FOR OFFICIAL USE.

M.O. 316.

AIR MINISTRY

METEOROLOGICAL OFFICE

NOTES ON THE METEOROLOGICAL OBSERVATIONS

MADE IN

BRITISH COLONIES AND PROTECTORATES

IN

1927

AND

Summarised in the Annual Reports of Colonial Governments.

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Regular meteorological observations have been made for many years past in the British Colonies and Protectorates at the request of the Home Government and since 1907 summaries of these observations, on a form drawn up in the Meteorological Office, have been included in the Annual Reports of the Colonial Governments. In order to render the valuable material thus accumulated more readily available, the Secretary of State for the Colonies has requested the Colonial Governments to forward reprints of these tables to the Meteorological Office, London, for distribution among the meteorological institutions in the Empire and in foreign countries with which it maintains an exchange of publications. This scheme has now been in operation since 1910 and through it valuable meteorological information has been rendered accessible.

The observations are in most cases taken under the supervision of officers who are engaged in scientific work but who have not received special training in meteorological work. The procedure adopted in the different Colonies has varied and the tables do not always contain all the information required for full use of the material. A questionnaire requesting further information as to the observations, was therefore prepared in the Meteorological Office and circulated through the Colonial Office to the Governors of the Colonies and Protectorates concerned. From the replies received and from a scrutiny of the printed summaries, and also of the daily observations when available, a series of " Notes " were prepared and issued with the summaries for 1923. Supplementary notes were issued with the summaries for 1924 and 1925; beginning with 1926 it is proposed to publish the " Notes " annually as an introduction to the collection of reprints. Changes which have been introduced since 1923 are marked by the date of the change in square brackets. For ready reference it is suggested that they may be bound or filed with the meteorological observations for the year 1927.

The " Notes " include a statement as to the hours of observations, the standard of time in use, and a brief reference to the exposure of the instruments. The exposure for thermometers recommended in the *Observer's Handbook* of the Meteorological Office, is in a Stevenson screen, freely exposed to sun and wind and not shaded by trees or buildings. The site prescribed for the exposure of the rain-gauge is a level grass plot, the rim of the gauge being one foot above the ground. The sheltering effect of trees, bushes, buildings, &c., must be avoided and the regulations adopted by the Meteorological Office specify that the distance between the gauge and any object should be at least twice the height of that object. When the site and exposure of the instrument appear to satisfy these conditions they are described as " conventional." Until recently the thermometers at stations of the Meteorological Service of the Government of India were exposed in wire cages, placed in huts with open sides, freely exposed to wind and sun. That form of exposure was regarded as generally appropriate for tropical conditions and was described in *Hints to Observers in Tropical Africa* issued by the Meteorological Office in 1907. It has been adopted at many tropical stations outside the Indian system. Instances are given in these notes. Experiments in India* have shown that Stevenson screens, if freely exposed, afford as much protection against solarisation as the other form of exposure, even under tropical conditions, and it is understood that Stevenson screens are being introduced at the Indian stations. In many tropical countries it is not possible to place the rain-gauge over grass and there is risk of in-splashing of rain-drops during heavy showers. The gauges are therefore placed at greater heights than one foot above the ground. Particulars are given in each instance. The latitudes, longitudes and heights of the stations are stated when this information is not given in the

* *Indian Meteorological Memoirs.* Vol. 24, Part III, 1922.

(37210) Wt. 3044/117 250 6/29 Harrow G. 1/27. (T.S.5956)

reprints. Then follows information as to the corrections applied to the readings of the barometer, the method of deducing the mean pressure for the day from the observations at the specified hours,† the hours of setting and reading the self-registering thermometers, the definitions adopted by the observer of " a day with rain," &c., any point being included which throws light on the meanings of the tables and the reliability of the data. Unless otherwise stated the heights of stations are the heights of the barometer cisterns above M.S.L., or if no barometer is in use, the heights above M.S.L. of the sites of the rain-gauges. For some stations, indicated by an asterisk against the name of the station, the daily observations are available in print or in manuscript and it has been possible to examine the published summaries in detail, in this way a number of errata have been discovered which are set out on pp. 20–24. For purposes of reference the years for which observations were first published have been noted for the majority of the stations.

The order in which the various Colonies are arranged is the same as that given in the geographical section of the *International Catalogue of Scientific Literature*, published by the Royal Society. This order has been adopted in the lists of contents of previous sets of summaries.

NOTES ON THE TABLES, 1927.

*Gibraltar

[Observations first published, 1852 ; interrupted, 1862–1863].
Hours of observation—7h., 13h., 18h., 21h., G.M.T.
The Observatory is situated in an obsolete bastion of the fortifications on the sea front, S.W. side of the Rock and 50 ft. above M.S.L. The exposure of the instruments is " conventional."
The height of the barometer above M.S.L. is 53 feet.
Pressure—$\frac{1}{3}$ (7 + 13 + 21h.) ; readings are reduced to 32°F., lat. 45° and M.S.L.
Temperature—Mean .. .. $\frac{1}{3}$ (7 + 13 + 21h.).
Maximum .. .. .. set at 7h. and read at 18h.
Minimum .. .. .. set at 18h. and read at 7h.
The absolute extremes refer, however, to the whole period of 24 hours.
Vapour Pressure and Relative Humidity—Computed from " Hygrometric Tables " published by the Meteorological Office, London, 1924 (M.O. 265). [1926.]
Rainfall—Rim of rain-gauge is 2 feet above a sloping roof.
Totals refer to the 24 hours beginning at 7h.
Definition of—Day with rain .. 0·1 mm. or more. [1927.]
Day with clear sky .. mean cloud amount (from observations taken 4 times a day) less than 2 tenths.
Day with overcast sky .. mean cloud amount (from observations taken 4 times a day) more than 8 tenths.
Day with gale .. .. wind force 8 or more (Beaufort scale).
Wind—The wind direction refers to " magnetic " north.

Cyprus

There are three stations, under the control of the Public Works Dept.
[Nicosia .. .. observations first published, 1907].
[Acheritou .. .. ,, ,, ,, 1912].
[Limassol .. .. ,, ,, ,, 1913].
Hours of observation, 8h. and 15h., zone time, 2 hours fast on G.M.T.
The site and the exposure of the instruments are " conventional " and the instruments are tested, usually once every two years, by an official of the Physical Department, Cairo.
Pressure—$\frac{1}{2}$ (8 + 15h.) ; readings are reduced to 32°F., lat. 45° and M.S.L.
Temperature—Mean .. .. $\frac{1}{2}$ (max. + min.)
Maximum .. .. read and set at 8h., and entered to previous day.
Minimum .. .. read and set at 8h., and entered to day of reading.
Vapour Pressure and Relative Humidity—Computed from Glaisher's Hygrometric Tables.

† *E.g.*, the mean of observations at 7h., 13h. and 21h., is represented by the formula $\frac{1}{3}$ (7 + 13 +21h).

Rainfall—Rim of rain-gauge is 1 foot above the ground.
Totals refer to the 24 hours beginning at 8h.
Definition of—Day with rain .. not stated, but is probably a day with 0·01 in. or more.
Day with clear sky .. .. cloudless sky.
Day with overcast sky .. mean cloud amount more than 5 tenths.
Wind—The wind direction refers to " magnetic " north.
No data of wind force are published, but it is stated that the wind force is estimated on a scale 0–10. The highest force recorded is between 5 and 6 and it is stated that no gales are experienced.

*Malta

[Observations first published, 1852 ; interrupted, 1855–1857].
Hours of observation—8h., 14h., 19h., zone time, one hour fast on G.M.T.
The site and the exposure of the instruments are " conventional."
Pressure—$\frac{1}{2}$ (8 + 19h.) ; readings are reduced to 32°F., lat. 45° and M.S.L. [1924].
Temperature—Mean .. .. $\frac{1}{3}$ (8 + 14 + 19h.).
Maximum .. .. set at 8h. and read at 19h.
Minimum .. .. set at 19h. and read at 8h.
Vapour Pressure and Relative Humidity—Computed from " Hygrometric Tables " published by the Meteorological Office, London, 1924. (M.O. 265). [1926].
Rainfall—Rim of rain-gauge is 59 feet above the ground.
Totals refer to the 24 hours beginning at 8h.
Definition of—Day with rain .. .. 0·01 in. or more.
Day with clear sky .. .. mean cloud amount less than 2 tenths.
Day with overcast sky .. .. mean cloud amount more than 8 tenths.
Day with gale .. .. .. day on which the autographic record shows that a force of 8 on Beaufort scale was reached at any time between 0h. and 24h.
Wind—A Robinson cup anemometer and an anemobiagraph are in use. The cups are 79 feet above the ground and 8 feet above the roof. The head of the anemobiagraph is 15 feet above the roof. The wind summary is based on observations at all three hours [1927]. The direction is observed to 32 points ; the number of entries under N. include only the winds from N by W., N., and N by E. ; similarly the entries under E. include only the winds from E by N., E., and E by S. But under NE. are entered all observations between NNE. and ENE. inclusive (*i.e.*, NNE., NE by N., NE., NE by E. and ENE.) ; under SE. all observations between ESE. and SSE., &c. The entries under the headings N., E., S. and W. are therefore relatively low and those under NE., SE., SW. and NW. relatively high.

Hong Kong, Royal Observatory

[Observations first published, 1884].
First order station of the International Classification.
Some elements published for hours of 7h., 13h., 21h., zone time, 8 hours fast on G.M.T.
Pressure.—Mean of 24 hourly observations ; readings are reduced to 32°F., and lat. 45° at a height of 109 feet above M.S.L.
Temperature—The mean temperature at fixed hours is taken by whirling thermometers.
The daily extremes are taken from the records of a thermograph, and refer to the civil day.
Vapour Pressure and Relative Humidity—Computed from " Tables for the Reduction of Meteorological Observations," published by the Government of India Meteorological Department, 1910.
Rainfall—Rim of rain-gauge is 18 in. above the ground.
Totals refer to the civil day.

Definition of—Day with rain .. .. 0·01 in. or more.
Day with clear sky .. .. mean cloud amount less than 20 per cent.
Day with overcast sky .. .. mean cloud amount more than 80 per cent.

Wind—A Beckley anemometer is in use, with the cups 45 feet above the ground and 13 feet above the roof.

Sunshine—A Campbell-Stokes universal recorder is in use.

Ceylon

Station.	Rain-gauge Ht. of rim.	Years of Observation.	Station.	Rain-gauge Ht. of rim.	Years of Observation.
†Colombo ..	‡1 ft. 6 in.	20	Ratnapura ..	2 ft. 2 in.	59
Puttalam ..	2 ft. 2 in.	59	Anuradhapura	3 ft. 3 in.	58
Mannar ..	1 ft. 0½ in.	58	Kurunegala ..	1 ft. 1 in.	41
Jaffna	1 ft. 9 in.	57	Kandy	1 ft. 6 in.	59
Trincomalee ..	3 ft. 7 in.	59	Badulla ..	2 ft. 0 in.	55
Batticaloa ..	1 ft. 0½ in.	59	Diyatalawa ..	2 ft. 0 in.	27
Hambantota ..	1 ft. 9 in.	59	Hakgala ..	1 ft. 5 in.	45
Gallé	2 ft. 2 in.	59	Nuwara Eliya	1 ft. 1 in.	59

Hours of observation 9½h. and 15½h., time of meridian 82½°E., 5½ hours fast on G.M.T.

The thermometers are exposed in wire cages under shelters with open sides.

Pressure—½ (9½ + 15½h.); readings are reduced to 32°F., lat. 45°, and M.S.L.

Temperature—mean .. .. ½ (max. + min.).

The mean maximum and mean minimum temperatures (both dry bulb and wet bulb) are not given separately as such, but the "Average Daily Range" is given (*i.e.*, the difference between the mean maximum and mean minimum) and from this table and the ½ (max. + min.) values, the mean maximum and mean minimum temperatures can be computed. The maximum is read and set at 15½h. and the minimum at 9½h.

Relative Humidity— Computed from "Tables for the Reduction of Meteorological Observations," published by the Government of India Meteorological Department, 1910. Two sets of relative humidity values are published :—
(1) Mean of 9½h. and 15½h.
(2) Values computed from ½ (max. + min.) dry bulb and ½ (max. + min.) wet bulb. These values are considered to give an approximation to the average humidity during the 24 hours.

Rainfall—For heights of rims of rain-gauges above ground see above.

Totals refer to the 24 hours beginning at 9½h.

Definition of—Day with rain .. .. 0·01 in. or more.

Wind—Robinson cup anemometers are in use. The heights of the cups above the ground are as follows :—

Colombo ..	18½ ft.	Batticaloa ..	35 ft. above the ramparts, which are 15 ft. above ground.
Puttalam ..	21 ft.		
Mannar ..	13½ ft.		
Jaffna ..	14 ft.	Hambantota	11½ ft.
Trincomalee	14 ft. 9 in.	Gallé ..	12½ ft.
		Ratnapura ..	15 ft.
		Diyatalawa ..	12 ft. 10 in.

Federated Malay States

Station	Rain-gauge Ht. of rim.	First year of Observation.
Taiping	1 ft. 2 in.	1889
Kuala Lumpur	1 ft. 3 in.	1879
Seremban	1 ft.	1903
Raub	1 ft. 6 in.	1908
Fraser's Hill	1 ft.	1925
Tanah Rata	1 ft. 10 in.	1925
Rhododendron Hill	1 ft.	1925

† Data from 1869 for neighbouring station.
‡ There is in addition a pluviograph with its rim at 5 ft. 3 in. the catch of which differs very little from that of the standard gauge.

There are two sets of tables for the Federated Malay States. The first contains Taiping, Kuala Lumpur (Lake Gardens), Seremban and Raub. The second contains Kuala Lumpur (Lake Gardens) in greater detail, Cameron's Highlands (Tanah Rata and Rhododendron Hill) and Fraser's Hill. The following information refers to both sets unless otherwise stated.

The height of the station at Kuala Lumpur is given incorrectly in the first report and should be 320 feet.

Hours of observation—9h., 15h., 21h., zone time, 7 hours fast on G.M.T. (9h. and 15h. only at Rhododendron Hill).

At Kuala Lumpur and Fraser's Hill, the thermometers are exposed in standard screens. At Taiping, Seremban and Raub, the thermometers are exposed in wire cages under thatched shelters.

The exposures of the stations at Cameron's Highlands are not stated.

Temperature—At Taiping and the other stations in the first set of tables the mean is .. .. .. ⅓ (9 + 15 + 21h.).
At the Museums stations the mean is ½ (max. + min.).
Maximum .. .. read and set at 9h., and entered to previous day.
Minimum .. .. read and set at 9h., and entered to day of reading.

Vapour Pressure and Relative Humidity—Computed from "Tables for the Reduction of Meteorological Observations," published by the Government of India Meteorological Department, 1910.

Rainfall—For heights of rims of rain-gauges above ground see above.

Definition of—Day with rain .. .. 0·2 mm. or more.
Day with clear sky .. .. mean cloud amount less than 2 tenths.
Day with overcast sky .. .. mean cloud amount greater than 8 tenths.

Sunshine—Campbell-Stokes recorders are in use at Kuala Lumpur and Fraser's Hill, and the two stations at Cameron's Highlands.

Straits Settlements

Station.	Lat.	Long.	Height of Barometer above M.S.L.	Standard of Time.	First year of Observation.
Singapore ..	1° 18′ N.	103° 51′ E.	36 feet	105th meridian, 7 hr. fast on G.M.T.	1841†
Malacca (Durian Daun).	2° 13′ N.	102° 14′ E.	23 feet	Local time, 6 hr. 49 min. fast on G.M.T.	1880
Labuan ..	5° 15′ N.	115° 15′ E.	55½ feet	Local time, 7 hr. 41 min. fast on G.M.T.	1890‡
Penang ..	5° 34′ N.	100° 20′ E.	16½ feet	Local time, 6 hr. 41 min. fast on G.M.T.	1880

Hours of observation 9h., 15h., 21h.

The instruments are exposed in a screen with single-louvred walls and a double top at Singapore, and in cages beneath thatched shelters at Penang and Malacca. No information is given regarding the exposure at Labuan.

Pressure—⅓ (9 + 15 + 21h.); readings are reduced to 32°F., lat. 45° at station level.

Temperature—The following are the hours at which the maximum and minimum thermometers are set and read :—

Station	Maximum Set	Maximum Read	Maximum Entered to previous day	Minimum Set	Minimum Read
Singapore	21h.	21h.	—	21h.	21h.
Malacca	9h.	15h.	—	9h.	9h.
Penang	9h.	9h.	yes	9h.	9h.
Labuan	9h.	9h.	not stated	9h.	9h.

Rainfall—Heights of rims of rain-gauges above ground are :—
Singapore 12 in., Malacca 16 in., Penang 25½ in.
Totals refer to the 24 hours beginning at 9h.

† Interrupted 1846–1868. ‡ Interrupted 1896–1910.

Definition of—Day with rain—Singapore 0·2 mm. or more. Penang—The rain-days are entered under " overcast days " ; Labuan—not stated.
Day with clear sky and overcast sky—The criteria do not appear to be as stated.

Wind—At Singapore the wind observations refer to " magnetic " north ; at Penang and Malacca to true north. This information is not available for Labuan.

Sunshine—A Campbell-Stokes recorder is in use at Singapore.

Palestine

Station.	Rain-gauge Ht. of rim.	First year of Observations.	Station.	Rain-gauge Ht. of rim.	First year of Observations.
Jericho ..	1 metre.	1925	Jerusalem ..	1 metre.	1895‡
Jenin ..	1 metre.	1925	Gaza	1 metre.	1900§
Haifa ..	1·3 metres.	1897†	Beersheba ..	1 metre.	1925

Hours of observation 8h., 14h., 20h. at Jericho and Jenin ; 8h. and 14h. at Haifa ; 8h. at Jerusalem, Gaza and Beersheba. Egyptian standard time, 2 hours fast on G.M.T.

The instruments are exposed in standard Egyptian pattern single-louvred screens.

Pressure—readings are reduced to O°C. and lat. 45° at station level.

Temperature—
Jericho and Jenin.
Mean .. .. .. $\frac{1}{4}$ (8 + 14 + 20h. + min.).
Maximum .. .. read and set at 20h. and entered to day of reading.
Minimum .. .. read and set at 8h. and entered to day of reading.
Haifa, Jerusalem, Gaza and Beersheba.
Mean .. .. .. $\frac{1}{2}$ (max. + min.).
Maximum .. .. read and set at 8h. and entered to previous day.
Minimum .. .. read and set at 8h. and entered to day of reading.

Relative Humidity and Vapour Pressure—Computed from " Jelinek's Psychrometer-Tafeln. Anhang : Hygrometer-Tafeln " by J. M. Pernter. 6th edition. Leipzig, 1911.

Rainfall—For heights of rims of rain-gauges above ground see above.
Totals refer to the 24 hours beginning at 8h.

Gambia—Cape St. Mary.

[Observations first published, 1926].
Hour of observation, 9h., time of meridian 16° 40′ W., 1 hr. 6 min. 40 sec. slow on G.M.T.
The site and exposure of the instruments are " conventional."

Temperature—
Maximum .. .. read and set at 9h. and entered to previous day.
Minimum .. .. read and set at 9h. and entered to day of reading.

Vapour Pressure and Relative Humidity—Computed from Glaisher's Hygrometric Tables. The values of vapour tension (" Elastic Force of Vapour ") are in inches of mercury.

Rainfall—Rim of rain-gauge is 1 ft. above the ground.
Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain .. .. 0·01 in. or more.

Wind—The velocity is obtained by means of a Robinson cup anemometer, the cups being 10 ft. above the ground.

† Interrupted 1905–24. ‡ Interrupted 1914–24. § Interrupted 1905–24.

Gold Coast

[Observations first published, *Accra, 1888 ; Axim, Tamale and Kumasi, 1914].
Hour of observation, 9h., G.M.T.
At Accra, Kumasi and Axim the site and exposure of the instruments are " conventional." At Tamale, the thermometers are exposed in a wire cage under a thatched roof.

Pressure—the values are as read, no corrections having been applied.
The heights of the barometer cisterns above M.S.L. are :—Accra, 52·6 ft. Kumasi, 980 ft.

Temperature—Mean, $\frac{1}{2}$ (max. + min.).
Maximum and minimum—at Accra the maximum is read and set at 9h. and entered to the previous day ; the minimum is read and set at 9h. and entered to day of reading. At Kumasi, Axim and Tamale, both maximum and minimum are read and set at 9h., and entered to day of reading.

Relative Humidity—at 9h., computed from Glaisher's Hygrometric Tables.

Rainfall—Height of rim of rain-gauge (h_r) above ground at Kumasi should be 1 ft. 10½ in.
Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain—0·01 inch or more.
Day with clear sky—at Accra, no cloud visible [1927]. At other stations the criteria are not stated.
Day with overcast sky—at Accra, sky covered with cloud [1927]. At other stations the criteria are not stated.

Wind—At Accra an electrical cup anemometer is in use. After October 8th calms are entered only for complete absence of wind.
At Axim the winds are observed to 4 points only.

Nigeria

Hour of observation 9h., zone time, one hour fast on G.M.T. The following notes give the exposure of the thermometers (A, standard screen ; B, modified screen ; C, wooden screen under thatched roof or shelter ; D, tropical shelter, roof usually thatched, sometimes wood ; E, verandah or shaded wall), the heights of the rims of the rain-gauges above the ground, and the year for which observations were first published.

Station.	Exposure of thermometer.	Height of rain-gauge.	First Year of Observations.	Station.	Exposure of thermometer.	Height of rain-gauge.	First Year of Observations.
		in.				in.	
Abeokuta ..	unsatisfactory	30	1905	Kano	A	12	1905
Afikpo ..	A	24	1905	Katsina ..	—	—	1923
Asaba	D	18	1903	Keffi	D	12	1909
Bamenda ..	D	26	1923	*Lagos	A	12	1886
Bauchi ..	D	8¼	1906	Lokoja ..	A	13	1901
Benin City ..	C	24	1903	*Maiduguri ..	D	11	1909
Birnin Kebbi	D	12	1909	Makurdi ..	—	—	1926
Brass	E	30	1907	Minna	D	—	1914
Calabar ..	E	22	1895	Ogoja	—	—	1924
Debundscha ..	—	—	1926	Ondo	C	9¼	1901
Enugu Ngwo ..	C	24	1916	Owerri	B	22¼	1907
*Hadeija ..	D	10	1918	Port Harcourt	B	12	1915
Ibadan ..	B	16	1901	*Sokoto ..	D	10	1905
Ibi	A	11	1909	Victoria ..	C with double felt roof	14	1922
Ilorin	A	12	1905				
Jos	D	20½	1921	Warri	A	14	1907
*Kaduna ..	A	12	1913	Yelwa	—	—	1925
				*Yola	B	9¼	1904

Pressure—Lagos—9h. ; readings are reduced to 32° F. and M.S.L. at station latitude, but the height correction applied appears to be too great by ·003 in.
Kaduna Capital—9h. ; values are inaccurate.

Temperature—Mean .. .. ½ (max. + min.).
Maximum .. ..read and set at 9h., and entered to the previous day.
Minimum .. ..read and set at 9h., and entered to day of reading.

Relative Humidity—Computed from " Glaisher's Hygrometric Tables."
At Lagos the relative humidity is the mean of observations at 9h. and 15h. [1927.]

Rainfall—For heights of rims of rain-gauges above ground see above. Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain .. .. 0·01 in. or more.

Sierra Leone

Station.	Rain-gauge Ht. of rim.	First Year of Observations.	Station.	Rain-gauge Ht. of rim.	First Year of Observations.
*Freetown ..	1 ft. 3 in.	1874	Kaiyima ..	No information.	1927
Batkanu ..	0 ft. 9½ in.	1913			
Bo	1 ft. 10 in.	1913	Kissy ..	1 ft.	1913
Bonthe, Sherbro	1 ft.	1913	Makeni ..	1 ft. 6 in.	1923
Daru ..	1 ft. 10 in.	1913	Moiamba ..	1 ft. 4 in.	1913
Hill Station..	2 ft. 6 in.	1916	Njala ..	1 ft.	1926
Kabala ..	1 ft. 10½ in.	1913	Pujehun ..	2 ft.	1923

Hours of observation 9h., 17h., Freetown local time, 53 minutes slow on G.M.T.

The heights of the stations (where known) are as follows :—
Freetown (barometer) 224 ft.; rain-gauges :—Batkanu 300 ft., Kissy 350 ft., Bo 320 ft., Bonthe, Sherbro 11 ft., Daru 600 ft., Hill Station 650 ft.

The thermometers are exposed in wire cages under shelters.

Pressure—½ (9 + 17h.); readings are reduced to 32° F., lat. 45° and M.S.L. [1924]. For Freetown, see table of corrections, p. 22.

Temperature—Mean .. .. ½ (9 + 17h.). [1925].
Maximum .. .. read and set at 9h., and entered to previous day.
Minimum .. .. read and set at 9h., and entered to day of reading.

Vapour Pressure and Relative Humidity—Computed from " Hygrometric Tables " published by the Meteorological Office, London, 1924 (M.O. 265).

Rainfall—For heights of rims of rain-gauges above ground see above.
Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain .. .. Day with some precipitation, whether measurable or not. [1925].
Day with clear sky .. .. Day when cloud amount was 0 at either hour of observation [1927]. For Freetown, see table of corrections, p. 22.
Day with overcast sky .. .. Day when cloud amount was 10 at either hour of observation [1927]. For Freetown, see table of corrections, p. 22.
Day with gale .. .. .. force 8 or more.

Wind—The winds are observed to 16 points at 9h. and 17h. For Freetown, see table of corrections, p. 22.

Nyasaland—*Zomba

[Observations first published, 1892].
Hours of observation 9h., and 21h. local time, 2hr. 21min. fast on G.M.T.
The thermometers are exposed in a wire cage under a thatched shelter.

Pressure—½ (9 + 21h.); readings are reduced to 32° F., at station latitude and level.

Temperature—Mean .. .. ½ (9 + 21h.).
Maximum .. .. read and set at 9h., and entered to previous day.
Minimum .. .. read and set at 9h., and entered to day of reading.

Vapour Pressure and Relative Humidity—Computed from " Hygrometric Tables " published by the Meteorological Office, London, 1924 (M.O. 265).

Rainfall—Rim of rain-gauge is 15 in. above the ground.
Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain—a day with some precipitation, whether measurable or not.

Day with clear sky and overcast sky—The observations of cloud amount made at 9h. and 21h. are classified either as " clear " or as " overcast," but the special definitions of these terms are not given.

Day of gale, day of strong wind—The numbers in these columns are derived from observations of the bending of eucalyptus trees in the wind and not from estimates of the wind force on a numerical scale.

Tanganyika

Station.	Rain-gauge Ht. of rim.	Observations first published.	Interruptions.
*Dar-es-Salaam ..	1 ft. 8 in.	1893	1913–22.
Mwanza	— 10 in.	1894	1896–97; 1900; 1912–22.
Arusha	3 ft. 3 in.	1903	1905; 1912–22.
Amani	2 ft. 7 in.	1901	1912–23.
Kigoma	3 ft. 1½ in.	1927	—
Manyoni	3 ft. —	1924	—

Hours of observation, 9h. and 14h., Dar-es-Salaam local time, 2hr. 39min. fast on G.M.T., except for Kigoma and Manyoni, 9 h. only.

The site and exposure of the instruments at Dar-es-Salaam, Amani, Kigoma and Manyoni are "conventional." At Arusha and Mwanza, the thermometers are exposed under thatched shelters.

Temperature—Mean .. .. ½ (max. + min.).
Maximum .. .. read and set at 9h., and entered to previous day.
Minimum .. .. read and set at 9h., and entered to day of reading.

Rainfall— For heights of rims of rain-gauges above ground see above.
Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain—0·2 mm. or more [1927].

Uganda

The first years of published observations are shown for convenience under " Temperature."

Standard of Time adopted is that of longitude 37½° E., 2½ hours fast on G.M.T.

Notes on Exposures :—
Entebbe, Kampala : in Sudan pattern screens.
Jinja : in a Sudan pattern screen under a thatched shelter.
Masaka : in a standard screen under a thatched shelter.
Arua : in a single louvred screen.
Bukalasa : in a Sudan pattern screen.
Bombo, Fort Portal, Gulu, Mbarara, Ngetta : in cages under thatched shelters.
Masindi, Mbale, Mubende, Serere, Simsa : in cages under verandahs.
Kamuli : on a stone pillar under verandah, facing towards house.
Dwoli : under a thatched verandah.

Pressure—Entebbe : readings are reduced to 32° F. and lat. 45° at station level. [1927].
Jinja : readings are reduced to 32° F. and lat. 45° at station level. [1927].

Temperature—The following are the hours at which the maximum and minimum thermometers are set and read and also the first years of published observations :—

	Maximum			Minimum		First year of
	Set	Read	Entered to previous day	Set	Read	Observations.
*Entebbe ..	21h.	21h.	—	21h.	7h.	1896
Jinja ..	7h.	7h.	yes	7h.	7h.	1901
Arua ..	9h.	9h.	yes	9h.	9h.	1923
Bombo ..	9h.	9h.	yes	9h.	9h.	1915
Bukalasa ..	7h.	21h.	—	18h.	7h.	1920
Dwoli ..	8h.	8h.	no	8h.	8h.	1926
Fort Portal ..	14h.	14h.	—	14h.	14h.	1901
Gulu	8h.	8h.	yes	8h.	8h.	1911
Kampala ..	7h.	7h.	yes	14h.	14h.	1907
†Kamuli ..	7h.	7h.	yes	7h.	7h.	1926
Masaka ..	21h.	21h.	—	21h.	21h.	1902
Masindi ..	8h.	8h.	yes	8h.	8h.	1906
Mbale ..	7h.	7h.	yes	7h.	7h.	1907
Mbarara ..	16h.	14h.	—	16h.	14h.	1901
Mubende ..	7h.	21h.	—	21h.	7h.	1909
Ngetta ..	7h.	7h.	yes	7h.	7h.	1926
†Serere ..	7h.	7h.	yes	7h.	7h.	1920
Simsa ..	7h.	7h.	yes	7h.	7h.	1923

At Entebbe the grass minimum thermometer is set at 21h. and read at 7h. and the solar maximum is set at 21h. and read at 14h.

Relative Humidity—Computed from Glaisher's Hygrometric Tables.

Rainfall—Totals refer to the 24 hours beginning at 7h., except at Arua and Bombo, 9h., Gulu, Masindi and Dwoli, 8h.

Heights of rims of rain-gauges are 1 ft. above ground, with the exception of Jinja (18 in.), Bukalasa (10 in.), Fort Portal (15 in.), Mbale (8½ in.), Dwoli (2 ft. 6 in.).

Definition of—Day with rain .. 0·01 in. or more.
Day with clear sky .. mean cloud amount less than 2 tenths.
Day with overcast sky mean cloud amount greater than 8 tenths.

Wind—A Robinson cup anemometer, with cups 15 ft. above the ground is in use at Entebbe.

Sunshine—A Campbell-Stokes recorder is in use at Entebbe ; it is shaded on the west by a hill subtending an angle of 10°.

Zanzibar and Pemba Island

Zanzibar

[Observations first published, 1891.]

Latitude 6° 10′ S. Longitude 39° 14′ E. Height of barometer above M.S.L. 50 ft.

Hour of observation 8h., local time, 2hr. 36min. fast on G.M.T.

The thermometers are exposed in a wire cage with a wooden top under a specially erected shelter with a board and tile roof.

Pressure—8h. It is not stated what corrections, if any, have been applied.

Temperature—Maximum .. read and set at 8h., and entered to previous day.
Minimum .. read and set at 8h., and entered to day of reading.

Dew Point and Relative Humidity—Probably computed from the " Tables for the Reduction of Meteorological Observations," published by the Government of India Meteorological Department 1910.

Rainfall—Rim of rain-gauge is 50 ft. above the ground.
Totals refer to the 24 hours beginning at 8h.

Definition of—Day with rain .. not stated.

† Minimum readings also entered to previous day.

Pemba Island

[Observations first published, 1910.]

Latitude 5° 15′ S. Longitude 39° 44′ E. Height of rain-gauge above M.S.L. 55 ft.

Hour of observation 7h., local time, 2hr. 39min. fast on G.M.T.

The thermometers are exposed in the shade under a verandah.

Temperature—Maximum .. read and set at 7h., and entered to previous day.
Minimum .. read and set at 7h., and entered to day of reading.

Rainfall—Rim of rain-gauge is 3 ft. 8 in. above the ground.
Totals refer to the 24 hours beginning at 7h.

Definition of—Day with rain .. not stated.

Basutoland

[Observations first published, 1922.]

Hour of observation 8½h., South African mean time, two hours fast on G.M.T.

The site and the exposure of the instruments are " conventional."

Pressure—In inches. 8½h. It is not stated what corrections, if any, have been applied to the readings.

Temperature—In °F. Mean .. ½ (max. + min.).
Maximum .. .. read and set at 8½h., and entered to previous day.
Minimum .. .. read and set at 8½h., and entered to day of reading.

Relative Humidity—Computed from tables by R. de C. Ward.†
The values given in the column headed " Tension of Vapour " are the computed temperatures of the dew point in degrees Fahrenheit.

Rainfall—In Inches.—Rim of rain-gauge is 4 ft. above the ground.
Totals refer to the 24 hours beginning at 8½h.

Definition of—Day with rain—not stated.

Bechuanaland Protectorate

[Observations first published, 1922.]

Hour of observation 8½h., South African mean time, two hours fast on G.M.T.

No information is available as to the observations beyond that given on the sheet.

Northern Rhodesia (July 1926 to June 1927).

[Observations first published, 1906.]

The following particulars refer only to *Livingstone and Fort Jameson ; no information has been received for other stations.

Hours of observation—8h. and 18h. at Livingstone, 8h. at Fort Jameson, South African mean time, 2 hours fast on G.M.T.

The site and exposure of the instruments are " conventional " at Livingstone. At Fort Jameson the thermometers are exposed under a thatched shelter.

Pressure—Readings are corrected to 32°F., at station latitude and level.

Temperature—Mean .. .. ½ (max. + min.).
Maximum .. .. read and set at 8h. and entered to previous day.
Minimum .. .. read and set at 8h. and entered to day of reading.

Relative Humidity—Computed from " Glaisher's Hygrometric Tables," 10th edition, 1910.

Rainfall—Heights of rims of rain-gauges are 4 ft. above the ground.
Totals refer to the 24 hours beginning at 8h.

Definition of—Day with rain .. .. 0·01 in. or more.

Wind—At Livingstone a cup indicating anemometer is in use, with the cups 26 ft. 6 in. above the ground.

Sunshine—At Livingstone a sunshine recorder of Campbell-Stokes type is in use.

† " Practical Exercises in Elementary Meteorology," Boston, 1899.

Swaziland

[Observations first published, 1922.]

Hour of observation 8½h., time of longitude 30°E., 2 hours fast on G.M.T.

The site and the exposure of the instruments are " conventional " as far as is stated.

Temperature—Mean .. ½ (max. + min.).
Maximum .. .. read and set at 8½h., and entered to previous day.
Minimum .. .. read and set at 8½h., and entered to day of reading.

Vapour Pressure and Relative Humidity—Computed from the " Smithsonian Physical Tables," 1897.

Rainfall—Heights of rims of rain-gauges are 4 ft. above the ground.
Totals refer to the 24 hours beginning at 8½h.

Definition of—Day with rain .. .. 0·005 in. or more.
Day with clear sky and overcast sky.. criteria not stated.
Day with gale .. no. of observations at 8½h. when wind is force 7 or more on Beaufort scale.

*Bermuda—1926 and 1927.

Hours of observation, 8h., 15h., 20h., local time, 4hr. 19min. slow on G.M.T.

The site and exposure of the instruments are " conventional."

Pressure—½ (8 + 20h.) ; readings are reduced to 32° F., at station latitude and a height of 151 ft. above M.S.L.

Temperature—1926—For mean, see table of corrections, p. 22.
1927—mean .. ½ (max. + min.).
Maximum .. .. read and set at 20h.
Minimum .. .. read and set at 8h., and entered to day of reading.

Relative Humidity—⅓ (8 + 15 + 20h.), computed from the tables supplied by the Meteorological Service of Canada.

Rainfall—Rim of rain-gauge is 1 ft. above the ground.
Totals refer to the 24 hours beginning at 8h.

Definition of—Day with rain—1926 .. a day with some precipitation whether measurable or not.
1927 Jan.–July.. 0·01 in. or more.
1927 Aug.–Dec.. a day with some precipitation whether measurable or not.
Day completely cloudy .. .. criterion not stated.
Day with gale .. .. .. criterion not stated.
Mean velocity—1926 .. .. mean of day.

Wind—A cup anemometer is in use with the cups 50 ft. above the ground.

Bahamas—*Nassau

[Observations first published, 1855.]

Lat. 25° 5′ N. Long. 77° 20′ W. Height of the barometer cistern above M.S.L. 31·4 ft. The instruments were moved to the Wireless Telegraph Station on August 3rd, 1927.

Hours of observation 7½h. and 15h., 75th meridian time, 5 hours slow on G.M.T.

The site and the exposure of the instruments are " conventional."

Pressure—Readings are reduced to 32° F., lat. 45° and M.S.L.

Temperature—Maximum .. read and set at 7½h., and entered to day of reading.
Minimum .. read and set at 7½h., and entered to day of reading.
The values given under the headings of " Temperature. Max. and Min." refer to mean daily maximum and minimum.

Relative Humidity—Computed from " Psychrometric Tables " by C. F. Marvin, published by the U.S. Weather Bureau, 1915.

Rainfall—Rim of rain-gauge is 1 ft. above the ground.
Totals refer to the 24 hours beginning at 7½h.

Wind—The values given as " Wind Force " refer to velocity in miles per hour. A Belfort Standard U.S. Weather Bureau pattern anemometer is in use. The cups are 20 ft. above the roof of a building which is 15 ft. high.

Jamaica

	*Kingston	Negril Point	Morant Point
Observations first published ..	1881	1895	1881
Standard of time	75th meridian	75th meridian	75th meridian
Slow on G.M.T.	5 hours	5 hours	5 hours
Pressure—			
Readings are reduced to ..	32°F., lat. 45°, M.S.L., and corrected for diurnal range.		
Temperature—Mean	†	†	†
Maximum	read and set at 7h., entered to previous day.	set at 7h. and read at 15h.	set at 7h. and read at 15h.
Minimum .. .. .. (entered to day of reading)	read and set at 15h.	set at 15h. and read at 7h.	set at 15h. and read at 7h.
Vapour Pressure and Relative Humidity—	" Glaisher's Hygrometric Tables," 1915 edition.		
Rainfall—			
Rim above ground	51 ft.	6½ ft.	3 ft.
For 24 hours beginning ..	7h.	7h.	7h.
Definition of—			
Day with rain	0·01 in. or more	0·01 in. or more	0·01 in. or more
Day with gale	40 mi/hr or more	40 mi/hr or more	40 mi/hr or more
Wind—			
Anemometer in use	U.S. Weather Bureau pattern.	Robinson's	not stated
Cups above ground	69 ft.	94 ft.	18 ft.

† The mean temperature is obtained by the following formula devised by the late Maxwell Hall: ¼ (7 + 15h + Max. + Min.) — 0·5°F.

Leeward Islands

	*Antigua	St. Kitts	Dominica	*Montserrat	Tortola
Years of observation	52	58	29	13	26
Latitude	17° 5′ N.	17° 18′ N.	15° 30′ N.	16° 45′ N.	18° 25′ N.
Longitude	61° 45′ W.	62° 48′ W.	61° 20′ W.	62° 5′ W.	64° 36′ W.
Height of barometer above M.S.L.	120·6 ft.	157 ft.	50 ft.	130 ft.	20 ft.
Hours of observation	9h., 15h.	9h., 15h.	9h., 15h.	9h., 15h.	9h.
Standard of time ..	local	local	probably local	local	60th meridian
Slow on G.M.T. ..	4hr. 7min.	4hr. 11min.	4hr. 5min.	4hr. 8min.	4hr.
Pressure—	½(9 + 15h.) reduced to 32°F., lat. 45° M.S.L.	½(9 + 15h.) reduced to 32°F., lat. 45° M.S.L.	aneroid barometer	½(9 + 15h.) reduced to 32°F., lat. 45° M.S.L	9h. reduced to 32°F., lat. 45° M S.L.
Temperature—					
Mean	½(9 + 15h.)	½(9 + 15h.)	½(9 + 15h.)	½(9+15h.)[1927]	—
Maximum ..	read and set at 9h. entered to previous day.	read and set at 9h. entered to previous day.	set at 9h. and read at 15h.	see special notes.	read and set at 9h. entered to previous day.
Minimum .. (entered to day of reading)	read and set at 9h.	read and set at 9h.	set at 15h. and read at 9h.	read and set at 9h.	read and set at 9h.
Rainfall—					
Rim above ground.	4 ft.	1 ft.	3 ft. 6 in.	see special notes.	1 ft. 7 in.
Day with rain	0·01 in. or more.	0·01 in. or more.	Not stated.	0·01 in. or more.	Not stated.
Day with clear sky.	mean cloud less than 2/10 [1925]	criterion indefinite.	—	criterion indefinite.	—
Day with overcast sky.	criterion indefinite [1927].	criterion indefinite.	—	criterion indefinite [1924]	—

Totals of rainfall refer to the 24 hours beginning at 9 h., except for Montserrat from August to December, 1927, when the totals refer to the 24 hours ending at 9h.

Relative Humidity—Computed from " Hints to Meteorological Observers " by W. Marriott.

Special Notes—

St. Kitts—Until the beginning of March 1927, the screen containing the thermometers was 10½ ft. to the west of the laboratory, 20 ft. high, when it was moved to a " conventional " site. The site of the rain-gauge is not stated.

Montserrat—

Temperature—Maximum thermometer read and set at 9h.; January to July 1927, entered to previous day, August to December 1927, entered to day of reading.

Rainfall—The height of the rim of the rain-gauge was 3 ft. from January to June 1927, and 1 ft. from July to December 1927.

Wind—The summary appears to be unreliable chiefly owing to the number of missing observations.

Dominica—The thermometers are exposed in a wire cage suspended in a shed with open sides. The rain-gauge is on Morne Bruce, 400 ft. above M.S.L.

Grenada—*Richmond Hill

[Observations first published, 1891.]

Hours of observation 9h. and 18h., local time, 4hr. 7min. slow on G.M.T.

Site and exposure of the barometer and thermometers " conventional."

The barometer was moved from the gallery of the Superintendent's residence to an enclosure near the thermometer screen. No change of height is stated.

The rain-gauge is 2 ft. 3 in. distant from a wall 1 ft. 2 in. high, which is surmounted by an iron fence 6 ft. high composed of bars 1 in. wide set 8 in. apart.

Pressure—Mean .. .. ½ (9 + 18h.); values as read, no corrections have been applied. (See below for attached thermometer.)

The height of the barometer cistern above M.S.L. is 509 ft.

Temperature—The figures under 9 a.m., 6 p.m. and Mean refer to readings of the attached thermometer.

Maximum .. read and set at 9h., and entered to previous day.
Minimum .. read and set at 9h., and entered to day of reading.

Vapour Pressure and Relative Humidity—Computed from " Hygrometric Tables " published by the Meteorological Office, London, 1924 (M.O. 265).

Rainfall—Rim of rain-gauge is 1 ft. above the ground. [1927].

Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain—0·01 in. or more.

Day with clear sky ..
Day with overcast sky } criteria not " conventional."
Day with gale .. ..

Wind—The wind direction refers to " magnetic " north.

St. Lucia—Reunion Experiment Station

[Observations first published, 1891.]

Hours of observation 7h., 12h., 17h., 60th meridian time, 4 hours slow on G.M.T.

Thermometers are in a wire cage under a thatched roof.

Temperature—Mean .. .. ⅓ (7 + 12 + 17h.)
Maximum .. .. .. read and set at 17h.
Minimum .. .. .. read and set at 7h., and entered to day of reading.

Rainfall—Rim of rain-gauge is 1 ft. above the ground.

Totals refer to the 24 hours beginning at 7h.

Definition of—Day with rain .. .. 0·01 in. or more.

St. Vincent—Agricultural Experiment Station

[Observations first published, 1830; interrupted, 1842–1893.]

Hours of observation 9h. and 15h., local time, 4hr. 5min. slow on G.M.T.

Thermometers are exposed in a single-louvred screen; the rain-gauge is of an obsolete pattern.

Pressure—In inches—½ (9 + 15h.); readings are reduced to 32°F., lat. 45°, and M.S.L.

Temperature—In °F. Mean .. ½ (9 + 15h).
Maximum .. .. .. read and set at 9h. and entered to previous day.
Minimum .. .. .. read and set at 9h. and entered to previous day.

Vapour Pressure (in inches) and Relative Humidity—Computed from " Glaisher's Hygrometric Tables."

Rainfall—In inches. Rim of rain-gauge is 13 in. above the ground.

Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain .. .. 0·01 in. or more.
Day with clear sky .. .. no cloud at either hour of observation.
Day with overcast sky .. .. overcast at both hours of observation.

Barbados

[Observations first published, 1853; interrupted, 1863–1864.]

Latitude 13° 8′ N. Longitude 59° 36′ W.

Hours of observation: 8h. and 17h., 60th meridian time, 4 hours slow on G.M.T.; pressure and attached thermometer readings at 9h. and 15h.; other observations at 8h. and 17h.; rainfall observations at 6h.

The site and the exposure of the instruments are " conventional."

Pressure—In inches—½ (9 + 15h.); readings are reduced to 32°F., lat. 45° and M.S.L.

Temperature—In °F. Mean .. The figures under 9, 3 and Mean refer to readings of the attached thermometer.
Maximum .. .. .. read and set at 17h., and entered to day of reading.
Minimum .. .. .. read at 17h. each day and at 8h. on the following day, the lower reading being taken as the minimum temperature of the day on which the 17h. reading is made.

Vapour Pressure (in inches) and Relative Humidity—Computed from " Hints to Meteorological Observers " by W. Marriott, 7th Ed., 1911.

Rainfall—Rim of rain-gauge is 1 ft. above the ground.

Totals refer to the 24 hours beginning at 6h.

Definition of—Day with rain .. .. 0·01 in. or more.
Day with clear sky .. mean cloud amount less than 2 tenths.
Day with overcast sky .. mean cloud amount greater than 8 tenths.

Wind—Wind directions refer to " magnetic " north.

Trinidad—St. Clair, Port of Spain

[Observations first published, 1862.]

Hours of observation 7h. and 15h., 60th meridian time, 4 hours slow on G.M.T.

Site and exposure " conventional."

Pressure—Mean—½ (7 + 15h.); readings are corrected to 32° F., and M.S.L. at station latitude.

Temperature—in ° F. Mean .. ½ (7 + 15h.)
Maximum .. .. .. read and set at 15h.
Minimum .. .. .. read and set at 15h.

Vapour Pressure (in inches) and Relative Humidity—Computed from "Glaisher's Hygrometric Tables."

Rainfall—Rim of rain-gauge is 1 ft. 2 in. above the ground. [1927].

Totals refer to the 24 hours beginning at 7h.

Definition of—Day with rain .. .. 0·01 in. or more.

British Guiana—1926.

[Observations first published, 1887.]
The following notes refer to **Georgetown** and **Mazaruni** only.
Hours of observation, 7h., 13h., 18h., local official time, 3hr. 45min. slow on G.M.T.
At Georgetown, the standard thermometer screen is protected from direct sunshine by a shelter. At Mazaruni the site and exposure of the instruments are "conventional."

Pressure—Readings are reduced to 32° F., lat. 45° and M.S.L.

Temperature—Maximum .. read and set at 18h.
Minimum .. set at 18h., and read at 7h.

Vapour Pressure and Relative Humidity—computed from tables based on "Glaisher's Hygrometric Tables."

Rainfall—Heights of rims of rain-gauges are 1 ft. above the ground.
Totals refer to the 24 hours beginning at 7h.

Wind—Three anemometers are in use at Georgetown, a Lowne's electrical recording and a Robinson's cup, with vane or cups 60 ft. above the ground, and a Dines' pressure tube anemometer with vane 74 ft. above the ground.

Sunshine—Campbell-Stokes recorders are in use at both stations.

Falkland Islands—*Port Stanley

[Observations first published, 1904.]
Hour of observation, 9h. local time, 3hr. 51min. slow on G.M.T.
The site and the exposure of the instruments are "conventional."

Pressure—readings are reduced to 32° F., lat. 45° and M.S.L. [1924].
Height of the barometer above M.S.L., 6 ft.

Temperature—Mean .. .. ½ (max. + min.).
Maximum .. .. read and set at 9h. and entered to previous day.
Minimum .. .. read and set at 9h., and entered to day of reading.

Rainfall—Rim of rain-gauge is 1 ft. above the ground.
Totals refer to the 24 hours beginning at 9h.

Definition of—Day with rain—a day with some precipitation, whether measurable or not. [1926].
Day with clear sky .. .. cloud amount 1 tenth or less.
Day with overcast sky .. .. cloud amount 9 tenths or more.

Mauritius—*Royal Alfred Observatory

[Observations first published, 1861.]
The site and the exposure of the instruments are "conventional."

Pressure—Mean of 24 hours; readings are reduced to 32°F., lat. 45°, at station level. Height of barometer cistern above M.S.L., 181 ft.

Temperature—"Mean" is mean of 24 hours.
Maximum and minimum values refer to the civil day 0h. to 24h.

Dew Point, Vapour Pressure and Relative Humidity—The mean temperature of the dew-point, the degree of humidity and the elastic force of vapour are derived from the mean daily temperature of the air and of evaporation, by means of tables based on "Glaisher's Hygrometric Tables," and are not the means of 24-hourly values.

Rainfall—Totals refer to the civil day, 0h. to 24h.

Definition of—Day with rain—0·1 mm. or more.

Evaporation—The amount of evaporation is obtained from the readings of a Negretti and Zambra evaporimeter which consists of a cylindrical brass vessel 8 in. in diameter and 4 in. deep. The amount of water in the vessel is measured at midnight.

Sunshine—A Campbell-Stokes recorder is in use.

Wind—A Robinson cup anemometer is in use.

Seychelles

[Observations first published, 1891.]
Hours of observation 10h. and 16h., 60th meridian time, 4 hours fast on G.M.T.
The thermometers are exposed in a wire cage under a thatched shelter.
The rain-gauge is of an obsolete pattern.
The site is "conventional."

Pressure—½ (10 + 16h.); readings are corrected for index error only.

Temperature—Mean .. .. ½ (10 + 16h.).
Maximum—read and set at 10h. and 16h. and the highest value entered to the day of reading.
Minimum—read and set at 10h. and 16h. and the lowest value entered to the day of reading.

Cloudiness—The column under "Rainfall, Mean," refers to mean cloudiness, ½ (10 + 16h.).

Rainfall—Rim of rain-gauge is 1 ft. above the ground.
Totals refer to the 24 hours beginning 10h.

Definition of—Day with rain .. .. a day with some precipitation whether measurable or not.
Day with clear sky .. .. } criteria indefinite. [1927].
Day with overcast sky .. .. }

Fiji—*Suva

[Observations first published, 1886.]
Hours of observation 8½h. and 15½h., zone time, 12 hours fast on G.M.T.
The site and the exposure of the instruments are "conventional."

Pressure—Readings are reduced to 32° F., M.S.L., at station latitude. A new barometer was brought into use on 1st April, 1927.

Temperature—
Maximum .. .. read and set at 8½h. and entered to previous day.
Minimum .. .. read and set at 8½h. and entered to day of reading.

Vapour Pressure and Relative Humidity—Computed from "Hygrometric Tables," published by the Meteorological Office, London, 1924 (M.O. 265).

Rainfall—Rim of rain-gauge is 1 ft. above the ground.
Totals refer to the 24 hours beginning at 8½h.

Definition of—Day with rain .. .. 0·01 in. or more.
Day with clear sky .. .. cloud amount less than 2 tenths.
Day with overcast sky .. .. cloud amount greater than 8 tenths. [1926].

Wind—A Dines electric cup anemometer is in use.

Sunshine—A Campbell-Stokes sunshine recorder is in use.

South Georgia—*Cumberland Bay

[Observations first published, 1905.]
Hours of observation 8h., 14h., 20h., local time, 2hr. 26min. slow on G.M.T.

Pressure—values in millimetres, initial figure 7 omitted. Readings are reduced to 0° C., at station latitude and level, and appear to be a good approximation to 24-hr. mean.
The height of the barometer above M.S.L. is 4 metres.

Temperature—Mean .. .. not stated, but appears to be a good approximation to 24-hr. mean.
Maximum .. .. .. read and set at 20h.
Minimum .. .. .. read and set at 8h.
Both values are entered to the day of reading.

Rainfall—in millimetres.
Totals refer to the 24 hours ending at 20h.

Definition of—Day with rain—criterion indefinite.

ERRATA, 1926.

Bermuda—1926.

Pressure—Mean, February, 29·911; March, 29·922; May, 29·875; August, 29·985; September, 29·919; October, 29·895; Year, 29·963. Highest, August, 30·155 on 14th; December, 30·413 on 28th; Year, 30·413 on December 28th. Lowest, February, 29·338 on 11th; June, 29·783 on 14th; Year 29·198 on October 22nd. Range, February, ·949; June, ·390; August, ·634; December, ·887; Year, 1·214.

Temperature—The column headed "mean max." gives mean temperature ½ (8 + 20h.) except for the following months.

	June,	Sept.,	Oct.,	Nov.,	Year.
½ (8 + 20)	74·3	77·2	72·7	69·9	69·3

Absolute maximum, October, date, 17th.

Absolute minimum, August, 62·2; September, date, 25th; October, 60·2 on 29th; December, dates, 19th and 20th. Mean daily range, September, 12·1. Greatest range, May, 17·8; August, 20·8; September, 16·8.

Relative Humidity—Mean, March, 74; April, 85; May, 84; October, 79. Lowest, June, 52.

Cloud Amount—Mean, January, 7; February, 6; September, 6.

Wind—Direction, February, W. 22; NW. 15. June, N. 2; NE. 1. July, SE. 36; S. 20. Year, N. 26; NE. 153; SE. 174; S. 96; W. 126; NW. 145.
Velocity—mean, June, 11. Highest velocity, direction, March, W. and SW. July, date, 7th.

Rainfall—Amount, September, 4·58; Year, 70·32. Days, August, 13; September, 14; Year, 167. Highest amount, July, 0·90; September, 2·02.

Number of Days—Thunderstorms, February, 3; May, 2; October, 2; November, 1; Year, 15.

British Guiana—Georgetown, 1926.

Pressure—p. 40, Mean, 13h., October, 29·829 in., 1010·1 mb.

ERRATA, 1927.

Gibraltar.

Mean Pressure—June, 30·020; November, 29·993; Year, 30·049.

Temperature—Mean minimum, October, 63·4; December, 53·0. Mean maximum, May, 73·9. Absolute minimum, December, date, 28th.

Vapour Pressure—21h., April, 12·9; Year, 15·3. Mean, February, 11·4; April, 12·4.

Relative Humidity—Mean, February, 77.

Rainfall—Total, May, 0·81; November, 6·52; December, 14·39; Year, 36·11.

Number of Days—Rain—March, 9; Year, 91.

Clear Sky—June, 3; November, 6; Year, 83.

Overcast Sky—June, 0; Year, 43.

Wind—April, NE. 8; E. 29; S. 4; NW. 4. May, S. 2; NW. 4. June, E. 16; SW. 29. August, W. 7; NW. 4. December, S. 1; W. 27; NW. 26. Year, NE. 39; E. 242; S. 29; SW. 284; W. 235; NW. 118.

Cyprus, Acheritou.

Number of observations of Wind from NE., January, 21.

Malta, Valletta.

Mean Pressure—January, 30·007; September, 29·963; Year, 29·984.

Temperature—14h., February, 57·6; Year, 70·0. Mean, February, 54·6; November, 66·5; Year, 67·5.
Mean minimum, April, 55·6; June, 69·9; Year, 62·5.

Relative Humidity—19h., Year, 79·2.

Rainfall—Maximum fall, March, 0·41.

Number of Days—Clear Sky, March, 3; Year, 92.
Thunderstorms, November, 3; Year, 10.

Gambia—Cape St. Mary.

February—the mean minimum temperature is lower than the absolute minimum. Probably the mean is inaccurate.

Gold Coast—Accra.

Pressure—November, 1014·9.

Temperature—Mean, May, 81·2; November, 81·3; Mean maximum, May, 86·6. Absolute minimum, November, date, 11th; December, dates, 6th and 30th.

Relative Humidity—May, 72·3; July, 78·1; September, 82·0; Year, 75·3.

Amount of Cloud—September, 7·5; November, 4·9; Year, 5·8.

Rainfall—Maximum in 24 h., January, date, 27th.

Number of Days—Clear Sky—(cloud amount 0) January, 13; March, 2; April, 1; Year, 23.

Wind—February, W. 11., August, N. 1; NW. 1. September, Calm 0. Year, N. 22; NW. 85.

Nigeria—Hadeija.

Temperature—9h., February, 78·6; July, 81·2. Mean, mean minimum and absolute minimum, delete all values. This remark applies from October, 1924, inclusive. Mean maximum, January, 87·5. Absolute maximum, October, 98.

Relative Humidity—February, 42; April, 39; July, 68; October, 65; Year, 51.

Kaduna Capital.

Mean Pressure—delete all values.

Temperature—9h., August, 72·9. Mean, mean minimum and absolute minimum, delete all values. Mean maximum, March, 93·9; October, 87·2; November, 90·6; Year, 88·0.

Relative Humidity—March, 72; April, 71; July, 85; December and Year, delete.

Rainfall—Total, July, 10·90; Year, 55·60. Maximum fall and date, July, 1·82 on 16th; Year, 1·94 on September 9th.

Lagos.

Mean Pressure—February, 29·899; June, 29·986; Year, 29·952.

Temperature—Mean, November, 82·5. Mean minimum, November, 76·8.

Relative Humidity—Heading of column should read ½ (9 + 15h.).

Maiduguri.

Temperature—9h., February, 74·6; April, 93·8; June, 84·8. Mean, April, 91·7. Mean maximum, April, 108·8.

Relative Humidity—February, 29; April, 24; June, 59.

Rainfall—Total, July, 7·73; Year, 27·53.

Sokoto.

Temperature—9h., August, 79·3; October, 84·0; Year, 81·7. Mean, May, 90·2; October, 83·9; November, 81·9; December, 77·6; Year, 82·8. Mean maximum, May, 103·2; July, 90·0; October, 96·0; November, 98·4; Year, 96·1. Mean minimum, May, 77·2; November, 65·3; December, 61·5; Year, 69·5.

RelativeHumidity—October, 64.

Yola.

Temperature—9h., February, 88·5; June, 76·5; October, 81·4; Year, 80·8. Mean, January, 80·9; September, 80·3; October, 82·5; Year, 82·4. Mean maximum, January, 93·5; April, 90·4. Mean minimum, October, 72·6. Absolute minimum, November, 64.

Relative Humidity—February, 29; March, 40; June, 76; October, 70; December, 32; Year, 60.

Rainfall—Total, May, 4·22; Year, 48·32.

Number of Days—Rain—August, 12; Year, 67.

Sierra Leone—Freetown.

Pressure—See below.

Temperature—Mean maximum, September, 85.

Relative Humidity—Mean, Year, 77·5.

Cloud Amount—April, 9h., 7; 17h., 5; Mean, 6. Year, 9h., 5·6; 17h., 4·9; Mean, 5·3.

Rainfall—Maximum fall, September, 5·83 on 19th; November, 2·06 on 26th.

Number of Days—Rain, October, 27; Year, 189. *Thunderstorms*, March, 4; May, 19; Year, 87. *Clear Sky and Overcast Sky*. The figures given below should be substituted for those given in the Annual Report for 1927, to correspond with the figures given in the Annual Report for 1926.

Wind—The following figures should be substituted for those given in the Annual Report.

Mean Pressure mb. 32° F. lat. 45°, M.S.L.	Jan. 1011·1	Feb. 1011·3	Mar. 1011·5	April 1010·9	May 1012·1	June 1013·1	July 1014·6	Aug. 1013·6	Sept. 1012·4	Oct. 1012·1	Nov. 1011·2	Dec. 1011·2	Year. 1012·1
Number of Days—													
Clear Sky	16	12	9	4	2	1	0	0	0	0	1	16	61
Overcast Sky ..	1	0	3	8	1	8	15	17	7	5	5	2	72
Wind—Number of observations from :—													
N.	1	0	2	3	2	3	2	0	2	2	0	4	21
NE.	11	3	1	6	11	7	8	1	7	12	7	15	89
E.	14	1	3	1	5	5	3	1	4	11	1	10	59
SE.	1	0	0	0	1	1	3	0	1	1	0	1	9
S.	1	0	1	0	2	4	9	10	4	1	0	0	32
SW.	20	37	28	26	17	24	25	33	20	18	11	10	269
W.	6	11	13	8	12	7	5	4	6	2	1	0	75
NW.	2	4	14	11	5	1	3	1	2	1	3	2	49
Calm	6	0	0	5	7	8	4	12	14	14	37	20	127

Nyasaland—Zomba.

Temperature—9h., September, 71; 21h., April, 65; May, 61; December, 71; Year, 66. Mean, December, 73. Mean maximum, February, 81. Mean minimum, January to March and Year, delete; August, 51. Absolute minimum, January to March, delete; April, date, 29th.

Vapour Pressure—Heading of columns should be millibars. 9h., March, 21·6; Year, 20·9. 21h., August, 15·3; Year, 19·1. Mean, March, 21·1; August, 15·6.

Relative Humidity—9h., February, 82; Mean, February, 87.

Earth Temperature—Heading should be ½ (9 a.m. + 9 p.m.) for both columns. 1 ft., May, 70. 4 ft., March, 76; June, 71; Year, 75.

Wind—January, SE. 2, S. 4; May, Calm, 46; August, NW. 3; November, NE. 6, E. 17. December, 1 observation missing. Year, NE. 50; E. 201; SE. 28; S. 18; NW. 9; Calm, 368.

Tanganyika—Dar-es-Salaam.

Temperature—Dry bulb, 14h., July, 27·3. Mean, March, 27·0. Mean minimum, March, 23·3. Wet bulb, 9h., August, 22·1; 14h., April, 25·6; July, 21·8.

Uganda—Entebbe.

Mean Pressure—May, 26·139.

Temperature—Dry bulb, 14h., March, 77·9; 21h., December, 69·6. Absolute minimum, January, date, 8th. Earth thermometers, 4 ft., May, 76·4.

Vapour Pressure—7h., August, 19·6.

Relative Humidity—7h., August, 86.

Cloud Amount—November, 7h., 6·4.

Number of Days—Overcast sky, February, 0; April, 5; November, 5; Year, 50.

Wind—April, S. 38. August, E. 3; W. 10; NW. 5. November, E. 5; S. 19. Year, S. 345; W. 187; NW. 65.

Northern Rhodesia—Livingstone, July, 1926 to June, 1927 at 8h., only.

Relative Humidity—March, 42; May, 60; June, 78; July, 69; August, 78; September, 67; October, 65; December, 61; Year, 61.

Bright Bulb in Sun—Year, 109·5.

Cloud Amount—May, 6·0.

Wind Force—Mean, February, 1·2.

Bermuda.

Pressure—Mean, October, 29·903; November, 30·059; Year, 29·987. Highest, January, 30·381; August, 30·212 on 18th; October, 30·166; Year, 30·462. Lowest, February, 29·754 on 26th; Year, 29·319. Range, January, ·945; February, ·480; August, ·405; October, ·711; Year, 1·143.

Temperature—Mean, July, 77·6; September, 79·1. Highest, May, 84·4 on 30th; June, 86·6; July, 87·8 on 31st; August, 91·8; September, 90·2 on 4th; October, 88·4 on 29th; November, 80·8; December, 78·6 on 1st; Year, 91·8. Lowest, May, 57·4 on 10th; June, 61·4 on 1st; July, 61·8; August, 70·8; September, 67·8 on 30th; October, 62·8; November, 59·2 on 22, 23, 24, 28; December, 48·8; Year, 45·2. Range, mean, March, 14·9; November, 13·2. Greatest, March, 18·6; May, 23·4; October, 20·0.

Relative Humidity—Lowest, February, 52 on 3rd; March, 49 on 4th; July, 65 on 7th; Year, 49.

Cloud Amount—Mean, April, 4.

Wind—direction :—	N.	NE.	E.	SE.	S.	SW.	W.	NW.	Calm.
January ..	0	37	0	3	7	27	2	17	0
February ..	0	9	1	0	0	47	4	23	0
March ..	1	9	0	19	8	24	12	20	0
April ..	3	27	1	8	2	22	8	19	0
Year ..	29	180	24	148	96	378	80	160	0

June, S. 1; SW. 62. September, E. 4; S. 3. October, N. 2; E. 9. November, NE. 23. Velocity—mean—August, 6; September, 9; December, 13. Delete Year.

Rainfall—Total amount, January, 6·08; June, 7·84; August, 4·40; Year, 49·12. Mean Year, 4·09. Number of days of rain—August, 13; September, 11; October, 14; November, 11; December, 17; Year, 164. Mean Year, 14. Highest amount, Year, 3·06.

Number of Days Thunderstorm—January, 4; September, 5; Year, 24.

Bahamas—Nassau.

Daily returns are only available for August to December.

Pressure—7½h., September, 29·98; October, 29·93. 15h., August, 29·99; September, 29·95; October, 29·88.

Temperature—Dry bulb, 7½h., August, 84·6; October, 79·6; November, 76·0. 15h., August, 86·1; September, 81·6. Wet bulb, 7½h., August, 79·2; November, 71·4; December, 67·8. 15h., August, 79·4; September, 76·6. Mean maximum, delete January, February, August and September; October, 83·0; November, 78·9; December, 76·9. Mean minimum, January appears low; August, 76·6; November, 71·5.

Relative Humidity—7½h., August, 79. 15h., August, 76; September, 80.

Wind Velocity, mi/hr.—8h., November, 10·8. 15h., August, 3·7; October, 6·6; November, 12·4; December, 8·4.

Cloud Amount—15h., November, 2·5; December, 3·9.

Rainfall—Total, December, 0.

Leeward Islands—Antigua.

Pressure—June, 30·055; Year, 29·998.

Temperature—15h., December, 82·2. Mean, December, 81·5. Mean maximum, June, 85·6; December and Year, delete. Mean minimum, Year, 72·0. Absolute maximum, August, 92 on 22nd; September, 92 on 15th; December, delete.

Relative Humidity—9h., January, 72·7. Mean, January, 70·5; December, 66·1.

Cloud Amount—October, 9h., 6·0; 15h., 6·1; Mean, 6·1. Year, 9h., 5·9; 15h., 6·1; Mean, 6·0.

Rainfall—Total, June, 4·17; Year, 56·15. Maximum fall, Year, 1·94 on October 28th.

Number of Days—Rain, June, 17; Year, 210.

Wind—April, E. 1. May, Variable, 1. June, NE. 24; Calm, 1; Variable, 1. July, NE. 22; SE. 35; Calm, 1. August, NE. 29; SW. 4; Variable, 1. Missing, 3. October, NE. 20, SE. 25, S. 1; Calm, 8. November, NE. 20, SE. 27; Calm, 7. December, NW. 2; Missing, 4. Year, NE. 350, E. 6, SE. 297, S. 12, SW. 16, W. 4, NW. 5; Calm, 24; Variable, 3; Missing, 7.

Montserrat.

Pressure—April, 29·931 ; August, 29·940.
Temperature—9h., March, 78·6. Mean, March, 79·9 ; July, 82·5. Mean maximum, May, 85·9 ; Year, 84·9. Absolute minimum, Year, 67 on February 23rd, March 5th, December 16th and 31st. Absolute maximum, January, dates 2, 3, 30 ; February, 83 on 27th ; Year, 94 on August 31st.
Cloud Amount—9h., October, 6·1 ; December, 5·4 ; Year, 5·8. 15h., December, 6·7 ; Year, 6·1. Mean, May, 4·6 ; Year, 5·9.
Rainfall—Total, February, 7·25. Maximum fall, April, date, 16th ; July 1·67 on 29th ; October, 1·79 ; Year, 3·08 on February 28th.
Number of Days—Thunderstorm, June, 4 ; July, 2 ; August, 1 ; October, 0 ; Year, 9.

Grenada—Richmond Hill.

Temperature—Attached thermometer at 9h., May, 82 ; July, 81 ; October, 83 ; December, 79. 18h., January, 82 ; March, 82 ; June, 82 ; July, 84 ; August, 86 ; September, 86 ; October, 84 ; Year, 83. Mean, January, 80 ; February, 79 ; March, 80 ; May, 83 ; June, 81 ; September, 85 ; October 83 ; November, 82 ; Year, 82. Mean maximum, January, 83 ; April, 85 ; May, 86 ; August, 88. Mean minimum, March, 74 ; April, 74 ; September, 77 ; November, 76 ; Year, 75. Absolute maximum, April, 87 ; Year, 92 in August, September and October. Absolute minimum, February 70 ; March, the value of 53° F. seems too low and the minimum is probably 70 on 8th ; October, 70 on 17th ; Year, 67 on January 14th.
Vapour Pressure—September, 9h., 29·5, Mean, 29·0 ; Year, Mean, 27·4.
Relative Humidity—April, 9h., 77·4. Mean, 79·4.
Cloud Amount—9h., September, 5 ; November, 5 ; December, 4 ; Year, 5. 18h., Year, 5. Mean, September, 4 ; November, 5 ; December, 4 ; Year, 5.
Rainfall—Total, Year, 76·76. Maximum in Year, 5·50 on November 27th.
Number of Days—Rain, February, 21 ; May, 16 ; Year, 230. *Thunderstorms*, October, 11, Year, 31. *Gale*, February, 0 ; Year, 0.
Wind—August, Calm, 17 ; Year, N. 3 ; NE. 93 ; E. 358 ; SE. 120 ; S. 2 ; SW. 2 ; Calm, 152.

St. Vincent.

Temperature—February. The values in the columns "Means of Minimum and Maximum" should be transposed.

Barbados.

Pressure—Heading should read "Mean Pressure, corrected to 32° F., M.S.L. and corrected for gravity."
Wind—Direction, October, SW. 3.

Falkland Islands—Stanley.

Rainfall—Total, January, 2·42 ; August, 2·24. Maximum fall, June, date, 12th.
Number of Days with Rain, April, 24 ; Year 273. *Clear Sky*, April, 2 ; May, 3 ; October, 4 ; December, 2 ; Year, 22. *Overcast Sky*, May, 2 ; August, 8 ; September, 12 ; November, 6 ; Year, 85.
Wind—Number of observations of force 4 to 7, January 19 ; February, 20 ; May, 16 ; September, 18 ; October, 24 ; December, 15 ; Year, 210. Direction, January, N. 5 ; SW. 6 ; WSW. 4 ; NW. 3. April, NW. 3. May, W. 10. November, S. 2. Year, N. 14 ; S. 21 ; SW. 49 ; WSW, 43 ; W. 85. Mean Force. May, 3·5. Year, 4·0.

Fiji, Suva.

Cloud Amount—15½ h., Dec., 7·1.
Numbers of Days with Thunderstorm (i.e., Thunder and Lightning), November, 2 ; Year, 35. *Gale*, August, 2 ; Year, 4.

South Georgia—Cumberland Bay.

Temperature—Maximum, Year, 18·5 on December 24th. Minimum, Year. —12·6 on September 2nd.
Cloud Amount—January, 7·2 ; February, 8·1 ; Year, 7·6.

Printed by H.M.S.O. Press, Harrow.