	6·56	−3·58
	Rajputana (East) Central India (West)	1·7	?	0·86	3·64	−2·78
	Rajputana (West)	0·5	?	0·16	1·35	−1·19
Madras	East Coast (North)*	10·0	9·1	9·09	6·91	+2·18
	Ditto (do.) (*a*)	16·5	12·4	9·82	8·63	+1·19
	Hyderabad (South)*	?	?	8·56	4·41	+4·15
	Madras (Central)	9·1	7·2	7·73	5·36	+2·37
	East Coast (Central)	7·4	5·5	5·28	3·61	+1·67
	Ditto (South)	8·5	6·4	7·64	4·86	+2·78
	Madras (South)	3·1	3·8	2·40	2·23	+0·17

* NOTE.—The figures entered against divisions marked with an asterisk have been obtained from Weekly Telegraphic Reports.

Arakan, Tenasserim, Lower and Central Burma received almost daily rainfall during the month. Occasional rain was also obtained in Upper Burma, but the only periods of general rain over the province were from the 8th to the 12th and the 15th to the 19th.

The following gives a summary of the rainfall data of the province published in the *Burma Gazette*:—

Division.	Number of rainy days. Actual, September 1895.	Number of rainy days. Normal, September.	Rainfall. Average actual, September 1895.	Rainfall. Average normal, September	Rainfall. Variation from normal.
			Inches.	Inches.	Inches.
Tenasserim	20·4	?	29·87	23·17	+6·70
Lower Burma	17·8	?	14·16	13·03	+1·13
Central Burma	13·3	?	8·18	8·68	−0·50
Upper Burma	11·0	?	8·81	?	?
Arakan	17·9	?	15·08	19·61	−4·53

The Assam Valley received some light showers during the first five days of the month and daily rain from the 6th to the 14th. A break of four days followed until the 19th when showery weather recommenced, but the rainfall during the remainder of the month was light and scattered. Silchar obtained somewhat more frequent rain than the Assam Valley, the chief periods being from the 5th to the 12th and the 20th to the 23rd; but the falls were lighter than usual.

The rainfall of the month was normal in the Assam Valley and in moderate defect (−18 per cent.) in Silchar, as is shown by the following statement:—

Division.	Number of rainy days. Average actual, September 1895.	Number of rainy days. Variation from normal.	Rainfall. Average actual, September 1895.	Rainfall. Variation of actual from normal.	Rainfall. Percentage variation from normal.
			Inches.	Inches.	
Surma	?	?	19·39	−4·14	−18
Brahmaputra	?	?	10·68	+0·41	+ 4

The distribution of the rainfall of the month in Bengal was mainly dependent upon the character and tracks of the cyclonic storms of the period. Orissa obtained light to moderate rain from the 3rd to the 5th during the generation of the first storm of the month. Bengal received a moderate burst of rain from the 7th to the 12th or after the breaking up of the first storm of the month and under the conditions described in the pressure section. Bihar and Chota Nagpur obtained local showers, chiefly on the 10th, 11th, and 12th. An almost complete break in the rains obtained from the 13th until the 17th. The second storm of the month gave general and moderately heavy rain to the province from the 18th to the 21st. The following data show the character of this rainfall:—

Division.	Average actual rainfall in 24 hours preceding 8 A.M. of 18th.	19th.	20th.	21st.	Total of period.
	Inches.	Inches.	Inches.	Inches.	Inches.
East Bengal	0·81	0·47	0·28	0·10	1·66
South-West Bengal	0·56	1·37	0·62	0·31	2·86
North Bengal	0·09	1·00	0·57	0·10	1·76
Bihar	0·10	0·61	1·59	0·72	3·02
Orissa	1·64	2·14	0·37	0·17	4·32
Chota Nagpur	0·24	2·08	1·22	0·02	3·56

An almost complete break again obtained from the 22nd to the 27th, when the third storm of the month began to form in the Bay. Showery weather set in on the 28th. South-West Bengal received light to moderate showers on the 28th and 30th, North Bengal on the 29th and 30th, and Orissa on the 30th.

One marked feature of the rainfall of the month was the absence of cyclonic downpours, so that although the rainfall of the month was scanty, it was more effective than usual.

The following table gives a summary of the rainfall data of the month in the province of Bengal:—

Division.	Number of Rainy days.		Rainfall.		
	Average actual, September 1895.	Variation from normal.	Average actual, September 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches.	
Bengal, East	11·7	−2·1	10·79	−1·69	−14
Do., North	12·3	−1·2	13·52	−2·55	−16
Do., Deltaic	8·3	−3·5	5·43	−3·49	−39
Do., Central	8·5	−3·7	6·99	−2·98	−29
Orissa	19·4	−1·9	9·38	−0·87	− 8
Chota Nagpur	6·0	−6·7	6·00	−2·59	−30
North Bihar	8·3	−1·4	8·85	−0·79	− 8
South Do.	6·5	−3·0	5·55	−1·60	−22

The rainfall of the month was very irregularly distributed. The districts, for which data are given in the following table, obtained less than two-thirds of their normal fall:—

District.	Rainfall.		
	Average actual, September 1895.	Average normal, September.	Percentage variation from normal.
	Inches.	Inches.	
Howrah	4·38	8·61	−49
24-Parganas	5·48	9·60	−43
Nadia	4·25	8·52	−50
Jessore	4·61	8·43	−45
Jalpaiguri	10·42	23·93	−57
Faridpur	5·24	8·68	−40
Noakhali	5·36	16·26	−67
Malda	3·60	10·52	−66
Balasore	6·97	11·28	−38
Palamau	3·49	7·82	−55
Singhbhum	4·34	8·38	−48

The whole of the North-Western Provinces obtained moderately heavy rain from the 1st to the 3rd.

The eastern districts, including Gorakhpur, Basti, Azamgarh, Ballia, North Oudh and the hill districts received frequent local showers during the period from the 4th to the 16th.

The second storm of the month in its final stages gave moderate to heavy general rain in Oudh and the eastern districts of the province on the 19th, 20th and 21st. Practically no rain fell in the western and central districts of the North-Western Provinces during this period. Falls exceeding 4 inches in 24 hours were registered at a considerable number of stations. The following gives data of the falls exceeding 5 inches —

District.	Station.	Date.	Heaviest rainfall in 24 hours preceding 8 A.M. of date.
			Inches.
Jaunpur	Jaunpur	19th	5·00
Benares	Chandauli	20th	5·68
	Benares	,,	5·20
Fyzabad	Akbarpur	,,	5·20
	Tanda	,,	5·20
Mirzapur	Chunar	,,	5·06

No rain fell during the remainder of the month with the exception of a few local showers, chiefly in Garhwal, Benares, Mirzapur and Ballia.

The following is a comparative statement of the rainfall data of the month, published in the North-Western Provinces Gazette:—

Division.	Number of Rainy days.		Rainfall.		
	Average actual, September 1895.	Variation from normal.	Average actual, September 1895.	Average normal, September.	Percentage variation from normal.
			Inches.	Inches.	
Oudh, North	6·6	+4·1	7·24	2·45	+196
Do. South	5·7	−1·7	6·22	6·52	− 5
N.-W.-P. (East)	4·9	−3·7	5·50	6·89	− 20
Do. (Central)	3·3	−3·2	2·83	5·53	− 49
Do. (Submontane)	4·8	−2·0	4·31	7·34	− 41
Do. (West)	2·6	−2·7	1·99	4·80	− 59

In the Punjab some local showers were received, chiefly in the hill districts, during the first and last weeks of the month. Over by far the greater part of the province no rain fell at all and hence the monsoon rains in this area terminated at the end of August.

The following comparative statement shows the failure of the rains in this area in September :—

Division.	Rainy days.			Rainfall.		
	Average actual, September 1895.	Average normal September.	Variation from normal.	Average actual, September 1895.	Average normal, September.	Variation from normal.
				Inches.	Inches.	Inches.
Punjab South .	0·1	2·4	—1·5	0·03	1·99	—1·96
,, Central .	0·8	3·3	—2·5	0·41	3·54	—3·13
,, Submontane.	0·3	3·8	—3·5	0·14	3·93	—3·79
,, Hills .	4·1	7·4	—3·3	2·74	6·40	—3·66
,, North-West.	1·1	2·7	—1·6	0·39	2·27	—1·88
,, West .	0·4	8·5	—8·1	0·17	0·79	—0·62

. Baluchistan was, like the Punjab, practically rainless. Some local showers of no importance fell on the 18th and 19th.

The western states of Rajputana received a few light local showers of no importance and the rainfall in that area, as in the greater part of the Punjab and Sind, was practically nil. The eastern states of Dholpur, Bhurtpore, Kerowlee and Kotah obtained light to moderate showers from the 1st to the 3rd. Ajmere and the south-western states had light to moderate rain from the 15th to the 20th, and some light local showers on the 27th. The rainfall of the month was scanty over the whole area and largely below the normal, as is shown by the following comparative statement for the larger states :—

State.	Rainfall.			
	Average actual, September 1895.	Average normal, September.	Variation from normal.	Percentage variation, from normal.
	Inches.	Inches.	Inches.	
Ulwar	0·28	4·94	—4·66	—94
Bhurtpore . . .	0·69	4·25	—3·56	—84
Dholpur . . .	1·71	?	?	?
Kerowlee . . .	1·43	4·52	—3·09	—68
Tonk	0·10	2·71	—2·61	—96
Deoli	0·93	4·53	—3·60	—79
Kotah	0·91	4·77	—3·86	—81
Ajmere-Merwara . .	0·89	2·88	—1·99	—69
Oodeypore . . .	2·28	5·16	—2·88	—56
Sirohee	0·46	4·23	—3·77	—89

There were three periods of rainfall during the month in Central India. The first period lasted from the 1st to the 9th. Gwalior, Bundelkhand and Baghelkhand obtained moderately heavy rain on the 1st and 2nd. Light local showers were received during the remainder of this period.

During the second period, from the 14th to the 18th, Gwalior received moderate rain and Bhopal and Rewah light showers.

Gwalior again received light to moderate rain from the 21st to the 23rd.

The rainfall of the month was considerably below the normal, but to a less extent than in Rajputana. The following gives comparative data for the larger states or divisions :—

State.	Rainfall.			
	Average actual, September 1895.	Average normal, September.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Bundelkhand . . .	2·33	6·39	—4·06	—64
Rewah	2·22	6·43	—4·21	—65
Gwalior . . .	3·50	6·19	—2·69	—43
Bhopal	2·73	8·79	—6·06	—69

The rainfall of the month in the Central Provinces occurred during the same periods as in Central India. Light to moderate showers from the 1st to the 9th gave a very irregular distributed rainfall. The fall during this period was lightest in the eastern districts, and was moderate in amount in the western districts. The second period of rainfall extended from the 13th to the 18th. The eastern and central districts received light local showers and the western, moderate and fairly general rain. During the third period of rainfall from the 21st to the 23rd the western districts again received moderate rain and the eastern and central districts light local showers of little value. The rainfall of the month was hence in large general defect in the eastern and central districts, and in moderate to large defect in the western districts, as also in Berar, where rain fell under the same conditions and during the same periods.

The following table gives a summary of the rainfall data of the month :—

Division.	Number of rainy days.		Rainfall.		
	Average actual, September 1895.	Variation from normal.	Average actual, September 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches.	
Central Provinces (East) .	5·1	—4·4	3·06	—4·56	—60
Ditto (Central)	5·3	—4·4	2·78	—5·17	—66
Ditto (West) .	7·7	—1·8	4·36	—4·44	—50

The Konkan districts of the Bombay Presidency received daily showers throughout the month. The falls were generally light; but the passage of the first storm of the month across the Deccan intensified winds on the west coast and gave heavy rain on the 7th and 8th. The following gives mean rainfall data of the Kolaba and Thana districts for this period :—

District.	Rainfall in 24 hours preceding 8 A.M. of date.				Total of period.
	6th.	7th.	8th.	9th.	
	Inch.	Inches.	Inches.	Inch.	Inches.
Kolaba	0·61	4·76	3·47	0·47	9·31
Thana	0·08	1·40	4·48	0·52	6·48

The rainfall of the month was very considerably in defect. It averaged only 9·91 inches or 34 per cent. below the normal. The North Kanara district received an average of only 4·59 inches and Ratnagiri of 8·25 inches (their normal falls being 10·24 inches and 16·52 inches respectively).

The Deccan districts and Khandesh obtained general rain during three periods of disturbance. The first period was from the 6th to the 9th, during which the districts of Bijapur, Sholapur, Poona, Ahmednagar, Nasik and Khandesh received a more or less heavy downpour during the passage of the first storm of the month northwards through that area. The following table gives mean rainfall data for these districts during this period :—

District.	Rainfall in 24 hours preceding 8 A.M. of date.				Total of period.
	6th.	7th.	8th.	9th.	
	Inches.	Inches.	Inche	Inch.	Inches.
Sholapur . . .	0·36	7·24	0·28	0·01	7·89
Bijapur	0·24	2·62	0·01	...	2·87
Poona	0·52	3·67	1·32	0·04	5·55
Ahmednagar . . .	0·60	3·08	0·88	...	4·56
Nasik	0·15	1·03	1·26	0·19	2·63
Khandesh . . .	0·38	2·31	0·37	0·10	3·16

The second period of rainfall in the Deccan districts was from the 13th to the 16th. The rainfall during this period did not accompany the advance of any cyclonic disturbance, and was due to the prevalence of a stronger westerly current than usual in the Deccan. The falls were unusually heavy, more especially in the Sholapur, Poona, Ahmednagar, Nasik and Khandesh districts. The following gives the average daily fall from the 13th to the 16th in these districts:—

District.	Rainfall in 24 hours preceding 8 A.M. of date.				Total of period.
	13th.	14th.	15th.	16th.	
	Inches.	Inches.	Inches.	Inch.	Inches.
Sholapur . . .	1·69	0·59	1·33	0·09	3·70
Poona	0·04	0·96	1·04	0·09	2·13
Ahmednagar . . .	0·08	1·45	1·09	0·29	2·91
Nasik	0·12	0·47	1·65	0·58	2·82
Khandesh . . .	0·01	0·41	0·88	0·83	2·13

The last period of rainfall extended from the 21st to the 24th in the northern districts (or Khandesh) and to the 27th in the southern districts. Moderately heavy rain fell daily throughout this period in these districts.

The rainfall of the month was hence unusually abundant in this area and was largely in excess. The excess averaged 76 per cent. in the Bombay Deccan, and 35 per cent. in Khandesh. The following comparative data illustrate the distribution of rainfall more fully in this area :—

District.	Rainfall.		
	Average actual, September 1895.	Average normal, September.	Variation from normal.
	Inches.	Inches.	Inches.
Dharwar	4·98	3·82	+ 1·16
Bijapur	8·52	5·58	+ 2·94
Belgaum	7·51	4·52	+ 2·99
Satara	10·35	4·83	+ 5·52
Sholapur	19·15	7·86	+ 11·29
Poona	10·60	7·50	+ 3·10
Ahmednagar	11·89	6·19	+ 5·70
Nasik	9·94	8·04	+ 1·90
Khandesh	8·07	4·49	+ 3·58

Gujarat received a moderately heavy burst of rain on the 8th, and occasional showers from the beginning of the month to the 18th. Kathiawar obtained some light local showers during the same period. The total rainfall of the month was largely in defect in both areas (61 per cent. in Gujarat and 76 per cent. in Kathiawar). Practically no rain fell in Sind.

The following table gives comparative data of the rainfall of the month for the six divisions of the Presidency:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, September 1895.	Variation from normal.	Average actual, September 1895.	Variation from normal.	Percentage variation from normal.
			Inches	Inches.	
Konkan	13·8	−3·0	9·91	−5·06	−34
Bombay Deccan . .	10·1	+1·7	9·65	+4·17	+76
Khandesh . . .	10·8	+1·6	9·52	+2·45	+35
Gujarat	4·2	−4·1	3·13	−4·90	−61
Kathiawar . . .	2·0	−2·4	1·14	−3·56	−76
Sind	0·1	?	0·02	−0·47	−96

The northern coast districts of Madras, Ganjam and the Circars, received more frequent rain than usual. The first storm of the month gave general rain to these districts and an excessive downpour in the districts of Godavari and Kistna, through which it passed. The following gives a brief summary of the rainfall due to this storm:—

District.	Average actual rainfall in 24 hours preceding 8 A.M. of date.				
	4th.	5th.	6th.	7th.	Total of period.
	Inch.	Inches.	Inches.	Inch.	Inches.
Ganjam	0·18	0·64	0·37	0·04	1·23
Vizagapatam . . .	0·17	0·90	0·81	0·06	1·94
Godavari . . .	0·36	1·60	4·79	0·08	6·83
Kistna	0·35	0·53	6·54	0·11	7·53
Nellore	0·22	0·10	0·27	0·01	0·60

The data show the localized character of the rainfall, and also indicate that it occurred chiefly in front of the advancing storm.

Light rain was received from the 12th to the 17th, and moderate rain from the 27th to the 29th, in connection with the second and third storms of the month.

The rainfall of the month was normal in amount in the two northern districts and was nearly double the normal fall in the Godavari and Kistna districts.

The East Coast, Central and South divisions, received light to moderate daily rain during three periods, *viz.*, the 12th to the 15th, the 20th to the 22nd, and the 25th to the 30th. The rainfall of the month was more abundant than usual in the whole area (about 50 per cent. in excess) and was absolutely greatest in South Arcot and Trichinopoly (107 and 90 per cent. in excess respectively).

The southern districts obtained light local showers; but there was no general rain in that area. The rainfall of the month was slightly less than the normal.

The Central and South Central districts obtained rain during two periods, *viz.*, from the 12th to the 15th, and from the 20th to the 30th. The rainfall was well distributed and in excess in all the districts in those two divisions. The excess was small in Coimbatore, and moderate in Bellary and Kurnool, but large in Salem (62 per cent.), Cuddapah (81 per cent.) and Anantapur (55 per cent.)

It is noteworthy that this general excess at the level of the plains accompanied deficient rainfall in the Nilgiris, where the mean rainfall of the month was only 6·37 inches or 2·14 inches (25 per cent.) below the normal.

The Malabar coast districts received light rain from the 1st to the 24th The chief periods of fairly general rain were the 1st to the 3rd, the 7th and 8th, the 14th and 15th, the 19th and the 24th. The rainfall of the month in this division was very scanty, averaging 4·69 inches in amount or 5·51 inches below than the normal average of the month. The following gives comparative data for each of the 22 Collectorates of the Presidency:—

District.	Number of rainy days.		Rainfall.			Percentage variation from normal.
	Average actual, September 1895.	Average normal, September.	Average actual, September 1895.	Average normal, September.	Variation from normal.	
			Inches.	Inches.	Inches.	
Ganjam . .	11·0	10·0	6·85	6·84	+0·01	0
Vizagapatam .	12·0	9·9	7·71	7·40	+0·31	+4
Godavari . .	8·7	8·2	11·59	6·94	+4·65	+67
Kistna . .	7·9	8·0	10·90	5·79	+5·11	+88
Nellore . .	7·4	5·5	5·28	3·61	+1·67	+46
Chingleput .	7·8	6·4	5·80	4·93	+0·87	+18
Madras . .	7·0	7·1	4·41	4·75	−0·34	−7
North Arcot .	8·6	6·8	7·86	5·45	+2·41	+44
South Arcot .	10·1	6·7	10·80	5·23	+5·57	+107
Tanjore . .	7·7	5·8	7·01	4·27	+2·74	+64
Trichinopoly .	10·7	5·9	7·99	4·20	+3·79	+90
Madura . .	5·5	4·8	3·48	2·92	+0·56	+19
Tinnevelly .	1·9	2·4	1·09	1·29	−0·20	−16
Malabar . .	9·4	13·6	4·14	9·15	−5·01	−55
South Canara .	11·9	15·6	5·67	11·72	−6·05	−52
Salem . .	10·6	7·6	8·91	5·50	+3·41	+62
Coimbatore .	5·3	4·8	3·00	2·92	+0·08	+3
Nilgiris . .	11·0	13·7	6·37	8·51	−2·14	−25
Cuddapah .	9·8	6·7	9·32	5·14	+4·18	+81
Anantapur .	7·6	7·2	8·49	5·46	+3·03	+55
Bellary . .	8·4	7·7	6·15	5·13	+1·02	+20
Kurnool . .	10·2	7·3	6·62	5·77	+0·85	+15

Table

Abstract of Observations taken at 8 A.M. at 206

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
I.—Burma Coast and Bay Islands.		...	...	−·007	...	...	...	...	...	...	...	86·1	+0·9	76·1	+1·1	81·1	+1·0	10·0	...	...	...	...	16·9
Bay Island	Port Blair	61	29·800†	?	29·792†	29·910	20th	29·709	16th	·201	80·1	84·9	?	76·6	?	80·8	?	8·3	88·5	10th & 12th.	74·0	2nd	14·5
	Camorta	?	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tenasserim	Mergui*	96	29·850	?	29·878	29·956	19th	29·720	1st	·236	78·2	84·5	?	73·9	?	79·2	?	10·6	89·7	12th	72·1	17th	17·6
	Tavoy	26	29·901	?	29·858	30·048	30th	29·760	1st	·288	77·3	84·6	?	73·7	?	79·2	?	10·9	91·2	12th	72·2	4 days	19·0
	Moulmein	94	29·787	+·005	29·818	29·940	30th	29·635	1st	·305	78·1	85·5	+1·0	75·0	+0·9	80·3	+1·0	10·5	91·5	28th	72·3	24th	19·2
	Toungoo	183	29·654	−·005	29·779	29·810	30th	29·505	16th	·305	79·9	90·0	+1·4	76·2	+0·8	83·1	+1·1	13·8	91·7	2nd	74·2	5 days	20·5
Lower Burma	Rangoon	41	29·810	−·010	29·788	29·961	30th	29·648	1st	·313	78·8	86·8	+1·3	76·5	+0·6	81·7	+1·0	10·3	90·7	7th	72·9	27th	17·8
	Bassein	27	29·804	−·019	29·766	29·965	30th	29·662	1st	·303	79·7	86·4	+1·1	76·7	+1·2	81·6	+1·2	9·7	89·7	24th	74·8	30th	14·9
	Diamond Island,	41	29·795	−·013	29·771	29·918	30th	29·649	1st	·269	80·8	84·7	?−0·1	78·1	+2·8?	81·4	? +1·4	6·6	87·6	12th	75·3	29th	12·3
Arakan	Akyab	20	29·799	+·001	29·762	29·918	20th	29·626	17th	·292	81·2	87·4	+0·8	78·0	0	82·7	+0·4	9·4	91·2	2 days	75·2	9th	16·0
II.—Burma Inland.		...	...	...	...	...	...	...	...	...	...	88·0	−0·5	73·3	+0·9	80·7	+0·3	14·7	...	...	...	...	23·7
Central Burma	Thayetmyo	134	29·691	0	29·766	29·848	30th	29·542	16th	·306	81·1	90·6	+0·9	76·7	+1·0	83·7	+1·0	13·9	94·1	2 days	74·6	29th	19·5
	Minbu	?	29·667	?	?	29·824	30th	29·532	16th	·292	80·0	90·1	?	76·9	?	83·5	?	13·2	94·1	13th	74·1	2 days	20·0
	Yamethin	645	29·189	?	29·785	29·323	30th	29·055	16th	·268	79·6	91·4	?	75·1	?	83·3	?	16·3	97·2	30th	73·0	29th	24·2
	Taunggyi	?	?	?	?	?	?	?	?	?	67·7	78·4	?	62·1	?	70·3	?	16·3	81·7	2 days	55·5	28th	26·2
Upper Burma	Mandalay	249	29·581	?	29·780	29·721	30th	29·443	16th	·278	81·1	90·9	?	77·3	?	84·1	?	13·6	98·5	1st	73·1	1st	25·4
	Kindat	?	29·453	?	?	29·606	30th	29·308	16th	·298	77·6	87·4	−1·8	75·6	+0·8	81·5	−0·5	11·8	92·3	6th	71·0	28th	21·3
	Lashio	?	27·086	?	?	27·185	30th	26·994	1st	·191	73·0	84·4	?	67·4	?	75·9	?	17·0	90·5	2 days	64·0	2 days	26·5
	Bhamo	?	29·443	?	?	29·552	30th	29·329	16th	·223	78·6	90·8	?	75·0	?	82·9	?	15·8	97·6	14th	70·8	29th	26·8
III.—Assam.		...	...	+·011	...	...	...	...	...	...	...	88·3	−0·4	76·2	0	82·3	−0·2	12·1	...	...	...	...	21·2
Assam (Surma)	Silchar	104	29·712	? +·018	29·767	29·794	20th	29·562	17th	·232	79·9	90·2	+0·5	76·2	−0·1	83·2	+0·2	14·0	96·6	2 days	73·3	26th	23·3
	Dapoota	?	29·520	?	29·763	29·635	18th	29·410	1st	·225	79·7	90·2	?	74·9	?	82·5	?	15·3	95·9	28th	72·4	30th	23·5
Brahmaputra	Sibsagar	333	29·484	+·008	29·776	29·594	30th	29·379	16th	·215	78·4	86·8	−1·8	76·2	−0·3	81·5	−1·1	10·6	92·2	28th	72·5	28th	19·7
	Dhubri	115	29·678	+·006	29·748	29·785	30th	29·559	2 days	·226	79·9	86·0	+0·2	77·4	+0·4	81·8	+0·3	8·6	91·2	5th	72·8	29th	18·4
IV.—Bengal and Orissa.		...	...	+·015	...	...	...	...	...	...	...	89·3	+1·4	78·0	+0·8	83·7	+1·1	11·2	...	...	...	...	19·2
East Bengal	Chittagong	87	29·714	0	29·749	29·809	20th	29·547	16th	·262	80·5	87·5	+0·9	76·3	+0·1	81·9	+0·5	11·2	91·2	30th	74·1	5 days	17·1
	Lungleh	?	?	?	?	?	?	?	?	?	69·3	76·7	?	66·7	?	71·7	?	10·0	80·8	4th	64·5	11th	16·3
	Noakhali	43	29·754	?	29·744	29·844	20th	29·591	16th	·253	81·9	87·2	?	78·0	?	82·6	?	9·2	90·5	4th & 27th.	73·3	9th	17·2
	Comilla	36	29·757	?	29·741	29·855	20th	29·593	16th	·262	81·2	88·8	?	76·5†	?	82·7†	?	12·3	93·3	4th	72·8	10th	20·5
	Sirajganj	49	29·730	?	29·729	29·829	29th & 30th.	29·582	17th	·247	81·2	87·3	?	78·1	?	82·7	?	9·2	91·8	4th	73·2	3 days	18·6
	Narayanganj	26	29·760	+·015	29·733	29·859	20th	29·608	17th	·251	82·9	88·6	+0·1	80·1	+1·4	84·4	+0·8	8·5	93·1	28th	74·2	9th	18·9
	Barisal	13	29·779	?	29·737	29·867	20th	29·640	16th	·227	83·4	89·5	+2·0	79·1	+1·4	84·3	+1·7	10·4	93·3	4th	74·9	9th	18·4
	Mymensingh	59	29·729	+·006	29·739	29·823	20th	29·579	17th	·244	81·7	87·5	−0·1	78·1	+1·0	82·8	+0·5	9·4	93·7	4th	73·6	10th	20·1
Deltaic Bengal	Faridpur	46	29·745	?	29·739	29·839	30th	29·598	17th	·241	82·7	88·1	?	79·2	?	83·7	?	8·9	90·8	4 days	73·9	9th	16·9
	Jessore	33	29·742	+·007	29·722	29·841	30th	29·601	17th	·240	83·7	90·7	+1·6	78·5	+0·1	84·6	+0·9	12·2	93·5	2 days	73·9	11th	19·6
	Calcutta	21	29·746	+·015	29·713	29·859	30th	29·596	17th	·263	83·2	89·4	+2·0	78·8	+1·0	84·1	+1·5	10·6	92·4	2 days	74·2	28th	18·2
	Saugor Island	25	29·734	+·010	29·703	29·833	21st	29·573	18th	·260	84·0	89·8	+2·0	81·0	+1·6	85·5	+1·8	8·8	92·7	17th	76·0	30th	16·7
	Krishnagar	47	29·719	?	29·714	29·835	30th	29·575	1st	·260	83·6	92·0	?	78·2	?	85·1	?	13·8	95·3	4 days	73·2	11th	22·1
	Midnapore	149	29·620	?	29·716	29·740	30th	29·461	19th	·279	83·6	92·0	?	78·5	?	85·3	?	13·5	95·3	14th & 16th.	75·1	18th	20·2

† Mean of 29 days.

I.

stations in India, Burma, etc., in September 1895.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th September 1895.	Normal rainfall for period 1st June to 30th September.	Variation from normal of period, 1st June to 30th September.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20·48	20·02	−0·89	...	...	...	...	I.—Burma Coast and Bay Islands.	
1	1	...	...	...	...	11	12	5	12·1	9·3	+ 30	89	·920	8·1	17	?	?	27·83	19·56	+8·27	86·00	69·53	+16·47	3·65	Port Blair .	Bay Islands.
...	...	...	...	...	...	...	...	...	...	?	...	...	...	...	...	?	?	...	?	?	...	?	...	...	Camorta .	
...	6	1	...	...	4	6	4	6	1·5	1·5	0	92	·889	4·8	18	?	?	26·31	26·24	+0·07	113·62	118·52	− 4·90	3·26	Merguí* .	Tenasserim.
24	...	...	...	1	1	3	...	1	1·4	?	?	92	·865	7·5	20	?	?	31·30	?	?	138·35	?	?	5·48	Tavoy.	
...	...	1	6	10	4	4	4	1	2·6	2·8	− 7	91	·870	8·4	16	22·36	−6·36	24·00	28·85	−4·85	133·96	149·35	−15·39	4·00	Moulmein.	
10	2	1	...	11	5	1	...	...	2·3	2·8	− 18	90	·926	7·6	14	17·55	−3·55	11·27	12·21	−0·94	49·81	63·23	−13·42	3·00	Toungoo.	
...	1	3	4	3	5	5	6	3	3·5	3·8	− 8	92	·920	8·2	13	19·55	−6·55	14·45	16·04	−1·59	73·10	73·42	− 0·32	4·19	Rangoon .	Lower Burma.
6	...	1	3	6	6	1	2	5	5·3	3·4	+ 56	91	·928	6·6	17	21·27	−4·27	13·26	16·00	−2·74	75·02	86·69	−11·67	2·34	Bassein.	
...	1	5	1	2	2	10	5	4	10·4	6·8	+ 53	86	·896	7·5	16	18·90	−2·90	19·69	19·19	+0·50	84·65	91·36	− 6·71	5·22	Diamond Island.	
...	3	9	11	4	3	...	...	...	2·9	3·0	− 3	92	·982	7·8	18	17·73	+0·27	16·17	22·04	− 5·87	132·18	158·83	−26·65	3·61	Akyab. .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8·73	9·48	−1·38	...	...	...	...	II.—Burma Inland.	
...	2	1	...	8	16	2	...	1	4·8	4·7	+ 2	84	·878	7·9	12	13·36	−1·36	5·81	6·23	−0·42	18·92	26·57	− 7·65	1·01	Thayetmyo .	Central Burma.
2	1	1	4	13	4	1	1	3	8·8	?	?	87	·897	5·8	11	?	?	6·14	?	?	20·24	?	?	1·58	Minbu.	
1	2	1	...	11	11	1	1	2	4·7	?	?	86	·867	1·8	9	?	?	6·78	?	?	17·61	?	?	1·35	Yamethin.	
9	...	3	...	12	...	6	...	...	?	?	?	87	·599	6·8	13	?	?	5·67	?	?	37·19	?	?	1·22	Taunggyi.	
2	1	...	...	4	11	9	1	2	5·4	?	?	86	·904	6·8	12	?	?	14·06	?	?	24·71	?	?	4·70	Mandalay .	Upper Burma.
25	2	1	...	...	...	...	...	2	1·1	?	?	94	·907	8·6	11	?	?	10·38	12·72	−2·34	55·31	51·24	+ 4·07	2·66	Kindat.	
			Not	rec	orde	d.			?	?	?	90	·725	5·9	12	?	?	7·78	?	?	36·94	?	?	2·57	Lashio.	
15	...	7	...	1	1	2	2	2	1·7	?	?	90	·893	5·2	13	?	?	13·23	?	?	48·09	?	?	2·95	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16·61	12·42	+7·94	...	...	...	...	III.—Assam.	
27	1	...	1	...	1	...	...	...	1·5	2·7	− 44	89	·910	7·9	17	15·40	+1·60	13·33	13·13	+0·20	67·54	74·48	− 6·94	2·56	Silchar .	Assam (Surma) Valley.
...	2	5	11	2	4	2	4	...	?	?	?	88	·888	6·8	12	?	?	5·37	?	?	45·16	?	?	1·05	Dapoota.	
6	...	8	2	5	1	7	1	...	3·7	2·5	+ 48	96	·934	8·5	14	15·09	−1·09	21·31	12·31	+9·00	72·03	56·82	+15·21	6·28	Sibsagar .	Brahmaputra.
4	3	7	5	4	1	5	...	1	4·4	3·2	+ 37	91	·934	7·3	13	12·75	+0·25	26·44	11·82	+14·62	94·91	66·54	+28·37	9·58	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9·31	11·08	−2·47	...	...	...	...	IV.—Bengal and Orissa.	
1	1	7	8	9	3	1	...	...	4·0	4·5	− 11	90	·934	6·6	12	12·73	−0·73	15·99	11·39	+4·60	62·86	69·46	− 6·60	6·98	Chittagong .	East Bengal.
			Not	rec	orde	d.			?	?	?	95	·681	?	20	?	?	26·07	?	?	92·65	?	?	5·15	Lungleh.	
...	1	4	6	7	3	5	2	2	3·3	?	?	90	·983	4·3	13	15·85	−2·85	5·42	17·80	−12·38	63·81	93·17	−29·36	1·25	Noakhali.	
...	...	1	17	...	12	...	...	...	3·1	?	?	93	·989	6·4	11	13·50	−2·50	9·21	11·40	−2·19	41·32	65·16	−23·84	2·10	Comilla.	
19	...	1	1	2	7	...	...	...	2·1	?	?	91	·965	7·5	8	11·70	−3·70	10·29	9·87	+0·42	35·95	43·47	− 7·52	1·87	Sirajganj.	
3	...	4	5	9	3	5	1	...	5·3	4·6	+ 15	89	·999	8·4	9	12·09	−3·09	5·22	8·18	−2·96	26·58	45·30	−18·72	1·15	Narayanganj.	
17	...	3	2	3	2	2	...	...	2·0	?	?	87	1·005	6·6	9	14·85	−5·85	4·99	11·01	−6·02	34·09	55·21	−21·12	1·63	Barisal.	
3	2	7	7	7	3	1	...	...	3·3	?	?	90	·975	6·4	12	15·35	−3·35	10·10	13·26	−3·16	57·03	60·23	− 3·20	2·57	Mymensingh.	
10	1	2	4	4	7	2	...	...	3·7	?	?	90	1·009	5·4	10	11·75	−1·75	6·07	10·04	−3·97	34·84	46·95	−12·11	1·67	Faridpur .	Deltaic Bengal.
1	4	...	3	5	8	4	4	1	3·0	3·4	− 12	88	1·019	6·4	9	9·50	−0·50	4·68	8·84	−4·16	26·02	43·52	−17·50	1·73	Jessore.	
3	1	4	2	4	4	8	3	1	3·6	4·5	− 20	85	·970	5·0	10	14·18	−4·18	4·03	9·60	−5·57	32·42	45·55	−13·13	0·74	Calcutta.	
1	3	6	2	1	5	5	5	2	12·5	10·1	+ 24	87	1·015	7·6	6	14·45	−8·45	4·61	12·83	−8·22	34·73	54·95	−20·22	1·42	Saugor Island.	
1	...	2	5	4	9	...	8	1	4·3	?	?	81	·935	6·1	6	10·25	−4·25	2·90	7·90	−5·00	22·40	38·08	−15·68	0·81	Krishnagar.	
7	8	3	1	1	7	1	...	2	3·5	?	?	83	·953	2·3	12	12·05	−0·05	8·86	7·17	+1·69	37·06	41·06	− 4·00	2·87	Midnapore.	

* Wind observations for 27 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure 8 A.M. in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal.	Bankura	298	29·449	P	29·698	29·568	30th	29·282	19th	·286	82·7	91·4	P	78·1	P	84·8	P	13·3	94·1	5 days	75·6	19th & 30th	18·5
	Raniganj*	334	29·419	P	29·702	29·566	30th	29·243	19th	·323	81·9	91·9	P	77·8	P	84·9	P	14·1	95·7	18th	72·9	2nd	22·8
	Burdwan	99	29·670	+·011	29·716	29·783	30th	29·525	1st	·258	83·1	91·3	+1·8	79·6	+0·9	85·5	+1·4	11·7	94·2	14th	76·2	30th	18·0
	Naya Dumka	489	29·272	P	29·718	29·392	30th	29·136	19th	·256	82·6	90·1	P	76·8	P	83·4	P	13·3	93·5	18th	73·8	25th	19·7
	Berhampore	67	29·704	+·013	29·720	29·828	30th	29·567	1st	·261	83·0	90·2	+1·4	78·9	+0·5	84·6	+1·0	11·3	92·7	3 days	73·8	11th	18·9
	Rampore Boalia	70	29·697	P	29·716	29·804	30th	29·565	17th	·239	83·3	89·6	P	78·9	P	84·2	P	10·7	92·1	4 days	74·1	29th & 30th	18·0
	Malda†	72	P	P	P	P	P	P	P	P	82·6	91·0	P	78·5	P	84·8	P	12·5	95·1	18th	76·0	13th & 16th	19·1
	Bogra	61	29·713	+·017	29·727	29·850	29th	29·579	17th	·271	82·5	88·7	+0·7	78·3	+1·1	83·5	+0·9	10·4	93·2	4th	73·7	29th	19·5
North Bengal	Dinajpur	123	29·651	+·011	29·728	29·772	29th	29·530	1st	·242	81·3	89·1	+0·6	78·2	+0·7	83·7	+0·7	10·9	93·8	5th	74·7	9th	19·1
	Rangpur	123	29·664	P	29·742	29·786	29th	29·544	17th	·242	81·6	88·7	P	77·6	P	83·2	?	11·1	93·8	5th	71·2	9th	22·6
	Jalpaiguri	284	29·508	+·021	29·750	29·614	20th	29·396	1st	·218	80·0	88·6	+1·3	76·1	+0·8	82·3	+1·1	12·5	93·4	2 days	73·1	2 days	20·3
Orissa	Balasore	56	29·718	P	29·720	29·824	21st	29·560	19th	·264	83·4	90·6	+3·0	78·3	+0·8	84·4	+1·9	12·3	93·9	2 days	74·8	18th & 30th	19·1
	False Point	21	29·744	+·021	29·707	29·864	21st	29·608	1st	·256	83·7	89·3	+1·5	78·5	+0·5	84·0	+1·0	10·8	94·5	17th	76·1	4 days	18·4
	Cuttack	80	29·678	+·018	29·701	29·788	21st	29·556	1st	·232	82·1	91·7	+1·9	78·6	+0·7	85·2	+1·3	13·1	96·7	24th	75·2	19th	21·5
	Shortt's Island	P	29·737	P	P	29·826	22nd	29·588	16th	·238	84·9	90·5	P	‡80·3	P	‡85·4	P	10·2	95·0	16th	75·8	20th	19·2
	Puri	20	29·750	P	29·714	29·850	21st	29·633	17th	·217	83·2	89·9	P	79·8	P	84·9	P	10·1	94·7	17th	74·6	19th	20·1
V.—Gangetic Plain and Chota Nagpur.		...	...	+·023	...	...	...	...	...	...	...	90·9	+1·5	76·8	+0·1	83·8	+0·8	14·1	...	...	...	...	22·9
Chota Nagpur	Hazaribagh	2,007	27·772	+·027	29·721	27·879	30th	27·597	19th	·282	77·9	87·1	+2·7	72·8	+0·7	79·9	+1·7	14·3	89·7	15th & 26th	70·3	25th & 30th	19·4
	Ranchi	2,128	27·640	P	29·704	27·744	30th	27·423	19th	·321	77·9	85·9	+2·7	72·4	+1·6	79·2	+2·2	13·5	89·2	29th	69·9	26th	19·3
	Daltonganj	730?	29·032	P	29·716	29·141	30th	28·875	1st	·263	82·6	92·1	P	76·1	P	84·1	P	16·0	95·8	11th	68·8	26th	27·0
	Chaibassa	760	28·998	+·032	29·706	29·112	30th	28·733	19th	·379	81·7	91·7	+3·0	76·5	+0·8	84·1	+1·9	15·2	94·9	14th	72·0	27th	22·9
Bihar, South	Gaya	375	29·392	+·034	29·721	29·514	30th	29·266	1st	·248	82·5	92·7	+1·9	77·8	−0·1	85·3	+0·9	14·9	96·5	15th	74·8	4 days	21·7
	Dehri	351	29·398	P	29·703	29·525	30th	29·257	1st	·268	83·7	92·1	P	?	P	P	P	P	96·8	11th	P	P	P
	Patna	183	29·577	+·017	29·712	29·713	30th	29·440	1st	·273	84·3	90·3	+0·1	78·8	−0·3	84·6	−0·1	11·5	93·0	2 days	73·2	29th	19·8
	Arrah	190	29·571	P	29·713	29·703	30th	29·434	1st	·269	83·0	92·1	P	78·1	P	85·1	P	14·0	94·9	25th	74·5	11th & 21st	20·4
	Buxar	239	29·507	P	29·701	29·631	30th	29·360	20th	·271	83·0	91·1	P	77·5	P	84·3	P	13·6	94·0	11th & 15th.	71·3	30th	22·7
Bihar, North	Purnea	125	29·647	+·019	29·726	29·768	30th	29·514	1st	·254	82·3	89·9	+1·0	78·3	+1·0	84·1	+1·0	11·6	94·2	3 days	75·2	19th	19·0
	Bhagalpur	160	29·595	P	29·708	29·725	30th	29·464	1st	·261	83·4	90·8	P	78·6	P	84·7	P	12·2	94·2	8th	75·6	29th	18·6
	Darbhanga	166	29·596	+·011	29·716	29·715	30th	29·470	1st	·245	83·6	88·8	+0·6	79·8	+1·0	84·3	+0·8	9·0	93·0	3 days	75·5	12th	17·5
	Muzaffarpur	178	29·584	P	29·716	29·717	30th	29·454	1st	·263	82·4	90·1	P	77·9	P	84·0	P	12·2	93·2	28th	75·2	4 days	18·0
	Motihari	224	29·537	P	29·719	29·667	30th	29·395	1st	·272	82·2	89·4	P	76·6	P	83·0	?	12·8	93·5	5th	73·8	3 days	19·7
	Chapra	181	29·577	P	29·712	29·707	30th	29·436	1st	·271	83·0	90·9	P	77·9	P	84·4	P	13·0	94·2	8th	72·6	19th	21·6
N.-W. Provinces (Eastern Districts).	Benares	267	29·484	+·026	29·707	29·620	30th	29·258	20th	·362	81·8	92·0	+1·1	76·8	−0·7	84·4	+0·2	15·2	96·3	15th	69·6	25th	26·7
	Allahabad	309	29·442	+·023	29·705	29·568	30th	29·302	20th	·266	83·3	93·4	+2·6	76·8	0	85·1	+1·3	16·6	96·6	4 days	70·3	25th	26·3
N.-W. Provinces (East Sub-Montane).	Gorakhpur	256	29·190	+·017	29·705	29·621	30th	29·335	20th	·286	81·6	90·2	−0·2	76·5	−1·4	83·4	−0·8	13·7	94·9	17th	72·2	12th & 20th	22·7
Oudh, South	Lucknow	368	29·379	+·020	29·706	29·512	30th	29·253	10th	·259	82·5	92·1	+0·4	75·9	−0·4	84·0	0	16·2	96·3	15th	67·8	25th	28·5
Oudh, North	Bahraich	403	29·345?	P	29·709?	29·494	30th	29·204	1st	·290	81·6	90·2	P	76·3	P	83·2	P	13·9	94·4	18th & 26th	72·0	21st & 24th.	22·4
N.-W. Provinces (Central).	Cawnpore	416	29·333	P	29·703	29·459	27th	29·227	1st	·232	82·7	93·2	P	76·0	P	84·6	P	17·2	99·9	25th	68·0	25th	31·9
	Mainpuri	516	29·227	P	29·702	29·354	30th	29·102	1st	·252	81·7	93·6	P	76·0	P	84·8	P	17·6	98·8	24th	69·0	27th	29·8

* Mean of 5 days. † Mean of 23 days. ‡ Mean of 28 days.

I—*continued.*

in India, Burma, etc., in September 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.							Heaviest rainfall during month.	Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th September 1895.	Normal rainfall for period, 1st June to 30th September.	Variation from normal of period, 1st June to 30th September.			
23	1	...	2	2	..	1	1	...	0·9	?	?	82	·918	4·4	9	12·55	−3·55	7·57	7·98	−0·41	40·40	44·15	−3·75	3·86	Bankura .	Central Bengal.
11	1	1	3	3	1	3	1	1	1·9	?	?	85	·933	4·2†	8	11·40	−3·40	7·90	7·26	+0·64	34·82	42·96†	−8·14	3·06	Raniganj.*	
9	3	1	1	5	1	7	2	1	2·9	3·1	− 3	83	·944	5·5	10	12·09	−2·09	7·96	8·51	−0·55	32·69	41·15	−8·46	3·20	Burdwan.	
...	3	1	3	7	6	4	2	4	4·6	?	?	82	·917	4·9	13	13·00	0	9·43	10·63	−1·20	36·83	46·28	−9·45	2·10	Naya Dumka.	
2	1	1	7	2	8	5	2	2	4·0	3·7	+ 8	88	1·003	6·4	10	12·55	−2·55	9·86	9·74	+0·12	30·07	41·45	−11·38	3·63	Berhampore.	
9	...	4	2	6	5	3	1	...	4·3	?	?	87	·994	4·6	11	12·15	−1·15	10·49	11·27	−0·78	35·15	44·64	−9·49	3·28	Rampore Boalia.	
1	1	2	...	5	3	9	...	2	2·3	?	?	88	·980	4·2	8	11·80	−3·80	4·20	11·50	−7·30	33·93	44·00	−10·07	0·78	Malda.†	
13	...	1	3	9	...	4	...	...	2·6	?	?	87	1·005	5·1	11	12·05	−1·05	10·44	10·80	−0·36	38·17	50·09	−11·92	2·80	Bogra.	
8	1	6	4	3	4	3	...	...	3·3	?	?	89	·955	6·7	13	12·40	+0·60	20·81	10·54	+10·27	58·75	53·23	+5·52	5·15	Dinajpur .	North Bengal.
4	1	8	6	1	3	5	2	...	2·5	?	?	89	·963	6·9	14	13·05	+0·95	21·42	13·61	+7·81	56·77	61·66	−4·89	6·20	Rangpur.	
5	4	7	5	6	1	...	...	2	2·5	?	?	87	·889	6·3	13	15·35	−2·35	9·63	22·21	−12·58	45·60	103·37	− 7·77	2·04	Jalpaiguri.	
7	2	3	...	...	2	9	3	4	4·3	?	?	86	·996	3·3	7	13·70	−6·70	6·64	12·58	− 5·94	46·88	45·90	+ 0·98	2·38	Balasore .	Orissa.
1	2	2	6	1	2	7	6	3	9·0	7·9	+14	83	·965	6·5	4	12·82	−8·82	2·61	13·06	−10·45	45·77	45·58	+ 0·19	1·32	False Point.	
5	...	6	1	2	...	6	7	3	2·8	2·4	+17	82	·913	4·7	10	11·73	−1·73	6·80	11·20	−4·40	60·12	45·98	+14·14	3·02	Cuttack.	
1	4	5	1	2	4	8	3	2	?	?	?	82	·984	4·6	9	?	?	12·31	?	?	47·89	?	?	4·38	Shortt's Island.	
8	4	6	...	1	...	7	1	3	9·6	?	?	83	·943	4·7	10	13·35	−3·35	12·90	10·02	+ 2·88	61·63	37·63	+24·20	5·26	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	6·44	7·75	−1·18	...	...	...	...	**V.—Gangetic Plain and Chota Nagpur.**	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
1	2	...	2	3	6	3	5	8	7·3	7·0	+ 4	80	·764	6·1	9	12·55	−3·55	8·85	9·03	−0·18	38·25	44·10	−5·85	3·10	Hazaribagh.	Chota Nagpur.
2	2	5	2	2	2	5	4	6	6·2	?	?	80	·761	2·5	6	14·50	−8·50	6·02	9·25	−3·23	46·13	45·29	+ 0·84	3·49	Ranchi.	
...	3	...	2	2	15	3	3	2	3·9	?	?	78	·869	3·1	2	?	?	3·49	?	?	26·51	?	?	3·08	Daltonganj.	
4	5	3	1	2	1	6	4	4	1·2	?	?	82	·890	4·6	4	12·25	−8·25	4·34	8·24	−3·90	38·38	43·27	−4·89	2·98	Chaibassa.	
14	1	1	4	1	1	1	7	...	4·1	2·3	+78	78	·865	4·1	7	9·82	−2·82	4·15	7·37	−3·22	29·89	41·27	−11·38	1·52	Gaya. .	Bihar, South.
4	...	1	4	3	7	9	1	1	6·6	?	?	79	·909	4·2	6	10·38	−4·38	5·26	7·67	−2·41	36·09	36·35	−0·26	3·40	Dehri.	
6	...	1	5	4	4	2	8	...	3·9	2·9	+34	79	·923	5·6	8	9·18	−1·18	7·46	6·14	+1·32	39·94	38·99	+0·95	2·56	Patna.	
...	2	3	2	5	5	5	6	2	2·9	?	?	85	·962	3·6	8	9·80	−1·80	5·61	6·87	−1·26	32·72	34·78	− 2·06	1·53	Arrah.	
4	...	2	9	2	3	3	6	1	3·9	?	?	82	·925	4·2	4	9·20	−5·20	7·92	7·19	+0·73	45·63	33·44	+12·19	2·85	Buxar.	
7	1	9	6	2	2	2	2	1	3·3	2·0	+65	87	·965	6·2	8	11·00	−3·00	5·48	14·12	−8·64	39·41	54·64	−15·23	1·20	Purnea .	Bihar, North.
4	1	4	4	6	2	6	2	1	3·2	?	?	84	·955	5·4	6	9·65	−3·65	5·56	7·60	−2·04	37·39	36·62	+0·77	2·44	Bhagalpur.	
5	...	3	10	6	...	3	2	1	3·3	3·6	− 3	87	·973	5·1	9	9·73	−0·73	7·98	7·76	+0·22	34·45	42·72	−8·27	2·51	Darbhanga.	
14	...	1	7	5	...	...	2	1	2·8	?	?	89	·990	3·5	9	9·20	−0·20	6·20	9·97	−3·77	38·46	39·65	−1·19	1·37	Muzaffarpur.	
3	...	7	11	4	...	...	...	5	4·9	?	?	86	·954	4·9	14	8·67	+5·33	12·12	9·16	+2·96	57·06	39·03	+18·03	3·19	Motihari.	
3	1	2	5	5	3	4	6	1	3·5	?	?	84	·944	4·0	8	8·30	−0·30	7·68	6·90	+0·78	33·11	35·13	−2·02	3·17	Chapra.	
11	1	...	6	...	2	4	6	...	3·1	3·9	−21	83	·908	4·2	4	8·91	−4·91	5·88	6·59	−0·71	26·69	34·29	− 7·60	4·95	Benares .	N.-W. Provinces (Eastern Districts).
5	2	...	4	2	4	4	7	2	4·4	2·9	+52	78	·887	4·4	5	7·73	−2·73	3·91	6·05	−2·14	25·94	35·17	−9·23	1·82	Allahabad.	
1	5	3	3	4	5	...	6	3	1·4	2·1	−33	82	·887	4·9	9	8·55	+0·45	9·55	8·56	+0·99	48·18	43·84	+4·34	4·84	Gorakhpur .	N.-W. Provinces (East Submontane).
4	1	6	2	3	2	7	3	2	?	2·8	?	81	·899	4·5	8	7·55	+0·45	5·01	6·27	−1·26	32·90	34·73	−1·83	1·34	Lucknow .	Oudh, South.
12	1	2	7	4	...	...	...	4	1·4§	?	?	84	·920	2·6	9	?	?	11·74	7·45	+4·29	45·48	35·08	+10·40	4·45	Bahraich .	Oudh, North.
4	1	1	5	4	...	2	11	2	3·6	?	?	77	·866	1·8	4	6·8	−2·8	4·34	4·57	−0·23	24·19	27·86	−3·67	2·80	Cawnpore .	N.-W. Provinces (Central).
23	...	...	1	...	...	1	5	...	0·3	?	?	76	·836	2·9	3	?	?	3·04	6·09	−3·05	25·63	30·00	−4·37	1·88	Mainpuri.	

† Mean of 23 days. § Mean of 27 days. * Mean of 25 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
VI.—Upper Sub-Himalayas		...	...	+·019	...	...	...	...	...	...	...	94·6	+2·4	73·8	+0·4	84·2	+1·4	20·8	...	...	...	...	32·5
N.-W. Provinces (Sub-montane).	Bareilly	568	29·173	+·026	29·706	29·316	30th	29·040	1st	·276	81·0	92·0	+1·7	75·8	−0·1	83·9	+0·8	16·2	95·3	25th & 26th.	65·7	24th	29·8
	Dehra Dun	2,233	27·554	+·021	29·739	28·689	30th	27·417	1st	·272	74·1	85·8	+1·5	69·2	−1·1	77·5	+0·2	16·6	88·0	19th	63·0	25th & 26th	25·0
	Roorkee	887	28·853	+·014	29·710	28·990	30th	28·717	1st	·273	78·9	92·7	+1·5	72·5	−1·1	82·7	+0·2	20·2	95·7	10th	63·3	25th	32·4
	Meerut	738	28·995	+·015	29·700	29·119	30th	28·877	1st	·242	80·5	93·8	+2·2	74·9	+0·2	84·4	+1·2	18·9	97·5	25th	65·0	24th	32·5
Punjab, Central.	Delhi	718	29·021	+·016	29·700	29·142	30th	28·895	1st	·247	84·0	96·2	+3·6	77·5	+0·9	86·9	+2·3	18·7	100·5	25th	72·9	27th	27·6
	Lahore	702	29·017	+·012	29·687	29·152	30th	28·901	10th	·251	83·1	100·0	+3·3	75·9	+2·9	87·9	+3·1	24·1	103·3	4 days	67·1	24th	36·2
Punjab (Sub-montane).	Umballa	962?	28·814?	?	29·702?	28·956	30th	28·684	1st	·272	79·2	93·4	?	72·9	?	83·2	?	20·5	97·6	25th	62·0	24th	35·6
	Patiala	?	28·921	?	?	29·062	30th	28·746	10th	·316	81·6	95·2	?	73·9	?	84·5	?	21·3	97·8	12th	63·9	24th	33·9
	Ludhiana	812	28·925	+·014	29·705	29·060	30th	28·813	1st & 10th	·247	82·0	97·4	+2·6	74·9	0	86·2	+1·3	22·5	101·0	24th	67·5	24th	33·5
Punjab, North	Sialkot	830	28·910	+·035	29·710	29·051	30th	28·767	1st	·284	82·1	98·0	+2·7	75·2	+1·9	86·7	+2·3	22·8	100·7	15th	68·1	23rd	32·6
	Rawalpindi	1,683	28·077	+·017	29·731	28·209	30th	27·961	1st	·248	78·3	96·2	+2·8	68·9	+0·2	82·6	+1·5	27·3	100·5	8th	61·6	21st & 23rd	38·9
VII.—Indus Valley and North-West Rajputana.		...	...	+·029	...	...	...	...	...	...	...	99·	+1·7	74·3	−0·9	86·9	+0·4	25·0	...	...	...	...	37·2
Punjab, West	Peshawar	1,110	28·664	+·033	29·712	28·780	30th	28·531	8th	·249	78·3	96·2	+0·5	69·1	−0·9	82·7	−0·2	27·1	103·0	9th	62·0	26th	41·0
	Mardan	?	?	?	?	?	?	?	?	?	77·7	97·9	?	69·1	?	83·5	?	28·8	103·0	3 days	62·0	22nd & 27th	41·0
	Khushab	612	29·104	?	29·685	29·241	30th	28·990	1st	·251	84·0	101·9	?	75·1	?	88·6	?	26·8	107·3	7th	67·5	24th	39·8
	Montgomery	558	29·162	?	29·682	29·281	30th	29·044	9th	·237	87·1	102·9	?	75·0	?	89·0	?	27·9	109·9	9th	66·5	24th	43·4
	D. I. Khan	573	29·127	+·004	29·672	29·270	18th	28·983	8th	·287	81·1	101·9	+1·3	72·2	−2·8	87·1	−0·8	29·7	108·1	6th	63·8	25th	44·3
	Mooltan	420	29·288	+·009	29·676	29·401	30th	29·166	8th & 9th	·235	83·3	101·6	+1·9	75·7	−1·7	88·7	+0·1	25·9	105·4	9th & 30th	70·1	20th	35·3
	Sirsa	662	29·068	+·017	29·692	29·172	26th	28·951	8th	·221	84·4	103·6	+5·4	77·5	+2·5	90·6	+4·0	26·1	108·6	10th	67·3	23rd	41·3
Sind and Cutch	Jacobabad	186	29·560	+·053	29·707	29·661	25th	29·440	8th	·221	82·7	103·6	+0·6	74·2	−1·7	89·0	−0·6	29·4	107·4	3rd & 9th	67·1	21st	40·3
	Hyderabad	96	29·685	?	29·734	29·798	23rd	29·571	8th	·227	81·6	97·4	+0·2	74·8	−1·4	86·2	−0·6	22·6	102·2	9th	72·0	26th & 27th	30·2
	Kurrachee	49	29·768	+·044	29·768	29·875	23rd	29·660	7th	·215	80·3	88·4	+0·1	76·3	−0·6	82·4	−0·3	12·1	94·0	28th	73·8	26th & 27th.	20·2
	Bhuj	395	29·436	+·044	29·786	29·530	23rd	29·322	7th	·208	80·2	94·1	+2·4	73·4	−1·3	83·8	+0·6	20·7	101·5	29th	70·4	24th	31·1
Rajputana, West	Bickaneer	753	28·980	?	29·689	29·091	26th	28·853	8th	·238	85·4	101·0	+3·1	78·9	−0·2	90·0	+1·5	22·1	107·1	9th	70·5	22nd	36·6
	Pachpadra	380	29·440	?	29·778	29·537	26th	29·320	8th	·217	82·1	100·5	?	74·9	?	87·7	?	25·6	107·0	30th	68·2	27th	38·8
VIII.—East Rajputana, Central India and Gujarat.		...	...	+·035	...	...	...	...	...	...	...	92·4	+3·0	74·2	+0·4	83·3	+1·7	18·3	...	...	...	...	29·7
Rajputana, East.	Jeypore	1,431	28·366	+·026	29·755	28·459	25th	28·254	8th	·205	81·3	96·7	+3·9	73·6	+1·1	85·2	+2·5	23·1	99·5	4 days	67·0	24th	32·5
	Sambhar	1,254	28·526	+·031	29·741	28·622	26th	28·411	8th	·211	81·0	95·5*	+3·9*	75·2	+1·3	85·4*	+2·6	20·3	100·0	9th	67·5	28th	32·5
	Ajmere	1,611	28·206	+·046	29·783	28·304	26th	28·083	8th	·221	79·2	91·3	?	73·4	+0·5	82·3	?	17·9	95·9	30th	65·7	28th	30·2
	Deesa	466	29·371	+·047	29·794	29·456	25th	29·240	8th	·216	81·5	97·2	+4·9	73·4	−0·3	85·3	+2·3	23·8	104·9	30th	68·0	25th	36·9
Kathiawar	Rajkot	429	29·424	+·046	29·807	29·510	23rd	29·295	7th	·215	80·9	93·6	+2·6	71·1	−1·4	82·4	+0·6	22·5	99·9	29th	65·9	24th	34·0
	Veraval	?	29·853	?	29·813	29·952	23rd	29·718	7th	·234	79·8	84·6	?	75·1	?	79·9	?	9·5	94·6	29th	69·8	24th	24·8
Central India	Nowgong	757	29·009	+·024	29·724	29·104	30th	28·928	1st	·176	80·5	92·9	+2·4	75·6	+0·8	84·2	+1·6	17·3	99·0	26th	69·5	25th	29·5
	Indore	1,823	28·013	+·046	29·796	28·090	23rd	27·887	7th	·203	75·3	86·5	+1·7	70·5	+0·4	78·5	+1·1	16·0	90·7	3 days	65·6	29th	25·1
	Neemuch	1,630	28·202	+·057	29·794	28·299	26th	28·075	8th	·224	77·9	89·9	+2·5	70·8	+0·2	80·4	+1·4	19·1	94·8	30th	63·7	28th	31·1
Gujarat	Surat	36	29·831	+·032	29·810	29·916	23rd	29·677	7th	·239	80·3	90·0	+1·8	75·4	+0·1	82·8	+1·0	14·6	96·2	28th & 29th	71·5	25th	24·7
	Ahmedabad	176	29·680	?	29·805	29·766	23rd	29·520	7th	·246	81·4	93·9	?	76·3	?	85·1	?	17·6	100·8	30th	72·1	25th	28·7
N.-W. P., West	Agra	555	29·190	+·013	29·703	29·292	27th	29·082	1st	·210	83·6	95·5	+3·3	76·7	+0·3	86·1	+1·8	18·8	101·0	25th	70·8	24th	30·2
	Jhansi	858	28·914	+·025	29·727	29·018	30th	28·816	1st	·202	82·6	93·7	+2·8	76·9	+1·8	85·4	+2·3	16·8	100·6	26th	74·4	3 days	26·2

* Mean of 29 days.

l—continued.

in India, Burma, etc., in September 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.								Heaviest rainfall during month.	Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th September, 1895.	Normal rainfall for period, 1st June to 30th September.	Variation from normal of period, 1st June to 30th September.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·02	5·39	−4·27	...	...	...	...	VI.—Upper Sub-Himalayas.	
...	...	...	...	...	...	...	...	...	0·8	3·0	− 73	82	·887	2·4	3	6·73	− 3·73	1·49	8·00	− 6·51	34·42	44·36	− 9·94	0·61	Bareilly .	N.-W. Provinces (Sub-montane).
20	...	...	...	7	...	...	...	3	0·6	1·1	− 45	79	·673	3·6	7	10·30	− 3·30	4·29	10·38	− 6·09	73·75	78·88	− 5·13	1·52	Dehra Dun,	
30	...	...	...	...	...	...	...	...	2·0	2·0	0	80	·795	2·3	4	5·55	− 1·55	1·38	7·17	− 5·79	39·40	37·92	+ 1·48	0·50	Roorkee,	
20	...	...	2	6	2	...	...	...	0·8	2·1	− 62	74	·774	1·8	2	4·55	− 2·55	2·27	5·74	− 3·47	41·40	28·31	+13·09	1·50	Meerut,	
23	...	...	...	3	...	...	3	1	3·6	3·8	− 5	59	·691	1·2	1	4·09	− 3·09	0·95	4·23	− 3·28	13·98	26·15	−12·17	0·95	Delhi . .	Punjab, Central.
6	1	...	2	2	1	...	15	3	2·2	2·0	+ 10	61	·692	0·7	0	2·55	− 2·55	0	2·49	− 2·49	7·29	16·83	− 9·54	0	Lahore,	
11	...	...	6	1	5	...	6	1	0·7	?	?	82	·828	1·6	0	?	?	0	5·31	− 5·31	30·23	27·75	+ 2·48	0	Umballa .	Punjab (Sub-montane).
18	...	...	4	5	1	...	1	1	1·6	?	?	75	·816	1·8	0	?	?	0	?	?	23·75	?	?	0	Patiala .	
15	...	7	...	3	...	3	1	1	1·8	1·1	+ 64	66	·735	1·6	0	3·36	− 3·36	0	4·28	− 4·38	18·58	24·06	− 5·48	0	Ludhiana,	
6	1	1	1	12	4	2	2	1	1·6	1·6	0	63	·697	2·0	0	2·82	− 2·82	0	3·11	− 3·11	22·30	25·58	− 3·28	0	Sialkot .	Punjab (North).
16	6	3	2	1	2	...	...	...	1·6	1·3	+ 23	59	·602	1·4	2	4·27	− 2·27	0·89	3·13	− 2·24	21·26	22·75	− 1·49	0·77	Rawalpindi,	
15	5	6	2	...	1	...	1	...	...	...	...	...	...	...	...	...	...	0·24	0·96	−0·80	...	...	...	...	VII.—Indus Valley and North-West Rajputana.	
...	...	...	...	...	...	...	...	...	1·6	1·3	+ 23	59	·602	1·4	2	4·27	− 2·27	0·89	3·13	− 2·24	21·26	22·75	− 1·49	0·77	Peshawar .	Punjab, West.
20	3	1	...	...	...	2	1	3	2·6	3·1	− 16	62	·614	0·7	1	1·82	− 0·82	0·33	0·64	− 0·31	2·57	5·48	− 2·91	0·25	Mardan,	
?	?	?	?	?	?	?	?	?	?	?	?	?	?	?	3	?	?	1·10	?	?	11·76	?	?	0·50	Khushab,	
2	1	10	13	2	1	1	...	...	3·9	?	?	59	·699	0·3	1	1·60	− 0·60	0·61	1·41	− 0·80	11·19	6·98	+ 4·21	0·61	Montgomery,	
1	1	...	...	4	4	15	5	...	6·2	?	?	49†	·631†	0·7	1	1·40	− 0·40	0·25	1·03	− 0·78	12·06	7·72	+ 4·34	0·25	D. I. Khan,	
19	1	3	5	1	...	...	...	1	4·5	1·7	+165	57	·614	0·1	0	0·73	− 0·73	0	0·23	− 0·23	6·80	5·07	+ 1·73	0	Mooltan,	
1	...	1	1	10	1	14	1	1	2·8	2·8	0	63	·707	0·2	0	0·55	− 0·55	0	0·42	− 0·42	8·69	5·53	+ 3·16	0	Sirsa,	
4	2	2	1	2	2	2	13	2	6·1	3·6	+ 69	52	·637	1·5	0	2·73	− 2·73	0	1·79	− 1·79	6·35	12·39	− 6·04	0	Jacobabad .	Sind and Cutch.
16	...	...	...	7	6	...	...	1	1·6	3·1	− 48	67	·754	0·7	1	0·18	+ 0·82	0·25	0·06	+ 0·19	2·28	2·73	− 0·45	0·25	Hyderabad,	
...	...	...	...	...	1	28	...	1	16·7	12·5	+ 34	66	·705	0·8	0	0·80	− 0·80	0	0·52	− 0·52	5·59	6·03	− 0·44	0	Kurrachee,	
...	...	...	...	...	3	12	11	4	14·7	14·9	− 1	92	·951	4·6	0	0·82	− 0·82	0	0·54	− 0·54	4·09	6·08	− 1·99	0	Bhuj,	
...	2	...	...	...	...	...	17	11	12·7	11·3	+ 12	72	·759	1·7	0	?	?	0	1·96	− 1·96	11·87	13·54	− 1·67	0	Bickaneer .	Rajputana, West.
...	...	...	...	...	3	17	7	3	6·7	5·6	+ 20	51	·611	1·8	2	?	?	0·53	1·19	− 0·66	9·53	9·64	− 0·11	0·31	Pachpadra.	
7	...	...	...	3	2	11	3	4	9·6	6·1	+ 57	72	·791	4·4	0	?	?	0	1·72	− 1·72	9·23	8·83	+ 0·40	0		
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·81	5·39	−3·48	...	...	...	...	VIII.—East Rajputana, Central India and Gujarat.	
...	...	...	...	...	...	...	...	...	3·9	5·2	− 25	62	·668	2·7	1	5·00	− 4·00	0·27	4·40	− 4·13	21·46	26·33	− 4·87	0·24	Jeypore .	Rajputana, East.
4	2	1	...	...	...	1	13	9	5·4	7·2	− 25	67	·726	1·6	1	3·50	− 2·50	0·34	3·33	− 2·99	14·78	20·44	− 5·66	0·26	Sambhar,	
9	...	...	...	...	...	...	20	1	5·8	5·0	+ 16	71	·705	2·1	0	3·18	− 3·18	0·10	2·53	− 2·43	23·21	19·73	+ 3·48	0·05	Ajmere,	
4	1	...	...	...	...	3	21	1	7·4	8·5	− 13	62	·669	1·3	0	3·73	− 3·73	0	4·83	− 4·83	13·76	25·58	−11·82	0	Deesa,	
...	1	...	2	...	1	7	13	6	8·0	8·5	− 6	74	·781	2·0	2	5·73	− 3·73	0·57	4·25	− 3·68	17·36	27·42	−10·06	0·35	Rajkot .	Kathiawar.
...	4	1	...	...	...	1	15	9	5·7	?	?	80	·817	4·5	2	?	?	0·56	?	?	12·96	?	?	0·24	Veraval,	
6	7	...	...	...	2	...	11	4	2·2	2·4	− 8	78	·815	4·3	2	6·91	− 4·91	1·24	6·32	− 5·08	33·46	40·79	− 7·33	0·75	Nowgong .	Central India.
5	...	...	1	...	2	3	17	2	2·4	4·8	− 50	85	·743	6·3	11	8·91	+ 2·09	8·00	8·48	− 0·48	27·25	31·61	− 4·36	3·45	Indore,	
13	4	...	...	2	...	...	3	9	7·8	10·2	− 24	74	·713	2·5	5	6·91	− 1·91	2·93	5·35	− 2·42	25·20	30·06	− 4·86	1·20	Neemuch,	
1	1	5	...	...	...	5	16	2	?	9·2	?	80	·834	5·0	4	7·55	− 3·55	3·83	8·07	− 4·24	27·65	44·36	−16·71	3·35	Surat . .	Gujarat.
6	1	...	...	...	...	7	8	8	3·8	?	?	72	·772	3·8	2	?	?	2·05	?	?	30·67	?	?	1·92	Ahmedabad,	
...	3	1	...	1	...	3	7	15	3·5	4·1	− 15	67	·771	2·3	3	5·45	− 2·45	1·38	4·91	− 3·53	20·25	26·62	− 6·37	0·67	Agra . .	N.-W. P., West.
4	...	1	...	2	...	12	...	11	3·4	3·2	+ 6	68	·763	2·5	7	7·00	0	2·30	6·80	− 4·50	28·27	36·79	− 8·52	0·81	Jhansi,	
5	1	...	...	1	...	10	9	4																		

† Mean of 25 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			Mean actual pressure (reduced to 32°).	Variation from normal.	Mean pressure reduced to sea-level and to constant gravity, 45° Lat.	Highest pressure recorded month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
IX.--Deccan		...	...	+·028	...	...	...	...	...	...	...	87·6	+1·5	72·1	+0·7	79·8	+1·1	15·5	...	...	...	...	24·6
Bombay, Deccan	Belgaum	2,524	27·361	+·014	29·834	27·431	22nd	27·268	7th	·163	70·2	79·1	+0·6	65·0	−0·2	72·1	+0·2	14·1	85·2	30th	61·9	2nd & 16th,	23·3
	Sholapur	1,590	28·268	+·014	29·818	28·338	22nd	28·130	6th	·208	75·0	86·8	−1·2	69·9	−0·3	78·4	−0·8	16·9	93·2	1st	67·1	3 days	26·1
	Poona	1,840	28·034	+·019	29·833	28·104	22nd	27·877	7th	·227	73·7	83·9	+0·1	68·6	−0·1	76·3	0	15·3	92·0	30th	64·4	1st	27·6
	Bijapur	1,946	27·926	?	29·828	27·984	22nd	27·818	7th	·166	73·1	84·7	?	68·6	?	76·7	?	16·1	90·8	6th	64·0	7th	26·8
Khandesh	Malegaon	1,430	28·414	+·026	29·805	28·493	22nd	28·234	7th	·259	76·8	87·0	−0·1	71·1	+1·0	79·1	+0·5	15·9	91·9	30th	68·7	15th	23·2
	Ahmednagar	2,152	27·716	?	29·818	27·786	22nd	27·517	7th	·269	74·0	84·1	?	68·1	?	76·1	?	16·0	90·3	6th	62·0	4th	28·3
Berar	Akola	930	28·882	+·024	29·767	23·967	21st	28·731	6th	·236	78·1	90·8	+2·5	73·1	+0·7	82·0	+1·6	17·7	95·9	13th	69·7	27th & 28th	26·2
	Amraoti	1,215	28·591	+·032	29·769	28·665	21st	28·451	6th	·214	77·0	89·8	+2·1	72·7	+1·0	81·2	+1·6	17·1	93·2	4 days	70·3	4th & 11th	22·9
Central Provinces, West.	Khandwa	1,044	28·779	+·043	29·788	28·854	23rd	28·632	7th	·222	77·4	88·3	+0·9	73·5	+0·6	80·9	+0·8	14·8	93·2	30th	67·6	28th	25·6
	Hoshangabad	1,020	28·789	+·037	29·775	28·873	22nd	28·681	7th	·192	77·5	89·1	+1·1	73·5	+0·2	81·3	+0·7	15·6	92·4	3 days	69·8	26th	22·6
	Nagpur	1,025	28·766	+·031	29·749	28·850	22nd	28·607	6th	·243	79·3	90·5	+1·7	74·7	+1·2	82·6	+1·5	15·8	94·8	26th & 27th,	71·6	17th;	23·2
Central Provinces, Central.	Chanda	634	29·163	+·022	29·743	29·251	23rd	28·958	6th	·293	80·0	91·3	+2·5	75·2	+1·0	83·3	+1·8	16·1	93·9	14th & 25th,	73·0	8th	20·9
	Seoni	2,033	27·779	+·043	29·750	27·867	21st	27·629	6th	·238	77·2	87·5	+2·3	71·0	+0·3	79·3	+1·3	16·5	92·2	15th	67·1	26th	25·1
	Jubbulpore	1,327	28·446	+·022	29·734	28·529	30th	28·346	6th	·183	77·7	89·3	+2·3	72·9	+0·1	81·1	+1·2	16·4	93·0	16th & 26th,	65·2	26th	27·8
	Saugor	1,762	28·037	+·036	29·754	28·116	26th	27·945	8th	·171	77·1	88·7	+2·7	73·2	+2·1	81·0	+2·4	15·5	93·9	26th	67·7	27th	26·2
Central Provinces, East.	Raipur	970	28·813	+·041	29·732	28·911	21st	28·708	6th	·203	81·4	90·7	+3·2	75·8	+1·3	83·3	+2·3	14·9	94·4	23rd & 27th,	72·6	28th	21·8
	Sutna	1,040	28·720	+·028	29·721	28·823	30th	28·628	1st	·195	80·7	89·9	+2·7	74·9	+0·6	82·4	+1·7	15·0	94·5	25th & 26th,	67·1	25th	27·4
	Sambalpur	463	29·299	+·022	29·710	29·398	21st	29·170	19th	·228	83·5	91·6	+2·6	77·7	+0·5	84·6	+1·6	13·9	94·5	17th & 26th.	74·7	27th	19·8
Hyderabad, North.	Aurangabad	?	27·998	?	?	28·082	22nd	27·826	7th	·256	76·4	85·9	?	69·2	?	77·6	?	16·7	92·6	28th	65·9	1st	26·7
	Indur	?	?	?	?	?	?	?	?	?	78·3	88·5	?	73·7	?	81·1	?	14·8	97·1	10th	71·2	7th	25·9
	Bidar	?	27·676	?	?	27·756	22nd	27·476	6th	·280	73·6	83·7	?	69·4	?	76·6	?	14·3	88·0	1st	66·0	23rd	22·0
Hyderabad, South.	Gulbarga	1,502	28·342	?	29·803	28·420	22nd	28·258	7th	·162	75·2	86·0	?	70·6	?	78·3	?	15·4	93·0	1st	63·8	10th	29·2
	Raichur	1,378	28·471	?	29·801	28·543	22nd	28·323	6th	·220	75·7	87·2	?	72·1	?	79·7	?	15·1	92·6	1st	68·6	8th	24·0
	Hyderabad (Deccan), Secunderabad	1,690	28·141	+·026	29·784	28·218	22nd	27·911	6th	·307	75·7	85·5	−0·8	72·2	+1·8	78·9	+0·5	13·3	90·9	28th	69·2	7th	21·7
	Khamamet	1,787	28·047	?	29·788	28·126	22nd	27·822	6th	·304	74·9	86·5	?	71·2	?	78·9	?	15·3	91·6	1st	67·9	7th	23·7
		373	29·431	?	29·749	29·515	21st	29·154	6th	·361	80·8	90·0	?	75·9	?	83·0	?	14·1	94·0	25th	72·3	11th	21·7
X.--West Coast		...	...	+·006	...	...	...	...	...	...	...	83·6	+0·4	75·3	+0·8	79·5	+0·6	8·3	...	...	...	...	13·3
Konkan	Bombay	37	29·853	+·023	29·830	29·944	23rd	29·687	7th	·257	78·8	83·7	−0·6	76·2	−0·1	79·9	−0·4	7·5	88·0	29th & 30th	71·0	8th	17·0
	Ratnagiri	110	29·786	+·030	29·835	29·860	22nd	29·706	7th	·154	75·1	83·9	0	74·5	+0·3	79·2	+0·2	9·4	85·9	20th	72·4	4 days	13·5
	Mormugao	60	29·851	?	29·846	29·921	22nd	29·775	29th	·146	78·3	83·3	?	75·0	?	79·2	?	8·3	86·0	23rd & 30th.	71·4	4th	14·6
	Goa	199	29·701	+·011	29·837	29·771	23rd	29·627	6th	·144	78·9	81·7	?	77·0	?	79·4	?	4·7	83·5	30th	75·0	3rd	8·5
	Karwar	44	29·868	+·010	29·844	29·949	22nd	29·801	6th	·148	77·2	83·1	+0·5	75·6	+2·1	79·3	+1·3	7·5	84·7	24th & 28th,	73·5	16th	11·2
Malabar	Cochin	11	29·925	−·011	29·863	29·983	22nd	29·848	28th	·135	79·1	85·4	+1·1	75·3	+1·1	80·4	+1·1	10·1	87·2	3 days	72·7	4th	14·5
	Calicut	27	29·898	−·014	29·855	29·956	22nd	29·821	28th	·135	78·5	84·7	+0·5	74·6	+0·7	79·7	+0·6	10·1	86·8	23rd & 29th,	72·0	19th	14·8
	Mangalore	65	29·861	−·007	29·859	29·930	22nd	29·794	29th	·136	77·9	84·1	+0·9	74·2	+0·4	79·2	+0·7	9·9	85·8	23rd & 24th.	71·4	4th	14·4
	Trivandrum	198	29·735	?	29·865	29·792	22nd	29·658	28th	·134	78·2	82·8	?	75·5	?	79·2	?	7·3	85·0	11th	73·5	29th	11·5
XI.—South India		...	...	−·001	...	...	...	...	...	...	...	89·4	−0·1	73·7	+0·3	81·6	+0·1	15·7	...	...	...	...	24·7
Madras, South	Pamban	37	29·841	?	29·805	29·897	22nd	29·773	29th	·124	83·2	89·1	?	79·3	?	84·2	?	9·8	92·3	10th	74·2	12th	18·1
	Tinnevelly	168	29·720	?	29·817	29·773	23rd	29·653	28th	·125	84·7	98·2	?	78·6	?	88·4	?	19·6	101·4	3 days	72·9	12th	28·5
	Madura	447	29·421	−·008	29·804	29·488	22nd	29·352	28th	·136	81·4	94·6	−1·2	75·0	−0·2	84·8	−0·7	19·6	100·5	10th	72·5	14th	28·0

I—*continued.*

in India, Burma, etc., in September 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th September 1895.	Normal rainfall for period, 1st June to 30th September.	Variation from normal of period, 1st June to 30th September.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...	7·60	7·99	−1·14	...	...	...	...	**IX.—Deccan.**	
1	3	2	...	...	...	2	14	8	14·3*	16·7	− 14	89	·657	8·5	10	10·18	− 0·18	8·94	4·64	+ 4·30	40·14	35·34	+ 4·80	2·04	Belgaum .	Bombay Deccan.
...	3	1	...	1	...	2	4	19	11·1	9·9	+ 12	81	·701	6·7	11	9·73	+ 1·27	17·60	8·16	+ 9·44	27·81	24·85	+ 2·96	6·69	Sholapur.	
1	...	1	...	...	...	4	13	8	7·3	11·4	− 36	82	·677	7·7	7	8·18	− 1·18	7·72	5·21	+ 2·71	23·62	20·03	+ 3·59	4·21	Poona.	
...	...	...	1	...	...	7	15	7	7·8	?	?	85	·691	7·8	13	8·60	+ 4·40	14·58	?	?	20·70	?	?	3·63	Bijapur.	
1	2	...	1	...	..	3	13	10	12·2	7·6	+ 61	78	·713	6·8	12	8·64	+ 3·36	12·70	6·92	+ 5·78	21·47	20·46	+ 1·01	4·80	Malegaon .	Khandesh.
...	8	5	...	...	1	2	6	8	12·4	?	?	84	·701	6·6	12	?	?	9·48	?	?	20·38	?	?	3·95	Ahmednagar.	
6	...	...	1	...	...	1	11	11	5·8	5·8	0	82	·783	5·3	8	10·18	− 2·18	5·69	7·22	− 1·53	24·39	30·94	− 6·55	1·74	Akola .	Berar.
...	2	3	...	3	...	6	8	8	6·4	4·4	+ 45	86	·794	5·4	5	8·27	− 3·27	3·53	6·94	− 3·41	23·40	31·20	− 7·80	1·79	Amraoti.	
1	1	...	1	1	...	1	12	13	6·6	6·2	+ 6	82	·766	5·4	7	7·55	− 0·55	4·22	7·56	− 3·34	21·04	29·57	− 8·53	1·59	Khandwa .	Central Provinces, West.
5	...	2	...	2	2	14	5	...	3·1	2·5	+ 24	87	·826	5·9	9	10·18	− 1·18	4·23	11·61	− 7·38	40·01	51·92	−11·91	1·25	Hoshangabad.	
17	1	1	...	1	1	1	2	6	5·7	4·9	+ 16	81	·807	5·7	7	10·64	− 3·64	3·45	10·13	− 6·68	52·60	43·85	+ 8·75	1·05	Nagpur.	
7	3	2	...	1	2	1	12	2	3·6	4·1	− 12	78	·805	4·7	9	?	?	4·27	10·75	− 6·48	32·55	51·35	−18·80	1·25	Chanda .	Central Provinces, Central.
?	?	?	?	?	?	?	?	?	?	3·9	?	83	·780	4·1	8	11·73	− 3·73	5·53	10·15	− 4·92	38·54	52·07	−13·53	2·84	Seoni .	
...	...	...	2	4	4	5	11	4	2·6	3·4	− 24	84	·797	4·5	3	9·36	− 6·36	1·43	8·77	− 7·34	50·87	54·79	− 3·92	0·92	Jubbulpore.	
11	...	...	...	1	2	9	4	3	3·4	3·3	+ 3	83	·770	3·5	8	8·64	− 0·64	3·84	8·19	− 4·35	42·00	44·22	− 2·22	1·09	Saugor.	
2	2	2	6	1	1	4	11	1	6·3	5·9	+ 7	80	·855	4·2	6	10·45	− 4·45	2·08	8·46	− 6·38	41·40	46·51	− 5·11	0·64	Raipur .	Central Provinces, East.
3	8	...	2	2	2	2	9	2	5·2	6·5	− 20	79	·822	3·5	4	8·36	− 4·36	2·32	6·96	− 4·64	40·79	40·74	+ 0·05	1·14	Sutna.	
...	1	7	...	...	4	12	1	5	4·4	2·2	+100	79	·898	4·1	8	?	?	3·96	10·07	− 6·11	56·40	60·45	− 4·05	2·27	Sambalpur.	
10	...	1	...	1	1	5	7	5	3·5	?	?	79	·717	7·1	12	?	?	6·30	7·44	− 1·14	28·06	26·71	+ 1·35	1·42	Aurangabad	Hyderabad, North.
...	7	...	1	...	1	1	4	16	8·1	?	?	81	·787	8·1	6	?	?	5·71	6·91	− 1·20	29·77	32·34	− 2·57	3·00	Indur.	
...	7	1	1	...	...	1	9	11	7·3	?	?	89	·737	4·7	14	?	?	16·06	8·94	+ 7·12	35·08	34·38	+ 0·70	4·15	Bidar.	
3	2	2	1	...	...	3	9	10	9·8	?	?	84	·732	5·9	15	?	?	17·11	6·44	+10·67	30·02	22·58	+ 7·44	5·20	Gulbarga .	Hyderabad, South.
...	3	...	1	...	1	3	14	8	7·6	?	?	80	·715	6·1	12	?	?	7·42	?	?	19·31	?	?	2·22	Raichur.	
5	1	1	...	1	...	1	13	8	5·6	?	?	84	·747	6·6	11	?	?	7·06	5·99	+ 1·07	25·86	25·91	− 0·05	1·86	Hyderabad (Division).	
2	...	4	1	...	...	2	6	15	7·3	7·0	+ 4	81	·706	6·6	8	?	?	10·79	?	?	29·50	?	?	3·00	Secunderabad	
19	1	1	...	...	...	...	...	9	5·2	?	?	85	·900	3·9	11	?	?	11·62	?	?	43·41	?	?	4·09	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4·73	9·64	−4·63	...	...	...	...	**X.—West Coast.**	
...	3	5	2	5	6	2	3	4	8·9	11·7	− 24	89	·879	7·7	12	14·18	− 2·18	12·10	11·81	+ 0·29	63·76	69·78	− 6·02	5·07	Bombay .	Konkan.
5	7	2	3	6	2	...	2	3	5·6	8·2	− 32	89	·851	6·2	16	16·09	− 0·09	6·93	13·18	− 6·25	81·18	104·60	−23·42	2·24	Ratnagiri.	
5	7	1	1	2	...	3	4	7	6·2*	?	?	91	·883	5·1	8	?	?	2·50	?	?	82·25	?	?	0·47	Mormugao.	
15	5	...	2	...	1	2	3	2	5·9	?	?	88	·867	7·4	10	?	?	3·65	8·57	− 4·92	64·61	92·68	−28·07	1·26	Goa.	
5	9	3	2	...	...	...	10	1	3·7	?	?	89	·824	5·3	10	16·09	− 6·09	3·53	13·75	−10·22	100·06	114·41	−14·35	1·08	Karwar.	
20	1	7	...	1	...	...	...	1	4·1	?	?	87	·869	6·2	12	13·73	− 1·73	3·49	9·38	− 5·89	60·55	72·61	−12·06	0·46	Cochin .	Malabar.
5	6	...	1	3	2	...	2	11	10·3	?	?	87	·836	6·5	10	10·13	− 0·13	4·07	6·16	− 2·09	81·20	84·55	− 3·35	0·68	Calicut.	
9	3	2	8	3	1	1	2	1	2·2	2·4	− 8	88	·843	7·6	11	16·60	− 5·60	4·38	10·14	− 5·76	117·95	102·39	+15·56	0·73	Mangalore.	
3	23	1	...	...	...	...	...	3	6·4	?	?	84	·823	6·6	6	?	?	1·95	4·13	− 2·18	22·91	29·07	− 6·16	0·49	Trivandrum.	
...	...	...	..	..	..	...	...	...	...	...	...	...	...	...	.	...	...	6·59	5·29	+1·94	...	...	...	...	**XI.—South India.**	
...	2	3	...	2	3	10	8	2	12·3	?	?	75	·858	3·1	1	1·80	− 0·80	0·58	1·44	− 0·86	1·77	2·42	− 0·65	0·45	Pamban .	Madras, South.
...	2	1	...	...	...	6	12	9	8·0	?	?	59	·706	5·5	2	1·9	+ 0·1	3·22	?	?	3·34	?	?	2·56	Tinnevelly.	
1	7	...	...	...	...	...	...	22	1·6	3·4	− 53	69	·742	4·2	7	6·09	+ 0·91	7·36	4·23	+ 3·13	14·67	12·01	+ 2·66	2·13	Madura.	

* Mean of 29 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras, South Central.	Salem .	940	28·964	−·009	29·849	29·039	22nd	28·894	28th	·145	78·0	91·2	−0·2	72·4	+1·2	81·8	+0·5	18·8	95·9	11th	70·0	4th & 26th	25·9
	Coimbatore	1,348	28·537	−·007	29·837	28·597	22nd	28·474	6th	·123	75·9	90·5	+1·0	71·1	+0·6	80·8	+0·8	19·4	94·9	12th	69·1	4th & 23rd.	25·8
Coorg . . .	Mercara .	3,781	26·214	+·002	?	26·286	22nd	26·156	28th	·130	65·0	72·4	0	62·7	+1·0	67·6	+0·5	9·7	76·5	27th & 28th.	59·2	4th	17·3
Mysore . .	Chitaldroog	2,405	27·497	?	29·838	27·592	22nd	27·387	6th	·205	71·7	83·6	?	67·3	?	75·5	?	16·3	88·1	12th	63·9	16th	24·2
	Bangalore Fort.	3,021	26·909	−·009	29·839	27·003	22nd	26·837	28th	·166	69·9	82·6	+0·7	65·7	+0·7	74·2	+0·7	16·9	88·3	12th	62·8	8th & 17th	25·5
	Hassan .	3,091	26·859	?	29·867	26·935	22nd	26·791	6th	·144	70·3	80·2	?	64·1	?	72·1	?	16·1	84·6	26th	60·7	16th	23·9
	Mysore .	2,518	27·413	?	29·860	27·491	22nd	27·348	28th	·143	72·2	85·7	?	66·7	?	76·2	?	19·0	90·9	12th	63·0	4th	27·9
Madras, East-Coast, South.	Negapatam	31	29·832	−·015	29·792	29·886	23rd	29·767	28th	·119	82·0	93·1	+0·9	75·7	−0·5	84·4	+0·2	17·4	98·8	8th	71·2	3 days	27·6
	Cuddalore .	12	29·840	?	29·781	29·897	21st & 23rd	29·779	29th	·118	81·1	92·1	?	75·5	?	83·9	?	16·6	97·8	7th	71·2	15th	26·6
	Trichinopoly	255	29·608	−·017	29·797	29·672	22nd	29·538	28th	·134	80·6	94·5	−0·8	75·6	+0·2	85·1	−0·3	18·9	98·1	3 days	70·9	30th	27·2
	Madras .	22	29·818	−·014	29·771	29·899	22nd	29·740	15th	·159	82·6	94·1	+0·9	77·3	+0·3	85·7	+0·6	16·8	100·0	4th & 13th	71·5	13th	28·5
Madras, East-Coast, Central.	Nellore .	71	29·751	?	29·755	29·831	22nd	29·656	5th	·175	83·2	95·1	?	78·4	?	86·8	?	16·7	100·8	4 days	74·6	20th	26·2
	Masulipatam	15	29·792	+·011	29·742	29·873	23rd	29·615	5th	·258	82·1	90·0	−1·3	77·6	+0·2	83·8	−0·6	12·4	95·0	1st	68·6	6th	26·4
Madras, Central	Cuddapah .	433	29·425	?	29·800	29·512	22nd	29·298	6th	·214	80·0	92·4	−0·1	75·8	−0·1	84·1	−0·1	16·6	100·2	9th	71·7	15th	28·5
	Kurnool .	923	28·926	−·001	29·798	29·009	22nd	28·781	6th	·228	77·9	89·1	−0·2	73·1	0·1	81·1	−0·2	16·0	94·2	1st	69·9	8th	24·3
	Bellary .	1,475	28·394	+·009	29·822	28·477	22nd	28·256	6th	·221	76·9	90·1	−0·6	72·3	−0·5	81·2	−0·6	17·8	95·7	12th	68·4	8th	27·3
Madras, East-Coast, North	Rajahmundry	112	29·681	+·017	29·733	29·780	21st	29·468	5th	·312	81·5	90·4	+0·1	77·3	+0·3	83·9	+0·2	13·1	94·0	3 days	73·0	6th	21·0
	Cocanada .	26	29·752	+·009	29·713	29·854	21st	29·489	5th	·365	82·0	88·4	−0·1	78·5	+0·3	83·5	+0·1	9·9	95·2	3rd	74·0	27th	21·2
	Vizagapatam	31	29·742	+·012	29·711	29·845	21st	29·529	5th	·316	82·8	90·3	−0·6	77·8	+0·5	84·1	−0·1	12·5	96·4	2nd	75·1	5th	21·3
	Gopalpur .	21	29·747	?	29·708	29·847	21st	29·636	1st	·211	81·8	88·5	?	77·9	?	83·3	?	10·6	92·7	2nd	74·1	17th	18·6
XII.—Hill Stations.																							
Baluchistan .	Shirino .	?	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kachh Fort	?	23·873	?	?	23·980	30th	23·800	3 days	·180	67·5	82·8	?	43·6	?	63·2	?	39·2	91·5	7th	35·0	20th & 22nd	56·5
	Pishin .				Not recorded.						?	90·9	?	35·9	?	63·4	?	55 0	96·1	7th	26·9	26th	69·2
	Quetta .	5,502	24·633	+·040	?	24·741	30th	24·544	8th	·197	63·8	85·3	+0·1	45·6	−4·8	65·5	−2·4	39·7	90·6	3 days	36·8	22nd	53·8
	Kalat .	?	?	?	?	?	?	?	?	?	52·4*	86·4	?	33·4*	?	59·9	?	53·0	93·7	14th	24·2	19th	69·5
	Chaman .	4,311	25·644	?	?	25·782	30th	25·542	7th	·240	76·1	90·8	?	61·3	?	76·1	?	29·5	100·0	7th	51·1	21st	45·9
Northern India.	Leh . .	11,503	19·752	?	?	19·883	27th	19·660	15th	·223	50·5	70·9	?	41·0	?	55·9	?	29·9	82·8	7th	31·6	13th	51·2
	Srinagar .	5,204	24·875	?	?	24·985	22nd	24·752	8th	·233	60·0	79·0	?	52·1	?	65·6	?	26·9	89·8	7th	43·2	22nd & 23rd.	46·6
	Astor (Kashmir).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gilghit .	?	24·638	?	?	24·750	4 days	24·470	8th	·280	71·6	88·4	?	67·5†	?	77·8†	?	20·9	101·1	7th	59·7	30th	41·4
	Cherat .	?	25·660	?	?	25·774	30th	25·552	1st	·222	74·7	88·2	?	65·0	?	76·6	?	23·2	94·4	6th & 7th	54·2	18th	40·2
	Murree .	6,344	23·841	+·022	?	23·953	30th	23·749	1st	·204	64·2	74·9	+1·1	60·6	+1·8	67·8	+1·5	14·3	78·6	3 days	50·1	10th	28·5
	Poo . .	?			Not recorded.						?	74·9	?	51·8	?	63·4	?	23·1	82·2	8th	43·6	26th	39·2
	Simla .	7,224	23·123	+·026	?	23·223	30th	23·016	1st	·207	60·0	67·2	−0·5	56·9	−0·2	62·1	−0·4	10·3	71·0	28th	53·2	30th	17·8
	Chakrata .	6,977	23·327	+·040	?	23·449	30th	23·222	1st	·227	Thermometers not in use.												
	Mussooree .	6,705	23·551	?	?	23·661	30th	23·442	1st	·219	62·3	69·8	+1·8	58·2	+0·7	64·0	+1·3	11·6	73·3	28th	55·4	22nd	17·9
	Ranikhet .	6,069	24·093	+·036	?	24·216	30th	23·978	1st	·238	64·2	73·3	+1·0	59·8	−0·2	66·6	+0·4	13·5	76·0	12th	55·5	17th	20·5
	Yatung .	10,480?	?	?	?	?	?	?	?	?	?	60·0	?	45·7	?	52·8	?	14·3	65·0	1 s	40·4	26th	24·6
	Gnatong .	?	19·323	?	?	19·388	26th	19·234	10th	·154	47·6	52·6	?	41·3	?	47·0	?	11·3	58·4	1st	36·6	17th	21·8
	Darjeeling .	7,421	22·987	−·013	?	23·087	30th	22·899	10th	·188	59·2	65·0	+0·2	55·6	+0·5	60·4	+0·4	9·4	68·6	4th	53·7	2 days	14·9
	Gantak .	?	24·475	?	?	24·590	30th	24·350	10th	·240	65·0	74·8	?	56·6	?	65·7	?	18·2	80·2	5th	53·6	24th	26·6

* Uncorrected.

† Mean of 29 days.

I—*continued.*

in India, Burma, etc., in September 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8A.M. Mean Humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th September 1895.	Normal rainfall for period, 1st June to 30th September.	Variation from normal of period, 1st June to 30th September.	Haviest rainfall during month.	Station.	Meteorological Province or District.
16	...	...	...	3	6	3	1	1	1·9	3·7	−49	79	·767	6·6	14	6·91	+7·09	9·71	5·63	+4·08	29·30	20·93	+8·37	2·19	Salem . .	Madras, South Central.
...	...	...	...	...	7	23	...	...	4·0	6·6	−39	86	·777	4·2	3	2·18	+0·82	1·69	1·13	+0·56	6·15	4·98	+1·17	1·22	Coimbatore.	
1	5	1	...	...	...	1	6	16	9·4	7·9	+19	91	·570	8·1	15	17·10	−2·10	8·14	10·98	−2·84	97·45	105·44	−7·99	1·62	Mercara .	Coorg.
1	...	...	...	...	...	6	19	4	10·2	?	?	82	·641	7·9	7	?	?	3·38	?	?	13·11	?	?	1·02	Chitaldroog .	Mysore.
...	...	...	1	...	...	7	15	7	7·7	6·7	+15	85	·629	8·0	13	8·36	+4·64	8·80	4·72	+4·08	20·85	18·56	+2·29	2·44	Bangalore Fort.	
...	...	...	1	...	...	2	18	9	3·8	?	?	79	·585	7·6	7	?	?	2·25	?	?	13·31	?	?	0·70	Hassan.	
3	1	...	...	...	...	11	12	3	10·8	?	?	80	·624	7·1	7	?	?	4·33	?	?	14·45	?	?	1·40	Mysore.	
3	...	...	...	...	...	17	9	1	7·7	5·2	+48	78	·850	4·7	9	6·36	+2·64	9·42	3·04	+6·38	17·70	10·89	+6·81	3·04	Negapatam .	Madras, East-Coast, South.
3	...	...	...	...	...	17	9	1	7·7	5·2	+48	78	·850	4·7	9	6·36	+2·64	9·42	3·04	+6·38	17·70	10·89	+6·81	3·04	Cuddalore.	
...	1	...	...	...	3	4	14	8	1·5	?	?	86	·918	4·7	8	6·4	+1·6	9·67	?	?	18·19	?	?	3·00	Trichinopoly.	
4	...	...	...	...	...	5	17	4	4·9	7·1	−31	73	·763	6·3	13	4·91	+8·09	7·65	3·21	+4·44	18·49	11·00	+7·49	1·89	Madras.	
4	...	...	...	...	1	9	14	2	5·1	6·5	−22	74	·824	6·3	7	6·45	+0·55	4·41	4·69	−0·28	15·07	15·23	−0·16	1·26	Nellore .	Madras, East-Coast, Central.
3	1	...	...	...	...	1	8	17	7·8	?	?	74	·835	8·5	7	5·30	+1·70	5·62	?	?	15·23	?	?	2·24	Masulipatam.	
2	5	...	...	1	2	2	3	15	5·4	6·4	−16	85	·937	7·3	8	8·80	−0·80	10·20	5·70	+4·50	28·80	23·95	+4·85	4·40	Cuddapah .	Madras, Central.
...	...	...	...	...	...	6	20	4	?	?	?	77	·777	8·0	14	6·70	+7·30	8·29	5·48	+2·81	17·84	19·87	−2·03	3·28	Kurnool.	
8	...	...	...	...	...	1	14	7	?	?	?	76	·823	7·4	13	7·83	+5·17	6·56	6·54	+0·02	19·37	21·25	−1·88	1·83	Bellary.	
2	...	...	...	...	...	1	18	9	9·4	9·3	+ 1	68	·625	8·6	7	6·27	+0·73	7·80	4·09	+3·71	13·88	10·50	+3·38	4·75	Bellary.	
2	...	...	...	...	...	1	18	9	9·4	9·3	+ 1	68	·625	8·6	7	6·27	+0·73	7·80	4·09	+3·71	13·88	10·50	+3·38	4·75	Rajahmundry	Madras, East-Coast, North.
4	3	1	1	...	2	3	13	3	?	?	?	80	·880	7·1	8	8·60	−0·60	8·70	7·61	+1·09	36·19	27·94	+8·25	2·96	Cocanada.	
1	4	2	...	1	2	5	8	7	7·2	?	?	81	·888	5·5	11	9·10	+1·90	6·91	5·73	+1·18	21·94	23·48	−1·54	1·94	Vizagapatam.	
...	1	1	...	...	...	1	24	3	2·4	2·2	+ 9	82	·924	6·7	9	10·91	−1·91	8·86	8·27	+0·59	26·03	22·74	+3·29	2·45	Gopalpur.	
2	9	2	1	...	3	3	2	8	10·7	7·2	+49	87	·942	2·5	10	9·33	+0·67	7·91	7·51	+0·40	34·51	29·75	+4·76	1·88		
																									XII.—Hill Stations.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Shirino .	Baluchistan.
3	3	1	...	3	...	6	11	3	4·5	?	?	34‡	·228‡	0	0	?	?	0	?	?	0·58	?	?	0	Kachh Fort.	
														Not	recorded.										Pishin.	
26	1	...	...	...	1	...	1	1	1·8	3·5	−49	54	·321	0	0	0·55	−0·55	0	0·16	−0·16	1·63	2·19	−0·56	0	Quetta.	
...	3	...	...	...	27	...	...	...	?	?	?	?	?	?	0	?	?	0	?	?	0·32	?	?	0	Kalat.	
...	...	1	8	7	3	7	3	1	6·7	?	?	32	·295	0	0	?	?	0	?	?	0	?	?	0	Chaman.	
...	2	5	2	2	5	7	7	...	3·2	1·7	+88	46	·170	3·4	1	?	?	0·27	?	?	1·08	?	?	0·21	Leh . .	Northern India.
9	2	1	...	5	6	2	2	3	4·8	?	?	87	·464	3·6	3	?	?	0·63	?	?	5·62	?	?	0·18	Srinagar.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Astor (Kashmir).	
			Not	rec	orde	d.			?	?	?	43	·332	3·4	1	?	?	0·13	?	?	1·18	?	?	0·13	Gilghit.	
7	6	1	...	3	9	2	1	1	9·5	?	?	49	·429	0·9	2	?	?	1·05	?	?	6·44	?	?	0·60	Cherat.	
11	3	...	3	2	1	...	...	10	6·9	5·4	+28	55	·339	1·6	3	6·55	−3·55	1·60	6·16	−4·56	35·07	34·56	+ 0·51	0·96	Murree.	
9	...	...	1	1	3	8	8	...	?	?	?	?	?	2·6	1	?	?	0·37	?	?	2·00	?	?	0 33	Poo.	
7	12	7	...	...	1	1	...	2	3·9	1·7	+129	70	·367	3·0	7	8·36	−1·36	4·88	6·56	−1·68	53·42	48·88	+ 4·54	1·80	Simla.	
2	11	...	...	4	4	...	...	3	8·5*	4·7	+81	?	?	4·3	5	?	?	2·02	6·92	−4·90	61·23	51·84	+ 9·39	1·06	Chakrata.†	
...	3	4	4	4	...	2	6	7	?	8·1	?	77	·434	3·5	4	10·09	−6·09	3·09	10·34	−7·25	85·99	79·43	+ 6·56	1·21	Mussooree.	
17	3	3	...	1	...	2	2	2	3·0	1·9	+58	81	·482	4·4	4	7·73	−3·73	2·15	8·02	−5·87	41·09	41·15	− 0·06	0·68	Ranikhet.	
				Not	rec	orded			?	?	?	?	?	?	10	?	?	4·54	?	?	28·04	?	?	1·22	Yatung.	
									?	?	?	?	?	?	21	?	?	10·70	?	?	83·59	?	?	1·51	Gnatong.	
8	...	...	...	10	3	1	3	5	4·5	?	?	87	·288	7·1	20	16·00	+4·00	25·57	15·85	+9·72	108·29	103·17	+ 5·12	7·26	Darjeeling.	
4	...	3	9	5	...	1	7	1	4·0	3·0	+33	95	·482	8·8	20	16·00	+4·00	25·57	15·85	+9·72	108·29	103·17	+ 5·12	7·26	Gantak.	
...	1	2	2	...	4	6	10	5	2·1	?	?	90	·562	7·7	19	?	?	14·56	?	?	80·92	?	?	2·66		

* Mean of 23 days.

† Chakrata, wind for 24 days.

‡ Mean of 29 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Stations.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			Mean actual pressure (reduced to 32°)	Variation from normal.	Mean pressure reduced to sea-level and to constant gravity, 45° Lat.	Highest pressure during recorded month.	Date.	Lowest pressure during recorded month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India.	Mount Abu.	3,945	26·015	+·033	?	26·099	23rd	25·902	8th	·197	70·5	77·1	+1·7	64·6	−0·2	70·8	+0·8	12·5	82·7	30th	60·9	4 days	21·8
	Pachmarhi .	3,528	26·393	+·040	?	26·474	21st	26·297	7th	·177	72·3	78·1	+1·1	66·6	+0·4	72·4	+0·8	11·5	82·7	27th	60·7	27th	22·0
South India .	Wellington .	6,200	24·226	−·002	?	24·277	23rd	24·162	28th	·115	64·5	72·3	+1·3	55·8	+0·1	64·0	+0·7	16·5	76·2	11th	51·2	17th & 23rd.	25·0
XIII.—Extra India.																							
Ceylon . .	Trincomalee	75	29·788*	?	29·791*	29·839	23rd & 30th.	29·728	29th	·111	84·1	91·2	?	77·6	?	84·4	?	13·6	94·0	3rd & 10th.	73·0	13th	21·0
	Colombo .	40	29·907	−·009	29·873	29·957	23rd	29·834	28th	·123	82·9	86·9	?	77·7	?	82·3	?	9·2	88·5	4 days.	74·0	29th	14·5
	Galle . .	48	29·898	?	29·872	29·958	19th	29·816	28th	·142	80·6	82·8	?	78·0	?	80·4	?	4·8	86·0	28th	76·0	16th	10·0
Persia . .	Meshed .	3,104	...		Not recorded.						64·6	?	?	52·3	?	?	?	?	?	?	42·9	15th	?
	Teheran .	?							Not yet received.														
	Ispahan .	?	?	?	?	?	?	?	?	?	72·0	89·7	?	55·9*	?	72·9*	?	33·8	97·8	4th	48·8	22nd	49·0
	Bushire .	14	29·754	+·042	29·723	29·915	30th	29·582	15th	·333	87·4	92·8	−1·4	78·6*	−0·2	85·6*	−0·8	14·2	98·0	7th	69·6	30th	28·4
	Jask . .	?	29·802*	?	?	29·892	23rd	29·709	7th	·183	84·6	91·2	?	79·7	?	85·5	?	11·5	96·0	21st	77·4	19th	18·6
Arabia . .	Muscat .	?	29·782	?	?	29·882	24th	29·677	7th	·205	83·9	85·9	?	82·3	?	84·1	?	3·6	90·5	1st	78·9	25th	11·6
	Baghdad .	?	29·409	?	?	29 620	26th	29·267	1st	·353	77·2	100·0	?	71·1	?	85·6	?	28·9	108·0	3rd	59·4	27th	48·6
	Aden . .	94	29·745	−·003	29·769	29·820	30th	29·624	9th	·196	86·0	94·1	+0·5	82·6	+0·5	88·4	+0·5	11·5	97·3	3 days	79·3	2nd	18·0
	Perim . .	?	29·651	?	?	29·728	30th	29·538	9th	·190	88·3	94·8	?	84·2	?	89·6	?	10·6	100·5	3rd	81·2	10th	19·3
Afghanistan .	Kabul . .	?	?	?	?	?	?	?	?	?	61·0	87·8	?	51·5	?	69·7	?	36·3	99·1	3rd	44·6	26th	54·5
Central Asia .	Kashgar .	?	25·675‡	?	?	26·030‡	26th	25 430‡	8th	·600	66 6	82·1	?	57·6	?	69·9	?	24·5	88·3	8th	50·2	26th	38·1
Arabian Sea Islands.	Amini Devi.	15	29·925	?	29·868	30·000	2nd	29·859	28th	·141	81·2	84·6	?	77·6	?	81·1	?	7·0	90·0	9th	75·4	15th & 17th,	14·6
	Minicoy .	10	29·953	?	29 888	30·008	23rd	29·860	28th	·128	81·0	86·8	?	79·7§	?	83·1§	?	7·1	89·1	1st & 18th	75·6	21st	13 5
Africa . .	Zanzibar .	73	30·083	?	30·083	30·135	17th	30·021	9th	·114	76·0	81·5	?	73·7	?	77·6	?	7·8	84·8	3rd	70·7	22nd	13·9

* Mean of 29 days.

‡ Aneroid, corrected.

§ Mean of 18 days.

I—*concluded.*

in India, Burma, etc., in September 1895—concluded.

Wind Direction: Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind velocity: Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M.: Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall: Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st June to 30th September 1895.	Normal rainfall for period, 1st June to 30th September.	Variation from normal of period, 1st June to 30th September.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
1	1	2	...	1	...	16	2	7	7·3	7·3	0	73	·538	2·5	2	7·40	−5·40	0·54	10·71	−10·17	49·35	63·65	−14·30	0·21	Mount Abu.	Central India.
13	1	1	2	1	1	1	8	2	6·9	5·6	+23	79	·625	6·6	13	12·55	+0·45	5·36	15·97	−10·61	63·79	72·20	−8·41	1·18	Pachmarhi.	
18	3	1	...	1	...	...	3	4	2·4	3·5	−32	71	·430	3·0	13	9·22	+3·78	6·43	4·49	+ 1·94	16·34	16·16	+0·18	1·78	Wellington .	South India.
																									XIII.—Extra India.	
...	...	...	...	...	...	30	...	...	9·3	?	?	74*	·868*	3·5	6	?	?	5·97	4·39	+1·58	15·01	12·73	+2·28	1·54	Trincomalee	Ceylon.
...	...	...	...	...	...	16	14	...	11·4	8·7	+31	73	·829	6·2	9	?	?	2·69	5·29	−2·60	18·23	22·27	−4·04	0·38	Colombo .	
1	...	...	...	...	...	...	9	20	9·3	?	?	93	·971	4·5	16	?	?	7·10	7·67	−0·57	21·90	26·40	−4·50	1·08	Galle . .	
			Not recorded.						?	?	?	?	?	1·1	0	?	?	0·01	?	?	0·01	?	?	0·01	Meshed .	Persia.
													Not yet received.												Teheran,	
4	2	..	...	...	1	4	5	14	4·1	?	?	68	·535	0·3	0	?	?	0	?	?	0	?	?	0	Ispahan.	
...	7	7	8	4	1	3	...	...	5·2†	7·7	−32	59	·772	?	?	?	?	?	0	?	0	0	?	0	Bushire.	
4	...	...	18	6	2	...	...	...	14·8	?	?	77	·909	1·6	0	?	?	0	?	?	0	?	?	0	Jask.	
...	1	5	11	6	...	...	1	6	3·3*	?	?	81	·948	0·9	0	?	?	0	?	?	0	?	?	0	Muscat.	Arabia.
9	9	1	2	...	...	...	...	9	2·8	?	?	38	·358	0	0	?	?	0	?	?	0	?	?	0	Baghdad.	
5	...	5	7	1	3	7	2	...	9·3*	8·5	+9	75	·925	3·1	1	?	?	0·11	0·21	−0·10	0·18	0·43	−0·25	0·11	Aden.	
...	...	5	6	5	2	4	3	5	10·8	?	?	72	·950	4·1	0	?	?	0	?	?	0·02	?	?	0	Perim.	
...	8	2	12	4	3	...	1	...	?	?	?	?	?	0	0	?	?	0	?	?	2·00	?	?	0	Kabul .	Afghanistan.
29	...	...	...	...	...	...	...	1	2·9	?	?	46	·302	3·3	0	?	?	0·05	?	?	2·58	?	?	0·05	Kashgar .	Central Asia.
...	3	1	...	...	...	2	18	6	15·0	?	?	84	·894	6·9	10	?	?	3·41	?	?	32·78	?	?	0·85	Amini Devi .	Arabian Sea Islands.
...	...	...	...	...	...	2	19	9	15·3	?	?	83	·869	5·4	10	?	?	4·49	?	?	23·89	?	?	0·90	Minicoy.	
...	...	...	...	10	14	6	...	...	5·3	?	?	86	·773	5·7	10	?	?	5·26	?	?	7·74	?	?	1·60	Zanzibar .	Africa.

* Mean of 29 days.

† Mean of 27 days.

Table

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

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·811	29·721	·090	29·768	−·013	29·760	85·0	76·6	8·4	88·5	74·0	14·5	82·9	81·2	79·5	0	74·9	79·1	77·7	77·2
	Rangoon	...	·824	·714	·110	·770	−·016	·748	86·5	76·6	9·9	90·6	72·9	17·7	81·5	82·6	79·9	+1·2	74·8	78·5	78·5	77·3
	Diamond Island	...	·808	·710	·098	·761	−·018	·737	84·6	78·1	6·5	87·5	74·4	13·1	82·3	81·8	80·3	+1·6	75·9	78·3	77·3	77·2
	Cocos Island	111	·725	·637	·088	·683	?	·726	85·6	77·2	8·4	89·4	73·9	15·5	82·4	82·3	80·1	?	74·5	78·4	78·0	77·0
	Akyab	...	·813	·697	·116	·759	−·005	·721	87·4	77·9	9·5	91·2	75·0	16·2	84·1	85·1	81·9	+0·4	76·0	81·1	82·1	79·7
Assam.	Silchar	...	·719	·591	·128	·660	+·014	·714	90·3	76·3	14·0	96·8	73·5	23·3	83·6	87·5	82·2	+0·7	75·0	79·1	80·0	78·0
	Sibsagar	...	·497	·370	·127	·435	+·006	·721	86·8	76·2	10·6	92·2	72·5	19·7	81·5	86·3	80·3	−0·5	75·5	78·6	80·5	78·2
	Dhubri	...	·693	·575	·118	·640	+·007	·709	85·8	77·5	8·3	91·2	73·0	18·2	81·9	83·7	79·9	+0·8	76·2	78·7	79·1	78·0
Bengal and Orissa.	Chittagong	...	·727	·607	·120	·671	−·005	·705	87·6	76·3	11·3	91·3	73·9	17·4	84·0	84·8	81·1	+0·6	75·6	79·7	80·1	78·5
	Narayanganj	...	·768	·657	·111	·718	+·012	·686	88·7	80·1	8·6	93·0	74·0	19·0	85·0	86·2	84·1	+1·2	77·1	80·6	80·5	79·4
	Calcutta (Alipore)	...	·756	·648	·108	·704	+·018	·671	89·3	78·7	10·6	92·4	74·2	18·2	86·1	86·4	83·8	+1·5	76·5	80·3	79·5	78·8
	Saugor Island	...	·748	·646	·102	·699	+·016	·668	89·7	81·0	8·7	92·5	75·8	16·7	86·8	86·8	84·2	+1·6	78·3	81·9	80·9	80·4
	Burdwan	...	·681	·567	·114	·627	+·012	·673	91·5	79·5	12·0	94·2	76·2	18·0	86·5	88·7	84·5	+1·0	77·5	80·0	79·9	79·1
	Berhampore	...	·712	·601	·111	660	+·014	·674	90·2	78·8	11·4	92·7	73·8	18·9	86·5	88·5	83·8	+0·8	76·6	80·8	80·7	79·4
	False Point	..	·755	·655	·100	·707	+·019	·669	89·4	78·6	10·8	94·5	76·0	18·5	87·1	86·0	82·7	+0·9	77·0	80·6	80·2	79·3
	Cuttack	...	·688	·583	·105	·640	+·019	·661	91·5	78·6	12·9	96·6	75·2	21·4	85·9	86·5	83·5	+1·0	76·6	79·7	78·9	78·4
Gangetic Plain and Chota N. Gpur.	Hazaribagh	...	27·784	27·685	·099	27·739	+·028	·666	87·1	72·8	14·3	89·8	70·3	19·5	82·1	83·9	78·8	+1·9	69·7	74·2	73·8	72·6
	Patna	...	29·589	29·471	·118	29·535	+·018	·668	90·5	78·8	11·7	93·0	73·4	19·6	86·8	88·2	83·6	+0·1	76·3	79·6	79·5	78·5
	Darbhanga	...	·612	·495	·117	·559	+·016	·677	88·7	79·7	9·0	93·2	75·3	17·9	85·8	87·3	83·3	+0·6	78·0	80·4	80·3	79·6
	Allahabad	...	·451	·342	·109	·399	+·018	·658	93·5	76·8	16·7	96·8	70·1	26·7	87·8	91·3	84·1	+1·0	74·6	79·4	79·3	77·8
	Lucknow	...	·393	·282	·112	·341	+·011	·662	92·3	75·9	16·4	96·6	67·8	28·8	86·5	90·0	83·5	−0·4	72·2	78·8	79·5	76·8
Upper Sub-Himalayas.	Dehra Dun	...	27·586	27·497	·089	27·534	+·027	·700	85·9	69·2	16·7	88·3	63·0	25·3	79·6	82·0	76·3	−0·2	66·1	72·3	73·0	70·5
	Roorkee	...	28·870	28·767	·103	28·812	+·015	·652	92·8	72·5	20·3	95·5	63·3	32·2	85·0	91·3	82·0	0	70·4	76·6	76·7	74·6
	Meerut	...	29·014	·912	·102	·954	+·014	·645	94·0	74·9	19·1	97·5	65·2	32·3	86·8	91·8	83·8	+0·9	72·2	76·0	76·3	74·8
	Lahore	...	·038	·940	·098	·983	+·014	·635	100·3	75·9	24·4	103·4	67·0	36·4	90·7	99·2	87·6	+3·3	69·5	75·1	76·4	73·6
	Ludhiana	...	28·942	·841	·101	·886	+·011	·618	97·6	74·9	22·7	100·8	67·7	33·1	89·2	96·1	85·7	+2·1	70·9	74·9	76·0	73·9
Indus Valley and N.-W. Rajputana.	Peshawar	...	·675	·565	·110	·614	+·031	·685	96·5	69·3	27·2	103·0	62·0	41·0	86·3	94·7	82·2	+0·4	63·2	71·4	72·7	69·1
	Mooltan	...	29·300	29·222	·078	29·255	+·020?	·633	101·7	75·6	26·1	105·6	70·1	35·5	90·2	100·3	88·1	+0·7	68·6	76·4	80·0	75·0
	Jacobabad	...	·568	·451	·114	·505	+·041	·645	103·8	74·2	29·6	108·3	67·1	41·2	92·5	101·8	88·3	0	69·1	77·6	76·7	74·5
	Kurrachee	...	·780	·708	·072	·746	+·046	·717	88·4	76·3	12·1	93·9	73·8	20·1	85·1	85·5	81·4	0	74·5	81·5	82·5	79·5
E. Rajputana, Central India, and Gujarat.	Jeypore	...	28·280	28·279	·101	28·325	+·030	·686	96·9	73·6	23·3	100·0	66·9	33·1	88·8	94·1	83·9	+1·9	68·5	73·3	73·6	72·5
	Ajmere	...	·219	·123	·096	·165	+·040	·710	91·8	73·4	18·4	98·4	65·7	32·7	85·0	90·4	81·8	+0·2	68·6	74·9	76·7	73·4
	Deesa	...	29·377	29·252	·125	29·314	+·036	·725	97·7	73·4	24·3	105·4	68·1	37·3	87·9	96·0	84·6	+2·8	69·4	73·2	73·9	72·2
	Nowgong	...	·015	28·909	·106	28·964	+·020	·666	93·1	75·5	17·6	98·7	69·3	29·4	85·9	90·1	83·0	+1·1	73·1	77·6	77·4	76·0
	Agra	...	·200	29·101	·099	29·145	+·064	·647	96·0	76·6	19·4	101·2	70·6	30·6	90·5	93·6	86·0	+2·6	72·1	77·4	76·8	75·4
Deccan.	Belgaum	...	27·364	27·267	·097	27·318	+·008	·764	79·1	65·0	14·1	85·1	61·9	23·2	74·4	73·9	70·3	−0·1	64·7	69·4	69·6	67·9
	Sholapur	...	28·272	28·145	·127	28·220	+·013	·748	86·6	69·9	16·7	92·9	66·9	26·0	79·4	82·3	76·5	−1·1	68·5	72·3	72·7	71·2
	Poona	...	·037	27·934	·103	27·991	+·014	·768	84·0	68·6	15·4	91·8	64·5	27·3	77·9	80·1	74·5	+0·1	67·0	71·1	71·7	69·9
	Akola	...	·886	28·763	·123	28·825	+·016	·700	91·0	73·1	17·9	96·1	69·7	26·4	83·9	87·4	81·1	+1·3	71·8	76·2	76·6	74·9
	Buldana	2,132	27·719	27·615	·104	27·668	+·024	·731	82·7	69·2	13·5	87·2	67·4	19·8	77·3	79·8	75·2	−0·5	67·5	71·6	72·4	70·5
	Khandwa	...	28·785	28·666	·119	28·727	+·033	·720	88·3	73·5	14·8	93·2	67·8	25·4	81·9	86·0	79·6	+0·5	71·2	75·2	76·1	74·2

II.

85 Stations in India, Burma, etc., for September 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean wind direction.	Normal wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·845	·946	·903	·898	+·006	92	84	85	87	−1	8·2	8·5	8·4	+1·4	...	3	1	...	1	2	20	25	8	S. 80° W.	S. 43° W.	73	73	285	214	...	...	Port Blair .	Burma Coast and Bay Islands.
·842	·937	·921	·900	+·005	92	87	83	87	−2	8·3	7·7	8·0	−0·1	...	...	3	7	9	16	14	8	3	S. 9° W.	S. 18° W.	48	49	86	91	...	...	Rangoon .	
·864	·915	·878	·886	+·012	90	83	81	85	−2	8·3	8·4	8·4	+1·5	1	1	3	4	6	5	20	13	7	N. 54° W.	S. 39° W.	43	58	276*	155	...	...	Diamond Island,	
·819	·921	·905	·882	?	88	83	82	84	?	6·6	7·0	6·8	?	2	...	2	...	...	14	38	1	2	S. 36° W.	?	80	?	?	?	12·36	3·26	Cocos Island	
·872	1·025	1·058	·985	+·077	91	88	87	89	+4	7·3	7·5	7·4	+0·4	...	4	5	14	3	16	6	10	2	S. 17° E.	S. 9° E.	23	41	72	72	...	...	Akyab .	
·854	·937	·926	·906	+·003	94	82	72	83	−1	7·8	6·9	7·4	+0·3	47	1	1	1	...	1	2	5	2	N. 83° W.	S. 89° W.	10	2	36*	61	...	...	Silchar .	Assam.
·876	·942	·963	·927	+·010	97	88	77	87	+1	7·3	5·0	6·2	−1·8	15	...	17	2	8	...	18	...	...	S. 45° E.	N. 73° E.	15	18	91*	58	...	...	Sibsagar .	
·890	·941	·933	·921	+·028	94	86	81	87	0	6·1	6·7	6·4	−0·1	15	1	15	7	2	2	14	2	2	S. 87° E.	S. 66° E.	10	28	121	77	...	...	Dhubri .	
·877	·964	·968	·936	+·022	96	82	81	86	−5	7·2	7·0	7·1	+0·5	1	2	7	5	9	10	9	9	8	S. 25° W.	S. 29° E.	18	31	97*	109	...	...	Chittagong .	Bengal and Orissa.
·895	·987	·966	·949	−·015	87	82	77	82	−4	7·9	7·7	7·8	+1·0	1	3	4	10	15	11	12	1	3	S. 28° E.	S. 11° E.	42	57	129	112	...	...	Narayanganj	
·888	·958	·919	·922	−·034	90	77	74	80	−7	5·6	6·9	6·3	−0·9	2	3	7	7	6	6	14	8	7	S. 43° W.	S. 27° E.	16	43	86	101	...	...	Calcutta (Alipore),	
·935	1·026	·979	·980	+·001	88	80	77	82	−4	8·1	8·2	8·2	+1·4	...	5	5	3	9	12	15	7	4	S. 23° W.	S. 4° W.	32	48	305	241	...	...	Saugor Island	
·917	·936	·905	·919	−·011	91	74	67	77	−5	6·1	7·4	6·8	−0·6	7	8	6	4	7	9	13	2	4	S. 6° W.	S. 31° E.	13	38	70*	72	...	...	Burdwan .	
·888	·976	·945	·936	+·001	90	78	71	80	−6	6·4	6·7	6·6	−1·5	4	5	5	9	6	14	10	3	4	S. 16° E.	S. 41° E.	23	36	93*	88	...	...	Berhampore	
·907	·958	·958	·941	+·014	93	75	78	82	−2	6·4	6·8	6·6	−0·2	1	3	7	10	5	15	10	5	4	S. 14° E.	S. 25° W.	25	36	213*	198	...	...	False Point	
·892	·931	·887	·903	+·004	91	75	71	79	−2	5·1	7·1	6·1	−0·4	5	2	14	6	3	4	13	8	5	N. 88° W.	S. 10° W.	5	20	68	56	...	...	Cuttack .	
·691	·748	·712	·717	−·043	86	69	62	72	−9	7·3	8·1	7·7	−0·2	...	12	3	6	5	9	5	6	14	N. 45° W.	S. 64° E.	18	21	173	169	...	...	Hazaribagh	Gangetic Plain and Chota Nagpur.
·877	·914	·892	·894	−·020	89	72	67	76	−4	5·3	5·9	5·6	−1·4	2	3	5	14	4	7	4	14	7	S. 50° W.	S. 77° E.	3	42	93*	74	...	...	Patna .	
·941	·967	·944	·951	+·015	92	79	73	81	−2	5·2	4·6	4·9	−0·5	4	2	7	19	13	1	3	5	6	S. 87° E.	S. 86° E.	37	54	79	93	...	...	Darbhanga	
·833	·894	·844	·857	−·035	90	68	59	72	−8	4·4	4·2	4·3	−0·9	5	2	5	9	2	4	4	15	14	N. 62° W.	N. 42° E.	26	11	105	79	...	...	Allahabad .	
·741	·883	·868	·831	−·004	83	70	63	72	−1	4·4	5·5	5·0	−0·4	7	7	10	5	6	4	4	7	10	N. 4° W.	N. 1° E.	17	14	?	68	...	...	Lucknow .	
·608	·705	·702	·672	?	84	70	64	73	?	3·4	4·2	3·8	−0·9	19	1	1	...	4	6	5	15	9	S. 79° W.	N. 80° W.	37	18	15	27	...	...	Dehra Dun	Upper Sub-Himalayas.
·721	·807	·728	·752	−·014	90	67	50	69	−3	2·6	2·1	2·4	−1·4	28	...	3	9	8	1	5	4	2	S. 50° E.	S. 6° E.	17	9	45	49	...	...	Roorkee .	
·763	·760	·706	·743	−·013	87	60	48	65	−4	1·9	2·1	2·0	−1·7	31	...	...	2	4	...	2	10	11	N. 77° W.	N. 34° W.	25	17	21	49	...	...	Meerut .	
·647	·667	·605	·640	−·074	71	46	33	50	−6	0·7	1·2	1·0	−0·4	4	7	3	9	11	10	1	10	5	S. 40° W.	N. 60° E.	12	13	53	50	...	...	Lahore .	
·717	·682	·634	·678	−·076	82	50	37	56	−9	2·2	2·6	2·4	−0·4	1	3	9	2	19	3	5	9	9	S. 35° E.	N. 40° W.	8	13	44	29	...	...	Ludhiana .	
·518	·595	·530	·548	−·041	71	47	33	50	−4	0·7	2·2	1·5	−0·1	12	3	9	14	2	1	4	6	9	N. 33° E.	N. 39° E.	20	55	62*	75	...	...	Peshawar .	Indus Valley and N.-W. Rajputana.
·612	·729	·756	·699	−·096	69	51	39	53	−8	0·2	0·5	0·4	−0·5	...	...	4	...	27	...	27	...	2	S. 3° E.	S. 32° W.	57	33	72*	61	...	...	Mooltan .	
·650	·748	·586	·662	−·032	76	49	29	51	−2	0·4	1·0	0·7	+0·1	34	...	...	...	9	14	3	...	...	S. 11° E.	S. 36° E.	38	41	40*	69	...	...	Jacobabad .	
·834	1·029	1·070	·977	+·150	92	85	87	88	+12	3·4	3·3	3·4	−0·5	...	...	...	...	...	3	29	27	1	S. 65° W.	S. 62° W.	89	83	340	360	...	...	Kurrachee .	
·642	·626	·575	·614	−·061	76	46	37	53	−11	2·2	5·3	3·8	+0·3	...	4	3	1	1	...	3	25	23	N. 64° W.	N. 31° W.	73	45	92	118	...	...	Jeypore .	E. Rajputana, Central India, and Gujarat.
·647	·743	·751	·714	+·025	78	62	53	65	−1	1·5	3·1	2·3	−0·9	2	3	4	...	1	...	2	33	15	N. 45° W.	S. 80° W.	35	44	136	120	...	...	Ajmere .	
·669	·621	·541	·610	−·116	81	48	33	54	−12	1·9	1·4	1·7	−3·0	...	6	1	2	1	1	4	26	19	N. 69° W.	S. 65° W.	70	50	175	203	...	...	Deesa .	
·789	·839	·773	·800	+·009	89	68	56	71	− 2	4·0	5·4	4·7	−0·9	6	5	2	5	...	4	1	34	3	N. 63° W.	N. 67° W.	48	28	48*	57	...	...	Nowgong .	
·736	·768	·700	·735	−·050	79	54	46	60	−7	2·7	3·2	3·0	−0·7	...	1	9	...	3	...	5	...	42	S. 40° W.	N. 26° W.	63	13	98*	99	...	...	Agra .	
·607	·658	·671	·645	−·001	98	77	81	85	0	7·3	8·6	8·0	+0·5	...	1	2	1	...	2	10	26	14	N. 85° W.	N. 84° W.	73	82	343	374	..	...	Belgaum .	Deccan.
·681	·707	·685	·691	−·028	93	71	63	76	+6	7·5	8·2	7·9	−0·2	...	6	6	2	2	1	4	6	33	N. 41° W.	N. 73° W.	62	68	247*	238	...	...	Sholapur .	
·645	·676	·672	·664	−·008	92	71	66	76	−1	7·8	8·0	7·9	+0·2	8	...	...	...	...	...	6	31	14	N. 83° W.	N. 89° W.	77	70	174	260	...	...	Poona .	
·764	·802	·775	·780	+·045	94	69	61	75	+2	5·9	7·2	6·6	+0·1	8	4	4	...	1	1	3	16	23	N. 58° W.	N. 66° W.	61	66	135	144	...	...	Akola .	
·653	·706	·704	·688	+·005	91	76	70	79	+1	6·9	7·9	7·4	+1·1	...	3	3	1	1	1	3	7	41	N. 48° W.	N. 48° W.	76	64	157	195	11·87	2·55	Buldana .	
·738	·791	·777	·769	+·031	90	73	64	76	+2	6·8	7·0	6·9	+1·6	...	3	11	...	1	...	4	6	35	N. 38° W.	N. 69° W.	68	66	157	148	...	...	Khandwa .	

* Corrected.

Table

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

Meteorological Province.	Station.	Elevation of bar cistern above sea-level in feet	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*concld.*	Hosangabad	...	28·793	28·676	·117	28·736	+·027	29·705	89·4	73·5	16·0	92·6	69·8	22·8	82·8	86·7	80·1	+0·5	71·9	77·2	77·9	75·7
	Nagpur	...	·773	·658	·115	·717	+·039	·686	90·7	74·7	16·0	95·1	71·5	23·6	83·9	86·5	81·7	+1·3	70·9	76·6	76·3	74·6
	Do. (Sanitary Commr.'s Office).	...	·794	·673	·121	·734	?	·694	91·4	74·8	16·6	95·5	71·4	24·1	84·6	87·2	82·1	?	71·9	76·9	76·7	75·2
	Jubbulpore	...	·456	·342	·114	·400	+·021	·669	89·6	72·9	16·7	93·2	65·3	27·9	82·2	86·6	79·8	+1·2	71·2	75·6	75·1	74·0
	Saugor	...	·048	27·942	·106	27·996	+·046	·688	89·0	73·2	15·8	93·9	67·7	26·2	82·6	85·6	79·5	+2·3	69·7	75·1	75·7	73·5
	Raipur	...	·824	28·707	·117	28·767	+·035	·664	90·8	75·8	15·0	94·4	72·6	21·8	85·3	86·4	82·2	+1·7	73·3	77·6	76·9	75·9
	Sutna	...	·732	·625	·107	·681	+·026	·669	90·3	74·9	15·4	95·0	66·9	28·1	85·6	87·4	81·3	+1·0	72·7	76·9	76·3	75·3
	Hyderabad (Deccan.)	...	·151	·027	·124	·094	?	·717	85·4	72·1	13·3	91·0	69·4	21·6	79·0	82·8	78·1	?	70·4	73·5	75·1	73·0
West Coast.	Bombay	...	29·865	29·765	·100	29·812	+·027	·789	83·8	76·1	7·7	88·1	71·2	16·9	80·3	81·6	79·4	−0·3	73·2	76·8	76·8	75·6
	Ratnagiri	...	·793	·698	·095	·743	+·019	·730	83·9	74·5	9·4	85·9	72·2	13·7	80·9	81·2	78·5	−0·1	72·7	76·7	76·8	75·4
	Karwar	...	·881	·782	·099	·829	+·011	·804	83·0	75·5	7·5	81·9	73·5	11·4	80·3	80·9	78·7	+1·0	73·0	75·5	75·9	74·8
	Cochin	...	·933	·852	·081	·890	−·002	·827	85·4	75·3	10·1	87·4	72·5	14·9	81·9	83·3	79·8	+0·9	74·0	77·0	77·6	76·2
South India.	Salem	...	28·964	28·823	·141	28·907	−·015	·776	91·2	72·5	18·7	96·1	70·2	25·9	82·8	88·1	79·7	+0·6	70·9	74·4	76·0	73·8
	Mysore	...	·414	·296	·118	·355	?	·770	85·7	66·7	19·0	91·0	62·8	28·2	78·0	81·9	75·3	?	65·3	69·1	69·7	68·0
	Mercara	...	26·225	26·135	·090	26·193	0	?	72·4	62·7	9·7	76·7	59·0	17·7	68·2	67·7	66·4	+0·4	61·5	64·8	65·3	63·9
	Bangalore	...	·912	·799	·113	·867	−·017	·763	82·5	65·8	16·7	88·1	62·7	25·4	75·3	78·8	73·2	+0·5	64·7	69·0	69·8	67·8
	Hassan	...	·861	·764	·097	·824	?	·796	80·3	64·1	16·2	84·7	60·7	24·0	75·5	75·8	71·1	?	62·5	67·2	68·5	66·1
	Chitaldroog	...	27·497	27·379	·118	27·447	?	·765	83·7	67·3	16·4	88·4	63·8	24·6	76·1	81·2	74·9	?	61·4	69·4	70·2	68·0
	Trichinopoly	...	29·615	29·470	·145	29·556	−·011	·739	94·4	75·6	18·8	98·3	73·9	24·4	87·2	91·7	82·9	0	71·2	75·8	77·0	74·7
	Madras	...	·823	·705	·118	·771	−·006	·721	94·0	77·1	16·9	100·1	71·3	28·8	87·2	88·3	84·1	+0·3	?	77·2	78·5	77·3
	Bellary	...	28·399	28·262	·137	28·340	+·006	·743	89·8	72·1	17·7	95·6	68·4	27·2	81·6	87·5	79·7	−0·4	67·3	70·3	71·2	69·6
	Vizagapatam	...	29·750	29·644	·106	29·699	+·008	·666	90·0	77·8	12·2	96·4	74·7	21·7	86·8	87·5	83·7	−0·5	76·2	79·7	80·3	78·7
	Cocanada	...	·759	·640	·119	·700	?	·662	88·1	78·5	9·6	95·2	74·0	21·2	85·5	86·8	83·0	?	75·9	78·3	78·5	77·6
Hill Station, Baluchistan.	Quetta	...	24·638	24·560	·078	24·591	+·038	?	85·2	45·6	39·6	90·6	37·0	53·6	75·3	81·7	64·6	−2·3	40·6	57·3	59·6	52·5
Hill Stations, Northern India.	Leh	...	19·750	19·642	·108	19·704	+·018	?	70·6	41·0	29·6	82·8	31·6	51·2	58·5	66·5	55·3	+2·1	29·3	44·0	48·8	40·7
	Srinagar	...	24·883	24·797	·086	24·832	?	?	79·0	52·0	27·0	89·8	43·0	46·8	66·2	77·6	65·2	?	51·4	61·6	69·2	60·7
	Murree	...	23·872	23·835	·037	23·846	+·020	?	75·2	60·6	14·6	78·8	50·1	28·7	70·9	71·5	66·8	+1·3	51·5	60·0	59·9	57·1
	Chamba	3,005	26·844	26·762	·082	26·811	+·011	?	86·2	63·7	22·5	89·4	57·0	32·4	75·8	82·3	73·1	+0·1	60·1	65·9	69·3	65·1
	Kailang	10,087	20·793	20·737	·056	20·773	+·025	?	68·8	40·9	27·9	79·7	35·0	44·7	60·1	63·3	52·6	−1·3	38·7	48·8	47·8	45·1
	Simla (Ridge)	...	23·142	23·092	·050	23·109	+·024	?	67·2	56·8	10·4	71·0	53·2	17·8	62·8	64·0	61·0	0	51·6	56·8	58·2	55·5
	Chakrata	...	·339	·281	·058	·302	+·028	?					Therm	meters	not in	use.						
	Ranikhet	...	24·110	24·040	·070	24·061	+·031	?	73·1	59·7	13·4	76·0	55·6	20·4	68·5	69·7	65·3	−0·3	57·0	62·2	63·5	60·9
	Katmandu	4,388	25·528	25·461	·067	25·497	−·044	?	81·8	66·1	15·7	85·4	61·9	23·5	75·6	77·0	72·7	−1·2	64·6	69·2	70·3	68·0
	Darjeeling	...	23·001	22·926	·075	22·966	+·007	?	64·8	55·6	9·2	68·8	53·7	15·1	61·4	62·1	59·5	+1·0	55·0	59·9	60·5	58·5
Hill Stations, Central India.	Mount Abu	...	26·029	25·958	·071	25·993	+·024	?	77·5	64·6	12·9	83·7	60·7	23·0	73·6	75·8	70·6	+1·2	61·2	66·3	67·6	65·0
	Pachmarhi	...	·407	26·321	·086	26·365	+·045	?	78·3	66·6	11·7	82·5	60·7	21·8	74·9	75·9	71·4	+0·9	65·3	68·5	69·6	67·8
	Chikalda	3,642	·297	·206	·091	·251	+·032	?	75·3	65·5	9·8	80·4	62·2	18·2	71·6	72·9	69·3	+0·3	64·2	68·5	69·1	67·3

II—*continued.*

at 85 Stations in India, Burma, etc., for September 1895—continued.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from								Mean wind direction.	Normal mean wind direction of month.								
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·767	·865	·849	·827	+·041	93	77	68	79	+ 1	5·1	6·1	5·6	−0·2	18	...	3	3	2	1	25	7	1	S. 48° W.	N. 86° W.	42	50	72	59	...	...	Hoshangabad	Deccan—*contd.*
·712	·824	·783	·773	+·005	82	71	63	72	− 2	5·6	7·0	6·3	−0·9	12	9	7	5	1	4	4	6	12	N. 25° W.	N. 54° W.	27	37	142	118	...	...	Nagpur .	
·746	·828	·788	·787	?	86	70	62	73	?	4·9	6·2	5·6	?	20	11	2	2	3	5	3	7	7	N. 46° W.	?	20	?	36*	?	...	...	Do. (Sanitary Commr's Office).	
·747	·802	·731	·760	−·011	92	73	59	75	− 2	4·3	5·5	4·9	−1·2	...	10	5	3	3	5	9	15	10	N. 71° W.	N. 69° W.	35	34	63	78	...	...	Jubbulpore .	
·687	·779	·768	·745	+·020	84	70	65	73	− 3	4·0	5·1	4·6	+0·2	...	8	1	2	5	1	19	11	13	S. 89° W.	N. 77° W.	45	43	83	80	...	...	Saugor . .	
·787	·845	·801	·811	+·007	88	70	64	74	− 4	4·9	6·6	5·8	−0·9	5	4	8	13	1	1	9	13	6	N. 36° W.	S. 69° W.	12	29	147*	141	...	...	Raipur . .	
·780	·817	·772	·790	+·024	90	67	61	73	0	3·9	4·4	4·2	−0·8	1	13	...	2	2	5	2	17	18	N. 57° W.	N. 55° W.	55	31	120*	155	...	...	Sutna . .	
·724	·759	·783	·755	?	92	77	71	80	?	6·7	6·8	6·6	?	3	7	2	3	1	1	...	20	22	N. 54° W.	?	63	?	133*	?	...	...	Hyderabad (Deccan.) .	
·779	·878	·860	·839	−·029	87	85	80	84	− 2	8·2	7·1	7·7	+0·3	...	3	4	3	2	6	5	14	23	N. 67° W.	S. 89° W.	48	55	213	273	...	...	Bombay .	West Coast.
·780	·862	·866	·836	+·001	92	82	82	85	+ 1	6·1	6·9	6·5	+0·8	2	7	...	1	...	1	8	15	26	N. 64° W.	S. 88° W.	71	55	134*	188	...	...	Ratnagiri .	
·780	·818	·829	·809	−·012	88	79	79	82	− 4	4·9	5·8	5·4	−0·5	2	5	1	...	...	...	4	20	28	N. 62° W.	N. 86° W.	79	78	89	?	...	...	Karwar . .	
·825	·865	·869	·853	+·021	93	80	77	33	− 2	5·3	6·3	5·8	+0·5	2	...	1	1	...	1	5	38	12	N. 85° W.	N. 82° W.	82	61	96	?	...	...	Cochin .	
·736	·738	·736	·737	−·021	93	67	57	72	− 1	6·6	7·2	6·9	+1·5	29	1	...	...	3	7	12	5	3	S. 43° W.	S. 68° W.	33	77	44	84	...	...	Salem . .	South India.
·609	·603	·575	·596	?	93	63	54	70	?	7·4	7·7	7·6	?	4	1	...	1	...	3	11	28	12	S. 88° W.	?	72	?	261*	?	...	...	Mysore . .	
·533	·577	·596	·569	−·005	93	84	88	88	− 3	7·7	8·9	8·3	−0·3	...	3	...	1	1	...	2	23	30	N. 63° W.	N. 72° W.	82	84	225	173	...	...	Mercara. .	
·601	·637	·625	·621	+·022	94	73	65	77	+ 1	7·4	7·8	7·6	+1·6	1	1	1	1	...	1	11	30	14	N. 87° W.	S. 82° W	77	88	183*	161	...	...	Bangalore .	
·548	·574	·613	·578	?	91	65	69	75	?	7·4	7·9	7·7	?	...	2	1	...	...	...	5	35	17	N. 78° W.	?	85	?	89*	?	...	...	Hassan . .	
·571	·636	·603	·603	?	85	71	57	71	?	8·0	8·2	8·1	?	...	1	2	2	...	...	10	28	17	N. 80° W.	?	73	?	209*	?	...	...	Chitaldroog .	
·709	·737	·731	·726	0	80	58	50	63	− 1	5·2	6·4	5·8	−1·2	14	2	...	...	...	2	7	25	10	N. 87° W.	N. 78° W.	62	77	118	168	...	...	Trichinopoly .	
?	·802	·843	·846	+·034	?	63	64	73	0	5·7	6·1	5·9	−0·2	...	3	4	7	6	3	10	17	10	S. 85° W.	S. 36° W.	28	53	120	154	...	...	Madras . .	
·612	·600	·562	·591	−·078	78	56	44	59	− 6	8·7	9·1	8·9	+1·5	6	...	...	1	1	...	2	34	16	N. 78° W.	N. 78° W.	77	74	221	219	...	...	Bellary . .	
·882	·919	·938	·913	+·031	93	73	72	79	+ 6	6·8	6·9	6·9	+1·2	...	1	6	...	...	9	20	21	3	S. 64° W.	S. 60° W.	61	48	55	50	...	..	Vizagapatam.	
·863	·872	·864	·866	?	88	72	68	76	?	5·2	5·2	5·2	?	...	4	5	2	7	6	13	13	10	S. 74° W.	?	33	?	172*	?	...	...	Cocanada .	
·205	·286	·284	·258	+·004	67	32	26	42	+ 3	0	0	0	−0·4	35	1	...	...	...	1	1	13	9	N. 74° W.	N. 56° W.	35	50	45*	76	...	...	Quetta . .	Hill Station, Baluchistan.
·070	·164	·206	·147	−·018	27	35	31	31	−10	3·9	4·6	4·3	+0·4	1	1	2	2	1	6	26	17	4	S. 60° W.	S. 59° W.	67	32	93	40	...	...	Leh.	Northern India.
·380	·509	·632	·501	?	95	78	66	80	?	3·1	2·9	3·0	?	12	10	5	2	9	7	0	4	11	N. 1° E.	?	13	?	88*	?	...	...	Srinagar.	
·292	·410	·404	·369	−·046	55	54	52	54	−10	2·5	1·6	2·0	−1·3	9	3	1	4	10	9	8	3	13	S. 34° W.	S. 52° E.	18	8	166*	130	...	...	Murree.	
·488	·528	·567	·528	−·023	81	59	52	64	− 4	2·8	5·7	4·3	+1·2	27	3	1	...	1	...	...	5	23	N. 45° W.	N. 11° W.	47	13	120*	105	0·32	0·15	Chamba.	
·220	·250	·202	·224	+·008	84	48	35	56	− 7	4·6	6·2	5·4	+1·0	...	2	1	...	2	19	10	18	8	S. 56° W.	S. 57° W.	57	63	43	36	0·44	0·32	Kailang.	
·333	·404	·431	·389	−·057	71	70	72	71	− 7	4·5	6·1	5·3	−0·1	19	21	9	1	...	4	2	...	4	N. 7° E.	S. 78° W.	42	30	96	?	...	...	Simla (Ridge).	
?	?	?	?	?	?	?	?	?	?	1·3	1·1	1·2	−5·2	...	4	...	1	2	31	3	5	1	S. 80° W.	S. 74° W.	53	36	327*	113	...	...	Chakrata.	Hill Stations,
·441	·496	·521	·486	−·022	85	71	72	76	− 4	5·3	5·8	5·6	−0·3	21	2	1		1	1	7	22	4	S. 87° W.	S. 52° W.	45	39	78*	51	...	...	Ranikhet.	
·598	·643	·664	·635	+·010	92	73	72	79	+1	6·4	6·5	6·5	+0·4	...	...	...	26	2	...	3	22	7	N. 47° W.	S. 88° W.	3	32	20	?	7·49	2·08	Katmandu.	
·428	·502	·513	·481	+·004	96	92	92	93	−1	9·2	8·3	8·8	+0·6	11	6	6	7	7	1	4	11	6	N. 18° W.	S. 72° E.	10	12	98	73	...	...	Darjeeling.	
·505	·566	·582	·551	+·012	83	70	66	73	−2	3·3	4·2	3·8	−1·6	...	4	4	1	3	2	27	8	11	S. 73° W.	S. 67° W	50	27	175*	173	...	...	Mount Abu.	Central India.
·613	·626	·653	·631	+·003	93	73	74	80	−2	6·7	7·0	6·9	−0·3	21	5	3	2	2	1	2	14	10	N. 59° W.	N. 58° W.	33	45	144*	134	...	...	Pachmarhi.	
·589	·663	·670	·641	+·011	94	86	84	88	0	7·2	7·8	7·5	+0·2	14	27	5	...	2	...	...	...	12	N. 6° W	N. 22° W.	63	65	223	230	6·51	1·44	Chikalda.	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S.L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, S. India.	Wellington . .	...	24·232	24·155	·077	24·194	−·001	?	72·2	55·8	16·4	76·3	51·2	25·1	68·3	66·9	62·7	+0·6	53·6	61·0	61·1	58·6
Extra India.	Muscat . .	...	29·790	29·718	·072	29·754	?	?	85·9	82·2	3·7	90·3	78·8	11·5	84·7	85·5	84·0	?	76·4	80·2	80·2	78·9
	Aden . . .	...	·756	·643	·113	·693	+·011	29·717	94·0	82·6	11·4	97·3	79·4	17·9	89·5	90·4	87·4	+0·4	75·3	80·4	79·5	78·4
	Perim . . .	...	·648	·533	·115	·583	?	?	94·8	84·2	10·6	100·5	81·2	19·3	91·4	89·9	88·3	?	68·9	81·4	81·0	77·1
	Minicoy . .	...	·968	·872	·096	·922	?	·857	86·8	?	?	89·1	75·6	13·5	82·9	84·1	?	?	75·1	77·9	78·1	77·0
	Zanzibar . .	...	30·089	·977	·112	30·033	+·021	30·033	81·4	73·7	7·7	84·6	70·7	13·9	77·4	80·5	77·3	−0·4	71·3	73·8	75·1	73·4
	Port Victoria (Seychelles).	15	·034	·951	·083	29·993	?	29·953	81·3	77·0	4·3	82·4	73·9	8·5	80·1	80·1	78·8	?	71·1	73·9	73·8	72·9

II—*concluded.*

Stations in India, Burma, etc., for September 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·391	·462	·480	·444	+·016	88	67	74	76	−1	7·4	8·1	7·8	+0·9	12	4	1	1	6	6	11	8	11	S. 73° W.	S. 79° W.	32	33	57	72	...	...	Wellington.	Hill Station, S. India.
·839	·974	·961	·925	?	76	81	79	79	?	0·8	0·1	0·5	?	...	1	16	23	4	1	...	4	11	N. 57° E.	?	50	?	79	?	...	...	Muscat.	Extra India.
·783	·917	·865	·855	+·001	70	66	61	66	−1	2·8	1·8	2·3	0	9	...	3	9	4	23	12	...	...	S. 10° E.	S.31° E.	55	51	241	214	...	...	Aden.	
·504	·938	·941	·794	?	43	64	67	58	?	1·3	4·9	3·1	?	...	...	18	7	6	7	3	6	14	N. 31° E.	?	18	?	261	?	...	...	Perim.	
?	·892	·885	?	?	?	80	76	?	?	5·3	5·3	5·3	?	...	...	..	..	...	...	2	38	20	N. 77° W.	?	89	?	367	?	...	...	Minicoy.	
·740	·787	·803	·777	+·057	88	84	77	83	+6	5·7	5·0	5·4	+0·4	...	4	3	1	20	17	10	2	2	S.16° W.	S. 12° W.	53	46	122	118	...	...	Zanzibar.	
·685	·751	·748	·728	?	74	73	73	73	?	5·0	4·9	5·0	?	...	...	...	1	50	8	1	...	...	S. 39° E.	?	95	?	297	?	3·61	250	Port Victoria (Seychelles).	

G. I. C. P. O.—No. 82 Meteor.—7·2·96.—377.

LITHO. BY J. N. MUNDLE.

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 185, Wr., I.—June 96.—6,000
Reg. No. 149, Wr., I.—Apl. 95.—6,500.
Simon., S. I. O., Calcutta.

Explanation.

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

Reg. No. 155, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.
Zinco., S. I. O., Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

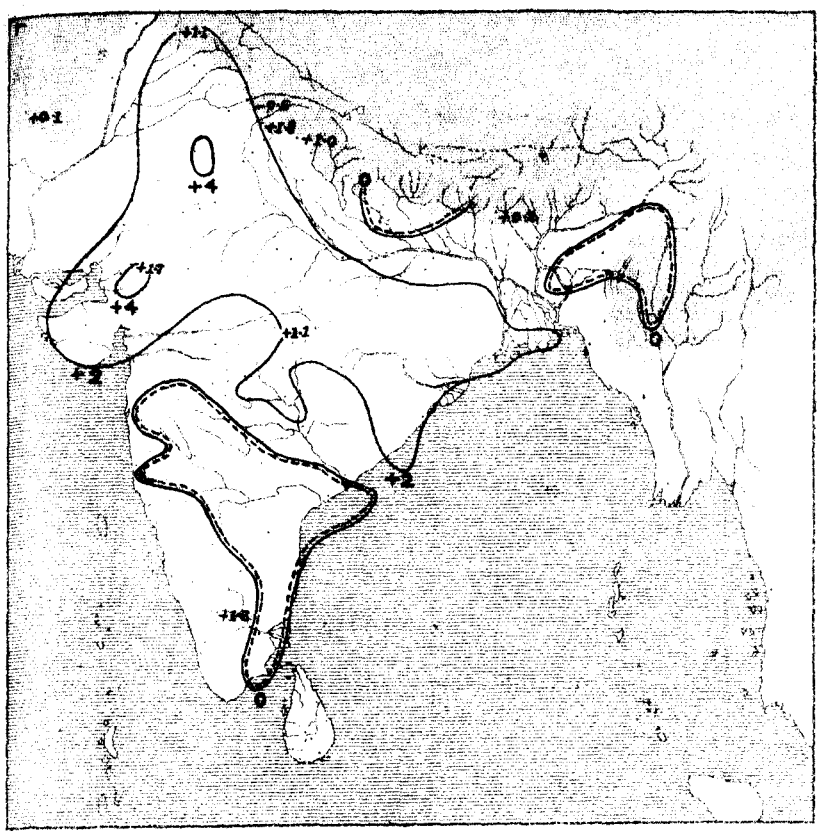
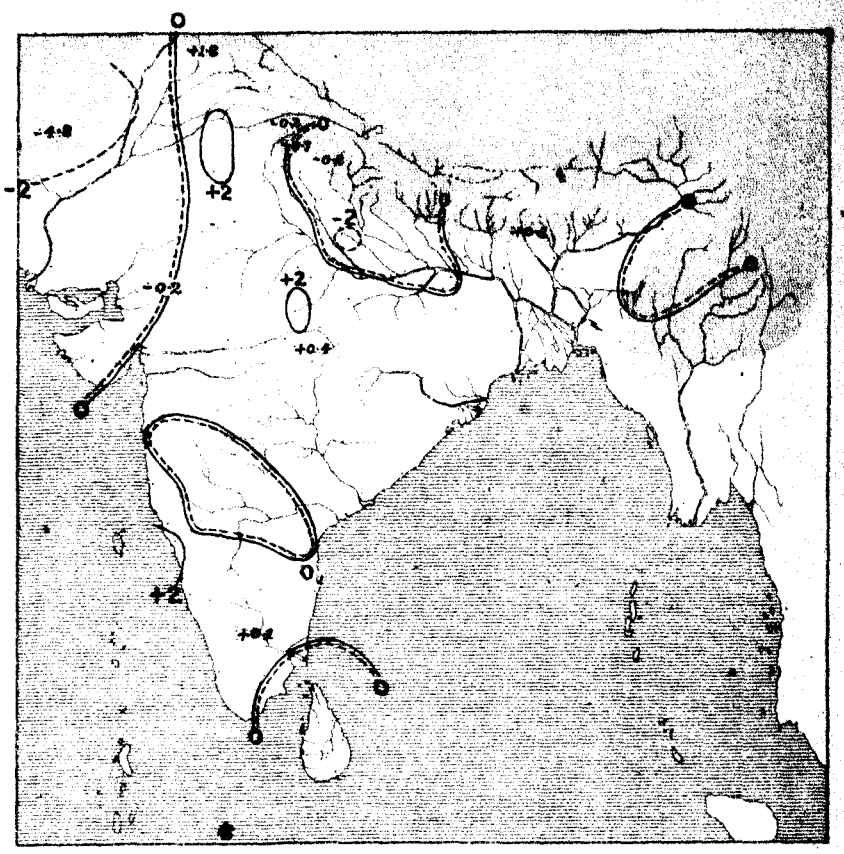


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

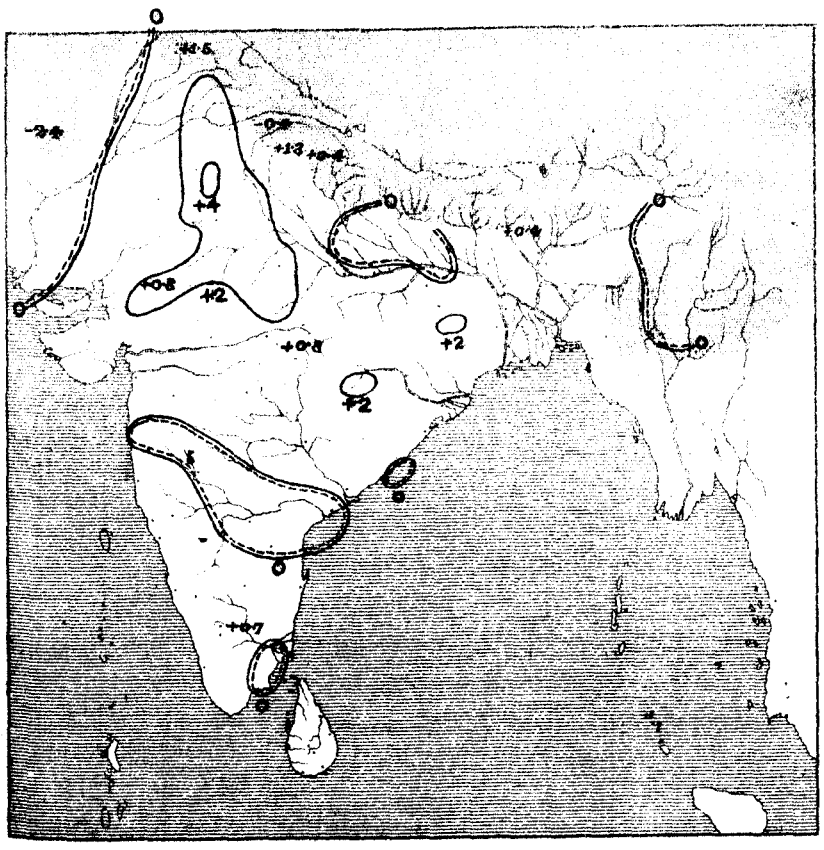
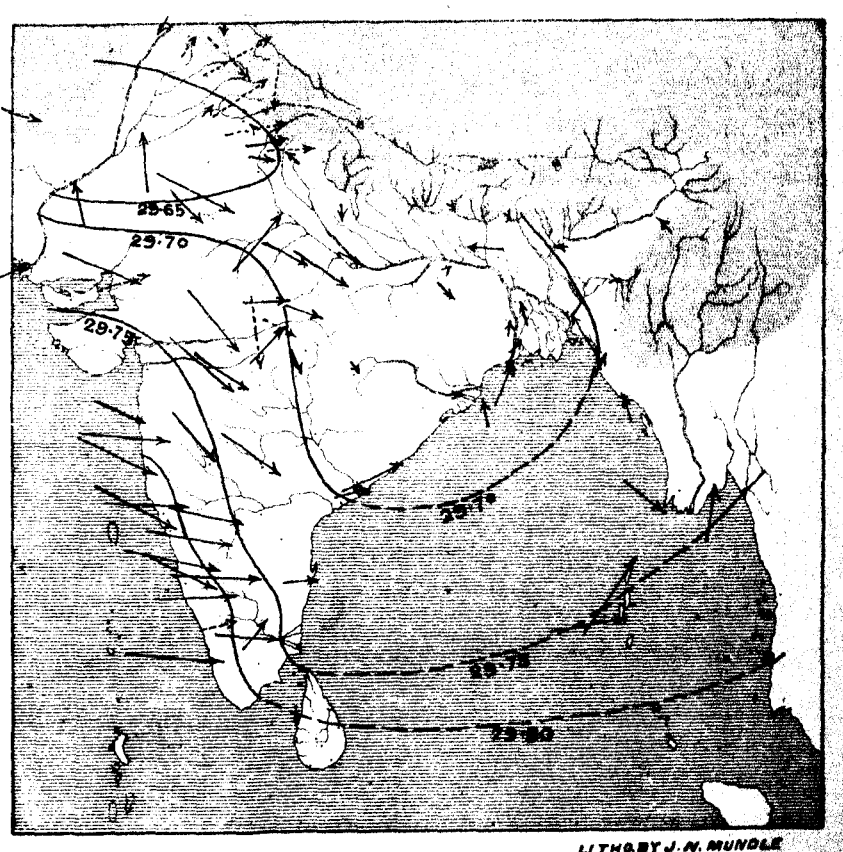


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF SEPTEMBER 1895.



LITH. BY J. N. MUNDLE

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of 4th of an inch being equal to 100 per cent.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Zinco., S. I. ., Calcutta.

Reg. No. 155, Wr., I.—June 95.—6,000.

Reg. No. 149, Wr., I.—Apl. 95.—4,500.

LITHO. BY J.N. MUNDLE.

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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

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INTRODUCTION.

THIS review of the weather in India during the month of October 1895 is based on observations taken daily at 8 A.M. at 206 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 85 stations. The rainfall summary is based on the rainfall data of the meteorological observatories and on the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the provincial Governments that have been received up to the date of the publication of the review. A summary of the weather in the Bay of Bengal and the Arabian Sea, based on information extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given.

Summary of the chief features of the weather in India during the month of October 1895.

October is pre-eminently a month of transition. The south-west monsoon winds usually begin to retreat from North-Western India before the end of September and withdraw from Northern India, the north of the Bay and the north and centre of the Arabian Sea before the end of the month of October. South-west humid winds continue to blow with more or less steadiness in the south of the Arabian Sea and the south and centre of the Bay. These south-west winds in the Bay are deflected through south, south-east and east and blow as north-east winds on the Coromandel Coast. As long as south-west winds continue to prevail in the south of the Bay (which is usually until the middle or end of December) the north-east winds blowing across the Coromandel Coast give more or less frequent rain to Southern India which is heaviest in the coast districts. In Northern India light variable winds or calms generally prevail. The mean air movement is however, from the west down the Gangetic Plain. In the Peninsula winds range between east and north-east. The mean air motion over the whole of the Indian area except the southern portions of the Bay of Bengal and Arabian Sea, although generally feeble, is opposite in direction to that which obtains in September. These changes in the mean wind directions accompany corresponding changes of pressure. Pressure rises rapidly in North-Western India, Assam and Upper Burma, and moderately in Central India and the north of the Peninsula. Before the end of the month pressure is usually highest in Upper India, and is lowest in the centre or south of the Bay. The range of pressure is, however, small and baric gradients very slight. The most important feature of the pressure distribution during the month is hence its approximate uniformity. Pressure is slightly higher in the interior than in the coast districts and is lowest in the Bay and the south of the Peninsula. Temperature begins to fall rather rapidly in Sind, West Rajputana and the

South-West Punjab, which are dry hot areas during the rains. The mean temperature conditions of the month, like the mean pressure conditions, are more uniform in October than in any other month of the year. The mean temperature of the month ranges between 75° (in the North Punjab) and 85° (in Central Rajputana,) and the daily range of temperature varies from 28° in Upper Sind and West Rajputana to 10° in the coast districts of Bengal and Madras. The amount of aqueous vapour in the air diminishes rather rapidly in North-Western and Central India during the month. The decrease in humidity is usually greater in the North-Western Provinces, East Rajputana and Central India than in the Punjab, in consequence of the greater fall of temperature in the latter area. Rain is chiefly received in Bengal, Burma, Madras and the Deccan. In Bengal and Burma it occurs usually during the first-half of the month and in the Peninsula during the second-half of the month. One of the most important meteorological features of the month is the tendency to the formation of extensive and intense cyclones in the Bay. These appear to require a considerable period for their development, and the uniform conditions of temperature and pressure of the month are especially favourable to their growth, provided the humid south-west current in the south of the Bay be strong enough to ensure abundant supplies of aqueous vapour, the condensation of which undoubtedly supplies the motive power of these storms.

It was stated in last month's review that a storm formed in the north-west of the Bay in the last week of that month and that it was on the 30th in the north-west angle and approaching the Bengal coast. It was a storm of moderate intensity on the morning of the 1st, the centre being at that time a little to the east of False Point. The storm crossed the coast during the evening of the 1st and recurved with increasing rapidity so that its course which was north with a slight easting on the morning of the 1st was probably east-north due east through Central and East Bengal on the 2nd. The centre was a little to the south of Dacca at 8 A.M. and the depression at the centre was at least six-tenths of an inch. The storm had intensified considerably during the previous 24 hours and gave very strong stormy winds with very heavy rain in South-East Bengal. The winds and rain caused much destruction of property and crops. The storm filled up almost completely during the next 24 hours. A shallow diffused residual depression lay over Upper Assam and Upper Burma on the morning of the 3rd. It disappeared during the next 24 hours. The storm gave a moderately heavy burst of rain to Orissa, Bengal and Assam as is shown by the following data:—

Division.	Average actual rainfall in 24 hours preceding 8 A.M. of			Total of period.
	1st.	2nd.	3rd.	
	Inches.	Inches.	Inches.	Inches.
Orissa	1·60	0·66	0·01	2·27
Bengal (Deltaic) . .	0·80	2·31	0·24	3·35
,, (East) . .	0·86	2·38	1·84	5·08
,, (Central) . .	0·20	0·36	0·07	0·63
,, (North) . .	0·27	0·33	0·33	0·93
Assam (Surma) . .	0·74	0·95	1·99	3·68
,, (Brahmaputra) .	0·27	0·28	0·29	0·84

Fine dry weather set in over Bengal and Assam on the 4th and held steadily over nearly the whole area during the remainder of the month.

Temperature was excessive at the commencement of the month in North-Western and Central India. Weather was slightly disturbed over Kashmir and probably in Afghanistan on the 1st and 2nd and light to moderate snow fell on the higher elevations on these days. A cool wave crossed the North-West Frontier on the 2nd and advanced slowly eastwards on the 3rd and 4th. The heavy rainfall in North-Eastern India from the 1st to the 3rd reduced temperature considerably in that area, and temperature was generally below the normal over the whole of Northern India on the 4th and following days. Fine, clear and much drier weather than usual prevailed at this time over the whole of Northern and Central India and very low humidities were recorded in Upper India and at the Punjab hill stations. The lowest reported 8 A.M. humidity during the period from the 5th to the 10th was 22 per cent. at Sirsa on the 9th.

The breaking up of the cyclonic storm on the 3rd and 4th was followed by a general increase of pressure on the 5th and following days and pressure was more or less considerably above the normal of the period from the 6th to the 13th, the excess being largest and most pronounced in the submontane districts of Northern India. Steeper gradients than usual in October now prevailed and moderate to heavy rain was received in the centre and south of the Peninsula on the 7th, 8th and 9th. The rainfall diminished temperature considerably in Southern India and hence temperature was generally below the normal by small to moderate amounts on the 9th and 10th. Little or no rain fell in Southern India on the 10th and 11th. Light showers were received on the 12th and 13th.

Temperature increased rapidly in Baluchistan on the 11th and 12th. A slight disturbance affected Upper India during the next four days. A very shallow depression appeared in Baluchistan on the 14th and passed through the South Punjab and North Rajputana on the 15th and

16th and the western districts of the North-Western Provinces on the 17th after which it ceased to affect the weather in Northern India. The disturbance gave moderate showers to Kashmir on the 14th, 15th and 16th and much cloud in North-Western India on the 15th and 16th. Some light showers were also received in the Punjab hills on the 15th and in Kumaun on the 16th, but the rainfall due to the disturbance was very slight and partial.

The southern half of the Peninsula received light to moderate rain during this period from the 13th to the 17th. A feeble cool wave advanced across the North-West Frontier on the 15th and affected Northern India. Temperature continued in defect in Southern India but had risen in Central India and the northern half of the Peninsula where weather was finer and clearer than usual and temperature was hence in moderate to considerable excess.

Pressure conditions changed considerably during this period and on the 18th and 19th pressure was in moderate to considerable defect in Baluchistan and Sind and off the west coast of India. Weather became slightly disturbed due apparently to an advance of humid winds along the west coast. Showers fell in the west coast districts from Kathiawar southwards and also in Baluchistan on the 19th, 20th, 21st and 22nd. These showers caused a large reduction of temperature which reversed the conditions prevailing previously in Central India and the North Deccan. Weather was squally with strong winds at the west coast stations and the conditions suggest that a cyclonic disturbance was probably forming in the centre of the Arabian Sea during this period. On the 23rd and 24th rainfall was almost restricted to Southern India but unsettled and abnormal pressure conditions continued in the Arabian Sea and had extended to the Bay. A cyclonic storm of slight intensity formed in that area during the next 24 hours. It advanced westwards on the 25th and the centre crossed the North Coromandel coast near Nellore on the morning of the 26th. The centre and south of the Peninsula received moderate to heavy general rain on the 26th, 27th and 28th. The disturbed weather extended northwards into Orissa, Chota Nagpur and South Bengal on the 27th and these areas received light to moderate showers on the 28th and 29th. Fine weather set in again over North-Eastern India on the 30th but temperature, which had been reduced largely below the normal by the rainfall of the 29th, was more or less in defect in North-Eastern India during the remainder of the month.

The southern half of the Peninsula obtained light to moderate rain on the 29th and 30th and local showers on the 31st. At the end of the month fine weather with slight to moderate cloud obtained over the whole of Northern and Central India.

Temperature at the end of the month was in slight to moderate excess over the whole of India with the exception of North-Eastern India, where it was in moderate to considerable defect chiefly due to unusually low night temperatures.

Pressure.—The mean pressure of the Indian land area for the month was practically normal, being only ·002″ above the mean of the month. Pressure was in local excess over Northern and Central India, the Central Provinces and Hyderabad, and was in local defect in the west and south of the Peninsula. The local excess was slightly greater than ·02″ in the Circars and the deficiency was more than ·03″ in amount at Mangalore and Calicut (each —·032″). The vertical pressure anomalies were negative but small in amount in Northern India.

The mean distribution of pressure for the month was very uniform in India. Pressure was slightly lower in the south-west of the Bay and in the Arabian sea than elsewhere but the total range of the mean pressure of the month over India was less than a tenth of an inch.

The following table gives pressure variation data for the eleven meteorological provinces of the Empire:—

Meteorological Province.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Burma Coast and Bay Islands	+·005	+·003
Burma Inland	—·003	—·005
Assam	+·019	+·017
Bengal and Orissa	+·005	+·003
Gangetic Plain and Chota-Nagpur	+·011	+·009
Upper Sub-Himalayas	—·006	—·008
Indus Valley and North-West Rajputana	—·005	—·007
East Rajputana, Central India and Gujarat	0	—·002
Deccan	+·010	+·008
West Coast	—·018	—·020
South India	+·004	+·002

Temperature.—The chief feature of the temperature conditions of the month was the low night temperature in North-Eastern India, due to the abnormal dryness of the air.

The mean day or maximum temperature of the month was in slight to moderate excess in Northern and Upper and Central India, the west coast districts and Lower Burma. The variations were generally less than 2° in amount but exceeded 2° locally at Sibsagar (—2°·3), Allahabad (+2°·5), Jhansi (+2°·2), Jubbulpore (+2°·2), Sirsa (+2°·3), Sambhar (+2°·3), Amraoti (+2°·2) and Akola(+2°·3).

The mean minimum or night temperature of the month was higher than usual in the Peninsula to the south of Lat. 20° N. and in Lower Burma and generally lower than the normal over the remainder of India. The deficiency was considerable in the North-Western Provinces, North Bihar, North-East and Central Bengal and Assam, and exceeded 3° at the following stations: Sibsagar (—3°·3),

Silchar (—3°·6)), Purnea (—3°·1), Gorakhpur (—3°·9), Roorkee (—3°·2) and perhaps Benares (—4°·5?).

The mean temperature conditions were approximately normal over nearly the whole of India, as the day and night temperatures generally varied in opposite directions from the normal. Temperature was in slight excess over the greater part of North-West India, the western half of the Peninsula and Lower Burma and in defect elsewhere. The only important feature was a moderate deficiency in Upper Burma, Assam and East Bengal, a condition in October generally associated with an early retreat of the south-west monsoon from Bengal and Burma. The deficiency exceeded 2° at Sibsagar (—2°·8), Silchar (—2°·6), Mymensingh (—2°·1) and perhaps Jessore (—2°·3).

The following table gives comparative mean temperature data of the month for the eleven meteorological provinces :—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, October 1895.	Mean minimum temperature, October 1895.	Mean daily temperature, October 1895.
	°	°	°
Burma Coast and Bay Islands . .	+0·8	+0·8	+0·8
Burma Inland	—0·9	—0·1	—0·5
Assam	—1·7	—2·9	—2·3
Bengal and Orissa	—0·7	—1·9	—1·3
Gangetic Plain and Chota-Nagpur .	+0·5	—2·3	—1·0
Upper Sub-Himalayas . . .	+0·8	—1·0	—0·1
Indus Valley and North-West Rajputana.	+0·9	—0·6	+0·2
East Rajputana, Central India and Gujarat.	+0·9	—1·3	—0·2
Deccan	+0·8	—0·4	+0·2
West Coast	+1·0	+0·9	+1·0
South India	—1·1	+0·1	—0·5

Winds were, on the mean of the month, more easterly than usual in the east of the Bay and were somewhat steadier. They were slightly weaker than usual in Lower Burma where also winds were very abnormal in direction. Winds were steadier and stronger than usual in Arakan and Bengal and were more northerly and less easterly. The prevailing winds of the month had a much stronger westerly element than usual in the Gangetic Plain, the East Punjab, Rajputana and Central India. There was an abnormal preponderance of northerly winds at the Himalayan hill stations where the air movement was even steadier and stronger than usual. Winds were on the whole unsteady and were weaker than usual over the Peninsula, more especially in the southern half.

Humidity and cloud.—The air was slightly drier in Burma and at Port Blair, a result due to increased temperature and not to deficiency of aqueous vapour. The mean humidity of the month was more or less largely below the normal over the whole of Northern and Central India, the Central Provinces, Berar and the greater part of the Deccan and west coast districts. The deficiency was greatest in the Upper Sub-Himalayas (averaging —13) and in the Gangetic Plain and Chota-Nagpur (averaging —10) and was absolutely greatest at Roorkee (—27), Allahabad (—17) and Agra (—13). The decreased humidity was mainly due to the large deficiency in the amount of aqueous vapour in the air caused by the very early withdrawal of the humid south-west monsoon currents from Northern and Central India. Humidity was slightly higher than usual in Southern India and the Madras coast districts. It was, on the other hand, largely in defect at the hill stations in Northern and Central India as at the neighbouring plain stations.

The variations of the mean amount of cloud for the month were much less pronounced than those of the humidity conditions. There was slightly less cloud than usual in Upper Burma and the whole of Northern India (with the exception of the Indus Valley where the mean cloud amount of the month was in slight excess). The deficiency was greatest and most marked in Upper Assam.

Cloud was in slight excess in Baluchistan as in the Indus Valley and was in slight to moderate excess in the Peninsula. The excess was large in amount at the west coast stations south of Bombay. For example, the mean cloud amount at Karwar was 1·6 above the normal of the month and at Cochin 1·8 above the normal.

The following table gives variation data of the mean aqueous vapour pressure, mean humidity and mean cloud amount of ten meteorological provinces for the month of October :—

Meteorological Province.	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.
	"		
Burma Coast and Bay Islands . .	+·021	—2	—0·3
Assam	—·068	—2	—0·9
Bengal and Orissa	—·072	—5	—0·4
Gangetic Plain and Chota-Nagpur .	—·075	—10	—0·3
Upper Sub-Himalayas . . .	—·086	—8	—0·2
Indus Valley and North-West Rajputana.	—·069	—7	+0·5
East Rajputana, Central India and Gujarat.	—·088	—8	0
Deccan	—·048	—4	+0·4
West Coast	+·003	—3	+1·3
South India	+·017	+3	+0·9

Rainfall.—The character and distribution of this element were determined by the unusually early retreat of the south-west monsoon currents in Northern India. The rains of 1895 practically ceased in the Punjab and North-West Rajputana on the 30th of August, in the eastern districts of the North-Western Provinces on the 26th of September, in Bengal and Assam on the 3rd of October and in Burma on the 6th of October. The rainfall of the month was hence more or less considerably in defect over the whole of Northern and Central India, Berar, the Central Provinces and Burma. The deficiency was absolutely largest in amount in Burma, Bihar and the North-Western Provinces and was small in amount in Upper India, where the normal rainfall of the month does not exceed two or three-tenths of an inch. The humid current from the Bay was, on the other hand, directed more largely to the centre and south of the Peninsula and the rainfall of the month was hence in slight to considerable excess in the Madras coast and south districts and in Mysore, Travancore, Malabar and the Konkan.

Baluchistan and Kashmir received earlier rain from cold weather disturbances than usual and the precipitation of the month was hence in excess in these two areas.

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

METEOROLOGICAL PROVINCE.	RAINFALL.		
	Average actual, for October 1895.	Average normal, for October.	Variation from normal.*
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands .	5·05	9·40	−4·24
Burma Inland . . .	3·16	5·57	−2·95
Assam	3·74	4·61	−0·87
Bengal and Orissa . . .	4·40	4·91	−0·99
Gangetic Plain and Chota-Nagpur.	0·73	2·63	−1·91
Upper Sub-Himalayas . .	0·07	0·49	−0·33
Indus Valley and North-West Rajputana.	0·08	0·08	−0·01
East Rajputana, Central India, and Gujarat.	0·80	0·67	−0·25
Deccan	2·60	2·96	−0·76
West Coast	7·72	7·90	+0·12
South India	10·71	7·96	+2·00

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

Atmospheric Pressure.

The mean pressure of the Indian land area was ·002″ above the normal.

Pressure was in local excess, or the pressure anomalies were positive, over nearly the whole of Northern and Central India, the Central Provinces, Berar, Hyderabad and North Madras. They were generally small in amount at stations in those areas but exceeded ·02″ at the stations for which data are given below :—

STATION.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Sambalpur	+·025	+·023
Vizagapatam	+·025	+·023
Rajahmundry	+·026	+·024
Cocanada	+·023	+·021
Masulipatam	+·023	+·021

The pressure anomalies were negative in the western half of the Peninsula and in the Punjab, North Rajputana, Lower Sind, Cutch, Kathiawar and Gujarat. The negative anomalies exceeded ·02″ at stations in the Malabar coast districts. The following gives data :—

STATION.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly
	″	″
Mangalore	—·030	—·032
Calicut	—·030	—·032
Cochin	—·027	—·029

Pressure was in slight defect at the hill stations in Northern India and hence the vertical pressure anomalies were negative, but were generally small in amount. They were large in the Sikkim Himalayas as represented by

the station of Darjeeling. The following gives data for eight pairs of stations :—

HILL STATION.	Variation of pressure from normal. (a)	NEIGHBOURING PLAIN STATION.	Variation of pressure from normal. (b)	Vertical pressure anomaly or (a)—(b).
	"		"	"
Leh . . .	—·014	Lahore . .	—·019	+·005
Murree . .	—·006	Rawalpindi .	—·010	+·004
Simla. . .	—·014	Ludhiana . .	—·005	—·009
Chakrata . .	+·008	Roorkee . .	—·009	+·017
Darjeeling . .	—·038	Dhubri . .	+·008	—·046
Quetta . .	—·004	Jacobabad . .	+·012	—·016
Mount Abu. .	—·016	Deesa . .	+·003	—·019
Wellington .	—·012	Coimbatore .	—·005	—·007

The chief features of the pressure conditions of the month were :—

(1) The mean pressure of the whole Indian land area practically agreed with the normal.

(2) The mean pressure of the month was very uniform in amount over the greater part of the area. It was slightly lower in the south-west of the Bay and off the west coast of India than elsewhere.

(3) Pressure was locally in slight excess in Northern and Central India and in slight to moderate local defect in the western half of the Peninsula. These conditions almost invariably accompany an early withdrawal of the monsoon currents from Northern India.

(4) The vertical pressure anomalies were small in amount and generally negative but were of little significance.

Barometric depressions and cyclonic storms of the month.

Cyclonic Storm of the 28th of September to the 2nd of October.—The origin of this storm is described in the September weather review. It formed in the north-west of the Bay on the 27th and 28th of September under the usual conditions of storm generation in the south-west monsoon season. It had developed into a storm of moderate intensity on the 30th of September and was advancing northwards with a tendency to recurve to the east. It lay over the north-west angle on that day, the centre at 8 A.M. being in about Lat. 17½° N. and Long. 87½° to 88° E. The following gives a continuation of the history of this storm.

1st October.—Pressure had decreased rapidly in the north-west angle of the Bay during the previous 24 hours due to the further development of the storm. The following gives 8 A.M. observations at the coast stations nearest to the centre at that hour :—

STATION.	PRESSURE.			WIND.		Cloud.	Rainfall.	REMARKS.
	8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"	"	"				Inches	
Puri . .	29·592	—·183	?	WNW	24	10	3·81	
False Point .	·442	—·317	—·342	NE	16	10	2·55	Squally.
Shortt's Island.	·512	—·322	?	NE byN	6*	...	...	
Balasore .	·612	—·190	—·182	NNE	7	9	2·42	Raining.
Saugor Island	·632	—·156	—·160	E	13	10	1·89	Sea rough.
F. L. V. *Hesperus* (Intermediate).	·570	—·190	...	ESE	4 to 5*	10	...	Moderate squalls and swell from SE.

These observations combined with those of the preceding day show that the centre was to the east-south-east of False Point and that it was advancing northwards with a slight easting. The centre was probably in about Lat. 20½° N. and Long. 88° E at 8 A.M.

The character of the weather in the north-west angle of the Bay is fully shown by the following extracts from the logs of the British India Steam ships the *Nadir*, the *Pundua* and *Chindwara* which encountered the full strength of the storm on that day :—

Hour.	NAME OF VESSEL.	POSITION.		Barometer corrected.	WIND.		WEATHER.
		Lat. N.	Long. E.		Direction.	*Force.	
		° ′	° ′	"			
4 A.M.	S.S. *Nadir*	...	...	29·71	E	7	Weather getting worse, wind steadily increasing.
8 „	...	...	...	·55	Sto ESE	4	Heavy gale from west with blinding rain.
Noon.	...	19 27	86 40	·75	NNE	4	Terrific squalls and blinding rain.
4 P.M.	...	...	...	·80	WSW	8	Weather moderating.
8 „	...	...	...	·95	WSW	7	...
Midnight.	...	...	...	·99	WSW	8	Passing severe squalls.

*Force—Beaufort Scale.

Hour.	Name of Vessel.	Position. Lat. N.	Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force *	Weather.
		° ′	° ′	″			
4 A.M.	S.S. *Pundua*	...	...	29·69	SSW	...	Hard squalls at intervals. Heavy sea.
8 „	...	20 13	88 44	·62	SSE	...	Hard squalls of wind and rain.
Noon.	...	20 50	88 7	·49	SE	...	Strong wind. Heavy sea.
4 P.M.	...	...	...	·23	SSE	...	Blowing a hurricane with hard squalls and blinding rain.
8 „	...	...	...	·33	SW by W	...	Hard squalls of wind and rain, wind increasing in force and blowing a hurricane.
Midnight.	...	...	...	·33	WSW	...	Hard squalls of wind and rain. High tremendous.
2 A.M.	S.S. *Chindwara.*	...	...	·52	E	...	...
4 „	...	...	...	·49	ESE	...	Strong breeze with frequent squalls.
6 „	...	...	...	·45	E	...	Strong breeze with hard squalls of wind and rain. Heavy sea.
8 „	...	20 29	87 25	·45	E	...	...
10 „	...	...	...	·36	E by S	...	Moderate gale, heavy hard squalls of wind and rain.
Noon.	...	20 39	87 42	·10	SE	...	...
12-30 P.M.	...	...	...	·07	S by E	...	...
1 P.M.	...	...	...	·04	SW by S	...	Heavy gale, high sea.
1-30 P.M.	...	...	...	·05	W	...	...
2 P.M.	...	...	...	29·03	W	...	Heavy gale, and high sea.
2-30 P.M.	...	...	...	·05	W	...	...
3 „	...	...	...	·04	W	...	Hard wind and rain.
4 „	...	...	...	·05	W	...	Heavy gale, and high sea.
6 „	...	...	...	·22	W	...	Hard squalls of wind and rain.
8 P.M.	S.S. *Chindwara.*	...	...	29·40	W	...	Moderate gale of wind and high sea.
10 „	...	...	...	·46	W	...	...
Midnight.	...	...	...	·50	W	...	Moderate gale with squalls of wind and rain.

* Force—Beaufort Scale.

Rain had fallen generally in Burma, Assam, South Bengal and Orissa. Fine clear weather prevailed in North-Western India and skies were densely clouded in North-Eastern India.

The following gives 4 P.M. observations taken at the same stations as in the table of 8 A.M. data above :—

Station.	Pressure. 4 P.M. reduced to sea-level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 4 P.M.	Wind. Average hourly velocity in miles during past 6 hours.	Cloud.	Rainfall in previous 6 hours.	Remarks.
	″	″	″				Inches.	
False Point .	29·473	—·119	—·220	W	32·2	10	1·76	Overcast, gloomy.
Shortt's Island.	29·420	—·293	?	NW	?	10	2·53	Overcast, squally, rainy.
Saugor Island	29·269	—·376	—·422	NE	24·0	10	0·39	Gloomy.
F. L. V. *Hesperus* (Intermediate).	29 133	...	—·550	E	9 to 10 *	10	?	High sea.

* Force—Beaufort scale.

These observations show that the storm increased rapidly in intensity during the morning of the 1st, and that it was now a storm of considerable severity.

The progress of the storm is shown more fully by the additional observations recorded at Cocanada, False Point, Shortt's Island, Saugor Island and on board the Intermediate Station Floating Light vessel. These are given below.

Cocanada.—The weather at this port is described in the following terms by the Port Officer :—

Morning. Light and gentle breezes with a smooth sea. At 2 P.M very threatening and stormy to northwards with banks of cumulus clouds. At 3 P.M. very threatening and stormy to northward with masses of pallium moving from north-west. Thunder heard. There was much thunder and lightning during the night with heavy rain from 3 A.M. to 11 A.M. of the 2nd.

False Point.—The following gives the character of the weather at this station on the 1st, derived from a report of the Port Officer:—

4 A.M.—Strong breeze; overcast sky and dark gloomy weather with drizzling rain from north-east.

8 A.M.—Wind blowing a hard gale with frequent heavy squalls and heavy showers of rain; a dull leaden overcast sky and ugly looking weather.

10 A.M.—Wind hauling to the northward. Very heavy rain.

Noon.—Wind west-north-west. Weather unchanged.

4 P.M.—Wind west. Weather moderating, but still blowing very hard, but squalls not so frequent or fierce. Continuous heavy rain with a thick heavy overcast sky and dark gloomy weather.

8 P.M.—Wind, west-south-west, strong breeze and squally, with showers of rain. Thick overcast sky.

Midnight.—Wind, west-south-west. Fresh breeze with drizzling rain.

Shortt's Island.—Mr. Tusker, Light house keeper, describes the weather experienced during the day as follows:—

"From 0 to 6-0 A.M. of the 1st instant, weather remained fine but overcast and a threatening appearance to NE through E to SE. 7-0 to 8-0 A.M. squalls again began, at first light but increasing in force. From 8-0 to 10-0 A.M. squalls more frequent and becoming stronger wind NNE fresh gale. 11-0 A.M. wind shifted to N and at noon to NNW, with hard incessant rain and blowing a strong gale, weather looking very wild. Noon to 2-0 P.M., weather much the same. 2-45 P.M. wind shifted to NW still blowing a strong gale, appearance of the weather from N.E. through E and S to SW exceedingly wild. At 4-30 P.M. rain stopped but force of gale about the same, scud driving very fast. 4-45 P.M. wind shifted to west and the clouds breaking to west-north-west through west to south-west. 6-0 P.M. still blowing a strong gale, no rain, weather looking finer but still very ugly to the southward. At 6-30 P.M. squalls again began and continued with moderate rain till 8 P.M. Wind west, strong gale. From 8-0 to 10-0 P.M. squalls less frequent, rain less and force of wind moderating somewhat, weather still dirty looking, scud driving fast. From 10-0 to 11-0 P.M. wind moderated to a fresh gale, little rain. From 11-0 P.M. to midnight, clouds breaking and winds decreasing to a strong breeze from west. No rain after this and weather cleared generally."

The following observations were recorded at two hourly intervals at that station:—

Hour.	Barometer corrected.	Wind.	
		Direction.	Force (Beaufort scale).
	"		
8 A.M.	29·512	NE by N	6
10 „	·454	NNE	8
Noon	·369	NNW	9
2 P.M.	·330	NNW	9
4 „	·365	NW	9
6 „	·441	W	9
8 „	·528	W	9
10 „	·546	W	8
Midnight	...	W	6

Intermediate Station.—A most interesting series of observations were recorded by Captain Beahen of the F. L. V. *Hesperus* at anchor at the Intermediate station at the entrance of the Hooghly.

Hour.	Barometer corrected.	Wind.		Weather.
		Direction.	Force (Beaufort scale).	
1st October.	"			
2 A.M.	29·600	ESE	4 to 5	Moderate squalls and swell from SE.
4 „	·562	SE	4 to 5	Unchanged.
6 „	·582	SSE	4 to 5	Ditto.
8 „	·570	ESE	4 to 5	Ditto.
10 „	·550	E	4 to 5	Ditto.
Noon	·372	E to ESE	6 to 8	Squalls increasing in force and frequency; sea and swell rising fast.
1 P.M.	·332	E to ENE	7 to 8	Squalls, sea and swell increasing.
2 „	·272	E to ENE	7 to 9	Squalls, sun came out for 5 minutes.
3 „	·222	E to ENE	9 to 10	High sea and swell from ESE.
4 „	·133	E	9 to 10	Suddenly lulled to force 2 just a few minutes after 4 P.M. Low lying clouds to E. Heavy drizzle; exceedingly dirty to N W with a little lightning. 4·30 P.M. swell from NW and SE met; sea like a boiling pot. NE airs.
5 „	·061	NE	2	.....
6 „	·063	NNW	5 to 7	.....
7 „	·092	NNW	8 to 11	Violent short incessant gusts from NNW to NW with blinding rain and high NW swell and a moderate sea.
8 „	·210	NW	8 to 11	
9 „	·312	WNW	9 to 11	
10 „	·414	WNW	8 to 10	Frequent hard squalls; high NW sea and swell; occasional heavy rollers from S and very faint lightning at times to NW.
11 „	·394	WNW to NW	8 to 10	
Midnight	·374	NW to WNW	8 to 10	
2nd October				
2 A.M.	·397	W to WNW	9 to 10	Squally with passing showers, high NW sea and swell with occasional rollers from S.
4 „	·397	W to WNW	9 to 10	Squalls less frequent.
6 „	·538	W	8 to 9	Steady gale.
8 „	·566	W	8 to 9	Weather moderating fast.
10 „	·645	W	7 to 8	.....

Saugor Island.—The following observations were recorded by the observer at this station during the storm on the 1st:—

Hour.	Pressure. Reduced to sea-level and constant gravity at Lat. 45°.	Wind. Direction.	Wind. Average hourly velocity.	Cloud.	Rainfall since last observation.	Remarks.
	"				Inch.	
8 A.M.	29·632	E	13	10	1·57	Sea rough.
10 „	·587	ENE	17	10	0·37	Gloomy.
11 „	·545	NE	14	10	...	Sea slight, continuous rain.
2 P.M.	·372	ENE	28	10	0·08	Sea rough, increasing, wind coming in puffs, drizzling rain.
4 „	·269	NE	30	10	0·31	Gloomy.
5 „	·238	NNE	30	10	0·10	Sea rough with heavy swell from west-south-west. Weather squally with incessant drizzling rain.
8 „	·306	NW	44	10	0·15	Sea tremendous, wind increasing in force.
11 „	·396	WNW	39	10	0·10	Sea tremendous, weather stormy with hard squalls.

The preceding data establish that the centre of the depression was east of Shortt's Island at about 2 P.M., and east of the Intermediate Station at about 5-30 P.M., and of Saugor Island between 5 P.M. and 8 P.M. The wind averaged 35 miles per hour in velocity at False Point from 10 A.M. to 2 P.M. and about 40 miles per hour at Saugor Island between 5 P.M. and 11 P.M. The centre probably passed quite near to the F. L. V. *Hesperus*. Her lowest barometer (at 5 P.M.) was 29·06" (corrected) and the strongest winds of force 11.

The preceding data also indicate that the storm crossed the coast some distance to the east of Saugor Island shortly before 8 P.M. of the 1st and that the pressure at the storm centre was almost certainly not below 29·00.

2nd October.—The storm had advanced during the night in a north-easterly direction and lay on the morning of the 2nd over East Bengal where pressure had given way unusually rapidly. The following observations define its position at 8 A.M.:—

Station.	Pressure. 8 A.M. reduced to sea-level and constant gravity at Lat. 45°.	Pressure. Change in past 24 hours.	Pressure. Variation from normal.	Wind. Direction at 8 A.M.	Wind. Average hourly velocity in miles during past 24 hours.	Cloud.	Rainfall.	Remarks.
	"	"	"				Inches.	
Chittagong	29·491	—·348	—·330	SE	12	10	2·46	Dark gloomy weather.
Barisal	·368	—·425	—·437	SE	?	10	4·75	Severe gale of wind.
Noakhali	·311	—·497	—·496	SE	17	10	3·30	
Comilla	·376	—·446	—·441	E	13	10	1·93	Raining.
Narayanganj	·264	—·545	—·539	ENE	24	10	1·83	Severe gale of wind.
Jessore	·372	—·348	—·429	NNW	16	10	3·90	Severe gale of wind.
Saugor Island	·559	—·073	—·235	W	34	10	1·60	Sea rough.

The actual reading (corrected) reported by the Barisal observer was 28·868 inches and he states that it was correctly taken. His house was blown down during the storm and it is almost certain that he was in too disturbed a state of mind to read the barometer accurately. It is probable that the correct reading was 29·368 which it will be seen agrees closely with the readings of the Noakhali and Narayanganj observers.* Assuming the corrected reading of the Barisal barometer at 8 A.M. given above the centre of the storm at that hour was a little to the south of Dacca in about Lat. 23¼° N. and Long. 90½° E. Strong cyclonic winds had prevailed during the night in South Bengal and heavy general rain had fallen over the whole of South-East Bengal. The following gives the heaviest rainfalls (exceeding 6 inches) during the previous 24 hours:—

District.	Station.	Rainfall in 24 hours preceding 8 A.M. of 2nd.
		Inches.
Backergunge	Bauphal	7·30
Khulna	Rampal	6·50
"	Bagirhat	6·15

* See note page 470.

The following gives 4 P.M. observations at stations in Assam and East Bengal:—

Station.	Pressure.			Wind.		Cloud.	Rainfall in previous 6 hours.	Remarks.
	4 P.M. reduced to sea-level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 4 P.M.	Average hourly velocity in miles during past 6 hours.			
	"	"	"				Inches.	
Saugor Island	29·558	+·289	−·135	SW	22·2	10	0·02	Raining.
Narayanganj	·263	−·347	−·436	NW	38·3	10	1·58	Gloomy, squally.
Chittagong	·395	−·273	−·324	WSW	34·2	10	0·70	Gloomy, overcast.
Silchar	·368	−·343	−·341	NE	6·7	10	0·17	Overcast.
Sibsagar	·619	−·126	−·099	NE	2·5	10	0·04	Drizzling, gloomy, overcast.
Dhubri	·471	−·224	−·229	NE	28·7	10	Nil	Strong wind.

These observations indicate that the storm was now filling up, but do not indicate the exact position of the centre.

3rd October.—The pressure changes in North-Western India and the Peninsula were small in amount. Pressure had increased very rapidly in East and South Bengal and had fallen rapidly in Upper Assam and Upper Burma. The chart of the 3rd showed that a residual depression lay over Assam and Upper Burma but there was no longer an integral cyclonic circulation of the winds in the area of depression. Skies were rapidly clearing in Bengal but were overcast in Assam and Upper Burma. Moderate to heavy rain had fallen in East Bengal, Assam and Upper Burma.

During the next 24 hours a brisk to rapid recovery of pressure, largest in amount in Upper Burma, occurred, and the residual depression had disappeared and ordinary weather conditions were again established. Skies were still clouded in Burma and moderate to heavy rain had been received. Skies cleared rapidly during the day and rain generally ceased in that area. The rainfall of the period from the 1st to the 4th was the last heavy general burst during the south-west monsoon of 1895 in North-Eastern India.

The following gives the position and rate of advance of the storm centre from the 30th September to the 2nd of October.

Date.	Hour.	Position.		Distance passed over during interval.	Average velocity in miles per hour.
		Lat. N.	Long. E.		
		° ′	° ′	Miles	
30th September	8 A.M.	17 30	87 30		
1st October	"	20 30	88 0	200	8½
2nd October	"	23 15	90 30	260	11

The rainfall accompanying the storm was heavy and concentrated and occurred chiefly in South and East Bengal, Assam and Upper Burma. The following table gives a comparative statement of the rainfall accompanying the storm.

Division.	Average actual rainfall in 24 hours preceding 8 A.M.					Total of period.
	30th September.	1st October.	2nd October.	3rd October.	4th October.	
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Orissa	0·76	1·60	0·66	0·01	0	3·03
Bengal (Deltaic)	0·22	0·80	2·31	0·24	0	3·57
" (East)	0·24	0·86	2·38	1·84	0·04	5·36
" (Central)	0·34	0·20	0·36	0·07	0	0·97
" (North)	0·17	0·27	0·33	0·33	0·28	1·38
Assam (Surma)	0·58	0·74	0·95	1·99	1·21	5·47
" (Brahmaputra)	0·09	0·27	0·28	0·29	0·39	1·30
Burma (Upper)	1·10	0·54	0·29	0·38	0·68	2·99
" (Central)	0·08	0·12	0·23	0·38	0·62	1·43
" (Lower)	0·15	0·35	0·24	0·63	0·39	1·76

Pressure increased more or less considerably over the whole of India on the 5th and 6th, the rise being greatest in Northern India. These changes established high pressure conditions in Northern India and slight to moderate gradients in the Bay. The humid current in the south and centre of the Bay was hence diverted to the centre and south of the peninsula which began to receive general rain on the 6th from the retreating south-west monsoon current.

A further general rise of pressure, greatest in Northern India, occurred on the 8th and 9th and emphasized the high pressure conditions obtaining in Northern India. Rain hence fell in increasing amounts in the southern half of the peninsula until the 9th. The pressure changes were small in amount on the 10th and 11th, the chief features of the pressure conditions being a large excess in Northern India, greatest in the submontane districts, and a slight to moderate deficiency in Southern India, most marked in Malabar. The pressure changes were irregular and generally small in amount on the 12th and 13th. Light to moderate showers fell in Southern India on these dates and a few showers of no importance in South Bengal and Orissa.

The chief feature of the meteorology of the next four days was a very shallow low pressure area which passed across Upper India and gave cloudy weather in the plains and showers in the hill districts. It was first shown in Upper Sind and the South-West Punjab on the morning of the 14th. It drifted slowly eastwards across the South

Punjab and North Rajputana on the 15th and 16th into the western districts of the North-Western Provinces on the 17th and filled up there during the next 24 hours. Kashmir received showers on the 14th, 15th and 16th and the Punjab Himalayas on the 15th. Some light scattered showers fell in Kumaon and Garhwal on the 16th. The higher elevations of the North-West Himalayas obtained light to moderate snow during this disturbance.

Whilst this feeble depression was advancing across Northern India the southern half of the peninsula continued to receive fairly general daily rain.

During this period from the 14th to the 17th the general pressure changes produced an important modification of the pressure distribution, probably dependent in part at least upon important changes in progress in the Arabian Sea and Bay of Bengal.

Pressure had given way over the whole of India and was now normal or in slight defect in Northern India. It was in moderate defect over the south of the Bay and was in moderate to considerable defect at all the west coast stations from Cochin to Kurrachee and also in Baluchistan. The conditions in India indicated that a shallow low pressure area lay over a considerable portion of the Arabian Sea. The weather of the next week depended upon the development and movement of this low pressure area.

Weather was very unsettled in the Arabian Sea during the third and fourth weeks of the month. The data for this sea area for October are as yet scanty and not sufficient to enable the changes in progress to be traced with exactness. The following is a very brief account of this disturbed period in the Arabian Sea. Fuller and more accurate data will be found in the charts of the Indian monsoon area for the period.

Weather at the commencement of the third week of the month was fine, and skies generally clear in the Arabian Sea. Light to fresh north-easterly and east-north-easterly winds obtained over the whole area. Winds were light in the Gulf of Aden where several vessels experienced easterly winds of force 1 to 2. Weather was showery to the west of Ceylon and south-west of Malabar on the 15th, and winds were unsteady and variable in the north of the Arabian Sea. Winds continued to fall off in strength on the 16th and 17th in the centre, and southerly winds accompanied with cloudy and showery or squally weather extended northwards from the equatorial belt. Thus on the 16th the S.S. *Clan Stewart* in Lat. 6° 6′ S. and Long. 59° 32′ E. had squally and rainy weather. The S.S. *Pemba* in Lat. 1° 26′N. and Long. 59° 58′E. had south-west winds force 4 and continuous rain. The S.S. *Pemba* which had advanced to Lat. 4° 17′N. and Long. 62° 15′E. at 8 A.M. of the 17th had heavy rain and hard squalls on that day. Cloudy rainy weather continued off the Ceylon and South Malabar coasts and the S.S. *Wanderer* in Lat. 7° 13′N. and Long. 76¾°E. had torrents of rain during the day. On the 18th squally weather had extended northwards to Lat. 12°N. in the centre and south-east of the sea, and winds were shifting to north and north-west, thus indicating the tendency to the establishment of a cyclonic disturbance. Weather was showery along the west coast as far north as Ratnagiri, and winds ranged between east and south-east.

All the vessels contributing information for the 19th which were to the south of Lat. 18°N. had squally weather with more or less rain. The data when charted indicate that there was a low pressure area with a feeble cyclonic circulation in the south of the Arabian Sea, with its centre in about Lat. 9½N. and Long. 63°E. The winds experienced in this area by vessels were of force 3 to 5.

Cloudy showery weather advanced as far as Lat. 22°N. by 8 A.M. of the 20th, and weather was more or less squally with heavy rain over nearly the whole sea area to the south of Lat. 22°N. The information for the 21st and 22nd is very scanty but appears to indicate that the depression advanced in a general northerly direction. The centre was probably in about Lat. 11°N. on the 21st and in Lat. 13°N. on the 22nd. The disturbance was unchanged in character on the 23rd, the chief features being squally rainy weather with light to moderate and irregular winds. The great majority of vessels reported winds of force 1 to 3. The air movement intensified considerably on the 24th and 25th. Cyclonic winds of force 6 and hard squalls were experienced by several vessels on the 24th and winds of force 6 to 8 by five vessels on the 25th. The disturbance on these days was in the centre of the Arabian Sea, the centre being probably in about Lat. 14°N. and Long. 63°E. on the 25th and in about Lat. 15°N. or 16°N. and Long. 64 or 64½° E. on the 26th. Winds moderated during the next 48 hours and weather improved and the depression apparently filled up in about Lat. 16½°N. and Long. 65°E. on the 27th and 28th. The disturbance hence never advanced beyond the initial stages of a cyclonic storm. It gave squally weather with much rain over the greater part of the Arabian Sea and the west coast districts of India from the 17th to the 27th.

The same general conditions and actions which originated disturbed weather in the Arabian Sea produced a similar result in the Bay of Bengal. Weather on the 21st was fine in the north of the Bay with light winds and cloudy with strong south west winds and heavy rain in the south of the Bay. Pressure was however approximately uniform. Similar conditions obtained on the 22nd. On the 23rd cloudy showery weather was advancing northwards up the centre of the Bay, and general but moderate rain fell in the Coromandel coast districts. Pressure gave way slightly in the west of the Bay, and increased in the east and a shallow depression was shown off the North Coromandel coast on the morning of the

24th. The marine data are however too scanty to enable the position or character of the disturbance to be determined. The depression was somewhat more clearly defined on the morning of the 25th, and rain was falling in larger amounts in the coast districts south of Cocanada. The depression advanced westwards during the day and crossed the coast on the morning of the 26th. The following data define its position at 8 A.M :—

STATION.	PRESSURE.			WIND.		CLOUD.	RAINFALL.	REMARKS.
	8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	"	"	"				Inches.	
Nellore .	29·737	+·029	?	SSE	12	6	1·33	
Masulipatam	·778	+·060	—·093	SSE	14	6	1·87	
Kurnool .	·769	—·043	—·145	NE	...	10	3·25	Continuous rain for upwards of 12 hours.
Bellary .	·827	+·005	—·097	NW	6	10	2·14	
Cuddapah .	·730	—·081	?	SW	...	10	2·21	Continuous rain for upwards of 12 hours.

The depression was hence small in amount and the storm was diffused in character and of slight intensity.

The S. S. *Kaisar-i-Hind* which passed through the eastern quadrant during the night had west winds of force 4 at 8 A.M. of the 25th and south-west winds force 4 and cloudy weather at 8 A.M of the 26th. Showery weather had extended northwards along the coast to Orissa and moderate to heavy rain had fallen in the Circars and Madras Deccan districts. The depression filled up during the next 24 hours, but disturbed showery weather continued for some days. The peninsula south of Lat. 18° N. obtained daily rain from the 27th to the 30th and Orissa, Ganjam, the Circars and South Bengal, showers from the 27th to the 29th. Weather improved and skies cleared on the 31st in South Bengal, Orissa and the Deccan, whilst cloudy showery weather continued in South India.

The disturbance in the Bay of Bengal was hence similar in general character to that in the Arabian Sea. It was throughout a feeble diffused disturbance and gave moderate winds with much rain over a large area.

The central depression broke up almost immediately after reaching the land, but weather continued slightly disturbed for some days afterwards and light to moderate rain fell over a large area in the Peninsula and North-Eastern India.

Summary of the Reports of the weather and snowfall in the mountain districts to the north and north-west of India.

I.—THE AFGHAN MOUNTAIN DISTRICTS.

Kurram district.—The weather was fine during the greater part of the month. There were a few local storms of which the heaviest was on the 20th when about 2 feet of snow fell upon the higher ranges of the Sufed Koh. The falls during the remaining storms of the month were light and of no importance. The snowfall is considered by the natives of the district to have been unusually heavy for this month of the year. The snow line descended to about 8,000 feet on the Sufed Koh during the storm of the 20th.

II.—PUNJAB HIMALAYAS.

Upper Sutlej Valley (Poo).—Light falls of snow occurred on the 27th and 28th of September above 12,000 feet. The amount of rain in the valley below on these days was 0·37 inch.

Snow storms occurred on the 15th and 16th of October above 12,000 feet ; 0·11 inch of rain was registered at the Poo observatory.

The snow storms are said to have extended all over the valley.

Summary of special Storm Reports.

Cyclonic storms are of occasional occurrence in October and are sometimes of exceptional intensity. One was generated in the Bay during the month, but was of slight intensity. Several reports of these storms were received, and the information they contained is incorporated in the pressure section. Thunderstorms are of occasional occurrence in October. The following gives a statement of those for which special reports were received :—

15th.—Severe thunderstorm at Salem from 4 P.M. to 5-10 P.M.

19th.—Duststorm at Bhuj at 9-30 P.M.

20th.—Duststorm at Bhuj at 4-13 P.M. to 4-40 P.M. Severe thunderstorm at Pachpadra at 6 P.M.

Brief Summary of the weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—As is usually the case during the first fortnight of October light unsteady winds obtained generally over the Arabian Sea during the first nine days of the month. Weather was fine during the whole of this period except in the south east where squalls were of frequent occurrence. The general air movement ranged from 2·3 to 2·9 and averaged 2·6 for the whole period. Winds were north-easterly to easterly on the 10th, with squalls and rain in the south-east and in the neighbourhood of Socotra.

Conditions remained practically unaltered until the 16th, a steady north-east current prevailing generally. A significant change took place during the next 24 hours in the south of the sea where humid south-west winds set in on the morning of the 17th and weather became disturbed. Thus the S.S. *Pemba* in Lat. 4¼° N. and Long. 62¼° E. at 8 A.M. experienced fresh south-west winds and heavy squalls of wind and rain, and the S.S. *Wanderer* in Lat. 7¼° N. and Long. 76¾° E. at the same hour had fresh southerly winds with torrents of rain. The disturbed weather extended northwards to Lat. 12° N. on the 18th and to Lat. 18° N. on the 19th. Winds also strengthened and were blowing with an average velocity of 3·0 at 8 A.M. of the 19th.

A storm began to form in the area of disturbed weather during the day. An irregular cyclonic circulation of the winds existed over the Arabian Sea during the next eight or nine days but the storm failed to develop properly. It however occasioned very unsettled squally weather over the Arabian Sea during the last ten days of the month. Conditions were during this period most disturbed on the 25th and 26th when gales of wind (force 8), hard squalls and a heavy confused sea were experienced by some vessels. The general wind force averaged 4·0 on these two days.

At the end of the month normal winds prevailed over the Arabian Sea though weather was showery except in the extreme north. The mean wind force for the period the 27th to the 31st was 3·3.

Bay of Bengal.—The cyclonic storm which had formed in the north-west of the Bay on the last two days of the previous month lay off the Orissa coast at 8 A.M. of the 1st. Winds were cyclonic in direction over the whole of the Bay and were strongest in the south and east quadrants of the storm where several vessels experienced gales of force 9. The mean intensity of the air movement as determined from the data of 22 vessels was 4·4. Weather was cloudy in the south but squally and rainy over the remainder of the Bay, the squalls being most severe and frequent in the inner storm area. Thus the S.S. *Chindwara* and S.S. *Pundua* about 50 miles from the centre of the storm at 8 A.M. experienced "frequent hard squalls of wind and rain."

The storm intensified considerably during the day and the weather became stormy in the north of the Bay in the afternoon, and one vessel (the S.S. *Pundua*) experienced winds of hurricane force, hard squalls and blinding rain at 4 P.M. The centre crossed the Bengal coast during the evening.

On the morning of the 2nd winds of force 5 to 9 obtained over the northern half of the Bay and of force 2 to 4 over the southern half. Weather was generally squally with heavy rain but to a slightly less extent than on the preceding day. The wind force averaged 4·8. Winds and weather moderated rapidly during the next 48 hours. On the morning of the 4th light to moderate winds and fine weather were re-established over the Bay. The mean air movement diminished from 3·6 on the 3rd to 3·0 on the 4th.

Important pressure changes occurred during the next five days which gradually resulted in the establishment of the pressure distribution characteristic of the retreating south-west monsoon period. The period from the 5th to 9th while these changes were in progress was characterized by light unsteady winds and fine to showery weather.

Northerly winds set in over the north of the Bay on the 9th and extending rapidly southwards were established over the whole of the Bay to the north of Lat. 10° N. on the 11th. Weather continued fine over the Bay except near the Coromandel coast where rain had commenced to fall due to the retreating south-west monsoon current. To the south of Lat. 8° N. unsteady winds and showery weather prevailed. The air movement averaged 1·8 at 8 A.M. of the 11th. No important change occurred during the next seven days. On the 18th the mean air movement was 0·4 greater than on the 11th. Winds began to strengthen in the south of the Bay during the next 24 hours and on the 19th averaged 2·9. Conditions changed rapidly during the next 48 hours in the south of the Bay where weather became disturbed with moderate to strong south-west winds. Thus the S. S. *Deepdale* in Lat. 7¼°N. and Long. 86½°E. at 8 A.M. of the 21st experienced S.W. winds of force 6, heavy rain and a high head sea, and the S. S. *Rosetta* about 250 miles to the south-west at the same hour had heavy squalls and rain. The disturbed conditions intensified and extended slowly northwards to Lat. 12° N. on the 24th. To the north of Lat. 12° N. north-easterly winds of force 2 to 4 and fine weather held steadily.

The general wind force averaged 2·9 during the period from the 19th to the 24th. This combination of conditions were such as frequently precedes the initiation of storms in the Bay. A feeble storm formed over the south-west of the Bay during the day. It marched westwards and passed inland on the early morning of the 26th. Heavy squalls, thick rain, and a heavy sea were experienced until the 27th over the southern half of the Bay. The strongest winds, however, did not exceed 6 in force, and the mean air movement ranged between 3·1 and 3·3. The storm, although only of slight intensity, initiated a period of feeble general disturbance over the Bay, which lasted quite until the end of the month. The mean force of the winds decreased to 2·7 at 8 A.M. of the 31st.

As usual, the information for the equatorial region is very limited. So far as can be judged, the winds were slightly more easterly than usual in the western half of the belt. Moderate trade winds prevailed steadily in the belt during the greater part of the month. They were probably strongest from the 9th to the 18th.

Temperature of the air.

The mean temperature conditions did not differ largely from the normal over by far the greater part of the country, excepting North-Eastern India.

The mean maximum or day temperature of the month was above the normal in Sind, the Punjab, the North-Western Provinces, Bihar, Chota Nagpur, the Central Provinces, Berar, Central India and Rajputana, and also in Lower Burma, the Konkan and Malabar. The variations from the normal were generally small in amount, and exceeded 2° at the following stations only:—

STATION.	MEAN MAXIMUM TEMPERATURE.		
	Actual, October 1895.	Normal, October.	Variation of actual from normal.
	°	°	°
Allahabad	92·4	89·9	+2·5
Jhansi	94·6	92·4	+2·2
Sirsa	98·2	95·9	+2·3
Sambhar	93·9	91·6	+2·3
Akola	92·4	90·1	+2·3
Amraoti	91·6	89·4	+2·2
Jubbulpore	89·0	86·8	+2·2

The mean maximum or day temperature was below the normal over the remainder of the country, but the variations were small, nowhere exceeding 2° except at Sibsagar where the mean maximum temperature of the month was 2°·3 below the normal, and Madura, where it was 3°·2 below it.

The mean minimum or night temperature was generally in very slight excess in the Peninsula to the south of Lat. 20° N. and was more or less in defect over the whole of India to the north of that parallel. The deficiency exceeded 2° locally at Indore (—2°·1) and Jubbulpore (—2°·5), and also over nearly the whole of the North-Western Provinces, North Bihar, North Bengal, East and Central Bengal and Assam.

It was more than 3° in amount at the following stations in these provinces, for which data are given:—

STATION.	MEAN MINIMUM TEMPERATURE.		
	Actual, October 1895.	Normal, October.	Variation of actual from normal.
	°	°	°
Silchar	68·8	72·4	—3·6
Sibsagar	67·6	70·9	—3·3
Jessore	71·3	74·9	—3·6
Chittagong	70·1	73·7	—3·6?
Purnea	68·1	71·2	—3·1
Benares	64·2	68·7	—4·5?
Gorakhpur	66·3	70·2	—3·9
Roorkee	58·3	61·5	—3·2

As the variations of the maximum and minimum temperatures were opposite in character at the great majority of stations, the variations of the mean temperature of the month were small in amount and less than 1° in the majority of cases.

The mean temperature of the month was in defect in North-Eastern India, the greater part of the North-Western Provinces, West Punjab, Kathiawar, the western districts of Central India, the eastern half of the Peninsula and

Upper Burma, and was generally above the normal over the remainder of India. The variations exceeded 2° for stations in a small area including the greater part of Assam and East Bengal.

The following give comparative data for that area of most deficient temperature :—

Station.	Mean daily temperature.		
	Actual, October 1895.	Normal, October.	Variation of actual from normal.
	°	°	°
Sibsagar	75·2	78·0	—2·8
Silchar	78·0	80·6	—2·6
Jessore	79·5	81·8	—2·3
Mymensingh	77·9	80·0	—2·1
Narayanganj	79·6	81·6	—2·0

Both the day and night temperatures and hence also the mean temperature were in slight defect at the hill stations in Northern India. The following gives data for five typical stations :—

Station.	Mean daily temperature.		
	Actual, October 1895.	Normal, October.	Variation of actual from normal.
	°	°	°
Quetta	56·5	57·0	—0·5
Leh	41·5	42·1	—0·6
Simla	55·3	56·8	—1·5
Ranikhet	60·5	61·7	—1·2
Darjeeling	52·9	55·0	—2·1

The following table gives temperature data for 51 meteorological divisions of the Empire :—

Province.	Division.	Actual Temperature.					Variation from normal of		
		Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	89·5	74·6	82·1	14·9	19·9	+0·8	+1·0	−0·2
	Lower Burma	88·1	77·1	82·7	11·0	16·1	+1·3	+1·5	−0·2
	Central do.	90·3	73·9	82·3	16·4	24·7	−0·2	0	−0·2
	Upper do.	86·9	68·9	78·0	18·0	27·9	−1·6	?	?
	Arakan	87·1	74·9	81·0	12·2	19·0	−0·8	−1·9	+1·1
Bengal and Assam	Eastern Bengal	84·5	69·9	77·2	14·5	27·2	−0·9	−2·5	+1·6
	Assam (Surma)	87·2	68·8	78·0	18·4	33·1	−1·6	−3·6	+2·0
	Do. (Brahmaputra)	83·4	69·4	76·4	14·0	26·3	−1·7	−2·6	+0·9
	Deltaic Bengal	87·3	72·3	79·9	15·0	26·7	−0·6	−2·0	+1·4
	Central do.	87·5	70·6	79·0	16·9	30·0	−0·2	−2·4	+2·2
	North do.	85·6	69·0	77·4	16·6	29·3	−1·3	−1·2	−0·1
	Orissa	87·9	75·0	81·5	12·9	22·7	−0·4	−0·7	+0·3
	Chota Nagpur	86·1	65·9	76·0	20·2	34·7	+0·4	−0·9	+1·3
	Bihar (South)	89·8	69·0	79·3	20·7	34·1	+0·6	−1·9	+2·5
	Do. (North)	87·7	68·3	78·0	19·4	33·3	+0·1	−2·9	+3·0
North-Western Provinces and Oudh.	North-Western Provinces (East)	90·4	65·2	77·8	25·2	41·5	+0·9	−3·7	+4·6
	Oudh (South)	91·0	63·1	77·1	27·9	45·1	+0·1	−2·5	+2·6
	Do. (North)	88·5	65·2	76·9	23·3	38·4	?	?	?
	North-Western Provinces (Central)	93·7	63·1	78·4	30·6	48·3	?	?	?
	Do. do. (West)	94·8	68·1	81·5	26·7	44·7	+2·1	−0·1	+2·2
	Do. do. (Submontane)	88·4	60·1	74·3	28·2	43·9	+0·9	−2·4	+3·3
Punjab	Punjab (South)	95·9	65·2	80·6	30·7	48·5	+2·0	−0·1	+2·1
	Do. (Central)	93·7	62·0	77·8	31·7	51·1	+0·5	+2·1	−1·6
	Do. (Submontane)	91·6	60·9	76·3	30·7	47·2	+0·5	−1·3	+1·8
	Do. (Hill Districts)	68·2	49·5	58·9	18·7	35·4	−1·2	−0·7	−0·5
	Do. (North-West)	89·2	57·5	73·4	31·7	53·3	−0·1	0	−0·1
	Do. (West)	94·7	62·2	78·5	32·6	50·6	−0·1	−1·2	+1·1
Bombay and Malabar Coast Districts (Madras).	Malabar	85·6	75·1	80·4	10·5	17·1	+1·1	+0·7	+0·4
	Madras (South Central)	87·6	71·2	79·4	16·4	26·6	−1·1	+0·7	−1·8
	Coorg	75·5	63·4	69·5	12·1	18·3	+0·1	+1·3	−1·2
	Mysore	81·4	66·4	73·9	15·0	22·9	−0·9	+0·7	−1·6
	Konkan	86·9	76·0	81·4	10·9	20·4	+0·9	+1·1	−0·2
	Bombay Deccan	86·1	67·3	76·8	18·8	30·2	−0·1	+0·6	−0·7
	Hyderabad (North)	86·7	67·5	77·1	19·2	29·4	?	?	?
	Khandesh	87·0	64·0	75·9	23·1	37·4	−0·3	−1·3	+1·0

PROVINCE.	DIVISION.	ACTUAL TEMPERATURE. Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	VARIATION FROM NORMAL OF Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
CENTRAL PROVINCES AND BERAR.	Berar	92·0	67·2	79·7	24·8	35·4	+2·3	+0·5	+1·8
	Central Provinces (West)	90·3	65·8	78·1	24·5	37·6	+0·9	−1·4	+2·3
	Do. (Central)	88·4	64·7	76·6	23·7	38·6	+1·2	−0·8	+2·0
	Do. (East)	89·2	70·2	79·8	19·0	28·8	+0·9	−0·8	+1·7
BOMBAY (NORTH)	Gujarat	92·8	69·8	81·3	23·0	38·7	−0·4	−1·3	+0·9
	Kathiawar	90·8	69·8	80·3	21·1	35·2	−1·3	−1·1	−0·2
	Sind	97·0	68·7	82·9	28·3	43·6	+1·4	−0·4	+1·8
RAJPUTANA AND CENTRAL INDIA.	Central India (East)	90·7	64·0	77·3	26·7	44·1	+1·8	−1·4	+3·2
	Rajputana (East), Central India (West)	92·6	62·7	77·7	29·9	47·0	+1·0	−1·9	+2·9
	Do. (West)	98·6	67·4	83·0	31·3	48·4	+2·0	−2·0	+4·0
MADRAS	East Coast (North)	87·7	74·5	81·1	13·2	21·2	−0·4	−0·4	0
	Hyderabad (South)	87·3	70·6	79·0	16·7	26·9	−0·9	+1·8	−2·7
	Madras (Central)	88·4	71·9	80·1	16·5	27·4	−1·1	−0·2	−0·9
	East Coast (Central)	87·9	75·8	81·9	12·2	25·7	−1·7	+0·1	−1·8
	Do. (South)	87·4	74·8	81·1	12·7	23·1	−1·3	−0·1	−1·2
	Madras (South)	88·4	75·6	82·0	12·8	23·0	−3·2	0	−3·2

At the commencement of the month temperature was in moderate to considerable excess in North-Western and Central India, and was in slight to moderate defect in Burma and the coast districts of the Bay.

The following gives variation data for the 24 hour period ending at 8 A.M. of the 1st :—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−5·6	−0·4	−3·0
Bengal and Assam	+0·3	−0·1	+0·1
N.-W. Provinces and Oudh	+2·4	+2·5	+2·5
Punjab	+4·7	+3·4	+4·1
Sind and Rajputana	+5·8	+1·3	+3·6
Central India and Gujarat	+5·4	+1·7	+3·6
Central Provinces and Berar	+3·0	+2·1	+2·6
Bombay	+1·2	+0·9	+1·1
Madras	−2·7	0	−1·4

A large temporary reduction of temperature occurred in North-Eastern India during the next two days due to the heavy rainfall accompanying the storm of that period.

The following gives variation data showing the amount of the reduction of temperature and the rapidity with which temperature increased after the cessation of the rainfall :—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF DATE. 2nd October.	3rd October.	4th October.	5th October.	6th October.
	°	°	°	°	°
Orissa	−5·3	+0·1	+1·8	+2·2	+2·1
Bengal	−4·1	−3·5	+0·8	+1·6	−0·2
Assam	−2·6	−5·3	−2·0	−1·0	−3·6
Bihar	−2·4	−1·5	+0·6	−0·4	−1·3
Chota Nagpur	−1·4	−0·3	+2·4	+2·3	+0·4

Whilst these changes were in progress in North-Eastern India, a cool wave passed slowly eastwards across Baluchistan and Upper India. The following data for four stations illustrate the character and progress of the wave :—

STATION.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF DATE. 1st October.	2nd October.	3rd October.	4th October.	5th October.	6th October.
	°	°	°		°	°
Quetta	−1·2	−5·2	−8·8	−5·9	−5·8	−6·1
Jacobabad	+2·5	+2·8	−0·5	−3·8	−3·5	−4·0
Bickaneer	+4·5	+2·6	+0·8	−2·5	−1·0	+0·6
Jeypore	+2·8	+2·9	+1·0	+0·1	+1·0	−0·3

This cool wave followed a period of very feeble disturbance and light showers in Afghanistan and the Kashmir Himalayas. The combined effect of the cool wave and the reduction of temperature in North-Eastern India due

to rainfall was to give slightly lower temperature than usual over the whole of Northern and Central India and the north of the Peninsula during the period from the 4th to the 10th.

The following variation data for the 7th illustrate the temperature conditions during this period :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−0·3	−0·5	−0·4
Bengal and Assam	+0·7	−3·5	−1·4
North-Western Provinces and Oudh	+3·1	−7·6	−2·3
Punjab	+1·1	−3·5	−1·2
Sind and Rajputana	−0·2	−4·6	−2·4
Central India and Gujarat	+2·1	−4·8	−1·4
Central Provinces and Berar	+2·0	−3·8	−0·9
Bombay	+0·6	−0·2	+0·3
Madras	+0·8	+0·1	+0·5

Temperature increased rapidly in Baluchistan on the 11th and 12th and was in excess on the 12th and following two days. The warm wave or wave of excess temperature extended slowly eastwards and southwards with the result that on the 14th and 15th temperature was in general excess, except in North-Eastern India and parts of Madras. The following gives variation data of the 15th in illustration :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·7	+1·5	+1·6
Bengal and Assam	+1·3	−2·6	−0·7
N.-W. Provinces and Oudh	+2·6	−2·0	+0·3
Punjab	+1·8	+4·8	+3·3
Sind and Rajputana	+2·9	+0·8	+1·9
Central India and Gujarat	+2·9	−2·6	+0·2
Central Provinces and Berar	+3·0	−3·5	−0·3
Bombay	+4·3	+0·4	+2·4
Madras	−1·4	+0·2	−0·6

Weather was slightly disturbed on the 15th and 16th, and again on the 19th and 20th in Baluchistan and Upper India, and moderate to heavy snow fell on the Sufed Koh and on the higher Kashmir elevations.

A feeble cool wave advanced across Northern India as the result of the first disturbance and was followed by a warm wave. The cool wave due to the local snowfall of the 19th and 20th on the Sufed Koh only affected the Punjab. The temperature variations during this period from the 17th to the 23rd, were hence very irregular. The most important was a considerable reduction of temperature in the Konkan and North Bombay due to a moderate burst of rain in that area from the 20th to the 25th. The following variation data for the 23rd illustrate the peculiar features of the temperature conditions of the period :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·6	+0·6	+1·1
Bengal and Assam	+0·8	−3·3	−1·3
North-Western Provinces and Oudh	+1·6	−1·7	−0·1
Punjab	+1·8	+0·3	+1·1
Sind and Rajputana	+0·9	+1·7	+1·3
Central India and Gujarat	−2·2	+3·7	+0·8
Central Provinces and Berar	+1·6	+3·9	+2·8
Bombay	−2·6	+1·7	−0·5
Madras	−1·4	−0·2	−0·8

The cyclonic disturbance of the 24th and 25th which originated in the Bay of Bengal caused a considerable reduction of temperature over the greater part of the Peninsula. The variation data for the 26th, given below are interesting, as they show the very large decrease of temperature accompanying the moderate rainfall of this period in the Peninsula :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·8	+2·5	+2·2
Bengal and Assam	+1·4	+1·2	+1·3
N.-W. Provinces and Oudh	−4·5	−0·5	−2·5
Punjab	−0·4	−0·1	−0·3
Sind and Rajputana	−2·4	−0·5	−1·5
Central India and Gujarat	−10·4	+1·2	−4·6
Central Provinces and Berar	−2·2	+4·6	+1·2
Bombay	−3·7	+1·9	−0·9
Madras	−5·6	−1·7	−3·7

Rainfall diminished in amount in Southern India during the last three days of the month, whilst fine clear weather held steadily in Northern India. Temperature hence increased, but the variations were nowhere large at the end of the month, as is shown by the following table giving the temperature variations from the normal for the 24 hours preceding 8 A.M. of the 31st:—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+2·1	+1·0	+1·6
Bengal and Assam	—1·6	—3·3	—2·5
N.-W. Provinces and Oudh	+0·2	—2·5	—1·2
Punjab	+1·9	+1·4	+1·7
Sind and Rajputana	+2·4	+0·2	+1·3
Central India and Gujarat	+0·3	—2·9	—1·3
Central Provinces and Berar	+0·3	+3·0	+1·7
Bombay	—1·1	+3·1	+1·0
Madras	+0·6	+2·0	+1·3

The following table gives the variations of the mean temperature, week by week, during the month and for the whole month:—

Political area or Province.	Variation from normal of mean temperature of week ending					
	5th October.	12th October.	19th October.	26th October.	2nd November.	For whole month.
	°	°	°	°	°	°
Burma	—0·9	—0·1	+0·8	+1·5	+1·3	+0·7
Bengal and Assam.	—0·5	—1·4	—0·7	—0·4	—3·2	—1·3
N.-W. Provinces and Oudh.	+1·6	—1·5	—0·1	—0·6	—1·6	—0·7
Punjab	+1·3	—0·8	+0·7	+0·9	+0·5	+0·1
Sind and Rajputana.	+0·9	—0·7	+1·0	+0·6	+0·8	+0·3
Central India and Gujarat.	—2·2	—1·4	+0·8	—1·3	—1·2	—0·5
Central Provinces and Berar.	+1·6	—1·3	+0·1	+2·0	—0·4	+0·2
Bombay	+1·0	—0·1	+1·8	—0·5	+0·9	+0·4
Madras	—1·1	—0·8	—0·1	—1·1	+0·5	—0·5

Winds.

As October is a month of slow transition from the south-west monsoon proper to the north-east or cold weather monsoon, and is characterised by marked uniformity of pressure and temperature conditions, the air movement of the period is feeble and more irregular than in any other month of the year.

Winds were slightly weaker than usual at Port Blair and Rangoon and were very abnormal in direction in Burma and the Andamans, the mean directions varying irregularly from station to station. The following gives data for these stations:—

Station.	Wind direction.	
	Mean actual, October 1895.	Normal, October.
Port Blair	S 28° E	S 5° W
Rangoon	S 26° W	S 37° E
Diamond Island	N 4° W	S 59° E

The large and abnormal easting in the winds at Port Blair was evidently due to the retreat of the monsoon winds from the north of the Bay much earlier than usual in this month.

The wind directions at Akyab and in Bengal had a stronger northerly element than usual and a westerly instead of the usual easterly component. The mean wind directions at the stations in Bengal were in fact such as usually obtain in November after the south-west monsoon influence has withdrawn from the north of the Bay and moderate land winds have set in over the Gangetic Plain. The following gives mean wind direction data for four typical stations in Bengal:—

Station.	Wind direction.	
	Mean actual, October 1895.	Mean normal, October.
Saugor Island	N 16° W	N 10° E
Berhampore	N 68° W	N 12° W
Burdwan	N 16° W	N 19° E
Hazaribagh	N 45° W	N 42° W

Winds were slightly steadier and stronger than usual on the mean of the month in Bengal.

Winds were more westerly than usual in the Gangetic Plain and East Punjab as is shown by the following comparative data :—

Station.	Wind direction. Mean actual, October 1895.	Mean normal, October.
Allahabad	N 82° W	N 42° W
Lucknow	N 56° W	N 30° W
Meerut	N 79° W	N 48° W
Lahore	N 40° W	N 3° W

Winds were light but of normal steadiness in the North-Western Provinces, but were very variable and irregular in the North and East Punjab as is shown by the following statement :—

Station.	Steadiness. Actual percentage, October 1895.	Normal percentage, October.	Variation from normal.	Velocity in miles per diem. Mean actual, October 1895.	Mean normal, October.	Variation from normal.
Ludhiana	5	2	—19	39	25	+14
Lahore	8	12	—4	43	38	+ 5
Peshawar	10	35	—25	64	59	+ 5

North-west winds, with a stronger westerly component than usual, obtained in Rajputana and Central India.

The following gives comparative data of steadiness and the mean velocity of the air movement in different districts of Northern India during the month :—

Province or Division.	Velocity in miles per diem. Mean actual, October 1895.	Mean normal, October.	Variation from normal.	Percentage, variation.	Steadiness. Actual percentage October 1895.	Normal percentage, October.	Variation from normal.
Bengal	89	76	+13	+17	32	15	+17
Chota Nagpur	140	119	+21	+18	29	34	— 5
Bihar	48	50	— 2	— 4	10	4	+ 6
North-Western Provinces and Oudh.	43	45	— 2	— 4	27	27	0
Punjab	44	42	+ 2	+ 5	16	23	— 7
Rajputana	100	103	— 3	— 3	41	25	+16
Central India	60	70	—10	—14	46	41	+ 5

Winds were as unsteady at Murree as in the East Punjab, but were very steady at Simla, Leh, Kailang, Chakrata and Ranikhet. They were somewhat variable at Darjeeling, where the percentage of steadiness was 34, but to a much less extent than usual in October at that station, as the normal percentage of steadiness is only 5.

The chief feature of the air movement at the hill stations was the abnormal preponderance of northerly winds. The following gives mean direction data for stations at which this feature was most strongly exhibited :—

Station.	Wind direction. Mean actual, October 1895.	Mean normal, October.
Murree	N 55° E	S 30° E
Simla	N 14° W	N 87° W
Darjeeling	N 74° W	S 3° E

Winds were stronger than usual at the *Himalayan* stations. The following gives data for four typical stations :—

Station.	Steadiness. Actual percentage, October 1895.	Normal percentage, October.	Variation from normal.	Velocity in miles per diem. Mean actual, October 1895.	Mean normal, October.	Variation from normal.	Percentage variation from normal.
Leh	81	34	+47	87	45	+42	+93
Murree	5	10	— 5	177	145	+32	+22
Chakrata	69	30	+39	238	120	+118	+98
Darjeeling	34	5	+29	112	62	+50	+81

The increased air movement at the hill stations stands in marked contrast to the conditions in the Gangetic Plain.

North-easterly winds, with a stronger easterly element than usual, prevailed in Berar, the Central Provinces, and Deccan. Winds were, however, of normal steadiness and strength in these areas as is shown by the following data :—

Division.	Steadiness. Actual percentage, October 1895.	Normal percentage, October.	Variation from normal.	Velocity in miles per diem. Mean actual, October 1895.	Mean normal, October.	Variation from normal.	Percentage variation from normal.
Berar	32	42	—10	93	100	— 7	— 7
Central Provinces	29	34	— 5	74	67	+ 7	+10
Bombay Deccan	40	40	0	161	193	—32	—17
Madras Deccan	26	12	+14	121	100	+21	+21

Winds were more variable than usual at Bombay and more northerly than usual. They were of normal strength at the Konkan and Malabar Coast stations.

Winds were remarkably unsteady at most stations in the interior of Madras and in Coorg, and the mean wind directions varied very irregularly from the normal. The following data illustrate the unsteadiness of the winds in this area:—

Station.	Steadiness.			Velocity in miles per diem.			
	Actual percentage, October 1895.	Normal percentage, October.	Variation from normal.	Mean actual, October 1895.	Mean normal, October.	Variation from normal.	Percentage variation from normal.
Mercara	6	24	—18	140	82	+58	+71
Salem	3	39	—36	11	63	—52	—83
Trichinopoly	14	33	—19	52	93	—41	—44

Winds were, on the other hand, less variable and unsteady at the coast stations. Thus at Madras the percentage was 31 or 21 above the normal (10 per cent.).

The following data illustrate the irregular variations of the mean winds from the normal in the southern half of the Peninsula:—

Station.	Wind direction.	
	Mean actual, October 1895.	Mean normal, October.
Vizagapatam	N 12° W	S 65° E
Madras	N 79° E	N 35° E
Bangalore	S 74° E	N 16° W
Bellary	S 70° E	N 24° E

The following table gives comparative data of the air movement of the month in the Peninsula:—

Division.	Steadiness.			Velocity in miles per diem.			
	Actual percentage, October 1895.	Normal percentage, October.	Variation from normal.	Mean actual, October 1895.	Mean normal, October.	Variation from normal.	Percentage variation from normal.
Berar	33	42	—10	93	100	— 7	— 7
Central Provinces	29	34	— 5	74	67	+ 7	+10
West Coast	24	28	— 4	190	200	—10	— 5
Deccan and Mysore	34	28	+ 6	145	156	—11	— 7
Madras Coast	33	14	+19	78	83	— 5	— 6

The following gives a comparison of the direction and velocity of the mean air movement at Zanzibar and the Seychelles with October 1894:—

Station.	Wind direction.		Steadiness.		Velocity in miles per diem.	
	Mean actual, October 1894.	Mean actual, October 1895.	Actual, October 1894.	Actual, October 1895.	Mean actual, October 1894.	Mean actual, October 1895.
Zanzibar	S 9 E	S 2° W	53	39	148	99
Seychelles	S 57 E	S31° E	40	87	156	240

Winds were hence much more easterly at these stations in October 1894 than in the corresponding month of 1895.

Humidity and Cloud.

One of the most noteworthy features of the month due to the very early withdrawal of the monsoon currents from Northern India was the excessive dryness of the air over the whole of Northern and Central India.

The amount of aqueous vapour present in the air was more or less largely below the normal over the whole of Bengal, the Gangetic Plain, the Punjab, Rajputana, Central India and the Central Provinces. The mean humidity percentage was hence considerably below the normal at all stations in this area of deficient aqueous vapour, but the variations varied largely from station to station, due chiefly to local conditions. The following gives comparative

data for seven stations, where the decrease in humidity was most strongly exhibited:—

Station.	Absolute humidity.			Relative humidity.		
	Average actual, October 1895.	Average normal, October.	Variation from normal.	Average actual, October 1895.	Average normal, October.	Variation from normal.
	"	"	"	%	%	
Agra . .	·400	·492	—·092	36	49	—13
Allahabad .	·477	·630	—·153	51	68	—17
Hazaribagh .	·457	·445	+·012	54	65	—11
Calcutta . .	·729	·842	—·113	73	84	—11
Jeypore . .	·312	·422	—·110	34	45	—11
Jubbulpore .	·454	·568	—·114	54	65	—11
Saugor . .	·420	·507	—·087	46	57	—11

The following gives comparative data for the various provinces in this large area of decreased humidity:—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, October 1895.	Average normal, October.	Variation from normal.	Average actual, October 1895.	Average normal, October.	Variation from normal.
	"	"	"	%	%	
Bengal . .	·741	·833	—·092	74	80	— 6
Assam . .	·726	·794	—·068	80	82	— 2
Chota Nagpur .	·457	·445	+·012	54	65	—11
Bihar . .	·664	·733	—·069	68	74	— 6
North-Western Provinces and Oudh.	·435	·537	—·102	48	59	—11
Punjab . .	·378	·457	—·079	43	50	— 7
Rajputana .	·355	·443	—·088	39	46	— 7
Central India .	·446	·526	—·080	50	58	— 8
Central Provinces	·498	·573	—·075	54	62	— 8
Berar . .	·499	·557	—·058	55	61	— 6

The data indicate that, on the whole, the deficiency was most marked in South Bengal, Bihar, the eastern districts of the North-Western Provinces and the northern districts of the Central Provinces, all of which usually receive moderate rain during a part or the whole of the month.

The decreased humidity was as conspicuous a feature at the hill stations as at the plain stations. The following gives data for four typical stations:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, October 1895.	Normal, October.	Variation from normal.	Actual, October 1895.	Normal, October.	Variation from normal.
	"	"	"	%	%	
Leh . . .	·074	·099	—·025	27	41	—14
Simla . .	·185	·256	—·071	44	52	— 8
Ranikhet . .	·264	·328	—·064	50	61	—11
Chikalda . .	·408	·473	—·065	54	64	—10

The absolute humidity data of Leh, Srinagar and Murree for this month, are very interesting, as they show that the air was much drier during the night than the day hours at these stations.

The air was slightly drier than usual in the West Coast districts as is shown by the following data for Bombay and Karwar:—

Station.	Absolute humidity.			Relative humidity.		
	Actual, October 1895.	Normal, October.	Variation from normal.	Actual, October 1895.	Normal, October.	Variation from normal.
	"	"	"	%	%	
Bombay . .	·809	·843	—·034	76	80	—4
Karwar . .	·815	·818	—·003	78	84	—6

The mean values of the absolute and of the relative humidity of the month were slightly higher for stations in the Bombay Deccan, Madras and Mysore. The variations were in no case large. The following gives mean variation data:—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, October 1895.	Average normal, October.	Variation from normal.	Average actual, October 1895.	Average normal, October.	Variation from normal.
	"	"		%	%	
Bombay Deccan	·594	·573	+·021	68	64	+4
Madras Deccan	·605	·629	—·024	64	64	0
Mysore . .	·622	·591	+·031	79	76	+3
Madras Coast	·859	·818	+·041	82	76	+6

The mean humidity percentage of Wellington was 4 higher than the normal.

Humidity was in slight to moderate defect in Burma and at Port Blair (due to increased temperature) as is shown by the following data :—

Station.	Absolute humidity.			Relative humidity.		
	Actual, October 1895.	Normal, October.	Variation from normal.	Actual, October 1895.	Normal, October.	Variation from normal.
	"	"	"	%	%	
Port Blair . .	·932	·908	+·024	81	86	−5
Rangoon . .	·908	·891	+·017	84	85	−1
Diamond Island	·889	·871	+·018	79	84	−5

The chief features of the mean humidity conditions of the month were as follows :—

(1). Decreased humidity over Burma, the whole of Northern and Central India, the Central Provinces, Berar and the West Coast districts. The deficiency was large and marked over nearly the whole area, and was greatest in South Bengal, Bihar, the eastern districts of the North-Western Provinces and the northern districts of the Central Provinces. The mean humidity was 10 and upwards below the normal at the great majority of stations in these four areas.

(2). The decreased humidity was large and marked at the hill stations up to the level of Leh.

(3). Humidity was slightly in excess in the Bombay Deccan, Mysore and the Madras coast districts.

The variations of the cloud amount were similar in character to those of the humidity at the majority of stations, a deficiency in one element accompanying a deficiency in the other element of observation and *vice versâ*.

The mean cloud amount was slightly larger than usual in Lower Burma and at Port Blair. The following gives data in illustration :—

Station.	Mean cloud amount.		
	Actual, October 1895.	Normal, October.	Variation from normal.
Port Blair	6·4	5·8	+0·6
Lower Burma	5·9	5·7	+0·2

There was less cloud than usual in Bengal, the Gangetic Plain, the East Punjab and at the majority of the hill stations in Upper India. The following gives comparative data for this area :—

Division.	Mean cloud amount.		
	Average actual, October 1895.	Average normal, October.	Variation from normal.
Bengal	3·7	4·3	−0·6
Orissa	4·8	4·5	+0·3
Chota Nagpur	4·1	4·3	−0·2
Bihar	2·0	3·2	−1·2
Assam	3·8	4·7	−0·9
North-Western Provinces and Oudh .	1·3	1·1	+0·2
East Punjab	0·7	0·8	−0·1

The deficiency was largest in amount at Sibsagar, where it averaged 2·3.

There was on the whole somewhat more cloud than usual in the West Punjab, Baluchistan, Sind, Central India and the Central Provinces, in all of which districts, with the exception of Baluchistan, the air was considerably drier than usual. The following gives comparative data for this area of slightly increased cloud (accompanying a large deficiency of aqueous vapour present in the lowest air strata) :—

Station.	Mean cloud amount.		
	Average actual, October 1895.	Average normal, October.	Variation from normal.
Baluchistan (Quetta) . . .	1·3	0·4	+0·9
West Punjab	1·4	0·9	+0·5
Sind	0·9	0·4	+0·5
Rajputana	1·6	1·6	0
Central India	2·6	2·5	+0·1
Berar	3·2	3·6	−0·4
Central Provinces	3·2	2·8	+0·4

Cloud was in large excess at the Konkan and Malabar coast stations, notwithstanding that the air was much drier than usual. The following gives data for this area of largely increased cloud amount in October 1895 :—

Station.	Mean cloud amount.		
	Actual, October 1895.	Normal, October.	Variation from normal.
Ratnagiri	5·3	3·1	+2·2
Karwar	6·1	4·5	+1·6
Cochin	7·6	5·8	+1·8

There was on the other hand somewhat less cloud than usual at Bombay.

Skies were more clouded than usual in October over the Deccan, Madras and Mysore. The increased cloud amount was most marked at Wellington and Bellary (at each of which stations the mean of the month was 1·8 above the normal) and at Salem (1·5 in excess).

The following gives comparative data for this area :—

Division.	Mean cloud amount.		
	Average actual, October 1895.	Average normal, October.	Variation from normal.
Bombay Deccan	6·2	5·5	+0·7
Madras Deccan	8·2	6·4	+1·8
Madras Coast	6·0	5·3	+0·7
Mysore	7·2	5·8	+1·4

The following is a brief summary of the mean distribution of cloud in October 189—

(1) Cloud was in slight excess at Port Blair and in Burma.

(2) Cloud was more or less largely in defect in Bengal, the Gangetic Plain and East Punjab.

(3) It was in slight to moderate excess in Sind, Central India and the Central Provinces.

(4) It was in large excess in the Konkan and Malabar coast districts.

(5) It was in largish excess in the Deccan, Mysore and Madras.

(6) It was in slight excess in Baluchistan, the Kashmir Himalayas, in largish excess in Sikkim and in moderate defect in the Central Himalayas.

Rainfall.

The rainfall of October is due to the retreating south-west monsoon current. Over the whole of North-Western and Central India the average rainfall of the month is less than 2 inches, and diminishes in amount westwards to the Indus Valley, for which it is less than two-tenths of an inch. In the North and Central Deccan, Central Provinces, Bengal and the greater part of Burma the average rainfall ranges between 2 and 5 inches, whilst in Lower Burma and the Peninsula, south of Lat. 13° N., it ranges between five and thirteen inches, and is greatest in amount in the Madras coast districts from Vizagapatam to Cuddalore.

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

(1) No rain fell over nearly the whole of the Punjab, Sind, Rajputana, the North-Western Provinces and the eastern states of Central India.

(2) The rainfall of the month was in slight defect in Burma.

(3) It was in considerable defect in Bihar and in slight to moderate defect in Chota Nagpur, North-West Bengal, and Assam, and in slight excess in East Bengal.

(4) The rainfall of the month was in largish defect in the Central Provinces and Berar, and in large excess in South Hyderabad.

(5) The rainfall of the month was in slight defect in the Bombay Deccan and was in slight excess in Mysore and the west coast districts.

(6) The rainfall was in moderate to large excess in the Madras coast districts and in South Madras.

(7) The rainfall was in defect over the remainder of India, including the Punjab and Rajputana, but the deficiency was small in actual amount.

The following table gives a summary of the rainfall data of the month for 51 meteorological divisions of India, based so far as possible on the rainfall statements of the month published by the Provincial Governments and other authorities :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, October 1895.	Average normal, October.	Average actual, October 1895.	Average normal, October.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	6·24	9·83	−3·59
	Lower Burma*	?	?	6·34	8·32	−1·98
	Central do.*	?	?	3·25	5·55	−2·30
	Upper do.*	?	?	1·99	?	?
	Arakan*	?	?	4·90	9·14	−4·24

PROVINCE.	DIVISION.	NUMBER OF RAINY DATE.		RAINFALL.		
		Average actual, October 1895.	Average normal, October.	Average actual, October 1895.	Average normal, October.	Variation from normal.
				Inches.	Inches.	Inches.
BENGAL AND ASSAM	Eastern Bengal	3·6	6·1	5·75	5·48	+0·27
	Assam (Surma)*	?	?	6·16	6·70	—0·54
	Do. (Brahmaputra)*	?	?	1·82	3·63	—1·81
	Deltaic Bengal	4·3	5·5	4·51	4·61	—0·10
	Central do.	2·9	4·7	1·83	3·90	—2·07
	North do.	2·6	4·5	1·81	4·88	—3·07
	Orissa	6·0	6·8	5·35	6·16	—0·81
	Chota Nagpur	3·2	4·2	2·82	2·87	—0·05
	Bihar (South)	1·0	3·0	0·28	3·13	—2·85
	Do. (North)	1·0	2·9	0·43	3·58	—3·15
NORTH-WESTERN PROVINCES AND OUDH.	North-Western Provinces (East)	0·1	2·0	0·03	2·18	—2·15
	Oudh (South)	0·2	1·6	0·07	1·60	—1·53
	Do. (North)	0·1	1·5	0·02	1·61	—1·59
	North-Western Provinces (Central)	0·1	1·1	0·01	1·10	—1·09
	Do. do. (West)	0	0·8	0	0·61	—0·61
	Do. do. (Submontane)	0·2	1·2	0·06	1·37	—1·31
PUNJAB	Punjab (South)	0	0·3	0·01	0·14	—0·13
	Do. (Central)	0	0·5	0	0·34	—0·34
	Do. (Submontane)	0·2	0·6	0·04	0·38	—0·34
	Do. (Hill Districts)	1·1	1·3	0·34	0·90	—0·56
	Do. (North-West)	0·5	0·9	0·17	0·47	—0·30
	Do. (West)	0·1	0·2	0·01	0·09	—0·08
BOMBAY AND MALABAR COAST DISTRICTS (MADRAS).	Malabar	13·8	12·0	11·35	10·04	+1·31
	Madras (South Central)	10·5	8·2	7·91	5·92	+1·99
	Coorg	11·2	?	6·80	?	?
	Mysore*	?	?	6·29	5·73	+0·56
	Konkan	8·2	7·6	5·38	5·55	—0·17
	Bombay Deccan	7·3	7·5	4·73	5·02	—0·29
	Khandesh	2·6	5·0	1·79	3·61	—1·82
CENTRAL PROVINCES AND BERAR.	Berar*	?	?	1·33	2·58	—1·25
	Central Provinces (West)*	?	?	0·67	1·95	—1·28
	Do. (Central)*	?	?	0·69	1·71	—1·02
	Do. (East)*	?	?	0·76	1·87	—1·11
BOMBAY (NORTH)	Gujarat	2·8	2·5	1·67	1·36	+0·31
	Kathiawar	2·1	0·8	1·12	0·69	+0·43
	Sind	0·1	?	0·09	0·03	+0·06
RAJPUTANA AND CENTRAL INDIA.	Central India (East)	0·8	?	0·36	1·61	—1·25
	Rajputana (East), Central India (West)	0·1	?	0·05	0·50	—0·45
	Rajputana (West)	0	?	0·02	0·08	—0·06
MADRAS	East Coast (North)	8·2	7·6	8·58	7·12	+1·46
	Do. (do.) (a)	8·5	6·7	3·75	4·76	—1·01
	Hyderabad (South)*	?	?	5·03	2·27	+2·76
	Madras (Central)	7·3	6·6	6·57	5·55	+1·02
	East Coast (Central)	11·3	8·4	10·83	9·75	+1·08
	Do. (South)	14·0	9·2	11·84	8·34	+3·50
	Madras (South)	13·8	7·8	10·85	6·04	+4·81

* NOTE.—The figures entered against divisions marked with an asterisk have been obtained from the weekly telegraphic reports.

The rainfall of the month was very unfavourably distributed in Bengal. Moderate to heavy rain was received from the 1st to the 3rd in South and East Bengal from the cyclonic storm of that period. The largest amounts were

registered in the Khulna, Jessore, Backergunge, Noakhali and Chittagong districts. The following were the most noteworthy falls :—

DATE.	DISTRICT.	STATION.	Heaviest fall in 24 hours preceding 8 A. M. of date.
			Inches.
2nd .	Khulna . . .	Satkhira . .	9·55
„ .	„ . . .	Rampal . . .	6·50
„ .	„ . . .	Bagerhat . .	6·15
„ .	Backergunge . .	Bauphal . .	7·30
„ .	„ . . .	Barisal . . .	5·88
„ .	„ . . .	Pirojpur . . .	5·25

Light showers, more or less local in character, were received during this period in North Bengal, Bihar and Chota Nagpur.

Little or no rain fell over the whole province between the 4th and 26th. South and East Bengal received light to moderate rain on the 27th and 28th, and Orissa and Chota Nagpur on the 26th, 27th, and 28th, during the feebly disturbed weather of the last week of the month. Light local showers of little importance fell in Bihar during the month during the first three days.

The following gives comparative data for the eight divisions of the province :—

DIVISION.	NUMBER OF RAINY DAYS.		RAINFALL.		
	Average actual, October 1895.	Variation from normal.	Average actual, October 1895.	Variation of actual from normal.	Percentage variation from normal.
			Inches.	Inches.	
Bengal East . . .	3·6	−2·5	5·75	+0·27	+ 5
„ North . .	2·6	−1·9	1·81	−3·07	−63
„ Deltaic . .	4·3	−1·2	4·51	−0·10	− 2
Central Bengal . .	2·9	−1·8	1·83	−2·07	−53
Orissa	6·0	−0·8	5·35	−0·81	−13
Chota Nagpur . .	3·2	−1·0	2·82	−0·05	− 2
North Bihar . . .	1·0	−1·9	0·43	−3·15	−88
South „ . . .	1·0	−2·0	0·28	−2·85	−91

The statement indicates that the rainfall of the month was normal in Eastern and Deltaic Bengal, Chota Nagpur and Orissa, but was more or less seriously in defect over the remainder of the province. The following gives comparative data for the Collectorates in which the deficiency exceeded 50 per cent :—

DIVISION.	DISTRICT.	RAINFALL.		
		Average actual, October 1895.	Average normal, October.	Percentage variation from normal.
		Inches.	Inches.	
South-West Bengal .	Murshidabad . .	1·58	4·37	−64
North „ .	Darjeeling . .	0·40	6·96	−94
„ „ .	Dinajpur . .	0·36	3·44	−89
„ „ .	Bogra . . .	0·77	4·34	−82
„ „ .	Rangpur . .	1·25	4·46	−72
„ „ .	Jalpaiguri . .	1·66	5·60	−70
„ „ .	Rajshahi . .	1·53	4·53	−66
„ „ .	Pabna . . .	1·92	4·43	−57
East „ .	Mymensingh .	1·68	5·32	−69
Bihar . . .	Champaran . .	0·10	3·46	−97
„ . . .	Gaya . . .	0·19	2·58	−93
„ . . .	Bhagalpur . .	0·23	3·50	−93
„ . . .	Saran . . .	0·34	3·74	−91
„ . . .	Malda . . .	0·32	3·62	−91
„ . . .	Shahabad . .	0·38	3·19	−88
„ . . .	Monghyr . .	0·40	3·13	−87
„ . . .	Purnea . . .	0·50	3·43	−85
„ . . .	Patna . . .	0·53	2·97	−81
„ . . .	Darbhanga . .	0·53	2·72	−81
„ . . .	Muzaffurpur . .	0·81	3·03	−73
„ . . .	Sonthal Parganas .	1·42	3·62	−60
Chota Nagpur . .	Palamau . .	0·88	2·81	−69

The deficiency was large and general in North Bengal and Bihar, averaging 63 per cent. for the former area and 90 per cent. for the latter.

The rainfall in Assam was somewhat scanty. It received a moderate and general burst from the 1st to the 3rd during the cyclonic storm of the first week of the month. Silchar and the eastern districts of the Brahmaputra Valley had light showers of little importance from the 27th to the 29th. The south-west monsoon rains of 1895 hence terminated on the 3rd October in Assam. The following

statement shows that the rainfall of the month was in considerable deficiency in the Brahmaputra division and was normal in the Surma division :—

Division.	Number of rainy days.			Rainfall.			
	Average actual October 1895.	Average normal October.	Variation from normal.	Average actual, October 1895.	Average normal, October.	Variation from normal.	Percentage variation from normal.
				Inches.	Inches.	Inches.	
Assam (Surma) . .	5·6	6·2	—0·6	6·17	5·86	+0·31	+ 5
„ (Brahmaputra)	3·8	5·5	—1·7	1·94	3·75	−1·81	−48

The hill and north-western districts of the Punjab and North-Western Provinces received some light showers, chiefly on the 15th and 16th, but the rainfall was very slight and of no importance and was *nil* over the remainder of these areas. The rainfall of the month was hence more or less considerably in defect in these two provinces, the amount being absolutely greatest in the eastern districts of the North-Western Provinces. The following gives comparative data for these two provinces :—

(A) PUNJAB.

Division.	Number of rainy days.			Rainfall.		
	Average Actual October 1895.	Average normal, October.	Variation from normal.	Average actual, October 1895.	Average normal, October.	Variation from normal.
				Inch.	Inch.	Inch.
Punjab, South .	0	0·3	−0·3	0·01	0·14	−0·13
„ Central .	0	0·5	−0·5	0	0·34	−0·34
„ Submontane.	0·2	0·6	−0·4	0·04	0·38	−0·34
„ Hills .	1·1	1·3	−0·2	0·34	0·90	−0·56
„ North-West.	0·5	0·9	−0·4	0·17	0·47	−0·30
„ West .	0·1	0·2	−0·1	0·01	0·09	−0·08

(B). NORTH-WESTERN PROVINCES.

Division.	Number of rainy days.		Rainfall.		
	Average actual, October 1895.	Variation from normal.	Average actual, October 1895.	Average normal, October.	Percentage variation from normal.
			Inch.	Inch.	
Oudh, North . .	0·1	−1·4	0·02	1·61	−99
Do. South . .	0·2	−1·4	0·07	1·60	−96
N.-W. P. (East) . .	0·1	−1·9	0·03	2·18	−99
Do. (Central) . .	0·1	−1·0	0·01	1·10	−99
Do. Submontane .	0·2	−1·0	0·06	1·37	−96
Do. (West) . .	0	−0·8	0	0·61	−100

British Baluchistan received moderate showers from the 19th to the 21st due to a feeble disturbance similar in character to the cold weather disturbances. The precipitation was heaviest on the plateau and higher elevations. As the normal rainfall of the month is practically *nil* the actual was in largish excess. The following gives comparative data for three stations, for which normal means are available :—

Station.	Rainfall.		
	Actual, October 1895.	Normal, October.	Variation from normal.
	Inch.	Inch.	Inch.
Kalat	0·40	0·06	+0·34
Quetta	0·66	0·08	+0·58
Pishin	0·73	0	+0·73

There were two periods of light to moderate showers in Kashmir, *viz.*, the 1st to the 3rd, and the 14th to the 16th. The precipitation was light in the valley but moderate on the higher elevations surrounding the valley.

No rain fell in Rajputana and in the eastern states of Central India. Bhopal and Gwalior received light to moderate showers daily from the 21st to the 26th. The following gives comparative data of the rainfall of the month for these two states :—

State.	Rainfall.			
	Average actual, October 1895.	Average normal, October.	Variation from normal.	Percentage variation from normal.
	Inch.	Inch.	Inch.	
Bhopal	0·35	1·33	−0·98	−74
Gwalior	0·51	0·74	−0·23	−31

The Konkan districts of the Bombay Presidency received light to moderate showers during the first three days of the month and frequent showers from the 17th to the 25th. The total rainfall of the month averaged 5·38 inches, and was almost identical with the normal.

The Deccan districts obtained light to moderate daily rain during the first week of the month, and occasional showers during the disturbed period from the 16th to the

27th. The rainfall of the month was generally below the normal, the deficiency being most marked in the northern districts of Poona and Sholapur. Some light showers of no importance fell in Khandesh during the first three days of the month, and moderate showers from the 20th to the 26th. The rainfall of the month averaged 1·79 inches, barely 50 per cent. of the normal rainfall of the month.

Gujarat and Kathiawar obtained moderate rain during the disturbed period of the fourth week of the month, from the 22nd to the 25th. The rainfall of the month was in slight to moderate excess in these divisions.

The following gives comparative rainfall data of the month for the six divisions of the Bombay Presidency:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, October 1895.	Variation from normal.	Average actual, October 1895.	Variation from normal.	Percentage variation from normal.
			Inches.	Inches.	
Konkan . .	8·2	+0·6	5·38	−0·17	− 3
Bombay Deccan .	7·3	−0·2	4·73	−0·29	− 6
Khandesh . .	2·6	−3·0	1·79	−1·82	− 50
Gujarat . .	2·8	+0·3	1·67	+0·31	+ 23
Kathiawar . .	2·1	+1·3	1·12	+0·43	+ 62
Sind . . .	0·1	?	0·09	+0·06	+200

Light showers of little importance were received in the various divisions of the Madras Presidency during the first week of the month.

The rains of the retreating south-west monsoon commenced on the 11th in the Coromandel Coast districts. Heavy general rain fell over the greater part of South and Central Madras from the 11th to the 16th.

The following gives average district rainfalls in 24 hours exceeding 1 inch and shows fully the area of heaviest rainfall:—

Date.	District.	Average actual rainfall.	Heaviest rainfall in district.
		Inches.	Inches.
12th	Madura . . .	1·01	4·27
„	Tanjore . . .	1·11	1·88
14th	„ . .	1·21	2·75
„	Trichinopoly . .	1·27	3·80
16th	South Arcot . .	1·64	4·53

Moderate general rain fell in the coast districts from the 20th to the 23rd. The fall was heaviest in the South Coromandel Coast districts, where several stations recorded falls exceeding 4 inches. The following table gives data showing the character of this burst of rainfall:—

Date.	District.	Average actual rainfall.	Heaviest rainfall in district.
		Inches.	Inches.
21st . . .	Chingleput . .	1·71	2·69
„ . . .	Nellore . . .	1·04	6·11
22nd . . .	Chingleput . .	1·93	3·85
„ . . .	Tanjore . . .	1·55	4·20
„ . . .	Pudukotta State .	1·93	4·13
„ . . .	Madura . . .	1·12	3·23
23rd . . .	South Arcot . .	3·09	8·30
„ . . .	Tanjore . . .	1·37	4·65
„ . . .	Trichinopoly . .	1·24	3·55
„ . . .	Chingleput . .	1·13	4·05

The rainfall of this period was heaviest in the Chingleput, South Arcot, Tanjore and Trichinopoly districts.

The Deccan districts received little or no rain during this period, and the north coast districts only light showers.

The disturbed weather of the last week of the month gave a general burst of rain over the whole presidency. Average rainfalls exceeding 2 inches in 24 hours were received in the following districts during this period.

Date.	District.	Average actual rainfall.	Heaviest rainfall in district.
		Inches.	Inches.
26th	Ganjam	2·96	6·56
„	Vizagapatam	2·45	16·85
„	Cuddapah	2·35	5·84
„	Kurnool	3·54	7·10
27th	Ganjam	2·08	12·36

The rainfall during this period was hence heavy in the northern coast districts and the districts of Cuddapah and Kurnool as shown above. Some very heavy downpours were received in Ganjam and Vizagapatam.

The following gives comparative data of the total rainfall of the month in the Madras Presidency :—

Division.	Rainfall.			
	Average actual, October 1895.	Average normal, October.	Variation from normal.	Percentage variation from normal.
	Inches.	Inches.	Inches.	
Madras, Central . .	6·57	5·55	+1·02	+18
Madras East Coast Central	10·83	9·75	+1·08	+11
Madras East Coast South	11·84	8·34	+3·50	+42
Madras, South . .	10·85	6·04	+4·81	+80
Madras, South Central .	7·91	5·92	+1·99	+34
Malabar . . .	11·35	10·04	+1·31	+13

The rainfall was in excess in all divisions, the percentage variations increasing in amount in the east coast districts from north to south. The chief feature of the rainfall of the month was the heavy rainfall of the month in South Madras and the Coromandel coast districts, which usually receive the heaviest rainfall from the retreating south-west monsoon in November and not in October.

The following gives comparative data for each of the 22 Collectorates of the Presidency :—

District.	Number of rainy days.		Rainfall.		
	Average actual, October 1895.	Average normal, October.	Average actual, October 1895.	Average normal, October.	Variation from normal.
			Inches.	Inches.	Inches.
Ganjam . . .	6·9	7·5	8·71	7·87	+0·84
Vizagapatam . .	7·4	7·4	7·39	6·47	+0·92
Godavari . . .	9·3	7·8	9·97	7·57	+2·40
Kistna	9·7	7·5	7·66	6·21	+1·45
Nellore	11·3	8·4	10·83	9·75	+1·08
Chingleput . . .	15·2	9·3	14·21	9·89	+4·32
Madras . . .	19·0	10·0	11·61	10·99	+0·62
North Arcot . . .	12·2	8·3	8·29	7·23	+1·06
South Arcot . .	16·6	9·4	17·42	8·79	+8·63
Tanjore	15·7	10·1	12·65	8·92	+3·73
Trichinopoly . . .	12·1	9·3	8·56	6·91	+1·65
Madura	14·1	8·0	11·10	6·34	+4·76
Tinnevelly . . .	13·3	6·8	10·54	5·63	+4·91
Malabar . . .	14·5	12·1	12·26	9·48	+2·78
South Canara . .	12·4	11·8	9·72	10·84	−1·12
Salem	10·5	8·6	7·94	6·26	+1·68
Coimbatore . . .	10·5	7·8	7·86	5·50	+2·36
Nilgiris . . .	16·6	12·1	13·59	9·24	+4·35
Cuddapah . . .	8·0	7·0	6·58	6·53	+0·05
Anantapur . . .	7·9	6·3	6·34	5·46	+0·88
Bellary	7·2	6·3	5·93	4·76	+1·17
Kurnool . . .	6·8	6·0	7·36	5·27	+2·09

NOTE.

* The Calcutta Meteorological office has called my attention to the fact that the Bengal Meteorological Reporter has accepted the corrected reading 28·868″ of the Barisal barometer at 8 A.M. of the 2nd, mainly because it is confirmed by a reading of the Comilla barometer (*viz.* 28·910″ actual or corrected to sea level and constant gravity 28·768″). The time at which this reading was taken is not stated in the brief storm report sent in by the Comilla observer. He, however, reports an average wind velocity of 129 miles per hour between 8 A.M. and 9-30 A.M. The Calcutta office also bases its opinion on the general accuracy of the observations made by the Barisal observer. If these readings be accepted, the track of the storm would be slightly different to that stated in pages 451-52. The centre, according to the observations of the Floating Light Vessels, passed a little distance to the east of the Light Ships at the Eastern Channel and Intermediate stations. It was then advancing in a north-easterly track and recurving to east. It probably crossed the coast 40 to 50 miles east of Saugor Island between 7 and 8 P.M., and advanced during the next twelve hours in a course changing from north-east to east north-east during the night. It passed near or over Barisal about 8 A.M. and near Comilla in the afternoon.

There are, however, discrepancies in the observations which it is almost impossible to reconcile, and it is greatly to be regretted that none of the observers in the storm area took frequent and accurate observations during the storm on the 2nd.

That the storm was of great severity at Barisal is shown by the information extracted from a report of the inspection of the Barisal observatory made by Babu Jati Lal De of the Bengal Meteorological office on the 12th October : "The storm of the 2nd October last was very severe. In the town itself there is not a house which does not bear the marks of the fury of the storm. All huts and thatched bungalows were blown down. Very big trees were uprooted and hundreds of country boats sank in the river. People say that the fury of the storm of the 2nd October 1895 was in no way less than that of the Backerganj cyclone of 1876. The river rose along with the storm and the water submerged the whole town."

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
1. Burma Coast and Bay Islands.		...	...	+·005	...	...	...	...	...	...	...	88·7	+0·8	75·9	+0·8	82·3	+0·8	12·8	...	...	...	...	18·0
Bay Islands	Port Blair	61	29·863	?	29·855	29·971	1st	29·801	18th & 24th.	·170	82·8	88·5	?	78·4	?	83·5	?	10·1	90·8	3 days	76·3	17th	14·5
Tenasserim	Mergui	96	29·891	?	29·919	29·999	3rd	29·777	15th	·222	80·3	88·5	?	73·9	?	81·2	?	14·6	91·3	20th	71·6	26th	19·7
	Tavoy	26	29·947	?	29·904	30·030	1st	29·895	16th	·135	79·1	90·0	?	73·6	?	81·8	?	16·4	92·2	4 days	70·7	12th	21·5
	Moulmein	94	29·853	+·007	29·884	29·959	1st	29·791	6th	·168	79·1	89·1	+0·9	75·4	+1·0	82·3	+1·0	13·7	91·5	7 days	72·8	3 days	18·7
	Toungoo	183	29·740	−·004	29·866	29·830	1st	29·674	19th	·156	80·0	90·4	+0·7	75·4	+0·9	82·9	+0·8	15·0	92·7	12 days	73·2	2 days	19·5
Lower Burma	Rangoon	41	29·895	+·002	29·873	30·000	1st	29·839	19th	·161	79·9	89·2	+2·0	76·2	+0·6	82·7	+1·3	13·0	92·2	24th	74·4	9th	17·8
	Bassein	27	29·907	+·007	29·869	29·997	1st	29·862	19th	·135	80·3	88·3	+1·3	76·0	+1·0	82·2	+1·2	12·3	90·7	26th	74·3	2 days	16·4
	Diamond Island	41	29·891	+·013	29·867	29·970	1st	29·840	18th	·130	83·2	86·9	+0·5	79·2	+3·0	83·1	+1·8	7·7	89·6	31st	75·4	8th	14·2
Arakan	Akyab	20	29·904	+·007	29·867	29·968	10th	29·756	2nd	·212	78·5	87·1	−0·8	74·9	−1·9	81·0	−1·4	12·2	89·8	27th	70·2	21st	19·6
2. Burma Inland		...	...	−·003	...	...	...	...	...	...	...	87·0	−0·9	69·4	−0·1	78·3	−0·5	17·6	...	...	...	...	26·8
Central Burma	Thayetmyo	134	29·789	−·003	29·865	29·863	26th	29·731	3rd	·132	79·4	89·9	−0·2	74·0	0	82·0	−0·1	15·9	93·1	5 days	71·1	2 days	22·0
	Minbu	?	29·761	?	...	29·836	9th	29·654	3rd	·182	79·0	89·7	?	74·1	?	81·9	?	15·6	95·6	28th	69·1	23rd	26·5
	Yamethin	645	29·277	?	29·876	29·359	26th	29·182	3rd	·177	78·7	91·3*	?	73·5	?	83·0*	?	17·8	96·5	26th	71·9	4 days	25·5
	Taunggyi	?	?	?	?	?	?	?	?	?	66·2	77·2	?	57·6	?	67·4	?	19·6	80·2	2 days	51·5	6th	28·7
Upper Burma	Mandalay	249	29·662	?	29·866	29·750	26th	29·476	3rd	·274	79·8	90·8	?	74·3	?	82·6	?	16·5	94·5	28th	69·1	8th	25·4
	Kindat	?	29·557	?	...	29·645	9th	29·235	3rd	·410	74·0	85·8	−1·6	71·1	−0·1	78·5	−0·9	14·7	89·3	27th	67·0	2 days	22·3
	Lashio	?	27·147	?	...	27·210	11th	27·040	21st	·170	68·3	83·0	?	63·3	?	73·2	?	19·7	85·5	2 days	55·0	31st	30·5
	Bhamo	?	29·546	?	...	29·633	9th	29·229	3rd	·404	73·8	87·9	?	67·0	?	77·5	?	20·9	92·1	11th	58·8	31st	33·3
3. Assam		...	...	+·019	...	...	...	...	...	...	...	84·6	−1·7	69·2	−2·9	76·9	−2·3	15·5	...	...	...	...	28·5
Assam (Surma)	Silchar	104	29·842	+·029	29·901	29·924	27th	29·587	3rd	·337	73·8	87·2	−1·6	68·8	−3·6	78·0	−2·6	18·4	94·5	1st	61·4	31st	33·1
Brahmaputra	Sibsagar	333	29·616	?	29·914	29·709	27th	29·296	3rd	·413	71·1	82·8	−2·3	67·6	−3·3	75·2	−2·8	15·2	90·2	1st	62·0	29th	28·2
	Dhubri	115	29·823	+·008	29·894	29·910	10th	29·556	3rd	·354	74·6	83·9	−1·1	71·1	−1·9	77·5	−1·5	12·8	89·2	1st	64·9	29th	24·3
4. Bengal and Orissa		...	...	+·005	...	...	...	...	...	...	...	86·5	−0·7	71·3	−1·9	79·0	−1·3	15·2	...	...	...	...	27·3
East Bengal	Chittagong	87	29·829	0	29·865	29·897	10th	29·455	2nd	·442	76·2	86·2	−0·2	70·1	−3·67	78·2	−1·9	16·1	89·7	1st	62·1	31st	27·6
	Lungleh	?	?	?	?	?	?	?	?	?	66·3	74·6	?	62·3	?	68·4	?	12·3	78·9	1st	53·8	31st	25·1
	Noakhali	43	29·867	?	29·857	29·950	27th	29·322	2nd	·628	77·3	85·0	?	70·5	?	77·8	?	14·5	88·5	1st	60·5	31st	28·0
	Comilla	36	29·885	?	29·869	29·968	27th	29·393	2nd	·575	77·5	85·6	?	69·5	?	77·6	?	16·1	91·3	1st	61·9	30th & 31st	29·4
	Sirajganj	49	29·872	?	29·871	29·967	27th	29·489	2nd	·478	75·5	85·2	?	70·7	?	78·0	?	14·5	90·8	5th	61·8	31st	29·0
	Narayanganj	26	29·887	+·007	29·861	29·981	27th	29·290	2nd	·691	78·2	86·3	−1·7	72·9	−2·2	79·6	−2·0	13·4	91·1	1st	64·8	31st	26·3
	Barisal	13	29·885	−·014?	29·843	29·994	27th	28·911	2nd	1·083	79·6	87·2	−0·3	73·0	−1·4	80·2	−0·9	14·2	91·8	5th	68·4	31st	23·4
	Mymensingh	59	29·867	+·003	29·878	29·964	27th	29·516	2nd	·448	76·0	85·5	−1·3	70·3	−2·8	77·9	−2·1	15·2	90·2	5th	61·1	30th	29·1
Deltaic Bengal	Faridpur	46	29·878	?	29·872	29·986	27th	29·300	2nd	·686	78·1	85·5	?	71·7	?	78·7	?	13·8	90·8	5th	63·0	31st	27·8
	Jessore	33	29·884	+·004	29·864	30·007	27th	29·392	2nd	·615	79·3	87·7	−0·9	71·3	−3·6	79·5	−2·3	16·4	92·0	2 days	61·9	31st	30·1
	Calcutta	21	29·899	+·009	29·866	30·003	27th	29·552	2nd	·451	78·3	86·	−0·6	73·2	−1·2	79·7	−0·9	12·8	91·4	7th	67·7	8th	23·7
	Saugor Island	25	29·889	+·007	29·858	29·966	27th	29·589	2nd	·37	79·6	86·5	−0·3	74·9	−1·2	80·7	−0·8	11·6	89·9	15th	69·5	23rd	20·4
	Krishnagar	47	29·878	?	29·875	29·987	27th	29·504	2nd	·483	78·1	89·5	?	70·5	?	80·0	?	19·0	94·8	7th	63·7	31st	31·1
	Midnapore	149	29·779	?	29·878	29·876	27th	29·513	2nd	·363	77·8	88·	?	72·2	?	80·5	?	16·5	94·3	3 days	67·2	24th	27·1

* Mean of 16 days.

I.

in India, Burma, etc., in October 1895.

WIND DIRECTION, Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.			RAINFALL.												STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.	Mean cloud amount.	Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 31st October 1895.	Normal rainfall for period, 1st Oct. to 31st Oct.	Variation from normal of period.	Heaviest rainfall during month.		
...	...	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	5·05	9·40	—4·24	...	...	...	...	**1. Burma Coast and Bay Islands.**	
3	2	2	3	3	2	4	8	4	5·6	6·4	− 13	86	·965	6·3	10	?	?	4·64	12·17	− 7·53	4·64	12·17	− 7·53	2·00	Port Blair .	BAY ISLANDS.
...	6	2	8	4	4	2	1	4	1·7	1·5	+ 13	88	·908	3·8	14	?	?	6·87	13·54	− 6·67	6·87	13·54	− 6·67	1·15	Mergui .	TENASSERIM.
28	1	...	...	...	...	1	...	1	0·9	?	?	89	·890	1·8	7	?	?	4·16	?	?	4·16	?	?	1·68	Tavoy.	
...	1	8	10	4	2	3	2	1	1·5	1·7	− 12	90	·895	6·5	9	11·55	−2·55	7·39	8·10	− 0·71	7·39	8·10	− 0·71	2·82	Moulmein.	
11	7	3	3	6	1	...	...	...	0·5	1·8	− 72	88	·913	4·1	8	10·55	−2·55	4·02	6·76	− 2·74	4·02	6·76	− 2·74	1·06	Toungoo.	
...	1	6	4	3	7	8	2	...	2·5	3·2	− 22	92	·937	4·8	7	9·09	−2·09	2·56	6·74	− 4·18	2·56	6·74	− 4·18	0·93	Rangoon .	LOWER BURMA.
9	3	5	1	3	1	3	4	2	3·6	2·5	+ 44	90	·930	3·9	12	12·18	−0·18	6·07	8·21	− 2·14	6·07	8·21	− 2·14	2·00	Bassein.	
3	6	7	5	...	2	3	1	4	7·3	6·4	+ 14	81	·922	5·0	6	11·60	−5·60	3·50	9·22	− 5·72	3·50	9·22	− 5·72	0·97	Diamond Island.	
...	3	21	5	...	1	...	1	...	3·0	2·3	+ 30	90	·878	4·5	4	8·64	−4·64	6·29	10·44	− 4·15	6·29	10·44	− 4·15	4·16	Akyab .	ARAKAN.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·16	5·57	—2·95	...	...	...	...	**2. Burma, Inland.**	
...	6	4	2	5	10	3	1	...	2·7	3·1	− 13	85	·845	3·9	6	7·91	−1·91	2·94	4·24	− 1·30	2·94	4·24	− 1·30	1·15	Thayetmyo	CENTRAL BURMA.
2	3	1	2	6	3	1	5	8	6·6	?	?	82	·822	3·4	3	?	?	2·40	?	?	2·40	?	?	1·50	Minbu.	
5	4	1	...	10	10	...	...	1	3·6	?	?	86	·849	3·1	7	?	?	3·28	?	?	3·28	?	?	0·84	Yamethin.	
10	...	1	...	11	1	6	...	2	?	?	?	88	·572	5·0	8	?	?	4·83	?	?	4·83	?	?	1·16	Taunggyi.	
4	5	...	3	4	5	10	...	...	5·2	?	?	80	·805	3·8	5	?	?	2·18	?	?	2·18	?	?	0·80	Mandalay .	UPPER BURMA.
24	2	...	...	2	1	1	...	1	1·1	?	?	91	·779	6·8	4	?	?	2·30	6·90	− 4·60	2·30	6·90	− 4·60	1·05	Kindat.	
...	...	...	...	...	...	...	...	...	?	?	?	90	·629	6·0	6	?	?	4·13	?	?	4·13	?	?	1·14	Lashio.	
19	...	7	...	1	...	1	1	2	1·3	?	?	86	·731	2·5	7	?	?	3·20	?	?	3·20	?	?	0·83	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·74	4·61	−0·87	...	...	...	...	**3. Assam.**	
28	...	1	1	...	...	1	...	...	1·8	2·1	− 14	88	·735	4·8	6	6·30	− 0·30	7·57	5·28	+ 2·29	7·57	5·28	+ 2·29	2·95	Silchar .	ASSAM (SURMA).
8	1	12	3	5	1	1	...	...	3·4	2·0	+ 70	96	·732	4·6	5	7·45	−2·45	3·14	5·07	− 1·93	3·14	5·07	− 1·93	0·94	Sibsagar .	BRAHMAPUTRA
2	3	12	7	1	1	3	1	1	4·0	2·9	+ 38	86	·742	3·1	1	3·50	−2·50	0·52	3·49	− 2·97	0·52	3·49	− 2·97	0·33	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4·40	4·91	−0·99	...	...	...	...	**4. Bengal and Orissa.**	
...	7	16	3	3	1	...	...	1	3·5	3·0	+ 17	88	·802	4·1	3	6·64	−3·64	5·52	5·23	+ 0·29	5·52	5·23	+ 0·29	2·46	Chittagong	EAST BENGAL.
...	...	...	...	Not	recorded.	...	...	...	?	?	?	88	·569	?	5	?	?	8·68	?	?	8·68	?	?	7·12	Lungleh.	
...	8	13	5	2	1	1	...	1	3·3	?	?	87	·817	2·5	3	6·95	−3·95	5·06	6·86	− 1·80	5·06	6·86	− 1·80	3·30	Noakhali.	
14	6	...	6	2	3	...	...	...	2·4	?	?	92	·868	3·3	5	5·72	−0·72	7·97	4·23	+ 3·74	7·97	4·23	+ 3·74	4·34	Comilla.	
24	3	1	2	...	...	1	...	...	1·7	?	?	86	·765	2·9	5	5·05	−0·05	1·71	4·38	− 2·67	1·71	4·38	− 2·67	0·59	Sirajganj.	
1	6	9	4	4	3	1	1	2	4·4	2·3	+ 91	82	·792	4·6	5	5·27	−0·27	5·34	4·52	+ 0·82	5·34	4·52	+ 0·82	2·05	Narayanganj	
17	5	3	1	2	2	...	...	1	2·1	?	?	81	·829	3·7	5	5·90	−0·90	7·83	5·26	+ 2·57	7·83	5·26	+ 2·57	4·75	Barisal.	
5	4	9	9	3	...	1	...	...	2·4	?	?	85	·767	2·9	3	5·50	−2·50	2·32	5·62	− 3·30	2·32	5·62	− 3·30	1·65	Mymensingh.	
23	2	2	...	1	1	2	...	...	2·2	?	?	84	·820	2·6	4	5·30	−1·30	3·95	4·30	− 0·35	3·95	4·30	− 0·35	2·76	Faridpur .	DELTAIC BENGAL.
10	8	2	2	1	4	3	1	...	2·7	2·1	+ 29	83	·837	3·6	5	5·73	−0·73	6·16	4·42	+ 1·74	6·16	4·42	+ 1·74	3·90	Jessore.	
12	3	5	1	1	...	5	3	1	2·8	3·2	− 13	83	·810	3·7	5	5·45	−0·45	2·79	4·08	− 1·29	2·79	4·08	− 1·29	1·44	Calcutta.	
...	5	12	2	...	1	4	3	4	8·9	6·5	+ 37	85	·859	5·7	4	7·82	−3·82	4·64	8·14	− 3·50	4·64	8·14	− 3·50	1·60	Saugor Island.	
...	4	2	4	3	6	1	9	2	3·4	?	?	75	·723	3·4	3	5·30	−2·30	3·66	4·19	− 0·53	3·66	4·19	− 0·53	2·06	Krishnagar.	
12	10	4	...	...	3	...	...	2	1·4	?	?	78	·749	2·6	7	5·25	+1·75	4·72	4·78	− 0·06	4·72	4·78	− 0·06	1·84	Midnapore.	

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal	Bankura	298	29·609	?	29·863	29·703	27th	29·362	2nd	·341	76·9	88·3	?	71·0	?	79·7	?	17·3	94·1	5th	65·2	30th	28·9
	Raniganj	334	29·603	?	29·892	29·710	27th	29·344	2nd	·366	76·1	88·6	?	70·4	?	79·5	?	18·2	93·7	5th	64·0	31st	29·7
	Burdwan	99	29·829	+·014	29·878	29·937	27th	29·521	2nd	·416	76·6	88·2	−0·5	72·2	−2·5	80·2	−1·5	16·0	93·2	3 days	66·2	31st	27·0
	Naya Dumka	489	29·430	?	29·886	29·523	27th	29·178	2nd	·345	77·0	86·8	?	69·1	?	77·9	?	17·7	93·5	5th	61·0	31st	32·5
	Berhampore	67	29·860	+·009	29·876	29·972	27th	29·542	2nd	·430	77·6	87·8	+0·1	71·6	−2·9	79·8	−1·4	16·2	93·7	5th	62·2	31st	31·5
	Rampur Boalia.	70	29·849	?	29·870	29·964	27th	29·530	2nd	·434	78·7	86·4	?	71·7	?	79·1	?	14·7	91·1	6th & 7th.	63·1	31st	28·0
	Malda*	72	?	?	?	?	?	?	?	?	75·6	86·9	?	68·2	?	77·6	?	18·7	92·1	4th & 5th.	60·5	31st	31·6
	Bogra	61	29·854	+·016	29·868	29·961	27th	29·528	2nd	·433	77·6	86·6	−0·3	70·4	−1·9	78·5	−1·1	16·2	91·7	5th	61·2	31st	30·5
North Bengal	Dinajpur	123	29·798	−·001	29·878	29·887	10th	29·541	3rd	·346	75·4	86·5	−0·9	70·0	−2·1	78·3	−1·5	16·5	91·3	5th	60·3	31s	31·0
	Rangpur	123	29·810	?	29·889	29·893	10th	29·548	2nd	·350	76·1	85·6	?	69·5	?	77·6	?	16·1	90·3	1st	60·2	31st	30·1
	Jalpaiguri	284	29·646	+·002	29·895	29·733	10th	29·383	3rd	·350	72·9	84·7	−1·6	67·6	−1·6	76·2	−1·6	17·1	88·9	6th	62·1	3 days	26·8
Orissa	Balasore	56	29·876	+·010	29·879	29·955	9th	29·610	1st	·345	77·9	87·4	−0·4	72·1	−1·0	79·8	−0·7	15·3	92·9	6th	66·8	24th	26·1
	False Point	21	29·894	+·008	29·857	29·971	9th	29·480	1st	·491	80·2	87·1	−0·2	73·8	−0·9	80·5	−0·6	13·3	91·5	4th	69·6	24th	21·9
	Cuttack	80	29·835	+·007	29·859	29·925	11th	29·565	1st	·360	77·9	89·2	−0·7	74·2	−0·3	81·7	−0·5	15·0	94·2	6th	70·7	4 days	23·5
	Shortt's Island	?	29·888	?	?	29·961	9th	29·541	1st	·420	82·2	87·8	?	78·5	?	83·2	?	9·3	93·2	5th	73·0	24th	20·2
	Puri	20	29·902	?	29·865	29·971	9th	29·628	1st	·343	79·8	88·1	?	76·2	?	82·2	?	11·9	92·7	7th & 8th.	71·1	28th	21·6
5. Gangetic Plain and Chota Nagpur.		...	...	+·011	...	...	...	...	...	...	...	89·0	+0·5	66·6	−2·3	77·8	−1·0	22·3	...	...	...	...	37·1
Chota Nagpur	Hazaribagh	2,007	27·912	+·015	29·890	27·999	11th	27·695	3rd	·304	73·4	83·8	+0·7	66·0	−0·8	74·9	−0·1	17·8	89·2	4th	58·2	30th	31·0
	Ranchi	2,128	27·782	?	29·875	27·858	11th	27·578	3rd	·280	73·2	83·3	+0·6	64·7	−0·7	74·0	−0·1	18 6	90·2	4th	58·0	30th & 31st.	32·2
	Daltonganj	730?	29·182	?	29·881	29·279	11th	28·970	3rd	·309	75·8	89·0	?	63·8	?	76·4	?	25·2	94·3	4th & 5th.	53 0	30th	41·3
	Chaibassa	760	29·166	+·021	29·888	29·247	9th	28·950	2nd	·297	75·4	88·1	0	69·1	−1·2	78·6	−0·6	19·0	92·9	5th	58·5	30th	34·4
Bihar, South	Gaya	375	29·554	+·021	29·892	29·645	9th	29·289	3rd	·356	75·7	90·6	+1·3	69·5	−1·4	80·0	−0·1	21·1	96·0	5th	60·2	30th	35·8
	Dehri	351	29·566	?	29·878	29·662	11th	29·287	3rd	·375	76·5	90·3	?	?	?	?	?	?	94·8	6th & 7th.	?	?	?
	Patna	183	29·740	+·007	29·878	29·839	11th	29·163	3rd	·376	78·0	88·1	−0·2	70·1	−2·4	79·1	−1·3	18·0	92·0	3 days	61·3	31st	30·7
	Arrah	190	29·733	?	29·879	29·831	9th & 11th.	29·466	3rd	·365	75·7	90·1	?	67·7	?	78·9	?	22·4	93·9	6th	58·5	30th	35·4
	Buxar	239	29·673	?	29·872	29·778	9th & 11th.	29·391	3rd	·387	76·2	89·7	?	68·5	?	79·1	?	21·2	93·0	6th	58·4	31st	34·6
Bihar, North	Purnea	125	29·801	+·015	29·882	29·900	10th	29·540	3rd	·369	74·6	87·6	+0·1	68·1	−3·1	77·9	−1·5	19·5	90·7	2 days	58·3	2 days	32·4
	Bhagalpur	160	29·755	?	29·871	29·864	10th	29·490	3rd	·374	77·2	88·6	?	68·4		78·6	?	20·2	93·2	5th	58·1	30th	35·1
	Darbhanga	166	29·751	−·001	29·875	29·857	9th	29·474	3rd	·383	75·6	86·4	+0·1	70·7	−2·7	78·6	- 1·3	15·7	91·0	5th	62·9	2 days	28·1
	Muzaffarpur	178	29·743	?	29·879	29·842	9th	29·467	3rd	·375	75·6	87·3	?	67·7	?	77·5	?	19·6	92·2	5th	58·2	31st	34·0
	Motihari	224	29·694	?	29·880	29·802	10th	29·415	3rd	·387	74·7	87·1	?	65·9	?	76·6	?	21·2	92·0	5th	55·4	30th	36·6
	Chapra	181	29·734	?	29·873	29·837	9th	29·461	3rd	·376	76·1	89·0	?	68·7	?	78·9	?	20·3	92·8	6th	59·1	30th	33·7
N.-W. Provinces (Eastern Districts).	Benares	267	29·650	+·012	29·878	29·750	9th	29·379	3rd	·371	74·3	90·6	+0·7	64·2	−4·5?	77·4	−1·9	26·4	96·3	4th	53·5	30th	42·8
	Allahabad	309	29·605	+·007	29·875	29·760	11th	29·344	3rd	·356	75·7	92·4	+2·5	65·0	−2·6	78·7	−0·1	27·4	97·6	4th & 7th.	53·4	30th	44·2
N.-W. Provinces (East Sub-montane).	Gorakhpur	256	29·653	+·010	29·873	29·760	9th	29·373	3rd	·387	75·1	88·1	−0·6	66·3	−3·9	77·2	−2·3	21·8	92·9	4th	55·3	31st	37·6
Oudh, South	Lucknow	368	29·534	+·001	29·868	29·645	9th & 11th.	29·268	3rd	·377	74·3	91·0	+0·1	63·1	−2·5	77·1	−1·2	27·9	96·8	4th	51·7	30th	45·1
Oudh, North	Bahraich	403	29·501	?	29·874	29·615	9th	29·217	3rd	·398	73·9	88·5	?	65·2	?	76·9	?	23·3	94·4	4th	56·0	30th	38·4
N.-W. Provinces (Central).	Cawnpore	416	29·489	?	29·863	29·589	10th & 11th.	29·228	3rd	·361	75·6	93·3	?	63·0	?	78·2	?	30·3	99·9	3rd	52·0	29th & 30th.	47·9
	Mainpuri	516	29·383	?	29·871	29·490	9th	29·137	3rd	·353	72·5	94·0	?	63·1	?	78·6	?	30·9	100·3	3rd	51·6	31st	48·7

* Mean of 27 days.

I—*continued.*

in India, Burma, etc., in October 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.								Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st Oct. to 31st Oct. 1895.	Normal rainfall for period, 1st Oct. to 31st Oct.	Variation from normal of period from 1st Oct. to 31st Oct.			
22	1	...	3	...	...	1	4	...	1·2	P	P	75	·692	3·1	2	5·50	− 3·50	2·98	4·15	− 1·17	2·98	4·15	− 1·17	2·43	Bankura .	CENTRAL PENGAL.
26	1	...	1	...	1	...	1	1	0·7	P	P	77	·700	3·4	4	4·00	0	3·04	3·41	− 0·37	3·04	3·41	− 0·37	1·73	Raniganj.	
8	8	2	1	1	1	4	2	4	1·9	2·1	−10	79	·724	4·2	2	4·64	− 2·64	3·70	3·15	+ 0·55	3·70	3·15	+ 0·55	2·51	Burdwan.	
9	3	2	4	2	1	...	4	6	1·8	P	P	72	·672	2·9	3	4·89	− 1·89	2·14	4·08	− 1·94	2·14	4·08	− 1·94	1·19	Naya Dumka	
2	4	4	3	...	6	8	2	2	2·5	2·1	+19	82	·775	3·2	3	5·55	− 2·55	1·73	3·90	− 2·17	1·73	3·90	− 2·17	0·87	Berhampore.	
15	5	1	1	1	4	4	...	...	3·2	P	P	80§	·790§	2·0	3	5·30	− 2·30	1·14	4·44	− 3·30	1·14	4·44	− 3·30	0·46	Rampur Boalia.	
4	...	2	...	1	...	10	...	10	2·2	P	P	84	·749	1·6	2	4·35	− 2·35	0·48	4·38	− 3·90	0·48	4·38	− 3·90	0·22	Malda.*	
13	3	1	1	6	3	2	2	...	1·8	P	P	82	·777	2·4	2	4·70	− 2·70	0·47	3·27	− 2·80	0·47	3·27	− 2·80	0·27	Bogra.	
5	...	10	4	2	5	4	...	1	1·6	P	P	86	·761	2·3	1	3·20	− 2·20	0·57	4·72	− 4·15	0·57	4·72	− 4·15	0·36	Dinajpur .	NORTH BENGAL.
4	3	12	3	2	4	2	1	...	1·9	P	P	85	·766	3·3	3	3·95	− 0·95	1·06	5·32	− 4·26	1·06	5·32	− 4·26	0·55	Rangpur.	
9	3	6	5	3	2	...	...	3	1·8	P	P	84	·680	4·2	3	4·80	− 1·80	1·25	5·42	− 4·17	1·25	5·42	− 4·17	0·48	Jalpaiguri.	
4	10	3	...	...	1	3	1	9	3·6	P	P	84	·813	2·5	4	6·75	− 2·75	4·04	6·49	− 2·45	4·04	6·49	− 2·45	2·42	Balasore .	ORISSA.
1	12	2	2	...	...	3	3	8	6·5	6·1	+ 7	85	·862	4·5	8	7·36	+ 0·64	11·55	8·06	+ 3·49	11·55	8·06	+ 3·49	2·89	False Point.	
17	1	4	1	1	...	1	5	1	2·3	1·9	+21	82	·789	3·2	6	6·18	− 0·18	2·93	1·90	+ 1·03	2·93	1·90	+ 1·03	0·82	Cuttack.	
...	8	4	3	...	1	6	6	3	P	P	P	78	·858	2·9	8	P	P	13·57	P	P	13·57	P	P	3·35	Shortt's Island.	
8	9	8	...	1	...	1	3	1	9·2	P	P	83§	·849§	2·6	7	8·55	− 1·55	10·96	8·81	+ 2·15	10·96	8·81	+ 2·15	3·81	Puri.	
..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·73	2·63	− 1·91	...	...	...	...	5 Gangetic Plain and Chota Nagpur.	
6	2	...	2	2	8	6	3	2	5·3	5·0	+ 16	66	·543	3·2	4	4·55	− 0·55	4·50	2·90	+ 1·60	4·50	2·90	+ 1·60	2·61	Hazaribagh.	CHOTA NAGPUR.
7	3	1	...	1	3	5	5	6	4·6	?	P	71	·576	1·8	4	4·55	− 0·55	2·49	2·79	− 0·30	2·49	2·79	− 0·30	1·09	Ranchi.	
...	1	...	1	3	14	8	3	1	1·8	P	P	70	·623	2·3	2	P	P	0·88	P	P	0·88	P	P	0·51	Daltonganj.	
9	4	1	1	1	3	4	4	4	1·0	P	P	78	·696	3·5	4	4·60	− 0·60	3·23	2·73	+ 0·50	3·23	2·73	+ 0·50	1·74	Chaibassa.	
17	1	1	...	1	6	4	1	...	2·6	1·5	+ 73	64	·577	2·6	1	2·91	− 1·91	0·15	1·83	− 1·68	0·15	1·83	− 1·68	0·15	Gaya .	BIHAR, SOUTH.
...	...	...	1	2	7	18	2	1	4·3§	P	P	71	·643	2·3	1	2·75	− 1·75	0·32	2·89	− 2·57	0·32	2·89	− 2·57	0·28	Dehri.	
4	...	2	4	...	8	2	10	1	2·5	1·9	+ 31	69	·670	2·0	2	3·55	− 1·55	1·07	2·77	− 1·70	1·07	2·77	− 1·70	0·92	Patna.	
2	1	...	...	2	9	10	5	2	3·2	P	P	79	·696	1·5	1	3·70	− 2·70	1·06	3·28	− 2·22	1·06	3·28	− 2·22	1·05	Arrah.	
1	2	2	4	6	2	6	7	1	1·9	P	P	68	·616	2·2	1	3·00	− 2·00	0·60	3·35	− 2·75	0·60	3·35	− 2·75	0·60	Buxar.	
8	1	9	3	1	1	6	1	1	2·6	1·4	+ 86	85	·736	3·4	0	3·64	− 3·64	0·13	3·46	− 3·33	0·13	3·46	− 3·33	0·07	Purnea .	BIHAR, NORTH.
11	1	...	2	3	9	3	1	1	2·0	P	P	74	·700	2·4	1	3·15	− 2·15	0·34	3·20	− 2·86	0·34	3·20	− 2·86	0·28	Bhagalpur.	
8	1	2	8	4	1	2	3	2	1·6	2·2	− 27	81	·716	1·8	2	2·91	− 0·91	0·30	3·23	− 2·93	0·30	3·23	− 2·93	0·18	Darbhanga.	
20	...	2	3	1	...	...	3	1	1·0	P	P	84	·744	1·4	0	2·95	− 2·95	0·15	3·47	− 3·32	0·15	3·47	− 3·32	0·07	Muzaffarpur	
2	1	7	6	...	...	2	6	7	3·3	P	P	84	·727	1·4	1	2·39	− 1·39	0·23	3·49	− 3·26	0·23	3·49	− 3·26	0·23	Motihari.	
5	1	...	5	3	3	7	5	2	2·2	P	P	76	·690	1·5	1	2·90	− 1·90	0·40	3·60	− 3·20	0·40	3·60	− 3·20	0·38	Chapra.	
19	...	...	1	...	3	4	4	...	2·3	2·6	− 12	73	·638	2·0	0	2·45	− 2·45	0	2·30	− 2·30	0	2·30	− 2·30	0	Benares .	N.-W. PROVINCES (EASTERN DISTRICTS).
6	...	1	1	3	5	3	8	4	2·5	1·6	+ 56	64	·507	2·5	0	1·64	− 1·64	0	1·83	− 1·83	0	1·83	− 1·83	0	Allahabad .	
...	8	1	3	1	2	2	9	5	1·0	1·3	− 23	74	·653	1·9	1	2·64	− 1·64	0·21	3·77	− 3·56	0·21	3·77	− 3·56	0·16	Gorakhpur	N.-W. PROVINCES (EAST SUB-MONTANE).
2	2	5	2	2	2	9	6	1	P	1·9	P	68	·587	2·1	0	1·36	− 1·36	0·07	0·83	− 0·76	0·07	0·83	− 0·76	0·07	Lucknow .	OUDH, SOUTH
22	...	2	3	1	...	...	...	3	0·8	P	P	74	·629	1·0	0	P	P	0·02	1·69	− 1·67	0·02	1·69	− 1·67	0·02	Bahraich .	OUDH, NORTH.
5	...	...	1	3	2	4	14	2	2·6	P	P	58	·521	1·1	0	1·60	− 1·60	0	1·08	− 1·08	0	1·08	− 1·08	0	Cawnpore .	N.-W. PROVINCES (CENTRAL).
30	...	...	...	...	...	...	1	...	0·3	P	P	56	·454	0·6	0	P	P	0	0·82	− 0·82	0	0·82	− 0·82	0	Mainpuri.	

§ Mean of 30 days. * Mean of 27 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
6. Upper—Sub-Himalayas		...	...	−·006	...	...	...	...	...	...	...	90·6	+0·8	60·9	−1·0	75·8	−0·1	29·7	...	...	...	...	46·7
N.-W. Provinces (Sub-montane).	Bareilly	568	29·333	+·010	29·881	29·445	11th	29·068	3rd	·377	70·9	90·1*	+0·9	62·6	−2·6	76·4*	−0·9	27·5	95·3	3rd	50·2	29th	45·1
	Dehra Dun	2,233	27·676	−·011	29·907	27·786	9th	27·434	3rd	·352	65·6	82·7	+1·0	58·3	−2·5	70·5	−0·8	24·4	88·0	4th	51·5	28th	36·5
	Roorkee	887	29·000	−·009	29·885	29·110	9th	28·732	3rd	·378	66·9	89·4	+0·3	58·3	−3·2	73·8	−1·5	31·1	95·7	4th	48·7	28th	47·0
	Meerut	738	29·147	−·007	29·873	29·255	9th	28·891	3rd	·364	68·7	91·2	+1·2	61·3	−1·4	76·3	−0·1	29·9	97·5	3rd	50·5	30th	47·0
Punjab, Central.	Delhi	718	29·169	−·007	29·865	29·260	9th	28·899	3rd	·361	75·1	93·5	+1·7	66·9	−1·1	80·2	+0·3	26·6	100·5	3rd	59·4	28th & 29th.	41·1
	Lahore	702	29·177	−·007	29·869	29·292	26th	28·883	3rd	·409	70·6	93·7	+0·5	62·0	+2·1	77·8	+1·3	31·7	100·8	1st	49·7	28th	51·1
Punjab (Sub-montane).	Umballa	962?	28·971?	?	29·877?	29·074	9th	28·666	3rd	·408	70·3	91·5	?	59·5	?	75·5	?	32·0	97·5	1st	48·0	30th	49·5
	Patiala	?	29·065*	?	?	29·179	9th	28·768	3rd	·411	71·1*	91·0*	?	61·0*	?	76·0*	?	30·0	96·0	2nd	51·0	30th	45·0
	Ludhiana	812	29·076	−·005	29·879	29·185	9th	28·765	3rd	·420	70·9	92·4	+0·5	62·2	−1·3	77·3	−0·4	30·2	99·0	3rd	51·8	29th	47·2
Punjab, North	Sialkot	830	29·067	?	29·892	29·173	26th	28·770	3rd	·403	70·2	92·6	+0·6	62·1	+0·3	77·4	+0·5	30·5	99·7	1st	49·2	29th	50·5
	Rawalpindi	1,683	28·224	−·010	29·927	28·348	26th	27·961	3rd	·387	67·1	88·6	+0·6	56·2	+0·3	72·4	+0·5	32·4	98·0	1st	44·5	28th	53·5
7. Indus Valley and North-West Rajputana.		...	...	−·005	...	...	...	...	...	...	...	95·2	+0·9	64·1	−0·6	79·7	+0·2	31·1	...	...	...	...	49·2
Punjab, West	Peshawar	1,110	28·832	+·010	29·913	28·956	26th	28·590	3rd	·366	66·0	86·9	−1·5	56·9	−0·5	71·9	−1·0	30·0	98·0	1st	47·0	27th & 29th.	51·0
	Mardan	?	?	?	?	?	?	?	?		63·9	88·6	?	54·8	?	71·7	?	33·8	100·0	1st	42·0	28th & 29th.	58·0
	Khushab	612	29·280	?	29·877	29·408	27th	29·001	3rd	·404	73·1	93·4	?	62·7	?	78·0	?	30·7	101·3	1st	50·5	28th	50·8
	Montgomery	558	29·320	?	29·855	29·448	26th	29·056	3rd	·392	76·9	96·5	?	62·2	?	79·4	?	34·3	106·9	2nd	53·5	28th	53·4
	D. I. Khan	594	29·301?	−·018?	29·866?	29·455	26th & 27th	29·050	3rd	·405	69·7	92·3	−1·8	59·4	−2·0	75·9	−1·9	32·9	100·1	1st	48·8	28th	51·3
	Mooltan	420	29·466	−·010	29·867	29·598	26th	29·225	3rd	·373	71·9	96·6	+1·6	64·3	−0·3	80·5	+0·7	32·3	105·4	1st	58·7	3 days	46·7
	Sirsa	662	29·215	−·013	29·858	29·331	26th	28·930	3rd	·401	73·2	98·2	+2·3	63·4	+0·9	80·9	+1·6	34·8	106·1	2nd	50·2	29th	55·9
Sind and Cutch.	Jacobabad	186	29·716	+·012	29·867	29·845	26th	29·512	3rd	·333	76·7	99·2	+1·2	64·0	+0·9	81·6	+1·1	35·2	108·4	1st & 2nd.	59·5	5th & 26th.	48·9
	Hyderabad	96	29·813	+·016	29·862	29·030	26th	29·634	3rd	·296	80·7	99·4	+2·0	69·5	−1·1	84·5	+0·5	29·9	109·2	2nd	60·5	25th	48·7
	Kurrachee	49	29·866	−·016	29·867	29·980	26th	29·713	3rd	·267	77·8	93·2	+2·0	70·8	−0·6	82·0	+0·7	22·4	100·9	11th & 12th.	64·9	5th	36·0
	Bhuj	395	29·513	−·018	29·862	29·600	11th	29·374	3rd	·226	79·3	96·0	+0·3	70·5	−0·7	83·3	−0·2	25·5	104·6	2nd	63·9	26th	40·7
Rajputana, West	Bickaneer	746	29·115	?	29·837	29·226	26th	28·880	3rd	·346	79·4	97·6	+2·0	70·5	−2·0	84·1	0	27·1	105·6	2nd	60·6	29th	45·0
	Pachpadra	380	29·233	?	29·880	29·659	26th	29·344	3rd	·315	73·0	99·6	?	64·2	?	81·9	?	35·4	109·5	2nd	57·8	29th & 30th.	51·7
8. East Rajputana, Central India and Gujarat.		...	...	0	...	...	...	...	...	...	...	92·6	+0·9	65·8	−1·3	79·2	−0·2	26·8	...	...	...	...	43·5
Rajputana, East	Jeypore	1,431	28·495	−·007	29·909	28·590	25th	28·264	3rd	·326	74·8	94·4	+1·2	62·8	−1·7	78·6	−0·3	31·6	101·0	2nd	53·1	29th	47·9
	Sambhar	1,254	28·649	−·014	29·890	28·744	26th	28·424	3rd	·320	73·0	93·9	+2·3	62·6	−2·1	78·2	+0·1	31·3	101·0	1st	53·4	29th	47·6
	Ajmere	1,611	28·325	−·001	29·936	28·417	26th	28·106	3rd	·311	70·5	92·6	+1·2	61·6	−1·4	77·1	−0·1	31·0	98·4	1st & 2nd	48·8	29th	49·6
	Deesa	466	29·466	+·003	29·894	29·547	11th	29·303	3rd	·244	77·9	97·8	+1·8	65·1	−1·8	81·5	0	32·7	106·9	2nd	57·6	29th & 31st.	49·3
Kathiawar	Rajkot	429	29·490	−·015	29·874	29·563	9th	29·382	3rd	·181	80·7	93·9	−1·3	67·3	−1·1	80·6	−1·2	26·6	100·9	1st & 2nd	61·4	30th	39·5
	veraval	?	29·895	?	29·855	29·970	11th	29·831	19th	·139	78·8	87·7	?	72·2	?	80·0	?	15·5	96·6	17th	65·8	30th	30·8
Central India	Nowgong	757	29·158	?	29·889	29·247	10th	28·947	3rd	·300	72·7	92·1	+1·7	64·3	−0·8	78·2	+0·5	27·8	100·0	3rd	53·0	30th	47·0
	Indore	1,823	28·125	+·016	29·924	28·199	10th & 11th	27·993	3rd	·206	72·9	86·6	−0·5	61·6	−2·1	74·1	−1·3	25·0	93·7	3rd	52·1	30th	41·6
	Neemuch	1,630	28·319	+·020	29·926	28·402	9th	28·134	3rd	·268	75·2	90·1	+0·2	62·6	−2·0	76·4	−0·9	27·5	97·3	2nd	51·4	30th	45·9
Gujarat	Surat	36	29·891	−·011	29·870	29·965	11th	29·818	3rd	·147	77·7	91·9	−0·4	69·2	−1·3	80·6	−0·9	22·7	98·7	18th	61·5	29th	37·2
	Ahmedabad	176	29·765	?	29·892	29·845	11th	29·624	3rd	·221	77·6	93·7	?	70·4	?	82·0	?	23·3	102·8	2nd	62·6	30th	40·2
N.-W. P., West	Agra	555	29·346	?	29·872	29·444	9th	29·087	3rd	·357	75·7	94·9	+2·0	66·7	−1·1	80·8	+0·5	28·2	104·5	3rd	56·9	30th	47·6
	Jhansi	858	29·065	+·012	29·892	29·158	10th	28·846	3rd	·312	77·6	94·6	+2·2	69·5	+1·0	82·1	+1·6	25·1	102·1	3rd	60·4	29th	41·7

* Mean of 30 days.

I—*continued.*

in India, Burma, etc., in October 1895—continued.

WIND DIRECTION. Number of Winds from									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.							Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st Oct. to 31st Oct. 1895.	Normal rainfall for period, 1st Oct. to 31st Oct.	Variation from normal of period.			
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·07	0·49	−0·33	...	...	...	...	6. Upper—Sub-Himalayas.	
16	1	2	...	7	...	...	...	5	0·9	1·9	−53	69	·535	0·8	0	0·91	−0·91	0·06	1·15	−1·09	0·06	1·15	−1·09	0·06	Bareilly .	N.-W. PROVINCES (SUB-MONTANE).
31	...	...	...	...	...	...	...	...	0·8	1·7	−53	65	·421	1·0	1	1·20	−0·20	0·17	0·99	−0·82	0·17	0·99	−0·82	0·10	Dehra Dun.	
23	...	...	...	6	1	1	...	...	1·8	1·4	+29	70	·469	0·5	1	0·55	+0·45	0·21	0·43	−0·22	0·21	0·43	−0·22	0·21	Roorkee.	
30	...	...	...	...	...	...	1	...	0·7	1·4	−50	61	·441	0·4	0	0·45	−0·45	0	0·42	−0·42	0	0·42	−0·42	0	Meerut.	
12	...	...	4	...	...	1	14	...	3·1	2·4	+29	41	·363	1·0	0	0·18	−0·18	0·02	0·08	−0·06	0·02	0·08	−0·06	0·02	Delhi .	PUNJAB, CENTRAL.
13	4	2	7	3	...	...	2	...	1·8	1·6	+13	54	·408	0·4	0	0·45	−0·45	0	0·26	−0·26	0	0·26	−0·26	0	Lahore.	
23	...	...	3	3	...	...	...	2	0·8	?	?	62	·468	0·3	0	?	?	0·02	0·31	−0·29	0·02	0·31	−0·29	0·02	Umballa .	PUNJAB (SUB-MONTANE).
12	2	10	...	...	3	1	2	...	1·7*	?	?	67*	·524*	0·6	0	?	?	0·02	?	?	0·02	?	?	0·02	Patiala.	
14	...	2	...	11	2	1	...	1	1·8	0·9	+100	54	·418	0·9	0	0·55	−0·55	0	0·40	−0·40	0	0·40	−0·40	0	Ludhiana.	
22	4	1	2	...	1	...	1	...	1·5	1·4	+7	52	·381	0·9	1	0·82	+0·18	0·20	0·31	−0·11	0·20	0·31	−0·11	0·11	Sialkot .	PUNJAB, NORTH.
9	9	9	...	...	...	...	1	3	2·7	1·2	+125	52	·357	1·5	0	1·45	−1·45	0·05	0·55	−0·50	0·05	0·55	−0·50	0·05	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	0·08	−0·01	...	...	...	...	7. Indus Valley and North-West Rajputana.	
20	4	...	1	...	2	1	1	2	2·7	2·5	+ 8	60	·394	1·2	0	0·27	−0·27	0·07	0·11	−0·04	0·07	0·11	−0·04	0·04	Peshawar .	PUNJAB, WEST.
...	...	...	...	No t recor	ded.	...	...		?	?	?	?	?	?	1	?	?	0·26	?	?	0·26	?	?	0·26	Mardan.	
4	2	10	9	1	2	1	2	...	3·8	?	?	43	·354	0·4	0	0·20	−0·20	0	0·07	−0·07	0	0·07	−0·07	0	Khushab.	
4	...	3	4	9	7	1	1	2	4·3	?	?	47†	·390†	0·5	0	0·10	−0·10	0	0·06	−0·06	0	0·06	−0·06	0	Montgomery	
18	1	5	6	...	...	...	...	1	2·0	1·2	+67	55	·400	0·2	0	0·09	−0·09	0	0·05	−0·05	0	0·05	−0·05	0	D. I. Khan.	
10	...	5	...	9	...	7	...	...	1·1	2·0	−45	59	·465	0·4	0	0	0	0	0	0	0	0	0	0	Mooltan.	
13	1	1	2	3	3	5	3	...	3·6	2·5	+44	38	·318	1·0	0	0·64	−0·64	0	0·14	−0·14	0	0·14	−0·14	0	Sirsa.	
10	4	1	1	5	4	...	1	5	3·0	2·2	+36	45	·410	1·0	0	0	0	0	0	0	0	0	0	0	Jacobabad .	SIND AND CUTCH.
6	3	1	...	1	1	10	3	6	7·2	7·8	− 8	43	·435	0·9	0	0	0	0	0	0	0	0	0	0	Hyderabad.	
3	3	2	2	1	...	5	10	5	9·1†	9·7	− 6	70	·669	0·6	0	0	0	0	0	0	0	0	0	0	Kurrachee.	
8	2	...	4	1	...	2	5	9	8·4	6·0	+40	62	·609	1·2	0	?	?	0·14	0·35	−0·21	0·14	0·35	−0·21	0·09	Bhuj.	
3	1	1	1	1	3	12	5	4	4·0	4·0	0	33	·330	1·2	0	?	?	0	0·10	−0·10	0	0·10	−0·10	0	Bickaneer .	RAJPUTANA, WEST.
24	1	...	1	2	1	1	1	...	5·5	3·7	+49	54	·441	2·7	1	?	?	0·56	0·05	+0·51	0·56	0·05	+0·51	0·56	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·80	0·67	−0·25	...	...	...	...	8. East Rajputana, Central India, and Gujarat.	
12	1	1	...	...	...	3	5	9	2·6	3·7	−30	49	·422	1·5	0	0·90	−0·90	0	0·30	−0·30	0	0·30	−0·30	0	Jeypore .	RAJPUTANA, EAST.
22	3	1	...	...	...	1	4	...	2·4	4·7	−49	53	·425	1·2	0	0·50	−0·50	0	0·17	−0·17	0	0·17	−0·17	0	Sambhar.	
19	...	1	...	1	...	3	7	...	2·3	2·6	−12	60	·438	1·0	0	0·64	−0·64	0·01	0·31	−0·30	0·01	0·31	−0·30	0·01	Ajmere.	
...	2	4	8	7	6	4	...	...	7·6‡	6·7	+13	45	·421	1·3	1	0·45	−0·45	0·29	0·35	−0·06	0·29	0·35	−0·06	0·19	Deesa.	
8	3	8	6	...	...	...	5	1	5·7	5·6	+ 2	69	·728	1·7	2	1·27	+0·73	0·95	0·45	+0·50	0·95	0·45	+0·50	0·71	Rajkot .	KATHIAWAR.
7	9	8	3	...	...	...	3	1	8·3	?	?	67	·649	3·6	4	?	?	2·83	?	?	2·83	?	?	0·98	Veraval.	
9	1	1	2	2	4	6	6	...	1·5	1·5	0	63	·513	2·5	0	1·82	−1·82	0·02	1·17	−1·15	0·02	1·17	−1·15	0·02	Nowgong .	CENTRAL INDIA.
6	4	5	4	3	2	1	4	2	2·6	2·3	+13	67	·541	2·7	2	3·09	−1·09	1·52	1·45	+0·07	1·52	1·45	+0·07	0·69	Indore.	
3	...	6	5	2	1	6	8	...	6·5	7·9	−18	51	·443	2·2	1	1·09	−0·09	0·35	0·49	−0·14	0·35	0·49	−0·14	0·32	Neemuch.	
1	1	11	9	2	1	3	2	1	?	5·1	?	68	·657	3·2	4	3·00	+1·00	1·42	1·53	−0·11	1·42	1·53	−0·11	0·61	Surat .	GUJARAT.
2	2	9	8	5	1	3	...	1	4·8	?	?	59	·549	3·1	3	?	?	2·91	?	?	2·91	?	?	1·36	Ahmedabad.	
6	...	2	...	4	...	12	...	7	2·6	3·0	−13	47	·422	1·2	0	0·45	−0·45	0	0·47	−0·47	0	0·47	−0·47	0	Agra . .	N.-W.P., WEST.
5	1	...	...	...	...	13	9	3	2·9	2·6	+12	46	·434	1·3	0	1·27	−1·27	0·05	0·70	−0·65	0·05	0·70	−0·65	0·05	Jhansi.	

* Mean of 29 days.

† Mean of 16 days.
‡ ,, ,, 24 ,,

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
9. Deccan		...	...	+·010	...	...	...	...	...	...	...	88·1	+0·8	67·2	−0·4	77·7	+0·2	20·9	...	...	...	...	32·9
Bombay, Deccan	Belgaum	2,524	27·388	−·009	29·852	27·447	10th	27·331	29th	·116	72·3	82·5	+0·1	65·9	+0·9	74·3	+0·5	16·6	87·7	16th	61·9	11th & 12th.	25·8
	Sholapur	1,590	28·335	+·001	29·894	28·410	11th	28·269	29th	·141	76·6	88·5	−0·6	68·8	+0·9	78·7	+0·2	19·7	92·2	3 days	61·1	11th	31·1
	Poona	1,840	28·092	−·008	29·896	28·167	11th	28·031	24th.	·136	73·4	87·6	+0·1	66·5	+0·1	77·1	+0·1	21·1	93·0	16th	58·9	11th	34·1
	Bijapur	1,946	27·980	?	29·881	28·053	10th	27·920	29th	·133	74·4	85·8	?	68·0	?	76·9	?	17·8	89·3	20th	59·6	11th	29·7
Khandesh	Malegaon	1,430	28·506	0	29·906	28·577	9th	28·409	3rd	·168	74·8	89·3	−0·3	64·0	−1·3	76·6	−0·8	25·3	94·4	3 days	55·5	29th	38·9
	Ahmednagar	2,152	27·795	?	29·906	27·868	11th	27·732	3rd	·136	73·3	84·7*	?	63·9	?	75·1*	?	20·8	89·4	16th	53·5	11th	35·9
Berar	Akola	930	28·935	+·002	29·889	29·079	11th	28·878	3rd	·201	75·4	92·4	+2·3	66·1	+0·1	79·3	+1·2	26·3	95·4	17th	58·0	14th	37·4
	Amraoti	1,215	28·718	+·016	29·901	28·800	11th	28·581	3rd	·219	77·2	91·6	+2·2	68·3	+0·9	80·0	+1·6	23·3	95·2	2nd & 4th,	61·8	13th	33·4
Central Provinces, West.	Khandwa	1,044	28·895	+·022	29·914	28·971	10th	28·767	3rd	·204	74·4	91·5	+1·6	64·1	−2·0	77·9	−0·2	27·4	95·7	19th & 20th.	54·1	29th	41·6
	Hoshangabad*	1,020	28·932	+·018	29·934	29·010	11th	28·765	3rd	·245	72·2	88·9	−0·2	65·4	−1·7	77·2	−1·0	23·5	93·9	3rd	56·3	29th	37·6
	Nagpur	1,025	28·903	+·018	29·899	28·930	11th	28·773	2nd	·207	75·5	90·6	+1·2	68·0	−0·4	79·3	+0·4	22·6	95·8	3rd	62·1	29th	33·7
Central Provinces, Central	Chanda	634	29·294	+·014	29·883	29·379	11th	29·179	3rd	·200	75·9	88·8	−0·6	68·2	−0·3	78·5	−0·5	20·6	92·9	3 days	61·1	11th	31·8
	Seoni	2,033	27·914	?	29·905	27·987	9th	27·763	3rd	·224	75·0	87·4	+1·4	63·9	−0·4	75·7	+0·5	23·5	95·7	3rd & 4th,	54·9	29th	40·8
	Jubbulpore	1,327	28·589	?	29·901	28·669	9th	28·418	3rd	·251	71·0	89·0	+2·2	61·6	−2·5	75·4	−0·2	27·4	94·0	4th	49·9	29th & 30th.	44·1
	Saugor	1,762	28·171	+·012	29·915	28·250	9th	28·001	3rd	·249	72·1	88·4	+1·6	65·2	0	76·8	+0·8	23·2	92·4	3rd	54·8	29th	37·6
Central Provinces, East.	Raipur	970	28·959	+·019	29·893	29·038	11th	28·814	3rd	·224	77·7	89·2	+1·4	69·5	−0·2	79·4	+0·6	19·7	93·9	6th	64·7	28th	29·2
	Sutna	1,040	28·875	+·007	29·893	28·960	26th	28·658	3rd	·302	74·6	89·2	+1·8	63·7	−1·9	76·4	−0·1	25·5	93·5	4th	52·3	29th	41·2
	Sambalpur	463	29·455	+·025	29·874	29·532	9th	29·271	2nd	·261	73·8	89·2	+0·4	70·9	−1·3	80·1	−0·5	18·3	93·5	4th	65·2	9th & 10th	28·3
Hyderabad, North.	Aurangabad	?	28·081	?	?	28·151	11th	28·010	3rd	·141	77·0	90·1	?	65·1	?	77·6	?	25·0	94·6	17th	60·0	12th	34·6
	Indur	?	?	?	?	?	?	?	?	?	77·3	83·4	?	69·1	?	77·7	?	17·3	91·6	2nd	61·5	12th	30·1
	Bidar	?	27·758	?	?	27·832	11th	27·678	29th	·154	74·0	83·5	?	68·3	?	75·9	?	15·2	87·5	2nd	64·0	27th	23·5
Hyderabad, South.	Gulbarga	1,502	28·410	?	29·872	28·488	10th	28·326	29th	·162	76·1	88·3	?	69·4	?	78·9	?	18·9	91·1	23rd	62·1	11th	29·0
	Raichur	1,378	28·531	?	29·862	28·603	11th	28·443	29th	·160	76·4	87·6	?	71·8	?	79·7	?	15·8	92·1	19th & 20th.	67·1	26th	25·0
	Hyderabad (Deccan).	1,690	28·234	+·015	29·885	28·308	11th	28·151	29th	·157	75·0	85·9	−0·9	69·6	+1·8	77·8	+0·5	16·3	89·4	6th & 7th,	63·2	11th	26·2
	Secunderabad.	1,787	28·137	?	29·883	28·212	11th	28·054	29th	·158	73·7	85·8	?	68·6	?	77·2	?	17·2	90·1	2nd	62·5	11th & 12th.	27·6
	Khamamet	373	29·548	?	29·868	29·620	9th & 11th.	29·461	3rd	·159	79·1	89·1	?	73·7	?	81·4	?	15·4	92·5	3 days	65·7	11th	26·8
10 West Coast		...	...	−·018	...	...	...	...	...	...	...	86·3	+1·0	75·6	+0·9	81·0	+1·0	10.7	...	...	...	...	18·9
Konkan	Bombay.	37	29·885	−·010	29·862	29·956	6th	29·834	16th	·122	79·3	87·7	+0·4	76·6	+0·4	82·2	+0·4	11·1	92·5	12th & 15th	73·0	20th & 21st	19·5
	Ratnagiri	110	29·794	0	29·843	29·871	10th	29·731	16th	·140	81·0	89·0	+0·8	75·0	+1·5	82·0	+1·2	14·0	95·9	14th	70·9	11th & 12th.	25·0
	Mormugao	60	29·850	?	29·845	29·923	10th	29·772	16th	·151	79·5	86·9	?	75·8	?	81·4	?	11·1	92·0	13th	71·4	1th	20·6
	Goa	199	29·699	−·015	29·835	29·771	10th	29·639	16th	·132	80·0	84·3	?	77·9	?	81·1	?	6·4	88·0	4 days	75·0	12th & 13th,	13·0
	Karwar	44	29·866	−·014	29·842	29·929	10th	29·787	16th	·142	77·9	86·4	+1·4	74·5	+1·4	80·5	+1·4	11·9	92·3	13th	68·5	11th	23·8
Malabar	Cochin	11	29·907	−·027	29·845	29·984	1st	29·839	16th	·145	79·7	86·5	+0·8	75·1	+0·7	80·9	+0·8	11·4	90·3	12th	73·2	4 days	17·1
	Calicut	27	29·886	−·030	29·843	29·956	1st	29·791	16th	·165	79·1	86·9	+1·1	74·7	+0·6	80·8	+0·9	12·2	91·8	15th	72·5	20th & 31st.	19·3
	Mangalore	65	29·848	−·030	29·846	29·908	6th	29·781	16th	·127	79·2	86·4	+1·3	75·0	+0·9	80·7	+1·1	11·4	92·8	14th	72·9	8th & 11th.	19·9
	Trivandrum	198	29·724	?	29·854	29·809	1st	29·648	16th	·161	77·6	82·5	?	75·7	?	79·1	?	6·8	85·0	7th	73·0	25th	12·0
11. South India		...	...	+·004	...	...	...	...	...	...	...	86·2	−1·1	72·3	+0·1	79·3	−0·5	13·9	...	...	...	...	23·6
Madras, South.	Pamban	37	29·878	?	29·842	29·962	1st	29·805	25th	·157	80·5	86·0	?	77·7	?	81·9	?	8·3	90·3	8th & 29th,	74·2	23rd	16·1
	Tinnevelly	168	29·753	?	29·852	29·817	9th	29·679	25th & 29th,	·138	79·8	90·8	?	75·3	?	83·1	?	15·5	101·4	5th	72·4	24th	29·0
	Madura	447	29·462	−·002	29·848	29·511	9th	29·385	25th	·126	79·4	88·5	−3·2	73·8	0	81·1	−1·6	14·7	94·9	7th	71·0	22nd	23·9

* Mean of 20 days.

I—*continued.*

in India, Burma, etc., in October 1895—continued.

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.	Normal.	Percentage variation.	Hygrometry, 8 A.M.: Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall: Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st Oct. to 31st Oct. 1895.	Normal rainfall for period, 1st Oct. to 31st Oct.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·60	2·96	−0·76	...	...	...	...	9. Deccan.	
8	1	6	8	5	2	1	...	...	8·7	10·5	− 17	83	·654	5·6	8	8·09	− 0·09	7·85	6·39	+1·46	7·95	6·39	+ 1·46	1·95	Belgaum .	Bombay, Deccan
1	...	7	3	13	1	2	2	2	9·3	7·4	+ 26	67	·612	5·5	7	5·91	+1·09	2·57	5·10	−2·53	2·57	5·10	− 2·53	0·69	Sholapur.	
20	...	2	4	2	...	...	2	1	2·8	5·8	− 52	74	·607	4·8	6	6·18	−0·18	5·46	4·80	+0·66	5·46	4·80	+ 0·66	1·78	Poona.	
1	...	2	11	7	...	2	5	3	4·6	?	?	77	·654	5·7	6	7·70	−1·70	2·89	?	?	2·89	?	?	1·24	Bijapur.	
6	1	3	1	1	1	4	4	10	7·6	4·5	+ 69	67	·577	4·1	2	4·18	−2·18	1·68	2·84	− 1·16	1·68	2·84	−1·16	1·04	Malegaon .	Khandesh.
16	2	5	1	6	...	...	...	1	5·8	?	?	78	·641	3·1	3	?	?	1·41	?	?	1·41	?	?	0·88	Ahmednagar.	
17	...	2	7	1	...	...	3	1	2·6	3·3	− 21	65	·575	2·7	3	4·09	−1·09	0·76	3·50	− 2·74	0·76	3·50	− 2·74	0·32	Akola .	Berar.
...	4	6	6	3	3	4	2	3	5·3	2·9	+ 83	59	·554	3·1	0	4·09	−4·09	0·18	2·88	− 2·70	0·18	2·88	− 2·70	0·07	Amraoti.	
11	2	6	5	3	2	...	...	2	4·1	2·9	+ 41	62	·530	2·8	1	3·27	−2·27	0·60	1·73	− 1·13	0·60	1·73	− 1·13	0·57	Khandwa .	Central Provinces, West.
17	...	7	4	...	1	2	...	...	1·8	1·5	+ 20	68	·553	3·5	1	3·18	−2·18	0·16	1·82	− 1·66	0·16	1·82	− 1·66	0·16	Hoshangabad.*	
28	1	2	...	...	.	...	...	...	3·8	3·7	+ 3	67	·593	4·0	3	3·55	−0·55	1·02	2·05	− 1·03	1·02	2·95	− 1·93	0·40	Nagpur.	
23	2	4	2	...	...	...	...	...	2·2	2·3	− 4	74	·666	4·1	6	?	?	3·55	2·24	+ 1·31	3·55	2·24	+ 1·31	1·04	Chanda .	Central Provinces, Central.
				Not recorded.					?	3·1	?	59	·518	3·1	1	3·55	−2·55	0·24	2·36	− 2·12	0·24	2·36	− 2·12	0·22	Seoni.	
...	1	2	4	12	8	1	2	1	1·6	2·1	− 24	67	·514	1·9	0	2·45	−2·45	0·10	2·07	− 1·97	0·10	2·07	− 1·97	0·09	Jubbulpore.	
24	1	1	...	...	1	3	1	...	2·1	2·7	− 22	61	·483	2·5	0	2·91	−2·91	0·16	1·45	− 1·29	0·16	1·45	− 1·29	0·07	Saugor.	
3	10	5	3	3	...	1	4	2	4·8	3·8	+ 26	67	·626	3·6	2	3·82	−1·82	0·46	2·29	− 1·83	0·46	2·29	− 1·83	0·24	Raipur .	Central Provinces, East.
2	9	2	1	2	...	2	8	5	3·5	4·3	− 19	55	·476	1·7	2	2·09	−0·09	0·61	2·37	− 1·76	0·61	2·37	− 1·76	0·40	Sutna.	
...	11	12	...	1	...	4	...	3	3·9	2·0	+ 95	77	·753	3·2	4	?	?	0·82	2·04	− 1·22	0·82	2·04	− 1·22	0·28	Sambalpur.	
12	...	7	5	3	1	2	1	...	3·6	?	?	61	·560	3·2	3	?	?	1·93	2·96	− 1·03	1·93	2·96	− 1·03	1·11	Aurangabad	Hyderabad, North.
7	...	4	5	3	4	2	2	4	6·6	?	?	78	·725	3·7	9	?	?	4·37	2·63	+ 1·74	4·37	2·63	+ 1·74	1·94	Indur.	
...	2	3	8	6	5	4	2	1	6·3	?	?	82	·690	2·2	6	?	?	6·28	3·65	+ 2·63	6·28	3·65	+ 2·63	2·78	Bidar.	
6	1	6	10	4	1	2	1	...	9·3	?	?	75	·682	5·7	5	?	?	5·17	3·06	+ 2·11	5·17	3·06	+ 2·11	2·63	Gulbarga.	Hyderabad, South.
...	2	2	4	6	8	3	3	3	6·3	?	?	78	·712	4·4	8	?	?	8·33	?	?	8·33	?	?	2·42	Raichur.	
13	...	4	2	6	3	...	2	1	4·1	?	?	82	·712	5·1	4	?	?	2·28	3·08	− 0·80	2·28	3·08	−0·80	1·17	Hyderabad (Deccan).	
4	2	6	13	2	...	1	1	2	5·0	3·8	+ 42	79	·661	5·2	5	?	?	2·11	?	?	2·11	?	?	1·04	Secunderabad.	
25	...	2	1	3	...	...	..	...	3·8	?	?	81	·842	2·6	7	?	?	6·54	?	?	6·54	?	?	2·60	Khamamet.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	7·72	7·90	+0·12	...	...	...	...	10. West Coast.	
...	...	13	9	7	2	...	...	.	9·0	9·8	− 8	82	·834	4·5	4	3·45	+0·55	3·62	2·47	+ 1·15	3·62	2·47	+ 1·15	1·67	Bombay.	Konkan.
4	2	6	5	9	4	1	...	...	6·3	7·7	− 18	76	·801	5·0	10	5·91	+4·09	4·85	4·28	+ 0·57	4·85	4·28	+ 0·57	1·30	Ratnagiri.	
7	2	...	4	12	6	...	...	...	6·1	?	?	87	·884	3·8	10	?	?	5·41	?	?	5·41	?	?	2·33	Mormugao.	
6	3	4	16	...	...	2	...	...	4·8	?	?	82	·838	6·4	9	?	?	6·17	5·97	+ 0·20	6·17	5·97	+ 0·20	2·85	Goa.	
7	2	3	11	2	...	1	5	...	3·4	?	?	87	·831	4·7	10	9·09	+0·91	6·48	7·68	− 1·20	6·48	7·68	− 1·20	2·35	Karwar.	
12	4	11	1	..	1	...	...	2	2·7	?	?	85	·875	6·7	21	15·09	+5·91	18·46	14·01	+ 4·45	18·46	14·01	+ 4·45	3·53	Cochin .	Malabar.
1	1	8	12	6	1	...	1	1	9·1	?	?	86	·843	6·2	15	10·44	+4·56	10·04	10·17	− 0·13	10·04	10·17	− 0·13	1·67	Calicut.	
8	...	3	12	5	2	...	...	1	2·3	2·7	− 15	85	·853	7·5	9	9·90	− 0·90	5·74	7·82	− 2·08	5·74	7·82	− 2·08	1·31	Mangalore.	
19	6	1	3	...	1	...	...	1	2·4	?	?	87	·829	7·7	16	?	?	8·72	10·76	− 2·04	8·72	10·76	− 2·04	1·71	Trivandrum.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10·71	7·96	+2·00	...	...	...	...	11. South India.	
2	2	5	2	2	4	4	5	5	9·6	?	?	85	·890	4·2	16	7·50	+8·50	18·50	6·86	+11·64	18·50	6·86	+11·64	3·08	Pamban .	Madras, South.
...	7	4	2	2	1	4	3	8	3·6	?	?	79	·806	7·7	17	7·3	+ 9·7	14·78	?	?	14·78	?	?	2·11	Tinnevelly.	
3	9	4	1	...	1	...	1	12	1·5	2·9	− 48	76	·771	5·4	16	9·73	+6·27	9·57	8·21	+ 1·36	9·57	8·21	+ 1·36	2·90	Madura.	

* Mean of 28 days. † Mean of 30 days. ‡ Mean of 30 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras, South Central.	Salem	940	28·999	−·005	29·885	29·052	6th	28·918	25th	·134	78·1	87·7	−1·6	72·1	+1·6	79·9	0	15·6	92·4	7th & 8th.	69·5	8th	22·9
	Coimbatore	1,348	28·571	−·005	29·873	28·623	9th	28·503	25th	·120	75·6	87·5	−0·5	70·3	−0·3	78·9	−0·4	17·2	94·4	8th	64·1	24th	30·3
Coorg	Mercara	3,781	26·224	−·009	?	26·286	5th	26·166	25th	·120	66·2	75·5	+0·1	63·4	+1·3	69·5	+0·7	12·1	78·5	17th & 31st.	60·2	25th	18·3
Mysore	Chitaldroog	2,405	27·524	?	29·860	27·585	9th & 10th.	27·466	29th	·119	73·4	82·4	?	67·5	?	75·0	?	14·9	86·6	20th	63·9	10th	22·7
	Bangalore	3,021	26·936	−·020	29·868	26·999	6th	26·864	25th	·135	70·2	80·1	−0·9	65·6	+0·7	72·9	−0·1	14·5	84·8	7th	60·4	10th	24·4
	Hassan	3,091	26·873	?	29·880	26·930	10th	26·810	25th	·120	70·4	79·6	?	65·3	?	72·4	?	14·3	82·6	6th	60·9	10th	21·7
	Mysore	2,518	27·425	?	29·869	27·483	10th	27·365	25th	·118	72·6	83·4	?	67·3	?	75·4	?	16·1	86·9	6th	64·0	10th	22·9
Madras, East Coast, South.	Negapatam	31	29·881	−·001	29·841	29·932	6th	29·806	25th	·126	80·7	87·0	−0·9	75·7	+0·2	81·4	−0·4	11·3	93·2	7th	70·2	25th	23·0
	Cuddalore	12	29·908	?	29·849	29·962	10th	29·801	25th	·161	78·7	85·8	?	74·6	?	80·2	?	11·2	91·3	7th	70·2	25th	21·1
	Trichinopoly	255	29·654	−·009	29·844	29·706	5th & 9th.	29·571	25th	·135	79·1	89·0	−1·8	74·3	+0·3	81·7	−0·8	14·7	95·5	5th	71·9	15th	23·6
	Madras	22	29·899	+·007	29·852	29·967	10th	29·788	25th	·179	79·4	87·8	−1·2	74·4	−0·8	81·1	−1·0	13·4	92·0	7th	67·5	25th	24·5
Madras, East Coast, Central.	Nellore	71	29·837	?	29·842	29·915	10th	29·702	25th	·213	80·4	88·5	?	75·7	?	82·1	?	12·8	93·7	3rd	66·1	25th	27·6
	Masulipatam	15	29·908	+·023	29·858	29·986	10th	29·768	25th	·218	80·6	87·3	−1·7	75·8	+0·1	81·6	−0·8	11·5	90·0	7th	66·2	25th	23·8
Madras, Central	Cuddapah	433	29·480	?	29·856	29·557	10th	29·349	26th	·208	79·8	89·2	−0·8	73·7	−0·4	81·4	−1·0	15·5	95·1	8th	67·5	10th & 26th.	27·6
	Kurnool	923	28·990	?	29·865	29·068	11th	28·882	26th	·186	77·5	88·7	−0·6	71·1	−0·2	79·9	−0·4	17·6	93·2	24th	63·3	26th	29·9
	Bellary	1,475	28·443	0	29·874	28·511	9th	28·367	29th	·144	76·5	87·3*	−2·0	70·8	+0·1	79·1*	−1·0	16·5	91·2	5 days	66·4	11th	24·8
Madras, East Coast, North.	Rajahmundry	112	29·813	+·026	29·863	29·886	9th	29·695	25th	·191	79·5	88·9	−0·5	73·9	−0·9	81·4	−0·7	15·0	92·0	16th & 17th.	69·0	25th	23·0
	Cocanada	26	29·886	+·023	29·848	29·964	9th	29·752	25th	·212	80·1	85·8	−0·2	75·9	+0·2	80·9	0	9·9	90·2	2nd	72·5	11th & 22nd.	17·7
	Vizagapatam	31	29·890	+·025	29·859	29·962	9th	29·790	3rd	·172	81·0	88·8	?	74·6	?	81·7	?	14·2	92·2	4th & 10th.	70·4	22nd	21·8
	Gopalpur	21	29·900	?	29·861	29·972	9th	29·724	1st	·248	77·9	87·1	?	73·6	?	80·3	?	13·5	90·2	7th	68·1	9th	22·1
12. Hill Stations		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Baluchistan	Kachh	?	23·952	?	?	24·030	9th	23·840*	3rd	·190	55·9	69·5	?	37·4	?	53·5	?	32·1	77·0	3 days	31·0	3 days	46·0
	Pishin	...	...	...	Not recorded.						?	79·7*	?	32·6	?	56·1*	?	47·1	92·1	6th	23·9	6th	68·2
	Quetta	5,502	24·719	−·004	?	24·809	9th	24·614	3rd	·195	56·4 (a)	74·2	−0·6	38·8 (a)	−0·4	56·5	−0·5	35·4	82·2	1st	33·3	3 days	48·9
	Kalat	?			Not recorded.						42·6	74·8	?	27·7	?	51·3	?	47·1	84·3	12th	19·8	27th	64·5
	Chaman	4,311	25·753	0	?	25·850	26th	25·671	3rd	·179	65·3	78·8	?	52·6	?	65·7	?	26·2	88·0	12th	42·1	3rd	45·9
Northern India	Leh	11,503	19·754	?	?	19·882	11th	19·605	3rd	·277	36·8	55·8	?	28·1	?	42·0	?	27·7	65·5	1st	18·5	28th	47·0
	Srinagar	5,204	25·004	?	?	25·083	9th & 10th.	24·835	3rd	·248	45·9	66·6	?	39·6	?	53·1	?	27·0	80·8	1st	30·1	29th	50·7
	Gilgit	?	24·756	?	?	24·870	10th	24·570	3rd	·300	55·8	71·1	?	52·0	?	61·6	?	19·1	80·8	12th	41·7	30th	39·1
	Cherat	?	25·762	?	?	25·868	9th	25·537	3rd	·331	63·7	76·8	?	55·7	?	66·3	?	21·1	88·9	1st	49·7	25th & 26th.	39·2
	Murree	6,344	23·902	−·006	?	24·001	3 days	23·706	3rd	·295	55·4	68·6	−0·6	53·1	0	60·9	−0·3	15·5	77·6	1st	47·6	26th & 27th.	30·0
	Poo	?			Not recorded.						?	64·4	?	39·5	?	52·0	?	24·9	73·0	1st	34·0	17th & 28th.	39·0
	Simla	7,224	23·166	−·014	?	23·269	9th	22·990	3rd	·279	52·5	60·9	−1·7	49·6	−1·3	55·3	−1·5	11·3	66·5	1st	44·7	27th	21·8
	Chakrata	6,977	23·373	+·008	?	23·479	9th	23·221	3rd	·258	...	...	...	...	Thermometers not in use.				...	...	...	...	..
	Mussooree	6,705	23·603	?	?	23·704	9th	23·442	3rd	·262	55·9	64·5	+0·3	50·3	−1·3	57·4	−0·5	14·2	70·3	4th	41·5	28th	28·8
	Ranikhet	6,069	24·156	+·007	?	24·262	9th	24·001	3rd	·261	57·3	68·0	−1·2	52·9	−1·2	60·5	−1·2	15·1	73·0	2nd	48·0	16th	25·0
	Yatung	10,180?			Not recorded.						?	52·7	?	34·2	?	43·5	?	18·5	58·9	3rd	27·9	30th	31·0
	Gnatong	?	19·268	?	?	19·386	10th	19·168	3rd	·218	38·0	43·2	?	29·8	?	36·6	?	13·4	51·4	3 days	24·1	31st	27·3
	Darjeeling	7,421	23·016	−·038	?	23·137	9th	22·839	3rd	·298	51·9	58·9	−1·9	46·8	−2·2	52·9	−2·1	12·1	66·6	3rd	41·7	3 days	24·9
	Gantok	?	24·537	?	?	24·698	9th	24·347	2nd	·351	57·8	67·6	?	48·5	?	58·1	?	19·1	74·4	12th	44·4	31st	30·0

* Mean of 30 days. (a) Uncorrected

I—*continued.*

in India, Burma, etc., in October 1895—continued.

WIND DIRECTION. NUMBER OF WINDS FROM									WIND VELOCITY.			HYGROMETRY, 8 A.M.		Mean cloud amount.	RAINFALL.								Heaviest rainfall during month.	STATION.	METEOROLOGICAL PROVINCE OR DISTRICT.
Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st to 31st October 1895.	Normal rainfall for period, from 1st to 31st October.	Variation from normal of period.			
25	1	1	...	...	4	...	...	...	0·3	2·8	−89	80	·779	6·6	14	11·36	+2·64	11·74	6·89	+ 4·85	11·74	6·89	+ 4·85	3·20	Salem .	MADRAS, SOUTH CENTRAL.
...	...	...	5	...	22	4	...	...	2·0	3·5	−43	91	·811	6·3	14	8·91	+5·09	5·71	5·94	− 0·23	5·71	5·94	− 0·23	1·40	Coimbatore.	
9	1	5	5	2	2	2	3	2	5·9	3·6	+64	91	·590	8·3	13	13·50	−0·50	6·44	9·60	− 3·16	6·44	9·60	− 3·16	0·74	Mercara .	COORG.
3	...	2	9	6	...	2	6	3	7·0	?	?	80	·667	8·4	12	?	?	4·82	?	?	4·82	?	?	1 01	Chitaldroog.	MYSORE.
...	1	5	8	4	...	6	6	1	6·8	4·0	+70	85	·634	7·5	10	10·00	0	6·22	7·15	− 0·93	6·22	7·15	− 0·93	1·79	Bangalore.	
2	...	2	10	7	1	2	4	3	2·9	?	?	85	·632	8·9	8	?	?	7·34	?	?	7·34	?	?	2·31	Hassan.	
5	...	6	7	...	1	6	4	2	7·3	?	?	84	·670	7·7	9	?	?	10·22	?	?	10·22	?	?	5·17	Mysore.	
9	1	5	1	..	1	5	2	7	7·4	3·7	+100	88	·923	6·9	19	10·82	+8·18	18·00	10·59	+ 7·41	18·00	10·59	+ 7·41	2·23	Negapatam	MADRAS, EAST COAST, SOUTH.
...	6	2	2	1	5	5	3	7	1·2	?	?	94	·930	6·5	21	9·40	+11·60	31·89	?	?	31·89	?	?	8·30	Cuddalore.	
19	1	4	...	...	...	1	3	3	2·2	3·8	−42	83	·817	6·9	11	10·00	+1·00	10·08	7·49	+ 2·59	10·08	7·49	+ 2·59	2·36	Trichinopoly	
9	4	4	1	3	3	4	1	2	4·2	5·0	−16	87	·879	7·3	19	12·09	+6·91	11·61	11·00	+ 0·61	11·61	11·00	+ 0·61	2 35	Madras.	
14	1	...	1	3	4	...	2	6	4·1	?	?	87	·901	8·6	12	8·90	+3·10	7·91	?	?	7·91	?	?	2·44	Nellore .	MADRAS, EAST COAST, CENTRAL.
2	10	9	...	2	3	3	1	1	6·0	4·4	+36	85	·888	5·3	10	9·91	+0·09	12·23	9·34	+ 2·89	12·23	9·34	+ 2·89	2·50	Masulipatam.	
...	...	8	8	2	1	8	1	3	?	?	?	80	·810	6·5	9	6·80	+2·20	5·95	6·33	− 0·38	5·95	6·33	− 0·38	2·21	Cuddapah .	MADRAS, CENTRAL.
14	...	1	13	...	...	...	1	2	?	?	?	77	·728	6·2	8	7·00	+1·00	5·93	5·03	+ 0·90	5·93	5·03	+ 0·90	3·25	Kurnool.	
7	1	1	8	6	1	1	2	4	3·3	4·3	−23	71	·646	7·9	5	6·73	−1·73	7·79	4·29	+ 3·50	7·79	4·29	+ 3·50	2·35	Bellary.	
6	12	8	3	...	...	1	1	...	?	?	?	77	·791	5·7	12	7·80	+4·20	11·11	5·96	+ 5·15	11·11	5·96	+ 5·15	2·22	Rajahmundry	MADRAS, EAST COAST, NORTH.
1	10	11	1	1	1	1	4	1	8·2	?	?	79	·812	4·0	11	10·00	+1·00	9·37	10·36	− 0·99	9·37	10·36	− 0·99	1·72	Cocanada.	
...	4	...	...	...	...	...	14	13	2·4	2·0	+20	80	·854	4·5	8	10·36	−2·36	9·83	10·54	− 0·71	9·83	10·54	− 0·71	3·18	Vizagapatam.	
...	14	1	1	...	1	1	2	11	7·4	6·3	+17	85	·809	2·1	8	9·44	−1·44	9 27	9·73	− 0·46	9·27	9·73	− 0·46	4·15	Gopalpur.	
...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12. Hill Stations.	
2	...	3	3	4	...	6	8	5	5·0	?	?	46	·199	0·8	2	?	?	1·18	?	?	1·18	?	?	0·68	Kachh.	BALUCHISTAN.
				Not recorded.					?	?	?	?	?	?	2	?	?	0·73	?	?	0·73	?	?	0·50	Pishin.	
28	...	...	...	...	1	1	...	1	1·6	3·0	−47	50	·228	0·9	2	0·18	+1·82	0·66	0·07	+ 0·59	0·66	0·07	+ 0·59	0·53	Quetta.	
...	2	...	...	...	29	...	...	...	?	?	?	?	?	?	2	?	?	0·40	?	?	0·40	?	?	0·22	Kalat.	
...	...	1	5	12	5	7	...	1	7·1	?	?	29	·185	1·0	1	?	?	0·27	?	?	0·27	?	?	0·19	Chaman.	
...	...	...	1	...	7	6	16	1	3·6	2·0	+80	50	·109	2·2	0	?	?	0·04	?	?	0·04	?	?	0·04	Leh.	NORTHERN INDIA.
6	2	1	6	8	2	1	1	4	5·9	?	?	90	·281	3·0	4	?	?	2·01	?	?	2·01	?	?	0·82	Srinagar.	
				Not recorded.					?	?	?	48	·216	3·9	1	?	?	0·96	?	?	0·96	?	?	0·87	Gilgit.	
4	15	1	...	3	...	...	...	8	12·7	?	?	39	·229	1·9	0	?	?	0·04	?	?	0·04	?	?	0·04	Cherat.	
10	2	4	...	2	2	...	3	8	7·3	5·7	+28	39	·173	1·8	4	2·45	+1·55	1·21	1·65	− 0·44	1·21	1·65	− 0·44	0·46	Murree.	
6	...	1	1	6	6	7	3	1	?	?	?	?	?	0·8	0	?	?	0·11	?	?	0·11	?	?	0·09	Poo.	
2	17	9	1	1	1	...	...	...	5·6	2·5	+124	44	·177	0·5	0	1·27	−1·27	0·09	1·22	− 1·13	0·09	1·22	− 1·13	0·05	Simla.	
12	15	...	...	...	...	...	...	4	9 9	5·1	+94	?	?	0·9	1	?	?	0·18	0·84	− 0·66	0·18	0·84	− 0·66	0·18	Chakrata.	
...	2	1	6	2	1	2	4	13	?	8·5	?	53	·240	0·8	1	1·40	−0·40	0·24	0·99	− 0·75	0·24	0·99	− 0·75	0·22	Mussooree.	
16	2	...	...	...	2	3	6	2	3·8†	1·7	+124	60	·285	0·6	0	1·09	−1·09	0·04	1·48	− 1·44	0·04	1·48	− 1·44	0·04	Ranikhet.	
				Not recorded.			...	...	?	?	?	?	?	?	4	?	?	1·38	?	?	1·38	?	?	0·51	Yatung.	
6	...	...	...	4	6	1	7	7	5·0	?	?	75	·169	4·6	13	?	?	4·23	?	?	4·23	?	?	0·61	Gnatong.	
10	1	3	7	1	...	2	3	4	4·7	2·6	+81	87	·339	6·7	2	3·75	−1·75	0·40	4·64	− 4·24	0·40	4·64	− 4·24	0·26	Darjeeling.	
...	1	1	3	2	1	5	15	3	1·3	?	?	83	·405	4·9	9	?	?	3·82	?	?	3·82	?	?	1·22	Gantok.	

† Mean of 23 days.

Table

Abstract of Observations taken at 8 A.M. at 206 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	26·100	−·016	P	26·192	11th	25·929	3rd	·263	71°6	78°6	−0°3	63°8	−0°4	71°2	−0°4	14°8	85°7	2nd	55°4	25th	30°3
	Pachmarhi	3,528	26·500	+·007	P	26·576	9th	26·389	3rd	·187	71°5	78°7	+1°4	58°6	−1°2	68°7	+0°1	20°1	81°7	5 days	48°2	29th	33°5
South India	Wellington	6,200	24·250	−·012	P	24·304	6th	24·170	25th	·134	61°9	68°7	+0°2	55°4	+0°4	62°1	+0°3	13°3	73°2	2nd	51°2	3rd	22°0
13. Extra India.																							
Ceylon	Trincomalee	75	29·834	P	29·838	29·897	1st	29·762	25th	·135	82°9	87°6	P	75°9	P	81°8	P	11°7	93°0	7th	73°5	22nd	19°5
	Colombo*	40	29·902	−·013	29·868	29·983	1st	29·838	25th	·145	80°6	84°9†	P	74°8†	P	79°8†	P	10°1	88°0	20th	72°5	10th & 12th.	15°5
	Galle	48	29·892	P	29·866	29·981	1st	29·831	25th	·150	79°8	82°8	P	76°6	P	79°7	P	6·2	85°0	3 days	74°0	20th	11°0
Persia	Meshed	3,104	P		Not recorded.						53°3	P	P	47°1	P	P	P	P	P	P	39°7	5th	P
	Teheran	P	26·090‡	P	P	26·250	1st	25·935	17th	·315	62°0‡	74°1‡	P	52°6‡	P	63°6‡	P	22°1	85°8	10th	43°8	22nd	42°0
	Ispahan	P			Not recorded.						58°5	75°5	P	46°1	P	60°8	P	29°4	86°2	9th	37°4	22nd	48°8
	Bushire	14	29·932	−·009	29·903	30·043	11th	29·809	3rd	·234	78°7	87°5	−0°4	71°4	+0°6	79°5	+0°1	16°1	97°3	9th	62°4	20th	34°9
	Jask	P	29·917‡	P	P	30·033	10th	29·790	19th	·243	82°3	89°8‡	P	75°7‡	P	82°7‡	P	14°1	96°8	1st	68°6	30th	28°2
Arabia	Muscat	P	29·918	P	P	30·019	10th	29·812	19th	·207	83°3	85°7	?	80°9	?	83°3	P	4°8	90°3	1st	76°7	27th	13°6
	Baghdad	P	29·521	−·023	P	29·686	27th	29·384	3rd	·302	66°8	87°5	−6°2	61°6	−0°4	74°6	P	25°9	98°7	5th	54°3	31st	44°4
	Aden	94	29·838	−·034	29·864	29·904	1st	29·793	4th	·111	81°7	90°1	−1°1	77°4	+0°3	83°8	−0°4	12°7	96°3	5th & 6th.	72°4	28th	23°9
	Perim	P	29·730	P	P	29·790	1st	29·672	4th	·118	85°6	91°2	P	80°3	P	85°8	P	10°9	94°7	22nd	78°6	27th & 30th.	16°1
Afghanistan	Kabul	P			Not recorded.						46°5	73°4	P	39°1	P	56°3	P	34°3	83°2	1st	32°6	27th	50°6
Central Asia	Kashgar	P	25·757‡	P	P	26·100	31st	25·370	3rd	·730	47°1‡	66°5‡	P	41°4‡	P	54°0‡	P	25°1	82°0	1st	30°1	29th	51°9
Arabian Sea Islands.	Amini Devi	15	29·901	P	29·844	30·004	6th	29·819	17th	·185	79°9	80°1	P	76°0	P	78°1	P	4°1	82°5	20th	73°1	23rd	9°4
	Minicoy	10	29·913	P	29·848	29·985	4th	29·811	16th	·171	80°5	87°0	P	78°3§	P	82°2§	P	8·7	92°0	7th	75°3	15th	16°7
Africa	Zanzibar	73	30·018	P	30·018	30·100	2nd	29·936	12th	·164	78°3	83°1	P	76°0	P	79°5	P	7°1	86°3	19th	73°7	2nd	12°6

* Mean of 29 days. ‡ Mean of 30 days
† „ 28 „ § „ 15 „

I—*concluded.*

in India, Burma, etc., in October 1895—concluded.

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.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st Oct. to 31st 1895.	Normal rainfall for period, from 1st Oct. to 31st Oct.	Variation from normal of period.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
6	2	9	3	4	1	2	3	1	5·6	4·0	+40	44	·335	1·8	0	0·60	−0·60	0·10	0·71	− 0·61	0·10	0·71	− 0·61	0·08	Mount Abu	Central India.
16	1	5	3	2	...	1	2	1	6·4	2·9	+121	52	·397	3·6	0	4·27	−4·27	0·08	2·63	− 2·55	0·08	2·63	− 2·55	0·05	Pachmarhi.	
28	...	2	1	...	...	...	...	...	1·7	2·6	−35	84	·473	7·5	18	15·89	+2·11	14·79	12·10	+ 2·69	14·79	12·10	+ 2·69	2·96	Wellington.	South India.
																									13. Extra India.	
7	...	1	...	1	...	20	...	2	2·8‡	?	?	80	·893	4·5	13	?	?	6·07	8·41	−2·34	6·07	8·41	− 2·34	1·38	Trincomalee	Ceylon.
...	3	1	...	4	2	13	4	2	7·1	7·3	− 3	80	·840	7·8	22	?	?	29·59	13·51	+16·08	29·59	13·51	+16·08	4·31	Colombo.	
8	3	4	...	...	...	...	5	11	5·5	?	?	93	·945	5·1	16	?	?	12·91	13·35	−0·44	12·91	13·35	− 0·44	2·89	Galle.	
				Not recorded.					?	?	?	?	?	3·3	2	?	?	0·81	?	?	0·81	?	?	0·30	Meshed.	Persia.
27	...	2	...	...	...	...	...	1	3·0*	?	?	49‡	·270‡	2·8‡	1	?	?	0·27	?	?	0·27	?	?	0·10	Teheran,¶	
1	5	...	1	2	...	7	4	11	3·9	?	?	81	·399	3·0	2	?	?	1·09	?	?	1·09	?	?	0·53	Ispahan.	
...	2	10	5	13	...	...	1	...	7·1	6·5	+ 9	58	·581	0·7	1	?	?	0·32	0	+0·32	0·32	0	+0·32	0·30	Bushire.	
7	1	2	17	1	...	...	1	2	9·8*	?	?	74‡	·808‡	0·7*	1	?	?	0·25	?	?	0·25	?	?	0·20	Jask.	
...	...	3	10	5	2	2	5	4	3·4	?	?	71	·812	0·3	0	?	?	0	?	?	0	?	?	0	Muscat .	Arabia.
15	6	2	1	1	3	...	1	2	2·3	?	?	59	·389	0	1	?	?	0·13	?	?	0·13	?	?	0·13	Baghdad.	
4	...	5	17	3	2	...	...	...	11·3‡	12·2	− 7	67	·721	1·1	0	?	?	0	0·02	−0·02	0	0·02	−0·02	0	Aden.	
...	...	6	8	13	4	...	...	...	17·3	?	?	65	·805	1·7	0	?	?	0	?	?	0	?	?	0	Perim.	
...	8	2	11	2	4	3	...	1	?	?	?	?	?	0	0	?	?	0	?	?	0	?	?	0	Kabul .	Afghanistan.
26	1	2	...	...	...	...	...	1	3·5*	?	?	52‡	·166‡	3·7†	0	?	?	0·04	?	?	0·04	?	?	0·04	Kashgar¶ .	Central Asia.
...	5	2	2	2	6	5	7	2	7·5	?	?	85	·898	7·5	17	?	?	10·09	?	?	10·09	?	?	1·30	Amini Devi	Arabian Sea Islands.
...	1	1	3	2	4	5	9	5	11·0	?	?	84	·876	6·4	19	?	?	15·11	?	?	15·11	?	?	2·81	Minicoy .	
2	...	...	3	9	8	8	1	...	4·2‡	?	?	83	·794	6·2	5	?	?	1·20	?	?	1·20	?	?	0·31	Zanzibar .	Africa.

‡ Mean of 30 days. * Mean of 29 days. ¶ Wind observations for 30 days.
† „ „ 28 „

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.						Temperature of Air.										Temperature, Wet-bulb.			
			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.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·874	29·769	·105	29·820	+·012	29·811	88·7	78·4	10·3	90·8	76·3	14·5	86·3	85·6	82·3	+2·2	76·2	80·9	79·7	78·9
	Rangoon	...	·906	·783	·123	·850	+·003	·828	89·5	76·1	13·4	92·3	71·2	18·1	83·7	86·0	81·1	+1·4	74·8	79·6	79·4	77·9
	Diamond Island	...	·899	·794	·105	·815	+·001	·820	87·0	79·2	7·8	89·5	75·6	13·9	85·3	84·4	82·0	+2·3	76·2	79·4	78·0	77·9
	Cocos Island	111	·803	·709	·099	·757	?	·799	87·5	78·6	8·9	88·6	75·8	12·8	85·1	83·7	81·6	?	75·0	79·4	78·0	77·5
	Akyab	...	·912	·803	·109	·859	+·006	·822	87·0	74·9	12·1	89·8	70·2	19·6	82·8	84·8	80·4	−1·1	73·1	79·2	79·9	77·4
Assam.	Silchar	...	·813	·715	·129	·783	+·014	·838	86·8	68·9	17·9	91·1	61·4	29·7	80·0	84·5	76·8	−2·3	67·8	74·3	74·5	72·2
	Sibsagar	...	·627	·495	·131	·560	−·007	·852	82·4	67·6	14·8	87·8	62·1	25·7	76·6	81·4	74·1	−2·1	67·2	72·7	71·5	71·5
	Dhubri	...	·834	·707	·127	·767	0	·837	83·6	71·1	12·5	87·8	65·1	22·7	78·4	82·6	76·5	−1·4	69·1	73·4	73·9	72·1
Bengal and Orissa.	Chittagong	...	·837	·726	·111	·782	−·004	·816	86·0	70·1	15·9	88·9	62·3	26·6	81·4	82·9	77·3	−1·8	69·7	75·4	75·3	73·5
	Narayanganj	...	·895	·790	·105	·841	+·008	·809	86·0	72·9	13·1	90·4	65·0	25·4	81·8	84·0	79·3	−1·4	70·6	74·6	74·4	73·2
	Calcutta (Alipore)	...	·910	·802	·108	·851	+·016	·818	85·9	73·3	12·6	91·3	67·6	23·7	82·1	84·8	79·5	−0·4	71·0	74·3	74·2	73·1
	Saugor Island	...	·899	·788	·111	·839	+·011	·803	86·4	74·9	11·5	89·9	69·6	20·3	83·4	84·1	79·6	−0·4	72·5	76·9	76·5	75·3
	Burdwan	...	·839	·722	·117	·776	+·011	·823	88·1	72·1	16·0	93·7	66·0	27·7	82·0	86·0	79·5	−1·8	70·5	73·6	73·3	72·5
	Berhampore	...	·863	·755	·107	·805	+·012	·820	87·6	71·6	16·0	93·7	62·2	31·5	83·0	86·5	79·2	−1·4	68·8	74·5	73·9	72·4
	False Point	...	·906	·808	·098	·855	+·010	·818	87·1	73·8	13·3	91·4	69·6	21·8	84·0	84·2	79·2	−0·6	73·1	77·4	76·7	75·7
	Cuttack	...	·844	·739	·105	·790	+·007	·812	89·1	74·3	14·8	94·1	70·5	23·6	82·8	86·2	80·6	−0·1	72·5	75·4	75·2	74·4
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	27·925	27·829	·096	27·879	+·012	·829	83·6	66·0	17·6	89·2	58·0	31·2	78·6	81·2	73·8	+0·5	59·7	65·8	66·0	63·8
	Patna	...	29·740	29·632	·108	29·682	−·002	·818	88·0	70·3	17·7	92·0	61·3	30·7	83·1	85·7	78·3	−0·9	67·8	78·2	71·6	72·5
	Darbhanga	...	·767	·617	·120	·703	−·003	·825	86·3	70·7	15·6	91·2	62·9	28·3	81·5	85·4	78·0	−1·4	69·2	73·7	73·3	72·1
	Allahabad	...	·617	·504	·113	·554	+·001	·816	92·3	65·0	27·3	97·6	53·4	44·2	84·9	90·6	77·6	−1·1	61·5	69·4	68·4	66·4
	Lucknow	...	·549	·438	·111	·488	−·008	·812	91·0	63·2	27·8	96·9	51·8	45·1	83·6	88·7	76·4	−1·4	58·0	69·2	69·5	65·6
Upper Sub-Himalayas.	Dehra Dun	...	27·699	27·613	·086	27·644	−·010	·839	82·5	58·3	24·2	88·0	51·5	36·5	74·7	77·7	68·8	−1·5	53·6	62·6	63·1	59·8
	Roorkee	...	29·017	28·905	·112	28·950	−·016	·803	89·2	58·2	31·0	95·7	48·8	46·9	79·6	86·7	72·7	−1·5	56·0	65·5	65·4	62·3
	Meerut	...	·162	29·059	·103	29·104	−·014	·807	91·0	61·4	29·6	97·7	50·6	47·1	79·7	83·2	75·1	−0·6	57·9	61·8	66·9	63·2
	Lahore	...	·187	·093	·094	·133	−·014	·800	93·4	62·0	31·4	100·0	49·9	50·1	81·8	92·5	76·7	+2·5	55·5	65·2	67·8	62·8
	Ludhiana	...	·091	28·992	·099	·034	−·010	·811	92·1	62·1	30·0	99·2	51·6	47·6	82·5	89·4	75·8	+0·6	57·0	64·9	65·9	62·6
Indus Valley and N.-W. Rajputana.	Peshawar	...	28·838	·736	·102	28·780	0	·878	86·5	57·0	29·5	91·5	47·0	44·5	77·4	83·9	70·4	−0·5	50·8	61·6	63·8	58·7
	Mooltan	...	29·477	29·381	·096	29·422	−·013	·808	96·1	64·4	31·7	102·9	58·6	44·3	82·3	93·6	79·0	+1·8	57·1	66·8	71·6	65·2
	Jacobabad	...	·728	·612	·116	·663	+·003	·806	98·8	63·9	34·9	108·3	59·4	48·9	89·2	95·7	79·9	+1·7	56·0	67·7	69·1	64·3
	Kurrachee	...	·876	·781	·095	·830	−·023	·831	93·2	70·8	22·4	100·7	65·0	35·7	86·5	89·5	81·1	+1·6	65·4	73·4	77·3	72·0
E. Rajputana, C. India and Gujarat.	Jeypore	...	28·509	28·409	·100	28·453	−·006	·826	94·2	62·6	31·6	101·2	53·0	48·2	85·7	91·7	76·8	+0·2	54·2	64·2	65·2	61·2
	Ajmere	...	·336	·237	·099	·283	−·009	·810	92·3	61·6	30·7	98·4	48·8	49·6	83·2	91·1	76·1	+1·1	55·3	66·1	68·8	63·4
	Deesa	...	29·471	29·358	·116	29·410	−·007	·823	97·5	65·1	32·4	107·1	57·4	49·7	89·5	94·3	80·7	+0·1	58·3	66·7	65·9	63·7
	Nowgong	...	·161	·056	·105	·104	−·004	·813	92·0	64·2	27·8	100·0	52·9	47·1	82·7	88·9	77·1	+0·2	59·6	68·1	67·8	65·2
	Agra	...	·355	·249	·106	·291	?	·891	94·9	66·7	28·2	104·9	56·9	48·0	86·8	92·2	79·8	+2·0	58·7	67·7	68·2	64·9
Deccan.	Belgaum	...	27·393	27·285	·108	27·338	−·018	·772	82·5	65·9	16·6	87·5	61·8	25·7	76·8	77·5	72·6	+0·4	65·2	69·6	70·1	68·3
	Sholapur	...	28·340	28·210	·130	28·278	−·001	·801	88·1	68·8	19·3	92·3	61·1	31·2	82·1	85·5	77·2	+0·2	65·9	70·9	70·1	69·0
	Poona	...	·093	27·972	·121	·037	−·008	·805	87·5	66·5	21·0	92·8	59·1	33·7	80·3	84·7	76·2	+0·4	64·3	69·0	69·3	67·5
	Akola	...	29·001	28·871	·130	·932	−·004	·808	92·3	66·1	26·2	95·5	58·0	37·5	84·6	89·9	79·4	+1·4	62·8	70·8	69·6	67·8
	Buldana	2,132	27·818	27·711	·107	27·761	+·005	·818	84·7	66·3	18·4	89·6	61·8	27·8	80·7	82·8	75·8	−0·7	61·3	66·6	66·4	64·8

II.

at 85 Stations in India, Burma, etc., for October 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·875	·985	·936	·932	+·024	90	78	76	81	− 5	6·5	6·2	6·4	+0·6	..	2	3	11	18	9	6	9	4	S 28° E	S 5° W	34	24	132	152	...	...	Port Blair	Burma Coast and Bay Islands.
·850	·956	·918	·908	+·017	91	83	74	84	− 1	5·6	5·5	5·6	−0·5	...	1	9	11	9	14	9	7	2	S 28° W	S 37° E	32	28	64	77	...	...	Rangoon	
·866	·926	·876	·889	+·018	87	76	74	79	− 5	5·4	6·7	6·1	+0·8	...	7	9	6	9	5	8	3	15	N 4° W	S 59° E	11	21	191*	159	...	...	Diamond Island	
·823	·926	·881	·878	?	84	76	76	79	?	4·0	4·4	4·2	?	..	6	3	3	9	16	7	2	4	S 6° E	?	33	?	?	?	2·47	1·14	Cocos Island	
·796	·950	·958	·901	+·023	92	65	80	86	+ 4	3·0	2·4	2·7	−2·2	...	5	21	5	...	4	3	19	5	N 15° W	S 35° E	29	12	69	58	...	...	Akyab	
·675	·776	·723	·725	−·086	95	76	62	78	− 2	4·5	3·9	4·2	−0·6	37	...	4	6	2	2	6	5	...	S 12° E	S 56° E	8	9	43*	47	...	...	Silchar	Assam.
·666	·753	·767	·729	−·003	93	83	72	84	− 1	4·5	3·9	4·2	−2·3	10	...	37	1	9	...	4	1	...	N 60° E	N 66° E	55	53	81*	47	...	...	Sibsagar	
·690	·761	·723	·725	−·054	90	78	65	78	− 2	3·0	2·8	2·9	+0·2	11	2	7	15	3	3	11	8	2	S 45° E	N 47° E	11	20	92	69	...	...	Dhubri	
·726	·802	·769	·769	−·085	98	75	70	81	− 2	3·0	3·1	3·1	−1·2	2	18	15	2	3	1	3	4	14	N 2° W	N 10° W	53	14	83*	71	...	...	Chittagong	Bengal and Orissa.
·723	·766	·727	·739	−·111	89	71	63	74	− 6	4·0	3·0	3·5	−0·6	...	11	13	9	3	2	7	2	15	N 70° E	S 55° E	35	4	88	58	...	...	Narayanganj	
·734	·748	·706	·729	−·113	99	68	60	73	−11	3·8	3·4	3·6	−0·6	2	7	10	8	7	...	10	9	9	N 16° W	N 48° W	14	11	66	70	...	...	Calcutta (Alipore)	
·773	·839	·814	·808	−·051	89	73	70	77	− 5	5·3	5·3	5·3	+0·7	...	14	11	3	2	4	9	7	9	N 16° W	N 10° E	31	13	195	156	...	...	Saugor Island	
·731	·720	·657	·703	−·091	92	66	54	71	− 4	3·5	3·9	3·7	−0·5	10	14	7	3	5	3	8	2	10	N 16° W	N 19° E	23	29	44*	47	...	...	Burdwan	
·670	·744	·670	·695	−·098	96	66	51	69	−10	3·1	3·1	3·1	−1·6	5	11	3	3	1	7	8	12	12	N 68° W	N 12° W	35	16	60*	51	...	...	Berhampore	
·809	·857	·820	·829	0	97	74	71	81	+ 1	5·2	5·5	5·4	+0·8	...	15	5	10	18	5	6	2	11	N 70° E	N 40° E	21	25	154*	142	...	...	False Point	
·777	·782	·730	·763	−·022	91	70	60	74	− 1	3·5	4·6	4·1	−0·3	7	7	20	9	3	...	6	6	4	N 35° E	N 32° E	34	25	52	43	...	...	Cuttack	
·442	·477	·452	·457	+·012	68	50	44	54	−11	3·4	4·7	4·1	−0·2	2	8	4	7	4	7	...	14	16	N 45° W	N 42° W	29	34	140	119	...	...	Hazaribagh	
·654	·647	·588	·630	−·070	88	57	48	64	− 6	2·0	2·4	2·2	−1·3	...	2	11	9	4	10	6	12	8	S 58° W	N 21° E	5	4	59*	46	...	...	Patna	Gangetic Plain and Chota Nagpur.
·699	·729	·665	·698	−·067	92	63	54	71	− 5	1·8	1·5	1·7	−1·1	14	...	2	10	9	3	7	11	6	S 15° W	N 68° E	14	3	37	54	...	...	Darbhanga	
·510	·516	·403	·477	−·153	81	43	28	51	−17	2·1	2·9	2·5	+0·8	5	2	5	9	6	6	5	11	13	N 82° W	N 42° W	11	13	61	42	...	...	Allahabad	
·425	·530	·471	·475	−·099	72	46	35	51	−10	2·0	2·3	2·2	+0·5	1	8	9	4	2	3	11	11	13	N 56° W	N 30° W	32	39	?	47	...	...	Lucknow	
·359	·423	·402	·395	?	73	49	42	55	?	1·0	0·5	0·8	−0·3	29	...	1	1	6	8	3	11	3	S 42° W	N 38° W	23	19	23	40	...	...	Dehra Dun	
·425	·449	·350	·408	−·085	86	44	27	52	−7	0·5	0·6	0·6	−0·2	28	...	1	10	7	4	5	1	6	S 41° E	S 27° E	16	11	44	34	...	...	Roorkee	Upper Sub-Himalayas.
·445	·423	·382	·417	−·081	80	41	28	50	− 7	0·4	0·7	0·6	−0·1	38	...	...	1	1	...	2	12	8	N 79° W	N 48° W	29	40	16	34	...	...	Meerut	
·362	·404	·353	·373	−·073	64	37	23	41	− 6	0·3	0·4	0·4	−0·3	19	7	4	4	6	4	5	5	8	N 40° W	N 3° W	8	12	43	38	...	...	Lahore	
·409	·383	·331	·374	−·100	72	35	24	44	−10	0·6	1·4	1·0	+0·1	9	2	9	...	20	1	2	8	11	S 82° E	N 40° W	5	24	39	25	...	...	Ludhiana	
·302	·350	·330	·327	−·041	63	38	30	44	− 3	1·2	2·8	2·0	+0·6	22	2	13	5	2	2	7	5	4	N 26° E	N 54° E	10	35	64*	59	...	...	Peshawar	
·374	·455	·481	·437	−·095	61	41	30	44	−10	0·6	0·8	0·7	+0·1	15	...	7	...	24	...	15	...	...	S 26° E	S 70° W	40	21	28*	45	...	...	Mooltan	Indus Valley and N.-W. Rajputana.
·346	·393	·362	·367	−·071	59	29	22	36	− 7	0·5	1·3	0·9	+0·5	16	2	2	2	8	13	11	2	6	S 15° W	S 47° E	31	11	75*	52	...	...	Jacobabad	
·563	·649	·778	·663	+·025	74	53	57	61	− 2	0·5	0·8	0·7	−0·2	...	2	1	3	2	7	23	17	7	S 63° W	S 67° W	60	64	208	235	...	...	Kurrachee	
·320	·323	·294	·312	−·110	56	25	20	34	−11	1·4	2·3	1·9	+0·1	2	4	2	..	1	1	8	17	27	N 67° W	N 4° W	69	37	61	86	...	...	Jeypore	
·371	·434	·430	·412	−·050	66	38	30	45	− 4	0·9	1·6	1·3	+0·2	9	2	7	4	5	4	11	14	6	N 89° W	N 76° W	10	23	58	61	...	...	Ajmere	E. Rajputana, C. India and Gujarat.
·405	·356	·261	·341	−·103	64	27	18	37	− 5	1·3	1·9	1·6	−0·3	...	3	4	18	16	7	9	3	2	S 51° E	N 62° W	44	16	182	161	...	...	Deesa	
·459	·499	·401	·453	−·083	75	45	30	50	− 8	2·2	2·7	2·5	−0·2	7	6	5	4	...	1	7	25	7	N 73° W	N 42° W	47	35	36*	35	...	...	Nowgong	
·398	·429	·373	·400	−·082	49	33	25	36	−13	1·1	1·5	1·3	+0·4	...	1	3	...	6	...	16	...	36	N 67° W	N 78° W	53	40	73*	72	...	...	Agra	
·616	·636	·645	·632	+·043	96	69	69	78	+ 6	6·1	6·9	6·5	+0·9	...	6	9	14	12	5	5	4	5	S 86° E	N 88° E	29	72	210	251	...	...	Belgaum	
·604	·621	·546	·590	+·015	85	57	46	63	+ 2	5·9	6·8	6·4	+0·4	2	3	22	11	15	2	3	2	2	N 81° E	N 50° E	52	30	267*	190	...	...	Sholapur	Deccan.
·580	·570	·527	·559	+·006	83	56	46	63	+ 4	5·1	6·3	5·7	+0·8	21	...	6	18	9	...	...	3	3	E	N 38° E	39	17	67	139	...	...	Poona	
·540	·572	·459	·521	−·050	83	48	34	55	− 6	1·9	4·2	3·1	0	14	...	10	18	8	...	2	6	4	N 82° E	N 20° E	33	32	65	82	...	...	Akola	
·487	·484	·448	·473	−·033	75	47	42	55	− 5	2·5	4·0	3·3	−0·7	...	6	15	5	14	3	...	3	16	N 37° E	N 29° E	30	52	151*	117	1·08	1·07	Buldana	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85 Stations

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L., and for gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*continued.*	Khandwa	...	28·898	28·777	·121	28·834	+·012	29·827	91·4	64·2	27·2	96·2	54·1	42·1	83·1	80·1	76·6	−0·1	59·9	69·2	68·4	65·8
	Hoshangabad	...	·933	·814	·119	·870	+·010	·815	88·8	65·4	23·4	94·0	56·4	37·6	81·7	87·4	76·3	−0·6	60·7	69·0	68·9	66·2
	Nagpur	...	·910	·786	·124	·844	+·023	·819	90·3	67·9	22·4	95·6	62·0	33·6	82·8	87·8	79·3	+0·6	62·1	71·0	70·9	68·0
	Do. (Sanitary Commr.'s Office)	...	·931	·807	·124	·869	?	·835	91·5	67·4	24·1	97·3	61·7	35·6	84·4	88·3	78·7	?	62·4	70·2	69·9	67·5
	Jubbulpore	...	28·595	28·483	·112	28·535	−·003	29·811	88·9	61·6	27·3	93·9	49·7	44·2	81·4	86·2	74·0	+0·1	58·9	67·3	65·9	64·0
	Saugor	...	·178	·073	·105	·122	+·014	·820	88·5	65·2	23·3	92·6	54·3	38·3	82·6	86·7	75·8	+0·7	58·3	66·2	66·4	63·6
	Raipur	...	·967	·849	·118	·904	+·015	·810	88·9	69·5	19·4	93·9	64·7	29·2	83·0	86·0	79·3	+0·7	65·2	71·2	69·8	68·7
	Sutna	...	·880	·776	·104	·823	0·	·820	89·1	63·7	25·4	93·5	52·3	41·2	84·3	86·3	75·1	−0·4	59·4	66·9	66·4	64·2
	Hyderabad (Deccan).	...	·243	·121	·122	·180	?	·896	85·9	69·5	16·4	89·3	63·2	26·1	80·7	82·8	76·9	?	67·8	72·2	71·7	70·6
West Coast.	Bombay	...	29·889	29·783	·106	29·832	−·010	·807	87·7	76·5	11·2	92·6	72·8	19·8	82·7	85·3	81·4	+0·3	72·6	76·5	77·5	75·5
	Ratnagiri	...	·798	·694	·104	·742	−·009	·789	89·0	75·0	14·0	95·9	70·8	25·1	86·0	84·7	80·8	+1·0	72·3	76·7	77·8	75·6
	Karwar	...	·875	·771	·104	·819	−·013	·794	86·6	74·4	12·2	92·3	68·5	23·8	82·9	83·6	79·7	+1·5	73·0	76·4	76·9	75·5
	Cochin	...	·914	·828	·086	·867	−·021	·804	86·8	75·2	11·6	90·1	73·1	17·0	83·5	83·4	80·1	+0·6	74·0	78·2	77·7	76·6
South India.	Salem	...	·003	28·867	·136	28·941	−·003	·817	87·7	72·1	15·6	92·3	69·3	23·0	81·6	83·3	77·7	−0·2	71·1	74·7	75·6	73·8
	Mysore	...	27·435	27·311	·124	27·373	?	·795	83·3	67·2	16·1	86·8	64·1	22·7	76·9	79·9	74·4	?	66·3	69·7	70·3	68·8
	Mercara	...	26·235	26·142	·093	26·194	−·009	?	75·6	63·4	12·2	78·4	60·0	18·4	70·4	70·4	68·2	+0·6	62·1	66·2	66·5	64·9
	Bangalore	...	·915	·834	·111	·894	−·013	·799	80·2	65·6	14·6	84·6	60·5	24·1	74·7	77·3	72·2	−0·1	64·7	68·7	69·4	67·6
	Hassan	...	·883	·778	·105	·835	?	·807	79·6	65·3	14·3	82·6	60·9	21·7	75·1	76·8	71·7	?	63·8	68·4	68·7	67·0
	Chitaldroog	...	27·531	27·413	·118	27·474	?	·791	82·5	67·5	15·0	86·6	63·9	22·7	77·1	80·2	74·4	?	64·5	70·0	70·1	68·2
	Trichinopoly	...	29·660	29·526	·134	29·599	−·002	·785	89·1	74·3	14·8	95·3	72·0	23·3	84·0	85·4	79·7	−0·6	72·0	76·2	76·9	75·1
	Madras	...	·904	·794	·110	·852	+·013	·804	87·9	74·5	13·4	92·2	67·3	24·9	83·4	83·6	80·3	−0·8	?	78·1	77·9	77·2
	Bellary	...	28·450	28·317	·133	28·386	+·004	·797	87·5	70·8	16·7	91·4	66·2	25·2	81·2	84·3	77·8	−0·9	67·2	70·3	70·8	69·4
	Vizagapatam	...	29·902	29·791	·111	29·842	+·024	·810	88·7	74·7	14·0	92·2	70·3	21·9	85·3	85·6	81·5	−1·8	73·4	77·3	77·2	76·0
	Cocanada	...	·903	·792	·111	·848	?	·810	85·6	75·9	9·7	90·2	72·3	17·9	83·3	84·8	80·6	?	73·2	76·5	76·3	75·3
Hill Station, Baluchistan.	Quetta	...	24·721	24·640	·081	24·672	−·006	?	73·8	39·0	34·8	81·5	33·3	48·2	65·7	70·3	55·6	−0·3	35·8	50·1	51·8	45·9
Hill Stations, Northern India.	Leh	11,503	19·755	19·662	·093	19·718	−·014	?	55·5	28·1	27·4	64·6	18·5	46·1	44·1	50·2	41·5	−0·6	18·3	33·3	36·3	29·3
	Srinagar	...	25·012	24·913	·099	24·953	?	?	66·4	39·5	26·9	79·6	30·1	49·5	53·1	64·8	52·6	?	39·1	49·1	55·6	47·9
	Murree	...	23·926	23·890	·036	23·899	−·014	?	68·4	53·1	15·3	74·0	47·7	26·3	62·7	62·6	59·1	−0·2	41·6	48·9	48·7	46·4
	Chamba	3,005	26·967	26·867	·100	26·926	−·023	?	80·9	53·8	27·1	89·2	48·9	40·3	67·7	75·6	64·6	−0·6	48·7	55·5	58·9	54·4
	Kallang	10,087	20·836	20·766	·070	20·809	+·001	?	54·5	29·3	25·2	67·6	22·5	45·1	46·9	49·9	39·4	−3·0	26·8	35·4	36·5	32·9
	Simla (Ridge)	...	23·183	23·134	·049	23·150	−·012	?	60·6	49·6	11·0	66·4	44·7	21·7	55·5	57·4	54·1	−1·4	41·4	44·9	45·5	44·0
	Chakrata	...	·388	·330	·058	·350	−·010	?	Not recorded.											Not recorded.		
	Ranikhet	...	24·171	24·100	·071	24·120	+·004	?	67·8	52·9	14·9	72·8	47·9	24·9	64·0	61·0	59·2	−1·7	46·4	52·0	52·3	50·2
	Katmandu	4,388	25·625	25·558	·067	25·591	−·059	?	77·3	53·4	23·9	83·5	46·8	36·7	69·8	71·0	63·8	−3·8	52·0	61·2	61·9	58·4
	Darjeeling	...	23·031	22·948	·083	22·989	−·030	?	56·5	46·8	11·7	66·6	41·7	24·9	54·3	55·9	52·0	−2·5	45·4	51·6	52·1	49·7
Hill Stations, Central India.	Mount Abu	...	26·116	26·033	·078	26·071	−·021	?	78·4	63·7	14·7	85·6	55·3	30·3	75·5	76·1	70·4	−0·4	52·9	59·2	60·6	57·6
	Pachmarhi	...	·516	·431	·085	·470	+·015	?	78·6	58·5	20·1	81·9	48·1	33·8	75·0	76·1	67·9	+0·4	54·9	61·1	62·3	59·4
	Chikalda	3,642	·404	·310	·094	·353	+·013	?	77·9	64·2	13·7	82·1	60·0	22·1	74·3	75·3	70·4	+0·6	56·9	62·0	62·3	60·4

II—*continued.*

in India, Burma, etc., for October 1895—continued.

Vapour tension.					Humidity.					Cloud.				Wind direction. Number of Winds from											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
·473	·546	·440	·486	—·057	77	49	33	53	− 5	2·8	3·6	3·2	+0·9	...	...	24	6	15	2	2	6	7	N 70° W	N 24° E	37	28	99	68	...	...	Khandwa	Deccan—*continued.*
·482	·557	·479	·506	−·091	76	51	38	55	− 8	2·7	3·0	2·9	+0·4	30	4	12	4	1	3	5	2	...	N 35° E	N 12° E	14	25	43	38	...	...	Hoshangabad	
·493	·618	·550	·554	−·028	71	56	43	57	− 3	3·7	5·1	4·4	+0·4	32	4	14	5	1	...	1	3	2	N 37° E	N 37° E	27	51	92	89	...	...	Nagpur	
·511	·565	·504	·527	?	75	48	39	54	?	3·2	4·6	3·9	?	19	19	13	5	1	1	2	1	1	N 25° E	?	45	?	22*	?	...	...	Do. (Sanitary Commr.'s Office)	
·475	·499	·388	·454	−·114	85	46	31	54	−11	1·4	2·9	2·2	−0·6	...	10	12	6	6	7	8	8	5	N 14° E	N 3° E	10	17	42	49	...	...	Jubbulpore	
·413	·447	·400	·420	−·087	65	41	32	46	−11	2·1	3·6	2·9	+1·2	...	4	6	2	10	4	22	14	...	S 41° W	N 28° W	40	45	53	64	...	...	Saugor	
·569	·610	·520	·566	−·075	78	55	43	59	− 7	3·2	4·2	3·7	+0·2	7	14	18	9	...	4	2	5	3	N 30° E	N 28° E	43	37	117	95	...	...	Raipur	
·461	·450	·403	·438	−·077	77	38	32	49	− 8	2·2	3·0	2·6	+0·4	2	19	3	5	...	2	5	21	5	N 47° W	N 34° W	45	47	84*	105	...	...	Sutna	
·663	·687	·643	·664	?	91	66	59	72	?	4·7	4·7	4·7	?	4	...	12	7	26	6	1	5	1	S 60° E	?	52	?	101*	?	...	...	Hyderabad (Deccan)	
·751	·834	·841	·809	−·034	82	75	70	76	− 4	3·8	3·9	3·9	−0·3	...	...	13	12	5	3	3	8	18	N 8° E	N 15° E	21	38	217	231	...	...	Bombay	West Coast.
·760	·795	·863	·806	+·015	87	65	73	75	− 1	4·5	6·1	5·3	+2·2	2	4	2	3	11	3	11	10	16	S 84° W	S 81° W	27	17	162	168	...	...	Ratnagiri	
·794	·824	·837	·818	0	93	73	73	80	− 4	5·1	7·1	6·1	+1·6	2	6	...	...	1	...	15	30	8	W	N 82° W	73	56	80	?	...	...	Karwar	
·827	·894	·874	·865	+·034	95	78	77	83	0	6·3	8·3	7·6	+1·8	12	3	8	...	2	3	6	24	4	N 83° W	S 76° W	39	40	63	?	...	...	Cochin	
·746	·771	·781	·766	+·008	95	72	69	79	+ 2	6·7	7·5	7·1	+1·5	44	2	3	1	2	3	4	1	2	S 22° W	S 52° W	3	39	11	63	...	...	Salem	South India.
·637	·638	·622	·632	?	95	69	61	75	?	8·2	7·0	7·6	?	15	2	8	14	5	3	7	6	2	S 78° E	?	18	?	178*	?	...	...	Mysore	
·544	·598	·602	·581	−·001	93	81	82	85	− 1	8·1	8·3	8·2	+0·4	13	1	11	8	5	1	7	9	7	N 6° E	N 36° W	6	24	140	82	...	...	Mercara	
·602	·633	·630	·622	+·031	95	74	67	79	+ 3	7·6	6·8	7·2	+1·4	...	2	8	22	5	3	10	9	3	S 74° E	N 16° W	23	9	162*	95	...	...	Bangalore	
·578	·618	·611	·602	?	92	71	67	77	?	8·2	8·0	8·1	?	1	1	10	22	6	...	6	11	5	N 78° E	?	24	?	70*	?	...	...	Hassan	
·574	·648	·613	·612	?	85	70	60	72	?	7·8	7·6	7·7	?	...	1	8	23	7	...	4	10	9	N 70° E	?	24	?	148*	?	...	...	Chitaldroog	
·756	·799	·812	·789	+·025	89	69	68	75	+ 2	6·8	7·7	7·2	−0·3	38	2	10	1	2	...	2	3	4	N 13° E	N 44° W	14	33	52	93	...	...	Trichinopoly	
?	·897	·882	·896	+·076	?	77	77	86	+ 7	7·1	6·6	6·9	+0·8	...	9	15	11	8	8	6	2	3	N 79° E	N 35° E	31	10	98	121	...	...	Madras	
·623	·608	·585	·605	−·024	83	58	51	64	0	8·1	8·2	8·2	+1·8	5	2	...	22	12	4	2	7	8	S 70° E	N 24° E	29	14	80	104	...	...	Bellary	
·809	·831	·823	·821	+·005	94	69	67	77	+ 5	5·2	4·9	5·1	+0·5	...	9	15	6	3	2	3	14	10	N 12° W	S 65° E	34	18	57	44	...	...	Vizagapatam	
·786	·824	·796	·802	?	87	73	67	76	?	4·1	3·9	4·0	?	...	5	21	15	8	3	4	5	1	N 71° E	?	45	?	202*	?	...	...	Cocanada	
·181	·202	·196	·193	0	74	33	28	45	+ 3	0·8	1·7	1·3	+0·9	35	1	...	...	1	1	3	15	6	N 86° W	N 56° W	34	50	36*	63	...	...	Quetta	Hill Station, Baluchistan.
·024	·100	·098	·074	−·025	17	36	29	27	−14	3·1	4·9	4·0	+0·2	...	...	1	1	...	8	33	17	2	S 54° W	S 56° W	81	34	87	45	...	...	Leh	Hill Stations, Northern India.
·239	·208	·341	·297	?	96	75	57	76	?	2·6	3·7	3·2	?	9	11	4	2	8	9	2	6	11	N 41° W	?	11	?	110*	?	...	...	Srinagar	
·149	·206	·201	·185	−·048	36	37	36	36	− 9	1·9	2·5	2·2	+0·1	14	4	8	2	13	3	4	4	10	N 55° E	S 30° E	5	10	177	145	...	...	Murree	
·290	·302	·311	·301	−·096	69	44	35	49	− 5	2·0	3·4	2·7	+0·9	35	1	1	2	3	1	1	5	13	N 51° W	N 11° E	19	7	138*	107	0·30	0·15	Chamba	
·125	·112	·101	·113	−·013	77	36	30	48	+ 1	2·2	5·1	3·7	+0·3	...	1	...	...	6	24	17	9	5	S 30° W	S 49° W	66	68	47	37	1·13	1·12	Kailang	
·179	·191	·185	·185	−·071	50	43	39	44	− 8	0·8	1·1	1·0	−0·4	3	28	7	1	...	2	4	4	11	N 14° W	N 87° W	62	35	137	?	...	...	Simla (Ridge)	
?	?	?	?	?	?	?	?	?	?	0·6	0·7	0·7	−1·0	...	7	2	...	...	52	...	...	1	S 1° E	S 64° W	69	30	238	120	...	...	Chakrata	
·252	·266	·274	·264	—·064	62	44	45	50	−11	0·4	0·6	0·5	−1·1	7	1	1	...	...	7	22	23	1	S 62° W	S 54° W	69	55	101*	42	...	...	Ranikhet	
·383	·448	·463	·431	−·046	92	61	59	71	− 2	4·4	4·4	4·4	+0·6	3	...	1	14	5	2	2	34	1	S 73° W	W	31	52	14	?	0·40	0·27	Katmandu	
·293	·357	·353	·334	—·036	91	85	79	85	+ 3	7·2	6·8	7·0	+1·5	9	3	7	6	1	...	6	25	4	N 74° W	S 3° E	34	5	112	62	...	...	Darjeeling	
·281	·319	·356	·319	−·019	48	37	41	42	− 2	1·8	2·8	2·3	+0·2	1	3	20	2	8	5	13	5	5	N 79° E	N 14° E	7	6	133*	98	...	...	Mount Abu	Hill Stations, Central India.
·397	·382	·407	·395	−·053	80	45	46	57	− 6	3·7	4·3	4·0	+0·8	20	6	11	9	4	...	5	3	4	N 45° E	N 17° E	24	37	136*	70	...	...	Pachmarhi	
·385	·420	·418	·408	−·065	64	50	49	54	−10	3·6	5·0	4·3	+0·8	28	12	8	2	4	3	2	...	3	N 29° E	N 3° E	23	42	129	135	1·08	0·88	Chikalda	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85 Stations

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity, 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, South India.	Wellington	...	24·257	24·173	·081	24·215	−·002	?	68°7	55°5	13°2	73°4	51·4	22°0	65°2	64°0	60°9	+0·1	55°3	61°2	60°8	59°1
Extra India.	Muscat	...	29·926	29·847	·079	29·887	?	?	85°5	80·9	4°6	89°5	76°7	12°8	84°8	84°8	83°0	?	70°9	77°1	77°5	75°2
	Aden	...	·849	·739	·110	·794	−·039	29·819	90·0	77°4	12°6	96·3	72°5	23°8	85°8	86°4	82°8	0	70°6	74°1	74°5	73°1
	Perim	...	·727	·610	·117	·669	?	?	91·1	80·3	10·8	94·7	78·6	16·1	88·3	87·6	84·8	?	62·9	77·3	77 8	72·7
	Minicoy	...	·925	·829	·096	·875	?	·810	86.9	?	?	92·0	75·4	16·6	83·1	82·9	?	?	75·0	78·1	77·8	77·0
	Zanzibar	...	30·018	·895	·123	·957	+·003	·956	83·3	76·0	7·3	86·3	73·7	12·6	79·4	82·6	79·5	+0·5	72·6	74·9	75·4	74·3
	Port Victoria (Seychelles)	15	29·981	·896	·085	·939	?	·899	81·6	76·4	5·2	82·7	72·1	10·6	80·3	80·4	78·7	?	71·8	74·7	74·6	73·7

II—*concluded.*

in India, Burma, etc., for October 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind direction. Number of Winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·436	·501	·501	·479	+·038	98	80	84	87	+4	8·9	9·3	9·1	+1·8	6	2	5	8	28	11	1	1	...	S 49° E	S 32° E	64	27	39	56	...	...	Wellington	Hill Station, South India.
·630	·833	·848	·770	?	60	70	71	67	?	0·1	0·5	0·3	?	...	4	19	17	1	...	1	4	16	N 29° E	?	50	?	81	?	...	...	Muscat	Extra India.
·663	·692	·697	·684	−·039	70	56	56	61	−4	1·4	0·7	1·1	−0·6	2	...	3	32	7	11	6	1	...	S 63° E	S 88° E	61	55	307	307	...	...	Aden	
·344	·794	·826	·655	?	33	59	63	52	?	0·6	2·5	1·5	?	...	...	9	25	24	4	...	...	...	S 73° E	?	82	?	115	?	...	...	Perim	
?	·898	·885	?	?	?	79	79	?	?	6·0	6·7	6·4	?	3	2	3	4	2	6	9	22	11	S 86° W	?	47	?	264	?	...	...	Minicoy	
·760	·806	·788	·785	+·019	85	80	70	78	0	5·3	4·2	4·8	+0·1	..	4	5	3	13	15	15	3	4	S 2° W	S 9° W	39	38	99*	109	...	...	Zanzibar	
·718	·787	·778	·761	?	79	76	75	77	?	6·7	7·3	7·0	?	...	...	...	3	39	17	2	1	...	S 31° E	?	87	?	240	?	6·08	2·20	Port Victoria (Seychelles)	

G. I. C. P. O.—No. 103 Meteor.—27-3-96.—377.

* Corrected.

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 156, Wr., I.—June 94.—5,000
Reg. No. 149, Wr., I.—Apl. 95—4,500.
Zinco., S. I. O., Calcutta.

Explanation.

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

Reg. No. 165, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.
Zinco., S. I. O., Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

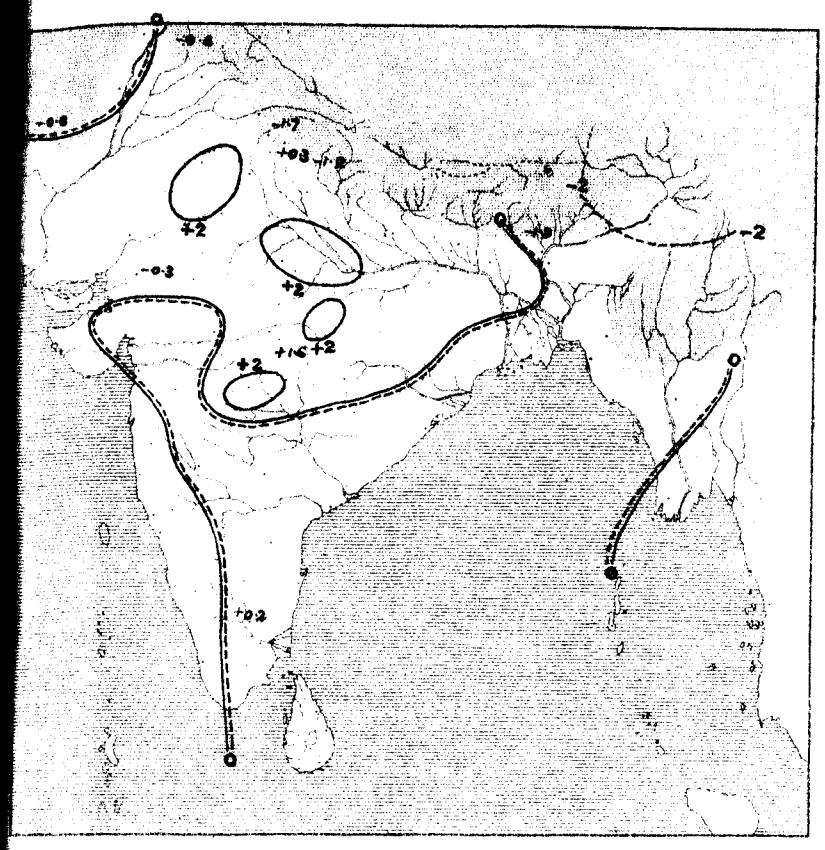
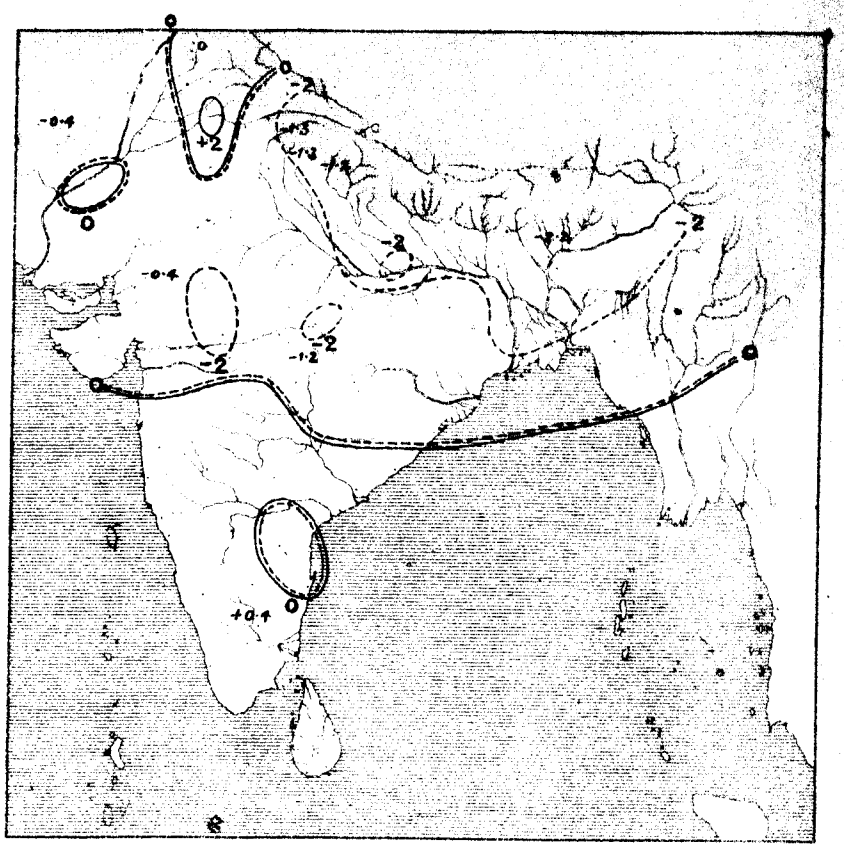


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

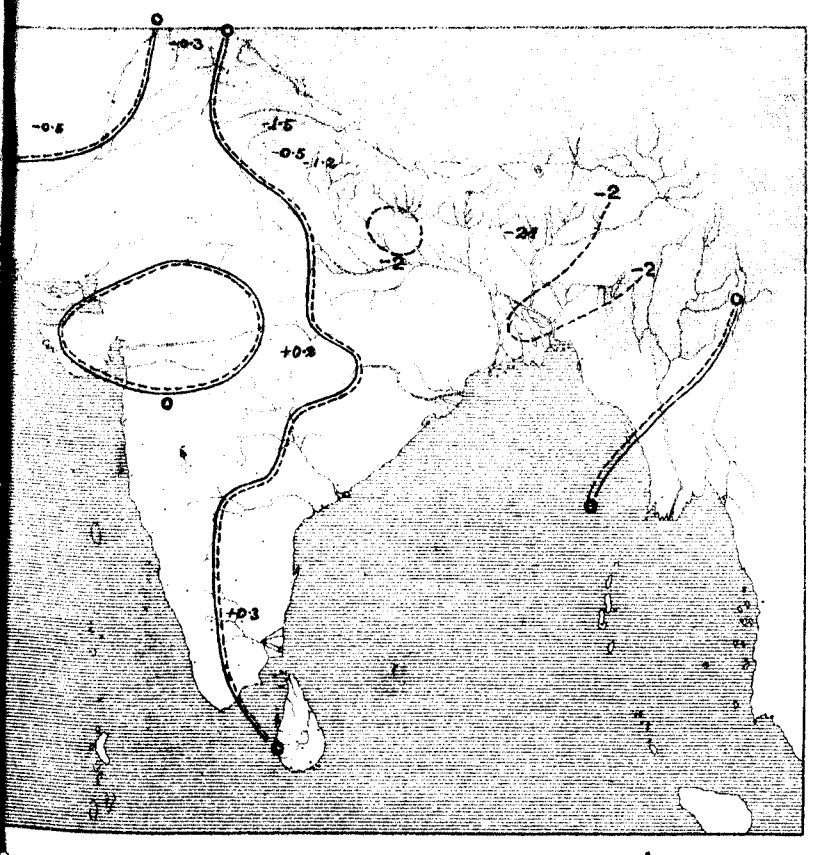
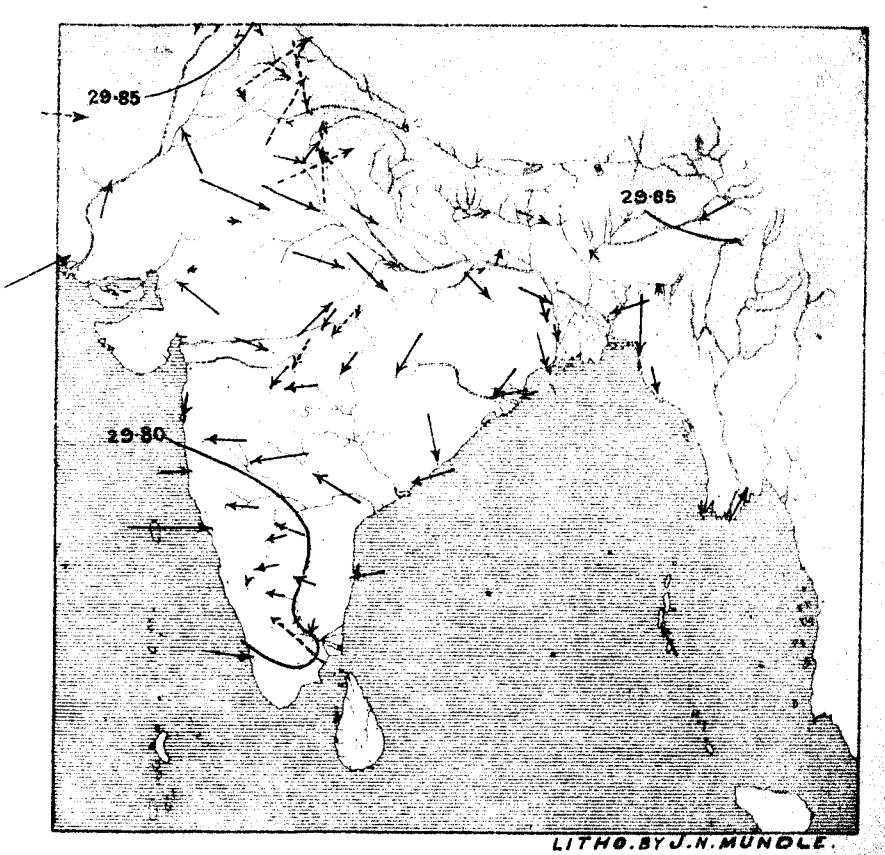


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF **OCTOBER 1895.**



LITHO. BY J. N. MUNDLE.

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{5}$th of an inch being equal to 100 per cent.

Reg. No. 155. Wr. I.—June 94.—5,000.
Reg. No. 149. Wr. I.—Apl. 95.—1,500

Zinco. S. I. O. Calcutta.

LITHO. BY J. N. MUNDLE.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Reg. No. 155, Wr., I.—June 96.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.

Zinco. S. I. Calcutta.

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 51 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 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 figures.

1. Tenasserim	15. Behar (North)	29. Madras (South Central)	43. Central India (East)
2. Lower Burma	16. North Western Provinces (East)	30. Coorg	43a(a). Do. do. (a)
3. Central do.	17. Oudh (South)	31. Mysore	44. Rajputana (East) Central India (West)
4. Upper do.	18. Do. (North)	32. Konkan	45. Rajputana (West)
5. Arakan	19. North Western Provinces (Central)	33. Bombay Deccan	46. East Coast (North)
6. Eastern Bengal	20. Do. do. (West)	34. Hyderabad (North)	46(a). Do. do. (a)
7. Assam (Surma)	21. Do. do (Submontane)	35. Khandeish	47. Hyderabad (South)
8. Do. (Brahmaputra)	22. Punjab (South)	36. Berar	48. Madras (Central)
9. Deltaic Bengal	23. Do. (Central)	37. Central Provinces (West)	49. East Coast (Central)
10. Central do.	24. Do. (Submontane)	38. Do. (Central)	50. East Coast (South)
11. North do.	25. Do. (Hill Districts)	39. Do. (East)	51. Madras (South)
12. Orissa	26. Do. (North West)	40. Guzerat	
13. Chota Nagpore	27. Do. (West)	41. Kattiawar	
14 Behar (South)	28. Malabar	42. Sind	

Reg. No. 89, Wt., L—Mar. 95—5,000. Litho., S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, NOVEMBER, 1895.

INTRODUCTION.

This review of the weather in India during the month of November 1895 is based on observations taken daily at 8 A. M. at 207 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 85 stations. The rainfall summary is based on the rainfall data of the meteorological observatories and on the weekly rainfall telegrams received during the month from District Officers throughout India, and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the publication of the review. A summary of the weather in the Bay of Bengal and the Arabian Sea, based on information extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given.

Summary of the chief features of the weather in India during the month of November 1895.

The normal meteorological conditions of the month of November are in many respects similar to those of October, as the month forms a part of the transition period during which the south-west monsoon current is retreating from the Indian land and sea areas.

Pressure usually increases in Northern India, and hence the gradients favouring the extension and increasing intensity of the north-east winds in the Bay and Arabian Sea become steeper during the month. Pressure (8 A.M.) at the commencement of the month ranges normally between 29·90″ in the Punjab and 29·80″ in the centre and south of the Bay, and at the end of the month between 30·00″ in the Punjab and Central Rajputana and 29·80″ in the south of the Bay.

The total range of pressure hence usually increases from an average of one-tenth to an average of two-tenths of an inch during the month.

The most important feature in the mean distribution of pressure is the existence of a very shallow belt or trough of low pressure which stretches across the centre of the Bay from the Coromandel coast to the Andamans, and which defines the area over which the humid south-west winds across the entrance and south of the Bay recurve through south, south-east and east, and finally blow as north-east winds on the Coromandel coast, and usually give moderate to heavy rain in Central and South Madras and Mysore during the month.

Over the whole of Northern and Central India the weather is almost invariably fine, with clear skies and light winds.

North-westerly to westerly winds prevail in the Gangetic Plain, and northerly winds in Bengal. In Rajputana and Central India winds range between north and north-east and are light and somewhat unsteady. Easterly winds obtain in the Peninsula, the air movement in that area forming part of the general drift from north-east to south-west across the north of the Bay and the north and centre of the Arabian Sea.

Temperature falls rapidly in North Western India during the month, and the mean temperature of the month ranges from 62° in the North Punjab to 80° in the Andamans, the south of the Bay and West Ceylon. The daily range of temperature is always large in Northern India in November, in consequence of the clearness and dryness of the atmosphere, and exceeds 30° over a large part of the Punjab, Sind, Rajputana, Central India, Berar, the Central Provinces and the North-Western Provinces.

The month is almost invariably rainless over the whole of India to the north of Lat. 21° N., except in Assam and Bengal which occasionally receive rain during the existence of the cyclonic storms of the month. These storms usually originate in the centre of the Bay and travel westwards to the Coromandel or North Madras coast. The Peninsula to the south of Lat. 15° N. receives moderate to heavy rain, due to the retreating south-west monsoon current in the Bay. The rainfall is usually heaviest in the Coromandel Coast districts south of Madras and in West Mysore and the Nilgiris, Palnis and other hills of Southern India.

The following gives a summary of the more important changes of meteorological conditions and the chief features of the weather in India during November 1895:—

The month was unusually free from disturbance. Temperature at the commencement of the month was considerably to largely in excess over the whole of North-Western and Central India, where the rains had ceased much earlier than usual. Pressure was in considerable excess in the southern half of the Peninsula, and was very uniform over the whole land area. Weather was showery in the west coast districts, the West Deccan and Southern India from the 1st to the 5th, after which fine dry weather set in over the Deccan and west coast districts.

Pressure increased briskly in Burma and Assam on the 4th, and light showers were received in that area during the next three or four days. Temperature fell considerably in Burma and was largely below the normal for some days, as is shown by the following variation data for the period from the 3rd to the 10th.

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of							
	3rd Nov.	4th Nov.	5th Nov.	6th Nov.	7th Nov.	8th Nov.	9th Nov.	10th Nov.
	°	°	°	°	°	°	°	°
Burma . .	−0·6	+0·4	−1·2	−3·8	−4·7	−3·9	−3·1	−1·4

The most noteworthy feature of this period was the steady large excess of temperature in North-West and Central India. The following gives variation data for every second day from the first to the eleventh:—

Province or station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of					
	1st Nov.	3rd Nov.	5th Nov.	7th Nov.	9th Nov.	11th Nov.
	°	°	°	°	°	°
Baluchistan (Quetta).	+6·8	+5·2	+2·2	+8·3	+2·9	+7·2
Punjab . .	+2·2	+5·6	+5·2	+5·1	+3·4	+6·9
Sind and Rajputana.	+2·0	+4·2	+5·2	+5·8	+7·4	+5·7
North-Western Provinces and Oudh.	−0·1	+2·0	+3·6	+4·2	+4·5	+5·6
Central India and Gujarat.	+0·7	+3·4	+5·0	+4·7	+5·0	+5·2

Dry weather prevailed generally in Southern India during this period from the 5th to the 11th. Pressure decreased in Northern India during the next two days and was approximately uniform over the land area on the 13th. Temperature had risen in Burma and was now normal or in slight excess, and continued in large excess in North-Western and Central India. The following gives variation data for the area of greatest excess from the 11th to the 15th:—

Political area or province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	11th Nov.	12th Nov.	13th Nov.	14th Nov.	15th Nov.
	°	°	°	°	°
Punjab	+6·9	+7·0	+6·3	+6·9	+7·8
Sind and Rajputana .	+5·7	+5·5	+7·2	+6·3	+8·5
North-Western Provinces and Oudh.	+5·6	+6·2	+6·6	+5·1	+5·8
Central India and Gujarat.	+5·2	+5·1	+5·2	+5·4	+4·3

A slight disturbance of the cold weather type began to affect Baluchistan and Upper India on the 14th. The

depression drifted across Upper India from Baluchistan to the western districts of the North-Western Provinces. It gavec loudy weather in the plains of Upper India, and light showers of rain or snow in Kashmir and the Upper India hill districts on the 16th, 17th and 18th. The nights were unusually warm during this cloudy period in Upper India. Thus the mean minimum temperature of the Punjab averaged 13°·2 above the normal on the night of the 14th and 11°·9 on the night of the 15th.

A feeble cool wave passed through Baluchistan on the 15th and 16th, and reduced temperature to some extent in Upper India during the next three days. The following data illustrate the influence of this cool wave:—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF							
	12th Nov.	13th Nov.	14th Nov.	15th Nov.	16th Nov.	17th Nov.	18th Nov.	19th Nov.
	°	°	°	°	°	°	°	°
Baluchistan (Quetta).	+3·8	+4·8	+6·2	+5·7	—0·5	—8·5	—5·3	+1·2
Punjab . .	+7·0	+6·3	+6·9	+7·8	+7·7	+5·1	+1·4	—0·3
Sind and Rajputana.	+5·5	+7·2	+6·3	+8·5	+7·4	+5·4	+3·1	+0·9

Pressure increased considerably in Northern India relatively to the south of the Peninsula and the Bay on the 18th and 19th, thus modifying very considerably the distribution of pressure. High pressure conditions were established in Northern India, and moderate gradients for northerly winds prevailed in both the land and sea areas. The area of lowest pressure was transferred to the extreme south of the Bay, and northerly winds extended southwards from the centre to the south of the Bay.

Pressure was in general excess on the 19th, the excess being nearly a tenth of an inch greater in Sind and the Punjab than in Ceylon. The area of greatest excess of pressure was transferred to Burma and North-Eastern India on the 24th. Showery weather, due to the strong north-east winds established in the Bay, set in over Southern India on the 19th and 20th. The falls were generally light, except in the coast districts, and the Chingleput, Arcot, Trichinopoly and Tanjore districts received moderate rain during the remainder of the month.

The chief feature of the weather during the period from the 19th to the end of the month was the high temperature in Central India, the Central Provinces and Berar. The following gives data for the period from the 19th to the 23rd:—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF				
	19th Nov.	20th Nov.	21st Nov.	22nd Nov.	23rd Nov.
	°	°	°	°	°
Gujarat and Central India.	+5·1	+6·1	+6·9	+5·3	+4·2
Central Provinces and Berar.	+5·3	+5·2	+5·1	+4·7	+4·2

No important change occurred during the remainder of the month. Pressure decreased to some extent but continued in more or less general excess, and was most largely above the normal in Burma, more especially from the 24th to the 26th and the 29th and 30th.

Showery weather prevailed during the last ten days of the month in the Coromandel coast districts, and fine dry weather over the whole of Northern and Central India and the Deccan.

Temperature continued steadily in excess over Northern and Central India, and as in the previous week, the excess was most marked in Central India and the Central Provinces. The following gives data in illustration:—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF						
	24th Nov.	25th Nov.	26th Nov.	27th Nov.	28th Nov.	29th Nov.	30th Nov.
	°	°	°	°	°	°	°
Berar and Central Provinces . . .	+4·2	+4·1	+3·2	+2·4	+3·3	+3·6	+5·1
Gujarat and Central India . . .	+4·6	+4·3	+4·3	+3·7	+5·5	+4·9	+4·1

The air was unusually cool and dry in Burma during the period from the 24th to the end of the month, in which pressure was in marked excess in that area. The following gives temperature variation data of the period for Burma:—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF						
	24th Nov.	25th Nov.	26th Nov.	27th Nov.	28th Nov.	29th Nov.	30th Nov.
	°	°	°	°	°	°	°
Burma . . .	—0·8	—2·3	—1·5	—2·0	—2·1	—1·6	—0·5

Ordinary cold weather conditions obtained over Northern and Central India at the end of the month and pressure was in moderate to considerable excess in Northern India and Burma and in slight defect in the extreme south of the Bay, thus giving moderate to fresh north-east monsoon winds in the Bay.

Temperature was above the normal over India generally, the excess being large and marked in the Central Provinces, Central India and the North-Western Provinces. It

was, on the other hand, in slight defect in Burma, where much drier and cooler weather than usual obtained.

Pressure averaged ·033″ above the normal for the whole Indian land area, and was hence in excess by nearly the same amount as in November 1893 and November 1894. The local anomalies were large and were directly related to the scanty rainfall of the month in Southern India. Pressure was in moderate local excess in Burma and the centre and south of the Peninsula, in which areas the anomalies were positive and ranged between ·02″ and ·03″. Pressure was, on the other hand, in local defect in Northern India, more especially in the Punjab and North-Western Provinces, where the anomalies were negative, ranging between ·02″ and ·03″. There was hence, on the mean of the month, a smaller difference of pressure (and hence feebler gradients for northerly winds than usual). The vertical anomalies as determined from the variations at the hill stations and neighbouring plain stations, were small in amount, but were generally positive. The most noteworthy feature of the month was the general large excess of pressure which accompanied unusually high temperature over the land area. The following gives comparative data for the eleven meteorological divisions:—

METEOROLOGICAL PROVINCE.	Variation of mean 8 A.M. pressure of month from normal.	Mean temperature variation.
	″	°
Burma Coast and Bay Islands	+·055	—1·2
Burma Inland	+·055	—1·6
Assam	+·035	+0·7
Bengal and Orissa	+·032	+1·6
Gangetic Plain and Chota Nagpur	+·021	+2·9
Upper Sub-Himalayas	+·014	+3·9
Indus Valley and North-West Rajputana	+·010	+3·6
East Rajputana, Central India and Gujarat	+·022	+4·9
Deccan	+·038	+3·2
West Coast	+·048	+1·7
South India	+·054	+1·1

Temperature.—The variations of the mean temperature conditions of the month were very broadly marked, the chief features being general excess in India and slight general deficiency in Burma. The mean day or maximum temperature of the month was normal or in slight defect in Burma and was in excess over the whole of India. The excess was more than 4° in amount over Cutch, Rajputana Central India, Khandesh, Berar and the Central Provinces, and was absolutely greatest at Saugor (+7°·7), Khandwa (+7°·0), Jubbulpore (+6°·6), Jhansi, Sutna and Neemuch (each, +6°·3), that is in Central India and the northern and adjacent districts of the Central Provinces. The day temperature was in slight to moderate excess at the hill stations in Northern India, and hence to a somewhat smaller extent than at the neighbouring plain stations.

The mean minimum temperature of the month was lower than usual in Burma. The deficiency was moderate, slightly exceeding 2° at the majority of stations, and was greatest at Rangoon, where it was 2°·7 in amount. The mean night temperature of the month was normal in the Deccan and more or less in excess over the remainder of India. The excess was large in Baluchistan, Upper Sind, the Punjab, Rajputana and Central India, in which it ranged between 4° and 7°. It was more than 6° in amount at Lahore and Jhansi (each 7°·5), Sirsa (6°·4) Jacobabad and Jeypore (each 6°·3), Quetta (6°·2) and Rawalpindi (6°·1) *i.e.*, chiefly in Baluchistan, Upper Sind and the East Punjab.

The mean temperature of the month was in general excess in India and in defect in Burma. The deficiency in the latter area was not large in amount and exceeded 1° only at Akyab (—1°·9), Rangoon (—1°·4), Toungoo (—1°·1) and perhaps Kindat (—2°·3). The means for the latter station are doubtful, as the earlier observations were not very carefully taken. The mean temperature of the month was in slight excess in the Peninsula and Bengal and in moderate to large excess in Northern and Central India, in which it ranged between 2° and 7°. It was more than 4° over the greater part of the Punjab, Rajputana, Central India and the Central Provinces, and was over 5° at the stations, for which data are given below:—

STATION.	MEAN DAILY TEMPERATURE.		
	Actual, November 1895.	Normal, November.	Variation of actual from normal.
	°	°	°
Jhansi	77·3	70·4	+6·9
Saugor	74·7	68·3	+6·4
Ajmere	71·9	66·3	+5·6
Sambhar	72·5	67·2	+5·3
Jeypore	74·1	68·8	+5·3
Neemuch	74·1	68·8	+5·3
Nowgong	72·3	67·0	+5·3
Lahore	69·0	63·8	+5·2
Sutna	71·6	66·5	+5·1

The excess in the temperature was hence most pronounced in the area including Jhansi and Saugor.

The increased temperature was almost as pronounced

at the hill stations. The excess at Quetta was 4°·7 and at Mount Abu and Pachmarhi each 3°·6, and at the Himalayan stations it ranged between 2°·5 at Simla and 0°·5 at Darjeeling.

The following table gives variation data of the mean temperature conditions of the month for the eleven meteorological provinces of India:—

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

Winds were slightly stronger and steadier than usual in Burma. They were very unsteady in the Gangetic Plain and (to a less extent) in Bengal and were more easterly than usual in these two areas. Winds were as unsteady in Berar and the Central Provinces as in the Gangetic Plain and were feebler than usual (the mean air movement averaging about 20 per cent. below the normal). Winds were more easterly than usual in Southern India and were feebler than usual. Winds were very unsteady at the hill stations in Upper India. The chief features of the air movement of the month over nearly the whole of India were abnormal unsteadiness and weaknes and the increased easting of the winds in Bengal, the Gangetic Plain and the Madras coast districts.

Humidity and cloud.—The air was abnormally dry at Port Blair and in Burma, due to the unusual prevalence of northerly land winds. The mean humidity of the month was, for example, 8 below the normal at Rangoon. The air contained slightly more aqueous vapour than usual over the greater part of Northern India and also in Rajputana and Central India. The mean humidity of the month varied somewhat irregularly from the normal, but was on the whole in slight defect. It was in large local defect at Allahabad (−10) and in the North and West Punjab. The air was also drier than usual at the hill stations in Upper India.

The month was unusually dry over the whole of the Peninsula, with the exception of the Madras coast districts. This feature of increased dryness of the air was as strongly marked in the west coast districts as in the interior of the Deccan. The mean humidity of the month was most considerably in defect in this area at Raipur (10 below the normal), Mercara (11 below the normal), Buldana (8 below the normal), Cochin (7 below) and Karwar (6 below).

Skies were unusually free from cloud in Burma. The mean cloud amount of the month at Rangoon was only 2·1 and was 2·5 below the normal. Cloud was also in slight to moderate defect in Bengal and Bihar, but was more or less considerably in excess in the North-Western Provinces, the Punjab, Baluchistan, Rajputana, Sind, Central India and the hill districts of Upper India. The excess was most marked in the Punjab and Sind. For example, at Jacobabad the amount of cloud averaged 4·0, or 2·9 above the normal of the month.

There was much less cloud than usual over the whole of the Peninsula. The deficiency was most marked in the Bombay Deccan, and the Madras coast districts.

The following table gives variation data of the mean aqueous vapour pressure, humidity and cloud amount of the month in ten meteorological provinces of India:—

Meteorological province.	Variation from normal of		
	Mean absolute humidity.	Mean relative humidity.	Mean cloud amount.
	"		
Burma Coast and Bay Islands	−·061	−5	−0·8
Assam	+·007	0	+0·5
Bengal and Orissa	+·029	−1	−0·5
Gangetic Plain and Chota Nagpur	+·036	−2	−0·2
Upper Sub-Himalayas	+·034	+1	+1·1
Indus Valley and North-West Rajputana.	+·008	−5	+2·0
East Rajputana, Central India and Gujarat.	+·044	0	+0·6
Deccan	+·003	−2	−1·0
West Coast	0	−5	−0·6
South India	−·001	−2	−0·6

Rainfall.—The chief feature of the month was the very scanty rainfall, more especially in Lower Burma and the southern half of the Peninsula, which usually receive moderate to heavy rain from the retreating south-west monsoon. The month was even drier than usual in North-Western India, and no rain (with the exception of some light showers in the hill districts) fell in the Punjab, Rajputana, the North-Western Provinces, Central India, the

Central Provinces, Bihar, Chota Nagpur and South Bengal. The normal rainfall in all these areas is small, and hence the deficiency was not important, except as the continuation of a feature in the meteorology of the preceding two months. The west coast districts, Deccan and Southern India received light to moderate showers from the 1st to the 5th. Southern India (or the Peninsula south of Latitude 17° N.) obtained light to moderate rain between the 19th and the end of the month. The rainfall was moderate in amount at the South Coromandel coast stations, but diminished rapidly into the interior. The rainfall of the month was in considerable to large defect in Lower Burma, Tenasserim and Southern India. The deficiency averaged about 70 per cent. in the Burma coast districts, and nearly 40 per cent. in Southern India.

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

Meteorological province.	Rainfall.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.*
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands .	1·45	4·20	—2·81
Burma Inland . . .	0·91	1·95	—0·18
Assam	0·53	0·76	—0·23
Bengal and Orissa . . .	0·26	0·90	—0·71
Gangetic Plain and Chota Nagpur.	0·01	0·19	—0·18
Upper Sub-Himalayas . .	0·04	0·16	—0·11
Indus Valley and North-West Rajputana.	0·03	0·14	—0·11
East Rajputana, Central India and Gujarat.	0	0·22	—0·22
Deccan	0·39	0·85	—0·58
West Coast	1·75	3·30	—1·35
South India	3·88	5·97	—2·31

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

Atmospheric Pressure.

The mean pressure of the Indian land area in the month of November 1895 was ·033″ above the normal, and hence was in excess by almost exactly the same amount as in November 1893 and November 1894, when it was ·039″ and ·038″ respectively above the normal.

The local variations were, however, larger and more pronounced in November 1895 than in the corresponding month of 1893 and 1894.

Pressure relatively to the general condition was in excess in Burma, Assam, East Bengal and the Peninsula south of Latitude 21° N. The positive anomalies in these two areas were greater than ·02″ at the stations, for which data are given below:—

Division.	Station.	Variation of 8 A.M. pressure from normal.	Pressure anomaly.
		″	″
Burma . .	Kindat	+·079	+·037
	Akyab	+·055	+·022
	Thayetmyo . . .	+·055	+·022
	Bassein	+·061	+·028
	Moulmein	+·060	+·027
Peninsula . .	Masulipatam . . .	+·063	+·030
	Madras	+·060	+·027
	Hyderabad (Deccan) . .	+·062	+·029
	Sholapur	+·057	+·024
	Ratnagiri	+·063	+·030
	Belgaum	+·055	+·022
	Karwar	+·057	+·024
	Bellary	+·055	+·022
	Salem	+·058	+·025
	Negapatam . . .	+·055	+·022

This large excess of pressure in the Deccan and Coromandel coast districts was directly related to the deficient rainfall of the month in that area, and the excess in Burma to the abnormal prevalence of northerly winds over the Bay area during the month.

The pressure anomalies were negative over Northern and Central India and exceeded ·02″ in amount at sta-

tions in the Punjab, the greater part of the North-Western Provinces and Rajputana.

The following gives data :—

Division.	Station.	Variation of 8 A.M. pressure from normal.	Pressure anomaly.
		"	"
Punjab	Mooltan	+·003	—·030
	Dera Ismail Khan	+·003	—·030
	Peshawar	+·008	—·025
	Lahore	+·003	—·030
	Sirsa	+·006	—·027
	Delhi	+·009	—·024
N.-W. Provinces	Meerut	+·009	—·024
	Roorkee	+·012	—·021
	Lucknow	+·010	—·023
	Allahabad	+·008	—·025
	Sutna	+·004	—·029
	Agra	+·003	—·030
Rajputana	Sambhar	+·013	—·020

Pressure was more largely in excess at the hill stations in Northern India than at the neighbouring plain stations, indicating an excess of pressure in the middle and perhaps the higher atmospheric strata.

The following gives data for six pairs of stations :—

Hill Station.	Variation of pressure from normal (*a*).	Neighbouring plains station.	Variation of pressure from normal. (*b*)	Vertical pressure anomaly or (*a*)—(*b*).
	"		"	"
Leh	+·055	Lahore	+·005	+·050
Quetta	+·025	Jacobabad	+·018	+·007
Murree	+·038	Rawalpindi	+·012	+·026
Simla	+·042	Ludhiana	+·017	+·025
Chakrata	+·062	Roorkee	+·012	+·050
Ranikhet	+·056	Bareilly	+·020	+·036

The chief features of the pressure distribution of the month were :—

1st—General excess, accompanying considerably higher temperature than usual.

2nd—Local excess in Burma and the Peninsula, moderately large in amount in Burma, the Deccan and Coromandel coast districts.

3rd—Local deficiency in Northern and Central India, most pronounced in the Punjab and North-Western Provinces *i. e.* in a portion of the area of greatest excess of temperature.

4th—Excess of pressure at the hill stations in North-Western India as compared with the plain stations, and slight deficiency at Darjeeling in North-Eastern India.

Barometric depressions of the month.

The month was unusually free from disturbances. Cyclonic storms are of frequent occurrence in November, but in the month under discussion no storm formed or appeared in the Bay.

The following is a summary of the more important changes of the pressure conditions in India during the month:—

Pressure was increasing at the commencement of the month and was on the 1st below the normal to a slight extent in Northern India and Burma and above it in the Peninsula, the excess being moderate to considerable in amount in South, East and Central Madras.

Pressure was lowest in the east of the Bay and Burma, but the gradients were everywhere very slight, and the air movement in the land area was hence very feeble. Light variable or north-easterly airs obtained in the north of the Bay, and light to moderate south-westerly to westerly winds in the south of the Bay where weather was cloudy and showery. No change of importance occurred on the 2nd and 3rd. The southern half of the Peninsula received light to moderate showers during this period from the 1st to the 3rd.

Pressure increased briskly in Burma on the 4th, and was in moderate excess in that area on the morning of the 5th. Conditions were unchanged in the Peninsula, where pressure continued in moderate to considerable excess. Light to moderate showers fell on the 4th in Southern India.

Pressure increased generally on the 5th and 6th, the rise on the whole being greatest in Bengal, Assam and Upper Burma and on the 7th pressure was in general excess.

The following gives a statement of the mean variation of pressure from the normal at 8 A.M. of the 7th in different provinces :—

POLITICAL AREA OR PROVINCE.	Mean variation from normal at 8 A.M. of the 7th.
	"
Burma	+·100
Bengal and Assam	+·069
North-Western Provinces and Oudh	+ 067
Punjab	+·046
Sind and Rajputana	+·023
Central India and Gujarat	+·057
Central Provinces and Berar	+·058
Bombay	+·099
Madras	+·082

Pressure was now most largely above the normal in Burma, and moderately steep gradients obtained for northerly winds in that area. Westerly winds held in the extreme south of the Bay, but northerly winds had extended southwards over the centre and south-west of the Bay. Weather was fine on the 5th and following days in Southern India. Light showers, on the other hand, fell in Upper Burma on the 5th and 6th.

Pressure decreased generally on the 8th and 9th, but was throughout this period from the 7th to the 9th in excess in Burma and the southern half of the Peninsula both absolutely and relatively to Northern India. Fine dry weather obtained over the whole land area.

Pressure was slightly lower in the Bay than elsewhere, but fine weather with light variable winds obtained in that area.

Pressure gave way generally to a moderate extent on the 10th, and increased on the 11th and 12th over the whole area by somewhat larger amounts than those of the preceding fall. No change occurred in the relative distribution of pressure during this period, the chief features being a moderately large excess in Burma and the Peninsula, more especially relative to Northern India. As usual under these conditions in November steady fine dry weather prevailed over the whole land area.

Pressure fell rapidly in Baluchistan and Upper India during the next 48 hours, and a very shallow depression lay over Baluchistan on the morning of the 14th. The disturbance was of little importance. It gave some cloud but no rain to Baluchistan on the 14th. It advanced eastwards across North Rajputana and the South-East Punjab on the 15th and 16th and gave cloudy skies, but practically no rain in the plains of Upper India on these dates. Some showers fell in Kashmir and the hill districts of the Punjab and North-Western Provinces on the 16th and 17th. Skies cleared on the evening of the 17th, and fine cloudless weather again prevailed in Upper India on the morning of the 18th.

Moderately large pressure changes accompanied and followed the passage of this very feeble disturbance across Northern India, which considerably modified the distribution of pressure. Pressure increased considerably in Northern India relatively to Southern India, so that on the 18th moderate gradients for northerly winds were established in the Bay of Bengal, and the area of lowest or minimum pressure was transferred to the extreme south of the Bay.

Pressure further increased during the next 24 hours, more especially in Upper India, thus emphasizing the anticyclonic conditions now established in Northern India. The following table gives data for ten typical stations showing the pressure conditions obtaining at 8 A.M. on the 19th :—

STATION.	PRESSURE.			WIND.		Cloud.	Rainfall.
	8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.		
	"	"	"				Inches.
Peshawar	30·172	+·070	+·097	SW	3	0	
Jeypore	·108	+·031	+·052	Calm	3	2	
Nagpur	·063	+·025	+·061	Calm	2	0	
Sibsagar	·082	+·008	+·052	SE	1	0	
Calcutta	·031	+·014	+·060	Calm	2	2	
Rangoon	29·982	—·013	+·067	NNE	5	0	
Port Blair	·928	—·007	?	NNE	5	1	
Madras	30·008	+·034	+·104	NNE	4	10	1·48
Colombo	29·916	+·011	+·018	NNE	5	1	0·75
Port Victoria (Seychelles).	·916	—·034	?	SSE	8	6	0·25

Pressure, as is indicated by the preceding data, was in general excess, the amount of the excess ranging between ·10 inch in the Punjab and ·02 inch in South Ceylon, thus giving an abnormal total gradient of ·08 inch favouring the general northerly air movement of the period. Northerly winds hence extended over nearly the whole of the Bay and blew rather strongly on the Coromandel coast districts, to which they gave showery weather, chiefly in the immediate neighbourhood of the coast.

The pressure changes of the next two days, the 20th and 21st, were of little importance, and did not modify the

pressure conditions. Pressure decreased to a moderate extent over the whole area on the 22nd, and was steady during the next 24 hours. This was followed by a general rise of pressure on the 24th and 25th, which was most marked in Burma, resulting in the transfer of the area of greatest excess of pressure from North-Western to North-Eastern India. The following data for ten stations illustrate the conditions obtaining on the morning of the 25th:—

Station.	Pressure.			Wind		Cloud.	Rainfall.
	8 A.M. reduced to sea level, and constant gravity at Lat 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.		
	"	"	"				Inches.
Peshawar . .	30·102	+·026	+·021	Calm	1	10	
Jeypore . .	30·119	+·051	+·040	SE	4	3	
Nagpur . .	30·092	+·046	+·060	Calm	2	0	
Sibsagar . .	30·139	+·041	+·078	Calm	1	0	
Calcutta . .	30·069	+·038	+·066	NNW	1	3	
Rangoon . .	30·005	+·005	+·061	NE	7	0	
Port Blair . .	29·929	+·014	?	ESE	6	5	
Madras . .	29·984	+·033	+·046	N	7	10	4·66
Colombo . .	29·894	+·015	+·004	ESE	4	8	
Port Victoria (Seychelles).	29·901	+·032	?	SSE	9	7	

The preceding data show that pressure was ·08″ above the normal in Assam and Upper Burma and was normal in Ceylon. It was only ·02″ above the normal at Peshawar. An abnormal gradient of nearly a tenth of an inch hence obtained between Burma and the extreme south of the Bay. North-east winds of moderate strength now prevailed over the whole of the Bay, where weather was fine, except near the South Coromandel coast, where it was cloudy and showery. Moderate rain was received in Nellore, Chingleput and North and South Arcot on the 19th and in the Tanjore and Trichinopoly districts on the 22nd, 23rd and 25th.

A very shallow depression which had apparently advanced from Persia lay over Baluchistan on the 25th, and skies had clouded over in that area and the Kashmir and Punjab hill districts. It passed eastwards through Rajputana on the 26th and disappeared in the North-Western Provinces during the next 48 hours. It gave light showers on the 25th, 26th and 27th to Baluchistan, Afghanistan and the North Punjab, and light snow on the higher mountain ranges in Upper India.

Pressure increased briskly in Upper India on the 28th, and was in moderate excess in that area on that day and practically normal over the remainder of India. A local increase of pressure in Assam and Burma during the next 24 hours again transferred the area of greatest excess of pressure to Burma, and a further rise of pressure greatest in Northern India on the 30th emphasized the high pressure conditions obtaining in North-East India.

The following pressure data for ten stations at 8 A.M. of the 30th illustrate the conditions obtaining on that day:—

Station.	Pressure.			Wind.		Cloud.	Rainfall.
	8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly in velocity during past 24 hours.		
	"	"	"				Inches.
Peshawar . .	30·140	+·065	+·005	Calm	2	2	
Jeypore . .	30·143	+·060	+·045	ENE	3	0	
Nagpur . .	30·085	+·068	+·035	Calm	2	0	
Sibsagar . .	30·199	+·092	+·118	Calm	1	10	0·06
Calcutta . .	30·078	+·075	+·053	Calm	2	0	
Rangoon . .	30·018	+·061	+·064	NNE	8	0	
Port Blair . .	29·927	+·044	+·010	ESE	6	7	
Madras . .	29·962	+·024	+·014	NNW	8	4	
Colombo . .	29·867	+·023	−·030	N	5	10	0·37
Port Victoria (Seychelles).	29·969	+·028	?	E	2	5	0·02

The preceding data indicate that the abnormal gradient between Upper Assam and Upper Burma and the extreme south of the Bay had increased to ·15″ or nearly one-sixth of an inch. Moderate to strong north-east winds obtained over the Bay area, and fine dry weather prevailed over the whole of India, except in the South Coromandel coast districts, where some light showers of no importance were received on the 29th and 30th.

Summary of the reports of the weather and snowfall in the mountain districts to the north and north-west of India.

The following gives a summary of the information relating to snowfall during the month of November in the mountain districts to the north and north-west of India.

I.—AFGHAN MOUNTAIN AREA.

(1) *Hills bordering the Dera Ismail Khan district.*—The following statement of the snowfall in October and November has been received from the Deputy Commissioner:—

October.—From the afternoon of the 19th to the early morning of the 21st snow fell almost continually on the high peaks of Marwatai, Bosh and Pirghal (upwards of 10,000 feet in elevation). The depth of the fall slightly exceeded 6 inches. Snow at this season is very unusual.

November.—Snow fell during the night of the 24th and on the 25th on the hills upwards of 10,000 feet in elevation. It also fell on the night of the 25th on Jaimila (9,400 feet) down to about 8,500 feet. The weather for some days previously was very cloudy. Snow is unusual on these hills in November.

(2) *Kurram.*—Very little snow fell during the month of November. The weather was cloudy on the 20th but was generally bright and fine during the month. The greater part of the snow which fell in October melted during the month.

(3) *Kabul.*—Snow is reported to have fallen on the Hindki, Pughman, Wasilabad, Siah Sung and Kohi Daman hills on the 1st and 26th. The fall was light, and is said to have been slightly less than 6 inches in amount.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(1) *Upper Sutlej Valley.*—The Reverend T. Schreve writes that snow fell on two occasions during the month at Poo and on the neighbouring hills. Snow fell on the 15th and 16th as far down as 9,000 feet. The fall probably exceeded one foot on the neighbouring hills. Light snow fell also on the 26th and 27th.

(2) *Gurdaspur district (Dalhousie hills).*—The following account of the snowfall on the hills in the neighbourhood of Dalhousie during the period September 1894 to October 1895 has been forwarded by the Civil Surgeon, Dalhousie:—Snow fell in the hills to the north of Dalhousie about the end of September 1894. There were after that date repeated storms in these hills but snow did not fall in Dalhousie itself till December 3rd, when 6 inches fell. On the 10th, there was a slight shower, and on the 11th, 12th and 13th falls of 6 inches, 3 inches and 6 inches respectively. Clear weather was then reported till the 22nd, when clouds gathered and snow fell on the 23rd and 24th to a depth of one inch and 2 inches respectively. On the 29th one inch was recorded. On the 30th there was a slight shower, and on the 31st one foot of snow. Cloudy weather prevailed on the 1st, 2nd and 3rd January 1895. On the 4th a slight shower of snow fell, and again on the 6th and 7th. On the 11th four inches fell, on the 14th one inch, on the 19th one inch, on the 20th one foot, and on the 21st one foot and one inch. On February 1st one foot and six inches were recorded and eight inches on the 2nd. On the 11th there was a hailstorm. On March 10th two inches hail fell. It again hailed on the 23rd and 24th, and on the 25th there was a slight shower of snow. The total snowfall was therefore 7 feet and 10 inches compared with 6 feet and 7 inches during the same period of the preceding season. In 1895 the first snow fell on the surrounding hills to the north on the 15th of September. Several hailstorms occurred during the first fortnight of October.

III.—NORTH-WESTERN PROVINCES HIMALAYAS (KUMAUN).

Almora District.—The following is the account of the snowfall in Kumaun recorded during the period from the 16th October to the end of November 1895.

Malla Johar.—Snow fell on the 17th October and on the 1st of November. The falls were moderate in amount.

Malla Danpur.—Snow fell on two occasions in October from the 19th to 20th and from the 25th to the 27th, and on four occasions in November, and the falls ranged between 6 inches and a foot and a half.

Malla Byans, Chaudans and Darma.—No snow whatever fell in October but in November one foot was reported on the 18th.

The snowfall is said to have been about the same in amount as in the corresponding month of the previous year. Weather was damp and cold.

IV.—SIKKIM HIMALAYAS.

(1) *Sikkim.*—Surgeon-Captain A. Pearse sends the following account of the snowfall in Upper Sikkim recorded during a tour in the north of Sikkim. The route taken was chiefly up the western (Lachen) branch of the Teesta river:—

"Snow on the road was first seen at Pangri, elevation about 10,700ft. At Tangu, on 30th October, the snow was about 14 inches in depth, and a Thibetan who had crossed the Kongra Lama Pass the previous day reported that the snow on the pass was three to four feet deep. By the 10th November the snow had almost entirely disappeared at Tangu but was still lying to a considerable depth on the northern slopes of the mountains in the vicinity. From the 28th October to 11th November the weather was very fine and clear, only one slight fall of snow occurring during that period (*viz.*, on the 4th November). The snow on the top of the Libula Pass on the 4th November was very deep, but the pass was not blocked, as a coolie had crossed it a day or two previously. Clouds which sometimes came up the valley from the south during the afternoon as a rule completely disappeared before 9 P.M."

He also notes that "on two or three days there were three distinct currents of air as shown by the clouds and it was noticed that if the intermediate current was from the north or colder regions, rain, more or less heavy, was the result. But if the intermediate current was from the south or warmer regions, the weather which followed was fine. Whether this is a recognized rule or not, I do not know, but it struck me as being interesting."

Summary of special storm reports.

The weather was even finer than usual over the whole of India and no storm reports were received.

Brief summary of the weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—On the first three days of the month unsteady northerly winds of force 1 to 5 obtained generally over the Arabian Sea except in the neighbourhood of the African coast, where southerly winds still held. Weather was fine to showery. On the 4th north-east winds extended along the African coast and prevailed generally over the Arabian Sea. No important change occurred until the 15th when the winds began to intensify. On the 16th the mean intensity of the air movement was 3·7 as compared with 2·6 on the 1st. Steady north-east monsoon winds of force 2 to 6 prevailed uninterruptedly during the second half of the month. Weather was generally fine during this period except in the neighbourhood of the Arabian coast where showers were of occasional occurrence. The mean intensity of the air movement for the second half of the month was 3·6 as compared with 2·9 for the first half.

The meteorological conditions over the Arabian Sea during the month were fairly normal, the only abnormal feature being the early extension of the winter monsoon winds to the extreme south and south-west of the sea, where in ordinary years westerly or south-westerly winds prevail.

Bay of Bengal.—Large oscillations of pressure occurred over the Bay during the first seven days of the month, the distribution of pressure changing considerably from day to day. Winds were hence very unsteady during this period over the greater part of the Bay, light winds chiefly from northerly directions prevailing in the north, moderate westerly winds in the south, and light irregular winds in the intermediate area. Weather was generally fine except in the centre, south and south-west, where it was cloudy with occasional showers. The mean air movement ranged from 2·7 on the 1st to 3·2 on the 7th. Pressure changed rapidly again during the next two days, and on the 10th was very uniform over the whole of the Bay. The air movement fell off rapidly and averaged only 1·8 at 8 A.M. of the 10th as compared with 3·2 on the 7th. Very light and unsteady winds, chiefly from northerly directions, prevailed over the Bay during the period from the 7th to the 13th. Occasional showers were received in the neighbourhood of the Madras coast, but over the remainder of the Bay fine weather prevailed during this period. The pressure conditions began to alter on the 14th, on which day northerly winds prevailed in all parts of the Bay. Increasing gradients for northerly winds obtained during the remainder of the month, and hence the air movement increased steadily during this period from an average of 2·2 on the 14th to 4·1 on the 30th. Weather was fine generally during this period except in the neighbourhood of the Coromandel and East Ceylon Coasts, where it was more or less rainy and squally due to the intensified north-east winds. Conditions were most unsettled in this area from the 22nd to the 25th, when several vessels experienced heavy squalls and rain and a strong sea.

Temperature of the air.

The variations of the mean temperature conditions of the month from the normal were large and marked. Temperature was more or less considerably in excess in India and below the normal in Burma.

The mean maximum or day temperature of the month was higher than usual in the whole of India and was normal or in slight defect in Burma. The excess in India was most pronounced in the area including Rajputana, Central India, Berar, the Central Provinces and the south-eastern districts of the North-Western Provinces, over the whole of which it was over 4° above the normal.

The following gives comparative data for the stations at which the excess was more than 5° in amount:—

Province.	Station.	Mean maximum temperature. Actual, November 1895.	Normal, November.	Variation of actual from normal.
		°	°	°
Rajputana	Sambhar	88·4	82·5	+5·9
	Deesa	96·1	90·4	+5·7
	Ajmere	88·4	83·1	+5·3
Central India	Sutna	86·4	80·1	+6·3
	Neemuch	89·7	83·4	+6·3
	Indore	87·4	81·8	+5·6
	Nowgong	87·4	82·0	+5·4
Central Provinces.	Saugor	88·4	80·7	+7·7
	Khandwa	92·3	85·3	+7·0
	Jubblpore	87·4	80·8	+6·6
	Raipur	88·0	82·1	+5·9
	Seoni	86·3	80·6	+5·7
	Nagpur	89·1	83·9	+5·2
Berar	Amraoti	90·4	85·2	+5·2
	Akola	91·0	85·9	+5·1
North-Western Provinces.	Jhansi	90·4	84·1	+6·3
	Allahabad	87·8	82·1	+5·7

The area of greatest excess of day temperature defined by the abnormal of 6° was defined by the stations of Jhansi, Sutna, Saugor, Jubbulpore, Khandwa and Neemuch. The day temperature was in slight excess at the hill stations in North-Western India and in moderate excess at Mount Abu and Quetta (each 3°).

The mean night or minimum temperature of the month was in slight to moderate defect in Burma. The deficiency was most marked at the stations for which data are given below:—

Station.	Mean minimum temperature. Actual, November 1895.	Normal, November.	Variation of actual from normal.
	°	°	°
Rangoon	70·2	72·9	−2·7
Toungoo	67·9	70·3	−2·4
Akyab	69·7	71·9	−2·2
Bassein	69·7	71·8	−2·1
Thayetmyo	66·0	68·0	−2·0

The mean minimum temperature of the month was normal in amount in the Deccan, and in moderate to large excess in North-Western and Central India and in slight excess over the remainder of India. The excess was more than 4° in amount at most stations in Baluchistan, the Punjab, Central India and Rajputana, and was upwards of 5° at stations for which data are given below:—

Province.	Station.	Mean minimum temperature. Actual, November 1895.	Normal, November.	Variation of actual from normal.
		°	°	°
Baluchistan	Quetta	37·1	30·9	+6·2
Punjab	Lahore	53·7	46·2	+7·5
	Sirsa	54·4	48·0	+6·4
	Rawalpindi	48·2	42·1	+6·1
	Peshawar	49·6	44·1	+5·5
	Ludhiana	55·1	50·0	+5·1
Rajputana	Jeypore	59·3	53·0	+6·3
	Ajmere	55·3	49·4	+5·9
Sind	Jacobabad	55·7	49·4	+6·3
Central India	Nowgong	57·1	51·9	+5·2
North-Western Provinces.	Jhansi	64·2	56·7	+7·5
	Meerut	54·9	49·6	+5·3

The mean temperature of the month was above the normal in India and below it in Burma. The negative variations of the mean temperature in Burma exceeded 1° at Kindat (−2°·3?), Akyab (−1°·9), Rangoon (−1°·4) and Toungoo (−1°·1). Temperature was in slight excess in the Peninsula and Bengal, and in moderate to large excess in North-Western and Central India. The excess was over 4° in amount in the area including Baluchistan, Upper Sind, the Punjab excepting the western districts, Rajputana, Central India, the northern and central districts of the Central Provinces, Gujarat and Kathiawar. The

following gives comparative data for stations at which the excess was more than 5° in amount :—

Province.	Station.	Mean daily temperature.		
		Actual, November 1895.	Normal, November.	Variation of actual from normal.
		°	°	°
Punjab	Sirsa	71·5	66·2	+5·3
	Lahore	69·0	63·8	+5·2
Rajputana	Ajmere	71·9	66·3	+5·6
	Sambhar	72·5	67·2	+5·3
	Jeypore	74·1	68·8	+5·3
North-Western Provinces.	Jhansi	77·3	70·4	+6·9
Central India	Nowgong	72·3	67·0	+5·3
	Neemuch	74·1	68·8	+5·3
	Sutna	71·6	66·5	+5·1
Central Provinces	Saugor	74·8	68·3	+6·5

The following gives a summary of the most important features of the mean temperature conditions of the month :—

(1) The day temperature was normal or in slight defect, and the night temperature in slight to moderate defect in Burma.

(2) Both the day and night temperatures were more or less considerably in excess in North-Western and Central India and Baluchistan. The excess was most marked in Rajputana, Central India, Kathiawar, Sind, Baluchistan and the South Punjab, in which the mean temperature of the month was from 4° to 7° above the normal of the month.

(3) The day temperature was in slight to moderate excess in the centre and south of the Peninsula, and the night temperature normal or in slight defect. The mean temperature of the month was in slight excess over the Peninsula to the south of Latitude 20° N.

The following table gives comparative data for 51 meteorological divisions into which India is divided :—

Province.	Division.	Actual Temperature.					Variation from normal of		
		Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	87·9	68·4	78·2	19·5	28·2	+0·1	−1·8	+1·9
	Lower Burma	86·4	72·3	79·4	14·1	22·9	+0·1	−2·4	+2·5
	Central do.	87·8	68·1	77·9	19·7	33·6	+0·5	−2·0	+2·5
	Upper do.	80·3	60·4	70·4	19·9	34·4	−3·4	−1·1	−2·3
	Arakan	84·0	69·7	76·9	14·3	24·0	−1·5	−2·2	+0·7
Bengal and Assam	Eastern Bengal	81·9	64·3	73·1	17·7	26·7	+1·2	+0·6	+0·6
	Assam (Surma)	85·2	63·7	74·5	21·5	32·1	+0·5	−0·1	+0·6
	Do. (Brahmaputra)	80·3	62·5	71·5	17·9	27·0	+1·1	+0·8	+0·3
	Deltaic Bengal	84·4	65·6	75·1	18·9	29·7	+1·8	+1·2	+0·6
	Central do.	84·4	63·9	74·2	20·5	31·3	+2·3	+1·6	+0·7
	North do.	82·7	63·1	73·1	19·6	29·5	+0·5	+3·1	−2·6
	Orissa	85·3	68·6	77·0	16·7	28·1	+2·3	+1·4	+0·9
	Chota Nagpur	82·8	58·9	70·8	23·9	35·4	+3·6	+2·3	+1·3
	Bihar (South)	85·9	61·8	73·8	24·0	35·0	+3·5	+3·1	+0·4
	Do. (North)	83·8	61·1	72·5	22·7	34·5	+2·1	+2·1	0
North-Western Provinces and Oudh.	North-Western Provinces (East)	85·7	58·1	71·9	27·5	38·7	+3·8	+2·3	+1·5
	Oudh (South)	85·8	55·4	70·6	30·4	41·6	+2·9	+3·6	−0·7
	Do. (North)	83·7	59·0	71·4	24·7	35·9	?	?	?
	North-Western Provinces (Central)	87·3	55·5	71·4	31·8	45·3	?	?	?
	Do. do. (West)	89·1	62·0	75·6	27·2	40·2	+5·1	+6·2	−1·1
	Do. do. (Submontane)	81·8	54·6	68·2	27·2	40·7	+2·7	+4·0	−1·3
Punjab	Punjab (South)	87·7	56·6	72·2	31·1	49·0	+4·0	+4·9	−0·9
	Do. (Central)	84·2	53·7	69·0	30·5	47·1	+2·9	+7·5	−4·6
	Do. (Submontane)	83·7	54·6	69·2	29·1	45·8	+3·0	+5·1	−2·1
	Do. (Hill Districts)	61·7	45·3	53·6	16·4	34·2	+1·6	+3·2	−1·6
	Do. (North-West)	80·1	49·2	64·6	30·9	48·3	+2·4	+5·7	−3·3
	Do. (West)	85·0	52·8	68·9	32·3	52·2	+1·9	+3·5	−1·6
Bombay and Malabar Coast Districts (Madras).	Malabar	88·0	74·4	81·2	13·7	22·9	+2·4	+0·8	+1·6
	Madras (South Central)	87·5	69·0	78·4	18·5	27·7	+1·1	+0·5	+0·6
	Coorg	76·2	61·3	68·8	14·9	21·8	+1·2	+1·0	+0·2
	Mysore	81·0	62·4	71·7	18·6	27·5	+2·0	−0·1	+2·1
	Konkan	88·6	73·7	81·2	14·9	22·4	+1·9	+1·8	+0·1
	Bombay Deccan	85·5	60·8	73·2	24·8	34·8	+1·2	−0·1	+1·3
	Hyderabad (North)	83·7	62·6	73·2	21·2	31·4	?	?	
	Khandesh	88·0	57·1	72·5	30·9	41·5	+4·4	+2·5	+1·9

Province.	Division.	Actual Temperature. Mean maximum.	Mean minimum.	Mean of day.	Mean daily range.	Absolute range.	Variation from normal of Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Central Provinces and Berar.	Berar	90·7	61·4	76·1	29·3	39·6	+5·2	+2·6	+2·6
	Central Provinces (West)	89·9	59·7	74·8	30·2	39·4	+5·7	+2·4	+3·3
	Do. (Central)	87·4	58·0	72·7	29·4	39·6	+5·7	+2·6	+3·1
	Do. (East)	87·8	62·0	74·9	25·8	35·7	+5·1	+2·4	+2·7
Bombay (North)	Gujarat	93·5	65·2	79·4	28·3	36·7	+3·7	+1·5	+2·2
	Kathiawar	91·0	65·9	78·5	25·2	34·7	+3·4	+4·9	−1·5
	Sind	89·5	62·2	75·8	27·3	45·3	+3·0	+4·4	−1·4
Rajputana and Central India.	Central India (East)	86·9	56·9	72·0	30·0	42·1	+5·9	+4·6	+1·3
	Rajputana (East), Central India (West)	89·8	57·7	73·8	32·1	43·9	+5·5	+4·5	+1·0
	Do. (West)	91·3	57·9	74·5	33·4	55·3	+5·0	?	?
Madras	East Coast (North)	86·3	69·2	77·8	17·1	27·8	+2·4	+0·9	+1·5
	Hyderabad (South)	86·0	63·8	74·9	22·2	31·7	+2·0	−0·3	+2·3
	Madras (Central)	88·6	66·5	77·6	22·0	31·5	+2·1	+0·2	+1·9
	East Coast (Central)	87·2	72·3	79·7	14·9	23·5	+1·9	+0·9	+1·0
	Do. (South)	86·3	73·1	79·7	13·2	21·1	+1·4	+0·5	+0·9
	Madras (South)	87·5	74·9	81·2	12·6	19·6	+0·6	+1·0	−0·4

The following is a statement of the larger and more important changes of the temperature conditions during the month.

Temperature at the beginning of the month was in moderate defect in North-Eastern India, and in slight to largish excess over the remainder of India and in Lower Burma. The following table giving variation data for the 24 hours period ending at 8 A.M. of the 1st illustrates the conditions prevailing at the commencement of the month:—

Political area or Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·9	−0·4	+0·8
Bengal and Assam	−1·0	−3·5	−2·3
N.-W. Provinces and Oudh	+1·4	−1·6	−0·1
Punjab	+2·9	+1·5	+2·2
Sind and Rajputana	+3·0	+1·0	+2·0
Central India and Gujarat	+1·5	−0·2	+0·7
Central Provinces and Berar	−0·9	+3·1	+1·1
Bombay	−0·6	+3·8	+1·6
Madras	+1·4	+1·6	+1·5

Temperature increased on the 2nd and 3rd in North-Eastern India, and was normal on the 4th in that area and in excess over the remainder of India.

The following gives variation data for the 4th for comparison with the corresponding data of the 1st:—

Political area or Province.	Variation from normal of Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+1·3	−0·5	+0·4
Bengal and Assam	+0·8	−0·7	+0·1
N.-W. Provinces and Oudh	+3·9	+3·1	+3·5
Punjab	+5·2	+6·4	+5·8
Sind and Rajputana	+6·2	+4·1	+5·2
Central India and Gujarat	+6·1	+2·7	+4·4
Central Provinces and Berar	+6·5	−1·6	+2·5
Bombay	+1·7	+1·3	+1·5
Madras	+3·6	−0·4	+1·6

Temperature was more or less in excess during the next four days in Northern and Central India. It decreased considerably on the 5th and 6th in Burma, and was in marked defect in that area from the 5th to the 10th as is shown by the following:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of 5th November.	6th November.	7th November.	8th November.	9th November.	10th November.
	°	°	°	°	°	°
Burma	−1·2	−3·8	−4·7	−3·9	−3·1	−1·4

Weather was showery in Upper Burma during this period, and hence the deficiency of temperature was greater in the day than in the night temperature.

Temperature in India during the period was largely in excess in Upper Sind, Rajputana, Punjab and Central India. The following gives data for the 8th in illustration :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−4·6	−3·2	−3·9
Bengal and Assam	+1·2	+2·7	+2·0
N.-W. Provinces and Oudh	+3·2	+5·7	+4·5
Punjab	+2·5	+7·8	+5·2
Sind and Rajputana	+7·7	+7·1	+7·4
Central India and Gujarat	+6·3	+3·0	+4·7
Central Provinces and Berar	+5·3	+0·2	+2·8
Bombay	+2·4	−0·9	+0·8
Madras	+2·7	−3·1	−0·2

No important change in the temperature conditions occurred between the 10th and 14th. Temperature continued in large excess in North-Western and Central India and in slight to moderate defect in Burma. It decreased to some extent in Baluchistan and increased in Burma. The following gives variation data for the 24 hours period preceding 8 A.M. of the 15th, which show that temperature was most largely in excess on that day in the Punjab, Sind and Rajputana, by amounts averaging 8° :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−0·3	+0·4	+0·1
Bengal and Assam	+3·5	+4·6	+4·1
N.-W. Provinces and Oudh	+5·1	+6·5	+5·8
Punjab	+2·3	+13·2	+7·8
Sind and Rajputana	+7·1	+9·8	+8·5
Central India and Gujarat	+5·1	+3·5	+4·3
Central Provinces and Berar	+6·6	+3·7	+5·2
Bombay	+2·8	−0·8	+1·0
Madras	+3·1	−1·1	+1·0

A slight disturbance affected Baluchistan and Upper India during the next three days and gave some showers, chiefly in Kashmir and the Punjab hill districts. A feeble cold wave passed from Baluchistan into Upper India and reduced temperature below the normal for a short period in that area, as is indicated by the following data :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of				
	16th November.	17th November.	18th November.	19th November.	20th November.
	°	°	°	°	°
Baluchistan (Quetta)	−0·5	−8·5	−5·3	+1·2	+2·1
Punjab	+7·7	+5·1	+1·4	−0·3	+1·0
Sind and Rajputana	+7·4	+5·4	+3·1	+0·9	−0·3

Temperature continued during this period more or less considerably in excess over the remainder of India, and increased slightly in Burma, and was on the 21st in general excess, as is shown by the following temperature variation data for the 24 hours preceding 8 A.M. of the 21st :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+2·4	0	+1·2
Bengal and Assam	+3·7	+0·9	+2·3
N.-W. Provinces and Oudh	+4·1	+1·2	+2·7
Punjab	+2·7	−0·3	+1·2
Sind and Rajputana	+2·3	+1·0	+1·7
Central India and Gujarat	+6·6	+7·2	+6·9
Central Provinces and Berar	+5·4	+4·8	+5·1
Bombay	+2·9	+4·0	+3·5
Madras	+1·1	+2·2	+1·7

Temperature decreased over the greater part of India during the next three days as is established by the following :—

Political area or Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of		Change.
	21st November.	24th November.	
	°	°	°
Burma	+1·2	−0·8	−2·0
Bengal and Assam	+2·3	+0·4	−1·9
N.-W. Provinces and Oudh	+2·7	+1·4	−1·3
Punjab	+1·2	+1·3	+0·1
Sind and Rajputana	+1·7	+1·7	0
Central India and Gujarat	+6·9	+4·6	−2·3
Central Provinces and Berar	+5·1	+4·2	−0·9
Bombay	+3·5	+2·2	−1·3
Madras	+1·7	+1·6	−0·1

The most noteworthy feature of this period was the large excess of temperature in Baluchistan. This is shown by the data given below :—

Station.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of						
	20th Nov.	21st Nov.	22nd Nov.	23rd Nov.	24th Nov.	25th Nov.	26th Nov.
	°	°	°	°	°	°	°
Quetta . . .	+2·1	+4·6	+4·8	+5·4	+7·7	+15·1	+9·3

Temperature fell to a moderate extent in Burma on the 25th and Madras on the 25th and 26th and was normal or in slight defect in those two areas during the remainder of the month.

The following temperature variation data for the 27th indicate the conditions established by these changes :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	−0·8	−3·2	−2·0
Bengal and Assam . . .	+1·0	−1·7	−0·4
N.-W. Provinces and Oudh .	+1·2	+3·1	+2·2
Punjab	−3·4	+9·3	+3·0
Sind and Rajputana . .	+2·7	+6·9	+4·8
Central India and Gujarat .	+3·9	+3·5	+3·7
Central Provinces and Berar .	+4·4	+0·3	+2·4
Bombay	+2·0	+0·4	+1·2
Madras	+0·3	−1·6	−0·7

No important change occurred during the remainder of the month, and the chief features of the conditions during this period were :—

1st.—Excess in Northern and Central India, greatest and most marked in Rajputana and Central India.

2nd.—Deficiency in Burma, slight to moderate in amount.

The following illustrates the excessive temperature in Central India :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of			
	27th Nov.	28th Nov.	29th Nov.	30th Nov.
	°	°	°	°
Sind and Rajputana . . .	+4·8	+4·7	+1·3	+2·6
Central India and Gujarat . .	+3·7	+5·5	+4·9	+4·1

The area of greatest excess of temperature was transferred to the Central Provinces on the 30th. The mean temperature of the previous 24 hours averaged 5°·1 above the normal and was 8° above it at Jubbulpore and Sutna.

The following gives data illustrating the persistent lower temperature than usual in Burma during this period :—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of			
	27th November.	28th November.	29th November.	30th November.
	°	°	°	°
Burma	−2·0	−2·1	−1·6	−0·5
Madras	−0·7	+0·1	+0·6	+1·3

Skies were clear or very lightly clouded in Burma during this period, and the deficiency was hence much more pronounced in the night than in the day temperature.

The following variation data illustrate the temperature conditions obtaining at the end of the month in India :—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	0	−0·9	−0·5
Bengal and Assam . . .	+0·4	+2·7	+1·6
N.-W. Provinces and Oudh .	+2·5	+4·6	+3·6
Punjab	+2·6	+2·5	+2·6
Sind and Rajputana . .	+1·0	+4·2	+2·6
Central India and Gujarat .	+2·4	+5·8	+4·1
Central Provinces and Berar .	+5·2	+5·0	+5·1
Bombay	+1·9	+0·9	+1·4
Madras	+1·3	+1·2	+1·3

The following table gives the variations of the mean temperature week by week during the month. The data are taken from the weekly weather reviews published in the *Gazette of India* :—

Political Area or Province.	Variation from normal of mean temperature of week ending				
	9th November.	16th November.	23rd November.	30th November.	For whole month.
	°	°	°	°	°
Burma	−2·4	−0·3	+0·1	−1·5	−1·3
Bengal and Assam . .	+0·9	+3·7	+3·1	+0·6	+1·8
N.-W. Provinces and Oudh	+3·7	+5·8	+4·0	+2·2	+3·7
Punjab . . .	+5·0	+7·0	+1·5	+2·6	+4·0
Sind and Rajputana .	+5·7	+6·8	+1·9	+3·2	+4·7
Central India and Gujarat	+4·7	+5·0	+5·5	+4·5	+4·6
Central Provinces and Berar.	+2·6	+4·7	+5·0	+3·7	+4·0
Bombay . . .	+1·2	+1·4	+2·7	+1·5	+1·7
Madras	+0·3	+1·6	+1·5	+0·4	+1·1

Winds.

Winds were weaker and less steady than usual at Port Blair and contained a feeble southerly instead of the northerly component on the mean of the month. The mean wind direction was S 79° E, the normal being N 63°E.

Winds were slightly stronger and steadier in Burma and were normal in direction.

Winds were more easterly than usual at the great majority of stations in Bengal as is shown by the following :—

Station.	Wind direction.		
	Mean actual, November 1895.	Mean normal, November.	Easterly deflection.
Narayanganj	N36°E	N17°W	+53°
Burdwan	N 2°E	N 7°W	+ 9°
Berhampore	N 1°E	N25°W	+26°
Cuttack	N14°E	N 1°W	+15°

They were less steady than usual and below their normal strength.

Winds were remarkably unsteady in the Gangetic Plain and Chota Nagpur and were also below their normal strength. The following gives data for six representative stations :—

Station.	Velocity in miles per diem.			Steadiness.		
	Mean actual, November 1895.	Normal, November.	Percentage variation.	Actual percentage, November, 1895.	Normal Percentage, November.	Variation from normal.
Hazaribagh	95	104	− 9	8	55	−47
Darbhanga	21	44	−52	13	55	−42
Lucknow	15	34	−56	18	46	−28
Meerut	25	30	−17	23	46	−23
Ludhiana	39	22	+77	17	36	−19
Peshawar	60	51	+18	7	15	− 8

As might be expected from the unsteadiness of the winds at stations in the Gangetic Plain, the mean wind directions differed considerably and irregularly from the normal. Easterly winds prevailed to an unusual extent, as is shown by the following :—

Station.	Wind direction.	
	Mean actual, November 1895.	Mean normal, November.
Patna	N68°E	N64°W
Allahabad	N16°E	N65°W
Roorkee	S61°E	S36°W

Winds were light and unsteady in Sind and Rajputana and were more westerly than usual. The following gives data :—

Station.	Wind direction.		
	Mean actual, November 1895.	Mean normal, November.	Westerly deflection.
Deesa	N24°W	N33°E	+57°
Nowgong	N35°W	N10°W	+25
Ajmere	W	N32°E	Large.

Winds were almost as unsteady in the Central Provinces and Berar as in the Gangetic Plain. The following gives data :—

Station.	Velocity in miles per diem.			Steadiness.		
	Mean actual, November 1895.	Mean normal, November.	Percentage variation.	Actual percentage, November 1895.	Normal percentage, November.	Variation from normal.
Akola	82	84	− 2	24	50	−26
Buldana	97	113	−14	6	59	−53
Khandwa	53	62	−15	20	55	−35
Nagpur	42	71	−41	5	60	−55
Jubbulpore	23	41	−44	5	25	−20

Winds were slightly less steady and somewhat below their normal strength at the west coast stations.

The mean wind direction of the month at Cochin was N 64° W, the normal being S 49° W, thus showing the early extension of northerly winds to the south of the Arabian Sea.

Winds were of normal steadiness but feebler than usual in Madras and South India generally. They were also more easterly than usual. The following gives examples :—

Station.	Wind direction.		
	Mean actual, November 1895.	Mean normal, November.	Easterly deflection.
Bellary	N87°E	N80°E	+ 7°
Trichinopoly	N36°E	N31°E	+ 5
Bangalore	N67°E	N60°E	+ 7
Mercara	N72°E	N61°E	+11

Winds were very unsteady at the hill stations. The mean percentage of steadiness at Simla was only 7 as compared with the normal 32 and at Darjeeling it was 17. Winds varied in direction very irregularly from the normal.

Humidity and Cloud.

The air was abnormally dry at Port Blair and in Burma, as is shown by the following data :—

Station.	Absolute humidity.			Relative Humidity.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.	Average actual, November 1895.	Average normal, November.	Variation from normal.
	"	"	"	%	%	
Port Blair .	·876	·947	—·071	78	84	— 6
Rangoon . .	·686	·798	—·112	71	79	— 8
Diamond Island .	·737	·806	—·069	70	80	—10

The decreased humidity in Burma was one of the more important features of the meteorology of the month.

The air contained slightly more aqueous vapour (as measured by the pressure) than usual in Arakan, Assam, Bengal, Chota Nagpur, Bihar, the North-Western Provinces and the Punjab. Temperature was considerably above the normal over this area, and hence the mean humidity percentages varied slightly but somewhat irregularly from the normal, but were in slight excess at the majority of stations. At Allahabad the mean humidity of the month was 10 below the normal, at Peshawar and Mooltan 6 below it and at Calcutta 5 below it. The following table gives comparative data for this large area of slightly increased absolute humidity of the air :—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.	Average actual, November 1895.	Average normal, November.	Variation from normal.
	"	"	"	%	%	
Arakan . . .	·764	·756	+·008	83	80	+3
Assam . . .	·613	·606	+·007	79	79	0
Bengal . . .	·634	·609	+·025	73	74	—1
Chota Nagpur .	·371	·353	+·018	50	54	—4
Bihar . .	·549	·495	+·054	67	66	+1
North-Western Provinces.	·396	·348	+·048	55	55	0
Punjab . . .	·323	·310	+·013	49	52	—3

The mean vapour pressure of the month was slightly above the normal at stations in Rajputana and Central India, but the mean humidity was in defect due to the abnormally high temperature of the month.

The air contained somewhat less vapour than usual in Berar, the Deccan, Mysore and the west coast districts, and the mean humidity values for the month were more or less considerably below the normal at all stations in those areas and also in the Central Provinces. The deficiency in the relative humidity was most marked at Mercara (11 in defect), Raipur (10 in defect), Buldana (8 in defect), Karwar and Cochin (each 7 in defect).

The following gives comparative data for this large area of decreased humidity :—

Division.	Absolute humidity.			Relative humidity.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.	Average actual, November 1895.	Average normal, November.	Variation from normal.
	"	"	"	%	%	
Central Provinces .	·391	·378	+·013	49	53	— 4
Berar . . .	·386	·403	—·017	46	52	— 6
Bombay Deccan .	·434	·453	—·019	54	53	+ 1
Mysore . . .	·507	·528	—·021	68	73	— 5
Coorg . . .	·482	·541	—·059	72	83	—11
West Coast . .	·719	·719	0	68	73	— 5

The air was, on the other hand, slightly damper at the Madras coast stations. The mean humidity percentage of the month was 6 in excess at Madras and 3 at Vizagapatam.

The variations of the humidity conditions from the normal were generally the same in character at the hill stations as at the adjacent plain stations. Thus humidity was more or less considerably in defect at the hill stations in Upper and Central India and was above it at the stations in the Eastern and Central Himalayas.

It is noteworthy that the increased dryness of the air appears to have extended southwards as far as Zanzibar, where the humidity percentage of the month was 7 below the normal, and hence to nearly as large an extent as at the Burma stations.

The more important features of the mean humidity conditions of the month were :—

(1) The air was abnormally dry in Burma and the Andamans.

(2) The air contained somewhat more vapour than usual in Northern and Central India.

(3) The air was much drier over the whole of the Peninsula, with the exception of the Madras coast districts.

(4) It was considerably drier than usual over the North-West Himalayas, but was damper in Sikkim and probably generally in the Eastern Himalayas.

The variations in the amount of cloud were similar in general character to those of the humidity conditions over the greater part of the Indian area; but there were important exceptions to this parallelism in the variations of these two elements.

There was much less cloud than usual in Burma as is shown by the following :—

Station.	Mean cloud amount.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.
Rangoon	2·1	4·6	—2·5
Diamond Island	3·0	4·4	—1·4

The variations of the mean cloud amount of the month at stations in South and East Bengal were small and of little importance.

Cloud was below the normal in West Bengal, Chota Nagpur, Bihar and the eastern districts of the North-West Provinces. The following gives comparative data :—

Area.	Mean cloud amount.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.
West Bengal	1·5	2·7	—1·2
Chota Nagpur	2·4	2·4	0
Bihar	0·5	1·3	—0·8
North-Western Provinces East	0·9	1·1	—0·2

Cloud was in considerable to large excess in the western districts of the North-Western Provinces, the Punjab, Sind, Rajputana and in slight defect in Central India.

Division.	Mean cloud amount.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.
North-Western Provinces (West)	1·4	0·6	+0·8
Punjab	3·1	1·4	+1·7
Sind	3·3	1·1	+2·2
Rajputana	1·8	1·1	+0·7
Central India	1·0	1·3	—0·3

The excess in the cloud amount of the month was very strikingly exhibited at the hill stations in Northern India. The following gives comparative data for five representative stations :—

Station.	Mean cloud amount.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.
Quetta	3·2	1·2	+2·0
Leh	5·4	3·9	+1·5
Simla	3·5	1·9	+1·6
Darjeeling	6·7	4·2	+2·5
Mount Abu	1·8	1·3	+0·5

The mean cloud amount of the month was below the average at almost all stations in the Peninsula. The following gives comparative data for six large divisions :—

Division.	Mean cloud amount.		
	Average actual, November 1895.	Average normal, November.	Variation from normal.
Central Provinces	0·9	1·7	—0·8
Berar	1·4	2·1	—0·7
Bombay Deccan	1·6	3·4	—1·8
Bombay Coast	1·7	1·8	—0·1
Madras Coast	3·7	4·8	—1·1
South India	4·8	5·4	—0·6

The deficiency was hence greatest in actual amount in the Bombay Deccan.

The mean cloud amount of the month was less than 1·0 at Patna (0·4), Sutna (0·5), Raipur and Jubbulpore (0·6), Saugor (0·8) and Hoshangabad (0·9), *i.e.*, in an area including the northern and eastern districts of the Central Provinces, Baghelkhand and Central Bihar.

The chief features of the distribution of cloud during the month were :—

(1) Less cloud than usual in Burma, Bengal and Bihar.

(2) Increased cloud in North-Western India.

(3) Decreased cloud in the Peninsula.

Rainfall.

Rainfall in November is generally due to the retreating south-west monsoon current in the Bay of Bengal. Under normal conditions the air current recurves in the Bay and advances as a current from the north-east to the Madras coast districts, the Deccan and Southern India, to which it usually gives frequent moderate rain. The retreating current is, however, necessarily weak and unsteady. Hence the rainfall due to it is subject to even greater irregularities than the ordinary south-west monsoon rainfall in Northern and Central India.

In consequence of the weakness and irregularity of the current and the conditions of the air movement in the Bay, there is a strong tendency to the formation of severe cyclonic storms. These storms in the majority of cases advance westwards to the Madras Coast, but occasionally march along a northerly track into Orissa, or a north-east track into Burma and Arakan. Hence Burma and Orissa, in addition to the light rainfall they almost invariably receive when cyclonic storms are forming in the Bay during the month, occasionally obtain heavy cyclonic falls. Bengal also usually receives light rain during the existence of these cyclonic storms in the Bay.

The average rainfall of the whole of North-Western and Central India, including the Punjab, Sind, Rajputana, North Bombay, Central India, the North-Western Provinces and Bihar, is small in amount, not exceeding two or three-tenths of an inch. Bengal, Assam, Berar and the Central Provinces, which receive rain in the outskirts of the cyclonic storms of the month, have slightly larger amounts. In Bengal the rainfall decreases from an average of two inches in the coast districts of Orissa and East Bengal to two-tenths of an inch in North Bengal and Bihar. Similarly, in Burma the average rainfall of the month decreases from four inches in the coast districts to half an inch in the central districts of Upper Burma.

The rainfall in Madras and the Deccan is of great importance. In the South Coromandel districts the average rainfall of the month slightly exceeds 15 inches. The amount decreases rapidly into the interior to an inch in the South Deccan, and slowly northwards along the coast districts to Ganjam, where the average is barely three inches.

The rainfall of the month of November 1895 was unusually small in amount. No rain fell over by far the greater part of India, including South Bengal, Bihar, Chota Nagpur, the North-Western Provinces, the Punjab (excepting the hill districts), Gujarat, Kathiawar, Sind, Rajputana, Central India and the Central Provinces.

The chief periods of rainfall in the remainder of India during the month were :—

1st.—From the 1st to the 5th, when light to moderate rain was received in the Peninsula to the south of Lat. 17° N.

2nd.—From the 11th to the 13th, when the central and southern districts of Madras, and Travancore obtained light showers.

3rd.—From the 19th to the 30th, when the districts of Madras from Chingleput southwards obtained light to moderate daily showers. The rainfall was heaviest during this period in the Chingleput, South Arcot and Tanjore districts.

The following table gives comparative rainfall data of the month for the 51 meteorological districts or areas into which India is divided. In the majority of districts the data are based on the published monthly rainfall statements, but in the case of Mysore, Burma and Hyderabad South, for which the monthly statements were not received in time, the data are derived from the weekly telegrams received from district officers in those provinces :—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, November 1895.	Average normal, November.	Average actual, November 1895.	Average normal, November.	Variation from normal.
				Inches.	Inches.	Inches.
Burma	Tenasserim*	?	?	0·07	1·01	—0·94
	Lower Burma*	?	?	0·28	3·20	—2·92
	Central do.*	?	?	0·41	1·73	—1·32
	Upper do.*	?	?	1·42	?	?
	Arakan*	?	?	1·75	3·23	—1·48
Bengal and Assam	Eastern Bengal	0·1	1·4	0·22	1·14	—0·92
	Assam (Surma)	1·6	1·4	1·02	0·83	+0·19
	Do. (Brahmaputra)	0·8	1·2	0·37	0·52	—0·15
	Deltaic Bengal	0·1	1·0	0·04	0·35	—0·31
	Central do.	0	0·7	0	0·27	—0·27
	North do.	0·8	0·4	0·27	0·14	+0·13
	Orissa	0·1	2·1	0·50	1·38	—0·88
	Chota Nagpur	0	0·9	0	0·45	—0·45
	Bihar (South)	0	0·4	0	0·22	—0·22
	Do. (North)	0·1	0·3	0·02	0·09	—0·07

*Note.—The figures entered against divisions marked with an asterisk have been obtained from the weekly telegraphic reports.

Province.	Division.	Number of rainy days. Average actual, November 1895.	Number of rainy days. Average normal, November.	Rainfall. Average actual, November 1895.	Rainfall. Average normal, November.	Rainfall. Variation from normal.
				Inches.	Inches.	Inches.
North-Western Provinces and Oudh.	North-Western Provinces (East)	0	0·2	0	0·11	−0·11
	Oudh (South)	0	0·1	0	0·02	−0·02
	Do. (North)	0	0·1	0	0·04	−0·04
	North-Western Provinces (Central)	0	0·1	0	0·03	−0·03
	Do. do. (West)	0	0·1	0	0·04	−0·04
	Do. do. (Submontane)	0·2	0·2	0·06	0·12	−0·06
Punjab	Punjab (South)	0	0·1	0	0·07	−0·07
	Do. (Central)	0	0·1	0	0·06	−0·06
	Do. (Submontane)	0·1	0·3	0·04	0·16	−0·12
	Do. (Hill Districts)	1·3	0·9	0·47	0·72	−0·25
	Do. (North-West)	0·2	0·5	0·05	0·53	−0·48
	Do. (West)	0·1	0·3	0·02	0·18	−0·16
Bombay and Malabar Coast Districts (Madras).	Malabar	2·1	5·6	1·83	4·01	−2·18
	Madras (South Central)	4·5	5·9	2·88	3·76	−0·88
	Coorg	1·7	?	1·50	?	?
	Mysore*	?	?	1·94	2·18	−0·24
	Konkan	1·7	1·7	1·32	1·10	+0·22
	Bombay Deccan	1·7	2·4	1·10	1·46	−0·36
	Khandesh	0·3	1·4	0·24	0·98	−0·74
Central Provinces and Berar.	Berar	0·3	?	0·13	0·76	−0·63
	Central Provinces (West)	0·1	0·7	0·01	0·38	−0·37
	Do. do. (Central)	0	0·6	0·01	0·37	−0·36
	Do. do. (East)	0·1	0·7	0·04	0·48	−0·44
Bombay (North)	Gujarat	0	0·4	0	0·18	−0·18
	Kathiawar	0	0·1	0	0·21	−0·21
	Sind	0	?	0·01	0·07	−0·06
Rajputana and Central India.	Central India (East)	0	?	0	0·33	−0·33
	Rajputana, (East) Central India (West)	0	?	0	0·08	−0·08
	Rajputana (West)	0	?	0	0·02	−0·02
Madras	East Coast (North)	0·9	3·5	0·73	3·26	−2·53
	Ditto (do.) (*a*)	1·5	4·6	0·98	2·80	−1·82
	Hyderabad (South)*	?	?	1·05	0·36	+0·69
	Madras (Central)	1·7	3·3	0·86	2·26	−1·40
	East Coast (Central)	4·7	7·6	2·71	9·22	−6·51
	Ditto (South)	8·0	8·8	6·27	8·66	−2·39
	Madras (South)	5·9	8·3	3·47	6·21	−2·74

* NOTE.—The figures entered against divisions marked with an asterisk have been obtained from the weekly telegraphic reports.

Occasional showers were received in Burma during the period from the 4th to the 15th. The falls were generally light and local. The largest amounts were obtained in Upper Burma on the 5th, 6th and 7th. The total rainfall of the month was small in Lower and Central Burma and was in large defect by amounts averaging 91 per cent. and 77 per cent. of the normal respectively. Upper Burma received an average total fall of 1·42 inches, probably slightly greater than the normal rainfall of the month.

Assam obtained light to moderate showers during the first and second weeks of the month and also on the 29th and 30th. Showers also fell in the Assam Valley between the 16th and 21st, but the amounts were small and the rainfall of little importance. The following gives a comparative statement of the rainfall in the two divisions of the province based on the complete data for the month published in the *Assam Gazette*:—

Division.	Number of rainy days. Average actual, November 1895.	Number of rainy days. Variation from normal.	Rainfall. Average actual, November 1895.	Rainfall. Variation from normal.	Rainfall. Percentage variation from normal.
			Inches.	Inch.	
Assam. Surma	1·6	+0·2	1·02	+0·19	+23
Assam. Brahmaputra	0·8	−0·4	0·37	−0·15	−29

No rain fell in Bihar and Chota Nagpur during the month and practically none (*i.e.*, less than an average of a

tenth of an inch) in South and Central Bengal. Orissa obtained moderate showers on the 1st, and East Bengal (chiefly the south-east districts of Chittagong and Noakhali) light showers from the 4th to the 10th. Occasional showers of little importance fell during the month in Sikkim and the Jalpaiguri district of North Bengal. Practically no rain was received in the remaining districts of North Bengal. The following comparative statement indicates to what extent the rainfall of the month was in defect in the province:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, November 1895.	Variation from normal.	Average actual, November 1895.	Variation of actual from normal.	Percentage variation from normal.
			Inch.	Inch.	
Bengal, East	0·1	−1·3	0·22	−0·92	− 81
Do. North	0·8	+0·4	0·27	+0·13	+ 93
Do. Deltaic	0·1	−0·9	0·04	−0·31	− 89
Do. Central	0	−0·7	0	−0·27	−100
Orissa	0·1	−2·0	0·50	−0·88	− 64
Chota Nagpur	0	−0·9	0	−0·45	−100
North Bihar	0·1	−0·2	0·02	−0·07	− 78
South do.	0	−0·4	0	−0·22	−100

No rain fell in the North-Western Provinces, except in the hill districts of Garhwal, Almora, Naini Tal and Dehra Dun, which received some light showers (chiefly on the 18th). The average rainfall of the month is, however, less than a tenth of an inch in amount, and hence the deficiency was very small and of no importance. The following table gives comparative data for the six divisions of the province:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, November 1895.	Variation from normal.	Average actual, November 1895.	Variation from normal.	Percentage variation.
			Inch.	Inch.	
Oudh, North	0	−0·1	0	−0·04	−100
Do. South	0	−0·1	0	−0·02	−100
N.-W. P. (East)	0	−0·2	0	−0·11	−100
Do. (Central)	0	−0·1	0	−0·03	−100
Do. (Submontane)	0·2	0	0·06	−0·06	− 50
Do. (West)	0	−0·1	0	−0·04	−100

The rainfall of the month in the Punjab was practically *nil*, except in the hill districts which received an average of ·47 inch, a quarter of an inch less than the normal average of the month.

British Baluchistan received slightly larger amounts than usual in November, due to showers on the 25th, 26th and 27th.

No rain fell in Rajputana or Central India during the month. The normal fall is barely a tenth of an inch in Rajputana and three-tenths of an inch in Central India.

The month was rainless over the northern districts of the Bombay Presidency, including Sind, Cutch, Kathiawar and Gujarat. The Konkan and Deccan districts received light to moderate showers on the 1st, 2nd and 3rd, and some light local showers on the 4th. Fine clear dry weather obtained during the remainder of the month.

The rainfall of the month was in slight defect over the whole Presidency, except the Konkan, which received an average of 0·2 inch more than the normal. The deficiency was greatest in Khandesh, where it averaged nearly three-quarters of an inch.

The following is a statement of the rainfall data of the six divisions of the Presidency:—

Division.	Number of rainy days.		Rainfall.		
	Average actual, November 1895.	Variation from normal.	Average actual, November 1895.	Variation from normal.	Percentage variation.
			Inches.	Inch.	
Konkan	1·7	0	1·32	+0·22	+ 20
Bombay Deccan	1·7	−0·7	1·10	−0·36	− 25
Khandesh	0·3	−1·1	0·24	−0·74	− 76
Gujarat	0	−0·4	0	−0·18	−100
Kathiawar	0	−0·1	0	−0·21	−100
Sind	0	?	0·01	−0·06	− 86

There were three periods of rainfall during the month in the Madras Presidency.

The first period was from the 1st to the 5th. The northern and central districts received light showers, more or less local in character. The rainfall was general and moderate to heavy in the southern districts, more especially on the 4th. The following districts received average amounts on that day exceeding one inch:—

District.	Average rainfall of 24 hours preceding 8 A.M. in district.	Heaviest rainfall in district.
	Inches.	Inches.
South Arcot	1·50	3·06
Tanjore	1·83	5·21
Trichinopoly	1·93	3·90
Malabar	1·24	2·68
Coimbatore	1·54	3·80

The second period was from the 11th to the 13th. Light and scattered showers were received during this period, chiefly in the Coromandel coast districts. The rainfall of this period was small in amount and of little importance.

The third period extended from the 19th to the 30th. The northern and central districts obtained practically no rain in this period. The rainfall was moderate in amount in the Coromandel coast districts, but diminished rapidly in amount into the interior.

Average district rainfalls exceeding one inch were received during this period in the districts for which data are given below :—

District.	Date.	Average rainfall of 24 hours preceding 8 A.M. in district.	Heaviest rainfall in district.
		Inches.	Inches.
Tanjore	22nd	1·70	4·02
Chingleput	25th	2·40	5·08
Do.	26th	1·25	3·43

The following table gives data of the rainfall of the month in the eight divisions of the Presidency :—

Division.	Rainfall.			
	Average actual, November 1895.	Average normal, November.	Variation from normal.	Percentage variation.
	Inches.	Inches.	Inches.	
Madras, Central . .	0·86	2·26	—1·40	—62
Do. East Coast, Central.	2·71	9·22	—6·51	—71
Do. East Coast, South	6·27	8·66	—2·39	—28
Do. South . .	3·47	6·21	—2·74	—44
Do. South Central .	2·88	3·76	—0·88	—23
Malabar . . .	1·83	4·01	—2·18	—54
Madras East Coast (North)	0·73	3·26	—2·53	—78
Ditto do.	0·98	2·80	—1·82	—65

The following table gives data for each of the 22 Collectorates in the Presidency. It shows that the rainfall was in defect in all districts except Madras and that the deficiency was greatest, relatively to the normal in the northern and central coast districts and in Kurnool and Cuddapah :—

District.	Number of rainy days.		Rainfall.		
	Average actual, November 1895.	Average normal, November.	Average actual, November 1895.	Average normal, November.	Variation from normal.
			Inches.	Inches.	Inches.
Ganjam . . .	0·7	3·3	0·68	3·33	—2·65
Vizagapatam . . .	0·9	4·2	0·74	3·37	—2·63
Godavari . . .	0·9	3·1	0·69	3·22	—2·53
Kistna	1·1	3·3	0·61	3·15	—2·54
Nellore	4·7	7·6	2·71	9·22	—6·51
Chingleput . . .	9·1	9·9	7·91	11·46	—3·55
Madras	16·0	11·0	14·67	13·75	+0·92
North Arcot . . .	4·3	7·3	2·10	7·64	—5·54
South Arcot . . .	9·3	9·2	6·88	8·72	—1·84
Tanjore . . .	10·9	10·2	10·00	10·42	—0·42
Trichinopoly . . .	6·6	7·1	4·09	4·53	—0·44
Madura . . .	5·9	7·7	3·48	5·53	—2·05
Tinnevelly . . .	5·8	9·1	3·47	7·11	—3·64
Malabar . . .	2·4	6·6	2·05	4·66	—2·61
South Canara . .	1·5	4·3	1·43	3·07	—1·64
Salem	4·4	5·9	2·68	3·80	—1·12
Coimbatore . . .	4·6	5·9	3·15	3·64	—0·49
Nilgiris . . .	7·3	8·6	3·71	5·62	—1·91
Cuddapah . . .	2·4	4·8	0·80	3·85	—3·05
Anantapur . . .	2·1	3·1	1·28	1·99	—0·71
Bellary	1·9	2·3	1·23	1·30	—0·07
Kurnool . . .	0·4	2·9	0·23	1·50	—1·27

Table

Abstract of Observations taken at 8 A.M. at 207

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
I.—Burma Coast and Bay Islands.		...	...	+·055	...	...	...	...	...	...	...	87·0	−0·2	70·9	−2·1	79·0	−1·2	16·1	...	...	...	...	24·4
Bay Islands	Port Blair	61	29·919	?	29·911	29·977	16th	29·861	6th	·116	81·7	87·9	?	78·2	?	83·0	?	9·7	89·5	20th & 24th.	75·4	10th & 26th.	14·1
	Camorta	?								Not recorded.													
Tenasserim	Mergui	96	29·918	?	29·947	29·985	16th	29·843	2nd	·142	78·2	87·8	?	69·4	?	78·6	?	18·4	91·4	30th	65·3	15th	26·1
	Tavoy	26	30·035	?	29·992	30·084	15th	29·928	1st	·156	76·3	88·3	?	66·5	?	77·4	?	21·8	90·2	6 days	62·2	15th & 16th,	28·0
	Moulmein	94	29·951	+·060	29·984	30·036	15th	29·835	2nd	·201	75·3	88·2	−0·1	69·9	−1·2	79·1	−0·7	18·3	91·5	20th & 21st.	65·3	6th & 25th,	26·2
	Toungoo	183	29·848	+·051	29·979	29·939	15th	29·724	1st	·215	72·4	87·3	+0·3	67·9	−2·4	77·6	−1·1	19·4	92·7	1st	60·1	29th	32·6
Lower Burma	Rangoon	41	29·992	+·052	29·970	30·069	14th	29·885	1st	·184	74·7	87·2	−0·1	70·2	−2·7	78·7	−1·4	17·0	92·2	1st	65·8	26th	26·4
	Bassein	27	30·011	+·061	29·973	30·087	15th	29·908	3rd	·179	74·3	86·6	+0·7	69·7	−2·1	78·2	−0·7	16·9	90·7	2nd	63·0	29th	27·7
	Diamond Island, Akyab	41	29·979	+·052	29·955	30·050	16th	29·895	3rd	·155	80·1	85·5	−0·2	77·0	?	81·3	?	8·5	88·1	4th	73·4	25th	14·7
Arakan	Akyab	20	30·017	+·055	29·980	30·080	16th	29·920	3rd	·160	73·5	84·0	−1·5	69·7	−2·2	76·7	−1·9	14·7	88·2	5th	64·2	28th	24·0
II.—Burma Inland		...	...	+·055	...	...	...	...	...	...	...	82·2	−1·5	62·0	−1·6	72·2	−1·6	20·2	...	...	...	...	34·2
Central Burma	Thayetmyo	134	29·916	+·055	29·995	29·998	30th	29·780	1st	·218	74·3	88·0	+0·5	66·0	−2·0	77·0	−0·8	22·0	93·1	1st	57·7	28th	35·4
	Minbu	?	29·897	?	?	29·987	30th	29·767	1st	·220	73·0	86·8	?	68·0	?	77·4	?	18·8	92·6	1st	57·6	28th	35·0
	Yamethin	645	29·404	?	30·017	29·481	30th	29·268	1st	·213	71·0	88·5	?	70·3	?	79·4	?	18·2	93·0	2nd	62·5	9th	30·5
	Taunggyi	?			Not recorded.						58·5	73·2	?	50·3	?	61·8	?	22·9	76·2	4 days	40·6	27th	35·6
Upper Burma	Mandalay	249	29·805?	?	30·012?	29·895	30th	29·676	1st	·219	71·2	85·8	?	66·1	?	76·0	?	19·7	91·0	4th	55·7	27th	35·3
	Kindat	?	29·721	?	?	29·828	30th	29·594	1st	·234	65·7	78·6	−3·4?	63·5	−1·1	71·1	−2·3?	15·1	85·3	11th	59·0	28th	26·3
	Lashio	?	27·247	?	?	27·319	24th	27·144	3rd	·175	60·4	75·3	?	53·4	?	64·4	?	21·9	80·1	3 days	43·0	27th	37·1
	Bhamo	?	29·704	?	?	29·799	30th	29·594	1st	·205	64·7	81·4	?	58·7	?	70·1	?	22·7	88·0	14th	49·3	29th	38·7
III.—Assam		...	...	+·035	...	...	...	...	...	...	...	81·9	+0·9	62·9	+0·5	72·5	+0·7	19·1	...	...	...	...	28·7
Assam (Surma)	Silchar	104	29·966	?	30·026	30·045	30th	29·878	3rd	·167	69·5	85·2	+0·5	63·7	−0·1	74·5	+0·2	21·5	88·7	16th	56·6	27th	32·1
Brahmaputra	Sibsagar	333	29·756	+·036	30·062	29·890	30th	29·663	1st	·227	63·3	79·0	+0·6	59·2	−0·6	69·1	0	19·8	82·3	14th	52·4	28th	29·9
	Dhubri	115	29·953	+·034	30·027	30·067	30th	29·864	3rd	·203	69·9	81·6	+1·6	†65·7	+2·1	†73·9	+1·9	†15·9	84·2	14th	60·1	26th	24·1
IV.—Bengal and Orissa		...	...	+·032	...	...	...	...	...	...	...	83·7	+1·6	65·0	+1·4	74·4	+1·6	18·7	...	...	...	...	29·0
East Bengal	Chittagong	87	29·950	+·043	29·988	30·025	20th	29·854	3rd	·171	70·5	83·9	+1·1	65·0	−1·3	74·4	−0·1	18·9	86·7	9th	59·1	28th	27·6
	Lungleh	?			Not recorded.						61·0	70·0	?	57·7	?	63·9	?	12·3	72·9	16th & 19th.	54·2	28th & 29th.	18·7
	Noakhali	43	29·988	?	29·979	30·076	30th	29·883	3rd	·193	71·5	82·9	?	63·7	?	73·4	?	19·2	85·5	3 days	56·0	3 days	29·5
	Comilla	36	30·006	?	29·991	30·087	30th	29·915	3rd	·172	72·2	83·9	?	64·2	?	74·1	?	19·7	86·4	3 days	57·0	27th & 28th,	29·4
	Sirajganj	49	30·001	?	30·001	30·096	30th	29·903	3rd	·193	70·0	83·0	?	65·4	?	74·2	?	17·6	85·6	14th	59·6	28th	26·0
	Narayanganj	26	30·016	+·041	29·991	30·105	20th	29·916	3rd	·189	73·0	83·9	+0·2	67·5	+1·6	75·7	+0·9	16·4	87·1	14th	61·3	27th & 30th,	25·8
	Barisal	13	30·021	+·027	29·980	30·111	20th	29·923	3rd	·188	73·9	*84·9	+2·7	*65·8	+0·4	*75·3	+1·6	*19·1	88·3	13th & 14th,	59·0	27th	29·3
	Mymensingh	59	29·991	+·037	30·003	30·083	20th	29·892	3rd	·191	70·6	83·0	+0·7	64·8	+1·6	73·8	+1·2	18·2	85·7	16th	58·5	27th	27·2
Deltaic Bengal	Faridpur	46	30·006	?	30·000	30·099	20th	29·911	3rd	·188	72·5	82·7	?	65·7	?	74·3	?	17·0	86·6	13th	59·0	28th	27·6
	Jessore	33	30·014	+·033	29·995	30·106	20th	29·924	3rd	·182	72·6	84·5	+1·2	64·3	+0·1	74·4	+0·7	20·2	87·5	14th	56·3	28th	31·2
	Calcutta	21	30·025	+·023	29·992	30·109	30th	29·944	3rd	·165	71·9	83·5	+2·3	66·0	+1·4	74·8	+1·9	17·5	86·4	3 days	58·2	23rd	28·2
	Saugor Island	25	30·017	+·024	29·987	30·098	20th	29·931	3rd	·167	73·8	83·3	+1·9	69·2	+2·2	76·3	+2·1	14·1	86·4	10th	62·4	27th & 29th,	24·0
	Krishnagar	47	30·006	?	30·003	30·098	20th	29·920	3rd	·178	72·0	85·8	?	63·5	?	74·7	?	22·3	89·7	12th	55·7	27th	34·0
	Midnapore	149	29·901	?	30·003	29·984	30th	29·823	3rd	·161	70·4	86·8	?	64·7	?	75·8	?	22·1	90·3	11th & 12th.	57·2	23rd & 27th.	33·1

* Mean of 28 days. † Mean of 27 days.

I.

Stations in India, Burma, etc., in November 1895.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st Oct. to 30th Nov, 1895.	Normal rainfall for period from 1st Oct. to 30th Nov.	Variation from normal of period from 1st Oct. to 30th Nov.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·45	4·20	- 2·81	...	...	...	...	**I.—Burma Coast and Bay Islands.**	
...	3	2	6	7	2	2	5	3	6·0	7·1	−15	82	·888	4·4	10	P	P	6·40	8·97	— 2·57	11·04	21·14	−10·10	1·57	Port Blair .	Bay Islands.
													Not	recorded.											Camorta.	
...	10	4	5	2	...	...	1	8	1·6	1·6	0	75	·724	3·2	1	P	P	0·10	3·63	— 3·53	6·97	17·17	−10·20	0·10	Mergui .	Tenasserim.
24	2	4	...	...	...	...	...	...	1·2	P	P	75	·679	0·1	1	P	P	1·83	P	P	5·99	P	P	1·82	Tavoy.	
...	4	6	7	10	1	...	1	1	2·7	2·4	+13	77	·675	2·5	0	2·18	−2·18	0·03	2·32	— 2·29	7·42	10·42	— 3·00	0·03	Moulmein.	
3	15	1	1	1	...	...	...	9	2·5	1·7	+47	85	·695	2·3	0	2·36	−2·36	0·07	1·37	— 1·30	4·09	8·13	— 4·04	0·07	Toungoo.	
...	6	12	6	3	1	1	...	1	4·6	4·4	+ 5	83	·714	1·9	2	3·18	−1·18	1·44	2·98	— 1·54	3·95	9·72	— 5·77	1·11	Rangoon .	Lower Burma.
6	1	12	7	3	...	...	..	1	4·9	3·1	+58	83	·714	2·8	1	5·55	−4·55	0·29	4·21	— 3·92	6·36	12·42	— 6·06	0·29	Bassein.	
...	2	20	6	1	...	...	...	1	12·1	8·6	+41	73	·753	2·6	0	7·10	−7·10	0	7·21	— 7·21	3·50	16·43	−12·93	0	Diamond Island.	
...	8	19	2	...	1	...	...	...	2·6	2·2	+18	90	·740	4·8	4	3·09	+0·91	2·86	2·94	— 0·08	9·15	13·38	— 4·23	1·08	Akyab .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·91	1·95	−0·18	...	...	...	...	**II.—Burma Inland**	
...	11	5	2	1	3	1	1	6	3·2	3·5	— 9	77	·651	2·3	3	3·45	−0·45	1·41	2·16	— 0·75	4·35	6·40	— 2·05	0·76	Thayetmyo .	Central Burma.
...	4	...	...	...	1	...	6	19	8·1	P	P	77	·639	3·7	1	P	P	0·28	P	P	2·68	P	P	0·22	Minbu.	
1	13	3	...	2	1	...	1	9	2·8	P	P	82	·631	1·8	1	P	P	0·29	P	P	3·57	P	P	0·13	Yamethin.	
11	...	2	2	10	3	1	...	...	?	P	P	80	·398	4·4	5	P	P	1·37	P	P	6·20	P	P	0·46	Taunggyi.	
3	12	2	4	3	1	2	1	2	3·4	P	P	86	·646	4·5	4	P	P	0·68	P	P	2·86	P	P	0·20	Mandalay .	Upper Burma.
28	...	...	...	...	..	...	1	1	0·8	P	P	95	·608	5·5	2	P	P	2·12	1·73	+ 0·39	4·42	8·63	— 4·21	1·05	Kindat.	
			Not recorded.						P	P	P	90	·478	5·6	3	P	P	0·71	P	P	4·84	P	P	0·34	Lashio.	
17	1	7	1	...	...	2	...	2	1·0	P	P	91	·561	3·1	3	P	P	0·38	P	P	3·58	P	P	0·14	Bhamo.	
...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	0·53	0·76	−0·23	...	...	...	...	**III.—Assam.**	
29	...	...	...	1	...	...	...	...	*1·0	2·1	−52	87	·630	5·1	3	2·18	+0·82	0·87	1·46	— 0·59	8·44	6·74	+ 1·70	0·57	Silchar .	Assam (Surma).
26	...	3	...	1	...	...	...	...	1·4	1·7	−18	98	·579	?	1	1·18	−0·18	0·22	0·60	— 0·38	3·36	5·67	— 2·31	0·14	Sibsagar .	Brahmaputra.
...	4	18	8	...	...	...	...	...	4·3	4·9	−12	87	·635	2·4§	1	0·38	+0·62	0·49	0·21	+ 0·28	1·01	3·70	— 2·69	0·47	Dhubri.	
...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·26	0·90	−0·71	...	...	...	...	**IV.—Bengal and Orissa.**	
...	7	17	5	1	...	...	...	...	2·5	3·0	−17	92	·688	2·4	1	1·73	−0·73	0·17	1·73	— 0·56	5·69	6·96	— 1·27	0·11	Chittagong .	East Bengal.
			Not recorded.						P	P	P	92	·498	P	3	P	P	1·90	P	P	10·58	P	P	1·19	Lungleh.	
...	7	15	7	...	..	...	...	1	0·9	P	P	90	·701	1·7	0	1·55	−1·55	0·07	1·82	— 1·75	5·13	8·68	— 3·55	0·04	Noakhali.	
19	6	...	3	1	1	...	...	...	0·8	P	P	93	·742	1·8§	0	1·89	−1·89	0·08	0·94	— 0·86	8·05	5·17	+ 2·88	0·06	Comilla.	
30	...	...	...	...	...	...	...	...	0·5	P	P	91	·667	0·9§	0	0·80	−0·80	0	0·38	— 0·38	1·71	4·76	— 3·05	0	Sirajganj.	
14	..	5	7	2	1	...	1	...	1·9	1·9	0	88	·712	2·9‡	0	0·82	−0·82	0·12	1·18	— 1·06	5·46	5·70	— 0·24	0·08	Narayanganj.	
26	2	1	...	...	1	...	...	...	1·4§	P	P	*85	*·718	2·1	0	1·45	−1·45	0·11	1·28	— 1·17	7·94	6·54	+ 1·40	0·08	Barisal.	
7	2	12	7	1	...	...	...	1	1·3	P	P	88	·660	?	1	0·80	+0·20	0·30	0·45	— 0·45	2·62	6·07	— 3·45	0·30	Mymensingh.	
22	2	3	...	2	1	...	...	...	0·8	P	P	89	·716	1·0	1	1·10	− 0·10	0·14	0·39	— 0·25	4·09	4·69	— 0·60	0·14	Faridpur .	Deltaic Bengal.
14	6	3	1	1	...	1	2	2	1·5	1·8	−17	86	·684	1·8	0	0·73	−0·73	0·06	1·42	— 1·36	6·22	5·84	+ 0·38	0·06	Jessore.	
12	5	2	2	1	1	2	2	3	1·8	3·0	−40	84	·664	0·9	0	0·82	−0·82	0	0·73	— 0·73	2·79	4·81	— 2·02	0	Calcutta.	
...	8	8	2	...	...	2	1	9	7·0	6·4	+ 9	87	·729	2·2	0	1·55	−1·55	0·08	1·94	— 1·86	4·72	10·08	— 5·36	0·07	Saugor Island.	
3	5	1	3	3	6	1	2	6	2·2	P	P	78	·620	1·4	0	0·70	−0·70	0	0·34	— 0·34	3·66	4·53	— 0·87	0	Krishnagar.	
7	18	1	...	...	1	1	...	2	0·9	P	P	79	·594	0·7	0	0·90	−0·90	0	0·23	— 0·23	4·72	5·01	— 0·29	0	Midnapore.	

‡ Mean of 21 days.

§ Mean of 29 days.

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal.	Bankura	298	29·736?	?	29·996?	29·822	30th	29·653	3rd	·169	70·3	85·0	?	63·9	?	74·5	?	21·1	88·6	11th	55·8	27th	32·8
	Raniganj	334	29·723	?	30·020	29·807	30th	29·645	3rd	·162	69·4	85 2	?	63·2	?	74·2	?	22·0	89·3	11th	55·7	27th	33·6
	Burdwan	99	29·957	+·027	30·007	30·047	20th	29·879	3rd	·168	70·4	85·2	+2·5	65·7	+1·6	75·4	+2·1	19·5	88·2	4 days.	57·9	23rd	30·3
	Naya Dumka	489	29·556†	?	30·022†	29·647	30th	29·479	1st	·168	70·0	83·3	?	62·5	?	72·9	?	20·8	86·1	11th	55·0	23rd	31·1
	Berhampore	67	29·986	?	30·003	30·078	20th	29·896	3rd	·182	70·4	84·3	+2·5	65·3	+1·2	74·9	+1·9	19·0	87·7	14th	57·2	27th	30·5
	Rampur Boalia.	70	29·976?	?	29·998?	30·077	20th	29·899	3rd	·178	71·9	83·8	?	64·4	?	74·1	?	19·4	87·6	14th	58·1	27th	29·5
	Malda	72	?	?	?	?	?	?	?	?	70·5	84·6	?	61·8	?	73·2	?	22·8	88·6	14th	53·9	27th & 28th.	34·7
	Bogra	61	29·976?	+·035?	29·991?	30·067	20th	29·884	3rd	·183	71·3	84·0	+1·9	64·3	+2·1	74·2	+2·0	19·7	86·2	3 days	58·4	28th	27·8
North Bengal	Dinajpur	123	29·930	+·032	30·012	30·024	30th	29·843	1st	·181	69·3	83·5	+1·1	62·8	+2·5	73·1	+1·8	20·7	85·8	13th & 18th.	54·9	27th	30·9
	Rangpur	123	29·942	?	30·024	30·044	30th	29·850	3rd	·194	70·3	83·2*	?	63·3*	?	73·8*	?	19·9*	85·5	5th	55·6	27th	29·9
	Jalpaiguri	284	29·779	+·028	30·031	29·888	30th	29·695	3rd	·193	68·3	81·5	−0·2	63·2	+3·6	72·4	+1·7	18·3	84·6	5th & 13th.	57·0	27th	27·6
Orissa	Balasore	48	30·006	+·032	30·010	30·093	20th	29·918	3rd	·175	70·6	85·7	+3·0	64·0	+1·6	74·9	+2·3	21·7	89·9	12th	54·5	27th	35·4
	False Point	21	30·029	+·033	29·992	30·104	20th	29·948	3rd	·156	73·5	84·1	+2·2	66·7	+1·0	75·4	+1·6	17·4	88·5	13th	58·0	27th	30·5
	Cuttack	80	29·967	+·027	29·992	30·042	20th	29·884	3rd	·158	71·0	86·6	+1·6	67·7	+1·6	77·2	+1·6	18·9	90·2	14th	60·1	26th & 27th.	30·1
	Shortt's Island	?	30·023	?	?	30·098	25th	29·934	3rd	·164	78·6	84·3	?	74·3	?	79·3	?	10·0	88·4	12th	69·8	28th	18·6
	Puri	20	30·034	?	29·997	30·110	20th	29·939	8th	·171	74·0	86·0	?	70·5	?	78·3	?	15·5	89·7	14th	63·6	27th	26·1
V.—Gangetic Plain and Chota Nagpur.		...	...	+·021	...	...	...	...	...	...	...	84·7	+3·3	59·5	+2·5	72·1	+2·9	25·2	...	...	...	...	36·8
Chota Nagpur	Hazaribagh	2,007	28·035	?	30·014	28·114	30th	27·962	1st	·152	67·4	80·2	+3·5	60·5	+2·8	70·4	+3·2	19·7	84 2	14th	53·7	26th	30·5
	Ranchi	2,128	27·882	+·021	30·004	27·967	20th	27·806	1st	·161	68·1	80·3	+3·9	59·0	+3·0	69·7	+3·5	21·3	84·4	14th	52·0	24th	32·4
	Daltonganj	730?	29·304	?	30·019	29·400	30th	29·206	1st	·194	66·9	84·6	?	54·9	?	69·7	?	29·7	90·3	11th	48·0	24th & 27th.	42·3
	Chaibassa	760	29·277	+·034	30·015	29·359	30th	29·202	3rd	·157	67·8	85·9	+3·4	61·0	+1·0	73·5	+2·2	24·9	89·6	3 days	53·1	27th	36·5
Bihar (South)	Gaya	375	29·686	+·028	30·031	29·804	30th	29·588	1st	·216	68·0	86·9	+4·5	62·0	+2·9	74·5	+3·7	24·9	90·0	11th & 16th.	54·6	26th	35·4
	Dehri	351	29·697	?	30·017	29·806	30th	29·600	10th	·206	68·6	86·7	?	?	?	?	?	?	91·0	14th	?	?	?
	Patna	183	29·878	+·015	30·021	30·005	30th	29·773	3rd	·232	70·8	83·8	+2·4	63·1	+3·2	73·5	+2·8	20·7	87·5	14th	55·3	27th	32·2
	Arrah	190	29·870	?	30·020	29·988	30th	29·768	10th	·220	68·4	86·4	?	60·4	?	73·4	?	26·0	89·4	11th & 14th.	51·7	26th	37·7
	Buxar	239	29·814	?	30·017	29·937	30th	29·714	1st	·223	70·9	85·8	?	61·6	?	73·7	?	24·2	88·5	4 days	53·9	28th	34·6
Bihar (North)	Purnea	125	29·936	+·035	30·020	30·042	30th	29·852	1st	·190	66·5	84·1	+2·2	61·1	+2·3	72·7	+2·3	23·0	87·0	6th	52·5	26th	34·5
	Bhagalpur	160	29·891	?	30·009	30·003	30th	29·805	1st	·198	70·8	85·1	?	61·5	?	73·3	?	23·6	89·0	11th	52·8	22nd	36·2
	Darbhanga	166	29·892	+·022	30·019	30·012	30th	29·796	1st	·216	68·5	82·7	+1·9	63·8	+1·8	73·3	+1·9	18·9	85·7	5th	56·7	27th	29·0
	Muzaffarpur	178	29·880	?	30·020	29·998	30th	29·784	1st	·214	68·2	82·9	?	60·9	?	71·9	?	22·0	86·2	6th	51·8	27th	34·4
	Motihari	224	29·835	?	30·026	29·959	30th	29·740	1st	·219	67·9	83·3	?	58·7	?	71·0	?	24·6	87·2	14th	49·4	21st	37·8
	Chapra	181	29·873	?	30·015	29·998	30th	29·737	3rd	·261	68·1	84·7	?	60·8	?	72·8	?	23·9	88·7	14th	53·4	27th	35·3
N.-W. P. (Eastern Districts).	Benares	267	29·784	+·014	30·019	29·896	30th	29·683	10th	·213	65·6	85·6	+3·7	56·7	+1·2	71·2	+2·5	28·9	89·2	4 days	50·5	23rd & 25th.	38·7
	Allahabad	309	29·758	+·008	30·015	29·842	30th	29·638	1st	·204	67·9	87·8	+5·7	57·6	+3·2	72·7	+4·5	30·2	92·6	3 days	50·4	23rd	42·2
N.-W. P. (East Submontane).	Gorakhpur	256	29·789	+·020	30·013	29·920	30th	29·676	1st	·244	68·4	83·6	+2·0	60·1	+2·6	71·9	+2·3	23·5	87·4	14th	52·3	24th	35·1
Oudh (South)	Lucknow	368	29·675	+·010	30·020	29·797	30th	29·575	1st	·222	66·0	85·8	+2·9	55·4	+3·6	70·6	+3·3	30·4	89·8	5 days	48·2	23rd & 25th.	41·6
Oudh (North)	Bahraich	403	29·637	?	30·018	29·767	30th	29·535	1st	·232	67·3	83·7	?	59·0	?	71·4	?	24·7	86·9	13th & 14th.	51·0	22nd	35·9
N.-W. Provinces (Central).	Cawnpore	416	29·627	?	30·016	29·739	30th	29·528	1st	·211	67·3	87·3	?	55·3	?	71·3	?	32·0	93·3	10th & 11th,	49·0	5 days	44·3
	Mainpuri	516	29·522	?	30·023	29·633	30th	29·421	1st	·212	63·4	87·2	?	55·6	?	71·4	?	31·6	92·8	10th & 11th.	46·6	25th	46·2

† Mean of 29 days.

* Mean of 25 days.

I—*continued.*

in India, Burma, etc., in November 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 30th November 1895.	Normal rainfall for period from 1st October to 30th November.	Variation from normal of period from 1st October to 30th November.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
25	1	...	...	...	...	...	4	...	0·7	?	?	75	·560	1·2	0	0·75	−0·75	0	0·25	− 0·25	2·98	4·40	− 1·42	0	Bankura .	Central Bengal.
8	5	2	2	...	...	...	4	9	1·2	?	?	80	·580	1·0	0	0·60	−0·60	0	0·20	− 0·20	3·04	3·61	− 0·57	0	Raniganj.	
16	8	2	1	...	...	2	1	...	1·0	1·9	−47	79	·594	0·8	0	0·82	−0·82	0	0·96	− 0·96	3·70	4·11	− 0·41	0	Burdwan.	
11	2	3	3	1	2	1	2	5	1·0	?	?	77	·576	0·3	0	0·42	−0·42	0	0·18	− 0·18	2·14	4·26	− 2·12	0	Naya Dumka.	
2	6	6	5	1	...	1	1	8	1·6	1·7	−6	86	·646	0·7	0	0·55	−0·55	0	0·69	− 0·69	1·73	4·59	− 2·86		Berhampore.	
13	11	4	1	...	1	...	...	...	2·5	?	?	83	·653	0·6	0	0·45	−0·45	0·04	0·14	− 0·10	1·18	4·58	− 3·40	0·04	Rampur Boalia.	
...	...	4	...	2	...	6	...	18	2·0†	?	?	82	·617	0·7	0	0·35	−0·35	0	0·16	− 0·16	0·48	4·54	− 4·06	0	Malda.	
8	5	13	...	3	...	...	1	...	1·2	?	?	86	·662	0·1‡	0	0·50	−0·50	0	0·47	− 0·47	0·47	3·74	− 3·27	0	Bogra.	
...	5	17	2	...	1	...	1	4	1·3	?	?	86	·616	0·8	0	0·30	−0·30	0	0·08	− 0·08	0·57	4·80	− 4·23	0	Dinajpur .	North Bengal.
3	4	20	2	...	1	...	...	...	1·2	?	?	89	·656	2·1	0	0·10	−0·10	0	0·10	− 0·10	1·06	5·42	− 4·36	0	Rangpur.	
6	6	7	6	2	...	...	...	3	1·6	?	?	86	·597	?	2	0·15	+1·85	0·66	0·15	+ 0·51	1·91	5·57	− 3·66	0·33	Jalpaiguri.	
3	10	...	...	...	...	8	2	7	2·3	?	?	82	·623	0·4	1	1·70	−0·70	0·20	1·25	− 1·05	4·24	7·74	− 3·50	0·20	Balasore .	Orissa.
1	20	1	1	...	...	...	1	6	4·1	6·5	−37	84	·705	2·4†	1	3·00	−2·00	0·47	3·57	− 3·10	12·02	11·63	+ 0·39	0·38	False Point.	
17	1	3	...	...	...	2	7	...	1·3	1·7	−24	82	·631	1·1†	1	2·45	−1·45	1·66	1·90	+0·24	4·59	3·80	+ 0·79	1·63	Cuttack.	
...	12	3	...	...	...	1	7	7	?	?	?	71	·695	1·0	2	?	?	1·68	?	?	15·25	?	?	1·41	Shortt's Island	
5	22	2	...	...	...	...	...	1	7·5	?	?	80	·680	0·5	0	2·95	−2·95	0·07	2·30	− 2·23	11·03	11·11	− 0·08	0·07	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	0·19	−0·18	...	...	...	...	V.—Gangetic Plain and Chota Nagpur.	
12	...	...	2	4	8	4	...	...	4·0	4·3	−7	65	·440	1·2	0	1·09	−1·09	0	0·33	− 0·33	4·50	3·23	+ 1·27	0	Hazaribagh.	Chota Nagpur.
9	2	3	2	2	4	5	2	1	3·3	?	?	62	·426	0	0	0·85	− 0·85	0	0·45	− 0·45	2·49	3·24	− 0·75	0	Ranchi.	
...	...	...	2	5	19	1	2	1	0·8	?	?	70	·460	0·8	0	?	?	0	?	?	0·88	?	?	0	Daltonganj.	
7	...	...	...	...	1	7	10	5	0·8	?	?	78	·540	0·7	0	1·00	−1·00	0	0·48	− 0·48	3·23	3·21	+ 0·02	0	Chalbassa.	
24	...	...	...	...	5	1	...	...	1·6	1·2	+33	62	·432	0·5	0	0·91	−0·91	0	0·43	− 0·43	0·15	2·26	− 2·11	0	Gaya .	Bihar (South).
...	...	...	1	2	11	16	...	...	3·2	?	?	70	·493	0·7	0	0·57	−0·57	0	0·25	− 0·25	0·32	3·14	− 2·82	0	Dehri.	
5	...	3	5	1	5	7	4	...	1·7	1·5	+13	72	·542	0·3	0	0·45	−0·45	0	0·18	− 0·18	1·07	2·95	− 1·88	0	Patna.	
...	3	1	2	2	3	4	8	7	0·8	?	?	79	·553	0·1	0	0·40	−0·40	0	0·15	− 0·15	1·06	3·43	− 2·37	0	Arrah.	
10	...	2	7	1	2	5	2	1	1·2	?	?	65	·500	0·4	0	0·35	−0·35	0	0·17	− 0·17	0·60	3·52	− 2·92	0	Buxar.	
9	...	5	9	1	1	3	1	1	1·3	1·2	+8	87	·574	0·7	1	0·27	+0·73	0·28	0·10	+ 0·18	0·41	3·56	− 3·15	0·20	Purnea .	Bihar (North).
7	1	4	1	5	5	5	1	1	1·5	?	?	76	·582	0·6	0	0·30	−0·30	0	0·27	− 0·27	0·34	3·47	− 3·13	0	Bhagalpur.	
11	2	3	5	4	...	1	2	2	0·9	1·8	−50	84	·591	0·4	0	0·27	−0·27	0	0·07	− 0·07	0·30	3·30	− 3·00	0	Darbhanga.	
16	...	1	6	5	...	1	1	...	0·6	?	?	86	·599	0·3	0	0·42	−0·42	0	0·09	− 0·09	0·15	3·56	− 3·41	0	Muzaffarpur.	
5	...	3	5	3	...	8	4	2	2·6	?	?	89	·607	0·5	0	0·17	−0·17	0	0·02	− 0·02	0·23	3·51	− 3·28	0	Motihari.	
6	...	3	4	6	2	4	3	2	1·2	?	?	81	·564	0·2	0	0·40	−0·40	0	0·29	− 0·29	0·40	3·89	− 3·49	0	Chapra.	
25	...	...	1	...	1	2	1	...	1·2	2·1	−43	82	·521	0·5	0	0·82	−0·82	0	0·36	− 0·36	0	2·66	− 2·66	0	Benares .	N.-W. P. (Eastern Districts).
15	...	1	3	1	...	2	5	3	1·7	1·3	+31	68	·467	0·7	0	0·45	−0·45	0	0·17	− 0·17	0	2·00	− 2·00	0	Allahabad.	
4	5	...	...	4	6	3	1	7	1·0	0·9	+11	77	·537	0·8	0	0·18	−0·18	0·02	0·10	− 0·08	0·23	3·87	− 3·64	0·02	Gorakhpur .	N.-W. P. (East Submontane).
11	3	2	1	2	1	5	3	2	0·1§	1·4	−93	79	·510	1·0	0	0·09	−0·09	0	0·05	− 0·05	0·07	0·88	− 0·81	0	Lucknow .	Oudh (South).
21	...	1	2	4	...	...	...	2	0·6	?	?	79	·539	0·3	0	?	?	0	0	0	0·02	1·69	− 1·67	0	Bahraich .	Oudh (North).
11	...	1	3	2	2	2	7	2	1·9	?	?	68	·453	0·4	0	0	0	0	0·02	− 0·02	0	1·10	− 1·10	0	Cawnpore .	N.-W. Provinces (Central).
30	...	...	...	...	...	...	...	...	0·1	?	?	64	·371	1·1	0	?	?	0	0	0	0	0·82	− 0·82	0	Mainpuri.	

§ Mean of 20 days. ‡ Mean of 27 days.

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
VI.—Upper Sub-Himalayas		...	...	+·014	..	...	...	...	...	...	..	82·9	+2·9	54·3	+4·8	68·6	+3·9	28·7	...	...	...	...	44·2
N.-W. Provinces (Submontane).	Bareilly .	568	29·463	+·020	30·024	29·571	30th	29·356	10th	·215	62·6	83·1	+2·2	55·2	+3·0	69·2	+2·6	27·9	88·3	13th	46·7	23rd	41·6
	Dehra Dun .	2,233	27·782	+·007	30·049	27·880	30th	27·682	10th	·198	59·9	77·4	+3·2	54·7	+3·3	66·1	+3·3	22·7	83·5	13th	48·5	23rd & 29th,	35·0
	Roorkee .	887	29·133	+·012	30·036	29·249	30th	29·016	10th	·233	59·4	82·5	+2·1	53·6	+4·4	68·0	+3·3	28·9	88·8	13th	46·2	22nd	42·6
	Meerut .	738	29·281	+·009	30·027	29·397	30th	29·180	10th	·217	59·4	84·1	+3·1	54·9	+5·3	69·5	+4·2	29·2	91·0	13th	47·5	24th	43·5
Punjab (Central)	Delhi . .	718	29·307	+·009	30·022	29·422	30th	29·202	10th	·220	65·0	86·9	+3·9	58·7	+3·3	72·8	+3·6	28·2	93·0	13th	48·4	24th	44·6
	Lahore .	702	29·319	+·003	30·033	29·435	30th	29·230	1st	·205	59·2	84·2	+2·9	53·7	+7·5	69·0	+5·2	30·5	92·3	5th	45·2	5 days	47·1
Punjab (Submontane).	Umballa .	962?	29·106	?	30·031	29·211	30th	29·000	10th	·211	64·0	84·0	?	53·9	?	69·0	?	30·1	91·0	11th	44·0	22nd & 23rd.	47·0
	Patiala .	?	29·204	?	?	29·307	30th	29·102	1st	·205	62·4	83·8	?	54·6	?	69·3	?	29·0	90·4	3rd	45·0	23rd	45·4
	Ludhiana .	812	29·213	+·017	30·038	29·320	30th	29·118	10th	·202	60·5	83·4	+3·0	55·1	+5·1	69·3	+4·1	28·3	90·6	3rd	45·6	23rd	45·0
Punjab (North) .	Sialkot .	830	29·200	+·029	30·047	29·301	30th	29·122	1st & 10th.	·179	60·2	82·8	+2·2	54·0	+5·5	68·4	+3·9	28·8	91·6	4th	46·1	3 days	45·5
	Rawalpindi	1,643	28·353	+·012	30·064	28·450	19th	28·267	14th	·183	55·2	79·9	+3·2	48·2	+6·1	64·1	+4·7	31·7	88·0	7th	39·4	30th	48·6
VII.—Indus Valley and N.-W. Rajputana.		...	...	+·010	...	...	...	...	...	...	...	86·6	+3·0	55·7	+4·6	71·2	+3·6	30·9	...	...	...	...	50·3
Punjab (West) .	Peshawar .	1,110	28·951	+·008	30·061	29·068	26th	28·868	14th	·200	56·2	78·9	+1·9	49·6	+5·5	64·3	+3·7	29·3	87·6	6th	40·4	22nd	47·2
	Mardan .	?			Not recorded.						*51·3	78·6*	?	44·8*	?	61·7*	?	33·8*	88·0	5th & 6th.	36·0	23rd	52·0
	Khushab .	612	29·432	?	30·050	29·532	21st	29·338	1st	·194	60·8	84·1	?	52·8	?	68·5	?	31·3	93·3	4th	43·0	30th	50·3
	Montgomery	558	29·476	?	30·030	29·586	21st	29·396	1st	·190	63·6	86·3	?	53·5	?	69·9	?	32·8	96·3	8th	44·0	22nd & 23rd.	52·3
	D. I. Khan .	594	29·463?	+·003	30·051?	29·602?	26th	29·340	1st	·262	56·6	83·2	+1·3	49·9	+3·7	66·6	+2·5	33·3	92·1	5th & 6th.	36·9	19th	55·2
	Mooltan .	420	29·633	+·003	30·047	29·751	21st	29·516	14th	·235	61·6	86·5	+2·4	54·8	+3·2	70·7	+2·8	31·7	94·8	7th	43·7	18th	51·1
	Sirsa . .	662	29·361	+·006	30·025	29·464	30th	29·290	10th	·174	61·0	88·4	+4·1	54·4	+6·4	71·5	+5·3	34·0	96·6	9th	43·2	19th	53·4
Sind and Cutch .	Jacobabad .	186	29·879	+·018	30·036	30·006	19th	29·770	1st	·236	65·0	87·8	+1·9	55·7	+6·3	71·8	+4·1	32·1	98·0	7th	42·5	18th & 20th.	55·5
	Hyderabad .	96	29·958	+·011	30·011	30·071	21st	29·852	1st	·219	70·5	90·1	+2·9	62·7	+3·5	76·4	+3·2	27·4	100·7	4th	54·0	28th	46·7
	Kurrachee .	12	30·054	?	30·019	30·135	21st	29·906	1st	·229	72·2	87·3	?	65·0	?	76·2	?	22·3	95·3	4th	54·9	20th	40·4
	Bhuj . .	395	29·646	+·018	30·005	29·687	28th	29·561	1st	·126	73·4	92·6	+4·3	65·3	+3·3	78·9	+3·8	27·3	99·0	6th	60·4	20th	38·6
Rajputana (West)	Bickaneer .	746	29·260	?	30·031	29·370	19th	29·172	1st	·198	67·0	88·9	+5·0	59·6	?	74·1	?	29·3	98·1	8th	45·1	23rd	53·0
	Pachpadra .	380	29·613?	?	29·970?	29·768	21st	29·424	2nd	·344	63·6	93·6	?	56·1	?	74·9	?	37·5	102·0	6th	44·4	23rd	57·6
VIII.—East Rajputana, Central India and Gujarat.		...	...	+·022	...	...	...	...	...	...	...	90·3	+5·1	60·7	+4·6	75·5	+4·9	29·6	...	..	...	...	40·6
Rajputana (East)	Jeypore .	1,431	28·614	+·014	30·051	28·696	20th	28·542	1st	·154	68·6	88·9	+4·3	59·3	+6·3	74·1	+5·3	29·6	94·5	10th	54·1	29th	40·4
	Sambhar .	1,254	28·782	+·013	30·050	28·852	20th	28·700	1st	·152	64·0	88·4	+5·9	56·5	+4·6	72·5	+5·3	31·9	94·5	5th	48·4	20th & 30th.	46·1
	Ajmere .	1,611	28·446	?	30·093	28·518	30th	28·376	1st	·142	61·7	88·4	+5·3	55·3	+5·9	71·9	+5·6	33·1	93·9	5th	46·3	23rd	47·6
	Deesa . .	466	29·578	+·018	30·014	29·622	30th	29·507	1st	·115	72·2	96·1	+5·7	60·0	+3·2	78·1	+4·5	36·1	102·9	6th	52·6	23rd	50·3
Kathiawar .	Rajkot .	429	29·614	+·028	30·003	29·673	12th	29·534	1st	·139	77·1	93·2	+3·4	63·3	+4·9?	78·3	+4·2?	29·9	98·4	6th	57·9	3 days	40·5
	Veraval .	?	30·020	?	29·979	30·070	13th	29·928	1st	·142	75·6	88·8	?	68·4*	?	78·7*	?	20·4*	93·6	21st	64·8	14th	28·8
Central India .	Nowgong .	757	29·274	?	30·022	29·347	30th	29·201	1st	·146	64·6	87·4	+5·4	57·1	+5·2	72·3	+5·3	30·3	93·0	11th	51·5	26th & 27th,	41·5
	Indore .	1,823	28·219	+·032	30·038	28·263	21st	28·169	1st	·094	69·0	87·4	+5·6	56·6	+2·8	72·0	+4·2	30·8	90·7	11th & 12th.	53·1	24th & 26th.	37·6
	Neemuch .	1,630	28·426	+·034	30·049	28·475	30th	28·373	1st	·102	72·3	89·7	+6·3	58·5	+4·3	74·1	+5·3	31·2	94·3	10th	52·8	24th	41·5
Gujarat . .	Surat . .	36	30·012	+·037	29·992	30·066	13th	29·922	1st	·144	74·1	93·6	+3·7	63·8	+1·5?	78·7	+2·6?	29·8	96·7	6th	58·5	24th	38·2
	Ahmedabad†	176	†29·885	?	†30·015	29·925	16th	29·805	1st	·120	74·7	93·3‡	?	66·5‡	?	80·0‡	?	26·8‡	96·7	6th & 7th.	61·6	30th	35·1
N.-W. P. (West) .	Agra . .	555	29·489	+·003	30·028	29·593	30th	29·399	10th	·194	67·3	87·8	+3·8	59·7	+4·8	73·8	+4·3	28·1	93·5	11th	52·4	25th	41·1
	Jhansi .	858	29·190	+·016	30·032	29·276	30th	29·109	1st	·167	71·4	90·4	+6·3	64·2	+7·5	77·3	+6·9	26·2	96·1	10th	56·9	26th	29·2

* Mean of 29 days. † Mean of 28 days. ‡ Mean of 27 days.

I—*continued.*

in India, Burma, etc., in November 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 30th November 1895.	Normal rainfall for period, from 1st October to 30th November.	Variation from normal of period, from 1st Oct. to 30th Nov., 1895.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	0·16	−0·11	...	...	...	...	VI.—Upper Sub-Himalayas.	
18	...	3	2	5	...	1	...	1	0·6	1·7	− 65	78	·453	0·7	0	0·27	− 0·27	0	0·13	− 0·13	0·06	1·28	− 1·22	0	Bareilly	N.-W. Provinces (Submontane).
30	...	...	...	...	...	...	...	...	0·9	1·7	− 47	69	·360	2·3	1	0·60	+0·40	0·14	0·37	− 0·23	0·31	1·36	− 1·05	0·14	Dehra Dun.	
22	...	...	4	2	...	...	...	2	1·2	1·1	+ 9	77	·398	1·2	1	0·64	+ 0·36	0·12	0·16	− 0·04	0·33	0·59	− 0·26	0·12	Roorkee.	
25	...	...	...	...	...	2	3	...	0·7	1·3	− 46	62	·370	1·1	0	0·36	−0·36	0	0·08	− 0·08	0	0·50	− 0·50	0	Meerut.	
11	...	...	1	3	...	..	14	1	2·4	2·3	+ 4	47	·289	2·1	0	0·18	− 0·18	0·02	0·07	− 0·05	0·04	0·15	− 0·11	0·02	Delhi .	Punjab (Central).
15	4	...	3	2	3	...	3	...	1·6	1·4	+ 14	64	·317	2·4	0	0·27	−0·27	0	0·10	− 0·10	0	0·36	− 0·36	0	Lahore.	
24	...	...	2	2	...	..	...	2	0·9	?	?	69	·426	1·3	0	?	?	0	0·18	− 0·18	0·02	0·49	− 0·47	0	Umballa .	Punjab (Submontane).
17	...	5	1	...	2	3	1	...	1·5	?	?	73§	·419§	1·2	0	?	?	0	?	?	0·02	?	?	0	Patiala.	
13	...	1	...	4	4	4	3	1	1·7	0·8	+113	64	·342	2·7	0	0·36	−0·36	0	0·09	− 0·09	0	0·49	− 0·49	0	Ludhiana.	
24	5	...	1	...	...	...	...	...	1·5	1·0	+ 50	61	·321	2·3	1	0·18	+0·82	0·17	0·09	+ 0·08	0·37	0·40	− 0·03	0·17	Sialkot .	Punjab (North).
13	2	2	...	...	...	1	7	5	2·7	1·1	+145	56	·248	3·1	0	0·36	−0·36	0·04	0·35	− 0·31	0·09	0·90	− 0·81	0·03	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	0·14	−0·11	...	...	...	...	VII.—Indus Valley and N.-W. Rajputana.	
18	...	...	...	1	4	6	1	...	2·6	2·1	+ 24	63	·288	3·6	1	0·64	+0·36	0·16	0·57	− 0·41	0·23	0·68	− 0·45	0·11	Peshawar	Punjab (West).
							Not	record	ed.						0	?	?	0·03	?	?	0·29	?	?	0·03	Mardan.	
11	2	4	3	1	1	6	1	1	2·5	?	?	45	·241	2·8	0	0·40	−0·40	0	0·33	− 0·33	0	0·40	− 0·40	0	Khushab.	
15	2	1	3	4	1	...	...	4	3·4	?	?	47	·283	2·6	0	0·20	−0·20	0	0·07	− 0·07	0	0 13	− 0·13	0	Montgomery.	
27	...	1	1	...	...	...	...	1	0·8	0·7	+ 14	63	·300	1·6	1	0·45	+ 0·55	0·16	0·21	− 0·05	0·16	0·26	− 0·10	0·12	D. I. Khan.	
14	1	11	...	3	1	...	...	...	1·2	1·5	− 20	61	·349	2·2	0	0·09	−0·09	0	0·10	− 0·10	0	0·10	− 0·10	0	Mooltan.	
12	1	2	2	4	1	1	2	5	3·5	2·0	+ 75	47	·253	2·2	0	0·09	−0·09	0	0·01	− 0·01	0	0·15	− 0·15	0	Sirsa.	
17	5	2	...	2	...	...	...	4	2·3	1·6	+ 44	53	·338	4·1	0	0	0	0·02	0·16	− 0·14	0·02	0·16	− 0·14	0·02	Jacobabad .	Sind and Cutch.
7	8	2	...	...	4	5	...	4	8·7	6·1	+ 43	50	·394	3·1	0	0·20	−0·20	0	0·06	− 0·06	0	0·06	− 0·06	0	Hyderabad.	
...	3	8	11	1	...	2	4	1	5·3	7·9	− 33	64	·537	2·7	0	0·09	−0·09	0	0·09	− 0·09	0	0·09	− 0·09	0	Kurrachee.	
8	2	1	2	...	1	...	9	7	6·1	4·7	+ 30	64	·530	0	0	?	?	0	0·02	− 0·02	0·14	0·37	− 0·23	0	Bhuj.	
1	6	2	..	2	3	3	6	7	3·5	2·4	+ 46	39	·269	2·6	0	?	?	0	0·08	− 0·08	0	0·18	− 0·18	0	Bickaneer .	Rajputana (West).
22	2	1	1	2	...	...	...	2	4·2	2·1	+100	50	·299	3·1	0	?	?	0	0	0	0·56	0·05	+ 0·51	0	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0	0·22	−0·22	...	...	...	...	VIII.—East Rajputana, Central India and Gujarat.	
12	1	...	4	2	2	4	2	3	3·1	3·0	+ 3	48	·343	2·4	0	0·20	−0·20	0·01	0·24	− 0·23	0·01	0·54	− 0·53	0·01	Jeypore .	Rajputana (East).
25	3	1	...	1	...	...	...	...	1·7	3·4	− 50	50	·300	2·2	0	0·30	−0·30	0	0·19	− 0·19	0	0·36	− 0·36	0	Sambhar.	
23	1	2	...	2	...	1	1	...	2·0	1·4	+ 43	67	·369	1·9	0	0·27	−0·27	0	0·19	− 0·19	0·01	0·50	− 0·49	0	Ajmere.	
...	6	9	2	1	2	...	5	5	6·8*	7·5	− 9	36	·282	0·3	0	0·18	−0·18	0	0·16	− 0·16	0·29	0·51	− 0·22	0	Deesa.	
3	4	17	3	...	...	...	1	2	3·7	4·9	− 24	61	·574	0·5	0	0·18	−0·18	0	0·36	− 0·36	0·95	0·81	+ 0·14	0	Rajkot .	Kathiawar.
4	15	10	...	...	...	...	...	1	5·3	?	?	63	·557	1·4	0	?	?	0	?	?	2 83	?	?	0	Veraval.	
13	1	4	2	...	...	7	3	...	1·3	1·0	+ 30	67	·411	1·2	0	0·55	−0·55	0	0·25	− 0·25	0·02	1·42	− 1·40	0	Nowgong .	Central India.
15	7	1	...	...	3	...	3	1	1·2	2·0	− 40	61	·431	0·6	0	0·73	−0·73	0	0·45	− 0·45	1·52	1·90	− 0·38	0	Indore.	
2	6	12	3	3	2	...	1	1	4·6	7·5	− 39	41	·322	0·9	0	0·18	−0·18	0	0·21	− 0·21	0·35	0·70	− 0·35	0	Neemuch.	
...	3	2	11	1	2	1	2	8	?	5·9	?	65	·557	0·7	0	0·55	−0·55	0	0·17	− 0·17	1·42	1·70	− 0·28	0	Surat .	Gujarat.
2	5	9	7	2	...	1	...	...	3·0	?	?	51	·440	1·1	0	?	?	0	?	?	2·91	?	?	0	Ahmedabad.	
11	...	2	...	1	...	7	...	9	2·4	2·5	− 4	56	·372	1·1	0	0·18	−0·18	0	0·05	− 0·05	0	0·52	− 0·52	0	Agra .	N.-W. P. (West).
13	...	2	...	...	1	7	5	2	1·7	1·8	− 6	46	·350	0·7	0	0·36	−0·36	0	0·12	− 0·12	0·05	0·82	− 0·77	0	Jhansi .	

§ Mean of 26 days.

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
IX.—Deccan	...	...	...	+·038	...	...	...	...	...	...	...	87·2	+4·5	60·6	+1·9	73·9	+3·2	26·6	...	...	...	...	36·6
Bombay (Deccan)	Belgaum	2,524	27·495	+·055	29·977	27·555	12th	27·436	1st	·119	70·7	83·1	+1·5	61·6	0	72·4	+0·8	21·5	85·7	14th	56·9	18th & 29th.	28·8
	Sholapur	1,590	28·453	+·057	30·019	28·493	16th	28·386	1st	·107	73·3	87·4	+0·5	61·8	−0·4	74·6	+0·1	25·6	91·2	8th	56·6	28th	34·6
	Poona	1,840	28·204	+·045	30·033	28·254	12th	28·120	1st	·134	68·7	86·9	+1·7	59·7	0	73·3	+0·9	27·2	91·5	8th	50·5	27th	41·0
	Bijapur	1,946	28·089	?	30·007	28·131	13th & 16th.	27·987	1st	·144	72·0	84·7	?	59·9	?	72·3	?	24·8	87·8	8th	53·1	27th	34·7
Khandesh	Malegaon	1,430	28·616	+·036	30·031	28·655	12th	28·548	1st	·107	71·4	90·1	+4·4	59·3	+2·5	74·7	+3·5	30·8	93·9	7th	53·5	28th & 29th.	40·4
	Ahmednagar	2,152	27·902	?	30·036	27·954	12th	27·831	1st	·123	69·9	85·8	?	54·8	?	70·3	?	31·0	88·9	4 days	46·4	27th	42·5
Berar	Akola	930	29·113	+·031	30·021	29·157	25th	29·045	1st	·112	70·1	91·0	+5·1	58·9	+2·0	75·0	+3·6	32·1	95·9	7th	53·1	27th & 29th.	42·8
	Amraoti	1,215	28·835	+·043	30·031	28·881	21st & 25th	28·778	1st	·103	73·7	90·4	+5·2	63·9	+3·2	77·2	+4·2	26·5	95·2	5th	58·3	28th	36·4
Central Provinces (West).	Khandwa	1,044	28·999	+·037	30·032	29·044	25th	28·937	1st	·107	69·4	92·3	+7·0	58·5	+2·8	75·4	+4·9	33·8	95·7	4 days	53·6	29th	42·1
	Hoshangabad	1,000	29·041	+·024	30·039	29·094	21st	28·994	1st	·100	66·3	88·4	+5·0	58·8	+2·1	73·6	+3·6	29·6	91·4	4 days	53·8	27th	37·6
	Nagpur	1,025	29·023	+·039	30·034	29·077	25th	28·967	1st	·110	70·6	89·1	+5·2	61·9	+2·2	75·5	+3·7	27·2	93·3	5th & 12th.	54·7	29th	38·6
Central Provinces (Central).	Chanda	634	29·421	+·043	30·021	29·458	20th & 21st	29·346	1st	·112	69·9	87·4	+2·9	59·5	+0·4	73·5	+1·7	27·9	90·5	13th & 14th.	52·6	28th	37·9
	Seoni	2,033	28·018	?	30·038	28·077	20th	27·960	1	·117	69·6	86·3	+5·7	57·5	+2·3	71·9	+4·0	28·8	91·2	11th & 12th.	50·9	27th	40·3
	Jubbulpore	1,327	28·695	?	30·033	28·758	20th	28·627	1st	·131	62·8	87·4	+6·6	54·0	?	70·7	?	33·4	92·0	11th	47·9	27th	44·1
	Saugor	1,762	28·271	+·023	30·030	28·330	20th	28·214	1st	·116	69·3	88·4	+7·7	61·1	+5·1	74·8	+6·5	27·3	91·8	11th & 12th.	55·7	27th	36·1
Central Provinces (East).	Raipur	970	29·076	+·034	30·024	29·148	20th	29·011	1st	·137	71·6	88·0	+5·9	62·6	+2·4	75·3	+4·2	25·4	92·3	12th & 13th.	58·3	30th	34·0
	Sutna	1,040	28·989	+·004	30·029	29·061	20th	28·914	1st	·147	66·9	86·4	+6·3	56·7	+3·9	71·6	+5·1	29·7	92·0	11th	49·3	27th	42·7
	Sambalpur	463	29·588	+·036	30·015	29·659	20th	29·516	1st	·143	71·4	87·5	+4·3	61·4	?	74·4	?	26·1	91·5	12th	54·2	26th	37·3
Hyderabad (North).	Aurangabad	?	28·194	?	?	28·224	25th	28·085	1st	·139	75·9	89·4	?	60·1	?	74·7	?	29·3	93·8	6th	53·0	28th	40·8
	Indur	?	?	?	?	?	?	?	?	?	71·4	85·3	?	60·3	?	72·8	?	25·0	88·8	5th & 7th.	52·2	26th	36·6
	Bidar	?	27·863	?	?	27·906	12th & 16th.	27·803	1 st	·103	71·3	82·1	?	64·8	?	73·5	?	17·3	85·1	8th & 12th.	59·0	27th	26·1
Hyderabad (South).	Gulbarga	1,502	28·534	?	30·012	28·575	12th & 13th.	28·458	1st	·117	72·2	86·3	?	62·6	?	74·5	?	23·7	90·2	8th	57·1	27th	33·1
	Raichur	1,378	28·651	?	29·995	28·711	16th	28·571	1st	·140	73·8	86·5	?	67·3	?	76·9	?	19·2	90·1	8th	62·7	27th	27·4
	Hyderabad (Deccan).	1,690	28·351	+·062	30·026	28·404	16th	28·285	1st	·119	70·1	84·9	+2·0	61·9	−0·5	73·4	+0·9	23·0	87·9	3 days	54·3	26th	33·6
	Secunderabad	1,787	28·252	?	30·030	28·302	16th	28·198	1st	·104	68·0	84·8	?	61·6	?	73·2	?	23·2	87·1	3 days	54·6	26th	32·5
	Khamamet	373	29·674	?	30·001	29·737	15th	29·603	1st	·134	73·4	87·7	?	65·7	?	76·7	?	22·0	90·0	12th	58·2	27th	31·8
X.—West Coast	...	...	...	+·048	...	...	...	...	...	...	...	88·3	+2·1	74·0	+1·3	81·2	+1·7	14·4	...	...	...	...	22·6
Konkan	Bombay	37	30·001	+·048	29·978	30·047	16th	29·922	1st	·125	74·5	88·3	+1·8	75·2	+2·1	81·8	+2·0	13·1	91·0	20th	72·5	3 days	18·5
	Ratnagiri	110	29·906	+·063	29·955	29·960	16th	29·836	1st	·124	79·6	92·0	+1·6	71·7	+1·8	81·9	+1·7	20·3	96·9	13th	65·4	29th	31·5
	Mormugao	60	29·957?	?	29·952?	30·020	16th	29·898	3rd	·122	77·0	88·0	?	74·3	?	81·2	?	13·7	91·0	13th	70·4	18th & 30th.	20·6
	Goa	199	29·810	+·055	29·948	29·872	16th	29·738	1st & 3rd.	·134	78·3	85·5	?	76·1	?	80·8	?	9·4	87·0	9 days.	72·0	19th	15·0
	Karwar	44	29·970	+·057	29·946	30·027	16th	29·910	1st	·117	74·2	89·1	+2·2	71·1	+1·6	80·1	+1·9	18·0	91·8	23rd	65·4	18th	26·4
Malabar	Cochin	11	29·979	+·035	29·917	30·039	7th & 13th.	29·902	23rd	·137	79·8	89·6	+2·7	75·4	+1·2	82·5	+1·9	14·2	93·3	28th	70·7	16th	22·6
	Calicut	27	29·966	+·038	29·923	30·042	16th	29·900	23rd	·142	79·5	88·5	+1·4	73·7	+0·6	81·1	+1·0	14·8	90·3	23rd & 28th.	69·0	16th	21·3
	Mangalore	65	29·932	+·039	29·929	29·992	16th	29·873	22nd	·119	79·4	90·2	+3·0	73·5	+0·7	81·9	+1·9	16·7	93·8	27th	69·0	16th	24·8
	Trivandrum	198	29·786	?	29·916	29·846	13th	29·707	23rd	·139	78·4	83·7	?	74·8	?	79·3	?	8·9	93·5	12th	71·5	16th	22·0
XI.—South India	...	...	...	+·054	...	...	...	...	...	...	...	85·6	+1·7	69·0	+0·5	77·3	+1·1	16·6	...	...	...	...	25·3
Madras (South)	Pamban	37	29·971	?	29·935	30·033	15th	29·918	1st	·115	80·5	84·8	?	76·2	?	80·5	?	8·6	88·8	2nd	72·7	20th	16·1
	Tinnevelly	168	29·843	?	29·942	29·908	15th	29·790	22nd	·118	79·1	89·8	?	75·1	?	82·5	?	14·7	94·7	2nd	72·4	6th	22·3
	Madura	447	29·562	?	29·950	29·623	15th	29·498	22nd	·125	78·8	88·0	+0·6	73·4	+1·0	80·7	+0·8	14·6	90·4	14th	70·0	15th	20·4

I—*continued.*

in India, Burma, etc., in November 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 30th November 1895.	Normal rainfall for period, from 1st October to 30th November.	Variation from normal of period, 1st October to 30th November.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·39	0·85	−0·58	...	...	...	...	IX.—Deccan.	
9	...	...	11	9	1	...	...	...	10·5	11·7	− 10	68	·510	1·2	1	2·73	−1·73	1·54	2·11	− 0·57	9·39	8·50	+ 0·89	1·50	Belgaum .	Bombay (Deccan).
4	1	2	9	14	...	...	...	...	8·1	7·7	+ 5	56	·468	1·3	1	1·73	−0·73	0·71	1·15	− 0·44	3·28	6·25	− 2·97	0·71	Sholapur.	
21	...	...	6	3	...	...	...	...	2·1	5·8	− 64	69	·495	1·5	2	2·64	−0·64	0·74	1·31	− 0·57	6·20	6·11	+ 0·09	0·47	Poona.	
2	...	1	13	11	1	...	1	1	2·9	?	?	68	·537	1·8	2	2·20	−0·20	1·57	?	?	4·46	?	?	1·18	Bijapur.	
5	1	1	...	...	1	1	7	14	6·0	4·0	+ 50	66	·513	1·7	0	1·75	−1·75	0	0·64	− 0·64	1·68	3·48	− 1·80	0	Malegaon .	Khandesh.
28	2	...	...	...	...	...	...	...	3·0	?	?	65	·489	1·1	1	?	?	0·91	?	?	2·32	?	?	0·91	Ahmednagar.	
6	...	7	9	4	2	2	...	...	3·0	3·4	− 12	58	·433	0·7	0	1·18	−1·18	0	0·75	− 0·75	0·76	4·25	− 3·49	0	Akola . .	Berar.
...	6	1	3	11	2	1	1	5	3·2	3·0	+ 7	51	·426	0·8	0	1·27	−1·27	0	0·62	− 0·62	0·18	3·50	− 3·32	0	Amraoti.	
19	...	3	4	3	...	...	...	1	2·2	2·6	− 15	55	·391	0·6	0	1·09	−1·09	0	0·31	− 0·31	0·60	2·04	− 1·44	0	Khandwa .	Central Provinces (West).
13	...	11	6	...	...	...	...	...	1·6	1·9	− 16	65	·419	0·6	0	0·91	−0·91	0	0·61	− 0·61	0·16	2·43	− 2·27	0	Hoshangabad.	
30	...	...	...	..	...	...	...	...	1·6	3·0	− 47	70	·524	1·1	1	1·09	−0·09	0·16	0·90	− 0·74	1·18	3·85	− 2·67	0·16	Nagpur.	
19	2	6	1	1	1	...	...	...	1·2	1·8	− 33	76	·562	0·7	0	?	?	0·08	1·12	− 1·04	3·63	3·36	+ 0·27	0·08	Chanda .	Central Provinces (Central).
			Not	reco	rded.				?	2·6	?	61†	·445†	0·8	0	0·82	−0·82	0	0·60	− 0·60	0·24	2·96	− 2·72	0	Seoni.	
...	...	5	16	7	1	...	1	...	1·1	1·8	− 39	66	·378	0·7	0	1·27	−1·27	0	0·50	− 0·50	0·10	2·57	− 2·47	0	Jubbulpore.	
19	2	1	1	4	1	...	...	2	1·5	2·3	− 35	50	·361	0·7	0	0·55	−0·55	0	0·45	− 0·45	0·16	1·90	− 1·74	0	Saugor.	
9	4	5	3	3	...	1	4	1	2·8	3·3	− 15	60	·461	0·3	0	1·82	−1·82	0	0·52	− 0·52	0·46	2·81	− 2·35	0	Raipur .	Central Provinces (East).
10	7	3	2	...	...	...	4	4	3·8	3·2	+ 19	52	·347	0·7	0	0·73	−0·73	0	0·30	− 0·30	0·61	2·67	− 2·06	0	Sutna.	
...	14	6	...	4	2	2	...	2	3·2	1·4	+129	75	·580	0·4	0	?	?	0	0·65	− 0·65	0·82	2·69	− 1·87	0	Sambalpur.	
20	...	4	4	1	...	1	...	...	2·3	?	?	51	·457	0·9	0	?	?	0	0·61	− 0·61	1·93	3·57	− 1·64	0	Aurangabad.	Hyderabad (North).
17	3	...	2	4	1	...	...	3	4·2	?	?	77	·595	1·3	0	?	?	0	1·06	− 1·06	4·37	3·69	+ 0·68	0	Indur.	
...	...	6	7	11	1	5	...	...	5·0	?	?	70	·537	0·4	2	?	?	1·80	1·15	+ 0·65	8·08	4·80	+ 3·28	1·45	Bidar.	
15	...	2	12	1	...	...	...	...	7·9	?	?	65	·519	1·5	1	?	?	0·10	0·64	− 0·54	5·27	3·70	+ 1·57	0·10	Gulbarga .	Hyderabad (South).
...	...	7	14	5	3	...	...	1	6·0	?	?	68	·578	1·3	1	?	?	0·10	?	?	8·43	?	?	0·10	Raichur.	
23	...	1	1	4	1	...	...	...	3·0	?	?	77	·571	1·1	1	?	?	0·40	1·76	− 1·36	2·68	4·84	− 2·16	0·39	Hyderabad (Deccan).	
17	...	10	2	1	...	...	...	...	3·6	3·5	+ 3	75	·515	1·0	1	?	?	1·17	?	?	3·28	?	?	1·15	Secunderabad	
29	...	1	...	...	...	...	...	...	3·2	?	?	83	·690	0·4	1	?	?	0·43	?	?	6·97	?	?	0·43	Khamamet.	
...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	1·75	3·30	−1·35	...	...	...	...	X.—West Coast.	
...	...	10	19	1	...	...	...	...	8·5	9·9	− 14	76	·737	1·3	0	1·09	−1·09	0·06	0·66	− 0·60	3·68	3·13	+ 0·55	0·04	Bombay .	Konkan.
...	1	5	12	10	2	...	...	...	5·0	9·0	− 44	60	·603	1·8	2	1·18	+0·82	1·30	0·50	+ 0·80	6·15	4·78	+ 1·37	0·72	Ratnagiri.	
...	...	...	17	13	...	...	...	...	*8·3	?	?	79	·746	0·5	0	?	?	0·17	?	?	5·58	?	?	0·09	Mormagao.	
...	...	5	25	...	...	...	...	...	4·4	?	?	71	·693	1·5	0	?	?	0·07	1·45	− 1·38	6·24	7·42	− 1·18	0·07	Goa.	
3	...	6	20	1	...	...	...	...	3·3	?	?	81	·690	1·2	1	3·82	−2·82	0·44	2·63	− 2·19	6·92	10·31	− 3·39	0·44	Karwar.	
13	4	11	2	...	...	...	...	...	3·2	?	?	78	·810	2·7	3	10·09	−7·09	4·08	6·77	− 2·69	22·54	20·78	+ 1·76	2·22	Cochin .	Malabar.
1	...	13	12	3	...	1	...	...	8·8	?	?	79	·789	1·9	3	8·44	−5·44	3·16	5·06	− 1·90	13·20	15·23	− 2·03	2·68	Calicut.	
2	...	1	20	7	...	...	...	...	2·7	3·0	− 10	72	·727	2·8	1	5·10	−4·10	1·79	3·09	− 1·30	7·53	10·91	− 3·38	1·69	Mangalore.	
24	2	3	...	...	...	...	...	1	1·9	?	?	84	·820	3·5	8	?	?	4·69	6·24	− 1·55	13·41	17·00	− 3·59	1·05	Trivandrum	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	3·88	5·97	−2·31	...	...	...	...	XI.—South India.	
5	8	10	3	...	2	...	1	1	9·6	?	?	83	·861	4·2	15	8·00	+7·00	13·06	9·55	+ 3·51	31·56	16·41	+15·15	2·04	Pamban. .	Madras (South).
...	13	6	...	1	...	1	1	8	4·2	?	?	81	·813	4·6	4	10·50	−6·50	4·47	?	?	19·25	?	?	3·64	Tinnevelly.	
...	13	9	...	...	...	...	...	8	4·1	3·8	+ 8	75	·743	3·2	5	7·09	−2·09	2·22	4·66	− 2·44	11·79	12·87	− 1·08	0·82	Madura.	

* Mean of 28 days.
† „ „ 29 „

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.												
			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 month.	Date.	Lowest pressure during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras (South Central).	Salem	940	29·097	+·058	29·990	29·161	15th	29·047	23rd	·114	76·6	88·1	+1·2	69·4	+1·4	78·9	+1·3	18·7	90·9	11th & 12th.	62·9	15th	28·0
	Coimbatore	1,348	28·667	+·052	29·970	28·713	12th	28·608	23rd	·105	74·8	86·9	+1·0	68·6	−0·4	77·9	+0·3	18·3	90·9	14th	63·6	8th	27·3
Coorg	Mercara	3,781	26·303	+·052	P	26·355	13th	26·253	23rd	·102	65·6	76·2	+1·2	61·3	+1·0	68·8	+1·1	14·9	79·5	3rd	57·7	7th	21·8
Mysore	Chitaldroog	2,405	27·628	P	29·983	27·683	16th	27·560	1st	·123	71·2	80·9	P	62·8	P	71·9	P	18·1	84·1	3rd	59·4	27th & 28th.	24·7
	Bangalore	3,021	27·027	+·042	29·973	27·079	13th	26·982	1st	·097	69·4	80·5	+2·0	61·9	−0·1	71·2	+1·0	18·6	83·3	1st & 3rd	55·4	15th	27·9
	Hassan	3,091	26·967	P	29·990	27·015	13th	26·917	1st	·098	70·0	79·6	P	60·5	P	70·0	P	19·1	82·6	4th	53·9	28th	28·7
	Mysore	2,518	27·518	P	29·976	27·573	15th	27·477	23rd	·096	71·8	83·0	P	64·4	P	73·7	P	18·6	86·9	3rd & 4th	58·4	16th	28·5
Madras (East Coast, South).	Negapatam	31	29·977	+·055	29·937	30·029	15th	29·909	22nd	·120	79·1	85·7	+2·0	74·7	+0·8	80·2	+1·4	11·0	92·7	4th	71·7	23rd	21·0
	Cuddalore	12	30·010	P	29·953	30·064	12th	29·941	27th	·123	77·0	85·5	P	72·9	P	79·2	P	12·6	88·3	3 days	70·2	7th	18·1
	Trichinopoly	255	29·754?	+·048?	29·945?	29·806	15th	29·703	22nd	·103	78·3	87·9	+1·1	72·6	+0·9	80·2	+1·0	15·3	92·5	4th	69·4	8th	23·1
	Madras	22	30·010	+·060	29·963	30·072	15th	29·959	3rd	·113	77·9	86·0	+1·0	72·0	−0·3	79·0	+0·4	14·0	89·5	10th	67·5	7th	22·0
Madras (East Coast, Central).	Nellore	71	29·958	P	29·964	30·022	15th	29·896	1st	·126	78·1	87·8	P	72·3	P	80·0	P	15·5	91·7	10th	68·6	27th	23·1
	Masulipatam	15	30·033	+·063	29·983	30·091	15th	29·965	1st	·126	77·5	86·5	+1·9	72·2	+0·9	79·4	+1·4	14·3	90·0	14th	66·2	3 days	23·8
Madras (Central)	Cuddapah	433	29·601	P	29·981	29·660	15th & 16th.	29·535	3rd	·125	77·1	89·8‡	+3·3	69·3	0	79·5‡	+1·7	20·5‡	93·1	3rd & 4th	63·4	27th	29·7
	Kurnool	923	29·114	P	30·000	29·170	16th	29·067	1st	·103	74·1	88·8	+2·2	64·9	+0·7	76·9	+1·5	23·9	93·2	12th	58·3	28th	34·9
	Bellary	1,475	28·554	+·055	30·002	28·611	15th & 16th.	28·429	1st	·182	73·6	87·1	+0·8	65·4	−0·1	76·3	+0·4	21·7	89·7	13th & 14th.	59·9	28th	29·8
Madras (East Coast, North).	Rajahmundry	112	29·933	+·055	29·983	29·990	16th	29·868	1st	·122	75·0	88·8	+2·2	69·7	+0·6	79·2	+1·4	19·1	92·0	14th	63·0	27th	29·0
	Cocanada	26	30·013	+·057	29·974	30·071	15th & 16th.	29·946	9th	·125	76·2	84·8	+3·0	71·2	+1·2	78·0	+2·1	13·6	90·6	14th	64·5	27th	26·1
	Vizagapatam	31	30·013	+·048	29·982	30·078	20th	29·926	8th	·152	77·4	86·9	+1·9	69·2	P	78·1	?	17·7	89·8	16th	61·9	26th & 27th.	27·9
	Gopalpur	21	30·030	P	29·991	30·095	20th	29·953	1st	·142	72·9	84·8	P	66·7	P	75·8	P	18·1	87·7	14th	59·6	30th	28·1
XII.—Hill Stations.																							
Baluchistan	Kachh	?	24·007	P	P	24·060	3 days	23·940	26th & 27th	·120	49·5	62·5	P	34·8	P	48·7	P	27·7	70·0	7th	20·0	17th	50·0
	Pishin				Not recorded.						P	69·5	P	34·0	P	51·8	P	35·5	80·1	7th	16·9	17th	63·2
	Quetta	5,502	24·789	+·025	P	24·885	16th	24·719	27th	·166	47·6	66·9	+3·1	37·1	+6·2	52·0	+4·7	29·8	75·2	7th	22·8	17th	52·4
	Kalat	?			Not recorded.						37·8*	67·9	P	26·2*	P	47·0*	P	41·7*	78·5	7th	5·8	17th	72·7
	Chaman	4,311	25·840	P	P	25·984	16th	25·738	25th	·246	56·4	70·1	P	47·0	P	58·6	P	23·1	80·1	7th	27·1	17th	53·0
Northern India	Leh	11,503	19·815	P	P	19·945	5th	19·650	18th	·295	28·0	46·6	P	21·6	P	34·1	P	25·0	59·2	3rd	9·5	24th	49·7
	Srinagar	5,204	25·076	P	P	25·162	21st	24·991	4th	·171	40·5	59·8	P	34·8	P	47·4	P	25·0	70·8	5th	26·1	24th	44·7
	Gilghit	P	24·868	P	P	25·050	19th	24·670	16th	·380	48·5	61·9	P	43·5	P	52·7	P	18·4	72·2	7th	33·9	24th	38·3
	Cherat	P	25·848	P	P	25·934	19th	25·784	16th	·150	57·2	67·1	P	51·2	P	59·2	P	15·9	78·3	1st & 7th	43·7	19th	34·6
	Samana	P	23·931	P	P	24·053	19th	23·753	26th	·300	P	60·6	P	45·5	P	53·0	P	15·1	68·0	1st	34·0	27th	34·0
	Murree	6,344	23·960	+·038	P	24·013	19th	23·901	23rd	·112	51·0	62·3	+1·3	48·4	+3·3	55·4	+2·3	13·9	72·6	14th	37·0	26th	35·6
	Poo				Not recorded.						P	58·1	P	36·4	P	47·2	P	21·7	71·7	2nd	28·0	30th	43·7
	Simla	7,224	23·225	+·042	P	23·300	15th	23·161	23rd	·139	49·8	57·5	+1·9	46·9	+3·0	52·2	+2·5	10·6	62·3	12th	40·3	28th	22·0
	Chakrata	6,977	23·438	+·062	P	23·519	15th	23·365	1st	·154	50·1†	60·8†	+1·9	45·7†	+2·8	53·2†	+2·4	15·1†	69·2	11th	37·6	18th	31·6
	Mussooree	6,705	23·668	P	P	23·745	15th	23·593	1st	·152	52·4	59·1	+0·9	48·5	+3·7	53·8	+2·3	10·6	65·2	4th & 12th.	41·0	18th	25·2
	Ranikhet	6,069	24·225	+·056	P	24·316	18th	24·148	1st	·168	52·9	63·1	+0·7	48·7	+2·0	55·9	+1·4	14·4	71·0	11th	42·0	18th	29·0
	Yatung	10,430?			Not recorded.						P	49·2	P	30·6	P	39·9	P	18·6	55·9	3rd	20·9	24th	35·0
	Gnatong	P	19·295	P	P	19·394	15th	19·220	1st	·174	35·3	40·2	P	25·9	P	33·1	P	14·3	48·0	8th	16·1	25th	31·9
	Darjeeling	7,421	23·080	+·020	P	23·168	15th	23·002	1st	·166	47·7	53·7	−0·8	43·4‡	+1·8	48·6‡	+0·5	10·3‡	58·2	15th	37·7	25th	20·5
	Gantak	P	24·611	P	P	24·699	30th	24·530	1st	·169	54·7	63·5	P	44·8	P	54·2	P	18·7	70·2	4th	37·9	24th	32·3

* Uncorrected. † Mean of 23 days. ‡ Mean of 29 days.

I—*continued.*

in India, Burma, etc., in November 1895—continued.

Wind Direction. Number of winds from									Wind Velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.								Heaviest rainfall during month.	Station.	Meteorological Provinces or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 30th November: 1895.	Normal rainfall for period from 1st October to 30th November.	Variation from normal of period from 1st October to 30th November			
30	...	...	...	...	...	...	...	...	0·2	3·3	− 94	78	·719	3·6	5	7·36	−2·36	2·49	3·96	− 1·47	14·23	10·85	+ 3·38	1·00	Salem	Madras (South Central).
...	...	...	20	...	10	...	...	...	1·8	2·6	− 31	87	·756	5·1	6	8·09	−2·09	1·67	3·72	− 2·05	7·38	9·66	− 2·28	0·73	Coimbatore.	
3	1	15	11	...	...	...	...	...	7·8	3·7	+111	81	·513	4·4	1	7·20	−6·20	0·77	3·34	− 2·57	7·21	12·94	− 5·73	0·72	Mercara	Coorg.
1	...	3	16	5	...	...	3	2	6·7	?	?	73	·598	3·9	4	?	?	3·11	?	?	7·93	?	?	2·08	Chitaldroog	Mysore.
...	...	12	13	3	1	...	1	...	6·8	3·7	+ 59	76	·547	4·0	2	6·09	−4·09	1·72	3·59	−1·87	7·91	10·74	− 2·80	0·73	Bangalore.	
2	...	11	15	2	...	...	...	...	3·1	?	?	77	·563	4·6	4	?	?	3·43	?	?	10·77	?	?	1·76	Hassan.	
3	1	12	11	2	...	1	..	...	7·2	?	?	76	·588	4·6	1	?	?	1·21	?	?	11·43	?	?	1·11	Mysore.	
5	2	8	1	...	...	1	1	12	9·5	5·2	+ 83	85	·834	6·3	13	13·09	−0·09	17·22	15·95	+ 1·27	35·22	26·54	+ 8·68	3·98	Negapatam.	Madras (East Coast, South).
...	12	2	1	...	...	...	1	14	1·6	?	?	92	·860	4·5	11	11·80	−0·80	9·66	?	?	41·55	?	?	2·70	Cuddalore.	
15	6	6	...	...	...	...	2	1	2·5	4·2	− 40	80	·779	5·2	8	8·45	−0·45	3·46	5·37	− 1·91	13·54	12·86	+ 0·68	1·84	Trichinopoly.	
2	13	3	1	...	1	1	2	7	5·1	6·8	− 25	86	·827	5·5	16	13·00	+3·00	14·67	13·21	+ 1·46	26·28	24·21	+ 2·07	4·66	Madras.	
8	2	...	...	...	...	...	3	17	4·1	?	?	84	·812	6·0	7	9·40	−2·40	5·25	?	?	13·16	?	?	2·15	Nellore	Madras (East Coast, Central).
1	18	7	1	...	...	...	...	3	5·0	5·5	− 9	81	·764	3·1	2	5·91	−3·91	0·72	7·06	− 6·34	12·95	16·40	− 3·45	0·35	Masulipatam	
7	1	11	8	2	...	...	...	1	?	?	?	75	·701	3·1	2	7·00	−5·00	0·48	4·67	− 4·19	6·43	11·00	− 4·57	0·26	Cuddapah	Madras (Central).
26	...	...	4	...	...	...	...	...	?	?	?	72	·613	1·8	0	3·17	−3·17	0·04	1·15	− 1·11	5·97	6·18	− 0·21	0·04	Kurnool.	
19	2	...	5	3	1	...	..	...	2·1	3·3	− 36	64	·540	4·8	3	3·82	−0·82	2·09	2·13	− 0·04	9·88	6·42	+ 3·46	1·60	Bellary.	
...	27	3	...	...	...	...	...	...	?	?	?	71	·629	3·3	0	2·80	−2·80	0·05	3·35	− 3·30	11·16	9·31	+ 1·85	0·05	Rajahmundry	Madras (East Coast, North).
...	18	5	1	...	1	...	...	5	8·0	?	?	73	·660	1·9	1	4·30	−3·30	0·09	7·41	− 7·32	9·46	17·77	− 8·31	0·07	Cocanada.	
...	3	1	...	...	...	...	16	10	2·0	2·4	− 17	74	·704	1·9	1	7·18	−6·18	0·20	6·90	− 6·70	10·03	17·44	− 7·41	0·20	Vizagapatam.	
...	14	...	...	...	...	..	...	16	8·3	7·0	+ 19	79	·643	0·2	1	4·33	−3·33	0·92	5·48	− 4·56	10·19	15·21	− 5·02	0·92	Gopalpur.	
XII.—Hill Stations.																										
5	1	4	4	2	...	1	10	3	3·6	?	?	51	·178	1·4	2	?	?	0·65	?	?	1·83		?	0·50	Kachh.	Baluchistan.
							Not	recorded	ed.	?	?	?	?	?	2	?	?	0·36	?	?	1·09	?	?	0·18	Pishin.	
25	...	...	...	1	2	1	1	...	1·6	2·7	− 41	59	·197	2·6	2	0·09	+1·91	0·57	0·27	+ 0·30	1·23	0·34	+ 0·89	0·35	Quetta.	
...	2	...	...	...	28	..	...	...	?	?	?	?	?	?	2	?	?	1·02	?	?	1·42	?	?	0·48	Kalat.	
...	1	1	12	13	...	2	1	...	6·0	?	?	37	·174	3·5	1	?	?	0·24	?	?	0·51	?	?	0·20	Chaman.	
...	...	...	1	1	6	16	5	1	2·7	?	?	54	·081	5·6	0	?	?	0·04	?	?	0·08	?	?	0·01	Leh.	Northern India
11	2	...	5	3	4	1	2	2	4·9	?	?	92	·234	4·5	2	?	?	0·64	?	?	2·65	?	?	0·24	Srinagar	
				Not	recorded				?	?	?	47	·159	4·5	1	?	?	0·30	?	?	1·26	?	?	0·24	Gilghit.	
2	18	...	...	2	2	...	...	6	15·8	?	?	42	·197	3·9	1	?	?	0·21	?	?	0·25	?	?	0·18	Cherat.	
				Not	recorded.				?	?	?	?	?	3·2	1	?	?	0·27	?	?	0·27	?	?	0·25	Samana.	
7	5	1	2	8	...	1	...	6	8·6	5·1	+ 69	36	·134	4·1	2	0·73	+1·27	0·51	1·08	− 0·57	1·72	2·73	− 1·01	0·20	Murree.	
15	2	2	3	2	1	3	2	...	?	?	?	?	?	3·3	4	?	?	1·31	?	?	1·42	?	?	0·48	Poo.	
5	12	4	2	...	5	1	...	1	5·8	1·9	+205	42	·147	2·3	1	1·18	−0·18	0·14	0·54	− 0·40	0·23	1·76	− 1·53	0·14	Simla.	
15	13	...	...	...	2	...	...	...	9·0	4·5	+100	51†	·180†	1·2	0	?	?	0·08	0·59	− 0·51	0·26	1·43	− 1·17	0·08	Chakrata.	
...	2	...	10	2	2	...	3	11	?	?	?	55	·217	1·3	1	?	?	0·23	0·76	− 0·53	0·47	1·75	− 1·28	0·23	Mussooree.	
19	1	3	...	1	1	2	3	...	2·8*	1·2	+133	67	·269	2·0	2	1·00	+1·00	0·38	0·33	+ 0·05	0·42	1·81	− 1·39	0·19	Ranikhet.	
				Not	recorded.		...	...	?	?	?	?	?	?	4	?	?	0·86	?	?	2·24	?	?	0·30	Yatung.	
13	1	1	2	7	1	1	4	...	4·6	?	?	76	·153	3·9‡	5	?	?	1·87	?	?	6·10	?	?	0·45	Gnatong.	
6	1	7	12	2	...	1	1	...	3·3	1·7	+ 94	88	·296	4·6§	3	0·63	+2·37	1·00	0·30	+ 0·70	1·40	4·91	− 3·51	0·42	Darjeeling.	
...	1	3	...	...	3	4	16	3	1·4	?	?	82	·357	3·8	6	?	?	2·67	?	?	6·49	?	?	1·35	Gantak.	

* Mean of 28 days.

§ Mean of 27 days.

Table

Abstract of Observations taken at 8 A.M. at 207 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level, in feet.	Pressure, 8 A.M., in inches.								Temperature of Air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India	Mount Abu	3,945	26·189	+·025	?	26·228	12th & 21st	26·141	1st	·087	69·2	76·4	+3·1	61·2	+4·1	68·9	+3·6	15·2	83·2	5th	54·9	30th	28·3
	Pachmarhi	3,528	26·590	+·040	?	26·633	20th	26·527	1st	·106	70·3	78·1	+6·2	51·9	+0·9	65·1	+3·6	26·2	81·2	7th	47·8	28th	33·4
South India	Wellington	6,200	24·319	+·044	?	24·370	13th	24·277	23rd	·093	59·3	67·6	+0·8	50·3	−2·2	59·0	−0·7	17·3	71·2	3 days	40·7	15th	30·5
XIII.—Extra India.																							
Ceylon	Trincomalee	75	29·912	?	29·915	29·961	13th	29·848	22nd	·113	82·3	85·9	?	75·4	?	80·7	?	10·5	89·0	1st	73·0	3 days	16·0
	Colombo	40	29·945	+·020	29·911	30·005	6th	29·876	28th	·129	83·8	87·7	?	74·3	?	81·0	?	13·4	91·5	16th	73·0	5 days	18·5
	Galle	48	29·932	?	29·906	30·001	12th	29·850	22nd	·151	80·9	83·7	?	75·9	?	79·8	?	7·8	87·5	17th	74·5	26th	13·0
Persia	Meshed	3,104				Not recorded					41·1	?	?	37·7	?	?	?	?	?	?	21·0	17th	?
	Teheran	?	*26·127	?	?	26·425	16th	25·850	28th	·575	*48·2	*61·3	?	*11·1	?	*51·2	?	*20·2	77·0	13th	32·5	16th	44·5
	Ispahan	?	?	?	?	?	?	?	?	?	?	60·5	?	37·3	?	48·9	?	23·2	69·6	13th	30·9	8th	38·7
	Bushire	14	30·105	+·037	30·076	30·238	6th	29·985	1st	·253	66·2	74·6	−4·4	61·4	−0·7	68·0	−2·5	13·2	83·6	20th	53·8	28th	29·8
	Jask	?	30·065	?	?	30·178	16th	29·972	1st	·206	73·9	82·1	?	69·2	?	75·7	?	12·9	87·5	6th	60·2	20th	27·3
Arabia	Muscat	?	30·081	?	?	30·168	17th	29·984	1st	·184	77·9	79·8	?	75·8	?	77·8	?	4·0	84·2	6th	71·9	19th & 20th	12·3
	Baghdad	?	29·688	−·006	?	29·884	6th	29·544	28th	·340	52·1	71·4	−5·2	48·2	−1 8	59·8	−3·5	23·2	82·8	1st	41·4	5th	41·4
	Aden	94	29·947	−·010	29·974	30·033	12th	29·829	1st	·204	79·3	84·4	−1·8	76·6	+3·4	80·6	+0·8	7·8	88·3	2nd	71·9	24th & 25th	16·4
	Perim	?	29·807	?	?	29·934	12th	29·684	27th	·250	80·9	86·8	?	77·5	?	82 1	?	9·3	90·5	1st	75 2	12th & 14th	15·3
Afghanistan	Kabul	?				Not recorded.					39·9	63·3	?	34·4	?	48·9	?	28·9	73·2	6th	20·6	17th	52·6
Central Asia	Kashgar	?	25·880	?	?	26·360	1st	25·540	25th	·820	30·0	47·0	?	28·1	?	37·5	?	18·9	58·1	9th	24·0	21st	34·1
	Amini Devi	15	29·980	?	29 923	30·047	13th	29·902	25th	·145	81·5	†81·7	?	†75·2	?	†78·5	?	†6·5	83·6	26·h	72·1	17th	11·5
	Minicoy	10	29·991	?	29·926	30·054	13th	29·921	22nd	·133	83·3	88·4	?	‡79·1	?	‡83·9	?	‡9·3	90 7	16th	76·0	6th	14 7
Africa	Zanzibar	73	29·980	?	29·980	30·060	8th	29·862	22nd	·198	79·9	83·3	?	77·2	?	80·2	?	6·1	87·1	27th	74·8	1st	12·3

* Mean of 29 days. † Uncorrected. ‡ Mean of 23 days.

I—*concluded.*

in India, Burma, etc., in November 1895—concluded.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 30th November 1895.	Normal rainfall for period from 1st October to 30th November	Variation from normal of period from 1st October to 30th November.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
7	3	8	1	2	1	1	4	3	4·6	3·7	+ 24	43	·297	1·0	0	0·18	−0·18	0	0·27	−0·27	0·10	0·98	− 0·88	0	Mount Abu.	Central India.
24	...	...	1	1	1	3	...	...	2·7	2·5	+ 8	51	·376	1·1	0	1·09	−1·09	0	0·71	−0·71	0·09	3·34	− 3·25	0	Pachmarhi.	
22	2	3	3	...	...	...	...	...	1·8	2·7	− 33	79	·406	4·5	9	13·22	−4·22	3·19	8·45	−5·26	17·98	20·55	− 2·57	1·01	Wellington .	South India.
																									XIII.—Extra India.	
11	1	6	1	1	1	5	2	2	1·1	?	?	80	·876	3·9	17	?	?	14·10	12·68	+1·42	20·17	21·09	− 0·92	2·02	Trincomalee.	Ceylon.
...	12	5	3	3	3	3	1	...	5·7	5·8	−2	71	·824	4·2	9	?	?	4·83	13·25	−8·42	34·42	26·76	+ 7·66	1·48	Colombo .	
21	1	5	...	...	...	...	...	3	2·6	?	?	87	·914	3·0	11	?	?	7·75	11·72	−3·97	20·66	25·07	− 4·41	2·24	Galle .	
						Not recorded.			Not recorded.			?	?	5·4	1	?	?	0·20	?	?	1·01	?	?	0·20	Meshed .	Persia.
28	...	...	...	...	...	...	...	1	3·0	?	?	53	·180	4·0	4	?	?	0·69	?	?	0·96	?	?	0·21	Teheran.*	
5	2	7	...	2	1	5	2	6	2·5	?	?	91	·282	3·3	2	?	?	0·61	?	?	1·70	?	?	0·48	Ispahan,	
...	4	8	5	9	1	...	...	3	7·6	?	?	67	·435	4·3	2	?	?	0·42	1·53	−1·11	0·74	1·53	−0·79	0·30	Bushire.	
7	5	7	1	1	...	...	...	9	10·3	?	?	67	·568	4·6	0	?	?	0·04	?	?	0·29	?	?	0·04	Jask.	
...	...	1	2	7	2	1	13	4	3·5	?	?	71	·680	1·8	2	?	?	0·70	?	?	0·70	?	?	0·55	Muscat .	Arabia.
13	4	1	...	3	3	...	...	6	2·1	?	?	75	·299	1·6	2	?	?	1·33	?	?	1·46	?	?	0·76	Baghdad.	
...	...	6	23	1	...	...	...	...	12·2	11·6	+5	73	·726	4·9	0	?	?	0	0·21	−0·21	0	0·23	− 0·23	0	Aden.	
...	...	6	20	2	1	...	1	...	21·0	?	?	75	·786	3·0	0	?	?	0	?	?	0	?	?	0	Perim.	
...	7	1	15	1	1	...	5	...	?	?	?	?	?	1·7	2	?	?	1·50	?	?	1·50	?	?	1·00	Kabul .	Afghanistan.
29	...	...	...	...	...	...	...	...	0·9	?	?	?	?	4·7†	0	?	?	0·10	?	?	0·14	?	?	0·06	Kashgar* .	Central Asia.
...	18	4	...	...	...	...	1	7	4·8	?	?	82	·879	4·1	0	?	?	0·08	?	?	10·17	?	?	0·05	Amini Devi.	
6	5	8	3	1	1	1	2	3	6·1	?	?	79	·844	4·0	4	?	?	1·99	?	?	17·10	?	?	0·77	Minicoy.	
...	3	2	2	8	9	6	...	...	3·9	?	?	88	·896	5·5	10	?	?	8·13	?	?	9·33	?	?	2·96	Zazibar .	Africa.

* Wind observations for 29 days.

† Mean of 27 days.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85

Meteorological Province	Station	Elevation of barometer 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Burma Coast and Bay Islands.	Port Blair	...	29·926	29·828	·098	29·876	+·033	29·868	87·9	78·2	9·7	89·8	75·4	14·4	85·7	84·2	81·8	+ 1·3	74·8	79·5	78·1	77·5
	Rangoon	...	·998	·880	·118	·939	+·043	·917	87·0	70·0	17·0	90·5	65·8	24·7	81·1	84·3	76·7	− 1·3	67·7	73·6	73·2	71·5
	Diamond Island	...	·983	·879	·104	·930	+·045	·904	85·3	76·9	8·4	88·1	73·4	14·7	82·7	83·1	80·2	?	72·3	74·4	74·5	73·7
	Cocos Island	111	·871	·774	·097	·822	?	·865	85·0	77·3	7·7	88·5	73·1	15·4	83·3	81·2	79·8	?	72·0	75·5	74·8	74·1
	Akyab	...	30·027	·922	·105	·978	+·042	·941	84·4	69·8	14·6	88·2	64·2	24·0	78·7	81·8	76·8	− 1·3	67·6	74·6	76·3	72·8
Assam.	Silchar	...	29·968	·846	·122	·903	+·029	·960	85·3	63·7	21·6	88·7	56·6	32·1	76·7	82·8	73·2	+ 0·6	62·5	70·1	71·9	68·2
	Sibsagar	...	·764	·629	·135	·696	+·024	·992	78·8	59·4	19·4	82·3	52·5	29·8	70·8	77·1	67·8	+ 0·2	59·4	67·9	69·6	65·6
	Dhubri	...	·964	·836	·128	·894	+·038	·966	81·3	65·7	15·6	84·2	60·1	24·1	74·6	79·6	72·1	+ 2·1	64·2	69·4	70·9	68·2
Bengal and Orissa.	Chittagong	...	·958	·850	·108	·902	+·035	·938	84·1	65·0	19·1	87·0	59·1	27·9	78·3	80·4	74·0	0	64·7	72·6	72·8	70·0
	Naryangunge	...	30·027	·914	·113	·967	+·030	·941	84·0	67·5	16·5	87·0	61·5	25·5	78·7	81·4	75·9	+ 1·4	65·9	72·3	71·2	69·8
	Calcutta (Alipore)	...	·036	·926	·110	·973	+·012	·940	83·5	66·0	17·5	86·6	58·4	28·2	78·6	82·3	74·4	+ 2·1	65·0	70·3	69·9	68·4
	Saugor Island	...	·030	·919	·111	·968	+·017	·938	83·3	69·2	14·1	86·6	62·2	24·4	79·8	81·1	75·3	+ 1·9	66·8	72·6	71·9	70·4
	Burdwan	...	29·970	·852	·118	·904	+·021	·952	85·1	65·7	19·4	88·4	57·9	30·5	78·8	82·8	74·8	+ 1·3	63·8	69·7	69·6	67·7
	Berhampore	...	·995	·886	·110	·934	+·022	·950	84·2	65·3	18·9	87·7	57·2	30·5	78·3	83·4	74·6	+ 1·4	63·1	71·1	71·3	68·5
	False Point	...	30·037	·934	·103	·985	+·012	·948	84·0	66·7	17·3	88·5	57·8	30·7	80·7	81·7	74·4	+ 1·4	66·3	72·7	72·5	70·5
	Cuttack	...	29·977	·859	·118	·917	+·010	·941	86·6	67·7	18·9	90·1	60·0	30·1	78·4	84·4	76·4	+ 1·8	65·8	70·6	70·7	69·0
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	28·047	27·950	·097	27·995	+·016	·943	80·1	60·5	19·6	84·2	53·7	30·5	74·7	77·8	69·4	+ 2·7	53·8	62·5	61·7	59·3
	Patna	...	29·883	29·777	·106	29·825	+·008	·964	83·6	63·1	20·5	87·5	55·3	32·2	77·9	82·0	72·5	+ 2·2	60·6	67·8	67·8	65·4
	Darbhanga	...	·910	·791	·119	·846	+·026	·969	82·7	63·8	18·9	85·7	56·7	29·0	77·3	81·2	72·4	+ 1·2	62·5	69·2	69·6	67·1
	Allahabad	...	·754	·642	·112	·688	+·004	·954	87·6	57·6	30·0	92·6	50·6	42·0	79·4	86·0	71·3	+ 3·9	55·3	65·6	65·8	62·2
	Lucknow	...	·691	·587	·107	·633	+·001	·963	85·7	55·4	30·3	90·3	48·2	42·1	77·2	82·4	69·8	+ 2·0	50·9	65·1	66·3	60·8
Indus Valley and Upper Sub-Himalayas.	Dehra Dun	...	27·819	27·722	·097	27·759	+·016	·988	77·3	54·7	22·6	83·7	48·6	35·1	69·5	72·2	64·0	+ 2·3	51·0	58·8	60·3	56·7
	Roorkee	...	29·157	29·051	·106	29·092	+·009	·962	82·3	53·6	28·7	89·0	46·2	42·8	72·7	79·3	66·5	+ 2·6	51·8	61·7	63·1	58·9
	Meerut	...	·307	·206	·101	·248	+·002	·967	83·8	54·8	29·0	91·0	47·7	43·3	71·5	79·5	67·6	+ 2·8	52·4	60·0	63·2	58·5
	Lahore	...	·344	·256	·088	·290	+·005	·977	83·7	53·7	30·0	92·2	45·2	47·0	70·9	81·9	66·8	+ 4·8	49·0	58·8	63·0	57·0
	Ludhiana	...	·240	·142	·098	·180	+·015	·978	83·0	54·6	28·4	90·7	45·6	45·1	72·5	80·2	66·9	+ 4·3	51·0	60·5	62·3	57·9
Indus Valley and N.-W. Rajputana.	Peshawar	...	28·963	28·875	·091	28·911	+·007	30·035	78·4	49·7	28·7	87·6	40·6	47·0	68·0	74·3	61·6	+ 3·6	44·5	55·6	58·3	52·8
	Mooltan	...	29·650	29·557	·093	29·594	+·006	29·992	86·1	54·6	31·3	94·8	43·7	51·1	72·6	83·4	68·4	+ 3·3	49·8	59·6	65·3	58·2
	Jacobabad	...	·895	·784	·111	·830	+·015	·976	87·3	55·7	31·6	97·9	42·4	55·5	78·2	83·2	69·1	+ 4·2	49·7	61·4	63·8	58·3
	Kurrachee	...	30·062	·973	·089	30·014	+·013	·575	87·2	64·9	22·3	95·4	54·7	40·7	82·1	83·2	75·6	?	59·4	68·3	70·8	66·1
E. Rajputana, C. India, and Gujarat.	Jeypore	...	28·635	28·537	·098	28·576	+·017	·972	83·4	59·3	29·1	94·6	54·1	40·5	80·4	85·7	72·1	+ 4·6	51·6	61·4	64·1	59·0
	Ajmere	...	·459	·360	·099	·407	+·012	·988	88·0	55·3	32·7	93·9	46·2	47·7	76·6	86·4	70·3	+ 4·8	50·2	61·5	66·9	59·5
	Deesa	...	29·593	·480	·113	29·530	+·021	·947	95·9	59·9	36·0	103·1	52·8	50·3	87·0	93·5	77·7	+ 4·0	52·4	63·9	64·9	60·4
	Nowgong	...	·287	·178	·109	·226	−·003	·946	87·2	57·2	30·0	93·0	51·2	41·8	76·7	84·8	71·5	+ 5·1	53·3	63·4	64·8	60·5
	Agra	...	·505	·398	·107	·441	−·001	·962	87·7	59·7	28·0	93·6	52·5	41·1	78·6	85·3	72·7	+ 5·0	55·2	64·3	67·8	62·4
Deccan.	Belgaum	...	27·495	27·388	·107	27·437	+·018	·871	83·2	61·7	21·5	85·6	56·8	28·8	77·3	80·9	71·7	+ 1·0	59·1	64·7	64·6	62·9
	Sholapur	...	28·457	28·329	·128	28·391	+·051	·922	87·5	61·7	25·8	91·2	56·7	34·5	80·8	86·2	73·9	+ 0·3	58·1	66·1	65·6	63·2
	Poona	...	·204	·088	·116	·148	+·047	·924	86·9	59·6	27·3	91·5	50·5	41·0	79·5	85·1	73·1	+ 0·9	57·6	65·3	64·4	62·5
	Akola	...	29·120	·989	·131	29·051	+·022	·933	91·3	58·9	32·4	95·9	52·9	43·0	82·1	89·9	75·6	+ 3·6	55·7	66·6	67·0	63·1
	Buldana	2,132	27·924	27·819	·105	27·868	+·038	·932	85·0	63·3	21·7	87·9	58·1	29·5	80·5	83·5	74·7	+ 2·7	56·3	63·9	63·4	61·2
	Khandwa	...	29·009	28·884	·125	28·942	+·030	·938	92·4	58·5	33·9	95·7	53·8	41·9	82·7	91·0	75·1	+ 5·0	53·4	65·3	66·7	61·8

II.

Stations in India, Burma, etc., for November 1895.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.													Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province or District.
														Number of winds from																				
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																									%	%						
·820	·924	·883	·876	−·071	85	75	75	78	−6	4·7	6·1	5·4	+0·4	1	6	10	10	16	5	4	5	3	S. 79° E.	N. 63° E.	32	53	143	165	...	...	Port Blair .	Burma Coast and Bay Islands.
·652	·733	·672	·686	−·112	98	68	57	71	−8	1·7	2·4	2·1	−2·5	...	9	26	17	7	...	1	...	...	N. 61° E.	N. 60° E.	75	57	114	102	...	...	Rangoon .	
·735	·744	·739	·737	−·069	79	66	65	70	−10	2·5	3·4	3·0	−1·4	...	3	22	15	11	...	...	2	7	N. 64° E.	N. 59° E.	59	64	338*	195	...	...	Diamond Island.	
·718	·781	·780	·760	?	77	68	73	73	?	1·6	2·6	2·1	?	...	6	36	4	6	1	...	...	6	N. 44° E.	?	70	?	?	?	6·05	4·17	Cocos Island.	
·649	·809	·835	·764	+·008	89	82	77	83	+3	3·6	3·6	3·6	+0·3	...	3	20	8	3	6	3	10	7	N. 32° E.	N. 6° W.	23	29	62	54	...	...	Akyab .	
·556	·650	·639	·615	−·004	93	71	58	74	−3	4·4	3·8	4·1	+0·7	49	1	2	5	1	1	...	...	1	N. 78° E.	S. 77° E.	12	30	24*	45	...	...	Silchar .	Assam.
·510	·649	·626	595	+·007	100	86	69	85	+1	?	?	?	?	33	...	24	1	2	...	...	...	...	N. 51° E.	N. 62° E.	42	69	31*	39	...	...	Sibsagar .	
·596	·653	·641	·630	+·018	94	76	63	78	+1	1·5	1·6	1·6	+0·2	6	5	18	21	3	1	2	2	2	N. 66° E.	N. 47° E.	55	46	107	118	...	...	Dhubri .	
·612	·727	·707	·682	−·007	99	75	68	81	+2	2·0	2·8	2·4	−0·4	...	11	12	6	3	1	2	8	17	N. 10° W.	N. 20° W.	45	53	60*	73	...	...	Chittagong	Bengal and Orissa.
·621	·712	·633	·655	+·030	92	72	59	74	+2	2·4	3·8	3·1	+0·9	...	9	10	13	7	2	4	4	11	N. 36° E.	N. 17° W.	30	38	46	47	...	...	Naryangunge	
·611	·635	·570	·605	+·013	94	64	52	70	−5	1·7	2·3	2·0	−0·7	3	16	7	7	2	1	6	9	9	N. 17° W.	N. 17° W.	36	58	43	65	...	...	Calcutta (Alipore).	
·633	·709	·667	·670	+·032	88	69	62	73	−2	3·1	3·3	3·2	+0·4	1	17	9	2	1	6	7	5	12	N. 24° W.	N. 5° E.	37	58	170	154	...	...	Saugor Island.	
·574	·610	·555	·580	+·034	90	61	49	67	0	0·9	1·4	1·2	−1·5	21	21	6	3	...	...	5	1	3	N. 2° E.	N. 7° W.	40	69	23*	44	...	...	Burdwan .	
·554	·671	·610	·612	+·049	88	69	53	70	−4	1·1	2·2	1·7	−0·8	5	18	8	7	2	2	2	4	12	N. 1° E.	N. 25° W.	45	54	38*	40	...	...	Berhampore	
·648	·703	·679	·677	+·051	98	67	62	76	+2	3·1	3·1	3·1	−0·6	...	17	9	13	6	3	3	2	7	N. 38° E.	N. 22° E.	40	57	102*	157	...	...	False Point	
·615	·647	·573	·612	+·026	89	66	49	68	0	1·2	2·2	1·7	−0·9	17	11	15	5	...	2	2	5	5	N. 14° E.	N. 1° W.	40	43	32	40	...	...	Cuttack .	
·339	·419	·355	·371	+·018	63	49	37	50	−4	1·5	3·3	2·4	0	9	10	4	3	7	10	1	5	11	N. 29° W.	N. 42° W.	8	55	95	104	...	...	Hazaribagh	Gangetic Plain and Chota Nagpur.
·504	·553	·494	·517	+·058	86	57	45	63	+1	0·1	0·7	0·4	−1·3	14	2	13	9	3	6	3	6	4	N. 68° E.	N. 64° W.	17	29	41*	36	...	...	Patna .	
·557	·611	·574	·581	+·019	93	65	51	71	+1	0·3	0·8	0·6	−0·2	21	3	5	9	8	2	2	5	5	N. 83° E.	S. 79° W.	13	55	21	44	...	...	Darbhanga	
·410	·449	·375	·411	+·001	86	44	30	53	−10	0·8	1·0	0·9	−0·2	8	5	6	11	5	2	3	9	9	N. 16° E.	N. 65° W.	16	21	38	34	...	...	Allahabad.	
·319	·464	·433	·405	+·050	72	49	40	54	0	1·4	1·9	1·7	+0·7	19	7	5	3	4	4	2	5	11	N. 26° W.	N. 45° W.	18	46	15*	34	...	...	Lucknow.	
·332	·367	·380	·360	?	77	51	48	59	?	1·7	2·5	2·1	+0·9	35	1	...	3	11	4	2	3	1	S. 26° E.	N. 76° W.	22	18	23	41	...	...	Dehra Dun	Upper Sub-Himalayas.
·367	·406	·367	·380	+·044	89	50	37	59	+2	1·1	1·6	1·4	+0·5	28	...	1	8	14	2	1	...	6	S. 61° E.	S. 36° W.	27	28	31	27	...	...	Roorkee .	
·367	·369	·366	·367	+·040	85	48	37	57	+2	1·2	1·5	1·4	+0·7	36	...	...	3	1	1	1	15	3	S. 89° W.	N. 50° W.	23	46	25*	30	...	...	Meerut .	
·293	·342	·330	·322	+·009	70	45	31	49	0	1·8	3·4	2·6	+1·4	17	10	1	9	3	3	...	9	8	N. 14° W.	N. 47° W.	20	22	39	33	...	...	Lahore .	
·333	·377	·327	·346	+·041	77	47	32	52	0	2·7	4·1	3·4	+1·8	17	3	1	1	12	1	3	6	16	N. 70° W.	N. 44° W.	17	36	39	22	...	...	Ludhiana .	
·235	·298	·298	·277	+·006	65	44	36	48	−6	3·4	4·0	3·7	+1·7	34	1	1	3	5	2	4	3	7	S. 65° W.	N. 73° E.	7	15	60*	51	...	...	Peshawar .	
·300	·346	·392	·346	−·006	68	42	34	48	−6	2·5	2·6	2·6	+1·8	30	...	17	...	11	...	1	...	...	N. 79° E	S. 73° W.	33	8	22*	33	...	...	Mooltan .	Indus Valley and N.-W. Rajputana.
·290	·330	·347	·322	+·023	63	34	30	42	−3	3·5	4·5	4·0	+2·9	30	3	3	2	6	3	2	...	11	N. 11° W.	N. 12° W.	7	16	58*	38	...	...	Jacobabad.	
·458	·531	·60	5·9	?	70	47	52	56	?	2·7	2·4	2·6	+1·5	...	1	7	9	1	7	17	18	...	S. 48° W.	S. 81° W.	34	18	129	190	..	...	Kurrachee .	
·290	·310	·330	·310	+·023	57	29	26	37	−6	2·3	2·6	2·5	+1·5	1	1	3	5	7	5	8	12	18	N. 89° W.	N. 12° W.	30	39	70	70	...	...	Jeypore .	E. Rajputana, Central India, and Gujerat.
·304	·363	·419	·362	+·054	69	40	33	47	+1	1·6	2·5	2·1	+1·2	5	3	7	3	9	3	5	18	7	W	N. 32° E.	20	10	49	35	...	...	Ajmere .	
·298	·291	·236	·275	−·004	57	23	15	32	−2	0·4	0·9	0·7	−0·7	...	7	13	3	4	5	1	12	15	N. 24° W.	N. 33° E.	33	31	165	181	...	...	Deesa .	
·359	·408	·317	·371	+·043	76	45	30	50	−2	1·2	1·6	1·4	+0·1	6	6	4	11	...	2	4	19	8	N. 35° W.	N. 10° W.	28	32	27*	24	...	...	Nowgong .	
·380	·416	·450	·415	+·103	74	42	37	51	+7?	1·1	1·7	1·4	+0·8	...	1	6	...	10	...	15	...	28	N. 69° W.	N. 81° W.	35	36	68*	60	...	...	Agra .	
·476	·460	·410	·449	−·021	86	49	40	58	−1	1·2	2·0	1·6	−2·0	...	3	16	25	11	...	1	1	1	N. 81° E.	N. 84° E.	73	67	274	280	...	...	Belgaum .	Deccan.
·446	·464	·378	·429	−·039	80	44	30	51	−2	1·4	1·7	1·6	−2·2	2	4	15	12	25	...	1	...	1	S. 86° E.	N. 69° E.	65	63	184*	191	...	...	Sholapur .	
·458	·453	·364	·425	+·002	88	45	31	54	+6?	1·6	1·8	1·7	−1·1	28	1	1	18	11	...	...	...	1	S. 78° E.	N. 83° E.	44	45	51	138	...	..	Poona .	
·407	·449	·359	·405	+·005	80	41	26	49	−3	0·7	1·2	1·0	−0·5	7	5	11	13	5	1	5	5	8	N. 44° E	N. 64° E.	24	50	82*	84	...	...	Akola.	
·371	·390	·338	·366	−·038	63	37	30	43	−8	1·3	2·0	1·7	−0·8	6	8	4	5	11	8	3	1	14	N. 42° E.	N. 69° E.	6	59	97*	113	0·88	0·88	Buldana .	
·349	·410	·353	·371	+·012	70	37	24	44	−4	0·8	1·5	1·2	−0·4	1	...	15	...	23	...	9	1	11	S. 70° E.	N. 63° E.	20	55	53	62	..	...	Khandwa .	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*contd.*	Hoshangabad	...	29·053	28·936	·117	28·991	+·027	29·955	88·2	58·8	29·4	91·6	53·8	37·8	78·1	86·8	73·2	+2·7	54·3	65·3	67·7	62·4
	Nagpur	...	·035	·908	·127	·968	+·083	·950	89·4	61·6	27·8	93·5	54·5	39·0	80·5	87·6	76·0	+3·6	56·9	69·5	70·6	65·7
	Nagpur (Sanitary Commissioner's Office).	...	·055	·930	·125	·993	?	·966	90·0	61·0	29·0	93·8	54·3	39·5	81·1	88·4	75·1	?	56·4	66·9	68·4	63·9
	Jubbulpore	...	28·707?	·590?	·117	·645?	?	·933?	87·4	54·0	33·4	92·0	47·7	44·3	76·3	85·1	70·2	+3·8	51·3	62·8	63·9	59·3
	Saugor	...	·286	·184	·102	·231	+·028	·938	88·3	61·1	27·2	92·1	55·7	36·4	81·9	86·6	74·3	+4·8	53·4	62·7	64·4	60·2
	Raipur	...	·088	·964	·124	29·022	+·029	·935	87·9	62·5	25·4	92·3	58·3	34·0	79·8	85·6	75·6	+4·0	57·5	66·0	65·1	62·9
	Sutna	...	·000	·896	·104	28·941	+·006	·948	86·3	56·7	29·6	92·0	49·1	42·9	80·0	84·5	70·5	+4·5	52·3	63·3	63·7	59·8
	Hyderabad (Deccan).	...	28·359	·246	·113	·301	?	·940	84·9	61·7	23·2	88·0	54·3	33·7	79·3	80·7	72·3	?	60·3	68·3	67·2	65·3
West Coast.	Bombay	...	30·005	29·893	·112	29·943	+·033	·919	88·3	75·2	13·1	91·2	72·3	18·9	81·7	85·4	80·7	+1·7	69·7	73·6	75·3	72·9
	Ratnagiri	...	29·907	·798	·109	·847	+·055	·894	92·1	71·8	20·3	96·8	65·5	31·3	87·2	86·3	80·2	+1·6	66·2	73·0	76·1	71·8
	Karwar	...	·971	·858	·113	·909	+·050	·884	89·4	71·1	18·3	91·7	65·6	26·1	82·3	87·7	79·5	+2·3	68·7	73·6	76·2	72·8
	Cochin	...	·982	·885	·097	·928	+·031	·865	89·7	75·4	14·3	93·3	70·6	22·7	85·2	87·1	81·6	+1·9	73·1	76·8	77·8	75·9
South India.	Salem	...	·097	28·977	·120	·042	+·043	·922	87·9	69·4	18·5	91·1	63·0	28·1	81·5	82·4	76·9	+1·1	68·4	72·7	72·5	71·2
	Mysore	...	27·522	27·409	·113	27·466	?	·896	82·9	64·2	18·7	87·1	58·2	28·9	76·7	80·4	72·9	?	62·5	67·2	66·9	65·5
	Mercara	...	26·312	26·220	·092	26·272	+·048	?	76·1	61·3	14·8	79·6	57·5	22·1	69·9	72·7	67·9	+1·3	58·4	63·2	63·7	61·8
	Bangalore	...	27·034	·931	·103	·986	+·037	·901	80·3	61·9	18·4	83·3	55·5	27·8	74·9	77·3	70·4	+0·6	60·6	65·2	65·3	63·7
	Hassan	...	26·971	·868	·103	·923	?	·902	79·5	60·5	19·0	82·6	53·9	28·7	74·9	77·9	69·6	?	58·5	65·4	65·6	63·2
	Chitaldroog	...	27·634	·524	·110	·579	?	·911	80·8	62·7	18·1	84·1	58·3	25·8	76·0	79·0	71·3	?	59·2	66·6	65·8	63·9
	Trichinopoly	...	29·758	29·637	·121	29·703	+·044	·890	87·7	72·6	15·1	92·6	69·2	23·4	82·2	83·9	78·8	+0·5	70·6	74·6	74·6	73·3
	Madras	...	30·017	·917	·100	·966	+·047	·919	86·2	71·9	14·3	89·7	67·5	22·2	82·0	82·4	78·3	+0·1	?	76·2	75·6	75·1
	Bellary	...	28·565	28·437	·128	28·501	+·058	·919	86·9	65·5	21·4	89·7	59·7	30·0	80·3	84·4	75·2	0	62·4	67·1	67·5	65·7
	Vizagapatam	...	30·021	29·913	·108	29·962	+·042	·931	86·9	69·2	17·7	89·8	62·1	27·7	84·1	84·1	78·9	−0·2	68·0	73·0	73·1	71·4
	Cocanada	...	·022	·916	·106	·969	?	·932	84·8	71·1	13·7	90·6	64·5	26·1	81·8	83·4	77·6	?	68·0	72·6	71·8	70·8
Hill Station, Baluchistan.	Quetta	...	24·793	24·721	·072	24·747	+·026	?	66·5	37·1	29·4	75·0	22·9	52·1	56·6	61·3	50·5	+3·6	33·3	45·4	47·1	41·9
Hill Stations, Northern India.	Leh	...	19·819	19·742	·077	19·782	+·055	?	46·0	21·6	24·4	59·2	9·5	49·7	34·4	41·7	33·4	+1·1	?	26·5	30·9	?
	Srinagar	...	25·089	25·005	·084	25·037	?	?	59·4	34·7	24·7	70·8	25·9	44·9	46·2	58·5	46·8	?	34·5	42·7	51·4	42·9
	Murree	...	23·990	23·953	·037	23·962	+·038	?	61·7	48·4	13·3	72·4	37·2	35·2	56·6	55·6	53·3	+2·7	37·8	43·9	44·3	42·0
	Chamba	3,005	27·078	26·984	·094	27·041	+·016	?	73·3	50·7	22·6	82·7	44·2	38·5	61·2	66·9	58·5	+2·3	46·3	51·6	55·0	51·0
	Kailang	10,087	20·905	20·838	·067	20·881	+·057	?	48·4	25·5	23·1	64·2	13·0	51·2	38·1	42·1	33·6	+0·2	23·3	30·2	32·4	28·6
	Simla (Ridge)	...	23·249	23·196	·053	23·212	+·051	?	57·3	46·9	10·4	62·3	40·3	22·0	53·1	53·1	50·9	+1·9	38·6	42·5	43·9	41·7
	Chakrata	...	·463	·400	·063	·421	+·053	?	60·1	45·6	14·5	69·2	37·6	31·6	56·4	53·2	51·0	+1·2	39·6	44·8	44·9	43·1
	Ranikhet	...	24·247	24·174	·073	24·198	+·044	?	62·8	48·7	14·1	70·9	41·9	29·0	59·1	59·1	54·6	+0·5	44·6	50·1	50·9	48·5
	Katmandu	4,388	25·701?	25·629?	·072	25·661?	?	?	73·5	48·7	24·8	78·3	39·6	38·7	65·1	64·8	58·8	+0·1	47·2	57·6	57·8	54·2
	Darjeeling	...	23·097	23·019	·078	23·053	+·021	?	53·7	43·4	10·3	58·2	37·7	20·5	50·9	50·9	47·9	+0·4	42·1	48·4	48·3	46·3
Hill Stations, Central India.	Mount Abu	...	26·207	26·134	·073	26·164	+·030	?	76·2	61·2	15·0	83·4	54·7	28·7	73·4	73·8	68·1	+3·5	50·7	57·6	58·2	55·5
	Pachmarhi	...	·608	·529	·079	·565	+·044	?	78·0	52·0	26·0	81·2	47·8	33·4	74·9	75·4	65·1	+3·5	48·8	60·2	60·1	56·4
	Chikalda	3,642	·503	·409	·094	·452	+·053	?	77·8	62·8	15·0	81·2	58·4	22·8	73·8	75·7	70·6	+4·0	54·6	59·3	60·3	58·1

II—*continued.*

Stations in India, Burma, etc., for November 1895—continued.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.													Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from									Mean wind direction.	Normal mean direction of month.									
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																									%	%						
·370	·466	·442	·426	+·038	74	48	35	52	− 2	0·3	1·5	0·9	−0·5	41	...	14	4	...	1	...	..	...	N. 56° E.	N. 60° E.	27	66	37	48	...	...	Hoshangabad.	Deccan—*contd.*
·408	·590	·538	·512	+·097	74	57	41	57	+ 4	0·9	1·7	1·3	−1·2	57	...	1	2	...	...	...	...	..	N 73° E.	N. 60° E.	5	60	42	71	...	...	Nagpur	
·401	·485	·448	·445	?	74	46	34	51	?	0·3	0·4	0·4	?	23	14	8	7	2	..	...	..	6	N. 23° E.	?	42	?	13*	?	...	...	Nagpur(Sanitary Commissioner's Office).	
·347	·405	·165	·306	−·062	83	44	27	51	− 5	0·3	1·0	0·6	−1·1	...	5	8	9	7	7	4	13	7	N. 74° W.	N. 47° E.	5	25	23	41	...	...	Jubbulpore.	
·315	·334	·331	·327	+·031	59	31	26	39	− 4	0·6	1·1	0·8	−0·3	...	6	7	1	18	3	16	3	6	S. 1° E.	N. 20° E.	20	47	31	56	...	...	Saugor	
·412	·458	·351	·407	−·038	72	45	29	49	−10	0·3	0·9	0·6	−1·6	13	14	12	4	1	1	1	7	7	N. 1° E.	N. 31° E.	42	57	67*	83	...	...	Raipur	
·340	·376	·331	·349	+·051	74	37	28	46	0	0·4	0·6	0·5	−0·7	2	26	3	4	2	2	1	8	12	N. 16° W.	N. 21° W.	57	33	83*	82	...	...	Sutna	
·514	·560	·506	·527	?	92	56	48	65	?	1·6	1·8	1·7	?	8	1	4	16	28	3	...	..	...	S. 40° E.	?	42	?	76*	?	...	...	Hyderabad (Deccan).	
·658	·725	·745	·709	+·016	75	67	61	68	− 3	1·2	1·3	1·3	−0·9	...	2	7	20	3	...	...	7	21	N. 14° E.	N. 17° E.	35	59	206	236	...	...	Bombay	West Coast.
·578	·626	·764	·656	−·004	74	49	61	61	− 3	1·4	2·5	2·0	+0·8	1	8	7	12	3	2	3	5	19	N. 4° W.	N. 1° W.	34	30	178	199	...	...	Ratnagiri	
·670	·716	·750	·712	−·004	88	65	58	70	− 6	1·1	2·1	1·6	−0·9	3	2	5	12	1	...	...	14	23	N. 34° W.	N. 26° W.	42	46	79	?	...	...	Karwar	
·785	·813	·831	·801	−·007	89	67	64	73	− 7	2·3	3·7	3·0	−1·5	15	6	7	...	...	...	1	28	3	N. 64° W.	S. 49° W.	47	24	76	?	...	...	Cochin	
·684	·688	·666	·679	+·026	94	64	61	73	− 3	4·3	5·7	5·0	0	51	...	2	...	...	1	4	...	2	S. 70° W.	S. 65° E.	?	22	?	74	...	...	Salem	South India.
·550	·551	·493	·531	?	91	60	48	66	?	4·9	5·7	5·3	?	3	2	16	26	10	1	1	1	..	N. 84° E.	?	72	?	178*	?	...	...	Mysore	
·461	·502	·484	·482	−·059	85	69	61	72	−11	4·6	4·6	4·6	−1·9	13	...	15	26	1	...	1	2	2	N. 72° E.	N. 61° E.	59	49	189	90	...	...	Mercara	
·518	·512	·490	·507	−·021	93	59	52	68	− 5	4·2	5·2	4·7	−0·2	...	4	24	26	4	...	...	1	1	N. 67° E.	N. 60° E.	80	63	164*	90	...	...	Bangalore	
·476	·521	·493	·502	?	89	60	52	67	?	4·9	5·8	5·4	?	...	...	27	28	4	...	...	1	...	N. 71° E.	?	85	?	76*	?	...	...	Hassan	
·463	·538	·471	·491	?	80	60	48	63	?	4·0	4·2	4·1	?	1	2	21	29	5	1	...	...	1	N. 74° E.	?	80	?	141*	?	...	...	Chitaldroog	
·724	·758	·734	·739	+·005	90	69	65	75	− 1	5·1	6·2	5·7	−1·3	24	9	23	1	2	...	...	...	1	N. 36° E.	N. 31° E.	50	53	61	100	...	...	Trichinopoly	
?	·827	·798	·834	+·076	?	76	73	86	+ 6	5·3	4·7	5·0	−1·1	...	30	19	7	1	...	...	...	3	N. 24° E.	N. 24° E.	82	59	125	159	...	...	Madras	
·529	·501	·465	·498	−·047	84	48	39	57	− 5	5·9	6·0	6·0	+1·3	9	1	7	36	5	1	...	...	1	N. 87° E.	N. 80° E.	73	56	48	78	...	...	Bellary	
·673	·668	·672	·671	+·011	94	57	57	69	+ 3	2·3	2·3	2·3	−1·1	...	13	20	4	1	3	3	10	6	N. 6° E.	N. 75° E.	42	56	50	53	...	...	Vizagapatam.	
·651	·680	·629	·653	?	85	63	55	68	?	1·7	1·9	1·8	?	...	5	23	18	9	...	...	2	3	N. 65° E.	?	67	?	198*	?	...	...	Cocanada	
·157	·193	·181	·177	+·027	69	42	35	49	+ 1	2·6	3·8	3·2	+2·0	31	3	1	1	2	4	5	8	5	S. 82° W.	N. 41° W.	20	46	39*	60	...	...	Quetta	Hill Station, Baluchistan.
?	·084	·086	?	?	?	43	35	?	?	5·3	5·5	5·4	+1·5	...	...	...	1	0	10	39	9	1	S. 45° W.	S. 4° W.	87	24	62	46	...	...	Leh	Hill Stations, Northern India.
·201	·241	·304	·249	?	98	76	63	79	?	4·2	4·0	4·1	?	12	10	6	...	10	9	3	2	8	N. 43° E.	?	3	?	91*	?	...	...	Srinagar	
·123	·160	·178	·154	−·004	36	36	42	38	− 4	4·4	4·9	4·7	+1·8	11	2	1	3	27	4	1	5	6	S. 37° E.	S. 46° E.	35	17	216*	138	...	...	Murree	
·266	·275	·298	·280	+·004	72	52	47	57	+ 6	4·0	5·6	4·8	+2·6	51	...	...	...	2	...	1	1	5	N. 69° W.	S. 65° E.	7	14	95*	87	0·95	0·32	Chamba	
·107	·105	·104	·105	+·004	77	48	44	56	+ 6	3·9	5·3	4·6	+1·0	...	1	...	...	7	10	15	17	10	S. 59° W.	S. 53° W.	57	65	38	29	1·32	0·87	Kailang	
·152	·164	·193	·170	−·009	47	41	49	46	− 2	2·7	4·2	3·5	+1·6	3	17	6	1	2	16	10	...	5	N. 85° W.	S. 89° W.	7	32	138	?	...	...	Simla (Ridge).	
·184	·179	·216	·193	−·003	61	41	53	52	− 3	1·5	2·2	1·9	+0·3	4	5	...	...	...	51	...	...	...	S.	S. 55° W.	77	28	214	109	...	..	Chakrata	
·254	·272	·291	·272	+·026	74	55	58	62	+ 4	2·0	1·5	1·8	+0·5	14	...	1	4	...	2	18	19	2	S. 66° W.	S. 52° W.	52	35	75*	30	...	...	Ranikhet	
·311	·391	·402	·368	+·031	89	63	65	72	+ 1	3·4	4·8	4·1	+2·0	..	...	...	28	...	...	...	31	1	N. 80° W.	N. 81° W.	7	60	14	?	0·09	0·04	Katmandu	
·258	·316	·315	·296	+·030	90	84	84	86	+ 6	6·0	7·4	6·7	+2·5	10	4	12	13	1	...	5	13	1	N. 29° E.	N. 61° W.	17	8	81	40	...	...	Darjeeling	
·252	·296	·308	·285	+·054	47	36	37	40	+ 3	1·5	2·1	1·8	+0·5	1	6	6	...	7	4	13	11	12	N. 88° W.	N. 73° E.	32	20	107*	90	...	...	Mount Abu	Hill Stations, Central India.
·311	·351	·347	·336	+·035	80	41	40	54	0	1·6	2·7	2·2	+0·2	23	13	2	4	3	1	2	3	9	N. 11° W.	N. 52° E.	28	46	57*	60	...	...	Pachmarhi	
·334	·341	·348	·341	−·027	59	41	39	46	−10	1·6	3·2	2·4	+0·2	28	14	2	...	1	6	4	...	5	N. 24° W.	N. 3° W.	17	21	109	114	0·04	0·04	Chikalda	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 85

Meteorological Province.	Station.	Elevation of barometer cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S.L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, S. India.	Wellington . .	...	24·322	24·252	·070	24·287	+·045	P	67·5	50·4	17·1	71·2	40·9	30·3	63·8	63·1	57·9	−0·6	49·8	57·8	59·0	55·5
Extra India.	Muscat . .	...	30·084	30·003	·081	30·044	P	P	79·7	75·8	3·9	84·2	71·9	12·3	79·2	79·4	77·7	P	69·0	72·3	72·7	71·3
	Aden . . .	...	29·955	29·853	·102	29·908	−·005	29·934	84·3	76·7	7·6	88·3	71·9	16·4	80·9	82·4	80·0	+1·5	70·6	73·3	72·6	72·2
	Perim . . .	...	·808	·693	·115	·755	P	P	86·6	77·5	9·1	90·3	75·2	15·1	83·4	83·3	81·2	P	68·3	75·7	75·4	73·1
	Minicoy . .	...	·999	·901	·098	·949	P	·884	88·4	79·1	9·3	90·7	76·0	14·7	84·3	85·3	82·7	P	74·3	77·9	77·6	76·6
	Zanzibar . .	...	·979	·879	·100	·929	+·012	·929	83·5	77·2	6·3	87·3	74·8	12·5	80·8	82·9	80·2	+0·3	74·9	77·9	78·5	77·1
	Port Victoria (Seychelles).	15	·997	·911	·086	·954	P	·914	82·0	75·9	6·1	84·2	72·8	11·4	80·5	81·1	78·7	P	72·6	76·1	76·0	74·9

II—*concluded.*

Stations in India, Burma, etc., for November 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from								Mean wind direction,	Normal mean wind direction of month,								
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																									%	%						
·357	·411	·459	·409	−·005	95	72	80	82	− 2	5·7	6·9	6·3	−0·5	3	3	5	9	30	8	2	...	...	S 53° E	S. 41° E.	68	53	44	56	...	...	Wellington.	Hill Station, S. India.
·621	·701	·713	·673	P	70	70	71	70	P	1·9	2·3	2·1	P	...	...	12	13	2	...	...	7	26	N. 6° W.	P	43	P	84	P	...	...	Muscat	Extra India.
·670	·721	·671	·687	+·037	73	68	61	67	0	3·6	1·9	2·8	+0·7	1	1	4	39	13	2	...	...	...	S. 79° E.	E	67	65	444	286	...	...	Aden	
·577	·787	·777	·714	P	62	69	68	66	P	2·1	1·4	1·3	P	...	2	11	31	6	9	...	1	...	S. 85° E.	P	70	P	511	P	...	...	Perim	
·795	·870	·842	·836	P	80	74	70	75	P	4·0	4·4	4·2	P	3	12	16	7	...	1	2	7	12	N. 2° E.	P	48	P	146	P	...	...	Minicoy	
·836	·918	917	·890	+·809	89	87	82	86	−7	5·7	5·6	5·7	+0·1	...	6	6	6	9	15	14	2	2	S. 10° E.	S. 6° W.	33	9	94	104	...	...	Zanzibar	
·760	·843	·832	·812	P	85	81	79	82	P	6·6	7·1	6·9	P	...	4	7	14	21	6	1	2	5	S. 72° E.	P	48	P	135	P	9·30	2·45	Port Victoria (Seychelles)	

G. I. C. P. O.—No. 113 Meteor.—16-4-96.—377.

LITHO. BY J.N. MUNDLE.

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr., I.—June 94.—5,000.

Zinco., S. I. O., Calcutta.

LITHO. BY J.N.MUNDLE.

Explanation.

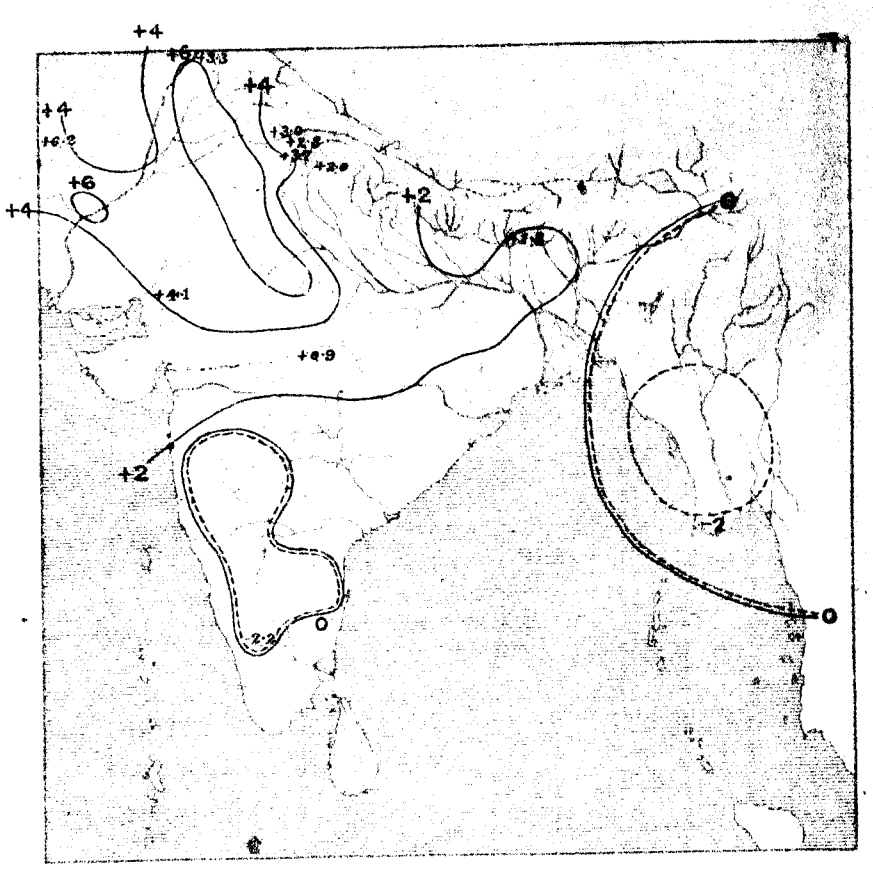
The Chart shows the variation of the mean 8 a.m. pressure of the month from the normal by means of lines drawn for equal amounts of variation (of two hundredths of an inch or ·020″). The numbers are given in thousandths of an inch, 20 representing ·020″ or two hundredths of an inch, &c. Continuous lines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

Reg. No. 153, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.

Imco. S. I. O., Calcutta.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

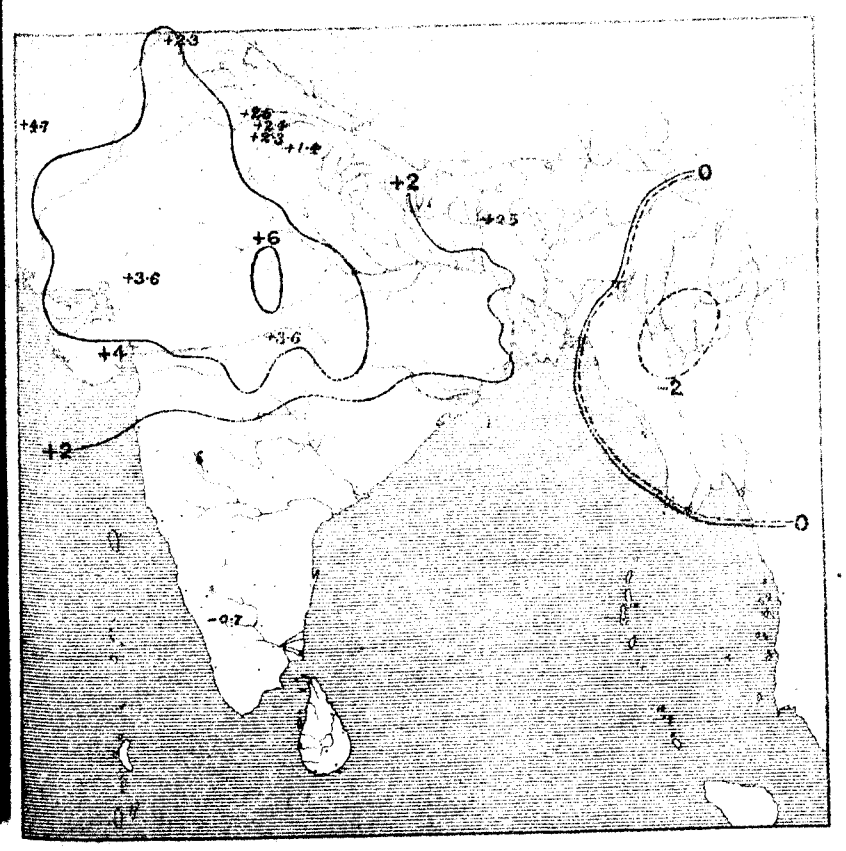
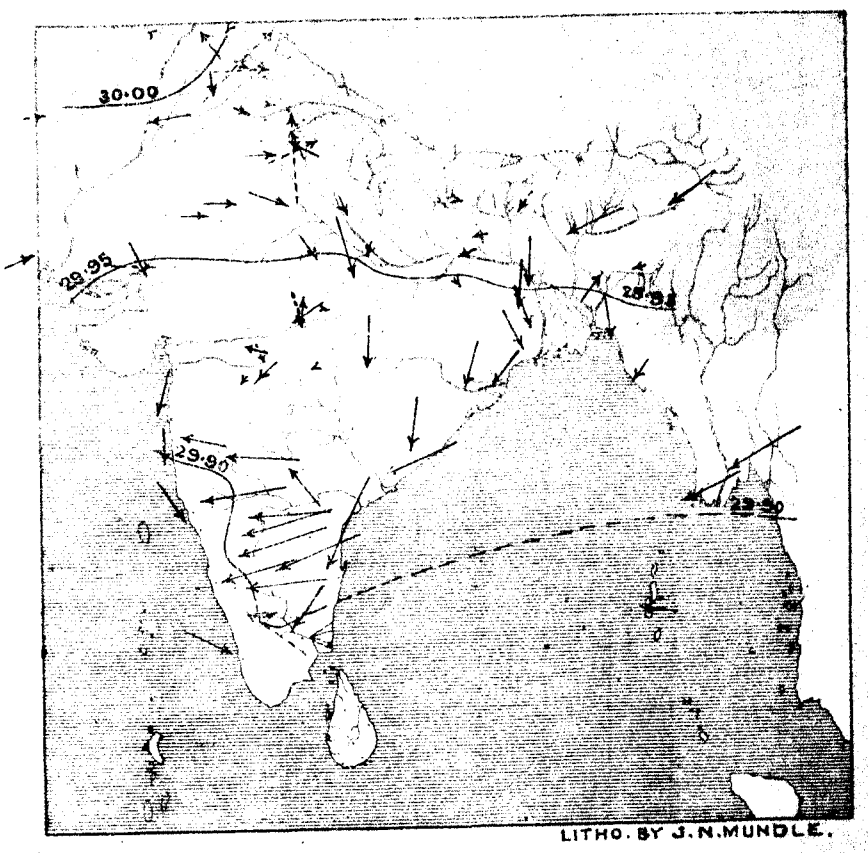


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF NOVEMBER 1895.



LITHO. BY J.N.MUNDLE.

Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{20}$th of an inch being equal to 100 per cent.

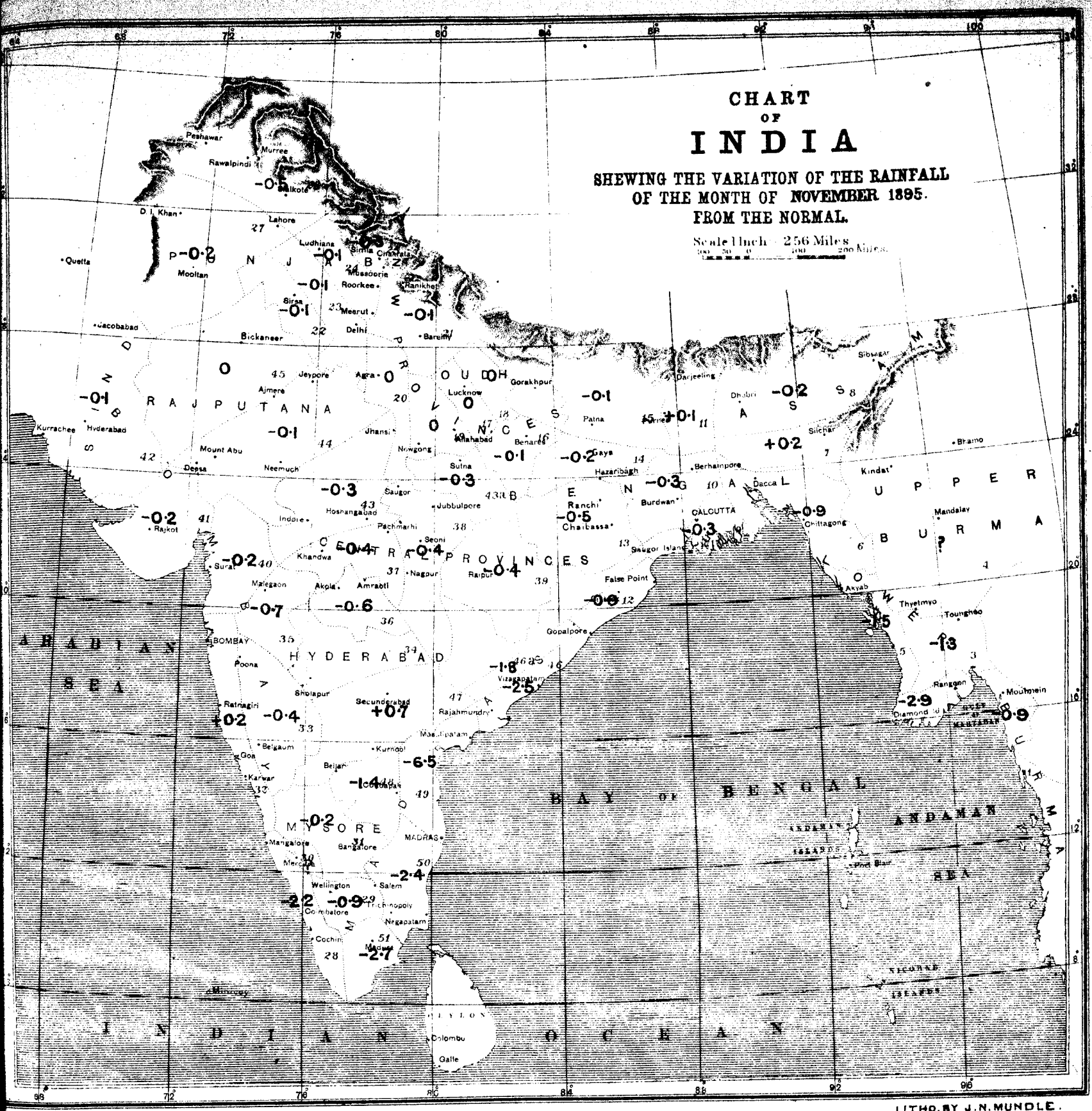
Photo. S. I. O. Calcutta.

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Reg. No. 155, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500.

Zinco., S. I. ... Calcutta.



LITHO. BY J.N. MUNDLE.

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 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg. No. 59, Wr., 1.—Mar. 96.—5,000.

Litho., S. I. O., Calcutta.

GOVERNMENT OF INDIA.

METEOROLOGICAL DEPARTMENT.

MONTHLY WEATHER REVIEW

PUBLISHED BY ORDER OF

THE GOVERNMENT OF INDIA.

CALCUTTA, DECEMBER 1895.

INTRODUCTION.

THIS review of the weather in India during the month of December 1895 is based on observations taken daily at 8 A.M. at 208 stations, and on additional observations taken at 10 A.M. and 4 P.M. at 84 stations. The rainfall summary is based on the rainfall data of the meteorological observatories, and on the weekly rainfall telegrams received during the month from District Officers throughout India. and the rainfall statements of the month published by the Provincial Governments that had been received up to the date of the publication of the review. A summary of the weather in the Bay of Bengal and the Arabian Sea, based on information extracted from the logs of vessels entering the ports of Calcutta and Bombay, is also given.

Summary of the chief features of the weather in India during the month of December 1895.

The most important feature in the meteorology of the month of December is the final withdrawal of south-west humid winds from the south of the Bay and the extension of north-east monsoon winds over the whole of the Bay. This change usually occurs in the third or fourth week of the month. During the early part of the month the north-east winds which prevail on the Coromandel Coast and in East Ceylon continue to give light to heavy rain. This rainfall is heaviest in the South Coromandel Coast districts and diminishes rapidly westwards from the coast into the interior.

Cyclonic storms are also of occasional occurrence during the month, and the final withdrawal of the retreating south-west monsoon current from the south of the Bay is frequently immediately preceded by the formation of a cyclonic storm in the south-west of the Bay. These storms almost invariably march westwards to the South Coromandel Coast between Negapatam and Cuddalore or Pondicherry and usually break up in the Madura, Tinnevelly and Coimbatore districts. They occasionally give excessive cyclonic rain to the South Coromandel coast districts.

Another important feature is the occasional appearance of shallow depressions in Upper India. These depressions originate sometimes in Baluchistan and Persia and sometimes in North-Western India. They generally give very little rain if they occur during the early part of December. In the latter part of December and in January and February, these depressions and storms of the cold weather frequently give moderate general rain to Northern India and moderate to heavy snow to the hill districts. They usually march in an easterly direction across Northern India. When they enter India from Baluchistan they frequently give rise to the formation of secondary or subsidiary depressions in the Punjab. These subsidiary storms are usually much deeper and more intense than the primary storms and give heavy rain in the Punjab, and stormy weather and heavy snow in the hills.

At the commencement of the month pressure was in

general excess by amounts increasing from ·01″ in Southern India to ·12″ in the submontane districts of Northern India. Temperature was above the normal over the whole of India, but in moderate defect in Burma. The excess was most marked in the Central Provinces, Berar and Central India, where the mean temperature averaged 5° above the normal.

Weather was feebly disturbed with numerous series of local thunderstorms on the 2nd and 3rd in the area of greatest excess of temperature, including the South Punjab, East Rajputana, the North-Western Provinces, Central India, and the northern districts of the Central Provinces. The whole of that area received light, but very irregularly distributed rain, the only rainfall of the month over nearly the whole of North-Western and Central India. A large temporary reduction of temperature occurred in the area of rainfall, and temperature was in decreasing defect in that area from the 3rd to the 7th. During this period temperature continued in considerable to large excess in Berar and the Central Provinces. The following gives data in illustration:—

Berar and Central Provinces.	3rd.	4th.	5th.	6th.	7th.	8th.
	°	°	°	°	°	°
Variation of maximum .	+3·1	+2·2	+2·9	+3·6	+2·9	+0·1
„ of minimum .	+5·1	+4·0	+5·1	+6·0	+5·6	−0·9
„ of mean . .	+4·1	+3·1	+4·0	+4·8	+4·3	−0·4

Temperature was in slight to moderate excess in North-Eastern India and Burma during this period as is shown by the following:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date.				
	3rd.	4th.	5th.	6th.	7th.
	°	″	°	°	°
Burma	+1·3	+1·9	+1·3	+1·0	+0·7
Bengal and Assam . . .	+3·4	+0·8	+0·3	+0·4	−0·5

Temperature was in large excess in the Persian area from the 1st to the 6th. Pressure decreased slightly from the 1st to the 5th and rapidly on the 6th and a low pressure area and cold weather disturbance appeared on that day in West Persia. It drifted eastwards during the next three days and gave light to moderate showers in Persia on the 6th and 7th, to Baluchistan on the 8th and 9th and Kashmir and the Punjab hills on the 9th and 10th. It gave some cloud, but no rain to the plains of Upper India. The disturbance produced a large, but brief reduction of temperature in Baluchistan and the West and North Punjab.

Weather had become unsettled in the Bay whilst the cold weather disturbance described above was in progress. Pressure had fallen on the 5th, 6th and 7th in the east and south-east of the Bay relatively to the Indian land area, and was in considerable to large defect in that area on the 8th. Squally weather with increasing winds set in on the 7th and 8th over the south and south-east of the Bay, and a cyclonic whirl began to form in that area on the 9th to the south-west of the Andamans in about Lat. 10° N. and Long. 89° E. It developed rapidly on the 10th and began to move northwards. It was of considerable intensity but of small extent on the 11th. The Ships *Bann* and *Wanderer* in the inner storm area during the day experienced terrific squalls and winds of hurricane force. The storm advanced with rapidly increasing velocity during the day and recurved slightly to the east and struck the East Bengal coast near Chittagong early on the morning of the 12th. It broke up rapidly during the day, but Central and Upper Burma received moderate to heavy rain during the next two days. The storm gave heavy rain to the Chittagong, Noakhali, Barisal and Tipperah districts on the 11th and 12th.

During the existence of this storm dry north-westerly land winds prevailed over the Peninsula instead of the normal north-easterly winds of the period. Fine bright weather with cloudless skies obtained during the period, but in consequence of the unusually large radiation during the night hours temperature was reduced very considerably below the normal over the Peninsula during this period from the 9th to the 13th. The following gives data for the Madras Presidency, in which the reduction of temperature was most marked:—

Variation from normal in the Madras Presidency of	8th.	9th.	10th.	11th.	12th.	13th.
	°	°	°	°	°	°
Mean maximum temperature	−0·5	−0·1	−2·7	−2·0	+0·8	+0·7
Mean minimum temperature	−1·1	−2·9	−7·2	−7·7	−7·0	−4·8
Mean temperature . .	−0·8	−1·5	−5·0	−4·9	−3·1	−2·1

Lower night temperatures were recorded during this period at Madras and other stations than have been observed

during the past 20 years in the month of December as is shown by the following statement:—

Station.	Lowest minimum temperature December 1895.	Lowest minimum temperature recorded in December previous to 1895.
	°	°
Madras	57·5	61·1
Bellary	50·9	51·8
Bangalore	48·9	48·2
Salem	55·5	55·7
Cuddapah	53·3	54·8
Kurnool	45·6	46·8

Temperature increased generally on the 14th and 15th, and on the 16th differed little from the normal except in Sind and Baluchistan where it was in considerable excess and in Bengal where it was in moderate defect (chiefly due to unusually low night temperature).

A very feeble cold weather disturbance affected the Persian area from the 12th to the 15th and gave light showers in Persia and Baluchistan.

During the next six days from the 16th to the 21st, normal fine weather with slightly higher temperature and pressure than usual obtained over nearly the whole Indian area. Pressure increased on the 22nd and following days in Northern India relatively to Southern India and the south of the Bay, and much steeper gradients than usual for northerly winds obtained from the 22nd to the 27th. Temperature decreased in the Peninsula and was more or less below the normal over the greater part of India during this period, as is shown by the following data:—

Political area or Province.	Variation from normal of mean day temperature of 24 hours preceding 8 A.M. of date.					
	22nd.	23rd.	24th.	25th.	26th.	27th.
	°	°	°	°	°	°
Burma	+1·6	−0·2	−0·5	−1·4	+0·3	+1·5
Bengal and Assam	−1·4	−1·1	−1·2	−1·8	−1·8	−1·1
North-Western Provinces and Oudh.	−0·1	+1·0	+0·7	−1·2	−1·8	−0·6
Punjab	+1·5	+1·7	+1·5	+0·6	+1·6	+1·2
Sind and Rajputana	+0·2	+0·9	−1·0	−0·5	+0·8	+1·8
Central India and Gujarat	+2·9	+2·0	+0·5	−1·3	−1·3	−1·2
Central Provinces and Berar	+2·9	+2·6	−0·2	−2·2	−1·8	−3·0
Bombay	+0·8	+0·3	−0·1	−1·7	−2·0	−2·4
Madras	−1·8	−2·1	−2·6	−1·8	−1·8	−2·6

Temperature was during this period in moderate excess in Baluchistan and the Persian area.

A belt of low pressure lay across the entrance to the Bay during this period from the 21st to the 27th. Weather was squally with much rain in this belt, whilst strong winds with clear skies held steadily over the centre and north of the Bay. An unusually rapid decrease of pressure occurred in this belt on the 27th, and on the morning of the 28th, weather was very squally with "very heavy rain" and "deluges of rain." Skies clouded over in the Peninsula and the area of rainfall and squally weather extended over Southern India and gave an unusually heavy and general burst of rain to that area during the remainder of the month. The following gives data showing the distribution of this rainfall:—

Division.	Average actual rainfall in 24 hours preceding 8 A.M. of date.			Total average rainfall.
	29th.	30th.	31st.	
	Inches.	Inches.	Inches.	Inches.
Madras East Coast North	0	0	0	0
" " " Central	1·21	0·46	0·21	1·88
" " " South	2·52	2·12	1·57	6·21
Madras South	1·07	3·03	1·76	5·86
Malabar Coast	0	0	0	0
Madras South Central	0·53	0·61	0·40	1·54
Madras Hills	0·72	0·93	1·47	3·12
Madras Central	0·31	0·21	0·24	0·76

The rainfall was especially heavy in the Tinnevelly, Trichinopoly, Tanjore, South and North Arcot and Chingleput districts.

Temperature increased considerably in the Peninsula under the influence of the humid conditions of this period and was in slight to moderate excess at the end of the month over the whole of India except North Bengal where it was normal and South Madras where it was in slight to moderate defect.

Pressure.—The mean pressure of the Indian land area was ·002″ below the normal of the month and was hence practically normal.

Relatively to the general condition pressure was in excess to the north and west of a line running from Mangalore, through Masulipatam, Hazaribagh to Gorakhpur. The local excess was more than ·02″ in amount at Neemuch (·035″?), Jacobabad (·027″) and Khandwa (·023″).

Pressure was locally in defect or the baric anomalies were negative to the east of the line defined above. The deficiency of pressure exceeded ·02″ in Ceylon, Malabar

and the southern half of the Bay and also in Arakan and East Bengal. In the latter area it was due to the influence of the first cyclonic storm of the month, but in the south of the Bay it was a persistent feature of the month. The deficiency was ·026″ at Colombo, ·024″ at Port Blair and Calicut, and ·021″ at Cochin.

The pressure variations were slightly greater at the hill stations in Northern India than at the neighbouring plains stations, or the vertical anomalies were positive but small in amount, except in the case of Leh, where the excess of pressure was considerable.

The following table gives comparative data showing the amount of variation in the eleven meteorological provinces of India:—

Meteorological Province.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Burma Coast and Bay Islands	−·021	−·019
Burma Inland	+·008	+·010
Assam	−·009	−·007
Bengal and Orissa	−·012	−·010
Gangetic Plain and Chota Nagpur	−·002	0
Upper Sub-Himalayas	+·002	+·004
Indus Valley and North-West Rajputana	+·007	+·009
East Rajputana, Central India and Gujarat	+·010	+·012
Deccan	+·014	+·016
West Coast	−·006	−·004
South India	−·010	−·008

Temperature.—The variations of the mean temperature conditions from the normal were much smaller in December 1895 than in the preceding month, but they indicate a general excess due to the continuance over the greater part of India, of the unusually fine and dry weather in December, which prevailed in the preceding month.

The maximum or day temperature was in slight to moderate excess over nearly the whole of India and in Lower Burma and was in slight to moderate defect in Central and Upper Burma. The variation from the normal exceeded 2° locally at Deesa (+2°·1), Khandwa (+2°·2), Saugor (+2°·1), Jubbulpore (+2°·5), Rawalpindi (+2°·4), Moulmein (+3°·2), and perhaps Thayetmyo (—2°·4).

The minimum or night temperature of the month was above the normal in Baluchistan and North Western India and in Burma, and normal or in defect over the remainder of India. The excess was considerable in Baluchistan, Upper Sind and Lower Burma, as is shown by the following data.

Station.	Mean minimum temperature		
	Actual December 1895.	Normal December.	Variation of actual from normal.
	°	°	°
Quetta	32·4	28·8	+3·6
Mooltan	46·8	43·5	+3·3
Jacobabad	46·5	43·4	+3·1
Thayetmyo	62·6	58·9	+3·7
Moulmein	70·8	66·5	+4·3

The deficiency over the remainder of India was generally small in amount and exceeded 2° locally at Darbhanga (—2°·7), Sambalpur (—2°·6), Cuddapah and Kurnool (each —2°·4) and Berhampore (—2°·2).

The mean temperature of the month was below the normal to a slight extent in North Eastern India and the Deccan and Coromandel coast districts and above it to a slight extent over the remainder of India. The variations were less than 2° at all stations except Moulmein (+3°·8), Mooltan (+2°·5) and Jacobabad (+2°·0).

Temperature was slightly lower than usual at the Upper India hill stations and was in considerable defect at Leh in Ladakh.

The following table gives comparative temperature data of the month for the eleven meteorological provinces:—

Meteorological Province.	Variation from normal of		
	Mean maximum temperature, December 1895.	Mean minimum temperature, December 1895.	Mean daily temperature, December 1895.
	°	°	°
Burma Coast and Bay Islands	+0·6	+2·4	+1·5
Burma Inland	−2·0	+2·2	+0·1
Assam	+0·4	−1·3	−0·4
Bengal and Orissa	+0·3	−1·3	−0·5
Gangetic Plain and Chota Nagpur.	+0·5	−1·0	−0·3
Upper Sub-Himalayas	+1·0	+0·2	+0·6
Indus Valley and North-West Rajputana.	+1·4	+1·7	+1·6
East Rajputana, Central India and Gujarat.	+0·8	+0·9	+0·8
Deccan	+0·8	−0·4	+0·2
West Coast	+1·0	−0·4	+0·3
South India	+0·3	−1·0	−0·3

Winds.—Winds were stronger than usual on the mean of the month at Port Blair and the Burma and Arakan coast stations. They were steadier and more directly from the north in Bengal. The air movement was normal in amount over the Gangetic Plain, but winds were more westerly than usual at the western stations in that area,

viz., at Meerut, Ludhiana and Lahore. The air movement was light and unsteady in Sind and the West Punjab and was normal in amount in Rajputana and Central India. Winds were steadier and somewhat stronger than usual in the Central Provinces, Berar and the Deccan. They were abnormally strong in Mysore and Coorg, but were normal in force and direction at the Konkan coast stations. They were of normal strength at the Madras coast stations, but were more northerly or less easterly than usual. The mean wind direction at Minicoy and Zanzibar was N. E. and at the Seychelles N. W.

Humidity and Cloud.—The air was slightly damper than usual at Port Blair and in the Burma and Bengal coast districts. It was much drier than usual over the whole of the remainder of India with the exception of the Coromandel coast stations. This feature of increased dryness was on the whole most marked in the Central Provinces, Berar and the west coast districts. At several stations the mean humidity of the month was from 10 to 13 below the normal. The decreased humidity was solely due to the diminished amount of aqeous vapour present in the air, a result of the early withdrawal of the south-west monsoon currents from Northern and Central India.

The cloud amount was larger than usual in the areas directly affected by the two large disturbances which formed over the Bay, that is in Southern India, Bengal and Burma. The excess was large at Port Blair and the coast stations of Burma, Arakan and Bengal. There was less cloud than usual over the remainder of India and the deficiency was most marked in Berar and the Central Provinces. Skies were, on the whole, most serene in Bihar and the eastern districts of the North-Western Provinces where the mean cloud amount ranged between 0 4 and 1·2.

The following table gives variation data of the mean aqueous vapour pressure, humidity and cloud amount of the month in ten meteorological provinces of India:—

Meteorological Province	Variation from normal of		
	Mean aqueous vapour pressure.	Mean humidity.	Mean cloud amount.
	"		
Burma Coast and Bay Islands .	+·031	+1	+1·9
Assam	−·011	−2	−0 5
Bengal and Orissa . .	−·049	−6	+1·0
Gangetic Plain and Chota Nagpur	−·034	−7	−0·4
Upper Sub-Himalayas .	−·038	−7	−0·4
Indus Valley and North-West Rajputana	0	−2	−0·3
East Rajputana, Central India and Gujarat.	−·009	−1	−0 6
Deccan . . .	−·044	−5	−0·6
West Coast . . .	−·062	−9	+0·7
South India . . .	−·047	−5	+0·7

Rainfall.—The month was abnormally dry over the greater part of India. Two cold weather disturbances which originated in Persia gave moderate showers to Baluchistan, Kashmir and the Punjab hills. A feeble disturbance gave numerous thunder showers in Central India and the neighbouring districts on the 2nd and 3rd. The rainfall of the month was in excess in Baluchistan, but was more or less in defect over the whole of India except in the two areas that received abnormal rain from the two disturbances that originated in the Bay during the month. The first of these, a cyclonic storm of considerable intensity, advanced to the mouth of the Megna. It gave a heavy burst of rain to Arakan and the south-eastern districts of East Bengal on the 11th and 12th and moderate to heavy rain in Burma during the three days following the dispersion of the storm. The rainfall of the month was hence in large excess in Central and Upper Burma, Arakan, South-East Bengal and Cachar. The second disturbance of the month gave an unusually heavy and general burst of rain to South and Central Madras from the 29th to the 31st. The rainfall was exceptionally heavy in the Tanjore and Tinnevelly districts. Central and South Madras received on the average of the whole area twice their normal falls of the month during this period.

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

Meteorological Province	Rainfall		
	Average actual December 1895	Average normal December.	Variation from normal.
	Inches.	Inches.	Inches.
Burma Coast and Bay Islands .	1 46	1·09	+0·54*
Burma Inland . . .	2·56	0·10	+2·48*
Assam	0·79	0·47	+0·33*
Bengal and Orissa . .	0·57	0·28	+0·19*
Gangetic Plain and Chota Nagpur	0·16	0·25	−0·08*
Upper Sub-Himalayas . .	0·06	0·46	−0·40
Indus Valley and North-West Rajputana.	0·02	0·17	−0·15
East Rajputana, Central India and Gujarat.	0·08	0·17	−0·07*
Deccan	0·05	0·51	−0·46
West Coast . . .	0 57	0·81	−0·17*
South India . . .	3·28	2·49	+0·68*

* A reference to Table I will show that the means in columns 2nd and 3rd are derived from a smaller number of stations than the means in the first column. The sum of the figures in columns 2 and 3 therefore will not agree with the figures in column 4.

Atmospheric Pressure.

The mean pressure of the Indian land area for the month was practically normal, being only ·002″ in defect, in this respect agreeing with the mean conditions for December 1894, when pressure was only ·003″ in excess. The local anomalies however differed entirely in the two months. In December 1895 pressure was locally in defect or the anomalies were negative in North-Eastern India, Burma, the Bay and South India and were positive over the remainder of India. In December 1894 the anomalies were positive in Sind, the Punjab, the Bay, Burma and North-Eastern India and were negative elsewhere.

The pressure anomalies in December 1895 were positive and ·020″ or upwards at Neemuch (+ 035″?), Jacobabad (+·027″), Khandwa (+·023″) and Indore (+·020″).

Pressure relatively to the general condition was in moderate defect over the south and south-east of the Bay, Ceylon and Malabar and also locally in the north-east of the Bay. The pressure anomalies were hence negative in these areas and exceeded ·020″ in absolute amount at the following stations:—

Station.	Variation of mean 8 A.M. pressure of month from normal.	Pressure anomaly.
	″	″
Calicut	−·026	−·024
Cochin	−·023	−·021
Colombo	−·028	−·026
Port Blair	−·024	−·022
Rangoon	−·026	−·024
Akyab	−·025	−·023
Chittagong	−·025	−·023
Parisal	−·027	−·025

The deficient pressure in the south and south-east of the Bay was due to persistent abnormal conditions throughout the month in that area, and probably extended southwards over the equatorial belt, as is indicated by the considerable deficiency of pressure at Zanzibar (−·028″). In the north-east of the Bay it was an effect of the passage of the cyclonic storm of the second week of the month.

Pressure at the level of the hill stations in Northern India was generally in slight excess, but the variations were small and differed little in amount from those of the neighbouring plains stations. The following data illustrate this feature:—

Hill Station.	Variation from normal pressure. (a)	Plain Station.	Variation from normal pressure. (b)	Vertical pressure anomaly. (a)−(b)
	″		″	″
Leh	+·028	Lahore	+·006	+·022
Murree	+·007	Peshawar	+·003	+·004
Simla	−·004	Ludhiana	+·008	−·012
Ranikhet	+·015	Bareilly	+·004	+·011
Quetta	+ 015	Jacobabad	+·025	−·010
Darjeeling	−·010	Dhubri	−·016	+·006

The vertical anomalies were hence generally positive and were largest in the case of Leh and Lahore. This distribution of pressure in the vertical direction is usually a feature of finer and drier weather than usual in Upper India during the cold weather.

Barometric depression and cyclonic storm of the month.

Pressure at the commencement of the month was higher than usual, the excess increasing in amount northwards, and was slightly larger than a tenth of an inch in the submontane districts of Northern India. Pressure gave way considerably but irregularly over the whole area during the next 72 hours. Local actions in the northern districts of the Central Provinces, Central India, Rajputana and the North-Western Provinces gave rise to a series of thunderstorms on the 2nd and 3rd in these areas. This disturbance was not due to the passage of a cold-weather depression across Northern India, but originated locally in Central India and the adjacent districts, and was probably a result of the unusually high temperature which had obtained for some days in that area.

Pressure increased slowly but very irregularly during the next three days from the 4th to the 7th, and was in slight to considerable defect, the deficiency being greatest in the southern half of the Bay, the Andaman Sea and Lower Burma.

A slight disturbance affected the Persian area (Meso-

potamia, Persia, Afghanistan and Baluchistan) during the period from the 6th to the 10th. Temperature was in large and increasing excess from the 1st to the 6th, as is shown by the following data for three stations :—

Date.	Variation of mean temperature from normal.		
	Baghdad.	Bushire.	Teheran.
	°	°	°
1st	+2·9	−0·9	+4·3
2nd	+3·0	+2·4	+7·8
3rd	+6·2	+4·4	+8·0
4th	+8·5	+7·1	+8·0
5th	+7·2	+7·0	+9·4
6th	+8·3	+7·2	+7·3

Pressure decreased slowly over the whole Persian area from the 1st to the 5th, and rapidly on the 6th, on which day a moderate depression was shown over West Persia and Mesopotamia. Baghdad and Bushire recorded the lowest pressure due to this disturbance on the 6th; Teheran and Ispahan on the 7th; and Jask, Muscat, Quetta and Chaman on the 8th. Baghdad had moderate showers on the 6th, and Teheran on the 7th. Baluchistan received fairly general moderate rain on the 8th, and local showers on the 9th. The largest fall reported was 1·3 inches at Bostan on the 8th. The disturbance affected Upper India on the 9th, giving much cloud in the Punjab, and the Upper India hill districts on the 9th and 10th. No rain fell on the plains of the Punjab, with the exception of a few showers, chiefly in the Gurdaspur district. Kashmir and the Punjab hill districts obtained moderate rain or snow on the 9th and 10th. Skies cleared over the whole of Upper India on the 10th and fine dry weather prevailed in that area for some days, during which a cyclonic storm of considerable intensity formed in the Bay and advanced to the North Arakan and East Bengal Coasts. The following gives a history of this storm.

Cyclonic storm of the 9th to the 12th December.—Pressure on the 6th, 7th and 8th was more or less in defect over the whole of India. The deficiency was greatest in the south and south-east of the Bay where it exceeded a tenth of an inch. Steeper gradients than usual hence obtained in the Bay. Unusually strong north-east winds prevailed in the west and centre of the Bay, ranging in force between 4 and 8. The chief feature of the weather was the frequent occurrence of squalls with much rain in the Bay to the south of Lat. 12° N.

The following table gives 8 A.M. observations in this area on the 7th.

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S. *Buccleuch* .	14 23	93 47	29·82	NE.byN.	4	Fine.
S.S. *Mutiana* .	10 3	81 18	·78	N.	4	Cloudy with rain, 10 A.M. Wind increasing in squalls and heavy rain.
S.S. *Muttra* .	9 21	85 6	·80	E.	4	Overcast. Midnight, heavy rain squalls.
S.S. *Myrtle Dene*	7 3	82 18	·79	WNW.	5	4 A.M. occasional showers.
S. *Clackmannanshire.*	4 19	93 1	·79	WSW.	...	7 A.M. heavy squalls and much rain.
S. *Cressington* .	3 9S	89 44	...	SE.	5	Squally. 4 P.M. heavy rain.

The data are not sufficient to show fully the meteorological conditions prevailing over the entrance to the Bay, but they indicate that pressure was lowest to the north of the Equator, and probably between Lat. 8° N. and Lat. 4° N. Strong southerly humid winds were blowing to the south and east of this area, and weather was more or less squally over the whole area. The Port Blair data also indicate that there was a marked tendency to the advance of southerly winds up the east of the Bay.

The following gives data for the low pressure area in the extreme south of the Bay on the 8th :—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S. *Clyde* . .	16 11	86 0	29·87	NNE.	7	4 A.M. squally.
S. *Bann* . .	15 52	87 39	·85	N. by E.	5	Cloudy. 8 P.M. rainy.
S.S. *Simla* .	11 0	81 20	·85	NE.	5	Overcast with passing sharp squalls of wind and rain.
S.S. *Roma* .	9 20	81 13	·84	NE.	7	Occasional squalls of wind and rain.
S. *Clackmannanshire.*	5 52	92 24	·76	WNW.	1	Squalls and rain.
S.S. *Arratoon Apcar.*	2 2	101 40	·82	Var.	2	Fine. Midnight, heavy continuous rain.
S. *Cressington* .	1 11S	89 53	...	W.	4	Squally.

These observations indicate in the first place that the area of disturbed squally weather was extending northwards, and that skies were now clouded to the south of Lat. 16° N. The shift of winds at Port Blair (from SSE to ESE) and the prevalence on the Coromandel coast of winds from northerly and north-north-westerly directions instead of from north-east, establish that there was now an indraught over the whole of the south of the Bay to a depression, the centre of which was perhaps in about Lat. 10° N. The majority of vessels in the south of the Bay experienced heavy continuous rain.

9th December.—The pressure changes were small in amount over the whole Indian area, except in the south-east of the Bay, where pressure had, as shown by the Port Blair and other observations, fallen ·05″ to ·10″ in amount.

The low pressure area in the Bay had advanced or extended northwards, and the centre of the depression on the morning of the 9th was probably in about Lat. 12° N. The following gives data showing the character of the disturbance at 8 A.M :—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S.S. *Nurbudda*	16 38	93 9	29·79	NE	4	Fine.
S. *Bann* . .	15 41	89 22	·68	NE	5	Noon, heavy rain.
S S. *Muttra* .	13 28	85 20	...	NNE	6	Midnight, heavy rain squalls.
S.S. *Meanatchy* .	...	...	...	NE	5 to 6	Suspicious and unsettled.
S. *Clackmannanshire.*	7 41	92 18	·76	SSE	4	Heavy showers and squalls.
S.S *Obra* . .	7 5	82 13	·80	N	4	Hazy horizon.
S S. *Roma* . .	6 1	81 45	·80	N	9	Cloudy.
S. *Cressington* .	0 48	90 43	...	W by S	8	Heavy squalls.

The preceding observations do not enable the development of the storm to be traced. They show that winds were cyclonic in direction to the south of Lat. 16° N. and that weather was unsettled and squally. Cloudy weather had extended northwards to the head of the Bay.

The wind velocity at Port Blair had increased from an average of 7 miles per hour on the 8th to 17 miles per hour on the 9th. The S. S. *Kerbela*, which left Barwa for Rangoon on the previous day, was crossing the Bay in front of the advancing depression on the 9th. The following gives the weather experienced during the day :—

9th, 8 A.M.—Strong N. N. E. wind with hard puffs at intervals; no rain, sky only partially clouded, N. E. swell, barometer falling slowly.

Noon—Position Lat. 17° 48° N., Long 87° 38°E.

9th, 4 P.M.—Strong breezes ; sky overcast but no rain. Moderate NE swell.

10th December.—Pressure had increased slightly in Burma and fallen over India generally. It had fallen briskly in the centre of the Bay, thus emphasizing the low pressure conditions in that area. Fine weather with clear or lightly clouded skies obtained in India. Skies were heavily clouded in Burma, and at the head of the Bay. The following gives 8 A.M. data of the low pressure area in the Bay :—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S.S. *Boolduna*	18 57	85 50	29·86	NE.byN.	5	Fine. Midnight continuous rain.
S. *Buccleuch* .	18 34	88 40	·82	NE.byE.	6	Hard puffs, 8 P.M. heavy rain and hard squalls.
S. *Bann* . .	16 38	89 27	·76	NE.byE.	...	Heavy rain.
S.S. *Guildhall* .	13 32	92 1	·75	E.	5	Rough sea; cloudy. Midnight, heavy continuous rain, terrific squalls and very high sea.
S. *Clackmannanshire.*	11 11	91 58	·71	SE.	7	Heavy squalls and rain.
S.S. *Arthur Head*	9 4	83 11	...	NE.	8	4 A.M. heavy squalls from NNE with rain.
S.S. *Canara* .	18 31	90 56	·82	NNE.	6	Heavy head swell and overcast.
S.S. *Kerbela* .	...	91 0	Fall rapid.	E.	5 to 6	Rough sea.
S.S. *Roma* .	Colombo		·79	...	...	4 A.M. clear.
S. *Cressington* .	2 17	91 39	...	W.	4	Cloudy, 4 A.M. squally.

The data show that weather had improved in the extreme south of the Bay, but was becoming more squally and stormy in the centre of the Bay. The logs of the S.S. *Guildhall* and S. *Bann* and *Wanderer* establish that a small cyclonic storm of considerable intensity had formed

in the large low-pressure area covering the southern half of the Bay. The following gives in full the information for the 10th contained in their logs, and the logs of the S.S. *Kerbela* and S. *Clackmannanshire* which were within the storm area during the day :—

Hour.	Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
		° ′	° ′	″			
8 A.M.	S.S. *Kerbela* .	...	...	Bar. change. 0·09″	NE	6	Gloomy and overcast, moderate north-east swell.
10 „	Ditto . .	...	...	...	ENE	6	Frequent squalls of wind and rain, sky not evil looking.
Noon.	Ditto . .	16 48 by	90 51 obs.	...	...	...	
4 P.M.	Ditto . .	...	...	...	E	5 to 6	Head sea with heavy showers of rain.
8 „	Ditto . .	...	...	Steady.	E to ESE	8	Passing hard squalls, sky almost cloudless and stars shining brightly.
10 „	Ditto . .	...	...	...	...	...	Heavy squall of rain from eastward, lightning to south-west.
Midnight.	Ditto . .	...	...	...	...	6	Increasing head sea, sky appearance not bad.
4 A.M.	S.S. *Guildhall*.	...	...	...	E	4	Squally.
8 „	Ditto . .	13 32	92 1	29·75	E	5	Cloudy. Rough sea. Heavy continuous rain, terrific squalls and very high sea.
Midnight.	Ditto . .						
8A.M.	S. *Clackmannanshire*.	11 11 by	91 58 obs.	·71	SE	7	Heavy squalls and rain.
Noon.	Ditto . .	...	...	...	ESE	8	Heavy sea.
4 P.M.	Ditto . .	...	...	...	ESE	7	Showery.
8 „	Ditto . .	...	...	...	SE	8	Showery.
Midnight.	Ditto . .	...	...	...	SSE	...	Blowing hard with heavy sea.
4 A.M.	S. *Bann* . .	...	...	...	NE by E	...	Less squally.
8 „	Ditto . .	16 38 by	89 27 D. R.	·76	NE by E	...	Wind increasing and heavy rain.
Noon.	Ditto . .	...	...	...	NE by E	...	Dark and dull looking.
4 P.M.	Ditto . .	...	...	...	...	...	Wind increasing with strong squalls and torrents of rain.
6 „	Ditto . .	...	...	...	...	...	Blowing a strong gale.
Midnight.	Ditto . .	...	...	...	...	...	Wind blowing with hurricane force and a very heavy sea.

The following describes the weather experienced by the S. *Bann* during the day : "Winds were very unsteady during the afternoon of the 9th. During the night they increased and were blowing very hard at midnight with heavy squalls. Weather improved to some extent during the early morning of the 10th. At noon the wind was increasing with strong squalls and torrents of rain, and at 6 P.M. it was blowing a strong gale. Battened main and after hatches down. 10 P.M., blowing very hard with terrific squalls and heavy rain. Lightning to the south-eastwards. Furled the mizzen lower top-sail, the fore lower top-sail blowing away whilst taking it in. Midnight, wind blowing with hurricane force and a very heavy sea."

The preceding information hence establishes that a small storm of considerable intensity had formed during the previous 24 hours. The centre was probably in about Lat. 12°N. and Long. 89°E at 8 A.M. It began to advance northwards during the day, and the data of the afternoon and evening observations taken at Port Blair and on board the S.S. *Kerbela* indicate that the centre at midnight was probably in about Lat. 13° or 14°N. and Long. 89°E.

11th December.—Pressure had given way over the whole Indian area, slightly in Upper India, and briskly to rapidly in the north and centre of the Bay. The land observations indicated that a depression of some intensity lay over the centre of the Bay. Skies were clear over the whole of India, except in Bengal and Burma, where they were now overcast.

The following data show the character and position of the storm in the Bay at 8 A.M. :—

Name of Vessel.	8 A.M. Position. Lat. N.	8 A.M. Position. Long. E.	Barometer corrected.	Wind. Direction.	Wind. Force.	Weather.
	° ′	° ′	″			
S.S. *Booldana* .	21 0	87 45	29·81	NE.	6	Overcast and rainy.
S. *Clyde* . .	18 24	85 38	·78	NNE.	8	Threatening sky.
S.S. *Simla* . .	18 36	87 32	·70	N.	5	Cloudy.
S.S. *Kerbela* . .	...	...	Fall rapid.	SE.	7 and above.	Very rough sea; cyclonic storm forming very heavy swell from SE.
S. *Bann* . .	17 33	89 1	28·890	...	...	Tremendous sea. Blowing a hurricane.
S. *Clackmannanshire*.	15 40	92 9	29·66	SSE.	9	Very hard squalls and heavy rain.
Barque Jupiter .	16 17	92 1	·44	ESE.	...	
S.S. *Kasara* . .	17 21	94 6	·70	NE.	4	Fine.
S. *Cressington* .	2 52	91 33	...	Variable	2	Fine.

Fine weather with moderate winds now prevailed in the extreme south of the Bay, and cloudy weather with strong winds at the head of the Bay. A low pressure area covered the centre of the Bay, and within this a cyclonic storm, in which winds of hurricane violence and terrific squalls were experienced, was established. The storm was probably of moderate extent and the centre at 8 A.M. was in about Lat. 16½°N. and Long. 89°E.

The ship *Bann* experienced the full weight of the storm in the morning. The captain describes the weather as follows: "At 8 A.M. during a terrific squall the main lower top-sail blew out at the bolt ropes, wind blowing a hurricane with a tremendous sea and vessel rolling and labouring very heavily and shipping much water on deck. Barometer falling rapidly at 9 A.M., wind veering from east towards south and lulling down. Shortly after, wind veered rapidly and commenced blowing with force. At noon it blew very violently, carrying away mizzen lower top-sail, and the fore and main upper top-sails. 1 P.M., still blowing very heavily, vessel rolling and labouring very much. At 2 P.M. wind decreasing and set sail accordingly. At 8 P.M. fresh breeze. Weather clear."

The centre appears to have passed over or quite close to the ship *Bann* about 9 A.M. when the estimated position of the vessel was in Lat. 17½°N and Long. 89°E. Her position was obtained by dead reckoning and no allowance appears to have been made for current, and she was probably considerably south of this position.

The S.S. *Kerbela* and *Guildhall* were within the inner storm area during the morning. The following account of the weather experienced by the S.S. *Kerbela* is extracted from a letter received from the Captain :—

4 A.M.—Fresh east-south-east gale; frequent hard squalls of wind and rain. Steamer pitching and lurching heavily.

4-30 A.M.—Heavy south-east and south-south-west swell; hauled up steamer with her head south-south-east to prevent heavy lurching.

8 A.M.—Strong south-east gale with a terrible high sea from south-east to south-west, but no rain; wind coming in puffs. Barometer fallen ·12″ since 8 A.M. yesterday. Thought of running vessel away to north-east, but owing to the wind remaining so persistently at south-east, came to the conclusion that the storm was recurving abaft my beam, so continued going to south-south-eastward. At sunrise the sky had a very harsh and wild appearance in that quarter, but finer looking to the south-eastward, although the sky had a greenish appearance in that quarter. To the westwards were heavy banks of cloud of a purple colour at sunrise.

9 A.M.—Very heavy south-east to south-west sea, the tops breaking heavily. There must have been more wind than we had at any time to cause such a sea.

Noon.—Moderate gale from south-south-east with occasional hard squalls, but no rain; since 4 A.M. sea decreased slightly. Position by observation Lat. 16° 4′N. and Long. 92° 18′ E., agreeing with the D. R.

4 P.M.—Wind shifted in a terrific squall to the south-west. Aneroid pumping ·15 of an inch. After the squall was over, the barometer began to rise quickly and sea to go down, so kept steamer away gradually for Alguada.

The S.S. *Kerbela* was in the eastern quadrant during the morning and at some distance from the centre. Her position and winds harmonize with the position assigned to the storm centre at 8 A.M.

The ship *Wanderer* which was advancing up the east of the Bay towards Chittagong was involved in the inner storm area during the day. The following account of the weather experienced on board that vessel is extracted from her log :—

11th, 1 A.M.—Fresh breeze and heavy rain. Wild looking with sea breaking ugly. Furled upper top-sails and foresail.

7-30 A.M.—Wind backing to northward.

11 A.M.—Burst into a terrific hurricane, blowing every stitch of canvas, fore and aft, off the ship. High cross sea, filling ship, fore and aft. Barometer 28·90″, ship's position Lat. 18°4′ N. and Long. 89° 30′ E.

Noon.—Wind north-west, blowing a hurricane with terrific force and squalls quickly following each other, making it impossible to see any distance along the deck, the sea running high and cross, causing ship to labour very heavily.

1-30 P.M.—Fore top-mast stay sail of extra canvas that was lashed on the stay was blown completely away. During the whole time ship was taking large quantities of water, doing considerable damage round the decks.

2-30 P.M.—Cross jack lift carried away, and whilst securing yard five hands were injured by being washed around the deck. The after-steering-gear being shipped, all hands were kept in the whale back.

4-30 P.M.—Wind abated and sky began to clear, the sea going down rapidly.

The *Wanderer* had fresh winds from north-east and east-north-east and heavy rain on the 10th. The weather assumed a very threatening appearance during the night and the storm appears to have burst with unusual suddenness upon the vessel. The storm centre probably advanced a little to the east of the vessel in the afternoon between 1-30 P.M. and 3 P.M. The position assigned to the vessel

at noon by dead reckoning is Lat. 18¾°N. and Long. 89½°E. which fixes approximately the position of the storm centre at 3 P.M. Winds of hurricane violence lasted from 11 A.M. to about 4 P.M.

As the storm centre was advancing at the rate of nearly twenty-five miles per hour, it may be inferred that the diameter of the inner storm area in a north and south direction was approximately 125 miles. The storm was hence of small extent, but was of great intensity. The lowest reading of the barometer recorded in the log of the *Wanderer* (corrected to the Calcutta standard) was 28·85″. This agrees closely with the lowest reading of the barometer on board the ship *Bann* (*vis.* 28·90″). It is hence certain that during the afternoon of the 11th the depression at the centre of the strom area was at least one inch in amount.

The S.S. *Guildhall* had southerly winds, force 9, from midnight to 8 A.M. with terrific squalls, heavy continuous rain and a very high sea. She was during this time in about Lat. 12½°N. and Long. 90°E. The weather moderated rapidly after 8 A M. She was in the outer storm area during the morning, and experienced the intensified south-west humid winds in that area.

12th December.—The only important pressure changes of the previous 24 hours were due to the rapid advance of the cyclonic storm from the centre of the Bay to the Chittagong coast. The chart of the day shows that a depression of considerable intensity but of small extent, the centre of which was near Chittagong, lay over the north-east angle of the Bay. The following data define its position :—

Station.	Pressure.			Wind.		Cloud.	Rainfall.	Weather.
	8 A.M. reduced to sea level and constant gravity at Lat. 45°.	Change in past 24 hours.	Variation from normal.	Direction at 8 A.M.	Average hourly velocity in miles during past 24 hours.			
	″	″	″					
Akyab .	29·764	—·026	—·209	SSW	9	10	1·25	Heavy rain.
Chittagong .	·625	—·199	—·366	SSE	7	10	4·27	Continuous rain.
Dacca .	·713	—·126	—·281	NNW	9	10	0·76	
Barisal .	·705	—·132	—·304	NW	8	10	1·10	

Moderate to heavy rain had fallen during the previous 24 hours in Central and Upper Burma and in South-East Bengal.

The weather at Chittagong during the storm is thus described by the Port Officer: "The 11th of December was threatening, dull and cloudy, and towards the evening slight showers of rain fell. The wind was north-north-east in the day, but towards the evening it backed to north and became very gusty. It continued increasing in strength, some of the gusts towards midnight being very heavy. It blew hardest between 2 A.M. and 4 A.M. of the 12th December, and at about 4 A.M. the wind shifted quickly to east and continued veering towards the south. The sky at 6 A.M. began to clear, and by 8 A.M. the wind had moderated to a moderate breeze."

The account of the Port Officer shows that the storm was of moderate intensity on the morning of the 12th. It also indicates that the storm approached Chittagong early on the morning of the 12th, and that it began to break up with great rapidity and was of slight intensity at 8 A.M.

The whole of the observations indicate that the storm centre passed a little to the west of Chittagong between 4 A.M. and 5 A.M., and crossed the mouth of the Megna shortly after 5 A.M. It had hence advanced a distance of nearly 500 miles during the previous 20 hours and had hence marched with unusual rapidity, its velocity during the last 24 hours of its course being almost certainly greater than in any previously recorded cyclonic storm in the Bay of Bengal.

Weather improved rapidly in the morning over the north of the Bay and before noon it was fine with moderate breezes and light cloud.

The following gives the position and rate of motion of the storm from the 10th to the 12th :—

Date.	Hour.	Position of centre.		Distance passed over during interval.	Average hourly velocity in miles.
		Latitude N.	Longitude E.		
		° ′	° ′		
10th . .	8 A.M. .	12 0	89 0	...	...
,, . .	Midnight	14 0	89 0	140	9
11th . .	8 A.M. .	16 0	89 15	140	18
12th . .	4 A.M. .	22 35	91 0	460	23

The storm was interesting in several respects. In consequence of the pressure changes over the whole Indian area during the period from the 4th to the 8th, a shallow depression had formed over the south and south-east of

the Bay. Weather was unsettled with increasing winds and squally weather in this area on the 8th and 9th. Within this large area a small central disturbance originated on the afternoon and evening of the 9th and extended outwards on the 10th. It developed on the evening of the 10th into a cyclonic storm of comparatively small extent, but of great violence, and winds of hurricane force were experienced during the night of the 10th and morning of the 11th by the ships *Bann* and *Wanderer*, which were involved within the inner storm area.

Its course was determined by the abnormal pressure distribution of the period, the axis of the low pressure area in the Bay running north and south instead of east and west, as is usually the case in December. It apparently broke up very rapidly on approaching the mouth of the Megna during the early morning of the 12th.

The storm was noteworthy—

1st.—For the rapidity of its formation.

2nd.—For its unusual course. Storms in the Bay in December usually march westwards to the Coromandel Coast.

3rd.—For the rapidity of its march during the last 24 hours of its existence.

An unusually large increase of pressure occurred over the Indian land area during the 24 hours preceding 8 A.M. of the 13th. The following gives the average value of the increase of pressure in different parts of India:—

PROVINCE.	Mean change of pressure during 24 hours preceding 8 A.M. of 13th.
	"
Burma	+·103
Bengal and Assam	+·188
North-Western Provinces and Oudh	+·144
Punjab	+·166
Sind and Rajputana	+·117
Central India and Gujarat	+·124
Central Provinces and Berar	+·145
Bombay	+·089
Madras	+·107

A further rise occurred during the next 24 hours, and on the morning of the 14th pressure was in general excess by small to moderate amounts. Burma received moderate showers from the 13th to the 15th, after the breaking up of the cyclonic storm described above.

A slight disturbance similar in character to that of the 6th to the 9th affected Persia and Baluchistan from the 12th to the 16th. It gave light local showers in Persia on the 12th, 13th and 14th, and to Baluchistan on the 15th and 16th. No rain fell in the Punjab and Kashmir during this disturbance.

Pressure increased to a moderate extent over the whole of India on the 16th and 17th. The changes were small and irregular during the next three days. Pressure was in slight to considerable excess, the excess increasing westwards from Burma and Assam to Upper India and the Deccan. Fine dry weather with almost cloudless skies obtained over the whole of India during this period.

The pressure changes in the Indian land area during the next week, *i.e.*, from the 21st to the 27th were generally small in amount, and pressure was more or less in excess during this period, the excess increasing in amount northwards to a maximum in Baluchistan and the submontane districts of Northern India. Fine dry weather held steadily over the whole land area during this period.

A disturbance or storm of very unusual character, gave a heavy burst of rain to Southern India during the last four days of the month. The following gives a history of this disturbance:—

Storm and Disturbance of the 28th to the 31st December.—As stated above, pressure on the 27th was normal or in slight defect in the south of the Bay, and was in considerable excess in Northern India and Baluchistan. Steeper gradients than usual hence obtained, and strong north-east winds prevailed in the Bay and Arabian Sea.

The available data indicate that north-east winds extended southwards over the whole of the Bay to the neighbourhood of the equator up to the 25th. The following gives data in illustration.

NAME OF VESSEL.	8 A.M. POSITION.		Barometer corrected,	WIND.		WEATHER.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	"			
S. *Buccleuch*	21 34	91 29	30·03	N by E	4	Fine.
S. *Cressington*	17 37	88 4	...	NE	5	4 P.M., wind gusty and unsteady.
S.S. *Lawada*	10 28	87 56	29·93	NE	5	Moderate sea and fine, 4 P.M. frequent sharp rain squalls.
S.S. *Canara*	Near Rangoon.		·93	NNE	6	Fine.
S.S. *Lalpoora*	6 43	82 24	·87	NE by N	6	Moderate sea and fine.
S.S. *Lightning*	8 14	97 53	·83	NNE	5	Overcast and squally.
S. *Erne*	2 51	93 5	·82	N&NNE	4	Passing clouds.
Schooner Parvady.	1 52	92 29	·82	N	6	Squally and cloudy.

The preceding data establish conclusively that to the north of Latitude 2° N. north-east winds prevailed generally in the Bay and to the south of the entrance to the Bay. Winds were moderate to strong in force over the southern half of this area. Weather was fine except between Latitude 2° N. and 10° N. where it was somewhat squally.

The following gives data for the entrance to the Bay on the 26th:—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	"			
S.S. *Lalpoora* .	8 57	83 25	29·88	NNE	6	Moderate sea and cloudy. Noon, occasional squalls and some rain.
R.I.M.S. *Canning* .	8 11	84 19	·87	N	4	Overcast, 4 A.M., squally with rain.
S.S. *Dalmatia* .	6 6	81 30	·86	NNE	4	Moderate sea, 8 P.M., heavy rain squalls.
S.S. *Purnea* .	7 1	98 38	·84	NE	5	Fine, 4 P.M., overcast and rainy at times.
S. *Erne* . .	3 9	93 54	...	NW	3	2 P.M. Frightful heat.
Schooner Parvady.	2 8	93 43	·80	NW	2to0	Fine, 4 P.M. squally.

Weather was almost certainly more squally in this area than on the 25th, and winds had fallen off in the extreme south and were shifting to west.

Similar data are given below for the 27th:—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	"			
S.S. *Ameer* . .	6 0	80 3	29·86	N	6	Heavy beam sea and overcast, 4 P.M., thick heavy rain at times.
S.S. *Fultala* . .	7 40	82 22	·87	NNE	4	Heavy rain squalls.
R.I.M.S. *Canning* .	6 13	80 42	·86	W	3	Overcast, Noon, occasional squalls with drizzling rain.
S.S. *Dalmatia* .	7 46	82 33	·84	NE	3	Overcast and dull. 4 P.M. constant heavy rain.
S. *Erne* . .	4 38	93 47	·87	...	...	Thunder and lightning at 7 A.M.
Schooner Parvady .	2 39	94 0	·84	S	2	Fine.

Winds were less steady than on the 26th, and weather was more squally, three out of the six vessels reporting heavy rain. The data indicate that north-easterly winds obtained over the whole Bay area to the north of Latitude 6° N.

28th December.—The pressure changes of the previous 24 hours were of a very unusual character. Pressure had decreased rapidly in Ceylon and the extreme south of the Bay, and was practically unchanged over the whole of Northern India. This intensified the baric gradients in the Bay and brought into greater prominence the low pressure area in the extreme south of the Bay which had not yet been finally absorbed into the equatorial low pressure belt of the north-east monsoon proper. North-easterly winds of force 4 to 6 prevailed over the north and centre of the Bay, but to the south of Latitude 10° N. winds had shifted to east, and weather was squally with heavy rain. The following gives a summary of the available data for this sea area:—

Name of Vessel.	8 A.M. Position.		Barometer corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	"			
S.S. *Nawab* .	Pondicherry		29·86	NNE	3	Heavy sea and squally with heavy rain.
S.S. *Ameer* .	7 52	82 30	·78	E	4	Heavy N. E. swell, very heavy squalls and thick heavy rain.
S.S. *Dalmatia* .	9 41	83 37	·78	E	5	Heavy confused sea, 4 P.M. squally and heavy rain.
S.S. *Nevasa* .	5 55	81 18	·76	Var.	2	Continuous rain.
S. *Erne* . .	6 49	93 7	·83	E	...	Heavy peals of thunder from 1 to 6 A.M., and heavy squalls and deluges of rain.
Schooner Parvady.	3 36	94 4	·82	E	2	Fine.
S.S. *Clan Fraser*	4 42S	74 44	·89	WNW	4	Fine, 4 P.M. occasional showers.

Easterly winds, light to moderate in force, prevailed over the entrance to the Bay to the north of Lat. 3° N. Unusually heavy rain was falling over this area, the precipitation being described as "deluges of rain" in the log of one vessel, and as "very heavy" in two others. Skies were clouding over in the Coromandel coast districts and rain was beginning to fall in the Tanjore and South Arcot districts.

29th December.—Pressure had given way slightly to briskly in Northern and Central India, and was unchanged in the south of the Bay and Ceylon. Skies were now heavily clouded over the Peninsula to the south of Lat. 16° N., and heavy rain had been received in the

southern coast districts of Madras. The following statement shows the distribution of the heavy rainfall of the preceding 24 hours in Southern India :—

District.	Average rainfall of 24 hours preceding 8 A.M. in district.	Heaviest rainfall in district.
	Inches.	Inches.
Cuddapah	1·19	4·00
Nellore	1·21	4·80
Chingleput	2·16	4·73
North Arcot	1·88	4·35
South Arcot	3·54	6·70
Tanjore	3·48	6·00
Trichinopoly	2·87	5·12
Madura	1·35	3·35
Tinnevelly	0·78	3·50

The rainfall during the previous 24 hours was hence heaviest in the South Arcot and Tanjore districts.

The information for the sea area immediately to the north of the equatorial belt for this day is scanty. The following is a summary :—

Name of Vessel.	8 A.M. Position.		Barometer, corrected.	Wind.		Weather.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′	″			
S.S. *Goa*	8 11	51 1	29·90	NNE	6	Head sea and cloudy. Noon squally and rainy.
S.S. *City of London.*	8 20	77 8	·77	NE	1	Heavy rain at times.
S.S. *City of Agra.*	8 6	75 4	·79	N	2	Moderate sea and overcast, 8 P.M. heavy rain.
S.S. *Clan Fraser.*	0 47S	76 48	·79	WNW	4	Confused swell and fine, 4 A.M. squally and rainy.
S.S. *Ameer*	11 13	83 51	·84	ENE	6	High confused sea, violent rain squalls and much lightning.
S.S. *Dalmatia*	12 38	84 38	·89	ENE	3	Cloudy.
S.S. *Nevasa*	8 54	83 8	29·78	ESE	5	High east swell, and passing squalls of wind and rain.
S.S. *Chyebassa*	8 28	81* 37	·73	SE	7	Heavy squalls and rain.
S.S. *Rohilla*	6 14	91 57	·82	ENE	4	4 A.M. cloudy.
Schooner Parvady.	4 10	94 11	·86	W	2	Fine, 4. A.M. cloudy with strong squalls from north-east to north-west.

* Noon position.

The data establish that weather was squally with much rain immediately to the north of the equatorial belt, and that there was probably a sharp transition given to north-west near the Equator to easterly winds in Lat. 4° to 6° N. Weather was, however, less disturbed in the eastern half of the entrance to the Bay, and it is hence probable that the disturbance was being transferred westwards.

30th December.—The pressure changes were everywhere small in amount and of little significance, except in Southern India and Madras, where pressure was increasing slowly. Skies were more or less clouded over nearly the whole of the Peninsula, and heavy rain had fallen over the greater part of Southern India.

The following gives data showing the distribution of the heaviest rainfall :—

District.	Average rainfall of 24 hours preceding 8 A.M. in district.	Heaviest rainfall in district.
	Inches.	Inches.
Chingleput	1·34	2·55
North Arcot	1·50	2·28
South Arcot	2·65	4·62
Tanjore	3·10	5·85
Trichinopoly	2·13	4·24
Madura	2·09	4·19
Tinnevelly	3·96	9·37
Salem	0·84	2·30

The precipitation during the previous 24 hours was hence heaviest in the Tinnevelly district. Very heavy rain had been received on the eastern flanks of the Ceylon hills. The information for the sea area is even more scanty than hitherto. The following is a summary:—

NAME OF VESSEL.	8 A.M. POSITION.		Barometer, corrected.	WIND.		WEATHER.
	Lat. N.	Long. E.		Direction.	Force.	
	° ′	° ′				
S.S. *City of London*	5 57	81 0	29·82	ENE	6	Moderate sea, squally and showery.
S.S. *Rohilla* . .	5 41	86 56	·80	ENE	4to5	4 P.M. cloudy.
S.S. *Nawab* . .	8 49	81* 16	·84	EbyN	4	Dull rainy.
S.S. *Chyebassa* .	Near	Galle*	·80	...	...	4 A.M. heavy rain from N. E.
Schooner Parvady.	6 26	93 34	·86	NE	6	Fine.
S S. *City of Agra.*	7 4	79 8	·83	SE	2	Confused sea and much rain.

* Noon position.

Weather had improved considerably. Easterly winds prevailed as far south as Lat. 5° N., and there was no indication on this, as on the previous day, of a cyclonic whirl in the area of disturbance. A remarkable feature of the disturbed weather on this day was the occurrence of a series of tornadoes in the neighbourhood of Madras; an account of these is given in an appendix, page 561.

31st December.—Pressure had increased briskly in South India and Ceylon and was unchanged in Northern India. It was in slight excess in Northern India and in slight defect in Ceylon and Malabar, and the abnormal conditions which had prevailed during the previous three days were hence passing away. Skies were still heavily clouded in South India and the Deccan, but began to clear during the day. Light to moderately heavy general rain had been received over Southern India. The following gives data for the districts in which it was heaviest:—

DISTRICT.	Average rainfall of 24 hours preceding 8 A.M. in district.	Heaviest rainfall in district.
	Inches.	Inches.
Chingleput	1·57	6·37
North Arcot	3·36	10·50
South Arcot	2·01	1·31
Tanjore	1·43	2·94
Trichinopoly	1·07	2·57
Madura	1·16	4·42
Tinnevelly	2·36	4·70
Nilgiris	1·47	4·70
Cuddapah	0·80	1·93

The rainfall was hence heaviest in the North and South Arcot and Tinnevelly districts.

Weather was squally with occasional showers over the enrtrance to the Bay but was improving. Winds had shifted to their normal north-easterly directions as far south as Lat. 5° N. at least and were moderate to fresh in force.

Skies cleared rapidly during the day, and fine dry weather was established over Southern India during the next 24 hours.

Summary of the Reports of the Weather and Snowfall in the Mountain Districts to the north and north-west of India.

I.—AFGHAN MOUNTAIN DISTRICTS.

(*a*) *Hills bordering the Dera Ismail Khan District.*—The following is an account of the snowfall during the month of December in the hills bordering the Tank Tahsil received from the Political Agent, Wano.

10th December.—Snow fell during the night on the higher peaks of the Marwatti range to a depth of about one foot.

15th December.—On the night of the 15th snow fell on the Marwatti range and Pirghal to a depth of about 6 inches. A little also fell on Yanimela (9,400 feet) and on Kot Kun (7,900 feet), but it did not lie long.

21st December.—Weather cloudy. Rain fell at night in Wano, and snow fell on the Marwatti Bosh, and Pirghal.

During the rest of the month the weather was fine, clear and warm, and by the 31st nearly all the snow had disappeared.

(*b*) *Kurram.*—"A heavy fall of snow took place on the 15th December; snow descended to about 6,000 feet. There was also a very slight fall on the 20th December.

"Both these storms were very local and appeared to be confined to the Kurram valley.

Still and clear weather prevailed in the intervals between the snowstorms.

The accumulation of snow on the Sufed Koh was very slight, probably about 4 feet of snow on Sikaram, the highest peak of the Sufed Koh.

The weather was unusually warm and dry during the month. The inhabitants of the district consider the snowfall very slight as compared with that of previous years."

(*c*) *Kabul.*—Snow fell from 3 P.M. of the 10th to noon of the 11th. The fall measured 8 inches. A slight fall occurred on the 14th at Kabul, as also at Paghman. The hills surrounding Kabul were clad with snow. The depth of snow accumulation on the hills surrounding Kabul at the end of the month was stated to be 10 inches.

The total accumulation of snow according to the latest reports was 8 inches at Kohidaman, 14 inches at Ghazni, 25 inches at Hazara, 15 inches at Wasilabad, 11 inches at Paghman and 6(?) yards in Kafiristan.

(*d*) *Khyber Pass District.*—The first fall of the season in Tirah occurred in the last week of December, and is reported to have been about 4 or 5 inches in depth and to have melted away during the next two days.

During the period under report no snow accumulation was observed on either the Lakka or Tartarra hills. Snow is lying in sheltered places on the range of hills to the south of Landi Kotal and between that place and Kuramna.

At the end of December and in the early part of January there was unusual cold.

The snowfall of the period is said to have been less than that of the previous year.

II.—KASHMIR AND PUNJAB HIMALAYAS.

(*a*) *Chamba.*—The Deputy Conservator of Forests, Chamba district, has sent the following report of the snowfall in the Chamba Hills from the beginning of September to the 15th December:—

"Slight falls of snow on the higher ranges bounding the Pangi valley commenced early in September, but did not stay on the ground below 13,000 feet. On October 15th and 16th an unusually heavy snowfall occurred, there being a deposit of 3 inches at Kilar (8,600 feet) on the 15th, and another of 3 inches on the 16th. The snowfall descended to 6,500 feet.

On the 16th November there was a storm in the Bhandal valley, and snow descended to 7,300 feet at Langera, where the deposit was half an inch.

Snow fell again on 26th November in the same valley, when there was a deposit of two inches at Langera (7,300 feet) and it descended to 7,000 feet. On the same date two inches of snow fell at Kalatop (8,000 feet).

On the 4th and 5th December there was a fairly general storm over the inner ranges when the following falls were recorded, the snow line descending to 6,000 feet:—

Dec.	Chanan. 6,500 ft.	Bara. 7,000 ft.	Thanela. 7,000 ft.	Langera. 7,300 ft.	Bhandal. 6,000 ft.
4th	*Nil.*	3″	*Nil.*	½″	*Nil.*
5th	1″	3″	1″	1″	*Nil.*

The first heavy snowstorm of the season occurred on the 9th and 10th December, when the following falls were recorded:—

Chanan.	Bara.	Thanela.	Langera.	Bhandal.	Kalatop.
6″	3ft.	9″	2ft.	½″	9″

On the outer range (Dalhousie) the snow descended to 6,500 ft., and on the inner ranges to 6,000 feet.

In Pangi the weather was normal during the snowstorm of October which was preceded by heavy rain. The storm of the 16th November in the Bhandal valley appeared to be local and was accompanied by a great deal of lightning and thunder. Heavy rain and hailstones of unusual size fell at low elevations.

The snowstorms in December were not uniform in character all over the country, but varied considerably at places of about the same elevation, and between the storms the weather was fine with nearly cloudless skies.

On the 11th November there was an accumulation of 6 feet of snow on the Lach Pass (14,600 feet), since which date communication with Pangi has ceased.

On the 15th December there were 4 feet of snow on the Padri Pass (between Chamba and Kashmir.)

In Pangi the fall in October is said to have been unusually heavy in comparison with previous early falls.

Elsewhere the snowfall was about normal."

(*b*) *Simla Hill Districts.*—The Deputy Conservator of Forests, Bushahr Division, has sent the following account of the snowfall in the Upper Sutlej valley from the 15th October to 15th December:—

"The first fall of snow occurred on the 16th November when the snow line descended to 9,500 feet.

The fall was light, in fact a mere sprinkling on the Chencil pass between the Pabar and the Rupin. The fall is reported to have been 1½ feet deep at 12,000 feet.

Light falls of snow occurred again on the 17th and 18th and 26th of November, and 3rd and 5th December; on the last date the snow line was at 7,700 feet. At this elevation the ground was only thinly covered. The falls were general throughout Bushahr. The weather in the intervals is reported to have been fair, though unusually cold with a clear sky.

No reports have been received regarding the depth on the passes, except on the Chencil where the snow was 1½ feet deep at the end of December.

The snowfall during the corresponding period of 1894 was much heavier and descended lower."

III.—NORTH-WESTERN PROVINCES HIMALAYAS.

Almora District.—The following is a summary of a report for the period, 16th November to 15th December, received from the Deputy Commissioner:—

"*Malla Danpur.*—Snow fell on the following dates:—

17th to 19th November 1895		1′
20th to 22nd	„ „	1′
30th November to 1st December		0′ 6″
4th December		1′ 6″

giving a total of four feet.

Malla Johar.—A heavy fall of snow occurred on the peaks of Utadhura and Ralamdhura on the 3rd and 4th December. The total fall on these two days amounted to 8½ feet. The fall on Milani was 4½ feet.

Malla Byans, Chandans and Darwa.—Snow fell 1 foot deep on the 18th November and 1½ feet on the 4th December.

The snowfall was larger in amount than generally occurs in December."

Summary of Special Storm Reports.

The following gives a statement of the chief local storms of which reports were received during the month:—

2nd.—Duststorm at Jeypore at 7-30 A.M. Severe duststorm followed by thunderstorm at Allahabad from 9-35 P.M. to 8 A.M.

Brief Summary of the Weather in the Arabian Sea and Bay of Bengal during the month.

Arabian Sea.—Moderate to strong north-east monsoon winds prevailed steadily throughout the month over the Arabian Sea. The mean air movement for the whole region ranged between 2·9 and 4·8, and was strongest during the last eight days of the month. Weather was generally fine and dry, except in the extreme south-east, where frequent showers were experienced during the first and last weeks of the month, and occasional showers in the interval. Weather in that area was most unsettled from the 28th to the end of the month, when several vessels experienced heavy squalls and continuous rain.

Bay of Bengal.—Normal north-east winds obtained generally over the Bay to the north of Lat. 5°N. during the first five days of the month. To the south of Lat. 5°N. the winds were rather unsteady, westerly winds alternating with northerly winds. Steeper baric gradients than usual existed over the south of the Bay during this period, and hence the air movement was stronger over the Bay than is ordinarily the case in the beginning of December. The mean intensity of the winds ranged from 3·3 on the 2nd and 3rd to 4·0 on the 5th. Weather was fine except in the region of unsteady winds in the extreme south and in the neighbourhood of the Coromandel Coast, where it was unsettled with more or less heavy showers and occasional squalls.

Winds strengthened over the entrance to the Bay during the next 24 hours, and weather in that region became more disturbed than on the preceding day. Thus the S. S. *Mombassa* near the Equator in Long. 84⅓° at 8 A.M. of the 6th experienced strong westerly winds and hard squalls, and the S. S. *Muttra* in Lat. 6½° N. and Long. 81¾° E. at the same hour had fresh north-east winds and thick rain. Winds increased further in strength during the day, and on the morning of the 7th were blowing with an average force of 5·0. Moderate to strong westerly winds with much rain now prevailed in the extreme south of the Bay as far north as Lat. 9° N. Skies were clouding over in the centre and east of the Bay, but continued clear over the north of the Bay. The unsettled conditions intensified during the next 48 hours and extended up the centre of the Bay as far north as Lat. 16° N. Unusually strong winds, in some cases rising to the force of a strong gale (9), prevailed over the southern half of the Bay (*i.e.*, to the south of Lat. 16° N.) on the morning of the 9th. Over the northern half of the Bay winds were light and weather fine. The air movement averaged 5·1 at 8 A.M. of the 9th. A cyclonic storm developed within the area of disturbed conditions over the centre of the Bay during the day. It intensified considerably on the 10th and 11th, advanced in a northerly direction and passed inland across the Chittagong coast on the early morning of the 12th. Cyclonic weather hence prevailed over the Bay from the 10th to the morning of the 12th, except in the south where, with the advance northward of the storm, winds decreased rapidly in strength, and weather cleared up. The storm, although very severe, was of a small extent, and hence its influence did not extend much beyond the storm area. This is shown clearly by the wind data of Port Blair where the average hourly velocity was only 6 miles on the 11th as compared with 21 miles on the previous day. On the other hand the weather was stormy in the storm area, the ships *Bann* and the *Wanderer* which were involved in the inner storm area experiencing winds of hurricane force and terrific squalls.

The storm broke up with unusual rapidity and the weather improved equally rapidly over the north of the Bay and was generally fine at 8. A.M. of the 12th. Winds also diminished rapidly in strength, and the strongest winds at 8.A.M. did not exceed force 6. The general air movement averaged only 3·0. Winds continued somewhat unsteady

until the 16th when normal north-east winds of force 1 to 6 were re-established over the whole of the Bay.

No important change occurred during the next 48 hours except that the air movement decreased rather rapidly in strength and averaged only 2·5 on the 17th and 18th. Except in the extreme south where showers and occasional squalls continued to occur, fine weather prevailed generally.

Winds increased rapidly in force on the 18th and extended southwards as far at least as the equator. Thus the *Schooner Parvady* experienced NNE winds at 8 A.M. of the 19th in Lat. 0° 5′ N and Long. 86° 26′ E.

The average wind force at 8 A.M. of the 19th as derived from the data of 25 vessels was 3·6. Winds continued to increase in force and averaged 4·5 on the 20th and 4·2 on the 22nd. Weather continued showery in the south and fine elsewhere.

No significant change occurred during the next five days. On the 27th, however, the weather began to become more disturbed in the extreme south of the Bay and the winds to shift round to easterly directions. Three vessels in that area on the 28th experienced very heavy squalls and thick rain and one vessel "deluges of rain."

There was on this and the following day a strong tendency to the formation of a storm in the area of disturbed weather, but it failed to develop. Winds hence returned to their normal northerly directions on the morning of the 30th although weather continued unsettled with heavy rain and squalls during the next 24 hours.

As usual the data for the equatorial belt are scanty. They however tend to show that the prevailing winds during the month in this region were from between north and west or north and east, and that there were but few instances of winds containing a southerly component. On several days during the month the north-east current from the Arabian Sea extended right across the equator as far south at least as Lat. 7°S. This is clearly shown by the data of Zanzibar and the Seychelles.

Temperature of the air.

The variations of the mean temperature conditions of the month from the normal were much smaller in December than in November 1895.

The mean maximum temperature of the month was above the normal over nearly the whole of India and in Lower Burma. The variations were generally small in amount and were 2° or above in two areas for which data are given below :—

Province.	Station.	Mean maximum temperature.		
		Actual, December 1895.	Normal, December.	Variation of actual from normal.
		°	°	°
Lower Sind and West Rajputana.	Kurrachee	82·0	80·0	+2·0
	Hyderabad	80·6	78·6	+2·0
	Deesa	87·2	85·1	+2·1
Berar and Central Provinces North.	Akola	84·0	82·0	+2·0
	Khandwa	83·9	81·7	+2·2
	Saugor	78·0	75·9	+2·1
	Jubbulpore	78·5	76·0	+2·5

The mean maximum or day temperature of the month was in slight to moderate defect in Central and Upper Burma. The deficiency was most marked at Thyetmyo (−2°·4) and Toungoo (−1°·8).

The mean minimum or night temperature departed more largely from the normal than the day temperature. It was in excess in Burma, North-Western India and South Madras, and below the normal over the remainder of India. The excess was more than 2° in amount in two areas for which data are given below :—

Province.	Station.	Mean minimum temperature.		
		Actual, December 1895.	Normal, December.	Variation of actual from normal.
		°	°	°
Burma	Moulmein	70·8	66·5	+4·3
	Thayetmyo	62·6	58·9	+3·7
	Bassein	68·0	65·3	+2·7
	Toungoo	64·7	62·6	+2·1
	Diamond Island	74·6	72·0	+2·6
Baluchistan and Mid-Indus Valley.	Quetta	32·4	28·8	+3·6
	Jacobabad	46·5	43·4	+3·1
	Mooltan	46·8	43·5	+3·3

The night temperature of the month was more than 2° below the normal at the following stations :—

Station.	Mean minimum temperature.		
	Actual, December 1895.	Normal, December.	Variation of actual from normal.
	°	°	°
Jessore	52·2	55·2	−3·0
Darbhanga	51·3	54·0	−2·7
Sambalpur	51·2	53·8	−2·6
Kurnool	57·0	59·4	−2·4
Cuddapah	63·6	66·0	−2·4
Berhampore	53·1	55·3	−2·2

The variations of the mean maximum and minimum temperatures of the month were hence similar in character in North-Western India, but were generally of opposite sign over the remainder of India. The mean temperature of the month hence generally differed from the normal by small amounts. It was in slight defect in North-Eastern India, and the Peninsula south of Lat. 20°N., with the exception of South Madras. The largest variations were registered at Jessore (—1°·7), Kurnool (—1°·6), Bellary (—1°·4), Darbhanga and Cuttack (each —1°·2) and Hyderabad Deccan and Sambalpur (each —1°·1). The mean temperature was in excess over the remainder of India, but the variations were less than 2° in amount, except at Mooltan (+2°·5) and Jacobabad (+2°·0).

Both the day and night temperatures, and hence also the mean temperature, were below the normal to a slight extent at the hill stations in North-Western India. Temperature was on the other hand in moderate excess at Quetta and probably over the whole of Baluchistan and Persia.

The following table gives temperature data for each of the 51 meteorological divisions into which India is divided:—

Province.	Division.	Actual Temperature.					Variation from normal of		
		Mean maximum.	Mean minimum.	Mean of day	Mean daily range	Absolute range.	Maximum.	Minimum.	Daily range.
		°	°	°	°	°	°	°	°
Burma	Tenasserim	88·2	68·7	78·5	19·5	30·1	+0·7	+3·2	−2·5
	Lower Burma	86·0	70·7	78·4	15·3	22·4	+1·1	+2·4	−1·3
	Central do.	81·1	62 6	71·9	18·5	30·0	−2·4	+3·7	−6·1
	Upper do.	75·7	54·5	65·1	21 2	34·3	−1·5	+0·6	−2·1
	Arakan	81·5	65·0	73·3	16·5	26·5	−0·4	+0·6	−1·0
Bengal and Assam	Eastern Bengal	76·0	54·7	65·4	21·3	33·0	−0·1	−0·7	+0·6
	Assam (Surma)	79·6	54·5	67·0	25·1	37·8	+0·1	−0·7	+0·8
	Do. (Brahmaputra)	73·9	51·6	62·8	22·3	30·7	+0·7	−1·6	+2·3
	Deltaic Bengal	77·4	53·9	65·7	23·6	35·8	+0·5	−1·8	+2·3
	Central do.	77·1	52·2	64·7	24·9	35·7	+0·3	−1·5	+1·8
	North do.	77·2	50·8	63·9	26·6	35·4	+1·2	−1·3	+2·5
	Orissa	78·8	58·6	68·7	20 2	32·2	−0·2	−1·5	+1·3
	Chota Nagpur	74·1	48·1	61·1	26·0	35·7	+0·3	−0·9	+1·2
	Bihar (South)	75·5	49·7	62·6	25·8	38·1	+0·3	−0·7	+1·0
	Do. (North)	75·3	48·2	61·8	27·1	38·0	+0·6	−2·3	+2·9
North-Western Provinces and Oudh.	North-Western Provinces (East)	75·4	47·4	61·4	28·0	39·0	+0·7	−1·1	+1·8
	Oudh (South)	76 1	46·4	61·3	29·7	39 8	+0·6	+0·8	−0·2
	Do. (North)	75·1	46·3	60·7	28 8	40·3	?	?	?
	North-Western Provinces (Central)	75·7	46·7	61·2	29·1	40·5	?	?	?
	Do. do. (West)	76·6	50·7	63·7	25·9	36·4	−0·2	+1·3	−1·5
	Do. do. (Submontane)	72·8	44·1	58·4	28 7	37·7	+1·2	−0·5	+1·7
Punjab	Punjab (South)	75·3	46·7	61·0	28·6	39·1	+0·7	+1·3	−0·6
	Do. (Central)	71·9	42·4	57·2	29·5	38·1	+0·4	+1·8	−1·4
	Do. Submontane)	72·6	43·5	58·1	29·2	40 6	+0·7	+1·1	−0·4
	Do. (Hill Districts)	50·3	36·4	42·3	11·8	28·8	−1·0	−0·2	−0·8
	Do. (North-West)	69·4	37·5	53·5	31·9	42·9	+1·3	+0·2	+1·1
	Do. (West)	74·4	42 8	58·6	31 7	41 6	+1·4	+2·2	−0·8
Bombay and Malabar Coast Districts (Madras).	Malabar	87·3	71·2	79·3	16·0	25·3	+1·0	−0·7	+1·7
	Madras (South Central)	85·7	65·0	75 4	20·7	33·7	+0·4	−0·7	+1·1
	Coorg	74·1	57 4	65·8	16·7	28 2	−0·4	−0·2	−0·2
	Mysore	78 9	57·8	68·4	21·2	34·7	+0·7	−0·9	+1·6
	Konkan	86·9	68·7	77 8	18·2	28·5	+1·0	0	+1·0
	Bombay Deccan	82 3	55·4	68·9	26·9	38·8	−0·4	−0·4	0
	Hyderabad (North)	81·4	54·4	67·9	27·0	37 6	?	?	?
	Khandesh	82·6	50·1	66·4	32 5	45·8	+0·6	+0·6	0
Central Provinces and Berar.	Berar	83·5	53·8	68·7	29·7	40·3	+1·7	+0·3	+1·4
	Central Provinces (West)	81·7	51·3	66·5	30·4	42·5	+1·4	+0·3	+1·1
	Do. (Central)	79·1	48 2	64·0	31·5	43·1	+1·8	−0·9	+2·7
	Do. (East)	79·8	52 1	66 0	27·7	38 9	+1·0	−1·5	+2·5
Bombay (North)	Gujarat	87·0	58·6	72·8	28·4	39·3	+1·3	+1·0	+0·3
	Kathiawar	86 3	57·7	72·0	28·6	40·4	+0·2	+0·8	−0·6
	Sind	80·9	53·2	67·1	27·7	37·5	+1·6	+2·0	−0·4
Rajputana and Central India.	Central India (East)	75·4	46·7	61·1	28·7	40·5	+0·4	+0·7	−0·3
	Rajputana (East) Central India (West)	79·4	48·2	63·8	31·2	42·9	+1·0	+0·6	+0·4
	Rajputana (West)	79·4	47·1	63·3	32·3	43·0	+1·4	?	?
Madras	East Coast (North)	82·3	62·7	72·5	19·6	31·1	+1·1	−1·4	+2·5
	Hyderabad (South)	82·5	57·1	69·8	25·5	36·5	−0·5	−1·7	+1·2
	Madras (Central)	84·6	60·1	72·4	24·5	38·5	−0·6	−2·0	+1·4
	East Coast (Central)	82·9	66 9	74·9	16·1	28·0	+0·1	−0·6	+0·7
	East Coast (South)	83·3	69·8	76·6	13 6	28·6	+0·4	−0·3	+0·7
	Madras (South)	84·7	72·5	78·7	12·2	20·0	+0·3	0	+0·3

Temperature at the commencement of the month as during the greater part of November was more or less in excess in India, and was in slight to moderate defect in Burma and Assam. The excess was large in the Central Provinces, Berar and Central India as is shown by the data of the 1st given in the following table :—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	+0·5	—0·9	—0·2
Bengal and Assam	+2·1	+2·1	+2·1
N.-W. Provinces and Oudh	+2·5	+6·1	+4·3
Punjab	+1·8	+3·8	+2·8
Sind and Rajputana	+1·4	+6·6	+4·0
Central India and Gujarat	+3·0	+8·1	+5·6
Central Provinces and Berar	+4·3	+6·1	+5·2
Bombay	+2·3	+2·1	+2·2
Madras	+0·4	+1·7	+1·1

The preceding data indicate that the night temperature was more largely above the normal than the day temperature.

Series of thunderstorms occurred in Rajputana. Central India, the North-Western Provinces and the northern districts of the Central Provinces on the 2nd and 3rd and caused a large temporary reduction of temperature in these areas on those days. Temperature increased rapidly on the 5th and 6th in the Central Provinces and Berar, and was in largish excess in these areas from the 5th to the 7th as is shown by the following data :—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF DATE.			
	4th.	5th.	6th.	7th.
	°	°	°	°
Central Provinces	+2·7	+3·2	+3·8	+2·5
Berar	+4·9	+4·8	+6·3	+6·1

Large and rapid changes of temperature occurred during the next three days. Temperature increased considerably and was largely above the normal in Baluchistan and the Indus Valley on the 8th, but fell largely below the normal during the next 24 hours, due to light rainfall in Baluchistan. Temperature fell rapidly over the greater part of the Peninsula on the 8th and 9th, and was in defect over the greater part of India on the morning of the 9th as is shown by the following variation data :—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	—1·3	+2·3	+0·5
Bengal and Assam	—1·4	—4·1	—2·8
N.-W. Provinces and Oudh	—0·3	—1·8	—1·1
Punjab	—5·1	+6·8	+0·9
Sind and Rajputana	+0·5	+4·0	+2·3
Central India and Gujarat	+0·3	0	+0·2
Central Provinces and Berar	—1·2	—2·5	—1·9
Bombay	—0·4	—0·8	—0·6
Madras	—0·1	—2·9	—1·5

The most noteworthy feature of the temperature conditions of the period from the 9th to the 13th was the very low temperature in the Deccan and the Coromandel coast districts due to the abnormal prevalence of dry land north-westerly winds. The following comparative data for the Madras Presidency illustrate this feature :—

DATE.	VARIATION FROM NORMAL OF		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
8th	—0·5	—1·1	—0·8
9th	—0·1	—2·9	—1·5
10th	—2·7	—7·2	—5·0
11th	—2·0	—7·7	—4·9
12th	+0·8	—7·0	—3·1
13th	+0·7	—4·8	—2·1
14th	+0·4	—2·8	—1·2

A noteworthy feature of this period was the abnormally low night temperature in the Madras Presidency and the Deccan, and more especially at the coast stations. The following data give the variation of the minimum tempe-

rature from the normal on the 10th, 11th, 12th, 13th and 14th at five stations:—

Station.	Variation from normal of minimum temperature of 24 hours preceding 8 A.M. of date.				
	10th.	11th.	12th.	13th.	14th.
	°	°	°	°	°
Kurnool	−14·5	−13·5	−11·9	−11·6	− 2·3
Bellary	−10·2	−8·9	− 5·8	− 5·7	− 4·0
Cuddapah	−12·0	−12·6	−11·0	− 8·5	+ 1·7
Madras	−8·8	−12·7	− 9·6	− 8·5	− 1·5
Salem	−6·0	− 8·9	− 9·9	− 4·2	− 2·7

Lower minimum temperatures were recorded at several stations in the Madras Presidency than have been previously experienced in the month of December during the past 20 years as is shown by the following table:—

Station.	Lowest, December 1895.	Lowest, in December previous to 1895.
	°	°
Madras	57·5	61·1
Bellary	50·9	51·8
Bangalore	48·9	48·2
Salem	55·5	55·7
Cuddapah	53·3	54·8
Kurnool	45·6	46·8

Temperature was also reduced below the normal in the west coast districts and in Berar and the Central Provinces, but to a less extent than in Madras. The following variation data for the 24 hours preceding 8 A.M. of the 11th illustrate the temperature conditions prevailing during this period over the Indian area:—

Political area or Province.	Variation from normal of		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
	°	°	°
Burma	0	+2·8	+1·4
Bengal and Assam	−1·3	+0·3	−0·5
N.-W. Provinces and Oudh	+1·3	+0·8	+1·1
Punjab	−2·4	+2·4	0
Sind and Rajputana	−1·2	+2·1	+0·5
Central India and Gujarat	+0·3	+0·7	+0·5
Central Provinces and Berar	−0·4	−2·6	−1·5
Bombay	−1·8	−5·4	−3·6
Madras	−2·0	−7·7	−4·9

The low temperature in the Peninsula during this period from the 9th to the 13th was due to the abnormal prevalence of northerly and north-westerly winds, a part of the general indraught to the storm area in the Bay. The dispersion of the storm was followed by a very rapid rise of temperature in the Peninsula on the 14th and 15th, and on the 15th the conditions differed to a slight extent from the normal, except in Baluchistan and the Indus valley where temperature was largely above the normal on the 16th. The following table gives mean temperature variation data for the 15th, 16th, 17th, and 18th:—

Political area or Province.	Variation from normal of mean daily temperature during 24 hours preceding 8 A.M. of date.			
	15th.	16th.	17th.	18th.
	°	°	°	°
Burma	+1·6	+1·1	+2·0	+1·7
Bengal and Assam	−1·3	−1·7	−0·9	+0·2
N.-W. Provinces and Oudh	−1·7	−1·7	−0·3	0
Punjab	+0·1	−0·1	+0·9	0
Sind and Rajputana	−0·3	+2·0	+3·1	+2·4
Central India and Gujarat	−1·4	−0·5	+0·7	+2·0
Central Provinces and Berar	−2·9	−1·0	+0·4	+2·0
Bombay	−1·9	−0·7	0	+2·2
Madras	+0·2	+0·8	+1·9	+2·2
Baluchistan (Quetta)	+2·7	+4·8	−4·7	−4·9

The preceding data establish that temperature increased considerably during this period over the whole Indian area, and was on the 17th and 18th in moderate general excess, except in the hill and submontane districts of Northern India where it was below the normal by small amounts, and in Baluchistan where it was in considerable defect. No important change occurred during the next four days. Temperature increased to some extent in Central India, Berar and the Central Provinces and was in largish excess as is shown by the following data:—

Province.	Variation from normal of mean temperature of 24 hours preceding 8 A.M. of date.			
	19th.	20th.	21st.	22nd.
	°	°	°	°
Central India and Gujarat	+2·9	+3·0	+3·2	+2·9
Central Provinces	+3·1	+3·3	+2·7	+2·8
Berar	+3·1	+4·0	+3·7	+3·1

Unusually dry weather with more northerly and stronge winds than usual prevailed in North-Eastern India and the Peninsula from the 22nd to the 28th. Temperature hence again fell below the normal, the decrease being chiefly

in the night temperature and the area of deficient temperature extended westwards and north-westwards.

The following gives the variations of the mean daily temperature in this cool area from the 23rd to the 27th :—

PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF 24 HOURS PRECEDING 8 A.M. OF DATE.				
	23rd.	24th.	25th.	26th.	27th.
	°	°	°	°	°
Bengal and Assam . . .	−1·1	−1·2	−1·8	−1·8	−1·1
Central India and Gujarat .	+2·0	−0·5	−1·3	−1·3	−1·2
Central Provinces and Berar .	+2·6	−0·2	−2·2	−1·8	−3·0
Bombay	+0·3	−0·1	−1·7	−2·0	−2·4
Madras	−2·1	−2·6	−1·8	−1·8	−2·6

Temperature was in moderate to considerable excess in Burma, Baluchistan and Upper India during this period.

The following table gives variation data for the Indian area on the 27th. It shows that the day temperature was in slight to moderate excess over the greater part of India whilst the night temperature was in considerable to large defect over nearly the whole area (due to the abnormal dryness of the atmosphere) :—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
Burma	+0·2	+2·7	+1·5
Bengal and Assam . . .	+0·3	−2·5	−1·1
N.-W. Provinces and Oudh .	+0·6	−1·7	−0·6
Punjab	+2·9	−0·6	+1·2
Sind and Rajputana . .	+5·0	−1·4	+1·8
Central India and Gujarat .	+1·6	−4·0	−1·2
Central Provinces and Berar .	−0·3	−5·7	−3·0
Bombay	0	−4·8	−2·4
Madras	−0·3	−4·8	−2·6

The second disturbance of the month which formed in the Bay began to give cloudy weather on the 27th and 28th. This disturbance affected the Peninsula during the remainder of the month, causing a large increase in the night temperature.

The following data illustrate the conditions obtaining at the end of the month :—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF		
	Mean maximum temperature.	Mean minimum temperature.	Mean temperature.
Burma	+2·0	+1·9	+2·0
Bengal and Assam . . .	+1·5	−0·7	+0·4
N.-W. Provinces and Oudh .	+5·4	−0·6	+2·4
Punjab	+8·3	+0·1	+4·2
Sind and Rajputana . .	+5·8	−0·2	+2·8
Central India and Gujarat. .	+5·5	−1·0	+2·3
Central Provinces and Berar .	+4·0	−0·3	+1·9
Bombay	+2·8	+8·3	+5·6
Madras	−4·3	+6·4	+1·1

The following table gives variation data of the mean temperature week by week during the month, and of the whole month :—

POLITICAL AREA OR PROVINCE.	VARIATION FROM NORMAL OF MEAN TEMPERATURE OF WEEK ENDING				
	7th	14th	21st	28th	For whole month
Burma	+0·9	+0·8	+1·5	+0·5	+1·1
Bengal and Assam . . .	+1·4	−1·1	−1·1	−1·3	−0·5
N.-W. Provinces and Oudh .	+1·0	−0·2	−0·5	−0·2	+0·1
Punjab	+1·6	−0·3	0	+1·4	+1·1
Sind and Rajputana . .	+1·4	−0·3	+1·3	+0·6	+1·5
Central In ia and Gujarat . .	+1·1	−0·4	+1·4	+0·1	+0·7
Central Provinces and Berar	+4·3	−1·8	+1·2	−0·7	+0·5
Bombay	+1·7	−2·2	+1·1	−1·0	+0·2
Madras	+1·2	−2·7	+1·5	−1·8	−0·4

Winds.

The mean air movement in December 1895 was considerably stronger than usual at Port Blair and on the Burma coast. Winds were on the mean of the month approximately normal in direction at the Burma stations. The mean wind direction at Port Blair was much more easterly than usual, *viz.*, N.79°E., the normal being N51°E. Winds were also very unsteady at that station, thus showing the disturbed and abnormal character of the weather in the south-east of the Bay during a large part of the month.

The following data illustrate the increased strength of the winds in that area:—

STATION.	VELOCITY IN MILES PER DIEM.		
	Mean actual, December 1895.	Normal, December.	Variation from normal.
Port Blair	204	171	+33
Rangoon	141	114	+27
Diamond Island	375	166	+209
Akyab	70	56	+14

Winds in Bengal, Orissa and Bihar were somewhat steadier than usual and varied irregularly in strength from station to station. On the mean of all stations the air movement was normal in amount. It was more directly from the north than usual, as is shown by the following data for five typical stations:—

STATION.	WIND DIRECTION.		
	Mean actual, December 1895	Normal, December.	Increased northing.
Chittagong	N2°W	N23°W	+21°
Calcutta	N10°W	N26°W	+16°
Berhampore	N10°W	N26°W	+16°
Hazaribag	N20°W	N54°W	+34°
Patna	N72°W	N83°W	+11°

Winds were on the whole slightly steadier, but of normal strength in the Gangetic plain. The mean directions of the air movement varied somewhat irregularly in different parts of the plain, but on the whole winds were more westerly and less northerly than usual, more especially in the western half, as is shown by the following:—

STATION.	WIND DIRECTION.		
	Mean actual, December 1895.	Normal, December.	Decreased northing.
Meerut	S89°W	N52°W	−39°
Ludhiana	N50°W	N30°W	−20°
Lahore	N54°W	N36°W	−18°

The air movement was very light and unsteady in Sind and the West Punjab. It was feebler than usual in Rajputana, and the mean wind directions varied largely from the normal, the chief feature being increased southing in the winds.

The following gives comparative data of the air movement in the different provinces of Northern and Central India:—

AREA.	VELOCITY IN MILES PER DIEM.		
	Mean actual, December 1895.	Normal, December.	Variation from normal.
Bengal	79	71	+ 8
Bihar	56	46	+10
Chota Nagpur	145	110	+35
North-Western Provinces and Oudh	40	43	− 3
Punjab	39	38	+ 1
Rajputana	95	103	− 8
Central India	51	58	− 7

In the Central Provinces, Berar and the Deccan winds were practically normal in direction, but were stronger and steadier than usual. The following data for four stations illustrate the features of increased strength and steadiness:—

STATION.	VELOCITY IN MILES PER DIEM.			STEADINESS.		
	Mean actual, December 1895.	Normal, December.	Variation from normal.	Actual percentage, December 1895.	Normal percentage, December.	Variation from normal.
Belgaum	340	296	+44	80	70	+10
Khandwa	83	57	+26	64	41	+23
Akola	98	77	+21	72	58	+14
Raipur	67	66	+ 1	71	48	+23

The mean air movement of the month at the west coast stations from Bombay to Karwar was normal in amount and direction. The mean wind direction at Cochin was N. 43° W., the normal being S. 50° W. Winds were much stronger than usual in Mysore and Coorg, but were of normal strength in the Madras coast districts. They were

more northerly than usual, as is shown by the following comparative data :—

STATION.	WIND DIRECTION.		
	Mean actual, December 1895.	Normal, December.	Increased northing.
Vizagapatam	N32°E	N83°E	+51°
Madras	N10°E	N24°E	+14°
Bangalore	N66°E	N70°E	+ 4°
Mercara	N62°E	N73°E	+11°

The increased northing was most strongly shown at the coast stations and was evidently an effect of the abnormal pressure conditions in the south and south-east of the Bay.

The following gives data for the mean directions of the month at Minicoy, Zanzibar and the Seychelles:—

STATION.	WIND DIRECTION.	
	Mean actual, December 1895.	Normal, December.
Minicoy	N35°E	N34°E*
Zanzibar	N34°E	N26°E
Seychelles	N3 °W	S31°W*

*Mean actual, December 1894.

The preceding data show that northerly winds extended across the western halt of the equatorial belt as far as Lat. 4°S during the greater part of the month, and as shown by the daily observations, from the 12th to the end of the month.

Humidity and Cloud.

The air was on the average of the month slightly damper than usual at Port Blair, Akyab and Chittagong, as is shown by the following data :—

STATION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Average actual, December 1895.	Average normal, December.	Variation from normal.	Average actual, December 1895.	Average normal, December.	Variation from normal.
	"	"	"	%	%	
Port Blair . . .	·885	·834	+·051	82	80	+2
Akyab	·633	·583	+·050	79	75	+4
Chittagong . . .	·519	·520	—·001	80	75	+5

Over nearly the whole of India the air was drier than usual, to such an extent in fact that the largely decreased humidity was one of the more remarkable features of the meteorology of the month. The following gives comparative data for the larger divisions.

DIVISION.	ABSOLUTE HUMIDITY.			RELATIVE HUMIDITY.		
	Average actual, December 1895.	Average normal, December.	Variation from normal.	Average actual, December 1895.	Average normal, December.	Variation from normal.
	"	"	"	%	%	
Burma	·675	·651	+·024	74	74	0
Bengal	·420	·465	—·045	66	71	— 5
Bihar	·363	·401	—·038	65	70	— 5
Chota Nagpur . .	·240	·255	—·015	45	52	— 7
North-Western Provinces and Oudh.	·271	·300	—·029	54	61	— 7
Punjab	·238	·269	—·031	54	59	— 5
Rajputana . . .	·252	·268	—·016	44	45	— 1
Central India. . .	·273	·275	—·002	54	53	+ 1
Berar	·258	·336	—·078	39	51	—12
Central Provinces . .	·281	·319	—·038	47	52	— 5
Deccan	·313	·363	—·050	45	47	— 2
West coast . . .	·568	·630	—·062	59	68	— 9
Madras coast . .	·588	·621	—·033	69	71	— 2

The deficiency in the amount of aqueous vapour in the air was hence general over the whole of India and was on the whole most marked in the Central Provinces, Berar, the Deccan and Bombay coast districts. The following gives

comparative data for the stations at which the mean relative humidity was more than 10 in defect.

Station.	Relative Humidity.		
	Mean actual, December 1895.	Normal, December.	Variation from normal.
	%	%	
Buldana	36	49	—13
Chikalda	40	53	—13
Raipur	42	54	—12
Karwar	58	69	—11
Calcutta	61	72	—11
Lucknow	48	59	—11
Ludhiana	50	61	—11

The only important local exception to the increased dryness of the air was Madras (where the mean humidity of the month was 3 in excess) and perhaps Jacobabad.

The mean humidity percentage of the month was almost as largely in defect at the hill stations in the Upper India Himalayas as at the adjacent plains. It was on the other hand in moderate excess at Quetta (+9) and in slight excess at Wellington and perhaps Leh.

It may be noted that the air was somewhat drier than usual at Aden (the mean relative humidity being 4 in defect) and in slight excess at Zanzibar.

The mean cloud amount of the month was more or less in excess in the area directly affected by the first cyclonic storm of the month, *i. e.*, at Port Blair and in Cachar, Burma, Bengal, Orissa and Chota Nagpur. The following gives comparative data :—

Station or Division.	Mean Cloud Amount.		
	Actual, December 1895.	Normal, December.	Variation from normal.
Port Blair	6·6	4·4	+2·2
Burma	4·7	2·9	+1·8
Cachar	4·0	2·9	+1·1
Bengal	3·0	1·9	+1·1
Orissa	3·0	2·2	+0·8
Chota Nagpur	2·4	2·0	+0·4

The increase in the amount of cloud was greatest at Diamond Island (+2·5), Chittagong (+2·3) Narayanganj (+2·4) and Port Blair (+2·2). There was apparently much less cloud than usual at Sibsagar, but the observations at that station are by no means satisfactory at present.

There was also more cloud than usual in the west coast districts and in Southern India and the Madras Deccan. The following gives data for five typical stations in those areas :—

Station.	Mean Cloud Amount.		
	Actual, December 1895.	Normal, December.	Variation from normal.
Ratnagiri	3·0	0·9	+2·1
Cochin	3·4	3·2	+0·2
Bellary	5·7	3·4	+2·3
Madras	6·4	5·3	+1·1
Bangalore	4·6	4·1	+0·5

Over the remainder of India and also in Baluchistan skies were more free from cloud than usual.

The following gives data in illustration :—

Division.	Mean cloud amount.		
	Actual, December 1895.	Normal, December.	Variation from normal.
Bihar	0·6	1·5	—0·9
North-Western Provinces and Oudh.	1·3	1·9	—0·9
Punjab	2·4	2·7	—0·3
Sind	1·8	1·9	—0·1
Rajputana	1·1	1·7	—0·6
Central India	1·2	1·7	—0·5
Berar	1·4	2·3	—0·9
Central Provinces	1·2	1·8	—0·6

The deficiency was on the whole most marked in Bihar and Berar.

Skies were also less clouded than usual at the hill stations in Northern and Central India. The following gives data for four stations in illustration :—

Station.	Mean cloud amount.		
	Actual, December 1895.	Normal, December.	Variation from normal.
Quetta	1·5	3·0	—1·5
Murree	3·0	4·7	—1·7
Ranikhet	1·5	2·5	—1·0
Mount Abu	0·5	1·8	—1·3

The mean cloud amount of the month was less than 1·0 at the stations for which data are given below :—

Station.	Mean cloud amount.		
	Actual, December 1895.	Normal, December.	Variation from normal.
Meerut	0·9	1·7	—0·8
Sutna	0·9	1·4	—0·5
Khandwa	0·8	1·9	—1·1
Jubbulpore	0·8	1·9	—1·1
Patna	0·7	1·8	—1·1
Agra	0·6	1·4	—0·8
Mount Abu	0·5	1·8	—1·3
Darbhanga	0·4	1·0	—0·6
Deesa	0·1	1·7	—1·6

Rainfall.

December is usually the month of least rainfall in India. The normal rainfall of the month is less than an inch in amount over the whole of India, with the exception of the coast districts of South Madras. The average rainfall of the month slightly exceeds 10 inches at the South Coromandel coast stations, but diminishes rapidly inland and northwards, and is less than one inch in amount to the west of a line joining Madura, Coimbatore, Salem, Cuddapah and Ongole, and is less than three or four-tenths of an inch over the whole of Northern and Central India, and the Deccan and also in Burma.

The rainfall of December 1895 was less than a tenth of an inch in amount over the greater part of India, including Tenasserim, Assam (Brahmaputra), Bengal (except East Bengal), Orissa, Bihar, Chota Nagpur, Coorg, Berar, the Central Provinces, Kathiawar, Rajputana, Konkan, the Bombay Deccan, Khandesh, Gujarat, Hyderabad, North Madras, and the greater part of the Punjab.

The rainfall of the month was in defect over the whole Indian area, with the exception of those districts which received rain from the two cyclonic storms or disturbances of the month that formed in the Bay.

Persia and Baluchistan received slightly larger amounts of rain than usual due to the occurrence of two feeble disturbances of the cold weather type.

The chief periods of disturbance and rainfall in India were as follows:—

1st.—The 2nd and 3rd, when Rajputana, Central India, the North-Western Provinces and the northern districts of the Central Provinces obtained light rain during series of thunderstorms.

2nd.—From the 11th to the 15th. The Chittagong, Noakhali, Backergunj and Tipperah districts of South-East Bengal obtained moderate to heavy rain during this period from the first cyclonic storm of the month. Burma received light to moderate rain during the later stages and after the breaking up of the storm.

3rd.—From the 29th to the 31st, when the whole of Southern India obtained a heavy general burst of rain, due to a disturbance of very unusual character which originated in the extreme south of the Bay.

The following table gives comparative rainfall data for 51 meteorological divisions of the Empire—

Province.	Division.	Number of rainy days.		Rainfall.		
		Average actual, December 1895.	Average normal, December.	Average actual, December 1895.	Average normal, December.	Variation from normal.
				Inches.	Inch.	Inches.
Burma	Tenasserim*	?	?	0	0	0
	Lower Burma*	?	?	0·24	0·17	+0·07
	Central do.*	?	?	1·16	0·07	+1·09
	Upper do.*	?	?	2·53	?	?
	Arakan*	?	?	3·84	0·41	+3·43
Bengal and Assam	Eastern Bengal	1·1	0·5	1·53	0·39	+1·14
	Assam (Surma)*	?	?	1·36	0·62	+0·74
	Do. (Brahmaputra)*	?	?	0·07	0·39	−0·32
	Deltaic Bengal	0·1	0·4	0·05	0·26	−0·21
	Central do.	0·1	0·3	0·04	0·17	−0·13
	North do.	0·2	0·4	0·03	0·18	−0·15
	Orissa	0	0·8	0	0·51	−0·51
	Chota Nagpur	0·1	0·5	0·01	0·34	−0·33
	Bihar (South)	0·3	0·4	0·10	0·22	−0·12
	Do. (North)	0·2	0·4	0·05	0·14	−0·09
North-Western Provinces and Oudh.	North-Western Provinces (East)	0·6	0·4	0·30	0·26	+0·04
	Oudh (South)	0·5	0·6	0·13	0·41	−0·28
	Do. (North)	0·1	0·6	0·03	0·38	−0·35
	North-Western Provinces (Central)	0·9	0·4	0·24	0·37	−0·13
	Do. do. (West)	1·0	0·5	0·31	0·34	−0·03
	Do. do. (Submontane)	0·2	0·7	0·08	0·41	−0·33
Punjab	Punjab (South)	0	0·4	0	0·24	−0·24
	Do. (Central)	0·5	0·5	0·20	0·28	−0·08
	Do. (Submontane)	0·1	0·8	0·05	0·58	−0·53
	Do. (Hill Districts)	1·0	1·3	0·42	0·88	−0·46
	Do. (North-West)	0	0·8	0·01	0·51	−0·50
	Do. (West)	0·1	0·2	0·03	0·11	−0·08

Province.	Division.	Number of rainy days. Average actual, December 1895.	Number of rainy days. Average normal, December.	Rainfall. Average actual, December 1895.	Rainfall. Average normal, December.	Rainfall. Variation from normal.
				Inches.	Inches.	Inches.
Bombay and Malabar Coast Districts (Madras).	Malabar	0·1	1·4	0·10	0·80	−0·70
	Madras (South Central)	2·7	2·6	1·77	1·40	+0·37
	Coorg	0·1	?	0·05	?	?
	Mysore*	?	?	0·13	0·62	−0·49
	Konkan	0	0·3	0·01	0·14	−0·13
	Bombay Deccan	0·1	0·5	0·02	0·41	−0·39
	Khandesh	0·1	0·8	0·03	0·56	−0·53
Central Provinces and Berar.	Berar	0	?	0	?	?
	Central Provinces (West)	?	?	0·04	0·52	−0·48
	Do. (Central)	?	?	0·06	0·36	−0·30
	Do. (East)	?	?	0	0·37	−0·37
Bombay (North)	Gujarat	0	0·1	0	0·06	−0·06
	Kathiawar	0	0·1	0	0·04	−0·04
	Sind	0·5	?	0·11	0·11	0
Rajputana and Central India.	Central India (East)	0·8	?	0·39	0·41	−0·02
	Rajputana (East) Central India (West)	0·4	?	0·15	0·20	−0·05
	Rajputana (West)	0	?	0	0·02	−0·02
Madras	East Coast (North)	0	0·8	0·01	0·99	−0·98
	Do. (do.) (a)	0	0·7	0	0·34	−0·34
	Hyderabad (South)*	?	?	0·01	0·26	−0·25
	Madras (Central)	1·3	0·9	0·98	0·46	+0·52
	East Coast (Central)	3·5	2·9	2·69	2·72	−0·03
	East Coast (South)	4·6	5·2	7·91	5·13	+2·78
	Madras (South)	5·0	4·8	6·93	3·93	+3·00

NOTE.—The figures entered against divisions marked with an asterisk have been obtained from the weekly telegraphic reports.

No rain fell over the greater part of Tenasserim during the month. Arakan and Burma obtained an unusual burst of rain from the 12th to the 15th due to the first cyclonic disturbance of the month. The largest amounts were received in Arakan and Upper Burma. The following gives comparative data of the rainfall of that area for December 1895 :—

Division.	Rainfall. Average actual, December 1895.	Rainfall. Average normal, December.	Rainfall. Variation from normal.
	Inches.		
Tenasserim	0·16	?	?
Lower Burma	0 39	?	?
Central ,,	1·14	?	?
Upper ,,	1·99	?	?
Arakan	3·23	?	?

The Brahmaputra division of Assam was practically rainless during the month. The Surma division received moderate rain on the 12th and 13th which gave it an average of 1·36 inches or upwards of twice the normal all of the month.

The greater part of Bengal, Orissa and Chota-Nagpur and Bihar had no rain during the month. East Bengal obtained a moderate burst on the 12th and 13th, the distribution of which was determined by the track of the cyclonic storm that occasioned the rainfall.

The following gives average data showing the distribution of that burst of rain :—

District.	Rainfall. Average actual, December 1895.	Rainfall. Average normal, December.	Rainfall. Variation from normal.
	Inches.	Inch.	Inches.
Noakhali	3·66	0·75	+2·91
Chittagong	2·67	0·54	+2·13
Backergunge	1·88	0·40	+1·48
Tippera	1·34	0·37	+0·97
Dacca	0·56	0·24	+0·32
Faridpur	0·35	0·14	+0·21
Mymensingh	0·28	0·21	+0·07

The rainfall of the month was hence in large excess in the four districts of Noakhali, Chittagong, Backergunge, and Tippera, and was small in amount in the remaining districts of East Bengal. The rainfall averaged 1·53 inches for the whole division, nearly four times its normal amount Light local showers were received in Bihar on the 2nd and 3rd, and in some parts of Bengal on the 12th and

13th, but the total rainfall ranged between a tenth of an inch in South Bihar and *nil* in Orissa and was hence practically *nil*.

The feeble disturbance of the 3rd and 4th gave numerous local thundershowers in the eastern, central and western divisions of the North-Western Provinces and in South Oudh. The largest amounts were received in the eastern, central and western divisions of the North-Western Provinces, where the total rainfall of the month was practically normal in amount, averaging three-tenths of an inch.

The rainfall of the month was less than a tenth of an inch over by far the greater part of the Punjab. The hill districts received light showers, chiefly on the 10th and 11th, but the rainfall of the month, which averaged ·42 inch, was barely one-half of the normal fall. The central districts had light showers on the 2nd and 3rd. The rainfall of the month was below the normal over the whole province, but the deficiency was small except in the eastern and northern divisions in which it averaged ·5 inch.

British Baluchistan obtained moderate general rain on the 7th, 8th and 9th from the first cold weather disturbance of the season. Light local showers were also received on the 15th and 16th and again on the 21st and 22nd, chiefly in the plateau districts. The rainfall of the month ranged between 1 and 2 inches in the Peshin and Quetta districts and was in moderately large excess, as is shown by the following comparative data for two stations:—

STATION.	RAINFALL.		
	Actual, December 1895.	Normal, December.	Variation from normal.
	Inches.	Inch.	Inches.
Peshin	1·28	0·35	+0·93
Quetta	1·86	0·36	+1·50

East Rajputana and Central India had light showers on the 2nd and 3rd which gave an average total rainfall for the month slightly smaller than the normal amount on the average of the whole area. The following gives comparative data for the larger states or divisions in this area:—

STATE.	RAINFALL.		
	Average actual, December 1895.	Average normal, December.	Variation from normal.
	Inch.	Inch.	Inch.
Ulwar	0·39	0·39	0
Bhurtp re	0·22	0·22	0
Kerowlee	0·22	0·19	+0·03
Kotah	0·18	0·27	−0·09
Bhopal	0·33	0·53	−0·20
Gwalior	0·61	0·21	+0·40
Rewah	0·15	0·56	−0·41
Bundelkhand	0·27	0·46	−0·19

The rainfall of the month was actually or practically nil over the large area including Cutch, Kathiawar, Berar, the Central Provinces, Hyderabad, North Madras, the Bombay Deccan, Konkan, Sind and Malabar. Mysore had light showers of little importance which gave an average of barely a tenth of an inch. The normal rainfall of the month is small in amount over nearly the whole of that area, and hence the deficiency was small except in Mysore where it averaged ·5 inch.

There were three periods of more or less general rainfall in Madras. These were as follows:—

1st.—From the 1st to the 5th—The rainfall during this period was restricted to the Coromandel coast and southern districts. The Tanjore district received moderate general rain during this period, and Nellore, Madura and Tinnevelly light but fairly general rain.

2nd.—From the 15th to the 16th—The Nellore, Chingleput and the Palni hill districts obtained light rain. Little or no rain fell in the remainder of the province.

3rd.—From the 29th to the 31st—The whole of the presidency, with the exception of the northern coast districts including Ganjam, Vizagapatam, Godavari and Kistna and the districts of Bellary and Kurnool where practically no rain fell, received general and heavy rain. The following gives a summary of the rainfall in the districts which received average amounts exceeding one inch during this disturbance:—

DISTRICT.	AVERAGE ACTUAL RAINFALL IN 24 HOURS PRECEDING 8 A.M. OF			Total of period.	Average rainfall of month.
	29th December.	30th December.	31st December.		
	Inches.	Inches.	Inches.	Inches.	Inches.
Nellore	1·21	0·46	0·21	1·88	2·72
Chingleput	2·16	1·34	1·57	5·07	5·03
North Arcot	1·88	1·50	3·36	6·74	2·82
South Arcot	3·54	2·65	2·01	8·20	5·64
Tanjore	3·48	3·10	1·43	8·01	8·02
Trichinopoly	2·87	2·13	1·07	6·07	3·65
Madura	1·35	2·09	1·16	4·60	4·02
Tinnevelly	0·78	3·96	2·36	7·10	3·80
Salem	0·56	0·84	0·48	1·88	1·47
Coimbatore	0·50	0·37	0·31	1·18	1·13
Nilgiris	0·72	0·93	1·47	3·12	2·95
Cuddapah	1·19	0·71	0·80	2·70	1·06

This burst of rainfall occurred unusually late in the season and under very abnormal circumstances. It was, as shown above, heaviest in the southern districts where the rainfall of the month was hence in marked excess.

The following gives comparative data for the six divisions of the presidency:—

Division.	Number of rainy days.			Rainfall.		
	Average actual, December 1895.	Average normal, December.	Variation from normal.	Average actual, December 1895.	Average normal, December.	Variation from normal.
				Inches.	Inches.	Inches.
Madras Central . .	1·3	0·9	+0·4	0·98	0·46	+0·52
„ East Coast, Central.	3·5	2·9	+0·6	2·69	2·72	—0·03
„ East Coast, South.	4·6	5·2	—0·6	7·91	5·13	+2·78
„ South . .	5·0	4·8	+0·2	6·93	3·93	+3·00
„ „ Central,	2·7	2·6	+0·1	1·77	1·40	+0·37
Malabar . . .	0·1	1·4	—1·3	0·10	0·80	—0·70

The distribution of the rainfall is shown more fully by the following data for each of the 22 Collectorates of the presidency:—

District.	Number of rainy days.		Rainfall.		
	Average actual, December 1895.	Average normal, December.	Average actual, December 1895.	Average normal, December.	Variation from normal.
			Inches.	Inches.	Inches.
Ganjam . . .	0	1·1	0·01	1·43	—1·42
Vizagapatam . .	0	0·8	0	1·10	—1·10
Godavari . . .	0	0·7	0	0·69	—0·69
Kistna . . .	0·1	0·7	0·03	0·52	—0·49
Nellore . . .	3·5	2·9	2·69	2·72	—0·03
Chingleput . .	5·1	4·7	6·04	5·03	+1·01
Madras . . .	6·0	5·2	5·05	5·24	—0·19
North Arcot . .	3·3	3·3	6·87	2·83	+4·04
South Arcot . .	3·8	5·4	8.60	5·64	+2·96
Tanjore . . .	7·0	7·3	11·24	8·02	+3·22
Trichinopoly . .	3·4	5·2	6·14	3·69	+2·45
Madura . . .	4·8	4·9	5·73	4·02	+1·71
Tinnevelly . .	5·2	4·6	8·40	3·80	+4·60
Malabar . . .	0·2	1·8	0·15	1·02	—0·87
South Canara .	0	0·9	0	0·48	—0·48
Salem . .	2·7	2·7	2·03	1·47	+0·56
Coimbatore . .	2·7	2·5	1·38	1·31	+0·07
Nilgiris . . .	2·6	4·5	3·22	2·95	+0·27
Cuddapah . . .	3·3	1·7	3·03	1·06	+1·97
Anantapur . .	1·1	0·7	0·25	0·21	+0·04
Bellary . . .	0·3	0·4	0·05	0·17	—0·12
Kurnool . . .	0·2	0·6	0·04	0.25	—0·21

Appendix A.

The following is an account of a tornado which passed over the Arkonam Railway station on the 30th December. The account was drawn up by G. B. Winter, Esq., after examining a number of witnesses, including a man who had been sent out to examine the whole track of the storm, and was forwarded to me by C. Michie Smith, Esq., Government Astronomer, Madras.

"1. *Its origin, direction and distance travelled.*—The storm was first seen at mile 33 from Madras and about ½ mile south of the Madras Railway line. It travelled parallel to the main line from the 33rd mile to about 37·16 and on the average of about ½ mile south of the line. From here it appears to have left the ground, and crossing over the line in mid-air came down again over the tank opposite mile 42·4 and about 300 feet north of that point on the Madras Railway. It passed through the Arkonam station compound about 200 feet north of the platform, knocking down a lot of trees and branches in its path, unroofed the whole of one side of the carriage shed, missed the engine shed, and unroofing the coke shed passed along the siding to the depôt and travelled towards the forest reserve about midway between the new workshops and the south-west line. It passed through the forest reserve and crossed the line at 46·6, and finally dissipated itself over the Nagavadoo tank opposite mile 46·12 and about 900 feet to the south of the line at that point, after having travelled a distance of nearly 12 miles.

2. *Speed.*—The only reliable information I could get was that the tornado passed through Chinnamapet station just as No. 98 train was leaving that station. This train was ten minutes late, so that this time must have been 9-50 A.M. The tornado passed through Arkonam yard at 10-3 A.M., the mileage of the former station being 33 and the latter 42½. I calculate the tornado must have been moving at the rate of 30 miles an hour.

3. *Size of the tornado.*—Its most destructive effects were confined within a space of 60 or 80 feet. Its effect

was probably felt within a width of 500 or 600 feet.

4. *Damage done by the tornado.*—It was stated that a point handle to which a weight of 50lbs. was attached was blown over by the wind. But I believe this must have been done by some object in motion knocking it over. Some of the point handles were bent.

The whole of one side of the carriage shed in the Arkonam station yard was unroofed, and I saw these sheets of corrugated iron carried at least 200 yards into the air. Some of the sheets were found ¾ mile away from where they were blown off.

The most curious instance of damage done was the unroofing of the coke shed in the same yard. Here the building was closed, all the windows and doors being shut. It was noticed that the roof had been burst open from the *inside*. Some of the purlins had snapped under the strain, and one broken piece was knocked clean through one of the sheets.

A pointsman's sentry box was knocked clean over. This box weighed 226lbs. and was anchored down by 4 pieces of rail weighing 75lbs. to the yard. The pieces of rail were 3 feet long and were buried in the ground to about 2 feet 6 inches. The earth had been rammed round each rail, but must have become soft through the soaking of the rain. The rails were entirely uprooted. Two trollies were blown right over and one turned over upside down. Branches of trees 6 inches in diameter were snapped off.

5. *General characteristics.*—As the storm approached the roar it made was terrific. It much resembled the noise of an express train running over a railway bridge, or, as some one expressed it, as the noise of an express train running the station multiplied by ten. A large amount of rain had fallen, and the rain ceased just three minutes before the arrival of the tornado.

As it passed over a tank it sucked up the water and formed a *pucka* water spout as seen at sea.

Several persons were badly knocked about by the storm, among whom was Mr. Woodfall, a Permanent way Inspector, who stated that he was completely whipped off his leg and carried some distance. A lascar belonging to the Telegraph Engineering workshops was badly knocked about in the same manner, and when he came up to tell his story he was covered with coal and mud and his face bruised.

A woman in Kateramudar village also had a similar experience."

Mr. Michie Smith states that a second tornado passed near Arkonam (to the southwards), but he has not been able to obtain details. It was apparently less violent than the storm described above.

The following extracts from reports received by the Collector of North Arcot and Chingleput relate to other storms which also occurred on the same day.

Tirutani.—The Deputy Tehsildar writes—"With reference to your honour's circular, I beg to report that it was raining heavily on the morning of the 30th and only a few people had gone out into the fields, when the storm came up, nobody knows whence it originated. The information is that it was seen coming from Chancha village in Trivellore Taluk of the Chingleput District."

The following account of this storm was obtained by the Deputy Tehsildar from Kullaparadese of Maruthavallipurram:—

"I was going on the morning of the 30th from Karakallur to Maruthavallipuram. At about 10 A.M. I heard a loud noise and saw something black extending from the earth to the skies, and proceeding from the middle of the Manur lake. I was passing through the *varagu* (a kind of gram fields. The cloud seemed to be whirling. I was thrown down by the cloud. The *varagu* seeds were blown about, and when they came against me, they felt like gunshots. The rain-drops that came from the cloud felt to me hot."

This storm was probably not the continuation of the Arkonam tornado, although it occurred about the same hour.

The following is a brief account of another storm or tornado which occurred about 5 P.M. at Renigunta, a station in the Madras Railway, 40 miles to the north of Arkonam.

The Tehsildar of the Tirupati Sub-division writes—"I beg to report that a tornado of considerable violence came from the eastern side of Renigunta and passed over Renigunta at 5 P.M. of the 30th. It passed over the western side of the town and stopped at the fresh water pond. It removed the thatches from 5 or 6 houses and the zinc sheets of the engine shed of the Madras Railway, and blew down the telegraph wires."

Table

Abstract of Observations taken at 8 A.M. at 208

Meteorological Province or District.	Station.	Elevation of bar cistern above sea level in feet.	Pressure 8 A.M. in inches.								Temperature of air.												
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
I.—Burma Coast and Bay Islands.		...	...	−·021	...	...	...	...	...	...	...	86·5	+0·6	70·0	+2·4	78·3	+1·5	16·5	...	...	...	...	25·7
Bay Islands	Port Blair	61	29·893	?	29·885	29·979	18th	29·721	9th	·258	80·8	86·1	?	78·1	?	82·1	?	8·0	90·5	4th	73·0	24th	17·5
	Camorta	?	...	...	...	...	...	Not recorded			...	...	...	...	...	...	...	...	...	...	...	...	...
Tenasserim	Mergui	96	29·894	?	29·923	29·973	19th	29·780	9th	·193	78·9	90·0	?	71·3	?	80·6	?	18·7	93·3	28th	66·3	22nd	27·0
	Tavoy	26	29·991	?	29·918	30·051	19th	29·888	9th	·163	75·7	90·3	?	68·0	?	79·2	?	22·3	92·7	2 days	60·2	22nd	32·5
	Moulmein	94	29·924	−·018	29·956	29·998	17th	29·791	9th	·207	75·4	90·4	+3·2	70·8	+4·3	80·6	+3·8	19·6	96·5	30th	63·3	24th	33·2
	Toungoo	183	29·835	−·020	29·965	29·955	1st	29·721	11th	·234	61·9	82·2	−1·8	64·7	+2·1	73·5	+0·2	17·5	86·8	3 days	59·1	2 days	27·7
Lower Burma	Rangoon	41	29·970	−·026	29·948	30·047	28th	29·822	9th	·225	72·3	88·5	+1·2	69·5	+1·8	79·0	+1·5	19·0	91·2	30th	65·8	2 days	25·4
	Bassein	27	29·991?	−·018?	29·954?	30·065	18th	29·838	9th	·227	71·3	85·3	+0·9	68·0	+2·7	76·7	+1·8	17·3	89·2	4th	63·5	31st	25·7
	Diamond Island,	41	29·958	−·021	29·934	30·036	17th & 19th.	29·806	9th	·230	76·9	84·1	?	74·6	+2·6	79·4	?	9·5	87·6	4th	71·4	11th	16·2
Arakan	Akyab	20	30·004	−·025	29·967?	30·104	1st	29·801	12th	·303	67·5	81·5	−0·4	65·0	+0·6	73·3	+0·1	16·5	85·2	3rd	58·7	26th	26·5
II.—Burma Inland.		...	...	+·008	...	...	...	...	...	...	...	77·2	−2·0	56·1	+2·2	66·4	+0·1	20·5	...	...	...	...	33·3
Central Burma	Thayetmyo	134	29·916	+·008	29·997	30·018	27th	29·791	12th	·227	68·0	82·0	−2·4	62·6	+3·7	72·3	+0·7	19·4	88·1	4th	55·7	24th	32·4
	Minbu	?	29·901	?	?	30·031	27th	29·759	12th	·272	65·6	80·1	?	62·6	?	71·4	?	17·5	86·6	2 days	58·0	2 days	28·6
	Yamethin	645	29·407	?	30·029	29·509	27th	29·265	12th	·244	64·7	81·0	?	?	?	?	?	?	89·0	3 days	?	?	?
	Taunggyi	?			Not recorded.						58·6	71·5	?	49·7	?	60·6	?	21·8	75·7	3rd	41·1	23rd	34·6
Upper Burma	Mandalay	249	29·812	?	30·022	29·926	27th	29·681	12th	·245	64·4	80·0	?	60·7	?	70·4	?	19·3	86·5	3rd	56·2	18th	30·3
	Kindat	?	29·724	?	?	29·852	27th	29·561	12th	·291	58·0	74·2	−1·5	55·9	+0·6	65·1	−0·5	18·3	79·3	2 days	51·5	28th	27·8
	Lashio	?	27·249	?	?	27·364	27th	27·092	12th	·272	57·2	73·7	?	50·1	?	61·9	?	23·6	80·6	9th	40·1	18th	40·5
	Bhamo	?	29·710	?	?	29·837	27th	29·569	8th	·267	55·5	71·7	?	51·1	?	62·9	?	23·6	80·1	3rd	41·4	26th	38·7
III.—Assam.		...	...	−·009	...	...	...	...	...	...	...	75·7	+0·4	52·6	−1·3	64·1	−0·4	23·1	...	...	...	...	33·0
Assam (Surma)	Silchar	104	29·972	−·003	30·035	30·062	27th	29·720	12th	·342	59·4	79·3	−0·2	54·5	−0·7	66·9	−0·4	24·8	86·5	2nd	48·7	26th	37·8
Brahmaputra	Sibsagar	333	29·773	−·007	30·088	29·883	1st	29·578	12th	·305	52·5	72·6	+0·9	48·8	−1·7	60·7	−0·4	23·8	75·9	3rd	41·9	28th	34·0
	Dhubri	115	29·969	−·016	30·046	30·068	27th	29·733	12th	·335	58·8	75·1	+0·5	54·4	−1·5	64·8	−0·5	20·7	77·7	6th	50·4	31st	27·3
IV.—Bengal and Orissa.		..	...	−·012	...	...	...	...	...	...	...	77·2	+0·3	54·1	−1·3	65·7	−0·5	22·9	...	...	...	...	34·4
East Bengal	Chittagong	87	29·951	−·025	29·991	30·039	1st	29·588	12th	·451	61·8	78·0	+0·1	57·0	−1·4	67·5	−0·7	21·0	85·2	2 days	50·1	26th	35·1
	Lungleh	?			Not recorded.						57·3	66·9	?	43·0	?	59·9	?	13·9	72·5	12th	47·2	25th	25·3
	Noakhali	43	29·998	?	29·990	30·089	19th	29·689	12th	·400	60·9	77·2	?	53·3	?	65·3	?	23·9	83·5	1st & 2nd.	47·2	27th	36·3
	Comilla	36	30·022	?	30·007	30·100	1st	29·702	12th	·398	62·0	77·8	?	54·4	?	66·1	?	23·4	83·4	2nd & 3rd.	47·6	10th	35·8
	Sirajganj	49	30·020	?	30·021	30·106	17th	29·783	12th	·323	58·4	76·6	?	54·0	?	65·3	?	22·6	81·8	2nd	48·2	20th	33·6
	Narayanganj	26	30·031	−·009	30·006	30·113	1st	29·738	12th	·375	61·1	77·3	−1·1	56·6	−0·7	67·0	−0·9	20·7	83·1	3 days	52·3	20th	30·8
	Barisal	13	30·038	−·027	29·997	30·117	19th	29·746	12th	·371	62·0	77·6	+0·4	55·6	−0·6	66·6	−0·1	22·0	84·3	2 days	50·0	2 days	34·3
	Mymensingh	59	30·004	−·019	30·017	30·089	1st	29·741	12th	·348	58·6	76·8	+0·3	53·8	−0·2	65·3	+0·1?	23·0	82·2	2nd	49·1	16th	33·1
Deltaic Bengal	Faridpur	46	30·025	?	30·021	30·106	17th	29·770	12th	·336	60·6	75·8	?	53·7	?	64·8	?	22·1	81·2	2nd & 3rd.	47·5	24th	33·7
	Jessore	33	30·045	−·002	30·026	30·127	19th	29·795	12th	·332	59·7	77·5	−0·3	52·2*	−3·0	64·8*	−1·7	25·3	82·6	3rd	43·9	24th	38·7
	Calcutta	21	30·064	−·007	30·032	30·147	19th	29·816	12th	·331	59·9	76·8	+0·7	54·6	−1·5	65·8	−0·4	22·2	81·3	1st	47·2	25th	34·1
	Saugor Island	25	30·052	−·011	30·022	30·134	26th	29·829	12th	·305	62·5	76·8	+1·0	58·2	−0·9	67·5	+0·1	18·6	81·5	1st	51·7	3 days	29·8
	Krishnagar	47	†30·039	?	†30·037	30·121	17th	29·803	12th	·318	†59·7	78·3‡	?	50·7‡	?	64·5‡	?	27·6	84·0	3rd	44·2	21st	39·8
	Midnapore	149	29·938	?	30·043	30·018	19th	29·720	12th	·298	59·5	79·3	?	53·7	?	66·6	?	25·6	83·8	2nd & 3rd	45·1	26th	38·7

* Mean of 28 days. † Mean of 30 days. ‡ Mean of 29 days.

I.

stations in India, Burma, etc., in December 1895.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 31st December 1895.	Normal rainfall for period, 1st October to 31st December.	Variation from normal of period, 1st October to 31st December.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·46	1·09	+0·54	...	...	...	...	I.—Burma Coast and Bay Islands.	
...	4	8	5	6	3	1	3	1	7·8	7·2	+ 8	84	·887	6·2	15	?	?	8·10	5·94	+2·16	19·14	27·08	− 7·94	2·71	Port Blair .	Bay Islands.
														Not	recorded.										Camorta .	
...	9	2	3	5	3	1	...	8	1·7	1·8	− 6	76	·756	3·8	0	?	?	0	0·57	−0·57	6·97	17·74	−10·77	0	Mergui .	Tenasserim.
26	2	2	...	...	...	...	...	1	1·5	?	?	80	·717	0·4	0	?	?	0·04	?	?	6·03	?	?	0·03	Tavoy.	
...	2	10	9	2	...	1	1	6	2·5	2·6	− 4	82	·725	4·3	0	0·18	−0·18	0	0·05	−0·05	7·42	10·47	− 3·05	0	Moulmein.	
...	17	2	...	1	1	...	...	10	3·3	2·3	+ 44	88	·602	4·7	2	0·36	+1·64	0·93	0·20	+0·73	5·02	8·33	− 3·31	0·75	Toungoo.	
...	14	12	2	...	1	...	...	2	5·9	4·9	+ 20	82	·652	4·5	1	0·45	+0·55	0·47	0·09	+0·38	4·42	9·81	− 5·39	0·42	Rangoon .	Lower Burma.
8	...	19	3	1	...	...	...	...	5·3	2·7	+ 96	81	·626	4·8	2	0·55	+1·45	0·71	0·14	+0·57	7·07	12·56	− 5·49	0·40	Bassein.	
...	1	27	1	1	1	...	...	...	14·4	7·4	+ 95	75	·691	5·5	4	0·90	+3·10	1·39	0·87	+0·52	4·89	17·30	−12·41	0·79	Diamond Island.	
...	12	17	1	...	...	1	...	...	2·9	2·2	+ 32	89	·605	4·2	2	1·27	+0·73	1·49	0·88	+0·61	10·64	14·26	− 3·62	1·25	Akyab. .	Arakan.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·56	0·10	+2·48	...	...	...	...	II.—Burma Inland.	
...	16	7	2	...	...	1	...	5	4·6	3·2	+ 44	77	·529	4·8	5	0·36	+4·64	1·70	0·10	+1·60	6·05	6·50	− 0·45	0·66	Thayetmyo .	Central Burma.
3	3	1	...	...	...	...	8	16	9·5	?	?	82	·518	4·8	4	?	?	4·32	?	?	7·00	?	?	2·62	Minbu.	
6	12	2	...	...	...	...	1	10	4·4	?	?	88	·538	2·5	3	?	?	3·16	?	?	6·73	?	?	2·20	Yamethin.	
10	...	...	...	17	2	2	...	...	?	?	?	84	·415	5·2	4	?	?	2·69	?	?	8·89	?	?	1·15	Taunggyi.	
4	12	4	1	...	...	...	3	7	3·2	?	?	88	·533	2·9	3	?	?	1·72	?	?	4·58	?	?	0·99	Mandalay .	Upper Burma.
30	...	...	...	...	...	...	...	1	0·8	?	?	97	·471	2·9	2	?	?	3·45	0·09	+3·36	7·87	8·72	− 0·85	3·25	Kindat.	
			Not	rec	orde	d.			?	?	?	91	·434	6·1	4	?	?	1·40	?	?	6·24	?	?	0·54	Lashio.	
21	1	8	...	...	...	...	...	1	1·0	?	?	97	·438	4·7	2	?	?	2·07	?	?	5·65	?	?	1·56	Bhamo.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·79	0·47	+0·33	...	...	...	...	III.—Assam.	
31	...	...	...	...	...	...	...	...	1·2	1·9	− 37	90	·463	5·3§	2	1·09	+0·91	2·14	0·71	+1·43	10·58	7·45	+ 3·13	1·46	Silchar .	Assam (Surma).
27	...	3	1	...	...	...	...	...	1·6	1·6	0	99	·398	?	1	2·18	−1·18	0·24	0·63	−0·39	3·60	6·30	− 2·70	0·13	Sibsagar .	Brahmaputra.
3	11	10	5	...	...	...	...	2	5·1	4·5	+ 13	89	·442	1·8‖	0	0·13	−0·13	0	0 06	−0·06	1·01	3·76	− 2·75	0	Dhubri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·57	0·28	+0·19	...	...	...	...	IV.—Bengal and Orissa.	
3	11	14	2	...	1	...	...	...	2·5	3·2	− 22	91	·506	4·1	2	0·91§	+1·09	4·47	0·74	+3·73	10·16	7·69	+ 2·47	4·27	Chittagong .	East Bengal.
			Not	rec	orde	d.			?	?	?	75	·353	?	3	?	?	3·80	?	?	14·38	?	?	2·00	Lungleh.	
...	18	10	1	...	...	...	...	2	1·8	?	?	92	·495	2·4	1	0·65	+0·35	3·57	0·59	+2·98	8·70	9·27	− 0·57	3·49	Noakhali.	
23	8	...	...	...	...	...	...	...	1·0	?	?	94	·528	1·7‖	1	0·61	+0·39	2·43	0·44	+1·99	10·48	5·61	+ 4·87	2·40	Comilla.	
24	6	...	...	...	...	...	...	1	1·8	?	?	87	·428	2·0†	0	0·50	−0·50	0	0·14	−0·14	1·71	4·90	− 3·19	0	Sirajganj.	
4	11	4	2	...	...	...	...	10	2·6	1·9	+ 37	86	·469	3·5¶	1	0·73	+0·27	0·76	0·15	+0·61	6·22	5·85	+ 0·37	0·76	Narayanganj.	
24	3	2	...	...	...	...	...	2	2·0	?	?	84	·472	2·2	2	0·50	+1·50	1·24	0·27	+0·97	9·18	6·81	+ 2·37	1·10	Barisal.	
11	12	3	2	1	...	...	1	1	1·4	?	?	90	·416	?	0	0·40	−0·40	0	0·14	−0·14	2·62	6·21	− 3·59	0	Mymensingh.	
14	14	...	...	...	...	...	1	2	1·4	?	?	86	·465	1·5†	0	0·40	−0·40	0·05	0·15	−0·10	4·14	4·84	− 0·70	0·05	Faridpur .	Deltaic Bengal.
6	14	2	...	...	...	...	...	9	2·3	1·7	+ 35	79	·414	2·3*	0	0·64	−0·64	0·04	0·24	−0·20	6·26	6·08	+ 0·18	0·04	Jessore.	
12	11	2	...	...	...	...	...	6	2·0	3·0	− 33	73	·382	2·9	0	0·73	−0·73	0	0·31	−0·31	2·79	5·12	− 2·33	0	Calcutta.	
...	21	6	...	...	...	...	...	4	9·3	6·4	+ 45	82	·470	4·0	0	1·27	−1·27	0·06	0·37	−0·31	4·78	10·45	− 5·67	0·06	Saugor Island.	
...	7	1	1	...	...	...	8	13	2·9*	?	?	70†	·362†	2·3†	0	0·25	−0·25	0	0·11	−0·11	3·66	4·64	− 0·98	0	Krishnagar.	
6	16	1	...	...	...	...	...	8	2·0	?	?	66	·347	1·6		0·40	−0·40	0	0·37	−0 37	4·72	5·38	− 0·66	0	Midnapore.	

§ Mean of 21 days. ‖ Mean of 26 days. ¶ Mean of 22 days.

Table

Abstract of Observations taken at 8 A.M. at 208 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure 8 A.M. in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central Bengal.	Bankura .	298	29·782	?	30·052	29·877	18th	29·567	12th	·310	57·8	77·7	?	52·9	?	65·3	?	24·8	82·1	1st	46·8	26th	35·3
	Raniganj .	334	29·763	?	30·069	29·852	27th	29·554	12th	·298	57·8	77·8	?	*52·7	?	*65·5	?	25·1	82·0	1st	46·2	24th	35·8
	Burdwan .	99	29·996	−·001	30·049	30·088	17th	29·764	12th	·324	59·6	77·6	−0·1	54·5	−1·4	66·1	−0·8	23·1	82·1	3rd	48·1	22nd	34·0
	Naya Dumka	489	29·588	?	30·071	29·678	27th	29·381	12th	·297	57·3	75·7	?	50·6	?	63·2	?	25·1	80·3	2nd	44·7	23rd	35·6
	Berhampore.	67	30·015	−·011	30·037	30·107	18th	29·772	12th	·335	57·3	76·9	+0·4	53·1	−2·2	65·0	−0·9	23·8	82·2	2nd	47·1	24th	35·1
	Rampore Boalia.	70	30·005	?	30·028	30·092	1st	29·775	12th	·317	58·9	77·1	?	52·7	?	64·9	?	24·4	81·6	3rd	47·9	21st	33·7
	Malda† .	72	30·019	?	30·047	30·100	18th	29·805	12th	·295	57·2	76·6	?	48·6	?	62·6	?	28·0	82·6	2nd	42·5	24th	40·1
	Bogra . .	61	29·997	?−·008	30·014	30·083	18th	29·766	12th	·317	57·7	77·5	+0·6	52·6	−1·0	65·1	−0·2	24·9	83·2	3rd	47·2	2 days	36·0
North Bengal .	Dinajpur .	123	29·955	−·014	30·042	30·040	1st	29·739	12th	·301	55·8	77·7	+1·1	49·9	−1·4	63·8	−0·2	27·8	81·8	2 days	45·0	19th	36·8
	Rangpur .	123	29·961	?	30·047	30·047	27th	29·742	12th	·305	56·8	?	?	51·2	?	?	?	?	?	?	46·6	20th	?
	Jalpaiguri .	284	29·791	−·013	30·051	29·888	27th	29·588	12th	·300	57·1	76·6	+1·3	51·3	−1·1	64·0	?+0·1	25·3	80·3	2nd	46·3	12th	34·0
Orissa . .	Balasore .	56	30·041	−·014	30·037	30·126	26th	29·824	2 days	·302	59·1	79·5	+0·7	52·9	−1·5	66·2	−0·4	26·6	83·4	1st	45·9	2 days	37·5
	False Point.	21	30·060	−·009	30·023	30·162	20th	29·791	11th	·371	62·7	77·2	−0·1	55·4	−1·9	66·3	−1·0	21·8	82·4	2 days	46·9	26th	35·5
	Cuttack .	80	30·001	−·012	30·028	30·096	20th	29·766	11th	·330	60·5	80·8	−1·2	57·2	−1·1	69·0	−1·2	23·6	84·3	5 days	50·6	25th	33·7
	Shortt's Island.	?	30·055	?	?	30·143	26th	29·795	11th	·348	71·5	76·4	?	67·6	?	72·0	?	8·8	83·0	6th	62·0	27th	21·0
	Puri . .	20	30·061	?	30·025	30·161	20th	29·796	11th	·365	63·7	80·1	?	60·0	?	70·1	?	20·1	84·7	2nd	51·5	28th	33·2
V.—Gangetic Plain and Chota Nagpur.		...	...	−·002	...	...	...	...	...	...	...	75·2	+0·5	48·1	−1·0	61·7	−0·3	27·1	...	...	...	...	38·1
Chota Nagpur .	Hazaribagh .	2,007	28·025	−·001	30·081	28·106	1st	27·851	12th	·255	56·3	71·9	+0·3	49·6	−0·6	60·8	−0·2	22·3	76·2	1st	46·1	20th	30·1
	Ranchi .	2,128	27·893	−·013	30·067	27·968	1st	27·714	12th	·254	56·7	72·4	+0·4	49·5	−0·1	60·9	?+0·2	22·9	76·5	5th	44·9	20th	31·6
	Daltonganj .	730?	29·342	?	30·081	29·428	1st	29·155	12th	·273	53·9	73·5	?	43·3	?	58·4	?	30·2	80·4	1st	38·0	3 days	42·4
	Chaibassa .	760	29·310	−·003	30·067	29·387	18th	29·117	12th	·270	56·2	78·4	+0·3	50·0	−2·0	64·2	−0·9	28·4	82·8	2nd	44·0	22nd	38·8
Bihar, South .	Gaya . .	375	29·729	?	30·084	29·817	27th	29·551	12th	·266	56·7	76·0	+0·2	50·3	−0·8	63·2	−0·3	25·7	81·8	3rd	45·9	28th	35·9
	Dehri . .	351	‡29·750	?	30·081‡	29·832	1st	29·571	12th	·261	‡56·7	‡75·8	?	§49·9	?	§62·5	?	25·9	87·0	1st	47·3	11th	39·7
	Patna . .	183	29·925	−·015	30·072	30·024	27th	29·734	12th	·290	57·3	74·4	+0·3	50·5	−0·6	62·4	−0·2	23·9	80·7	3rd	44·1	25th	36·6
	Arrah . .	190	29·920	?	30·076	30·022	27th	29·733	12th	·289	54·5	76·0	?	48·5	?	62·2	?	27·5	83·5	3rd	43·1	25th	40·4
	Buxar . .	239	29·871	?	30·082	29·970	27th	29·686	12th	·284	58·2	75·4	?	49·5	?	62·5	?	25·9	81·6	1st	43·9	25th	37·7
Bihar, North .	Purnea .	125	29·964	?	30·053	30·063	27th	29·808	11th	·255	53·3	76·8	+0·9	47·6	−1·8	62·2	−0·5	29·2	82·2	2nd	41·7	24th	40·5
	Bhagalpur .	160	29·930	?	30·052	30·025	27th	29·730	12th	·295	57·8	76·3	?	48·9	?	62·6	?	27·4	81·1	2nd	43·2	25th & 26th	37·9
	Darbhanga .	166	29·926	−·007	30·058	30·029	27th	29·730	12th	·299	55·4	74·4	+0·3	51·3	−2·7	63·0	−1·2	23·1	80·3	2 days	46·3	26th	34·0
	Muzaffarpur.	178	29·922	?	30·068	30·011	27th	29·722	12th	·289	53·7	74·2	?	47·5	?	60·9	?	26·7	80·7	3rd	42·3	25th	38·4
	Motihari .	224	29·869	?	30·067	29·967	1st & 27th.	29·683	12th	·284	53·8	74·8	?	45·0	?	60·0	?	29·8	81·6	3rd	41·0	24th & 26th.	40·6
	Chapra .	181	29·918	?	30·067	30·008	27th	29·733	12th	·275	54·1	75·1	?	49·0	?	62·1	?	26·1	80·8	3rd	44·5	25th	36·3
N.-W. Provinces (Eastern Districts).	Benares .	267	29·843	+·011	30·086	29·936	27th	29·670	12th	·266	53·0	75·6	+0·1	46·0	−1·8	60·5	−0·9	29·0	80·6	1st	41·0	22nd & 26th.	39·6
	Allahabad .	309	29·801	+·009	30·088	29·877	27th	29·629	12th	·248	54·7	76·1	+1·1	47·4	0	61·8	+0·6	28·7	82·2	1st	41·9	26th	40·3
N.-W. Provinces (East Sub-Montane).	Gorakhpur .	256	29·829	−·002	30·062	29·920	27th	29·657	12th	·263	55·0	75·1	+0·8	48·7	−1·5	61·9	−0·4	26·4	81·0	2nd	43·8	22nd & 25th	37·2
Oudh, South .	Lucknow .	368	29·724	+·003	30·079	29·922	27th	29·560	12th	·262	53·6	76·1	+0·6	46·4	+0·8	61·3	+0·7	29·7	80·9	1st & 2nd.	41·1	16th & 17th.	39·8
Oudh, North .	Bahraich .	403	29·673	?	30·068	29·776	1st	29·503	12th	·273	52·8	75·1	?	46·3	?	60·7	?	28·8	80·4	2nd	40·1	21st	40·3
N.-W. Provinces (Central).	Cawnpore .	416	29·682	?	30·085	29·765	27th	29·526	12th	·239	53·9	76·3	?	46·0	?	61·2	?	30·3	81·3	1st	40·0	26th	41·3
	Mainpuri .	516	29·580	?	30·092	29·662	27th	29·426	11th	·242	52·1	75·1	?	47·3	?	61·2	?	27·8	80·8	1st	41·6	20th	39·2

* Mean of 20 days. † Mean of 30 days. ‡ Mean of 29 days. § Mean of 22 days.

I—*continued.*

in India, Burma, etc., in December 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	S.E.	S.	S.W.	W.	N.W.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 31st December 1895.	Normal rainfall for period, 1st October to 31st December.	Variation from normal of period, 1st October to 31st December.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
10	1	...	...	...	...	...	17	3	1·4	P	P	70	·344	2·1	0	0·50	−0·50	0	0·22	−0·22	2·98	4·62	−1·64	0	Bankura .	Central Bengal.
1	4	1	...	...	...	...	6	18	2·8	P	P	75	·366	1·1	0	0·35	−0·35	0	0·12	−0·12	3·04	3·73	−0·69	0	Raniganj.	
8	10	...	1	...	...	...	1	11	1·4	1·9	−26	65	·341	1·9	0	0·27	−0·27	0	0·16	−0·16	3·70	4·27	−0·57	0	Burdwan.	
8	3	1	...	...	...	...	5	14	2·1	P	P	71	·340	1·6	0	0·42	−0·42	0·03	0·22	−0·19	2·17	4·48	−2·31	0·03	Naya Dumka.	
7	11	...	...	...	...	...	5	8	1·8	1·6	+13	85	·403	1·6	1	0·45	+0·55	0·22	0·14	+0·08	1·95	4·73	−2·78	0·19	Berhampore.	
10	21	...	...	...	...	...	...	...	3·9	P	P	78	·397	1·1	0	0·30	−0·30	0	0·11	−0·11	1·18	4·69	−3·51	0	Rampore Boalia.	
...	...	1	...	...	...	3	...	26	2·2	P	P	78	·369	0·7	0	0·30	−0·30	0	0·18	−0·18	0·48	4·72	−4·24	0	Malda.†	
7	8	5	...	...	...	...	6	5	1·8	P	P	84	·406	P	1	0·25	+0·75	0·16	0·10	+0·06	0·63	3·84	−3·21	0·10	Bogra.	
...	6	8	1	...	...	1	8	7	2·0	P	P	83	·373	0·4	0	0·30	−0·30	0	0·09	−0·09	0·57	4·89	−4·32	0	Dinajpur .	North Bengal.
2	7	12	...	...	...	1	...	9	1·7	P	P	89	·413	1·4	0	0·25	−0·25	0	0·10	−0·10	1·06	5·52	−4·46	0	Rangpur.	
10	9	3	2	...	...	...	...	7	1·5	P	P	86	·401	P	0	0·20	−0·20	0	0·09	−0·09	1·91	5·66	−3·75	0	Jalpaiguri.	
2	17	...	...	...	...	...	1	11	3·1	P	P	72	·368	1·2	0	0·70	−0·70	0	0·31	−0·31	4·24	8·05	−3·81	0	Balasore .	Orissa.
2	24	...	...	...	...	...	...	5	5·1	6·3	−19	77	·447	3·4	0	1·18	−1·18	0·05	0·91	−0·86	12·07	12·54	−0·47	0·05	False Point.	
23	3	2	...	...	...	...	2	1	1·5	1·3	+15	75	·397	3·1	0	1·18	−1·18	0·02	0·35	−0·33	4·61	4·15	+0·46	0·02	Cuttack.	
...	24	4	...	...	...	...	...	3	P	P	P	63	·485	1·8	0	P	P	0·06	P	P	15·31	P	P	0·06	Shortt's Island.	
1	27	1	...	...	...	...	...	2	9·9	P	P	70	·425	3·0	0	0·90	−0·90	0	0·68	−0·68	11·03	11·79	−0·76	0	Puri.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·16	0·25	−0·08	...	...	...	...	**V.—Gangetic Plain and Chota Nagpur.**	
10	2	1	2	...	...	2	8	6	6·0	4·6	+30	63	·288	2·2	0	0·45	−0·45	0	0·25	−0·25	4·50	3·48	+1·02	0	Hazaribagh.	Chota Nagpur.
6	6	1	...	...	...	...	7	11	3·9	P	P	58	·272	0	0	0·55	−0·55	0	0·23	−0·23	2·49	3·47	−0·98	0	Ranchi.	
...	2	...	1	2	15	8	2	1	1·9	P	P	75	·315	1·2	0	P	P	0	P	P	0·88	P	P	0	Daltonganj.	
11	1	...	...	...	...	7	10	2	0·9	P	P	75	·345	2·2	0	0·70	−0·70	0	0·32	−0·32	3·23	3·53	−0·30	0	Chaibassa.	
24	...	...	...	...	1	2	4	...	1·6	1·3	+23	67	·314	0·7	0	0·27	−0·27	0	0·19	−0·19	0·15	2·45	−2·30	0	Gaya. .	Bihar, South.
2	...	...	...	...	6	18	2	1	4·5†	P	P	71‡	·334‡	1·0‡	0	0·71	−0·71	0·07	0·57	−0·50	0·39	3·71	−3·32	0·07	Dehri.	
4	...	...	1	...	...	7	17	2	2·4	1·7	+41	71	·339	0·9	1	0·36	+0·64	0·23	0·13	+0·10	1·30	3·08	−1·78	0·23	Patna.	
1	2	...	1	1	1	6	12	7	1·3	P	P	79	·342	0·7†	1	0·35	+0·65	0·36	0·21	+0·15	1·42	3·64	−2·22	0·36	Arrah.	
1	...	...	...	...	1	13	14	2	1·7	P	P	69	·345	1·0†	1	0·45	+0·55	0·50	0·23	+0·27	1·10	3·75	−2·65	0·44	Buxar.	
5	1	3	1	...	...	7	3	3	2·6	1·3	+100	86	·351	0·1	0	0·36	−0·36	0	0·15	−0·15	0·41	3·71	−3·30	0	Purnea .	Bihar, North.
10	...	2	...	...	3	7	5	4	2·0	P	P	74	·361	1·1	0	0·35	−0·35	0	0·10	−0·10	0·34	3·57	−3·23	0	Bhagalpur.	
9	3	2	3	...	...	4	6	4	2·3	2·0	+15	83	·368	0·5	0	0·36	−0·36	0	0·11	−0·11	0·30	3·41	−3·11	0	Darbhanga.	
16	...	...	1	...	...	5	7	2	1·3	P	P	90	·377	0·5	1	0·20	+0·80	0·29	0·13	+0·16	0·44	3·69	−3·25	0·25	Muzaffarpur.	
5	2	2	...	2	...	9	8	3	3·5	P	P	92	·386	0·3	1	0·56	+0·44	0·37	0·18	+0·19	0·60	3·69	−3·09	0·37	Motihari.	
8	...	...	...	...	2	10	9	2	2·1	P	P	82	·351	0·5	1	0·35	+0·65	0·39	0·18	+0·21	0·79	4·07	−3·28	0·39	Chapra.	
19	...	...	...	...	...	8	4	...	2·4	2·4	0	77	·319	0·7	0	0·45	−0·45	0	0·24	−0·24	0	2·90	−2·90	0	Benares .	N.-W. Provinces (Eastern Districts).
12	...	...	1	1	1	3	8	5	2·1	1·5	+40	76	·331	0·9	1	0·64	+0·36	0·75	0·32	+0·43	0·75	2·32	−1·57	0·75	Allahabad.	
5	8	...	...	1	1	...	1	15	1·2	0·9	+33	75	·333	0·9	0	0·45	−0·45	0·06	0·17	−0·11	0·29	4·04	−3·75	0·06	Gorakhpur .	N.-W. Provinces (East Submontane).
8	1	2	...	...	...	5	9	6	0·9	1·7	−47	78	·322	1·3	0	0·82	−0·82	0·04	0·35	−0·31	0·11	1·23	−1·12	0·04	Lucknow .	Oudh, South.
16	2	...	2	...	...	2	2	7	0·9	P	P	80	·328	0·4	0	?	P	0·06	0·45	−0·39	0·08	2·14	−2·06	0·06	Bahraich .	Oudh, North.
9	2	1	1	...	...	2	12	4	3·0	P	P	73	·309	0·5	1	0·50	+0·50	0·34	0·30	+0·04	0·34	1·40	−1·06	0·34	Cawnpore .	N.-W. Provinces (Central).
30	...	...	...	...	...	...	1	...	0·4	P	P	67	·266	0·8	0	P	P	0·08	0·48	−0·40	0·08	1·30	−1·22	0·08	Mainpuri.	

Table

Abstract of Observations taken at 8 A.M. at 208 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
VI.—Upper Sub-Himalayas		...	...	+·002	...	...	...	...	...	...	...	72·4	+1·0	43·4	+0·2	57·9	+0·6	29·0	...	...	...	...	...	39·0
N.-W. Provinces (Sub-montane).	Bareilly	568	29·502	+·004	30·082	29·606	1st	29·352	11th & 12th	·254	49·6	73·9	+1·3	44·7	−0·8	59·2	+0·3	29·2	78·2	2nd	40·2	15th	38·0
	Dehra Dun	2,233	27·785	−·014	30·107	27·916	1st	27·646	12th	·270	47·8	70·0	+1·7	44·6	−1·0	57·3	+0·4	25·4	75·0	31st	40·5	3 days	34·5
	Roorkee	887	29·162	−·003	30·094	29·275	1st	29·011	12th	·264	45·8	73·5	+1·0	41·7	−1·7	57·6	−0·4	31·8	77·8	1st	36·9	22nd	40·9
	Meerut	738	29·327	+·002	30·095	29·423	1st	29·174	12th	·249	47·6	73·7	+0·7	45·3	+1·4	59·5	+1·1	28·4	78·6	1st	41·1	3 days	37·5
Punjab, Central.	Delhi	718	29·356	0	30·091	29·446	18th	29·207	12th	·239	53·7	74·5	+0·2	49·3	+0·8	61·9	+0·5	25·2	81·0	1st	44·4	27th	36·6
	Lahore	702	29·382	+·009	30·119	29·484	23rd	29·243	12th	·241	45·5	71·9	+0·4	42·4	+1·8	57·2	+1·1	29·5	75·8	1st	37·7	19th & 26th	38·1
Punjab (Sub-montane).	Umballa	962?	29·142	?	30·101	29·249	1st	28·983	12th	·266	47·7	73·2	?	42·5	?	57·9	?	30·7	77·0	1st	34·5	26th	42·5
	Patiala	?	*29·246	?	?	29·347	18th	29·100	12th	·247	49·2*	*72·9	?	*44·3	?	*58·6	?	28·6	76·3	2nd	38·0	26th	38·3
	Ludhiana	812	29·256	+·008	30·105	29·357	1st	29·109	12th	·248	47·9	72·0	+0·7	44·4	+1·1	58·2	+0·9	27·6	76·1	3rd	37·4	25th	38·7
Punjab, North	Sialkot	830	29·251	?	30·127	29·346	20th	29·100	12th	·246	46·4	71·1	+0·9	42·0	0	56·6	+0·5	29·1	76·0	1st	36·0	25th	40·0
	Rawalpindi	1,683?	28·387?	+·011	?30·194	28·493	23rd	28·243	12th	·250	40·6	70·0	+2·4	36·6	+0·3	53·3	+1·4	33·4	75·1	3rd & 31st	31·9	25th	43·2
VII.—Indus Valley and North-West Rajputana.		...	...	+·007	...	...	...	...	...	...	...	76·3	+1·4	45·7	+1·7	61·0	+1·6	30·7	...	...	...	...	...	40·9
Punjab, West	Peshawar	1,110	28·999	+·003	30·144	29·109	23rd	28·856	12th	·253	42·1	68·5	+0·7	38·6	+0·3	53·5	+0·5	29·9	75·1	3rd	33·9	3 days	41·2
	Mardan	...	...	...	Not recorded.			...	...	...	42·5	68·0	?	32·9	?	50·5	?	35·1	74·0	31st	27·0	26th & 27th	47·0
	Khushab	612	29·491	?	30·133	29·624	23rd	29·343	12th	·281	45·5	73·6	?	40·8	?	57·2	?	32·8	79·7	31st	36·0	3 days	43·7
	Montgomery	558	29·542	?	30·116	29·658	23rd	29·416	12th	·242	49·1	74·8	?	42·6	?	58·7	?	32·2	79·3	4 days	38·5	31st	40·8
	D. I. Khan	594	29·517	+·009	30·137	29·645	23rd	29·374	12th	·271	45·5	73·9	+1·1	40·8	+1·0	57·4	+1·1	33·1	81·3	31st	37·0	3 days	44·3
	Mooltan	420	29·699	0	30·124	29·824	23rd	29·563	5th	·261	50·9	75·3	+1·6	46·8	+3·3	61·1	+2·5	28·5	81·3	1st	43·7	14th	37·6
	Sirsa	662	29·422	+·007	30·108	29·521	23rd	29·297	12th	·224	47·8	76·0	+1·1	44·0	+1·7	60·0	+1·4	32·0	79·7	4 days	38·2	19th	41·5
Sind and Cutch	Jacobabad	186	29·955	+·025	30·117	30·077	18th	29·815	4th	·262	54·1	77·5	+0·9	46·5	+3·1	62·0	+2·0	31·0	82·5	3rd & 5th	43·0	6 days	39·5
	Hyderabad	96	30·032	+·008	30·087	30·135	23rd	29·890	4th	·245	59·7	80·6	+2·0	53·8	+1·5	67·2	+1·8	26·8	87·2	6th	47·5	25th	39·7
	Kurrachee	49	30·116	+·009	30·079	30·214	24th	29·979	4th	·235	63·1	82·0	+2·0	57·2	+1·3	69·6	+1·7	24·8	87·3	3rd	51·9	31st	35·4
	Bhuj	395	29·679	−·005	30·048	29·755	23rd & 24th	29·570	12th	·185	63·4	83·5	+1·5	55·4	?	69·5	?	28·1	86·4	2nd & 9th	51·0	4th	35·4
Rajputana, West	Bickaneer	771	29·321	?	30·114	29·454	23rd	29·220	12th	·234	54·5	76·6	+1·4	49·6	?	63·1	?	27·0	82·7	9th	45·1	13th	37·6
	Pachpadra	380	29·734	?	30·103	29·867	23rd	29·591	6th	·276	52·8	82·2	?	44·6	?	63·4	?	37·6	85·6	8th & 9th	37·2	15th	48·4
VIII.—East Rajputana, Central India and Gujarat.		...	...	+·010	...	...	...	...	...	...	...	80·9	+0·8	51·5	+0·9	66·2	+0·8	29·4	...	...	...	...	...	40·5
Rajputana, East	Jeypore	1,431	28·656	+·011	30·140	28·752	23rd	28·532	12th	·220	53·6	77·2	−0·4	47·8	?	62·5	?	29·4	82·0	31st	40·2	24th	41·8
	Sambhar	1,254	28·820	−·001	30·124	28·918	23rd	28·702	12th	·216	51·6	76·6	+1·3	46·4	+0·7	61·5	+1·0	30·2	81·4	10th	39·0	24th	42·4
	Ajmere	1,611	28·483	+·012	30·172	28·586	23rd	28·366	12th	·220	49·7	77·3	+1·1	45·6	+1·3	61·5	+1·2	31·7	81·4	10th	38·9	25th	42·5
	Deesa	466	29·618	+·004	30·066	29·699	23rd	29·501	12th	·198	61·2	87·2	+2·1	52·1	+0·1	69·7	+1·1	35·1	90·7	31st	47·1	15th	43·6
Kathiawar	Rajkot	429	29·643	+·006	30·041	29·713	24th	29·536	12th	·177	68·5	85·6	+0·2	53·0	+0·8	69·3	+0·5	32·6	91·4	31st	48·5	12th	42·9
	Veraval	?	30·036	?	29·996	30·102	20th	29·950	12th	·152	69·3	86·9	?	62·4	?	74·6	?	24·5	91·6	2nd	53·7	27th	37·9
Central India	Nowgong	757	29·341	+·002	30·112	29·423	27th	29·202	12th	·221	52·7	75·7	+0·5	46·8	+1·1	61·3	+0·8	28·9	81·6	1st	42·0	25th & 26th	39·6
	Indore	1,823	*28·242	+·018*	30·107*	28·314	23rd	28·120	12th	·194	57·2*	79·1	+0·6	48·0	?	63·6	?	31·1	83·7	31st	42·1	29th	41·6
	Neemuch	1,630	28·464	+·033?	30·131?	28·553	23rd	28·348	12th	·205	59·7	78·9	+1·0	49·3	+0·3	64·1	+0·7	29·6	84·8	2nd	41·5	25th & 26th	43·3
Gujarat	Surat	36	30·031	+·002	30·011	30·111	23rd	29·932	12th	·179	65·5	98·0	+1·3	57·8	+1·0	72·9	+1·2	30·2	93·7	31st	52·1	15th & 25th	41·6
	Ahmedabad	176	29·913	?	30·046	29·990	23rd	29·806	11th	·184	65·0	85·9	?	*59·4	?	*72·6	?	26·5	93·2	13th	56·2	16th	37·0
N.-W. P. (West)	Agra	555	29·541	+·002	30·100	29·630	20th	29·405	11th	·225	54·3	75·8	−0·2	48·3	+0·1	62·1	−0·1	27·5	80·6	2nd	41·9	21st	38·7
	Jhansi	858	29·243	+·016	30·107	29·326	20th	29·107	11th	·219	59·9	77·4	?	53·1	+2·5	65·3	?	24·3	83·0	2nd	48·9	30th	34·1

* Mean of 30 days.

I—*continued.*

in India, Burma, etc., in December 1895—continued.

Wind Direction. Number of winds from: Calm,	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 31st December 1895.	Normal rainfall for period, 1st October to 31st December.	Variation from normal of period, 1st October to 31st December.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	0·46	−0·40	...	...	...	...	VI.—Upper Sub-Himalayas.	
24	1	...	...	...	...	...	...	6	1·1	2·2	− 50	74	·269	0·7	0	0·64	− 0·64	0	0·31	− 0·31	0·06	1·59	− 1·53	0	Bareilly .	N.-W. Provinces (Sub-montane).
31	...	...	...	...	...	...	...	...	0·2	1·7	− 88	70	·237	2·3	0	1·10	− 1·10	0	0·62	− 0·62	0·31	1·98	− 1·67	0	Dehra Dun.	
24	3	...	...	...	...	...	...	4	2·0	1·3	+ 54	79	·251	1·2	0	0·91	− 0·91	0	0·33	− 0·33	0·33	0·92	− 0·59	0	Roorkee.	
18	...	...	...	...	...	4	8	1	1·4	1·6	− 13	70	·245	0·8	1	1·00	0	0·18	0·32	− 0·14	0·18	0·82	− 0·64	0·16	Meerut.	
6	...	...	1	1	...	...	20	3	2·6	2·7	− 4	57	·240	1·5	2	0·55	+ 1·45	0·30	0·30	0	0·34	0·45	− 0·11	0·20	Delhi . .	Punjab, Central.
26	2	...	1	1	...	...	1	...	1·2	1·5	− 20	74	·230	1·6	0	0·55	− 0·55	0·02	0·38	− 0·36	0·02	0·74	− 0·72	0·02	Lahore.	
26	1	...	...	...	...	1	1	2	1·1	?	?	77	·258	0·7	0	?	?	0	0·44	− 0·44	0·02	0·93	− 0·91	0	Umballa .	Punjab (Sub-montane).
17	...	2	...	...	...	7	1	2	1·0	?	?	87*	·306*	1·1*	0	?	?	0	?	?	0·02	?	?	0	Patiala .	
11	1	3	1	1	...	1	5	8	1·9	0·8	+138	68	·229	2·2	0	1·27	− 1·27	0·01	0·52	− 0·52	0·01	1·02	− 1·01	0·01	Ludhiana.	
30	...	...	1	...	...	...	...	...	0·6	1·1	− 45	72	·230	1·8	0	0·82	− 0·82	0·11	0·63	− 0·52	0·48	1·03	− 0·55	0·08	Sialkot .	Punjab (North).
16	2	2	...	...	1	...	5	5	2·7	1·1	+145	67	·174	2·6	0	1·27	− 1·27	0	0·76	− 0·76	0·09	1·66	− 1·57	0	Rawalpindi.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	0·17	−0·15	...	...	...	...	VII.—Indus Valley and North-West Rajputana.	
20	...	...	1	2	4	1	...	3	2·5	2·4	+ 5	71	·192	2·8	0	0·64	− 0·64	0	0·34	− 0·34	0·23	1·02	− 0·79	0	Peshawar .	Punjab, West.
														Not recorded.											Mardan.	
25	...	3	2	...	...	...	1	...	1·3	?	?	54	·169	2·3	0	0·20	− 0·20	0	0·16	− 0·16	0	0·56	− 0·56	0	Khushab.	
15	1	3	2	5	2	...	...	3	2·9	?	?	60	·212	2·1	0	0·40	− 0·40	0	0·20	− 0·20	0	0·33	− 0·33	0	Montgomery.	
26	...	1	1	...	...	...	2	1	0·6	0·8	− 25	76	·237	1·4	0	0·27	− 0·27	0	0·24	− 0·24	0·16	0·50	− 0·34	0	D. I. Khan.	
17	2	8	1	3	...	...	...	...	1·1	1·3	− 15	72	·271	1·7	0	0·18	− 0·18	0·04	0·20	− 0·16	0·04	0·30	− 0·26	0·04	Mooltan.	
15	2	...	2	2	2	1	3	4	3·6	2·2	+ 64	62	·210	3·5	0	0·73	− 0·73	0	0·35	− 0·35	0	0·50	− 0·50	0	Sirsa.	
20	3	2	2	1	...	...	...	3	2·2	1·6	+ 38	65	·276	2·5	0	0·09	− 0·09	0·03	0·10	− 0·07	0·05	0·26	− 0·21	0·03	Jacobabad .	Sind and Cutch.
7	9	2	...	1	1	...	1	10	8·6	6·5	+ 32	53	·275	1·4	0	0	0	0	0	0	0	0·06	− 0·06	0	Hyderabad.	
...	4	12	13	1	1	...	...	...	5·0	9·2	− 46	56	·332	1·7	1	0·10	+ 0·90	0·13	0·16	− 0·03	0·13	0·25	− 0·12	0·10	Kurrachee.	
5	2	2	2	6	7	2	3	2	6·7	5·1	+ 31	51	·298	0·1	0	?	?	0	0·08	− 0·08	0·14	0·45	− 0·31	0	Bhuj.	
6	5	2	2	2	2	4	1	7	3·4	2·4	+ 42	46	·202	2·3	0	?	?	0	0·16	− 0·16	0	0·34	− 0·34	0	Bickaneer .	Rajputana, West.
20	1	4	2	2	...	...	...	2	3·7	2·1	+ 76	62	·250	2·7	0	?	?	0	0·03	− 0·03	0·56	0·08	+ 0·48	0	Pachpadra.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	0·17	−0·07	...	...	...	...	VIII.—East Rajputana, Central India and Gujarat.	
12	1	...	1	1	1	2	9	4	2·6	3·4	− 24	63	·263	1·8	0	0·30	− 0·30	0·04	0·08	− 0·04	0·05	0·62	− 0·57	0·04	Jeypore .	Rajputana, (East.)
27	1	3	...	...	...	...	...	...	2·0	3·7	− 46	64	·247	1·7	1	0·60	+ 0·40	0·10	0·19	− 0·09	0·10	0·55	− 0·45	0·10	Sambhar.	
21	...	3	1	2	2	...	1	1	1·7	1·4	+ 22	75	·272	1·4	0	0·45	− 0·45	0	0·15	− 0·15	0·01	0·65	− 0·64	0	Ajmere.	
...	4	8	12	4	...	1	1	1	7·5*	8·1	− 7	36	·197	0·2	0	0·09	− 0·09	0	0·06	− 0·06	0·29	0·57	− 0·28	0	Deesa.	
4	2	10	14	1	...	...	...	...	4·6	4·8	− 4	53	·377	0·2	0	0	0	0	0·04	− 0·04	0·95	0·85	+ 0·10	0	Rajkot . .	Kathiawar.
2	12	15	1	1	...	...	...	..*	5·6	?	?	43	·305	0·5	0	?	?	0	?	?	2·83	?	?	0	Veraval.	
17	3	1	...	...	...	4	3	3	1·2	1·2	0	75	·311	1·0	1	0·64	+ 0·36	0·18	0·55	− 0·37	0·20	1·97	− 1·77	0·18	Nowgong .	Central India.
9	3	8	3	6	1	...	1	...	1·8	2·1	− 14	60	·291	1·5	0	0·55	− 0·55	0·08	0·21	− 0·13	1·60	2·11	− 0·51	0·07	Indore.	
...	5	16	9	1	...	...	...	...	4·2	8·1	− 48	51	·266	1·4	0	0·73	− 0·73	0·02	0·25	− 0·22	0·37	0·95	− 0·58	0·02	Neemuch.	
...	5	9	11	...	...	...	2	4	?	5·0	?	56	·358	0·7	0	0·18	− 0·18	0	0·02	− 0·02	1·42	1·72	− 0·30	0	Surat . .	Gujarat.
...	...	17	11	1	...	...	...	1	4·8	?	?	45	·278	0·5	0	?	?	0	?	?	2·91	?	?	0	Ahmedabad.	
10	...	...	...	2	...	9	...	10	2·5	2·6	− 4	64	·272	0·5	1	0·55	+ 0·45	0·16	0·19	− 0·03	0·16	0·71	− 0·55	0·16	Agra . .	N.-W. P., (West.)
18	...	1	...	...	1	6	3	2	1·6	2·3	− 30	56	·294	0·7	1	0·36	+ 0·64	0·49	0·13	+ 0·36	0·54	0·95	− 0·41	0·49	Jhansi.	

Table

Abstract of Observations taken at 8 A.M. at 208 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure 8 A.M. in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
IX.—Deccan		...	...	+·014	...	...	...	...	...	...	...	81·3	+0·8	53·1	−0·4	67·3	+0·2	28·4	...	...	...	...	39·9
Bombay, Deccan	Belgaum	2,524	27·484	0	29·987	27·576	20th	27·382	11th	·194	66·5	80·6	−0·6	57·6	−0·4	69·1	−0·5	23·0	83·7	21st	49·9	12th	33·8
	Sholapur	1,590	28·457	+·009	30·042	28·541	20th	28·338	11th	·203	67·3	84·1	−0·8	57·1	+0·2	70·6	−0·3	27·0	87·2	30th & 31st	47·6	11th	39·6
	Poona	1,840	28·203	?	30·058	28·279	20th	28·101	11th	·178	61·8	83·5	+0·1	52·7	−1·1	68·2	−0·5	30·8	87·0	31st	45·5	26th	41·5
	Bijapur	1,946	28·087	?	30·033	28·168	26th	27·977	12th	·191	65·0	80·8*	?	54·1	?	67·7*	?	26·7*	84·3	4th & 19th.	44·1	11th	40·2
Khandesh	Malegaon	1,430	28·628	+·005	30·071	28·699	20th	28·533	11th & 12th	·166	62·5	83·8	+0·6	50·9	+0·6	67·4	+0·6	32·9	87·4	1st & 21st	41·9	28th & 29th.	45·5
	Ahmednagar	2,152	27·900	?	30·064	27·976	20th	27·785	11th	·191	62·9	81·4	?	49·3	?	65·4	?	32·1	85·4	30th	39·4	10th	46·0
Berar	Akola	930	29·141	+·006	30·072	29·219	20th	29·016	11th	·203	59·6	84·0	+2·0	50·2	+0·3	67·2	+1·2	33·8	88·0	1st & 31st,	42·2	27th	45·8
	Amraoti	1,215	28·859	+·015	30·078	28·953	20th	28·727	11th	·226	64·2	82·9	+1·3	57·3	?	70·1	?	25·6	87·1	31st	52·4	15th	34·7
Central Provinces (West).	Khandwa	1,044	29·033	+·021	30·092	29·117	27th	28·918	12th	·199	57·9	83·9	+2·2	49·9	+1·0	66·9	+1·6	34·0	90·2	1st	42·1	26th	48·1
	Hoshangabad	1,000?	29·084?	+·054?	30·164?	29·159	20th	28·953	12th	·206	55·0	79·2	+0·4	51·3	+0·6	65·3	+0·5	27·9	85·3	2nd	42·8	25th	41·5
	Nagpur	1,025	29·053	+·013	30·085	29·139	20th	28·903	11th	·236	60·4	82·0	+1·7	52·7	−0·6	67·4	+0·6	29·3	85·2	3 days	47·2	26th	38·0
Central Provinces (Central).	Chanda	634	29·449	+·010	30·066	29·530	26th	29·287	11th	·243	58·3	82·5?	+0·9?	49·2?	−1·8?	65·9?	−0·5?	33·3?	87·0	31st	42·5	25th	44·5
	Seoni	2,033	28·032	+·018	30·105	28·111	20th	27·879?	11th	·232	56·8	77·2	0	?	?	?	?	?	80·2	4 days	?	?	?
	Jubbulpore	1,327	28·732	?	30·102	28·810	20th	28·588	12th	·222	51·9	78·5	+2·5	44·7	−0·4	61·7	+1·1	33·8	84·4	1st	38·4	25th	46·0
	Saugor	1,762	28·303	+·015	30·110	28·376	26th	28·168	11th	·208	57·0	77·4	+1·5	50·7?	−0·4?	64·1?	+0·6	26·7	83·8	2nd	45·1	25th	38·7
Central Provinces (East).	Raipur	970	29·115	+·016	30·088	29·211	20th	28·940	11th	·271	59·9	79·8	+1·5	52·9	−0·4	66·4	+0·5	26·9	84·3	6th	47·9	30th	36·4
	Sutna	1,040	29·041	+·003	30·113	29·113	26th	28·890	11th	·223	53·1	75·0	+0·3	46·5	+0·3	60·8	+0·3	28·5	82·5	1st & 2nd	41·2	14th	41·3
	Sambalpur	463	29·625	+·019	30·067	29·724	20th	29·455	11th	·269	60·7	79·7	+0·4	51·2	−2·6	65·5	−1·1	28·5	84·0	2nd	42·2	25th	41·8
Hyderabad (North).	Aurangabad	?	28·206	?	?	28·267	27th	28·123	11th	·144	67·9	84·1	?	52·2	?	68·1	?	31·9	87·2	30th	43·9	28th	43·3
	Indur	?			Not	record	ed.				64·6	81·5	?	51·8	?	66·7	?	29·7	84·9	31st	43·9	14th	41·0
	Bidar	?	27·866	?	?	27·970	20th	27·728	11th	·242	66·7	78·5	?	59·1	?	68·8	?	19·4	81·8	3rd	53·4	10th	28·4
Hyderabad (South).	Gulbarga	1,502	28·551	?	30·052	28·676	19th	28·399	11th	·277	65·1	83·0	?	56·2	?	69·6	?	26·8	86·8	4th	47·1	11th	39·7
	Raichur	1,378	28·654	?	30·016	28·752	20th	28·509	11th	·243	67·2	83·6	?	61·5	?	72·6	?	22·1	87·1	19th	53·2	11th	33·9
	Hyderabad (Division), Secunderabad	1,690	28·352	+·006	30·052	28·151	20th	28·181	11th	·270	62·2	81·1	−0·5	54·9	−1·7	68·0	−1·1	26·2	84·4	4th	47·3	10th	37·1
		1,787	28·253	?	30·055	28·352	20th	28·077	11th	·275	61·6	80·9	?	55·3	?	68·1	?	25·6	83·6	4 days	48·6	13th	35·0
	Khamamet	373	29·690	?	30·026	29·795	20th	29·504	11th	·291	64·6	84·0	?	57·4	?	70·7	?	26·6	87·0	17th	50·2	12th	36·8
X.—West Coast		...	...	−·006	...	...	...	...	...	...	...	87·0	+1·0	69·8	−0·4	78·5	+0·3	17·2	...	...	...	...	27·1
Konkan	Bombay	37	30·007	+·003	29·985	30·086	20th	29·920	4th	·166	73·1	85·2	+1·1	70·0	+0·5	77·6	+0·8	15·2	89·0	1st	66·0	15th	23·0
	Ratnagiri	110	29·906	+·009	29·956	29·990	26th	29·816	11th	·174	75·0	90·2	+0·9	67·3	+0·5	78·8	+0·7	22·9	94·9	30th	60·9	10th & 13th	34·0
	Mormugao	60	29·958	?	29·954	30·042	20th	29·872	12th	·170	72·1	86·5	?	69·8	?	78·2	?	16·7	90·0	30th	63·3	11th	26·7
	Goa	199	?29·796	?	?29·935	29·869	20th	29·722	4th 10th & 11th	·147	73·7	84·3	?	71·0	?	77·6	?	13·3	89·0	31st	65·0	12th & 13th,	24·0
	Karwar	44	29·968	+·001	29·945	30·043	26th	29·889		·159	69·3	88·2	+1·0	65·3	−1·1	76·8	−0·1	22·9	91·3	3 days	56·5	11th	34·8
Malabar	Cochin	11	29·952	−·023	29·890	30·041	20th	29·853	29th	·188	76·7	89·2	+1·3	72·9	+0·2	81·1	+0·8	16·3	92·8	2nd	68·3	14th	24·5
	Calicut	27	29·946	−·026	29·903	30·033	20th	29·853	11th	·180	75·8	88·1	+0·6	69·4	−1·0	78·8	−0·2	18·7	90·3	7th	61·5	12th	28·8
	Mangalore	23	29·943	0	29·916	30·042	20th	29·846	11th	·196	75·2	89·5	+1·0	69·3	−1·2	79·4	−0·1	20·2	93·3	21st	61·5	12th & 13th,	31·8
	Trivandrum	198	29·756	?	29·887	29·824	20th	29·654	29th	·170	75·6	82·2	?	73·3	?	77·8	?	8·9	84·0	4 days	68·0	14th	16·0
XI.—South India		...	...	−·010	...	...	...	...	...	...	...	82·5	+0·3	64·3	−1·0	73·4	−0·3	18·2	...	...	...	...	30·7
Madras (South)	Pamban	37	29·950	?	29·914	30·039	20th	29·855	29th	·184	77·3	81·1	?	74·7	?	77·9	?	6·4	83·3	3 days	70·2	12th	13·1
	Tinnevelly	168	29·830	?	29·930	29·926	20th	29·725	11th & 29th	·201	76·0	86·7	?	72·5	?	79·7	?	14·2	90·2	4 days	67·9	11th	22·3
	Madura	447	29·542	?	29·934	29·639	20th	29·441	11th	·198	75·1	86·3	+0·3	70·4	0	78·4	+0·2	15·9	89·4	6th & 17th	64·7	11th	24·7

* Mean of 5 days.

I—*continued.*

in India, Burma, etc., in December 1895—continued.

Wind Direction. Number of winds from: Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 31st December 1895.	Normal rainfall for period, 1st October to 31st December.	Variation from normal of period, 1st October to 31st December.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05	0·51	−0·46	...	...	...	...	**IX.—Deccan.**	
5	...	2	18	6	...	...	...	...	14·7	12·3	+ 20	55	·368	2·2	0	0·18	− 0·18	0	0·13	− 0·13	9·39	8·63	+ 0·76	0	Belgaum	Bombay, Deccan.
4	1	8	11	7	...	...	...	...	9·5	6·8	+ 40	48	·328	2·4	0	0·91	− 0·91	0	0·60	− 0·60	3·28	6·85	− 3·57	0	Sholapur,	
16	...	2	9	4	...	...	...	...	4·1	5·7	− 28	56	·318	1·9	0	0·82	− 0·82	0	0·26	− 0·26	6·20	6·37	− 0·17	0	Poona,	
...	...	5	14	9	...	...	2	1	3·6	?	?	76	·477	3·1	0	0·09	− 0·09	0·01	?	?	4·47	?	?	0·01	Bijapur,	
4	4	1	1	...	...	3	5	13	6·0	3·5	+ 71	59	·336	2·1	0	0·82	− 0·82	0	0·37	− 0·37	1·68	3·85	− 2·17	0	Malegaon	Khandesh.
19	2	2	2	2	1	...	1	2	4·4	?	?	54	·317	1·5	1	?	?	0·10	?	?	2·42	?	?	0·10	Ahmednagar,	
5	...	3	9	11	1	1	...	1	4·1	3·1	+ 32	50	·262	1·5	0	0·95	− 0·95	0	0·96	− 0·96	0·76	5·21	− 4·45	0	Akola	Berar.
...	7	11	12	...	1	...	...	...	5·4	3·1	+ 74	43	·264	1·8	0	1·09	− 1·09	0	0·73	− 0·73	0·18	4·23	− 4·05	0	Amraoti,	
15	1	5	5	3	1	1	...	...	3·5	2·4	+ 46	54	·264	1·3	0	0·64	− 0·64	0	0·56	− 0·56	0·60	2·60	− 2·00	0	Khandwa	Central Provinces (West).
7	...	8	16	...	...	...	...	...	3·1	2·4	+ 29	63	·286	1·5	1	1·00	0	0·25	0·63	− 0·38	0·41	3·06	− 2·65	0·25	Hoshangabad,	
31	...	...	...	...	...	...	...	...	2·6	2·8	− 7	61	·328	2·0	0	1·00	− 1·00	0	0·64	− 0·64	1·18	4·49	− 3·31	0	Nagpur,	
11	7	9	...	...	...	...	...	4	1·9	1·6	+ 19	69	·348	1·9	0	?	?	0	0·46	− 0·46	3·63	3·82	− 0·19	0	Chanda	Central Provinces (Central).
Not recorded.									?	2·5	?	71	·332	2·1	1	0·91	+ 0·09	0·12	0·67	− 0·55	0·36	3·63	− 3·27	0·12	Seoni	
...	2	10	11	...	4	1	1	2	1·5*	1·8	− 17	71	·282	0·9	0	0·91	− 0·91	0·06	0·38	− 0·32	0·16	2·95	− 2·79	0·06	Jubbulpore,	
27	...	...	2	1	1	...	...	...	1·6	2·5	− 36	62	·286	1·1	2	0·73	+ 1·27	0·39	0·76	− 0·37	0·55	2·66	− 2·11	0·26	Saugor,	
14	5	4	1	1	...	...	2	4	2·8	2·6	+ 8	52	·274	1·3	0	1·07	− 1·07	0	0·35	− 0·35	0·46	3·16	− 2·70	0	Raipur	Central Provinces (East).
6	13	...	1	2	...	...	1	8	3·4	3·6	− 6	68	·276	0·7	1	0·91	+ 0·09	0·22	0·42	− 0·20	0·83	3·09	− 2·26	0·22	Sutna,	
...	15	7	1	1	...	...	...	7	4·3	1·4	+207	65	·352	1·9	0	?	?	0	0·34	− 0·34	0·82	3·03	− 2·21	0	Sambalpur,	
2	...	17	11	1	...	...	...	...	3·1	?	?	41	·289	1·2	0	?	?	0	0·78	− 0·78	1·93	4·35	− 2·42	0	Aurangabad	Hyderabad (North).
10	4	1	7	5	3	1	...	...	4·4	?	?	70	·432	1·3	0	?	?	0	0·40	− 0·40	4·37	4·09	+ 0·28	0	Indur,	
...	2	11	12	5	1	...	...	...	7·0	?	?	62	·416	0·4	0	?	?	0	0·61	− 0·61	8·08	5·41	+ 2·67	0	Bidar,	
3	1	19	8	...	...	...	...	...	9·2	?	?	56	·357	2·5	0	?	?	0	0·40	−0·40	5·27	4·10	+ 1·17	0	Gulbarga	Hyderabad (South).
...	3	8	14	5	...	...	...	1	7·4	?	?	63	·431	2·7	0	?	?	0·03	?	?	8·46	?	?	0·03	Raichur,	
26	...	1	1	2	1	...	...	...	3·5	?	?	73	·423	2·3	0	?	?	0	0·27	− 0·27	2·68	5·11	− 2·43	0	Hyderabad (Division.)	
8	2	7	14	...	...	...	...	...	4·7	3·3	+ 42	64	·358	1·2	0	?	?	0	?	?	3·28	?	?	0	Secunderabad	
27	2	...	...	...	...	...	...	2	3·7	?	?	76	·473	1·1	0	?	?	0·03	?	?	7·00	?	?	0·03	Khamamet,	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·57	0·81	−0·17	...	...	...	...	**X.—West Coast.**	
...	...	12	16	3	...	...	...	...	9·5	10·0	− 5	71	·588	2·4	0	0·18	− 0·18	0	0·09	− 0·09	3·68	3·22	+ 0·46	0	Bombay	Konkan.
3	...	8	12	7	1	...	...	...	5·6	9·9	− 43	48	·423	3·3	0	0·27	− 0·27	0	0·08	− 0·08	6·15	4·86	+ 1·29	0	Ratnagiri,	
...	...	1	16	14	...	...	...	...	9·3	?	?	71	·564	0·7	0	?	?	0	?	?	5·58	?	?	0	Mormugao,	
...	...	8	22	1	...	...	...	...	5·2	?	?	63	·525	2·5	0	?	?	0	0·09	− 0·09	6·24	7·51	− 1·27	0	Goa,	
3	...	4	22	2	...	...	...	...	3·7	?	?	72	·511	1·5	0	0·18	− 0·18	0	0·09	− 0·09	6·92	10·40	− 3·48	0	Karwar,	
12	5	13	1	...	...	...	...	...	3·5	?	?	75	·705	3·2	2	3·36	− 1·36	1·20	1·81	− 0·61	23·74	22·59	+1·15	0·91	Cochin	Malabar.
1	...	16	13	1	...	...	...	...	10·7	?	?	71	·640	2·7	0	2·11	− 2·11	0·02	1·31	− 1·29	13·22	16·54	− 3·32	0·01	Calicut,	
1	...	2	21	7	...	...	...	...	3·1	3·5	−11	60	·531	3·2	0	1·10	− 1·10	0	0·48	− 0·48	7·53	11·39	− 3·86	0	Mangalore,	
15	2	4	5	3	...	1	...	1	2·3	?	?	79	·703	4·9	5	?	?	3·92	2·52	+ 1·40	17·33	19·52	− 2·19	1·50	Trivandrum,	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3·28	2·49	+0·68	...	...	...	...	**XI.—South India.**	
...	15	12	...	...	...	...	...	4	14·1	?	?	87	·814	3·9	10	7·00	+ 3·00	14·07	9·11	+ 4·96	45·63	25·52	+20·11	3·35	Pamban	Madras (South).
...	19	7	1	...	...	...	...	4	5·3	?	?	78	·707	5·9	6	6·50	−0·50	11·15	?	?	30·40	?	?	6·46	Tinnevelly,	
...	14	9	...	...	...	...	...	8	5·3	4·9	+8	74	·649	3·9	4	4·36	− 0·36	4·00	1·81	+ 2·19	15·79	14·68	+ 1·11	2·60	Madura,	

Table

Abstract of Observations taken at 8 A.M. at 208 Stations

Meteorological Province or District.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Madras, South Central.	Salem	940	29·087	−·012	29·987	29·178	20th	28·942	11th	·236	72·8	86·1	+0·1	65·2	+0·2	75·7	+0·2	20·9	90·4	3rd & 17th.	55·5	12th	34·9
	Coimbatore	1,348	28·647	−·012	29·963	28·742	29th	28·535	11th	·207	72·0	85·3	+0·6	64·8	−1·6	75·1	−0·5	20·5	89·4	17th	57·0	12th	32·4
Coorg	Mercara	3,781	26·272	−·012	?	26·368	20th	26·177	11th	·191	60·7	74·1	−0·4	57·4	−0·2	65·8	−0·3	16·7	78·5	17th	50·3	11th	28·2
Mysore	Chitaldroog	2,405	27·615	?	29·988	27·702	20th	27·496	11th	·206	67·0	78·7	?	59·3	?	69·1	?	19·4	83·1	18th & 19th.	51·4	11th	31·7
	Bangalore Fort.	3,021	27·005	?	29·981	27·088	20th	26·896	11th	·192	64·1	78·2	+0·7	57·7	−0·9	67·9	−0·1	20·5	81·7	17th	48·9	11th	32·8
	Hassan	3,091	26·942	?	29·992	27·037	20th	26·822	11th	·205	65·4	77·7	?	54·6	?	66·2	?	23·1	81·1	19th	42·7	12th	38·4
	Mysore	2,518	27·499	?	29·978	27·583	20th	27·395	11th	·188	67·3	81·1	?	59·4	?	70·3	?	21·7	85·9	4th	49·9	12th	36·0
Madras, East-Coast, South.	Negapatam	31	29·959	−·018	29·919	30·047	20th	29·849	11th	·198	75·3	81·3	+0·3	71·2	−0·6	76·3	−0·2	10·1	84·1	21st	64·7	10th & 11th	19·4
	Cuddalore	12	30·004	?	29·945	30·098	20th	29·885	11th	·213	73·9	82·9	?	69·2	?	76·1	?	13·7	95·3	3rd	58·3	11th	37·0
	Trichinopoly	255	29·744	−·021	29·937	29·844	20th	29·616	11th	·228	74·8	86·4	+2·0	69·4	+0·3	77·9	+1·2	17·0	90·0	16th	60·4	11th	29·6
	Madras	22	30·009	−·013	29·962	30·107	20th	29·859	11th	·248	74·0	82·6	−1·0	69·2	−0·6	75·9	−0·8	13·4	86·0	2nd	57·5	11th	28·5
Madras, East-Coast, Central.	Nellore	71	29·968	?	29·974	30·066	20th	29·799	11th	·267	72·0	83·2	?	67·7	?	75·5	?	15·5	87·2	13th	57·6	10th	29·6
	Masulipatam	15	30·048	+·007	29·998	30·157	20th	29·840	11th	·317	70·8	82·6	+0·1	66·0	−0·6	74·3	−0·3	16·6	85·5	12th	59·2	27th	26·3
Madras, Central	Cuddapah	433	29·611	?	29·997	29·699	20th	29·477	11th	·222	70·8	85·5	+0·7	63·6	−2·4	74·6	−0·9	21·9	89·0	17th & 19th	53·3	11th	35·7
	Kurnool	923	29·119	?	30·020	29·209	20th	28·972	11th	·237	67·3	84·7	−0·7	57·0	−2·4	70·9	−1·6	27·7	87·7	20th & 21st	45·6	10th	42·1
	Bellary	1,475	28·559	+·003	30·021	28·651	20th	28·421	11th	·230	67·8	83·4	−1·9	59·6	−1·1	71·6	−1·5	23·8	87·2	17th & 18th.	50·9	10th	36·3
Madras, East-Coast, North	Rajahmundry	112	29·942	−·014	29·997	30·050	20th	29·720	11th	·330	68·6	86·1	+0·6	63·2	−1·8	74·7	−0·6	22·9	90·0	12th	56·9	3 days	33·1
	Cocanada	26	30·022	−·010	29·983	30·132	20th	29·794	11th	·338	70·2	80·4	+1·3	65·0	−1·0	72·7	+0·2	15·4	86·6	12th	59·0	5 days	27·6
	Vizagapatam	31	30·030	−·007	30·000	30·138	20th	29·811	11th	·327	71·8	83·1	+1·5	64·0	−1·5	73·6	0	19·1	86·8	12th	54·4	21st	32·4
	Gopalpur	21	30·052	?	30·014	30·129	1st	29·802	11th	·327	63·5	79·5	?	58·4	?	68·9	?	21·1	83·2	4th & 7th	52·1	3 days	31·1
XII.—Hill Stations.																							
Baluchistan	Kachh Fort	?	*23·979	?	?	24·090	3rd.	23·860	8th	·230	39·3*	50·9*	?	28·1*	?	39·5	?	22·8	59·0	2nd & 27th	20·0	11th	39·0
	Pishin				Not recorded.						?	59·7†	?	29·1	?	44·7†	?	30·6	68·1	1st & 8th	23·9	3 days	44·2
	Quetta	5,502	24·756	+·015	?	24·855	31st	24·647	12th	·208	38·4	57·0	−0·1	32·4	+3·6	44·7	+1·8	24·6	64·2	8th	26·3	17th & 18th.	37·9
	Kalat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chaman	4,311	25·815	?	?	25·907	31st	25·642	8th	·265	46·5	61·5	?	40·9	?	51·2	?	20·6	70·1	8th	33·1	17th	37·0
Northern India.	Leh	11,503	19·757	?	?	19·926	27th	19·541	10th	·385	11·2	28·8	?	8·7	?	18·7	?	20·1	38·1	1st & 3rd	3·0	14th	35·1
	Srinagar	5,204	25·100	?	?	25·245	31st	24·892	5th	·353	32·6	41·5	?	29·3	?	35·4	?	12·2	56·9	3rd	24·1	26th	32·8
	Astor (Kashmir), Minimarg	?	22·369	?	?	22·643	1st	22·153	5th	·490	23·8	39·3	?	20·1	?	29·7	?	19·2	46·4	11th & 16th, 29th	13·0	7th	33·4
		?	21·418	?	?	21·563	31st	21·245	10th	·318	14·8	27·7	?	9·7	?	18·7	?	18·0	41·3		3·0	7th	38·3
	Gilghit	?	24·878	?	?	25·090	31st	24·650	5th	·440	35·5	49·0	?	33·1	?	41·0	?	15·9	57·8	2nd	28·3	13th	29·5
	Cherat	?	25·836	?	?	25·943	1st	25·710	12th	·233	48·0	56·7	?	?	?	?	?	?	62·3	4th	?	?	?
	Samana	?	23·903	?	?	24·003	27th & 31st.	23·753	5th	·250	?	54·5	?	31·6	?	43·0	?	22·9	58·0	4th & 5th	28·0	8 days	30·0
	Murree	6,344	23·915	+·007	?	24·009	1st	23·800	12th	·209	43·1	52·7	−1·0	40·0	0	46·4	−0·5	12·7	62·6	30th	33·0	22nd	29·6
	Poo	?			Not recorded.						?	46·6	?	27·3	?	36·9	?	19·3	53·6	30th	23·0	8th	30·6
	Simla	7,224	23·164	−·004	?	23·273	1st	23·043	12th	·230	42·7	50·3	−0·9	39·8	−0·4	45·1	−0·7	10·5	58·3	15th	34·2	5th	24·1
	Chakrata	6,977	23·379	+·012	?	23·482	1st	23·262	12th	·220	43·2	55·3	+0·3	39·1‡	−0·6	47·1‡	−0·2	16·2	63·2	30th	32·1	5th	31·1
	Mussooree	6,705	23·620	?	?	23·738	1st	23·499	12th	·239	43·9	51·0	−1·6	42·3	+1·6	46·7	0	8·7	58·2	15th & 25th.	33·0	7th	25·2
	Ranikhet	6,069	24·181	+·015	?	24·308	1st	24·057	12th	·251	46·0	56·3	−1·9	42·6	0	49·5	−1·0	13·7	64·1	30th & 31st.	36·6	5th	28·1
	Yatung	10,480?			Not recorded.						?	47·6	?	23·9	?	35·8	?	23·7	52·9	23rd	18·9	5th & 6th	34·0
	Gnatong§	?	19·201	?	?	19·332	1st	19·106	8th	·226	30·1	37·2§	?	19·2§	?	28·2§	?	18·0	43·4	30th	9·7	8th	33·7
	Darjeeling	7,421	23·029	−·010	?	23·154	1st	22·896	12th	·258	41·2	49·7	+0·8	37·0	+0·2	43·4	+0·5	12·7	56·1	11th	33·9	6th	22·2
	Gantak	?	24·582	?	?	24·786	1st	24·414	12th	·372	48·5	59·7	?	35·6	?	47·7	?	24·1	66·3	11th	31·0	27th	35·3

* Uncorrected. † Mean of 26 days. ‡ Mean of 29 days. § Mean of 20 days.

I—*continued.*

in India, Burma, etc., in December 1895—continued.

Wind Direction, Number of winds from Calm	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Wind Velocity. Mean velocity in miles per hour.	Normal.	Percentage variation.	Hygrometry, 8 A.M. Mean Humidity.	Mean vapour tension.	Mean cloud amount.	Rainfall. Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st October to 31st December 1895.	Normal rainfall for period, 1st October to 31st December.	Variation from normal of period, 1st October to 31st December.	Heaviest rainfall during month.	Station.	Meteorological Province or District.
30	...	1	...	...	...	...	...	...	0	4·0	−100	74	·605	3·6	3	3·18	−0·18	1·38	1·39	−0·01	15·61	12·24	+3·37	0·69	Salem .	Madras, South Central.
...	...	1	30	...	...	...	...	...	1·9	3·0	− 37	84	·668	4·5	3	3·45	−0·45	1·13	1·21	−0·08	8·51	10·87	−2·36	0·52	Coimbatore.	
1	...	18	12	...	...	...	...	...	9·5	4·7	+102	82	·440	5·2	0	1·50	−1·50	0·06	0·70	−0·64	7·27	13·64	−6·37	0·05	Mercara .	Coorg.
...	...	5	17	8	...	...	...	1	9·0	?	?	65	·440	3·9	0	?	?	0·11	?	?	8·04	?	?	0·06	Chitaldroog .	Mysore.
1	...	17	11	1	...	...	...	1	8·2	3·9	+110	74	·453	4·1	2	1·36	+0·64	0·65	0·55	+0·10	8·59	11·29	−2·70	0·34	Bangalore Fort.	
1	...	12	15	3	...	...	...	...	3·8	?	?	72	·455	4·8	0	?	?	0·09	?	?	10·86	?	?	0·06	Hassan.	
3	1	18	8	1	...	...	...	...	9·6	?	?	70	·473	4·3	0	?	?	0·11	?	?	11·54	?	?	0·07	Mysore.	
2	2	8	1	...	...	...	...	18	12·9	6·8	+ 90	86	·757	6·3	10	11·00	−1·00	19·98	12·41	+7·57	55·20	38·95	+16·25	4·96	Negapatam .	Madras, East-Coast, South.
...	10	4	1	...	...	...	3	13	2·6	?	?	88	·742	4·5	3	6·9	−3·9	7·39	?	?	48·94	?	?	4·07	Cuddalore.	
11	14	4	...	...	...	...	...	2	3·8	5·0	− 24	75	·649	5·7	3	5·64	−2·64	4·96	2·55	+2·41	18·50	15·41	+3·09	2·36	Trichinopoly.	
2	18	4	1	...	...	...	...	6	7·8	7·6	+ 3	82	·707	6·5	6	5·73	+0·27	5·05	5·28	−0·23	31·33	29·49	+1·84	1·45	Madras.	
...	3	1	1	1	...	...	...	25	4·9	?	?	83	·664	7·4	3	3·80	−0·80	2·66	?	?	15·82	?	?	1·14	Nellore .	Madras, East-Coast, Central.
...	23	6	...	...	...	...	...	2	5·7	5·7	0	74	·560	3·4	0	1·45	−1·45	0·07	1·06	−0·99	13·02	17·46	−4·44	0·06	Masulipatam.	
2	...	11	3	6	2	4	...	3	?	?	?	75	·574	4·1	4	1·50	+2·50	2·25	1·19	+1·06	8·68	12·19	−3·51	0·87	Cuddapah .	Madras, Central.
27	...	...	4	...	...	...	...	...	?	?	?	64	·443	3·3	0	1·00	−1·00	0·05	0·20	−0·15	6·02	6·38	−0·36	0·05	Kurnool.	
20	...	2	4	2	...	...	...	3	2·5	3·1	− 19	57	·395	4·7	1	0·45	+0·55	0·13	0·14	−0·01	10·01	6·56	+3·45	0·13	Bellary.	
...	28	3	...	...	...	...	...	...	?	?	?	64	·454	4·2	0	0·03	−0·03	0·01	0·38	−0·37	11·17	9·69	+1·48	0·01	Rajahmundry	Madras, East-Coast, North.
...	20	8	...	...	...	...	...	3	9·8	?	?	66	·488	3·5	0	1·00	−1·00	0·06	0·76	−0·70	9·82	18·53	−8·71	0·06	Cocanada.	
...	8	3	...	...	...	...	9	11	2·4	2·1	+ 14	60	·473	3·8	0	1·82	−1·82	0	2·49	−2·49	10·03	19·93	−9·90	0	Vizagapatam.	
...	15	1	...	...	...	...	...	15	10·3	6·9	+ 49	71	·418	2·2	0	1·18	−1·18	0	1·04	−1·04	10·19	16·25	−6·06	0	Gopalpur.	
																									XII.—Hill Stations.	
11	2	2	4	1	1	2	6	2	3·4	?	?	71	·172	1·2	4	?	?	1·7 9	?	?	3·62	?	?	0·87	Kachh Fort.	Baluchistan.
Not recorded.									?	?	?	?	?	?	2	?	?	1·28	?	?	2·37	?	?	0·80	Pishin.	
17	1	...	...	2	4	2	2	3	2·4	2·7	− 11	80	·185	1·5	4	0·91	+3·09	1·86	0·73	+1·13	3·09	1·07	+2·02	0·78	Quetta.	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Kalat.	
...	...	...	14	14	2	1	...	...	9·3	?	?	60	·196	2·5	1	?	?	0·25	?	?	0·76	?	?	0·18	Chaman.	
...	...	...	1	...	2	25	3	...	1·1	1·3	— 15	53	·039	5·3	0	?	?	0·14	?	?	0·22	?	?	0·07	Leh . .	Northern India.
5	1	2	3	6	7	1	4	2	5·5	?	?	89	·166	8·4	2	?	?	0·62	?	?	3·27	?	?	0·27	Srinagar.	
1	...	...	...	...	14	13	2	1	2·7	?	?	60	·076	4·5	0	?	?	0·11	?	?	?	?	?	0·08	Astor (Kashmir).	
...	2	8	15	4	1	1	...	...	8·8	?	?	84	·073	1·0	0	?	?	0	?	?	?	?	?	0	Minimarg.	
Not recorded.									?	?	?	72	·145	4·4	0	?	?	0	?	?	1·26	?	?	0	Gilghit.	
4	19	...	...	...	1	...	...	7	16·5	?	?	40	·135	3·4	0	?	?	0	?	?	0·25	?	?	0	Cherat.	
...	2	...	4	3	7	...	...	...	?	?	?	?	?	1·3	0	?	?	0	?	?	0·27	?	?	0	Samana. (a)	
6	3	4	1	14	...	...	...	3	7·3	6·1	+ 20	38	·099	2·0	0	1·55	−1·55	0·04	1·20	−1·16	1·76	3·93	− 2·17	0·04	Murree.	
15	7	1	1	1	...	1	2	3	?	?	?	?	?	3·0	0	?	?	0·08	?	?	1·50	?	?	0·06	Poo.	
4	7	8	3	4	4	...	...	1	4·4	1·8	+144	39	·104	2·9	1	1·45	−0·45	0·42	0·74	−0·32	0·65	2·50	− 1·85	0·39	Simla.	
16	14	1	...	...	...	...	...	...	7·2	4·2	+ 71	40	·108	1·3	0	?	?	0	0·66	−0·66	0·26	2·09	− 1·83	0	Chakrata.†	
1	1	2	7	1	1	1	7	10	?	?	?	50	·139	1·4	1	1·50	−0·50	1·17	?	?	1·64	?	?	1·16	Mussooree.	
24	...	1	1	...	3	2	...	...	1·5	1·3	+ 15	50	·163	1·4	0	1·00	−1·00	0	0·53	−0·53	0·42	2·34	− 1·92	0	Ranikhet.	
Not recorded									?	?	?	?	?	?	0	?	?	0	?	?	2·24	?	?	0	Yatung.	
4	...	...	2	9	1	1	2	1	6·8	?	?	71	·115	2·5	2	?	?	0·62	?	?	6·72	?	?	0·25	Gnatong.	
5	...	6	15	2	...	2	...	1	2·6	1.9	+ 37	72	183	2·2	0	0·75	−0·75	0·02	0·23	−0·21	1·42	5·17	− 3·75	0·02	Darjeeling.	
...	2	2	12	5	...	4	3	2	1·4	?	?	63	15	2·3	0	?	?	0·02	?	?	5·51	?	?	0·02	Gantak.	

(a) Wind observations of 16 days.

Table

Abstract of Observations taken at 8 A.M. at 208 Stations

Meteorological Province or District.	Stations.	Elevation of bar-cistern above sea-level in feet.	Pressure, 8 A.M., in inches.								Temperature of air.											
			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 month.	Date.	Lowest pressure recorded during month.	Date.	Total range of pressure during month.	Mean of 8 A.M.	Mean maximum.	Variation from normal.	Mean minimum.	Variation from normal.	Mean daily temperature.	Variation from normal.	Mean daily range of temperature.	Highest temperature observed during month.	Date.	Lowest temperature observed during month.	Date.	Absolute range during month.
Central India.	Mount Abu.	3,945	26·170	+·003	P	26·233	27th	26·045	12th	·188	59·7	67·8	−1·1	52·4	−0·1	60·1	−0·6	15·4	72·6	31st	49·0	15th	23·6
	Pachmarhi .	3,528	26·583	+·005	P	26·652	20th	26·457	11th	·195	57·5	70·1	+0·9	45·0	0	57·6	+0·5	25·1	73·8	5 days	37·3	26th	36·5
South India .	Wellington .	6,200	24·278	−·023	P	24·365	20th	24·153	11th	·212	55·9	66·3	+0·7	45·0	−4·1	55·7	−1·7	21·3	71·7	12th	35·2	12th	36·5
XIII.—Extra India.																							
Ceylon . .	Trincomalee	75	29·894 *	?	29·898 *	29·988	16th	29·795	10th	·193	79·8	82·9	?	74·1	?	78·5	?	8·8	85·0	3rd & 21st.	70·0	3 days	15·0
	Colombo .	40	29·905	−·028	29·871	29·995	18th	29·809	28th	·186	80·7	86·0	?	73·2	?	79·6	?	12·8	93·5	6th	69·0	12th	24·5
	Galle . .	48	29·891	?	29·865	29·975	18th	29·798	5th & 28th.	·177	79·0	82·6	?	74·0	?	78·8	?	7·7	85·0	18th	72·0	12th	13·0
Persia . .	Meshed .	3,104	...			Not recorded.					37·5	P	?	34·5	P	P	P	P	P	?	26·5	21st	P
	Teheran .	?	26·908	P	P	26·285	27th	25·810	12th	·475	43·1	57·0	?	37·6	?	47·3	P	19·4	67·0	5th	30·3	15th	36·7
	Ispahan .	?	24·787	P	P	24·950	27th	24·540	12th	·410	38·2	58·0	P	31·5	?	44·9	?	26·5	67·7	3rd	25·5	13th	42·2
	Bushire .	14	24·523 30·133	+·007	30·105	24·690 30·256	27th	24·270 29·973	6th	·420 ·283	61·1	71·2	+1·5	57·5	+2·0	64·4	+1·8	13·7	80·6	31st	49·3	17th, 21st & 22nd.	31·3
	Jask . .	?	30·098	?	?	30·182	2nd	29·987	12th	·195	70·0	79·2	?	65·2	?	72·2	?	14·0	82·7	7th	60·2	18th	22·5
Arabia . .	Muscat .	?	30·118	?	?	30·199	2nd	29·976	8th	·223	73·3	76·1	?	71·3	?	73·7	?	4·8	78·4	5th & 9th.	68·1	31st	10·3
	Baghdad .	?	29·709	−·022	P	29·932	27th	29·434	11th	·498	51·3	64·3	0	47·9	+4·7	56·1	+2·4	16·4	73·8	4th	40·5	15th	33·3
	Aden . .	94	29·989	−·012	30·016	30·051	17th	29·907	11th	·144	75·0	81·5	−1·2	72·6	0	77·1	−0·6	8·9	85·3	4th	69·9	18th & 22nd.	15·4
	Perim . .	?	29·796	?	?	29·877	20th	29·724	11th	·153	78·2	84·7	P	75·1	?	79·9	?	9·6	86·1	2nd & 5th	72·8	23rd	13·3
Afghanistan .	Kabul . .	?				Not recorded.					31·0	*54·8	?	25·5	?	40·2*	?	29·3	62·2	3rd, 8th & 30th	20·6	18th	41·6
Central Asia .	Kashgar .	?	25·833 ††	?	?	26·050	12th	25·390	4th	·660	15·5	33·7	?	13·3	?	23·5	?	20·4	50·5	4th	0·3	13th	50·2
Arabian Sea Islands.	Amini Devi.	15	29·967	P	29·910	30·036	20th	29·878	11th	·158	82·2	†82·2	P	74·5	P	78·4	P	7·7	85·3	30th	68·9	27th	16·4
	Minicoy .	10	29·960	P	29·895	30·036	20th	29·864	30th	·172	80·2	87·4	P	78·2**	P	82·8**	P	9·2	90·3	10th	72·8	13th	17·5
Africa . .	Zanzibar .	73	29·906	?	29·905	29·983	21st	29·829	30th	·154	81·9	86·0	?	79·7	?	82·9	?	6·3	88·0	29th	76·7	1st	11·3

* Mean of 30 days. † Uncorrected. ‡ Mean of 29 days. ** Mean of 26 days. †† Mean of 27 days.

I—*concluded.*

in India, Burma, etc., in December 1895—concluded.

Wind Direction. Number of winds from									Wind velocity.			Hygrometry, 8 A.M.		Mean cloud amount.	Rainfall.								Station.	Meteorological Province or District.
Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean velocity in miles per hour.	Normal.	Percentage variation.	Mean humidity.	Mean vapour tension.		Number of rainy days.	Normal number of rainy days.	Variation.	Rainfall of month.	Normal rainfall of month.	Variation from normal.	Total rainfall from 1st Oct. to 31st December 1895.	Normal rainfall for period, 1st Oct. to 31st December.	Variation from normal of period, 1st Oct. to 31st December.	Heaviest rainfall during month.		
11	3	9	...	3	2	2	...	1	5·0	3·6	+39	40	·206	0·6	0	0·18	−0·18	0	0·10	−0·10	0·10	1·08	−0·98	0	Mount Abu.	Central India.
25	...	2	2	1	1	...	...	...	3·6	2·6	+27	70	·330	2·1	1	0·91	+0·09	0·17	0·52	−0·35	0·26	3·86	−3·60	0·17	Pachmarhi.	
26	...	3	1	1	...	...	...	...	2·0	2·5	−20	75	·343	3·4	4	6·78	−2·78	5·77	4·16	+1·61	23·75	24·71	−0·96	2·96	Wellington .	South India.
XIII.—Extra India.																										
9	2	11	...	2	...	...	...	7	1·3	?	?	81	·826	4·8	18	?	?	25·77	13·48	+12·29	45·94	34·57	+11·37	5·58	Trincomalee	Ceylon.
...	12	16	1	1	1	...	...	...	10·5	7·9	+33	73	·766	5·1	9	?	?	9·46	6·70	+2·76	43·88	33·46	+10·42	3·02	Colombo .	
23	3	3	2	...	...	...	...	...	3·5	?	?	87	·860	4·9	10	?	?	6·63	6·43	+0·20	27·29	31·50	−4·21	3·14	Galle . .	
			Not	recorded.					?	?	?	?	?	5·3	2	?	?	0·72	?	?	1·73	?	?	0·50	Meshed .	Persia.
27	...	...	...	...	...	...	...	...	3·3	?	?	54	·153	3·2	1	?	?	0·70	?	?	1·66	?	?	0·70	Teheran, (b)	
8	1	3	1	3	...	4	...	11	2·5	?	?	84	·199	2·2	0	?	?	0	?	?	1·70	?	?	0	Ispahan.	
...	5	10	9	6	1	...	...	...	8·7	6·6	+32	74	·402	3·0	0	?	?	0·12	3·60	−3·48	0·86	5·13	−4·27	0·08	Bushire.	
2	10	11	5	1	...	...	...	2	9·8	?	?	70	·515	1·8	0	?	?	0	?	?	0·29	?	?	0	Jask.	
...	1	1	2	7	4	5	6	5	2·8	?	?	71	·584	1·3	0	?	?	0	?	?	0·70	?	?	0	Muscat.	Arabia.
9	10	2	2	2	3	...	2	1	3·1	?	?	89	·344	0·1	5	?	?	1·47	?	?	2·93	?	?	0·53	Baghdad.	
1	...	11	14	3	1	...	...	1	12·3*	12·4	−1	73	·626	7·1	0	?	?	0	0·49	−0·49	0	0·72	−0·72	0	Aden.	
...	...	..	26	4	1	...	...	...	19·7	?	?	75	·727	2·9	0	?	?	0	?	?	0	?	?	0	Perim.	
...	8	2	15	...	1	1	4	...	?	?	?	?	?	1·9	0	?	?	0	?	?	1·50	?	?	0	Kabul .	Afghanistan.
30	...	...	...	...	...	...	...	1	1·3	?	?	?	?	5·6	0	?	?	0·08	?	?	0·22	?	?	0·08	Kashgar .	Central Asia.
...	18	13	...	...	...	...	...	...	8·0	?	?	74	·814	3·3	0	?	?	0	?	?	10·17	?	?	0	Amini Devi .	Arabian Sea Islands.
4	8	11	3	...	1	...	1	3	8·0	?	?	76	·778	4·5	2	?	?	2·49	?	?	19·59	?	?	2·20	Minicoy.	
...	14	14	1	1	1	...	...	...	6·3	?	?	84	·918	4·3	7	?	?	4·00	?	?	13·33	?	?	1·28	Zanzibar .	Africa.

* Mean of 30 days.

b Wind observations of 27 days.

Table

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

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S. L., and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
								29+														
Burma Coast and Bay Islands.	Port Blair	...	29·900	29·803	·097	29·848	−·024	·839	86·0	78·1	7·9	90·5	73·0	17·5	84·0	83·0	80·9	+1·2	74·9	79·1	78·0	77·3
	Rangoon	...	·978	·854	·124	·914	−·024	·892	88·7	69·5	19·2	91·2	66·0	25·2	79·5	85·5	77·3	+1·8	66·7	72·2	74·1	71·0
	Diamond Island	...	·967	·862	·105	·910	−·031	·886	84·1	74·6	9·5	87·5	71·4	16·1	79·3	82·0	78·4	+1·4	70·6	72·2	74·8	72·5
	Cocos Island	111	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Akyab	...	30·022	·908	·114	·963	−·027	·926	81·3	65·0	16·3	85·0	58·7	26·3	73·8	78·9	72·9	+0·5	62·8	69·0	72·0	67·9
Assam.	Silchar	...	29·988	·852	·136	·916	−·008	·974	79·1	54·5	24·6	86·5	48·7	37·8	67·6	76·5	65·5	−0·2	53·5	62·7	65·4	60·5
	Sibsagar	...	·788	·629	·159	·707	−·023	1·009	72·6	48·8	23·8	75·9	41·9	34·0	61·7	71·2	59·6	+0·9	49·0	59·4	63·3	57·2
	Dhubri	...	·992	·851	·141	·915	−·014	·989	75·0	54·4	20·6	77·7	50·4	27·3	66·4	73·9	64·0	−0·5	53·5	61·3	64·6	40·2
Bengal and Orissa.	Chittagong	...	·969	·855	·114	·908	−·027	·946	77·7	57·0	20·7	85·2	49·9	35·3	69·3	74·0	66·8	−0·6	56·7	64·6	66·2	62·5
	Narayanganj	...	30·051	·932	·119	·987	−·015	·962	77·2	56·5	20·7	83·1	52·2	30·9	69·1	75·4	67·1	−0·4	54·4	63·4	64·6	60·8
	Calcutta (Alipore)	...	·081	·954	·127	30·008	−·013	·974	76·7	54·7	22·0	80·6	47·4	33·2	68·4	75·8	65·1	−0·1	52·7	59·1	61·5	57·8
	Saugor Island	...	·068	·944	·125	29·998	−·018	·968	76·6	58·1	18·4	80·9	51·8	29·1	69·8	74·5	66·5	0	55·6	62·2	62·8	60·2
	Burdwan	...	·009	·881	·128	·935	−·007	·985	77·7	54·6	23·1	82·3	48·1	34·2	69·8	76·2	65·8	−1·0	52·0	58·3	61·0	57·1
	Berhampore	...	·032	·917	·115	·965	−·005	·981	76·8	53·1	23·7	82·2	47·1	35·1	68·6	76·0	64·7	−1·2	50·7	60·4	63·0	58·0
	False Point	..	·073	·961	·112	30·015	−·018	·968	77·0	55·5	21·5	82·4	47·2	35·2	72·5	74·5	65·2	−1·4	54·4	63·7	63·8	60·6
	Cuttack	...	·016	·886	·130	29·948	−·018	·972	80·7	57·2	23·5	84·5	50·5	34·0	70·1	78·6	68·1	−1·3	54·2	59·9	62·6	58·9
Gangetic Plain and Chota Nagpur.	Hazaribagh	...	28·055	27·950	·105	27·992	−·004	1·002	71·8	49·6	22·2	74·9	46·0	28·9	64·6	69·4	59·8	−0·6	43·6	53·2	54·3	50·4
	Patna	...	29·940	29·821	·119	29·874	−·009	1·017	74·2	50·5	23·7	80·7	44·1	36·6	65·2	72·5	61·8	−0·6	48·3	57·4	60·4	55·4
	Darbhanga	...	·954	·826	·128	·884	0	1·011	74·7	51·3	23·4	80·4	46·3	34·1	65·6	72·8	62·4	−1·4	50·1	58·6	60·7	56·5
	Allahabad	...	·824	·705	·119	·753	+·005	1·027	76·0	47·4	28·6	81·9	42·0	39·9	66·1	74·4	60·2	+0·4	45·6	56·3	58·3	53·4
	Lucknow	...	·747	·636	·111	·681	−·007	1·021	76·1	46·4	29·7	80·7	40·9	39·8	65·9	73·6	60·2	+0·5	40·9	56·3	58·3	51·8
Upper Sub-Himalayas.	Dehra Dun	...	27·832	27·741	·091	27·776	+·005	1·041	70·1	44·6	25·5	75·1	40·6	34·5	60·3	65·3	55·3	−1·1	41·1	50·3	52·5	48·0
	Roorkee	...	25·197	29·093	·104	29·132	0	1·024	73·3	41·4	31·9	76·8	37·1	39·7	60·3	70·7	55·8	−0·8	40·2	51·8	55·2	49·1
	Meerut	...	·359	·261	·098	·301	+·003	1·039	73·6	45·3	28·3	77·1	41·1	36·0	60·4	70·1	58·0	+0·8	43·1	51·3	55·2	49·9
	Lahore	...	·414	·324	·090	·357	+·006	1·063	71·9	42·4	29·5	75·3	37·6	37·7	58·1	70·4	55·5	+1·6	39·5	50·5	56·4	48·8
	Ludhiana	...	·290	·197	·093	·232	+·012	1·049	71·9	44·5	27·4	76·1	37·4	38·7	61·2	69·6	56·5	+1·5	41·5	50·8	54·2	48·8
Indus Valley and N.-W. Rajputana.	Peshawar	...	·026	28·929	·097	28·966	+·003	1·116	68·7	38·7	30·0	75·1	33·9	41·2	55·7	65·4	51·6	+1·0	35·7	47·6	51·8	45·0
	Mooltan	...	·718	29·620	·098	29·657	+·010	1·066	75·4	46·8	28·6	81·3	43·7	37·6	61·8	72·4	59·0	+2·9	43·4	51·7	58·5	51·2
	Jacobabad	...	·982	·857	·125	·908	+·020	1·060	77·6	46·5	31·1	82·5	42·9	39·6	68·3	74·9	60·1	+2·3	43·4	57·2	59·9	53·5
	Kurrachee	...	30·131	30·019	·112	30·070	+·003	1·032	82·0	57·1	24·9	87·4	51·9	35·5	74·8	78·4	68·2	+1·2	51·5	60·9	64·4	58·9
E. Rajputana, Central India, and Gujarat.	Jeypore	...	28·684	28·581	·103	28·622	+·017	1·052	77·3	47·5	29·8	82·2	39·9	42·3	68·6	74·5	60·4	+0·5	43·5	55·4	58·3	52·4
	Ajmere	...	·502	·395	·107	·443	+·008	1·062	77·2	45·6	31·6	81·2	39·0	42·2	64·8	75·6	60·4	+1·4	42·3	54·5	60·7	52·5
	Deesa	...	29·637	29·516	·121	29·569	+·013	·994	87·2	52·3	34·9	92·4	47·1	45·3	77·9	84·9	68·9	+0·9	45·2	57·3	59·2	53·9
	Nowgong	...	·353	·239	·114	·286	+·004	1·027	75·6	46·7	28·9	78·6	42·0	36·6	64·5	73·1	60·2	+0·3	44·4	55·3	58·5	52·7
	Agra	...	·569	·461	·108	·503	+·002	1·039	75·7	48·3	27·4	80·6	41·7	38·9	66·0	74·1	61·5	+0·1	45·6	55·2	58·7	53·2
Deccan.	Belgaum	...	27·487	27·370	·117	27·426	−·003	·874	80·4	57·4	23·0	83·6	49·9	33·7	73·6	78·3	68·4	−0·9	53·3	59·3	60·0	57·5
	Sholapur	...	28·464	28·329	·135	28·396	+·007	·932	84·1	57·1	27·0	87·1	47·2	39·9	76·6	82·4	69·8	−0·7	51·0	60·1	62·4	57·8
	Poona	...	·205	·075	·130	·111	−·002	·930	83·6	52·7	30·9	86·8	45·5	41·3	75·0	81·7	68·1	−0·3	49·2	58·6	60·2	56·0
	Akola	...	29·149	29·008	·141	29·072	−·003	·968	84·2	50·6	33·6	88·4	42·2	46·2	73·8	83·0	66·5	+0·6	45·8	58·3	61·7	55·3
	Buldana	2,132	27·923	27·802	·121	27·856	−·005	·946	79·6	56·7	22·9	85·1	52·4	32·7	74·0	77·9	67·1	−0·1	49·0	56·8	57·7	54·5
	Khandwa	...	29·043	28·909	·134	28·969	+·015	·981	83·8	50·1	33·7	87·7	42·1	45·6	72·8	82·7	66·1	+1·2	44·9	57·6	60·9	54·5

II.

84 Stations in India, Burma, etc., for December 1895.

Vapour Tension.					Humidity.				Cloud.				Wind Direction. Number of winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Normal.	Total rainfal for the month.	Heaviest rainfall during the month.		
																								%	%						
·825	·933	·896	·885	+·051	86	80	79	82	+2	6·5	6·7	6·6	+2·2	1	10	15	9	12	7	3	3	2	N. 79° E.	N. 51° E.	35	72	204	171	...	...	Port Blair	Burma Coast and Bay Islands.
·622	·695	·690	·669	—·002	86	69	56	70	−3	4·0	5·1	4·6	+1·5	...	21	26	6	3	2	...	...	4	N. 31° E.	N. 36° E.	72	60	141	114	...	...	Rangoon	
·697	·701	·767	·722	+·024	81	70	70	74	−1	5·7	5·5	5·6	+2·5	...	4	38	4	6	1	...	...	9	N. 42° E.	N. 34° E.	69	74	375*	166	...	...	Diamond Island,	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Cocos Island	
·552	·650	·696	·633	+·050	88	78	71	79	+4	4·0	3·8	3·9	+1·5	2	15	14	5	...	...	1	11	14	N. 11° W.	N. 15° W.	58	39	70	56	...	...	Akyab	
·403	·508	·480	·464	—·009	94	76	54	75	0	4·4	3·5	4·0	+1·1	45	...	2	8	4	2	1	...	...	S. 70° E.	S. 57° E.	19	35	28*	42	...	...	Silchar	Assam.
·352	·480	·480	·437	—·012	100	87	63	83	−2	1·8	1·3	1·6	−2·8?	27	...	33	...	1	...	1	...	...	N. 47° E.	N. 65° E.	52	61	36*	37	...	...	Sibsagar	
·402	·476	·486	·455	—·012	94	73	58	75	−3	1·2	1·3	1·3	+0·1	13	2	20	26	1	...	...	...	...	N. 70° E.	N. 58° E.	69	42	120	109	...	...	Dhubri	
·463	·553	·542	·519	—·001	98	78	65	80	+5	4·4	4·2	4·3	+2·3	1	13	18	5	...	...	1	4	20	N. 2° W.	N. 23° W.	63	59	60*	76	...	...	Chittagong	
·400	·514	·468	·461	—·018	86	72	54	71	0	3·3	4·2	3·8	+2·4	...	17	12	6	1	1	2	5	18	N. 6° E.	N. 36° W.	58	44	63	48	...	...	Narayanganj	Bengal and Orissa.
·377	·384	·360	·374	—·071	87	55	40	61	−11	2·4	2·1	2·3	+0·5	1	29	9	1	...	...	1	2	19	N. 10° W.	N. 26° W.	79	60	48	66	...	...	Calcutta (Alipore).	
·414	·461	·419	·431	—·072	84	63	49	65	−9	3·5	3·9	3·7	+1·5	...	42	11	...	...	1	...	1	7	N. 2° E.	N. 7° E.	87	56	222	153	...	...	Saugor Island	
·358	·339	·337	·345	—·064	83	47	37	56	−7	1·7	2·0	1·9	0	7	37	1	...	...	...	1	1	15	N. 14° W.	N. 23° W.	79	67	35*	43	...	...	Burdwan	Gangetic Plain and Chota Nagpur.
·345	·420	·406	·390	—·042	84	60	45	63	−9	1·5	2·0	1·8	−0·1	7	30	6	1	...	1	...	3	14	N. 10° W.	N. 26° W.	71	62	43*	38	...	...	Berhampore	
·419	·478	·453	·450	—·049	94	60	53	69	−6	3·0	3·6	3·3	+0·7	1	30	17	11	1	...	...	...	2	N. 28° E.	N. 43° E.	77	64	137*	151	...	...	False Point	
·387	·392	·359	·379	—·078	81	52	37	57	−8	2·6	2·8	2·7	+0·9	23	17	13	4	...	...	...	2	3	N. 18° E.	N. 12° E.	48	35	32	29	...	...	Cuttack	
·214	·267	·239	·240	—·015	59	44	33	45	−7	2·6	2·1	2·4	+0·4	3	16	9	2	...	...	...	4	28	N. 20° W.	N. 54° W.	72	64	145	110	...	...	Hazaribagh	
·315	·373	·367	·352	—·022	84	60	46	63	−2	0·9	0·5	0·7	−1·1	7	2	1	2	...	...	8	20	22	N. 72° W.	N. 83° W.	64	52	57*	41	...	...	Patna	
·349	·404	·370	·374	—·054	91	64	46	67	−7	0·5	0·3	0·4	−0·6	4	5	3	3	1	1	6	25	14	N. 71° W.	S. 79° W.	56	58	54	51	...	...	Darbhanga	
·288	·327	·278	·298	—·044	87	50	33	57	−10	0·7	1·7	1·2	−0·3	8	5	3	3	1	1	2	19	20	N. 58° W.	N. 54° W.	53	22	49	42	...	...	Allahabad	
·189	·330	·287	·269	—·036	58	51	35	48	−11	1·1	1·4	1·3	−0·4	15	9	3	...	...	...	6	17	12	N. 61° E.	N. 53° W.	52	49	27*	40	...	...	Lucknow	
·217	·242	·240	·233	?	73	46	38	52	?	1·7	2·7	2·2	−0·2	41	...	...	...	4	4	6	6	...	S. 32° W.	N. 73° W.	23	16	7	40	...	...	Dehra Dun	Upper Sub-Himalayas.
·237	·275	·234	·249	—·037	89	52	31	57	−6	0·9	1·6	1·3	0·8	27	1	1	...	7	...	2	...	24	N. 45° W.	N. 82° W.	29	11	47	32	...	...	Roorkee	
·251	·262	·242	·253	—·032	83	50	33	55	−7	0·6	1·1	0·9	−0·8	23	...	...	1	1	...	4	29	4	S. 89° W.	N. 52° W.	53	50	38*	39	...	...	Meerut	
·208	·262	·271	·247	—·033	76	53	37	55	−2	1·7	2·5	2·1	−0·1	20	9	1	4	1	4	1	13	9	N. 54° W	N. 36° W	29	22	28	35	...	...	Lahore	
·227	·237	·219	·228	—·048	77	43	30	50	−11	2·4	3·0	2·7	−0·3	6	2	7	1	7	0	3	12	24	N. 50° W.	N. 30° W.	42	24	48	26	...	...	Ludhiana	
·175	·232	·220	·209	—·039	74	53	37	55	−6	2·7	2·4	2·6	−0·9	27	2	4	1	2	7	8	4	7	S. 65° W.	S. 2° E.	16	9	61*	59	...	...	Peshawar	Indus Valley and N.-W. Rajputana.
·240	·253	·308	·267	—·002	75	47	40	54	−2	1·9	2·0	2·0	0	27	...	22	...	8	...	3	...	2	N. 63° E.	N. 14° E.	32	11	20*	30	...	...	Mooltan	
·243	·323	·318	·295	+·054	77	47	37	54	+5	2·1	2·4	2·3	+0·3	35	1	4	4	3	...	6	2	7	N. 43° W.	N. 15° W.	5	22	52*	38	...	...	Jacobabad	
·312	·361	·425	·366	—·014	66	42	44	51	−5	1·3	1·2	1·3	−0·5	...	2	12	16	4	10	11	7	...	S. 51° E.	N. 42° E.	26	14	150*	216	...	...	Kurrachee	
·237	·279	·290	·269	—·003	71	40	34	48	−1	1·8	1·9	1·9	0	4	...	4	1	7	4	10	22	10	S. 77° W.	N. 14° W.	45	29	62	79	...	...	Jeypore	E. Rajputana, Central India, and Gujarat.
·234	·300	·347	·294	+·025	76	49	39	55	+5	0·8	1·6	1·2	−0·2	10	5	11	4	12	6	9	5	...	S. 48° E.	N. 84° E.	19	15	42	35	...	...	Ajmere	
·210	·200	·164	·192	—·069	53	21	14	29	−8	0	0·2	0·1	−1·6	...	8	14	19	9	4	3	4	1	N. 78° E	N. 17° E.	47	27	182	195	..	...	Deesa	
·268	·319	·295	·294	—·004	83	53	37	58	0	1·1	1·6	1·4	−0·5	4	15	3	4	...	1	6	16	13	N. 48° W.	N. 34° W.	50	29	20*	27	...	...	Nowgong	
·274	·298	·292	·288	+·004	80	47	35	54	+1	0·5	0·7	0·6	−0·8	...	1	6	...	6	...	10	...	39	N. 51° W.	N. 64° W.	55	28	74*	63	...	..	Agra	
·364	·336	·295	·331	—·045	76	40	30	49	0	1·6	3·0	2·3	−0·5	...	3	11	29	15	1	...	...	...	N 88° E.	S. 84° E.	80	70	340	296	..	...	Belgaum	Deccan.
·306	·322	·319	·316	—·061	64	35	28	42	−7	2·2	3·8	3·0	0	2	1	24	9	24	1	...	...	1	N 89° E.	N. 89° E.	68	57	214*	169	...	...	Sholapur	
·317	·296	·259	·291	—·040	77	33	24	45	+2	1·9	3·2	2·6	−0·1	9	...	4	24	17	...	2	3	2	S. 74° E.	S. 78° E.	56	56	100	136	...	...	Poona	
·252	·284	·270	·269	—·064	67	34	24	42	−10	0·5	1·5	1·0	−0·7	...	3	24	26	3	...	1	2	3	N. 64° E.	N. 61° E.	72	58	98·	77	...	...	Akola	
·256	·253	·229	·246	—·091	55	30	23	36	−13	1·1	2·2	1·7	−1·0	4	8	18	7	11	6	1	3	4	N. 67° E.	N. 82° E.	37	52	114*	116	*Nil*	*Nil*	Buldana	
·244	·292	·269	·268	—·053	65	36	24	42	−9	0·6	1·0	0·8	−1·1	1	1	33	8	13	...	2	...	4	N. 65° E.	N. 66° E.	64	41	83	57	...	...	Khandwa	

* Corrected.

Table

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

Meteorological Province.	Station.	Elevation of bar cistern above sea-level in feet	Pressure. Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean 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.	Temperature, Wet-bulb. Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Deccan—*contd.*	Hoshangabad	...	29·100	28·967	·133	29·027	?	29+ ?	78·8	51·0	27·8	85·5	43·8	41·7	67·1	77·4	61·0	+0·4	46·2	56·4	60·3	54·3
	Nagpur	...	·069	·928	·141	28·992	+·013	·990	82·0	52·8	29·2	85·1	47·2	37·9	71·6	80·5	66·5	−0·2	48·1	59·5	63·2	56·9
	Do. (Sanitary Commr.'s Office).	...	·091	·952	·139	29·022	?	1·011	82·7	52·4	30·3	85·2	47·0	38·2	72·2	81·3	67·2	?	46·9	58·9	63·0	56·3
	Jubbulpore	...	28·750?	28·626?	·124	28·681?	?	1·000?	78·3	44·8	33·5	82·7	38·5	44·2	64·8	75·3	60·2	+0·6	43·1	54·2	57·2	51·5
	Saugor	...	·326	·217	·109	·265	+·010	1·016	77·5	50·7	26·8	83·8	45·1	38·7	68·0	75·8	63·1	−0·2	45·2	55·1	57·6	52·6
	Raipur	...	29·124	·995	·129	29·053	+·011	·984	79·8	52·9	26·9	84·1	47·9	36·2	70·1	78·0	65·3	−0·3	48·0	56·0	58·4	54·1
	Sutna	...	·057	·946	·111	28·992	+·007	1·024	74·9	46·5	28·4	82·5	41·4	41·3	67·3	73·3	59·3	−0·4	43·3	54·7	55·8	51·3
	Hyderabad (Deccan.)	...	28·361	·237	·124	·295	?	·948	81·1	54·9	26·2	84·6	47·3	37·3	74·2	77·5	67·1	?	52·8	62·0	63·3	50·4
West Coast.	Bombay	...	30·014	29·893	·121	29·947	−·001	·924	85·1	70·1	15·0	87·9	66·0	21·9	76·8	82·0	76·2	+0·3	63·7	67·5	70·6	67·3
	Ratnagiri	...	29·910	·790	·120	·843	+·005	·890	90·1	67·4	22·7	94·7	61·1	33·6	84·2	84·3	76·7	+0·2	59·5	66·5	70·8	65·6
	Karwar	...	·969	·844	·125	·900	+·001	·875	88·3	65·4	22·9	91·3	56·6	34·7	78·5	86·2	75·7	+0·1	61·7	67·7	70·9	66·8
	Cochin	...	·953	·852	·101	·896	−·019	·833	89·3	73·0	16·3	92·8	68·4	24·4	83·5	86·3	79·8	+0·8	69·7	74·1	75·7	73·2
South India.	Salem	...	·086	28·957	·129	·021	−·020	·903	86·0	65·2	20·8	90·4	55·4	35·0	78·6	82·0	74·4	+0·4	63·6	68·7	69·9	67·4
	Mysore	...	27·502	27·380	·122	27·441	?	·880	81·1	59·3	21·8	86·1	50·0	36·1	73·9	78·9	69·7	?	56·7	63·1	63·2	61·0
	Mercara	...	26·281	26·186	·095	26·234	−·009	?	74·0	57·5	16·5	78·4	50·5	27·9	65·6	71·4	65·1	−0·1	53·8	59·0	60·2	57·7
	Bangalore	...	27·012	·906	·106	·958	−·021	·890	78·0	57·7	20·3	81·7	48·8	32·9	70·6	75·0	67·1	−0·5	55·9	61·2	61·9	59·7
	Hassan	...	26·951	·840	·111	·895	?	·887	77·6	54·6	23·0	81·1	42·7	38·4	71·3	75·7	65·7	?	52·2	60·7	61·4	58·1
	Chitaldroog	...	27·622	27·506	·116	27·563	?	·908	78·7	59·3	19·4	83·2	51·2	32·0	72·0	76·4	68·5	?	53·6	61·2	61·6	58·8
	Trichinopoly	...	29·744	29·623	·121	29·683	−·022	·872	86·5	69·4	17·1	90·0	60·6	29·4	79·8	83·8	77·0	+0·9	66·0	70·9	71·6	69·5
	Madras	...	30·016	29·914	·102	·963	−·012	·916	82·6	69·3	13·3	86·3	57·3	29·0	78·5	78·9	75·2	−0·8	?	72·1	72·0	71·2
	Bellary	...	28·566	28·431	·135	28·498	+·013	·927	83·1	59·6	23·5	87·0	50·9	36·1	75·7	80·9	70·4	−1·9	55·7	60·6	61·8	59·4
	Vizagapatam	...	30·041	29·929	·112	29·978	−·017	·947	82·8	64·1	18·7	86·8	54·5	32·3	79·5	79·0	74·2	−1·0	60·0	65·0	66·4	63·8
	Cocanada	...	·037	·928	·109	·983	?	·946	80·1	65·0	15·1	86·8	59·0	27·8	76·9	78·4	72·1	?	60·8	66·5	67·7	65·0
Hill Stations, Baluchistan.	Quetta	...	24·767	24·691	·076	24·717	+·015	?	57·1	32·4	24·7	64·4	26·4	38·0	47·6	52·4	43·6	+1·5	30·4	41·4	43·9	38·6
Hill Stations, Northern India.	Leh	...	19·769	19·692	·077	19·726	+·028	?	28·5	8·7	19·8	38·1	3·0	35·1	17·6	25·5	18·0	−6·3	?	13·3	22·0	?
	Srinagar	...	25·118	25·051	·067	25·073	?	?	40·6	29·3	11·3	56·9	23·9	33·0	34·6	39·9	34·8	?	28·8	32·1	35·5	32·1
	Murree	...	23·942	23·912	·030	23·915	+·008	?	53·0	40·0	13·0	64·6	33·0	31·6	47·8	47·2	44·8	+0·5	31·7	37·2	37·8	35·6
	Chamba	3,005	27·091	26·992	·099	27·044	−·003	?	65·5	42·0	23·5	74·0	37·0	37·0	51·3	58·4	49·9	−0·6	38·0	43·5	47·6	43·0
	Kailang	10,087	20·884	20·826	·058	20·857	+·034	?	34·2	13·7	20·5	41·7	7·0	34·7	24·6	28·3	20·3	−4·4	12·4	20·2	22·7	18·4
	Simla (Ridge)	...	23·198	23·143	·055	23·158	+·001	?	50·3	39·8	10·5	58·3	34·2	24·1	46·8	46·6	43·8	−0·8	32·6	36·8	37·8	35·8
	Chakrata	...	·413	·348	·065	·369	+·006	?	55·1	38·9	16·2	63·1	32·3	30·8	47·9	47·3	44·7	−1·1	32·2	36·7	38·1	35·7
	Ranikhet	...	24·209	24·138	·071	24·159	+·017	?	56·3	42·6	13·7	64·1	35·8	28·3	51·5	52·6	48·2	−1·3	37·1	42·8	42·9	40·9
	Katmandu	4,388	25·700?	25·608?	·092	25·652?	?	?	66·8	35·7	31·1	70·5	30·2	40·3	53·3	59·2	49·3	−3·2	34·0	47·9	50·4	44·1
	Darjeeling	...	23·046	22·961	·085	23·000	−·003	?	49·5	37·0	12·5	56·1	33·9	22·2	46·9	46·6	42·4	+0·5	33·8	41·1	42·0	39·0
Hill Stations, Central India.	Mount Abu	...	26·194	26·114	·080	26·146	+·006	?	67·9	52·4	15·5	72·7	49·0	23·7	64·7	65·3	59·5	−0·2	44·1	50·2	50·5	48·3
	Pachmarhi	...	·605	·517	·088	·555	+·005	?	70·1	45·0	25·1	74·8	37·5	37·3	65·2	67·4	57·0	−0·2	42·9	56·8	58·6	52·8
	Chikalda	3,642	·491	·390	·101	·434	+·010	?	72·2	55·3	16·9	77·8	51·2	26·6	66·9	70·6	63·4	+0·4	47·4	52·3	54·6	51·4

II—*continued.*

at 84 Stations in India, Burma, etc., for December 1895—continued.

Vapour Tension.					Humidity.					Cloud.				Wind Direction.											Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
														Number of winds from																	
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem	Normal.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·258	·325	·314	·299	−·037	68	49	34	50	− 5	1·4	1·0	1·2	−0·4	18	...	26	12	4	2	...	...	...	N. 65° E.	N. 61° E.	60	63	74	58	...	...	Hoshangabad	Deccan—*contd.*
·281	·363	·367	·337	−·008	69	46	35	50	− 2	1·5	1·9	1·7	−0·7	32	6	19	3	1	1	..	...	...	N. 44° E.	N. 64° E.	40	52	62	68	...	...	Nagpur .	
·258	·343	·362	·321	?	64	42	33	46	?	0·6	1·1	0·9	?	13	21	16	8	1	...	...	...	3	N. 28° E.	?	61	?	21*	?	...	...	Do. (Sanitary Commr.'s Office).	
·263	·294	·247	·268	−·032	87	48	28	54	− 3	0·7	0·9	0·8	−1·1	...	4	5	6	1	2	6	18	20	N. 29° W.	N. 32° E.	48	17	36	41	...	...	Jubbulpore .	
·237	·278	·253	·256	−·009	63	41	29	44	− 1	1·0	1·4	1·2	0	...	10	19	7	16	1	4	2	3	N. 68° E.	N. 37° E.	43	38	37	60	...	...	Saugor . .	
·273	·266	·233	·257	−·088	67	36	24	42	−12	1·0	1·5	1·3	−0·5	1	20	28	2	3	1	1	1	5	N. 25° E.	N. 35° W.	71	48	67*	66	...	...	Raipur . .	
·245	·275	·233	·251	+·001	76	41	29	49	+ 1	0·6	1·1	3·6	−0·5	...	34	1	3	2	...	1	5	16	N. 75° W.	N. 31° W.	72	39	82*	89	...	...	Sutna . .	
·382	·410	·410	·401	?	87	48	43	59	?	2·0	3·5	2·7	?	8	1	11	13	27	2	...	...	...	S 73° E.	?	68	?	86*	?	...	...	Hyderabad (Deccan.) .	
·507	·554	·601	·554	−·066	68	60	54	61	− 9	1·6	1·8	1·7	−0·1	...	1	13	16	3	...	...	10	19	N. 10° E.	N. 17° E.	35	63	229	238	...	...	Bombay .	West Coast.
·413	·418	·579	·470	−·088	61	35	49	48	−10	2·9	3·1	3·0	+2·1	1	11	8	7	7	2	3	3	20	N. 4° W.	N. 4° W.	35	36	204*	213	...	...	Ratnagiri .	
·510	·539	·556	·535	−·075	80	55	45	60	− 9	1·6	2·3	2·0	+0·4	9	...	4	18	1	...	...	4	26	N. 2° W.	N. 1° E.	33	57	90	?	...	...	Karwar .	
·686	·719	·749	·718	−·013	84	63	60	69	− 5	3·1	3·6	3·4	+0·2	14	7	13	...	...	...	1	23	4	N. 43° W.	S. 50° W.	40	15	81	?	...	...	Cochin .	
·577	·574	·569	·573	−·016	92	58	53	68	− 4	4·4	4·9	4·7	+0·6	55	1	...	1	2	...	2	...	1	S. 18° E.	N. 89° E.	?	48	?	91	...	...	Salem . .	South India.
·436	·448	·387	·423	?	85	53	40	59	?	4·4	5·3	4·9	?	6	2	24	22	7	...	...	1	...	N. 72° E.	?	72	?	233*	?	...	...	Mysore . .	
·379	·429	·395	·401	−·066	79	68	52	66	−11	4·3	4·1	4·2	−0·9	9	1	30	18	2	...	...	2	...	N. 62° E.	N. 73° E.	71	75	222	117	...	...	Mercara. .	
·432	·435	·404	·424	−·032	89	58	48	65	− 4	4·4	4·7	4·6	+0·5	...	4	24	26	5	...	...	...	3	N. 66° E.	N. 70° E	79	84	197*	93	...	...	Bangalore .	
·373	·416	·381	·390	?	85	54	44	61	?	4·5	5·3	4·9	?	...	2	31	24	5	...	...	...	...	N. 68° E.	?	87	?	93*	?	...	...	Hassan . .	
·349	·414	·370	·378	?	67	52	41	53	?	4·1	4·8	4·5	?	...	2	20	29	9	...	...	...	2	N. 77° E.	?	79	?	191*	?	...	...	Chitaldroog .	
·600	·642	·615	·619	−·044	83	63	54	67	− 7	4·9	5·5	5·2	−0·7	12	22	25	1	...	...	...	...	2	N. 23° E.	N. 39° E.	72	75	97	121	...	...	Trichinopoly .	
?	·711	·699	·715	+·023	?	72	71	81	+ 3	6·3	6·5	6·4	+1·1	5	28	20	1	...	...	...	...	8	N. 10° E.	N. 24° E	85	75	189	179	...	...	Madras . .	
·404	·349	·323	·359	−·106	77	39	31	49	− 9	5·2	6·2	5·7	+2·3	1	5	4	46	4	...	...	...	2	N. 83° E.	S. 87° E.	82	69	62	75	...	...	Bellary . .	
·472	·430	·482	·461	−·089	79	42	49	57	− 6	3·5	4·8	4·2	+1·7	...	22	29	7	...	2	...	1	1	N. 32° E.	N. 83° E.	77	55	56	49	...	..	Vizagapatam.	
·492	·517	·540	·513	?	77	56	55	63	?	3·0	3·3	3·2	?	...	1	35	22	3	...	...	...	1	N. 63° E.	?	87	?	233*	?	...	...	Cocanada .	
·152	·200	·200	·184	+·039	83	61	51	65	+ 9	1·1	1·8	1·5	−1·5	27	2	...	...	3	7	4	10	9	N. 78° W.	N. 48° W.	29	37	54*	58	...	...	Quetta . .	Hill Station, Baluchistan.
?	·048	·091	?	?	?	50	67	?	?	4·4	6·0	5·2	−0·3	2	...	...	1	...	4	51	3	1	S. 45° W.	S. 1° W.	89	34	27	30	...	...	Leh.	Hill Stations, Northern India.
·154	·153	·168	·160	?	94	78	65	79	?	8·4	7·4	7·9	?	12	5	3	1	14	16	1	4	6	S. 16° E.	?	26	?	103*	?	..	...	Srinagar,	
·098	·115	·135	·116	−·019	41	37	43	40	− 9	2·8	3·2	3·0	−1·7	12	4	9	3	29	2	...	...	3	S. 71° E	S. 58° E.	50	31	174*	167	...	...	Murree.	
·186	·196	·207	·196	−·042	69	52	43	55	0	3·9	4·8	4·4	0	55	1	...	...	2	...	1	...	3	N. 54° W.	S. 58° E.	3	16	86*	70	0·67	0·53	Chamba.	
·069	·075	·079	·074	−·023	83	56	51	63	− 3	3·9	4·3	4·1	−1·4	...	1	1	2	9	12	21	13	3	S. 35° W.	S. 44° W	58	46	22	20	0·48	0·47	Kailang.	
·117	·119	·140	·126	−·016	48	38	45	44	− 2	2·7	4·3	3·5	−0·1	15	12	9	2	3	10	9	...	2	N. 64° W.	N. 83° W.	5	18	103	?	...	...	Simla (Ridge).	
·119	·107	·130	·119	−·030	51	35	41	42	− 9	1·5	2·8	2·2	−1·0	17	9	...	...	...	35	1	...	...	S. 1° W.	S. 55° W.	43	14	173	100	...	...	Chakrata.	
·166	·187	·179	·177	−·020	62	50	46	53	− 3	1·1	1·8	1·5	−1·0	33	1	1	...		2	16	9	...	S. 59° W.	S. 54° W.	37	22	40*	35	...	...	Ranikhet.	
·182	·276	·269	·243	−·031	86	67	53	69	− 4	1·6	2·0	1·8	−1·1	...	...	...	20	...	1	...	41	...	S. 88° W.	N. 64° W.	34	61	14	?	0·24	0·24	Katmandu.	
·164	·199	·221	·195	−·005	76	65	70	70	− 6	3·3	3·8	3·6	−0·7	11	3	6	15	2	...	1	16	7	N. 5° W.	N. 54° W.	16	4	62	46	...	...	Darjeeling.	
·197	·199	·200	·199	−·013	50	33	32	38	− 3	0·4	0·6	0·5	−1·3	...	13	12	2	7	5	6	8	9	N. 13° W.	N. 48° E	23	14	121*	86	...	...	Mount Abu.	Hill Stations, Central India.
·257	·371	·396	·341	+·074?	84	59	59	67	+13?	1·7	2·3	2·0	−0·1	27	11	4	5	3	2	3	1	6	N. 12° E.	N. 29° E.	19	22	67*	63	...	...	Pachmarhi.	
·239	·226	·244	·236	−·072	54	34	33	40	−13	1·7	2·8	2·3	0	39	7	1	...	2	5	7	...	1	S. 50° W.	N. 77° W.	7	9	107	117	*Nil*	*Nil*	Chikalda.	

* Corrected.

Table

Abstract of Observations recorded at 10 A.M. and 4 P.M. at 84

Meteorological Province.	Station.	Elevation of bar-cistern above sea-level in feet.	Pressure.						Temperature of Air.										Temperature, Wet-bulb.			
			Mean of 10 hours.	Mean of 16 hours.	Mean daily range.	Mean daily pressure.	Variation from normal.	Mean reduced to S.L. and for gravity 45° Lat.	Mean maximum.	Mean minimum.	Mean daily range.	Highest maximum.	Lowest minimum.	Absolute range.	Mean 10 hours.	Mean 16 hours.	Mean daily.	Variation from normal.	Mean minimum.	Mean 10 hours.	Mean 16 hours.	Mean daily.
Hill Station, S. India.	Wellington	...	24·282	24·208	·074	24·245	−·018	29+ ?	66·3	45·9	21·4	71·8	35·4	36·4	62·2	61·3	54·3	−1·8	43·7	55·7	56·2	51·9
Extra India.	Muscat	...	30·132	30·035	·097	30·083	?	?	76·0	71·3	4·7	78·4	68·1	10·3	75·3	76·0	73·7	?	65·2	68·9	69·8	68·0
	Aden	...	29·995	29·893	·102	29·947	−·009	·974	81·4	72·6	8·8	85·1	69·7	15·4	78·5	79·6	76·6	0	67·4	70·0	69·5	69·0
	Perim	...	·807	·706	·101	·760	?	?	84·7	75·1	9·6	86·1	72·8	13·3	81·3	81·4	79·1	?	68·9	73·8	73·3	72·0
	Minicoy	...	·968	·866	·102	·912	?	·847	87·3	78·2	9·1	90·3	72·8	17·5	83·1	83·5	81·2	?	72·4	76·0	75·7	74·7
	Zanzibar	...	·904	·790	·114	·847	−·028	·846	86·3	79·7	6·6	88·0	76·7	11·3	83·1	85·9	82·9	+0·8	76·6	78·6	79·8	78·3
	Port Victoria (Seychelles).	15	·967	·885	·082	·926	?	?	81·2	75·5	5·7	82·9	72·7	10·2	79·9	80·5	78·2	?	72·1	75·5	75·6	74·4

II—*concluded.*

Stations in India, Burma, etc., for December 1895—concluded.

Vapour Tension.					Humidity.					Cloud.				Wind Direction. Number of winds from										Wind Steadiness.		Wind Velocity.		Rainfall.		Station.	Meteorological Province.
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.	Calm.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Mean wind direction.	Normal mean wind direction of month.	Average percentage.	Normal percentage.	Mean velocity in miles per diem.	Norm. 1.	Total rainfall for the month.	Heaviest rainfall during the month.		
																								%	%						
·280	·379	·402	·354	+·007	91	69	75	78	+2	4·4	5·6	5·0	−0·5	5	3	5	7	23	16	2	...	1	S. 43° E.	S. 35° E.	58	60	46	55	...	...	Wellington.	Hill Station, S. India.
·542	·624	·648	·605	?	71	71	72	71	?	0·8	1·3	1·1	?	...	1	15	12	1	2	3	7	21	N. 2° W.	?	34	?	66	?	...	...	Muscat.	Extra India.
·604	·622	·586	·604	−·033	75	64	58	66	−4	3·4	0·4	1·9	−2·1	1	...	7	40	10	4	...	...	...	S. 83° E.	N. 89° E.	84	69	306	299	...	...	Aden.	
·628	·733	·715	·692	?	72	69	66	69	?	2·3	0·3	1·3	?	...	...	...	28	16	17	1	...	...	S. 53° E.	?	77	?	469	?	...	...	Perim.	
·728	·805	·786	·773	?	76	70	68	71	?	4·3	5·3	4·8	?	3	18	19	9	1	3	...	1	8	N. 35° E.	?	47	?	192	?	...	...	Minicoy.	
·874	·921	·912	·902	+·060	86	81	76	81	+4	4·3	2·4	3·4	−0·8	...	20	33	5	2	...	1	...	1	N. 34° E.	N. 26° E.	82	30	151*	140	...	...	Zanzibar.	
·743	·825	·823	·797	?	84	81	79	81	?	6·5	6·3	6·4	?	...	7	4	3	3	4	2	3	36	N. 38° W.	?	56	?	141	?	19·38	6·10	Port Victoria (Seychelles).	

G. I. C. P. O.—No. 128 Meteor.—23-4-96.—377.

Explanation.

The lines of the above Chart represent isobars or lines of equal barometric pressure, and the numbers attached indicate the barometric pressure in inches and are drawn for differences of pressure of ·05 inch. The isobars in the Bay of Bengal are filled in by means of the shore observations, and by comparison with the ordinary or normal distribution of pressure as given in the Charts of the Bay of Bengal, prepared by Mr. Dallas, 1st Assistant Meteorological Reporter to the Government of India, and published by the Meteorological Department. Hence they have not the same validity as the isobars in the land area of India itself, but it is probable they deviate very little from the actual.

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

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

Reg. No. 155, Wr., I.—June 94.—6,000.

Zinco. S. I. O., Calcutta.

Explanation

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

Cinco. S. I. G. Calcutta.

Reg. No. 16., Wr., I.—June 94.—5,000.

Reg. No. 149, Wr., I.—Apl. 95.—4,500.

CHART SHEWING THE VARIATION OF THE MEAN MAXIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.

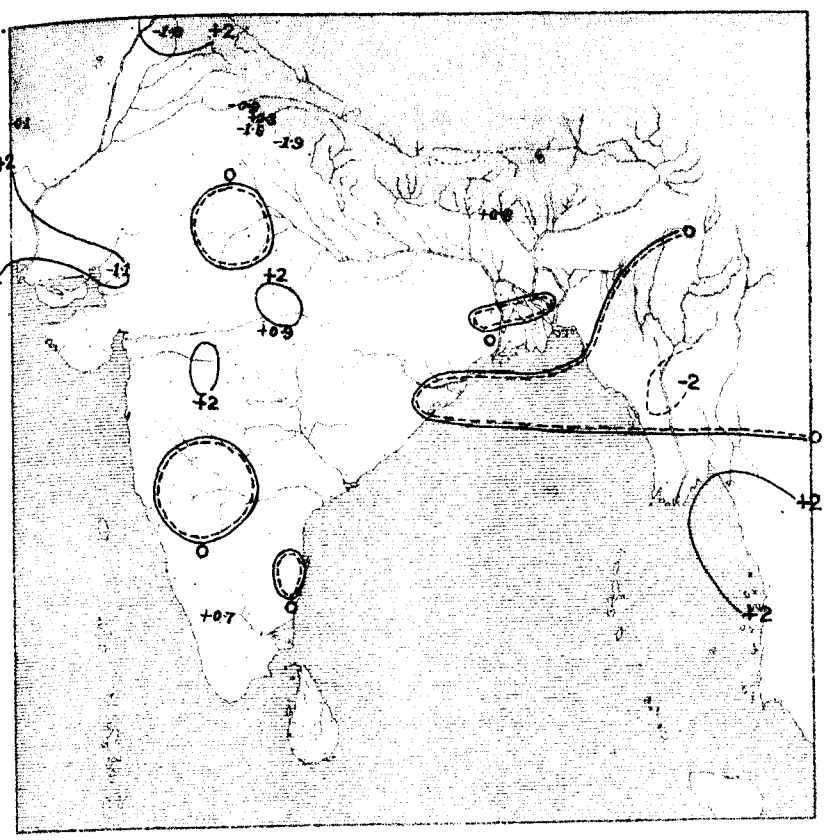
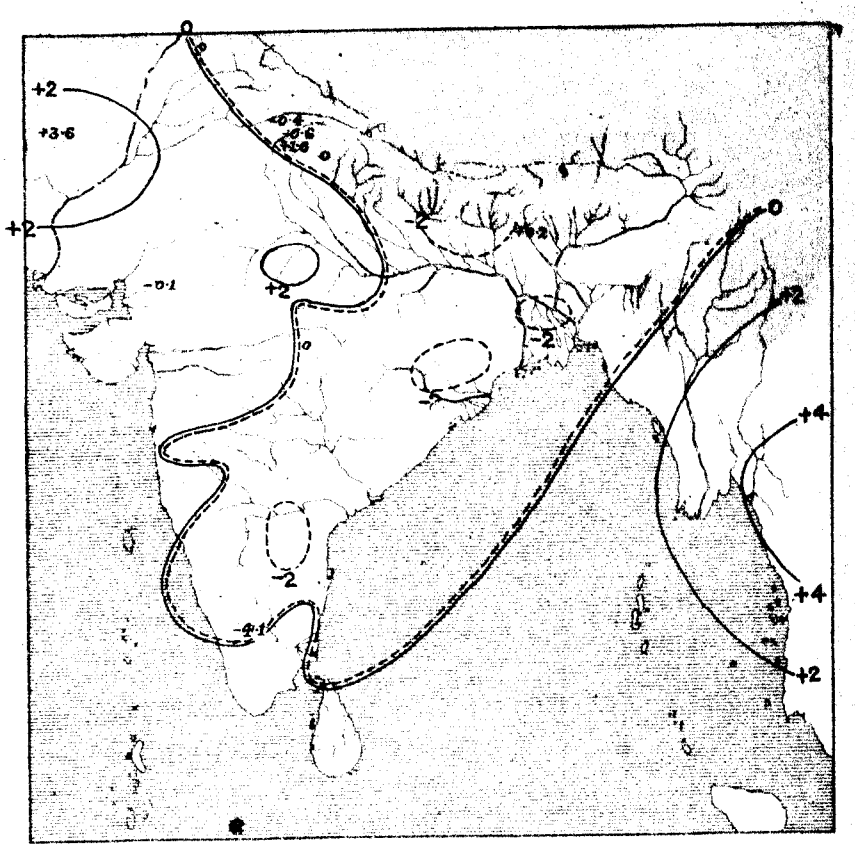


CHART SHEWING THE VARIATION OF THE MEAN MINIMUM TEMPERATURE OF THE MONTH FROM THE NORMAL.



Explanation.

Continuous lines indicate that the mean maximum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

Continuous lines indicate that the mean minimum of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

CHART SHEWING THE VARIATION OF THE MEAN DAILY TEMPERATURE OF THE MONTH FROM THE NORMAL.

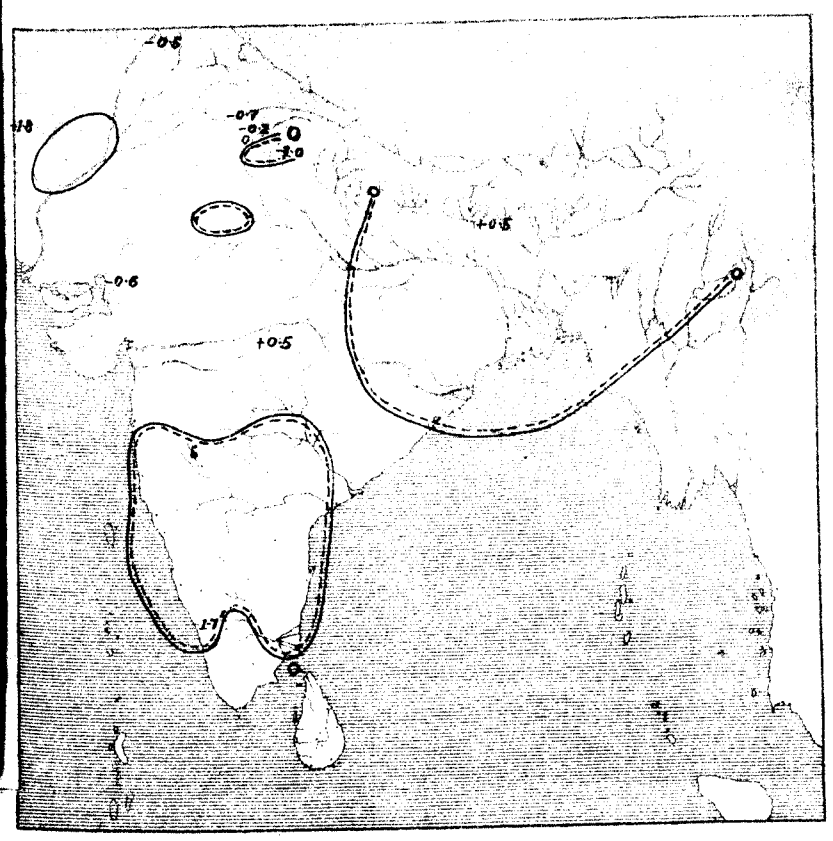
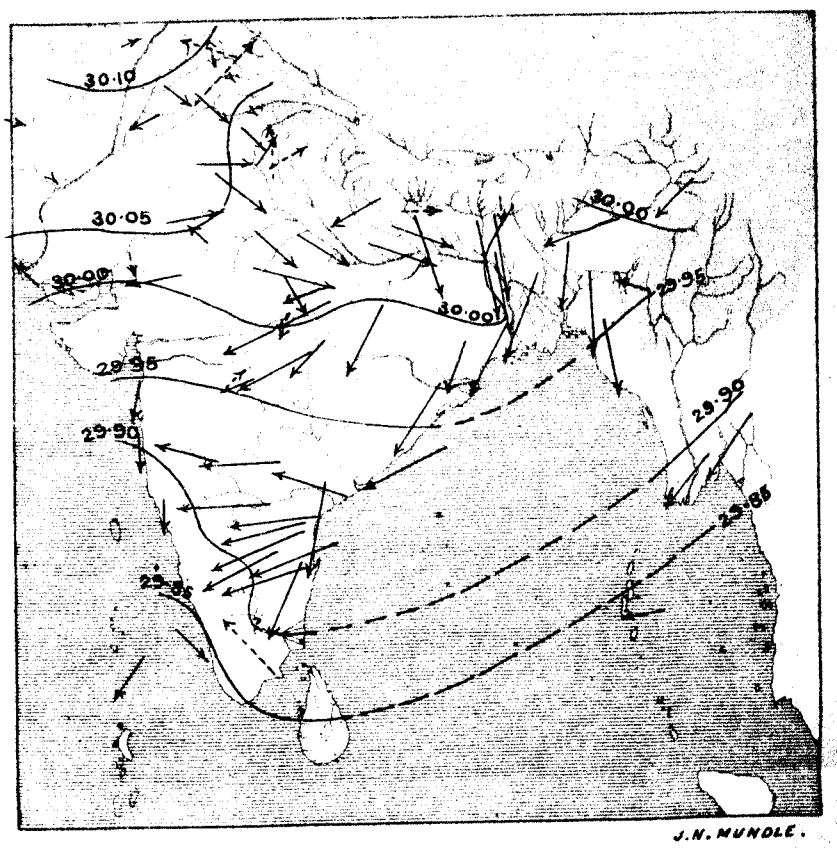


CHART SHEWING THE MEAN DISTRIBUTION OF PRESSURE AND THE RESULTANT WIND DIRECTIONS IN THE MONTH OF DECEMBER 1895.



Explanation.

Continuous lines indicate that the mean daily temperature of month was in excess by amounts indicated by the attached numbers. Broken or dotted lines that it was in defect by the amounts indicated by the attached numbers. Double lines are the lines of no variation, the broken line facing the area of deficient temperature.

The Chart is prepared in the same manner as the Monthly Charts which have hitherto appeared in the Annual Report, the only alteration made being that pressures are reduced to constant gravity (45°) The isobars are given for each twentieth of an inch. The arrows show the directions of the resultants of the wind recorded at 10 and 16 hours, and by their lengths the percentage of the observations expressing the numerical value of the resultant; a length of $\frac{1}{20}$th of an inch being equal to 100 per cent.

Zinco...h I O., Calcutta.

Reg. No. 155, Wr., I.—June 94.—5,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500

Explanation.

The Chart shows the distribution of the rainfall of the month by means of isohyetic lines or lines of equal amounts of rain. The data used in the preparation of this Chart are the rainfall returns of all the observatories in India (182 in number), except those at the Hill Stations over 3,500 feet in Elevation. The double line or line of no rainfall separates areas in which the rainfall exceeded a tenth of an inch from those it was actually or practically *nil* (*i.e.* less than a tenth of an inch). The dotted line faces the area of no rainfall

Zinco., S. I. O., Calcutta.

Reg. No. 155, Wr., I.—June 94.—6,000.
Reg. No. 149, Wr., I.—Apl. 95.—4,500

CHART OF INDIA

SHEWING THE VARIATION OF THE RAINFALL OF THE MONTH OF DECEMBER 1895. FROM THE NORMAL.

Scale 1 Inch = 256 Miles

LITHO. BY J. N. MUNDLE.

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 51 areas, over each of which the meteorological conditions are fairly uniform, reliable and useful means. The country is divided into 51 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 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 figures.

1. Tenasserim
2. Lower Burma
3. Central do.
4. Upper do.
5. Arakan
6. Eastern Bengal
7. Assam (Surma)
8. Do. (Brahmaputra)
9. Deltaic Bengal
10. Central do.
11. North do.
12. Orissa
13. Chota Nagpore
14. Behar (South)
15. Behar (North)
16. North Western Provinces (East)
17. Oudh (South)
18. Do. (North)
19. North Western Provinces (Central)
20. Do. do. (West)
21. Do. do (Submontane)
22. Punjab (South)
23. Do. (Central)
24. Do. (Submontane)
25. Do. (Hill Districts)
26. Do. (North West)
27. Do. (West)
28. Malabar
29. Madras (South Central)
30. Coorg
31. Mysore
32. Konkan
33. Bombay Deccan
34. Hyderabad (North)
35. Khandeish
36. Berar
37. Central Provinces (West)
38. Do. (Central)
39. Do. (East)
40. Guzerat
41. Kattiawar
42. Sind
43. Central India (East)
43a(a). Do. do. (a)
44. Rajputana (East) Central India (West)
45. Rajputana (West)
46. East Coast (North)
46(a). Do. do. (a)
47. Hyderabad (South)
48. Madras (Central)
49. East Coast (Central)
50. East Coast (South)
51. Madras (South)

Reg. No. 89, Wr, L—Mar. 96.—5,000.

Litho., S. I. O., Calcutta.