# RESULTS

OF THE

# MAGNETICAL AND METEOROLOGICAL OBSERVATIONS

MADE AT

## THE ROYAL ALFRED OBSERVATORY, MAURITIUS,

IN THE YEAR

## 1909.

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Weather Bureau

UNDER THE DIRECTION OF

T. F. CLAXTON, F.R.A.S.

AND EDITED BY

A. WALTER, F. R. A. S.—Director.

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994.5
.R38
1909

35155

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1913.

# National Oceanic and Atmospheric Administration

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# ERRATA.

## MAGNETICAL AND METEOROLOGICAL RESULTS 1908.

PAGE.

*viii* Last line but two, *for* South *read* North.

*xvi* Line 18, *for* movents *read* movements.

*xvii* Line 4, *between* $6^{d}$ *and* $12^{h}$ *insert* $9^{h}$ *between* $12^{h}$ *and* $18^{h}$ *insert* $15^{h}$.

(xiv) to (xvi) To heading of table in italics, *add* " those for Horizontal and Vertical Force are corrected for temperature " Unit for Declination for 0'·01 *read* 0'·1. (also applies to results for 1909 page xvi).

(xvi) *For* In English measure (C.G.S. Unit) *read*, In English measure (F.G.S. Unit)

In column 6 for 4·9865 *read* 5·0865.
4·9834 *read* 5·0834.
*&c.* *&c.*

(xx) Column 14 average, for 156°·8 *read* 156°·7.

(xxiii) Weather note 3rd. line from bottom of page *before*, " to 7 as the cyclone " &c. *insert* " and a positive wave from March 2 ".

(xxv) Column 25 average, *for* 77·8 *read* 77·9.
Column 20 average, *for* 6·3 *read* 5·7.

(xxvii) Column 21 April 5, *for* 10.1 *read* 10·2.
6, *for* 10·2 *read* 10·1.
average, *for* 7·39 *read* 7·31.

(xlv) Mean Barometric Pressure, February, *for* 29·730 ins. *read* 29·731 ins.

Absolute Minimum Temperature of the Air, (col 3) *for* 50°·6 on 1894 June 10 *read* 49°·9 on 1907 August 8
Absolute Minimum Temperature of Evaporation *for* 48°·9 on 1894 June 10 *read* 47°·9 on 1907 August 8
Absolute Minimum Temperature of the Dew Point *for* 46°·7 on 1894 June 10 *read* 45·8 on 1907 August 8
Elastic Force of Vapour *for* ·321 ins on 1894 June *read* ·308 ins on 1907 August 8.
} also applies to results for 1909 page (xlv)

Column 15 headed rainfall (Beckley) *read* and for Column 17 *read*

| | |
|---|---|
| 7·95 | 7·92 |
| 7·35 | 7·25 |
| 9·21 | 9·20 |
| 5·14 | 5·06 |
| 3·74 | 3·68 |
| 2·11 | 2·07 |
| 2·23 | 2·22 |
| 2·31 | 2·23 |
| 1·44 | 1·40 |
| 1·63 | 1·59 |
| 1·88 | 1·85 |
| 4·95 | 4·88 |
| 49·94 | 49·35 |

} also applies to col. 17 page xlv in results for 1909.

PLATE VI. Heading for North component *read* East component.

## MAGNETICAL AND METEOROLOGICAL RESULTS 1909.

PAGE.

*xi* Seventh line *for* 1908 *read* 1909.

(xli) Weather note first line *for* were *read* was.

C mb

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ROYAL ALFRED OBSERVATORY, MAURITIUS.

# RESULTS

OF

# MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.

1909.

# MAURITIUS MAGNETICAL AND METEOROLOGICAL OBSERVATIONS,

# 1909.

## INTRODUCTION.

### § I.—*Position of the Observatory Buildings and Instruments.*

The Observatory, in Latitude 20° 5′ 39″ S. and Longitude $3^h$. $50^m$. $12^s$· 6 E., is situated on a plain about three miles from the West Coast and stands in eleven acres of Crown Land. The reference mark at the entrance of the Main Building is 178·1 feet above mean sea level.

From west-south-west through west to north there is an uninterrupted view of the sea, and from north through east to south-east the ground generally rises to Mount Piton, the summit of which bears about four miles east-south-east and is 917 feet above mean sea level. Between south-east and south-west there is a chain of mountains the highest peak of which, the Pieterboth, bears nearly six miles due south, and has an altitude of 2,690 feet. The nearest extremities of two spurs which run north and north-west from the Pieterboth are at distances of three to four miles, and have an elevation of about 560 feet.

The Island is of volcanic origin, and the rocks are more or less magnetic. Around the Observatory the soil has a depth of 3 to 14 feet, below which is solid basalt.

The Main Building, the foundation stone of which was laid on 1870 May 30 by His Royal Highness the Duke of Edinburgh, was completed in the year 1875. It is a stone structure of rectangular base, 56 feet long by 38 feet wide, and faces north-by-west. It is sheltered on all sides by a verandah, to which a balcony was added in the years 1878, 1881, and 1882. In December 1902 the balcony was mosquito-proofed with wire gauze.

On the ground floor are three rooms, the Director's official room and the South-West Computing Room on the western side of the entrance hall, and on the eastern side the Principal Computing Room. In the latter are placed two Standard barometers, Newman No. 128 and Negretti and Zambra No. 2,170. There are two mean solar chronometers, Kullberg No. 3,400 and Webster No. 925, for magnetic and actinometric observations and for use with the photoheliograph, and one sidereal chronometer, Muirhead No. 450, for use with the

12-inch theodolite, and occasionally with the transit instrument. On the Northern wall are fixed two electric dials, one driven by the Standard mean time clock and one by the Standard sidereal clock. Between them is placed a commutator in connection with the accelerating and retarding apparatus of the mean time clock.

At the south end of the entrance hall is the transit pillar, which rises to a height of 36 feet above the ground floor.

On the first floor are four rooms, two on either side of the staircase, the west rooms serving as a library and the east as sleeping apartments. On the second floor is an attic, with three doors opening into domes, and a staircase leading to the roof upon which is mounted the Campbell-Stokes sunshine recorder. The North-West dome contains the registering parts of the Beckley Anemometer, the cups of which are 5 feet above the dome and 51 feet above the ground. In the North-East dome is a 6-inch equatorial by Cooke. In the South Dome is a 3 inch transit instrument by Troughton and Simms. It is of the portable type and is provided with reversing gear. An electric dial is fixed to the North-East corner of the Dome and a Morse chronograph stands on a shelf in the South-East corner. The dial is driven directly by the Standard Sidereal clock, and the chronograph by means of a relay in the clock circuit which closes the chronograph circuit every two seconds. This circuit is lead through a contact breaker in the electric dial operated by a stud projecting from a disc on the seconds wheel arbor. It thus interrupts the chronograph circuit at every 60th. second.

A Dines Pressure Tube Anemometer is mounted 5 feet above the South dome.

The Magnetic Observatory, which was completed in the year 1874, is situated 180 feet to the north of the main building. It consists of a rectangular stone chamber, 40 feet long and 34 feet wide, with its floor 12 feet below the surface of the ground. The building is primarily divided into east and west rooms, the former being used for photographic operations. The west room, known as the Magnet Basement, contains the magnetographs, barograph, seismograph and, since 1906 September 20, the Standard sidereal and mean time clocks. In its construction great care was taken to exclude iron and other magnetic substances. Precautions are also taken to keep the daily range of temperature small; the walls are double, with an air space of 30 inches between them, interrupted on the eastern side by the north and south doors of a lobby, the east and west doors of which served as a means of communication between the Magnet Basement and the Photographic Room until November 1903, when, in order to check the temperature changes produced on entering and leaving the Magnet Basement, the east door of the lobby was permanently closed and a new door built in the outer wall, 10 feet to the north, communicating with the Magnet Basement through the north and west doors of the lobby. The air space between the walls was closed at its north end. There is a wooden ceiling in addition to the exterior roof; the latter is thickly thatched with straw, and slopes from an altitude of 12 feet to the north and south walls, which rise to a height of 2 feet above the ground.

At a distance of 105 feet to the east of the Magnetic Observatory is a stone-capped ventilator communicating with the Magnet Basement by means of a 12-inch pipe, laid underground

at a depth of 11 feet below the surface. In November 1907 the Magnet Basement was further ventilated by means of pipes leading from each of the lamps of the self-registering instruments to a ventilator in the ceiling through which the noxious gases are discharged.

The Magnetic Pavilion, for absolute determinations of declination, horizontal force and dip, stands 180 feet to the west of the Magnetic Observatory. It was built in the year 1875, and similar precautions were observed respecting the introduction of iron as in the case of the Magnet Observatory, the nails, locks, &c. being either of copper or brass. A verandah was added in the year 1880. An opening in its south side admits of observation of circumpolar stars up to an altitude of 25°, for determining the azimuth of the Magnetic Mark, a stone pillar 450 feet to southward. The pillars on which the instruments are placed were originally built of non-magnetic bricks but on account of the anomalous vibration of the magnets used for absolute determinations of declination, horizontal force and dip, caused by the rafters of the floor resting on the foundations of the instrument pillars, in November 1901 the arrangement of the rafters was suitably modified, and the pillars strengthened by a covering of concrete (in default of a more suitable material) 8 inches thick at the base and 2 inches at the top; they are at equal distances apart, and lie in a direction nearly at right angles to the Astronomical Meridian. This alteration to the pillars produced an increase in the absolute value of declination amounting to 2′·09. The Unifilar instrument is placed on the central pillar, and the Dip Circle on the western; the eastern pillar is not at present in use.

The Declinometer Hut, for additional observations of declination, was erected in October 1904 at a distance of 90 feet to the south (magnetic) of the Magnetic Pavilion. It is a wooden building, 12 feet long by 7 feet wide and 12 feet high, with shutters on the south side which admit of observations of circumpolar stars, up to an altitude of about 30°, for determining the circle reading of the astronomical meridian on the 12-inch theodolite with which, in conjunction with collimator magnet No. 24 B, the observations of declination are made.

In the year 1878 a stone building was erected 240 feet to the north-east of the main building for the reception of the photoheliograph and thermograph. The Photoheliograph Room is 16 feet in diameter, and is surmounted by a wooden dome running on iron wheels and rotated by means of three handwheels. Adjoining it on the southern side are two small rooms, one of which is used for photographic operations. The second, or east room, contains the registering parts of the Kew thermograph, and is known as the Thermograph Room. The stems of the photographic thermometers project outwards into the Thermograph Screen, and are held in position by a metal frame to which are also attached the standard dry bulb and wet bulb thermometers. The screen is 6 feet square by 6 to 7 feet high, the roof sloping towards the South away from the building; the sides are of double louvre boarding, and the planks of the floor are double to afford protection against radiation from the ground, and have an air space between each to ensure sufficient ventilation. The bulbs of the thermometers are 2 feet above the floor and 6 feet above the ground.

At a distance of 30 feet to the south-south-east of the Main Building stands the transit hut, erected in the year 1906 for the reception of the old transit instrument which was

formerly in use in the South dome. The hut is constructed of wood and is 7 feet long by 8 feet wide and 7 feet high. The instrument pillars rest on a foundation of concrete 6 feet square by 4 feet deep.

About 120 feet to the east of the Main Building is a circular enclosure 33 feet in diameter. In it are placed (1) a wooden stand 4 feet high, carrying two solar radiation thermometers; (2) a 6-inch brass stand carrying a terrestrial radiation thermometer with an adjacent mercurial thermometer for standardizing it; (3) an evaporometer, consisting of a shallow cylindrical brass vessel 8 inches in diameter, surrounded by a wire cage; (4) a Symons earth thermometer suspended in a pipe for registering the temperature of the soil at a depth of 62 inches below the surface; (5) two similar thermometers in a longer pipe for recording the temperature of the soil at depths of 62 and 118 inches respectively.

The Beckley self-registering rain gauge is placed 30 feet to the south-south-west of the above enclosure, and the Glaisher rain gauge 96 feet to the north of the north-west corner of the Main Building. The receiving surface of the Beckley gauge is 2 feet and that of the Glaisher gauge 1 foot above the ground.

## § II.—*Routine Work of the Observatory and Staff.*

Continuous photographic records showing the variations of magnetic declination, horizontal force and vertical force, barometric pressure, temperature of the air, and of evaporation; also automatic records of the direction and velocity of the wind, and of the amount of rain are obtained with instruments of the Kew pattern; and since November 1902 automatic records of the pressure of the wind have been obtained with a Dines Pressure Tube Anemometer. The duration of bright sunshine is registered by a Campbell-Stokes universal instrument. Photographic records of earth movements are obtained with a Milne Seismograph.

During the year 46 complete determinations of magnetic horizontal force were made with the Kew Unifilar Instrument on 32 days, and the time of vibration of the deflecting magnet observed on 48 occasions, an interpolated value of $m$ being used in deducing the value of $X$. Absolute determinations of declination are made twice daily with the Declinometer. The dip is observed eight times in each month, four $3\frac{1}{2}$-inch needles being used in rotation. Eye observations of the principal meteorological elements are made daily at $0^h$, $6^h$, $12^h$ and $18^h$, Mauritius Standard Time, the day commencing at midnight and counting from $0^h$ to $23^h$. Since October 1903 hourly observations of the amount of cloud have been made. Daily readings are taken of solar and terrestrial radiation thermometers and of earth thermometers whose bulbs are at depths of 62 inches and 118 inches respectively, below the surface of the ground. Actinometric observations with the Balfour Stewart Actinometer were discontinued in October.

The magnetical, meteorological, and seismographical records are measured at each hour of Mauritius Standard Time.

The direction of motion of the various types of cloud are observed, as often as possible, with a Marvin Nephoscope.

Photographs of the sun are taken daily, weather permitting, and the negatives forwarded to the Secretary of the Solar Physics Committee, London.

Observations for Time are made daily with few exceptions. The Electric Time-Ball in Port Louis is dropped automatically by the Standard Mean Time Clock daily at 13$^h$ Mauritius Standard Time, except on Sundays and Public Holidays.

Meteorological bulletins are prepared daily for publication in the local press, and abstracts of the principal results for each month are forwarded to various Observatories in different parts of the world. From May to September code telegrams giving a résumé of the weather during the week are despatched every Saturday to the Director-General of Indian Observatories, in connection with the monsoon predictions. For the same period monthly departures from average of the principal meteorological elements are cabled to the Director-General of the Egyptian Survey Department.

Code telegrams showing the Meteorological conditions at Rodrigues and Cocos at 9$^h$ and 15$^h$ are received daily, and from December to April similar telegrams are exchanged between Réunion and Mauritius.

The meteorological observations made at Seychelles, Rodrigues, Cocos, the Botanic Gardens (Pamplemousses), the Nursery Gardens (Curepipe), Kingston (Plaines Wilhems), Bon Air (Moka), the Military Camp (Vacoa), and the Manse (Beau Bassin), are all systematically reduced at the Observatory. Rainfall Observations were received from 75 stations in different parts of the Island, and the results tabulated.

Storm warnings are issued, when necessary, in accordance with Government regulations, and the tracks of cyclones laid down from information obtained from vessels trading with Mauritius and from the Islands in the Indian Ocean.

During the year 1909 the Staff consisted of Mr. A. Walter, F.R.A.S, Chief Assistant, Mr. A. N. Figon, Second Assistant, with usually four extra assistants.

## § III.—*Magnetic Instruments.*

With the exception of the Declinometer, all the magnetic instruments in use at the Observatory are of the Kew pattern, described by the late Professor Balfour Stewart in the 9th. edition of the *Encyclopædia Britannica*; it is only necessary, therefore to mention here what specially applies to the Mauritius instruments.

UNIFILAR INSTRUMENT.—The unifilar instrument for observations of magnetic horizontal force is Elliot No. 24. It is mounted on the central pier in the Magnetic Pavilion, and is adapted for magnetic survey work, being furnished with a tripod stand and a mirror for observation of the sun's azimuth.

The instrumental constants, as determined at the Kew Observatory, are as follows :—

Correction for Graduation of Deflection Bar.

Correction at 30 cms. = + 0·0027 cms. at 17° Centigrade.
" " 45 " = + 0·0052 " " "

In the Deflection apparatus... ... ... 1 scale division = 1′·01.
In the Vibration Magnet (24 C) ... ... " " = 1′·85.

For Deflecting Magnet (24 A).

The correction for decrease of magnetic moment of the magnet to reduce to 0° Centigrade $= c = 0{\cdot}000306t + 0{\cdot}00000148t^2$, $t$ representing the temperature of the magnet (in degrees Centigrade) at time of observation.

The increase in the magnetic moment of the magnet produced by the inducing action of a magnetic force equal to unity of the C.G.S. system of absolute measurement $= \mu = 5{\cdot}202$.

The moment of inertia of the magnet $= K$. At temperature 0° Centigrade log. $K = 2{\cdot}43255$, and at the temperature 40° Centigrade log. $K = 2{\cdot}43298$.

The inertia cylinder weighs 62·35 grammes ; its length is 9·513 centimetres, and its diameter is 0·993 centimetre.

Normally the instrument is left with the vibration magnet suspended, the time of vibration being observed at about $9^h$ and $13^h$ on two days of each month. On the day preceding a complete determination of horizontal force, however, the vibration magnet is dismounted and the torsion plummet suspended. A suitable shelf set up in the pavilion allows either the deflection plummet or the vibration plummet to be swung away from the instrument itself. By this means it is possible to allow both the threads to untwist for several hours previous to the observations for determining Horizontal Force.

When displacing and replacing the vibration box the plummet is lowered into a conical cavity drilled into the bottom of the box so as to prevent the thread from twisting during transit.

DECLINOMETER.—Absolute determinations of magnetic Declination are made with collimator magnet No. 24 B and a 12-inch theodolite by Troughton and Simms.

The Magnet is mounted on a solid teak stand at the South end of the Declinometer Hut and the theodolite on a concrete pillar 4 feet to the north.

The horizontal circle of the theodolite is graduated to 5′ and read by two micrometers, the heads of which are graduted to 1″. The vertical circle which is 12 inches in diameter, is graduated to 5′ and read by two verniers to 5″. The length of the telescope is 18 inches, and the aperture of its object glass 2 inches. It is carried by a horizontal axis 10½ inches long, the pivots of which are supported in Y's by two vertical pillars which branch from the central pillar of the theodolite and carry also the micrometers. On the wire plate are fixed three spider threads, two vertical and one horizontal, the field of view being illuminated, when necessary, through the pivot of the horizontal axis on the side carrying the clamp.

From observations made on 1904 October 7 and 11 it appeared that a correction of $-0''\cdot37$ for inequality of pivots should be applied to the level readings with clamp west. On 1903 July 28 the value of 1 division of the striding level was found to be $1''\cdot67$.

On 1904 October 12 the distance between the scale and the lens of the collimator magnet was increased by placing a washer on the screw of the lens cell in order to bring the scale to the principal focus of the lens. The angular value of the scale was then found to be $1'\cdot725$.

Experiments on 1904 October 13 showed that no correction was necessary on account of the glass in the small window through which the magnet scale is observed.

The reading of the magnet scale is observed twice daily, at the approximate times of maximum and minimum declination; that is to say, at times varying from $8\frac{1}{2}^h$ and $14\frac{1}{2}^h$ in February to $10\frac{1}{2}^h$ and $15\frac{1}{2}^h$ in August. In practice, the observed scale reading (converted into arc), added to the reading of the azimuthal circle, is subtracted from a constant $(a+b+c)$ in which $a$ is the circle reading corresponding to the Astronomical Meridian, $b$ the reading of the magnet scale (converted into arc) corresponding to its line of collimation, and $c$ the correction for torsion.

The value of $a$ is determined from observations of the Astronomical Mark, distant 34,256 feet to southward, the azimuth of which is $24'.1''\cdot7$ East of South, according to observations made in the year 1907. The results of the observations are given in the Introduction for that year.

The value of $b$ is determined once a week by observing the scale reading with the magnet alternately in its normal position (scale erect) and reversed (scale inverted). Usually the mean of 5 determinations is adopted. The value of $c$ is also determined once a week, a brass plummet of the same weight being substituted for the collimator magnet No. 24 B, and the amount of torsion of the suspension thread observed. The effect of such torsion on the position of the magnet is determined by observing the reading of the magnet scale with the torsion circle set successively at the readings $(x^\circ)$, $(x+180^\circ)$, $(x^\circ)$, $(x-180^\circ)$, $(x)$.

The suspension thread of the magnet broke on February 15, June 21, September 6 and November 17 and was replaced on the same day. The correction necessary for each degree of torsion of the thread was found to be as follows:

| Date 1909. | Correction for 1° of torsion. | Date 1909. | Correction for 1°. of torsion. |
|---|---|---|---|
| | ′ | | ′ |
| January 11 ... ... | 0·024 | September 6 ... ... | 0·028 |
| February 15 ... ... | 0·024 | October 20 ... ... | 0·036 |
| April 15 ... ... | 0·025 | December 15 ... ... | 0·030 |
| June 21 ... ... | 0·028 | | |

The observed values of, *a*, *b*, *c* during the year 1909 were as follows :—

| Date. | | a. | b. | c. | Date. | | a. | b. | c. |
|---|---|---|---|---|---|---|---|---|---|
| | d | ° ′ | ′ | ′ | | d | ° ′ | ′ | ′ |
| January | 4 ... | 297.23·27 | 48·59 | +0·45 | July | 19 ... | 297.23·25 | 48·55 | −0·06 |
| | 11 ... | 23·35 | 48·49 | +0·48 | | 26 ... | 23·16 | 48·05 | 0·00 |
| | 18 ... | 23·41 | 48·71 | +0·12 | August | 2 ... | 23·24 | 48·34 | +0·06 |
| | 25 ... | 23·32 | 48·66 | 0·00 | | 9 ... | 23·20 | 48·64 | 0·00 |
| February | 1 ... | 23·26 | 48·86 | +0·12 | | 16 ... | 23·22 | 48·31 | −0·28 |
| | 8 ... | 23·18 | 48·92 | +0·06 | | 23 ... | 23·16 | 48·38 | −0·42 |
| | 15 .. | 23·76 | 48·83 | +0·12 | | 30 ... | 23·19 | 48·66 | −0·28 |
| | 22 ... | 24·34 | 48·73 | −0·72 | September | 6 ... | 23·11 | 48·56 | 0·00 |
| March | 1 ... | 24·24 | 48·80 | −0·72 | | 13 ... | 23·02 | 48·57 | 0·00 |
| | 15 ... | 23·99 | 48·36 | −0·24 | | 22 ... | 22·99 | 48·40 | 0·00 |
| | 22 ... | 23·85 | 48·48 | −0·60 | | 27 ... | 22·81 | 48·58 | 0·00 |
| | 29 ... | 23·68 | 48·57 | −0·96 | October | 5 ... | 22·86 | 48·80 | 0·00 |
| April | 6 ... | 23·49 | 48·48 | −0·76 | | 11 ... | 22·86 | 48·54 | 0·00 |
| | 13 ... | 23·29 | 48·61 | −0·78 | | 18 ... | 22·67 | 48·54 | +0·17 |
| | 20 ... | 23·23 | 48·73 | −0·91 | | 25 ... | 22·57 | 48·45 | 0·00 |
| | 26 ... | 23·03 | 48·85 | −1·04 | November | 3 ... | 22·17 | 48·64 | 0·00 |
| May | 3 ... | 22·72 | 48·56 | −0·78 | | 8 ... | 21·99 | 48·44 | 0·00 |
| | 10 ... | 22·61 | 48·39 | −1·04 | | 15 ... | 21·77 | 48·62 | 0·00 |
| | 24 ... | 22·44 | 48·48 | −1·17 | | 24 ... | 19·43 | 48·86 | 0·00 |
| | 31 ... | 22·47 | 48·44 | −1·43 | | 29 ... | 19·35 | 48·51 | 0·00 |
| June | 8 ... | 22·67 | 48·38 | −1·33 | December | 6 ... | 19·59 | 48·68 | 0·00 |
| | 14 ... | 22·72 | 48·49 | −1·30 | | 13 ... | 19·78 | 48·62 | −0·31 |
| | 21 ... | 23·58 | 48·35 | −1·04 | | 20 ... | 19·98 | 48·73 | −0·16 |
| | 29 ... | 23·35 | 48·56 | −0·56 | | 22 ... | 23·54 | 48·73 | −0·16 |
| July | 6 ... | 23·27 | 48·28 | −0·14 | | 27 ... | 23·54 | 48·93 | −0·31 |
| | 12 ... | 23·25 | 48·29 | −0·14 | | | | | |

New Thread on February 15, June 21, September 6 and November 17. New Wire in telescope on December 22.

DIP INSTRUMENT.—Observations of magnetic dip are made with a Kew Dip Circle (Dover No. 89), mounted on a brick pier to the west of the unifilar instrument. The needles employed are $3\frac{1}{2}$ inches long, and are numbered 1, 2, 3 and 4, respectively. The needle to be used is magnetised by double touch, and after wiping it with chamois leather and cleaning the pivots with cork it is placed in position in the instrument, and by means of a lever gently lowered on to the agate bearings, which are previously dusted. The circle readings of the needle points are then read and the observations repeated in the positions indicated on pages (vi) and (vii). Each value is the mean of at least three independent observations made after gently raising and lowering the needle on to the agate bearings until the change produced by the operation is small.

Needle No. 4 did not work satisfactorily during the year. After repolishing the pivots in February the value of the dip, as determined with this needle, decreased by about 15′

MAGNETOGRAPHS.—The instruments for recording the variations of magnetic declination, horizontal force and vertical force are mounted in the Magnet Basement, in a manner similar to that adopted at the Kew Observatory, the vertical force magnetometer being to the north, the declinometer to the east and the horizontal force magnetometer to the west. Petroleum oil lamps are used for photographic registration.

Thermometers are placed within the glass shades of the horizontal force and vertical force magnetometers, and are read daily before and after trimming the lamps (usually between $12^h$

and 13$^h$), and also at 16$^h$. These observations serve to standardize the records of the mercurial thermometer which are photographed on the barograph sheet.

The diurnal inequality of temperature in the Magnet Basement is exceedingly small, though the daily trimming of the lamps usually causes a temporary increase of temperature which is less within the glass shades covering the magnetometers than in the barometer case containing the photographic thermometer. The mean daily increase of temperature in each month of the year 1908 as shown by the photographs and the thermometers within the glass shades covering the horizontal force and vertical force magnetometers respectively is given in the following table.

| Month 1909. | Photographs (Cent.). | H.F. Thermometer (Cent.). | V.F. Thermometer (Cent.). |
|---|---|---|---|
| | ° | ° | ° |
| January ... ... | ·12 | ·02 | ·01 |
| February ... ... | ·05 | ·02 | ·02 |
| March ... ... | ·07 | ·02 | ·03 |
| April ... ... | ·10 | ·02 | ·03 |
| May ... ... | ·14 | ·05 | ·05 |
| June ... ... | ·08 | ·03 | ·05 |
| July ... ... | ·12 | ·05 | ·06 |
| August ... ... | ·10 | ·05 | ·08 |
| September ... ... | ·05 | ·03 | ·05 |
| October ... ... | ·06 | ·03 | ·04 |
| November ... ... | ·09 | ·02 | ·05 |
| December ... ... | ·07 | ·03 | ·06 |
| Year ... ... | ·09 | ·03 | ·04 |

The above results are derived from readings of the thermometers at the times of entering and leaving the Basement for the purpose of trimming the lamps and from the measures of the photographic records of temperature at these times.

Several attempts were made in the years 1886, 1887 and 1901 to exhaust the air from the glass shades of the magnetometers, but without success ; since the year 1889, however, the instruments have been protected from damp to a certain extent by the use of chloride of calcium, which has to be renewed at least three times a year. This practice was discontinued in the case of the Vertical Force in the year 1899 on account of the abnormal behaviour of of the magnet for several days subsequent to each renewal of the absorbent.

To facilitate the measures of the photographs, on 1904 August 22 the base line mirror of the declinometer was removed, the registering slit widened, and a glass scale inserted in place of the plano-convex cylindrical lens ; a scaled image of the slit is thus photographed on the paper and the variations of declination readily measured.

The horizontal force magnet is adjusted at right angles to the magnetic meridian as follows :—the reading of the torsion circle corresponding to the magnetic meridian is determined by inserting in place of the magnet a brass bar of the same weight and shape, and turning the torsion head until the same scale reading is obtained with bar up or magnet up ; then, with bar up, the torsion head is turned through 90°, and the scale read. This will be the correct

reading for the magnet when at right angles to the meridian ; it only remains to insert the magnet and turn the torsion head until the correct scale reading is obtained. In order to obtain scale readings of the magnet—or bar—when in the plane of the meridian, it is necessary to turn the mirror through an angle of 90° from its normal position.

The indications of the vertical force magnet are not comparable in accuracy with those of the horizontal force or declination magnets. Not only does the sensibility vary with the temperature and scale reading, but occasionally, after adjustment or the determination of scale value, a gradual increase or decrease of ordinate occurs, indicating a gradual change of force which is not real. In some cases this only continues for a few days, after which apparently accurate records are obtained ; but, as a rule, it becomes necessary to readjust the magnet.

In the year 1885 the following measurements were made to determine the angular movement of the declination, horizontal force and vertical force magnets necessary to produce a change of 1 millimetre of ordinate, and of 1 division of the reading scales, the curvature of which makes each division equidistant from the mirror.

The length of 500 divisions on each scale is 10 inches, or 254 millimetres.

| Magnetometer. | Distance from Back of Mirror. | |
|---|---|---|
| | To Scale. | To Surface of Cylinder. |
| | m.m. | m.m. |
| Declination ... ... ... ... | 1,100 | 1,539 |
| Horizontal Force ... ... ... | 1,163 | 1,547 |
| Vertical Force ... ... ... ... | 1,646 | 1,524 |

From which the following results were obtained :—

| Magnetometer. | Angular Value of 1 Division of Scale. | Angular Value of 1 m.m. of Ordinate. | Factor to reduce Scale Readings to 1 m.m. of Ordinate. |
|---|---|---|---|
| | ″ | ′ ″ | |
| Declination ... ... ... | 47·6 | 1.7·0 | ·710 |
| Horizontal Force ... ... | 45·1 | 1.6·7 | ·676 |
| Vertical Force ... ... ... | 31·8 | 1.7·7 | ·470 |

The scale values of the horizontal force and vertical force magnetometers are determined by the method of deflections, described by the late Professor Balfour Stewart at a meeting of the British Association for the Advancement of Science, held at Aberdeen in the year 1859.

The results of the observations made in the year 1909 are as follows :—

| Date 1909. | | Value of 1 Millimetre of Ordinate (C.G.S. Unit). | |
|---|---|---|---|
| | | Horizontal Force. | Vertical Force. |
| | d | | |
| February | 27 ... ... ... | 0·000051 | ·000084 |
| March | 18 ... ... ... | 0·000051 | ·000060 |
| March | 31 ... ... ... | 0·000051 | ·000063 |
| April | 29 ... ... ... | 0·000051 | ·000069 |
| May | 29 ... ... ... | 0·000051 | ·000070 |
| July | 7 ... ... ... | 0·000051 | ·000075 |
| July | 29 ... ... ... | 0·000051 | ·000074 |
| August | 28 ... ... ... | 0·000051 | ·000074 |
| September | 27 ... ... ... | 0·000051 | ·000074 |
| October | 28 ... ... ... | 0·000051 | ·000077 |
| November | 29 ... ... ... | 0·000051 | ·000072 |
| December | 28 ... ... ... | 0·000051 | ·000076 |

The vertical force magnet was adjusted on March 17, May 5, July 3 and November 3. The agate plane was re-levelled on March 17.

For converting the scale values into absolute units, mean annual values of horizontal force and vertical force are used. The angular movement of the declination magnet produced by the deflector in the standard positions for horizontal force and vertical force deflections is determined usually once a year.

To preserve, as far as possible, a constant scale zero, the adjustable slit plate was screwed to the end of the photographic telescope, and the latter securely clamped to its slate base, so that the steadiness of the zero now depends upon the steadiness of the slit and telescope ; whereas formerly it depended upon the steadiness of the base-line mirror.

Similar alterations to the horizontal force and vertical force magnetometers were made in December 1905, and the photographic arrangements modified to allow the declination, horizontal force and vertical force registers to run continuously for ten days, the two former on the same sheet. The paper is wound round the horizontal force cylinder and carried over a horizontal brass roller supported in a convenient position to intercept the beam of light from the horizontal force mirror ; it then passes over a second roller similarly placed with respect to the declination cylinder to which the end of the paper is attached. It is thus unwound from the horizontal force cylinder and wound up on the declination cylinder by the driving clock. In the same manner the paper from a vertical spool is wound up on the vertical force cylinder as the latter rotates, after passing over a vertical roller placed so as to intercept the beam of light from the vertical force mirror. The spool is made to turn with sufficient friction to prevent the paper from becoming slack.

On 1907 March 7 the lenses of the photographic telescopes were removed, and concave silver-backed glass mirrors, $1\frac{1}{2}$ inch in diameter, and 20 inches focal length, were substituted for the old plane glass mirrors, in order to improve the definition of the register. The necessary re-arrangement of the declination and horizontal force telescopes and scales for eye observations was made on June 3-5. The vertical force scale was not remounted.

The distances from the backs of the mirrors to the scales and to the surface of the photographic paper respectively, and the resulting angular values of 1 division of the scales and millimeter of photographic ordinate are now as follows :—

| Magnetometer. | Distance from Back of Mirror. | | Angular Value of 1 Division of Scale. | Angular Value of 1 m.m. of Ordinate. | Factor to reduce Scale Readings to 1 m.m. of Ordinate. |
|---|---|---|---|---|---|
| | To Scale. | To Photographic Paper. | | | |
| | m.m. | m.m. | ′ ″ | ′ ″ | |
| Declination ... ... ... ... ... | 485 | 1,514 | 1.48·0 | 1.8·1 | 1·586 |
| Horizontal Force ... ... ... ... | 459 | 1,521 | 1.54·2 | 1.7·8 | 1·684 |
| Vertical Force... ... ... ... ... | ... | 1,499 | ... | 1.8·8 | ... |

From a discussion of the variations in the value of the horizontal force base lines during the years 1898, 1899, and 1900 given in the Introduction to the Magnetical and Meteorological Observations for the year 1900, the following expression, in terms of the Centimètre-Gramme-Second Unit, was deduced for correcting the indications of the horizontal force magnetometer to a constant temperature of 70° Fahrenheit :—

$$0{\cdot}0001255\ (t^\circ - 70^\circ) - 0{\cdot}00000142\ (t^\circ - 70^\circ)^2.$$

This result differs considerably from that obtained in the year 1897 by artificially heating the magnet and noting the changes of scale reading produced thereby, but has been used in the horizontal force reductions since the year 1901, as it clearly represents the effect on the magnet of the annual variation of temperature in the Magnet Basement.

The temperature coefficient of the vertical force magnet now in use was determined in the month of July 1898 by artificially heating the magnet, and in the first experiment, on July 1, it was found that an increase of 5°·2 of temperature (Fahrenheit) caused a decrease of ·00073 (C.G.S. Unit) ; but by re-adjustment of the sliding collar attached to the temperature bar, after several trials the error of compensation was considerably reduced. In the final experiment, on July 11, an increase of 7°·6 of temperature (Fahrenheit) caused a decrease of ·000285 (C.G.S. Unit).

On account of frequent dislocations and re-adjustments, it has not been possible to determine the temperature coefficient of this magnet from the observed values of the photographic base-line.

## § IV.—*Magnetic Reductions.*

The indications of the declination and horizontal force magnetometers are standardised by the absolute determinations, which furnish] apparent corrections to the photographic measures (corrected for temperature in the case of horizontal force). These are plotted on a curve from which daily corrections are interpolated and applied to the mean daily values of the element as derived from the magnetograms.

A correction of $-1^{\circ}.30'$ has been applied to all observations of declination with the New Declinometer in the Declinometer Hut, in order to make the results comparable with those of former years, when the observations were taken in the Magnetic Pavilion.

An account of the comparisons made to determine the difference of declination on the two sites is given in the Introduction for 1905.

The results of the absolute determinations of horizontal force are given on pp. (ii) and (v). The practice of deducing $X$ from the observed value of $T$, and an interpolated value of $m$ has been continued during the year 1909, but the object in view *viz* increased accuracy in standardising the magnetograms, has not been fully realized owing to unsteadiness in the observed values of $m$ and consequent uncertainty in the interpolated values.

The Kew notation has been used in the reductions and in the headings of the Table.

At the beginning of the year 1907 two new tables for facilitating the reductions were brought into use ; one giving the true values of $\log \frac{1}{2}r^3 + \log (1 + 2\mu/r^3 + c)$ for different values of $t$ when the apparent values of $r$ are 1·0 ft. and 1·3 ft. respectively, and the other the value of $\log \pi^2 K - \log (1 + H/F + \mu X/m - c)$ for different values of $t$ when $(1 + H/F + \mu X/m) = 1{\cdot}002 = \beta$. A correction for small variations in the value of $\beta$ is obtained from a subsidiary table.

A third table giving the values of $P$, $\log (1 - P/r_1^2)$ and $\log (1 - P/r_2^2)$ for different values of $(\log A_1 - \log A_2)$ when $\log A_1 = 3{\cdot}53$, is also used. The small variations in the observed value of $\log A_1$ give rise to no appreciable error. The adopted value of $P$ is the mean of the values obtained on three successive days of observation.

The separate observations of dip in the several positions of the needle and instrument, together with the mean monthly dip from each needle, are given on pages (vi) and (vii).

The mean daily values in each month of horizontal force and declination, with the diurnal ranges of horizontal force, vertical force and declination, and the mean daily temperature within the glass shade of the horizontal force magnetometer are presented in vertical columns in one table, pp. (viii) to (xiii), as in the Meteorological Section. The monthly mean diurnal inequalities have been similarly collected on pp. (xiv) and (xv), and the mean diurnal inequalities for the year on p (xvi). which contains also the Mean Monthly and Yearly values of the Magnetic Elements.

In computing the monthly mean diurnal inequality of the magnetic elements the following days were rejected on account of magnetic disturbance : in declination January 1, 3, 31 ; March 18, 28 ; May 14, 18, 19 ; September 25, 30 ; October 19 ; in horizontal force January 1, 3, 31 ; March 18, 28 ; May 14, 18, 19, 26 ; June 28, 29 ; July 23 : August 19, 29, 30, 31 ; September 25, 30 ; October 23, 24 ; November 20, 27, 30 ; December 2, 13, 14, 19, 21.

The ordinates of the photographic curves are measured at each hour of the day, commencing at midnight and counting from $0^h$ to $23^h$. Until September 30 the declination scale

was graduated to show minutes of arc, each division being equal to 0·88 millimeter. On October 1, however, a scale graduated to 2′ was substituted, as it was found that the intervals on the original scale were too small for accurate decimal estimation. For the same reason the vertical force scale, graduated to millimiters, was discarded, and a fresh scale, graduated to 2 millimeters, substituted on December 1. The mean hourly ordinates in each month are multiplied by the scale values given on page *xiii* to convert them into absolute units. In the case of horizontal force, where the scale value is practically constant, one division on the scale is equal to 2·1 millimiters, the magnetometer having been so adjusted in December 1905 that a change of 10 $\gamma$ of horizontal force will produce a change of 2·1 millimeters of ordinate in place of 3·0 millimeters; for though the magnetometer works well at the latter sensibility the former suffices for all purposes except the clear registration of minute tremors (for which a more extended time scale is also necessary), the former sensibility has been adopted as, with a fixed slit and two registers on the same sheet, it is desirable that the range of motion should be as small as is consistent with accurate interpretation of the records which, under present conditions, can be measured to 1 $\gamma$ of the horizontal force and vertical force, and 0′·2 of declination.

Correction for any variation of scale value in the horizontal force magnetometer is made, when necessary, by multiplying the diurnal inequalities and the daily ranges by the quantity, $\sigma'/\sigma$; $\sigma$ being the value of 1 millimeter of ordinate used in the construction of the glass scale (4·74 $\gamma$), and $\sigma'$ the observed value.

The mean daily values of the declination and horizontal force ordinates derived from the hourly measures of the photographic registers are computed by the formula—

$$x = \left(\frac{x_0 + x_{24}}{2} + x_1 + x_2 + x_3 \ldots\ldots + x_{23}\right) \div 24.$$

in which $x_0, x_1, x_2, x_3, \ldots\ldots x_{24}$ represent the value of the element at the hours 0, 1, 2, 3 . . . . . 24, Mauritius Standard Time. This formula gives results differing from the mean of the twenty-four hourly values from $0^h$ to $23^h$ by the quantity $(x_{24} - x_0)/48$, which is occasionally appreciable.

For further particulars as to the extent of these non-periodic variations reference may be made to the Introduction for 1901 and 1902.

For the reasons given on page *xii* daily values of vertical force are not published.

The Mauritius magnetograms show progressive changes of ordinate which are not of magnetic origin, and the mean hourly values of the magnetic elements in each month include the effect of these non-periodic variations, which in the case of vertical force, particularly after adjustment of the magnet or determination of scale value, is relatively large. It is necessary, therefore, to apply corrections as follows. Calling the mean monthly value of the ordinate at $0^h$ and $24^h$, $x_0$, and $x_{24}$ respectively, the correction $\gamma$ to be applied at any hour $h$ is :

$$\gamma = (h - 12)\frac{x_0 - x_{24}}{24}$$

Though originally introduced in the vertical force reductions, on account of the defective action of the magnet, the system has been extended to horizontal force and declination for

the sake of uniformity, and the results on pages (xiv) and (xv) give the monthly mean solar diurnal variation of declination, horizontal force and vertical force, freed from the effect of all other periodic and non-periodic variations.

A brief description of the principal magnetic disturbances recorded in the year 1909 is given at the foot of pages (viii) to (xiii). In horizontal force and vertical force the unit of measurement is ·00001 of the Centimetre-Gramme-Second Unit. When any of the three elements is not mentioned it is to be understood that the movement in that element, if any, was insignificant. The hourly variation of the disturbed element above or below the mean value for the month is given numerically on page (xvii) except when the disturbance is of only a few hours duration.

The nomenclature adopted in the "Greenwich Magnetical and Meteorological Observations" has been used; the term "wave", indicating a movement in one direction and return; "double wave," a movement in one direction and return with continuation in the opposite direction and return; "two consecutive waves", consecutive wave movement in the same direction; "fluctuations," a number of movements in both directions. The extent and direction of the movement are indicated in brackets, + denoting an increase and − a decrease of the magnetic element. In the case of "fluctuations" the sign ± denotes positive and negative movements of generally equal extent.

Curves which do not admit of brief description in this way are reproduced on Plates (I) to (II).

## § V.—*Meteorological Instruments.*

SELF-RECORDING INSTRUMENTS.—The barograph, thermograph, and anemograph are of the Kew pattern, and are fully described in the *Annual Report of the Meteorological Committee of the Royal Society for the year* 1867.

BAROGRAPH.—To obtain a more open scale, and to facilitate the measures of the barograms, the following alterations were made in May 1904: the slate support for the barograph was cut and the distance between the recording cylinder and the barometer was increased from 6 feet to 8½ feet the distance between the lens and the barometer being decreased accordingly. A disc with fine vertical slit was introduced near the recording cylinder and arranged to carry a glass scale graduated on the side nearest the photographic paper to 0·051 inch which, according to measures of the barograms and corresponding eye observations of the Standard barometer from 1904 May 15 to June 5, represent 0·01 inch of barometer. A well-defined image of the barometer slit is thus photographed on the sheet, and traversed by white horizontal lines at every 0·01 inch of barometer. The lines representing 0·05 inch are slightly thickened and those representing 0·1 inch somewhat heavily thickened.

STANDARD BAROMETER.—The standard barometer, Negretti and Zambra No. 2,170, was purchased in the year 1904 and brought into regular use on 1906 January 1.

The instrument is mounted on a wooden stand 6 feet from the southern and 9 feet from the eastern wall of the Principal Computing Room. It is of the Fortin pattern as modified by Newman,¶ the capacity correction being made by adjusting the scale until its lower extremity which terminates in an ivory point, just touches the surface of the mercury in the

cistern. The diameter of the tube is $0^{in}\cdot6$, and of the glass cistern $2^{ins}\cdot8$. The bulb of the attached thermometer is $0^{in}\cdot2$ in diameter and $0^{in}\cdot9$ long.

The height of the barometer cistern above mean sea level is 181 feet.

The barometer is read daily at $0^h$, $6^h$, $12^h$, and $18^h$ Mauritius Standard Time. The readings are reduced to temperature 32° Fahrenheit, but not to sea-level or to Standard gravity at latitude 45°.

Barometer Newman No. 128, which had been used as a Standard since 1891 September 26, was discarded on 1905 December 31, on account of the accumulation of scum on the mercury in the cistern. The history of this barometer, and of others used at different times as Standards, is given in the Introductions for 1900–5.

From a discussion of the photographic records of the barograph and inter-comparison of the various Standard barometers, the following corrections to the published results have been deduced :—

CORRECTIONS APPLICABLE to the PUBLISHED OBSERVATIONS of BAROMETRIC PRESSURE.

| Year. \ Month. | Jan. | Feb. | Mar. | April. | May. | June. | July. | August. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. | in. |
| 1875 | −·020 | −·019 | −·016 | −·018 | −·020 | −·020 | −·017 | −·018 | −·019 | −·018 | −·019 | −·021 |
| 1876 | −·019 | −·019 | −·019 | −·018 | −·018 | −·018 | −·018 | −·019 | −·021 | −·021 | −·022 | −·020 |
| 1877 | −·019 | −·019 | −·019 | −·021 | −·019 | −·019 | −·018 | −·019 | −·020 | −·017 | −·018 | −·019 |
| 1878 | −·020 | −·020 | −·019 | −·018 | −·018 | −·018 | −·018 | −·018 | −·018 | −·018 | −·019 | −·019 |
| 1879 | −·019 | −·019 | −·019 | −·019 | −·018 | −·019 | −·018 | −·017 | −·018 | −·019 | −·018 | −·019 |
| 1880 | −·019 | −·019 | −·019 | −·020 | −·017 | −·018 | −·017 | −·019 | −·018 | −·019 | −·018 | −·019 |
| 1881 | −·019 | −·019 | −·018 | −·020 | −·019 | −·018 | −·017 | −·016 | −·017 | −·016 | −·018 | −·020 |
| 1882 | −·020 | −·018 | −·019 | −·020 | −·019 | −·018 | −·017 | −·017 | −·018 | −·017 | −·018 | −·020 |
| 1883 | −·018 | −·018 | −·018 | −·020 | −·019 | −·017 | ·000 | +·001 | −·002 | −·001 | −·001 | −·001 |
| 1884 | ·000 | −·001 | −·001 | ·000 | ·000 | +·001 | +·001 | −·001 | −·001 | −·002 | −·001 | −·001 |
| 1885 | ·000 | −·001 | −·001 | −·001 | −·002 | +·001 | +·001 | −·001 | −·001 | +·001 | +·001 | ·000 |
| 1886 | −·001 | −·001 | −·001 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | −·001 | −·001 |
| 1887 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | +·001 | ·000 | −·001 |
| 1888 | ·000 | +·001 | ·000 | −·001 | ·000 | −·001 | ·000 | ·000 | ·000 | ·000 | ·000 | −·001 |
| 1889 | −·001 | −·001 | −·001 | ·000 | −·001 | −·001 | ·000 | −·001 | ·000 | ·000 | −·001 | ·000 |
| 1890 | −·001 | ·000 | −·001 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 |
| 1891 | ·000 | −·001 | ·000 | ·000 | ·000 | ·000 | +·001 | +·001 | ·000 | −·001 | −·001 | −·002 |
| 1892 | −·001 | ·000 | +·001 | ·000 | ·000 | +·001 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 |
| 1893 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 |
| 1894 | ·000 | ·000 | ·000 | +·001 | ·000 | ·000 | ·000 | ·000 | ·000 | +·001 | ·000 | ·000 |
| 1895 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 | ·000 |
| 1896 | −·001 | −·001 | −·001 | −·001 | −·001 | −·001 | −·001 | −·001 | −·001 | −·001 | −·001 | −·001 |
| 1897 | −·002 | −·002 | −·002 | −·002 | −·002 | −·002 | −·002 | −·002 | −·002 | −·002 | −·002 | −·002 |
| 1898 | −·003 | −·003 | −·003 | −·003 | −·003 | −·003 | −·003 | −·003 | −·003 | −·003 | −·003 | −·003 |
| 1899 | −·004 | −·004 | −·004 | −·004 | −·004 | −·004 | −·004 | −·004 | −·004 | −·004 | −·004 | −·004 |
| 1900 | −·005 | −·005 | −·005 | −·005 | −·005 | −·005 | −·005 | −·005 | −·005 | −·005 | −·005 | −·005 |
| 1901 | −·006 | −·006 | −·006 | −·006 | −·006 | −·006 | −·006 | −·006 | −·006 | −·006 | −·006 | −·006 |
| 1902–5 | −·007 | −·007 | −·007 | −·007 | −·007 | −·007 | −·007 | −·007 | −·007 | −·007 | −·007 | −·007 |

The numbers in the above table, up to the end of the year 1891, include a small additional correction for temperature owing to the introduction, on 1892 January 1, of the International Tables of temperature corrections, which differ slightly from those formerly in use; also a further correction, up to the end of the year 1895, on account of incomplete standardisation of the barograph records.

DRY AND WET BULB THERMOMETERS.—The standard dry and wet bulb thermometers Nos. 714 and 715 (constructed at the Kew Observatory) are mounted in the Thermograph Screen between the photographic thermometers; they are read daily at $0^h$, $6^h$, $12^h$, and $18^h$, and the observations used to standardise the photographic records of the Thermograph.

On 1900 June 16, self-registering maximum and minimum dry bulb thermometers were added in order to compare their readings on each day with the measures of the highest and lowest points on the thermograms.

PHOTOGRAPHIC THERMOMETERS.—One of the photographic thermometers (the dry bulb) set up in the month of September, 1907, was accidentally broken on August 9, and as no spare thermometer of this type was available the old photographic thermometers with small registering air bubbles were re-mounted on August 19.

RADIATION THERMOMETERS.—The solar radiation thermometers, Hicks No. 1,355,333 and M.O. No. 583, are mounted horizontally in the thermometer enclosure, on a wooden stand 4 feet above the grass. They are self-registering maximum thermometers, enclosed in glass jackets from which the air has been exhausted; their bulbs and part of the stems are covered with lamp black. They are read daily at $18^h$.

The values given in column 14 of the "Daily Results of Meteorological Observations" are the readings of thermometer Hicks No. 1,355,333, with a correction of $-3^\circ.0$ applied to make them comparable with those of M.O. No. 583, obtained through the Meteorological Office, London, in March 1907.

The terrestrial radiation thermometer, N. & Z. No. 41,178, is a self-registering spirit minimum thermometer, with spherical bulb. It is mounted horizontally in the thermometer enclosure on a metal stand 6 inches above the grass. The index is read daily at $0^h$ and $6^h$, and a correction obtained by comparing the readings of the spirit at these hours with the corrected readings of a mercurial thermometer, M.O. No. 932, which is mounted close to the radiation thermometer with its bulb at the same height above the grass.

EARTH THERMOMETERS.—The earth thermometers Casella Nos. 12,380, 109,087 and 109,088 are of the pattern described by the late Mr. G.J. Symons in the *Quarterly Journal of the Royal Meteorological Society* Vol. III. No. 12380 is suspended by a chain in a cast iron pipe 70 inches long, sunk to a depth of 64 inches below the ground in the thermometer enclosure. The bulb of the thermometer is at a depth of 62 inches below the surface. Nos. 109,087 and 109,088 are suspended by a chain in a similar pipe 128 inches long, sunk to a depth of 120 inches below the surface. The bulb of the former is 118 inches, and of the latter 62 inches below the surface. Each thermometer is read daily at $9^h$.

The mean results of the comparisons between the readings of 12380 and 109088 for each month of the year 1909 are as follows :—

| Month. | Thermometer 62 inches below the surface. | | (a—b) |
|---|---|---|---|
| | Attached to chain of 10 feet thermometer (a). | At end of chain in adjacent pipe (b). | |
| | ° | ° | ° |
| January ... ... ... ... ... | 79·37 | 79·78 | — 0·41 |
| February ... ... ... ... ... | 80·19 | 80·63 | — 0·44 |
| March ... ... ... ... ... ... | 80·57 | 81·00 | — 0·43 |
| April ... ... ... ... ... ... | 79·97 | 80·18 | — 0·21 |
| May ... ... ... ... ... ... | 79·06 | 78·95 | + 0·11 |
| June ... ... ... ... ... ... | 77·41 | 77·02 | + 0·39 |
| July ... ... ... ... ... ... | 75·86 | 75·37 | + 0·49 |
| August... ... ... ... ... ... | 74·96 | 74·45 | + 0·51 |
| September ... ... ... ... ... | 74·72 | 74·34 | + 0·38 |
| October ... ... ... ... ... | 75·20 | 74·97 | + 0·23 |
| November ... ... ... ... ... | 76·02 | 76·01 | + 0·01 |
| December ... ... ... ... ... | 77·52 | 77·92 | — 0·40 |

COMPARISON OF THERMOMETERS.—The ordinary mercurial thermometers for eye observations are compared twice a year, near mid-winter and mid-summer, with Standard thermometer No. 701, specially constructed at the Kew Observatory, and calibrated in the year 1891. The following precautions are taken to ensure accuracy :—

The thermometers to be compared are placed in a double cistern of water on a board which is fixed at an angle of about 30° with the horizon. They are arranged symmetrically on either side of the Standard with their bulbs at the same depth below the surface of the water.

The observations are commenced at sunrise, when the water is of nearly the same temperature as the air. The water is stirred before each set of comparisons, but readings are not commenced until it has become nearly still. The thermometers are read in rotation commencing from the right and left alternately.

The observations are made with a small microscope fixed at the end of a brass tube 8 inches long, and held at right angles to the thermometer stems by a jointed arm.

The results of the comparisons in 1907 January, 1907 June, 1908 January, and 1908

July are given below, together with the correction adopted in the reductions for the year 1909. The mean of three consecutive determinations is adopted as the correction for the following six months :—

| Exposure. | Thermometer. | Temperature during Comparisons. (Fah.) | Correction. | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 1908 January. | 1908 July. | 1909 January. | 1909 June. | Adopted in 1909. January to June. | Adopted in 1909. July to December. |
| Thermograph Screen. | Dry bulb, No. 714. | 63<br>65<br>70<br>80<br>83 | 0<br>— 0·14<br>— 0·11 | 0<br>— 0·15 | 0<br>— 0·15 | 0<br>— 0·11 | 0<br>— 0·13 | 0<br>— 0·14 |
| | Wet bulb, No. 715. | 63<br>65<br>70<br>80<br>83 | — 0·17<br>— 0·13 | — 0·13 | — 0·18 | — 0·14 | — 0·15 | — 0·15 |
| 62 inches below surface of ground. | Earth, No. 12,380. | 63<br>72<br>83 | — 0·60 | — 0·57 | — 0·78 | — 0·76 | — 0·6 | — 0·7 |
| | Earth, No. 109,088. | 62<br>72<br>83 | — 0·19 | — 0·13 | — 0·24 | — 0·38 | — 0·21 | — 0·26 |
| 118 inches below surface of ground. | Earth, No. 109,087. | 62<br>72<br>83 | — 0·21 | — 0·22 | — 0·38 | — 0·43 | — 0·27 | — 0·34 |
| Magnetic Pavilion. | For deflections, No. 134. | 62<br>66<br>72<br>83 | — 0·18 | — 0·20 | — 0·09 | — 0·24 | — 0·10 | — 0·15 |
| | For vibrations, No. 120,566. | 62<br>66<br>72<br>83 | — 0·09 | — 0·20 | — 0·11 | — 0·23 | — 0·09 | — 0·15 |
| On Barometer (Negretti and Zambra No. 2,170). | Dry bulb, No. 109,841. | 62<br>66<br>72<br>83 | — 0·26 | — 0·23 | — 0·30 | — 0·56 | — 0·3 | — 0·4 |
| On grass. | Dry bulb, No. 932. | 62<br>72<br>83 | + 0·05 | + 0·18 | + 0·25 | + 0·31 | + 0·2 | + 0·3 |

Where the correction is applied to the mean of a number of readings the second decimal place is retained, in order to preserve accuracy to 0·1 of a degree.

The results depend upon the steadiness of the Standard thermometer, which is checked, as opportunity offers, by comparison with thermometers examined at the Kew Observatory immediately on their arrival in Mauritius.

As a further precaution a new Standard, No. 774, was obtained from the Kew

Observatory on 1903 May 7. The results of comparisons with Standard No. 701 are as follows :—

| Date. | Excess of 701 over 774. (Fah.) | Number of Comparisons. | Temperature. (Fah.) |
|---|---|---|---|
| | ° | | ° |
| 1903 May 7 ... ... | 0·00 | 17 | 66 |
| 1903 June 25 ... ... | —0·03 | 12 | 65 |
| 1904 January 19 ... ... | —0·02 | 56 | 71 |
| 1904 July 1 ... ... | —0·03 | 24 | 63 |
| 1905 January 12 ... ... | —0·05 | 8 | 73 |
| 1905 July 20 ... ... | —0·07 | 12 | 60 |
| 1906 January 6 ... ... | —0·02 | 12 | 70 |
| 1906 July 7 ... ... | —0·04 | 10 | 66 |
| 1907 January 11 ... ... | —0·05 | 12 | 76 |
| 1907 June 21 ... ... | —0·05 | 20 | 65 |
| 1908 January 17 ... ... | —0·06 | 20 | 67 |
| 1908 July 13 ... ... | —0·05 | 8 | 62 |
| 1909 January 6 ... ... | —0·04 | 16 | 71 |
| 1909 July 9 ... ... | —0·06 | 10 | 66 |

In January, Kew Standard No. 701 was found to be reading 2·°00 higher than Standard No. 774 and on examination it was found that a small portion of mercury had lodged in the capillary enlargement at the top of the stem.

The instrument was in consequence discarded as a standard and the old Kew Standard No. 107 brought into use in conjunction with the New Standard No. 774.

The errors of No. 107 as determined at the Observatory from comparisions with No. 701 are given below, and it will be seen that, although it has accumulated a large positive error, it appears to have remained steady, since 1891, at + 1·°07 Fah and this value has been adopted in the comparisons with the other thermometers. Standard No. 774 is still, apparently, changing.

ERROR OF KEW STANDARD NO. 107.

| Year. | Error. (Fah.) | Year. | Error. (Fah.) |
|---|---|---|---|
| 1891 | + 0·93 | 1902 | + 1·07 |
| 1892 | + 0·95 | 1903 | + 1·07 |
| 1893 | + 0·97 | 1904 | + 1·09 |
| 1894 | + 0·98 | 1905 | + 1·05 |
| 1895 | + 1·00 | 1906 | + 1·07 |

In 1885 the error of No 107 was + 0·°86 F. as determined from comparisons with 4 thermometers received from England in that year.

RAIN GAUGES.—The rain gauge in use since the establishment of the Observatory is of the Glaisher pattern. Its receiving surface is 8 inches in diameter and 10 inches above the ground ; it is read daily at midnight.

Since 1887 May 1 the amount of rain has also been recorded automatically by a Beckley pluviograph, described by the late Professor Balfour Stewart at a meeting of the British Association for the Advancement of Science, held at Exeter in the year 1869. Its receiving surface is 11·28 inches in diameter and 23 inches above the ground.

EVAPOROMETER.—The daily amount of evaporation is obtained from the readings of an evaporometer by Negretti and Zambra. The instrument consists of a cylindrical brass vessel, 8 inches in diameter and 4 inches deep, surrounded by a wire cage. The amount of water in the vessel is measured daily at midnight, and the difference between two successive readings, after due allowance for any rain which may have fallen and for water added or removed, gives the amount of water evaporated in the interval.

OZONOMETER.—The ozonometer is of the pattern recommended by Sir James Clarke, and is suspended at the south-east corner of the verandah of the Main Building. It consists of a double cylindrical wire gauze cage 10 inches high, the outer cage being 6½ inches in diameter and the inner cage 3½ inches. The gauze is sufficiently fine to protect the test papers from the action of light while permitting a free circulation of air through the cage. The test paper, which is placed on a hook projecting from the lid into the inner cylinder, is changed daily at midnight, and the amount of ozone determined by comparing the discoloration of the paper with a scale of graduated tints numbered from 0 to 10.

SUNSHINE RECORDER.—The instrument used for recording the duration of sunshine is an improved form of the Campbell-Stokes sunshine recorder described in the *Quarterly Journal of the Royal Meteorological Society*, Vol. VI. The half ring for supporting the paper is fixed at right angles to a semi-circular strip of gun-metal, graduated to degrees on its eastern side and slotted on its western side. Binding screws project from the north and south poles of the graduated circle, and working into small brass cups keep the glass sphere at its proper distance from the paper. The whole is supported on a slab of slate by a clamp, which holds the graduated circle in position, and admits of adjustment for any desired latitude. The obstruction caused by the half ring is insignificant, though somewhat greater in summer than in winter, as the ends are not cut parallel to the horizon. Under favourable atmospheric conditions the instrument will record from about 8 minutes after sunrise until 8 minutes before sunset in June, while in December no record is obtained within about 20 minutes of sunrise and sunset.

On account of an obstruction caused shortly before sunset by the North-West Dome when the sun's declination is greater than about 5° North, on 1900 August 17 the instrument was moved from its central position on the roof of the Main Building and planted 11 feet to westward, on a pedestal 9 feet high.

ACTINOMETER.—The observations with the Balfour Stewart actinometer were discontinued in 1909 as the results did not appear to justify the time and labour spent on them.

NEPHOSCOPE.—On 1904 February 12 a Marvin Nephoscope was set up on a massive brass tripod 200 feet to the north-north-west of the Main Building. The instrument is fully described in Prof. Bigelow's *Report on the International Cloud Observations (Report of the Chief of the Weather Bureau, U.S.A.*, 1898–9, Vol. II.)

Observations of the direction of motion of the clouds are made as follows :—The images of the cloud and knob of the sighting staff are made to coincide at the centre of the mirror; then, still keeping the image of the knob at the centre of the mirror, the latter is rotated on

on its axis until the cloud appears to move along a graduated line etched diametrically on the surface of the mirror. The azimuth of this line, and hence the direction of motion of the cloud is then read off on the graduated circle.

## § VI.—*Meteorological Reductions.*

The continuous records of barometric pressure, temperature of the air and of evaporation, direction and velocity of the wind, the duration of sunshine, and the amount of rainfall, are measured at each hour of the day from $0^h$ to $23^h$, Mauritius Standard Time, and daily and hourly means formed for each month.

The eye observations of the standard barometer and of the standard dry-bulb and wet-bulb thermometers, after correction for index error, furnish mean monthly corrections to the photographic measures, at $0^h$, $6^h$, $12^h$, and $18^h$; the corrections for intermediate hours being found by interpolation. A mean daily correction is adopted for periods during which it is sensibly constant.

The values given in the table of "Daily Results of Meteorological Observations" refer to the civil day. The mean daily values of barometric pressure, temperature of the air and of evaporation, north and east components and recorded velocity of the wind, given respectively in columns 1, 6, 8,23, 24, and 29 are derived from the hourly measures of the several registers, taking into account the difference between the ordinate at $0^h$ and $24^h$ on each day, as explained on page *xv* in the case of magnetic declination and horizontal force. For further particulars as to the extent of these non-periodic variations reference may be made to the Introductions for 1900, 1901, and 1902.

The daily maximum and minimum temperature given in columns 3 and 4 are the highest and lowest points on each day's thermogram, duly corrected for instrumental error.

The mean daily temperature of the dew point, and degree of humidity are deduced directly from the mean daily temperature of the air and of evaporation, by the aid of tables based upon Glaisher's *Hygrometrical Tables*, which give the temperature of the dew point to $0^\circ{\cdot}1$ and the relative humidity to 0·1 per cent, for every degree of air temperature and every $0^\circ{\cdot}1$ difference between air and evaporation temperatures.

The mean daily amount of cloud, column 20, is the mean of observations made at $6^h$, $9^h$, $13^h$ and $15^h$ of the total amount of cloud, on a scale of 0–10, 0 representing a clear sky and 10 an overcast sky. These hours have been used to render the results comparable with those of former years, though observations of the amount of cloud have been made hourly since October 1903. The mean monthly amount of cloud as derived from the 24 hourly values was less than that derived from the values at $6^h$, $9^h$, $13^h$ and $15^h$ by the following amounts in the years 1904 to 1909.

| | Jan. | Feb. | Mar. | Apr. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Year. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904 | + 0·8 | + 0·6 | + 0·6 | + 0·6 | + 0·8 | + 0·9 | + 0·9 | + 0·7 | + 0·5 | + 0·5 | + 0·6 | + 0·5 | + 0·67 |
| 1905 | + 0·2 | + 0·8 | + 0·6 | + 0·7 | + 1·0 | + 0·9 | + 0·4 | + 0·7 | + 1·3 | + 0·7 | + 0·5 | + 0·9 | + 0·72 |
| 1906 | + 0·9 | + 0·7 | + 0·5 | + 1·3 | + 1·1 | + 0·8 | + 0·7 | + 0·4 | − 0·2 | − 0·1 | − 0·7 | + 0·2 | + 0·47 |
| 1907 | − 0·1 | + 0·1 | 0·0 | + 0·2 | + 0·1 | + 0·4 | + 1·2 | + 0·8 | + 0·7 | + 0·7 | + 1·1 | + 0·5 | + 0·47 |
| 1908 | + 0·4 | + 0·6 | + 0·5 | + 0·8 | + 0·7 | + 0·9 | + 0·9 | + 0·4 | + 0·8 | + 0·8 | + 0·8 | + 1·5 | + 0·76 |
| 1909 | + 1·0 | + 0·7 | + 0·5 | + 0·2 | + 0·7 | + 0·1 | + 0·5 | + 0·6 | + 0·6 | + 0·7 | + 1·1 | + 0·8 | + 0·62 |

The mean daily direction and velocity of the wind, given in columns 25 and 26, are computed from the mean daily north and east components as derived from the hourly measures of the anemograms. The azimuth rotation adopted for the direction of the wind is from South (0°) through East (90°), North (180°) and West (270°); the values indicate the direction *from* which the wind blows. In column 29 is given the mean velocity of the wind, as recorded by the anemometer, irrespective of direction. For the sake of continuity no corrections have been applied to the recorded velocities on account of the use of Dr. Robinson's factor (3) in the construction of the scale.

The abbreviations under the heading "Weather" have the following significance :—

| | | | | | |
|---|---|---|---|---|---|
| *b* | denotes | blue sky, cloudless. | *o* | denotes | overcast. |
| *c* | „ | partially cloudy. | *p* | „ | passing showers. |
| *d* | „ | drizzle. | *q* | „ | squally. |
| *f* | „ | fine. | *r* | „ | continuous rain. |
| *g* | „ | gloomy. | *t* | „ | distant thunder. |
| *l* | „ | lightning. | *t-sm* | „ | thunderstorm. |

The times of the weather changes are indicated approximately by colons.

The daily departures from average of Barometric Pressure, Mean Temperature of the Air and of the Dew Point, Mean Resultant Wind Velocity, and the Amount of Rain, are shown graphically at the foot of each table of "Daily Results," in order to exhibit more clearly the relation between these elements.

The monthly values of the principal meteorological elements are collected on page (xliv) and their normals given on page (xlv). The normal monthly rainfall as derived from the daily readings of the Glaisher gauge, made until 1903 June 30 at 9 a.m., has been referred to the calendar month by assigning to the last day of each month the proper proportion of the rain measured at 9 a.m. on the first day of the following month, as shown by the records of the Beckley Pluviograph.

In counting days of thunderstorm, those days are included on which thunder was recorded, even though no lightning was seen : those on which lightning was seen, but no thunder heard, have not been counted.

The table of "Highest and Lowest Barometer Readings," page (xlvi), has been compiled from the photographic records of the barograph, corrected for diurnal variation, and reduced to 32° Fahrenheit. It exhibits the gradual increase and decrease of pressure produced by the passage of "highs" and "lows," without the minor fluctuations.

In the monthly and annual mean diurnal inequalities of the meteorological elements pages (xlvii) to (liii), the value at the 24th hour has been included. The hourly correction $(h - 12)\ (x_0 - x_{24})/_{24}$ has not been applied, as in the meteorological reductions the quantity $(x_0 - x_{24})$ signifies a real change in the element, only a portion of which (that due to the annual inequality) can be satisfactorily eliminated; the remaining portion is not in operation throughout the day, but affects the values at $0^h$ and $24^h$ only. In order to make the diurnal inequalities of the amount and duration of rainfall and the duration of bright sunshine

comparable with those of the other elements mean values have been given, whereas in former volumes previous to 1905, monthly totals were published. It should be mentioned also that in these elements the numbers represent the inequality during the hour *beginning* $0^h$, $1^h$, $2^h$, &c.

In the table " Direction of Motion of the Various Types of Cloud, " pages (liv) to (lvi), the azimuth rotation adopted is from South (0°) through East (90°), North (180°), and West (270°) ; the values indicate the direction from which the clouds come.

The table "Abstract of the Changes in the Direction of the Wind," pages (lvii) and (lviii), has been compiled from the records of the Beckley anemograph, and exhibits all changes in the direction of the wind amounting to, or exceeding, 2 points ; it is to be understood, however, that gradual changes of direction from day to day are not included, as such changes are shown by the directions given in the table of " Daily Results. "

The Rainfall tables, pages (lix) to (lxiii), have been compiled from information kindly furnished by the proprietors of sugar estates, and other amateur observers. When for any station the returns are incomplete, the mean annual rainfall is given, but not included in the formation of the average annual rainfall for all stations, which is comparable with the value given for the year 1909.

The information concerning cyclones, in the South Indian Ocean (appendix 1) has been derived from log books placed at the disposal of the Director by the Commanders of vessels touching at Mauritius, and also from observations received from various Islands in the Indian Ocean in addition to those made at Mauritius. For these observations special acknowledgments are due to the Rev. E. Colin S.J., (Madagascar) Mr. Bertho (Réunion), Mr. Besly (Rodrigues) and Mr. de Caila (Diego Garcia).

The results of Seismological Observations made during the year 1909 (Appendix 2) are explained in a separate Introduction.

T. F. CLAXTON

ROYAL ALFRED OBSERVATORY, MAURITIUS.

# RESULTS

OF

# MAGNETICAL OBSERVATIONS.

1909.

## DETERMINATIONS OF HORIZONTAL MAGNETIC FORCE in the YEAR 1909.

| Mauritius Standard Time, 1909. | | Deflecting Magnet. | | | | Observed Deflection. | | Temperature (Centigrade). | In Metric Measure. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Observed Time of one Vibration. $T$. | Effect of 90° Torsion. | $\left(1+\frac{H}{M}\mu+\frac{H}{M}\mu_1\right)$ | Temperature (Centigrade). | Distance. 1.0 feet. | Distance. 1.3 feet. | | $\log A_1 - \log A_2$ | Apparent value of $P$. | Adopted value of $P$. |
| | d h | Secs. | ′ | | ° | ° ′ | ° | ° | | | |
| January | 6. 9 | 3·8103 | 2·20 | 1·00194 | 25·7 | 13.38·88 | 6.10·81 | 26·3 | ·00097 | − 5·10 | − 5·69 |
| | 6. 16 | 3·8123 | | | 28·2 | 13.38·26 | 6.10·99 | 27·8 | ·00150 | − 7·91 | |
| | 9. 8 | 3·8080 | 2·00 | 1·00190 | 25·1 | ... | ... | ... | ... | | |
| | 21. 8 | 3·8095 | 2·00 | 1·00190 | 25·9 | ... | ... | ... | ... | | |
| | 21. 12 | 3·8107 | | | 28·5 | ... | ... | ... | ... | | |
| | 25. 9 | 3·8061 | 2·00 | 1·00190 | 26·7 | 13.36·66 | 6. 9·86 | 27·1 | ·00103 | − 5·42 | − 6·06 |
| February | 7. 9 | 3·8148 | 1·90 | 1·00188 | 29·4 | 13.36·92 | 6.10·06 | 29·9 | ·00110 | − 5·79 | − 5·74 |
| | 7. 12 | 3·8155 | | | 31·3 | 13.36·26 | 6.10·00 | 30·9 | ·00138 | − 7·28 | |
| | 11. 9 | 3·8105 | 1·90 | 1·00188 | 25·3 | ... | ... | ... | ... | | |
| | 11. 12 | 3·8115 | | | 27·7 | ... | ... | ... | ... | | |
| | 23. 10 | 3·8116 | 1·90 | 1·00188 | 26·0 | ... | ... | ... | ... | | |
| | 23. 13 | 3·8120 | | | 27·9 | ... | ... | ... | ... | | |
| March | 2. 11 | 3·8071 | 1·90 | 1·00188 | 28·4 | 13.36·45 | 6. 9·80 | 28·7 | ·00104 | − 7·38 | − 5·63 |
| | 3. 10 | 3·8122 | | | 27·1 | 13.37·91 | 6.10·50 | 26·1 | ·00108 | − 5·69 | − 5·63 |
| | 10. 10 | 3·8140 | 1·90 | 1·00188 | 25·9 | ... | ... | ... | ... | | |
| | 10. 12 | 3·8110 | | | 26·6 | ... | ... | ... | ... | | |
| | 18. 9 | 3·8117 | 1·90 | 1·00188 | 26·3 | 13.37·38 | 6. 9·85 | 26·9 | ·00063 | − 3·31 | − 5·16 |
| | 18. 14 | 3·8108 | | | 28·8 | 13.36·02 | 6. 9·54 | 28·2 | ·00097 | − 5·11 | |
| | 23. 10 | 3·8131 | 1·90 | 1·00188 | 26·0 | ... | ... | ... | ... | | |
| | 23. 13 | 3·8141 | | | 27·4 | ... | ... | ... | ... | | |
| April | 2. 9 | 3·8112 | 1·95 | 1·00189 | 23·7 | 13.38·99 | 6.11·05 | 24·4 | ·00118 | − 6·22 | − 4·68 |
| | 6. 13 | 3·8108 | 2·05 | 1·00191 | 26·9 | 13.36·68 | 6. 9·81 | 26·5 | ·00095 | − 5·00 | − 4·68 |
| | 7. 8 | 3·8123 | 2·00 | 1·00190 | 25·0 | ... | ... | ... | ... | | |
| | 7. 13 | 3·8112 | | | 27·3 | ... | ... | ... | ... | | |
| | 19. 9 | 3·8093 | 2·05 | 1·00191 | 23·1 | 13.38·21 | 6.10·27 | 24·5 | ·00066 | − 3·47 | − 5·10 |
| | 20. 11 | 3·8119 | 2·10 | 1·00192 | 26·9 | 13.37·62 | 6.10·23 | 26·3 | ·00095 | − 5·00 | − 5·10 |
| | 27. 9 | 3·8128 | 2·20 | 1·00194 | 25·6 | ... | ... | ... | ... | | |
| | 27. 12 | 3·8158 | | | 28·7 | ... | ... | ... | ... | | |
| May | 3. 11 | 3·8126 | 2·20 | 1·00194 | 27·1 | 13.37·33 | 6.10·28 | 27·3 | ·00115 | − 6·06 | − 4·84 |
| | 4. 12 | 3·8122 | 2·30 | 1·00196 | 26·9 | 13.37·58 | 6.10·16 | 26·5 | ·00089 | − 4·68 | − 4·84 |
| | 8. 9 | 3·8071 | 2·30 | 1·00196 | 22·1 | ... | ... | ... | ... | | |
| | 8. 12 | 3·8095 | | | 24·6 | ... | ... | ... | ... | | |
| | 17. 8 | 3·8130 | 2·40 | 1·00198 | 20·9 | ... | ... | ... | ... | | |
| | 17. 14 | 3·8162 | | | 25·5 | 13.38·87 | 6.10·79 | 25·3 | ·00093 | − 4·89 | − 5·79 |
| | 22. 8 | 3·8070 | 2·55 | 1·00200 | 21·9 | ... | ... | ... | ... | | |
| | 22. 12 | 3·8119 | | | 25·3 | ... | ... | ... | ... | | |
| June | 2. 14 | 3·8124 | 2·70 | 1·00203 | 26·1 | 13.37·62 | 6.10·58 | 25·7 | ·00135 | − 7·12 | − 6·43 |
| | 7. 9 | 3·8075 | 2·75 | 1·00204 | 21·0 | ... | ... | ... | ... | | |
| | 7. 12 | 3·8073 | | | 22·0 | ... | ... | ... | ... | | |
| | 16. 9 | 3·8078 | 2·80 | 1·00205 | 18·7 | 13.39·50 | 6.11·62 | 20·9 | ·00159 | − 8·39 | − 6·64 |
| | 16. 14 | 3·8130 | | | 24·2 | 13.38·12 | 6.10·67 | 24·0 | ·00119 | − 6·27 | − 5·90 |
| | 24. 8 | 3·8056 | 2·75 | 1·00204 | 19·4 | ... | ... | ... | ... | | |
| | 24. 12 | 3·8124 | | | 24·0 | ... | ... | ... | ... | | |
| July | 5. 9 | 3·8080 | 2·85 | 1·00206 | 20·5 | 13.39·73 | 6.11·21 | 21·6 | ·00098 | − 5·16 | − 5·90 |
| | 5. 14 | 3·8100 | | | 24·4 | 13.38·54 | 6.10·75 | 23·9 | ·00107 | − 5·63 | |
| | 8. 8 | 3·8064 | 2·85 | 1·00206 | 20·5 | ... | ... | ... | ... | | |
| | 8. 12 | 3·8115 | | | 24·3 | ... | ... | ... | ... | | |
| | 16. 9 | 3·8120 | 2·90 | 1·00207 | 20·7 | 13.39·56 | 6.11·54 | 21·5 | ·00154 | − 8·13 | − 4·68 |
| | 16. 14 | 3·8119 | | | 21·9 | 13.40·25 | 6.10·87 | 21·9 | ·00031 | − 1·63 | |
| | 24. 9 | 3·8083 | 2·90 | 1·00207 | 19·0 | ... | ... | ... | ... | | |
| | 24. 13 | 3·8111 | | | 23·4 | ... | ... | ... | ... | | |

The initials W. F. and P. are those of Messrs. Walter, Figon and Perrin respectively.

## DETERMINATIONS OF HORIZONTAL MAGNETIC FORCE in the YEAR 1909—*continued.*

| Mauritius Standard Time, 1909. | | In Metric Measure (C.G.S. Unit). | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | log $T^2$. | log $\frac{\pi^2 K}{\left(1+\frac{H}{F}+\mu\frac{X}{m}-e\right)}$ | log $m X$. | log $\frac{m}{X}$ | log $m$. Observed. | log $m$. Inferred. | log $X$. | $X$. | Magnetograph Reading. | Correction to Magnetograph. | Observer. |
| January | 6. 9 | 1·16192 | 3·43014 | 2·26822 | 3·53081 | 2·89951 | ... | 9·36870 | ·23372 | ·23721 | —·00349 | W. |
| | 6. 16 | 1·16238 | 3·43060 | 2·26822 | 3·53099 | 2·89960 | ... | 9·36862 | ·23368 | ·23733 | —·00365 | W. |
| | 9. 8 | 1·16140 | 3·43004 | 2·26864 | ... | ... | 2·89943 | 9·36949 | ·23400 | ·23748 | —·00348 | P. |
| | 21. 8 | 1·16194 | 3·43009 | 2·26815 | ... | ... | 2·89943 | 9·36872 | ·23373 | ·23756 | —·00383 | P. |
| | 21. 12 | 1·16200 | 3·43065 | 2·26865 | ... | | 2·89943 | 9·36922 | ·23400 | ·23753 | —·00353 | P. |
| | 25. 9 | 1·16096 | 3·43032 | 2·26936 | 3·52997 | 2·89966 | ... | 9·36970 | ·23426 | ·23785 | —·00359 | W. |
| February | 7. 9 | 1·16294 | 3·43082 | 2·26788 | 3·53057 | 2·89922 | ... | 9·36865 | ·23370 | ·23730 | —·00360 | W. |
| | 7. 12 | 1·16310 | 3·43117 | 2·26807 | 3·53055 | 2·89931 | ... | 9·36876 | ·23375 | ·23743 | —·00368 | W. |
| | 11. 9 | 1·16196 | 3·43008 | 2·26812 | ... | ... | 2·89943 | 9·36869 | ·23372 | ·23715 | —·00343 | P. |
| | 11. 12 | 1·16220 | 3·43051 | 2·26831 | ... | ... | 2·89943 | 9·36888 | ·23382 | ·23739 | —·00357 | P. |
| | 23. 10 | 1·16222 | 3·43019 | 2·26797 | ... | ... | 2·89944 | 9·36853 | ·23363 | ·23766 | —·00403 | P. |
| | 23. 13 | 1·16230 | 3·43054 | 2·26824 | ... | ... | 2·89944 | 9·36880 | ·23378 | ·23775 | —·00397 | P. |
| March | 2. 11 | 1·16119 | 3·43064 | 2·26945 | 3·53002 | 2·89973 | ... | 9·36971 | ·23427 | ·23809 | —·00382 | W. |
| | 3. 10 | 1·16235 | 3·43040 | 2·26805 | 3·53030 | 2·89917 | ... | 9·36887 | ·23381 | ·23776 | —·00395 | W. |
| | 10. 10 | 1·16276 | 3·43017 | 2·26741 | ... | ... | 2·89896 | 9·36845 | ·23359 | ·23729 | —.00370 | P. |
| | 10. 12 | 1·16208 | 3·43030 | 2·26822 | ... | ... | 2·89896 | 9·36926 | ·23402 | ·23746 | —·00344 | P. |
| | 18. 9 | 1·16224 | 3·43025 | 2·26801 | 3·52978 | 2·89890 | ... | 9·36912 | ·23395 | ·23739 | —·00344 | W. |
| | 18. 14 | 1·16203 | 3·43071 | 2·26868 | 3·52949 | 2·89908 | ... | 9·36959 | ·23420 | ·23770 | —·00350 | W. |
| | 23. 10 | 1·16256 | 2·43019 | 2·26763 | ... | ... | 2·89894 | 9·36869 | ·23372 | ·23718 | —·00346 | P. |
| | 23. 13 | 1·16276 | 3·43044 | 2·26768 | ... | ... | 2·89894 | 9·36874 | ·23374 | ·23731 | —·00357 | P. |
| April | 2. 9 | 1·16212 | 3·42980 | 2·26768 | 3·53027 | 2·89897 | ... | 9·36870 | ·23372 | ·23718 | —·00346 | W. |
| | 6. 13 | 1·16203 | 3·43035 | 2·26832 | 3·52933 | 2·89882 | ... | 9·36950 | ·23415 | ·23749 | —·00334 | W. |
| | 7. 8 | 1·16238 | 3·43002 | 2·26764 | ... | ... | 2·89892 | 9·36872 | ·23373 | ·23745 | —·00372 | P. |
| | 7. 13 | 1·16212 | 3·43043 | 2·26831 | ... | ... | 2·89892 | 9·36939 | ·23409 | ·23750 | —·00341 | P. |
| | 19. 9 | 1·16169 | 3·42969 | 2·26800 | 3·52977 | 2·89888 | ... | 9·36911 | ·23394 | ... | ... | W. |
| | 20. 11 | 1·16228 | 3·43035 | 2·26807 | 3·52992 | 2·89900 | ... | 9·36908 | ·23393 | ... | ... | W. |
| | 27. 9 | 1·16248 | 3·43011 | 2·26763 | ... | ... | 2 89893 | 9·36870 | ·23372 | ... | ... | P. |
| | 27. 12 | 1·16318 | 3·43067 | 2·26749 | ... | ... | 2·89893 | 9·36856 | ·23365 | ... | ... | P. |
| May | 3. 11 | 1·16244 | 3·43038 | 2·26794 | 3·52998 | 2·89896 | ... | 9·36898 | ·23387 | ·23742 | —·00355 | W. |
| | 4. 12 | 1·16235 | 3·43033 | 2·26798 | 3·52982 | 2·89890 | ... | 9·36908 | ·23393 | ·23748 | —·00355 | W. |
| | 8. 9 | 1·16118 | 3·42949 | 2·26831 | ... | ... | 2·89894 | 9·36937 | ·23385 | ·23762 | —·00377 | P. |
| | 8. 12 | 1·16174 | 3·42992 | 2·26818 | ... | ... | 2·89894 | 9·36924 | ·23385 | ·23767 | —·00382 | P. |
| | 17. 8 | 1·16253 | 3·42927 | 2·26674 | ... | ... | 2·89895 | 9·36779 | ·23323 | ·23686 | —·00363 | F. |
| | 17. 14 | 1·16326 | 3·43008 | 2·26682 | 3·53065 | 2·89873 | ... | 9·36808 | ·23339 | ·23684 | —·00345 | F. |
| | 22. 8 | 1·16116 | 3·42943 | 2·26827 | ... | ... | 2·89897 | 9·36930 | ·23405 | ·23731 | —·00326 | P. |
| | 22. 12 | 1·16228 | 3·43003 | 2·26775 | ... | ... | 2·89897 | 9·36878 | ·23377 | ·23723 | —·00346 | P. |
| June | 2. 14 | 1·16240 | 3·43016 | 2·26776 | 3·53050 | 2·89913 | ... | 9·36863 | ·23369 | ·23738 | —·00369 | F. |
| | 7. 9 | 1·16128 | 3·42926 | 2·26798 | ... | ... | 2·89900 | 9·36898 | ·23387 | ·23751 | —·00364 | P. |
| | 7. 12 | 1·16124 | 3·42943 | 2·26819 | ... | ... | 2·89900 | 9·36919 | ·23399 | ·23756 | —·00357 | P. |
| | 16. 9 | 1·16135 | 3·42886 | 2·26751 | 3·53080 | 2·89915 | ... | 9·36835 | ·23353 | ·23737 | —·00384 | F. |
| | 16. 14 | 1·16254 | 3·42980 | 2·26726 | 3·53018 | 2·89872 | ... | 9·36854 | ·23364 | ·23728 | —·00364 | F. |
| | 24. 8 | 1·16084 | 3·42899 | 2·26815 | ... | ... | 2·89903 | 9·36912 | ·23395 | ·23758 | —·00363 | P. |
| | 24. 12 | 1·16240 | 3·42978 | 2·26738 | ... | ... | 2·89903 | 9·36835 | ·23353 | ·23753 | —·00400 | P. |
| July | 5. 9 | 1·16140 | 3·42916 | 2·26776 | 3·53048 | 2·89912 | ... | 9·36864 | ·23369 | ·23736 | —·00367 | F. |
| | 5. 14 | 1·16185 | 3·42984 | 2·26799 | 3·53032 | 2·89915 | ... | 9·36883 | ·23379 | ·23737 | —·00358 | F. |
| | 8. 8 | 1·16102 | 3·42916 | 2·26814 | ... | ... | 2·89900 | 9·36914 | ·23396 | ·23761 | —·00365 | P. |
| | 8. 12 | 1·16220 | 3·42982 | 2·26762 | ... | ... | 2·89900 | 9·36862 | ·23368 | ·23722 | —·00354 | P. |
| | 16. 9 | 1·16230 | 3·42920 | 2·26690 | 3·53015 | 2·89852 | ... | 9·36837 | ·23354 | ·23732 | —·00378 | F. |
| | 16. 14 | 1·16228 | 3·42940 | 2·26712 | 3·53000 | 2·89856 | ... | 9·36856 | ·23365 | ·23728 | —·00363 | F. |
| | 24. 9 | 1·16146 | 3·42891 | 2·26745 | ... | ... | 2·89895 | 9·36850 | ·23361 | ·23733 | —·00372 | P. |
| | 24. 13 | 1·16210 | 3·42967 | 2·26757 | ... | ... | 2·89895 | 9·36862 | ·23368 | ·23714 | —·00346 | P. |

The initials W. F. and P. are those of Messrs. Walter, Figon and Perrin respectively.

## DETERMINATIONS OF HORIZONTAL MAGNETIC FORCE in the YEAR 1909.

| Mauritius Standard Time, 1909. | | Deflecting Magnet. Observed Time of one Vibration. $T'$. | Effect of 90° Torsion. | $\left(1+\frac{\mu_1}{H}+\frac{\mu_2}{H}\right)$ | Temperature (Centigrade). | Observed Deflection. Distance. 1.0 feet. | 1.3 feet. | Temperature (Centigrade). | In Metric Measure. $\log \Delta_1 - \log \Delta_2$ | Apparent value of $P$. | Adopted value of $P$. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | d h | Secs. | ′ | | | | | | | | |
| August | 3. 9 | 3·8078 | 2·95 | 1·00208 | 19·3 | 13.41·02 | 6.11·21 | 20·4 | ·00032 | − 1·68 | − 4·52 |
| | 3. 13 | 3·8100 | | | 23·2 | 13.39.37 | 6.11·12 | 22·5 | ·00108 | − 5·69 | |
| | 7. 9 | 3·8083 | 2·95 | 1·00208 | 20·7 | ... | ... | ... | ... | | |
| | 7. 12 | 3·8095 | | | 22·8 | ... | ... | ... | ... | | |
| | 17. 8 | 3·8040 | 2·95 | 1·00208 | 17·3 | 13.40·50 | 6.11·70 | 18·9 | ·00115 | − 6·06 | − 4·47 |
| | 17. 14 | 3·8080 | | | 22·4 | 13.38·95 | 6.10·68 | 21·7 | ·00077 | − 4·05 | |
| | 24. 9 | 3·8070 | 2·95 | 1·00208 | 20·6 | ... | ... | ... | ... | | |
| | 24. 13 | 3·8091 | | | 22·6 | ... | ... | ... | ... | | |
| September | 2. 8 | 3·8095 | 2·95 | 1·00208 | 20·6 | 13.40·06 | 6.10.54 | 21·4 | ·00004 | − 0·21 | − 4·89 |
| | 7. 9 | 3·8083 | 2·95 | 1·00208 | 22·2 | ... | ... | ... | ... | | |
| | 7. 12 | 3·8106 | | | 23·4 | ... | ... | ... | ... | | |
| | 16. 9 | 3·8080 | 2·90 | 1·00207 | 19·8 | 13.38·82 | 6.10·85 | 20·9 | ·00102 | − 5·37 | − 5·05 |
| | 25. 9 | 3·8092 | 2·85 | 1·00206 | 22·0 | ... | ... | ... | ... | | |
| | 25. 12 | 3·8098 | | | 23·8 | ... | ... | ... | ... | | |
| October | 4. 9 | 3·8153 | 2·90 | 1·00207 | 21·0 | 13.40·99 | 6.11·70 | 22·6 | ·00090 | − 4·74 | − 5·00 |
| | 5. 10 | 3·8140 | 2·90 | 1·00207 | 22·6 | 13.41·02 | 6.11·69 | 22·4 | ·00089 | − 4·68 | − 5·00 |
| | 9. 9 | 3·8045 | 2·80 | 1·00205 | 21·4 | ... | ... | ... | ... | | |
| | 9. 13 | 3·8156 | | | 23·7 | ... | ... | ... | ... | | |
| | 19. 9 | 3·8184 | 2·85 | 1·00206 | 22·4 | 13.42·40 | 6.12·51 | 23·0 | ·00111 | − 5·85 | − 4·84 |
| | 19. 13 | 3·8230 | | | 25·6 | 13.41·58 | 6.11·83 | 24·9 | ·00074 | − 2·89 | − 4·84 |
| | 23. 8 | 3·8162 | 2·80 | 1·00205 | 23·4 | ... | ... | ... | ... | | |
| | 23. 12 | 3·8173 | | | 25·5 | ... | ... | ... | ... | | |
| November | 4. 11 | 3·8154 | 2·80 | 1·00205 | 26·3 | 13.38·01 | 6.10·40 | 26·6 | ·00094 | − 4·95 | − 4·84 |
| | 5. 12 | 3·8164 | 2·80 | 1·00205 | 27·0 | 13.37·86 | 6.10·35 | 26·4 | ·00096 | − 5·05 | − 4·84 |
| | 11. 8 | 3·8124 | 2·80 | 1·00205 | 23·3 | ... | ... | ... | ... | | |
| | 11. 12 | 3·8168 | | | 27·4 | ... | ... | ... | ... | | |
| | 19. 10 | 3·8148 | 2·70 | 1·00203 | 26·2 | 13.37·43 | 6. 9·92 | 26·8 | ·00068 | − 3·57 | − 4·47 |
| | 20. 11 | 3·8212 | 2·70 | 1·00203 | 27·3 | 13.37·45 | 6.10·30 | 26·6 | ·00111 | − 5·85 | − 4·47 |
| | 24. 10 | 3·8219 | 2·70 | 1·00203 | 26·8 | ... | ... | ... | ... | | |
| | 24. 14 | 3·8224 | | | 28·9 | ... | ... | ... | ... | | |
| December | 6. 9 | 3·8206 | 2·60 | 1·00201 | 26·2 | 13.35·13 | 6. 9·12 | 26·5 | ·00093 | − 4·89 | − 4·74 |
| | 6. 13 | 3·8231 | | | 29·6 | 13.34·26 | 6. 8·34 | 28·7 | ·00048 | − 2·52 | |
| | 10. 9 | 3·8195 | 2·60 | 1·00201 | 26·8 | ... | ... | ... | ... | | |
| | 10. 12 | 3·8213 | | | 27·9 | ... | ... | ... | ... | | |
| | 27. 12 | 3·8220 | 2·55 | 1·00200 | 29·2 | 13.33·62 | 6. 8·88 | 29·4 | ·00085 | − 4·47 | − 4·58 |
| | 28. 12 | 3·8230 | 2·55 | 1·00200 | 29·2 | 13.34·18 | 6. 9·03 | 28·8 | ·00134 | − 7·06 | − 4·58 |
| | 29. 9 | 3·8224 | 2·55 | 1·00200 | 27·7 | ... | ... | ... | ... | | |
| | 29. 13 | 3·8244 | | | | | | | | | |

The initials W. F. and P. are those of Messrs. Walter, Figon and Perrin respectively.

DETERMINATIONS OF HORIZONTAL MAGNETIC FORCE in the YEAR 1909—*continued.*

| Mauritius Standard Time, 1909. | | In Metric Measure (C.G.S. Unit). | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | log $T^2$. | $\log \pi^2 K - \log\left(1 + \frac{H}{F} + \mu \frac{X}{m} - c\right)$ | log $m X$. | log $\frac{m}{X}$ | log $m$. Observed. | log $m$. Inferred. | log $X$. | $X$. | Magnetograph Reading. | Correction to Magnetograph. | Observer. |
| August | 3. 9 | 1·16135 | 3·42895 | 2·26760 | 3·53008 | 2·89884 | ... | 9·36876 | ·23375 | ·23725 | —·00350 | F. |
| | 3. 13 | 1·16185 | 3·42962 | 2·26777 | 3·52999 | 2·89888 | ... | 9·36889 | ·23382 | ·23731 | —·00349 | F. |
| | 7. 9 | 1·16146 | 3·42919 | 2·26773 | ... | ... | 2·89890 | 9·36883 | ·23379 | ·23738 | —·00359 | P. |
| | 7. 12 | 1·16174 | 3·42955 | 2·26781 | ... | ... | 2·89890 | 9·36891 | ·23384 | ·23753 | —·00369 | P. |
| | 17. 8 | 1·16048 | 3·42863 | 2·26815 | 3·52995 | 2·89905 | ... | 9·36910 | ·23394 | ·23735 | —·00341 | F. |
| | 17. 14 | 1·16140 | 3·42948 | 2·26808 | 3·52946 | 2·89877 | ... | 9·36931 | ·23405 | ·23732 | —·00327 | F. |
| | 24. 9 | 1·16116 | 3·42917 | 2·26801 | ... | ... | 2·89883 | 9·36918 | ·23398 | ·23744 | —·00346 | P. |
| | 24. 13 | 1·16164 | 3·42952 | 2·26788 | ... | ... | 2·89883 | 9·36905 | ·23391 | ·23752 | —·00361 | P. |
| September | 2. 8 | 1·16174 | 3·42917 | 2·26743 | 3·53024 | 2·89883 | ... | 9·36860 | ·23367 | ·23717 | —·00350 | F. |
| | 7. 9 | 1·16144 | 3·42945 | 2·26801 | ... | ... | 2·89878 | 9·36923 | ·23401 | ·23733 | —·00332 | P. |
| | 7. 12 | 1·16198 | 3·42966 | 2·26768 | ... | ... | 2·89878 | 9·36890 | ·23377 | ·23728 | —·00351 | P. |
| | 16. 9 | 1·16140 | 3·42905 | 2·26765 | 3·52957 | 2·89861 | | 9·36904 | ·23391 | ·23729 | —·00338 | F. |
| | 25. 9 | 1·16166 | 3·42942 | 2·26776 | ... | ... | 2·89868 | 9·36908 | ·23393 | ·23726 | —·00333 | P. |
| | 25. ½2 | 1·16180 | 3·42974 | 2·26794 | ... | ... | 2·89868 | 9·36926 | ·23402 | ·23742 | —·00340 | P. |
| October | 4. 9 | 1·16306 | 3·42924 | 2·26618 | 3·53094 | 2·89856 | ... | 9·36762 | ·23314 | ·23666 | —·00352 | W. |
| | 5. 10 | 1·16276 | 3·42952 | 2·26676 | 3·53090 | 2·89883 | ... | 9·36793 | ·23331 | ·23673 | —·00342 | W. |
| | 9. 13 | 1·16312 | 3·42972 | 2·26660 | ... | ... | 2·89863 | 9·36797 | ·23333 | ·23657 | —·00324 | P. |
| | 19. 9 | 1·16376 | 3·42949 | 2·26573 | 3·53180 | 2·89876 | ... | 9·36696 | ·23279 | ·23631 | —·00352 | W. |
| | 19. 13 | 1·16480 | 3·43005 | 2·26525 | 3·53153 | 2·89839 | ... | 9·36686 | ·23273 | ·23649 | —·00376 | W. |
| | 23. 8 | 1·16326 | 3·42968 | 2·26642 | ... | ... | 2·89856 | 9·36786 | ·23327 | ·23676 | —·00349 | P. |
| | 23. 12 | 1·16350 | 3·43005 | 2·26655 | ... | ... | 2·89856 | 9·36799 | ·23334 | ·23661 | —·00327 | P. |
| November | 4. 11 | 1·16308 | 3·43018 | 2·26710 | 3·53009 | 2·89859 | ... | 9·36850 | ·23361 | ·23717 | —·00356 | W. |
| | 5. 12 | 1·16330 | 3·43031 | 2·26701 | 3·52999 | 2·89850 | ... | 9·36851 | ·23362 | ·23718 | —·00356 | W. |
| | 11. 8 | 1·16240 | 3·42968 | 2·26728 | ... | ... | 2·89832 | 9·36896 | ·23386 | ·23710 | —·00324 | P. |
| | 11. 12 | 1·16340 | 3·43040 | 2·26700 | ... | ... | 2·89832 | 9·36868 | ·23371 | ·23722 | —·00351 | P. |
| | 19. 10 | 1·16294 | 3·43017 | 2·26723 | 3·52956 | 2·89839 | ... | 9·36883 | ·23379 | ·23728 | —·00349 | W. |
| | 20. 11 | 1·16440 | 3·43039 | 2·26599 | 3·52975 | 2·89787 | ... | 9·36812 | ·23341 | ·23724 | —·00383 | W. |
| | 24. 10 | 1·16456 | 3·43029 | 2·26573 | ... | ... | 2·89790 | 9·36783 | ·23325 | ·23697 | —·00372 | P. |
| | 24. 14 | 1·16468 | 3·43068 | 2·26600 | ... | ... | 2·89790 | 9·36810 | ·23340 | ·23725 | —·00385 | P. |
| December | 6. 9 | 1·16426 | 3·43019 | 2·26593 | 3·52853 | 2·89723 | ... | 9·36870 | ·23381 | ·23723 | —·00342 | W. |
| | 6. 13 | 1·16483 | 3·43079 | 2·26596 | 3·52827 | 2·89762 | ... | 9·36885 | ·23380 | ·23732 | —·00352 | W. |
| | 10. 9 | 1·16402 | 3·43029 | 2·26627 | ... | ... | 2·89753 | 9·36874 | ·23374 | ·23735 | —·00361 | P. |
| | 10. 12 | 1·16446 | 3·43050 | 2·26604 | ... | ... | 2·89753 | 9·36851 | ·23362 | ·23739 | —·00377 | P. |
| | 27. 12 | 1·16458 | 3·43074 | 2·26616 | 3·52849 | 2·89733 | ... | 9·36883 | ·23379 | ·23743 | —·00364 | W. |
| | 28. 12 | 1·16480 | 3·43074 | 2·26594 | 3·52860 | 2·89727 | ... | 9·36867 | ·23371 | ·23734 | —·00363 | W. |
| | 29. 9 | 1·16468 | 3·43046 | 2·26578 | ... | ... | 2·89730 | 9·36848 | ·23360 | ·23715 | —·00355 | P. |
| | 29. 13 | 1·16512 | 3·43088 | 2·26576 | ... | ... | 2·89730 | 9·36846 | ·23359 | ·23727 | —·00368 | P. |

The initials W. F. and P. are those of Messrs. Walter, Figon and Perrin respectively.

## RESULTS OF OBSERVATIONS of MAGNETIC DIP made in the MAGNETIC PAVILION in the YEAR 1909.

### NEEDLE No. 1.

| Mauritius Standard Time, 1909. | | Poles Direct (A dipping). Face of Needle to Face of Instrument. Face of Instrument. East. | Poles Direct (A dipping). Face of Needle to Face of Instrument. Face of Instrument. West. | Poles Direct (A dipping). Face of Needle to Back of Instrument. Face of Instrument. West. | Poles Direct (A dipping). Face of Needle to Back of Instrument. Face of Instrument. East. | Poles Reversed (B dipping). Face of Needle to Face of Instrument. Face of Instrument. East. | Poles Reversed (B dipping). Face of Needle to Face of Instrument. Face of Instrument. West. | Poles Reversed (B dipping). Face of Needle to Back of Instrument. Face of Instrument. West. | Poles Reversed (B dipping). Face of Needle to Back of Instrument. Face of Instrument. East. | Means. | Monthly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | d h | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ |
| January | 4. 9 | 55.26·7 | 50.54·7 | 53.26·7 | 53.14·7 | 53.56·2 | 54.38·7 | 52.18·7 | 56.41·2 | 53.49·7 | 53.46·3 |
| | 28. 9 | 55.19·2 | 50.50·2 | 53.19·2 | 52.59·7 | 54. 1·7 | 54.26·7 | 52.17·7 | 56.28·2 | 53.42·8 | |
| February | 2. 9 | 55.21·7 | 50.49·7 | 53.21·7 | 52.53·0 | 54. 0·7 | 54.32·7 | 52.17·7 | 56.23·0 | 53.42·5 | 53.42·4 |
| | 26. 9 | 55.17·2 | 50.54·8 | 53.12·7 | 53. 2·5 | 53.51·2 | 54.40·0 | 52.10·5 | 56.29·2 | 53.42·3 | |
| March | 2. 9 | 55.17·2 | 50.54·7 | 53.23·2 | 52.57·2 | 53.53·7 | 54.42·2 | 52.17·5 | 56.26·7 | 53.44·1 | 53.45·0 |
| | 29. 9 | 55.28·7 | 50.57·2 | 53.27·7 | 52.54·7 | 53.54·2 | 54.41·7 | 52.15·2 | 56.28·7 | 53.46·0 | |
| April | 3. 10 | 55.23·7 | 50.54·0 | 53.22·7 | 52.57·5 | 53.46·7 | 54.41·7 | 52.22·2 | 56.15.2 | 53.43·0 | 53.42·0 |
| | 28. 9 | 55.21·7 | 50.40·2 | 53.19·7 | 52.46·0 | 53.57·7 | 54.38·2 | 52.18·7 | 56.25·7 | 53.41·0 | |
| May | 5. 10 | 55.19·7 | 50.52·7 | 53.16·7 | 52.55·7 | 53.53·0 | 54.34·7 | 52.16·7 | 56.24·7 | 53.41·8 | 53.40·1 |
| | 28. 9 | 55.28·2 | 50.30·2 | 53.21·5 | 52.37·7 | 53.48·0 | 54.43·2 | 52.11·7 | 56.26·7 | 53.38·4 | |
| June | 1. 9 | 55.19·2 | 50.38·0 | 53.16·7 | 52.45·0 | 53.48·7 | 54.35·2 | 52.14·2 | 56.13·2 | 53.36·3 | 53.36·8 |
| | 28. 9 | 55. 6·7 | 50.43·2 | 53.15·7 | 52.50·2 | 53.43·2 | 54.38·7 | 52. 8·5 | 56.31·7 | 53.37·3 | |
| July | 2. 9 | 55.18·7 | 50.36·7 | 53.25·0 | 52.38·7 | 53.41·2 | 54.45·0 | 52.12·5 | 56.22·2 | 53.37·5 | 53.38·1 |
| | 28. 9 | 55.11·2 | 50.47·7 | 53.11·7 | 52.52·2 | 53.49·5 | 54.37·0 | 52.17·7 | 56.22·2 | 53.38·7 | |
| August | 2. 10 | 55.20·7 | 50.36·7 | 53.14·2 | 52.48·2 | 53.44·7 | 54.33·5 | 52.13·7 | 56.14·2 | 53.35·8 | 53.37·2 |
| | 28. 9 | 55. 5·2 | 50.49·2 | 53.19·5 | 52.48·2 | 53.45·2 | 54.31·7 | 52.16·7 | 56.32·7 | 53.38·6 | |
| September | 3. 9 | 55. 6·2 | 50.50·7 | 53.17·7 | 52.50·7 | 53.39·0 | 54.34·5 | 52. 5·7 | 56.30·0 | 53.36·8 | 53.39·3 |
| | 28. 9 | 55.19·0 | 50.43·7 | 53.27·5 | 52.59·5 | 53.42·7 | 54.40·7 | 52.10·0 | 56.31·2 | 53.41·8 | |
| October | 1. 9 | 55.25·7 | 51. 8·5 | 53.25·0 | 53. 3·7 | 53.38·2 | 54.48·0 | 52.12·5 | 56.16·7 | 53.44·8 | 53.41·6 |
| | 29. 8 | 55.14·7 | 50.44·7 | 53.22·7 | 52.48·7 | 53.41·7 | 54.41·7 | 52.17·7 | 55.15·7 | 53.38·4 | |
| November | 3. 9 | 55.10·5 | 50.32·2 | 53.23·5 | 52.50·2 | 53.44·7 | 54.48·7 | 52.12·7 | 56.30·2 | 53.39·1 | 53.35·5 |
| | 27. 9 | 55.12·2 | 50.36·2 | 53.14·7 | 52.32·2 | 53.35·7 | 54.40·5 | 52. 6·0 | 56.17·7 | 53.31·9 | |
| December | 1. 9 | 55.15·7 | 50.38·7 | 53.16·5 | 52.50·2 | 53.49·2 | 54.37·2 | 52.18·7 | 56.20·7 | 53.38·4 | 53.39·0 |
| | 29. 9 | 55.19·2 | 50.43·2 | 53.25·7 | 52.51·5 | 53.39·0 | 54.40·5 | 52.10·2 | 56.28·2 | 53.39·7 | |

### NEEDLE No. 2.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | d h | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ |
| January | 7. 9 | 54.30·2 | 51. 2·8 | 52.26·2 | 52.49·3 | 55.13·2 | 54. 7·3 | 53.11·5 | 56. 3·2 | 53.40·4 | 53.39·7 |
| | 26. 9 | 54.21·7 | 51. 6·7 | 52.26·2 | 52.52·7 | 55.14·2 | 53.56·7 | 53.18·7 | 55.54·2 | 53.38·9 | |
| February | 6. 9 | 54.21·7 | 51. 5·2 | 52.31·0 | 52.46·2 | 55. 7·5 | 54. 8·7 | 53.10·7 | 55.54·2 | 53.38·1 | 53.38·1 |
| | 24. 9 | 54.23·2 | 50.57·8 | 52.22·7 | 52.49·8 | 55.10·2 | 54.11·8 | 53.15·7 | 55.53·2 | 53.38·1 | |
| March | 6. 9 | 54.30·2 | 51. 0·2 | 52.38·7 | 52.44·2 | 55.12·2 | 53.56·7 | 53.14·7 | 55.52·7 | 53.38·7 | 53.37·8 |
| | 25. 9 | 54.27·7 | 50.58·7 | 52.33·7 | 52.39·0 | 55.12·7 | 54. 1·5 | 53. 4·5 | 55.56·2 | 53.36·8 | |
| April | 7. 10 | 54.25·2 | 50.54·7 | 52.36·7 | 52.40·2 | 55. 8·5 | 54. 5·2 | 53.13·0 | 55.55·0 | 53.37·3 | 53.36·6 |
| | 24. 9 | 54.23·7 | 50.57·2 | 52.29·7 | 52.41·2 | 55.10·7 | 53.58·2 | 53.14·2 | 55.52·7 | 53.36·0 | |
| May | 7. 9 | 54.28·5 | 50.56·5 | 52.32·7 | 52.42·2 | 55. 4·2 | 54. 1·7 | 53.10·5 | 55.50·7 | 53.35·9 | 53.37·5 |
| | 25. 9 | 54.29·7 | 51. 8·7 | 52.29·7 | 52.40·5 | 55.17·2 | 53.58·7 | 53.16·7 | 55.51·0 | 53.39·0 | |
| June | 5. 9 | 54.24·2 | 50.58·7 | 52.28·7 | 52.40·5 | 55.12·7 | 53.55·5 | 53.13·5 | 55.51·0 | 53.35·6 | 53.35·5 |
| | 24. 9 | 54.24·7 | 50.54·7 | 52.29·2 | 52.39·2 | 55. 4·2 | 54. 0·5 | 53.18·2 | 55.52·7 | 53.35·4 | |
| July | 6. 10 | 54.20·0 | 50.59·5 | 52.25·2 | 52.45·0 | 55. 6·7 | 54. 1·5 | 53.15·2 | 55.49·2 | 53.35·3 | 53.35·2 |
| | 24. 10 | 54.24·5 | 50.57·7 | 52.26·2 | 52.37·7 | 55.13·7 | 53.54·7 | 53.18·0 | 55.48·0 | 53.35·1 | |
| August | 6. 9 | 54.20·7 | 50.59·2 | 52.25·5 | 52.35·7 | 55.12·7 | 54. 1·0 | 53.12·7 | 55.53·7 | 53.35·2 | 53.33·9 |
| | 24. 9 | 54.22·0 | 50.55·2 | 52.23·0 | 52.37·0 | 55. 6·5 | 53.58·2 | 53.10·7 | 55.49·2 | 53.32.7 | |
| September | 7. 9 | 54.20·7 | 50.57·2 | 52.25·5 | 52.34·7 | 55.13·0 | 54. 1·7 | 53.15·5 | 55.48·5 | 53.34·6 | 53.33·8 |
| | 24. 8 | 54.32·2 | 50.54·5 | 52.27·0 | 52.33·7 | 55. 6·2 | 53.57·7 | 53. 8·2 | 55.43·7 | 53.32·9 | |
| October | 6. 9 | 54.23·5 | 50.55·7 | 52.31·0 | 52.35·2 | 55.10·7 | 54. 8·2 | 53.16·0 | 55.54·5 | 53.36·9 | 53.35·1 |
| | 25. 8 | 54.16·2 | 51. 2·2 | 52.25·7 | 52.34·2 | 55. 3·5 | 54. 2·7 | 53.12·5 | 55.49·5 | 53.33·3 | |
| November | 6. 10 | 54.22·2 | 50.51·5 | 52.31·7 | 52.26·2 | 55. 6·0 | 53.54·7 | 53.13·7 | 55.47·7 | 53.31·7 | 53.33·1 |
| | 24. 9 | 54.32·7 | 50.51·0 | 52.31·7 | 52.36·7 | 55. 3·7 | 54. 0·0 | 53.11·0 | 55.49·2 | 53.34·5 | |
| December | 7. 9 | 54.37·0 | 50.56·5 | 52.36·7 | 52.28·0 | 55. 4·7 | 54. 9·0 | 53. 7·0 | 55.52·7 | 53.36·5 | 53.36·3 |
| | 23. 11 | 54.29·7 | 50.51·7 | 52.30·7 | 52.28·7 | 55.33·2 | 53.56·0 | 53.10·7 | 55.48·7 | 53.36·2 | |

The observations for determination of Magnetic Dip were taken by Mr. Figon throughout the year.

RESULTS of OBSERVATIONS of MAGNETIC DIP made in the MAGNETIC PAVILION in the YEAR 1909—*concluded.*

## NEEDLE No. 3.

| Mauritius Standard Time, 1909. | | | Poles Direct (A dipping). | | | | Poles Reversed (B dipping). | | | | Means. | Monthly Means. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Face of Needle to Face of Instrument. | | Face of Needle to Back of Instrument. | | Face of Needle to Face of Instrument. | | Face of Needle to Back of Instrument. | | | |
| | | | Face of Instrument. | | Face of Instrument. | | Face of Instrument. | | Face of Instrument. | | | |
| | | | East. | West. | West. | East. | East. | West. | West. | East. | | |
| | d | h | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ |
| January | 11. | 9 | 56.16·0 | 51.32·2 | 54.25·7 | 53.30·5 | 53.11·7 | 54. 7·8 | 51.16·0 | 55.45·7 | 53.45·7 | 53.43·4 |
| | 20. | 9 | 56. 9·2 | 51.30·2 | 54.25·2 | 53.22·0 | 53. 5·2 | 53.53·7 | 51.23·2 | 55.40·7 | 53.41·1 | |
| February | 10. | 9 | 56.10·7 | 51.38·3 | 54.24·3 | 53.27·7 | 53.11·7 | 54. 2·5 | 51.20·8 | 55.43·7 | 53.44·9 | 53.45·2 |
| | 20. | 9 | 56. 7·2 | 51.39·3 | 54.23·2 | 53.37·3 | 53. 8·5 | 53.56·7 | 51.25·2 | 55.45·5 | 53.45·4 | |
| March | 11. | 9 | 56. 9·0 | 51.48·7 | 54.24·5 | 53.31·0 | 53.14·2 | 53.58·2 | 51.13·7 | 55.42·7 | 53.45·3 | 53.46·0 |
| | 22. | 9 | 56.16·2 | 51.28·2 | 54.30·2 | 53.31·2 | 53. 5·5 | 54. 8·2 | 51.18·2 | 55.55·7 | 53.46·7 | |
| April | 10. | 10 | 56.11·2 | 51.37·7 | 54.20·7 | 53.28·2 | 53. 2·5 | 54. 5·5 | 51.18·2 | 55.47·5 | 53.43·9 | 53.44·3 |
| | 21. | 9 | 56.22·2 | 51.29·7 | 54.28·2 | 53.12·5 | 53.11·7 | 54. 9·2 | 51.18·0 | 55.45·7 | 53.44·7 | |
| May | 10. | 9 | 56. 5·2 | 51.42·2 | 54. 9·7 | 53.30·7 | 53. 2·7 | 53.55·7 | 51.20·2 | 55.45·7 | 53.41·5 | 53.44·5 |
| | 21. | 9 | 56.40·7 | 51.28·7 | 54.33·2 | 53.19·0 | 53. 8·7 | 54.11·7 | 51.18·7 | 55.39·2 | 53.47·5 | |
| June | 9. | 9 | 56.40·2 | 51.50·7 | 54.14·7 | 53.18·7 | 53. 0·0 | 54.14·7 | 51.20·2 | 55.38·2 | 53.47·2 | 53.43·6 |
| | 21. | 10 | 56.14·5 | 51.30·7 | 54.10·2 | 53.24·2 | 52.58·7 | 54. 0·7 | 51. 9·5 | 55.51·2 | 53.40·0 | |
| July | 10. | 9 | 56.10·2 | 51.33·2 | 54.16·7 | 53.23·2 | 53. 6·0 | 53.55·7 | 51.15·2 | 55.49·7 | 53.41·1 | 53.40·8 |
| | 20. | 9 | 56.13·7 | 51.36·0 | 54.22·2 | 53.17·7 | 53. 1·2 | 53.55·2 | 51.16·2 | 55.41·2 | 53.40·4 | |
| August | 10. | 9 | 56. 5·2 | 51.51·7 | 54.17·2 | 53.27·2 | 53. 9·0 | 53.56·7 | 51.15·2 | 55.41·2 | 53.43·0 | 53.41·8 |
| | 20. | 10 | 56. 2·2 | 51.38·2 | 54.18·2 | 53.34·0 | 53. 1·5 | 54. 2·2 | 51.13·5 | 55.35·7 | 53.40·7 | |
| September | 10. | 9 | 56. 5·0 | 51.47·5 | 54.16·0 | 53.30·5 | 53. 4·2 | 53.57·5 | 51.20·7 | 55.43·7 | 53.43·1 | 53.42.1 |
| | 20. | 9 | 56. 7·7 | 51.34·7 | 54.13·7 | 53.33·5 | 53. 0·0 | 53.57·7 | 51.15·5 | 55.46·0 | 53.41·1 | |
| October | 11. | 9 | 56. 9·7 | 51.26·2 | 54.40·5 | 53.21·5 | 53. 8·7 | 54. 3·7 | 51.22·2 | 55.49·0 | 53.45·2 | 53.44·8 |
| | 21. | 8 | 56.20·2 | 51.26·2 | 54.25·2 | 53.25·7 | 53. 7·5 | 53.59·2 | 51.22·7 | 55.48·7 | 53.44·5 | |
| November | 10. | 9 | 56. 6·7 | 51.28·7 | 54.12·2 | 53.22·2 | 53. 3·7 | 53.55·7 | 51.12·2 | 55.47·0 | 53.38·6 | 53.40·5 |
| | 22. | 9 | 56.11·2 | 51.33·7 | 54.21·5 | 53.21·0 | 53. 2·7 | 54.16·2 | 51.14·2 | 55.39·2 | 53.42·5 | |
| December | 10. | 10 | 56. 4·7 | 51.36·2 | 54.11·2 | 53.25·2 | 53. 2·7 | 54. 1·2 | 51.11·7 | 55.40·0 | 53.39·1 | 53.39·3 |
| | 20. | 9 | 56. 5·7 | 51.35·5 | 54.17·2 | 53.22·7 | 53. 2·2 | 53.59·2 | 51.16·7 | 55.36·7 | 53.39·5 | |

## NEEDLE No. 4.

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | d | h | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ | ° ′ |
| January | 14. | 9 | 55.52·2 | 51.25·7 | 53.50·3 | 53.30·2 | 54.17·8 | 53.56·2 | 52.13·3 | 56. 9·7 | 53.54·4 | 53.56·8 |
| | 17. | 9 | 55.35·7 | 51.46·8 | 53.45·7 | 53.34·3 | 54. 2·0 | 54.22·2 | 52. 8·2 | 56.39·2 | 53.59·2 | |
| February | 15. | 9 | 55.41·0 | 51.40·0 | 53.12·2 | 53.18·8 | 54. 3·2 | 53.55·8 | 52.16·7 | 56.57·3 | 53.53·2 | 53.54·4 |
| | 17. | 9 | 55.30·0 | 51.23·7 | 53.33·2 | 53.46·3 | 53.50·8 | 54.17·2 | 51.56·8 | 57. 6·7 | 53.55·6 | |
| March | 16. | 9 | 56.15·7 | 49.27·2 | 54.12·7 | 51.37·7 | 53.10·2 | 55.17·2 | 51.15·7 | 57.29·5 | 53.35·8 | 53.38·2 |
| | 19. | 9 | 56.25·2 | 49.33·7 | 54.23·7 | 51.35·2 | 53. 2·7 | 55.33·2 | 51.14·2 | 57.37·0 | 53.40·6 | |
| April | 14. | 10 | 56.23·7 | 49.49·7 | 54.23·7 | 51.39·7 | 52.57·2 | 55.32·2 | 51. 5·5 | 57.32·5 | 53.40·6 | 53.39·3 |
| | 17. | 9 | 56.21·7 | 49.33·2 | 54.23·7 | 51.40·2 | 52.57·2 | 55.30·7 | 51. 9·7 | 57.27·5 | 53.38·0 | |
| May | 13. | 10 | 56.19·7 | 49.31·7 | 54.24·2 | 51.30·2 | 52.55·7 | 55.27·7 | 50.58·2 | 57.31·5 | 53.34·9 | 53.36.3 |
| | 18. | 9 | 56.27·2 | 49.24·2 | 54.29·5 | 51.29·2 | 53. 0·0 | 55.34·2 | 50.57.2 | 57.39·5 | 53.37·6 | |
| June | 14. | 9 | 56.24·7 | 49.43·2 | 54.24·7 | 51.36·7 | 52.51·0 | 55.19·2 | 50.57·0 | 57.30·2 | 53.35·9 | 53.36·5 |
| | 18. | 10 | 56.24·2 | 49.36·2 | 54.14·7 | 51.29·0 | 52.51·5 | 55.42·2 | 51. 1·7 | 57.37·7 | 53.37·2 | |
| July | 14. | 9 | 56.29·2 | 49.35·7 | 54.20·0 | 51.24·5 | 52.39·2 | 55.38·2 | 51. 0·7 | 57.39·7 | 53.35·9 | 53.36·5 |
| | 17. | 9 | 56.15·5 | 49.42·2 | 54.15·7 | 51.38·5 | 53. 2·5 | 55.32·7 | 51. 5·5 | 57.24.0 | 53.37·1 | |
| August | 14. | 9 | 56.20·7 | 49.20·2 | 54.21·2 | 51.11·2 | 53.20·7 | 55.47.2 | 51.27·7 | 57.39·2 | 53.41.1 | 53.36·6 |
| | 18. | 10 | 56. 1·7 | 49.17·7 | 54. 3·0 | 51. 7·5 | 52.56·7 | 55.50·7 | 51.10·7 | 57.48·5 | 53.32·1 | |
| September | 14. | 9 | 55.43·7 | 49.35·0 | 53.41·5 | 51.37·7 | 53. 2.7 | 56.15·0 | 51.19·7 | 57.49·5 | 53.38.1 | 53.35·0 |
| | 17. | 9 | 56. 7·7 | 49.29·5 | 54.11·0 | 51.19·5 | 52.49.5 | 55.41·0 | 50.56·7 | 57.41·2 | 53.32·0 | |
| October | 14. | 8 | 56.12·2 | 49.35·2 | 54.11·2 | 51.29·2 | 53. 2.2 | 55.49·0 | 51.12·2 | 57.39·7 | 53.38·9 | 53.38·4 |
| | 18. | 8 | 56.13·2 | 49.19·7 | 54.16·7 | 51.20·7 | 53. 3·7 | 55.56·2 | 50.59·2 | 57.53·2 | 53.37.8 | |
| November | 13. | 9 | 56.24·7 | 49.22·2 | 54.25·7 | 51.22·7 | 52.53·2 | 55.53·0 | 50.41·5 | 57.34·2 | 53.34·7 | 53.36·0 |
| | 17. | 8 | 56.22·7 | 49.18·2 | 54.30·7 | 51.17·7 | 53. 2·7 | 56. 2·2 | 50.38·7 | 57.45·2 | 53.37·3 | |
| December | 14. | 9 | 56. 9·7 | 49.24·2 | 54. 5·7 | 51.24·5 | 52.55·0 | 55.43·2 | 51. 4·7 | 57.40.7 | 53.33·5 | 53.33·3 |
| | 17. | 9 | 56.27·2 | 49. 9·7 | 54. 8·2 | 51. 5·7 | 52.42·2 | 56.11.7 | 50.48·2 | 57.52·5 | 33.33·2 | |

The observations for determination of Magnetic Dip were taken by Mr. Figon throughout the year.

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0′·1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|
| Jan. 1d | ° ′ ... | ... | ... | ... | 28°·1 |
| 2 | 9. 16·4 | ·23407 | 35 | ... | 28·1 |
| 3 | 15·4 | 374 | ... | ... | 28·1 |
| 4 | 15·8 | 346 | ... | ... | 27·9 |
| 5 | 14·4 | 376 | 21 | 35 | 27·8 |
| 6 | 14·8 | 383 | 45 | 40 | 27·6 |
| 7 | 15·1 | 377 | 40 | 29 | 27·5 |
| 8 | 14·9 | 390 | 38 | 30 | 27·6 |
| 9 | 15·3 | 395 | 48 | 26 | 27·5 |
| 10 | 15·6 | 405 | 49 | 19 | 27·6 |
| 11 | 15·2 | 402 | 38 | 19 | 27·8 |
| 12 | 15·2 | 401 | 41 | 11 | 27·9 |
| 13 | 15·2 | ... | 22 | ... | 27·9 |
| 14 | ... | ... | ... | ... | 27·8 |
| 15 | ... | 394 | ... | 13 | 27·8 |
| 16 | 15·7 | 401 | 30 | 27 | 27·9 |
| 17 | 15·8 | 396 | 20 | 21 | 27·7 |
| 18 | 15·7 | 402 | 24 | 42 | 27·7 |
| 19 | 15·0 | 395 | 29 | 33 | 28·0 |
| 20 | 14·9 | 401 | 34 | 34 | 28·0 |
| 21 | 15·2 | 393 | 34 | 19 | 27·9 |
| 22 | 14·9 | 406 | 56 | 55 | 27·9 |
| 23 | 15·0 | 404 | 58 | 30 | 27·9 |
| 24 | 14·4 | 411 | 50 | 29 | 27·9 |
| 25 | 14·8 | 406 | 39 | 63 | 27·8 |
| 26 | 14·8 | 374 | 42 | 31 | 27·6 |
| 27 | 14·9 | 389 | 33 | 55 | 27·7 |
| 28 | 15·2 | 378 | 31 | 54 | 28·0 |
| 29 | 14·9 | ... | 22 | ... | ... |
| 30 | 15·5 | ... | 50 | ... | ... |
| 31 | 14·6 | ... | 19 | ... | 28·1 |
| Mean | 9. 15·16 | ·23392 | 36·8 | 32·5 | 27·8 |

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0′·1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|
| Feb. 1d | ° ′ 9. 14·9 | ·23354 | 20 | 50 | 28°·1 |
| 2 | 15·8 | 358 | ... | ... | 28·2 |
| 3 | 15·0 | 347 | 22 | 50 | 28·5 |
| 4 | 15·1 | 361 | 16 | 47 | 28·5 |
| 5 | 14·7 | 372 | 41 | 19 | 28·6 |
| 6 | 15·1 | 368 | 49 | ... | 28·8 |
| 7 | 16·3 | 363 | 69 | 47 | 29·0 |
| 8 | 15·9 | 358 | 75 | 40 | 29·1 |
| 9 | 15·6 | 372 | 85 | 45 | 28·9 |
| 10 | 15·4 | 370 | 65 | 34 | 28·8 |
| 11 | 15·8 | 362 | 62 | 40 | 28·7 |
| 12 | 16·3 | 367 | 64 | 27 | 28·7 |
| 13 | 16·1 | 379 | 56 | 23 | 28·7 |
| 14 | 16·1 | 383 | 68 | 27 | 28·7 |
| 15 | 16·1 | 389 | 30 | 32 | 28·7 |
| 16 | 15·7 | 401 | 44 | 26 | 28·7 |
| 17 | 15·3 | 395 | 39 | 32 | 28·7 |
| 18 | 14·8 | 402 | 52 | 41 | 28·7 |
| 19 | ... | 393 | ... | 22 | 28·6 |
| 20 | 16·6 | 404 | 73 | 32 | 28·7 |
| 21 | 16·0 | 386 | 74 | 46 | 28·7 |
| 22 | 15·9 | 388 | 70 | ... | 28·7 |
| 23 | 15·5 | 403 | 55 | 43 | 28·7 |
| 24 | 15·7 | 397 | 44 | 24 | 28·6 |
| 25 | 16·0 | 401 | 53 | 14 | 28·5 |
| 26 | 14·9 | ... | 46 | ... | 28·6 |
| 27 | 14·8 | 426 | 69 | 35 | 28·7 |
| 28 | 14·8 | 405 | 41 | 18 | 28·7 |
| Mean | 9.15·56 | ·23382 | 53·2 | 33·9 | 28·7 |

## MAGNETIC DISTURBANCES.

Jan. $1^d.15^h$ to $2^d.15^h$. *See* Plate.

$2^d.15^h$ to $3^d.6^h$. Rapid fluctuations in H.F. (±20); in Dec. (±9).

$3^d.15^h$ to $4^d.15^h$. *See* Plate.

$4^d.15^h$ to $5^d.6^h$. Fluctuations in H.F. (±10); in Dec. small. $4^d.16\frac{1}{2}^h$ to $18\frac{1}{4}^h$. Wave in H.F. (−30) steep at end. $4^d.17\frac{1}{2}^h$ to $4^d.18\frac{3}{4}^h$. Wave in Dec. (+20).

$13^d.12\frac{1}{2}^h$ to $13\frac{1}{2}^h$. Wave in H.F. (−18) steep at commencement and at end. $13^d.13^h.40^m$ to $13^h.50^m$ Decrease in H.F. (18). $16^h$ to $17\frac{1}{2}^h$ decrease in H.F. (71) followed by gradual increase (36) till $21^h$, with superposed wave $18\frac{1}{2}^h$ to $20\frac{1}{4}^h$ (−10).

$22^d$. Accentuated diurnal variation in H.F.

$23^d.20^h$ to $24^d.5^h$. Frequent small fluctuations in H.F.

$25^d.1^h$ to $8^h$. Frequent small fluctuations in H.F.

$25^d.14^h$ to $26^d.6^h$. Fluctuations in H.F. (±10) with waves $19\frac{1}{2}^h$ to $23^h$. (+15) $26^d.3^h$ to $5\frac{1}{2}^h$. (+21).

$26^d.21^h$ to $27^d.1^h$. Irregular wave in H.F. (+20); $14^h$ to $14\frac{1}{2}^h$. Sharp wave in H.F. (+15) steep at commencement and at end.

$27^d.23\frac{1}{2}^h$ to $28^d.2^h$. Wave in H.F. (+25).

$29^d.16^h$ to $31^d.16^h$. *See* Plate.

Feb. $2^d.5\frac{1}{4}^h$ to $8^h$. Wave in H.F. (+47).

$2^d.10\frac{1}{2}^h$ to $11\frac{1}{2}^h$. Wave in H.F. (+40) steep at commencement decrease in H.F. continued until $15^h$. $2^d.17\frac{1}{2}^h$ to $18\frac{1}{4}^h$. wave in H.F. (+20).

$2^d.22\frac{1}{4}^h$ to $3^d.12^h$. Wave in H.F. (+50), occasional undulations (±6) throughout. In Dec. $2^d.5\frac{1}{2}^h$ to $8\frac{1}{2}^h$. double wave (−20 to +43); $2^d.10^h$ to $11\frac{1}{2}^h$. wave (+33); $19^h$ to $3^d.5^h$. undulations (±7).

$3^d.23\frac{1}{2}^h$ to $4^d.1^h$. Wave in H.F. (+15).

$6^d.4^h.50^m$. Sharp increase in H.F. (20) $6^d.11^h$ to $21^h$. general decrease in H.F. (111) $6^d.21\frac{1}{2}^h$ to $23\frac{3}{4}^h$. wave in H.F. (+57): in Dec. (+30). $7^d.1\frac{1}{4}^h$ to $2^h$. wave in H.F. (+30); in Dec. (−10)

$8^d.1^h$ to $4^h$. Wave in H.F. (+20)

$9^d$. Accentuated diurnal variation in Dec.

$9^d.12^h$ to $10^d.22^h$. Occasional small fluctuations in H.F. $9^d.16^h.0^m$. to $4^m$. Sharp decrease in H.F. (10). $10^d.5^h$ to $7^h$. wave in H.F. (+17).

$17^d.0^h$ to $1^h$. Wave in H.F. (+12).

$21^d.1\frac{1}{2}^h$ to $3^h$. Wave in H.F. (+9).

$21^d.21^h$ to $23^d.0^h$. Occasional small irregular waves in H.F. with superposed fluctuations.

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0'.1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|
| d | ° ′ | | | | ° |
| Mar. 1 | ... | ·23414 | ... | 38 | 28·6 |
| 2 | ... | 420 | ... | 51 | 28·6 |
| 3 | ... | 418 | ... | 49 | 28·6 |
| 4 | ... | 400 | ... | 47 | 28·5 |
| 5 | 9. 15·3 | 412 | 52 | 65 | 28·5 |
| 6 | 15·6 | 397 | 48 | 46 | 28·4 |
| 7 | 14·8 | 405 | 73 | 36 | 28·2 |
| 8 | 15·8 | 409 | 59 | 44 | 28·2 |
| 9 | 15·4 | 416 | 59 | 56 | 28·0 |
| 10 | 15·3 | 366 | 59 | 37 | 27·9 |
| 11 | 15·4 | 366 | 49 | 25 | 27·7 |
| 12 | 15·2 | 378 | 69 | 30 | 27·8 |
| 13 | 15·4 | 380 | 57 | 38 | 27·8 |
| 14 | 15·2 | 386 | 41 | 35 | 28·0 |
| 15 | 16·2 | 375 | 50 | 36 | 28·0 |
| 16 | 15·4 | 379 | 50 | 39 | 28·1 |
| 17 | 15·3 | 381 | 54 | 31 | 28·1 |
| 18 | 15·5 | 370 | 51 | ... | 28·1 |
| 19 | 14·6 | 337 | ... | ... | 28·0 |
| 20 | 16·3 | 338 | 29 | 73 | 28·0 |
| 21 | 15·6 | 352 | 43 | 74 | 28·0 |
| 22 | 14·8 | 367 | 43 | 63 | 28·0 |
| 23 | 15·3 | 367 | 61 | 25 | 27·9 |
| 24 | 16·0 | 364 | 51 | 34 | 27·6 |
| 25 | 15·9 | 373 | 54 | 30 | 27·5 |
| 26 | 15·6 | 380 | 42 | 57 | 27·4 |
| 27 | 15·9 | 375 | 40 | 47 | 27·3 |
| 28 | 16·2 | 347 | 65 | ... | 27·1 |
| 29 | 14·6 | 337 | 30 | 66 | 27·1 |
| 30 | 16·3 | 355 | 34 | 45 | 26·9 |
| 31 | 15·9 | 375 | 31 | 56 | 27·0 |
| Mean | 9. 15·51 | ·23379 | 49·8 | 45·5 | 27·9 |

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0'.1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|
| d | ° ′ | | | | ° |
| Apr. 1 | 9. 15·7 | ·23371 | 32 | 25 | 26·9 |
| 2 | 15·9 | 375 | 29 | 25 | 26·8 |
| 3 | 15·5 | 391 | 42 | 38 | 26·8 |
| 4 | 16·0 | 394 | 39 | 35 | 26·8 |
| 5 | 15·6 | 391 | 40 | 34 | 26·8 |
| 6 | 16·1 | 395 | 38 | 38 | 26·8 |
| 7 | 15·6 | 394 | 25 | 21 | 26·8 |
| 8 | 15·9 | 395 | 41 | 36 | 26·7 |
| 9 | 15·5 | 394 | 44 | 24 | 26·8 |
| 10 | 15·8 | 398 | 34 | 42 | 26·9 |
| 11 | 15·3 | 398 | 30 | 49 | 26·8 |
| 12 | 16·0 | 392 | 25 | 60 | 26·7 |
| 13 | 15·8 | 390 | 37 | 31 | 26·9 |
| 14 | ... | 386 | ... | 38 | 27·0 |
| 15 | 16·0 | 384 | 23 | 17 | 27·0 |
| 16 | 15·8 | ... | 24 | ... | 26·9 |
| 17 | 15·8 | ... | 16 | ... | 26·8 |
| 18 | 15·8 | ... | 30 | ... | 26·7 |
| 19 | 15·5 | ... | 22 | ... | 26·5 |
| 20 | 15·9 | ... | 50 | ... | 26·5 |
| 21 | 15·5 | ... | 52 | ... | 26·4 |
| 22 | 15·8 | ... | 56 | ... | 26·4 |
| 23 | 15·6 | ... | 47 | ... | 26·4 |
| 24 | 15·5 | ... | 47 | ... | 26·4 |
| 25 | 15·3 | ... | 38 | ... | 26·5 |
| 26 | 14·6 | ... | 23 | ... | 26·6 |
| 27 | 15·2 | ... | 33 | ... | 26·5 |
| 28 | 15·8 | ... | 50 | ... | 26·6 |
| 29 | 15·3 | ... | 29 | ... | 26·7 |
| 30 | 15·3 | ... | 31 | ... | 26·8 |
| Mean | 9. 15·63 | ·23390 | 35·4 | 34·2 | 26·7 |

## MAGNETIC DISTURBANCES.

| | |
|---|---|
| Mar. $2^d.23^h$ to $3^d.1^h$. | Wave in H.F. (+12); $3^d.19^h$ to 23 fluctuations in H.F. (+10). |
| $5^d.15^h.26$. | Sharp increase in H.F. (15) followed till $6^d.3^h$. by a wave (−65) |
| $6^d.6\frac{1}{2}^h$ to $14^h$. | Wave in H.F. (−32) in Dec. small fluctuations. |
| $9^d.2\frac{1}{2}^h$ to $4^h$. | Wave in H.F. (+10). |
| $12^d.7^h$ to $9^h$. | Wave in H.F. (+8). |
| $14^d.22^h$ to $15^d.5^h$. | Small undulations in H.F. |
| $18^d.13^h$ to $20^d.13^h$. | *See* Plate. |
| $21^d.15^h$ to $22^d.3^h$. | Wave in H.F. (−72) small fluctuations in Dec. |
| $23^d.13^h$ to $23^d.14^h$. | Undulations in H.F. (±6). |
| $25^d.18\frac{1}{2}^h$ to $21^h$. | Wave in H.F. (+14) steep at commencement. |
| $26^d.1^h$ to $3^h$. | Wave in H.F. (+24). $26^d.16^h.18^m$. Sharp increase in H.F. (10). $26^d.19^h$ to $22^h$. Wave in H.F. (−45). |
| $27^d.0\frac{1}{2}^h$ to $2^h$. | Wave in H.F. (+25). |
| $27^d.22^h$ to $28^d.22^h$. | *See* Plate. |
| $29^d.0^h$ to $9^h$. | Undulations in H.F. (±10). |

| | |
|---|---|
| Apr. $1^d.2^h$ to $1^d.4^h$. | Wave in H.F. (+23). |
| $11^d.15^h$ to $11^d.19^h$. | Occasionnal small fluctuations in H.F. $11^d.19^h$ to $12^d.4^h$. Wave in H.F. (−51); $12^d.14^h$. to $12^d.15^h$. Wave in H.F. (+17). |
| $13^d.1^h$ to $13^d.7^h$. | Two successive waves in H.F. (+20 and +17) |
| $16^d$. to $30^d$. | Loss of H.F. register. |
| $16^d.14\frac{1}{2}^h$ to $15\frac{1}{2}^h$. | Wave in Dec. (+14). |
| $17^d.0^h$ to $1\frac{1}{2}^h$. | Wave in Dec. (−8). |
| $18^d.3\frac{1}{2}^h$ to $6^h$. | Wave in Dec. (−20); $18^d.18^h$ to $19^d.3^h$. Occasionnal small undulations in Dec. $19^d.19^h$ to $19^d$. Wave in Dec. (+10). |
| $25^d.3^h$ to $15^h$. | Occasionnal small undulations in Dec. |
| $26^d.6^h$. to $10^h$. | Wave in Dec. (−54). |
| $27^d.21\frac{1}{2}^h$ to $22\frac{1}{2}^h$. | Wave in Dec. (+10). |

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0'·1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|
| | ° ′ | | | | ° |
| May 1 | 9. 15·7 | ... | 28 | ... | 26·7 |
| 2 | 15·9 | ·23389 | 31 | 26 | 26·7 |
| 3 | 15·6 | 387 | 21 | 12 | 26·7 |
| 4 | 15·3 | 392 | 25 | 20 | 26·8 |
| 5 | 15·0 | 393 | 31 | 29 | 26·6 |
| 6 | 14·8 | 384 | 28 | 21 | 26·4 |
| 7 | 15·3 | 393 | 29 | 28 | 26·3 |
| 8 | 14·8 | 396 | 26 | 38 | 26·1 |
| 9 | 15·6 | 388 | 38 | 22 | 25·8 |
| 10 | 15·3 | 391 | 40 | 23 | 25·7 |
| 11 | 15·2 | 384 | 35 | 34 | 25·4 |
| 12 | 15·3 | 385 | 22 | 18 | 25·3 |
| 13 | 15·8 | 384 | 44 | 33 | 25·4 |
| 14 | 17·7 | 313 | ... | ... | 25·7 |
| 15 | 15·5 | 274 | ... | ... | 25·6 |
| 16 | 15·0 | 325 | 26 | 36 | 25.4 |
| 17 | 15·9 | 332 | 29 | 24 | 25·4 |
| 18 | 15·8 | 319 | ... | ... | 25·5 |
| 19 | 15·1 | 307 | ... | ... | 25·3 |
| 20 | 15·5 | 334 | 20 | 23 | 25·3 |
| 21 | 15·2 | 350 | 30 | 29 | 25·6 |
| 22 | 15·3 | 356 | 22 | 39 | 25·7 |
| 23 | 15·3 | 353 | 26 | 31 | 25·7 |
| 24 | 15·7 | 363 | 28 | 25 | 25·9 |
| 25 | 15·9 | 378 | 24 | 19 | 25·8 |
| 26 | 15·4 | 375 | 30 | ... | 25·8 |
| 27 | 15·6 | 357 | 19 | 34 | 25·6 |
| 28 | 15·8 | 361 | 16 | 28 | 25·4 |
| 29 | 15·2 | 368 | 15 | 30 | 25·3 |
| 30 | 15·2 | 371 | 13 | 29 | 25·2 |
| 31 | 15·6 | 373 | 11 | 51 | 25·1 |
| Mean | 9 .15·49 | ·23362 | 26·2 | 28·0 | 25·8 |

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0'·1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|
| | ° ′ | | | | ° |
| June 1 | 9. 16·1 | ·23372 | 12 | 45 | 25·2 |
| 2 | 16·2 | 366 | 14 | 18 | 25·0 |
| 3 | 16·4 | 371 | 17 | 23 | 25·0 |
| 4 | 16·4 | 374 | 13 | 17 | 25·0 |
| 5 | 16·4 | 373 | 15 | 11 | 25·0 |
| 6 | 16·2 | 370 | 24 | 20 | 24·9 |
| 7 | 16·1 | 374 | 13 | 40 | 24·8 |
| 8 | 16·3 | 376 | 12 | 17 | 24·7 |
| 9 | 15·9 | 378 | 15 | 24 | 24·6 |
| 10 | 16·2 | 381 | 20 | 26 | 24·5 |
| 11 | 16·5 | 364 | 24 | 63 | 24·4 |
| 12 | 15·9 | 357 | 17 | 45 | 24·4 |
| 13 | 16·3 | 365 | 12 | 18 | 24·3 |
| 14 | 16·5 | 374 | 15 | 47 | 24·1 |
| 15 | 16·2 | 366 | 16 | 39 | 24·0 |
| 16 | 16·3 | 360 | 20 | 22 | 23·9 |
| 17 | 16·4 | 356 | 24 | 22 | 24·1 |
| 18 | 16·6 | 361 | 13 | 27 | 24·2 |
| 19 | 16·8 | 364 | 21 | 25 | 24·3 |
| 20 | 16·5 | 367 | 30 | 29 | 24·3 |
| 21 | 16·6 | 377 | 16 | 63 | 24·3 |
| 22 | 16·5 | 374 | 18 | 56 | 24·4 |
| 23 | 16·3 | 357 | 28 | 41 | 24·4 |
| 24 | ... | ... | ... | ... | 24·3 |
| 25 | ... | ... | ... | ... | 24·3 |
| 26 | 17·1 | 366 | 13 | 12 | 24·2 |
| 27 | 17·1 | 374 | 20 | 26 | 24·1 |
| 28 | 17·0 | 377 | 17 | ... | 23·9 |
| 29 | 17·0 | 366 | 15 | ... | 23·8 |
| 30 | 16·9 | 368 | 22 | 28 | 23·9 |
| Mean | 9. 16·45 | ·23369 | 17·7 | 30·9 | 24·4 |

## MAGNETIC DISTURBANCES.

May $1^d.7^h$ to $1^d.10^h$. Frequent small fluctuations in Dec.

$9^d.10^h.15^m$. Sharp decrease in H.F. (6) and increase in Dec. (16).

$11^d.9\frac{1}{2}^h$ to $11^d.11^h$. Wave in H.F. (−11).

$14^d.8\frac{1}{2}^h$ to $15^d.8\frac{1}{2}^h$. *See* Plate.

$15^d.8\frac{1}{2}^h$ to $16^d.0^h$. Small rapid fluctuations in H.F. Dec. and V.F.

$17^d.11^h$. to $17^d.13^h$. Wave in H.F. (+10).

$18^d.9^h.2^m$. Sudden increase in H.F. (10) followed by a general decrease (94) till $19^d.0^h$., with waves $18^d.15\frac{1}{2}^h$ to $18^d.18\frac{1}{2}^h$. (−29) and $18^d.20\frac{1}{2}^h$ to $18^d.22\frac{1}{2}^h$. (+60).

$19^d.0^h$ to $19^d.12^h$. Irregular increase in H.F. (78) with undulations (±15). In Dec. occasional undulations (±20).

$21^d.0\frac{1}{2}^h$ to $21^d.2^h$. Wave in H.F. (+16).

$22^d.23^h$ to $23^d.1^h$. Wave in H.F. (+21).

$26^d.4^h.8^m$ to $16^m$. Sharp increase in H.F. (26); $9^h$ to $22^h$. Decrease in H.F. (85); $23\frac{1}{2}^h$ to $27^d.1^h$. Wave in H.F. (+18).

$27^d.11^h$ to $27^d.15^h$. Wave in H.F. (+26).

June $1^d.14^h$ to $2^d.16^h$. Occasional small undulations in H.F.

$10^d.14\frac{1}{4}^h$ to $14^h\frac{1}{2}$. Decrease in H.F. (14).

$11^d$. Accentuated diurnal variation in H.F.

$12^d$. Accentuated diurnal variation in H.F.

$14^d$. Accentuated diurnal variation in H.F.

$15^d.1\frac{1}{2}^h$ to $15^d.3^h$. Wave in H.F. (+18). $15^h$ to $18\frac{1}{2}^h$. Wave in H.F. (−30).

$18^d.1^h$ to $18^d.1\frac{3}{4}^d$. Wave in H.F. (+10).

$21^d.9^h.28^m$. Sharp increase in H.F. (28). $21^d.14^h$ to $19^h$. Decrease in H.F. (50); $19^h$ to $22^h$. Wave in H.F. (+20) with superposed fluctuations (±5). Occasional small fluctuations followed till $22^d.8^h$.

$22^d.18^h$ to $23^d.7^h$. Occasional small fluctuations in H.F. with double wave, $22^d.21^h$ to $23^h$. (−10 to +10) in H.F. and (+30 to −8) in Dec.

$24^d.7^h$ to $10^h$. Wave in H.F. (+28).

$28^d.6^h.50^m$. Sharp increase in H.F. (11), followed by occasional small fluctuations and undulations till July $1^d$. $6^h$. with waves $28^d.16^h$ to $18^h$. (−11), $29^d.4\frac{1}{2}^h$ to $6\frac{1}{2}^h$. (−19) and $30^d.22\frac{1}{4}$ to July $1^d.0^h$. (+11).

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0'.1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. | Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0'.1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° ′ | | | | ° | d | ° ′ | | | | ° |
| July 1 | 9. 15·2 | ·23368 | 25 | 49 | 24·0 | Aug. 1 | 9. 18·5 | ·23372 | 32 | 25 | 23·1 |
| 2 | 15·8 | 373 | 20 | 40 | 24·0 | 2 | 18·4 | 367 | 34 | 45 | 23·1 |
| 3 | 16·7 | ... | 24 | ... | 23·9 | 3 | 17·9 | 358 | 31 | 34 | 23·1 |
| 4 | 16·9 | 368 | 26 | 37 | 23·7 | 4 | 18·0 | 370 | 30 | 46 | 23·1 |
| 5 | 16·5 | 363 | 20 | 14 | 23·7 | 5 | 18·2 | 367 | 40 | 29 | 23·1 |
| 6 | 17·0 | 362 | 25 | 16 | 23·7 | 6 | 17·8 | 371 | 27 | 22 | 23·1 |
| 7 | 17·3 | 369 | 30 | 14 | 23·7 | 7 | 18·6 | 377 | 32 | 50 | 23·1 |
| 8 | 16·9 | 370 | 36 | 62 | 23·7 | 8 | 18·4 | 375 | 24 | 33 | 23·1 |
| 9 | 16·8 | 359 | 17 | 24 | 23·6 | 9 | 17·9 | 352 | 39 | 62 | 23·1 |
| 10 | 16·6 | 363 | 22 | 26 | 23·5 | 10 | 18·3 | 351 | 34 | 39 | 23·0 |
| 11 | 17·2 | 374 | 20 | 26 | 23·5 | 11 | 18·6 | 359 | 42 | 46 | 22·9 |
| 12 | 17·5 | 361 | 23 | 45 | 23·4 | 12 | 18·3 | 358 | 32 | 43 | 22·9 |
| 13 | 17·4 | 356 | 21 | 43 | 23·3 | 13 | 18·5 | 361 | 41 | 24 | 22·9 |
| 14 | 18·1 | 359 | 21 | 33 | 23·4 | 14 | 18·4 | 365 | 35 | 31 | 22·9 |
| 15 | 17·0 | 357 | 23 | 25 | 23·3 | 15 | 18·4 | 367 | 35 | 25 | 23·0 |
| 16 | 18·0 | 362 | 16 | 25 | 23·5 | 16 | 18·3 | 369 | 34 | 16 | 22·9 |
| 17 | 17·9 | 368 | 21 | 25 | 23·7 | 17 | 18·5 | 369 | 43 | 28 | 22·9 |
| 18 | 18·6 | 363 | 29 | 14 | 23·8 | 18 | 18·4 | 374 | 32 | 43 | 22·9 |
| 19 | 18·3 | 373 | 25 | 16 | 23·9 | 19 | 18·5 | 365 | 37 | ... | 23·0 |
| 20 | 18·4 | 373 | 21 | 17 | 23·9 | 20 | 18·8 | 357 | 40 | 38 | 23·2 |
| 21 | 18·5 | 374 | 23 | 25 | 23·7 | 21 | 18·1 | 367 | 25 | 23 | 23·3 |
| 22 | 18·2 | 367 | 26 | 37 | 23·6 | 22 | 18·6 | 365 | 32 | 29 | 23·3 |
| 23 | 17·9 | 359 | 25 | ... | 23·4 | 23 | 17·7 | 364 | 41 | 18 | 23·4 |
| 24 | 17·3 | 353 | 25 | 34 | 23·5 | 24 | 18·2 | 375 | 30 | 42 | 23·3 |
| 25 | 17·8 | 351 | 30 | 27 | 23·4 | 25 | 18·0 | 375 | 23 | 44 | 23·2 |
| 26 | 17·5 | 359 | 33 | 30 | 23·3 | 26 | 18·0 | 370 | 22 | 67 | 23·1 |
| 27 | 17·5 | 369 | 27 | 33 | 23·5 | 27 | 17·6 | 363 | 23 | 39 | 23·2 |
| 28 | 17·9 | 370 | 17 | 41 | 23·5 | 28 | 18·2 | 370 | 24 | 31 | 23·2 |
| 29 | 17·6 | 361 | 33 | 35 | 23·3 | 29 | 17·1 | 346 | 29 | ... | 23·3 |
| 30 | 17·9 | 362 | 23 | 33 | 23·2 | 30 | 18·4 | 346 | 31 | ... | 23·2 |
| 31 | 17·6 | 366 | 35 | 24 | 23·1 | 31 | 17·5 | 350 | 37 | ... | 23·3 |
| Mean | 9. 17·41 | ·23364 | 24·6 | 30·0 | 23·6 | Mean | 9.18·20 | ·23364 | 32·6 | 36·0 | 23·1 |

## MAGNETIC DISTURBANCES.

**July** $10^d.1\frac{1}{2}^h$ to $2\frac{1}{2}^h$. Wave in H.F. (+15).

$12^d.8^h$ to $13^d.4^h$. Occasional undulations in H.F. (±6).

$17^d.2^h$ to $3^h$. Wave in H.F. (+9).

$22^d.3^h$ to $4^h$. Double wave in H.F. (−8 to +8).

$23^d.4^h$ to $12^h$. Wave in H.F. (+35). $12^h$ to $19\frac{1}{2}^h$. Double Wave in H.F. (−8 to +8). $20^h$ to $24^h$. Wave in H.F. (−20) small undulations followed till $24^d.22^h$.

$26^d.9^h$ to $15^h$. Wave in H.F. (−28).

$27^d.14^h$ to $19^h$. Wave in H.F. (−24).

$28^d.22^h$ to $29^d.1\frac{1}{2}^h$. Double crested wave in H.F. (−15 and −18): undulations followed till $30^d.0^h$.

**Aug.** $3^d.1^h$ to $1\frac{1}{4}^h$. Increase in H.F. (17); $4^h$ to $6^h$ wave in H.F. (+20) $8^h$ to $12^h$ wave in H.F. (−21).

$5^d.0\frac{1}{2}^h$ to $1^h$. Increase in H.F. (10); $11^h$ to $14^h$ wave in H.F. (−18).

$7^d.14^h$ to $18^h$ Wave in H.F. (−18).

$9^d.7\frac{1}{2}^h$ to $9\frac{1}{2}^h$. Decrease in H.F. (66); $21\frac{1}{2}^h$ to $22\frac{1}{2}^h$ wave in H.F. (+12).

$10^d.11^h$ to $18^h$. Double wave in H.F. (+29 to −21.)

$11^d.15^h$ to $17^h$. Wave in H.F. (−12).

$19^d.3^h$ to $16^h$ Two successive waves in H.F. (+50 and +45).

$20^d.12^h$ to $18^h$. Double wave in H.F. (−18 to +12).

$25^d.2^h$ to $4^h$. Wave in H.F. (+15).

$26^d$. Accentuated diurnal variation in H.F. with small superposed fluctuations.

$27^d.7^h$ to $16^h$. Three successive waves in H.F. (+16, +12 and +20).

$28^d.21^h$ to $29^d.16^h$. Small rapid fluctuations in H.F.

$29^d.6^h$ to $9\frac{1}{2}^h$. Wave in Dec. (−50).

$29^d.14\frac{1}{2}^h$ to $18\frac{1}{2}^h$. Wave in H.F. (−30).

$29^d.22\frac{1}{2}^h$ to $30^d.0\frac{1}{2}^h$. Wave in H.F. (+40), in Dec. (−38).

$30^d.13^h$ to $31^d.8^h$. Wave in H.F. (−70), with superposed double wave from $20^h$ to $22^h$ (−20 to +18) and wave $23\frac{1}{2}^h$ to $31^d.1^h$. (+35). Waves in Dec $30^d.13^h$ to $18^h$. (−57) and $20\frac{1}{4}^h$ to $21\frac{1}{4}^h$ (+28) Waves in H.F. $31^d.13^h$ to $17^h$. (+30) and $20^h$ to $22^h$ (+20).

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0′·1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. | Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0′·1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| d | ° ′ | | | | ° | d | ° ′ | | | | ° |
| Sept. 1 | 9. 17·8 | ·23354 | 40 | 29 | 23·4 | Oct. 1 | 9. 18·0 | ·23329 | 24 | 43 | 24·1 |
| 2 | 17·5 | 356 | 39 | 50 | 23·4 | 2 | 17·8 | 348 | 42 | 71 | 24·1 |
| 3 | 18·2 | 358 | 56 | 79 | 23·4 | 3 | 17·8 | 366 | 26 | 48 | 24·0 |
| 4 | 17·6 | 362 | 39 | 32 | 23·3 | 4 | 17·7 | 362 | 44 | 30 | 24·0 |
| 5 | 17·5 | 367 | 31 | 41 | 23·2 | 5 | 17·2 | 365 | 47 | 11 | 24·0 |
| 6 | 17·9 | 362 | 40 | 33 | 23·1 | 6 | 17·5 | 373 | 40 | 22 | 24·1 |
| 7 | 17·5 | 369 | 29 | 33 | 23·2 | 7 | 17·2 | 364 | 42 | 69 | 24·1 |
| 8 | 16·7 | 363 | 28 | 89 | 23·2 | 8 | 17·5 | 356 | 36 | 85 | 24·0 |
| 9 | 17·2 | 359 | 27 | 35 | 23·1 | 9 | 17·3 | 355 | 37 | 35 | 24·0 |
| 10 | 17·1 | 363 | 35 | 29 | 23·1 | 10 | ... | 378 | ... | 38 | 24·0 |
| 11 | 17·5 | 361 | 34 | 17 | 23·2 | 11 | 17·7 | 382 | 36 | 43 | 24·1 |
| 12 | 17·4 | 364 | 49 | 12 | 23·2 | 12 | 18·0 | 392 | 23 | 61 | 24·2 |
| 13 | 17·1 | 371 | 45 | 18 | 23·2 | 13 | 17·5 | 395 | 22 | 32 | 24·2 |
| 14 | 17·1 | 366 | 31 | 27 | 23·3 | 14 | 16·9 | 392 | 33 | 31 | 24·2 |
| 15 | 17·4 | 364 | 35 | 29 | 23·2 | 15 | 17·2 | 396 | 53 | 35 | 24·3 |
| 16 | 17·1 | 359 | 33 | 55 | 23·2 | 16 | 16·9 | 395 | 47 | 45 | 24·4 |
| 17 | 17·4 | 365 | 27 | 41 | 23·1 | 17 | 16·9 | 392 | 40 | 77 | 24·6 |
| 18 | 17·4 | 377 | 21 | 32 | 23·3 | 18 | 17·1 | 388 | 45 | 66 | 24·6 |
| 19 | 17·5 | 379 | 24 | 30 | 23·4 | 19 | 14·6 | 324 | ... | 107 | 24·6 |
| 20 | 17·5 | 382 | 29 | 28 | 23·4 | 20 | 16·3 | 343 | 41 | 39 | 24·5 |
| 21 | 16·7 | 362 | 29 | 100 | 23·5 | 21 | 16·9 | 366 | 49 | 21 | 24·6 |
| 22 | 17·0 | ... | 22 | ... | 23·7 | 22 | 16·8 | 364 | 39 | 17 | 24·6 |
| 23 | 16·7 | 347 | 35 | 13 | 23·7 | 23 | 16·6 | 335 | 32 | ... | 24·6 |
| 24 | 17·3 | 361 | 29 | 31 | 23·7 | 24 | 16·3 | ... | 33 | ... | 24·5 |
| 25 | ... | ... | ... | ... | 23·7 | 25 | 16·4 | 364 | 24 | 46 | 24·4 |
| 26 | 17·7 | ... | 29 | ... | 23·7 | 26 | 16·1 | 374 | 31 | 40 | 24·4 |
| 27 | ... | ... | ... | ... | 23·7 | 27 | 16·7 | 379 | 35 | 32 | 24·4 |
| 28 | 16·7 | 329 | 50 | 35 | 23·7 | 28 | 16·0 | 386 | 37 | 35 | 24·4 |
| 29 | 16·9 | 341 | 49 | 22 | 23·8 | 29 | 16·2 | 393 | 47 | 45 | 24·5 |
| 30 | 17·6 | 339 | 35 | 172 | 24·0 | 30 | 16·3 | 391 | 43 | 35 | 24·5 |
| | | | | | | 31 | 16·4 | 391 | 40 | 19 | 24·5 |
| Mean | 9. 17·32 | ·23361 | 34·6 | 42·8 | 23·4 | Mean | 9.16·93 | ·23371 | 37·5 | 44·1 | 24·3 |

## MAGNETIC DISTURBANCES.

Sept. $1^d.15^h$ to $16\frac{1}{4}^h$. Decrease in H.F. (26).

$3^d.3\frac{1}{4}^h$ to $4\frac{1}{2}^h$. Wave in H.F. (+15); $6^h$ to $16^h$. Irregular wave in H.F. (+68); $16^h$ to $19^h$. wave in H.F. (+21); $21^h$ to $22\frac{1}{2}^h$ wave in H.F. (+22); $20\frac{3}{4}^h$ to $21\frac{1}{4}^h$. wave in Dec. (+20).

$4^d.23\frac{1}{2}^h$ to $5^d.1.^h$. Wave in H.F. (+18).

$5^d.23\frac{1}{4}^h$ to $6^d.1^h$. Wave in H.F. (+17).

$8^d.18^h$ to $9^d.6^h$. Undulations in H.F. (±12).

$21^d.15^h.15^m$. Sharp increase in H.F. (17); $17\frac{1}{2}^h$ to $18^h$. decrese in H.F. (73); $20\frac{1}{2}^h$ to $22^h$ and $23^h$ to $24\frac{1}{2}^h$. waves in H.F. (−19) and (−27).

$25^d.14^h$ to $26^d.14^h$. *See* Plate

$28^d.19^h$ to $21^h$. Wave in H.F. (−23).

$30^d.8^h$ to $31^d.8^h$. *See* Plate.

Oct. $2^d.10\frac{1}{4}^h$ to $12^h$. Wave in H.F. (−30); $18\frac{1}{2}^h$ to $21^h$. wave in H.F. (+20).

$8^d$. Accentuated diurnal variation in H.F.

$17^d$. Accentuated diurnal variation in H.F.

$18^d.18^h$ to $20^h$. Wave in H.F. (+16); $23\frac{1}{2}^h$ to $19^d.1^h$ double wave in H.F. (−40 to +26); in Dec. wave (+26).

$19^d.6\frac{1}{2}^h$ to $8^h$. Sharp wave in H.F. (+22); in Dec. (−40), small fluctuations in H.F. and Dec till $19^d.23^h$.

$23^d.14\frac{1}{2}^h$ to $24^d.0^h$. Long irregular wave in H.F. (−120), $19^h$ to $21^h$. two successive wave in Dec. (+22 and +38), $23^h$ to $23\frac{3}{4}^h$. wave in Dec. (−25).

$24^d.19^h$ to $23^h$. Two successive waves in H.F. (+48 to +52), in Dec. (+20 and +30).

| Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0′·1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. | Month and Day. 1909. | Mean Magnetic Declination (West). | Mean Horizontal Magnetic Force (C.G.S. Unit). | Diurnal Range of Declination (0′·1). | Diurnal Range of Horizontal Force. (·00001 C.G.S. Unit.) | Temperature of Horizontal Force Magnet. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | ° ′ | | | | ° | | ° ′ | | | | ° |
| Nov. 1d | 9. 16·0 | ·23394 | 62 | 31 | 24·5 | Dec. 1d | 9. 16·0 | ·23354 | 48 | 40 | 26·5 |
| 2 | 16·5 | 395 | 46 | 14 | 24·6 | 2 | 15·7 | 363 | 31 | ... | 26·4 |
| 3 | 16·0 | 399 | 36 | 33 | 24·6 | 3 | 16·9 | 378 | 22 | 31 | 26·5 |
| 4 | 16·6 | 400 | 37 | 25 | 24·9 | 4 | 16·8 | 375 | 32 | 34 | 26·5 |
| 5 | 16·4 | 402 | 37 | 20 | 25·0 | 5 | 16·3 | 384 | 33 | 26 | 26·6 |
| 6 | 16·1 | 409 | 47 | 55 | 25·1 | 6 | 15·5 | 395 | 45 | 55 | 26·5 |
| 7 | 15·7 | 397 | 34 | 27 | 25·2 | 7 | 16·3 | 391 | 39 | 18 | 26·5 |
| 8 | 16·1 | 401 | 41 | 33 | 25·5 | 8 | 15·1 | 403 | 28 | 29 | 26·5 |
| 9 | 15·9 | 402 | 34 | 22 | 25·6 | 9 | 15·8 | 405 | 39 | 28 | 26·6 |
| 10 | 16·0 | 400 | 33 | 29 | 25·6 | 10 | 15·7 | 402 | 45 | 50 | 26·7 |
| 11 | 16·6 | 403 | 32 | 22 | 25·6 | 11 | 15·2 | 403 | 41 | 31 | 26·7 |
| 12 | 16·7 | 392 | 45 | 23 | 25·7 | 12 | 15·3 | 408 | 51 | 33 | 26·7 |
| 13 | 16·4 | 396 | 50 | 20 | 25·7 | 13 | 15·9 | 395 | 34 | ... | 26·7 |
| 14 | 15·8 | 403 | 57 | 30 | 25·7 | 14 | 16·6 | 369 | 37 | ... | 27·0 |
| 15 | 15·6 | 385 | 39 | 53 | 25·7 | 15 | 15·6 | 373 | 42 | 66 | 27·0 |
| 16 | 16·3 | 389 | 49 | 51 | 25·7 | 16 | 15·3 | 393 | 45 | 40 | 27·1 |
| 17 | 16·4 | 388 | 50 | 16 | 25·7 | 17 | 15·8 | 390 | 49 | 16 | 27·0 |
| 18 | 15·9 | 393 | 47 | 12 | 25·8 | 18 | 16·1 | 391 | 31 | 31 | 27·0 |
| 19 | 16·2 | 399 | 50 | 41 | 25·8 | 19 | 16·4 | ... | 33 | ... | 27·2 |
| 20 | 16·0 | 382 | 44 | ... | 25·8 | 20 | 16·0 | 402 | 35 | 35 | 27·2 |
| 21 | 16·0 | 382 | 28 | 19 | 25·9 | 21 | 17·1 | 396 | 44 | ... | 27·3 |
| 22 | 16·4 | 387 | 40 | 32 | 26·0 | 22 | 16·8 | 389 | 26 | 41 | 27·2 |
| 23 | 16·0 | 390 | 33 | 40 | 26·1 | 23 | 16·4 | 404 | 21 | 31 | 27·3 |
| 24 | 16·0 | 395 | 50 | 33 | 26·2 | 24 | 16·6 | 403 | 23 | 17 | 27·3 |
| 25 | 16·0 | 401 | 36 | 23 | 26·3 | 25 | 16·2 | 414 | 31 | 37 | 27·1 |
| 26 | 16·4 | 409 | 29 | 28 | 26·2 | 26 | 16·1 | 411 | 48 | 77 | 27·3 |
| 27 | 16·2 | 417 | 61 | ... | 26·3 | 27 | 16·6 | 402 | 41 | 48 | 27·3 |
| 28 | 15·6 | 396 | 46 | 21 | 26·4 | 28 | 16·9 | 406 | 30 | 30 | 27·3 |
| 29 | 15·4 | 405 | 42 | 23 | 26·5 | 29 | 17·0 | 404 | 37 | 13 | 27·3 |
| 30 | 14·1 | 355 | 80 | ... | 26·5 | 30 | 17·0 | 416 | 39 | 27 | 27·4 |
| | | | | | | 31 | 16·8 | 428 | 32 | 78 | 27·4 |
| Mean | 9. 16·04 | ·23396 | 43·8 | 28·7 | 25·7 | Mean | 9. 16·19 | ·23395 | 36·5 | 37·0 | 26·9 |

## MAGNETIC DISTURBANCES.

Nov. $6^d.17^h$ to $6^d.22^h$. Small fluctuations in H.F.

$8^d.21\frac{1}{2}^h$ to $8^d.23\frac{1}{2}^h$. Wave in H.F. (+16).

$11^d.23^h$ to $12^d.4^h$. Small fluctuations in H.F.

$15^d.10^h$ to $15^d.13\frac{1}{2}^h$. Wave in H.F. (+22) followed by small undulations from $21^h$ to $16^d.4^h$.

$16^d.23^h$ to $17^d.1^h$. Wave in H.F. (+25).

$20^d.16^h$ to $28^d.22^h$. Wave in H.F. (−50)

$21^d.1^h$ to $21^d.2^h$. Wave in H.F. (+61).

$27^d.7^h$ to $27^d.11\frac{1}{2}^h$. Wave in H.F. (+61). $20^h$ to $24^h$. Wave in H.F. (+30).

$30^d.8^h$ to $1^d.4^h$. Long wave in H.F. (−130).

Dec. $1^d.12^h$ to $2^d.14^h$. Small fluctuations in H.F. with two successive waves $1^d.19^h$. to $2^d.6^h$. (+30 and +25).

$6^d.12^h$. to $18^h$. Small fluctuations in H.F.

$13^d$. Accentuated diurnal variation in H.F. with wave $19^h$ to $20\frac{1}{3}^h$. (−35).

$14^d$. Accentuated diurnal variation in H.F. followed by a wave $15^d.1^h$. to $3^h$ (+20).

$21^d.18^h$ to $22^d.2^h$. Wave in H.F. (−60).

$23^d.22\frac{1}{2}^h$ to $24^d0.^h$. Wave in H.F. (+15).

$26^d$. Accentuated diurnal variation in H.F.

$31^d.19^h$ to Jan. $1^d.4^h$. Wave in H.F. (−60).

**MEAN DIURNAL INEQUALITY of the MAGNETIC ELEMENTS, and of the TEMPERATURE within the SHADES covering the HORIZONTAL FORCE and VERTICAL FORCE MAGNETS.**

*(The results in each case are diminished by the smallest hourly value).*

| Hour Mauritius Standard Time. | Declination. (0'·1). | Horizontal Force (0·1 γ). | Vertical Force (0·1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°·01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°·01 C.). | Declination. (0'·1). | Horizontal Force (0·1 γ). | Vertical Force (0·1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°·01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°·01 C.). | Declination. (0'·01). | Horizontal Force (0·1 γ). | Vertical Force (0·1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°·01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°·01 C.). |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | January. | | | | | February. | | | | | March. | | | | |
| Midnight | 29 | 24 | 130 | 3 | 5 | 42 | 18 | 183 | 6 | 6 | 58 | 20 | 178 | 5 | 5 |
| 1h | 31 | 49 | 127 | 3 | 5 | 42 | 36 | 180 | 5 | 5 | 58 | 40 | 176 | 4 | 4 |
| 2 | 32 | 48 | 127 | 2 | 4 | 42 | 45 | 180 | 5 | 5 | 57 | 81 | 167 | 4 | 4 |
| 3 | 34 | 62 | 125 | 2 | 3 | 44 | 42 | 180 | 3 | 3 | 56 | 112 | 161 | 3 | 3 |
| 4 | 36 | 64 | 131 | 1 | 2 | 46 | 26 | 179 | 2 | 2 | 55 | 109 | 159 | 2 | 2 |
| 5 | 40 | 49 | 135 | 1 | 2 | 49 | 33 | 181 | 1 | 1 | 57 | 108 | 161 | 1 | 1 |
| 6 | 43 | 57 | 143 | 0 | 1 | 51 | 43 | 180 | 1 | 1 | 59 | 120 | 162 | 0 | 0 |
| 7 | 53 | 91 | 151 | 0 | 0 | 60 | 56 | 190 | 0 | 0 | 63 | 107 | 171 | 0 | 0 |
| 8 | 59 | 97 | 147 | 0 | 0 | 73 | 45 | 210 | 1 | 1 | 83 | 92 | 200 | 0 | 0 |
| 9 | 54 | 106 | 132 | 1 | 1 | 81 | 47 | 193 | 3 | 3 | 94 | 83 | 203 | 2 | 2 |
| 10 | 50 | 137 | 107 | 1 | 1 | 73 | 57 | 154 | 6 | 6 | 93 | 145 | 164 | 3 | 3 |
| 11 | 38 | 159 | 52 | 3 | 1 | 60 | 105 | 98 | 7 | 5 | 74 | 234 | 86 | 4 | 5 |
| Noon | 21 | 127 | 21 | 4 | 7 | 39 | 125 | 53 | 13 | 14 | 42 | 312 | 32 | 10 | 12 |
| 13h | 8 | 97 | 2 | 4 | 7 | 21 | 129 | 3 | 14 | 14 | 17 | 330 | 0 | 9 | 10 |
| 14 | 0 | 84 | 0 | 4 | 7 | 2 | 133 | 0 | 16 | 15 | 0 | 282 | 8 | 8 | 8 |
| 15 | 0 | 57 | 16 | 4 | 7 | 0 | 118 | 35 | 16 | 14 | 2 | 209 | 52 | 7 | 7 |
| 16 | 3 | 27 | 32 | 3 | 6 | 10 | 79 | 85 | 14 | 12 | 18 | 123 | 105 | 5 | 5 |
| 17 | 12 | 15 | 63 | 4 | 7 | 29 | 26 | 137 | 14 | 12 | 36 | 58 | 140 | 4 | 4 |
| 18 | 20 | 1 | 89 | 3 | 5 | 39 | 11 | 162 | 13 | 11 | 48 | 24 | 157 | 4 | 4 |
| 19 | 22 | 1 | 99 | 4 | 6 | 39 | 0 | 162 | 12 | 11 | 51 | 19 | 164 | 4 | 4 |
| 20 | 23 | 1 | 104 | 3 | 5 | 40 | 6 | 166 | 11 | 10 | 55 | 12 | 171 | 3 | 3 |
| 21 | 24 | 0 | 114 | 3 | 5 | 42 | 7 | 173 | 11 | 10 | 57 | 0 | 174 | 2 | 2 |
| 22 | 25 | 24 | 120 | 3 | 5 | 42 | 4 | 180 | 10 | 9 | 57 | 3 | 173 | 1 | 1 |
| 23 | 27 | 29 | 124 | 3 | 5 | 42 | 12 | 182 | 9 | 9 | 57 | 1 | 171 | 0 | 0 |
| Mean | 28·5 | 58·6 | 95·5 | 2·5 | 4·0 | 42·0 | 50·1 | 143·6 | 8·0 | 7·5 | 52·0 | 109·3 | 139·0 | 3·5 | 3·7 |
| Number of Days employed. | 26 | 22 | 29 | 29 | 29 | 26 | 24 | 26 | 28 | 28 | 26 | 28 | 28 | 31 | 31 |

| | April | | | | | May. | | | | | June. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 33 | 0 | 168 | 5 | 5 | 25 | 19 | 165 | 6 | 6 | 20 | 21 | 135 | 6 | 6 |
| 1h | 32 | 14 | 164 | 4 | 4 | 24 | 32 | 160 | 6 | 6 | 19 | 15 | 133 | 5 | 6 |
| 2 | 32 | 25 | 162 | 4 | 4 | 24 | 34 | 152 | 5 | 5 | 18 | 3 | 130 | 5 | 6 |
| 3 | 34 | 67 | 161 | 4 | 4 | 23 | 48 | 148 | 5 | 5 | 18 | 38 | 128 | 5 | 6 |
| 4 | 34 | 81 | 160 | 3 | 3 | 24 | 58 | 146 | 3 | 3 | 19 | 53 | 127 | 5 | 6 |
| 5 | 35 | 74 | 161 | 2 | 2 | 26 | 72 | 143 | 3 | 3 | 19 | 66 | 123 | 4 | 5 |
| 6 | 36 | 94 | 161 | 1 | 1 | 23 | 89 | 143 | 2 | 2 | 18 | 95 | 123 | 4 | 5 |
| 7 | 34 | 94 | 163 | 0 | 0 | 17 | 118 | 135 | 1 | 1 | 10 | 132 | 110 | 3 | 4 |
| 8 | 47 | 103 | 191 | 1 | 1 | 27 | 146 | 154 | 0 | 0 | 9 | 150 | 114 | 2 | 3 |
| 9 | 63 | 112 | 205 | 2 | 2 | 42 | 146 | 174 | 2 | 2 | 19 | 171 | 127 | 2 | 3 |
| 10 | 68 | 121 | 185 | 3 | 3 | 50 | 129 | 159 | 4 | 4 | 27 | 170 | 125 | 1 | 2 |
| 11 | 50 | 150 | 102 | 3 | 4 | 44 | 149 | 91 | 4 | 3 | 30 | 170 | 108 | 0 | 0 |
| Noon | 22 | 179 | 22 | 6 | 12 | 30 | 177 | 28 | 7 | 8 | 25 | 171 | 68 | 4 | 6 |
| 13h | 5 | 216 | 0 | 6 | 11 | 16 | 150 | 7 | 7 | 8 | 18 | 165 | 25 | 4 | 6 |
| 14 | 0 | 240 | 13 | 6 | 10 | 4 | 111 | 0 | 6 | 8 | 8 | 144 | 0 | 4 | 5 |
| 15 | 1 | 217 | 41 | 6 | 9 | 0 | 68 | 10 | 6 | 8 | 0 | 111 | 3 | 4 | 4 |
| 16 | 8 | 130 | 76 | 4 | 6 | 4 | 26 | 60 | 6 | 8 | 2 | 63 | 38 | 4 | 4 |
| 17 | 19 | 65 | 109 | 4 | 6 | 15 | 20 | 117 | 5 | 7 | 12 | 39 | 96 | 4 | 4 |
| 18 | 27 | 58 | 132 | 5 | 7 | 25 | 37 | 152 | 4 | 6 | 22 | 40 | 126 | 4 | 4 |
| 19 | 31 | 46 | 147 | 6 | 8 | 28 | 31 | 160 | 4 | 6 | 25 | 36 | 135 | 4 | 4 |
| 20 | 32 | 32 | 160 | 7 | 8 | 29 | 18 | 169 | 3 | 5 | 25 | 21 | 140 | 4 | 4 |
| 21 | 32 | 23 | 165 | 6 | 7 | 29 | 0 | 173 | 3 | 4 | 24 | 12 | 142 | 4 | 4 |
| 22 | 33 | 8 | 167 | 5 | 6 | 28 | 5 | 170 | 1 | 2 | 23 | 0 | 142 | 4 | 4 |
| 23 | 32 | 4 | 167 | 5 | 6 | 26 | 7 | 170 | 1 | 2 | 22 | 10 | 138 | 4 | 4 |
| Mean | 30·8 | 89·7 | 132·6 | 5·4 | 4·1 | 24·3 | 70·4 | 124·4 | 3·9 | 4·7 | 18·0 | 79·0 | 105·7 | 3·7 | 4·4 |
| Number of Days employed. | 29 | 15 | 30 | 30 | 30 | 27 | 25 | 28 | 31 | 31 | 28 | 26 | 27 | 30 | 30 |

## MEAN DIURNAL INEQUALITY of the MAGNETIC ELEMENTS, and of the TEMPERATURE within the SHADES covering the HORIZONTAL FORCE and VERTICAL FORCE MAGNETS.

*(The results in each case are diminished by the smallest hourly value).*

| Hour Mauritius Standard Time. | Declination. (0'.1). | Horizontal Force (0.1 γ). | Vertical Force (0.1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°.01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°.01 C.). | Declination. (0'.1). | Horizontal Force (0.1 γ). | Vertical Force (0.1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°.01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°.01 C.). | Declination. (0'.1). | Horizontal Force (0.1 γ). | Vertical Force (0.1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°.01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°.01 C.). |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | July. | | | | | August. | | | | | September. | | | | |
| Midnight | 30 | 2 | 130 | 4 | 4 | 32 | 24 | 170 | 3 | 2 | 27 | 94 | 149 | 3 | 3 |
| 1h | 26 | 0 | 127 | 3 | 3 | 31 | 47 | 166 | 3 | 2 | 26 | 117 | 147 | 3 | 3 |
| 2 | 24 | 32 | 122 | 2 | 2 | 30 | 55 | 162 | 2 | 2 | 26 | 134 | 142 | 3 | 3 |
| 3 | 24 | 44 | 118 | 2 | 2 | 29 | 67 | 161 | 2 | 2 | 24 | 157 | 138 | 3 | 3 |
| 4 | 24 | 54 | 115 | 1 | 1 | 27 | 91 | 158 | 2 | 2 | 24 | 181 | 139 | 2 | 2 |
| 5 | 24 | 74 | 113 | 1 | 1 | 27 | 115 | 157 | 2 | 2 | 24 | 185 | 139 | 1 | 1 |
| 6 | 23 | 81 | 113 | 0 | 0 | 25 | 129 | 153 | 0 | 0 | 21 | 199 | 140 | 1 | 1 |
| 7 | 15 | 124 | 104 | 0 | 0 | 12 | 178 | 147 | 0 | 0 | 17 | 246 | 141 | 0 | 0 |
| 8 | 15 | 175 | 114 | 2 | 2 | 15 | 218 | 166 | 1 | 1 | 29 | 278 | 180 | 1 | 1 |
| 9 | 28 | 194 | 145 | 7 | 7 | 34 | 220 | 210 | 2 | 2 | 46 | 283 | 221 | 3 | 3 |
| 10 | 40 | 174 | 152 | 8 | 8 | 49 | 188 | 225 | 3 | 3 | 58 | 275 | 230 | 3 | 3 |
| 11 | 44 | 156 | 132 | 10 | 10 | 58 | 188 | 200 | 2 | 0 | 61 | 271 | 205 | 4 | 3 |
| Noon | 39 | 135 | 92 | 15 | 15 | 52 | 209 | 143 | 3 | 2 | 50 | 267 | 141 | 6 | 8 |
| 13h | 23 | 125 | 29 | 14 | 14 | 38 | 217 | 72 | 3 | 2 | 30 | 262 | 51 | 4 | 6 |
| 14 | 9 | 105 | 6 | 13 | 13 | 19 | 200 | 15 | 3 | 2 | 10 | 250 | 12 | 6 | 8 |
| 15 | 0 | 61 | 0 | 12 | 12 | 2 | 136 | 0 | 3 | 2 | 0 | 207 | 0 | 6 | 8 |
| 16 | 2 | 33 | 39 | 11 | 11 | 0 | 65 | 46 | 3 | 2 | 3 | 163 | 35 | 6 | 8 |
| 17 | 17 | 9 | 101 | 11 | 11 | 13 | 17 | 109 | 2 | 1 | 11 | 91 | 84 | 6 | 8 |
| 18 | 29 | 37 | 129 | 9 | 9 | 27 | 5 | 152 | 2 | 1 | 23 | 42 | 114 | 6 | 8 |
| 19 | 33 | 43 | 134 | 7 | 7 | 32 | 5 | 166 | 2 | 1 | 27 | 30 | 131 | 6 | 7 |
| 20 | 34 | 32 | 137 | 6 | 6 | 33 | 15 | 170 | 3 | 2 | 28 | 0 | 140 | 6 | 7 |
| 21 | 34 | 36 | 139 | 6 | 6 | 34 | 0 | 175 | 3 | 2 | 30 | 24 | 150 | 6 | 7 |
| 22 | 33 | 29 | 138 | 5 | 5 | 33 | 11 | 174 | 3 | 2 | 30 | 44 | 153 | 6 | 7 |
| 23 | 31 | 29 | 136 | 3 | 3 | 32 | 11 | 174 | 3 | 2 | 29 | 55 | 155 | 6 | 7 |
| Mean | 25·0 | 74·3 | 106·9 | 6·2 | 6·3 | 28·5 | 100·5 | 144·6 | 2·3 | 1·6 | 27·3 | 160·6 | 130·7 | 4·1 | 4·8 |
| Number of Days employed. | 30 | 29 | 27 | 31 | 31 | 31 | 27 | 31 | 31 | 31 | 28 | 26 | 26 | 30 | 30 |

| Hour Mauritius Standard Time. | Declination. (0'.1). | Horizontal Force (0.1 γ). | Vertical Force (0.1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°.01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°.01 C.). | Declination. (0'.1). | Horizontal Force (0.1 γ). | Vertical Force (0.1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°.01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°.01 C.). | Declination. (0'.1). | Horizontal Force (0.1 γ). | Vertical Force (0.1 γ). | Temperature within the Shade covering the Horizontal Force Magnet (0°.01 C.). | Temperature within the Shade covering the Vertical Force Magnet (0°.01 C.). |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | October. | | | | | November. | | | | | December. | | | | |
| Midnight | 38 | 71 | 146 | 4 | 4 | 42 | 46 | 140 | 0 | 0 | 36 | 21 | 129 | 2 | 2 |
| 1h | 39 | 108 | 145 | 4 | 4 | 43 | 41 | 141 | 0 | 0 | 37 | 41 | 132 | 1 | 1 |
| 2 | 38 | 107 | 146 | 4 | 4 | 42 | 58 | 142 | 1 | 1 | 39 | 58 | 132 | 1 | 1 |
| 3 | 38 | 116 | 146 | 4 | 4 | 44 | 61 | 144 | 1 | 1 | 40 | 50 | 134 | 1 | 1 |
| 4 | 39 | 127 | 148 | 3 | 3 | 48 | 63 | 149 | 1 | 1 | 43 | 64 | 138 | 1 | 1 |
| 5 | 41 | 122 | 151 | 3 | 3 | 52 | 49 | 156 | 0 | 0 | 48 | 64 | 144 | 1 | 1 |
| 6 | 43 | 132 | 157 | 2 | 2 | 60 | 41 | 176 | 0 | 0 | 54 | 79 | 154 | 0 | 0 |
| 7 | 48 | 151 | 168 | 2 | 2 | 77 | 39 | 194 | 0 | 0 | 63 | 94 | 165 | 0 | 0 |
| 8 | 56 | 145 | 189 | 2 | 2 | 83 | 61 | 184 | 1 | 1 | 66 | 123 | 165 | 1 | 1 |
| 9 | 64 | 165 | 199 | 1 | 1 | 75 | 79 | 145 | 2 | 2 | 60 | 158 | 147 | 1 | 1 |
| 10 | 66 | 210 | 185 | 1 | 1 | 61 | 110 | 102 | 3 | 3 | 53 | 202 | 121 | 0 | 0 |
| 11 | 59 | 245 | 139 | 1 | 0 | 41 | 153 | 59 | 3 | 3 | 39 | 230 | 85 | 1 | 0 |
| Noon | 42 | 268 | 66 | 4 | 5 | 22 | 194 | 31 | 6 | 7 | 23 | 204 | 47 | 3 | 2 |
| 13h | 21 | 297 | 8 | 4 | 4 | 6 | 195 | 0 | 3 | 3 | 7 | 175 | 15 | 3 | 2 |
| 14 | 6 | 270 | 0 | 1 | 0 | 0 | 160 | 6 | 3 | 2 | 0 | 144 | 0 | 3 | 3 |
| 15 | 0 | 215 | 24 | 0 | 0 | 3 | 116 | 36 | 3 | 2 | 3 | 78 | 9 | 2 | 2 |
| 16 | 9 | 114 | 66 | 0 | 0 | 16 | 78 | 75 | 2 | 1 | 10 | 36 | 37 | 2 | 2 |
| 17 | 23 | 29 | 105 | 0 | 0 | 32 | 36 | 108 | 1 | 0 | 18 | 6 | 57 | 1 | 1 |
| 18 | 31 | 10 | 126 | 1 | 1 | 40 | 19 | 125 | 2 | 1 | 27 | 0 | 79 | 1 | 1 |
| 19 | 33 | 16 | 132 | 2 | 2 | 40 | 5 | 124 | 3 | 2 | 32 | 7 | 92 | 2 | 2 |
| 20 | 36 | 0 | 137 | 4 | 4 | 39 | 0 | 128 | 4 | 3 | 33 | 7 | 101 | 3 | 3 |
| 21 | 37 | 21 | 141 | 5 | 5 | 40 | 9 | 133 | 5 | 4 | 33 | 6 | 106 | 5 | 5 |
| 22 | 38 | 52 | 144 | 6 | 6 | 40 | 19 | 137 | 5 | 4 | 34 | 7 | 119 | 5 | 5 |
| 23 | 39 | 70 | 135 | 6 | 6 | 43 | 28 | 140 | 5 | 4 | 35 | 23 | 125 | 6 | 6 |
| Mean | 36·8 | 127·5 | 125·1 | 2·7 | 2·6 | 41·2 | 69·2 | 115·6 | 2·3 | 1·9 | 34·7 | 78·2 | 101·4 | 2·3 | 1·8 |
| Number of Days employed. | 29 | 29 | 31 | 31 | 31 | 30 | 27 | 28 | 30 | 30 | 31 | 26 | 31 | 31 | 31 |

MEAN DIURNAL INEQUALITIES of MAGNETIC DECLINATION, HORIZONTAL FORCE, and VERTICAL FORCE, and of the TEMPERATURE within the GLASS SHADES of the HORIZONTAL FORCE and VERTICAL FORCE MAGNETS.

*(Each result is the mean of twelve monthly mean values, the annual means for each element being diminished by the smallest hourly value).*

1909.

| Hour, Mauritius Standard Time. | Declination (West) (0'·01). | Horizontal Force (0·1 γ). | Vertical Force (0·1 γ). | Temperature within the Glass Shade covering the Horizontal Force Magnet (0°·001 C.). | Temperature within the Glass Shade covering the Vertical Force Magnet (0°·001 C.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|
| Midnight | 33 | 19 | 147 | 34 | 34 | Midnight |
| 1h | 33 | 34 | 145 | 29 | 30 | 1h |
| 2 | 33 | 46 | 142 | 27 | 28 | 2 |
| 3 | 33 | 61 | 140 | 24 | 25 | 3 |
| 4 | 34 | 70 | 141 | 17 | 17 | 4 |
| 5 | 36 | 73 | 142 | 12 | 12 | 5 |
| 6 | 37 | 86 | 145 | 4 | 5 | 6 |
| 7 | 38 | 108 | 148 | 0 | 0 | 7 |
| 8 | 46 | 125 | 163 | 5 | 5 | 8 |
| 9 | 54 | 136 | 170 | 18 | 18 | 9 |
| 10 | 56 | 149 | 154 | 25 | 25 | 10 |
| 11 | 49 | 173 | 108 | 29 | 22 | 11 |
| Noon | 33 | 186 | 57 | 61 | 76 | Noon |
| 13h | 17 | 186 | 13 | 57 | 66 | 13h |
| 14 | 4 | 166 | 0 | 56 | 61 | 14 |
| 15 | 0 | 122 | 14 | 53 | 57 | 15 |
| 16 | 6 | 67 | 53 | 45 | 48 | 16 |
| 17 | 19 | 23 | 97 | 42 | 45 | 17 |
| 18 | 29 | 13 | 124 | 40 | 42 | 18 |
| 19 | 32 | 9 | 132 | 42 | 44 | 19 |
| 20 | 33 | 1 | 139 | 42 | 44 | 20 |
| 21 | 34 | 0 | 144 | 44 | 45 | 21 |
| 22 | 34 | 6 | 146 | 40 | 41 | 22 |
| 23 | 34 | 12 | 146 | 37 | 39 | 23 |
| Mean | 31·5 | 78·0 | 117·2 | 32·6 | 34·5 | Mean |
| Column | 1 | 2 | 3 | 4 | 5 | Column |

MEAN MONTHLY VALUES of MAGNETIC DECLINATION, DIP, HORIZONTAL FORCE, VERTICAL FORCE, and TOTAL FORCE in the YEAR 1909.

| Month, 1909. | Declination (West). | Dip (South). | In Metric Measure (C.G.S. Unit). Horizontal Force. | Vertical Force. | Total Force. | In English Measure (F.G.S Unit). Horizontal Force. | Vertical Force. | Total Force. |
|---|---|---|---|---|---|---|---|---|
| | ° ′ | ° ′ | | | | | | |
| January ... ... | 9.15·16 | 53.46·55 | ·23392 | ·31933 | ·39584 | 5·0732 | 6·9257 | 8·5850 |
| February ... ... | 9.15·56 | 53.45·03 | ·23382 | ·31890 | ·39543 | 5·0711 | 6·9163 | 8·5761 |
| March ... ... | 9.15·51 | 53.41·75 | ·23379 | ·31822 | ·39487 | 5·0704 | 6·9016 | 8·5640 |
| April ... ... | 9.15·63 | 53.40·55 | ·23390 | ·31813 | ·39487 | 5·0728 | 6·8996 | 8·5640 |
| May ... ... | 9.15·49 | 53.39·60 | ·23362 | ·31757 | ·39424 | 5·0667 | 6·8875 | 8·5503 |
| June ... ... | 9.16·45 | 53.38·10 | ·23369 | ·31738 | ·39413 | 5·0683 | 6·8833 | 8·5479 |
| July ... ... | 9.17·41 | 53.37·65 | ·23364 | ·31722 | ·39398 | 5·0672 | 6·8799 | 8·5446 |
| August ... ... | 9.18·20 | 53.37·38 | ·23364 | ·31717 | ·39393 | 5·0672 | 6·8788 | 8·5436 |
| September ... ... | 9.17·32 | 53.37·55 | ·23361 | ·31716 | ·39391 | 5·0665 | 6·8786 | 8·5431 |
| October ... ... | 9.16·93 | 53.39·98 | ·23371 | ·31776 | ·39446 | 5·0687 | 6·8916 | 8·5551 |
| November ... ... | 9.16·04 | 53.36·28 | ·23396 | ·31739 | ·39430 | 5·0741 | 6·8836 | 8·5512 |
| December ... ... | 9.16·19 | 53.36·98 | ·23395 | ·31751 | ·39439 | 5·0739 | 6·8862 | 8·5536 |
| Year | 9.16·32 | 53.39·78 | ·23377 | ·31781 | ·39453 | 5·0700 | 6·8927 | 8·5565 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

## HOURLY VARIATIONS of HORIZONTAL MAGNETIC FORCE and DECLINATION above or below the MEAN for the MONTH, on DAYS of MAGNETIC DISTURBANCE.

*(The unit for Horizontal Force is ·00001 of the Centimètre-Gramme-Second Unit and for Declination ·1. No correction for temperature has been applied to the Horizontal Force values).*

1909.

| Hour, Mauritius Standard Time. | January. | | | | | | | | | | February. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2d. | 3d. | | 4d. | | 13d. | 14d. | 29d. | 30d. | 31d. | 2d. |
| | H.F. | H.F. | Dec. | H.F. | Dec. | H.F. | H.F. | H.F. | H.F. | H.F. | H.F. |
| Midnight | − 19 | − 1 | 0 | − 42 | + 2 | ... | − 12 | − 19 | ... | − 19 | − 21 |
| 1h | − 16 | + 3 | − 8 | + 29 | − 50 | ... | − 9 | − 4 | ... | + 29 | − 20 |
| 2 | − 7 | + 9 | − 12 | − 94 | + 32 | ... | 0 | − 15 | ... | + 10 | − 24 |
| 3 | − 21 | − 2 | + 2 | − 55 | + 48 | ... | + 8 | − 20 | ... | + 29 | − 24 |
| 4 | + 18 | + 8 | + 14 | − 65 | + 24 | ... | + 13 | − 18 | ... | + 43 | − 20 |
| 5 | + 30 | + 19 | + 16 | − 55 | + 32 | ... | + 16 | − 20 | ... | − 48 | − 19 |
| 6 | + 13 | + 13 | + 18 | − 73 | + 48 | ... | + 13 | − 18 | ... | + 9 | + 30 |
| 7 | + 25 | + 9 | + 16 | − 81 | + 20 | ... | + 26 | − 16 | ... | ... | + 26 |
| 8 | + 40 | + 8 | + 14 | − 75 | + 8 | + 10 | + 26 | − 11 | + 18 | ... | − 7 |
| 9 | + 58 | − 2 | + 28 | − 45 | + 28 | + 17 | ... | ... | + 21 | ... | + 13 |
| 10 | + 62 | + 8 | + 42 | − 35 | + 18 | + 26 | ... | ... | − 18 | − 38 | + 6 |
| 11 | + 50 | + 10 | + 38 | − 31 | + 14 | + 34 | ... | ... | − 46 | − 31 | + 34 |
| Noon | + 28 | + 12 | + 8 | − 32 | − 8 | + 32 | ... | ... | − 61 | − 56 | − 10 |
| 13h | + 19 | + 18 | − 14 | − 51 | − 10 | + 18 | ... | ... | − 71 | − 89 | − 38 |
| 14 | + 9 | + 23 | − 30 | − 54 | − 6 | + 20 | ... | ... | − 71 | ... | − 40 |
| 15 | − 6 | + 29 | − 42 | − 45 | + 2 | + 17 | ... | ... | − 59 | ... | − 53 |
| 16 | − 11 | + 13 | − 40 | − 32 | 0 | + 22 | ... | ... | − 58 | − 66 | − 57 |
| 17 | − 1 | − 53 | − 10 | − 40 | − 4 | − 13 | ... | ... | − 32 | − 41 | − 51 |
| 18 | − 6 | − 89 | − 14 | − 64 | − 4 | − 42 | ... | ... | − 38 | − 61 | − 29 |
| 19 | + 9 | −112 | + 30 | − 42 | − 4 | − 43 | ... | ... | − 28 | − 57 | − 50 |
| 20 | + 13 | −113 | − 4 | − 35 | − 10 | − 27 | ... | ... | − 21 | − 41 | − 47 |
| 21 | + 39 | −122 | + 10 | − 31 | − 6 | − 19 | ... | ... | − 20 | − 41 | − 57 |
| 22 | + 12 | − 69 | − 8 | − 30 | − 4 | − 13 | ... | ... | − 12 | − 41 | − 56 |
| 23 | + 20 | − 13 | − 16 | − 23 | − 4 | − 13 | ... | ... | − 1 | − 31 | − 60 |
| Daily Range | 95 | 190 | 98 | 127 | 138 | 87 | ... | ... | ... | 164 | 114 |

| Hour, Mauritius Standard Time. | February. | | | March. | | | | May. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2d. | 6d. | 22d. | 18d. | 19d. | | 28d. | 14d. | | 15d. | |
| | Dec. | H.F. | H.F. | H.F. | H.F. | Dec. | H.F. | H.F. | Dec. | H.F. | Dec. |
| Midnight | + 4 | − 10 | 0 | + 5 | − 36 | + 4 | − 52 | + 22 | + 2 | −248 | + 88 |
| 1h | + 4 | − 12 | + 11 | + 4 | − 29 | + 6 | − 28 | + 23 | − 2 | −205 | + 32 |
| 2 | + 4 | − 9 | + 1 | + 1 | − 26 | + 6 | − 12 | + 27 | − 4 | −145 | − 12 |
| 3 | + 4 | − 8 | + 1 | + 2 | − 24 | − 2 | − 14 | + 28 | − 6 | −136 | − 2 |
| 4 | + 4 | − 3 | + 12 | + 1 | − 21 | − 2 | − 2 | + 28 | − 6 | − 95 | − 32 |
| 5 | − 2 | + 12 | + 9 | 0 | − 11 | + 2 | − 17 | + 30 | − 6 | −118 | − 32 |
| 6 | − 16 | + 17 | + 8 | 0 | − 11 | + 4 | − 24 | + 37 | − 6 | −102 | − 30 |
| 7 | + 10 | + 11 | + 11 | + 1 | − 5 | + 6 | − 34 | + 42 | − 12 | − 65 | − 30 |
| 8 | + 42 | + 8 | + 1 | − 3 | − 7 | + 14 | − 32 | + 42 | + 6 | − 70 | − 50 |
| 9 | − 4 | + 18 | − 14 | − 4 | − 15 | + 24 | − 29 | + 87 | + 38 | − 85 | − 4 |
| 10 | + 2 | + 26 | − 9 | + 5 | − 5 | + 24 | − 28 | + 10 | + 78 | − 94 | + 20 |
| 11 | + 26 | + 29 | + 9 | + 16 | + 6 | + 6 | − 9 | − 3 | + 86 | − 84 | + 26 |
| Noon | − 10 | + 7 | + 42 | + 25 | + 18 | − 28 | + 27 | + 3 | + 24 | − 75 | + 28 |
| 13h | − 4 | − 9 | + 41 | + 30 | + 19 | − 64 | + 33 | − 13 | + 8 | − 95 | + 16 |
| 14 | + 4 | − 3 | + 45 | + 37 | + 16 | − 70 | − 16 | − 23 | − 14 | − 75 | − 2 |
| 15 | − 6 | − 3 | + 20 | + 17 | − 2 | − 64 | − 58 | − 28 | − 26 | − 75 | − 10 |
| 16 | − 4 | − 21 | + 5 | + 11 | − 26 | − 58 | − 70 | − 53 | − 14 | − 65 | − 6 |
| 17 | − 8 | − 48 | + 5 | + 5 | − 70 | − 36 | − 37 | −133 | − 6 | − 55 | − 12 |
| 18 | − 12 | − 43 | − 8 | − 31 | −105 | − 28 | − 38 | −143 | 0 | − 53 | − 0 |
| 19 | − 10 | − 58 | − 26 | − 61 | −164 | − 24 | − 77 | −172 | + 34 | − 59 | + 4 |
| 20 | + 4 | − 73 | − 16 | − 91 | −184 | + 6 | − 81 | −193 | + 46 | − 61 | + 4 |
| 21 | − 6 | − 73 | − 18 | − 94 | −116 | + 16 | − 57 | −143 | +138 | − 52 | + 6 |
| 22 | + 14 | − 33 | − 2 | − 41 | − 98 | + 34 | − 54 | −235 | + 68 | − 44 | + 6 |
| 23 | + 10 | − 39 | + 5 | − 33 | − 95 | + 6 | − 53 | −285 | + 52 | − 51 | + 2 |
| Daily Range | 60 | 113 | 78 | 152 | 204 | 132 | 121 | 383 | 168 | 202 | 160 |

**HOURLY VARIATIONS of HORIZONTAL MAGNETIC FORCE AND DECLINATION, above or below the MEAN for the MONTH, on DAYS of MAGNETIC DISTURBANCE.**

*(The unit for Horizontal Force is ·00001 of the Centimetre-Gramme-Second Unit, and for Declination 0′·1. No Correction for temperature has been applied to the Horizontal Force values).*

1909.

| Hour, Mauritius Standard Time. | May. | | | | | June. | | July. | August. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 18d. | | 19d. | | 26d. | 28d. | 29d. | 23d. | 19d. | 29d. | 30d. |
| | H.F. | Dec. | H.F. | Dec. | H.F. | H.F. | H.F. | H.F. | H.F. | H.F. | H.F. |
| Midnight | − 23 | − 1 | −115 | + 33 | + 15 | + 4 | + 10 | − 9 | − 9 | − 3 | − 22 |
| 1h | − 21 | + 1 | − 97 | + 29 | + 16 | + 2 | + 6 | − 6 | − 9 | + 10 | − 32 |
| 2 | − 18 | + 1 | − 76 | + 7 | + 18 | + 1 | + 2 | − 5 | − 6 | − 3 | −114 |
| 3 | − 18 | + 1 | − 51 | + 35 | + 24 | + 1 | + 6 | − 2 | − 5 | − 3 | − 20 |
| 4 | − 18 | − 1 | − 51 | − 3 | + 26 | + 1 | + 12 | − 1 | + 4 | + 6 | − 19 |
| 5 | − 18 | − 1 | − 43 | + 21 | + 44 | + 3 | + 14 | + 5 | + 10 | + 1 | − 14 |
| 6 | − 17 | − 3 | − 61 | + 7 | + 41 | + 5 | + 15 | + 6 | + 17 | + 4 | − 9 |
| 7 | − 17 | − 9 | − 40 | − 25 | + 45 | +16 | + 19 | + 14 | + 31 | + 5 | − 1 |
| 8 | − 17 | + 3 | − 40 | − 33 | + 44 | +17 | + 19 | + 17 | + 38 | + 13 | + 2 |
| 9 | − 25 | + 21 | − 52 | − 17 | + 47 | +20 | − 3 | + 21 | + 24 | + 8 | − 2 |
| 10 | − 18 | − 1 | − 52 | − 23 | + 37 | +20 | + 2 | + 20 | + 8 | + 8 | + 8 |
| 11 | − 48 | − 9 | − 50 | − 23 | + 28 | +20 | + 5 | − 4 | − 4 | − 13 | 0 |
| Noon | − 39 | − 13 | − 47 | − 13 | + 29 | +16 | + 3 | − 13 | + 6 | − 14 | + 14 |
| 13h | − 42 | − 11 | − 59 | − 21 | + 24 | +18 | − 7 | − 5 | + 15 | − 23 | + 9 |
| 14 | − 50 | − 31 | − 53 | − 27 | + 4 | + 5 | − 17 | − 3 | + 14 | − 24 | − 10 |
| 15 | − 51 | − 13 | − 55 | − 33 | + 1 | 0 | − 24 | − 14 | + 11 | − 43 | − 26 |
| 16 | − 62 | − 11 | − 54 | − 17 | − 4 | − 3 | − 27 | − 21 | − 19 | − 59 | − 39 |
| 17 | − 63 | + 9 | − 56 | − 9 | 0 | −10 | − 22 | − 7 | − 20 | − 45 | − 64 |
| 18 | − 51 | + 15 | − 57 | − 5 | + 1 | 0 | − 11 | − 13 | − 12 | − 43 | − 47 |
| 19 | − 68 | + 19 | − 57 | + 5 | − 6 | + 4 | − 8 | − 15 | − 11 | − 47 | − 45 |
| 20 | − 84 | + 17 | − 48 | + 7 | − 25 | + 5 | − 10 | − 12 | − 12 | − 50 | − 36 |
| 21 | − 48 | + 27 | − 51 | + 7 | − 33 | +14 | − 12 | − 25 | − 14 | − 55 | − 26 |
| 22 | − 68 | + 23 | − 38 | + 5 | − 36 | +11 | − 16 | − 30 | − 18 | − 34 | − 26 |
| 23 | −102 | + 27 | − 48 | + 5 | − 28 | + 9 | − 8 | − 23 | − 17 | − 24 | − 25 |
| Daily Range | 94 | 70 | 84 | 70 | 87 | 37 | 56 | 54 | 62 | 72 | 81 |

| Hour, Mauritius Standard Time. | August. | October. | | | November. | | | December. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 31d | 19d | 23d | 24d | 20d | 27d | 30d | 2d | 13d | 14d | 19d | 21d |
| | H.F. | Dec. | H.F. | H.F. | H.F. | H.F. | H.F. | H.F. | H.F. | H.F. | H.F. | H.F. |
| Midnight | −12 | +15 | + 5 | −47 | − 7 | + 12 | + 2 | −31 | + 7 | −17 | ... | + 7 |
| 1h | −14 | +15 | + 4 | −53 | − 8 | + 10 | + 5 | −36 | + 4 | − 9 | ... | + 6 |
| 2 | −24 | + 1 | + 3 | −45 | − 7 | + 20 | + 8 | −36 | + 3 | − 9 | ... | + 8 |
| 3 | −15 | +13 | + 3 | ... | − 7 | + 20 | + 16 | −23 | +10 | − 3 | ... | +17 |
| 4 | −13 | + 5 | + 16 | ... | − 6 | + 22 | + 14 | −11 | +13 | − 3 | ... | +17 |
| 5 | − 9 | − 5 | + 31 | ... | 0 | + 18 | + 13 | −26 | + 9 | − 4 | ... | +18 |
| 6 | − 3 | −23 | + 23 | −27 | 0 | + 22 | + 19 | −26 | + 7 | − 6 | − 3 | +19 |
| 7 | − 3 | −57 | + 13 | −28 | − 3 | + 27 | + 17 | −25 | +15 | + 8 | 0 | +27 |
| 8 | + 4 | −45 | + 6 | −26 | − 2 | + 62 | + 16 | −21 | +17 | + 6 | + 1 | +36 |
| 9 | + 4 | −45 | − 3 | −23 | + 11 | + 70 | − 6 | −30 | +18 | +10 | + 7 | +24 |
| 10 | + 4 | −37 | − 9 | −20 | + 17 | + 82 | − 12 | −30 | +21 | +21 | +13 | +17 |
| 11 | −10 | −31 | − 9 | −10 | + 14 | + 47 | − 23 | −30 | +20 | +15 | +12 | +16 |
| Noon | − 1 | −43 | − 10 | −10 | + 16 | + 29 | − 33 | −41 | +14 | − 7 | + 5 | +13 |
| 13h | − 4 | −65 | − 13 | − 7 | + 10 | + 39 | − 37 | −45 | +12 | − 6 | − 1 | +11 |
| 14 | + 6 | −83 | − 16 | −10 | + 4 | + 25 | − 71 | −37 | +24 | −25 | − 3 | + 8 |
| 15 | + 6 | −73 | − 19 | −26 | 0 | + 30 | −106 | −25 | +30 | −29 | − 8 | 0 |
| 16 | −20 | −59 | − 66 | −20 | − 9 | + 17 | −117 | −32 | +22 | −39 | − 9 | 0 |
| 17 | −34 | −27 | − 96 | −28 | − 34 | + 9 | −146 | −35 | + 6 | −49 | − 8 | + 2 |
| 18 | −31 | −19 | −100 | −36 | − 56 | − 1 | −128 | −45 | − 1 | −68 | −12 | − 3 |
| 19 | −32 | − 3 | −129 | −45 | − 57 | − 20 | −107 | −46 | −25 | −81 | − 9 | −23 |
| 20 | −38 | − 7 | −129 | −10 | − 69 | − 21 | − 80 | −47 | −61 | −77 | − 8 | −37 |
| 21 | −23 | + 7 | −127 | −37 | − 59 | − 11 | − 68 | −41 | −47 | −86 | − 8 | −43 |
| 22 | −34 | + 5 | −119 | + 4 | − 35 | + 12 | − 66 | −36 | −51 | −85 | − 9 | −52 |
| 23 | −28 | + 5 | − 94 | −22 | − 32 | − 1 | − 68 | −28 | −31 | −64 | − 9 | −49 |
| Daily Range | 51 | 116 | 164 | 68 | 90 | 107 | 169 | 54 | 90 | 120 | ... | 93 |

ROYAL ALFRED OBSERVATORY, MAURITIUS.

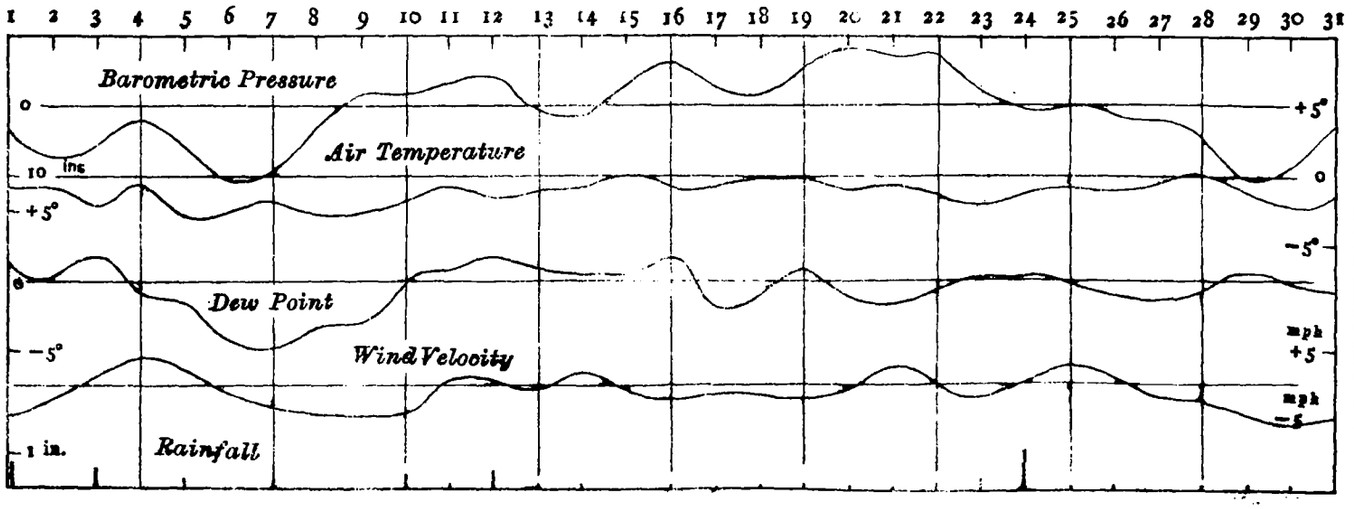
# RESULTS

OF

# METEOROLOGICAL OBSERVATIONS.

1909.

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew-Point. Mean. | Temperature of the Dew-Point. Excess above Average. | Degree of Humidity (Saturation = 100). Mean. | Degree of Humidity (Saturation = 100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | ° | ins. | mins. | in. |
| Jan. 1 | 29·749 | −·029 | 85·7 | 72·1 | 13·6 | 77·8 | −0·9 | 73·6 | 70·7 | +1·4 | 79 | + 6 | ·751 | 157·8 | 66·5 | 0·680 | 115 | ·120 |
| 2 | 29·705 | −·071 | 85·5 | 69·4 | 16·1 | 77·9 | −0·8 | 72·9 | 69·4 | +0·1 | 75 | + 2 | ·718 | 155·2 | 65·1 | 0·000 | ... | ·235 |
| 3 | 29·714 | −·060 | 82·3 | 72·2 | 10·1 | 76·5 | −2·2 | 73·5 | 71·3 | +1·9 | 84 | +11 | ·766 | 150·5 | 66·2 | 0·610 | 155 | ·130 |
| 4 | 29·753 | −·019 | 83·3 | 73·8 | 9·5 | 78·0 | −0·7 | 72·4 | 68·4 | −1·1 | 72 | − 2 | ·694 | 152·2 | 69·6 | 0·000 | ... | ·220 |
| 5 | 29·714 | −·056 | 82·0 | 72·3 | 9·7 | 75·8 | −3·0 | 71·3 | 68·1 | −1·5 | 77 | + 3 | ·687 | 153·2 | 66·2 | 0·275 | 75 | ·215 |
| 6 | 29·662 | −·107 | 84·1 | 67·3 | 16·8 | 76·1 | −2·7 | 70·1 | 65·1 | −4·5 | 71 | − 3 | ·620 | 155·3 | 61·7 | 0·000 | ... | ·190 |
| 7 | 29·668 | −·099 | 86·6 | 65·3 | 21·3 | 77·0 | −1·8 | 70·0 | 65·0 | −4·7 | 67 | − 7 | ·617 | 151·9 | 60·6 | 0·000 | ... | ·260 |
| 8 | 29·742 | −·023 | 87·1 | 67·3 | 19·8 | 75·8 | −3·0 | 70·4 | 66·5 | −3·3 | 73 | − 1 | ·650 | 159·6 | 60·5 | 0·000 | ... | ·180 |
| 9 | 29·781 | +·018 | 86·0 | 68·0 | 18·0 | 76·2 | −2·6 | 70·7 | 66·7 | −3·1 | 73 | − 2 | ·655 | 158·0 | 61·5 | 0·000 | ... | ·180 |
| 10 | 29·776 | +·015 | 85·3 | 70·3 | 15·0 | 76·9 | −2·0 | 72·9 | 70·0 | +0·1 | 79 | + 4 | ·733 | 15·07 | 63·4 | 0·435 | 220 | ·135 |
| 11 | 29·790 | +·031 | 84·5 | 72·9 | 11·6 | 78·3 | −0·6 | 73·9 | 70·8 | +0·8 | 78 | + 3 | ·754 | 152·3 | 69·5 | 0·085 | 65 | ·225 |
| 12 | 29·801 | +·044 | 84·1 | 74·6 | 9·5 | 77·2 | −1·7 | 74·0 | 71·7 | +1·7 | 83 | + 8 | ·777 | 158·2 | 69·4 | 0·480 | 75 | ·110 |
| 13 | 29·748 | −·007 | 83·3 | 73·1 | 10·2 | 77·8 | −1·1 | 73·6 | 70·7 | +0·6 | 79 | + 4 | ·751 | 151·8 | 69·4 | 0·020 | 10 | ·180 |
| 14 | 29·734 | −·019 | 83·7 | 72·9 | 10·8 | 78·1 | −0·8 | 73·7 | 70·5 | +0·4 | 78 | + 3 | ·746 | 151·0 | 68·5 | 0·085 | 10 | ·225 |
| 15 | 29·774 | +·023 | 85·3 | 72·9 | 12·4 | 79·0 | +0·1 | 74·0 | 70·5 | +0·3 | 75 | 0 | ·746 | 151·0 | 67·6 | 0·000 | ... | ·300 |
| 16 | 29·813 | +·064 | 84·3 | 74·8 | 9·5 | 78·2 | −0·7 | 74·6 | 72·1 | +1·9 | 82 | + 7 | ·788 | 161·2 | 71·3 | 0·075 | 40 | ·155 |
| 17 | 29·776 | +·029 | 85·1 | 72·4 | 12·7 | 78·1 | −0·8 | 72·3 | 68·3 | −2·0 | 72 | − 4 | ·692 | 152·0 | 66·3 | 0·060 | 20 | ·320 |
| 18 | 29·761 | +·016 | 86·3 | 70·9 | 15·4 | 78·9 | −0·1 | 73·4 | 69·5 | −0·8 | 73 | − 3 | ·721 | 153·8 | 63·8 | 0·025 | 15 | ·285 |
| 19 | 29·797 | +·054 | 86·2 | 73·9 | 12·3 | 78·9 | −0·1 | 74·0 | 70·7 | +0·3 | 76 | 0 | ·751 | 160·3 | 67·5 | 0·080 | 55 | ·220 |
| 20 | 29·822 | +·081 | 86·3 | 73·4 | 12·9 | 78·2 | −0·8 | 73·0 | 69·3 | −1·1 | 74 | − 2 | ·716 | 154·0 | 69·2 | 0·035 | 15 | ·235 |
| 21 | 29·813 | +·073 | 85·3 | 73·1 | 12·2 | 78·3 | −0·7 | 72·8 | 68·9 | −1·6 | 73 | − 3 | ·706 | 163·4 | 69·3 | 0·020 | 15 | ·220 |
| 22 | 29·812 | +·074 | 82·2 | 73·8 | 8·4 | 77·5 | −1·4 | 73·0 | 69·9 | −0·6 | 78 | + 2 | ·731 | 141·5 | 70·2 | 0·195 | 55 | ·175 |
| 23 | 29·759 | +·022 | 82·3 | 74·4 | 7·9 | 76·6 | −2·3 | 73·2 | 70·8 | +0·3 | 82 | + 6 | ·754 | 133·8 | 72·2 | 0·310 | 235 | ·060 |
| 24 | 29·730 | −·005 | 82·5 | 72·2 | 10·3 | 77·5 | −1·4 | 73·5 | 70·8 | +0·2 | 80 | + 4 | ·754 | 160·9 | 70·8 | 1·090 | 155 | ·170 |
| 25 | 29·733 | −·001 | 83·3 | 74·3 | 9·0 | 78·2 | −0·7 | 73·6 | 70·5 | −0·1 | 77 | + 1 | ·746 | 155·0 | 69·1 | 0·080 | 50 | ·240 |
| 26 | 29·723 | −·010 | 83·7 | 73·3 | 10·4 | 77·9 | −1·0 | 73·1 | 69·6 | −1·0 | 76 | 0 | ·723 | 153·8 | 67·0 | 0·080 | 40 | ·255 |
| 27 | 29·717 | −·015 | 86·4 | 70·9 | 15·5 | 78·4 | −0·5 | 73·2 | 69·5 | −1·2 | 74 | − 2 | ·721 | 155·4 | 64·9 | 0·000 | ... | ·275 |
| 28 | 29·690 | −·041 | 86·5 | 71·9 | 14·6 | 79·1 | +0·2 | 73·7 | 70·0 | −0·7 | 74 | − 2 | ·733 | 156·1 | 66·9 | 0·030 | 15 | ·250 |
| 29 | 29·630 | −·100 | 86·3 | 72·3 | 14·0 | 77·8 | −1·1 | 74·1 | 71·4 | +0·7 | 81 | + 5 | ·769 | 163·2 | 68·0 | 0·125 | 35 | ·165 |
| 30 | 29·641 | −·088 | 85·0 | 69·9 | 15·1 | 76·7 | −2·2 | 73·2 | 70·6 | −0·1 | 82 | + 6 | ·749 | 151·8 | 64·4 | 0·130 | 40 | ·130 |
| 31 | 29·705 | −·023 | 86·5 | 70·2 | 16·3 | 77·6 | −1·3 | 73·1 | 69·8 | −0·9 | 77 | + 1 | ·728 | 155·4 | 64·6 | 0·000 | ... | ·200 |
| Mean | 29·743 | −·007 | 84·7 | 71·8 | 12·9 | 77·6 | −1·3 | 72·9 | 69·6 | −0·6 | 76·6 | +1·5 | ·724 | 154·2 | 66·8 | Sum 5·005 | Sum 1510 | ·202 |
| Average | 29·750 | ... | 86·1 | 72·9 | 13·2 | 78·9 | ... | 73·8 | 70·2 | ... | 75·1 | ... | ·737 | 156·7 | 69·0 | 7·949 | 2266 | ·243 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day. 1909. | Ozone (Scale 0—10) | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind: Components. North. | Wind: Components. East. | Wind: Resultants. Direction. | Wind: Resultants. Velocity. | Wind: Excess above Average. Direction. | Wind: Excess above Average. Velocity. | Wind: Observed Velocity. | Temperature of the Soil 5 Feet. | Temperature of the Soil 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Jan. 1 | 3·0 | 4·9 | 6·8 | 51 | − 2·1 | + 5·2 | 68 | 5·6 | − 23 | − 2·9 | 6·2 | 79·3 | 76·33 | b. : c.f. : c.r. : b. |
| 2 | 4·0 | 3·0 | 10·9 | 82 | − 3·2 | + 7·5 | 67 | 8·1 | − 23 | − 0·4 | 8·5 | 79·4 | 76·33 | b. : c.f. : b. |
| 3 | 4·0 | 7·6 | 5·1 | 38 | − 2·2 | +11·1 | 79 | 11·3 | − 11 | + 2·8 | 11·6 | 79·3 | 76·33 | c.p. : c. : c.p. |
| 4 | 4·0 | 5·0 | 11·6 | 88 | − 1·9 | +14·4 | 82 | 14·5 | − 8 | + 6·0 | 14·8 | 79·4 | 76·38 | c.f.q |
| 5 | 4·0 | 7·5 | 9·2 | 70 | − 4·5 | +11·6 | 69 | 12·5 | − 20 | + 4·0 | 12·6 | 79·4 | 76·38 | c.p. : c.f.q. |
| 6 | 5·0 | 4·6 | 8·0 | 61 | − 5·0 | + 8·0 | 58 | 9·4 | − 31 | + 0·9 | 9·7 | 79·5 | 76·43 | c.f. |
| 7 | 4·0 | 2·7 | 11·9 | 90 | − 1·2 | + 1·6 | 53 | 2·0 | − 36 | − 6·5 | 7·1 | 79·6 | 76·43 | b. : c.f. |
| 8 | 4·0 | 5·8 | 7·5 | 57 | − 2·5 | + 2·9 | 49 | 3·9 | − 40 | − 4·6 | 6·5 | 79·6 | 76·43 | b. : c.f. : : b. |
| 9 | 3·0 | 6·7 | 6·9 | 52 | − 2·3 | + 5·9 | 69 | 6·3 | − 19 | − 2·2 | 6·6 | 79·7 | 76·48 | c.f. : b. |
| 10 | 4·0 | 7·3 | 2·5 | 19 | − 2·0 | + 4·3 | 65 | 4·8 | − 23 | − 3·7 | 6·4 | 79·7 | 76·53 | b. c.f. : c. : o.r. |
| 11 | 4·0 | 7·2 | 11·4 | 86 | − 1·1 | +11·4 | 85 | 11·4 | − 3 | + 2·9 | 11·9 | 79·7 | 76·53 | c.p. : c.f. : c.p.l |
| 12 | 5·0 | 7·6 | 5·6 | 42 | + 1·2 | +10·0 | 97 | 10·1 | + 10 | + 1·7 | 11·4 | 79·7 | 76·58 | c.f. : c.d. : o.r.t.l. c.f.l. |
| 13 | 4·0 | 7·5 | 5·3 | 40 | + 0·1 | +10·0 | 91 | 10·0 | + 4 | + 1·6 | 10·3 | 79·7 | 76·58 | c.p.l.: c.f. : o. : o.l. |
| 14 | 5·0 | 8·4 | 8·9 | 67 | + 2·2 | +12·1 | 100 | 12·3 | + 13 | + 3·9 | 12·5 | 79·8 | 76·58 | c.f.l.t.: c.p. : c.f. |
| 15 | 5·0 | 3·3 | 11·5 | 87 | + 1·6 | + 9·2 | 100 | 9·4 | + 14 | + 1·0 | 9·6 | 79·8 | 76·58 | c.f. : b. |
| 16 | 5·0 | 8·9 | 4·3 | 33 | + 2·2 | + 8·3 | 105 | 8·6 | + 19 | + 0·2 | 8·7 | 79·8 | 76·58 | c.p. : o.p. : c.p. : c.f. |
| 17 | 4·0 | 2·5 | 12·0 | 92 | + 1·4 | + 9·3 | 99 | 9·4 | + 13 | + 1·0 | 9·7 | 79·7 | 76·53 | c.p.l. : c.f. : b. |
| 18 | 3·0 | 3·9 | 11·3 | 86 | − 0·8 | + 9·0 | 85 | 9·0 | − 1 | + 0·6 | 9·2 | 79·8 | 76·58 | c.p. : c.f. : b. |
| 19 | 4·0 | 8·5 | 8·5 | 65 | + 1·1 | + 8·7 | 97 | 8·8 | + 11 | + 0·4 | 9·0 | 79·9 | 76·63 | c.p. : c.f. |
| 20 | 3·0 | 7·5 | 10·2 | 78 | − 2·6 | +10·2 | 76 | 10·5 | − 9 | + 2·1 | 10·7 | 79·9 | 76·63 | c.f. : c.p. : c.f. |
| 21 | 4·0 | 8·5 | 6·7 | 51 | + 1·9 | +13·7 | 98 | 13·8 | + 13 | + 5·4 | 13·9 | 79·9 | 76·68 | c.p. : c.q. : c.p. |
| 22 | 5·0 | 9·0 | 3·2 | 24 | + 2·3 | +10·0 | 103 | 10·2 | + 18 | + 1·8 | 10·4 | 79·9 | 76·63 | c.p : o. |
| 23 | 6·0 | 9·9 | 0·1 | 1 | + 0·8 | + 9·2 | 95 | 9·2 | + 10 | + 0·8 | 9·6 | 79·9 | 76·63 | o. : o.p. |
| 24 | 5·0 | 8·5 | 1·1 | 8 | + 0·4 | +11·5 | 92 | 11·5 | + 8 | + 3·1 | 11·6 | 79·8 | 76·63 | o.r. : c. : o.p. |
| 25 | 6·0 | 7·2 | 11·1 | 85 | + 2·2 | +13·8 | 99 | 14·0 | + 15 | + 5·7 | 14·1 | 80·0 | 76·73 | c.p. : c.f.q. : c.f. |
| 26 | 6·0 | 4·0 | 11·1 | 85 | − 0·3 | +12·7 | 89 | 12·7 | + 5 | + 4·4 | 12·9 | 80·1 | 76·78 | c.p. : c.f.q. : c.p. |
| 27 | 5·0 | 3·3 | 12·2 | 94 | − 0·9 | + 9·1 | 84 | 9·2 | 0 | + 0·9 | 9·3 | 80·1 | 76·78 | b. c.f. |
| 28 | 4·0 | 3·7 | 10·7 | 82 | − 2·4 | + 8·4 | 74 | 8·7 | − 10 | + 0·4 | 8·8 | 80·1 | 76·83 | b. : c.p. c.f. |
| 29 | 4·0 | 6·9 | 6·7 | 52 | − 2·5 | + 1·9 | 37 | 3·2 | − 46 | − 5·1 | 6·3 | 80·1 | 76·83 | b.:c.p. : c.f. : c.p.t. : c. : c.f. |
| 30 | 3·0 | 5·0 | 5·8 | 45 | − 1·1 | + 2·4 | 65 | 2·6 | − 18 | − 5·7 | 5·1 | 80·2 | 76·88 | b. : c.p. |
| 31 | 2·0 | 5·0 | 8·1 | 62 | − 2·6 | + 3·4 | 53 | 4·3 | − 30 | − 4·0 | 6·2 | 80·3 | 76·88 | b. : c.f. : c. |
| Mean | 4·2 | 6·2 | 7·94 | 60·4 | − 0·77 | + 8·61 | 84·9 | 8·64 | −1·6 | +0·22 | 9·72 | 79·78 | 76·58 | ... |
| Average | 3·2 | 6·4 | 7·69 | 58·6 | − 0·52 | + 8·40 | 86·5 | 8·42 | ... | ... | 11·07 | 79·92 | 77·12 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

Three cyclones were recorded in the South Indian Ocean during the month of January, one of which passed to the North of Mauritius from the 1st. to the 4th. and two others to the East of Rodrigues from the 5th. to 8th. and 26th. to 31st. respectively. The intervening period from the 8th. to the 26th. was characterised by a long positive wave of pressure with two marked superposed negative waves from the 12th. to 16th. and the 16th. to the 20th.

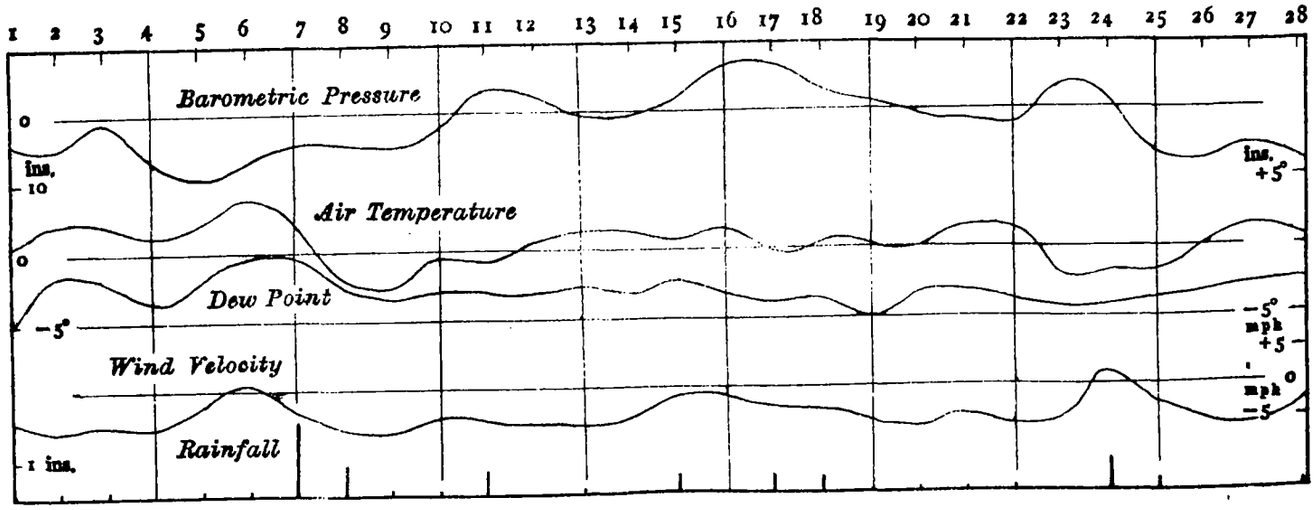
Temperature was generally below normal throughout the month, negative waves accompanying the two eastern cyclones and a slight positive wave the northern cyclone.

Variations of vapour-tension were correlated on the whole positively to those of pressure from the 1st. to the 20th., and negatively from the 20th. to the end of the month.

Low wind velocities occurred during the passage of the distant cyclones while increasing winds corresponded with the epochs of high or rising pressure.

The Rainfall of the month was 37% below normal and fell on 22 days.

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew Point. Mean. | Temperature of the Dew Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | | ins. | mins. | in. |
| Feb. 1 | 29·687 | −·040 | 88·2 | 70·6 | 17·6 | 79·5 | +0·6 | 74·3 | 70·6 | − 0·2 | 74 | − 2 | ·749 | 153·7 | 66·1 | 0·000 | ... | ·260 |
| 2 | 29·676 | −·050 | 88·1 | 74·7 | 13·4 | 81·0 | +2·2 | 77·2 | 74·6 | + 3·8 | 81 | + 5 | ·857 | 154·2 | 70·0 | 0·135 | 73 | ·210 |
| 3 | 29·716 | −·010 | 87·1 | 74·3 | 12·8 | 81·0 | +2·2 | 76·8 | 74·0 | + 3·2 | 79 | + 3 | ·840 | 152·4 | 66·7 | 0·045 | 52 | ·260 |
| 4 | 29·661 | −·065 | 88·5 | 71·3 | 17·2 | 80·0 | +1·2 | 75·1 | 71·8 | + 1·0 | 76 | − 1 | ·779 | 159·0 | 66·2 | 0·000 | ... | ·240 |
| 5 | 29·627 | −·098 | 88·1 | 73·4 | 14·7 | 80·9 | +2·1 | 76·8 | 74·0 | + 3·1 | 80 | + 3 | ·840 | 155·0 | 69·5 | 0·170 | 35 | ·230 |
| 6 | 29·656 | −·069 | 88·2 | 79·3 | 8·0 | 83·0 | +4·2 | 78·5 | 75·6 | + 4·7 | 78 | + 1 | ·885 | 153·0 | 75·6 | 0·015 | 5 | ·175 |
| 7 | 29·683 | −·042 | 87·4 | 74·0 | 13·4 | 80·9 | +2·2 | 77·8 | 75·8 | + 4·9 | 85 | + 8 | ·891 | 153·2 | 71·2 | 2·430 | 220 | ·050 |
| 8 | 29·681 | −·044 | 83·3 | 73·3 | 10·0 | 76·4 | −2·3 | 74·6 | 73·4 | + 2·5 | 90 | +13 | ·823 | 139·0 | 69·8 | 0·920 | 240 | ·100 |
| 9 | 29·673 | −·052 | 83·7 | 71·6 | 12·1 | 76·0 | −2·7 | 74·1 | 72·7 | + 1·8 | 90 | +13 | ·804 | 146·5 | 66·2 | 0·145 | 130 | ·230 |
| 10 | 29·707 | −·019 | 84·5 | 73·1 | 11·4 | 78·4 | −0·3 | 75·3 | 73·0 | + 2·1 | 84 | + 7 | ·812 | 145·2 | 69·2 | 0·005 | 10 | ·165 |
| 11 | 29·761 | +·035 | 85·4 | 74·2 | 11·2 | 78·0 | −0·6 | 75·0 | 72·9 | + 2·0 | 84 | + 7 | ·810 | 160·8 | 68·8 | 0·730 | 75 | ·230 |
| 12 | 29·747 | +·020 | 86·8 | 72·1 | 14·7 | 79·3 | +0·7 | 75·5 | 72·9 | + 1·9 | 81 | + 4 | ·810 | 158·3 | 65·9 | 0·000 | ... | ·220 |
| 13 | 29·720 | −·007 | 87·0 | 74·0 | 13·0 | 80·0 | +1·4 | 76·2 | 73·5 | + 2·5 | 81 | + 4 | ·826 | 155·9 | 67·4 | 0·010 | 10 | ·210 |
| 14 | 29·724 | −·003 | 86·6 | 75·2 | 11·4 | 80·1 | +1·6 | 75·7 | 72·7 | + 1·7 | 78 | + 1 | ·804 | 154·4 | 71·3 | 0·070 | 30 | ·250 |
| 15 | 29·747 | +·019 | 85·4 | 74·2 | 11·2 | 79·1 | +0·6 | 76·2 | 74·1 | + 3·1 | 85 | + 8 | ·843 | 153·0 | 69·3 | 0·560 | 65 | ·180 |
| 16 | 29·797 | +·068 | 85·5 | 75·9 | 9·6 | 80·1 | +1·6 | 75·8 | 72·8 | + 1·8 | 79 | + 1 | ·807 | 151·2 | 71·2 | 0·030 | 10 | ·265 |
| 17 | 29·800 | +·070 | 85·2 | 73·8 | 11·4 | 78·3 | −0·2 | 74·8 | 72·3 | + 1·3 | 82 | + 4 | ·793 | 156·2 | 71·0 | 0·530 | 115 | ·155 |
| 18 | 29·760 | +·029 | 86·6 | 73·9 | 12·7 | 79·1 | +0·6 | 75·2 | 72·5 | + 1·5 | 80 | + 2 | ·799 | 153·2 | 65·0 | 0·455 | 60 | ·220 |
| 19 | 29·744 | +·012 | 86·4 | 69·6 | 16·8 | 78·6 | +0·2 | 74·1 | 71·0 | 0·0 | 78 | 0 | ·759 | 160·3 | 64·2 | 0·000 | ... | ·240 |
| 20 | 29·728 | −·005 | 86·4 | 73·2 | 13·2 | 78·4 | 0·0 | 75·3 | 73·0 | + 2·0 | 84 | + 5 | ·812 | 155·2 | 69·7 | 0·075 | 30 | ·110 |
| 21 | 29·719 | −·015 | 87·9 | 72·6 | 15·3 | 79·9 | +1·6 | 75·9 | 73·1 | + 2·1 | 80 | + 1 | ·815 | 156·0 | 69·0 | 0·020 | 20 | ·250 |
| 22 | 29·708 | −·027 | 88·0 | 73·9 | 14·1 | 79·9 | +1·6 | 75·5 | 72·4 | + 1·4 | 78 | − 1 | ·796 | 147·8 | 68·5 | 0·025 | 15 | ·265 |
| 23 | 29·767 | +·031 | 81·6 | 72·6 | 9·0 | 76·5 | −1·8 | 73·7 | 71·7 | + 0·7 | 85 | + 6 | ·777 | 147·2 | 67·3 | 0·060 | 50 | ·060 |
| 24 | 29·752 | +·015 | 82·4 | 72·8 | 9·6 | 76·5 | −1·7 | 73·8 | 71·8 | + 0·8 | 85 | + 6 | ·779 | 143·5 | 70·2 | 0·850 | 250 | ·175 |
| 25 | 29·668 | −·070 | 82·2 | 72·5 | 9·7 | 76·6 | −1·6 | 74·1 | 72·3 | + 1·4 | 87 | + 8 | ·793 | 151·0 | 69·4 | 0·215 | 80 | ·105 |
| 26 | 29·665 | −·074 | 86·4 | 72·3 | 14·1 | 78·5 | +0·4 | 75·2 | 72·8 | + 1·9 | 83 | + 4 | ·807 | 154·6 | 69·0 | 0·000 | ... | ·215 |
| 27 | 29·690 | −·050 | 88·4 | 72·5 | 15·9 | 79·8 | +1·7 | 76·0 | 73·4 | + 2·5 | 81 | + 2 | ·823 | 156·6 | 68·0 | 0·000 | ... | ·210 |
| 28 | 29·662 | −·079 | 86·1 | 74·3 | 11·8 | 78·9 | +0·8 | 75·6 | 73·4 | + 2·5 | 83 | + 4 | ·823 | 154·9 | 70·8 | 0·105 | 45 | ·190 |
| Mean | 29·712 | −·018 | 86·1 | 73·4 | 12·7 | 79·1 | +0·6 | 75·5 | 73·0 | + 2·1 | 81·8 | +4·1 | ·813 | 152·9 | 68·8 | Sum 7·600 | Sum 1620 | ·195 |
| Average | 29·730 | ... | 85·6 | 73·0 | 12·6 | 78·5 | ... | 74·1 | 70·9 | ... | 77·7 | ... | ·757 | 156·4 | 68·9 | 7·351 | 2030 | ·214 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day 1909. | Ozone (Scale 0—10). | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind. Components. North. | Wind. Components. East. | Wind. Resultants. Direction. | Wind. Resultants. Velocity. | Wind. Excess above Average. Direction. | Wind. Excess above Average. Velocity. | Wind. Observed Velocity. | Temperature of the Soil. 5 Feet. | Temperature of the Soil. 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Feb. 1 | 3·0 | 3·5 | 10·8 | 83 | − 2·1 | + 7·0 | 73 | 7·3 | − 10 | − 1·0 | 7·6 | 80·3 | 76·88 | b. : c.f. : c.f.t. |
| 2 | 3·0 | 6·0 | 7·9 | 61 | − 1·8 | − 2·9 | 302 | 3·4 | +219 | − 4·9 | 5·4 | 80·3 | 76·88 | c.p. c.f. : c.t. : c.p. |
| 3 | 2·0 | 8·4 | 10·6 | 82 | − 1·6 | − 4·1 | 291 | 4·4 | +208 | − 3·9 | 5·7 | 80·2 | 76·88 | o.d. : c. : c.t. : c.f. |
| 4 | 2·0 | 7·0 | 11·1 | 86 | − 1·0 | − 2·3 | 293 | 2·5 | +211 | − 5·7 | 5·8 | 80·2 | 76.88 | c.f. : c. |
| 5 | 3·0 | 8·2 | 9·3 | 72 | + 6·8 | − 2·9 | 203 | 7·4 | +121 | − 0·8 | 9·4 | 80·1 | 76·93 | c.p. : c. |
| 6 | 4·0 | 8·6 | 9·2 | 71 | +10·1 | − 5·4 | 208 | 11·4 | +126 | + 3·2 | 12·6 | 80·1 | 76·93 | c.p. : c. |
| 7 | 6·0 | 9·6 | 4·8 | 37 | + 2.8 | − 4·8 | 240 | 5·5 | +158 | − 2·7 | 7·9 | 80·2 | 76·93 | c.p. : o.p.tl. |
| 8 | 5·0 | 10·0 | 0·7 | 5 | + 1·6 | + 0·2 | 173 | 1·6 | + 91 | − 6·6 | 5·8 | 80·3 | 76·98 | o.r.l.t. : o.t. : o.p. : c. |
| 9 | 4·0 | 9·3 | 2·9 | 23 | + 1·3 | − 1·3 | 225 | 1·9 | +143 | − 6·3 | 4·8 | 80·4 | 76·98 | c. : c.p. : o. |
| 10 | 3·0 | 9·3 | 4·2 | 33 | + 4·8 | + 1·1 | 167 | 4·9 | + 85 | − 3·3 | 7·2 | 80·5 | 76·98 | o.p. : c. : c.f. |
| 11 | 4·0 | 9·0 | 4·7 | 37 | + 1·2 | + 5·3 | 103 | 5·5 | + 21 | − 2·7 | 6·5 | 80·5 | 76·98 | c.p.l.t. : c.f. |
| 12 | 3·0 | 6·5 | 9·0 | 70 | − 0·5 | + 4·3 | 83 | 4·3 | + 2 | − 3·8 | 6·0 | 80·6 | 77·03 | c.f. : c.f.t. : c.f. |
| 13 | 2·0 | 6·3 | 8·9 | 70 | + 1·2 | + 4·1 | 106 | 4·2 | + 25 | − 3·9 | 5·4 | 80·6 | 77·08 | b. : c.f. : c.f.t.l. |
| 14 | 3·0 | 6·2 | 11·8 | 93 | + 1·7 | + 6·2 | 105 | 6·5 | + 24 | − 1·6 | 6·6 | 80·6 | 77·03 | c.p.lt. : c.f. : c.f.l. |
| 15 | 4·0 | 6·8 | 9·2 | 72 | + 2·9 | + 9·8 | 106 | 10·2 | + 25 | + 2·1 | 10·6 | 80·7 | 77·13 | c.p.l. : c.f. : c.p. : c.f.t.l. |
| 16 | 5·0 | 5·5 | 11·3 | 89 | + 2·2 | + 9·8 | 103 | 10.0 | + 22 | + 1·9 | 10·3 | 80·8 | 77·13 | c.p.l. : c.f. |
| 17 | 6·0 | 7·4 | 7·3 | 57 | − 1·3 | + 7·6 | 80 | 7·7 | − 1 | − 0·4 | 8·1 | 80·8 | 77·13 | b. : o.p. : c.f. : c.r. |
| 18 | 5·0 | 4·2 | 9·2 | 72 | − 1·4 | + 7·4 | 79 | 7·5 | − 2 | − 0·6 | 7·9 | 80·8 | 77·18 | c.r.c.p : c.p. : b. |
| 19 | 4·0 | 3·8 | 10·6 | 84 | − 2·8 | + 1·9 | 54 | 3·4 | − 47 | − 4·7 | 6·0 | 80·9 | 77·18 | b. : c.f. : c.f.l. |
| 20 | 3·0 | 7·0 | 6·2 | 49 | + 1·0 | + 2·1 | 116 | 2·4 | + 35 | − 5·7 | 5·1 | 80·9 | 77·18 | b.b. : c.l. : c.p. : b. |
| 21 | 2·0 | 5·5 | 11·0 | 87 | + 4·8 | 0·0 | 180 | 4·8 | + 99 | − 3·2 | 7·0 | 80·9 | 77·23 | b. c.p. : c.f.t.l. |
| 22 | 2·0 | 5·0 | 11·3 | 90 | + 1·3 | + 0·6 | 155 | 1.5 | + 75 | − 6·5 | 5·5 | 81·0 | 77·23 | c.f.l. : c.f. : c.f.t.l. |
| 23 | 6·0 | 9·7 | 0·8 | 6 | − 1·9 | + 5·0 | 69 | 5·3 | − 11 | − 2·7 | 6·2 | 80·9 | 77·28 | c.f.t.l. : o.p.t.l. |
| 24 | 7·0 | 9·6 | 1·8 | 14 | − 5·8 | +12·0 | 64 | 13·3 | − 16 | + 5·3 | 13·4 | 81·0 | 77·33 | o.r.t.l. c.q. : o.p. |
| 25 | 6·0 | 9·8 | 1·4 | 11 | − 4·0 | + 7·4 | 62 | 8.4 | − 18 | + 0·4 | 8·6 | 81·0 | 77·33 | o.p. : o. : o.p. |
| 26 | 3·0 | 7·2 | 9·4 | 75 | − 1·5 | − 2·4 | 302 | 2.9 | +222 | − 5·1 | 5·6 | 81·0 | 77·33 | c.f. : b. |
| 27 | 3·0 | 4·8 | 10·1 | 81 | − 1·5 | + 0·6 | 22 | 1.6 | − 58 | − 6·4 | 4·7 | 81·0 | 77·38 | b. : c.f. |
| 28 | 4·0 | 5·7 | 7·3 | 58 | − 3·5 | + 7·4 | 65 | 8.2 | − 15 | + 0·2 | 8·3 | 81·1 | 77·38 | c.f. : c.p. : c.f. |
| Mean | 3·8 | 7·1 | 7·60 | 59·6 | + 0·46 | + 2·63 | 99·9 | 2·67 | + 18·7 | − 5·46 | 7·29 | 80·63 | 77·10 | ... |
| Average | 3·0 | 6·3 | 7·21 | 56·7 | − 1·24 | + 8·03 | 81·2 | 8·13 | ... | ... | 10·99 | 80·74 | 77·64 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

After the passage of the Cyclone East of Rodrigues at the end of January, pressure remained below normal until the 10th of February and then increased to $+\cdot04^{in}$ by the 12th. It fell to $-.01^{in}$ by the 14th, and again increased to $+\cdot07^{in}$ by the 17th. From the 17th to the end of the month a steady decrease of pressure occurred, but broken by a superposed positive wave from the 22nd to the 25th.

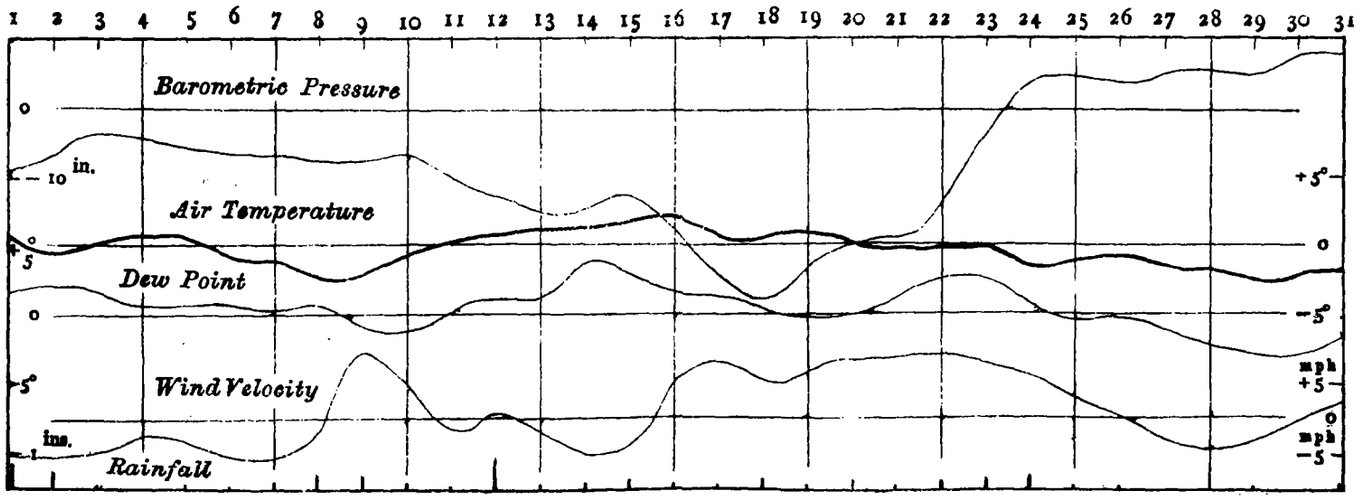
Temperature was variable during the month. High temperatures from the 1st to the 7th were followed by a short negative wave culminating on the 9th, after which it remained generally above normal until the 22nd when a second negative wave occurred lasting till the 26th.

Vapour tension remained steadily above normal throughout the month, while, with the exception of the 6th and 24th, wind velocity was below normal.

Correlated changes were weak during the month; increasing pressure being sometimes accompanied by increasing values and sometimes by decreasing values in the other elements.

Rainfall was 3 o/o above normal and fell on 22 days

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew Point. Mean. | Temperature of the Dew Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | | ins. | mins. | in. |
| Mar. 1 | 29·652 | −·092 | 87·0 | 73·1 | 13·9 | 78·8 | +0·8 | 75·1 | 72·5 | + 1·6 | 81 | + 2 | ·799 | 158·7 | 67·5 | 0·680 | 70 | ·240 |
| 2 | 29·675 | −·070 | 85·9 | 72·4 | 13·5 | 77·4 | −0·6 | 74·8 | 72·9 | + 2·0 | 86 | + 7 | ·810 | 154·2 | 67·0 | 0·475 | 110 | ·135 |
| 3 | 29·713 | −·034 | 85·2 | 72·2 | 13·0 | 78·0 | +0·1 | 74·7 | 72·4 | + 1·5 | 83 | + 4 | ·796 | 150·2 | 68·1 | 0·100 | 65 | ·155 |
| 4 | 29·702 | −·047 | 85·0 | 73·5 | 11·5 | 78·5 | +0·6 | 74·4 | 71·5 | + 0·6 | 79 | 0 | ·772 | 148·7 | 68·0 | 0·030 | 15 | ·190 |
| 5 | 29·687 | −·062 | 84·5 | 73·2 | 11·3 | 78·4 | +0·6 | 74·5 | 71·7 | + 0·8 | 80 | 0 | ·777 | 148·6 | 67·5 | 0·085 | 50 | ·205 |
| 6 | 29·682 | −·068 | 84·4 | 72·0 | 12·4 | 76·9 | −0·9 | 73·8 | 71·5 | + 0·7 | 84 | + 4 | ·772 | 153·4 | 66·4 | 0·040 | 25 | ·140 |
| 7 | 29·685 | −·067 | 85·2 | 70·1 | 15·1 | 76·5 | −1·3 | 73·4 | 71·1 | + 0·3 | 84 | + 4 | ·761 | 156·4 | 63·9 | 0·225 | 90 | ·165 |
| 8 | 29·674 | −·079 | 81·4 | 71·0 | 10·4 | 75·2 | −2·5 | 73·2 | 71·7 | + 0·9 | 89 | + 9 | ·777 | 142·2 | 66·0 | 0·375 | 150 | ·095 |
| 9 | 29·676 | −·078 | 81·0 | 72·7 | 8·3 | 75·8 | −1·9 | 72·3 | 69·7 | − 1·1 | 82 | + 2 | ·726 | 151·0 | 71·2 | 0·375 | 375 | ·195 |
| 10 | 29·689 | −·067 | 81·8 | 73·8 | 8·0 | 76·9 | −0·7 | 72·8 | 69·9 | − 0·9 | 79 | − 1 | ·731 | 149·4 | 70·3 | 0·070 | 40 | ·180 |
| 11 | 29·656 | −·102 | 83·9 | 72·1 | 11·8 | 77·7 | +0·1 | 73·7 | 70·9 | + 0·2 | 80 | 0 | ·756 | 151·2 | 67·1 | 0·000 | ... | ·180 |
| 12 | 29·630 | −·129 | 84·3 | 74·2 | 10·1 | 78·2 | +0·7 | 74·4 | 71·7 | + 1·0 | 81 | + 1 | ·777 | 155·6 | 70·8 | 0·060 | 60 | ·180 |
| 13 | 29·610 | −·151 | 84·2 | 73·4 | 10·8 | 78·7 | +1·2 | 74·8 | 72·0 | + 1·3 | 80 | 0 | ·785 | 152·2 | 70·8 | 0·025 | 30 | ·235 |
| 14 | 29·617 | −·145 | 85·0 | 74·6 | 10·4 | 78·5 | +1·1 | 76·3 | 74·7 | + 4·0 | 88 | + 8 | ·860 | 159·9 | 70·4 | 0·940 | 125 | ·140 |
| 15 | 29·637 | −·127 | 86·7 | 72·2 | 14·5 | 79·1 | +1·8 | 75·9 | 73·7 | + 3·0 | 84 | + 4 | ·832 | 150·9 | 67·8 | 0·110 | 50 | ·150 |
| 16 | 29·594 | −·172 | 84·6 | 76·2 | 8·4 | 79·5 | +2·2 | 75·1 | 72·1 | + 1·5 | 78 | − 2 | ·788 | 149·4 | 71·2 | 0·175 | 100 | ·135 |
| 17 | 29·522 | −·245 | 82·2 | 75·2 | 7·0 | 77·9 | +0·7 | 74·7 | 72·5 | + 1·9 | 84 | + 4 | ·799 | 150·2 | 71·8 | 0·280 | 245 | ·130 |
| 18 | 29·497 | −·272 | 82·8 | 75·1 | 7·7 | 78·1 | +0·9 | 74·0 | 71·1 | + 0·5 | 79 | − 1 | ·761 | 142·6 | 71·2 | 0·100 | 80 | ·150 |
| 19 | 29·541 | −·229 | 82·8 | 75·3 | 7·5 | 78·1 | +1·0 | 73·5 | 70·3 | − 0·2 | 77 | − 3 | ·741 | 150·9 | 71·6 | 0·020 | 35 | ·160 |
| 20 | 29·573 | −·199 | 81·1 | 74·1 | 7·0 | 77·1 | 0·0 | 73·4 | 70·8 | + 0·3 | 81 | + 1 | ·754 | 147·2 | 70·7 | 0·255 | 130 | ·105 |
| 21 | 29·576 | −·198 | 82·2 | 74·4 | 7·8 | 77·5 | +0·5 | 74·0 | 71·5 | + 1·1 | 82 | + 2 | ·772 | 144·2 | 71·5 | 0·130 | 110 | ·095 |
| 22 | 29·635 | −·140 | 80·4 | 75·1 | 5·3 | 76·7 | −0·3 | 74·6 | 73·1 | + 2·7 | 89 | + 8 | ·815 | 148·0 | 71·7 | 0·300 | 180 | ·120 |
| 23 | 29·733 | −·044 | 81·0 | 75·0 | 6·0 | 76·9 | 0·0 | 74·7 | 73·2 | + 2·8 | 88 | + 7 | ·818 | 145·4 | 72·1 | 0·320 | 145 | ·120 |
| 24 | 29·815 | +·036 | 80·2 | 72·5 | 7·7 | 75·2 | −1·7 | 72·7 | 70·9 | + 0·6 | 87 | + 6 | ·756 | 147·7 | 71·0 | 0·440 | 200 | ·110 |
| 25 | 29·826 | +·045 | 81·8 | 71·3 | 10·5 | 75·7 | −1·1 | 72·3 | 69·9 | − 0·4 | 83 | + 2 | ·731 | 152·8 | 67·8 | 0·040 | 25 | ·170 |
| 26 | 29·819 | +·036 | 81·6 | 71·5 | 10·1 | 75·9 | −0·8 | 72·6 | 70·1 | − 0·1 | 83 | + 2 | ·736 | 153·2 | 66·7 | 0·055 | 30 | ·205 |
| 27 | 29·831 | +·047 | 82·1 | 68·3 | 13·8 | 75·0 | −1·7 | 71·5 | 69·0 | − 1·2 | 82 | + 1 | ·708 | 148·8 | 60·9 | 0·000 | ... | ·180 |
| 28 | 29·838 | +·052 | 82·4 | 67·2 | 15·2 | 74·8 | −1·8 | 70·8 | 67·9 | − 2·2 | 79 | − 2 | ·682 | 150·9 | 61·2 | 0·000 | ... | ·190 |
| 29 | 29·831 | +·043 | 80·9 | 67·4 | 13·5 | 74·0 | −2·6 | 70·1 | 67·2 | − 2·9 | 79 | − 2 | ·666 | 150·0 | 60·6 | 0·050 | 35 | ·190 |
| 30 | 29·862 | +·072 | 81·3 | 67·0 | 14·3 | 74·4 | −2·1 | 70·2 | 67·1 | − 2·9 | 78 | − 3 | ·664 | 148·3 | 60·5 | 0·000 | ... | ·220 |
| 31 | 29·871 | +·079 | 79·8 | 71·2 | 8·6 | 74·7 | −1·8 | 71·1 | 68·4 | − 1·6 | 81 | 0 | ·694 | 142·7 | 65·2 | 0·110 | 65 | ·150 |
| Mean | 29·689 | −·077 | 83·0 | 72·5 | 10·5 | 77·0 | −0·3 | 73·5 | 71·1 | + 0·5 | 82·3 | +2·1 | ·762 | 150·4 | 68·0 | Sum 5·865 | Sum 2635 | ·162 |
| Average | 29·766 | ... | 84·0 | 72·1 | 11·9 | 77·3 | ... | 73·3 | 70·6 | ... | 80·2 | ... | ·747 | 153·6 | 68·2 | 9·214 | 2946 | ·183 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day. 1909. | Ozone (Scale 0–10) | Mean Amount of Cloud (Scale 0–10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind: Components. North. | Wind: Components. East. | Wind: Resultants. Direction. | Wind: Resultants. Velocity. | Wind: Excess above Average. Direction. | Wind: Excess above Average. Velocity. | Wind: Observed Velocity. | Temperature of the Soil: 5 Feet. | Temperature of the Soil: 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Mar. 1 | 4·0 | 5·7 | 8·6 | 69 | − 2·4 | + 3·9 | 58 | 4·6 | − 22 | − 3·4 | 5·6 | 81·1 | 77·33 | c.f. : c.p. : c.f.l. |
| 2 | 4·0 | 6·8 | 3·5 | 28 | − 2·7 | + 3·4 | 52 | 4·3 | − 28 | − 3·7 | 5·3 | 81·0 | 77·33 | c.f.l.t. : c.t. : c.r.t-sm. : c.l.t. |
| 3 | 5·0 | 6·2 | 6·4 | 52 | − 2·4 | + 2·8 | 49 | 3·7 | − 31 | − 4·3 | 5·7 | 81·1 | 77·38 | c.l.t. : c.f. : c.r.t-sm. : c.f. : b. |
| 4 | 6·0 | 3·8 | 9·7 | 78 | − 2·9 | + 7·6 | 69 | 8·2 | − 11 | + 0·2 | 8·3 | 81·0 | 77·38 | c.f. : c.p. : c.f. |
| 5 | 6·0 | 4·5 | 9·6 | 77 | − 0·4 | + 7·4 | 87 | 7·4 | + 7 | − 0·6 | 7·6 | 81·1 | 77·38 | c.p. : c.t. : c.f. |
| 6 | 5·0 | 6·2 | 7·7 | 63 | − 2·0 | + 3·8 | 62 | 4·3 | − 17 | − 3·7 | 5·4 | 81·1 | 77·38 | b. : c.f. : c.p.t. : c.f. |
| 7 | 4·0 | 4·4 | 6·7 | 54 | − 2·1 | + 2·2 | 46 | 3·0 | − 33 | − 5·0 | 4·9 | 81·1 | 77·38 | b. : c.f. : c. |
| 8 | 6·0 | 8·4 | 2·8 | 23 | − 4·2 | + 6·2 | 56 | 7·5 | − 23 | − 0·5 | 8·0 | 81·1 | 77·38 | c.f. : c. : o.p. |
| 9 | 7·0 | 9·8 | 5·8 | 47 | − 6·5 | +19·1 | 71 | 20·2 | − 8 | +12·2 | 20·3 | 81·0 | 77·38 | o.p. : o.d.q. : c.q. : c.f.q. |
| 10 | 8·0 | 8·1 | 6·4 | 52 | − 2·5 | +14·6 | 80 | 14·8 | + 1 | + 6·8 | 15·2 | 81·0 | 77·33 | o.p. : c.q. : c.f. : c.f.l. |
| 11 | 6·0 | 7·7 | 7·9 | 64 | − 1·2 | + 8·6 | 82 | 8·7 | + 3 | + 0·7 | 8·8 | 81·1 | 77·33 | c.f. : c. : c.l. |
| 12 | 7·0 | 8·5 | 7·6 | 62 | − 1·2 | +10·3 | 83 | 10·3 | + 4 | + 2·3 | 10·9 | 81·1 | 77·28 | o.t.p. : c. : o.p.l. |
| 13 | 6·0 | 7·0 | 9·9 | 81 | + 2·2 | + 8·3 | 105 | 8·6 | + 26 | + 0·6 | 8·8 | 81·1 | 77·18 | o. : c.f. : c.l.t. |
| 14 | 5·0 | 8·4 | 3·6 | 30 | + 1·5 | + 1·6 | 133 | 2·2 | + 54 | − 5·8 | 5·3 | 81·0 | 77·13 | c.l.t. : o.r. : c. |
| 15 | 5·0 | 7·9 | 7·4 | 61 | − 4·1 | − 3·3 | 321 | 5·3 | +242 | − 2·7 | 6·5 | 81·1 | 77·08 | c.f. : c. : c.p. : c. |
| 16 | 6·0 | 9·4 | 2·4 | 20 | −15·3 | + 2·4 | 9 | 15·5 | − 69 | + 7·4 | 15·5 | 81·0 | 77·03 | c.f. : c.r.q. : o. |
| 17 | 7·0 | 9·8 | 2·3 | 19 | −15·8 | + 9·0 | 30 | 18·2 | − 48 | +10·1 | 18·4 | 81·0 | 76·98 | o. : o.p.q. : o.r.t-sm. |
| 18 | 7·0 | 9·5 | 6·3 | 52 | −12·3 | + 8·7 | 35 | 15·0 | − 43 | + 6·9 | 15·3 | 81·0 | 76·98 | c. : o. : o.p. |
| 19 | 6·0 | 9·5 | 3·5 | 29 | −15·7 | + 6·6 | 23 | 17·0 | − 55 | + 8·9 | 17·1 | 81·0 | 76·98 | c.p. : c.q. : c.l. |
| 20 | 7·0 | 9·0 | 2·6 | 21 | −17·2 | + 6·6 | 21 | 18·4 | − 57 | +10·3 | 18·6 | 81·0 | 76·93 | o.p. : c.p. |
| 21 | 8·0 | 9·7 | 3·9 | 32 | −14·8 | +11·3 | 37 | 18·7 | − 40 | +10·6 | 19·2 | 81·0 | 76·98 | o.p.q. |
| 22 | 8·0 | 8·9 | 8·5 | 70 | − 9·1 | +17·0 | 62 | 19·2 | − 15 | +11·1 | 19·3 | 81·0 | 76·98 | c.p.q. |
| 23 | 7·0 | 9·4 | 6·1 | 51 | − 4·5 | +17·3 | 75 | 17·9 | − 2 | + 9·7 | 17·9 | 80·9 | 76·98 | c.p.q. |
| 24 | 8·0 | 9·8 | 2·9 | 24 | − 2·9 | +16·1 | 88 | 16·3 | + 4 | + 8·1 | 16·3 | 80·9 | 76·98 | c.p.q. |
| 25 | 7·0 | 6·5 | 9·5 | 79 | − 2·4 | +12·3 | 79 | 12·6 | + 3 | + 4·4 | 12·8 | 80·9 | 76·98 | c. : c.p. |
| 26 | 6·0 | 6·1 | 10·4 | 87 | + 0·5 | +10·9 | 93 | 10·9 | + 17 | + 2·6 | 11·1 | 81·0 | 77·03 | c.p. : c. : b. |
| 27 | 6·0 | 4·2 | 10·9 | 91 | − 0·7 | + 7·0 | 84 | 7·1 | + 8 | − 1·2 | 7·2 | 81·0 | 77·08 | b. : c.f. : b. |
| 28 | 6·0 | 2·5 | 10·7 | 90 | − 4·1 | + 4·2 | 46 | 5·9 | − 29 | − 2·4 | 6·1 | 80·9 | 77·08 | b. : c.f. |
| 29 | 6·0 | 3·5 | 10·8 | 91 | − 3·6 | + 6·1 | 59 | 7·1 | − 16 | − 1·2 | 7·2 | 80·8 | 77·13 | c.p. : c.f. : b. |
| 30 | 6·0 | 3·8 | 10·6 | 89 | − 3·6 | + 9·3 | 69 | 9·9 | − 6 | + 1·6 | 10·1 | 80·8 | 77·08 | c.f. : b. |
| 31 | 7·0 | 5·2 | 9·2 | 77 | − 5·2 | +11·8 | 66 | 12·9 | − 9 | + 4·6 | 13·0 | 80·7 | 77·03 | c.f. : c.p. : c.f. : c.p. |
| Mean - | 6·2 | 7·1 | 6·91 | 56·9 | − 5·08 | + 8·16 | 58·1 | 9·62 | −19·8 | + 1·54 | 11·35 | 81·00 | 77·16 | ... |
| Average | 3·6 | 6·4 | 6·72 | 55·3 | − 1·70 | + 7·90 | 77·9 | 8·08 | ... | ... | 10·42 | 81·15 | 78·06 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

Mauritius was under the influence of cyclonic disturbances from the 7th. to the 24th. and the changes in all elements were, in consequence, controlled by this single type of weather. Five cyclones occurred during this period the effects of which overlapped in the weather conditions at Mauritius.

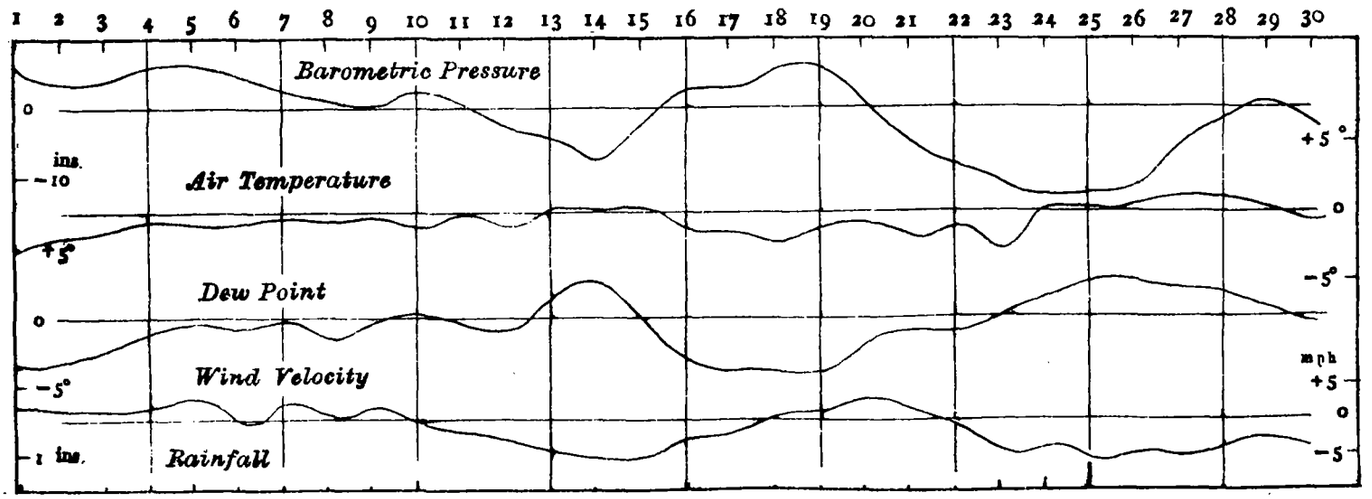
Pressure fell irregularly to −0·27 in. until the 18th. then rose rapidly to +0·04 in. and remained above normal until the end of the month.

Temperature fell generally till the 8th., rose during the decrease of pressure until the 16th. and then fell steadily until the 31st.

The curve of vapour-tension was irregular: it decreased generally from the 1st. to the 10th. and rose to (0·86 in.) by the 14th. A negative wave carried it to slightly below normal on the 19th. and a steady decrease set in from the 22nd. to the 31st.

The rainfall of the month was 36% below normal and fell on 27 days.

| Month and Day. 1909. | Barometric Pressure. | | Temperature of the Air. | | | | | Temperature of Evaporation. | Temperature of the Dew-Point. | | Degree of Humidity (Saturation=100). | | Elastic Force of Vapour. | Temperature of Radiation. | | Rainfall. | | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Excess above Average. | Highest. | Lowest. | Range. | Mean. | Excess above Average. | | Mean. | Excess above Average. | Mean. | Excess above Average. | | Highest in the Sun's Rays. | Lowest on the Grass. | Amount recorded by the Beckley Pluviograph. | Duration. | |
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | ° | ins. | mins. | in. |
| Apr. 1 | 29·856 | +·062 | 79·4 | 67·0 | 12·4 | 73·4 | −3·0 | 69·4 | 66·5 | −3·4 | 79 | − 2 | ·650 | 148·6 | 60·5 | 0·220 | 155 | ·230 |
| 2 | 29·831 | +·035 | 80·2 | 69·2 | 11·0 | 74·6 | −1·7 | 70·1 | 66·7 | −3·1 | 77 | − 4 | ·655 | 146·0 | 63·9 | 0·000 | ... | ·190 |
| 3 | 29·835 | +·037 | 81·6 | 69·2 | 12·4 | 75·0 | −1·3 | 70·4 | 67·1 | −2·7 | 76 | − 5 | ·664 | 149·3 | 61·1 | 0·040 | 20 | ·220 |
| 4 | 29·861 | +·061 | 81·3 | 71·2 | 10·1 | 75·5 | −0·7 | 71·5 | 68·5 | −1·2 | 79 | − 2 | ·697 | 150·6 | 65·0 | 0·005 | 5 | ·185 |
| 5 | 29·861 | +·059 | 80·5 | 71·4 | 9·1 | 75·3 | −0·8 | 71·8 | 69·3 | −0·4 | 82 | + 1 | ·716 | 141·0 | 66·6 | 0·170 | 85 | ·170 |
| 6 | 29·852 | +·048 | 81·3 | 70·9 | 10·4 | 75·2 | −0·9 | 71·4 | 68·6 | −1·0 | 80 | − 1 | ·699 | 149·2 | 63·4 | 0·010 | 10 | ·160 |
| 7 | 29·832 | +·026 | 81·4 | 71·2 | 10·2 | 75·7 | −0·3 | 72·1 | 69·5 | 0·0 | 81 | 0 | ·721 | 145·9 | 67·5 | 0·070 | 105 | ·180 |
| 8 | 29·811 | +·003 | 81·3 | 71·0 | 10·3 | 75·4 | −0·5 | 70·9 | 67·6 | −1·9 | 77 | − 4 | ·675 | 144·8 | 66·8 | 0·010 | 15 | ·210 |
| 9 | 29·816 | +·006 | 81·7 | 70·3 | 11·4 | 75·7 | −0·2 | 71·8 | 69·0 | −0·4 | 80 | − 1 | ·708 | 150·2 | 65·8 | 0·060 | 40 | ·200 |
| 10 | 29·833 | +·022 | 81·4 | 71·2 | 10·2 | 74·8 | −1·0 | 71·7 | 69·5 | +0·2 | 84 | + 3 | ·721 | 149·3 | 66·4 | 0·335 | 85 | ·135 |
| 11 | 29·815 | +·002 | 82·0 | 70·2 | 11·8 | 75·6 | −0·2 | 71·6 | 68·7 | −0·6 | 79 | − 2 | ·701 | 141·2 | 63·6 | 0·000 | ... | ·185 |
| 12 | 29·787 | −·028 | 83·3 | 66·1 | 17·2 | 74·7 | −1·0 | 70·9 | 68·1 | −1·1 | 80 | − 1 | ·687 | 150·5 | 57·9 | 0·000 | ... | ·180 |
| 13 | 29·773 | −·044 | 83·4 | 69·3 | 14·1 | 75·8 | +0·2 | 72·7 | 70·4 | +1·3 | 84 | + 3 | ·744 | 151·0 | 60·8 | 0·000 | ... | ·140 |
| 14 | 29·742 | −·077 | 82·8 | 71·3 | 11·5 | 75·8 | +0·3 | 73·5 | 71·8 | +2·8 | 88 | + 7 | ·779 | 152·0 | 64·7 | 0·145 | 130 | ·125 |
| 15 | 29·804 | −·016 | 83·8 | 69·1 | 14·7 | 76·1 | +0·7 | 71·9 | 68·9 | 0·0 | 78 | − 3 | ·706 | 151·0 | 61·2 | 0·000 | ... | ·220 |
| 16 | 29·847 | +·025 | 81·9 | 67·7 | 14·2 | 74·1 | −1·3 | 69·2 | 65·5 | −3·3 | 75 | − 6 | ·628 | 143·3 | 59·9 | 0·000 | ... | ·190 |
| 17 | 29·846 | +·022 | 81·5 | 67·2 | 14·3 | 73·9 | −1·4 | 68·8 | 65·0 | −3·8 | 74 | − 7 | ·617 | 141·9 | 59·7 | 0·000 | ... | ·200 |
| 18 | 29·880 | +·054 | 80·4 | 67·2 | 13·2 | 73·1 | −2·1 | 68·4 | 64·8 | −3·9 | 75 | − 6 | ·613 | 142·9 | 59·4 | 0·010 | 10 | ·180 |
| 19 | 29·886 | +·058 | 81·3 | 65·6 | 15·7 | 74·0 | −1·1 | 68·5 | 64·4 | −4·2 | 72 | − 9 | ·605 | 142·0 | 55·4 | 0·120 | 80 | ·200 |
| 20 | 29·839 | +·008 | 80·8 | 69·2 | 11·6 | 74·3 | −0·7 | 70·0 | 66·8 | −1·7 | 78 | − 3 | ·657 | 142·5 | 66·2 | 0·135 | 95 | ·175 |
| 21 | 29·779 | −·054 | 79·3 | 69·2 | 10·1 | 72·9 | −2·0 | 69·6 | 67·2 | −1·2 | 83 | + 2 | ·666 | 143·9 | 65·2 | 0·230 | 100 | ·190 |
| 22 | 29·753 | −·082 | 80·3 | 69·0 | 11·3 | 73·7 | −1·1 | 70·0 | 67·3 | −1·0 | 81 | 0 | ·668 | 146·2 | 63·0 | 0·010 | 5 | ·130 |
| 23 | 29·733 | −·104 | 80·2 | 66·7 | 13·5 | 71·8 | −2·9 | 69·7 | 68·1 | −0·1 | 88 | + 7 | ·687 | 146·7 | 61·2 | 0·295 | 100 | ·095 |
| 24 | 29·713 | −·126 | 81·5 | 68·9 | 12·6 | 74·9 | +0·3 | 71·8 | 69·5 | +1·4 | 83 | + 2 | ·721 | 146·7 | 63·1 | 0·310 | 110 | ·110 |
| 25 | 29·721 | −·121 | 82·7 | 69·4 | 13·3 | 74·6 | +0·1 | 72·3 | 70·5 | +2·5 | 87 | + 6 | ·746 | 150·1 | 65·4 | 0·720 | 120 | ·165 |
| 26 | 29·726 | −·118 | 82·2 | 68·7 | 13·5 | 75·1 | +0·7 | 72·2 | 70·1 | +2·2 | 85 | + 4 | ·736 | 141·2 | 62·3 | 0·000 | ... | ·160 |
| 27 | 29·792 | −·054 | 82·3 | 68·5 | 13·8 | 75·3 | +1·0 | 72·2 | 69·9 | +2·1 | 83 | + 3 | ·731 | 146·5 | 62·0 | 0·000 | ... | ·160 |
| 28 | 29·830 | −·018 | 81·8 | 70·0 | 11·8 | 75·5 | +1·3 | 72·0 | 69·4 | +1·7 | 82 | + 2 | ·718 | 145·6 | 63·8 | 0·000 | ... | ·180 |
| 29 | 29·853 | +·003 | 81·5 | 69·2 | 12·3 | 74·3 | +0·2 | 70·7 | 68·2 | +0·6 | 82 | + 2 | ·689 | 138·3 | 60·7 | 0·000 | ... | ·160 |
| 30 | 29·826 | −·027 | 82·0 | 67·0 | 15·0 | 73·4 | −0·6 | 69·7 | 66·9 | −0·5 | 80 | 0 | ·659 | 136·8 | 59·2 | 0·000 | ... | ·180 |
| Mean | 29·811 | −·011 | 81·5 | 69·1 | 12·4 | 74·7 | −0·6 | 70·9 | 68·1 | −0·7 | 80·4 | −0·5 | ·689 | 145·8 | 62·7 | Sum 2·895 | Sum 1270 | ·173 |
| Average | 29·822 | ... | 82·0 | 70·1 | 11·9 | 75·3 | ... | 71·4 | 68·8 | ... | 80·9 | ... | ·704 | 150·7 | 65·2 | 5·144 | 1708 | ·166 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day 1909. | Ozone (Scale 0—10). | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind. Components. North. | Wind. Components. East. | Wind. Resultants. Direction. | Wind. Resultants. Velocity. | Wind. Excess above Average. Direction. | Wind. Excess above Average. Velocity. | Wind. Observed Velocity. | Temperature of the Soil. 5 Feet. | Temperature of the Soil. 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Apr. 1 | 7·0 | 5·9 | 8·7 | 73 | − 4·7 | +11·2 | 67 | 12·1 | − 7 | + 3·7 | 12·4 | 80·7 | 76·98 | o.p. :c.f.q. : c.f. |
| 2 | 8·0 | 6·0 | 7·2 | 69 | − 2·8 | +11·1 | 76 | 11·5 | + 2 | + 3·1 | 11·7 | 80·6 | 76·98 | c.f. : c.f.q. : o. |
| 3 | 7·0 | 3·2 | 10·5 | 89 | − 3·7 | +11·4 | 72 | 12·0 | − 2 | + 3·6 | 12·3 | 80·6 | 77·03 | c.f. : b. : c.f. : c.p. |
| 4 | 7·0 | 5·5 | 10·7 | 91 | − 3·2 | +11·2 | 74 | 11·6 | + 1 | + 3·2 | 11·8 | 80·6 | 77·03 | b. : c.f. |
| 5 | 8·0 | 8·5 | 8·8 | 75 | − 1·2 | +13·4 | 85 | 13·5 | + 12 | + 5·1 | 13·6 | 80·6 | 77·08 | c.p. : c.q. : c. |
| 6 | 6·0 | 8·0 | 7·8 | 66 | − 2·3 | +10·0 | 77 | 10·3 | + 4 | + 1·8 | 10·3 | 80·5 | 77·08 | c.p. : c. : b. |
| 7 | 6·0 | 5·0 | 9·9 | 85 | − 2·4 | +13·0 | 80 | 13·2 | + 8 | + 4·7 | 13·3 | 80·5 | 77·08 | c.p. : c.f. : o.p. |
| 8 | 7·0 | 3·0 | 10·6 | 91 | − 3·0 | +10·8 | 74 | 11·2 | + 2 | + 2·7 | 11·4 | 80·4 | 77·03 | c.p. : c.f. : b. |
| 9 | 6·0 | 3·7 | 9·7 | 83 | − 3·1 | +11·1 | 74 | 11·5 | + 2 | + 3·0 | 11·7 | 80·4 | 77·03 | c.p.: c.q. : c.f. |
| 10 | 7·0 | 5·5 | 7·2 | 62 | − 1·4 | + 9·2 | 81 | 9·3 | + 9 | + 0·8 | 9·6 | 80·3 | 77·08 | c.p. : c. : c.r.: c. |
| 11 | 8·0 | 5·5 | 9·3 | 79 | − 1·8 | + 9·1 | 79 | 9·3 | + 8 | + 0·7 | 9·3 | 80·4 | 77·13 | c. : b.c. : b. |
| 12 | 6·0 | 4·3 | 10·7 | 91 | − 3·1 | + 6·8 | 66 | 7·4 | − 5 | − 1·2 | 7·5 | 80·4 | 77·13 | c.f. |
| 13 | 5·0 | 5·2 | 9·0 | 78 | + 1·0 | + 5·8 | 100 | 5·9 | + 29 | − 2·7 | 6·5 | 80·3 | 77·08 | b. : c.f. |
| 14 | 5·0 | 8·9 | 4·5 | 39 | − 0·2 | − 1·1 | 280 | 1·1 | +209 | − 7·5 | 4·9 | 80·2 | 77·03 | b. : c.p. : c. : c.p. |
| 15 | 5·0 | 2·4 | 11·1 | 96 | − 1·9 | + 1·0 | 28 | 2·2 | − 42 | − 6·4 | 5·2 | 80·1 | 77·08 | c. : b. : c.f. : b. |
| 16 | 6·0 | 2·1 | 10·9 | 94 | − 5·6 | + 5·0 | 42 | 7·5 | − 28 | − 1·1 | 8·1 | 80·1 | 77·13 | b. : c.f. |
| 17 | 6·0 | 4·0 | 10·6 | 91 | − 5·4 | + 6·1 | 48 | 8·1 | − 22 | − 0·5 | 8·6 | 80·1 | 77·18 | c. : c.f. : b. |
| 18 | 6·0 | 5·5 | 9·3 | 81 | − 5·6 | + 9·2 | 59 | 10·8 | − 11 | + 2·2 | 11·1 | 80·0 | 77·18 | c.f. : c.f. |
| 19 | 6·0 | 2·5 | 10·5 | 91 | − 4·5 | +10·8 | 67 | 11·7 | − 2 | + 3·1 | 11·9 | 80·0 | 77·23 | b. : c.f. : c.p. |
| 20 | 7·0 | 3·3 | 9·5 | 83 | − 6·9 | +11·8 | 60 | 13·7 | − 9 | + 5·1 | 13·8 | 80·1 | 77·28 | c.p.: c.f.q. : o.p. |
| 21 | 8·0 | 7·0 | 9·6 | 83 | − 1·4 | +12·0 | 83 | 12·1 | + 14 | + 3·5 | 12·2 | 80·1 | 77·33 | o.r. : c.f. : c.p.: c.f. |
| 22 | 7·0 | 7·7 | 6·6 | 57 | + 0·9 | + 9·5 | 95 | 9·5 | + 26 | + 0·9 | 9·9 | 80·0 | 77·38 | c.f. : p. |
| 23 | 6·0 | 8·8 | 4·7 | 41 | − 0·6 | + 4·2 | 82 | 4·3 | + 13 | − 4·3 | 5·8 | 80·0 | 77·33 | c.p. : c. : o.r. : c. |
| 24 | 6·0 | 6·7 | 10·2 | 89 | + 4·0 | + 0·8 | 169 | 4·1 | +101 | − 4·5 | 6·8 | 79·9 | 77·33 | c.p. : c.f. : c.r. |
| 25 | 5·0 | 8·5 | 2·5 | 22 | + 0·6 | + 1·9 | 107 | 2·0 | + 39 | − 6·6 | 5·1 | 79·8 | 77·33 | c.r.: c. :o.t-sm.: o.l. |
| 26 | 5·0 | 3·8 | 10·5 | 92 | + 2·2 | + 2·8 | 128 | 3·6 | + 60 | − 5·1 | 6·0 | 79·8 | 77·33 | b.l. : c.f. |
| 27 | 6·0 | 6·1 | 8·5 | 75 | − 0·3 | + 5·5 | 87 | 5·5 | + 19 | − 3·2 | 5·9 | 79·8 | 77·38 | c.f. : c. : c.f. |
| 28 | 5·0 | 6·0 | 10·0 | 88 | + 0·6 | + 6·1 | 96 | 6·1 | + 28 | − 2·6 | 6·8 | 79·8 | 77·38 | c.f. : c.t. : c.l.t. |
| 29 | 6·0 | 6·5 | 8·4 | 74 | − 0·8 | + 7·7 | 84 | 7·8 | + 17 | − 0·9 | 8·1 | 79·7 | 77·38 | o.l.t. : c. : b. |
| 30 | 6·0 | 1·1 | 10·9 | 96 | − 0·6 | + 6·1 | 84 | 6·2 | + 17 | − 2·5 | 6·5 | 79·7 | 77·38 | b. |
| Mean | 6·3 | 5·3 | 8·95 | 77·5 | − 1·91 | + 7·78 | 76·2 | 8·01 | + 5·8 | − 0·55 | 9·27 | 80·18 | 77·18 | ... |
| Average | 4·1 | 5·7 | 7·31 | 63·1 | − 2·87 | + 8·06 | 70·4 | 8·56 | ... | ... | 10·51 | 80·82 | 78·31 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

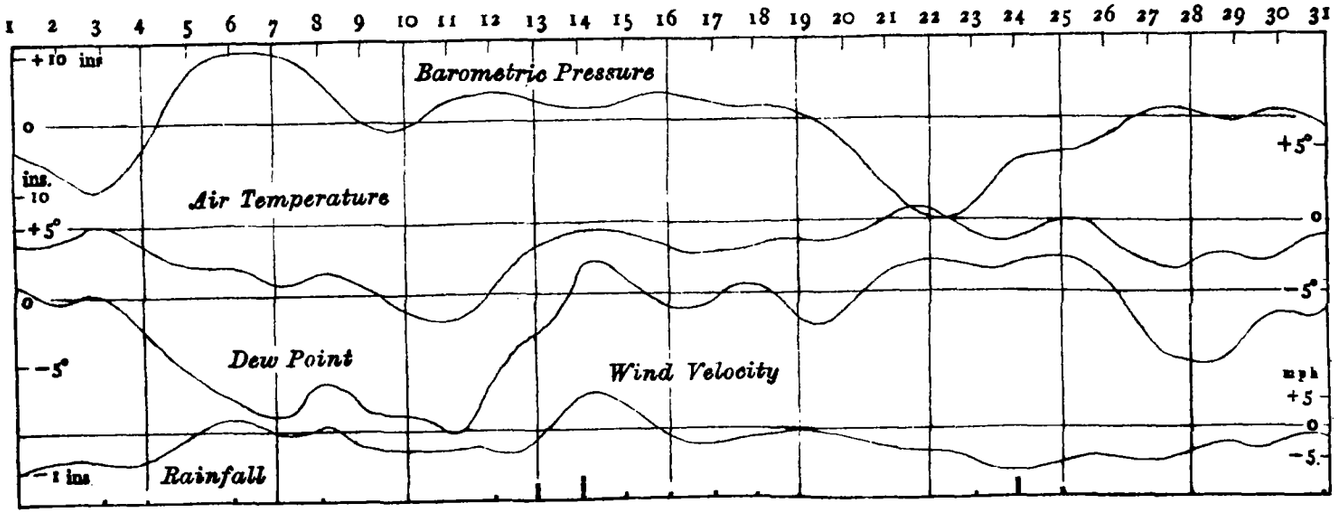
The high pressure which followed on the cyclonic disturbances of March continued until the 10th. of April the remainder of the month being characterised by a doubl ewave from −0·08 in. to +0·06 in. between the 11th. and 20th. and a prolonged negative wave from the 20th. to the 29th.

Temperature was below normal on all days except from the 13th to the 15th. and from the 24th. to the 29th. The variations show no marked correlation to any of the other elements.

The main variations in vapour-tension were correlated negatively, while those of wind velocity were correlated positively, to the pressure variations.

Rainfall was 44 % above normal and fell on 18 days

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew Point. Mean. | Temperature of the Dew Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | | ins. | mins. | in. |
| May 1 | 29·813 | −·042 | 81·2 | 65·1 | 16·1 | 72·5 | −1·4 | 68·7 | 65·8 | − 1·5 | 80 | 0 | ·635 | 140·9 | 57·0 | 0·000 | ... | ·180 |
| 2 | 29·789 | −·068 | 81·2 | 66·2 | 15·0 | 72·8 | −1·0 | 69·5 | 66·9 | − 0·3 | 82 | + 2 | ·659 | 141·0 | 57·2 | 0·000 | ... | ·155 |
| 3 | 29·760 | −·099 | 82·3 | 66·2 | 16·1 | 73·9 | +0·2 | 70·1 | 67·4 | + 0·3 | 80 | 0 | ·671 | 145·3 | 58·7 | 0·070 | 55 | ·140 |
| 4 | 29·833 | −·028 | 80·0 | 63·2 | 16·8 | 71·9 | −1·7 | 67·8 | 64·6 | − 2·4 | 78 | − 2 | ·609 | 145·4 | 54·3 | 0·130 | 30 | ·130 |
| 5 | 29·943 | +·079 | 78·2 | 62·7 | 15·5 | 70·9 | −2·6 | 65·6 | 61·5 | − 5·4 | 72 | − 8 | ·546 | 137·7 | 53·2 | 0·000 | ... | ·150 |
| 6 | 29·973 | +·107 | 76·6 | 65·2 | 11·4 | 70·5 | −2·9 | 64·2 | 59·3 | − 7·5 | 68 | −12 | ·505 | 136·4 | 56·6 | 0·045 | 30 | ·185 |
| 7 | 29·969 | +·101 | 77·5 | 62·6 | 14·9 | 69·0 | −4·3 | 62·5 | 57·5 | − 9·2 | 67 | −13 | ·473 | 143·2 | 49·5 | 0·000 | ... | ·160 |
| 8 | 29·925 | +·055 | 76·0 | 63·9 | 12·7 | 70·0 | −3·2 | 64·4 | 60·1 | − 6·4 | 71 | − 9 | ·520 | 138·5 | 52·8 | 0·040 | 35 | ·140 |
| 9 | 29·869 | −·003 | 78·1 | 59·2 | 18·9 | 68·5 | −4·6 | 62·6 | 57·9 | − 8·5 | 69 | −11 | ·480 | 133·2 | 48·5 | 0·000 | ... | ·160 |
| 10 | 29·874 | −·001 | 78·0 | 58·2 | 19·8 | 66·7 | −6·2 | 61·5 | 57·4 | − 8·9 | 72 | − 8 | ·472 | 146·8 | 48·2 | 0·000 | ... | ·160 |
| 11 | 29·908 | +·031 | 78·1 | 55·8 | 22·3 | 65·8 | −7·0 | 60·3 | 55·9 | −10·2 | 70 | −10 | ·447 | 139·9 | 45·8 | 0·000 | ... | ·160 |
| 12 | 29·921 | +·041 | 79·0 | 60·1 | 18·9 | 69·0 | −3·7 | 64·4 | 60·8 | − 5·2 | 75 | − 5 | ·533 | 137·3 | 51·4 | 0·010 | 10 | ·170 |
| 13 | 29·906 | +·024 | 79·2 | 63·9 | 15·3 | 71·2 | −1·4 | 66·5 | 63·0 | − 2·9 | 76 | − 4 | ·576 | 138·0 | 52·4 | 0·360 | 100 | ·150 |
| 14 | 29·900 | +·015 | 76·1 | 69·2 | 6·9 | 71·8 | −0·6 | 69·7 | 68·0 | + 2·3 | 88 | + 8 | ·684 | 131·8 | 66·9 | 0·500 | 350 | ·060 |
| 15 | 29·921 | +·034 | 78·1 | 68·2 | 9·9 | 71·7 | −0·6 | 68·3 | 65·7 | + 0·1 | 82 | + 2 | ·633 | 137·3 | 63·1 | 0·060 | 65 | ·120 |
| 16 | 29·926 | +·036 | 77·9 | 63·2 | 14·7 | 69·9 | −2·3 | 66·5 | 63·9 | − 1·5 | 82 | + 3 | ·594 | 143·2 | 54·1 | 0·010 | 10 | ·110 |
| 17 | 29·910 | +·018 | 78·4 | 63·1 | 15·3 | 69·9 | −2.1 | 67·4 | 65·5 | + 0·2 | 86 | + 7 | ·628 | 144·7 | 53·6 | 0·145 | 50 | ·115 |
| 18 | 29·907 | +·013 | 76·3 | 66·8 | 9·5 | 70·6 | −1·3 | 67·6 | 65·4 | + 0·3 | 83 | + 4 | ·626 | 132·4 | 58·4 | 0·070 | 20 | ·090 |
| 19 | 29·892 | −·005 | 77·3 | 63·1 | 14·2 | 70·1 | −1·6 | 65·6 | 62·2 | − 2·7 | 76 | − 3 | ·560 | 134·4 | 53·9 | 0·000 | ... | ·160 |
| 20 | 29·851 | −·048 | 78·1 | 61·3 | 16·8 | 70·2 | −1·4 | 67·0 | 64·5 | − 0·3 | 82 | + 3 | ·607 | 140·8 | 53·2 | 0·000 | ... | ·130 |
| 21 | 29·777 | −·125 | 79·3 | 66·2 | 13·1 | 72·1 | +0·6 | 68·8 | 66·2 | + 1·6 | 82 | + 3 | ·644 | 140·8 | 55·6 | 0·000 | ... | ·120 |
| 22 | 29·752 | −·152 | 79·9 | 65·0 | 14·9 | 71·7 | +0·4 | 68·8 | 66·6 | + 2·1 | 84 | + 5 | ·652 | 141·5 | 58·3 | 0·000 | ... | ·125 |
| 23 | 29·812 | −·095 | 78·2 | 63·8 | 14·4 | 69·6 | −1·6 | 67·4 | 65·7 | + 1·4 | 87 | + 8 | ·633 | 136·0 | 57·5 | 0·150 | 50 | ·060 |
| 24 | 29·856 | −·053 | 77·8 | 63·2 | 14·6 | 70·2 | −0·8 | 68·1 | 66·4 | + 2·3 | 88 | + 9 | ·648 | 134·0 | 57·7 | 0·375 | 85 | ·065 |
| 25 | 29·857 | −·054 | 78·9 | 65.2 | 13·7 | 70·9 | 0·0 | 68·1 | 66·0 | + 2·0 | 85 | + 7 | ·639 | 145·3 | 54·8 | 0·200 | 20 | ·140 |
| 26 | 29·897 | −·017 | 77·4 | 62·2 | 15·2 | 68·6 | −2·2 | 65·7 | 63·3 | − 0·5 | 83 | + 5 | ·582 | 140·7 | 50·2 | 0·000 | ... | ·100 |
| 27 | 29·929 | +·013 | 76·8 | 59·2 | 17·6 | 67·1 | −3·6 | 62·5 | 58·7 | − 5·0 | 75 | − 3 | ·494 | 139·5 | 48·7 | 0·000 | ... | ·140 |
| 28 | 29·916 | −·003 | 76·2 | 60·2 | 16·0 | 68·2 | −2·3 | 62·7 | 58·3 | − 5·2 | 71 | − 7 | ·487 | 140·8 | 51·0 | 0·000 | ... | ·120 |
| 29 | 29·925 | +·004 | 74·8 | 60·2 | 14·6 | 67·4 | −3·0 | 63·9 | 61·0 | − 2·4 | 80 | + 2 | ·537 | 135·8 | 49·0 | 0·000 | ... | ·100 |
| 30 | 29·925 | +·001 | 76·3 | 60·2 | 16·1 | 68·6 | −1·7 | 64·3 | 60·9 | − 2·3 | 77 | − 1 | ·535 | 139·2 | 51·0 | 0·000 | ... | ·100 |
| 31 | 29·897 | −·029 | 75·1 | 62·2 | 12·9 | 69·1 | −1·1 | 65·6 | 62·8 | − 0·2 | 80 | + 2 | ·572 | 139·9 | 53·7 | 0·035 | 15 | ·035 |
| Mean | 29·882 | −·008 | 78·0 | 63·1 | 14·9 | 70·0 | −2·1 | 66·0 | 62·9 | − 2·4 | 78·4 | −0·9 | ·577 | 139·4 | 54·1 | Sum 2·200 | Sum 925 | ·127 |
| Average | 29·890 | ... | 79·0 | 66·3 | 12·7 | 72·1 | ... | 68·1 | 65·3 | ... | 79·3 | ... | ·625 | 144·4 | 60·5 | 3·736 | 1335 | ·144 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day. 1909. | Ozone (Scale 0—10). | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind: Components. North. | Wind: Components. East. | Wind: Resultants. Direction. | Wind: Resultants. Velocity. | Wind: Excess above Average. Direction. | Wind: Excess above Average. Velocity. | Wind: Observed Velocity. | Temperature of the Soil 5 Feet. | Temperature of the Soil 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| May 1 | 4·0 | 2·4 | 11·0 | 97 | + 0·3 | + 5·2 | 93 | 5·2 | + 26 | − 3·5 | 5·5 | 79·6 | 77·38 | b. : c.f. : b. |
| 2 | 5·0 | 4·5 | 10·0 | 88 | + 1·5 | + 4·1 | 110 | 4·3 | + 43 | − 4·4 | 6·3 | 79·6 | 77·43 | b. : c.f. : b. |
| 3 | 3·0 | 6·2 | 10·0 | 88 | + 0·4 | − 2·6 | 261 | 2·7 | +194 | − 6·0 | 6·3 | 79·6 | 77·48 | c.f. : c. : o.p. |
| 4 | 4·0 | 4·3 | 6·7 | 59 | − 5·3 | + 1·5 | 16 | 5·5 | − 51 | − 3·3 | 5·8 | 79·5 | 77·48 | o.r. : c.f. : b. |
| 5 | 6·0 | 4·0 | 10·4 | 92 | − 6·5 | + 7·0 | 47 | 9·6 | − 19 | + 0·8 | 9·9 | 79·5 | 77·53 | b. : c.f. : |
| 6 | 7·0 | 1·9 | 10·7 | 95 | − 6·4 | +10·9 | 60 | 12·6 | − 6 | + 3·8 | 12·7 | 79·5 | 77·53 | c.p. : c.f.q : c.f. |
| 7 | 6·0 | 3·7 | 8·2 | 73 | − 4·9 | + 8·9 | 61 | 10·2 | − 5 | + 1·4 | 10·3 | 79·4 | 77·48 | b. : c.f. |
| 8 | 6·0 | 5·5 | 8·3 | 74 | − 5·6 | + 9·5 | 59 | 11·0 | − 7 | + 2·2 | 11·2 | 79·4 | 77·48 | c.p. : c.f. : b. |
| 9 | 6·0 | 1·4 | 10·6 | 95 | − 4·5 | + 6·7 | 56 | 8·1 | − 10 | − 0·7 | 8·4 | 79·4 | 77·48 | b. |
| 10 | 6·0 | 3·0 | 9·0 | 80 | − 3·7 | + 6·2 | 59 | 7·2 | − 7 | − 1·6 | 7·6 | 79·4 | 77·53 | b. : c.f. : b. |
| 11 | 5·0 | 1·3 | 10·7 | 96 | − 4·6 | + 6·3 | 54 | 7·8 | − 11 | − 1·0 | 8·0 | 79·4 | 77·48 | b. |
| 12 | 6·0 | 4·4 | 9·6 | 86 | − 3·3 | + 6·1 | 62 | 6·9 | − 3 | − 1·9 | 7·0 | 79·3 | 77·53 | c.p. : c.f. : b. |
| 13 | 7·0 | 3·2 | 10·6 | 95 | − 3·1 | + 9·0 | 71 | 9·5 | + 6 | + 0·7 | 9·6 | 79·2 | 77·53 | p. : c.f. : c.p. |
| 14 | 7·0 | 8·3 | 7·1 | 63 | − 2·5 | +15·3 | 81 | 15·5 | + 16 | + 6·6 | 15·7 | 79·1 | 77·53 | c.r. : c.r.q : c.f. : c.p. |
| 15 | 7·0 | 7·2 | 7·4 | 67 | − 2·7 | +12·4 | 78 | 12·7 | + 13 | + 3·8 | 12·9 | 79·1 | 77·53 | c.p. : c. : b. |
| 16 | 6·0 | 6·0 | 8·6 | 77 | − 3·2 | + 7·8 | 68 | 8·4 | + 3 | − 0·5 | 8·4 | 79·1 | 77·53 | b. : c.f. : c.p. |
| 17 | 7·0 | 7·9 | 6·4 | 58 | − 3·4 | + 7·2 | 65 | 8·0 | 0 | − 0·9 | 8·2 | 79·0 | 77·48 | c.p. : c. : c.p. : b. |
| 18 | 7·0 | 7·3 | 4·8 | 43 | − 3·3 | + 8·7 | 69 | 9·3 | + 5 | + 0·3 | 9·4 | 78·9 | 77·43 | c.f. : : c.p. : b. |
| 19 | 8·0 | 2·5 | 10·0 | 90 | − 3·4 | + 9·4 | 70 | 10·0 | + 6 | + 1·0 | 10·1 | 78·8 | 77·38 | c.f. : b. |
| 20 | 7·0 | 5·0 | 9·3 | 84 | − 2·1 | + 8·0 | 75 | 8·3 | + 11 | − 0·7 | 8·4 | 78·8 | 77·38 | c.f. : c. : b. |
| 21 | 7·0 | 3·4 | 9·9 | 89 | 0·0 | + 6·5 | 90 | 6·5 | + 26 | − 2·6 | 6·8 | 78·7 | 77·38 | b. : c.f. : c.f.l. |
| 22 | 6·0 | 6·0 | 9·1 | 83 | + 0·5 | − 3·5 | 262 | 3·5 | +198 | − 5·6 | 6·6 | 78·6 | 77·38 | c.f.l.t. : c.f. : c.f.l. |
| 23 | 5·0 | 8·0 | 2·8 | 25 | + 1·1 | + 2·0 | 119 | 2·3 | + 55 | − 6·8 | 4·0 | 78·5 | 77·43 | b.l. : c.p.t. : c.f. |
| 24 | 5·0 | 7·0 | 5·9 | 54 | − 0·1 | − 2·6 | 272 | 2·6 | +208 | − 6·6 | 4·1 | 78·3 | 77·38 | c.f. : c.p. : c.f. |
| 25 | 6·0 | 8·7 | 5·7 | 52 | − 1·7 | + 0·8 | 25 | 1·9 | − 38 | − 7·3 | 5·2 | 78·3 | 77·38 | c.r. : c. : c.f. : b. |
| 26 | 6·0 | 3·8 | 7·2 | 65 | − 4·3 | + 3·4 | 38 | 5·5 | − 25 | − 3·8 | 5·5 | 78·3 | 77·38 | b. : c.f. : b. |
| 27 | 6·0 | 2·4 | 10·7 | 97 | − 2·6 | + 1·9 | 36 | 3·2 | − 27 | − 6·1 | 5·4 | 78·3 | 77·38 | b. : c.f. : b. |
| 28 | 6·0 | 1·5 | 9·1 | 83 | − 7·2 | + 2·5 | 19 | 7·6 | − 44 | − 1·7 | 7·8 | 78·2 | 77·43 | b. : c.f. |
| 29 | 6·0 | 7·1 | 5·4 | 49 | − 6·1 | + 3·6 | 31 | 7·1 | − 32 | − 2·3 | 7·2 | 78·2 | 77·43 | c. |
| 30 | 5·0 | 6·0 | 6·2 | 56 | − 6·4 | + 6·6 | 46 | 9·2 | − 16 | − 0·2 | 9·3 | 78·2 | 77·43 | o. : b. : c. : o. |
| 31 | 7·0 | 9·1 | 5·2 | 47 | − 2·3 | + 7·5 | 73 | 7·8 | + 11 | − 1·7 | 7·9 | 78·1 | 77·48 | c. : c.p. : c.f. |
| Mean | 6·0 | 4·9 | 8·28 | 74·2 | − 3·08 | + 5·69 | 61·6 | 6·47 | − 3·1 | − 2·53 | 8·11 | 78·95 | 77·45 | ... |
| Average | 4·4 | 5·1 | 7·37 | 66·4 | − 3·85 | + 8·13 | 64·7 | 9·00 | ... | ... | 10·27 | 79·71 | 78·39 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

Changes in all elements were unusually large for the season. A double oscillation of pressure from April 29th. to May 9 (−0·10 in. to +0·11 in.) was followed by a period of high pressure until the 19th. and a marked negative wave till the 28th.

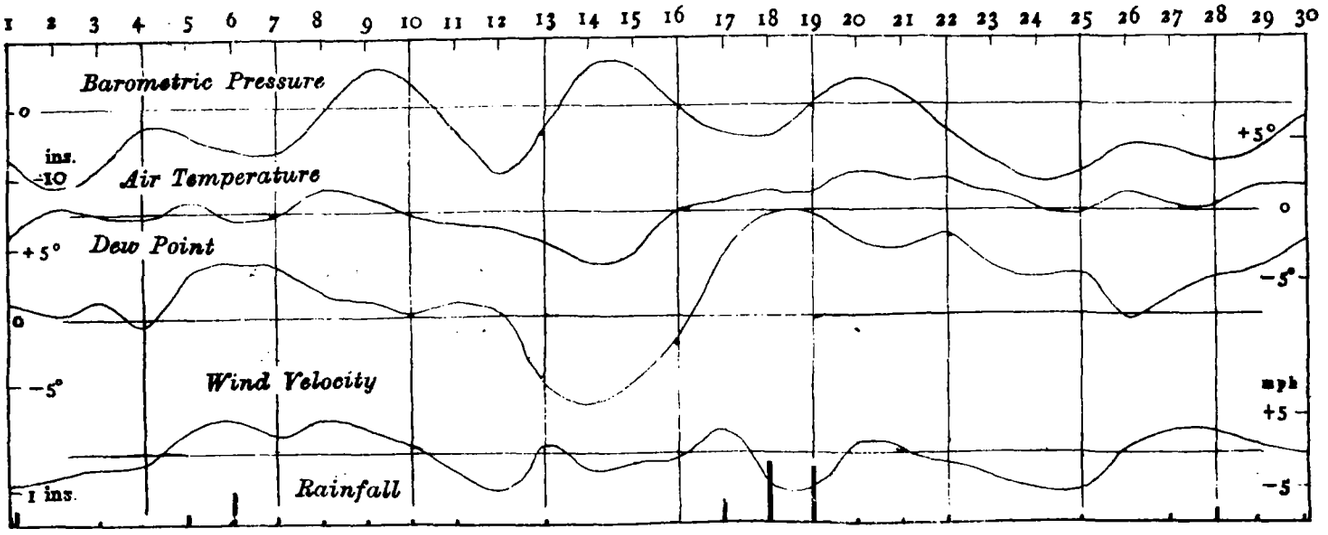
Temperature fell steadily till the 11th. and rose to nearly normal by the 14th, but remained below normal for the remainder of the month except during a slight positive wave on the 21st. and 22nd, corresponding to the negative wave of pressure which culminated on the latter date.

The variations of vapour-tension generally evidenced marked positive correlation to those of temperature.

The double oscillation of pressure at the beginning of the month corresponded to a similar movement in the wind velocity curve; a sharp positive wave of wind velocity accompanied an increase of temperature and vapour-tension on the 14th., after which the curve of wind velocity remained below normal until the end of the month.

The rainfall was 41% below normal and fell on 15 days.

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew-Point. Mean. | Temperature of the Dew-Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | ° | ins. | mins. | in. |
| June 1 | 29·859 | −·070 | 76·8 | 63·7 | 13·1 | 68·5 | −1·5 | 65·9 | 63·8 | +1·0 | 85 | + 7 | ·592 | 135·3 | 55·3 | 0·435 | 245 | ·095 |
| 2 | 29·821 | −·111 | 77·7 | 65·3 | 12·4 | 70·3 | +0·4 | 66·1 | 62·8 | +0·1 | 77 | − 1 | ·572 | 135·0 | 56·2 | 0·000 | ... | ·100 |
| 3 | 29·855 | −·080 | 77·7 | 64·2 | 13·5 | 69·8 | 0·0 | 66·4 | 63·7 | +1·2 | 81 | + 4 | ·590 | 140·0 | 53·7 | 0·070 | 40 | ·115 |
| 4 | 29·909 | −·029 | 77·0 | 60·5 | 16·5 | 69·3 | −0·4 | 65·2 | 61·9 | −0·5 | 77 | 0 | ·554 | 139·0 | 54·7 | 0·005 | 5 | ·110 |
| 5 | 29·902 | −·038 | 77·5 | 65·7 | 11·8 | 70·4 | +0·8 | 67·5 | 65·3 | +3·1 | 84 | + 7 | ·624 | 139·2 | 55·7 | 0·345 | 385 | ·095 |
| 6 | 29·881 | −·062 | 70·5 | 67·4 | 3·1 | 69·0 | −0·5 | 67·3 | 66·0 | +3·9 | 90 | +13 | ·639 | 111·0 | 65·2 | 0·890 | 845 | ·095 |
| 7 | 29·884 | −·062 | 71·3 | 67·5 | 3·8 | 69·2 | −0·2 | 67·2 | 65·6 | +3·7 | 89 | +12 | ·630 | 105·2 | 65·2 | 0·265 | 175 | ·065 |
| 8 | 29·943 | −·006 | 76·3 | 66·4 | 9·9 | 71·1 | +1·8 | 66·7 | 63·3 | +1·5 | 77 | 0 | ·582 | 141·6 | 62·5 | 0·050 | 130 | ·120 |
| 9 | 30·010 | +·058 | 75·5 | 66·1 | 9·4 | 70·4 | +1·2 | 66·2 | 62·9 | +1·2 | 77 | 0 | ·574 | 134·3 | 61·5 | 0·125 | 40 | ·145 |
| 10 | 29·992 | +·038 | 74·7 | 64·7 | 10·0 | 68·7 | −0·4 | 65·0 | 62·0 | +0·4 | 79 | + 2 | ·556 | 138·0 | 57·5 | 0·145 | 105 | ·105 |
| 11 | 29·929 | −·028 | 75·4 | 63·4 | 12·0 | 68·2 | −0·8 | 64·9 | 62·4 | +1·0 | 82 | + 5 | ·564 | 136·6 | 57·5 | 0·065 | 30 | ·095 |
| 12 | 29·865 | −·094 | 76·4 | 60·6 | 15·8 | 67·7 | −1·2 | 64·3 | 61·5 | +0·2 | 81 | + 5 | ·546 | 130·3 | 53·2 | 0·000 | ... | ·150 |
| 13 | 29·933 | −·029 | 71·6 | 60·2 | 11·4 | 66·6 | −2·2 | 60·8 | 56·2 | −5·0 | 70 | − 6 | ·453 | 126·0 | 50·2 | 0·060 | 30 | ·170 |
| 14 | 30·026 | +·061 | 72·4 | 58·0 | 14·4 | 65·0 | −3·7 | 59·3 | 54·6 | −6·5 | 69 | − 7 | ·427 | 133·8 | 48·7 | 0·000 | ... | ·120 |
| 15 | 30·022 | +·055 | 72·9 | 59·4 | 13·5 | 65·4 | −3·2 | 60·4 | 56·3 | −4·7 | 72 | − 4 | ·454 | 133·0 | 51·6 | 0·000 | ... | ·130 |
| 16 | 29·969 | ·000 | 75·5 | 60·4 | 15·1 | 68·5 | 0·0 | 63·7 | 59·9 | −1·0 | 74 | − 2 | ·516 | 140·0 | 50·4 | 0·000 | ... | ·120 |
| 17 | 29·933 | −·039 | 72·5 | 66·6 | 5·9 | 69·3 | +0·9 | 67·0 | 65·3 | +4·5 | 87 | +11 | ·624 | 127·6 | 64·2 | 0·750 | 560 | ·090 |
| 18 | 29·928 | −·046 | 72·5 | 67·4 | 5·1 | 69·8 | +1·4 | 68·8 | 68·0 | +7·3 | 94 | +18 | ·684 | 112·0 | 65·2 | 1·685 | 630 | ·035 |
| 19 | 29·979 | +·003 | 72·5 | 67·5 | 5·0 | 69·6 | +1·3 | 68·5 | 67·6 | +7·0 | 93 | +17 | ·675 | 102·0 | 63·5 | 1·560 | 330 | ·030 |
| 20 | 30·017 | +·039 | 76·5 | 67·2 | 9·3 | 70·8 | +2·6 | 68·0 | 65·7 | +5·2 | 84 | + 8 | ·633 | 133·1 | 64·5 | 0·115 | 70 | ·145 |
| 21 | 29·997 | +·018 | 76·2 | 66·4 | 9·8 | 70·4 | +2·2 | 67·4 | 65·1 | +4·7 | 84 | + 8 | ·620 | 136·0 | 63·4 | 0·075 | 50 | ·090 |
| 22 | 29·943 | −·038 | 76·4 | 67·2 | 9·2 | 70·4 | +2·3 | 67·9 | 66·1 | +5·8 | 86 | +10 | ·641 | 140·2 | 63·2 | 0·145 | 85 | ·125 |
| 23 | 29·901 | −·081 | 75·9 | 63·5 | 12·4 | 69·4 | +1·3 | 66·2 | 63·7 | +3·5 | 82 | + 6 | ·590 | 132·2 | 57·7 | 0·000 | ... | ·120 |
| 24 | 29·877 | −·107 | 76·9 | 62·4 | 14·5 | 68·4 | +0·4 | 65·4 | 63·0 | +2·8 | 83 | + 7 | ·576 | 145·6 | 54·8 | 0·000 | ... | ·140 |
| 25 | 29·888 | −·097 | 74·7 | 61·4 | 13·3 | 67·7 | −0·2 | 65·2 | 63·3 | +3·2 | 86 | +10 | ·582 | 123·3 | 54·9 | 0·010 | 5 | ·070 |
| 26 | 29·929 | −·058 | 73·9 | 65·4 | 8·5 | 69·1 | +1·2 | 63·7 | 59·5 | −0·5 | 72 | − 4 | ·509 | 125·8 | 60·7 | 0·000 | ... | ·160 |
| 27 | 29·925 | −·063 | 73·9 | 65·3 | 8·6 | 68.3 | +0·4 | 64·5 | 61·4 | +1·5 | 78 | + 2 | ·545 | 132·0 | 61·4 | 0·160 | 165 | ·150 |
| 28 | 29·912 | −·078 | 73·4 | 64·6 | 8·8 | 68·1 | +0·3 | 65·0 | 62·6 | +2·7 | 83 | + 7 | ·568 | 134·2 | 62·6 | 0·390 | 210 | ·130 |
| 29 | 29·926 | −·065 | 75·3 | 64·4 | 10·9 | 69·4 | +1·6 | 65·8 | 63·1 | +3·3 | 81 | + 5 | ·578 | 131·3 | 58·5 | 0·055 | 35 | ·135 |
| 30 | 29·980 | −·013 | 75·3 | 66·4 | 8·9 | 69·5 | +1·8 | 66·9 | 64·8 | +5·0 | 85 | + 9 | ·613 | 134·1 | 63·8 | 0·170 | 185 | ·130 |
| Mean - | 29·931 | −·034 | 74·8 | 64·3 | 10·5 | 68·9 | +0·2 | 65·6 | 62·9 | +1·8 | 81·4 | +5·0 | ·577 | 130·9 | 58·6 | Sum 7·570 | Sum 4355 | ·113 |
| Average | 29·965 | ... | 76·2 | 62·6 | 13·6 | 68·7 | ... | 64·4 | 61·1 | ... | 76·4 | ... | ·538 | 140·1 | 56·2 | 2·113 | 1275 | ·125 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



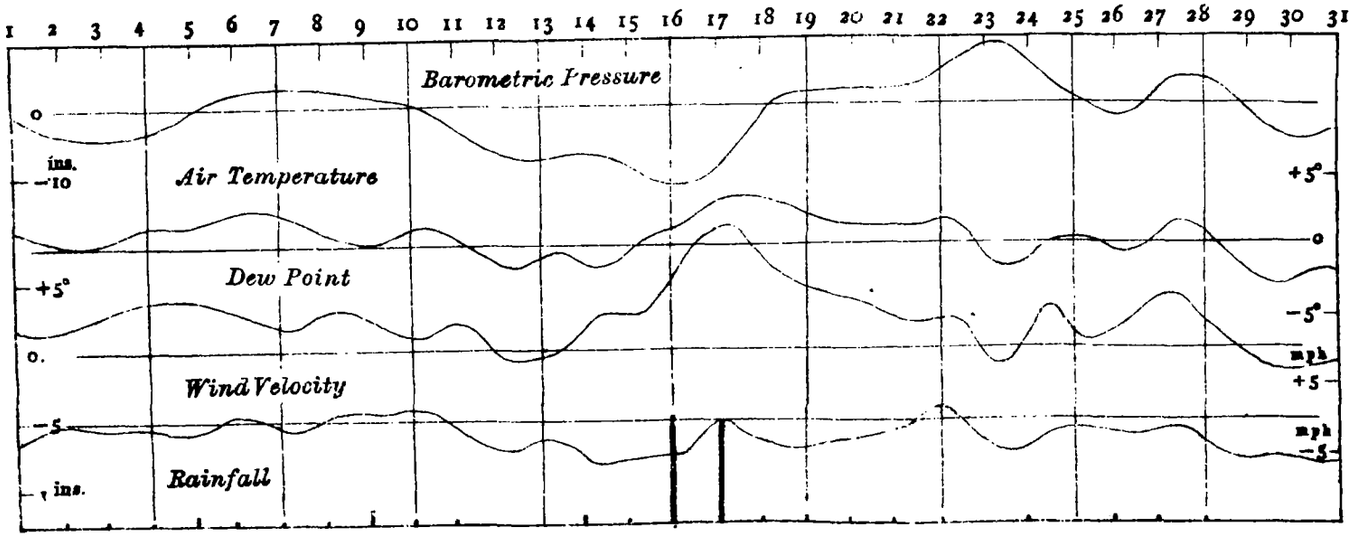
| Month and Day 1909. | Ozone (Scale 0—10). | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind. Components. North. | Wind. Components. East. | Wind. Resultants. Direction. | Wind. Resultants. Velocity. | Wind. Excess above Average. Direction. | Wind. Excess above Average. Velocity. | Wind. Observed Velocity. | Temperature of the Soil. 5 Feet. | Temperature of the Soil. 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| June 1 | 7·0 | 9·0 | 1·4 | 13 | − 3·2 | + 5·3 | 59 | 6·2 | − 3 | − 3·3 | 6·3 | 78·0 | 77·48 | o.r. : c. |
| 2 | 8·0 | 4·9 | 7·2 | 66 | − 2·6 | + 6·3 | 68 | 6·8 | + 6 | − 2·8 | 7·2 | 77·9 | 77·48 | c. : b. : c.f.: b. |
| 3 | 7·0 | 7·2 | 6·0 | 55 | − 2·8 | + 7·5 | 70 | 8·0 | + 9 | − 1·6 | 8·6 | 77·8 | 77·48 | c.f. : c.p. : c.f. : c.p. |
| 4 | 6·0 | 5·5 | 10·1 | 93 | − 4·6 | + 7·3 | 58 | 8·6 | − 3 | − 1·1 | 8·8 | 77·7 | 77·48 | b. : c.f. : c.p.: c.f. |
| 5 | 6·0 | 6·8 | 6·3 | 58 | − 4·9 | +13·5 | 70 | 14·4 | + 9 | + 4·7 | 14·5 | 77·7 | 77·48 | c.f. : c.p. : o.r. |
| 6 | 7·0 | 9·9 | 0·0 | 0 | − 4·8 | +15·4 | 73 | 16·1 | + 12 | + 6·3 | 16·3 | 77·6 | 77·43 | o.r.q. : o.p. : o.r. |
| 7 | 7·0 | 9·9 | 0·0 | 0 | − 3·6 | +12·7 | 74 | 13·2 | + 13 | + 3·4 | 13·2 | 77·5 | 77·43 | o.p. : o.t. |
| 8 | 7·0 | 6·7 | 7·0 | 64 | − 3·2 | +15·6 | 78 | 15·9 | + 17 | + 6·0 | 15·9 | 77·5 | 77·48 | o. : c.f. : o.p. |
| 9 | 6·0 | 4·8 | 9·1 | 83 | − 3·1 | +14·2 | 78 | 14·6 | + 17 | + 4·7 | 14·6 | 77·4 | 77·48 | o.p. : c.f.q. : b. |
| 10 | 5·0 | 5·5 | 6·9 | 63 | − 2·4 | +11·7 | 78 | 11·9 | + 17 | + 1·9 | 12·1 | 77·4 | 77·53 | b. : c.p.q. : b. : c.p. |
| 11 | 6·0 | 4·9 | 5·9 | 54 | − 3·2 | + 7·9 | 68 | 8·5 | + 8 | − 1·5 | 8·6 | 77·4 | 77·53 | c.p.: b.: c.f. |
| 12 | 6·0 | 5·2 | 10·2 | 94 | − 1·6 | − 2·0 | 51 | 2·6 | − 9 | − 7·5 | 5·3 | 77·3 | 77·53 | c.f. : b. |
| 13 | 7·0 | 3·0 | 9·4 | 86 | −12·1 | + 2·0 | 9 | 12·3 | − 51 | + 2·2 | 12·6 | 77·2 | 77·48 | o.p.: c.f.: b.q.: c.f. : b. |
| 14 | 8·0 | 7·9 | 5·9 | 54 | − 7·6 | + 3·9 | 27 | 8·6 | − 33 | − 1·6 | 8·8 | 77·2 | 77·43 | b: c. : c.f. |
| 15 | 8·0 | 7·1 | 6·6 | 61 | − 4·8 | + 8·1 | 59 | 9·4 | − 1 | − 0·8 | 9·6 | 77·2 | 77·43 | c. : c.f. |
| 16 | 6·0 | 7·0 | 5·7 | 52 | − 6·1 | + 8·7 | 55 | 10·6 | − 5 | + 0·3 | 11·0 | 77·1 | 77·38 | c.f. : o. |
| 17 | 7·0 | 9·8 | 1·6 | 15 | − 6·5 | +13·0 | 63 | 14·5 | + 3 | + 4·2 | 15·0 | 77·1 | 77·38 | o.r. : o.q. : o.r.l. |
| 18 | 7·0 | 10·0 | 0·0 | 0 | − 2·3 | + 4·7 | 64 | 5·3 | + 4 | − 5·0 | 6·6 | 77·0 | 77·38 | o.p.l.t.: o.r. : o. |
| 19 | 8·0 | 9·9 | 0·0 | 0 | − 2·7 | + 5·7 | 65 | 6·3 | + 5 | − 4·1 | 6·4 | 76·9 | 77·43 | o. : o.r. : c. |
| 20 | 7·0 | 4·2 | 9·8 | 90 | − 6·2 | +11·4 | 61 | 13·0 | + 1 | + 2·6 | 13·1 | 76·7 | 77·38 | c.p. : c.f. : o.p. |
| 21 | 7·0 | 7·8 | 8·3 | 76 | − 5·6 | +10·3 | 62 | 11·7 | + 2 | + 1·3 | 11·9 | 76·6 | 77·33 | o.r. : c.f. : c.p. |
| 22 | 6·0 | 8·7 | 4·6 | 42 | − 2·7 | + 9·2 | 74 | 9·6 | + 14 | − 0·8 | 9·7 | 76·4 | 77·28 | o.p. : c. : c.p. |
| 23 | 7·0 | 8·3 | 5·9 | 54 | − 3·6 | + 6·5 | 61 | 7·4 | 0 | − 3·1 | 7·8 | 76·4 | 77·23 | c. : c.f. : c. |
| 24 | 6·0 | 6·0 | 9·1 | 83 | − 1·3 | + 6·3 | 78 | 6·5 | + 17 | − 4·0 | 6·6 | 76·4 | 77·18 | c.f. : b. |
| 25 | 6·0 | 9·6 | 2·0 | 18 | − 4·6 | + 2·1 | 25 | 5·0 | − 36 | − 5·5 | 5·9 | 76·3 | 77·13 | b. : c.: o. |
| 26 | 6·0 | 5·0 | 9·5 | 87 | − 7·6 | + 9·6 | 52 | 12·2 | − 9 | + 1·7 | 12·5 | 76·2 | 77·13 | o. : c.f. : c. |
| 27 | 7·0 | 4·7 | 6·9 | 63 | − 5·3 | +12·9 | 68 | 14·0 | + 7 | + 3·5 | 14·1 | 76·2 | 77·13 | c. : c.f.q. : o.r. |
| 28 | 7·0 | 8·6 | 5·7 | 52 | − 7·0 | +13·1 | 62 | 14·9 | + 1 | + 4·3 | 15·0 | 76·2 | 77·13 | o.r. : c.q. : c. |
| 29 | 6·0 | 5·0 | 9·5 | 87 | − 5·1 | +10·7 | 65 | 11·8 | + 3 | + 1·2 | 11·9 | 76·2 | 77·08 | c.p. : : c.f. |
| 30 | 7·0 | 5·8 | 8·0 | 73 | − 4·2 | +10·8 | 69 | 11·6 | + 7 | + 1·0 | 11·6 | 76·1 | 77·03 | c.p. : c.f. : c.p. |
| Mean | 6·7 | 7·0 | 5·95 | 54·5 | − 4·52 | + 8·81 | 62·8 | 9·90 | + 2·0 | − 0·26 | 10·72 | 77·02 | 77·36 | ... |
| Average | 4·8 | 4·9 | 7·43 | 68·3 | − 4·96 | + 8·87 | 60·8 | 10·16 | ... | ... | 11·19 | 78·09 | 78·25 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

The pressure abnormality curve was characterised by a long positive wave lasting throughout the month and culminating about the 15th. on which were superposed six well-defined negative waves having a period of about 5 days.

The variations in the other elements show no marked and persistent correlation to these regular pressure changes. The negative wave of pressure from the 1st. to the 4th. was associated with a slight positive wave of temperature, a slight negative wave of vapour-tension and low wind velocities; that of the 5th. to the 9th. with a negative wave of temperature and positive waves of vapour-tension and wind velocity; that of the 9th. to 14th. with decreasing temperature and vapour-tension and a negative wave of wind velocity; that of the 15th. to the 20th. with increasing temperature and vapour-tension and a double wave, from positive to negative, in wind velocity; while that of the 21st. to the 26th. was associated with falling temperature and vapour-tension, and a marked negative wave of wind velocity.

Rainfall was abnormally heavy for the season, 7·570 ins. fell as compared with an average of 2·113 ins. or 258% above normal. Rain fell on 22 days.

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew Point. Mean. | Temperature of the Dew Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | | ins. | mins. | in. |
| July 1 | 29·993 | −·001 | 75·7 | 63·5 | 12·2 | 68·8 | +1·1 | 64·7 | 61·5 | + 1·8 | 78 | + 2 | ·546 | 134·4 | 53·4 | 0·000 | ... | ·140 |
| 2 | 29·960 | −·035 | 75·5 | 60·6 | 14·9 | 68·2 | +0·5 | 64·4 | 61·4 | + 1·7 | 79 | + 3 | ·545 | 136·0 | 49·7 | 0·020 | 10 | ·120 |
| 3 | 29·955 | −·041 | 74·6 | 64·0 | 10·6 | 68·1 | +0·5 | 64·9 | 62·5 | + 2·9 | 82 | + 6 | ·566 | 133·2 | 55·5 | 0·075 | 35 | ·095 |
| 4 | 29·958 | −·039 | 76·4 | 62·4 | 14·0 | 69·3 | +1·7 | 66·1 | 63·5 | + 3·9 | 82 | + 6 | ·586 | 137·0 | 56·4 | 0·155 | 65 | ·115 |
| 5 | 30·000 | +·003 | 75·5 | 65·5 | 10·0 | 69·5 | +1·9 | 66·2 | 63·6 | + 4·0 | 82 | + 6 | ·588 | 147·4 | 60·2 | 0·210 | 70 | ·095 |
| 6 | 30·023 | +·025 | 75·6 | 66·0 | 9·6 | 70·5 | +2·9 | 65·9 | 62·4 | + 2·8 | 76 | 0 | ·564 | 132·4 | 62·2 | 0·010 | 5 | ·130 |
| 7 | 30·032 | +·033 | 75·5 | 65·5 | 10·0 | 69·7 | +2·2 | 64·8 | 61·0 | + 1·5 | 74 | − 2 | ·537 | 136·0 | 57·2 | 0·015 | 10 | ·145 |
| 8 | 30·028 | +·028 | 75·3 | 64·8 | 10·5 | 68·9 | +1·4 | 65·5 | 62·8 | + 3·3 | 81 | + 5 | ·572 | 131·4 | 58·1 | 0·075 | 85 | ·085 |
| 9 | 30·024 | +·023 | 72·6 | 63·2 | 9·4 | 67·9 | +0·4 | 64·5 | 61·9 | + 2·4 | 81 | + 5 | ·554 | 129·9 | 54·0 | 0·420 | 110 | ·140 |
| 10 | 30·011 | +·010 | 74·5 | 64·0 | 10·5 | 69·1 | +1·6 | 64·2 | 60·4 | + 0·9 | 74 | − 2 | ·526 | 135·0 | 56·9 | 0·005 | 5 | ·135 |
| 11 | 29·965 | −·037 | 75·3 | 60·9 | 14·4 | 67·9 | +0·5 | 64·3 | 61·4 | + 2·0 | 80 | + 4 | ·545 | 132·2 | 53·2 | 0·025 | 10 | ·120 |
| 12 | 29·929 | −·073 | 75·5 | 58·5 | 17·0 | 66·0 | −1·4 | 62·1 | 59·0 | − 0·4 | 78 | + 2 | ·500 | 132·4 | 51·1 | 0·000 | ... | ·130 |
| 13 | 29·932 | −·071 | 75·6 | 60·5 | 15·1 | 67·1 | −0·3 | 62·6 | 59·0 | − 0·4 | 75 | − 1 | ·500 | 135·6 | 53·3 | 0·000 | ... | ·120 |
| 14 | 29·935 | −·069 | 71·6 | 61·7 | 9·9 | 65·9 | −1·5 | 63·8 | 62·2 | + 2·8 | 88 | +12 | ·560 | 116·3 | 54·2 | 0·360 | 95 | ·070 |
| 15 | 29·908 | −·096 | 75·2 | 60·5 | 14·7 | 67·8 | +0·4 | 64·8 | 62·4 | + 3·0 | 83 | + 7 | ·564 | 135·9 | 52·0 | 0·175 | 40 | ·115 |
| 16 | 29·891 | −·114 | 71·7 | 65·9 | 5·8 | 69·2 | +1·8 | 67·7 | 66·6 | + 7·2 | 92 | +16 | ·652 | 100·0 | 65·3 | 3·010 | 825 | ·070 |
| 17 | 29·931 | −·074 | 74·4 | 68·4 | 6·0 | 71·1 | +3·7 | 69·7 | 68·5 | + 9·2 | 92 | +16 | ·697 | 128·8 | 66·5 | 2·985 | 750 | ·095 |
| 18 | 30·015 | +·009 | 75·7 | 65·6 | 10·1 | 70·6 | +3·2 | 67·8 | 65·5 | + 6·2 | 84 | + 8 | ·628 | 137·9 | 58·1 | 0·135 | 75 | ·130 |
| 19 | 30·035 | +·028 | 75·7 | 64·5 | 11·2 | 69·2 | +1·8 | 65·9 | 63·3 | + 4·0 | 82 | + 6 | ·582 | 141·2 | 59·1 | 0·010 | 10 | ·110 |
| 20 | 30·032 | +·025 | 75·5 | 64·3 | 11·2 | 69·0 | +1·6 | 65·5 | 62·7 | + 3·4 | 80 | + 4 | ·570 | 137·2 | 57·3 | 0·045 | 30 | ·110 |
| 21 | 30·032 | +·025 | 75·4 | 63·4 | 12·0 | 68·9 | +1·5 | 64·5 | 61·1 | + 1·8 | 76 | 0 | ·539 | 139·3 | 57·2 | 0·015 | 15 | ·145 |
| 22 | 30·069 | +·062 | 75·5 | 63·5 | 12·0 | 69·3 | +2·0 | 65·0 | 61·6 | + 2·3 | 77 | + 1 | ·548 | 136·5 | 56·3 | 0·055 | 50 | ·155 |
| 23 | 30·104 | +·096 | 75·0 | 57·8 | 17·2 | 65·4 | −2·0 | 61·4 | 58·1 | − 1·2 | 77 | + 1 | ·483 | 139·7 | 51·0 | 0·000 | ... | ·140 |
| 24 | 30·055 | +·047 | 74·7 | 57·6 | 17·1 | 67·5 | +0·1 | 64·8 | 62·6 | + 3·3 | 84 | + 9 | ·568 | 141·1 | 53·1 | 0·150 | 100 | ·100 |
| 25 | 30·010 | +·002 | 75·4 | 61·5 | 13·9 | 67·5 | +0·1 | 63·2 | 59·8 | + 0·5 | 77 | + 2 | ·514 | 141·9 | 52·3 | 0·000 | ... | ·155 |
| 26 | 29·997 | −·011 | 74·5 | 59·6 | 14·9 | 66·8 | −0·6 | 64·0 | 61·6 | + 2·4 | 83 | + 8 | ·548 | 134·3 | 52·3 | 0·025 | 20 | ·105 |
| 27 | 30·051 | +·043 | 76·0 | 63·5 | 12·5 | 69·2 | +1·8 | 65·9 | 63·4 | + 4·2 | 82 | + 7 | ·584 | 134·3 | 54·5 | 0·020 | 30 | ·140 |
| 28 | 30·032 | +·023 | 75·2 | 58·1 | 17·1 | 67·2 | −0·2 | 63·0 | 59·5 | + 0·3 | 76 | + 1 | ·509 | 133·9 | 48·9 | 0·010 | 5 | ·170 |
| 29 | 29·971 | −·038 | 75·5 | 54·7 | 20·8 | 64·4 | −3·0 | 60·9 | 58·0 | − 1·2 | 80 | + 5 | ·482 | 142·0 | 46·2 | 0·000 | ... | ·105 |
| 30 | 29·965 | −·044 | 75·5 | 57·0 | 18·5 | 65·5 | −1·9 | 61·3 | 57·8 | − 1·5 | 76 | + 1 | ·479 | 139·5 | 48·2 | 0·000 | ... | ·125 |
| 31 | 29·992 | −·018 | 75·7 | 55·5 | 20·2 | 65·1 | −2·4 | 61·4 | 58·3 | − 1·0 | 79 | + 4 | ·487 | 143·2 | 46·8 | 0·000 | ... | ·150 |
| Mean | 29·995 | −·009 | 75·0 | 62·0 | 13·0 | 68·1 | +0·6 | 64·5 | 61·7 | + 2·3 | 80·3 | +4·6 | ·552 | 134·7 | 54·9 | Sum 8·005 | Sum 2450 | ·121 |
| Average | 30·004 | ... | 75·2 | 61·5 | 13·7 | 67·5 | ... | 63·1 | 59·4 | ... | 75·7 | ... | ·507 | 139·5 | 55·7 | 2·234 | 1494 | ·135 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day. 1909. | Ozone (Scale 0–10) | Mean Amount of Cloud (Scale 0–10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind: Components. North. | Wind: Components. East. | Wind: Resultants. Direction. | Wind: Resultants. Velocity. | Wind: Excess above Average. Direction. | Wind: Excess above Average. Velocity. | Wind: Observed Velocity. | Temperature of the Soil 5 Feet. | Temperature of the Soil 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| July 1 | 6·0 | 2·7 | 10·4 | 95 | − 5·3 | + 6·8 | 52 | 8·6 | − 10 | − 2·0 | 9·3 | 76·0 | 76·91 | c.f. : b. : c.f. : b. |
| 2 | 7·0 | 6·3 | 7·8 | 72 | − 5·5 | + 9·8 | 61 | 11·2 | − 1 | + 0·6 | 11·6 | 75·9 | 76·86 | c.f. : c.p. : c.f.: b. |
| 3 | 6·0 | 6·5 | 6·0 | 55 | − 4·9 | + 9·3 | 62 | 10·5 | 0 | − 0·2 | 10·7 | 76·0 | 76·86 | c. : c.p. |
| 4 | 7·0 | 4·7 | 6·5 | 60 | − 2·0 | +10·5 | 79 | 10·7 | + 16 | 0·0 | 11·0 | 75·9 | 76·86 | c.p.: c.f. : c.r. |
| 5 | 8·0 | 7·0 | 5·6 | 51 | − 1·9 | + 9·9 | 79 | 10·1 | + 16 | − 0·6 | 10·3 | 75·9 | 76·81 | c.p. |
| 6 | 7·0 | 6·3 | 9·1 | 83 | − 3·4 | +12·2 | 74 | 12·7 | + 11 | + 2·0 | 12·7 | 75·9 | 76·81 | c.p.: c.f.: b. : c.f. |
| 7 | 7·0 | 4·2 | 9·5 | 87 | − 2·4 | + 9·5 | 76 | 9·8 | + 13 | − 0·9 | 10·1 | 75·9 | 76·76 | c.p.: c.f. : b. |
| 8 | 7·0 | 6·3 | 6·4 | 59 | − 5·3 | +11·1 | 64 | 12·3 | + 1 | + 1·5 | 12·3 | 75·8 | 76·71 | b. : c.p. |
| 9 | 8·0 | 7·5 | 6·4 | 59 | − 5·1 | +12·2 | 67 | 13·2 | + 3 | + 2·4 | 13·2 | 75·8 | 76·66 | c.p. : o.r.q. : c.p. |
| 10 | 7·0 | 4·9 | 9·3 | 85 | − 3·9 | +12·7 | 73 | 13·3 | + 9 | + 2·5 | 13·3 | 75·8 | 76·61 | c.f. : c.f.q. : c.f. |
| 11 | 6·0 | 6·0 | 7·9 | 72 | − 4·4 | + 8·7 | 63 | 9·7 | − 1 | − 1·1 | 10·0 | 75·8 | 76·66 | c.p. : c.f. |
| 12 | 6·0 | 4·5 | 9·0 | 82 | − 4·7 | + 5·2 | 48 | 7·0 | − 16 | − 3·8 | 7·2 | 75·7 | 76·56 | c.f. : b. |
| 13 | 6·0 | 4·7 | 7·9 | 72 | − 6·7 | + 6·0 | 42 | 9·0 | − 22 | − 1·8 | 9·0 | 75·6 | 76·56 | c.f. : b. |
| 14 | 7·0 | 9·3 | 3·2 | 29 | − 0·5 | + 4·8 | 84 | 4·8 | + 20 | − 6·1 | 5·2 | 75·6 | 76·46 | c.p. : o.r. : c.f. : b. |
| 15 | 8·0 | 7·0 | 7·5 | 68 | + 0·1 | + 6·5 | 91 | 6·5 | + 27 | − 4·4 | 6·9 | 75·6 | 76·46 | b. : c.p.: c. : o.p. |
| 16 | 6·0 | 10·0 | 0·0 | 0 | + 1·3 | + 6·6 | 101 | 6·8 | + 36 | − 4·1 | 7·0 | 75·6 | 76·51 | o.p. : o.r. |
| 17 | 7·0 | 10·0 | 0·9 | 8 | + 8·3 | + 6·7 | 141 | 10·6 | + 76 | − 0·3 | 11·3 | 75·3 | 76·41 | o.r. : o.p. : o.r. |
| 18 | 7·0 | 5·2 | 7·9 | 72 | + 1·3 | + 7·5 | 100 | 7·6 | + 35 | − 3·3 | 8·0 | 74·9 | 76·41 | o. : c.f. |
| 19 | 6·0 | 4·6 | 9·5 | 86 | − 0·8 | + 8·5 | 85 | 8·6 | + 20 | − 2·3 | 8·7 | 74·9 | 76·36 | o.p. : c.f. : c.p. |
| 20 | 7·0 | 4·5 | 7·1 | 65 | − 3·4 | + 8·8 | 69 | 9·4 | + 4 | − 1·5 | 9·5 | 74·9 | 76·31 | c.p. : c.f. |
| 21 | 7·0 | 6·0 | 7·7 | 70 | − 1·8 | +10·6 | 80 | 10·7 | + 15 | − 0·2 | 10·9 | 74·9 | 76·26 | c.d.: c.f. : o.p. |
| 22 | 8·0 | 4·8 | 10·0 | 91 | + 0·1 | +13·2 | 91 | 13·2 | + 26 | + 2·2 | 13·4 | 74·9 | 76·26 | c.p. : c.f. : b. |
| 23 | 7·0 | 3·2 | 9·7 | 87 | − 1·2 | + 6·5 | 79 | 6·6 | + 14 | − 4·4 | 6·7 | 74·9 | 76·21 | c.f. : b. |
| 24 | 7·0 | 8·0 | 6·9 | 62 | − 1·1 | + 8·7 | 83 | 8·7 | + 18 | − 2·3 | 9·3 | 75·0 | 76·16 | c.f.: c.p. : c.f. : b. |
| 25 | 6·0 | 4·5 | 10·0 | 90 | − 1·8 | +10·0 | 80 | 10·2 | + 14 | − 0·8 | 10·2 | 74·8 | 76·16 | b. : c.f. : b. |
| 26 | 7·0 | 5·6 | 6·6 | 59 | − 1·1 | + 8·8 | 83 | 8·9 | + 17 | − 2·1 | 9·1 | 74·9 | 76·11 | b. : c.f. : c.p. : b. |
| 27 | 6·0 | 4·3 | 9·4 | 85 | − 3·3 | + 9·6 | 71 | 10·1 | + 5 | − 0·9 | 10·3 | 74·9 | 76·06 | b.: c.p. : c.f. |
| 28 | 6·0 | 2·2 | 10·4 | 94 | − 1·5 | + 6·3 | 77 | 6·5 | + 11 | − 4·5 | 6·8 | 74·9 | 76·01 | c.p. : b. |
| 29 | 6·0 | 5·1 | 5·7 | 51 | − 2·7 | + 5·6 | 64 | 6·2 | − 2 | − 4·8 | 6·3 | 74·8 | 75·96 | b. : c.f. |
| 30 | 6·0 | 6·5 | 8·0 | 71 | − 2·9 | + 4·0 | 54 | 5·0 | − 12 | − 6·1 | 5·2 | 74·9 | 75·91 | c.f. : b. |
| 31 | 7·0 | 3·9 | 8·9 | 79 | − 2·4 | + 2·3 | 44 | 3·4 | − 22 | − 7·7 | 5·4 | 74·8 | 75·91 | b. : c.f. |
| Mean | 6·7 | 5·7 | 7·46 | 67·7 | − 2·22 | + 8·35 | 75·1 | 8·64 | +10·7 | − 2·22 | 9·38 | 75·37 | 76·44 | ... |
| Average | 5·1 | 5·1 | 7·65 | 69·5 | − 4·69 | + 9·79 | 64·4 | 10·86 | ... | ... | 11·96 | 76·38 | 77·82 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

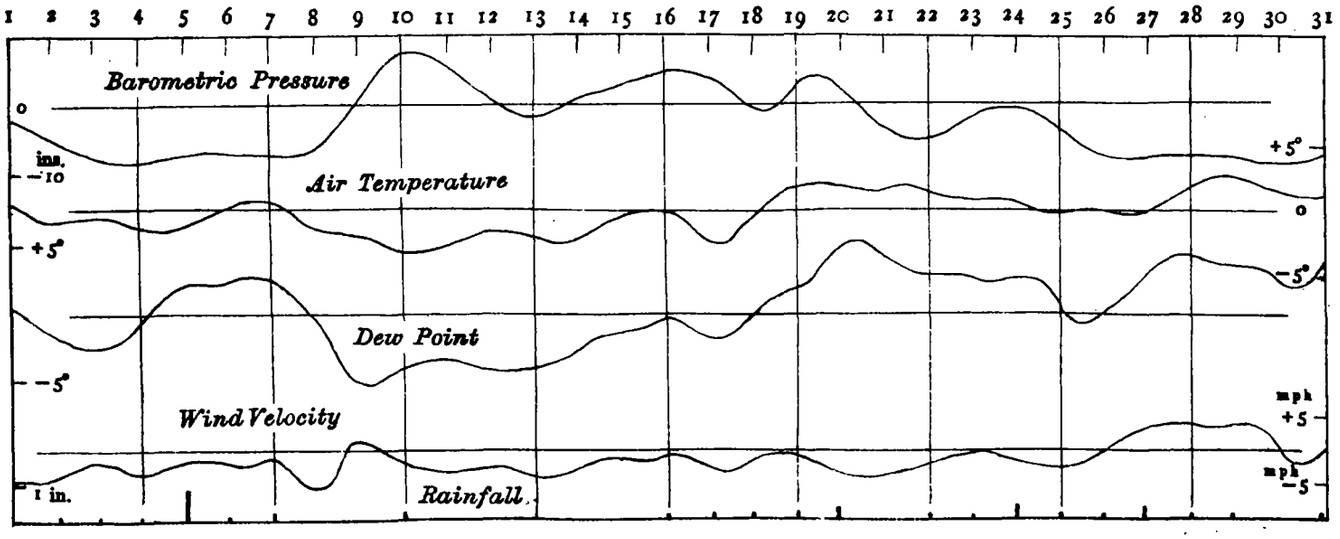
The characteristic feature of the month of July was it unusual wetness. Rain was recorded on 23 days, but with the exception of the heavy falls of the 16th. and 17th. which occurred at the end of a marked negative wave of pressure, these rains do not appear to have been associated with any special type of weather.

A double oscillation of pressure (negative to positive) from the 1st. to the 10th. was associated with variable temperature, vapour-tension and wind velocity ; the two former above normal.

An irregular negative wave of pressure from the 10th. to the 18th. was associated with generally rising temperature and vapour-tension, and a negative wave of wind velocity, the recovery to normal pressure from the lowest point of the wave being accompanied by decreasing temperature and vapour-tension, and a sharp positive wave of wind velocity.

A positive wave of pressure from the 21st. to the 25th. was accompanied by double waves, from negative to positive, in all elements, while the positive wave of pressure from the 26th. to the 29th. corresponded to similar changes in temperature and vapour-tension.

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew-Point. Mean. | Temperature of the Dew-Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | ° | ins. | mins. | in. |
| Aug. 1 | 29·997 | −·013 | 75·4 | 60·7 | 14·7 | 68·3 | +0·8 | 63·8 | 60·2 | +0·9 | 75 | 0 | ·522 | 140·2 | 53·4 | 0·000 | ... | ·130 |
| 2 | 29·963 | −·047 | 74·6 | 59·7 | 14·9 | 66·7 | −0·8 | 61·7 | 57·7 | −1·6 | 73 | − 2 | ·477 | 141·0 | 51·2 | 0·050 | 70 | ·110 |
| 3 | 29·939 | −·072 | 73·6 | 61·5 | 12·1 | 66·8 | −0·7 | 61·1 | 56·6 | −2·7 | 70 | − 5 | ·459 | 131·3 | 52·8 | 0·015 | 25 | ·175 |
| 4 | 29·933 | −·078 | 74·4 | 58·5 | 15·9 | 66·0 | −1·6 | 61·9 | 58·5 | −0·8 | 77 | + 2 | ·491 | 138·8 | 48·0 | 0·010 | 10 | ·115 |
| 5 | 29·941 | −·070 | 72·4 | 61·6 | 10·8 | 66·2 | −1·4 | 63·6 | 61·5 | +2·2 | 85 | +10 | ·546 | 141·0 | 51·7 | 0·840 | 230 | ·140 |
| 6 | 29·943 | −·068 | 74·3 | 62·7 | 11·6 | 67·7 | +0·1 | 64·3 | 61·5 | +2·2 | 81 | + 6 | ·546 | 138·5 | 59·9 | 0·015 | 10 | ·100 |
| 7 | 29·950 | −·061 | 75·3 | 61·6 | 13·7 | 68·4 | +0·8 | 64·8 | 61·9 | +2·6 | 80 | + 5 | ·554 | 135·2 | 52·2 | 0·085 | 35 | ·145 |
| 8 | 29·948 | −·063 | 75·7 | 58·5 | 17·2 | 66·2 | −1·5 | 62·5 | 59·5 | +0·2 | 79 | + 4 | ·509 | 138·2 | 50·8 | 0·000 | ... | ·140 |
| 9 | 30·030 | +·019 | 72·6 | 58·6 | 14·0 | 65·9 | −1·8 | 59·5 | 54·2 | −5·1 | 66 | − 9 | ·421 | 140·6 | 49·0 | 0·000 | ... | ·160 |
| 10 | 30·098 | +·087 | 71·9 | 57·7 | 14·2 | 64·3 | −3·4 | 59·3 | 55·2 | −4·1 | 72 | − 3 | ·436 | 135·0 | 52·4 | 0·010 | 5 | ·145 |
| 11 | 30·073 | +·062 | 73·4 | 56·4 | 17·0 | 65·2 | −2·5 | 60·1 | 55·8 | −3·6 | 72 | − 3 | ·446 | 139·1 | 48·2 | 0·000 | ... | ·155 |
| 12 | 30·016 | +·005 | 71·5 | 61·9 | 9·6 | 66·3 | −1·5 | 60·3 | 55·4 | −4·0 | 68 | − 7 | ·439 | 137·2 | 56·3 | 0·000 | ... | ·130 |
| 13 | 29·999 | −·012 | 72·8 | 57·9 | 14·9 | 65·3 | −2·5 | 59·6 | 55·0 | −4·4 | 69 | − 6 | ·433 | 141·8 | 47·7 | 0·000 | ... | ·160 |
| 14 | 30·028 | +·017 | 74·6 | 56·8 | 17·8 | 65·9 | −2·0 | 61·1 | 57·3 | −2·1 | 74 | − 1 | ·470 | 133·5 | 46·8 | 0·000 | ... | ·150 |
| 15 | 30·041 | +·030 | 74·9 | 61·0 | 13·9 | 67·5 | −0·4 | 62·4 | 58·2 | −1·2 | 72 | − 3 | ·485 | 135·5 | 51·0 | 0·000 | ... | ·155 |
| 16 | 30·065 | +·054 | 74·8 | 62·1 | 12·7 | 67·6 | −0·3 | 62·9 | 59·1 | −0·3 | 74 | − 1 | ·501 | 139·9 | 52·2 | 0·040 | 25 | ·135 |
| 17 | 30·034 | +·023 | 73·3 | 57·4 | 15·9 | 65·4 | −2·6 | 60·9 | 57·3 | −2·1 | 75 | 0 | ·470 | 135·8 | 48·6 | 0·070 | 10 | ·130 |
| 18 | 30·005 | −·006 | 75·4 | 63·2 | 12·2 | 68·5 | +0·5 | 63·8 | 60·1 | +0·7 | 75 | 0 | ·520 | 134·3 | 54·5 | 0·020 | 15 | ·180 |
| 19 | 30·053 | +·043 | 75·5 | 64·9 | 10·6 | 69·6 | +1·6 | 65·5 | 62·2 | +2·7 | 78 | + 4 | ·560 | 136·8 | 60·9 | 0·010 | 5 | ·130 |
| 20 | 30·019 | +·009 | 75·7 | 65·6 | 10·1 | 69·5 | +1·4 | 66·9 | 65·0 | +5·5 | 86 | +12 | ·617 | 143·2 | 60·7 | 0·310 | 150 | ·110 |
| 21 | 29·962 | −·048 | 76·7 | 64·3 | 12·4 | 69·7 | +1·6 | 65·8 | 62·8 | +3·3 | 79 | + 5 | ·572 | 139·0 | 56·0 | 0·000 | ... | ·160 |
| 22 | 29·973 | −·037 | 76·4 | 63·3 | 13·1 | 69·2 | +1·0 | 65·3 | 62·2 | +2·7 | 78 | + 4 | ·560 | 139·8 | 54·0 | 0·020 | 20 | ·160 |
| 23 | 30·009 | −·001 | 74·6 | 64·6 | 10·0 | 68·7 | +0·5 | 64·6 | 61·4 | +1·9 | 78 | + 4 | ·545 | 134·2 | 58·3 | 0·010 | 10 | ·120 |
| 24 | 30·004 | −·006 | 75·3 | 64·6 | 10·7 | 68·3 | +0·1 | 64·7 | 61·8 | +2·3 | 80 | + 6 | ·552 | 142·8 | 57·6 | 0·335 | 110 | ·150 |
| 25 | 29·954 | −·055 | 76·4 | 60·8 | 15·6 | 68·0 | −0·3 | 62·8 | 58·7 | −0·8 | 72 | − 2 | ·494 | 134·2 | 54·0 | 0·010 | 5 | ·200 |
| 26 | 29·934 | −·075 | 74·4 | 60·7 | 13·7 | 67·8 | −0·5 | 63·6 | 60·2 | +0·6 | 77 | + 3 | ·522 | 134·3 | 52·4 | 0·070 | 40 | ·150 |
| 27 | 29·933 | −·075 | 72·8 | 63·9 | 8·9 | 68.6 | +0·2 | 65·7 | 63·5 | +3·9 | 84 | +10 | ·586 | 129·8 | 63·4 | 0·315 | 160 | ·115 |
| 28 | 29·929 | −·079 | 75·7 | 65·6 | 10·1 | 70·7 | +2·3 | 66·3 | 62·9 | +3·3 | 76 | + 2 | ·574 | 134·9 | 64·1 | 0·010 | 5 | ·150 |
| 29 | 29·928 | −·080 | 76·3 | 66·3 | 10·0 | 70·3 | +1·8 | 66·0 | 62·6 | +3·0 | 77 | + 3 | ·568 | 134·8 | 61·9 | 0·010 | 5 | ·140 |
| 30 | 29·924 | −·083 | 76·3 | 61·4 | 14·9 | 69·1 | +0·6 | 64·6 | 61·1 | +1·4 | 76 | + 3 | ·539 | 145·6 | 53·5 | 0·000 | ... | ·140 |
| 31 | 29·951 | −·056 | 76·4 | 66·5 | 9·9 | 70·0 | +1·4 | 66·3 | 63·5 | +3·8 | 80 | + 7 | ·586 | 143·9 | 64·2 | 0·135 | 185 | ·175 |
| Mean | 29·986 | −·024 | 74·6 | 61·6 | 13·0 | 67·7 | −0·3 | 63·3 | 59·8 | +0·4 | 76·1 | +1·6 | ·516 | 137·7 | 54·4 | Sum 2·390 | Sum 1130 | ·144 |
| Average | 30·010 | ... | 75·7 | 61·8 | 13·9 | 68·0 | ... | 63·2 | 59·4 | ... | 74·5 | ... | ·508 | 143·3 | 55·8 | 2·305 | 1696 | ·158 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day 1909. | Ozone (Scale 0—10). | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind. Components. North. | Wind. Components. East. | Wind. Resultants. Direction. | Wind. Resultants. Velocity. | Wind. Excess above Average. Direction. | Wind. Excess above Average. Velocity. | Wind. Observed Velocity. | Temperature of the Soil. 5 Feet. | Temperature of the Soil. 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Aug. 1 | 6·0 | 8·7 | 4·4 | 39 | − 2·7 | + 6·2 | 66 | 6·7 | 0 | − 4·4 | 7·4 | 74·8 | 75·96 | o. : c. : c.f. |
| 2 | 7·0 | 5·8 | 7·4 | 66 | − 6·2 | + 4·5 | 36 | 7·7 | − 30 | − 3·4 | 7·8 | 74·7 | 75·91 | c.f. : c.p. |
| 3 | 7·0 | 1·7 | 10·6 | 95 | − 5·3 | + 9·1 | 60 | 10·5 | − 6 | − 0·6 | 10·6 | 74·7 | 75·91 | c.p : c.f. |
| 4 | 7·0 | 6·8 | 8·5 | 76 | − 3·0 | + 7·3 | 68 | 7·9 | + 1 | − 3·2 | 8·4 | 74·7 | 75·86 | c.p. : c.f. |
| 5 | 8·0 | 7·9 | 5·8 | 52 | − 2·1 | + 9·5 | 78 | 9·7 | + 11 | − 1·4 | 10·2 | 74·7 | 75·81 | c.p. : o.r. : o.p. |
| 6 | 7·0 | 7·6 | 6·8 | 61 | − 2·5 | + 9·2 | 75 | 9·6 | + 8 | − 1·5 | 9·7 | 74·6 | 75·86 | o. : c. : c.f. |
| 7 | 6·0 | 6·0 | 9·0 | 80 | + 0·1 | + 10·3 | 91 | 10·3 | + 24 | − 0·8 | 10·5 | 74·6 | 75·81 | o.p.: c.p. : c.f. : b. |
| 8 | 6·0 | 2·2 | 10·7 | 95 | − 2·7 | + 0·4 | 8 | 2·8 | − 59 | − 8.3 | 5·6 | 74·7 | 75·86 | b. : c.f. : b. |
| 9 | 5·0 | 4·5 | 9·9 | 88 | − 10·3 | + 8·5 | 40 | 13·3 | − 27 | + 2·1 | 13·7 | 74·6 | 75·81 | c.f.q. : b. |
| 10 | 6·0 | 7·5 | 9·0 | 80 | − 5·4 | + 7·5 | 54 | 9·3 | − 13 | − 1·9 | 9·6 | 74·5 | 75·76 | c.f. : c.p. |
| 11 | 6·0 | 5·0 | 10·0 | 88 | − 5·3 | + 6·7 | 52 | 8·5 | − 15 | − 2·7 | 8·9 | 74·5 | 75·71 | c.f. |
| 12 | 6·0 | 9·3 | 3·2 | 28 | − 5·4 | + 8·4 | 57 | 10·0 | − 10 | − 1·2 | 10·0 | 74·5 | 75·71 | o. : c. : c.f. |
| 13 | 5·0 | 6·2 | 7·8 | 69 | − 2·9 | + 6·9 | 67 | 7·5 | 0 | − 3·7 | 7·8 | 74·5 | 75·66 | o. : c.f. : b. |
| 14 | 6·0 | 3·1 | 10·5 | 92 | − 4·2 | + 8·9 | 65 | 9·8 | − 3 | − 1·4 | 9·8 | 74·4 | 75·66 | b. : c.f. |
| 15 | 6·0 | 4·5 | 9·7 | 85 | − 2·4 | + 11·2 | 78 | 11·4 | + 10 | + 0·2 | 11·5 | 74·5 | 75·76 | b. : c.f.q. : b. |
| 16 | 7·0 | 5·7 | 8·3 | 73 | − 2·1 | + 11·2 | 79 | 11·4 | + 11 | + 0·2 | 11·7 | 74·3 | 75·61 | c.p. : c.f. |
| 17 | 6·0 | 5·5 | 8·1 | 71 | − 4·8 | + 7·1 | 56 | 8·6 | − 12 | − 2·6 | 8·8 | 74·4 | 75·61 | c.f. :c.p.: c.f. : b. |
| 18 | 6·0 | 4·5 | 8·7 | 76 | − 4·3 | + 10·7 | 68 | 11·5 | 0 | + 0·3 | 11·5 | 74·4 | 75·61 | b. :c.p.: c.f. : b. |
| 19 | 6·0 | 6·8 | 7·8 | 68 | − 5·3 | + 9·8 | 62 | 11·2 | − 6 | 0·0 | 11·2 | 74·4 | 75·61 | c.f. |
| 20 | 7·0 | 8·5 | 4·1 | 36 | − 3·4 | + 8·5 | 68 | 9·1 | 0 | − 2·1 | 9·3 | 74·4 | 75·61 | c.p. |
| 21 | 7·0 | 3·2 | 10·8 | 94 | − 3·0 | + 9·7 | 73 | 10·2 | + 5 | − 1·0 | 10·4 | 74·3 | 75·56 | c.f. : b. |
| 22 | 6·0 | 4·0 | 9·6 | 83 | − 1·2 | + 10·4 | 83 | 10·5 | + 15 | − 0·7 | 10·7 | 74·3 | 75·51 | b. : c.p. : b. |
| 23 | 7·0 | 6·4 | 7·0 | 61 | − 3·8 | + 11·4 | 72 | 12.0 | + 4 | + 0·8 | 12·1 | 74·3 | 75·46 | c.p. : c.f. : b. |
| 24 | 6·0 | 7·8 | 7·7 | 67 | − 2·3 | + 9·8 | 77 | 10·1 | + 8 | − 1·1 | 10·1 | 74·3 | 75·46 | c.p. : c.f. : b. |
| 25 | 6·0 | 2·5 | 10·8 | 94 | − 3·5 | + 9·2 | 69 | 9·8 | 0 | − 1·4 | 10·0 | 74·3 | 75·46 | b. : c.f. : b. |
| 26 | 7·0 | 6·5 | 9·9 | 85 | − 5·4 | + 11·3 | 64 | 12·5 | − 5 | + 1·3 | 12·6 | 74·3 | 75·46 | c.f. : c.p. |
| 27 | 7·0 | 8·7 | 2·6 | 22 | − 2·7 | + 16·4 | 81 | 16·6 | + 12 | + 5·4 | 16·8 | 74·3 | 75·46 | c.p.q. : c. |
| 28 | 6·0 | 6·9 | 9·9 | 85 | − 3·3 | + 15·7 | 78 | 16·0 | + 9 | + 4·8 | 16.1 | 74·3 | 75·46 | c. : c.p.q. : c.f. |
| 29 | 7·0 | 7·3 | 5·0 | 43 | − 1·0 | + 16·0 | 86 | 16·0 | + 17 | + 4·8 | 16·2 | 74·2 | 75·46 | c.p. : c.f.q. |
| 30 | 6·0 | 4·1 | 8·0 | 69 | − 3·4 | + 9·6 | 71 | 10·2 | + 2 | − 1·0 | 10·2 | 74·2 | 75·46 | c.f. : c. |
| 31 | 7·0 | 8·5 | 8·2 | 71 | − 3·5 | + 14·0 | 76 | 14·4 | + 7 | + 3·2 | 14·6 | 74·2 | 75·46 | c.p. : c.f.q. : c. |
| Mean - | 6·4 | 5·9 | 8·06 | 70·7 | − 3·65 | + 9·53 | 69·0 | 10·20 | + 1·3 | − 0·98 | 10·77 | 74·45 | 75·66 | ... |
| Average | 5·2 | 5·5 | 7·49 | 65·7 | − 4·24 | + 10·35 | 67·7 | 11·18 | ... | ... | 12·34 | 75·28 | 77·25 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

A long negative wave of pressure from the 1st. to the 9th. was accompanied by variable temperature and wind velocity, and a double wave (negative to positive) of vapour-tension.

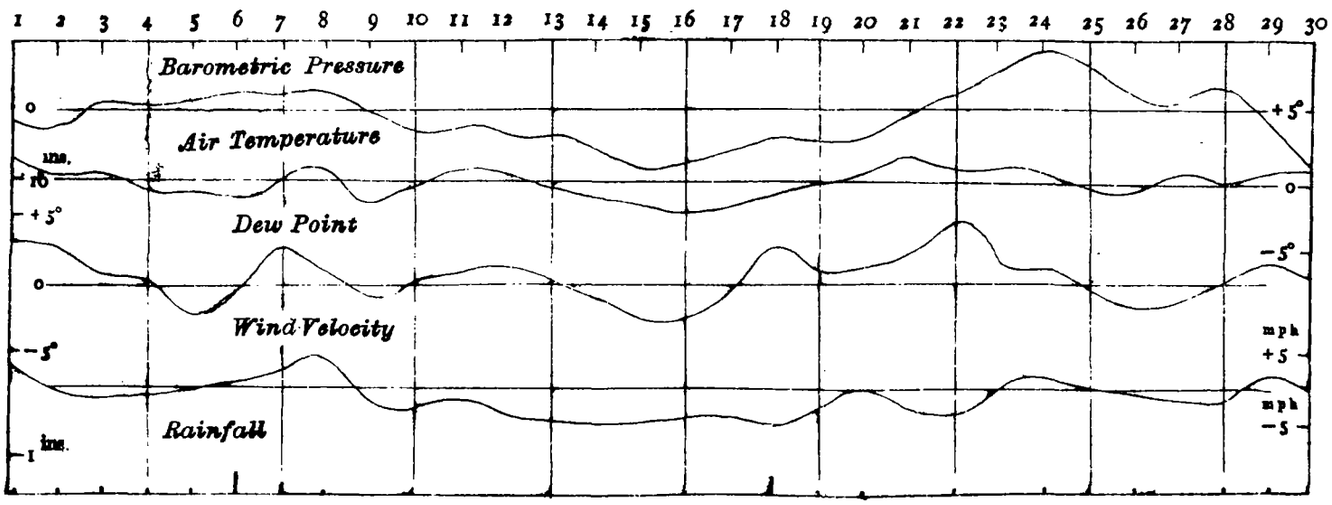
A positive wave of pressure from the 13th. to the 15th. was associated with increasing values in all elements, and the subsequent decrease of pressure from the 16th. to the 18th. with sharp negative waves in all elements.

A double oscillation of pressure (positive to negative) from the 18th. to the 24th. was accompanied by irregular positive waves in temperature and vapour-tension, and a slight negative wave in wind velocity.

Pressure fell from the 24th. to the 26th. and then remained about ·08 in. below normal until the end of the month, while positive waves occurred in temperature, vapour-tension and wind velocity.

The rainfall for the month was 4% above normal and fell on 21 days.

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew Point. Mean. | Temperature of the Dew Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | | ins. | mins. | in. |
| Sept. 1 | 29·995 | −·012 | 76·7 | 67·4 | 9·3 | 70·3 | +1·7 | 66·1 | 62·8 | + 3·1 | 77 | + 4 | ·572 | 140·2 | 63·2 | 0·195 | 165 | ·185 |
| 2 | 29·984 | −·022 | 76·2 | 63·3 | 12·9 | 69·1 | +0·4 | 65·4 | 62·5 | + 2·7 | 80 | + 7 | ·566 | 145·6 | 57·6 | 0·170 | 75 | ·170 |
| 3 | 30·021 | +·015 | 75·8 | 62·6 | 13·2 | 69·0 | +0·3 | 64·4 | 60·8 | + 1·0 | 75 | + 2 | ·533 | 139·1 | 56·3 | 0·130 | 55 | ·170 |
| 4 | 30·015 | +·010 | 75·4 | 62·6 | 12·8 | 68·0 | −0·8 | 63·7 | 60·3 | + 0·5 | 77 | + 4 | ·524 | 140·7 | 55·7 | 0·045 | 20 | ·125 |
| 5 | 30·020 | +·015 | 75·4 | 61·5 | 13·9 | 68·1 | −0·8 | 62·2 | 57·6 | − 2·2 | 69 | − 4 | ·475 | 137·2 | 54·4 | 0·100 | 65 | ·230 |
| 6 | 30·027 | +·023 | 75·6 | 61·5 | 14·1 | 67·6 | −1·3 | 63·2 | 59·7 | − 0·2 | 76 | + 3 | ·512 | 137·2 | 51·5 | 0·555 | 195 | ·135 |
| 7 | 30·024 | +·021 | 76·4 | 64·2 | 12·2 | 69·2 | +0·2 | 65·6 | 62·8 | + 2·9 | 80 | + 7 | ·572 | 138·5 | 61·7 | 0·280 | 165 | ·165 |
| 8 | 30·026 | +·024 | 76·3 | 63·9 | 12·4 | 69·8 | +0·8 | 64·8 | 60·8 | + 0·9 | 74 | + 1 | ·533 | 135·2 | 56·8 | 0·010 | 10 | ·220 |
| 9 | 30·001 | ·000 | 76·7 | 58·5 | 18·2 | 67·5 | −1·6 | 62·7 | 59·0 | − 1·0 | 74 | + 2 | ·500 | 153·0 | 50·9 | 0·000 | ... | ·160 |
| 10 | 29·971 | −·030 | 77·4 | 61·7 | 15·7 | 68·7 | −0·4 | 63·9 | 60·1 | + 0·1 | 74 | + 2 | ·520 | 147·8 | 55·1 | 0·000 | ... | ·175 |
| 11 | 29·973 | −·027 | 78·3 | 64·5 | 13·8 | 70·0 | +0·8 | 65·0 | 61·1 | + 1·1 | 74 | + 2 | ·539 | 142·5 | 57·4 | 0·000 | ... | ·160 |
| 12 | 29·967 | −·032 | 78·4 | 63·5 | 14·9 | 69·9 | +0·6 | 65·3 | 61·6 | + 1·5 | 75 | + 3 | ·548 | 146·5 | 55·2 | 0·000 | ... | ·200 |
| 13 | 29·963 | −·035 | 77·5 | 61·7 | 15·8 | 68·9 | −0·5 | 64·1 | 60·3 | + 0·2 | 74 | + 2 | ·524 | 146·3 | 54·0 | 0·000 | ... | ·135 |
| 14 | 29·944 | −·053 | 78·4 | 61·2 | 17·2 | 68·3 | −1·2 | 63·2 | 59·1 | − 1·0 | 73 | + 1 | ·501 | 147·9 | 53·3 | 0·000 | ... | ·180 |
| 15 | 29·911 | −·085 | 78·4 | 59·5 | 18·9 | 67·8 | −1·7 | 62·1 | 57·6 | − 2·6 | 70 | − 2 | ·475 | 137·0 | 52·0 | 0·000 | ... | ·200 |
| 16 | 29·922 | −·072 | 77·6 | 57·5 | 20·1 | 67·3 | −2·3 | 62·0 | 57·7 | − 2·5 | 71 | − 1 | ·477 | 138·7 | 52·1 | 0·000 | ... | ·200 |
| 17 | 29·942 | −·051 | 77·5 | 56·5 | 21·0 | 67·9 | −1·8 | 63·3 | 59·6 | − 0·6 | 75 | + 3 | ·511 | 147·6 | 50·4 | 0·000 | ... | ·180 |
| 18 | 29·953 | −·038 | 77·8 | 61·7 | 16·1 | 68·7 | −1·0 | 65·6 | 63·1 | + 2·8 | 82 | +10 | ·578 | 146·1 | 55·9 | 0·500 | 270 | ·110 |
| 19 | 29·947 | −·043 | 77·5 | 62·6 | 14·9 | 69·5 | −0·3 | 64·8 | 61·2 | + 0·9 | 75 | + 4 | ·541 | 145·8 | 57·2 | 0·010 | 5 | ·210 |
| 20 | 29·952 | −·037 | 77·5 | 64·6 | 12·9 | 70·3 | +0·4 | 65·4 | 61·7 | + 1·4 | 75 | + 4 | ·550 | 149·4 | 59·1 | 0·055 | 30 | ·215 |
| 21 | 29·986 | −·002 | 79·0 | 67·5 | 11·5 | 71·8 | +1·8 | 66·4 | 62·4 | + 2·0 | 72 | + 1 | ·564 | 144·0 | 62·5 | 0·000 | ... | ·200 |
| 22 | 30·010 | +·023 | 76·7 | 66·5 | 10·2 | 70·7 | +0·6 | 67·5 | 65·0 | + 4·6 | 82 | +11 | ·617 | 140·0 | 59·7 | 0·060 | 40 | ·110 |
| 23 | 30·045 | +·060 | 78·6 | 65·4 | 13·2 | 71·0 | +0·9 | 65·7 | 61·7 | + 1·2 | 73 | + 2 | ·550 | 151·9 | 61·5 | 0·000 | ... | ·170 |
| 24 | 30·070 | +·086 | 78·4 | 66·3 | 12·1 | 70·8 | +0·6 | 65·6 | 61·7 | + 1·2 | 73 | + 2 | ·550 | 144·3 | 59·2 | 0·020 | 10 | ·150 |
| 25 | 30·051 | +·069 | 78·5 | 63·5 | 15·0 | 69·6 | −0·6 | 64·5 | 60·4 | − 0·2 | 73 | + 2 | ·526 | 144·2 | 57·0 | 0·000 | ... | ·150 |
| 26 | 29·998 | +·017 | 78·6 | 62·6 | 16·0 | 69·4 | −0·9 | 63·6 | 59·0 | − 1·6 | 69 | − 2 | ·500 | 149·5 | 54·7 | 0·020 | 10 | ·180 |
| 27 | 29·991 | +·012 | 78·8 | 65·1 | 13·7 | 70·9 | +0·5 | 64·5 | 59·6 | − 1·1 | 68 | − 3 | ·511 | 145·5 | 59·9 | 0·000 | ... | ·260 |
| 28 | 30·010 | +·032 | 77·5 | 64·6 | 12·9 | 70·4 | −0·1 | 65·1 | 61·0 | + 0·3 | 72 | + 1 | ·537 | 144·0 | 60·3 | 0·010 | 5 | ·170 |
| 29 | 29·960 | −·016 | 79·0 | 65·3 | 13·7 | 71·1 | +0·5 | 66·0 | 62·2 | + 1·5 | 73 | + 2 | ·560 | 144·4 | 60·1 | 0·045 | 30 | ·200 |
| 30 | 29·891 | −·083 | 78·9 | 65·3 | 13·6 | 71·2 | +0·6 | 65·6 | 61·3 | + 0·5 | 71 | 0 | ·543 | 140·5 | 59·9 | 0·040 | 35 | ·200 |
| Mean | 29·986 | −·007 | 77·5 | 63·1 | 14·4 | 69·4 | −0·2 | 64·6 | 60·8 | + 0·6 | 74·2 | +2·3 | ·534 | 143·7 | 56·8 | Sum 2·245 | Sum 1185 | ·177 |
| Average | 29·993 | ... | 77·6 | 62·4 | 15·2 | 69·6 | ... | 64·3 | 60·2 | ... | 71·9 | ... | ·522 | 148·1 | 56·6 | 1·438 | 934 | ·191 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day. 1909. | Ozone (Scale 0—10) | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind: Components. North. | Wind: Components. East. | Wind: Resultants. Direction. | Wind: Resultants. Velocity. | Wind: Excess above Average. Direction. | Wind: Excess above Average. Velocity. | Wind: Observed Velocity. | Temperature of the Soil 5 Feet. | Temperature of the Soil 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Sept. 1 | 7·0 | 7·5 | 8·5 | 73 | − 0·6 | +16·2 | 88 | 16·2 | + 19 | + 5·1 | 16·3 | 74·2 | 75·41 | c.p. : c.q. : c.f.: c.p. |
| 2 | 7·0 | 6·7 | 7·9 | 68 | − 1·8 | +11·9 | 81 | 12·0 | + 11 | + 0·9 | 12·1 | 74·2 | 75·41 | c.p.: c.f. : c.p. |
| 3 | 8·0 | 5·0 | 9·9 | 85 | − 1·5 | +11·0 | 82 | 11·1 | + 12 | 0·0 | 11·2 | 74·2 | 75·41 | c.p.: c.f. : c.p. |
| 4 | 8·0 | 6·3 | 7·3 | 62 | − 2·3 | +10·4 | 78 | 10·7 | + 8 | − 0·4 | 10·7 | 74·2 | 75·41 | c.p. : c.f. : c.p. |
| 5 | 7·0 | 3·0 | 11·0 | 94 | − 3·2 | +11·7 | 75 | 12·1 | + 5 | + 1·0 | 12·2 | 74·1 | 75·41 | c.p. : c.f. : b. |
| 6 | 8·0 | 7·5 | 7·2 | 62 | − 2·9 | +12·0 | 76 | 12·4 | + 6 | + 1·3 | 12·6 | 74·2 | 75·31 | b. : c.f. : c.p. |
| 7 | 9·0 | 5·5 | 10·0 | 85 | − 2·0 | +14·8 | 82 | 14·9 | + 12 | + 3·9 | 15·1 | 74·2 | 75·26 | c.p. : c.f.q. : c.p. |
| 8 | 8·0 | 3·0 | 10·8 | 92 | − 1·2 | +16·4 | 86 | 16·4 | + 16 | + 5·4 | 16·6 | 74·2 | 75·26 | c.p. : c.f.q. : b. |
| 9 | 6·0 | 4·9 | 9·0 | 76 | − 3·3 | + 8·6 | 69 | 9·2 | − 1 | − 1·8 | 9·5 | 74·3 | 75·26 | b. : c.f. |
| 10 | 7·0 | 6·0 | 7·7 | 65 | − 3·2 | + 8·3 | 69 | 8·9 | − 1 | − 2·1 | 9·2 | 74·3 | 75·26 | c.f. |
| 11 | 6·0 | 6·2 | 7·4 | 63 | − 2·7 | + 9·7 | 74 | 10·0 | + 3 | − 0·9 | 10·4 | 74·3 | 75·26 | c.f. : b |
| 12 | 7·0 | 5·8 | 10·0 | 84 | − 0·4 | + 7·9 | 87 | 7·9 | + 16 | − 3·0 | 8·5 | 74·3 | 75·21 | b. : c.f. : b. |
| 13 | 8·0 | 5·0 | 7·2 | 61 | − 3·3 | + 6·3 | 62 | 7·1 | − 9 | − 3·8 | 7·2 | 74·3 | 75·21 | b. : c.f. : b. |
| 14 | 7·0 | 4·7 | 9·8 | 82 | − 3·1 | + 5·5 | 61 | 6·3 | − 10 | − 4·5 | 6·9 | 74·3 | 75·16 | b. : c.f. : b. |
| 15 | 7·0 | 2·8 | 9·8 | 82 | − 1·1 | + 6·3 | 80 | 6·4 | + 9 | − 4·4 | 7·0 | 74·3 | 75·16 | b. |
| 16 | 6·0 | 2·7 | 11·1 | 92 | − 1·2 | + 6·9 | 80 | 7·0 | + 8 | − 3·7 | 7·3 | 74·3 | 75·16 | b. |
| 17 | 7·0 | 4·6 | 9·7 | 81 | + 1·3 | + 6·5 | 101 | 6·7 | + 29 | − 4·0 | 7·7 | 74·3 | 75·11 | b. : c.f. : b. |
| 18 | 7·0 | 5·9 | 5·5 | 46 | 0·0 | + 5·2 | 90 | 5·2 | + 18 | − 5·4 | 6·3 | 74·3 | 75·16 | b. : o.r. : c.f. |
| 19 | 7·0 | 3·8 | 10·9 | 91 | − 1·5 | + 9·1 | 81 | 9·2 | + 9 | − 1·4 | 9·5 | 74·3 | 75·16 | c.p. : c.f. : b. |
| 20 | 7·0 | 6·9 | 9·4 | 78 | − 0·1 | +11·7 | 89 | 11·7 | + 17 | + 1·1 | 12·1 | 74·4 | 75·16 | b. : c.p. : c.f. : b. |
| 21 | 8·0 | 4·7 | 10·8 | 90 | + 1·6 | + 8·7 | 100 | 8·8 | + 28 | − 1·7 | 9·2 | 74·4 | 75·11 | b.: c.f. |
| 22 | 7·0 | 8·9 | 2·9 | 24 | + 1·7 | + 7·2 | 103 | 7·4 | + 31 | − 3·1 | 8·1 | 74·4 | 75·11 | c.f. : c.p.: c. : b. |
| 23 | 8·0 | 5·8 | 9·4 | 78 | − 0·3 | +11·7 | 89 | 11·7 | + 16 | + 1·3 | 11·9 | 74·4 | 75·06 | b. ; c.f. |
| 24 | 6·0 | 8·5 | 7·2 | 60 | − 2·0 | +13·1 | 81 | 13·2 | + 8 | + 2·8 | 13·3 | 74·5 | 75·11 | c.f. : c.p.: c.q. : c.f. |
| 25 | 7·0 | 5·3 | 7·5 | 62 | − 2·1 | +11·4 | 80 | 11·6 | + 7 | + 1·3 | 11·9 | 74·5 | 75·16 | b. : c.f.q. : c.f. |
| 26 | 6·0 | 6·0 | 9·9 | 82 | − 1·9 | +10·3 | 79 | 10·5 | + 6 | + 0·2 | 10·9 | 74·5 | 75·06 | c.f.:c.p.: c.f. |
| 27 | 5·0 | 4·7 | 10·8 | 89 | − 1·0 | + 9·9 | 84 | 10·0 | + 11 | − 0·2 | 10·2 | 74·5 | 75·11 | c. : c.f. |
| 28 | 6·0 | 7·1 | 5·3 | 43 | − 1·5 | + 9·8 | 81 | 9·9 | + 7 | − 0·3 | 10·2 | 74·6 | 75·16 | c.f. : c.p. : c.f. |
| 29 | 6·0 | 6·0 | 8·6 | 70 | − 0·3 | +12·2 | 89 | 12·2 | + 15 | + 2·0 | 12·8 | 74·6 | 75·11 | c.p. : c.f.q. : c.f. |
| 30 | 5·0 | 4·5 | 10·1 | 83 | + 1·0 | +10·2 | 96 | 10·2 | + 22 | + 0·1 | 10·7 | 74·6 | 75·11 | c. : c.f.: : c.p. |
| Mean | 6·9 | 5·5 | 8·75 | 73·4 | − 1·30 | +10·03 | 82·6 | 10·09 | +11·1 | − 0·60 | 10·59 | 74·34 | 75·21 | ... |
| Average | 4·8 | 5·6 | 8·01 | 67·0 | − 3·40 | +10·14 | 71·5 | 10·69 | ... | ... | 12·02 | 75·14 | 76·69 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

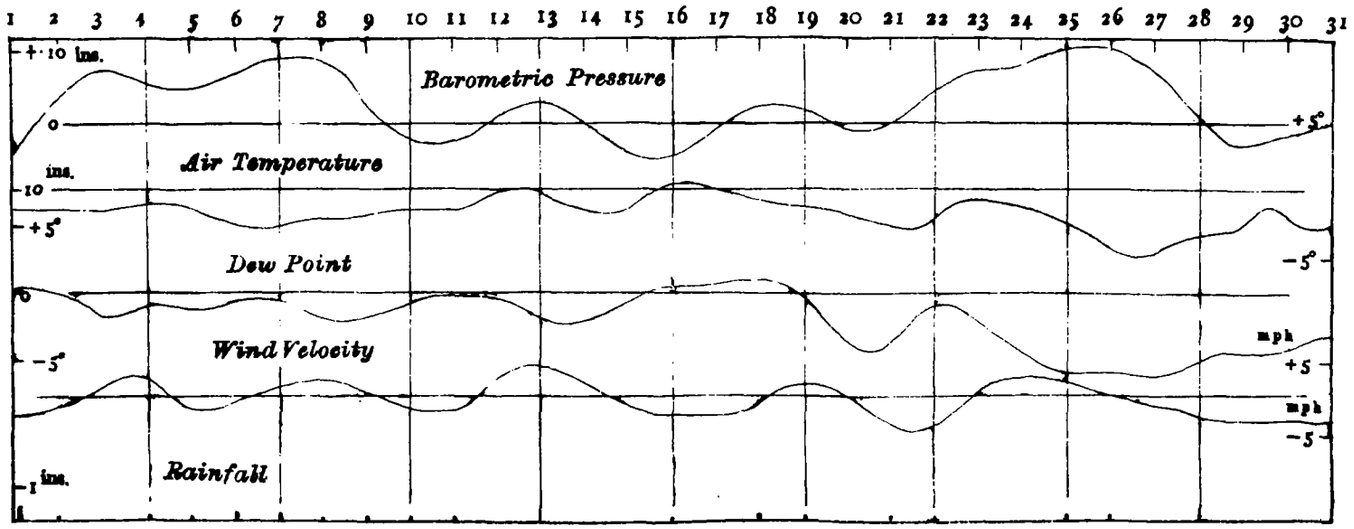
A shallow positive wave of pressure from the 2nd. to the 9th. was accompanied by double waves (negative to positive) in all elements.

Pressure fell steadily from the 9th. to the 15th. while positive waves occurred in temperature and vapour-tension, with decreasing wind velocity. The subsequent increase of pressure to the 24th. was accompanied by increasing temperature till the 21st., increasing vapour-tension till the 22nd. with a sharp superposed positive wave from the 17th. to the 19th., and increasing wind velocity till the 24th. also with a superposed positive wave from the 18th. to the 22nd.

The decrease of pressure from the 24th. to the 26th. was associated with decreasing values in all elements, while the slight increase of pressure from the 26th. to the 28th. and the subsequent rapid decrease to the 30th. were associated with slight positive waves in all elements.

The rainfall for the month was 56% above normal and fell on 17 days.

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew-Point. Mean. | Temperature of the Dew-Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | ° | ins. | mins. | in. |
| Oct. 1 | 29·930 | −·042 | 76·2 | 64·7 | 11·5 | 69·3 | −1·4 | 65·0 | 61·6 | +0·7 | 76 | + 5 | ·548 | 138·2 | 58·7 | 0·375 | 275 | ·135 |
| 2 | 30·006 | +·036 | 78.5 | 64·4 | 14·1 | 69·8 | −1·0 | 65·0 | 61·2 | +0·3 | 74 | + 3 | ·541 | 145·2 | 57·4 | 0·040 | 20 | ·180 |
| 3 | 30·047 | +·079 | 79·2 | 60·7 | 18·5 | 69·9 | −1·0 | 64·0 | 59·5 | −1·5 | 70 | − 1 | ·509 | 144·0 | 54·2 | 0·000 | ... | ·220 |
| 4 | 30·020 | +·054 | 78·2 | 64·6 | 13·6 | 70·0 | −1·0 | 64·6 | 60·4 | −0·6 | 72 | + 1 | ·526 | 144·0 | 61·0 | 0·080 | 115 | ·230 |
| 5 | 30·015 | +·051 | 78·5 | 65·1 | 13·4 | 69·9 | −1·1 | 64·4 | 60·1 | −1·0 | 71 | 0 | ·520 | 143·5 | 60·0 | 0·020 | 10 | ·195 |
| 6 | 30·034 | +·072 | 75·8 | 63·5 | 12·3 | 68·4 | −2·7 | 64·2 | 60·8 | −0·3 | 77 | + 6 | ·533 | 142·0 | 57·0 | 0·200 | 90 | ·145 |
| 7 | 30·056 | +·096 | 75·5 | 63·7 | 11·8 | 68·7 | −2·5 | 64·2 | 60·7 | −0·5 | 76 | + 5 | ·531 | 135·8 | 58·0 | 0·200 | 155 | ·165 |
| 8 | 30·053 | +·095 | 76·7 | 63·5 | 13·2 | 69·1 | −2·2 | 63·6 | 59·4 | −1·8 | 71 | 0 | ·507 | 150·3 | 58·0 | 0·115 | 180 | ·195 |
| 9 | 29·978 | +·022 | 78·5 | 63·1 | 15·4 | 69·6 | −1·8 | 64·0 | 59·6 | −1·7 | 71 | 0 | ·511 | 139·3 | 55·6 | 0·070 | 25 | ·210 |
| 10 | 29·929 | −·025 | 79·4 | 63·8 | 15·6 | 70·1 | −1·4 | 64·9 | 60·9 | −0·4 | 73 | + 2 | ·535 | 147·0 | 58·3 | 0·045 | 25 | ·215 |
| 11 | 29·926 | −·026 | 79·2 | 60·7 | 18·5 | 70·1 | −1·5 | 65·1 | 61·2 | −0·2 | 74 | + 4 | ·541 | 145·4 | 54.4 | 0·010 | 5 | ·170 |
| 12 | 29·960 | +·010 | 80·4 | 65·9 | 14·5 | 72·0 | +0·3 | 65·8 | 61·2 | −0·3 | 69 | − 1 | ·541 | 144·4 | 61·4 | 0·000 | ... | ·225 |
| 13 | 29·977 | +·029 | 79·4 | 65·7 | 13·7 | 71·4 | −0·4 | 64·6 | 59·4 | −2·1 | 66 | − 4 | ·507 | 147·2 | 60·5 | 0·000 | ... | ·235 |
| 14 | 29·931 | −·015 | 78·5 | 63·6 | 14·9 | 70·2 | −1·7 | 64·2 | 59·5 | −2·1 | 69 | − 1 | ·509 | 141·5 | 56·7 | 0·000 | ... | ·200 |
| 15 | 29·884 | −·060 | 80·4 | 61·8 | 18·6 | 71·2 | −0·8 | 65·8 | 61·6 | −0·1 | 72 | + 2 | ·548 | 152·4 | 55·4 | 0·000 | ... | ·200 |
| 16 | 29·897 | −·045 | 81·3 | 66·2 | 15·1 | 72·7 | +0·6 | 66·7 | 62·2 | +0·5 | 70 | 0 | ·560 | 147·0 | 59·5 | 0·015 | 10 | ·215 |
| 17 | 29·941 | +·001 | 81·2 | 63·6 | 17·6 | 72·0 | −0·2 | 66·7 | 62·8 | +1·0 | 73 | + 3 | ·572 | 146·8 | 57·3 | 0·000 | ... | ·145 |
| 18 | 29·968 | +·030 | 78·5 | 66·5 | 12·0 | 71·5 | −0·8 | 66·6 | 62·8 | +1·0 | 74 | + 4 | ·572 | 148·2 | 60·6 | 0·035 | 20 | ·255 |
| 19 | 29·940 | +·004 | 79·5 | 64·6 | 14·9 | 71·3 | −1·1 | 65·5 | 61·1 | −0·8 | 70 | 0 | ·539 | 149·9 | 58·5 | 0·020 | 20 | ·230 |
| 20 | 29·919 | −·015 | 80.3 | 61·9 | 18·4 | 70·6 | −1·9 | 63·4 | 57·8 | −4·2 | 64 | − 6 | ·479 | 142·0 | 54·0 | 0·000 | ... | ·280 |
| 21 | 29·950 | +·018 | 80·7 | 59·9 | 20·8 | 69·7 | −2·9 | 64·4 | 60·4 | −1·7 | 72 | + 2 | ·526 | 147·2 | 55·0 | 0·020 | 10 | ·160 |
| 22 | 29·989 | +·059 | 80·6 | 66·5 | 14·1 | 71·7 | −1·0 | 65·9 | 61·5 | −0·6 | 70 | 0 | ·546 | 148·3 | 60·1 | 0·105 | 55 | ·215 |
| 23 | 30·001 | +·073 | 80·6 | 64·2 | 16·4 | 72·0 | −0·8 | 64·9 | 59·5 | −2·7 | 65 | − 5 | ·509 | 150·7 | 58·9 | 0·000 | ... | ·260 |
| 24 | 30·017 | +·091 | 79·4 | 65·4 | 14·0 | 71·3 | −1·6 | 63·0 | 56·7 | −5·6 | 60 | −10 | ·461 | 147·0 | 59·5 | 0·000 | ... | ·300 |
| 25 | 30·031 | +·107 | 78·5 | 62·1 | 16·4 | 69·9 | −3·1 | 62·3 | 56·3 | −6·1 | 62 | − 7 | ·454 | 145·8 | 53·5 | 0·010 | 5 | ·240 |
| 26 | 30·019 | +·097 | 77·4 | 60·2 | 17·2 | 68·4 | −4·8 | 61·7 | 56·5 | −5·9 | 66 | − 3 | ·457 | 149·3 | 51·0 | 0·025 | 10 | ·170 |
| 27 | 29·962 | +·043 | 76·4 | 60·3 | 16·1 | 69.5 | −3·8 | 62·4 | 56·8 | −5·7 | 64 | − 5 | ·462 | 132·0 | 53·0 | 0·000 | ... | ·140 |
| 28 | 29·888 | −·029 | 79·7 | 59·5 | 20·2 | 70·1 | −3·3 | 63·7 | 58·7 | −3·9 | 67 | − 2 | ·494 | 150·9 | 50·5 | 0·000 | ... | ·175 |
| 29 | 29·881 | −·034 | 80·7 | 61.7 | 19·0 | 72·3 | −1·2 | 64·6 | 58·8 | −3·9 | 63 | − 6 | ·496 | 150·2 | 53·1 | 0·000 | ... | ·180 |
| 30 | 29·895 | −·018 | 79·2 | 61·9 | 17·3 | 71·0 | −2·6 | 64·4 | 59·3 | −3·4 | 67 | − 2 | ·505 | 142·9 | 55·9 | 0·000 | ... | ·160 |
| 31 | 29·912 | +·001 | 81·3 | 61·5 | 19·8 | 72·1 | −1·6 | 65·3 | 60·1 | −2·7 | 66 | − 3 | ·520 | 155·0 | 52·1 | 0·000 | ... | ·220 |
| Mean | 29·966 | +·024 | 79·0 | 63·3 | 15·7 | 70·5 | −1·6 | 64·5 | 59·9 | −1·9 | 69·5 | −0·6 | ·518 | 145·6 | 56·7 | Sum 1·385 | Sum 1030 | ·202 |
| Average | 29·942 | ... | 81·0 | 64·7 | 16·3 | 72·1 | ... | 66·2 | 61·8 | ... | 70·1 | ... | ·552 | 152·7 | 59·2 | 1·626 | 835 | ·228 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day. 1909. | Ozone (Scale 0—10)1 | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind: Components. North. | Wind: Components. East. | Wind: Resultants. Direction. | Wind: Resultants. Velocity. | Wind: Excess above Average. Direction. | Wind: Excess above Average. Velocity. | Wind: Observed Velocity. | Temperature of the Soil 5 Feet. | Temperature of the Soil 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Oct. 1 | 6·0 | 9·4 | 2·0 | 16 | − 1·4 | + 8·3 | 80 | 8·4 | + 5 | − 1·6 | 8·9 | 74·6 | 75·11 | o.r. : c. : c.f. |
| 2 | 6·0 | 7·0 | 8·4 | 69 | − 4·6 | + 8·8 | 62 | 9·9 | − 13 | − 0·1 | 10·1 | 74·6 | 75·11 | c. : c.p. : c.f. |
| 3 | 6·0 | 1·9 | 11·3 | 92 | − 3·9 | +11·5 | 71 | 12·1 | − 4 | + 2·2 | 12·4 | 74·7 | 75·11 | b. : q.: c.f. |
| 4 | 7·0 | 5·7 | 10·3 | 84 | − 4·6 | +13·6 | 71 | 14·4 | − 4 | + 4·5 | 14·5 | 74·7 | 75·06 | c. : c.f. : c.p. |
| 5 | 6·0 | 8·8 | 8·0 | 65 | − 3·6 | + 9·8 | 70 | 10·4 | − 6 | + 0·6 | 10·7 | 74·7 | 75·01 | c. : c.q.: c.p. : c.f. |
| 6 | 6·0 | 8·6 | 3·9 | 32 | − 3·1 | +10·3 | 73 | 10·8 | − 3 | + 1·0 | 10·9 | 74·8 | 75·01 | c. : c.p. |
| 7 | 7·0 | 8·5 | 6·1 | 50 | − 3·0 | +11·9 | 76 | 12·2 | 0 | + 2·5 | 12·4 | 74·8 | 75·06 | c.p.q. |
| 8 | 8·0 | 8·2 | 8·8 | 71 | − 4·1 | +13·0 | 72 | 13·7 | − 4 | + 4·0 | 13·8 | 74·8 | 75·06 | c.p. : c.q. : c |
| 9 | 7·0 | 5·3 | 9·7 | 78 | − 2·2 | +11·0 | 79 | 11·2 | + 3 | + 1·6 | 11·4 | 74·8 | 75·06 | c.p. : c.f. : c.p. |
| 10 | 6·0 | 7·0 | 6·9 | 56 | − 2·1 | + 8·9 | 77 | 9·1 | 0 | − 0·5 | 9·4 | 74·8 | 75·11 | c.p.: c.f. |
| 11 | 6·0 | 6·5 | 7·6 | 61 | − 1·7 | + 9·1 | 79 | 9·3 | + 2 | − 0·3 | 9·5 | 74·9 | 75·11 | c.f. : p.: c. |
| 12 | 6·0 | 4·5 | 11·0 | 89 | − 4·2 | +13·5 | 73 | 14·1 | − 4 | + 4·6 | 14·2 | 74·9 | 75·11 | c.f.q. b. |
| 13 | 5·0 | 6·0 | 10·0 | 81 | − 3·8 | +15·1 | 76 | 15·6 | − 1 | + 6·1 | 15·6 | 74·9 | 75·11 | b. : c.f.q. |
| 14 | 5·0 | 5·7 | 10·0 | 80 | − 1·6 | +12·3 | 83 | 12·4 | + 6 | + 3·0 | 12·4 | 74·9 | 75·11 | b. : c.f.q.: c.f. |
| 15 | 4·0 | 4·8 | 9·7 | 78 | + 0·6 | + 9·1 | 94 | 9·1 | + 16 | − 0·3 | 9·2 | 74·9 | 75·11 | c.f. : c. |
| 16 | 4·0 | 6·7 | 7·5 | 60 | + 0·2 | + 8·5 | 91 | 8·5 | + 13 | − 0·9 | 8·8 | 74·9 | 75·06 | c.p. : c. |
| 17 | 5·0 | 5·0 | 5·8 | 46 | − 3·1 | + 3·8 | 51 | 4·9 | − 27 | − 4·4 | 8·3 | 74·9 | 75·06 | b. : c.f. |
| 18 | 6·0 | 6·1 | 7·7 | 62 | − 4·9 | +10·0 | 64 | 11·1 | − 14 | + 1·8 | 11·4 | 75·0 | 75·06 | b. : c.p. :c.f. |
| 19 | 5·0 | 4·3 | 9·8 | 78 | − 1·2 | +13·0 | 85 | 13·1 | + 7 | + 3·8 | 13·2 | 75·0 | 75·06 | c.p. : c.f. : b. |
| 20 | 6·0 | 1·6 | 11·6 | 92 | + 0·3 | + 9·6 | 92 | 9·6 | + 13 | + 0·3 | 9·8 | 75·0 | 75·06 | b. : c.f. : b. |
| 21 | 5·0 | 6·2 | 6·2 | 49 | − 1·1 | + 5·1 | 78 | 5·2 | − 1 | − 4·0 | 6·5 | 75·1 | 75·11 | b. : c.f. : c.p. |
| 22 | 5·0 | 7·8 | 9·6 | 76 | − 4·6 | + 5·6 | 51 | 7·3 | − 28 | − 1·9 | 7·9 | 75·1 | 75·11 | c.p. : c.f. : b. |
| 23 | 5·0 | 5·2 | 11·3 | 90 | − 8·4 | +10·6 | 52 | 13·5 | − 27 | + 4·3 | 13·8 | 75·2 | 75·11 | c.f. |
| 24 | 6·0 | 3·5 | 11·6 | 91 | − 8·0 | +12·2 | 57 | 14·6 | − 22 | + 5·4 | 14·8 | 75·2 | 75·11 | c.f.q. |
| 25 | 6·0 | 5·5 | 8·5 | 67 | − 5·3 | +10·8 | 64 | 12·0 | − 16 | + 2·9 | 12·0 | 75·2 | 75·11 | c.p. : c.f. |
| 26 | 5·0 | 9·0 | 5·7 | 45 | − 3·4 | +10·2 | 72 | 10·8 | − 8 | + 1·7 | 10·9 | 75·2 | 75·11 | c.f. : o.p. : c.f. |
| 27 | 5·0 | 9·8 | 0·4 | 3 | − 2·8 | + 7·2 | 69 | 7·7 | − 11 | − 1·4 | 8·7 | 75·2 | 75·11 | o. : c.f. |
| 28 | 4·0 | 9·6 | 1·4 | 11 | − 1·5 | + 6·9 | 78 | 7·1 | − 2 | − 2·0 | 7·6 | 75·3 | 75·11 | c. |
| 29 | 4·0 | 9·1 | 5·1 | 40 | − 1·5 | + 6·5 | 77 | 6·7 | − 3 | − 2·4 | 7·2 | 75·3 | 75·11 | c. |
| 30 | 5·0 | 7·2 | 5·1 | 40 | − 0·1 | + 6·4 | 89 | 6·4 | + 9 | − 2·6 | 7·2 | 75·3 | 75·11 | c. |
| 31 | 4·0 | 7·5 | 7·7 | 60 | − 0·7 | + 6·8 | 84 | 6·8 | + 3 | − 2·2 | 7·8 | 75·3 | 75·26 | c. |
| Mean | 5·5 | 6·5 | 7·70 | 61·7 | − 2·89 | + 9·66 | 73·3 | 10·08 | − 4·4 | − 0·67 | 10·69 | 74·97 | 75·09 | ... |
| Average | 4·1 | 5·7 | 8·14 | 65·1 | − 2·00 | + 9·20 | 77·7 | 9·41 | ... | ... | 11·00 | 75·79 | 76·35 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

The weather of the month was characterised by low temperature and vapour-tension, the former being 1°·6 and the latter 0·034 in. below normal.

A double crested positive wave of pressure from the 1st. to the 9th. was associated with steady temperature and vapour-tension and two successive positive waves of wind velocity.

A double wave of pressure (negative to positive) from the 9th. to the 14th. was accompanied by a positive wave of temperature, decreasing vapour-tension and a positive wave of wind velocity.

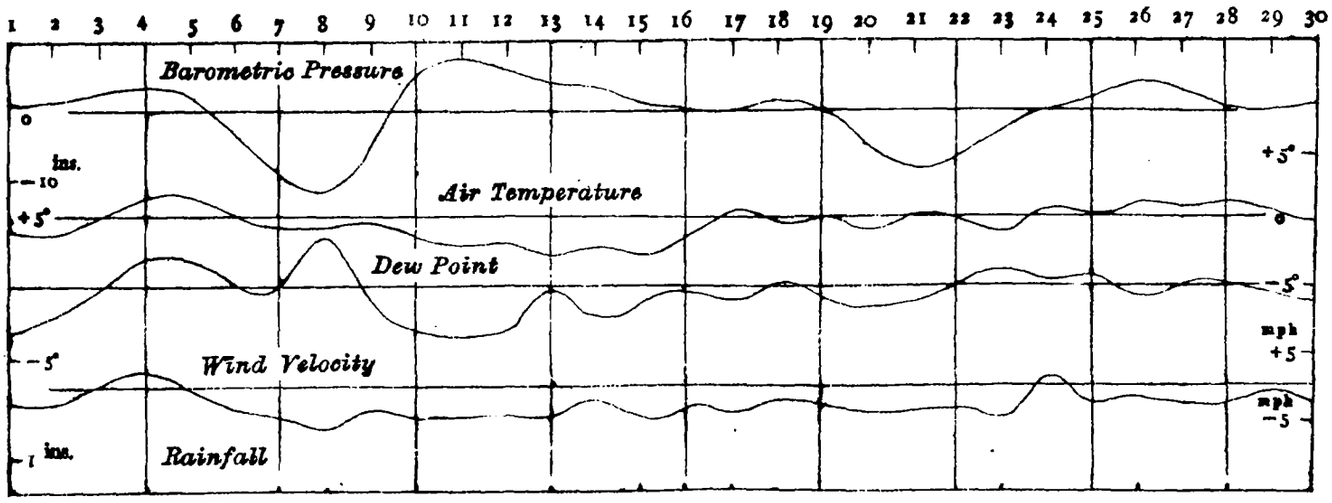
A negative wave of pressure from the 14th. to the 17th. was accompanied by increasing temperature and vapour-tension, and decreasing wind velocity.

A double wave of pressure (positive to negative) from the 17th. to the 21st. was accompanied by decreasing temperature and vapour-tension, and a positive wave of wind velocity.

A long positive wave of pressure from the 21st. to the 28th. was accompanied by negative waves of temperature and vapour-tension, and a positive wave of wind velocity.

Rainfall was 15% below normal on 17 days.

| Month and Day. 1909. | Barometric Pressure. Mean. | Barometric Pressure. Excess above Average. | Temperature of the Air. Highest. | Temperature of the Air. Lowest. | Temperature of the Air. Range. | Temperature of the Air. Mean. | Temperature of the Air. Excess above Average. | Temperature of Evaporation. | Temperature of the Dew Point. Mean. | Temperature of the Dew Point. Excess above Average. | Degree of Humidity (Saturation=100). Mean. | Degree of Humidity (Saturation=100). Excess above Average. | Elastic Force of Vapour. | Temperature of Radiation. Highest in the Sun's Rays. | Temperature of Radiation. Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Rainfall. Duration. | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | ° | ins. | mins. | in. |
| Nov. 1 | 29·923 | +·015 | 82·4 | 64·5 | 17·9 | 72·9 | −0·9 | 65·3 | 59·6 | − 3·3 | 63 | − 6 | ·511 | 144·0 | 56·0 | 0·000 | ... | ·300 |
| 2 | 29·924 | +·018 | 82·6 | 61·7 | 20·9 | 72·5 | −1·4 | 65·9 | 60·9 | − 2·1 | 67 | − 2 | ·535 | 151·0 | 56·1 | 0·000 | ... | ·260 |
| 3 | 29·933 | +·029 | 81·8 | 64·8 | 17·0 | 74·4 | +0·5 | 68·0 | 63·3 | + 0·2 | 68 | − 1 | ·582 | 153·5 | 58·6 | 0·000 | ... | ·275 |
| 4 | 29·939 | +·037 | 82·5 | 70·9 | 11·6 | 75·4 | +1·4 | 69·7 | 65·5 | + 2·3 | 72 | + 4 | ·628 | 151·6 | 65·9 | 0·000 | ... | ·220 |
| 5 | 29·924 | +·024 | 82·6 | 69·8 | 12·8 | 75·7 | +1·6 | 69·8 | 65·5 | + 2·2 | 71 | + 3 | ·628 | 156·3 | 64·1 | 0·000 | ... | ·220 |
| 6 | 29·871 | −·026 | 83·5 | 65·7 | 17·8 | 74·3 | +0·1 | 68·0 | 63·3 | − 0·1 | 69 | + 1 | ·582 | 150·1 | 60·0 | 0·000 | ... | ·280 |
| 7 | 29·807 | −·088 | 83·4 | 63·6 | 19·8 | 73·9 | −0·4 | 67·8 | 63·3 | − 0·2 | 70 | + 2 | ·582 | 144·3 | 57·6 | 0·190 | 25 | ·270 |
| 8 | 29·774 | −·119 | 79·0 | 70·4 | 9·2 | 73·9 | −0·5 | 70·2 | 67·5 | + 3·9 | 80 | +12 | ·673 | 149·4 | 66·2 | 0·010 | 5 | ·100 |
| 9 | 29·846 | −·045 | 83·6 | 65·3 | 18·3 | 74·5 | 0·0 | 67·4 | 62·1 | − 1·6 | 65 | − 3 | ·558 | 144·1 | 56·7 | 0·000 | ... | ·280 |
| 10 | 29·939 | +·050 | 84·8 | 61·1 | 23·7 | 73·2 | −1·4 | 65·8 | 60·3 | − 3·5 | 64 | − 4 | ·524 | 153·2 | 53·9 | 0·000 | ... | ·300 |
| 11 | 29·969 | +·082 | 83·5 | 60·6 | 22·9 | 72·7 | −2·0 | 65·5 | 60·0 | − 3·8 | 65 | − 3 | ·518 | 151·3 | 53·3 | 0·000 | ... | ·300 |
| 12 | 29·950 | +·065 | 84·6 | 62·2 | 22·4 | 72·9 | −1·9 | 65·7 | 60·4 | − 3·5 | 65 | − 3 | ·526 | 153·1 | 52·9 | 0·000 | ... | ·285 |
| 13 | 29·921 | +·038 | 83·3 | 65·4 | 17·9 | 72·2 | −2·7 | 67·4 | 63·8 | − 0·2 | 75 | + 7 | ·592 | 157·5 | 57·7 | 0·045 | 40 | ·120 |
| 14 | 29·920 | +·039 | 83·6 | 61·7 | 21·9 | 73·0 | −2·0 | 66·7 | 62·0 | − 2·1 | 69 | + 1 | ·556 | 154·9 | 55·1 | 0·000 | ... | ·260 |
| 15 | 29·896 | +·017 | 82·6 | 64·6 | 18·0 | 72·6 | −2·5 | 67·0 | 62·8 | − 1·4 | 71 | + 3 | ·572 | 145·8 | 56·0 | 0·010 | 5 | ·170 |
| 16 | 29·877 | +·001 | 82·6 | 66·1 | 16·5 | 73·7 | −1·5 | 68·1 | 64·0 | − 0·3 | 72 | + 4 | ·596 | 153·8 | 58·2 | 0·165 | 25 | ·225 |
| 17 | 29·882 | +·008 | 84·3 | 68·7 | 15·6 | 76·0 | +0·7 | 68·9 | 63·7 | − 0·7 | 66 | − 2 | ·590 | 151·8 | 61·2 | 0·115 | 20 | ·275 |
| 18 | 29·887 | +·015 | 84·8 | 65·7 | 19·1 | 75·5 | +0·1 | 69·4 | 64·9 | + 0·4 | 70 | + 2 | ·615 | 155·4 | 59·5 | 0·000 | ... | ·280 |
| 19 | 29·879 | +·009 | 84·6 | 67·7 | 16·9 | 75·8 | +0·3 | 68·8 | 63·7 | − 0·9 | 66 | − 2 | ·590 | 150·8 | 60·2 | 0·000 | ... | ·300 |
| 20 | 29·820 | −·048 | 85·6 | 65·3 | 20·3 | 75·1 | −0·5 | 68·1 | 63·0 | − 1·7 | 66 | − 2 | ·576 | 156·2 | 58·1 | 0·000 | ... | ·295 |
| 21 | 29·783 | −·082 | 86·7 | 66·6 | 20·1 | 76·1 | +0·4 | 68·9 | 63·8 | − 1·0 | 66 | − 2 | ·592 | 156·0 | 59·8 | 0·000 | ... | ·310 |
| 22 | 29·799 | −·064 | 86·8 | 66·6 | 20·2 | 76·2 | +0·4 | 69·5 | 64·7 | − 0·2 | 68 | − 1 | ·611 | 155·7 | 61·2 | 0·000 | ... | ·255 |
| 23 | 29·838 | −·023 | 84·0 | 66·5 | 17·5 | 74·9 | −1·0 | 69·8 | 66·1 | + 1·1 | 74 | + 5 | ·641 | 148·5 | 61·2 | 0·030 | 10 | ·150 |
| 24 | 29·861 | +·002 | 85·2 | 71·8 | 13·4 | 76·7 | +0·7 | 70·2 | 65·6 | + 0·5 | 68 | − 1 | ·630 | 151·0 | 66·5 | 0·000 | ... | ·310 |
| 25 | 29·879 | +·022 | 83·6 | 71·2 | 12·4 | 76·5 | +0·4 | 70·4 | 65·9 | + 0·7 | 70 | + 1 | ·637 | 157·4 | 65·4 | 0·000 | ... | ·195 |
| 26 | 29·900 | +·046 | 86·3 | 71·3 | 15·0 | 77·4 | +1·2 | 69·9 | 64·6 | − 0·8 | 65 | − 4 | ·609 | 154·3 | 65·0 | 0·010 | 5 | ·310 |
| 27 | 29·889 | +·037 | 87·8 | 69·2 | 18·6 | 77·3 | +1·0 | 70·3 | 65·3 | − 0·2 | 67 | − 2 | ·624 | 158·3 | 62·2 | 0·000 | ... | ·280 |
| 28 | 29·860 | +·010 | 86·4 | 70·8 | 15·6 | 77·8 | +1·4 | 70·8 | 65·7 | + 0·1 | 66 | − 3 | ·633 | 152·9 | 65·1 | 0·125 | 35 | ·345 |
| 29 | 29·854 | +·006 | 85·4 | 70·6 | 14·8 | 77·2 | +0·6 | 70·3 | 65·3 | − 0·4 | 67 | − 2 | ·624 | 151·3 | 62·9 | 0·000 | ... | ·280 |
| 30 | 29·864 | +·018 | 85·5 | 67·7 | 17·8 | 76·6 | −0·1 | 69·4 | 64·3 | − 1·5 | 66 | − 3 | ·603 | 152·9 | 60·6 | 0·000 | ... | ·265 |
| Mean | 29·880 | +·003 | 84·1 | 66·6 | 17·5 | 74·9 | −0·3 | 68·4 | 63·7 | − 0·6 | 68·4 | 0·0 | ·591 | 152·2 | 59·9 | Sum 0·700 | Sum 170 | ·257 |
| Average | 29·877 | ... | 84·1 | 67·2 | 16·9 | 75·2 | ... | 68·8 | 64·3 | ... | 68·4 | ... | ·603 | 156·2 | 61·7 | 1·878 | 906 | ·267 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day 1909. | Ozone (Scale 0—10). | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind. Components. North. | Wind. Components. East. | Wind. Resultants. Direction. | Wind. Resultants. Velocity. | Wind. Excess above Average. Direction. | Wind. Excess above Average. Velocity. | Wind. Observed Velocity. | Temperature of the Soil. 5 Feet. | Temperature of the Soil. 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Nov. 1 | 3·0 | 3·7 | 11·4 | 89 | − 1·3 | + 8·0 | 81 | 8·1 | 0 | − 0·9 | 8·6 | 75·3 | 75·06 | c. c.f. b. |
| 2 | 4·0 | 3·8 | 11·0 | 86 | − 1·5 | + 7·1 | 78 | 7·2 | − 3 | − 1·8 | 8·5 | 75·4 | 75·16 | b. : c.f. |
| 3 | 4·0 | 7·7 | 9·0 | 70 | − 0·5 | +11·2 | 87 | 11·2 | + 6 | + 2·2 | 11·4 | 75·4 | 75·11 | c.f. : c. |
| 4 | 4·0 | 9·4 | 6·1 | 47 | + 0·8 | +13·2 | 93 | 13·2 | + 12 | + 4·2 | 13·3 | 75·4 | 75·11 | c. |
| 5 | 3·0 | 8·0 | 7·7 | 60 | + 3·3 | + 9·5 | 109 | 10·1 | + 28 | + 1·2 | 10·6 | 75·4 | 75·11 | c. : c.f. |
| 6 | 2·0 | 5·0 | 11·2 | 87 | + 1·1 | + 7·1 | 99 | 7·2 | + 17 | − 1·7 | 7·6 | 75·4 | 75·11 | b. : c.f. : b. |
| 7 | 2.0 | 6·0 | 11·6 | 91 | + 4·5 | − 0·8 | 190 | 4·5 | +108 | − 4·4 | 6·7 | 75·4 | 75·11 | b. : c.f. : c.r. |
| 8 | 0·0 | 9·8 | 1·0 | 8 | + 0·6 | − 2·7 | 258 | 2·7 | +176 | − 6·2 | 4·7 | 75·5 | 75·16 | o. : o.p. : o. |
| 9 | 1·0 | 4·0 | 10·8 | 84 | − 2·5 | + 2·3 | 43 | 3·4 | − 39 | − 5·5 | 7·6 | 75·5 | 75·16 | c. : c.f. : b. |
| 10 | 2·0 | 2·1 | 12·2 | 95 | − 1·5 | + 1·7 | 49 | 2·3 | − 33 | − 6·6 | 6·2 | 75·6 | 75·16 | b. : c.f. |
| 11 | 3·0 | 3·7 | 12·0 | 93 | − 2·6 | − 0·4 | 351 | 2·6 | +269 | − 6·3 | 7·0 | 75·7 | 75·16 | b. : c.f. |
| 12 | 4·0 | 5·0 | 10·6 | 82 | − 4·1 | + 1·0 | 14 | 4·2 | − 69 | − 4·6 | 7·4 | 75·8 | 75·16 | b. : c.f. |
| 13 | 4·0 | 6·8 | 4·5 | 35 | − 2·9 | + 3·2 | 48 | 4·3 | − 35 | − 4·5 | 6·9 | 75·9 | 75·21 | c. : c.p. : b. |
| 14 | 4·0 | 4·4 | 10·7 | 82 | − 2·1 | + 9·0 | 77 | 9·2 | − 6 | + 0·4 | 9·5 | 75·9 | 75·21 | b. : c.f. : b. |
| 15 | 3·0 | 8·4 | 5·8 | 45 | + 0·9 | + 5·3 | 100 | 5·4 | + 17 | − 3·4 | 6·6 | 76·0 | 75·16 | b. : o.p. : c.f. : b. |
| 16 | 3·0 | 9·4 | 3·6 | 28 | + 0·8 | + 7·5 | 96 | 7·5 | + 13 | − 1·3 | 8·0 | 76·1 | 75·21 | b. : c.p. : c. |
| 17 | 3·0 | 6·5 | 9·0 | 69 | + 0·5 | + 4·9 | 96 | 4·9 | + 12 | − 3·9 | 6·9 | 76·2 | 75·21 | c. :c.p.: c.f. : b. |
| 18 | 2·0 | 5·0 | 11·1 | 85 | + 1·4 | + 8·9 | 99 | 9·0 | + 15 | + 0·2 | 9·5 | 76·2 | 75·21 | b. : c.f. : b. |
| 19 | 2·0 | 4·2 | 11·9 | 91 | + 2·3 | + 8·3 | 105 | 8·6 | + 21 | − 0·2 | 8·8 | 76·3 | 75·21 | b. : c.f. : b. |
| 20 | 2·0 | 5·0 | 9·4 | 72 | + 1·7 | + 6·3 | 105 | 6·5 | + 21 | − 2·2 | 6·9 | 76·3 | 75·21 | b. : c.f. : b. |
| 21 | 1·0 | 5·8 | 11·4 | 87 | + 4·5 | + 4·7 | 134 | 6·5 | + 50 | − 2·2 | 7·6 | 76·3 | 75·21 | b. : c.f. : b. |
| 22 | 0·0 | 6·7 | 10·4 | 79 | + 5·9 | + 4·0 | 146 | 7·1 | + 62 | − 1·6 | 8·0 | 76·3 | 75·21 | c.f. : c. : c.f. |
| 23 | 0·0 | 7·3 | 4·9 | 37 | + 0·7 | − 0·8 | 229 | 1·1 | +144 | − 7·6 | 6·3 | 76·4 | 75·26 | c.f. : c. :o.p. |
| 24 | 6·0 | 7·4 | 10·5 | 80 | − 5·9 | +12·0 | 64 | 13·3 | − 21 | + 4·6 | 13·4 | 76·4 | 75·26 | o. : c.f.q. : c.f. |
| 25 | 3·0 | 9·0 | 3·7 | 28 | − 1·5 | + 8·1 | 79 | 8·3 | − 6 | − 0·4 | 8·8 | 76·5 | 75·31 | b. : c. : o. |
| 26 | 4·0 | 8·0 | 10·3 | 79 | − 2·9 | + 9·6 | 73 | 10·0 | − 12 | + 1·3 | 10·1 | 76·6 | 75·31 | c. :c.p.: c. : c.f. |
| 27 | 4·0 | 5·5 | 10·1 | 77 | − 2·8 | + 8·6 | 72 | 9·0 | − 14 | + 0·3 | 9·2 | 76·7 | 75·36 | b. : c.f. : b. |
| 28 | 2·0 | 5·9 | 11·9 | 90 | − 0·2 | + 9·1 | 89 | 9·1 | + 3 | + 0·4 | 9·4 | 76·7 | 75·36 | c.f.: c.p. : c.f. |
| 29 | 3·0 | 6·0 | 11·5 | 87 | − 0·7 | +11·0 | 86 | 11·0 | 0 | + 2·3 | 11·2 | 76·8 | 75·36 | c.f. : c. : c.q.: c. : b. |
| 30 | 2·0 | 7·2 | 9·5 | 72 | − 0·6 | +10·0 | 87 | 10·0 | + 1 | + 1·3 | 10·3 | 76·9 | 75·36 | c.f. : c. |
| Mean | 2·7 | 6·2 | 9·16 | 70·5 | − 0·15 | + 6·23 | 88·6 | 6·23 | + 5·2 | − 2·58 | 8·57 | 76·01 | 75·21 | ... |
| Average | 3·4 | 5·5 | 8·59 | 66·1 | − 1·02 | + 8·75 | 83·4 | 8·81 | ... | ... | 10·70 | 77·02 | 76·34 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

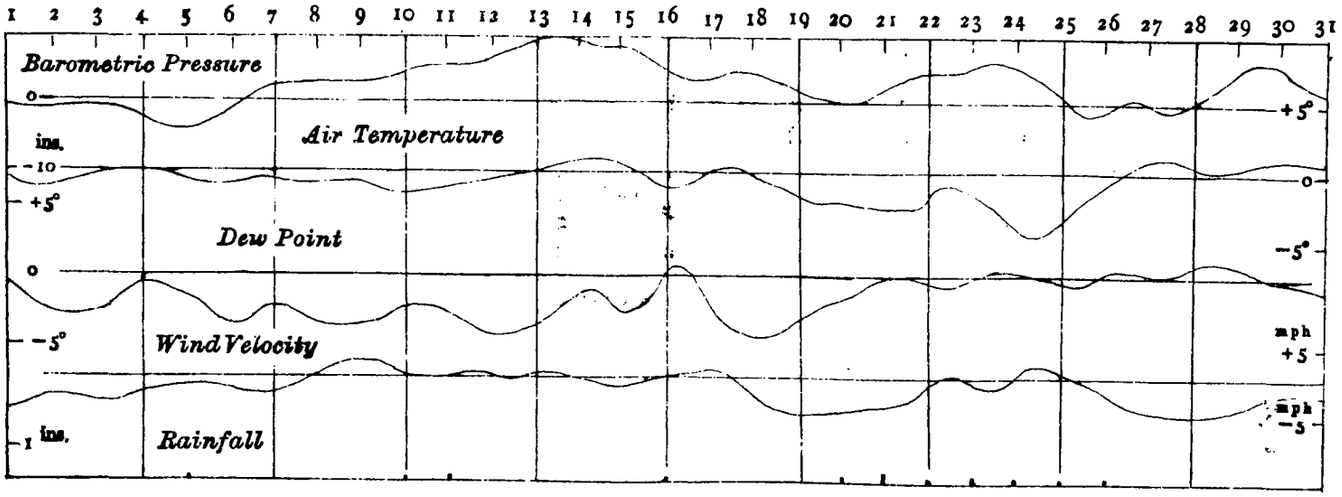
The characteristic feature of the month were the large and regular changes in pressure. A slight positive wave occurred from the 2nd. to the 5th. followed by a double wave (negative to positive) from the 5th. to the 15th., and a second double wave (also negative to positive) from the 19th. to 28th.

Positive waves occurred in each of the three other while elements from the 2nd. to the 5th. a double wave of vapour tension (positive to negative) and a shallow negative wave of temperature were associated with the first double wave of pressure (from the 5th. to the 15th.).

No other marked correlated movements occurred throughout the remainder of the month.

Rainfall was 63 % below normal and fell on 9 days.

| Month and Day. 1909. | Barometric Pressure. | | Temperature of the Air. | | | | | Temperature of Evaporation. | Temperature of the Dew-Point. | | Degree of Humidity (Saturation=100). | | Elastic Force of Vapour. | Temperature of Radiation. | | Rainfall. | | Amount of Evaporation. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Mean. | Excess above Average. | Highest. | Lowest. | Range. | Mean. | Excess above Average. | | Mean. | Excess above Average. | Mean. | Excess above Average. | | Highest in the Sun's Rays. | Lowest on the Grass. | Amount recorded by the Beckley Pluviograph. | Duration. | |
| | ins. | in. | ° | ° | ° | ° | ° | ° | ° | ° | | | in. | ° | ° | ins. | mins. | in. |
| Dec. 1 | 29·840 | −·003 | 85·6 | 68·5 | 17·1 | 76·4 | −0·4 | 70·3 | 65·9 | 0·0 | 70 | 0 | ·637 | 152·2 | 63·3 | 0·000 | ... | ·205 |
| 2 | 29·833 | −·008 | 85·7 | 63·0 | 17·7 | 75·7 | −1·3 | 68·7 | 63·6 | −2·4 | 66 | − 4 | ·588 | 153·3 | 62·1 | 0·000 | ... | ·285 |
| 3 | 29·836 | −·003 | 85·9 | 66·0 | 19·9 | 76·8 | −0·3 | 69·0 | 63·4 | −2·8 | 63 | − 7 | ·584 | 151·3 | 60·1 | 0·000 | ... | ·335 |
| 4 | 29·820 | −·017 | 85·9 | 70·8 | 15·1 | 77·4 | +0·2 | 70·4 | 65·5 | −0·8 | 67 | − 3 | ·628 | 159·7 | 65·6 | 0·000 | ... | ·250 |
| 5 | 29·795 | −·040 | 85·3 | 68·1 | 17·2 | 76·8 | −0·5 | 70·1 | 65·2 | −1·2 | 68 | − 2 | ·622 | 152·3 | 61·4 | 0·030 | 15 | ·270 |
| 6 | 29·823 | −·010 | 86·9 | 67·7 | 19·2 | 76·6 | −0·8 | 68·8 | 63·2 | −3·3 | 63 | − 7 | ·580 | 153·3 | 58·2 | 0·000 | ... | ·320 |
| 7 | 29·859 | +·028 | 86·8 | 67·1 | 19·7 | 77·0 | −0·5 | 69·6 | 64·4 | −2·2 | 65 | − 5 | ·605 | 156·7 | 59·7 | 0·000 | ... | ·340 |
| 8 | 29·860 | +·031 | 85·2 | 69·0 | 16·2 | 76·8 | −0·8 | 68·9 | 63·2 | −3·5 | 63 | − 7 | ·580 | 154·2 | 65·4 | 0·000 | ... | ·330 |
| 9 | 29·862 | +·035 | 85·2 | 70·3 | 14·9 | 77·0 | −0·6 | 68·8 | 63·0 | −3·8 | 62 | − 9 | ·576 | 152·8 | 65·4 | 0·000 | ... | ·340 |
| 10 | 29·876 | +·051 | 84·0 | 70·9 | 13·1 | 76·3 | −1·4 | 69·7 | 64·9 | −2·1 | 68 | − 3 | ·615 | 153·4 | 62·5 | 0·015 | 5 | ·265 |
| 11 | 29·881 | +·059 | 85·1 | 68·8 | 16·3 | 77·0 | −0·8 | 69·5 | 64·2 | −2·9 | 65 | − 6 | ·601 | 154·0 | 60·9 | 0·020 | 10 | ·340 |
| 12 | 29·891 | +·071 | 86·0 | 68·6 | 17·4 | 77·5 | −0·3 | 68·9 | 62·9 | −4·3 | 61 | −10 | ·574 | 152·1 | 61·7 | 0·000 | ... | ·365 |
| 13 | 29·918 | +·100 | 86·1 | 69·0 | 17·1 | 78·0 | +0·1 | 70·0 | 64·3 | −3·0 | 63 | − 8 | ·603 | 150·0 | 61·6 | 0·000 | ... | ·370 |
| 14 | 29·911 | +·095 | 87·3 | 71·9 | 15·4 | 78·8 | +0·8 | 71·8 | 66·7 | −0·7 | 67 | − 4 | ·655 | 152·3 | 64·8 | 0·000 | ... | ·340 |
| 15 | 29·899 | +·085 | 86·6 | 70·2 | 16·4 | 78·4 | +0·4 | 70·5 | 65·0 | −2·5 | 63 | − 8 | ·617 | 155·2 | 61·5 | 0·000 | ... | ·340 |
| 16 | 29·857 | +·046 | 83·1 | 72·3 | 10·8 | 76·8 | −1·3 | 71·9 | 68·5 | +0·9 | 76 | + 5 | ·697 | 138·2 | 64·3 | 0·075 | 50 | ·135 |
| 17 | 29·859 | +·050 | 85·4 | 73·1 | 12·3 | 78·4 | +0·3 | 70·2 | 64·5 | −3·3 | 62 | − 9 | ·607 | 153·8 | 67·0 | 0·000 | ... | ·340 |
| 18 | 29·853 | +·046 | 89·2 | 65·6 | 23·6 | 77·5 | −0·7 | 69·3 | 63·4 | −4·5 | 62 | − 9 | ·584 | 149·3 | 59·7 | 0·000 | ... | ·320 |
| 19 | 29·819 | +·014 | 86·0 | 68·0 | 18·0 | 76·3 | −1·9 | 70·1 | 65·6 | −2·4 | 70 | − 1 | ·630 | 152·8 | 62·6 | 0·000 | ... | ·180 |
| 20 | 29·810 | +·007 | 87·6 | 70·1 | 17·5 | 76·1 | −2·2 | 70·9 | 67·2 | −0·9 | 74 | + 3 | ·666 | 149·9 | 65·6 | 0·060 | 70 | ·205 |
| 21 | 29·841 | +·041 | 83·8 | 70·2 | 13·6 | 75·6 | −2·7 | 71·4 | 68·3 | +0·1 | 78 | + 7 | ·692 | 154·7 | 67·1 | 0·295 | 115 | ·180 |
| 22 | 29·850 | +·052 | 86·1 | 70·9 | 15·2 | 77·6 | −0·8 | 71·8 | 67·6 | −0·7 | 72 | + 1 | ·675 | 153·3 | 67·2 | 0·035 | 15 | ·275 |
| 23 | 29·864 | +·068 | 84·3 | 72·1 | 12·2 | 76·3 | −2·1 | 71·9 | 68·8 | +0·4 | 78 | + 7 | ·704 | 147·5 | 66·2 | 0·185 | 85 | ·135 |
| 24 | 29·843 | +·049 | 79·1 | 69·3 | 9·8 | 73·8 | −4·6 | 70·8 | 68·7 | +0·2 | 84 | +13 | ·701 | 119·2 | 65·7 | 1·195 | 345 | ·110 |
| 25 | 29·780 | −·012 | 85·2 | 71·8 | 13·4 | 76·7 | −1·8 | 71·9 | 68·4 | −0·2 | 76 | + 5 | ·694 | 155·1 | 67·7 | 0·030 | 15 | ·220 |
| 26 | 29·802 | +·012 | 87·7 | 71·3 | 16·4 | 78·8 | +0·3 | 73·3 | 69·5 | +0·8 | 73 | + 1 | ·721 | 157·2 | 66·9 | 0·030 | 15 | ·280 |
| 27 | 29·785 | −·003 | 89·3 | 70·1 | 19·2 | 79·6 | +1·1 | 73·4 | 69·1 | +0·3 | 70 | − 2 | ·711 | 156·8 | 65·0 | 0·000 | ... | ·300 |
| 28 | 29·813 | +·027 | 87·0 | 72·9 | 14·1 | 78·9 | +0·3 | 73·8 | 70·2 | +1·3 | 75 | + 3 | ·738 | 155·0 | 67·6 | 0·000 | ... | ·180 |
| 29 | 29·853 | +·069 | 88·1 | 72·2 | 15·9 | 79·5 | +0·9 | 73·5 | 69·3 | +0·3 | 71 | − 1 | ·716 | 151·0 | 68·0 | 0·000 | ... | ·260 |
| 30 | 29·814 | +·032 | 88·1 | 72·4 | 15·7 | 79·8 | +1·2 | 73·1 | 68·5 | −0·6 | 68 | − 4 | ·697 | 154·0 | 66·5 | 0·000 | ... | ·320 |
| 31 | 29·778 | −·002 | 88·8 | 72·5 | 16·3 | 79·4 | +0·8 | 72·4 | 67·6 | −1·6 | 67 | − 5 | ·675 | 150·0 | 66·8 | 0·000 | ... | ·320 |
| Mean | 29·843 | +·032 | 86·0 | 70·0 | 16·0 | 77·3 | −0·7 | 70·8 | 66·1 | −1·5 | 68·7 | −2·2 | ·644 | 151·6 | 64·1 | Sum 1·970 | Sum 740 | ·273 |
| Average | 29·811 | ... | 85·7 | 71·1 | 14·6 | 78·0 | ... | 72·1 | 67·6 | ... | 70·9 | ... | ·676 | 156·7 | 66·4 | 4·945 | 1502 | ·254 |
| Column | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |



| Month and Day. 1909. | Ozone (Scale 0—10) | Mean Amount of Cloud (Scale 0—10). | Duration of Bright Sunshine. | Percentage of Possible Sunshine. | Wind: Components. North. | Wind: Components. East. | Wind: Resultants. Direction. | Wind: Resultants. Velocity. | Wind: Excess above Average. Direction. | Wind: Excess above Average. Velocity. | Wind: Observed Velocity. | Temperature of the Soil 5 Feet. | Temperature of the Soil 10 Feet. | Weather. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | hrs. | | m.p.h. | m.p.h. | ° | m.p.h. | ° | m.p.h. | m.p.h. | ° | ° | |
| Dec. 1 | 1·0 | 9·0 | 5·7 | 43 | + 0·5 | + 4·6 | 96 | 4·6 | + 10 | − 4·0 | 6·2 | 76·9 | 75·36 | c. |
| 2 | 4·0 | 6·7 | 9·8 | 74 | − 2·8 | + 7·6 | 70 | 8·1 | − 17 | − 0·5 | 8·1 | 77·0 | 75·41 | c. |
| 3 | 3·0 | 6·8 | 10·6 | 80 | − 1·3 | + 7·1 | 80 | 7·2 | − 7 | − 1·4 | 7·6 | 77·0 | 75·41 | c.f. : c. |
| 4 | 2·0 | 7·0 | 7·5 | 57 | − 1·8 | + 7·0 | 76 | 7·2 | − 11 | − 1·4 | 8·1 | 77·1 | 75·41 | c.f. : c. : b. |
| 5 | 4·0 | 6·2 | 11·1 | 84 | − 3·4 | + 8·8 | 69 | 9·4 | − 18 | + 0·8 | 10·2 | 77·2 | 75·41 | c.f. : c.p.: c.f. : b. |
| 6 | 2·0 | 2·4 | 10·4 | 79 | − 3·2 | + 8·1 | 68 | 8·7 | − 20 | + 0·1 | 9·2 | 77·3 | 75·46 | b. : c.f. : b. |
| 7 | 1·0 | 4·5 | 12·4 | 94 | − 4·3 | + 8·7 | 64 | 9·7 | − 24 | + 1·1 | 9·8 | 77·3 | 75·46 | b. : c.f. : b. |
| 8 | 4·0 | 5·3 | 10·8 | 82 | − 2·6 | + 11·5 | 77 | 11·8 | − 11 | + 3·2 | 11·9 | 77·4 | 75·51 | b. : c.f. : b. |
| 9 | 4·0 | 3·2 | 12·2 | 92 | − 3·5 | + 12·8 | 75 | 13·3 | − 13 | + 4·7 | 13·3 | 77·5 | 75·51 | c. : c.f. : b. |
| 10 | 4·0 | 7·9 | 9·4 | 71 | − 1·7 | + 11·0 | 81 | 11·2 | − 8 | + 2·6 | 11·4 | 77·6 | 75·51 | c.p.: c.f. : b. |
| 11 | 4·0 | 4·5 | 11·7 | 88 | − 1·5 | + 11·0 | 82 | 11·1 | − 7 | + 2·6 | 11·5 | 77·6 | 75·51 | c.f.:c.p.: c.f. |
| 12 | 3·0 | 4·0 | 12·2 | 92 | 0·0 | + 10·4 | 90 | 10·4 | + 1 | + 1·9 | 10·8 | 77·5 | 75·46 | b. : c.f. : b. |
| 13 | 2·0 | 3·0 | 12·2 | 92 | + 0·6 | + 11·7 | 93 | 11·7 | + 3 | + 3·2 | 11·9 | 77·7 | 75·56 | b. : c.f. : b. |
| 14 | 3·0 | 3·7 | 11·5 | 86 | + 0·8 | + 10·6 | 94 | 10·6 | + 4 | + 2·1 | 10·8 | 77·9 | 75·56 | b. : c.f. : b. |
| 15 | 2·0 | 4·5 | 12·0 | 90 | + 1·7 | + 9·9 | 100 | 10·1 | + 10 | + 1·6 | 10·4 | 77·9 | 75·56 | b. : c.f. : b. |
| 16 | 2·0 | 9·8 | 1·0 | 8 | + 5·3 | + 9·2 | 120 | 10·6 | + 29 | + 2·1 | 11·9 | 77·9 | 75·56 | b. : c.p. : c. |
| 17 | 0·0 | 6·2 | 11·4 | 86 | + 5·9 | + 10·2 | 120 | 11·8 | + 29 | + 3·3 | 12·0 | 78·0 | 75·61 | c.f. |
| 18 | 0·0 | 4·5 | 11·2 | 84 | + 4·0 | + 5·6 | 125 | 6·9 | + 34 | − 1·6 | 7·7 | 78·1 | 75·61 | b. : c.f. |
| 19 | 0·0 | 6·3 | 5·9 | 44 | − 0·5 | − 1·2 | 293 | 1·3 | + 202 | − 7·2 | 5·6 | 78·1 | 75·61 | c.f. : c. : c.p. |
| 20 | 3·0 | 9·0 | 4·1 | 31 | − 3·3 | + 0·8 | 14 | 3·4 | − 78 | − 5·1 | 7·0 | 78·2 | 75·66 | c. : o. |
| 21 | 2·0 | 9·1 | 5·7 | 43 | − 3·2 | + 6·4 | 63 | 7·2 | − 29 | − 1·3 | 7·5 | 78·3 | 75·66 | o.r. : c.p. : c.f. |
| 22 | 2·0 | 5·9 | 9·0 | 68 | − 3·1 | + 11·0 | 74 | 11·5 | − 18 | + 3·0 | 11·8 | 78·4 | 75·71 | c.p. : c.f. |
| 23 | 3·0 | 7·5 | 3·6 | 27 | − 4·3 | + 9·0 | 65 | 9·9 | − 28 | + 1·4 | 10·2 | 78·5 | 75·71 | c.f. : o.p. : o.t. : o.r.l.t. |
| 24 | 4·0 | 10·0 | 0·3 | 2 | − 8·4 | + 9·9 | 50 | 13·0 | − 43 | + 4·5 | 13·0 | 78·5 | 75·71 | o.r.l.t. : o.p. : o. |
| 25 | 4·0 | 6·2 | 8·1 | 61 | − 3·1 | + 9·0 | 71 | 9·5 | − 22 | + 1·0 | 11·3 | 78·5 | 75·66 | c.p.: c.f. |
| 26 | 0·0 | 7·5 | 10·7 | 80 | + 5·2 | + 2·8 | 152 | 5·9 | + 59 | − 2·6 | 7·4 | 78·6 | 75·71 | c.p. : c.f. |
| 27 | 0·0 | 5·0 | 12·1 | 91 | + 0·2 | + 6·1 | 92 | 6·1 | 0 | − 2·4 | 6·6 | 78·6 | 75·71 | c.f. : c.f.l.t. |
| 28 | 0·0 | 7·5 | 5·0 | 38 | + 1·4 | + 6·3 | 102 | 6·5 | + 10 | − 2·0 | 6·8 | 78·7 | 75·76 | c.f. : c.t. : c.l.t. |
| 29 | 0·0 | 6·0 | 7·7 | 58 | − 1·0 | + 7·9 | 83 | 7·9 | − 9 | − 0·6 | 8·0 | 78·7 | 75·76 | c.f. : c.t.: c.f. |
| 30 | 1·0 | 3·0 | 11·5 | 86 | − 3·5 | + 8·8 | 68 | 9·5 | − 23 | + 1·0 | 9·7 | 78·8 | 75·76 | b. : c.f. |
| 31 | 0·0 | 3·3 | 11·5 | 86 | − 2·1 | + 7·6 | 75 | 7·9 | − 16 | − 0·6 | 8·2 | 78·8 | 75·81 | c.f. : b. |
| Mean | 2·1 | 6·0 | 8·98 | 67·6 | − 1·07 | + 8·07 | 82·4 | 8·14 | − 8·5 | − 0·39 | 9·55 | 77·92 | 75·58 | ... |
| Average | 3·1 | 6·1 | 8·27 | 62·3 | + 0·13 | + 8·53 | 90·9 | 8·53 | ... | ... | 10·79 | 78·55 | 76·60 | ... |
| Column | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

A short negative wave of pressure from the 3rd. to the 6th. was associated with a positive wave of vapour tension, nearly normal temperature and increasing wind velocity.

Pressure remained above normal for the remainder of the month with the exception of the 25th. and 27th. and three irregular positive waves occurred from the 6th. to the 20th., 20th. to the 25th. and the 27th. to the 31st. respectively.

Temperature remained generally below normal until the 12th. A slight positive wave was associated with the rise to maximum pressure from the 13th. to the 15th. after which it fell until the 24th. two small positive waves being superposed on the general decrease. From the 24th. to the end of the month a steady rise of temperature occurred.

The curve of vapour tension shows a series of small oscillatory movements with periods of from 2 or 3 days throughout the month. From the 1st. to the 13th. the trend of the curve was downward; from the 13th. to the 16th. it rose from − 0·021 in. to + 0·021 in.: from the 16th. to the 21st. a marked negative wave occurred, and the curve then oscillated about normal until the end of the month.

The principal changes in the abnormality curve of wind velocity are the two negative waves from the 17th. to the 22nd. and from the 24th. to the 30th. both of which were associated with decreasing pressure.

Rainfall was 60 % below normal and fell on 11 days.

## MONTHLY RESULTS of the METEOROLOGICAL ELEMENTS for the YEAR 1909.

| Month, 1909. | Mean Barometric Pressure. | Temperature of the Air. Highest. | Lowest. | Range. | Mean of the Daily Maxima. | Mean of the Daily Minima. | Mean of the Daily Ranges. | Mean. | Temperature of Evaporation. | Temperature of the Dew Point. | Degree of Humidity (Saturation =100). | Elastic Force of Vapour. | Temperature of Radiation. Mean of Highest in the Sun's Rays. | Mean of Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Duration. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | ° | ° | ° | ° | ° | ° | ° | ° | ° | | in. | ° | ° | ins. | mins. |
| January ... ... | 29·743 | 87·1 | 65·3 | 21·8 | 84·7 | 71·8 | 12·9 | 77·6 | 72·9 | 69·6 | 76·6 | ·724 | 154·2 | 66·8 | 5·005 | 1510 |
| February ... ... | 29·712 | 88·5 | 69·6 | 18·9 | 86·1 | 73·4 | 12·7 | 79·1 | 75·5 | 73·0 | 81·8 | ·813 | 152·9 | 68·8 | 7·600 | 1620 |
| March ... ... | 29·689 | 87·0 | 67·0 | 20·0 | 83·0 | 72·5 | 10·5 | 77·0 | 73·5 | 71·1 | 82·3 | ·762 | 150·4 | 68·0 | 5·865 | 2635 |
| April ... ... | 29·811 | 83·8 | 65·6 | 18·2 | 81·5 | 69·1 | 12·4 | 74·7 | 70·9 | 68·1 | 80·4 | ·689 | 145·8 | 62·7 | 2·895 | 1270 |
| May ... ... | 29·882 | 82·3 | 55·8 | 26·5 | 78·0 | 63·1 | 14·9 | 70·0 | 66·0 | 62·9 | 78·4 | ·577 | 139·4 | 54·1 | 2·200 | 925 |
| June ... ... | 29·931 | 77·7 | 58·0 | 19·7 | 74·8 | 64·3 | 10·5 | 68·9 | 65·6 | 62·9 | 81·4 | ·577 | 130·9 | 58·6 | 7·570 | 4355 |
| July ... ... | 29·995 | 76·4 | 54·7 | 21·7 | 75·0 | 62·0 | 13·0 | 68·1 | 64·5 | 61·7 | 80·3 | ·552 | 134·7 | 54·9 | 8·005 | 2450 |
| August ... ... | 30·986 | 76·[illegible] | 56·4 | 20·3 | 74·6 | 61·6 | 13·0 | 67·7 | 63·3 | 59·8 | 76·1 | ·516 | 137·7 | 54·4 | 2·390 | 1130 |
| September ... | 29·986 | 7[illegible] | [illegible] | 22·5 | 77·5 | 63·1 | 14·4 | 69·4 | 64·6 | 60·8 | 74·2 | ·534 | 143·7 | 56·8 | 2·245 | 1185 |
| October ... ... | 29·966 | 81·3 | 59·5 | 21·8 | 79·0 | 63·3 | 15·7 | 70·5 | 64·5 | 59·9 | 69·5 | ·518 | 145·6 | 56·7 | 1·385 | 1030 |
| November ... | 29·880 | 87·8 | 60·6 | 27·2 | 84·1 | 66·6 | 17·5 | 74·9 | 68·4 | 63·7 | 68·4 | ·591 | 152·2 | 59·9 | 0·700 | 170 |
| December ... | 29·843 | 89·3 | 65·6 | 23·7 | 86·0 | 70·0 | 16·0 | 77·3 | 70·8 | 66·1 | 68·7 | ·644 | 151·6 | 64·1 | 1·970 | 740 |
| | | | | | | | | | | | | | | | | hours. |
| Year ... ... | 29·869 | ... | ... | 21·9 | 80·4 | 66·7 | 13·6 | 72·9 | 68·4 | 65·0 | 76·5 | ·625 | 143·3 | 60·5 | 47·830 | 317·0 |
| Maximum ... | ins. 30·150 Aug. 10 | 89·3 Dec. 27 | ... | 27·2 Nov. | 86·1 Feb. | ... | 23·7 Nov. 10 | ... | 80·5 Feb. 7 | 78·1 Feb. 7 | 99·9 May 16 | in. ·961 Feb. 7 | 163·4 Jan. 21 | 75·6 Feb. 6 | ins. 4·21 during 24 hours ending July 17 | ... |
| Minimum ... | ins. 29·448 March 18 | ... | 54·7 July 29 | 18·2 April | ... | 61·6 Aug. | 3·1 June 6 | ... | 53·9 May 11 | 51·5 Aug. 3 & 9 | 37·9 Dec. 18 | in. ·381 Aug. 3 & 9 | ... | 45·7 May 11 | ... | |
| Column ... ... | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

| Month 1909. | Rainfall. Amount collected in the Glaisher Rain Gauge. | Excess of Beckley over Glaisher. | Mean Daily Amount of Evaporation. | Mean Daily Amount of Ozone (0—10). | Mean Amount of Cloud (0—10). | Daily Duration of Sunshine. | Percentage of Possible Sunshine. | Wind. Resultant. Direction. | Velocity. | Recorded Velocity. | Number of Days of Clear Sky (less than 3 of Cloud). | Overcast Sky (more than 7 of Cloud). | Rain. | Thunderstorms. | Lightning only. | Temperature of the soil. At a Depth of 5 Feet. | At a Depth of 10 Feet. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | in. | | | hrs. | | ° | m.p.h. | m.p.h. | | | | | | ° | ° |
| January ... ... | 4·875 | +·130 | ·202 | 4·2 | 6·2 | 7·94 | 60·4 | 84·9 | 8·64 | 9·72 | 2 | 14 | 22 | 2 | 3 | 79·78 | 76·58 |
| February ... ... | 7·455 | +·145 | ·195 | 3·8 | 7·1 | 7·60 | 59·6 | 99·9 | 2·67 | 7·29 | 0 | 13 | 22 | 9 | 3 | 80·63 | 77·10 |
| March ... ... | 5·935 | −·070 | ·162 | 6·2 | 7·1 | 6·91 | 56·9 | 58·1 | 9·62 | 11·35 | 1 | 16 | 27 | 6 | 4 | 81·00 | 77·16 |
| April ... ... | 2·825 | +·070 | ·173 | 6·3 | 5·3 | 8·95 | 77·5 | 76·2 | 8·01 | 9·27 | 4 | 6 | 18 | 3 | 1 | 80·18 | 77·18 |
| May ... ... | 2·195 | +·005 | ·127 | 6·0 | 4·9 | 8·28 | 74·2 | 61·6 | 6·47 | 8·11 | 7 | 8 | 15 | 2 | 1 | 78·95 | 77·45 |
| June ... ... | 7·365 | +·205 | ·113 | 6·7 | 7·0 | 5·95 | 54·5 | 62·8 | 9·90 | 10·72 | 0 | 14 | 22 | 1 | 1 | 77·02 | 77·36 |
| July ... ... | 7·830 | +·175 | ·121 | 6·7 | 5·7 | 7·46 | 67·7 | 75·1 | 8·64 | 9·38 | 2 | 5 | 23 | 0 | 0 | 75·37 | 76·44 |
| August ... ... | 2·285 | +·105 | ·144 | 6·4 | 5·9 | 8·06 | 70·7 | 69·0 | 10·20 | 10·77 | 3 | 10 | 21 | 0 | 0 | 74·45 | 75·66 |
| September ... | 2·230 | +·015 | ·177 | 6·9 | 5·5 | 8·75 | 73·4 | 82·6 | 10·09 | 10·59 | 2 | 5 | 17 | 0 | 0 | 74·34 | 75·21 |
| October ... ... | 1·360 | +·025 | ·202 | 5·5 | 6·5 | 7·70 | 61·7 | 73·3 | 10·08 | 10·69 | 2 | 12 | 17 | 0 | 0 | 74·97 | 75·09 |
| November ... | 0·685 | +·015 | ·257 | 2·7 | 6·2 | 9·16 | 70·5 | 88·6 | 6·23 | 8·57 | 1 | 11 | 9 | 0 | 0 | 76·01 | 75·21 |
| December ... | 1·950 | +·020 | ·273 | 2·1 | 6·0 | 8·98 | 67·6 | 82·4 | 8·14 | 9·55 | 1 | 9 | 11 | 4 | 0 | 77·92 | 75·58 |
| Year ... ... | 46·990 | +·840 | ·179 | 5·3 | 6·1 | 7·98 | 66·2 | 74·4 | 8·10 | 9·67 | 25 | 123 | 224 | 27 | 13 | 77·55 | 76·36 |
| Maximum ... | ... | ... | in. ·370 Dec. 13 | ° 9·0 Sep. 7 | ... | hrs. 12·4 Dec. 7 | % 97 May 1 & 27 | 27·2 m.p.h. for one hour March 2 | | | 7 May | 16 Mar. | 23 July | 9 Feb. | 4 Mar. | ° 81·1 Feb. & Mar. often | ° 77·53 May & June often |
| Minimum ... | ... | ... | in. ·030 June 19 | 0 | ... | 0 | 0 | 1·6 m.p.h. for one hour Jan 8 | | | 0 | 5 July & Sep. | 9 Nov. | 0 | 0 | ° 74·1 Sept. 5 | ° 75·01 Oct. 5 & 6 |
| Column ... ... | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |

## MONTHLY NORMALS of the METEOROLOGICAL ELEMENTS and EXTREME VALUES.

| Month. | Mean Barometric Pressure. | Temperature of the Air. Highest. | Lowest. | Range. | Mean of the Daily Maxima. | Mean of the Daily Minima. | Mean of the Daily Ranges. | Mean. | Temperature of Evaporation. | Temperature of the Dew Point. | Degree of Humidity (Saturation = 100). | Elastic Force of Vapour. | Temperature of Radiation. Mean of Highest in the Sun's Rays. | Mean of Lowest on the Grass. | Rainfall. Amount recorded by the Beckley Pluviograph. | Duration. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | ° | ° | ° | ° | ° | ° | ° | ° | ° | | in. | | | ins. | mins. |
| January ... ... | 29·750 | 93·1 | 64·7 | 22·0 | 86·1 | 72·9 | 13·2 | 78·9 | 73·8 | 70·2 | 75·1 | ·737 | 156·7 | 69·0 | 7·95 | 2266 |
| February ... | 29·730 | 91·0 | 63·8 | 20·0 | 85·6 | 73·0 | 12·6 | 78·5 | 74·1 | 70·9 | 77·7 | ·757 | 156·4 | 68·9 | 7·35 | 2030 |
| March ... ... | 29·766 | 88·8 | 63·3 | 19·6 | 84·0 | 72·1 | 11·9 | 77·3 | 73·3 | 70·6 | 80·2 | ·747 | 153·6 | 68·2 | 9·21 | 2946 |
| April ... ... | 29·822 | 86·9 | 61·2 | 20·9 | 82·0 | 70·1 | 11·9 | 75·3 | 71·4 | 68·8 | 80·9 | ·704 | 150·7 | 65·2 | 5·14 | 1708 |
| May ... ... | 29·890 | 84·5 | 55·4 | 23·2 | 79·0 | 66·3 | 12·7 | 72·1 | 68·1 | 65·3 | 79·3 | ·625 | 144·4 | 60·5 | 3·74 | 1335 |
| June ... ... | 29·965 | 82·9 | 50·6 | 23·1 | 76·2 | 62·6 | 13·6 | 68·7 | 64·4 | 61·1 | 76·4 | ·538 | 140·1 | 56·2 | 2·11 | 1275 |
| July... ... ... | 30·004 | 80·3 | 51·3 | 22·2 | 75·2 | 61·5 | 13·7 | 67·5 | 63·1 | 59·4 | 75·7 | ·507 | 139·5 | 55·7 | 2·23 | 1494 |
| August ... ... | 30·010 | 80·3 | 50·9 | 22·9 | 75·7 | 61·8 | 13·9 | 68·0 | 63·2 | 59·4 | 74·5 | ·508 | 143·3 | 55·8 | 2·31 | 1696 |
| September ... | 29·993 | 82·9 | 50·9 | 24·2 | 77·6 | 62·4 | 15·2 | 69·6 | 64·3 | 60·2 | 71·9 | ·522 | 148·1 | 56·6 | 1·44 | 934 |
| October ... ... | 29·942 | 87·8 | 54·6 | 26·0 | 81·0 | 64·7 | 16·3 | 72·1 | 66·2 | 61·8 | 70·1 | ·552 | 152·7 | 59·2 | 1·63 | 835 |
| November ... | 29·877 | 90·0 | 57·9 | 26·8 | 84·1 | 67·2 | 16·9 | 75·2 | 68·8 | 64·3 | 68·4 | ·603 | 156·2 | 61·7 | 1·88 | 906 |
| December ... | 29·811 | 94·7 | 62·1 | 24·0 | 85·7 | 71·1 | 14·6 | 78·0 | 72·1 | 67·6 | 70·9 | ·676 | 156·7 | 66·4 | 4·94 | 1502 |
| | | | | | | | | | | | | | | | | hours. |
| Year ... ... | 29·880 | ... | ... | 37·5 | 81·0 | 67·1 | 13·9 | 73·4 | 68·6 | 65·0 | 75·1 | ·623 | 149·9 | 61·9 | 49·93 | 315·5 |
| Maximum... ... | ins. 30·274 June 20 1877 | ° 94·7 Dec. 23 1900 | ... | ° 43·9 1900 | ° 89·9 Jan. 1900 | ... | ° 27·8 Aug. 12 1902 | ° 75·0 1875 | ° 82·8 Mar. 6 1905 | ° 81·5 Mar. 6 1905 | ° 98·5 Jan. 12 1901 | in. 1·077 Mar. 6 1905 | ° 166·2 Nov. 12 1908 | ... | ins. 19·318 during 24 hours ending Feb. 20d. 13h. 1896. | |
| Minimum... ... | ins. 27·780 April 29 1892 | ... | ° 50·6 June 10 1894 | ° 34·0 1892 | ... | ° 59·1 June 1894 | ° 2·0 June 14 1891 | ° 72·4 1893 | ° 48·9 June 10 1894 | ° 46·7 June 10 1894 | ° 34·0 Nov. 26 1896 | in. ·321 June 10 1894 | ... | ° 40·0 Aug. 8 1907 | ... | |
| Column ... ... | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

| Month. | Rainfall. Amount collected in the Glaisher Rain Gauge. | Excess of Beckley over Glaisher. | Mean Daily Amount of Evaporation. | Mean Daily Amount of Ozone (0—10). | Mean Amount of Cloud (0—10). | Daily Duration of Sunshine. | Percentage of Possible Sunshine. | Wind. Resultant. Direction. | Velocity. | Recorded Velocity. | Number of Days of Clear Sky (less than 3 of Cloud). | Overcast Sky (more than 7 of Cloud). | Rain. | Thunderstorms. | Lightning only. | Temperature of the soil. At a Depth of 5 Feet. | At a Depth of 10 Feet. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ins. | in. | in. | | | hrs. | | ° | m.p.h. | m.p.h. | | | | | | ° | ° |
| January ... ... | 7·98 | + ·03 | ·243 | 3·2 | 6·4 | 7·69 | 58·6 | 86·5 | 8·42 | 11·07 | 1·3 | 11·6 | 18·9 | 4·2 | 2·0 | 79·92 | 77·12 |
| February... ... | 7·45 | + ·10 | ·214 | 3·0 | 6·3 | 7·21 | 56·7 | 81·2 | 8·13 | 10·99 | 1·5 | 11·0 | 18·4 | 3·7 | 2·0 | 80·74 | 77·64 |
| March ... ... | 9·22 | + ·01 | ·183 | 3·6 | 6·4 | 6·72 | 55·3 | 77·9 | 8·08 | 10·42 | 1·4 | 12·7 | 21·4 | 4·6 | 1·7 | 81·15 | 78·06 |
| April ... ... | 5·22 | + ·08 | ·166 | 4·1 | 5·7 | 7·31 | 63·1 | 70·4 | 8·56 | 10·51 | 3·1 | 8·6 | 18·1 | 2·8 | 1·4 | 80·82 | 78·31 |
| May ... ... | 3·80 | + ·06 | ·144 | 4·4 | 5·1 | 7·37 | 66·4 | 64·7 | 9·00 | 10·27 | 6·6 | 7·0 | 14·9 | 1·2 | 0·4 | 79·71 | 78·39 |
| June ... ... | 2·15 | + ·04 | ·125 | 4·8 | 4·9 | 7·43 | 68·3 | 60·8 | 10·16 | 11·19 | 5·7 | 5·8 | 15·6 | 0·1 | 0·1 | 78·09 | 78·25 |
| July ... ... | 2·24 | + ·01 | ·135 | 5·1 | 5·1 | 7·65 | 69·5 | 64·4 | 10·86 | 11·96 | 4·9 | 5·6 | 19·7 | 0·0 | 0·0 | 76·38 | 77·82 |
| August ... ... | 2·39 | + ·08 | ·158 | 5·2 | 5·5 | 7·49 | 65·7 | 67·7 | 11·18 | 12·34 | 3·4 | 7·6 | 19·6 | 0·1 | 0·0 | 75·28 | 77·25 |
| September ... | 1·48 | + ·04 | ·191 | 4·8 | 5·6 | 8·01 | 67·0 | 71·5 | 10·69 | 12·02 | 3·1 | 7·5 | 15·4 | 0·1 | 0·0 | 75·14 | 76·69 |
| October ... ... | 1·67 | + ·04 | ·228 | 4·1 | 5·7 | 8·14 | 65·1 | 77·7 | 9·41 | 11·00 | 2·3 | 7·2 | 14·2 | 0·2 | 0·1 | 75·79 | 76·35 |
| November ... | 1·91 | + ·03 | ·267 | 3·4 | 5·5 | 8·59 | 66·1 | 83·4 | 8·81 | 10·70 | 2·2 | 6·7 | 12·2 | 0·7 | 0·4 | 77·02 | 76·34 |
| December ... | 5·01 | + ·07 | ·254 | 3·1 | 6·1 | 8·27 | 62·3 | 90·9 | 8·53 | 10·79 | 1·9 | 10·5 | 16·0 | 2·4 | 1·2 | 78·55 | 76·60 |
| Year ... ... | 50·52 | + ·59 | ·192 | 4·1 | 5·7 | 7·66 | 63·7 | 74·0 | 9·20 | 11·10 | 37·4 | 101·8 | 204·4 | 20·1 | 9·3 | 78·22 | 77·40 |
| Maximum ... | ... | ... | 0·370 Dec. 31 1907 | ° 9·7 June 2 1896 | ... | hrs. 12·5 Dec. 9 1889 | 97* | 103·3 m.p.h. for 1 hour: 121·2 m.p.h. for 5 mins. | | On Apr. 29 1892 | 13 Aug. 1902 | 25 Jan. 1904 | 31 Jan. 1905 | 19 Jan. 1898 | 9 Jan. 1863 | ° 82·7 Feb. 13 1892 | ° 79·99 May 13 1898 |
| Minimum ... | ... | ... | ‡ ·025 June 30 1908 | 0 | ... | 0 | 0 | ... | | | 0 | 1† | 3 Aug. 1907 | 0 | 0 | ° 72·8 Aug. 13 1908 | ° 75·00 Oct. 27 & 28 1906 |
| Column ... ... | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 |

* On June 19, 1899; June 12, 1904; April 19 and July 20, 1905; June 5, 1907.

† In April and June 1879; May 1882; July 1888.

‡ June 23, 1905.

HIGHEST and LOWEST READINGS of the BAROMETER, reduced to 32° Fahrenheit and corrected for DIURNAL VARIATION, as extracted from the PHOTOGRAPHIC RECORDS.

| Highest. | | | Lowest. | | | Highest. | | | Lowest. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mauritius Standard Time, 1909. | | Reading. | Mauritius Standard Time, 1909. | | Reading. | Mauritius Standard Time, 1909. | | Reading. | Mauritius Standard Time, 1909. | | Reading. |
| | d h | ins. | | d h | ins. | | d h | ins. | | d h | ins. |
| January | 4. 18 | 29·767 | January | 2. 21 | 29·687 | July | 1. 1 | 30·003 | July | 4. 7 | 29·934 |
| | 12. 14 | 29·820 | | 6. 18 | 29·623 | | 8. 15 | 30·041 | | 16. 23 | 29·849 |
| | 16. 16 | 29·832 | | 14. 20 | 29·716 | | 23. 5 | 30·119 | | 26. 9 | 29·981 |
| | 22. 12 | 29·842 | | 17. 19 | 29·747 | | 27. 23 | 30·072 | | 30. 5 | 29·945 |
| | | | | 29. 20 | 29·607 | | | | | | |
| February | 3. 5 | 29·736 | | | | August | 1. 5 | 30·011 | August | 4. 8 | 29·909 |
| | 11. 17 | 29·781 | February | 5. 23 | 29·614 | | 10. 10 | 30·150 | | 13. 6 | 29·981 |
| | 17. 9 | 29·815 | | 14. 6 | 29·706 | | 16. 12 | 30·076 | | 21. 21 | 29·937 |
| | 23. 17 | 29·815 | | 22. 17 | 29·693 | | 24. 0 | 30·024 | | 30. 8 | 29·905 |
| | | | | 26. 3 | 29·639 | | | | | | |
| March | 3. 16 | 29·727 | | | | | | | | | |
| | 10. 23 | 29·693 | March | 9. 20 | 29·653 | September | 6. 12 | 30·041 | September | 15. 18 | 29·890 |
| | 15. 2 | 29·653 | | 13. 7 | 29·581 | | 24. 14 | 30·099 | | 26. 15 | 29·976 |
| | 24. 16 | 29·840 | | 18. 17 | 29·473 | | 28. 11 | 30·027 | | 30. 18 | 29·867 |
| | 31. 2 | 29·891 | | 25. 20 | 29·805 | | | | | | |
| | | | | | | October | 3. 2 | 30·054 | October | 4. 17 | 29·996 |
| April | 5. 0 | 29·876 | April | 2. 9 | 29·809 | | 8. 1 | 30·082 | | 10. 17 | 29·909 |
| | 10. 12 | 29·848 | | 8. 18 | 29·794 | | 13. 0 | 29·996 | | 15. 7 | 29·862 |
| | 19. 2 | 29·910 | | 14. 6 | 29·721 | | 18. 11 | 29·983 | | 20. 17 | 29·898 |
| | 29. 2 | 29·878 | | 24. 6 | 29·679 | | 25. 12 | 30·060 | | 29. 6 | 29·859 |
| May | 6. 3 | 29·998 | May | 3. 10 | 29·737 | | | | | | |
| | 12. 5 | 29·936 | | 9. 16 | 29·843 | November | 4. 13 | 29·957 | November | 8. 4 | 29·743 |
| | 16. 0 | 29·944 | | 14. 6 | 29·886 | | 11. 9 | 29·983 | | 16. 20 | 29·855 |
| | 27. 10 | 29·951 | | 22. 8 | 29·732 | | 18. 15 | 29·903 | | 21. 18 | 29·763 |
| | | | | | | | 26. 12 | 39·909 | | 29. 7 | 29·840 |
| June | 4. 12 | 29·923 | June | 2. 20 | 29·803 | | | | | | |
| | 9. 20 | 30·031 | | 6. 18 | 29·867 | December | 1. 0 | 29·851 | December | 5. 11 | 29·778 |
| | 15. 7 | 30·046 | | 12. 21 | 29·845 | | 14. 1 | 29·936 | | 20. 11 | 29·793 |
| | 21. 2 | 30·031 | | 18. 7 | 29·895 | | 23. 13 | 29·894 | | 27. 18 | 29·769 |
| | 26. 12 | 29·949 | | 24. 0 | 29·870 | | 29. 14 | 29·866 | | 31. 16 | 29·760 |
| | | | | 28. 8 | 29·898 | | | | | | |

## MONTHLY MEAN DIURNAL INEQUALITY of the METEOROLOGICAL ELEMENTS in the YEAR 1909

*(The results in each case are diminished by the smallest hourly value).*

### January.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0°·1). | Temperature. Of Evaporation (0°·1). | Temperature. Of the Dew Point (0°·1). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001) | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine. (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 59 | 16 | 13 | 12 | 237 | 30 | 35 | 58 | 19 | ... | 0 | 7 | 0 | 5 | 0 | 0 | Midnight |
| 1h | 42 | 12 | 11 | 10 | 241 | 25 | 53 | 87 | 26 | ... | 11 | 5 | 6 | 5 | 6 | 3 | 1h |
| 2 | 29 | 9 | 7 | 6 | 238 | 15 | 40 | 66 | 18 | ... | 6 | 5 | 2 | 4 | 2 | 3 | 2 |
| 3 | 19 | 6 | 5 | 4 | 242 | 10 | 240 | 392 | 18 | ... | 2 | 0 | 9 | 2 | 10 | 9 | 3 |
| 4 | 18 | 2 | 1 | 1 | 245 | 3 | 116 | 189 | 19 | ... | 4 | 2 | 1 | 1 | 2 | 1 | 4 |
| 5 | 24 | 0 | 0 | 0 | 248 | 0 | 3 | 5 | 8 | 11 | 11 | 0 | 4 | 0 | 3 | 6 | 5 |
| 6 | 34 | 3 | 2 | 0 | 242 | 0 | 23 | 37 | 2 | 67 | 13 | 0 | 11 | 2 | 12 | 10 | 6 |
| 7 | 47 | 35 | 23 | 15 | 193 | 38 | 13 | 21 | 0 | 78 | 17 | 3 | 17 | 6 | 17 | 17 | 7 |
| 8 | 51 | 67 | 34 | 12 | 102 | 30 | 44 | 71 | 10 | 81 | 23 | 5 | 45 | 10 | 45 | 45 | 8 |
| 9 | 54 | 84 | 37 | 5 | 44 | 13 | 34 | 55 | 8 | 77 | 26 | 13 | 67 | 15 | 65 | 66 | 9 |
| 10 | 53 | 95 | 40 | 5 | 18 | 13 | 76 | 124 | 13 | 81 | 32 | 29 | 64 | 23 | 62 | 61 | 10 |
| 11 | 46 | 102 | 42 | 4 | 3 | 10 | 102 | 166 | 18 | 74 | 35 | 39 | 65 | 27 | 64 | 68 | 11 |
| Noon | 38 | 104 | 44 | 6 | 1 | 15 | 29 | 47 | 6 | 63 | 38 | 40 | 62 | 28 | 62 | 73 | Noon |
| 13h | 26 | 103 | 43 | 5 | 0 | 13 | 39 | 63 | 10 | 58 | 40 | 30 | 54 | 24 | 52 | 73 | 13h |
| 14 | 16 | 100 | 42 | 6 | 11 | 15 | 256 | 418 | 47 | 54 | 38 | 27 | 47 | 22 | 45 | 71 | 14 |
| 15 | 6 | 95 | 40 | 5 | 20 | 13 | 145 | 237 | 40 | 57 | 40 | 26 | 48 | 22 | 46 | 63 | 15 |
| 16 | 0 | 89 | 38 | 5 | 31 | 13 | 10 | 16 | 8 | 54 | 43 | 24 | 48 | 21 | 46 | 58 | 16 |
| 17 | 3 | 80 | 34 | 5 | 51 | 13 | 50 | 82 | 6 | 42 | 36 | 22 | 43 | 20 | 41 | 54 | 17 |
| 18 | 15 | 68 | 31 | 6 | 82 | 15 | 3 | 5 | 8 | 4 | 30 | 11 | 30 | 13 | 28 | 41 | 18 |
| 19 | 36 | 52 | 26 | 9 | 133 | 23 | 0 | 0 | 5 | ... | 23 | 11 | 16 | 11 | 15 | 17 | 19 |
| 20 | 48 | 37 | 21 | 10 | 173 | 25 | 37 | 61 | 18 | ... | 9 | 7 | 9 | 7 | 9 | 8 | 20 |
| 21 | 60 | 29 | 17 | 10 | 194 | 25 | 24 | 39 | 15 | ... | 0 | 6 | 8 | 6 | 7 | 9 | 21 |
| 22 | 70 | 24 | 16 | 11 | 209 | 28 | 73 | 118 | 26 | ... | 5 | 6 | 10 | 7 | 10 | 10 | 22 |
| 23 | 69 | 19 | 15 | 12 | 228 | 30 | 53 | 87 | 24 | ... | 1 | 4 | 7 | 4 | 7 | 7 | 23 |
| 24 | 58 | 15 | 13 | 11 | 237 | 28 | 53 | 58 | 24 | ... | 0 | 6 | 1 | 5 | 1 | 1 | 24 |
| Means | 36·8 | 49·8 | 23·8 | 7·0 | 136·9 | 17·7 | 62·0 | ... | 15·8 | ... | 19·3 | 13·1 | 27·0 | 11·6 | 26·3 | 31·0 | Means |
| Number of Days employed. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | Number of Days employed. |

### February.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0°·1). | Temperature. Of Evaporation (0°·1). | Temperature. Of the Dew Point (0°·1). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001) | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine. (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 53 | 15 | 12 | 10 | 209 | 27 | 302 | 259 | 34 | ... | 2 | 3 | 23 | 6 | 17 | 6 | Midnight |
| 1h | 42 | 11 | 10 | 8 | 218 | 22 | 300 | 247 | 59 | ... | 2 | 5 | 22 | 8 | 14 | 2 | 1h |
| 2 | 26 | 9 | 7 | 5 | 214 | 14 | 261 | 223 | 66 | ... | 9 | 1 | 22 | 2 | 16 | 4 | 2 |
| 3 | 20 | 9 | 7 | 6 | 218 | 16 | 159 | 136 | 52 | ... | 9 | 6 | 20 | 9 | 13 | 3 | 3 |
| 4 | 17 | 6 | 5 | 4 | 221 | 11 | 21 | 19 | 14 | ... | 3 | 3 | 18 | 3 | 12 | 0 | 4 |
| 5 | 21 | 3 | 1 | 0 | 218 | 0 | 63 | 53 | 39 | 3 | 4 | 3 | 20 | 4 | 13 | 2 | 5 |
| 6 | 30 | 0 | 0 | 0 | 227 | 0 | 59 | 50 | 20 | 50 | 14 | 0 | 21 | 0 | 16 | 3 | 6 |
| 7 | 45 | 22 | 19 | 18 | 213 | 49 | 59 | 50 | 18 | 70 | 15 | 2 | 21 | 3 | 15 | 5 | 7 |
| 8 | 54 | 55 | 38 | 26 | 145 | 72 | 45 | 38 | 12 | 70 | 19 | 14 | 19 | 22 | 10 | 20 | 8 |
| 9 | 58 | 75 | 44 | 23 | 81 | 63 | 80 | 69 | 13 | 77 | 22 | 28 | 19 | 47 | 12 | 36 | 9 |
| 10 | 54 | 89 | 49 | 24 | 48 | 66 | 41 | 35 | 7 | 73 | 26 | 41 | 13 | 71 | 15 | 46 | 10 |
| 11 | 45 | 98 | 52 | 22 | 24 | 60 | 52 | 44 | 25 | 72 | 25 | 49 | 9 | 84 | 18 | 56 | 11 |
| Noon | 36 | 104 | 54 | 22 | 8 | 60 | 9 | 8 | 12 | 69 | 22 | 55 | 5 | 92 | 21 | 62 | Noon |
| 13h | 23 | 105 | 53 | 19 | 0 | 52 | 120 | 102 | 25 | 67 | 25 | 55 | 0 | 100 | 20 | 62 | 13h |
| 14 | 13 | 103 | 50 | 17 | 0 | 46 | 79 | 67 | 13 | 64 | 27 | 52 | 2 | 95 | 17 | 58 | 14 |
| 15 | 3 | 98 | 49 | 16 | 12 | 44 | 43 | 37 | 20 | 60 | 29 | 35 | 6 | 73 | 5 | 50 | 15 |
| 16 | 0 | 93 | 45 | 15 | 18 | 41 | 7 | 6 | 0 | 50 | 26 | 35 | 6 | 73 | 5 | 45 | 16 |
| 17 | 6 | 84 | 43 | 17 | 45 | 46 | 29 | 24 | 7 | 36 | 22 | 27 | 6 | 57 | 0 | 35 | 17 |
| 18 | 17 | 73 | 40 | 18 | 74 | 49 | 0 | 0 | 2 | ... | 23 | 23 | 8 | 45 | 0 | 23 | 18 |
| 19 | 35 | 55 | 34 | 19 | 124 | 52 | 343 | 293 | 16 | ... | 19 | 20 | 13 | 35 | 5 | 7 | 19 |
| 20 | 49 | 40 | 27 | 18 | 163 | 49 | 261 | 223 | 12 | ... | 5 | 11 | 16 | 16 | 7 | 3 | 20 |
| 21 | 62 | 31 | 22 | 17 | 183 | 46 | 170 | 145 | 20 | ... | 0 | 8 | 18 | 11 | 10 | 4 | 21 |
| 22 | 62 | 25 | 19 | 14 | 192 | 38 | 50 | 43 | 18 | ... | 0 | 7 | 18 | 14 | 10 | 8 | 22 |
| 23 | 61 | 21 | 17 | 13 | 203 | 36 | 79 | 67 | 32 | ... | 2 | 7 | 18 | 9 | 11 | 9 | 23 |
| 24 | 51 | 16 | 13 | 11 | 209 | 30 | 79 | 259 | 32 | ... | 2 | 4 | 23 | 7 | 16 | 6 | 24 |
| Means | 35·3 | 49·6 | 28·4 | 14·5 | 130·7 | 39·6 | 108·4 | ... | 22·7 | ... | 14·1 | 19·8 | 14·6 | 35·4 | 11·9 | 22·2 | Means |
| Number of Days employed. | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | 28 | Number of Days employed. |

* Hours reckoned from *apparent* midnight.

MONTHLY MEAN DIURNAL INEQUALITY of the METEOROLOGICAL ELEMENTS in the YEAR 1909—*continued.*
(*The results in each case are diminished by the smallest hourly value.*)

March.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0·1°). | Temperature. Of Evaporation (0·1°). | Temperature. Of the Dew Point (0·1°). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001). | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine.* (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 59 | 13 | 8 | 6 | 142 | 16 | 19 | 33 | 19 | ... | 1 | 11 | 5 | 5 | 0 | 4 | Midnight |
| 1h | 46 | 10 | 5 | 4 | 145 | 11 | 47 | 79 | 23 | ... | 3 | 8 | 3 | 3 | 1 | 3 | 1h |
| 2 | 34 | 7 | 4 | 4 | 154 | 11 | 26 | 44 | 16 | ... | 11 | 6 | 3 | 2 | 2 | 2 | 2 |
| 3 | 22 | 5 | 3 | 3 | 157 | 8 | 57 | 97 | 19 | ... | 7 | 5 | 0 | 0 | 1 | 2 | 3 |
| 4 | 17 | 3 | 1 | 1 | 155 | 3 | 142 | 239 | 40 | ... | 2 | 3 | 2 | 0 | 3 | 6 | 4 |
| 5 | 18 | 1 | 0 | 0 | 158 | 0 | 16 | 27 | 21 | ... | 3 | 3 | 4 | 1 | 4 | 6 | 5 |
| 6 | 28 | 0 | 0 | 2 | 166 | 5 | 61 | 103 | 35 | 23 | 6 | 9 | 4 | 4 | 1 | 2 | 6 |
| 7 | 41 | 11 | 10 | 11 | 161 | 28 | 18 | 30 | 16 | 58 | 6 | 9 | 3 | 3 | 0 | 0 | 7 |
| 8 | 54 | 43 | 28 | 20 | 100 | 52 | 42 | 70 | 15 | 66 | 12 | 8 | 17 | 8 | 12 | 15 | 8 |
| 9 | 64 | 60 | 34 | 18 | 48 | 46 | 24 | 41 | 13 | 74 | 15 | 3 | 44 | 13 | 39 | 46 | 9 |
| 10 | 62 | 70 | 38 | 18 | 22 | 46 | 187 | 316 | 18 | 75 | 17 | 6 | 54 | 16 | 46 | 58 | 10 |
| 11 | 56 | 76 | 41 | 19 | 9 | 49 | 95 | 160 | 45 | 72 | 20 | 13 | 45 | 17 | 35 | 53 | 11 |
| Noon | 43 | 80 | 43 | 21 | 5 | 55 | 118 | 198 | 37 | 69 | 17 | 19 | 38 | 19 | 26 | 51 | Noon |
| 13h | 24 | 80 | 42 | 19 | 1 | 49 | 156 | 264 | 39 | 67 | 20 | 4 | 41 | 13 | 35 | 54 | 13h |
| 14 | 10 | 77 | 40 | 17 | 0 | 44 | 2 | 3 | 0 | 67 | 18 | 0 | 36 | 10 | 33 | 60 | 14 |
| 15 | 0 | 73 | 37 | 16 | 9 | 41 | 50 | 84 | 23 | 53 | 19 | 10 | 32 | 13 | 24 | 56 | 15 |
| 16 | 3 | 66 | 34 | 14 | 22 | 36 | 252 | 423 | 32 | 45 | 20 | 12 | 27 | 13 | 19 | 40 | 16 |
| 17 | 9 | 55 | 30 | 16 | 54 | 41 | 24 | 41 | 3 | 22 | 18 | 10 | 28 | 12 | 21 | 38 | 17 |
| 18 | 19 | 43 | 24 | 14 | 82 | 36 | 23 | 38 | 8 | ... | 14 | 3 | 17 | 5 | 16 | 24 | 18 |
| 19 | 39 | 32 | 19 | 11 | 105 | 28 | 35 | 60 | 16 | ... | 5 | 7 | 6 | 3 | 4 | 9 | 19 |
| 20 | 54 | 24 | 14 | 9 | 118 | 23 | 0 | 0 | 10 | ... | 2 | 7 | 11 | 5 | 8 | 11 | 20 |
| 21 | 72 | 21 | 12 | 8 | 126 | 21 | 18 | 30 | 10 | ... | 0 | 7 | 9 | 5 | 6 | 8 | 21 |
| 22 | 74 | 18 | 12 | 9 | 136 | 23 | 19 | 33 | 24 | ... | 2 | 5 | 10 | 4 | 8 | 9 | 22 |
| 23 | 72 | 14 | 9 | 8 | 144 | 21 | 34 | 57 | 19 | ... | 6 | 6 | 9 | 4 | 7 | 9 | 23 |
| 24 | 66 | 12 | 7 | 5 | 141 | 13 | 35 | 35 | 23 | ... | 3 | 9 | 7 | 5 | 3 | 6 | 24 |
| Means | 39·4 | 35·8 | 19·8 | 10·9 | 94·4 | 28·2 | 60·0 | ... | 21·0 | ... | 9·9 | 7·3 | 18·2 | 7·3 | 14·2 | 22·9 | Means |
| Number of Days employed. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | Number of Days employed. |

April.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0·1°). | Temperature. Of Evaporation (0·1°). | Temperature. Of the Dew Point (0·1°). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001). | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine.* (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 61 | 11 | 9 | 9 | 241 | 21 | 50 | 123 | 18 | ... | 11 | 0 | 8 | 0 | 9 | 7 | Midnight |
| 1h | 49 | 11 | 9 | 7 | 238 | 16 | 57 | 140 | 25 | ... | 14 | 0 | 8 | 0 | 9 | 9 | 1h |
| 2 | 39 | 9 | 6 | 5 | 238 | 12 | 72 | 177 | 42 | ... | 14 | 1 | 4 | 0 | 5 | 5 | 2 |
| 3 | 26 | 7 | 5 | 4 | 240 | 10 | 78 | 193 | 43 | ... | 19 | 3 | 2 | 0 | 3 | 1 | 3 |
| 4 | 21 | 3 | 3 | 3 | 247 | 7 | 22 | 55 | 15 | ... | 13 | 3 | 0 | 0 | 0 | 0 | 4 |
| 5 | 20 | 2 | 1 | 0 | 244 | 0 | 19 | 48 | 12 | ... | 6 | 3 | 6 | 2 | 6 | 5 | 5 |
| 6 | 27 | 0 | 0 | 1 | 249 | 3 | 33 | 82 | 18 | 24 | 10 | 2 | 5 | 1 | 6 | 4 | 6 |
| 7 | 40 | 10 | 9 | 10 | 249 | 24 | 25 | 62 | 13 | 77 | 2 | 3 | 6 | 2 | 6 | 4 | 7 |
| 8 | 51 | 50 | 33 | 22 | 170 | 53 | 15 | 37 | 12 | 87 | 4 | 0 | 26 | 6 | 25 | 26 | 8 |
| 9 | 63 | 74 | 40 | 18 | 97 | 43 | 60 | 148 | 17 | 89 | 10 | 5 | 57 | 14 | 54 | 61 | 9 |
| 10 | 65 | 88 | 43 | 14 | 53 | 33 | 0 | 0 | 0 | 92 | 16 | 17 | 65 | 21 | 59 | 75 | 10 |
| 11 | 54 | 97 | 44 | 10 | 23 | 24 | 0 | 0 | 0 | 89 | 17 | 26 | 68 | 25 | 62 | 82 | 11 |
| Noon | 37 | 102 | 45 | 9 | 6 | 21 | 0 | 0 | 0 | 91 | 19 | 27 | 63 | 25 | 57 | 84 | Noon |
| 13h | 19 | 103 | 44 | 6 | 0 | 14 | 0 | 0 | 0 | 91 | 21 | 27 | 57 | 25 | 51 | 79 | 13h |
| 14 | 6 | 101 | 43 | 6 | 4 | 14 | 0 | 0 | 0 | 85 | 19 | 31 | 58 | 27 | 52 | 79 | 14 |
| 15 | 0 | 95 | 42 | 6 | 16 | 14 | 20 | 49 | 8 | 81 | 21 | 29 | 58 | 26 | 52 | 72 | 15 |
| 16 | 5 | 83 | 38 | 8 | 49 | 19 | 118 | 292 | 38 | 67 | 22 | 25 | 55 | 24 | 49 | 61 | 16 |
| 17 | 13 | 68 | 34 | 10 | 92 | 24 | 165 | 407 | 28 | 34 | 24 | 15 | 37 | 17 | 33 | 40 | 17 |
| 18 | 25 | 49 | 28 | 15 | 153 | 36 | 15 | 37 | 12 | ... | 19 | 11 | 12 | 11 | 9 | 16 | 18 |
| 19 | 39 | 34 | 22 | 14 | 189 | 33 | 62 | 152 | 12 | ... | 0 | 9 | 4 | 6 | 2 | 5 | 19 |
| 20 | 55 | 26 | 18 | 12 | 207 | 29 | 20 | 49 | 18 | ... | 4 | 6 | 7 | 5 | 5 | 8 | 20 |
| 21 | 68 | 20 | 15 | 11 | 223 | 26 | 80 | 197 | 32 | ... | 3 | 6 | 4 | 4 | 3 | 4 | 21 |
| 22 | 69 | 15 | 11 | 10 | 231 | 24 | 48 | 119 | 32 | ... | 8 | 6 | 4 | 4 | 3 | 3 | 22 |
| 23 | 65 | 12 | 9 | 7 | 232 | 16 | 5 | 12 | 8 | ... | 13 | 3 | 6 | 2 | 6 | 6 | 23 |
| 24 | 59 | 10 | 8 | 7 | 242 | 16 | 3 | 119 | 5 | ... | 9 | 2 | 6 | 1 | 6 | 5 | 24 |
| Means | 39·0 | 43·2 | 22·4 | 9·0 | 157·3 | 21·3 | 38·7 | ... | 16·3 | ... | 12·7 | 10·4 | 25·0 | 9·9 | 22·9 | 29·6 | Means |
| Number of Days employed. | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | Number of Days employed. |

* Hours reckoned from *apparent* midnight.

## MONTHLY MEAN DIURNAL INEQUALITY of the METEOROLOGICAL ELEMENTS in the YEAR 1909

*(The results in each case are diminished by the smallest hourly value).*

### May.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0°·1). | Temperature. Of Evaporation (0°·1). | Temperature. Of the Dew Point (0°·1). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·001) | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine.* (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 58 | 7 | 8 | 7 | 262 | 15 | 55 | 179 | 15 | ... | 6 | 4 | 2 | 5 | 3 | 2 | Midnight |
| 1h | 51 | 10 | 7 | 4 | 242 | 9 | 17 | 56 | 13 | ... | 3 | 0 | 0 | 0 | 3 | 3 | 1h |
| 2 | 41 | 8 | 5 | 2 | 243 | 4 | 95 | 311 | 23 | ... | 8 | 2 | 2 | 3 | 4 | 1 | 2 |
| 3 | 31 | 6 | 4 | 3 | 246 | 6 | 85 | 276 | 42 | ... | 9 | 5 | 1 | 5 | 1 | 0 | 3 |
| 4 | 27 | 4 | 4 | 2 | 258 | 4 | 3 | 8 | 8 | ... | 5 | 4 | 2 | 5 | 3 | 2 | 4 |
| 5 | 25 | 2 | 2 | 0 | 256 | 0 | 22 | 73 | 26 | ... | 6 | 0 | 5 | 3 | 8 | 7 | 5 |
| 6 | 36 | 0 | 0 | 0 | 259 | 0 | 15 | 51 | 16 | 30 | 12 | 4 | 3 | 5 | 3 | 3 | 6 |
| 7 | 51 | 7 | 8 | 8 | 265 | 17 | 16 | 53 | 19 | 73 | 13 | 6 | 0 | 5 | 0 | 1 | 7 |
| 8 | 63 | 51 | 39 | 29 | 194 | 63 | 123 | 401 | 21 | 82 | 13 | 8 | 5 | 10 | 3 | 5 | 8 |
| 9 | 74 | 76 | 49 | 29 | 125 | 63 | 48 | 158 | 21 | 79 | 17 | 4 | 25 | 15 | 23 | 39 | 9 |
| 10 | 76 | 90 | 54 | 28 | 85 | 60 | 0 | 0 | 0 | 79 | 29 | 1 | 35 | 16 | 33 | 49 | 10 |
| 11 | 60 | 101 | 58 | 27 | 56 | 58 | 6 | 21 | 3 | 87 | 31 | 12 | 38 | 24 | 32 | 53 | 11 |
| Noon | 42 | 109 | 59 | 24 | 28 | 52 | 3 | 11 | 2 | 83 | 34 | 16 | 37 | 26 | 29 | 66 | Noon |
| 13h | 19 | 113 | 57 | 18 | 5 | 38 | 2 | 5 | 2 | 79 | 30 | 13 | 39 | 25 | 32 | 67 | 13h |
| 14 | 6 | 112 | 55 | 15 | 0 | 32 | 2 | 5 | 2 | 76 | 32 | 15 | 35 | 25 | 28 | 62 | 14 |
| 15 | 0 | 106 | 52 | 14 | 12 | 30 | 23 | 74 | 11 | 78 | 30 | 7 | 36 | 20 | 32 | 60 | 15 |
| 16 | 3 | 95 | 47 | 13 | 35 | 28 | 0 | 0 | 0 | 70 | 28 | 4 | 34 | 18 | 31 | 53 | 16 |
| 17 | 13 | 80 | 42 | 13 | 73 | 28 | 23 | 74 | 5 | 41 | 20 | 7 | 16 | 14 | 13 | 26 | 17 |
| 18 | 25 | 60 | 33 | 12 | 123 | 25 | 24 | 79 | 5 | ... | 13 | 12 | 4 | 13 | 0 | 7 | 18 |
| 19 | 40 | 41 | 23 | 9 | 167 | 19 | 5 | 16 | 6 | ... | 2 | 7 | 2 | 7 | 1 | 7 | 19 |
| 20 | 57 | 30 | 18 | 8 | 195 | 17 | 2 | 5 | 2 | ... | 3 | 6 | 2 | 6 | 2 | 3 | 20 |
| 21 | 66 | 24 | 13 | 5 | 199 | 11 | 31 | 100 | 19 | ... | 0 | 6 | 3 | 7 | 2 | 3 | 21 |
| 22 | 68 | 20 | 11 | 4 | 211 | 9 | 110 | 359 | 34 | ... | 0 | 3 | 2 | 4 | 4 | 6 | 22 |
| 23 | 66 | 16 | 9 | 3 | 217 | 6 | 2 | 5 | 5 | ... | 5 | 3 | 3 | 4 | 4 | 5 | 23 |
| 24 | 59 | 13 | 7 | 2 | 227 | 4 | 2 | 179 | 5 | ... | 9 | 3 | 2 | 4 | 3 | 2 | 24 |
| Mean | 42·3 | 47·2 | 26·6 | 11·2 | 159·3 | 23·9 | 28·6 | ... | 12·2 | ... | 14·3 | 6·1 | 13·3 | 10·8 | 11·9 | 21·3 | Mean |
| Number of Days employed. | 31 | 20 | 20 | 20 | 20 | 20 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | Number of Day employed |

### June.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0°·1). | Temperature. Of Evaporation (0°·1). | Temperature. Of the Dew Point (0°·1). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·001) | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine.* (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 44 | 6 | 6 | 6 | 174 | 12 | 27 | 33 | 12 | ... | 5 | 16 | 1 | 0 | 3 | 2 | Midnight |
| 1h | 39 | 5 | 4 | 4 | 173 | 8 | 65 | 80 | 58 | ... | 4 | 18 | 1 | 1 | 2 | 1 | 1h |
| 2 | 29 | 2 | 3 | 4 | 181 | 8 | 137 | 168 | 48 | ... | 9 | 16 | 3 | 1 | 5 | 2 | 2 |
| 3 | 18 | 4 | 3 | 2 | 172 | 4 | 75 | 92 | 65 | ... | 16 | 19 | 3 | 3 | 3 | 0 | 3 |
| 4 | 14 | 3 | 3 | 4 | 179 | 8 | 102 | 125 | 65 | ... | 12 | 21 | 0 | 3 | 0 | 1 | 4 |
| 5 | 12 | 1 | 1 | 2 | 179 | 4 | 72 | 88 | 42 | ... | 11 | 21 | 7 | 6 | 6 | 6 | 5 |
| 6 | 22 | 0 | 0 | 0 | 180 | 0 | 27 | 33 | 22 | 5 | 13 | 24 | 6 | 7 | 4 | 2 | 6 |
| 7 | 35 | 1 | 1 | 1 | 180 | 2 | 75 | 92 | 40 | 45 | 5 | 26 | 5 | 8 | 2 | 2 | 7 |
| 8 | 49 | 26 | 19 | 15 | 146 | 30 | 72 | 88 | 60 | 63 | 3 | 23 | 13 | 9 | 10 | 11 | 8 |
| 9 | 62 | 50 | 29 | 14 | 78 | 28 | 123 | 152 | 45 | 62 | 1 | 8 | 37 | 7 | 39 | 39 | 9 |
| 10 | 62 | 63 | 34 | 14 | 43 | 28 | 250 | 308 | 45 | 67 | 5 | 3 | 56 | 9 | 58 | 57 | 10 |
| 11 | 51 | 71 | 37 | 13 | 20 | 26 | 200 | 246 | 30 | 68 | 7 | 0 | 64 | 9 | 67 | 69 | 11 |
| Noon | 37 | 76 | 38 | 13 | 7 | 26 | 178 | 220 | 45 | 68 | 7 | 2 | 65 | 10 | 66 | 73 | Noon |
| 13h | 12 | 78 | 38 | 11 | 1 | 22 | 277 | 341 | 27 | 67 | 7 | 6 | 64 | 11 | 64 | 71 | 13h |
| 14 | 3 | 76 | 36 | 9 | 0 | 18 | 42 | 51 | 23 | 60 | 10 | 6 | 63 | 11 | 63 | 69 | 14 |
| 15 | 0 | 68 | 35 | 11 | 22 | 22 | 47 | 57 | 37 | 47 | 14 | 7 | 51 | 9 | 51 | 57 | 15 |
| 16 | 3 | 58 | 30 | 10 | 45 | 20 | 10 | 12 | 13 | 39 | 14 | 4 | 41 | 6 | 44 | 48 | 16 |
| 17 | 12 | 45 | 22 | 7 | 69 | 14 | 12 | 14 | 17 | 14 | 13 | 8 | 25 | 4 | 28 | 29 | 17 |
| 18 | 21 | 29 | 16 | 8 | 115 | 16 | 22 | 27 | 20 | ... | 6 | 18 | 14 | 6 | 13 | 13 | 18 |
| 19 | 35 | 21 | 12 | 7 | 136 | 14 | 47 | 57 | 20 | ... | 0 | 22 | 8 | 7 | 6 | 6 | 19 |
| 20 | 48 | 14 | 9 | 6 | 152 | 12 | 32 | 39 | 28 | ... | 2 | 22 | 12 | 8 | 10 | 9 | 20 |
| 21 | 55 | 13 | 10 | 8 | 166 | 16 | 97 | 119 | 60 | ... | 7 | 22 | 11 | 7 | 9 | 7 | 21 |
| 22 | 57 | 11 | 9 | 7 | 167 | 14 | 18 | 23 | 30 | ... | 7 | 22 | 5 | 6 | 4 | 3 | 22 |
| 23 | 53 | 9 | 7 | 6 | 169 | 12 | 0 | 0 | 0 | ... | 8 | 22 | 3 | 5 | 2 | 2 | 23 |
| 24 | 48 | 7 | 6 | 6 | 174 | 12 | 0 | 33 | 0 | ... | 4 | 16 | 3 | 1 | 5 | 4 | 24 |
| Mean | 32·8 | 29·5 | 16·3 | 7·5 | 117·1 | 15·0 | 89·3 | ... | 34·1 | ... | 7·6 | 14·9 | 22·4 | 6·2 | 22·6 | 23·3 | Mean |
| Number of Days employed. | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | Number of Days employed. |

* Hours reckoned from *apparent* midnight.

MONTHLY MEAN DIURNAL INEQUALITY of the METEOROLOGICAL ELEMENTS in the YEAR 1909—*continued.*

(*The results in each case are diminished by the smallest hourly value.*)

July.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0°·1). | Temperature. Of Evaporation (0°·1). | Temperature. Of the Dew Point (0°·1). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001). | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sun-* shine. (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 51 | 4 | 1 | 1 | 210 | 2 | 67 | 68 | 31 | ... | 16 | 7 | 7 | 5 | 7 | 5 | Midnight |
| 1h | 46 | 2 | 1 | 2 | 220 | 4 | 47 | 48 | 29 | ... | 16 | 9 | 3 | 5 | 2 | 0 | 1h |
| 2 | 35 | 1 | 0 | 2 | 219 | 4 | 60 | 61 | 23 | ... | 25 | 6 | 0 | 2 | 0 | 0 | 2 |
| 3 | 24 | 0 | 0 | 3 | 225 | 6 | 277 | 282 | 21 | ... | 22 | 4 | 1 | 0 | 2 | 3 | 3 |
| 4 | 19 | 1 | 1 | 5 | 230 | 10 | 69 | 71 | 10 | ... | 14 | 2 | 5 | 0 | 6 | 8 | 4 |
| 5 | 18 | 2 | 2 | 5 | 227 | 10 | 31 | 32 | 18 | ... | 15 | 4 | 5 | 1 | 6 | 6 | 5 |
| 6 | 25 | 1 | 2 | 5 | 232 | 10 | 5 | 5 | 0 | 10 | 10 | 3 | 8 | 2 | 8 | 7 | 6 |
| 7 | 37 | 6 | 5 | 8 | 224 | 15 | 3 | 3 | 3 | 61 | 22 | 4 | 8 | 2 | 9 | 5 | 7 |
| 8 | 53 | 35 | 27 | 25 | 188 | 49 | 42 | 43 | 19 | 79 | 18 | 4 | 12 | 4 | 12 | 10 | 8 |
| 9 | 67 | 65 | 40 | 25 | 107 | 49 | 0 | 0 | 0 | 80 | 23 | 1 | 44 | 8 | 43 | 43 | 9 |
| 10 | 68 | 80 | 42 | 17 | 48 | 33 | 76 | 77 | 15 | 75 | 25 | 12 | 70 | 16 | 67 | 69 | 10 |
| 11 | 59 | 88 | 42 | 11 | 14 | 21 | 68 | 69 | 21 | 77 | 30 | 11 | 73 | 16 | 70 | 71 | 11 |
| Noon | 43 | 94 | 44 | 11 | 2 | 21 | 173 | 176 | 42 | 79 | 32 | 12 | 68 | 16 | 65 | 67 | Noon |
| 13h | 19 | 95 | 45 | 11 | 0 | 21 | 210 | 213 | 21 | 74 | 33 | 11 | 69 | 15 | 66 | 73 | 13h |
| 14 | 7 | 93 | 44 | 13 | 8 | 25 | 71 | 72 | 8 | 71 | 32 | 12 | 68 | 16 | 65 | 70 | 14 |
| 15 | 0 | 88 | 41 | 11 | 14 | 21 | 248 | 252 | 37 | 65 | 30 | 10 | 66 | 15 | 64 | 67 | 15 |
| 16 | 3 | 81 | 38 | 11 | 31 | 21 | 135 | 139 | 23 | 66 | 30 | 2 | 61 | 10 | 60 | 62 | 16 |
| 17 | 11 | 64 | 32 | 12 | 75 | 23 | 90 | 92 | 33 | 27 | 17 | 3 | 45 | 9 | 44 | 44 | 17 |
| 18 | 21 | 41 | 24 | 13 | 137 | 25 | 173 | 176 | 47 | ... | 18 | 6 | 18 | 6 | 17 | 14 | 18 |
| 19 | 34 | 25 | 15 | 10 | 173 | 19 | 90 | 92 | 18 | ... | 4 | 2 | 9 | 1 | 10 | 5 | 19 |
| 20 | 47 | 17 | 9 | 5 | 186 | 10 | 87 | 89 | 16 | ... | 0 | 0 | 9 | 0 | 11 | 6 | 20 |
| 21 | 56 | 13 | 7 | 5 | 197 | 10 | 47 | 48 | 29 | ... | 1 | 3 | 4 | 0 | 6 | 1 | 21 |
| 22 | 58 | 8 | 4 | 3 | 203 | 6 | 129 | 131 | 29 | ... | 8 | 5 | 0 | 1 | 0 | 0 | 22 |
| 23 | 56 | 4 | 1 | 1 | 210 | 2 | 190 | 194 | 27 | ... | 15 | 4 | 9 | 3 | 10 | 7 | 23 |
| 24 | 51 | 3 | 0 | 0 | 210 | 0 | 190 | 68 | 27 | ... | 17 | 7 | 7 | 5 | 6 | 5 | 24 |
| Mean | 36·3 | 36·4 | 18·7 | 8·6 | 143·6 | 16·7 | 103·1 | ... | 21·9 | ... | 18·9 | 5·8 | 26·8 | 6·3 | 26·2 | 25·9 | Mean |
| Number of Days employed. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | Number of Days employed. |

August.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0°·1). | Temperature. Of Evaporation (0°·1). | Temperature. Of the Dew Point (0°·1). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001). | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sun-* shine. (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 57 | 11 | 8 | 4 | 233 | 7 | 15 | 51 | 15 | ... | 16 | 20 | 2 | 5 | 0 | 0 | Midnight |
| 1h | 50 | 11 | 9 | 6 | 237 | 14 | 23 | 77 | 21 | ... | 25 | 15 | 4 | 2 | 4 | 5 | 1h |
| 2 | 41 | 9 | 8 | 7 | 247 | 13 | 23 | 75 | 11 | ... | 35 | 15 | 2 | 2 | 2 | 1 | 2 |
| 3 | 32 | 6 | 5 | 5 | 250 | 9 | 86 | 286 | 30 | ... | 30 | 16 | 0 | 2 | 0 | 0 | 3 |
| 4 | 25 | 3 | 3 | 3 | 255 | 6 | 47 | 155 | 23 | ... | 27 | 12 | 4 | 0 | 6 | 5 | 4 |
| 5 | 24 | 0 | 1 | 1 | 256 | 2 | 25 | 84 | 34 | ... | 20 | 14 | 2 | 1 | 2 | 3 | 5 |
| 6 | 33 | 0 | 0 | 0 | 256 | 0 | 38 | 126 | 21 | 20 | 26 | 17 | 1 | 3 | 1 | 2 | 6 |
| 7 | 47 | 7 | 8 | 8 | 258 | 15 | 21 | 70 | 5 | 53 | 28 | 15 | 7 | 3 | 6 | 7 | 7 |
| 8 | 60 | 41 | 28 | 18 | 188 | 34 | 25 | 83 | 12 | 69 | 24 | 15 | 23 | 8 | 22 | 22 | 8 |
| 9 | 72 | 69 | 37 | 14 | 106 | 26 | 92 | 305 | 18 | 72 | 28 | 6 | 58 | 10 | 57 | 57 | 9 |
| 10 | 73 | 84 | 40 | 8 | 56 | 15 | 18 | 59 | 11 | 82 | 32 | 9 | 74 | 13 | 72 | 76 | 10 |
| 11 | 60 | 94 | 43 | 7 | 29 | 13 | 6 | 21 | 5 | 82 | 31 | 4 | 86 | 12 | 85 | 87 | 11 |
| Noon | 43 | 102 | 45 | 4 | 12 | 7 | 34 | 113 | 13 | 84 | 33 | 0 | 87 | 11 | 86 | 91 | Noon |
| 13h | 22 | 104 | 46 | 4 | 2 | 7 | 6 | 21 | 3 | 85 | 29 | 5 | 85 | 12 | 83 | 90 | 13 |
| 14 | 8 | 103 | 44 | 2 | 0 | 4 | 6 | 21 | 5 | 85 | 27 | 8 | 80 | 13 | 78 | 85 | 14 |
| 15 | 0 | 98 | 41 | 1 | 8 | 2 | 48 | 161 | 2 | 81 | 26 | 11 | 76 | 14 | 73 | 78 | 15 |
| 16 | 2 | 88 | 38 | 1 | 29 | 2 | 0 | 0 | 0 | 74 | 23 | 9 | 67 | 12 | 65 | 71 | 16 |
| 17 | 10 | 70 | 32 | 3 | 74 | 6 | 61 | 204 | 16 | 38 | 17 | 10 | 51 | 10 | 50 | 52 | 17 |
| 18 | 21 | 48 | 26 | 9 | 145 | 17 | 95 | 316 | 31 | ... | 14 | 19 | 17 | 9 | 14 | 13 | 18 |
| 19 | 35 | 30 | 19 | 10 | 197 | 19 | 6 | 21 | 5 | ... | 0 | 20 | 3 | 6 | 1 | 0 | 19 |
| 20 | 51 | 23 | 15 | 9 | 214 | 17 | 11 | 38 | 13 | ... | 0 | 17 | 5 | 4 | 4 | 2 | 20 |
| 21 | 60 | 18 | 12 | 7 | 221 | 13 | 13 | 43 | 10 | ... | 1 | 14 | 6 | 2 | 7 | 5 | 21 |
| 22 | 62 | 15 | 10 | 5 | 221 | 9 | 11 | 35 | 14 | ... | 0 | 14 | 3 | 1 | 3 | 1 | 22 |
| 23 | 61 | 14 | 9 | 5 | 227 | 9 | 20 | 66 | 11 | ... | 5 | 15 | 8 | 4 | 8 | 5 | 24 |
| 24 | 57 | 13 | 10 | 6 | 235 | 11 | 25 | 66 | 15 | ... | 16 | 20 | 4 | 6 | 2 | 2 | 25 |
| Mean | 40·2 | 42·4 | 21·5 | 5·9 | 158·2 | 11·0 | 30·2 | ... | 13·8 | ... | 20·5 | 12·8 | 30·2 | 6·6 | 29·2 | 30·4 | Mean |
| Number of Days employed. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | Number of Days employed. |

* Hours reckoned from *apparent* midnight.

## MONTHLY MEAN DIURNAL INEQUALITY of the METEOROLOGICAL ELEMENTS in the YEAR 1909

*(The results in each case are diminished by the smallest hourly value).*

### September.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0·1°). | Temperature. Of Evaporation (0·1°). | Temperature. Of the Dew Point (0·1°). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001). | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine. (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 73 | 15 | 11 | 10 | 286 | 19 | 45 | 141 | 25 | ... | 20 | 2 | 8 | 2 | 8 | 7 | Midnight |
| 1h | 61 | 13 | 9 | 9 | 287 | 17 | 15 | 47 | 15 | ... | 23 | 3 | 6 | 2 | 6 | 5 | 1h |
| 2 | 51 | 10 | 7 | 7 | 291 | 13 | 73 | 230 | 40 | ... | 18 | 3 | 1 | 0 | 1 | 1 | 2 |
| 3 | 41 | 6 | 4 | 4 | 295 | 7 | 25 | 78 | 20 | ... | 21 | 4 | 3 | 2 | 3 | 2 | 3 |
| 4 | 36 | 5 | 4 | 5 | 303 | 9 | 37 | 115 | 22 | ... | 16 | 4 | 4 | 2 | 4 | 4 | 4 |
| 5 | 40 | 3 | 1 | 1 | 295 | 2 | 27 | 84 | 17 | ... | 13 | 5 | 0 | 2 | 0 | 0 | 5 |
| 6 | 48 | 0 | 0 | 2 | 309 | 4 | 8 | 26 | 5 | 40 | 13 | 3 | 1 | 0 | 1 | 1 | 6 |
| 7 | 60 | 27 | 18 | 11 | 262 | 21 | 23 | 73 | 15 | 79 | 13 | 3 | 4 | 1 | 4 | 3 | 7 |
| 8 | 70 | 66 | 37 | 18 | 170 | 34 | 12 | 37 | 7 | 88 | 12 | 7 | 33 | 9 | 31 | 31 | 8 |
| 9 | 79 | 94 | 45 | 11 | 87 | 21 | 8 | 26 | 7 | 86 | 26 | 24 | 83 | 20 | 79 | 80 | 9 |
| 10 | 77 | 109 | 48 | 7 | 44 | 13 | 0 | 0 | 0 | 88 | 31 | 26 | 91 | 21 | 87 | 87 | 10 |
| 11 | 63 | 117 | 49 | 3 | 20 | 6 | 5 | 16 | 2 | 85 | 27 | 34 | 95 | 24 | 91 | 93 | 11 |
| Noon | 44 | 122 | 49 | 1 | 5 | 2 | 2 | 5 | 1 | 88 | 30 | 37 | 91 | 25 | 87 | 88 | Noon |
| 13h | 24 | 124 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 28 | 37 | 93 | 25 | 89 | 92 | 13h |
| 14 | 10 | 120 | 48 | 1 | 7 | 2 | 70 | 220 | 17 | 77 | 26 | 39 | 85 | 26 | 81 | 84 | 14 |
| 15 | 0 | 112 | 45 | 0 | 24 | 0 | 67 | 209 | 32 | 72 | 29 | 27 | 83 | 21 | 79 | 81 | 15 |
| 16 | 4 | 100 | 41 | 1 | 50 | 2 | 23 | 73 | 20 | 69 | 26 | 27 | 75 | 21 | 71 | 72 | 16 |
| 17 | 14 | 83 | 36 | 5 | 95 | 9 | 32 | 99 | 27 | 28 | 17 | 17 | 64 | 16 | 60 | 62 | 17 |
| 18 | 27 | 61 | 30 | 10 | 160 | 19 | 12 | 37 | 22 | ... | 20 | 14 | 28 | 13 | 25 | 25 | 18 |
| 19 | 44 | 42 | 23 | 12 | 216 | 23 | 52 | 162 | 32 | ... | 2 | 10 | 13 | 8 | 11 | 18 | 19 |
| 20 | 61 | 32 | 20 | 12 | 244 | 23 | 38 | 120 | 28 | ... | 0 | 4 | 11 | 4 | 11 | 10 | 20 |
| 21 | 76 | 26 | 17 | 12 | 260 | 23 | 143 | 450 | 18 | ... | 4 | 3 | 8 | 2 | 8 | 8 | 21 |
| 22 | 78 | 22 | 15 | 11 | 267 | 21 | 2 | 5 | 2 | ... | 7 | 0 | 12 | 1 | 12 | 11 | 22 |
| 23 | 75 | 18 | 12 | 10 | 276 | 19 | 30 | 94 | 23 | ... | 14 | 3 | 6 | 2 | 6 | 6 | 23 |
| 24 | 70 | 15 | 11 | 10 | 285 | 19 | 48 | 152 | 35 | ... | 20 | 3 | 5 | 2 | 5 | 5 | 24 |
| Mean | 49·0 | 53·7 | 25·2 | 6·9 | 181·5 | 13·1 | 31·9 | ... | 17·3 | ... | 18·2 | 13·6 | 36·1 | 10·0 | 34·4 | 35·0 | Mean |
| Number of Days employed. | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | Number of Days employed. |

### October.

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0·1°). | Temperature. Of Evaporation (0·1°). | Temperature. Of the Dew Point (0·1°). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001). | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine. (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 67 | 16 | 12 | 13 | 288 | 25 | 19 | 106 | 23 | ... | 6 | 9 | 9 | 6 | 9 | 8 | Midnight |
| 1h | 55 | 14 | 10 | 12 | 293 | 23 | 55 | 299 | 45 | ... | 11 | 10 | 9 | 6 | 8 | 8 | 1h |
| 2 | 42 | 11 | 9 | 12 | 299 | 23 | 44 | 238 | 21 | ... | 14 | 11 | 0 | 4 | 0 | 0 | 2 |
| 3 | 33 | 8 | 6 | 10 | 302 | 19 | 24 | 129 | 40 | ... | 13 | 6 | 6 | 3 | 8 | 6 | 3 |
| 4 | 31 | 4 | 4 | 9 | 310 | 17 | 36 | 197 | 44 | ... | 7 | 6 | 9 | 4 | 10 | 9 | 4 |
| 5 | 37 | 0 | 0 | 6 | 314 | 11 | 38 | 208 | 19 | ... | 9 | 7 | 6 | 3 | 7 | 7 | 5 |
| 6 | 47 | 4 | 6 | 13 | 321 | 25 | 38 | 206 | 24 | 37 | 14 | 5 | 1 | 0 | 4 | 5 | 6 |
| 7 | 60 | 44 | 27 | 20 | 234 | 38 | 37 | 202 | 29 | 65 | 17 | 0 | 26 | 6 | 28 | 28 | 7 |
| 8 | 70 | 75 | 38 | 16 | 147 | 30 | 21 | 114 | 8 | 66 | 21 | 4 | 61 | 15 | 59 | 62 | 8 |
| 9 | 75 | 97 | 42 | 9 | 81 | 17 | 26 | 141 | 13 | 75 | 24 | 15 | 78 | 22 | 73 | 75 | 9 |
| 10 | 70 | 113 | 45 | 4 | 38 | 8 | 0 | 0 | 0 | 73 | 20 | 19 | 100 | 25 | 94 | 97 | 10 |
| 11 | 58 | 123 | 48 | 2 | 18 | 4 | 31 | 167 | 13 | 71 | 20 | 19 | 98 | 24 | 92 | 98 | 11 |
| Noon | 43 | 127 | 48 | 1 | 6 | 2 | 2 | 9 | 1 | 72 | 22 | 21 | 103 | 25 | 97 | 103 | Noon |
| 13h | 25 | 130 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 72 | 23 | 20 | 95 | 25 | 89 | 97 | 13 |
| 14 | 10 | 128 | 48 | 0 | 4 | 0 | 0 | 0 | 0 | 68 | 20 | 13 | 91 | 22 | 86 | 95 | 14 |
| 15 | 0 | 120 | 46 | 2 | 21 | 4 | 10 | 53 | 3 | 67 | 20 | 10 | 84 | 20 | 80 | 90 | 15 |
| 16 | 1 | 108 | 43 | 4 | 48 | 8 | 0 | 0 | 0 | 64 | 15 | 9 | 74 | 19 | 71 | 77 | 16 |
| 17 | 10 | 91 | 37 | 5 | 83 | 9 | 13 | 70 | 9 | 37 | 12 | 7 | 73 | 18 | 70 | 74 | 17 |
| 18 | 26 | 70 | 32 | 10 | 144 | 19 | 2 | 9 | 2 | ... | 11 | 9 | 48 | 16 | 46 | 46 | 18 |
| 19 | 47 | 50 | 25 | 13 | 199 | 25 | 10 | 53 | 5 | ... | 5 | 12 | 22 | 12 | 19 | 20 | 19 |
| 20 | 64 | 36 | 20 | 14 | 235 | 26 | 0 | 0 | 0 | ... | 1 | 9 | 18 | 9 | 17 | 17 | 20 |
| 21 | 77 | 29 | 16 | 13 | 252 | 25 | 15 | 79 | 3 | ... | 1 | 7 | 15 | 7 | 15 | 15 | 21 |
| 22 | 80 | 24 | 15 | 14 | 270 | 26 | 23 | 123 | 23 | ... | 0 | 8 | 11 | 6 | 11 | 9 | 22 |
| 23 | 78 | 20 | 13 | 13 | 279 | 25 | 6 | 35 | 8 | ... | 5 | 7 | 9 | 5 | 10 | 9 | 23 |
| 24 | 69 | 17 | 11 | 13 | 284 | 25 | 11 | 60 | 8 | ... | 6 | 8 | 9 | 5 | 9 | 8 | 24 |
| Mean | 47·0 | 58·4 | 26·0 | 9·1 | 178·8 | 17.4 | 18·4 | ... | 13·6 | ... | 12·7 | 10·0 | 42·2 | 12·3 | 40·5 | 42·5 | Mean |
| Number of Days employed. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | Number of Days employed. |

* Hours reckoned from *apparent* midnight.

MONTHLY MEAN DIURNAL INEQUALITY of the METEOROLOGICAL ELEMENTS in the YEAR 1909—*continued.*

(*The results in each case are diminished by the smallest hourly value.*)

**November.**

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0°·1). | Temperature. Of Evaporation (0°·1). | Temperature. Of the Dew Point (0°·1). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001). | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine. (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 66 | 17 | 13 | 17 | 326 | 35 | 0 | 0 | 0 | ... | 0 | 0 | 6 | 0 | 6 | 4 | Midnight |
| 1h | 50 | 12 | 10 | 14 | 331 | 28 | 0 | 0 | 0 | ... | 0 | 1 | 4 | 0 | 4 | 1 | 1h |
| 2 | 39 | 8 | 7 | 12 | 335 | 24 | 0 | 0 | 0 | ... | 3 | 1 | 4 | 0 | 4 | 0 | 2 |
| 3 | 32 | 3 | 2 | 8 | 339 | 16 | 0 | 0 | 0 | ... | 5 | 2 | 3 | 0 | 2 | 0 | 3 |
| 4 | 32 | 1 | 1 | 8 | 345 | 16 | 0 | 0 | 0 | ... | 12 | 3 | 6 | 3 | 5 | 2 | 4 |
| 5 | 38 | 0 | 0 | 5 | 339 | 10 | 80 | 857 | 10 | 7 | 19 | 2 | 7 | 2 | 7 | 3 | 5 |
| 6 | 52 | 10 | 11 | 19 | 350 | 39 | 22 | 232 | 9 | 65 | 22 | 4 | 8 | 4 | 6 | 4 | 6 |
| 7 | 65 | 62 | 38 | 27 | 232 | 56 | 23 | 250 | 3 | 77 | 23 | 8 | 26 | 12 | 23 | 24 | 7 |
| 8 | 69 | 93 | 44 | 17 | 136 | 35 | 12 | 125 | 5 | 79 | 31 | 25 | 46 | 24 | 42 | 50 | 8 |
| 9 | 72 | 114 | 46 | 7 | 72 | 14 | 15 | 54 | 3 | 76 | 36 | 35 | 44 | 31 | 41 | 56 | 9 |
| 10 | 66 | 128 | 50 | 6 | 43 | 12 | 0 | 0 | 0 | 79 | 36 | 43 | 48 | 35 | 47 | 68 | 10 |
| 11 | 55 | 138 | 52 | 2 | 20 | 4 | 7 | 71 | 7 | 81 | 33 | 41 | 28 | 37 | 27 | 71 | 11 |
| Noon | 43 | 144 | 53 | 1 | 7 | 2 | 2 | 18 | 3 | 82 | 28 | 40 | 23 | 35 | 21 | 72 | Noon |
| 13h | 27 | 147 | 54 | 1 | 0 | 2 | 3 | 36 | 2 | 79 | 29 | 44 | 24 | 40 | 24 | 77 | 13h |
| 14 | 13 | 146 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 31 | 50 | 18 | 47 | 21 | 73 | 14 |
| 15 | 3 | 139 | 51 | 1 | 15 | 2 | 7 | 71 | 3 | 81 | 29 | 42 | 26 | 38 | 28 | 68 | 15 |
| 16 | 0 | 129 | 49 | 4 | 37 | 8 | 0 | 0 | 0 | 71 | 26 | 40 | 30 | 37 | 27 | 60 | 16 |
| 17 | 7 | 112 | 47 | 9 | 80 | 18 | 0 | 0 | 0 | 58 | 20 | 32 | 24 | 31 | 21 | 48 | 17 |
| 18 | 23 | 88 | 42 | 17 | 147 | 35 | 0 | 0 | 0 | 3 | 20 | 21 | 20 | 22 | 16 | 34 | 18 |
| 19 | 42 | 67 | 36 | 21 | 203 | 43 | 0 | 0 | 0 | ... | 12 | 13 | 10 | 14 | 7 | 12 | 19 |
| 20 | 59 | 52 | 30 | 21 | 242 | 43 | 0 | 0 | 0 | ... | 3 | 8 | 6 | 8 | 3 | 6 | 20 |
| 21 | 71 | 38 | 25 | 21 | 278 | 43 | 0 | 0 | 0 | ... | 3 | 5 | 2 | 3 | 1 | 2 | 21 |
| 22 | 78 | 29 | 19 | 19 | 298 | 39 | 10 | 107 | 3 | ... | 3 | 5 | 2 | 3 | 0 | 1 | 22 |
| 23 | 75 | 25 | 18 | 19 | 312 | 39 | 63 | 679 | 8 | ... | 2 | 3 | 0 | 0 | 0 | 1 | 23 |
| 24 | 63 | 18 | 15 | 18 | 327 | 37 | 0 | 0 | 0 | ... | 0 | 1 | 5 | 0 | 5 | 3 | 24 |
| Means | 45·6 | 68·8 | 30·6 | 11·8 | 192·6 | 24·0 | 9·8 | ... | 2·2 | ... | 17·0 | 18·8 | 16·8 | 17·0 | 15·5 | 29·6 | Means |
| Number of Days employed. | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | Number of Days employed. |

**December.**

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·001). | Temperature. Of the Air (0°·1). | Temperature. Of Evaporation (0°·1). | Temperature. Of the Dew Point (0°·1). | Degree of Humidity (0·1%). | Elastic Force of Vapour (in. 0·001). | Rainfall. Amount (in. 0·0001). | Rainfall. Percentage (1%). | Rainfall. Duration (min. 0·1). | Percentage of Possible Bright Sunshine. (1%). | Observed Amount of Cloud (Scale 0—100). | Wind. North Component (0·1 m.p.h.). | Wind. East Component (0·1 m.p.h.). | Wind. Resultant. Direction (1°). | Wind. Resultant. Velocity (0·1 m.p.h.). | Wind. Observed Velocity (0·1 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 64 | 19 | 12 | 25 | 306 | 55 | 106 | 359 | 8 | ... | 3 | 1 | 6 | 4 | 5 | 6 | Midnight |
| 1h | 49 | 15 | 11 | 24 | 314 | 53 | 72 | 245 | 27 | ... | 6 | 1 | 4 | 3 | 3 | 6 | 1h |
| 2 | 38 | 11 | 8 | 23 | 320 | 50 | 23 | 76 | 18 | ... | 10 | 1 | 4 | 3 | 4 | 6 | 2 |
| 3 | 30 | 8 | 7 | 22 | 330 | 48 | 16 | 54 | 11 | ... | 8 | 0 | 2 | 1 | 3 | 4 | 3 |
| 4 | 29 | 4 | 3 | 19 | 329 | 41 | 66 | 223 | 21 | ... | 8 | 1 | 1 | 1 | 1 | 2 | 4 |
| 5 | 34 | 0 | 0 | 17 | 334 | 37 | 140 | 473 | 19 | 11 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| 6 | 46 | 6 | 7 | 24 | 337 | 53 | 53 | 179 | 21 | 65 | 11 | 1 | 3 | 2 | 3 | 3 | 6 |
| 7 | 58 | 51 | 29 | 30 | 235 | 67 | 10 | 33 | 11 | 80 | 17 | 2 | 25 | 10 | 23 | 25 | 7 |
| 8 | 61 | 82 | 34 | 20 | 135 | 44 | 5 | 16 | 16 | 90 | 24 | 7 | 55 | 18 | 51 | 57 | 8 |
| 9 | 60 | 102 | 36 | 9 | 71 | 19 | 42 | 141 | 27 | 80 | 24 | 21 | 66 | 26 | 60 | 69 | 9 |
| 10 | 55 | 117 | 40 | 7 | 41 | 15 | 6 | 22 | 3 | 84 | 25 | 33 | 65 | 32 | 59 | 76 | 10 |
| 11 | 48 | 125 | 42 | 6 | 23 | 13 | 21 | 71 | 6 | 79 | 26 | 37 | 63 | 34 | 58 | 79 | 11 |
| Noon | 38 | 130 | 43 | 5 | 11 | 11 | 11 | 38 | 5 | 77 | 31 | 40 | 67 | 35 | 62 | 81 | Noon |
| 13h | 26 | 132 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 29 | 48 | 69 | 39 | 65 | 84 | 13h |
| 14 | 15 | 131 | 40 | 0 | 1 | 0 | 0 | 0 | 0 | 71 | 28 | 41 | 64 | 36 | 59 | 79 | 14 |
| 15 | 6 | 127 | 39 | 0 | 8 | 0 | 0 | 0 | 0 | 70 | 27 | 33 | 60 | 32 | 54 | 70 | 15 |
| 16 | 0 | 119 | 37 | 1 | 24 | 2 | 0 | 0 | 0 | 67 | 25 | 28 | 58 | 29 | 52 | 68 | 16 |
| 17 | 7 | 104 | 35 | 7 | 62 | 15 | 0 | 0 | 0 | 55 | 21 | 27 | 59 | 28 | 53 | 71 | 17 |
| 18 | 20 | 83 | 32 | 15 | 122 | 33 | 0 | 0 | 0 | 5 | 20 | 17 | 44 | 23 | 38 | 50 | 18 |
| 19 | 42 | 61 | 27 | 21 | 187 | 46 | 8 | 27 | 11 | ... | 13 | 11 | 23 | 16 | 18 | 26 | 19 |
| 20 | 56 | 48 | 24 | 25 | 226 | 55 | 8 | 27 | 5 | ... | 7 | 9 | 9 | 12 | 6 | 13 | 20 |
| 21 | 67 | 38 | 20 | 25 | 254 | 55 | 27 | 92 | 13 | ... | 4 | 6 | 7 | 8 | 4 | 10 | 21 |
| 22 | 74 | 32 | 17 | 24 | 269 | 53 | 8 | 27 | 5 | ... | 0 | 5 | 5 | 7 | 3 | 5 | 22 |
| 23 | 74 | 25 | 16 | 26 | 290 | 57 | 11 | 38 | 10 | ... | 1 | 0 | 4 | 2 | 4 | 5 | 23 |
| 24 | 62 | 19 | 13 | 26 | 306 | 57 | 106 | 359 | 8 | ... | 0 | 0 | 6 | 3 | 6 | 6 | 24 |
| Means | 42·4 | 63·6 | 24·5 | 16·0 | 181·4 | 35·2 | 29·6 | ... | 9·8 | ... | 14·9 | 14·8 | 30·8 | 16·2 | 27·8 | 36·0 | Means |
| Number of Days employed. | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | 31 | Number of Days employed. |

* Hours reckoned from *apparent* midnight.

## MEAN DIURNAL INEQUALITY of the METEOROLOGICAL ELEMENTS, for the YEAR 1909.

*(Each result is the mean of twelve monthly mean values, the annual means for each element being diminished by the smallest hourly value).*

| Hour, Mauritius Standard Time. | Barometric Pressure (in. 0·0001). | Temperature. Of the Air (0·01°). | Temperature. Of Evaporation (0·01°). | Temperature. Of the Dew Point (0·01°). | Degree of Humidity (0·01%). | Elastic Force of Vapour (in. 0·0001). | Rainfall. Amount (in. 0·00001). | Rainfall. Percentage (0·1 %). | Rainfall. Duration (min. 0·01). | Percentage of Possible Bright Sunshine.* (0·1 %). | Observed Amount of Cloud (Scale 0—1000). | Wind. North Component (0·01 m.p.h.). | Wind. East Component (0·01 m.p.h.). | Wind. Resultant. Direction (0·1°). | Wind. Resultant. Velocity (0·01 m.p.h.). | Wind. Observed Velocity (0·01 m.p.h.). | Hour, Mauritius Standard Time. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Midnight | 578 | 113 | 87 | 69 | 2421 | 157 | 347 | 1418 | 89 | ... | 52 | 15 | 25 | 19 | 19 | 22 | Midnight |
| 1h | 468 | 93 | 72 | 56 | 2442 | 126 | 357 | 1455 | 191 | ... | 78 | 11 | 19 | 15 | 15 | 17 | 1h |
| 2 | 355 | 67 | 52 | 43 | 2475 | 96 | 443 | 1814 | 178 | ... | 115 | 5 | 0 | 1 | 0 | 0 | 2 |
| 3 | 258 | 45 | 35 | 31 | 2506 | 69 | 666 | 2830 | 207 | ... | 114 | 7 | 3 | 5 | 2 | 4 | 3 |
| 4 | 223 | 21 | 20 | 22 | 2557 | 49 | 282 | 1224 | 141 | ... | 82 | 2 | 5 | 0 | 6 | 13 | 4 |
| 5 | 244 | 0 | 0 | 0 | 2549 | 0 | 177 | 759 | 128 | 82 | 82 | 0 | 16 | 5 | 17 | 22 | 5 |
| 6 | 342 | 8 | 16 | 24 | 2599 | 53 | 49 | 220 | 67 | 403 | 117 | 9 | 21 | 13 | 17 | 17 | 6 |
| 7 | 473 | 224 | 155 | 108 | 2248 | 245 | 0 | 0 | 50 | 680 | 128 | 16 | 83 | 40 | 71 | 80 | 7 |
| 8 | 572 | 558 | 325 | 168 | 1510 | 375 | 113 | 484 | 71 | 767 | 150 | 49 | 257 | 107 | 223 | 274 | 8 |
| 9 | 652 | 788 | 392 | 121 | 823 | 272 | 191 | 777 | 61 | 772 | 190 | 84 | 480 | 160 | 432 | 535 | 9 |
| 10 | 636 | 927 | 428 | 96 | 442 | 222 | 276 | 1181 | 0 | 790 | 225 | 148 | 574 | 201 | 514 | 662 | 10 |
| 11 | 531 | 1013 | 451 | 74 | 208 | 177 | 225 | 962 | 53 | 781 | 232 | 186 | 571 | 219 | 507 | 713 | 11 |
| Noon | 391 | 1067 | 463 | 67 | 74 | 165 | 198 | 864 | 46 | 771 | 241 | 206 | 552 | 229 | 486 | 738 | Noon |
| 13h | 207 | 1083 | 460 | 48 | 0 | 118 | 408 | 1719 | 14 | 743 | 242 | 199 | 536 | 225 | 471 | 745 | 13h |
| 14 | 83 | 1063 | 445 | 41 | 22 | 103 | 171 | 731 | 3 | 718 | 237 | 194 | 500 | 220 | 435 | 717 | 14 |
| 15 | 0 | 1004 | 424 | 38 | 143 | 97 | 321 | 1382 | 87 | 677 | 242 | 155 | 483 | 198 | 423 | 656 | 15 |
| 16 | 5 | 913 | 391 | 42 | 342 | 103 | 193 | 854 | 18 | 613 | 228 | 131 | 441 | 181 | 385 | 575 | 16 |
| 17 | 81 | 768 | 346 | 60 | 703 | 142 | 147 | 632 | 32 | 375 | 177 | 103 | 354 | 156 | 304 | 457 | 17 |
| 18 | 202 | 583 | 291 | 92 | 1229 | 208 | 38 | 193 | 38 | 34 | 153 | 85 | 178 | 116 | 137 | 234 | 18 |
| 19 | 375 | 413 | 227 | 99 | 1683 | 223 | 279 | 1101 | 28 | ... | 51 | 69 | 69 | 77 | 38 | 89 | 19 |
| 20 | 526 | 304 | 180 | 93 | 1955 | 211 | 144 | 557 | 32 | ... | 10 | 37 | 57 | 48 | 39 | 59 | 20 |
| 21 | 643 | 238 | 147 | 88 | 2120 | 198 | 285 | 1164 | 97 | ... | 0 | 26 | 40 | 33 | 27 | 43 | 21 |
| 22 | 677 | 191 | 124 | 78 | 2221 | 178 | 148 | 647 | 107 | ... | 13 | 20 | 30 | 25 | 21 | 34 | 22 |
| 23 | 656 | 153 | 105 | 72 | 2315 | 163 | 142 | 612 | 52 | ... | 44 | 14 | 29 | 20 | 22 | 38 | 23 |
| 24 | 579 | 120 | 87 | 65 | 2390 | 147 | 191 | 1418 | 58 | ... | 52 | 14 | 26 | 18 | 20 | 23 | 24 |
| Mean | 390 | 470 | 229 | 68 | 1519 | 156 | 232 | ... | 74 | ... | 130 | 714 | 214 | 93 | 185 | 271 | Mean |

## NUMBER of HOURS of PREVALENCE of each WIND referred to DIFFERENT POINTS of AZIMUTH, as recorded by the BECKLEY ANEMOGRAPH.

| Month. | 1909. North. | N.N.E. | N.E. | E.N.E. | East. | E.S.E. | S.E. | S.S.E. | South. | S.S.W. | S.W. | W.S.W. | West. | W.N.W. | N.W. | N.N.W. | Calm. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. | hrs. |
| January ... | 3 | 4 | 16 | 156 | 300 | 166 | 46 | 15 | 4 | 6 | 2 | 11 | 6 | 1 | 6 | 2 | 0 |
| February ... | 23 | 12 | 30 | 79 | 111 | 132 | 78 | 12 | 13 | 10 | 10 | 31 | 28 | 25 | 50 | 28 | 0 |
| March ... ... | 1 | 2 | 8 | 47 | 173 | 249 | 109 | 100 | 13 | 11 | 5 | 10 | 12 | 3 | 0 | 1 | 0 |
| April ... ... | 13 | 8 | 19 | 55 | 229 | 276 | 62 | 26 | 2 | 2 | 5 | 1 | 11 | 2 | 0 | 9 | 0 |
| May ... ... | 6 | 11 | 6 | 24 | 110 | 309 | 146 | 57 | 8 | 5 | 3 | 9 | 29 | 13 | 7 | 1 | 0 |
| June ... ... | 0 | 0 | 3 | 4 | 154 | 409 | 75 | 37 | 19 | 5 | 1 | 7 | 6 | 0 | 0 | 0 | 0 |
| July ... ... | 1 | 10 | 11 | 70 | 198 | 361 | 80 | 8 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 |
| August... ... | 0 | 0 | 0 | 12 | 239 | 382 | 76 | 19 | 10 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 0 |
| September ... | 4 | 1 | 14 | 92 | 322 | 238 | 44 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| October ... | 0 | 1 | 3 | 64 | 232 | 358 | 60 | 16 | 4 | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 0 |
| November ... | 10 | 17 | 41 | 109 | 222 | 178 | 46 | 19 | 2 | 4 | 5 | 13 | 25 | 10 | 10 | 9 | 0 |
| December ... | 15 | 12 | 42 | 97 | 221 | 240 | 74 | 14 | 8 | 5 | 3 | 2 | 3 | 5 | 3 | 0 | 0 |
| Total ... | 76 | 78 | 193 | 809 | 2511 | 3298 | 896 | 328 | 84 | 49 | 36 | 90 | 125 | 61 | 76 | 50 | ... |

* Hours reckoned from *apparent* midnight.

DIRECTION of MOTION of the various Types of CLOUD as derived from Observations with the MARVIN NEPHOSCOPE, during the YEAR 1909.

*The values represent the direction from which the clouds come; counting from South (0°), to East (90°), North (180°), West (270°).*

### Cirrus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 8.13 | 302 |
| 8.15 | 297 |
| 9. 9 | 240 |
| 9.12 | 247 |
| 12. 9 | 277 |
| 12.13 | 282 |
| 13.15 | 257 |
| 14.12 | 257 |
| 20. 9 | 277 |
| 20.12 | 277 |
| 21. 9 | 277 |
| 21.15 | 262 |
| 25. 8 | 266 |
| 25.13 | 256 |
| 25.15 | 250 |
| **Feb.** | |
| 2.10 | 284 |
| 2.12 | 293 |
| 3. 9 | 271 |
| 3.12 | 274 |
| 3.15 | 266 |
| 4. 9 | 304 |
| 4.12 | 316 |
| 4.15 | 324 |
| 5.15 | 296 |
| 10.10 | 292 |
| 10.12 | 286 |
| 11.15 | 276 |
| 12.10 | 276 |
| 12.12 | 266 |
| 13.12 | 286 |
| 13.14 | 290 |
| 19.15 | 286 |
| 22.12 | 286 |
| 22.15 | 296 |
| 24.10 | 246 |
| 26.10 | 292 |
| 26.12 | 290 |
| **March** | |
| 1. 8 | 256 |
| 2. 9 | 282 |
| 3.13 | 280 |
| 8. 9 | 66 |
| 9.13 | 250 |
| 10.13 | 246 |
| 11. 9 | 264 |
| 11.13 | 246 |
| 11.15 | 240 |
| 13.10 | 276 |
| 15. 9 | 316 |
| 15.12 | 306 |
| 15.15 | 296 |
| 18.15 | 350 |
| 23. 9 | 192 |
| 23.13 | 196 |
| 25.10 | 266 |
| **April** | |
| 5. 9 | 255 |
| 5.13 | 266 |
| 5.15 | 274 |
| 6. 9 | 240 |

| M.S.T. | Direction. |
|---|---|
| **April** | |
| d h | ° |
| 6.13 | 246 |
| 8.13 | 266 |
| 13. 8 | 260 |
| 21.15 | 256 |
| 22. 9 | 266 |
| 22.15 | 270 |
| 23.11 | 256 |
| 29. 9 | 196 |
| 29.15 | 246 |
| **May** | |
| 3.15 | 230 |
| 25.10 | 206 |
| **June** | |
| 16. 8 | 166 |
| **July** | |
| 13. 9 | 252 |
| 13.13 | 247 |
| **Oct.** | |
| 21. 9 | 240 |
| 28.11 | 250 |
| **Nov.** | |
| 3. 9 | 266 |
| 3.13 | 256 |
| 3.15 | 260 |
| 4. 9 | 260 |
| 5.15 | 256 |
| 6. 9 | 276 |
| 11.13 | 246 |
| 11.15 | 254 |
| 29.12 | 262 |
| 29.15 | 266 |
| 30. 9 | 256 |
| 30.12 | 254 |
| 30.15 | 256 |
| **Dec.** | |
| 1. 9 | 266 |
| 2.12 | 230 |
| 2.15 | 240 |
| 3. 9 | 246 |
| 3.13 | 252 |
| 17. 9 | 256 |
| 17.15 | 256 |
| 18.14 | 276 |
| 27. 9 | 250 |
| 27.15 | 306 |

### Cirro-Stratus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 9. 9 | 247 |
| 9.12 | 247 |

### Cirro-Stratus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 12. 9 | 277 |
| 13.15 | 257 |
| 14.12 | 257 |
| 20. 9 | 277 |
| 20.12 | 277 |
| 21.15 | 262 |
| 25. 8 | 260 |
| 25.13 | 256 |
| 25.15 | 250 |
| **Feb.** | |
| 2.10 | 284 |
| 3. 9 | 271 |
| 3.12 | 274 |
| 3.15 | 266 |
| 4. 9 | 304 |
| 4.12 | 316 |
| 4.15 | 324 |
| 5.15 | 296 |
| 10.10 | 292 |
| 10.12 | 286 |
| 11.15 | 276 |
| 12.10 | 276 |
| 12.12 | 266 |
| 22.15 | 296 |
| 26.10 | 292 |
| **March** | |
| 1. 8 | 256 |
| 8. 9 | 66 |
| 9.13 | 250 |
| 11. 9 | 264 |
| 11.13 | 246 |
| 11.15 | 240 |
| 13.10 | 276 |
| 15. 9 | 316 |
| 15.12 | 306 |
| 15.15 | 296 |
| 18.15 | 350 |
| 23. 9 | 192 |
| 23.13 | 196 |
| 25.10 | 266 |
| **April** | |
| 5.15 | 274 |
| 6. 9 | 240 |
| 6.13 | 246 |
| 8.13 | 266 |
| 22. 9 | 266 |
| 22.15 | 270 |
| 29. 9 | 196 |
| 29.15 | 246 |
| **July** | |
| 13. 9 | 252 |
| 13.13 | 247 |
| **Oct.** | |
| 21. 9 | 240 |
| **Nov.** | |
| 3. 9 | 266 |

### Cirro-Stratus.

| M.S.T. | Direction. |
|---|---|
| **Nov.** | |
| d h | ° |
| 3.13 | 256 |
| 3.15 | 260 |
| 4. 9 | 260 |
| 11.15 | 254 |
| 29.12 | 262 |
| 29.15 | 266 |
| 30. 9 | 256 |
| 30.12 | 254 |
| 30.15 | 256 |
| **Dec.** | |
| 1. 9 | 266 |
| 2.12 | 230 |
| 2.15 | 240 |
| 3. 9 | 246 |
| 3.13 | 252 |
| 17. 9 | 256 |
| 17.12 | 266 |
| 18.14 | 276 |
| 27. 9 | 250 |

### Cirro-Cumulus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 9. 9 | 246 |
| 13. 9 | 187 |
| 13.13 | 196 |
| 14. 9 | 187 |
| 16.14 | 52 |
| 18.15 | 257 |
| 21. 9 | 202 |
| **Feb.** | |
| 2.15 | 296 |
| 5. 9 | 286 |
| 10. 8 | 194 |
| 10.15 | 180 |
| 11.11 | 256 |
| 24.15 | 326 |
| 25. 9 | 300 |
| 26.15 | 290 |
| **March** | |
| 2. 9 | 282 |
| 3.11 | 130 |
| 4.12 | 286 |
| 8. 9 | 250 |
| 9.15 | 246 |
| 10.13 | 246 |
| 11. 9 | 276 |
| 12.12 | 226 |
| 12.15 | 220 |
| 17.15 | 356 |
| 18. 9 | 36 |
| 18.12 | 26 |
| 19. 9 | 316 |
| 20. 9 | 336 |
| 20.12 | 326 |
| **April** | |
| 5. 9 | 255 |
| 5.15 | 274 |

### Cirro-Cumulus.

| M.S.T. | Direction. |
|---|---|
| **April** | |
| d h | ° |
| 14.13 | 256 |
| 21.15 | 256 |
| 23.11 | 256 |
| 27. 9 | 206 |
| 28. 9 | 186 |
| 29. 9 | 196 |
| **May** | |
| 3.13 | 250 |
| 4. 9 | 240 |
| 5.13 | 305 |
| 15.14 | 356 |
| 17.10 | 246 |
| 17.12 | 252 |
| 17.15 | 256 |
| 18. 9 | 16 |
| 18.15 | 10 |
| 20.11 | 110 |
| 25.10 | 206 |
| **June** | |
| 5.13 | 112 |
| 7. 9 | 242 |
| 8. 9 | 236 |
| 8.12 | 246 |
| 8.15 | 250 |
| 11.12 | 266 |
| 12. 9 | 266 |
| 16. 8 | 166 |
| 16.15 | 174 |
| 17.15 | 190 |
| 21. 9 | 126 |
| 21.12 | 136 |
| 22.12 | 192 |
| 22.15 | 188 |
| 23.12 | 296 |
| 23.15 | 300 |
| 24. 9 | 304 |
| 24.12 | 310 |
| 25. 9 | 270 |
| 26. 8 | 250 |
| 28.15 | 166 |
| 29. 9 | 247 |
| **July** | |
| 6.12 | 142 |
| 6.15 | 135 |
| 13.15 | 122 |
| 14. 8 | 137 |
| 17.14 | 192 |
| 27. 9 | 117 |
| 27.12 | 115 |
| **Aug.** | |
| 6. 9 | 272 |
| 18.15 | 147 |
| 23. 9 | 122 |
| 27. 9 | 116 |
| 30.15 | 110 |
| 31. 9 | 276 |
| **Sept.** | |
| 4. 9 | 52 |

### Alto-Cumulus.

| M.S.T. | Direction. |
|---|---|
| **Oct.** | |
| d h | ° |
| 11. 9 | 112 |
| 11.15 | 156 |
| 13.15 | 196 |
| 21. 9 | 240 |
| **Nov.** | |
| 5.14 | 260 |
| 16.15 | 180 |
| 17.15 | 12 |
| **Dec.** | |
| 2.12 | 210 |
| 10. 9 | 96 |
| 17.15 | 250 |
| 20.12 | 296 |
| 27.15 | 306 |
| 28.15 | 307 |
| 29. 9 | 327 |
| 29.15 | 12 |

### Alto-Cumulus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 11. 8 | 142 |
| 11.15 | 127 |
| 13.12 | 197 |
| 14. 9 | 187 |
| 16.14 | 102 |
| 19. 9 | 132 |
| 20.15 | 22 |
| **Feb.** | |
| 10. 8 | 194 |
| 11.11 | 256 |
| 11.12 | 264 |
| 24.10 | 340 |
| 24.15 | 326 |
| 25. 9 | 300 |
| **March** | |
| 9. 9 | 270 |
| 12. 9 | 220 |
| 12.15 | 220 |
| 16.10 | 26 |
| 19.11 | 12 |
| 20.14 | 320 |
| **April** | |
| 1.12 | 26 |
| 2. 9 | 90 |
| 5.13 | 266 |
| 6.15 | 244 |
| 14.13 | 256 |
| 27.15 | 222 |
| **May** | |
| 17. [illegible] | 246 |
| [illegible] | 252 |
| 17.15 | 256 |
| **June** | |
| 8.12 | 246 |

### Alto-Cumulus.

| M.S.T. | Direction. |
|---|---|
| **June** | |
| d h | ° |
| 8.15 | 250 |
| 11.15 | 266 |
| 12. 9 | 266 |
| 16.12 | 168 |
| 16.15 | 174 |
| 17.13 | 180 |
| 17.15 | 190 |
| 21. 9 | 126 |
| 22.15 | 188 |
| 23. 9 | 116 |
| 24.12 | 310 |
| 25. 9 | 270 |
| 28.10 | 150 |
| 28.13 | 160 |
| **July** | |
| 2. 9 | 55 |
| 3. 9 | 107 |
| 6.15 | 135 |
| 12.12 | 312 |
| 14.15 | 287 |
| 15. 9 | 117 |
| 30. 9 | 62 |
| **Aug.** | |
| 1.12 | 315 |
| 4.12 | 30 |
| 5.11 | 122 |
| 6. 9 | 272 |
| 27. 9 | 116 |
| **Sept.** | |
| 10.15 | 106 |
| 11. 9 | 175 |
| 11.13 | 356 |
| 28.15 | 96 |
| **Oct.** | |
| 1.15 | 266 |
| 4. 9 | 116 |
| 5. 9 | 110 |
| 11. 9 | 112 |
| 11.15 | 156 |
| 15.15 | 132 |
| 16. 9 | 122 |
| 26.15 | 116 |
| 29. 9 | 126 |
| **Nov.** | |
| 10.15 | 266 |
| 16.15 | 180 |
| 20. 9 | 110 |
| 22.15 | 262 |
| 24.15 | 102 |
| 26. 9 | 86 |
| 26.13 | 82 |
| 29. 9 | 76 |
| **Dec.** | |
| 4.13 | 26 |
| 8. 9 | 76 |
| 10.12 | 80 |
| 16.15 | 114 |
| 20. 9 | 306 |
| 21.15 | 120 |
| 29.15 | 12 |

### Cumulo-Stratus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 5. 9 | 92 |
| 5.15 | 65 |
| 6. 9 | 37 |
| 6.12 | 27 |
| 6.15 | 14 |
| 9.14 | 27 |
| 16. 9 | 112 |
| 27.15 | 16 |
| 29.11 | 86 |
| **Feb.** | |
| 4.15 | 356 |
| 18.12 | 16 |
| 18.15 | 14 |
| 19.10 | 12 |
| 19.12 | 24 |
| 24.10 | 54 |
| 24.12 | 60 |
| 25.15 | 42 |
| 26.15 | 240 |
| **March** | |
| 4.15 | 32 |
| 5.15 | 12 |
| 9. 9 | 56 |
| 9.12 | 78 |
| 10. 9 | 66 |
| 10.15 | 76 |
| 16.10 | 356 |
| 16.15 | 356 |
| 17.10 | 16 |
| 17.12 | 12 |
| 18. 9 | 42 |
| 18.12 | 50 |
| 19.13 | 22 |
| 19.15 | 22 |
| 20.12 | 10 |
| 22. 9 | 56 |
| 22.12 | 60 |
| 22.14 | 65 |
| 23. 9 | 80 |
| 23.15 | 76 |
| 24. 9 | 90 |
| 24.13 | 96 |
| 24.15 | 90 |
| 25. 9 | 78 |
| 26.12 | 100 |
| 27. 9 | 86 |
| 31. 9 | 54 |
| **April** | |
| 1. 9 | 56 |
| 2. 9 | 75 |
| 6.15 | 84 |
| 7. 9 | 82 |
| 10.14 | 92 |
| 16.12 | 34 |
| 16.15 | 40 |
| 17.10 | 48 |
| 17.12 | 44 |
| 17.14 | 46 |
| 20. 9 | 46 |
| 20.15 | 46 |
| 27.15 | 30 |

### Cumulo-Stratus.

| M.S.T. | Direction. |
|---|---|
| **May** | |
| d h | ° |
| 5.10 | 22 |
| 5.15 | 24 |
| 7.11 | 52 |
| 7.15 | 56 |
| 8. 9 | 46 |
| 8.14 | 58 |
| 10. 9 | 42 |
| 10.12 | 36 |
| 10.15 | 30 |
| 15. 9 | 66 |
| 18. 9 | 64 |
| 25.12 | 346 |
| 26.11 | 16 |
| 26.15 | 336 |
| 27.10 | 14 |
| 27.15 | 20 |
| 28.11 | 342 |
| 28.13 | 336 |
| 29. 9 | 46 |
| 29.14 | 34 |
| 31. 9 | 68 |
| 31.12 | 72 |
| 31.15 | 66 |
| **June** | |
| 1.13 | 74 |
| 1.15 | 64 |
| 2. 9 | 64 |
| 4.15 | 46 |
| 5.14 | 74 |
| 7. 9 | 66 |
| 7.12 | 70 |
| 7.15 | 66 |
| 11.12 | 80 |
| 12.12 | 346 |
| 12.14 | 348 |
| 14. 9 | 42 |
| 14.12 | 46 |
| 14.15 | 40 |
| 15.10 | 56 |
| 15.12 | 64 |
| 15.15 | 56 |
| 16.13 | 29 |
| 16.15 | 36 |
| 17.10 | 56 |
| 17.12 | 56 |
| 17.15 | 52 |
| 19.14 | 90 |
| 21.15 | 60 |
| 22. 9 | 94 |
| 25.12 | 246 |
| 25.15 | 280 |
| 26. 9 | 40 |
| 28. 9 | 56 |
| 28.13 | 56 |
| 29.12 | 57 |
| 30.10 | 61 |
| 30.12 | 67 |
| **July** | |
| 1.15 | 50 |
| 2.12 | 81 |
| 3. 9 | 60 |
| 5. 9 | 86 |
| 5.12 | 92 |

### Cumulo-Stratus.

| M.S.T. | Direction. |
|---|---|
| **July** | |
| d h | ° |
| 5.15 | 87 |
| 8.12 | 72 |
| 8.15 | 65 |
| 9. 9 | 62 |
| 9.12 | 67 |
| 10. 9 | 78 |
| 10.13 | 77 |
| 10.14 | 74 |
| 12. 9 | 47 |
| 12.15 | 45 |
| 14. 9 | 57 |
| 14.13 | 92 |
| 16.10 | 107 |
| 16.12 | 117 |
| 16.15 | 112 |
| 17. 9 | 157 |
| 17.12 | 167 |
| 17.14 | 147 |
| 19.15 | 77 |
| 20.12 | 67 |
| 21. 9 | 77 |
| 21.15 | 77 |
| 23. 9 | 67 |
| 23.12 | 62 |
| 26. 9 | 79 |
| 26.12 | 92 |
| 26.15 | 75 |
| 29.12 | 57 |
| 29.15 | 62 |
| 31.12 | 35 |
| 31.14 | 20 |
| **Aug.** | |
| 2.10 | 45 |
| 2.15 | 42 |
| 3.11 | 57 |
| 3.13 | 53 |
| 4. 9 | 63 |
| 5. 9 | 107 |
| 5.15 | 86 |
| 9. 9 | 32 |
| 9.13 | 37 |
| 9.15 | 42 |
| 10. 9 | 57 |
| 10.15 | 57 |
| 11.10 | 37 |
| 12.10 | 67 |
| 12.13 | 67 |
| 12.15 | 62 |
| 13. 9 | 72 |
| 17. 9 | 47 |
| 19. 9 | 57 |
| 19.12 | 61 |
| 20. 9 | 67 |
| 23.12 | 82 |
| 23.15 | 75 |
| 24. 9 | 76 |
| 24.15 | 70 |
| 26. 9 | 60 |
| 26.12 | 56 |
| 27. 9 | 80 |
| 27.12 | 85 |
| 27.15 | 76 |
| 28.12 | 82 |
| 30.15 | 66 |
| 31. 9 | 70 |
| 31.12 | 66 |

## DIRECTION of MOTION of the various Types of CLOUD—*continued.*

### Cumulo-Stratus.

| M.S.T. | Direction. | M.S.T. | Direction. |
|---|---|---|---|
| **Sept.** | | **Nov.** | |
| d h | ° | d h | ° |
| 1. 9 | 88 | 8.10 | 214 |
| 1.12 | 86 | 8.15 | 196 |
| 2.12 | 82 | 11.15 | 12 |
| 3.12 | 76 | 12.12 | 6 |
| 4. 9 | 96 | 12.15 | 14 |
| 6.12 | 86 | 13.14 | 80 |
| 7.12 | 72 | 16.12 | 90 |
| 7.15 | 75 | 18. 9 | 106 |
| 9. 9 | 96 | 23.12 | 246 |
| 9.13 | 91 | 23.15 | 262 |
| 13.15 | 6 | 24. 9 | 46 |
| 14.13 | 346 | 24.12 | 46 |
| 14.15 | 342 | 24.15 | 52 |
| 15.15 | 346 | 25.12 | 86 |
| 16.15 | 6 | 25.15 | 12 |
| 17.12 | 80 | 26.15 | 26 |
| 17.15 | 12 | 27.14 | 26 |
| 18.12 | 330 | | |
| 22.10 | 125 | **Dec.** | |
| 22.12 | 135 | | |
| 22.15 | 119 | 3. 8 | 90 |
| 23.13 | 75 | 4.14 | 78 |
| 23.15 | 77 | 6.12 | 344 |
| 24.15 | 87 | 6.15 | 336 |
| 28. 9 | 76 | 16. 9 | 104 |
| 28.12 | 80 | 16.12 | 116 |
| 30.12 | 26 | 16.15 | 130 |
| 30.15 | 20 | 18.12 | 22 |
| | | 18.14 | 20 |
| | | 20.13 | 256 |
| | | 20.15 | 34 |
| **Oct.** | | 21. 9 | 76 |
| | | 23.12 | 86 |
| | | 23.15 | 90 |
| 1. 9 | 82 | 24. 9 | 88 |
| 1.12 | 82 | 24.12 | 82 |
| 1.15 | 76 | 24.15 | 76 |
| 2. 9 | 82 | | |
| 5.15 | 84 | | |
| 6. 9 | 76 | | |
| 6.13 | 78 | | |
| 6.15 | 74 | | |
| 7. 9 | 74 | | |
| 7.12 | 80 | | |
| 8.10 | 84 | | |
| 13. 9 | 70 | | |
| 14. 9 | 64 | | |
| 14.12 | 68 | | |
| 18. 9 | 70 | | |
| 18.13 | 68 | | |
| 19.13 | 78 | | |
| 21.13 | 346 | | |
| 21.15 | 332 | | |
| 22. 9 | 56 | | |
| 23. 9 | 34 | | |
| 23.14 | 56 | | |
| 25. 9 | 76 | | |
| 25.15 | 64 | | |
| 26. 9 | 76 | | |
| 26.13 | 68 | | |
| 26.15 | 74 | | |
| 27.12 | 78 | | |
| 28. 9 | 76 | | |
| 29.10 | 86 | | |
| 29.15 | 92 | | |

### Cumulus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 4. 9 | 65 |
| 4.12 | 67 |
| 4.15 | 65 |
| 5.12 | 82 |
| 5.15 | 72 |
| 6. 9 | 57 |
| 7. 9 | 267 |
| 7.12 | 247 |
| 7.15 | 267 |
| 11. 8 | 87 |
| 11.15 | 82 |
| 12. 9 | 92 |
| 13. 9 | 97 |
| 13.12 | 91 |
| 13.15 | 85 |
| 14. 9 | 92 |

| M.S.T. | Direction. | M.S.T. | Direction. |
|---|---|---|---|
| **Jan.** | | **Feb.** | |
| d h | ° | d h | ° |
| 14.12 | 97 | 22.13 | 196 |
| 15. 9 | 95 | 22.15 | 216 |
| 15.12 | 97 | 24.10 | 58 |
| 15.15 | 97 | 26.14 | 246 |
| 16. 9 | 107 | 27. 9 | 26 |
| 16.14 | 117 | 27.14 | 346 |
| 18. 9 | 104 | | |
| 18.12 | 107 | **March** | |
| 18.15 | 100 | | |
| 19. 9 | 117 | 1. 9 | 56 |
| 19.15 | 132 | 2. 9 | 68 |
| 20. 9 | 67 | 3. 9 | 70 |
| 20.12 | 72 | 3.13 | 108 |
| 20.15 | 67 | 4. 9 | 82 |
| 21. 9 | 87 | 4.12 | 80 |
| 21.15 | 87 | 5. 9 | 78 |
| 23. 9 | 107 | 5.12 | 76 |
| 25. 9 | 81 | 5.15 | 74 |
| 25.12 | 86 | 6. 9 | 86 |
| 25.15 | 88 | 6.12 | 90 |
| 26. 9 | 81 | 8. 9 | 66 |
| 26.12 | 81 | 10.11 | 76 |
| 26.15 | 76 | 10.12 | 82 |
| 27. 9 | 71 | 10.15 | 76 |
| 27.12 | 74 | 11. 9 | 104 |
| 27.15 | 71 | 11.13 | 106 |
| 28. 9 | 76 | 11.15 | 90 |
| 28.12 | 76 | 12. 9 | 96 |
| 28.15 | 70 | 12.12 | 110 |
| 29. 9 | 66 | 12.15 | 98 |
| | | 13. 9 | 106 |
| **Feb.** | | 13.12 | 126 |
| | | 13.14 | 122 |
| 1. 9 | 81 | 15.10 | 26 |
| 1.12 | 74 | 15.12 | 333 |
| 1.15 | 70 | 16.10 | 356 |
| 2.10 | 274 | 16.12 | 353 |
| 3.15 | 230 | 17. 9 | 360 |
| 4. 9 | 266 | 17.12 | 356 |
| 5. 9 | 226 | 18. 9 | 42 |
| 5.12 | 228 | 18.12 | 12 |
| 5.15 | 242 | 18.15 | 32 |
| 6. 9 | 210 | 19.10 | 16 |
| 6.14 | 220 | 19.12 | 22 |
| 10. 8 | 210 | 20. 9 | 22 |
| 10.12 | 196 | 20.13 | 18 |
| 11.11 | 126 | 22.10 | 58 |
| 11.12 | 112 | 22.15 | 65 |
| 12.10 | 110 | 23. 9 | 90 |
| 12.12 | 106 | 23.12 | 84 |
| 13. 9 | 104 | 23.15 | 80 |
| 13.12 | 106 | 24. 9 | 84 |
| 15. 9 | 118 | 24.12 | 80 |
| 15.12 | 112 | 24.15 | 80 |
| 15.15 | 116 | 25. 9 | 86 |
| 16. 9 | 86 | 25.12 | 90 |
| 16.12 | 92 | 25.15 | 86 |
| 16.15 | 86 | 26. 9 | 86 |
| 17.12 | 100 | 26.13 | 88 |
| 17.15 | 96 | 27. 9 | 94 |
| 18.10 | 26 | 27.14 | 90 |
| 19.12 | 36 | 29. 9 | 66 |
| 20. 9 | 110 | 29.12 | 66 |
| 20.12 | 126 | 29.15 | 62 |
| 22.10 | 156 | | |

| M.S.T. | Direction. | M.S.T. | Direction. |
|---|---|---|---|
| **March** | | **May** | |
| d h | ° | d h | ° |
| 30. 9 | 56 | 3.10 | 210 |
| 30.12 | 64 | 3.13 | 218 |
| 30.15 | 60 | 3.15 | 206 |
| 31. 9 | 62 | 5. 9 | 52 |
| | | 5.15 | 46 |
| **April** | | 6.10 | 46 |
| | | 6.12 | 50 |
| 1. 9 | 64 | 7.11 | 56 |
| 1.13 | 66 | 8.12 | 70 |
| 2.12 | 60 | 11.12 | 34 |
| 2.15 | 56 | 12.12 | 51 |
| 3.11 | 58 | 12.15 | 46 |
| 3.12 | 56 | 13. 9 | 76 |
| 3.14 | 58 | 13.12 | 75 |
| 5. 9 | 86 | 13.15 | 68 |
| 5.13 | 94 | 14.12 | 69 |
| 5.15 | 90 | 15. 9 | 66 |
| 6. 9 | 78 | 15.12 | 68 |
| 6.13 | 82 | 15.14 | 66 |
| 7. 9 | 76 | 17.10 | 76 |
| 7.12 | 82 | 17.12 | 78 |
| 7.15 | 78 | 17.15 | 82 |
| 8. 9 | 78 | 18. 9 | 70 |
| 8.12 | 80 | 19. 9 | 76 |
| 8.15 | 84 | 19.12 | 69 |
| 10. 9 | 86 | 20.11 | 76 |
| 10.12 | 88 | 20.15 | 84 |
| 13. 9 | 96 | 21.10 | 90 |
| 13.15 | 110 | 21.13 | 96 |
| 14.11 | 226 | 21.15 | 90 |
| 14.13 | 236 | 22. 9 | 240 |
| 14.14 | 256 | 22.14 | 250 |
| 15.15 | 346 | 26.15 | 336 |
| 16.12 | 34 | 27.10 | 14 |
| 16.15 | 40 | 27.15 | 20 |
| 17.10 | 56 | | |
| 19.12 | 56 | **June** | |
| 19.15 | 50 | | |
| 20. 9 | 48 | 2.13 | 52 |
| 20.12 | 52 | 2.15 | 46 |
| 20.15 | 46 | 4. 9 | 56 |
| 21. 9 | 86 | 5. 9 | 66 |
| 21.15 | 66 | 5.12 | 70 |
| 22. 9 | 90 | 8. 9 | 70 |
| 22.12 | 86 | 8.13 | 66 |
| 22.15 | 82 | 8.15 | 70 |
| 23.11 | 172 | 9. 9 | 66 |
| 24. 9 | 192 | 9.12 | 70 |
| 24.12 | 180 | 9.15 | 74 |
| 24.14 | 186 | 11. 9 | 86 |
| 26. 9 | 146 | 11.15 | 70 |
| 26.13 | 163 | 14.13 | 50 |
| 26.15 | 184 | 14.15 | 46 |
| 27. 9 | 66 | 15.15 | 60 |
| 28. 9 | 82 | 21. 9 | 68 |
| 28.12 | 100 | 21.12 | 66 |
| 29.12 | 74 | 22. 9 | 84 |
| 29.15 | 78 | 22.13 | 86 |
| | | 22.15 | 80 |
| **May** | | 23. 9 | 74 |
| | | 24. 9 | 90 |
| 1. 9 | 88 | 24.12 | 96 |
| 1.14 | 116 | 25. 9 | 144 |
| | | 26. 9 | 40 |

| M.S.T. | Direction. | M.S.T. | Direction. |
|---|---|---|---|
| **June** | | **Aug** | |
| d h | ° | d h | ° |
| 26.14 | 36 | 2.15 | 42 |
| 28. 9 | 56 | 3.11 | 57 |
| 28.13 | 56 | 3.15 | 44 |
| 29.10 | 59 | 4.12 | 67 |
| 29.12 | 57 | 4.15 | 62 |
| 29.15 | 59 | 5.11 | 90 |
| 30.10 | 61 | 6. 9 | 82 |
| 30.15 | 71 | 6.13 | 74 |
| | | 7. 9 | 77 |
| **July** | | 7.13 | 77 |
| | | 7.14 | 72 |
| 1.10 | 67 | 9. 9 | 32 |
| 1.15 | 59 | 9.13 | 37 |
| 2. 9 | 77 | 9.15 | 42 |
| 2.12 | 73 | 10. 9 | 67 |
| 2.15 | 61 | 11.10 | 37 |
| 3.13 | 65 | 11.12 | 42 |
| 3.14 | 62 | 11.15 | 47 |
| 5. 9 | 79 | 12.15 | 62 |
| 7. 9 | 65 | 13. 9 | 72 |
| 7.12 | 70 | 13.12 | 67 |
| 8. 9 | 66 | 13.15 | 62 |
| 9.12 | 65 | 14. 9 | 62 |
| 9.15 | 65 | 14.12 | 65 |
| 10.10 | 78 | 14.14 | 69 |
| 10.13 | 77 | 17.12 | 42 |
| 10.14 | 74 | 18. 9 | 63 |
| 12.12 | 60 | 18.12 | 57 |
| 12.15 | 45 | 18.15 | 57 |
| 14. 9 | 95 | 19.15 | 67 |
| 15.12 | 117 | 20.12 | 82 |
| 15.15 | 105 | 20.15 | 72 |
| 19. 9 | 79 | 21. 9 | 87 |
| 20. 9 | 87 | 21.12 | 77 |
| 20.15 | 87 | 21.14 | 67 |
| 21. 9 | 77 | 23. 9 | 76 |
| 21.12 | 82 | 23.12 | 82 |
| 21.15 | 77 | 24.12 | 70 |
| 22. 9 | 87 | 24.15 | 70 |
| 22.12 | 95 | 26. 9 | 60 |
| 22.15 | 82 | 26.12 | 56 |
| 23. 9 | 67 | 27.12 | 80 |
| 23.12 | 62 | 27.15 | 80 |
| 23.15 | 57 | 28. 9 | 84 |
| 24. 9 | 92 | 28.14 | 78 |
| 24.14 | 87 | 30.10 | 76 |
| 26. 9 | 79 | 30.12 | 86 |
| 26.15 | 87 | 31. 9 | 70 |
| 27. 9 | 77 | 31.15 | 76 |
| 27.12 | 85 | | |
| 27.15 | 72 | **Sept.** | |
| 28.10 | 67 | | |
| 28.12 | 77 | 1. 9 | 88 |
| 28.15 | 70 | 1.12 | 86 |
| 29.10 | 62 | 1.15 | 80 |
| 29.12 | 57 | 2. 9 | 86 |
| 29.15 | 62 | 2.15 | 78 |
| 30.12 | 30 | 3. 9 | 69 |
| 30.15 | 32 | 3.12 | 76 |
| 31.10 | 62 | 3.15 | 74 |
| | | 4.12 | 90 |
| **Aug.** | | 6. 9 | 96 |
| | | 6.12 | 86 |
| 2.10 | 45 | 7. 9 | 68 |

| M.S.T. | Direction. | M.S.T. | Direction. |
|---|---|---|---|
| **Sept.** | | **Oct.** | |
| d h | ° | d h | ° |
| 7.12 | 72 | 12.15 | 80 |
| 7.15 | 75 | 13.12 | 78 |
| 8. 9 | 76 | 13.15 | 70 |
| 8.13 | 78 | 14. 9 | 80 |
| 8.15 | 74 | 14.15 | 76 |
| 9. 9 | 96 | 15. 9 | 86 |
| 9.13 | 91 | 15.13 | 80 |
| 9.15 | 86 | 15.15 | 86 |
| 10. 9 | 100 | 16. 9 | 94 |
| 10.12 | 96 | 16.13 | 86 |
| 10.15 | 90 | 16.14 | 96 |
| 11.12 | 110 | 18.15 | 66 |
| 11.14 | 92 | 19. 9 | 90 |
| 13. 9 | 86 | 19.13 | 78 |
| 14. 9 | 84 | 19.15 | 76 |
| 15. 9 | 78 | 20. 9 | 96 |
| 15.13 | 86 | 20.13 | 86 |
| 16. 9 | 74 | 20.15 | 84 |
| 16.12 | 80 | 21. 9 | 84 |
| 17. 9 | 76 | 21.13 | 346 |
| 17.12 | 80 | 22. 9 | 70 |
| 18. 9 | 74 | 22.12 | 68 |
| 20. 9 | 93 | 22.15 | 62 |
| 20.12 | 97 | 23. 9 | 34 |
| 20.15 | 87 | 23.13 | 58 |
| 21. 9 | 111 | 23.14 | 56 |
| 21.12 | 102 | 25. 9 | 76 |
| 21.15 | 97 | 25.12 | 66 |
| 23. 9 | 83 | 25.15 | 64 |
| 23.13 | 75 | 26.15 | 74 |
| 24. 9 | 91 | 27.15 | 86 |
| 24.12 | 79 | 28.13 | 88 |
| 25. 9 | 67 | 28.15 | 70 |
| 25.13 | 83 | 30. 9 | 84 |
| 25.14 | 75 | 30.12 | 68 |
| 27. 9 | 88 | | |
| 27.13 | 84 | **Nov.** | |
| 27.15 | 86 | | |
| 28.15 | 68 | 3. 9 | 74 |
| 29. 9 | 84 | 3.13 | 68 |
| 29.15 | 74 | 4. 9 | 116 |
| 30. 9 | 74 | 4.13 | 108 |
| 30.15 | 76 | 4.15 | 110 |
| | | 5. 9 | 120 |
| **Oct.** | | 5.15 | 116 |
| | | 6. 9 | 86 |
| 1.15 | 76 | 6.14 | 84 |
| 2. 9 | 82 | 10.15 | 340 |
| 2.13 | 68 | 11. 9 | 36 |
| 2.14 | 72 | 11.13 | 65 |
| 4. 9 | 86 | 12. 9 | 56 |
| 4.12 | 76 | 13. 9 | 60 |
| 5. 9 | 80 | 13.13 | 36 |
| 5.12 | 80 | 15.10 | 120 |
| 7. 9 | 78 | 15.12 | 96 |
| 7.15 | 80 | 15.15 | 100 |
| 8.12 | 74 | 16.12 | 90 |
| 8.15 | 76 | 17.13 | 104 |
| 9.13 | 84 | 18. 9 | 106 |
| 9.14 | 80 | 18.12 | 120 |
| 11.12 | 80 | 18.15 | 116 |
| 11.15 | 76 | 19. 9 | 124 |
| 12. 9 | 94 | 19.13 | 112 |
| 12.12 | 96 | 19.15 | 96 |

## DIRECTION of MOTION of the various Types of CLOUD—*concluded.*

### Cumulus.

| M.S.T. | Direction. |
|---|---|
| **Nov.** | |
| d h | ° |
| 20. 9 | 102 |
| 20.12 | 96 |
| 20.14 | 100 |
| 22. 8 | 154 |
| 22.12 | 166 |
| 22.15 | 156 |
| 23. 9 | 236 |
| 24. 9 | 46 |
| 24.12 | 46 |
| 24.15 | 52 |
| 25. 9 | 88 |
| 25.15 | 80 |
| 26. 9 | 96 |
| 26.13 | 90 |
| 26.15 | 76 |
| 27. 9 | 61 |
| 27:12 | 66 |
| 27.14 | 60 |
| 29. 9 | 96 |
| 29.13 | 96 |
| 29.15 | 90 |
| 30. 9 | 92 |
| 30.12 | 86 |
| 30.15 | 82 |
| **Dec.** | |
| 1. 9 | 110 |
| 1.13 | 104 |
| 2. 9 | 66 |
| 2.12 | 60 |
| 3. 8 | 70 |
| 3.13 | 66 |
| 3.15 | 66 |
| 4. 9 | 88 |
| 4.12 | 84 |
| 4.14 | 78 |
| 6.12 | 344 |
| 6.15 | 336 |
| 7. 9 | 70 |
| 7.12 | 66 |
| 7.15 | 62 |
| 8. 9 | 66 |
| 8.12 | 70 |
| 8.15 | 66 |
| 9. 9 | 70 |
| 9.12 | 76 |
| 9.15 | 72 |
| 10. 9 | 84 |
| 10.12 | 82 |
| 10.15 | 78 |
| 11. 9 | 84 |
| 11.12 | 86 |
| 11.14 | 92 |
| 13. 9 | 92 |
| 13.12 | 86 |
| 13.15 | 82 |
| 14. 9 | 90 |
| 14.12 | 96 |
| 14.15 | 96 |

| M.S.T. | Direction. |
|---|---|
| **Dec.** | |
| d h | ° |
| 15. 9 | 96 |
| 15.12 | 100 |
| 15.15 | 96 |
| 17. 9 | 116 |
| 17.12 | 114 |
| 17.15 | 106 |
| 18. 9 | 114 |
| 20. 9 | 248 |
| 20.13 | 256 |
| 21.12 | 96 |
| 21.15 | 90 |
| 22. 9 | 80 |
| 22.15 | 86 |
| 23. 9 | 82 |
| 23.15 | 90 |
| 27. 9 | 104 |
| 27.12 | 110 |
| 27.15 | 114 |
| 28. 9 | 103 |
| 28.15 | 111 |
| 29. 9 | 105 |
| 29.12 | 101 |
| 30. 9 | 83 |
| 30 12 | 85 |
| 30.15 | 77 |
| 31. 9 | 85 |
| 31.15 | 87 |

### Cumulo-Nimbus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 14.15 | 100 |
| 25. 9 | 81 |
| 26. 9 | 86 |
| 28.10 | 80 |
| **Feb.** | |
| 3. 9 | 246 |
| 5. 9 | 206 |
| 10.15 | 186 |
| 13. 9 | 104 |
| 13.14 | 110 |
| 16. 9 | 96 |
| 20. 9 | 126 |
| 20.13 | 136 |
| 27.12 | 336 |

### Cumulo-Nimbus.

| M.S.T. | Direction. |
|---|---|
| **March** | |
| d h | ° |
| 3. 9 | 70 |
| 4. 9 | 86 |
| 5. 9 | 84 |
| 13. 8 | 100 |
| 15.15 | 330 |
| 16.13 | 353 |
| 25.12 | [illegible] |
| 25.15 | 70 |
| 26. 9 | 92 |
| 27.12 | 96 |
| 29.10 | 70 |
| 30.11 | 64 |
| **April** | |
| 2.12 | 60 |
| 7.12 | 90 |
| 7.15 | 86 |
| 10.10 | 90 |
| 13. 9 | 100 |
| 13.12 | 106 |
| 13.15 | 110 |
| 14.14 | 240 |
| 15.15 | 346 |
| 20. 9 | 46 |
| 22. 9 | 96 |
| 23.15 | 176 |
| 24.14 | 186 |
| 26.14 | 190 |
| 27.12 | 84 |
| **May** | |
| 3.10 | 210 |
| 3.13 | 218 |
| 6.10 | 56 |
| 8. 9 | 56 |
| 13. 9 | 94 |
| 18.12 | 76 |
| 22. 9 | 240 |
| 26.13 | 26 |
| **June** | |
| 25. 9 | 144 |
| 30.15 | 71 |
| **July** | |
| 1.12 | 74 |

### Cumulo-Nimbus.

| M.S.T. | Direction. |
|---|---|
| **July** | |
| d h | ° |
| 2. 9 | 77 |
| 3.13 | 65 |
| 3.14 | 62 |
| 7. 9 | 72 |
| 13.13 | 50 |
| 14.15 | 110 |
| 19.12 | 92 |
| 22. 9 | 87 |
| 23. 9 | 87 |
| 23.12 | 92 |
| 24.10 | 94 |
| 24.12 | 101 |
| 31.10 | 62 |
| **Aug.** | |
| 6. 9 | 82 |
| 6.13 | 84 |
| 7.14 | 85 |
| 10.12 | 70 |
| 18. 9 | 67 |
| 19.15 | 72 |
| 20.12 | 82 |
| 20.15 | 72 |
| 21. 9 | 87 |
| 26.15 | 64 |
| 28.14 | 78 |
| 30.12 | 92 |
| 31.15 | 76 |
| **Sept.** | |
| 1.15 | 84 |
| 2. 9 | 86 |
| 2.15 | 78 |
| 3. 9 | 69 |
| 4.12 | 90 |
| 6.12 | 90 |
| 7. 9 | 68 |
| 8. 9 | 76 |
| 10. 9 | 100 |
| 13.12 | 82 |
| 15. 9 | 78 |
| 20. 9 | 93 |
| 20.12 | 97 |
| 23. 9 | 83 |
| 25. 9 | 67 |
| 25.14 | 75 |
| 27.15 | 86 |
| 28. 9 | 84 |
| 29.12 | 78 |
| 30. 9 | 74 |
| 30.15 | 76 |
| **Oct.** | |
| 2.14 | 72 |

### Cumulo-Nimbus.

| M.S.T. | Direction. |
|---|---|
| **Oct.** | |
| d h | ° |
| 6. 9 | 86 |
| 7. 9 | 78 |
| 7.15 | 80 |
| 8.12 | 74 |
| 8.15 | 76 |
| 9. 9 | 90 |
| 11. 9 | 74 |
| 12.15 | 80 |
| 13.12 | 78 |
| 13.15 | 70 |
| 15. 8 | 104 |
| 16. 9 | 94 |
| 18.13 | 68 |
| 18.15 | 66 |
| 19. 9 | 90 |
| 22.15 | 62 |
| 27.15 | 86 |
| 28.15 | 70 |
| 30. 9 | 84 |
| 30.12 | 68 |
| **Nov.** | |
| 4. 9 | 116 |
| 4.13 | 108 |
| 4.15 | 110 |
| 8.12 | 186 |
| 13. 9 | 26 |
| 13.13 | 354 |
| 15.12 | 96 |
| 16. 9 | 100 |
| 16.12 | 90 |
| 17. 9 | 96 |
| 19. 9 | 124 |
| 20. 9 | 102 |
| 22.12 | 166 |
| 22.15 | 156 |
| 23. 9 | 236 |
| 25. 9 | 88 |
| 26. 9 | 96 |
| 30. 9 | 92 |
| 30.15 | 82 |
| **Dec.** | |
| 1. 9 | 110 |
| 1.13 | 104 |
| 2. 9 | 66 |
| 4. 9 | 88 |
| 7.12 | 66 |
| 7.15 | 62 |
| 10. 9 | 84 |
| 18. 9 | 114 |
| 20. 9 | 248 |
| 21.12 | 96 |
| 21.15 | 90 |

### Cumulo-Nimbus.

| M.S.T. | Direction. |
|---|---|
| **Dec.** | |
| d h | ° |
| 22.12 | 96 |
| 23. 9 | 82 |
| 27.12 | 110 |
| 27.15 | 114 |
| 28. 9 | 103 |
| 28.12 | 115 |

### Nimbus.

| M.S.T. | Direction. |
|---|---|
| **Jan.** | |
| d h | ° |
| 5. 9 | 87 |
| 6.15 | 14 |
| 11.12 | 92 |
| 12.13 | 97 |
| 12.15 | 105 |
| 14. 9 | 97 |
| 16.12 | 117 |
| 19.12 | 127 |
| 20. 9 | 60 |
| 21.12 | 92 |
| 23. 9 | 107 |
| 23.12 | 102 |
| 23.14 | 112 |
| 29.15 | 46 |
| 30.12 | 56 |
| **Feb.** | |
| 2.15 | 266 |
| 5.13 | 218 |
| 6. 9 | 186 |
| 6.12 | 194 |
| 9.12 | 246 |
| 9.15 | 236 |
| 15. 9 | 118 |
| 15.12 | 112 |
| 15.15 | 120 |
| 17. 9 | 90 |
| 17.12 | 90 |
| 18.13 | 10 |
| 19.15 | 46 |
| 20.14 | 132 |
| 23.10 | 90 |

### Nimbus.

| M.S.T. | Direction. |
|---|---|
| **Feb.** | |
| d h | ° |
| 23.12 | 96 |
| 24.10 | 64 |
| 24.12 | 60 |
| 24.15 | 64 |
| 25.12 | 62 |
| 26.14 | 246 |
| **March** | |
| 8.11 | 96 |
| 9. 9 | 56 |
| 9.15 | 68 |
| 10. 9 | 66 |
| 12.10 | 106 |
| 16.10 | 356 |
| 16.15 | 356 |
| 17.10 | 16 |
| 17.12 | 12 |
| 17.15 | 22 |
| 18.12 | 50 |
| 19.13 | 22 |
| 19.15 | 22 |
| 20. 9 | 12 |
| 20.12 | 10 |
| 22. 9 | 56 |
| 22.12 | 60 |
| 22.15 | 65 |
| 23. 9 | 80 |
| 23.12 | 84 |
| 23.15 | 76 |
| 24. 9 | 90 |
| 24.13 | 96 |
| 24.15 | 90 |
| 27. 9 | 86 |
| 31. 9 | 62 |
| 31.12 | 66 |
| **April** | |
| 2. 9 | 75 |
| 3.13 | 60 |
| 5. 9 | 86 |
| 7.11 | 86 |
| 10.14 | 92 |
| 21.12 | 102 |
| 23.11 | 172 |
| 28.15 | 96 |
| **May** | |
| 7.15 | 56 |
| 8.14 | 58 |
| 15. 9 | 70 |

### Nimbus.

| M.S.T. | Direction. |
|---|---|
| **May** | |
| d h | ° |
| 17.15 | 82 |
| 18. 9 | 64 |
| 18.15 | 78 |
| 20.13 | 71 |
| 29.11 | 80 |
| 31. 9 | 68 |
| **June** | |
| 1.10 | 84 |
| 4.13 | 62 |
| 5.14 | 74 |
| 7. 9 | 66 |
| 7.12 | 70 |
| 7.15 | 66 |
| 8.15 | 70 |
| 9.12 | 76 |
| 11.10 | 76 |
| 14. 9 | 42 |
| 14.15 | 40 |
| 15.10 | 56 |
| 16.15 | 36 |
| 17.10 | 56 |
| 17.12 | 56 |
| 17.15 | 52 |
| 19.14 | 90 |
| 21.15 | 60 |
| 22. 9 | 84 |
| 23.15 | 86 |
| 25.12 | 246 |
| 25.15 | 280 |
| 28.15 | 50 |
| 30.12 | 67 |
| **July** | |
| 2.12 | 81 |
| 3. 9 | 60 |
| 5. 9 | 86 |
| 5.12 | 92 |
| 5.15 | 87 |
| 8.12 | 72 |
| 8.15 | 65 |
| 9. 9 | 62 |
| 9.12 | 67 |
| 12. 9 | 47 |
| 14.13 | 92 |
| 16.10 | 107 |
| 16.12 | 117 |
| 16.15 | 112 |
| 17. 9 | 157 |
| 17.12 | 167 |
| 19.15 | 77 |
| 20.15 | 87 |
| 24. 9 | 92 |

### Nimbus.

| M.S.T. | Direction. |
|---|---|
| **July** | |
| d h | ° |
| 26.12 | 92 |
| 26.15 | 87 |
| 31.14 | 20 |
| **Aug.** | |
| 2.12 | 30 |
| 4. 9 | 63 |
| 5. 9 | 107 |
| 5.15 | 86 |
| 7. 9 | 97 |
| 10. 9 | 57 |
| 10.15 | 57 |
| 11.15 | 47 |
| 12.10 | 67 |
| 12.13 | 67 |
| 17. 9 | 47 |
| 19. 9 | 57 |
| 20. 9 | 67 |
| 23.15 | 75 |
| 24. 9 | 76 |
| 26.15 | 64 |
| 27. 9 | 80 |
| 27.15 | 76 |
| 28.12 | 82 |
| 30.15 | 66 |
| 31.12 | 66 |
| **Sept.** | |
| 2.12 | 82 |
| 4.14 | 94 |
| 6.15 | 84 |
| 13.15 | 42 |
| 17.15 | 90 |
| 18.12 | 330 |
| 21. 9 | 111 |
| 22.10 | 125 |
| 22.12 | 135 |
| 22.15 | 119 |
| 23.15 | 77 |
| 24. 9 | 91 |
| 24.15 | 87 |
| 29. 9 | 91 |
| **Oct.** | |
| 1. 9 | 82 |
| 5.15 | 84 |
| 6.13 | 78 |
| 6.15 | 74 |
| 7.12 | 80 |
| 8.10 | 84 |

### Nimbus.

| M.S.T. | Direction. |
|---|---|
| **Oct.** | |
| d h | ° |
| 13. 9 | 70 |
| 18. 9 | 70 |
| 21.13 | 346 |
| 21.15 | 332 |
| 22. 9 | 56 |
| 25. 9 | 96 |
| 26. 9 | 86 |
| 26.13 | 68 |
| 27. 7 | 110 |
| 28. 9 | 90 |
| 29.15 | 92 |
| **Nov.** | |
| 5. 9 | 120 |
| 8.10 | 214 |
| 8.15 | 196 |
| 13.14 | 80 |
| 15.10 | 120 |
| 16. 9 | 100 |
| 17. 9 | 96 |
| 22. 8 | 154 |
| 23.12 | 246 |
| 23.15 | 262 |
| 25.12 | 86 |
| 25.15 | 80 |
| 29.15 | 90 |
| **Dec.** | |
| 4.12 | 84 |
| 8.12 | 70 |
| 10.12 | 82 |
| 16. 9 | 104 |
| 16.12 | 116 |
| 16.15 | 130 |
| 20.15 | 34 |
| 21. 9 | 76 |
| 22.12 | 96 |
| 23.12 | 86 |
| 24. 9 | 88 |
| 24.12 | 82 |
| 28.12 | 115 |
| 28.15 | 111 |

ABSTRACT of the PRINCIPAL CHANGES in the DIRECTION of the WIND, as derived from the RECORDS of the BECKLEY ANEMOGRAPH in the YEAR 1909.

| Mauritius Standard Time. From | Mauritius Standard Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | points. | points. |
| **January.** | | | | | |
| d h | d h | | | | |
| 1.13 | 1.14 | E.S.E. | S. | 6 | |
| 1.15 | 1.16½ | S. | N. | | 16 |
| 1.19 | 1.19½ | N. | E.S.E. | 10 | |
| 7.10 | 7.12 | E.S.E. | N.W. | | 14 |
| 7.14½ | 7.16 | N.W. | N.E. | 8 | |
| 7.17½ | 7.20 | N.E. | S.E. | | 24 |
| 8. 7½ | 8.10½ | S.E. | W.N.W. | 14 | |
| 8.13½ | 8.16 | W.N.W. | E.S.E. | | 16 |
| 9. 9½ | 9.12½ | E.S.E. | E.S.E. | | 32 |
| 10. 9 | 10.12 | E.S.E. | W.S.W. | | 20 |
| 10.13½ | 10.15½ | W.S.W. | S.S.W. | 28 | |
| 10.16 | 10.17 | S.S.W. | E.S.E. | | 8 |
| 12.13½ | 12.16 | E.N.E. | W.N.W. | | 12 |
| 12.17 | 12.17½ | W.N.W. | E.S.E. | 16 | |
| 29.11 | 29.16½ | E.S.E. | W.N.W. | 16 | |
| 29.17 | 30. 9 | W.N.W. | E.N.E. | | 20 |
| 30.12 | 30.23 | E.N.E. | E.S.E. | 36 | |
| 31. 8 | 31. 9 | E.S.E. | E.N.E. | | 4 |
| 31.13 | | E.N.E. | S.S.W. | 12 | |
| 31.13½ | 31.14½ | S.S.W. | S.E. | | 38 |
| 31.15 | 31.19 | S.E. | W.S.W. | 10 | |
| 31.21 | | W.S.W. | E.S.E. | | 12 |
| **February.** | | | | | |
| 2. 4 | 2. 9 | E.S.E. | W.S.W. | 12 | |
| 3. 0½ | 3. 2 | W.S.W. | S.E. | | 10 |
| 3. 4 | 3. 8½ | S.E. | W.N.W. | 14 | |
| 3.13½ | 3.23½ | W.N.W. | S.S.E. | | 12 |
| 4. 7½ | 4.13 | S.S.E. | W.N.W. | 12 | |
| 4.21 | 4.22½ | W.N.W. | E.S.E. | 16 | |
| 5. 7 | 5. 8 | E.S.E. | N.N.W. | | 12 |
| 6.12½ | 6.13½ | N.N.W. | N.W. | | 2 |
| 7. 9 | 7.10 | N.W. | W.N.W. | | 2 |
| 7.18 | 7.20½ | W.N.W. | N.N.W. | 36 | |
| 7.20½ | 8. 9 | N.N.W. | W.S.W. | | 40 |
| 8.10 | 8.16 | W.S.W. | S.S.E. | 24 | |
| 8.18 | 8.19 | S.S.E. | E.N.E. | | 8 |
| 8.21 | 8.22 | E.N.E. | E.S.E. | 4 | |
| 9. 6 | 9.11 | E.S.E. | N.N.W. | 20 | |
| 9.12 | 9.14 | N.N.W. | W.S.W. | | 8 |
| 9.18 | 9.20 | W.S.W. | E.N.E. | 16 | |
| 9.22 | 10. 8 | E.N.E. | N. | | 38 |
| 10.14 | 11.20 | N. | E.S.E. | 42 | |
| 12. 9 | 12.13½ | E.S.E. | N.N.E. | | 8 |
| 12.15 | 12.17 | N.N.E. | S.S.W. | 16 | |
| 12.19½ | 12.20½ | S.S.W. | E.S.E. | | 8 |
| 13. 8 | 13.15 | E.S.E. | N.N.E. | | 8 |
| 13.16 | 13.22 | N.N.E. | E.S.E. | 8 | |
| 14. 5½ | 14.10 | E.S.E. | N.N.E. | | 8 |
| **Feb.—*cont.*** | | | | | |
| d h | d h | | | | |
| 14.11 | 14.20 | N.N.E. | E. | 6 | |
| 19.11 | 19.12 | E. | W.S.W. | 14 | |
| 19.16½ | 19.18 | W.S.W. | E.S.E. | 20 | |
| 20. 8 | 20.13½ | E.S.E. | S. | | 26 |
| 20.14½ | 21. 2 | S. | E. | 24 | |
| 21. 6½ | 21.12 | E. | N.N.W. | | 10 |
| 21.22 | 22. 2½ | N.N.W. | S.S.E. | 16 | |
| 22. 3½ | 22.16 | S.S.E. | N.W. | | 18 |
| 22.19 | 22.20 | N.W. | S.E. | 16 | |
| 26. 8½ | 26. 9 | S.E. | W.S.W. | | 22 |
| 26.10½ | 26.12 | W.S.W. | N.N.W. | 8 | |
| 26.12½ | 26.21 | N.N.W. | S.E. | | 18 |
| 27. 8½ | 27.21½ | S.E. | S.E. | 64 | |
| **March.** | | | | | |
| 1. 9½ | 1.12½ | S.S.E. | E.N.E. | | 8 |
| 1.13 | 1.14 | E.N.E. | W.S.W. | 16 | |
| 1.14 | 1.18 | W.S.W. | S.E. | | 42 |
| 2. 9 | 2.15½ | S.E. | E.S.E. | | 34 |
| 3.12½ | 3.13½ | E.S.E. | N.N.W. | 20 | |
| 3.16 | 3.18½ | N.N.W. | E.S.E. | | 20 |
| 6.13½ | 6.14½ | E.N.E. | N.N.W. | 24 | |
| 6.14½ | 6.16½ | N.N.W. | E.S.E. | | 20 |
| 7.10½ | 7.12½ | E.S.E. | N.W. | 18 | |
| 7.13 | 7.22 | N.W. | S.E. | | 48 |
| 8. 8 | 8.12½ | S.E. | N.E. | | 8 |
| 8.13 | 8.14½ | N.E. | S.S.W. | 14 | |
| 8.15 | 8.19½ | S.S.W. | E.S.E. | | 8 |
| 12.19 | 12.23 | E. | S.S.W. | 10 | |
| 12.23½ | 13. 0 | S.S.W. | N.E. | | 14 |
| 13. 0½ | 13. 1 | N.E. | E.S.E. | | 6 |
| 14. 9½ | 14.10 | E.N.E. | N.W. | | 10 |
| 14.10½ | 14.12 | N.W. | S.E. | 16 | |
| 14.13 | 14.16 | S.E. | W. | | 20 |
| 15. 0½ | 15. 3 | W. | S.E. | | 12 |
| 15. 8 | 15. 9 | S.E. | W.S.W. | 10 | |
| 15.15 | 15.20 | W.S.W. | S.S.W. | | 36 |
| 28.13 | 28.14½ | E.S.E. | W.S.W. | 12 | |
| 28.14½ | 28.15 | W.S.W. | E.S.E. | | 12 |
| **April.** | | | | | |
| d h | d h | | | | |
| 10.15½ | 10.16 | E. | N.E. | | 4 |
| 10.16 | 10.19 | N.E. | E.S.E. | 6 | |
| 13. 8½ | 13.11½ | E.S.E. | N.E. | | 6 |
| 13.13½ | 14. 9½ | N.E. | N.W. | 24 | |
| 14.16 | 14.19½ | N.W. | N. | | 28 |
| 14.20 | 15.10½ | N. | N.W. | 28 | |
| 15.15 | 15.17 | N.W. | N.E. | | 24 |
| 15.18 | 15.21 | N.E. | S. | 12 | |
| 16. 7 | 16.14 | S. | E.S.E. | | 6 |
| 16.16½ | 16.21½ | E.S.E. | S. | 6 | |
| 17. 8 | 17. 9 | S. | E.S.E. | | 6 |
| 22.17 | 23. 3 | E.N.E. | S.S.E. | 8 | |
| 23. 4 | 23. 9 | S.S.E. | N. | | 14 |
| 23. 9 | 23.11 | N. | E. | 8 | |
| 23.11 | 23.12½ | E. | N. | | 8 |
| 23.15½ | 23.17 | N. | S.S.E. | 14 | |
| 23.21 | 24. 9 | S.S.E. | N.N.W. | | 16 |
| 24.18 | 24.23 | N.N.W. | S.E. | 14 | |
| 25. 7 | 25.11½ | S.E. | N. | | 12 |
| 25.15½ | 25.22½ | N. | W. | 56 | |
| 25.22½ | 26.12½ | W. | N.N.W. | | 26 |
| 26.15 | 26.20 | N.N.W. | S.E. | 14 | |
| 27. 8 | 27.13 | S.E. | E.N.E. | | 6 |
| 27.18 | 27.23½ | E.N.E. | E.S.E. | 4 | |
| 28. 9 | 28.11 | E.S.E. | N.E. | | 6 |
| 28.16½ | 28.23 | N.E. | S.E. | 8 | |
| 29. 3 | 29. 4 | S.E. | E. | | 4 |
| **May.** | | | | | |
| 2. 8½ | 2. 9 | E.S.E. | N. | | 10 |
| 2.9½ | | N. | E.N.E. | 6 | |
| 2. 9½ | 2.12 | E.N.E. | N.N.E. | | 4 |
| 2.15 | 2.20 | N.N.E. | E.S.E. | 8 | |
| 3. 8½ | 4. 5½ | E.S.E. | S.E. | | 30 |
| 4.9½ | | S.E. | W.S.W. | 10 | |
| 4.10 | 4.12 | W.S.W. | S.S.E. | | 8 |
| 5. 6 | 5. 9 | S.S.E. | E.S.E. | | 4 |
| 22. 8½ | 22. 9¼ | S.E. | N.W. | 16 | |
| 23.11 | 23.18 | N.W. | N.W. | | 32 |
| 23.18 | 24.11 | N.W. | E. | 44 | |
| 24.11½ | 24.19½ | E. | N.E. | | 36 |
| 24.19½ | 25.11 | N.E. | N.W. | 24 | |
| 25.14¼ | | N.W. | E.S.E. | 14 | |
| 26.10¾ | 26.13¾ | S.E. | S.E. | 32 | |
| 27.11½ | | S.E. | N.W. | 16 | |
| 27.15 | 27.21½ | N.W. | S. | 20 | |
| 27.22 | 27.23¼ | S. | E.N.E. | | 10 |
| 27.23¾ | 28. 2¼ | E.N.E. | W. | 18 | |
| 28.2¼ | | W. | S.S.E. | | 10 |

ABSTRACT of the PRINCIPAL CHANGES in the DIRECTION of the WIND, as derived from the RECORDS of the BECKLEY ANEMOGRAPH in the YEAR 1909.—*concluded.*

| Mauritius Standard Time. From | Mauritius Standard Time. To | Change of Direction. From | Change of Direction. To | Amount of Motion. Direct. | Amount of Motion. Retrograde. |
|---|---|---|---|---|---|
| | | | | points. | points. |
| **June.** | | | | | |
| d h | d h | | | | |
| 1. 3 | 1. 4½ | S.S.E. | N.E. | | 10 |
| 1. 5 | 1. 6 | N.E. | S.S.W. | 14 | |
| 1. 6½ | 1. 8 | S.S.W. | E.N.E. | | 12 |
| 1. 9 | 1.12 | E.N.E. | S. | 14 | |
| 1.12¼ | 1.13 | S. | E.S.E. | | 6 |
| 12.11 | 12.13 | E.S.E. | E. | 30 | |
| 12.13 | | E. | W. | | 16 |
| 12.19 | 13. 2½ | W. | S.S.E. | | 10 |
| 17. 3 | 17. 4½ | S.E. | S.S.W. | 6 | |
| 17. 5 | 18. 7½ | S.S.W. | E.S.E. | | 8 |
| 18. 4 | 18. 8 | E.S.E. | N.E. | | 6 |
| 18. 9½ | 18.10 | N.E. | S.W. | 16 | |
| 18.10¼ | 18.10½ | S.W. | S.E. | | 8 |
| 18.10½ | 18.15 | S.E. | S.S.W. | 6 | |
| 18.16 | 18.20 | S.S.W. | E. | | 10 |
| 19.8¼ | | S.E. | S.S.W. | 6 | |
| 19.14½ | 19.15½ | S.S.W. | E. | | 10 |
| 25. 9 | 25.14 | E.S.E. | S.S.E. | | 28 |
| **July.** | | | | | |
| 1.11 | 2. 0 | E.S.E. | S.S.E. | 4 | |
| 2. 4 | 2. 9 | S.S.E. | E.S.E. | | 4 |
| 4.17½ | 4.18 | E. | N.E. | | 4 |
| 4.18 | 4.20 | N.E. | E.S.E. | 6 | |
| 14.11 | 14.11½ | E.S.E. | N.E. | | 6 |
| 14.13 | | N.E. | S.S.E. | 10 | |
| 14.13¼ | | S.S.E. | N.N.E. | | 12 |
| 14.13½ | | N.N.E. | S.E. | 10 | |
| 14.14½ | | S.E. | N.E. | | 8 |
| 15.13 | 15.20 | E.N.E. | S.E. | 6 | |
| 16.0½ | 16. 1½ | N.E. | E.S.E. | 6 | |
| 16.10½ | 16.14½ | N.E. | S.S.E. | 10 | |
| 16.14½ | 16.16 | S.S.E. | N.N.E. | | 13 |
| 16.18 | 16.19 | N.N.E. | S.W. | 18 | |
| 16.19 | 17. 4 | S.W. | N. | | 20 |
| 17.10½ | 17.21 | N. | S.E. | 12 | |
| 17.21¾ | 17.23 | S.E. | N.E. | | 8 |
| 30.10 | 30.17 | E. | S.S.E. | 36 | |
| 31.10 | 31.11¾ | S.S.E. | N.E. | | 10 |
| 31.11¾ | 31.12 | N.E. | W.S.W. | 18 | |
| 31.16 | 31.17 | W.S.W. | S.S.E. | 24 | |
| **August.** | | | | | |
| d h | d h | | | | |
| 1. 8 | 1.15 | S.S.E. | E. | | 6 |
| 1.21 | 2. 0 | E. | S.S.E. | 6 | |
| 2.11½ | 2.12½ | S.S.E.. | N.W. | 14 | |
| 2.12½ | 2.14 | N.W. | S.S.E. | | 14 |
| 2.16 | 2.21½ | S.S.E. | E.S.E. | | 4 |
| 5.23 | 6. 0 | E.S.E. | S. | 6 | |
| 6. 2 | 6. 3 | S. | E.S.E. | | 6 |
| 8.11 | 8.12 | E.S.E. | W.NW. | 16 | |
| 8.14 | 9. 1 | W.N.W. | S.S.E. | | 12 |
| 18. 6 | 18. 7 | E.S.E. | E.S.E. | 32 | |
| **September.** | | | | | |
| 13. 7 | 14. 3 | E.S.E. | S. | 6 | |
| 14. 4½ | 14. 9 | S. | E.S.E. | | 6 |
| 17.16 | 17.20 | N.E. | E.S.E. | 6 | |
| 18. 8 | 18.10½ | E.S.E. | E.N.E. | | 4 |
| 18.13½ | 18.17 | E.N.E. | N. | | 38 |
| 19.21 | 19.21½ | N. | E.S.E. | 10 | |
| 13.22½ | 30.24 | E.S.E. | E.N.E. | | 4 |
| **October.** | | | | | |
| 1. 0 | 1. 3½ | E.N.E. | E.S.E. | 4 | |
| 17. 9 | 17.10 | E. | W.N.W. | | 14 |
| 17.15½ | 17.16½ | W.N.W. | S.E. | | 14 |
| 18. 2½ | 18. 3½ | S.E. | W.S.W. | 10 | |
| 18. 3½ | 18. 9½ | W.S.W. | E.N.E. | | 16 |
| 21.12½ | 21.14½ | E.N.E. | S.S.W. | 12 | |
| 21.15½ | 21.16½ | S.S.W. | N.E. | | 14 |
| 21.17 | 22. 4 | N.E. | S.S.E. | 10 | |
| 27.12½ | 27.13 | E. | N.E. | | 4 |
| 27.14 | 27.14½ | N.E. | S.S.W. | 14 | |
| 27.15½ | 27.18 | S.S.W. | S.E. | | 6 |
| **November.** | | | | | |
| d h | d h | | | | |
| 7. 7 | 7. 7½ | E. | N.N.W. | | 10 |
| 7.23 | 8. 5 | N.N.W. | E. | 10 | |
| 8. 7 | 8.10½ | E. | W.S.W. | | 18 |
| 9. 0 | 9. 1 | W.S.W. | S.E. | | 10 |
| 9. 9 | 9. 9½ | S.E. | W. | | 20 |
| 9.15½ | 9.16 | W. | E.N.E. | | 18 |
| 9.17 | 9.19 | E.N.E. | E.S.E. | 4 | |
| 10. 9 | 10.10 | E.S.E. | E.N.E. | | 4 |
| 10.11½ | 10.13 | E.N.E. | W. | 18 | |
| 10.16 | 10.20 | W. | E.S.E. | 18 | |
| 11.10 | 11.10½ | E.S.E. | W.N.W. | 16 | |
| 11.10½ | 11.12½ | W.N.W. | S.S.W. | | 8 |
| 11.13 | 11.18 | S.S.W. | N.N.W. | 12 | |
| 11.18 | 11.20 | N.N.W. | S.E. | | 20 |
| 12.10½ | 12.16 | S.E. | W. | 12 | |
| 12.18 | 12.19 | W. | S.E. | | 12 |
| 13.10 | 13.12 | S.E. | W. | 12 | |
| 13.14 | 13.15 | W. | E.S.E. | | 14 |
| 15. 9 | 15.11 | E.S.E. | N.N.W. | | 12 |
| 15.11 | 15.15 | N.N.W. | E.N.E. | | 24 |
| 17.14½ | 17.18 | E.N.E. | E.S.E. | | 28 |
| 20. 6 | 20. 9 | E.S.E | N.E. | | 6 |
| 20.13 | 21. 0 | N.E. | E.S.E. | 6 | |
| 21. 5 | 21.13 | E.S.E. | N.N.E. | | 8 |
| 21.16 | 21.23 | N.N.E. | E. | 6 | |
| 22. 5 | 22.12 | E. | N. | | 8 |
| 22.15 | 22.22 | N. | E.S.E. | 10 | |
| 23. 7 | 23.21 | E.S.E. | E.S.E. | | 32 |
| **December.** | | | | | |
| 1.17 | 1.19 | E.N.E | S.W. | 12 | |
| 1.22½ | 1.23½ | S.W. | S.E. | | 8 |
| 3. 1 | 3. 2 | S.E. | S. | 4 | |
| 3. 3 | 3. 4 | S. | S.E. | | 4 |
| 19. 7 | 19. 9 | S.E. | N.W. | | 16 |
| 19.13 | 19.19½ | N.W. | S.S.E | | 14 |
| 20. 6 | 20.10 | S.S.E. | W.N.W. | 12 | |
| 20.12½ | 20.14 | W.N.W. | E.S.E. | | 16 |
| 25.14 | 25.22 | E.S.E. | E. | 34 | |
| 26. 6½ | 26.10½ | E. | N. | | 8 |
| 26.17 | 27. 1 | N. | S.E. | 12 | |

APPROXIMATE ALTITUDES OF RAINFALL STATIONS and the NAMES of OBSERVERS.

| District. | Station. | Observer. | Altitude. | Reference Number of Station. |
|---|---|---|---|---|
| | | | Feet. | |
| Rivière du Rempart. | L'Union Ribet ... | J. Desplaces ... | 200 | 1 |
| | Bel Mont ... ... | R. de Chazal ... | 50 | 2 |
| | Poudre d'Or ... | R. de Chazal ... | 20 | 3 |
| | St. Antoine ... | R. de Chazal ... | 50 | 4 |
| | Mon Loisir (S.E.) ... | E. Alizart ... | 300 | 5 |
| | Mon Loisir (R) ... | H. Rouillard ... | 300 | 6 |
| | Labourdonnais ... | A. Wiéhé ... | 290 | 7 |
| | Mon Choix... ... | W. P. Ebbels ... | 700 | 8 |
| | Beau Séjour ... | W. P. Ebbels ... | 300 | 9 |
| | Mont Piton ... | W. P. Ebbels ... | 860 | 10 |
| | Antoinette ... ... | G. Martin ... | 640 | 11 |
| | Mon Songe... ... | G. Martin ... | 620 | 12 |
| Pamplemousses. | Beau Plan ... ... | A. Lagesse ... | 195 | 13 |
| | The Observatory ... | T. F. Claxton ... | 179 | 14 |
| | Botanical Gardens... | P. Kœnig ... | 255 | 15 |
| | The Mount... ... | de Rosnay ... | | 16 |
| | La Grande Rosalie ... | C. Montocchio ... | 643 | 17 |
| | California ... ... | C. Montocchio ... | 840 | 18 |
| Port Louis. | The Albion Dock ... | C. Sumeire, C.M.G. | 18 | 19 |
| Flacq. | La Grande Retraite.. | M. Carosin ... | 350 | 20 |
| | Constance d'Arifat... | J. Harel ... ... | 100 | 21 |
| | Union Régnard ... | J. de St. Romain... | 600 | 22 |
| | Beau Champ ... | A. Schmidt ... | 20 | 23 |
| | Sans Souci ... ... | A. Dalais ... | 910 | 24 |
| | Olivia ... ... | A. Lagesse ... | 400 | 25 |
| | Etoile ... ... | I. Savignan ... | 400 | 26 |
| | Belle Mare ... | A. Dalais ... | 75 | 27 |
| Moka. | Nouvelle Découverte | P. Kœnig ... | 1,400 | 28 |
| | Providence ... ... | V. Lesur ... ... | 1,200 | 29 |
| | Val Ory ... ... | G. Régnard ... | 1,100 | 30 |
| | The Bower ... ... | C. F. Shand ... | 1,080 | 31 |
| | Bon Air Estate ... | E. Blandin de Chalain. | 1,050 | 32 |
| | Alma, Verdun ... | Hon. H. Léclézio, C.M.G. | 1,460 | 33 |
| | Le Réduit Gardens... | P. Kœnig ... | 1,000 | 34 |
| Plaines Wilhems. | Bagatelle ... ... | F. Byrd ... ... | 1,250 | 35 |
| | The Manse. | Rev. G. Mc Irvine M. A. | 850 | 36 |
| | Villa Fantaisie ... | H. Ducray ... | 830 | 37 |
| | Trianon Estate ... | E. Lagesse ... | 950 | 38 |
| | Les Rosiers (R. Hill) | A. d'Unienville ... | 960 | 39 |
| Plaines Wilhems.—*Continued.* | Salency ... ... | A. Boulé... ... | 923 | 40 |
| | Mizpah (4 Bornes)... | L. A. Gallet ... | 1,050 | 41 |
| | Bassin „ ... | R. D'Unienville ... | 800 | 42 |
| | Military Camp | Capt. J. E. Matheson. | 1,370 | 43 |
| | Bernica, (Upper Vacoas) | E. Mayer ... | 1,615 | 44 |
| | Réunion, (Vacoas)... | H. Robinson ... | 1,420 | 45 |
| | Curepipe Gardens ... | P. Kœnig ... | 1,840 | 46 |
| | La Marie Filter Bed. | P. Lejuge de Segrais, A.M.I.C.E. | 1,850 | 47 |
| | Mare-aux-Vacoas ... | P. Lejuge de Segrais, A.M.I.C.E. | 1,700 | 48 |
| | St. Joseph College ... | The Christian Brothers. | 1,850 | 49 |
| | Miremonde ... | G. Baissac ... | 1,850 | 50 |
| Black River. | La Ferme (Bambous) | A. Vigoureux ... | 350 | 51 |
| | Chamarel ... ... | J. Latapie ... | 400 | 52 |
| Grand Port | Midlands ... ... | H. Lenferna ... | 1,467 | 53 |
| | Bananes, Fressanges . | H. Lenferna ... | 1,400 | 54 |
| | Cluny Estate ... | J. Desplaces ... | 1,000 | 55 |
| | Cent Gaulettes ... | A. Dalais ... | 800 | 56 |
| | Ferney ... ... | A. Daniel ... | 20 | 57 |
| | Riche-en-Eau ... | E. de Rochecouste. | 1,200 | 58 |
| | Union Park Estate... | E. Lemaire ... | 900 | 59 |
| | Astrœa ... ... | H. Tyack ... | 700 | 60 |
| | Beau Vallon ... | L. Daruty de Grand Pré. | 60 | 61 |
| | Gros Bois ... ... | E. D'Unienville ... | 500 | 62 |
| | Union Vale... ... | E. Lemaire ... | 1,200 | 63 |
| | Mon Désert (Carié). | P. Carié ... ... | 200 | 64 |
| Savanne. | Pont Colville ... | H. Colin... ... | 1,050 | 65 |
| | Talbot Kanaka ... | P. Kœing ... | 2,000 | 66 |
| | Beau Bois ... ... | E. Labat ... | 350 | 67 |
| | St. Avold ... ... | T. N. Innis ... | 600 | 68 |
| | Britannia ... ... | T. N. Innis ... | 730 | 69 |
| | Colmar ... ... | A. de Gaye ... | 400 | 70 |
| | Bénarès (Residence). | A. de Gaye ... | 300 | 71 |
| | Bénarès (Sugar House). | A. de Gaye ... | 200 | 72 |
| | St. Aubin ... ... | E. Labat ... | 300 | 73 |
| | Union Bel Air ... | T. E. Mamet ... | 90 | 74 |
| | Savannah (Résidence) | O. Pilot ... ... | 200 | 75 |
| | Savannah, (Sugar House). | A. Lebreton ... | 200 | 76 |
| | Terracine ... ... | O. Pilot ... ... | 50 | 77 |

RAINFALL at VARIOUS STATIONS in MAURITIUS during the YEAR 1909.

| Reference Number of Station. | January. | | February. | | March. | | April. | | May. | | June. | | July. | | August. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. |
| | ins. | | ins. | | ins. | | ins. | | ins. | | ins. | | ins. | | ins. | |
| 1 | 3·56 | 13 | 7·03 | 10 | 4·19 | 13 | 5·45 | 14 | 1·93 | 8 | 4·91 | 12 | 7·76 | 11 | 1·33 | 6 |
| 2 | 3·28 | 9 | 6·10 | 9 | 2·90 | 9 | 4·23 | 8 | 1·98 | 9 | 6·42 | 13 | 4·56 | 7 | 0·76 | 3 |
| 3 | 2·39 | 7 | 6·89 | 9 | 4·05 | 12 | 4·27 | 13 | 2·31 | 7 | 5·59 | 14 | 4·14 | 7 | 1·23 | 8 |
| 4 | 1·76 | 10 | 6·77 | 16 | 2·73 | 15 | 3·62 | 12 | 1·69 | 13 | 4·83 | 20 | 4·40 | 12 | 1·73 | 13 |
| 5 | 4·60 | 19 | 11·32 | 20 | 5·39 | 22 | 5·32 | 23 | 4·40 | 18 | 13·68 | 27 | 7·07 | 21 | 3·79 | 20 |
| 6 | 4·35 | 17 | 7·54 | 14 | 6·29 | 19 | 4·03 | 13 | 2·59 | 11 | 6·54 | 19 | 7·33 | 17 | 1·98 | 12 |
| 7 | 5·89 | 14 | 8·35 | 13 | 5·24 | 21 | 3·06 | 12 | 3·50 | 15 | 7·11 | 19 | 7·08 | 12 | 2·01 | 12 |
| 8 | 10·34 | 13 | 15·35 | 15 | 9·12 | 20 | 6·56 | 15 | 5·77 | 11 | 17·78 | 19 | 11·94 | 16 | 4·91 | 11 |
| 9 | 4·36 | 19 | 10·90 | 17 | 4·90 | 25 | 4·89 | 19 | 3·60 | 15 | 13·46 | 23 | 9·38 | 20 | 3·38 | 17 |
| 10 | 7·93 | 24 | 13·43 | 19 | 7·56 | 22 | 7·66 | 20 | 4·86 | 14 | 17·18 | 25 | 12·60 | 21 | 5·58 | 17 |
| 11 | 5·50 | 19 | 11·39 | 20 | 6·70 | 22 | 5·40 | 18 | 3·39 | 11 | 15·77 | 26 | 9·18 | 18 | 4·41 | 17 |
| 12 | 6·53 | 18 | 17·03 | 21 | 8·70 | 22 | 7·23 | 22 | 3·52 | 12 | 17·60 | 26 | 8·42 | 13 | 5·20 | 17 |
| 13 | 6·42 | 20 | 8·82 | 18 | 7·05 | 25 | 4·60 | 20 | 1·94 | 9 | 8·67 | 18 | 9·10 | 18 | 2·81 | 14 |
| 14 | 5·00 | 22 | 7·60 | 22 | 5·87 | 27 | 2·89 | 18 | 2·20 | 15 | 7·57 | 22 | 8·01 | 23 | 2·39 | 21 |
| 15 | 7·38 | 22 | 8·68 | 19 | 5·64 | 24 | 3·50 | 16 | 2·52 | 14 | 8·57 | 22 | 9·36 | 23 | 3·00 | 19 |
| 16 | 5·24 | 22 | 8·84 | 17 | 7·40 | 20 | 3·48 | 12 | 3·20 | 10 | 10·46 | 20 | 8·91 | 12 | 3·44 | 11 |
| 17 | 5·71 | 11 | 11·21 | 15 | 8·77 | 20 | 4·94 | 15 | 3·35 | 11 | 12·98 | 21 | 10·06 | 16 | 4·12 | 11 |
| 18 | 3·49 | 7 | 11·25 | 12 | 10·06 | 15 | 3·82 | 7 | 2·19 | 6 | 10·48 | 14 | 11·11 | 10 | 3·72 | 8 |
| 19 | 4·14 | 6 | 8·53 | 16 | 4·86 | 12 | 1·75 | 4 | 0·41 | 1 | 4·34 | 9 | 5·59 | 5 | 0·67 | 2 |
| 20 | 2·48 | 8 | 12·17 | 19 | 7·66 | 17 | 7·11 | 20 | 5·04 | 8 | 19·66 | 21 | 9·40 | 16 | 4·49 | 15 |
| 21 | 3·19 | 16 | 10·75 | 18 | 8·79 | 18 | 8·60 | 19 | 4·50 | 12 | 17·72 | 21 | 8·57 | 15 | 3·53 | 15 |
| 22 | 4·02 | 12 | 12·39 | 22 | 9·39 | 22 | 9·34 | 26 | 2·81 | 12 | 18·27 | 27 | 9·09 | 21 | 2·88 | 15 |
| 23 | 2·16 | 16 | 7·40 | 22 | 6·58 | 20 | 7·77 | 16 | 2·94 | 10 | 11·76 | 21 | 5·60 | 19 | 1·43 | 13 |
| 24 | 7·60 | 21 | 18·72 | 23 | 25·82 | 26 | 9·71 | 23 | 6·04 | 18 | 34·31 | 27 | 13·29 | 27 | 8·06 | 24 |
| 25 | 4·23 | 16 | 11·42 | 18 | 10·99 | 16 | 7·05 | 13 | 2·88 | 14 | 18·66 | 21 | 8·74 | 20 | 3·41 | 15 |
| 26 | 4·39 | 21 | 12·68 | 22 | 16·67 | 23 | 7·01 | 21 | 4·01 | 13 | 24·26 | 23 | 10·11 | 20 | 4·13 | 16 |
| 27 | 2·32 | 7 | 9·68 | 14 | 8·79 | 11 | 4·66 | 11 | 2·99 | 8 | 10·61 | 16 | 3·88 | 7 | 3·26 | 10 |
| 28 | 4·70 | 21 | 16·59 | 22 | 14·00 | 24 | 8·81 | 21 | 3·23 | 15 | 12·38 | 25 | 13·87 | 23 | 4·40 | 21 |
| 29 | 7·33 | 23 | 23·21 | 21 | 24·22 | 24 | 8·29 | 21 | 4·27 | 13 | 22·87 | 27 | 14·01 | 23 | 5·88 | 20 |
| 30 | 7·59 | 26 | 20·79 | 22 | 11·16 | 29 | 3·64 | 26 | 1·81 | 22 | 8·45 | 27 | 9·93 | 27 | 2·42 | 25 |
| 31 | 6·30 | 20 | 23·35 | 22 | 11·72 | 23 | 6·86 | 22 | 1·42 | 14 | 8·49 | 21 | 10·26 | 19 | 2·53 | 18 |
| 32 | 5·86 | 17 | 23·93 | 21 | 14·38 | 22 | 3·31 | 11 | 2·29 | 14 | 8·95 | 21 | 8·98 | 16 | 2·72 | 13 |
| 33 | 9·47 | 24 | 27·28 | 23 | 25·55 | 25 | 8·80 | 23 | 5·50 | 20 | 21·40 | 28 | 14·21 | 25 | 6·91 | 23 |
| 34 | 5·32 | 22 | 21·03 | 22 | 10·61 | 25 | 2·19 | 15 | 1·45 | 17 | 7·68 | 28 | 7·99 | 27 | 1·88 | 20 |
| 35 | 5·91 | 19 | 28·51 | 22 | 21·15 | 24 | 4·88 | 24 | 2·88 | 21 | 12·11 | 25 | 10·77 | 25 | 3·29 | 20 |
| 36 | 5·23 | 19 | 17·89 | 21 | 9·13 | 22 | 1·87 | 11 | 1·24 | 13 | 6·36 | 19 | 6·83 | 15 | 1·16 | 13 |
| 37 | 4·48 | 15 | 17·91 | 21 | 9·66 | 18 | 2·11 | 13 | 1·58 | 18 | 6·82 | 21 | 7·53 | 15 | 1·04 | 15 |
| 38 | 5·68 | 16 | 25·53 | 19 | 14·22 | 18 | 2·11 | 13 | 2·66 | 12 | 7·50 | 18 | 7·37 | 11 | 1·46 | 9 |
| 39 | 4·72 | 12 | 20·02 | 16 | 10·17 | 15 | 2·12 | 10 | 2·29 | 10 | 7·20 | 12 | 6·59 | 6 | 0·95 | 10 |

RAINFALL at VARIOUS STATIONS in MAURITIUS during the YEAR 1909—*Continued.*

| Reference Number of Station. | September. | | October. | | November. | | December. | | Total Rainfall in 1909. | | Average Annual Rainfall. | | Number of years employed. | | Greatest Daily Rainfall in the year 1909. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Amount. | Number of Rainy Days. | Amount. | Number of Rainy Days. | For Rainfall. | For Rainy Days. | Amount. | Day. |
| | ins. | | ins. | | ins. | | ins. | | ins. | | ins. | | | | ins. | |
| 1 | 0·47 | 6 | 1·37 | 9 | 0·46 | 3 | 4·75 | 4 | 43·21 | 109 | 42·80 | 87 | 7 | 6 | ... | ... |
| 2 | 0·87 | 5 | 0·87 | 3 | 0·70 | 4 | 3·21 | 3 | 35·88 | 82 | 54·44 | 112 | 14 | 12 | 2·09 | Feb. 7 |
| 3 | 1·22 | 7 | 0·00 | 0 | 0·24 | 3 | 3·39 | 8 | 35·72 | 95 | 49·31 | 115 | 23 | 21 | 1·83 | July 16 |
| 4 | 1·76 | 8 | 0·92 | 6 | 0·44 | 4 | 3·16 | 7 | 33·81 | 136 | 47·36 | 128 | 41 | 8 | 2·12 | Feb. 7 |
| 5 | 3·76 | 11 | 1·12 | 12 | 1·10 | 12 | 4·04 | 12 | 65·29 | 217 | 64·57 | 214 | 6 | 6 | 2·82 | July 16 |
| 6 | 1·74 | 6 | 1·54 | 8 | 0·46 | 4 | 3·51 | 4 | 47·90 | 144 | 48·55 | 138 | 17 | 17 | 2·50 | July 17 |
| 7 | 2·74 | 8 | 0·34 | 10 | 0·43 | 5 | 1·84 | 6 | 47·59 | 147 | 61·04 | 131 | 47 | 48 | 3·20 | July 16 |
| 8 | 4·29 | 10 | 2·92 | 6 | 1·59 | 5 | 5·60 | 6 | 96·17 | 147 | 73·69 | 114 | 9 | 9 | 4·27 | July 17 |
| 9 | 3·29 | 13 | 2·20 | 11 | 1·06 | 7 | 4·16 | 11 | 65·58 | 197 | 73·57 | 159 | 29 | 9 | 3·66 | July 17 |
| 10 | 4·18 | 14 | 3·66 | 13 | 1·14 | 9 | 5·62 | 11 | 91·40 | 209 | 81·00 | 161 | 9 | 9 | 4·80 | July 17 |
| 11 | 4·53 | 14 | 1·70 | 10 | 0·89 | 8 | 3·23 | 8 | 72·09 | 191 | 68·49 | 164 | 19 | 17 | 3·90 | July 16 |
| 12 | 5·48 | 18 | 1·56 | 10 | 1·53 | 10 | 3·19 | 12 | 85·99 | 201 | 73·91 | 167 | 27 | 27 | 3·99 | July 17 |
| 13 | 3·39 | 13 | 2·39 | 12 | 0·66 | 7 | 2·93 | 7 | 58·78 | 181 | 50·21 | 117 | 24 | 21 | 4·59 | July 17 |
| 14 | 2·24 | 17 | 1·39 | 17 | 0·70 | 9 | 1·97 | 11 | 47·83 | 224 | 49·93 | 204 | 35 | 35 | 3·01 | July 16 |
| 15 | 3·29 | 15 | 2·13 | 12 | 1·00 | 7 | 3·05 | 10 | 58·12 | 203 | 61·74 | 172 | 42 | 42 | 4·25 | July 17 |
| 16 | 4·10 | 13 | 1·26 | 6 | 0·91 | 6 | 3·43 | 8 | 60·67 | 157 | 60·64 | 145 | 18 | 16 | 4·33 | July 16 |
| 17 | 3·94 | 10 | 1·54 | 8 | 1·00 | 7 | 3·17 | 9 | 70·79 | 154 | 71·96 | 153 | 29 | 28 | 4·55 | July 17 |
| 18 | 5·17 | 9 | 1·93 | 9 | 0·90 | 4 | 4·50 | 10 | 68·62 | 111 | 78·50 | 130 | 17 | 17 | 4·98 | July 17 |
| 19 | 0·80 | 3 | 0·16 | 2 | 0·27 | 2 | 1·63 | 5 | 33·15 | 67 | 37·44 | 67 | 14 | 14 | 4·60 | July 17 |
| 20 | 3·75 | 9 | 1·55 | 8 | 0·58 | 4 | 3·18 | 7 | 77·07 | 152 | 80·69 | 140 | 8 | 4 | 4·10 | July 16 |
| 21 | 1·50 | 8 | 1·70 | 6 | 0·88 | 6 | 2·95 | 5 | 72·68 | 159 | 66·35 | 147 | 24 | 14 | 4·57 | July 17 |
| 22 | 2·53 | 12 | 2·07 | 8 | 0·50 | 4 | 6·63 | 8 | 79·92 | 189 | 74·14 | 180 | 33 | 24 | 4·30 | Feb. 24 |
| 23 | 0·83 | 9 | 0·60 | 6 | 1·36 | 9 | 3·51 | 10 | 51·94 | 171 | 53·01 | 152 | 20 | 9 | 3·30 | July 16 |
| 24 | 4·46 | 19 | 4·26 | 17 | 1·77 | 8 | 10·26 | 13 | 144·30 | 246 | 132·11 | 195 | 26 | 22 | 6·20 | Feb. 24 |
| 25 | 2·35 | 12 | 1·90 | 11 | 2·50 | 8 | 5·03 | 8 | 79·16 | 172 | 72·36 | 176 | 13 | 13 | ... | ... |
| 26 | 2·31 | 11 | 3·91 | 13 | 1·99 | 5 | 7·55 | 9 | 99·02 | 197 | 102·32 | 193 | 28 | 25 | 5·18 | July 17 |
| 27 | 0·98 | 6 | 1·10 | 6 | 1·67 | 5 | 3·99 | 8 | 53·93 | 109 | 49·13 | 105 | 3 | 3 | 3·32 | March 9 |
| 28 | 5·07 | 18 | 2·39 | 15 | 1·18 | 8 | 5·19 | 10 | 91·81 | 223 | 102·58 | 200 | 2 | 2 | 6·12 | July 17 |
| 29 | 3·89 | 20 | 3·50 | 12 | 1·50 | 6 | 8·89 | 11 | 127·86 | 221 | 134·58 | 195 | 5 | 5 | 6·46 | Feb. 24 |
| 30 | 1·96 | 23 | 1·33 | 14 | 0·81 | 13 | 4·20 | 14 | 74·09 | 268 | 64·71 | 237 | 10 | 10 | 6·20 | July 17 |
| 31 | 1·70 | 12 | 1·41 | 14 | 0·84 | 11 | 4·51 | 16 | 79·39 | 212 | 68·66 | 242 | 23 | 23 | 6·38 | July 17 |
| 32 | 1·13 | 5 | 1·01 | 6 | 0·31 | 3 | 4·87 | 10 | 77·74 | 159 | 67·10 | 166 | 26 | 26 | 5·50 | July 16 |
| 33 | 4·59 | 19 | 3·23 | 16 | 1·60 | 11 | 7·61 | 13 | 136·15 | 250 | 125·77 | 251 | 37 | 34 | 7·42 | July 16 |
| 34 | 1·38 | 16 | 0·93 | 11 | 0·25 | 4 | 3·92 | 15 | 64·63 | 222 | 58·88 | 192 | 23 | 22 | 5·40 | July 17 |
| 35 | 3·24 | 23 | 1·79 | 17 | 0·67 | 10 | 5·55 | 14 | 100·75 | 244 | 87·98 | 204 | 4 | 4 | 6·58 | July 17 |
| 36 | 1·23 | 10 | 0·78 | 9 | 0·33 | 3 | 3·46 | 11 | 55·41 | 166 | 51·83 | 162 | 13 | 13 | 5·02 | July 17 |
| 37 | 1·14 | 12 | 0·99 | 11 | 0·43 | 7 | 4·03 | 12 | 57·72 | 178 | 52·86 | 148 | 13 | 13 | 5·93 | July 16 |
| 38 | 1·34 | 6 | 1·04 | 10 | 0·23 | 4 | 5·15 | 11 | 74·29 | 147 | 63·20 | 177 | 43 | 41 | 6·77 | Feb. 9 |
| 39 | 0·81 | 3 | 0·60 | 6 | 0·39 | 3 | 4·62 | 8 | 60·48 | 111 | 59·79 | 105 | 2 | 2 | 4·97 | Feb. 24 |

RAINFALL at VARIOUS STATIONS in MAURITIUS during the YEAR 1909—*continued.*

| Reference Number of Station. | January. | | February. | | March. | | April. | | May. | | June. | | July | | August. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. |
| | ins. | | ins. | | ins. | | ins. | | ins. | | ins. | | ins. | | ins. | |
| 40 | 5·29 | 14 | 24·41 | 17 | 15·71 | 17 | 2·03 | 10 | 2·92 | 11 | 8·57 | 18 | 8.25 | 16 | 1·88 | 13 |
| 41 | 4·66 | 16 | 24·32 | 16 | 14·90 | 17 | 2·41 | 12 | 2·20 | 13 | ... | ... | ... | ... | ... | ... |
| 42 | 4·13 | 6 | 14·00 | 17 | 18·19 | 18 | 0·96 | 8 | 1·24 | 10 | 6·54 | 17 | 6·75 | 11 | 0·48 | 6 |
| 43 | 7·33 | 24 | 23·54 | 19 | 25·89 | 23 | 3·86 | 16 | 3·09 | 20 | 12·11 | 26 | 10·81 | 24 | 2·98 | 18 |
| 44 | 9·06 | 26 | 17·14 | 24 | 26·17 | 31 | 5·61 | 30 | 3·51 | 29 | 12·97 | 30 | 12·21 | 31 | ... | ... |
| 45 | 8·65 | 27 | 18·75 | 20 | 27·03 | 30 | 5·38 | 29 | 3·45 | 25 | 15·60 | 29 | 12·09 | 28 | 3·86 | 26 |
| 46 | 12·49 | 23 | 16·19 | 20 | 23·98 | 27 | 4·27 | 22 | 1·97 | 14 | 15·81 | 24 | 15·24 | 23 | 4·83 | 24 |
| 47 | 9·82 | 19 | 20·58 | 20 | 22·30 | 26 | 6·30 | 25 | 4·57 | 20 | 14·29 | 29 | 11·97 | 26 | 3·97 | 21 |
| 48 | 12·05 | 24 | 25·30 | 22 | 32·36 | 24 | 9·02 | 26 | 8·86 | 21 | 27·33 | 29 | 15·89 | 29 | 9·02 | 26 |
| 49 | 15·00 | 25 | 25·25 | 24 | 36·32 | 28 | 8·77 | 25 | 4·61 | 21 | 25·38 | 29 | 17·31 | 29 | 6·02 | 22 |
| 50 | 14·26 | 15 | 25·04 | 13 | 33·34 | 21 | 7·77 | 9 | 5·41 | 4 | 21·29 | 8 | ... | ... | ... | ... |
| 51 | 3·21 | 10 | 12·27 | 13 | 12·18 | 15 | 1·57 | 9 | 0·89 | 7 | 5·49 | 13 | 7·14 | 10 | 0·54 | 6 |
| 52 | 2·88 | 8 | 17·43 | 18 | 15·72 | 18 | 7·23 | 16 | 6·69 | 16 | 15·06 | 21 | 13·00 | 21 | 4·64 | 20 |
| 53 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 17·85 | 27 | 12·51 | 24 |
| 54 | 10·58 | 21 | 28·64 | 23 | 34·08 | 25 | 13·81 | 21 | 8·61 | 17 | 39·58 | 25 | 19·04 | 21 | 14·76 | 22 |
| 55 | 9·50 | 24 | 26·76 | 25 | 29·65 | 28 | 10·31 | 22 | 9·71 | 19 | 47·77 | 28 | 16·63 | 24 | 11·33 | 27 |
| 56 | 8·07 | 24 | 22·39 | 24 | 22·78 | 28 | 9·43 | 23 | 6·70 | 19 | 35·80 | 26 | 13·39 | 22 | 9·05 | 20 |
| 57 | 3·22 | 14 | 13·00 | 18 | 12·68 | 22 | 7·98 | 17 | 3·38 | 10 | 20·94 | 25 | 12·17 | 17 | 3·48 | 15 |
| 58 | 5·50 | 19 | 16·02 | 23 | 18·04 | 28 | 7·33 | 18 | 6·78 | 16 | 24·46 | 27 | 12·57 | 24 | 5·20 | 21 |
| 59 | 8·71 | 24 | 17·66 | 20 | 24·74 | 25 | 7·28 | 19 | 6·28 | 16 | 31·23 | 27 | 11·19 | 23 | 7·27 | 22 |
| 60 | 5·35 | 11 | 15·53 | 21 | 16·25 | 23 | 8·24 | 15 | 7·80 | 13 | 27·37 | 22 | 12·01 | 15 | 3·20 | 7 |
| 61 | 3·95 | 17 | 9·42 | 19 | 10·88 | 25 | 7·22 | 23 | 2·58 | 15 | 14·60 | 26 | 9·66 | 16 | 4·01 | 17 |
| 62 | 6·64 | 23 | 10·23 | 23 | 18·46 | 25 | 6·99 | 19 | 8·74 | 19 | 23·22 | 28 | 11·76 | 22 | 5·72 | 21 |
| 63 | 3·00 | 18 | 6·16 | 18 | 11·52 | 23 | 5·06 | 17 | 2·45 | 11 | 14·11 | 26 | 10·03 | 20 | 3·14 | 18 |
| 64 | 2·02 | 14 | 4·17 | 16 | 12·87 | 22 | 5·06 | 16 | 1·76 | 13 | 11·92 | 24 | 9·36 | 21 | 2·35 | 15 |
| 65 | 9·44 | 28 | 21·98 | 20 | 24·51 | 26 | 8·95 | 24 | 8·68 | 18 | 32·98 | 27 | 15·57 | 27 | 11·19 | 22 |
| 66 | 10·78 | 15 | 27·80 | 14 | 29·14 | 18 | 8·15 | 16 | 10·61 | 14 | 28·20 | 24 | 15·33 | 27 | 10·61 | 21 |
| 67 | 5·35 | 17 | 16·32 | 17 | 21·66 | 24 | 5·68 | 17 | 7·64 | 20 | 26·45 | 27 | 12·36 | 26 | 6·62 | 20 |
| 68 | 8·43 | 15 | 17·58 | 16 | 21·46 | 22 | 5·13 | 12 | 9·77 | 12 | 27·54 | 21 | 12·99 | 18 | 9·05 | 18 |
| 69 | 5·49 | 15 | 16·03 | 19 | 21·71 | 24 | 6·71 | 19 | 8·98 | 18 | 36·16 | 25 | 12·33 | 22 | 9·46 | 19 |
| 70 | 4·54 | 20 | 13·42 | 19 | 22·16 | 22 | 6·01 | 19 | 6·74 | 15 | 23·70 | 26 | 13·07 | 21 | 6·23 | 18 |
| 71 | 2·65 | 18 | 7·49 | 17 | 22·33 | 23 | 8·20 | 17 | 4·52 | 15 | 19·46 | 24 | 11·31 | 22 | 3·22 | 15 |
| 72 | 2·25 | 16 | 7·98 | 18 | 22·33 | 24 | 6·70 | 19 | 3·03 | 13 | 16·53 | 25 | 12·43 | 20 | 2·93 | 15 |
| 73 | 3·24 | 17 | 17·86 | 17 | 15·57 | 25 | 2·62 | 20 | 3·38 | 18 | 20·70 | 25 | 12·38 | 22 | 4·61 | 18 |
| 74 | 5·13 | 12 | 18·49 | 12 | 13·30 | 16 | 5·52 | 15 | 5·47 | 16 | 17·57 | 21 | 10·23 | 13 | 3·97 | 10 |
| 75 | 2·52 | 6 | 9·14 | 13 | 28·97 | 22 | 9·15 | 14 | 6·09 | 9 | 24·37 | 20 | 12·34 | 14 | 2·58 | 6 |
| 76 | 2·68 | 12 | 7·36 | 14 | 29·45 | 22 | 8·84 | 15 | 4·18 | 12 | 19·61 | 23 | 13·69 | 17 | 3·02 | 9 |
| 77 | 4·09 | 20 | 11·29 | 16 | 17·57 | 23 | 4·86 | 18 | 3·38 | 14 | 14·03 | 27 | 9·50 | 22 | 4·00 | 17 |

RAINFALL at VARIOUS STATIONS in MAURITIUS during the YEAR 1909—*Concluded.*

| Reference Number of Station. | September. | | October. | | November. | | December. | | Total Rainfall in 1909. | | Average Annual Rainfall. | | Number of years employed. | | Greatest Daily Rainfall in the year 1909. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Total Rainfall. | No. of Days. | Amount. | Number of Rainy Days. | Amount. | Number of Rainy Days. | For Rainfall. | For Rainy Days. | Amount. | Day. |
| | ins. | | ins. | | ins. | | ins. | | ins. | | ins. | | | | ins. | |
| 40 | 1·72 | 9 | 1·16 | 9 | 0·46 | 3 | 5·46 | 11 | 77·86 | 148 | 60·67 | 137 | 12 | 11 | 5·72 | Feb. 10 |
| 41 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5·59 | July 17 |
| 42 | 0·72 | 8 | 1·17 | 7 | 0·28 | 3 | 2·83 | 5 | 57·29 | 116 | 47·16 | 86 | 7 | 7 | 4·70 | July 17 |
| 43 | 2·93 | 17 | 3·42 | 19 | 1·27 | 8 | 6·45 | 14 | 103·68 | 228 | 90·48 | 223 | 9 | 9 | 5·80 | July 17 |
| 44 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 45 | 4·06 | 26 | 3·91 | 24 | 1·32 | 11 | 9·75 | 15 | 114·45 | 296 | 89·74 | 229 | 32 | 29 | 5·85 | July 17 |
| 46 | 4·03 | 19 | 5·49 | 21 | 1·71 | 7 | 7·58 | 16 | 113·59 | 240 | 121·92 | 264 | 26 | 26 | 7·11 | July 17 |
| 47 | 2·92 | 18 | 4·55 | 15 | 1·12 | 6 | 9·95 | 14 | 112·34 | 239 | 100·22 | 217 | 4 | 3 | 5·75 | July 17 |
| 48 | 5·50 | 23 | 7·35 | 20 | 1·78 | 9 | 15·60 | 16 | 170·06 | 269 | 139·43 | 246 | 21 | 20 | 7·36 | Feb. 25 |
| 49 | 5·71 | 22 | 5·36 | 24 | 2·03 | 11 | 10·53 | 18 | 162·29 | 278 | 144·99 | 267 | 3 | 3 | 7·45 | July 17 |
| 50 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 51 | 0·32 | 4 | 0·83 | 6 | 0·66 | 4 | 5·30 | 8 | 50·40 | 105 | 52·15 | 99 | 5 | 5 | 6·00 | July 17 |
| 52 | 0·87 | 6 | 2·70 | 13 | 2·95 | 9 | 6·70 | 12 | 95·87 | 178 | 80·65 | 157 | 2 | 2 | 7·58 | July 16 |
| 53 | 6·74 | 22 | 5·80 | 22 | 3·94 | 14 | ... | ... | ... | ... | ... | ... | ... | ... | 5·74 | July 16 |
| 54 | 6·33 | 18 | 4·26 | 17 | 2·61 | 7 | 12·91 | 11 | 195·21 | 228 | 154·84 | 206 | 8 | 8 | 6·21 | March 8 |
| 55 | 6·87 | 21 | 4·22 | 20 | 3·43 | 11 | 11·03 | 19 | 187·21 | 268 | 144·13 | 240 | 46 | 46 | 6·86 | July 16 |
| 56 | 3·72 | 18 | 3·41 | 16 | 2·60 | 8 | 9·97 | 12 | 147·31 | 240 | 135·84 | 235 | 29 | 8 | 5·96 | June 17 |
| 57 | 2·12 | 11 | 2·23 | 8 | 1·25 | 5 | 6·23 | 10 | 88·68 | 172 | 91·17 | 180 | 32 | 32 | 6·81 | July 17 |
| 58 | 2·72 | 12 | 3·48 | 12 | 3·62 | 10 | 6·26 | 11 | 111·98 | 221 | 91·56 | 231 | 32 | 28 | 5·45 | July 17 |
| 59 | 4·23 | 17 | 3·08 | 21 | 2·29 | 12 | 8·80 | 12 | 132·76 | 238 | 121·97 | 234 | 16 | 16 | 5·56 | June 17 |
| 60 | 3·87 | 9 | 0·58 | 4 | 3·82 | 10 | 8·51 | 10 | 112·53 | 160 | 104·92 | 207 | 28 | 24 | 6·35 | July 17 |
| 61 | 2·01 | 10 | 1·77 | 9 | 0·82 | 4 | 4·20 | 11 | 71·12 | 192 | 63·62 | 200 | 45 | 44 | 4·78 | July 17 |
| 62 | 3·47 | 17 | 2·88 | 9 | 3·50 | 6 | 7·21 | 11 | 108·82 | 223 | 96·99 | 200 | 46 | 46 | 5·80 | July 17 |
| 63 | 1·86 | 13 | 0·84 | 5 | 1·41 | 6 | 5·02 | 8 | 64·60 | 183 | 70·56 | 168 | 6 | 5 | 5·14 | July 16 |
| 64 | 0·96 | 10 | 1·33 | 7 | 1·13 | 5 | 3·19 | 9 | 56·12 | 172 | 51·48 | 172 | 12 | 1 | 5·45 | July 16 |
| 65 | 4·42 | 22 | 5·01 | 20 | 3·60 | 7 | 15·12 | 13 | 161·45 | 254 | 127·91 | 237 | 3 | 3 | 6·58 | Feb. 25 |
| 66 | 4·42 | 15 | 7·94 | 17 | 3·06 | 7 | 12·31 | 12 | 168·35 | 200 | 135·76 | 205 | 3 | 3 | 8·41 | Feb. 25 |
| 67 | 3·22 | 18 | 2·60 | 18 | 2·30 | 9 | 9·92 | 12 | 120·12 | 225 | 106·81 | 202 | 13 | 13 | 6·43 | March 1 |
| 68 | 3·36 | 11 | 2·88 | 8 | 2·68 | 6 | 11·61 | 9 | 132·48 | 168 | 106·25 | 170 | 3 | 3 | 6·50 | July 16 |
| 69 | 3·13 | 13 | 5·27 | 11 | 2·32 | 7 | 10·64 | 9 | 138·23 | 201 | 101·25 | 186 | 24 | 12 | 10·33 | June 17 |
| 70 | 3·55 | 16 | 2·72 | 15 | 2·50 | 10 | 5·19 | 12 | 109·83 | 213 | 93·81 | 195 | 38 | 38 | 6·57 | July 17 |
| 71 | 2·36 | 15 | 1·59 | 16 | 2·39 | 9 | 3·90 | 13 | 89·42 | 204 | 72·36 | 186 | 24 | 23 | 6·24 | July 17 |
| 72 | 1·64 | 13 | 1·05 | 11 | 1·89 | 7 | 4·72 | 13 | 83·48 | 194 | 71·55 | 167 | 18 | 17 | 7·25 | July 17 |
| 73 | 3·06 | 18 | 3·04 | 16 | 2·27 | 9 | 4·05 | 14 | 92·78 | 219 | 80·72 | 211 | 42 | 42 | 6·40 | March 1 |
| 74 | 1·74 | 8 | 2·24 | 7 | 1·28 | 4 | 4·37 | 7 | 89·31 | 141 | 75·95 | 151 | 41 | 41 | 6·25 | July 16 |
| 75 | 1·59 | 4 | 1·15 | 4 | 1·85 | 2 | 4·93 | 9 | 104·68 | 123 | 102·38 | 133 | 5 | 5 | 6·84 | July 17 |
| 76 | 1·72 | 5 | 1·05 | 5 | 1·48 | 5 | 4·46 | 10 | 97·54 | 149 | 83·32 | 138 | 5 | 5 | 8·55 | March 3 |
| 77 | 1·40 | 13 | 1·39 | 9 | 0·92 | 3 | 5·31 | 6 | 77·74 | 188 | 60·11 | 134 | 21 | 20 | 6·69 | March 2 |

# APPENDIX 1.

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# CYCLONES

IN THE

# SOUTH INDIAN OCEAN

DURING THE YEAR

1909.

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# APPENDIX 1.

# CYCLONES

IN THE

# SOUTH INDIAN OCEAN

DURING THE YEAR

# 1909.

During the year 1909 nine cyclones were reported in the South Indian Ocean. The tracks of six of them have been determined as follows. (*See* Plate IV.):—

| Number of Cyclone. | Date 1909. | Position of Centre at noon. Latitude (South). | Position of Centre at noon. Longitude (East). | Distance travelled in 24 hours. |
|---|---|---|---|---|
| | | ° | ° | Miles. |
| 2 | January ... 5 | 16·8 | 68·5 | 319 |
| | 6 | 20·7 | 64·7 | 362 |
| | 7 | 25·7 | 61·0 | |
| 4 | March ... 7 | 13·3 | 55·9 | 245 |
| | 8 | 15·6 | 52·4 | 247 |
| | 9 | 18·1 | 49·0 | |
| 5 | March ... 9 | 15·3 | 58·0 | 159 |
| | 10 | 16·2 | 55·4 | 133 |
| | 11 | 17·6 | 53·6 | 118 |
| | 12 | 19·2 | 52·4 | 121 |
| | 13 | 21·2 | 52·2 | 150 |
| | 14 | 23·2 | 53·8 | 197 |
| | 15 | 24·2 | 57·2 | 199 |
| | 16 | 25·1 | 60·7 | |
| 6 | March ... 14 | 19·7 | 64·4 | 207 |
| | 15 | 21·7 | 61·4 | 233 |
| | 15½ | 23·2 | 60·0 | |
| | 16 | 25·0 | 60·7 | |
| 7 | March ... 17 | 15·0 | 59·7 | 78 |
| | 18 | 16·8 | 59·8 | 91 |
| | 19 | 18·3 | 60·0 | 67 |
| | 20 | 19·4 | 60·2 | 68 |
| | 21 | 20·5 | 60·5 | 154 |
| | 22 | 22·6 | 62·1 | 215 |
| | 23 | 24·0 | 65·7 | |
| 8 | March ... 21 | 11·6 | 61·4 | 240 |
| | 22 | 12·4 | 57·4 | 250 |
| | 23 | 13·2 | 53·2 | 126 |
| | 24 | 14·2 | 50·7 | |

Cyclone No. 1 passed to North and West of Mauritius from January 4 and 5. No. 3 passed East of Rodrigues between January 28 and February 2 and No. 9 passed over Keeling Island on November 27. The tracks of these cyclones have not been determined owing to want of observations. The observations made at Keeling Island during the passage of cyclone No. 9 are given on page. (lxxiii)

The weather in the South Indian Ocean during the passage of these cyclones is indicated in the following tables.

*Cyclone No.* 2.

The center of this cyclone passed about 120 miles to the East of Rodrigues during the morning of January 6.

January 5.

| Number of Vessel in Register. | Position at Noon. | | Barometric Pressure. | | | Maximum Temperature. (Fah). | Wind Direction and Force. | | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Lat. (S.) | Long. (E.) | 9 h. | Noon. | 15 h. | | 9 h. | Noon. | 15 h. | |
| | ° | ° | ins. | ins. | ins. | ° | | | | |
| 14408 | 31 | 56½ | ... | 30·40 | ... | ... | var. (2) | ... | E. (2) | c.p. S.W. swell |
| Mauritius... ... | | | 29·91 | 29·90 | 29·89 | 82 | E.S.E. (3) | E.b.S. (3) | E.S.E. (3) | c.p. : c.f.q. |
| Bourbon ... | | | ... | ... | 29·92 | 86 | ... | ... | E.S.E. | c. |
| Rodrigues ... | | | 29·93 | ... | 29·91 | 87 | S. (1) | ... | S.E. | f. : c.p. |

January 6.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14408 | 29¾ | 57 | ... | 30·29 | ... | ... | E. (2) | ... | E.S.E. (6) | c.q.r. high sea : S.E. swell |
| Mauritius... ... | | | 29·87 | 29·85 | 29·83 | 84 | S.E.b.E. (1) | E.b.S. (2) | S.E.b.E (2) | c.f. |
| Bourbon ... ... | | | 29·92 | ... | 29·84 | 84 | E.S.E (2) | ... | S.E.b.S. | c.f. |
| Rodrigues ... | | | 29·87 | ... | 29·89 | 86 | S.W. (1) | ... | N.W. | c.p. : f. |

January 7.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14408 | 27¾ | 58 | ... | 30·24 | ... | ... | E.S.E. | E.S.E. | E.S.E. | c.q. very heavy cross sea |
| 14411 | 12¼ | 48¼ | ... | 29·94 | ... | 77 | E. (5) | ** | N. (5) | c.q. |
| Mauritius... ... | | | 29·85 | 29·85 | 29·85 | 87 | S.E.b.S. (1) | N.W. (2) | N.b.W. (1) | b. : c.f. |
| Bourbon ... ... | | | 29·84 | ... | 29·86 | 84 | S.E.b.E. (1) | ... | E.N.E. | f. |
| Rodrigues ... | | | 29·93 | ... | 29·95 | 84 | W. | ... | N.W. | f. |

*Cyclones Nos.* 4,5,6,7, *and* 8.

From the 7th. to the 24th. of March, five cyclonic storms were reported in the South Indian Ocean in the neighbourhood of Mauritius.

No. 4 formed to the N.N.E. of Mauritius on March 7 and travelled to the Madagascar coasts by the 9th. No 5 formed due North of Mauritius, was due West of Reunion on the 13th. and then curved to South and S.E. by the 16th. On the 14th. cyclone No. 6 formed to the E.N.E. of Rodrigues, passed within 100 miles of that Island during the afternoon of the 13th. and ceased, apparently, in the same latitude and longitude as No. 5 on the same day.* (March 16th). On the 17th. cyclone No. 7 formed about 300 miles N. by W. of Mauritius,

* N.B. On Plate IV. Cyclone No. VI. *for* 16$^{d}$ *read* 15½$^{d}$ and *for* 17$^{d}$ *read* 16$^{d}$.

travelled on a S. by E. track to a little over 200 miles S.E. of Mauritius by the 22nd. and then curved on a S.E. track. Cyclone No. 8, the last of this series of storms, formed on the 21st. about 500 miles N.N.E. of Mauritius and travelled on a W.S.W. track toward the Coast of Madagascar.

March 7.

| Number of Vessel in Register. | Position at Noon. | | Barometric Pressure. | | | Maximum Temperature. (Fah). | Wind Direction and Force. | | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Lat. (S.) | Long. (E.) | 9 h. | Noon. | 15 h. | | 9 h. | Noon. | 15 h. | |
| | ° | ° | ins. | ins. | ins. | ° | | | | |
| 14428 | 26 | 44¾ | ... | 30·06 | ... | 74 | ... | S.E.b.E.(6) | ... | c.p. |
| 14429 | 26½ | 42¼ | ... | 30·17 | ... | 80 | ... | S.E.b.E.(6) | ... | c.q. High sea |
| 14430 | 13½ | 48¼ | 29·80 | 29·74 | 29·67 | 77 | S.S.E. (6) | * | S.W. (6) | o.g.q. High sea. S. swell |
| 14471 | 40½ | 79¼ | ... | 30·05 | ... | ... | N.N.E. (7) | N.N.E. (7) | N.E. (5) | c.q. High sea |
| 14460 | St Brandon | | ... | ... | ... | ... | ... | Northerly(3) | ... | o.g.r.q.l.t. |
| Mauritius... | | ... | 29·86 | 29·89 | 29·88 | 85 | E.S.E. (1) | W. by S. (1) | N.E.b.E.(1) | b. : c.f. : c. |
| Bourbon ... | | ... | 29·89 | ... | 29·93 | 84 | S.E. (1) | ... | E.S.E. (1) | c. Thunderstorm |
| Rodrigues | | ... | 29·92 | ... | 29·94 | 88 | W. (3) | ... | W.S.W. | c.f. cirrus from E.N.E. |

March 8.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14428 | 25¼ | 47½ | ... | 30·07 | ... | 76 | ... | E.S.E. (4) | ... | c. Heavy S.E. swell |
| 14429 | 27 | 45 | ... | 30·13 | ... | 80 | East (6) | ** | E.N.E. (6) | c.q. High sea |
| 14430 | 13 | 50 | 29·74 | 29·71 | 29·67 | 79 | ... | W.N.W. (7) | ... | o.g.r.l. Tremendous sea : S.S.W. swell |
| 14460 | St Brandon | | ... | ... | ... | ... | calm | ... | Northerly | p.l.t. heavy westerly swell |
| Mauritius... | | ... | 29·87 | 29·87 | 29.87 | 81 | S.E.b.E. (2) | E. by S. (1) | S. by E. (1) | c.f. : c. : o.p. |
| Bourbon ... | | ... | 29·87 | ... | 29·88 | 84 | E.S.E. (1) | ... | S.E. by E. | c. Slight sea |
| Rodrigues | | ... | 29·93 | ... | 29·93 | 87 | S.E. (5) | ... | E.N.E. | c.r.q. Sea rising |

March 9.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14428 | 23¼ | 50¾ | ... | 29·97 | ... | 80 | East (5) | ... | S.E. (5) | c.p.q. Confused sea Heavy S.E. swell. |
| 14429 | 26¾ | 48 | ... | 30·12 | ... | 80 | ... | var. (5) | ... | High rolling sea : swell N.E. |
| 14430 | 13¾ | 51 | 29·74 | 29·71 | 29·67 | 79 | N.W. (6) | ** | W.N.W. (6) | o.g.q.r.l. Confused sea, heavy S.W. swell. |
| 14460 | St Brandon | | ... | ... | ... | ... | ... | Easterly | ... | c. Heavy westerly swell. |
| Mauritius | | ... | 29·86 | 29·87 | 29·86 | 81 | E.S.E. (3) | E. by S. (5) | E.S.E. (4) | o.p. : o.d.q. : c.q. : c.f.q. |
| Bourbon | | ... | 29·87 | ... | 29·86 | 84 | S.E.b.E. (3) | ... | E.S.E. | o.g.r. Sea rising |
| Rodrigues | | ... | 29·92 | ... | 29·93 | 84 | S.E. (1) | ... | S.E. | o.g.r. Slight sea. |

* Wind veered. ** Wind backed.

March 10.

| Number of Vessel in Register. | Position at Noon. Lat. (S.) | Position at Noon. Long. (E.) | Barometric Pressure. 9 h. | Barometric Pressure. Noon. | Barometric Pressure. 15 h. | Maximum Temperature. (Fah). | Wind Direction and Force. 9 h. | Wind Direction and Force. Noon. | Wind Direction and Force. 15 h. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ins. | ins. | ins. | ° | | | | |
| 14428 | 21¼ | 54 | ... | 29·88 | ... | 83 | S.E.b.E. (5) | ... | E.N.E. (3) | o.g. High confused sea. |
| 14429 | 24½ | 51 | ... | 30·09 | ... | 80 | ... | N.E. (4) | ... | c.p.q. Long rolling sea. |
| 14430 | 14½ | 49½ | ... | 29·74 | 29·69 | 81 | N.N.E. (4) | * | E.N.E. (3) | o.g. weather improving. High S.W. swell |
| 14433 | 18 | 56¼ | ... | 29·87 | ... | 85 | E.S.E. | ** | N. | c.p. Moderate swell North. |
| 14460 | St Brandon | | ... | ... | 29·78 | 90 | E.N.E. | * | S.E. | c.q. High sea: heavy westerly swell. |
| Mauritius ... | | | 29·87 | 29·88 | 29·88 | 82 | E. by S. (3) | E. (4) | E. (4) | o.q. : c.q. : c.f. : c.f.l. |
| Bourbon ... | | | 29·87 | ... | 29·88 | 85 | E.S.E. (2) | ... | E.S.E. | Weather improving |
| Rodrigues ... | | | 29·90 | ... | 29·93 | 84 | S.E. (1) | ... | S.E. | c. |

March 11.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14429 | 22¼ | 53¾ | ... | 29·97 | ... | 84 | ... | E.N.E. (4) | ... | c.o.r.q. High swell. Wind veered to E.S.E. in the afternoon. |
| 14430 | Tamatave | | ... | 29·75 | ... | ... | ... | E.N.E. (3) | ... | Weather improving High E.S.E. swell. |
| 14433 | 15½ | 56 | ... | ... | ... | 84 | N. | ** | N.N.W. | p. Moderate swell N.N.W. |
| 14460 | St Brandon | | ... | ... | ... | ... | ... | Easterly | ... | c.q.r.l. |
| Mauritius ... | | | 29·86 | 29·85 | 29·82 | 84 | E. by S. (1) | E. (1) | E. (1) | c.f. : c : c.l. |
| Bourbon ... | | | 29·85 | ... | 29·93 | 86 | E. (2) | ... | E.S.E. | o.g. cirrus from W.S.W. |
| Rodrigues ... | | | 29·90 | ... | 29·91 | 84 | S.S.E. (2) | ... | S.E. | c.p. |

March 12.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14429 | 20¼ | 56½ | ... | 29·93 | ... | 82 | ... | E. (4) | ... | o.p.q. Moderate sea |
| 14430 | 18½ | 48½ | 29·70 | 29·67 | 29·64 | 79 | S. (3) | ** | N.E. (3) | o.g.r. (a.m.) High S.S.E. swell (p.m,) High S.E. swell. |
| 14431 | 10½ | 63¾ | ... | 29·81 | ... | 84 | W.b.N.(5) | S.S.W. (5) | W. (4) | o. High confused sea. |
| 14433 | 13½ | 54 | ... | 29·79 | ... | 82 | ... | N.N.W. | ... | c.p. Moderate N.N.W. swell. |
| 14460 | St Brandon | | ... | ... | ... | 91 | S.E. | ** | S.S.E. | f. Moderate sea; westerly swell. |
| Mauritius ... | | | 29·82 | 29·81 | 29·81 | 84 | E. by N. (2) | E. by N. (2) | E.b.N. (2) | o.t.p. : c. : o.p.l. |
| Bourbon ... | | | 29·85 | ... | 29·80 | 82 | N.E. (1) | ... | E.N.E. | o.g.r. |
| Rodrigues ... | | | 29·78 | ... | 29·88 | 86 | S.S.E. (1) | ... | S.E. | b. |

* Wind veered. ** Wind backed.

March 13.

| Number of Vessel in Register. | Position at Noon. Lat. (S.) | Position at Noon. Long. (E.) | Barometric Pressure. 9 h. | Barometric Pressure. Noon. | Barometric Pressure. 15 h. | Maximum Temperature. (Fah). | Wind Direction and Force. 9 h. | Wind Direction and Force. Noon. | Wind Direction and Force. 15 h. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ins. | ins. | ins. | ° | | | | |
| 14430 | 13 | 50½ | 29·67 | 29·63 | 29·62 | 79 | E.N.E. (6) | ** | N.N.E. (3) | o.g.p.q. Tremendous sea : at 1 p.m. wind backed to North. |
| 14431 | 13¾ | 63½ | ... | 29·79 | ... | 90 | S.W. (5) | S.W. (4) | S.W.b.W.(5) | c.p. High sea |
| 14433 | 13½ | 54 | ... | 29·79 | ... | 82 | ... | N.N.W. | ... | c. Moderate swell N.N.W. |
| 14460 | St Brandon | | ... | ... | ... | 91 | calm | ... | Southerly | c.r. Smooth sea : westerly swell. |
| Mauritius ... | | | 29·77 | 29·81 | 29·79 | 84 | E.N.E. (2) | N.E.b.E. (2) | N.E.b.E (2) | o. : c.f. : c.l.t. |
| Bourbon ... | | | 29·68 | ... | 29·74 | 86 | N.E. (2) | ... | N.E. | Weather becoming worse. |
| Rodrigues ... | | | 29·85 | ... | 29·85 | 85 | calm | ... | S. (1) | p. |

March 14.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14431 | 16½ | 61¼ | ... | 29·78 | ... | 90 | S.W. (5) | S.W. (5) | S.W.b.W.(5) | c.p. High sea. |
| 14433 | 11¾ | 52½ | ... | 29·83 | ... | 82 | ... | N.N.W. | ... | f. Moderate swell |
| 14440 | 12 | 43½ | ... | 29·78 | ... | 84 | ... | W. (2) | ... | c.r.q. |
| 14460 | St Brandon | | ... | ... | ... | ... | Westerly | * | W.S.W. | c.q. High sea : heavy westerly swell. |
| Mauritius ... | | | 29·80 | 29·80 | 29·80 | 85 | E. by N. (1) | E. by S. (1) | N.W.b.W. (5) | c.l.t. : o.r. : c. |
| Bourbon ... | | | 29·78 | ... | 29·82 | 84 | N. (3) | ... | W. | Weather improving. |
| Rodrigues ... | | | 29·79 | ... | 29·71 | 86 | S.W. (1) | ... | S.W. | o.g.r.q. |

March 15.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14431 | 19 | 58¾ | ... | 29·83 | ... | 89 | S.W.b.W.(5) | S.W.b.S. (5) | S.W. (5) | o.q.p. High swell from E.S.E. |
| 14433 | Farquhar | | ... | ... | ... | ... | ... | ... | ... | f. fresh breeze. |
| 14440 | Majunga | | ... | 29·78 | ... | 84 | ... | E.N.E. (1) | ... | r.t. |
| 14460 | St Brandon | | 29·88 | ... | 29·82 | 94 | ... | West | ... | c. scud. Heavy sea : westerly swell. |
| Mauritius ... | | | 29·82 | 29·83 | 29·81 | 87 | S. by W. (1) | W.b.S. (1) | S.W.b.W.(2) | c.f. : c. : c.p. : c. |
| Bourbon ... | | | 29·87 | ... | 29·87 | 84 | N.E.b.N.(2) | ... | S.W. | f. |
| Rodrigues ... | | | 29·80 | ... | 29·84 | 81 | N.E. (7) | ... | N.E. | o.g.r.q. Sea rough. |

March 16.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14440 | Majunga | | ... | 29·76 | ... | 87 | ... | E. by N. | ... | ... |
| 14460 | St Brandon | | ... | ... | 29·70 | 87 | ... | West (6) | ... | q. Mountainous sea : Hurricane appearance. |
| Mauritius ... | | | 29·79 | 29·78 | 29·76 | 85 | S. by E. (3) | S. by E. (4) | S. by E. (3) | c.f. : c.r.q. : o. |
| Bourbon ... | | | 29·87 | ... | 29·83 | 86 | S.W. (1) | ... | S.W. | f. cirrus from N.N.W. |
| Rodrigues ... | | | 29·82 | ... | 29·81 | 85 | E. (3) | ... | E. | c.p.q. Sea rough |

* Wind veered. ** Wind backed.

March 17.

| Number of Vessel in Register. | Position at Noon. Lat. (S.) | Position at Noon. Long. (E.) | Barometric Pressure. 9 h. | Barometric Pressure. Noon. | Barometric Pressure. 15 h. | Maximum Temperature. (Fah). | Wind Direction and Force. 9 h. | Wind Direction and Force. Noon. | Wind Direction and Force. 15 h. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ins. | ins. | ins. | ° | | | | |
| 14440 | Nossi Bé | | ... | 29·77 | ... | 88 | ... | E.N.E. (1) | ... | ... |
| 14460 | 16 | 59½ | ... | ... | 29·52 | 85 | ... | West (9) | ... | o.g.r. High beam sea : westerly swell. |
| Mauritius ... | | | 29·71 | 29·72 | 29·70 | 82 | S.S.E. (3) | S.E.b.S. (4) | S.S.E. (4) | o. : o.p.q. : o.p.t-s.m. |
| Boubon ... | | | 29·80 | ... | 29·77 | 85 | S.W. (3) | ... | S.S.E. | o·g.r. |
| Rodrigues ... | | | 29·76 | ... | 29·79 | 84 | E. (3) | ... | E. | c.p. Sea calm. |

March 18

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14432 | 14¾ | 48 | ... | 29·89 | ... | ... | S. (2) | * | S.S.W. | See choppy : Moderate S.E. swell. |
| 14440 | Nossi Bé | | ... | 29·60 | ... | 79 | ... | N.N.E. | ... | ... |
| Mauritius ... | | | 29·68 | 29·69 | 29·67 | 83 | S.E.b.S. (2) | S.E. (3) | S.E.b.S. (3) | c. : o. : o.p. |
| Bourbon ... | | | 29·77 | ... | 29·78 | 84 | S. (3) | ... | S. | c.p. Sea tremendous |
| Rodrigues ... | | | 29·74 | ... | 29·75 | 84 | E. (3) | ... | N.E. | o.g.r.q. |

March 19.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14433 | 11¼ | 51½ | ... | 29·85 | ... | 80 | S. | ** | S.S.E. | f. Moderate southerly swell |
| 14437 | 11 | 70 | ... | 29·85 | ... | 83 | N.W. | ** | W.N.W. | c.p. Moderate sea : westerly swell. |
| 14440 | Diego Suarez | | ... | 29·63 | ... | 82 | ... | N.N.E. | ... | t.q. Moderate sea. |
| Mauritius ... | | | 29·73 | 29·73 | 29·73 | 83 | S.E.b.S. (3) | S.S.E. (4) | S.S.E. (4) | c.p. : c.q. : c.l. |
| Bourbon ... | | | 29·80 | ... | 29·81 | 84 | E. (1) | ... | W.N.W. | c.f. Slight sea. |
| Rodrigues ... | | | 29·72 | ... | 29·75 | 84 | E. (5) | ... | E. | c.p. Sea rough. |

March 20.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14433 | 12¾ | 50½ | ... | 29·88 | ... | 82 | S. | ** | S.S.E. | f. moderate southerly swell. |
| 14436 | 28¼ | 39 | ... | 30·02 | ... | 75 | N.E. (3) | * | E. (5) | c.p. Moderate sea : easterly swell |
| 14437 | 13¼ | 67¼ | ... | 29·82 | ... | 84 | N.N.W. | ** | W.N.W. | c.p. Moderate sea : High westerly swell. |
| 14440 | Diego Suarez | | ... | 29·82 | ... | 84 | ... | E. (1) | ... | ... |
| Mauritius ... | | | 29·77 | 29·78 | 29·75 | 81 | S.b.E. (3) | S.S.E. (3) | S.S.E (3) | o.p. : c.p. |
| Bourbon ... | | | 29·85 | ... | 29·85 | 83 | S. (1) | ... | N.W. | o.p. Sea rising. |
| Rodrigues ... | | | 29·77 | ... | 29·80 | 85 | E.N.E. (2) | ... | E. | o.g.r. |

* Wind veered. ** Wind backed.

March 21.

| Number of Vessel in Register. | Position at Noon. Lat. (S.) | Position at Noon. Long. (E.) | Barometric pressure. 9 h. | Barometric pressure. Noon. | Barometric pressure. 15 h. | Maximum Temperature. (Fah). | Wind Direction and Force. 9 h. | Wind Direction and Force. Noon. | Wind Direction and Force. 15 h. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | ° | ° | ins. | ins. | ins. | ° | | | | |
| 14432 | 19 | 49½ | ... | 29·91 | ... | ... | S.S.W. (3) | ** | S.S.E. | High sea, |
| 14434 | 22¼ | 38½ | ... | 29·98 | ... | 79 | S.E. (2) | ** | S.E. (4) | f. S.E. swell. |
| 14435 | 11½ | 64¾ | ... | 29·86 | ... | ... | ... | N.W. (5) | ... | c.p. High sea. |
| 14436 | 26¾ | 43 | ... | 30·04 | ... | 80 | ... | E. (4) | ... | f. Moderate sea S.E. swell. |
| 14437 | 15¾ | 64½ | ... | 29·80 | ... | 84 | W | * | N.N.W. | o.r.q. Heavy confused sea: S.W. swell. |
| 14440 | Diégo Suarez | | ... | 29·98 | ... | 82 | ... | W.S.W. (1) | ... | t. |
| Mauritius... | | ... | 29·76 | 29·76 | 29·75 | 82 | S.E.b.S. (3) | S.E.b.S. (4) | S.E. (4) | o.p.q. |
| Bourbon ... | | ... | 29·86 | ... | 29·84 | 83 | S.S.E. (1) | ... | N.E. | f. |
| Rodrigues | | ... | 29·82 | ... | 29·84 | 85 | E. (3) | ... | S.E. | c.p. |

March 22.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14434 | 24¾ | 43 | ... | 29·95 | ... | 72 | ... | S.E. (4) | ... | f. Moderate sea. |
| 14435 | 14¼ | 62¼ | ... | 29·82 | ... | ... | N.W. (4) | ... | N.W. (4) | f. |
| 14436 | 25¾ | 47 | ... | 30·01 | ... | 79 | E. (6) | ... | E.N.E. (5) | f. Moderate sea: S.E. swell. |
| 14437 | 17¾ | 61 | ... | 29·76 | ... | 82 | N.W. | * | E.S.E. | o.r.q. (a.m.) S.W. swell (p.m.) S.E. swell. |
| 14440 | Diégo Suarez | | ... | 29·98 | ... | 82 | ... | E. by S. (1) | ... | t. |
| Mauritius... | | ... | 29·82 | 29·83 | 29·82 | 80 | S.E.b.E. (3) | E.S.E. (4) | E.S.E. (4) | c.p.q. |
| Bourbon ... | | ... | 29·88 | ... | 29·90 | 84 | E.S.E. (1) | ... | E.b.N. | f. |
| Rodrigues | | ... | 29·93 | ... | 29·94 | 82 | calm | ... | W.S.W. | c.p. |

March 23.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 14433 | 14 | 51 | ... | 29·86 | ... | 82 | S. | * | S.S.W. | o.r.q. High sea. |
| 14434 | 25¼ | 47 | ... | 30·01 | ... | 74 | ... | E.S.E. (5) | ... | f. Moderate sea. |
| 14435 | 17 | 60 | ... | ... | ... | ... | N.E. | * | ... | o.q.r. High confused sea. |
| 14436 | 23¼ | 50¾ | ... | 30·02 | ... | 80 | E.S.E. (5) | ... | E. (5) | f.q. Moderate sea: high S.E. swell. |
| 14437 | 20 | 57½ | ... | 29·92 | ... | 80 | S.E. | ** | E. | c.p. Rough sea. |
| 14440 | Diégo Suarez | | ... | 29·95 | ... | 86 | ... | S.E. (1) | ... | f. |
| 14460 | 17¾ | 59 | ... | ... | 29·76 | 85 | E.N.E. | * | S.E. | o.g.q.l. N.E. swell |
| Mauritius | | ... | 29·91 | 29·93 | 29·94 | 81 | E. by S. (4) | E. (3) | E. by S. (4) | c.p.q. |
| Bourbon | | ... | 29·90 | ... | 29·94 | 84 | E. by N. (3) | ... | E.S.E. | c.r. |
| Rodrigues | | ... | 29·95 | ... | 30·02 | 84 | W.S.W. (2) | ... | W.S.W. | f. |

* Wind veered. ** Wind backed.

March 24.

| Number of Vessel in Register. | Position at Noon. | | Barometric Pressure. | | | Maximum Temperature. (Fah). | Wind Direction and Force. | | | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|
| | Lat. (S.) | Long. (E.) | 9 h. | Noon. | 15 h. | | 9 h. | Noon. | 15 h. | |
| | ° | ° | ins. | ins. | ins. | ° | | | | |
| 14433 | 15 | 51½ | ... | 29·81 | ... | 82 | S. | * | S.W. | q. of hurricane force o.r.t.l. High sea S.E. swell. |
| 14434 | 23 | 50¾ | ... | 30·04 | ... | 76 | ... | E.S.E. (5) | ... | f. Rough sea : high E. swell. |
| 14436 | 22 | 54¾ | ... | 29·89 | ... | 80 | E.S.E. (6) | ... | E.N.E. (6) | c.p.q. Rough sea : confused high E. ly swell. |
| 14440 | 14¼ | 48 | ... | 29·98 | ... | 84 | S.E. (1) | * | S.W. (3) | ... |
| 14460 | 19½ | 58 | 29·97 | ... | 29·95 | 80 | ... | E.S.E. | ... | c.q.p. High S.E. swell. |
| Mauritius ... | | | 30·00 | 30·02 | 30·01 | 80 | E. (4) | E (3) | E. (3) | c.p.q. |
| Bourbon ... | | | 29·97 | ... | 29·99 | 84 | E.S.E. (3) | ... | E. by S. | c.p. |
| Rodrigues ... | | | 30·03 | ... | 30·05 | 83 | S.E. (2) | ... | S.E. | f. |

* Wind veered.

## *Cyclone No. 9.*

There are no observations which permit the determination of the track of this cyclone after its passage over Keeling Island from N.N.E. to S.S.W. The Superintendent of the Eastern Telegraph Company at that Station reports as follows :—

The wind began to blow strongly from the S.S.E. on the morning of the 27th. and the barometer fell steadily ; precautions were therefore taken in case of a further increase of the wind. As later in the day the barometer still continued to fall and the wind increased in violence, the cyclone shutters were put up, guy ropes fastened, boats brought ashore, and other preparations made for eventualities.

Towards the evening, the force of the wind became exceedingly strong, there was also a high sea running ; and I found that the foreshore was being gradually washed away ; further precautions were therefore taken to safeguard the Company's property.

Shortly after 7.30 p.m. the barometer fell rapidly, and the wind increased to a most terrific force : rain fell in torrents. At 8.15 p.m. all the instruments in the office were vibrating sharply, and it was impossible to read on any of the circuits : our duplex balances were also affected, Perth, Rodriguez and Batavia Stations were, therefore, advised, and the cables put to earth. The wind continued to blow with cyclonic force, but at 10 p.m. there was a distinct lull in the storm, and the moon which had previously been obscured, was then visible, but as the barometer was still exceedingly low (27·96$^{ins}$. corrected) it was evident that the storm was not yet over : precautions were therefore taken in case the wind veered round to the North, and hurricane shutters were put up at the back of the office, the Staff Quarters and other houses ".

The corrected readings of the barometer were as follows :—

| | h. m. | | | ins. |
|---|---|---|---|---|
| 27th. November | 8.00 | ... | ... | 29·830 |
| | 14.40 | ... | ... | 29·600 |
| | 15.20 | ... | ... | 29·560 |
| | 16.45 | ... | ... | 29·345 |
| | 18.15 | ... | ... | 29·245 |
| | 18.45 | ... | ... | 29·195 |
| | 19.30 | ... | ... | 29·080 |
| | 19.45 | ... | ... | 28·758 |
| | 20.30 | ... | ... | 28·560 |
| | 22.00 | ... | ... | 27·962 |
| | 22.01 | ... | ... | 27·986 |
| | 22.10 | ... | ... | 28·010 |
| | 22.20 | ... | ... | 28·012 |
| | 23.30 | ... | ... | 28·260 |
| | 23.35 | ... | ... | 28·360 |
| | 23.40 | ... | ... | 28·410 |
| | 23.45 | ... | ... | 28·510 |
| 28th. November | 0.15 | ... | ... | 28·808 |
| | 0.25 | ... | ... | 28·908 |
| | 0.30 | ... | ... | 29·058 |
| | 3.30 | ... | ... | 29·040 |
| | 4.30 | ... | ... | 29·000 |
| | 6.00 | ... | ... | 28·975 |

It will be seen that the barometer fell an inch in 12½ hours, the total fall being 1.87 inch in 14 hours ; the subsequent rise was as rapid as the fall. Unfortunately no record of the wind velocity was obtained, the anemometer having been blown away.

*Index to Vessels.*

| Number of Vessel in Register. | Ship's Name. | Number of Vessel in Register. | Ship's Name. | Number of Vessel in Register. | Ship's Name. | Number of Vessel in Register. | Ship's Name. |
|---|---|---|---|---|---|---|---|
| 14408 | Sch. Greyhound | 14431 | S.S. Shah Ameer | 14435 | S.S. Britannia | 14440 | S.S. Djibouti |
| 14428 | S.S. Counsellor | 14432 | M.M. Adour | 14436 | S.S. Clan Menzies | 14460 | Schooner Louis Alfred |
| 14429 | S.S. City of Delhi | 14433 | S.S. Secunder | 14437 | S.S. Fultala | 14471 | Bark Umvoti |
| 14430 | M.M. Melbourne | 14434 | S.S. Avondale Castle | | | | |

# APPENDIX 2.

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# RESULTS

OF

# SEISMOLOGICAL OBSERVATIONS.

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1909.

# APPENDIX 2.

# RESULTS

OF

# SEISMOLOGICAL OBSERVATIONS,

# 1909.

## INTRODUCTION.

The Seismograph used for the registration of unfelt earth movements is of the Milne pattern, recommended by the Seismological Committee of the British Association for the Advancement of Science, and described in the Annual Report of the Committee for the year 1896.

The instrument is mounted in the north-east corner of the Magnet Basement, on a concrete pillar which rises from a foundation of the same material, 8½ feet deep and 4 feet square. The pillar, which projects 4 feet above the floor, is 6 feet high and tapers from 4 feet square at the base to 1½ feet at the top. It is not in contact with the earth on any side, so that the instrument records the movements of the concrete foundation, the base of which is 10½ feet below the level of the floor and 22½ feet below the level of the ground.

On 1902, February 7, a second pendulum was added to the instrument for the registration of earth movements in a north-south direction, and arranged to record on the same strip of paper as the original pendulum.

On removal to the Magnet Basement on 1905, August 17, the instrument was orientated with its booms in an east-west direction, so that this component is now registered by the new pendulum, and the north-south component by the original pendulum.

For further particulars concerning the working of the instrument, reference may be made to the volumes for 1902 and 1903 (Appendix).

Particulars of 94 earthquakes registered during the year 1909 are given on pp. (lxxix) and (lxxx), and the seismograms of those recorded on are reproduced on Plate 5.

In addition to earthquake movements, the instrument records gradual changes of level, for the study of which the ordinates of the seismograms are measured at every hour of the day commencing at midnight (Mauritius Standard Time).The mean hourly ordinates in each month,

the progressive change, and daily ranges of level are converted into angular measure by the formulæ :—

$$a = \cdot 0528/\tau^2 - \cdot 000095/\tau^4 - \cdot 2398 \text{ for the original pendulum,}$$
$$a = \cdot 0520/\tau^2 - \cdot 000107/\tau^4 - \cdot 0786 \text{ for the new pendulum,}$$

where $a$ is the angular value (in seconds) of 1 division of the scale and $\tau$ the time of vibration of the pendulum (in minutes).

These formulæ were deduced from simultaneous observations of the time of vibration and scale value at varying sensibilities, made in the month of November and December 1907.

On 1907, November 23 new, spherical agate cups were fitted to the booms of the Seismograph, in place of the original cups which were conical. The bearing surfaces of the new cups are portions of spheres of 3 millimetres radius.

The observed times of vibration of the booms during the year 1909 are given below.

| Date, 1909. | Pendulum. | | Date, 1909. | Pendulum. | | Date, 1909. | Pendulum. | |
|---|---|---|---|---|---|---|---|---|
| | N.-S. | E.-W. | | N.-S. | E.-W. | | N.-S. | E.-W. |
| January. | mins. | mins. | May. | mins. | mins. | August. | mins. | mins. |
| 9 | 0·38 | 0·38 | 19 | ... | 0·33 | 10 | 0·45 | ... |
| 13 | ·42 | ·32 | 22 | 0·35 | ·33 | 12 | ·45 | 0·47 |
| 18 | ... | ·33 | 27 | ... | ·33 | 19 | ·47 | ... |
| 23 | ·40 | ·36 | 28 | ·26 | ... | 22 | ·45 | ... |
| | | | | | | 23 | ... | ·53 |
| February. | | | June. | | | 28 | ·40 | ... |
| 4 | ·37 | ·35 | 1 | ·70 | ... | | | |
| 8 | ·47 | ·37 | 4 | ... | ·33 | | | |
| 28 | ·37 | ·34 | 7 | ... | ·35 | September. | | |
| | | | 9 | ·37 | ... | 3 | ·43 | ... |
| March. | | | 14 | ... | ·33 | 13 | ... | ·47 |
| 8 | ·40 | ... | 15 | ·32 | ·33 | 27 | ... | ·47 |
| 10 | ·45 | ·33 | 17 | ·30 | ... | | | |
| 13 | ... | ·37 | 24 | ... | ·45 | | | |
| 20 | ·45 | ... | 25 | ·37 | ... | October. | | |
| 22 | ... | ·33 | | | | 5 | ... | ·37 |
| 23 | ·41 | ... | July. | | | 15 | ... | ·30 |
| 31 | ·45 | ·42 | 8 | ·47 | ... | 20 | ... | ·33 |
| | | | 10 | ·50 | ·45 | 23 | ·30 | ... |
| April. | | | 13 | ·50 | ... | 26 | ·25 | ·37 |
| 3 | ·43 | ·37 | 15 | ... | ·48 | | | |
| 7 | ·40 | ·33 | 17 | ... | ·47 | | | |
| 13 | ·38 | ·33 | 19 | ·50 | ... | November. | | |
| 20 | ... | ·37 | 24 | ... | ·48 | 3 | ·24 | ·37 |
| 23 | ·39 | ·33 | 25 | ·50 | ... | 11 | ... | ·35 |
| | | | 27 | ... | ·45 | 13 | ... | ·30 |
| May. | | | 28 | ·50 | ... | | | |
| 1 | ·40 | ·33 | | | | | | |
| 4 | ·38 | ·33 | August | | | December | | |
| 10 | ·37 | ·33 | 3 | ·37 | ... | 5 | ... | ·32 |
| 11 | ·33 | ... | 4 | ·45 | ... | 16 | ... | ·33 |
| 12 | ... | ·33 | 5 | ... | ·45 | 30 | ·24 | ·35 |
| 15 | ·40 | ... | 8 | ... | ·40 | | | |

The time of vibration of the booms is determined by eye and ear observations generally once a week, but in addition to this, measurements are made on the photographic register whenever the booms, have been disturbed by the observer, accidentally or otherwise.

It will be seen that the time of vibration of both booms varies considerably. In deriving the values given in the tables on pp (lxxxi)–(lxxxiv) the mean time of vibration is used for periods during which the variations are relatively small. It should be mentioned that the probable error of observation amounts to $0^{m}\cdot02$ when the time of vibration is small, or when the pendulum comes to rest too quickly, also the experiments indicate that the relation between $\alpha$ and $\tau$ depends to a small extent on the position of the pivot in the agate cup, owing to imperfections in the form of one or other, or both. For these reasons the adopted scale values may occasionally differ by 10 per cent. from the true value. This will affect all absolute values ; but in the case of mean monthly diurnal inequalities, the form of the curve, if not the amplitude, may be considered correct. For various reasons, in some months, only a few days' registers were available ; the monthly means are therefore not strictly comparable, apart from errors in the adopted scale values.

The diurnal range of level given on pp. (lxxxi)–(lxxxiii) refers to the civil day, and the progressive change of level is the excess of the ordinate at $24^{h}$ over the ordinate at $0^{h}$ on each. day, the sign (+) indicating a tilt to north or east, and the sign (—) a tilt to south or west.

The gradual tilting of the pillar is shown graphically on Plate 6. The diagram has been constructed by plotting the accumulated changes of level as rectangular co-ordinates from a fixed point. It is, however, incomplete, owing to the loss of register mentioned above. The total change of level during the year was probably greater than that shown in the diagram. The boom tilted irregular to the S.E. until the middle of April ; from the middle of April until the middle of August, Northward, and then North-Eastward until the end of the year.

In determining the mean diurnal inequality of level for each month page (lxxxiv), only those days have been included for which complete and undisturbed registers of both north and east components were available. The non-periodic variations have been eliminated by applying to each mean hourly value the correction—

$$\gamma = (h - 12)\ (x_0 - x_{24})/24,$$

where $\gamma$ is the correction to be applied to the mean monthly values at the hour $h$, and $x_0$, $x_{24}$, the mean monthly values at the hours $0^{h}$ and $24^{h}$ respectively.

The monthly mean north and east components of tilt are shown graphically on Plates 7 and 8, and to illustrate more clearly the nature of the diurnal tilting of the pillar, vector diagrams for each month, showing the amount and direction of tilt from hour to hour, have been constructed by plotting the north and east components as rectangular co-ordinates from a fixed point (Plate 9).

On the whole, the vector diagrams for the different months of 1909, show very much the same characteristics : a steady tilt to S.E. until $7^{h}$ or $8^{h}$ with a return to the N.W. until $15^{h}$ or $16^{h}$. The most disturbed months were January and June ; in the former month the N.S. component predominated, while in the latter the E.W. component predominated, but the movements were very irregular.

LIST of EARTHQUAKES recorded at the ROYAL ALFRED OBSERVATORY, MAURITIUS, in the YEAR 1909.

| Slide Register Number. | Mauritius Register Number. | Date, 1909. | | Time of Commencement of Preliminary Tremors (G.C.T.) | Time of Commencement of 2nd Phase (G.C.T.) | Time of Commencement of Large Waves (G.C.T.) | Time of Maximum (G.C.T.) | Time of End of Disturbance (G.C.T.) | Amplitude. Mills. | Amplitude. Arc. | Component. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | d. | h. m. | h. m. | h. m. | h. m. | h. m. | | ″ | | |
| 1676 | 728 | Jan.... | 3 | 22. 5·7 | ... | ... | ... | 22.37·7 | ... | ... | | Slight thickenings in both E.-W. and N.-S. |
| | 729 | „ | 17 | 3.49·0 | ... | ... | 3.52·5 | 3.56·0 | ... | ... | E. - W. | |
| 1695 | 730 | „ | 21 | 3.15·1 | ... | ... | 3.18·6 | 3.23·1 | ... | ... | E. - W. | In N.-S. very slight. |
| 1701 | 731 | „ | 23 | 2.58·0 | ... | ... | 3.18·0 | ? | 1·0 | ... | E. - W. | |
| | | | | 2.58·0 | 3. 7·0 | 3.14·5 | 3.21·0 | ? | 0·9 | ... | N. - S. | |
| | 732 | „ | 28 | 20.43·7 | ... | ... | ... | 20.57·7 | ... | ... | E. - W. | Irregular thickening in E.-W. only. Seismic origin uncertain. |
| | 733 | „ | 29 | 0. 3·7 | ... | ... | ... | 0.14·7 | ... | ... | E. - W. | |
| 1707 | 734 | „ | 29 | 1.29·7 | ... | ... | 1.34·3 | 1.51·7 | ... | ... | E. - W. | |
| | 735 | Feb.... | 2 | 8.19·9 | ... | ... | ... | 8.22·9 | ... | ... | N. - S. | |
| | 736 | „ | 2 | 23.25·3 | ... | ... | ... | 23.30·3 | ... | ... | E. - W. | |
| | 737 | „ | 5 | 10.40·2 | ... | ... | ... | 10.43·2 | ... | ... | | Irregular thickening in both : probably not of seismic origin. |
| 1715 | 738 | „ | 22 | 9.41·9 | ... | 9.50·4 | 9.50·9 | ... | 1·1 | ... | E. - W. | |
| | | | | | ... | ... | 10.23·4 | ... | 0·6 | ... | E. - W. | |
| | | | | | ... | ... | 9.51·9 | ... | ... | ... | N. - S. | |
| | | | | | ... | ... | 10. 2·9 | ... | ... | ... | N. - S. | |
| 1738 | 739 | „ | 26 | 12.15·9 | ... | ... | ... | 12.19·9 | ... | ... | E. - W. | In N.-S. very slight. |
| | 740 | „ | 26 | 17.57·9 | ... | ... | ... | 18.39·9 | ... | ... | E. - W. | Slight irregular thickening. |
| | | | | 17.30·9 | ... | ... | ... | 18.35·9 | ... | ... | N. - S. | |
| | 741 | „ | 27 | 8.35·2 | ... | ... | ... | 8.52·2 | ... | ... | E. - W. | Seismic origin uncertain. |
| | 742 | Mar.... | 7 | 18.24·0 | ... | ... | ... | 18.36·0 | ... | ... | E. - W. | |
| | | | | 18.24·5 | ... | ... | ... | 18.31·5 | ... | ... | N. - S. | |
| 1753 | 743 | „ | 8 | 11.55·5 | ... | 12.16·5 | 12.19·5 | 12.31·5 | 0·6 | ... | E. - W. | In N.-S. very slight. |
| 1758 | 744 | „ | 12 | 23.42·5 | ... | ... | 0.14·0 | ? | ... | ... | E. - W. | Occasional thickening. |
| | | „ | 13 | 0. 0·5 | ... | ... | 0.14·5 | 0.29·5 | ... | ... | N. - S. | |
| 1760 | 745 | „ | 13 | 14.48·5 | ... | ... | 15.22·5 | 17.17·0 | 0·8 | ... | E. - W. | Frequent movements. |
| | 746 | „ | 17 | 10.33·7 | ... | ... | ... | 10.40·2 | ... | ... | E. - W. | Irregular thickening in E.-W. in N.-S. very slight. |
| 1763 | 747 | „ | 17 | 23. 6·2 | ... | 23.24·7 | 23.28·2 | 0. 8·7 | 2·5 | ... | E. - W. | In N.-S. very slight and irregular |
| | 748 | „ | 20 | 14.28·4 | ... | ... | ... | 14.32·4 | ... | ... | E. - W. | |
| 1772 | 749 | April | 10 | 5.50± | ... | 6.19·8 | 6.24·8 | 8.± | 1·5 | ... | E. - W. | |
| 1773 | 750 | „ | 10 | 19.11·3 | ... | 20.31·8 | 20.34·5 | ... | 0·6 | ... | E. - W. | In N.-S. slight. Beginning and end uncertain. |
| | | | | ... | ... | ... | 20.36·8 | ... | 0·5 | ... | N. - S. | Frequent small movements. |
| 1774 | 751 | „ | 11 | 4.19·3 | ... | ... | 4.23·3 | 4.30·3 | ... | ... | E. - W. | |
| 1788 | 752 | „ | 25 | 22.25·1 | ... | ... | 22.30·1 | ... | ... | ... | E. - W. | |
| | | „ | 25 | ? | ... | ... | 23.18·1 | 23.35·6 | ... | ... | E. - W. | |
| | 753 | „ | 26 | 20.46·3 | ... | ... | ... | 20.52·3 | ... | ... | | |
| 1790 | 754 | „ | 27 | 13. 4·8 | 13.22·8 | 13.27·3 | 13.29·8 | 14.38·8 | 3·0 | ... | E. - W. | Irregular movements in both. |
| | | | | ... | ... | ... | 13.29·8 | ... | ... | ... | N. - S. | |
| | 755 | May... | 2 | 7.45·7 | ... | ... | 7.53·2 | 8.12·7 | ... | ... | E. - W. | |
| 1793 | 756 | „ | 2 | 19. 4·7 | ... | ... | 19.10·2 | 19·20·2 | 0·6 | ... | E. - W. | |
| | 757 | „ | 2 | 22.16·4 | ... | ... | 22.20·4 | 22.24·4 | ... | ... | E. - W. | In N.-S. very slight. |
| | | „ | 2 | 22.18·4 | ... | ... | 22.20·4 | 22.23·4 | ... | ... | N. - S. | Slight thickenings. |
| | 758 | „ | 2 | 22.42·4 | ... | ... | 22.47·4 | 22.51·4 | ... | ... | E. - W. | |
| | | „ | 2 | 22.43·4 | ... | ... | 22.46·9 | 22.51·4 | ... | ... | N. - S. | Slight thickenings. |
| | 759 | „ | 3 | 0.15·4 | ... | ... | 0.19·4 | 0.23·4 | ... | ... | E. - W. | |
| | | „ | 3 | 0.16·9 | ... | ... | 0.18·9 | 0.24·4 | ... | ... | N. - S. | |
| | 760 | „ | 10 | 13. 4·3 | ... | ... | ... | 13.16·3 | ... | ... | E. - W. | |
| | 761 | „ | 10 | 20.19·4 | ... | ... | 20.23·9 | 20.31·9 | ... | ... | E. - W. | Irregular thickenings. |
| | 762 | „ | 12 | 1.13·2 | ... | ... | 1.25·2 | 1.40·2 | 1·0 | ... | E. - W. | Slight in N.-S. |
| 1812 | 763 | „ | 17 | 8.21·6 | ... | ... | 8.32·1 | 8.53·1 | 1·0 | ... | | In N.-S. thickening with maximum at $1^{h}21^{m}\cdot2$ |
| 1825 | 764 | „ | 25 | 5.33·0 | ... | ... | 5.37·5 | 5.48·0 | ... | ... | E. - W. | All movements very irregular. |
| 1826 | 765 | „ | 26 | 2.45·8 | ... | ... | 2.53·8 | 3. 0·8 | ... | ... | E. - W. | Times refer to both components. |
| 1832 | 766 | „ | 30 | 21.21·7 | ... | ... | 21.43·7 | 22. 5·7 | 0·5 | ... | E. - W. | |
| | 767 | June... | 4 | 18.49·8 | ... | ... | 18.57·8 | 19. 6·3 | 5.± | ... | E. - W. | In N.-S. maximum at $19^{h}7^{m}\cdot3$. |
| 1851 | 768 | „ | 8 | ? | ... | 6.41·8 | 6.47·3 | ? | 2·0 | ... | E. - W. | In N.-S. very slight. |
| 1852 | 769 | „ | 9 | 1.21·9 | ... | ... | 1.28·9 | 1.51·9 | ... | ... | E. - W. | |

LIST of EARTHQUAKES recorded at the ROYAL ALFRED OBSERVATORY, MAURITIUS, in the YEAR 1909.—*concluded.*

| Shide Register Number. | Mauritius Register Number. | Date, 1909. | Time of Commencement of Preliminary Tremors (G.C.T.) | Time of Commencement of 2nd Phase (G.C.T.) | Time of Commencement of Large Waves (G.C.T.) | Time of Maximum (G.C.T.) | Time of End of Disturbance (G.C.T.) | Amplitude. Mills. | Amplitude. Arc. | Component. | Remarks. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | d. | h. m. | h. m. | h. m. | h. m. | h. m. | | ″ | | |
| | 770 | June... 12 | 20.41·2 | ... | ... | 20.58·2 | 21.46·2 | ... | ... | E. - W. | |
| | 771 | „ 18 | 19.28·0 | ... | ... | ... | 19.42·0 | ... | ... | E. - W. | |
| | 772 | „ 22 | 9.35·0 | ... | ... | ... | 9.50·0 | ... | ... | E. - W. | Boom much disturbed, seismic origin uncertain. |
| | 773 | „ 25 | 0.51·2 | ... | ... | ... | 1.51·2 | ... | ... | E. - W.<br>N. - S. | Many irregular movements which do not appear to be of seismic origin. |
| 1910 | 774 | „ 27 | ... | ... | ... | 8. 8·8 | 8.36·3 | 0·9 | ... | E. - W. | In N.-S. slight. |
| | 775 | „ 29 | 16.48·7 | ... | ... | ... | 16.54·7 | ... | ... | E. - W. | Irregular movements. |
| | 776 | July... 2 | 8.31·9 | ... | ... | ... | 12.31·9 | ... | ... | E. - W. | Frequent thickenings : seimic origin uncertain. |
| | 777 | „ 2 | 23.50·7 | ... | ... | ... | 0.37·2 | ... | ... | | Isolated thickenings in both components. |
| | 778 | „ 3 | ... | ... | ... | 6.12·7 | ... | ... | ... | E. - W. | Irregular thickenings : seimic origin uncertain.* |
| | | | ... | ... | ... | 7.27·7 | ... | ... | ... | N. - S. | |
| 1934 | 779 | „ 5 | ... | ... | ... | 22.34·5 | ... | ... | ... | | Irregular movements in both components. |
| | 780 | „ 7 | ... | ... | ... | 7.24·7 | ... | ... | ... | | Irregular movements „. |
| | 781 | „ 7 | ... | ... | ... | 10.10·7 | ... | ... | ... | N. - S. | |
| 1944 | 782 | „ 7 | 21.48·8 | ... | ... | 21.55·8 | 22. 4·3 | 4·0 | ... | E. - W. | |
| | | | 21.48·3 | ... | ... | 21.55·8 | 21.55·8 | 4·+ | ... | N. - S. | |
| 1980 | 783 | „ 26 | 11. 9·2 | ... | ... | 11.12·2 | 11.17·2 | ... | ... | E. - W. | |
| 1982 | 784 | „ 30 | 11.16·1 | ... | 12.10·6 | 12.13·6 | 13.19·6 | 1·4 | ... | E. - W. | |
| | | | 11.28·1 | ... | 11.32·6 | 11·33·1<br>11.52·6 | 13. 7·6 | 1·3<br>1·1 | ...<br>... | E. - W. | |
| 1985 | 785 | „ 31 | 20. 5·4 | ... | 20.38·9 | 20.41·9 | 21.28·4 | 0·6 | ... | E. - W. | In N.-S. frequent thickenings. |
| | 786 | Aug.... 7 | 17.45·3 | ... | ... | 17.51·3 | 17.56·3 | ... | ... | E. - W. | In N.-S. slight. |
| | 787 | „ 15 | 9. 1·7 | ... | ... | ... | 9. 6·7 | ... | ... | N. - S. | Small irregular movements. |
| | 788 | „ 16 | 8.10·5 | ... | ... | 8.14·5 | 8.17·5 | 1·1 | ... | E. - W. | In N.-S. thickening of trace. |
| | 789 | „ 25 | 10. 8·8 | ... | ... | ... | 10.14·8 | ... | ... | | Irregular movements in both. |
| 2071 | 790 | Sep.... 8 | 17.50·8 | ... | ... | 17.55·8 | 18. 5·8 | ... | ... | E. - W. | |
| | 791 | „ 16 | 19. 1·2 | ... | ... | 19.11·7 | 19.17·2 | 0·6 | ... | E. - W. | |
| | 792 | „ 19 | 14.34·6 | ... | ... | 14.36·6 | 14.40·6 | ... | ... | E. - W. | Irregular movements. |
| | 793 | „ 22 | 15.57·8 | ... | ... | ... | 16. 9·8 | ... | ... | N. - S. | |
| | 794 | „ 23 | 6.37·9 | ... | ... | 6.43·4 | 6.58·9 | 0·6 | ... | N. - S. | Very slight in E.-W. |
| 2108 | 795 | Oct.... 4 | 14.29·5 | ... | ... | ... | 14.34·5 | ... | ... | E. - W. | |
| | 796 | „ 21 | 0. 0·1 | ... | 0· 5·1 | 0· 6·1<br>0·11·1 | 0.54·1 | 1·0<br>1·0 | ... | E. - W. | |
| 2117 | | „ 20-21 | 23.55·1 | ... | 0· 7·1 | 0· 9·6 | 0.44·6 | 1·2 | ... | N. - S. | |
| | 797 | „ 28 | 4.17·2 | ... | ... | 4.20·7 | 4.35·7 | 0·5 | ... | E. - W. | |
| | 798 | „ 31 | 11.50·5 | ... | ... | 11.51·5 | 12.20·5 | 0·8 | ... | E. - W. | |
| 2132 | | | | | | | | | | | |
| 2134 | 799 | Nov.... 8 | 21.18·5 | ... | ... | 21.22·5 | 21.28·5 | ... | ... | E. - W. | |
| | 800 | „ 10 | 6.25·2 | ... | ... | 6.52·2 | ... | 0·7 | ... | E. - W. | Additional max. in E.-W. $6^h37.^m7$ and $7^h0^m5$ sheet changed at $11^h.36^m$. |
| 2137 | | „ 10 | ... | ... | ... | 6.37·7 | ... | 1·0 | ... | N. - S. | |
| | 801 | „ 12 | 20. 9·9 | ... | ... | 20.13·4 | 20.17·9 | ... | ... | E. - W. | |
| | 802 | „ 16 | ... | ... | ... | 19.16·7 | ... | ... | ... | E. - W. | |
| | 803 | „ 24 | 7.26·3 | ... | ... | 7.29·3 | 7.32·3 | ... | ... | E. - W. | |
| | 804 | „ 29 | 3.38·5 | ... | ... | 3.40·5 | 4. 0·5 | ... | ... | | Irregular movements in both. |
| | 805 | Dec.... 4 | 17. 9·7 | ... | ... | 17.11·7 | 17.16·7 | ... | ... | E. - W. | |
| | 806 | „ 8 | 9.50·4 | ... | ... | 9.56·9<br>9.59·9 | 10. 9·4 | ... | ... | E. - W. | |
| 2160<br>2161 | 807 | „ 9 | 16. 0·3 | ... | 16.30·8 | 16.34·3<br>16.36·8 | ... | 2·0<br>2·0 | ... | E. - W. | Continued for some hours after |
| | 808 | „ 9 | 21.56·9 | ... | ... | 22.28·4 | ... | 1·0 | ... | E. - W. | |
| | 809 | „ 9 | 23.45·9 | ... | ... | 0. 1·4 | 1. 0·9 | 0·5 | ... | E. - W. | |
| 2180 | | „ 9 | 23.54·4 | ... | ... | 23.55·9 | 0. 4·9 | 1·0 | ... | N. - S. | |
| | 810 | „ 22 | 13.41·9 | ... | ... | 13.47·9 | 14. 4·9 | 0·5 | ... | E. - W. | |
| | 811 | „ 23 | 23. 4·5 | ... | ... | 23.11·0 | 23.18·5 | 0·5 | ... | E. - W. | |

* From July, to 7 the booms were more or less disturbed by workmen.

DIURNAL RANGE and PROGRESSIVE CHANGE of LEVEL (NORTH and EAST COMPONENTS) as derived from the PHOTOGRAPHIC RECORDS of a MILNE SEISMOGRAPH. (*The Unit in the Table is* 0″·01.)

1909.

| Day of Month. | January. | | | | February. | | | | March. | | | | April. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | |
| | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. |
| 1 | 14 | 67 | − 8 | + 52 | 34 | 28 | 0 | + 14 | 38 | 29 | − 4 | − 29 | 16 | 22 | − 16 | + 23 |
| 2 | 20 | 67 | − 8 | − 22 | 44 | 49 | + 20 | − 21 | 34 | 22 | − 34 | 0 | 20 | 31 | − 6 | + 31 |
| 3 | 12 | 30 | 0 | + 8 | 38 | 49 | − 8 | − 28 | 34 | 43 | + 6 | + 43 | 28 | 31 | 0 | 0 |
| 4 | 28 | 52 | + 16 | + 45 | 46 | 91 | 0 | − 77 | 20 | 29 | − 6 | + 29 | 20 | 31 | 0 | − 31 |
| 5 | 22 | 45 | − 6 | + 15 | 24 | 21 | − 6 | − 21 | 24 | 50 | − 26 | + 50 | 12 | 39 | − 12 | + 23 |
| 6 | 18 | 15 | + 8 | + 15 | 36 | 28 | + 12 | − 28 | 22 | 7 | − 22 | 0 | 10 | 31 | − 8 | + 16 |
| 7 | 18 | 37 | + 12 | 0 | 20 | 21 | − 18 | + 14 | 20 | 15 | − 18 | + 15 | 10 | 16 | − 4 | − 8 |
| 8 | ... | ... | ... | ... | 30 | 35 | − 24 | + 35 | 24 | 29 | − 24 | + 29 | 24 | 16 | + 6 | − 15 |
| 9 | 28 | 15 | + 16 | ... | 50 | 14 | − 50 | 0 | 24 | 109 | − 8 | +109 | 18 | 31 | + 8 | + 23 |
| 10 | 22 | 22 | − 4 | − 8 | 18 | 7 | − 18 | − 7 | 24 | 22 | − 10 | + 7 | 16 | 16 | − 14 | − 16 |
| 11 | 22 | 22 | − 8 | + 15 | 40 | 21 | + 10 | + 7 | 22 | 7 | + 2 | 0 | 18 | 0 | 0 | 0 |
| 12 | 20 | 22 | − 4 | − 15 | 32 | 63 | + 22 | − 63 | 26 | 7 | + 14 | − 7 | 30 | 8 | + 4 | 0 |
| 13 | 20 | 15 | − 10 | − 7 | 32 | 28 | + 16 | − 28 | 16 | 30 | − 16 | − 30 | 20 | 16 | − 4 | + 16 |
| 14 | 42 | 7 | + 20 | − 7 | 26 | 35 | + 2 | − 28 | 10 | 52 | − 4 | − 52 | 32 | 55 | + 4 | − 39 |
| 15 | 30 | 22 | + 4 | − 15 | 42 | 63 | + 16 | + 63 | 10 | 59 | 0 | − 59 | 40 | 55 | − 12 | 0 |
| 16 | 24 | 22 | + 4 | + 15 | 26 | 35 | + 10 | + 7 | ... | 22 | ... | − 22 | 18 | 47 | − 18 | + 47 |
| 17 | 36 | 22 | + 2 | + 15 | 18 | 28 | − 18 | + 21 | 46 | 15 | − 46 | 0 | 20 | 31 | − 2 | + 31 |
| 18 | 34 | 7 | − 6 | + 7 | 10 | 21 | − 2 | + 7 | 56 | 22 | − 56 | + 15 | 12 | 39 | − 2 | + 39 |
| 19 | 42 | 14 | + 20 | − 7 | 24 | 49 | − 20 | + 49 | 16 | 7 | − 16 | + 7 | 16 | 70 | + 6 | + 62 |
| 20 | 38 | 14 | + 12 | + 14 | ... | ... | − 38 | ... | 24 | 22 | − 24 | + 22 | 16 | 47 | + 6 | − 8 |
| 21 | 46 | 50 | + 24 | + 49 | ... | ... | − 14 | ... | 16 | 52 | − 14 | + 53 | 12 | 31 | − 6 | + 31 |
| 22 | 12 | 14 | + 2 | + 14 | 30 | 21 | − 14 | 0 | ... | 15 | ... | + 15 | 16 | 39 | + 6 | − 23 |
| 23 | 34 | 43 | − 34 | + 36 | ... | ... | − 50 | ... | 22 | ... | + 6 | ... | 16 | 22 | − 6 | 0 |
| 24 | 28 | 7 | − 6 | 0 | ... | ... | − 4 | ... | 24 | ... | − 24 | ... | 36 | 70 | + 20 | − 47 |
| 25 | 34 | 22 | + 12 | + 22 | 16 | 43 | − 10 | + 7 | 26 | 75 | − 26 | + 76 | 14 | 39 | − 10 | − 16 |
| 26 | 34 | 7 | + 4 | − 7 | 50 | 35 | + 6 | − 21 | 16 | 46 | − 16 | + 30 | 32 | 62 | − 10 | − 39 |
| 27 | 28 | 14 | − 12 | + 14 | 24 | 35 | − 24 | − 35 | 16 | 15 | − 8 | + 15 | 20 | 22 | − 16 | − 8 |
| 28 | 52 | 7 | + 24 | 0 | 16 | 21 | − 16 | + 7 | 16 | ... | − 10 | ... | ... | ... | + 30 | + 55 |
| 29 | 34 | 50 | − 10 | − 43 | | | | | 18 | 62 | − 8 | + 52 | 36 | 70 | + 26 | − 39 |
| 30 | 40 | 21 | − 40 | 0 | | | | | 18 | 31 | − 2 | + 15 | 22 | 39 | − 2 | − 31 |
| 31 | 28 | 21 | − 8 | + 21 | | | | | 10 | 23 | − 6 | + 22 | | | | |
| Mean | 28·7 | 25·8 | + 0·5 | + 7·5 | 30·2 | 35·0 | − 7·8 | − 5·3 | 23·2 | 32·7 | −13·8 | +14·5 | 20·3 | 35·4 | − 1·1 | + 2·6 |
| Since Jan. 1 | ... | ... | + 16 | +226 | ... | ... | −204 | +100 | ... | ... | −604 | +505 | ... | ... | −636 | +582 |

DIURNAL RANGE and PROGRESSIVE CHANGE of LEVEL (NORTH and EAST COMPONENTS) as derived from the PHOTOGRAPHIC RECORDS of a MILNE SEISMOGRAPH. (*The Unit in the Table is* 0″·01.)—(*continued*).

1909.

| Day of Month. | May. | | | | June. | | | | July. | | | | August. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | |
| | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. |
| 1 | 34 | 31 | + 30 | − 8 | 0 | 23 | 0 | + 23 | ... | ... | + 7 | ... | 34 | 9 | + 31 | 0 |
| 2 | 48 | 23 | + 48 | + 8 | 12 | 16 | + 12 | 0 | ... | ... | + 36 | ... | ... | 3 | − 15 | + 3 |
| 3 | 42 | 39 | + 42 | − 23 | 12 | 8 | + 8 | + 8 | ... | ... | + 31 | ... | 24 | 18 | − 12 | − 18 |
| 4 | 38 | 16 | + 38 | + 16 | 8 | 8 | + 8 | + 8 | 21 | 10 | + 20 | + 7 | 55 | 9 | + 22 | + 3 |
| 5 | 32 | 23 | + 32 | + 8 | 8 | 16 | + 4 | − 16 | 18 | 17 | + 18 | − 14 | 37 | 27 | + 37 | + 27 |
| 6 | 20 | 39 | + 8 | + 39 | 8 | 16 | − 8 | + 8 | ... | ... | + 6 | − 4 | 19 | 6 | + 17 | + 6 |
| 7 | 24 | 47 | + 24 | + 47 | 4 | 8 | 0 | − 8 | 21 | 3 | + 14 | 0 | 21 | 9 | + 20 | + 9 |
| 8 | 36 | 31 | + 34 | + 31 | 8 | 31 | + 8 | − 23 | 14 | 14 | + 11 | + 4 | 9 | 27 | − 6 | − 12 |
| 9 | 44 | 31 | + 44 | + 31 | 12 | 23 | 0 | − 16 | 13 | 3 | + 13 | 0 | 37 | 6 | + 37 | + 3 |
| 10 | 36 | 47 | + 36 | − 23 | 8 | 8 | 0 | − 8 | 35 | 17 | + 35 | + 10 | 49 | 27 | + 50 | + 27 |
| 11 | 40 | 23 | + 40 | + 23 | 20 | ... | + 12 | ... | 17 | 17 | + 17 | + 17 | ... | 21 | ... | + 21 |
| 12 | 26 | 8 | + 22 | + 8 | 20 | 62 | + 16 | − 55 | 22 | 17 | + 20 | − 7 | 16 | 3 | + 13 | + 3 |
| 13 | ... | ... | − 10 | ... | 20 | 31 | + 16 | − 8 | 10 | 10 | + 6 | + 10 | 27 | 9 | + 24 | + 3 |
| 14 | 32 | 55 | − 30 | + 39 | 25 | 39 | + 25 | + 8 | 5 | 31 | 0 | + 31 | 25 | 12 | + 24 | 0 |
| 15 | 20 | 23 | − 8 | − 16 | 20 | 31 | 0 | + 16 | 11 | 7 | + 7 | + 7 | 12 | 36 | + 9 | − 33 |
| 16 | 20 | 16 | 0 | + 8 | 29 | 28 | + 4 | − 16 | 13 | 24 | − 11 | + 24 | 16 | 12 | + 10 | + 6 |
| 17 | 24 | 16 | − 12 | + 8 | 25 | 60 | − 25 | − 60 | ... | ... | ... | − 30 | 21 | 27 | + 14 | + 27 |
| 18 | 20 | 16 | − 20 | 0 | ... | ... | ... | ... | ... | ... | ... | − 81 | 13 | 6 | + 13 | ... |
| 19 | 44 | 16 | + 20 | + 8 | ... | ... | ... | ... | 63 | 13 | − 63 | + 4 | 7 | 9 | + 6 | ... |
| 20 | 32 | 8 | + 12 | 0 | ... | ... | ... | ... | ... | ... | ... | + 6 | ... | ... | − 15 | ... |
| 21 | 32 | 55 | + 8 | − 47 | ... | ... | ... | ... | ... | ... | ... | + 10 | ... | ... | + 2 | ... |
| 22 | 32 | 55 | + 12 | − 55 | ... | ... | ... | ... | ... | ... | ... | + 93 | 28 | 81 | + 26 | + 81 |
| 23 | 20 | 8 | − 8 | 0 | ... | ... | ... | ... | ... | ... | ... | + 39 | ... | ... | + 40 | ... |
| 24 | 36 | 55 | − 4 | − 39 | ... | ... | − 69 | ... | ... | ... | ... | − 45 | 28 | 39 | + 29 | + 21 |
| 25 | 24 | 8 | − 12 | + 8 | 29 | 64 | − 29 | − 48 | 27 | 16 | + 20 | + 6 | 43 | 15 | + 44 | + 15 |
| 26 | 24 | 16 | + 4 | + 16 | 49 | 36 | + 41 | − 24 | 20 | 13 | + 11 | + 25 | 37 | 15 | + 37 | + 15 |
| 27 | 20 | 23 | 0 | 0 | 37 | 16 | + 33 | − 4 | 22 | 22 | + 15 | − 6 | ... | ... | − 3 | ... |
| 28 | 12 | 23 | + 8 | + 23 | 12 | 12 | + 49 | 0 | 28 | 13 | + 10 | + 6 | ... | ... | + 30 | ... |
| 29 | 8 | 16 | + 8 | + 8 | 70 | 12 | + 69 | − 12 | 38 | 13 | + 24 | + 10 | 34 | 15 | + 35 | + 15 |
| 30 | 16 | 23 | + 16 | + 23 | ... | ... | ... | ... | ... | 19 | + 18 | − 16 | 40 | 21 | + 40 | + 3 |
| 31 | 8 | 8 | + 4 | + 8 | | | | | 24 | 19 | + 24 | − 13 | ... | ... | + 27 | + 54 |
| Mean | 28·1 | 26·6 | +12·3 | + 5·0 | 19·9 | 26·1 | + 7·6 | −10·8 | 22·2 | 14·9 | +12·0 | + 3·3 | 27·5 | 18·5 | 19·5 | +11·6 |
| Since Jan. 1 | ... | ... | −254 | +731 | ... | ... | −80 | +504 | ... | ... | +209 | +597 | ... | ... | +795 | +876 |

DIURNAL RANGE and PROGRESSIVE CHANGE of LEVEL (NORTH and EAST COMPONENTS) as derived from the PHOTOGRAPHIC RECORDS of a MILNE SEISMOGRAPH. (*The Unit in the Table is* 0″·01.)—(*concluded*).

1909.

| Day of Month. | September. | | | | October. | | | | November. | | | | December. | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | | Diurnal Range of Level. | | Progressive Change of Level. | |
| | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. |
| 1 | ... | ... | + 20 | ... | 12 | 22 | 0 | + 22 | 11 | 15 | + 11 | − 7 | 11 | 8 | + 11 | − 8 |
| 2 | ... | ... | + 20 | + 18 | 35 | 37 | + 34 | − 22 | 12 | 15 | ... | − 15 | 12 | 8 | 0 | + 8 |
| 3 | ... | ... | + 27 | + 3 | 23 | 37 | + 23 | − 7 | 11 | 22 | ... | + 7 | 11 | 16 | + 12 | 0 |
| 4 | ... | ... | ... | ... | 23 | 37 | + 23 | + 30 | 23 | 7 | − 23 | − 8 | 23 | 8 | + 23 | 0 |
| 5 | ... | ... | ... | ... | 12 | 22 | + 12 | − 7 | 11 | 7 | − 12 | + 8 | 12 | 8 | 0 | + 8 |
| 6 | ... | ... | ... | ... | 12 | 15 | 0 | + 15 | 23 | 15 | + 23 | + 7 | 11 | 32 | + 11 | − 16 |
| 7 | ... | ... | ... | ... | 12 | 7 | + 12 | + 7 | 12 | 30 | + 11 | + 30 | 23 | 8 | + 23 | + 8 |
| 8 | ... | ... | + 45 | −114 | ... | 22 | 0 | + 22 | 11 | 22 | − 12 | − 15 | 23 | 8 | + 12 | 0 |
| 9 | ... | ... | + 11 | − 54 | 23 | 15 | + 23 | + 8 | 12 | 37 | − 11 | 0 | 23 | 24 | + 23 | − 8 |
| 10 | ... | ... | ... | ... | 12 | 15 | + 12 | + 7 | 11 | 52 | + 12 | 0 | 23 | 8 | + 23 | + 8 |
| 11 | ... | ... | ... | ... | 23 | 15 | + 23 | − 7 | 12 | 22 | + 11 | − 7 | 23 | 16 | + 23 | − 16 |
| 12 | 22 | 78 | + 23 | + 78 | ... | 22 | 0 | + 15 | 23 | 52 | + 23 | + 52 | 23 | 16 | + 23 | − 8 |
| 13 | 22 | 51 | − 23 | + 51 | 12 | 22 | + 12 | − 15 | ... | 22 | 0 | − 8 | 12 | 16 | 0 | − 8 |
| 14 | 10 | 18 | + 11 | + 18 | 46 | 30 | + 46 | + 30 | 11 | 22 | 0 | + 15 | 34 | 24 | + 23 | − 16 |
| 15 | 22 | 21 | + 23 | + 6 | ... | 30 | 0 | − 21 | 12 | 15 | + 12 | + 7 | 11 | 8 | + 11 | − 8 |
| 16 | 32 | 15 | + 34 | ... | 12 | 15 | 0 | − 7 | ... | 7 | 0 | + 8 | 12 | 16 | − 11 | + 16 |
| 17 | ... | 12 | 0 | + 6 | 12 | 7 | + 12 | 0 | 11 | 7 | + 11 | 0 | 11 | 16 | − 12 | + 8 |
| 18 | 10 | 12 | − 11 | + 9 | 12 | 15 | + 12 | + 15 | 23 | 15 | + 23 | − 7 | 23 | 16 | + 23 | + 16 |
| 19 | 32 | 18 | + 34 | − 3 | 12 | 15 | + 12 | 0 | 12 | 7 | + 12 | + 7 | 12 | 16 | 0 | + 16 |
| 20 | 10 | 18 | + 11 | − 6 | 12 | 22 | + 12 | 0 | 11 | 15 | + 11 | 0 | 11 | 24 | 0 | + 24 |
| 21 | 22 | 15 | + 23 | + 3 | 12 | 15 | − 12 | + 7 | ... | 15 | 0 | − 7 | 12 | 8 | 0 | + 8 |
| 22 | 10 | 15 | − 11 | − 12 | 12 | 22 | + 12 | 0 | 12 | 15 | 0 | − 15 | 11 | 16 | − 11 | + 16 |
| 23 | 10 | 15 | + 11 | − 3 | ... | 22 | 0 | + 8 | 11 | 0 | − 12 | 0 | 23 | 32 | 0 | + 32 |
| 24 | 22 | 9 | + 23 | − 3 | 46 | 7 | + 35 | + 7 | ... | 0 | 0 | 0 | 23 | 40 | − 23 | + 40 |
| 25 | 10 | 9 | 0 | + 3 | 12 | 15 | + 12 | + 8 | ... | 0 | 0 | 0 | 12 | 16 | 0 | + 8 |
| 26 | 44 | 15 | + 45 | + 3 | ... | 15 | + 12 | + 15 | ... | 0 | 0 | 0 | 11 | 40 | + 12 | − 24 |
| 27 | 10 | 18 | + 11 | ... | ... | 22 | 0 | + 21 | 23 | 0 | + 12 | 0 | 12 | 16 | 0 | − 8 |
| 28 | ... | ... | 0 | ... | 12 | 7 | + 12 | + 8 | 12 | 7 | + 11 | + 7 | ... | 8 | 0 | − 8 |
| 29 | 10 | 6 | + 11 | + 6 | 23 | 7 | + 23 | 0 | 11 | 15 | − 12 | + 8 | 11 | 16 | 0 | 0 |
| 30 | 10 | 6 | + 11 | + 3 | 12 | 15 | + 12 | + 15 | 12 | 15 | + 12 | + 7 | 23 | 16 | 0 | 0 |
| 31 | | | | | 12 | 7 | + 12 | − 7 | | | | | 12 | 48 | 0 | − 16 |
| Mean - | 15·2 | 19·5 | +14·5 | + 0·6 | 17·8 | 18·6 | +12·5 | + 5·4 | 13·9 | 15·8 | + 4·0 | + 2·5 | 16·5 | 17·8 | + 6·3 | + 2·3 |
| Since Jan. 1 | ... | ... | +1144 | +888 | ... | ... | +1530 | +1055 | ... | ... | +1643 | +1129 | ... | ... | +1839 | +1201 |

MONTHLY MEAN DIURNAL INEQUALITY of LEVEL (NORTH and EAST COMPONENTS) as derived from the PHOTOGRAPHIC RECORDS of a MILNE SEISMOGRAPH.

(*The results in each case are diminished by the smallest hourly value, the unit in the Table being* 0″·001.)

1909.

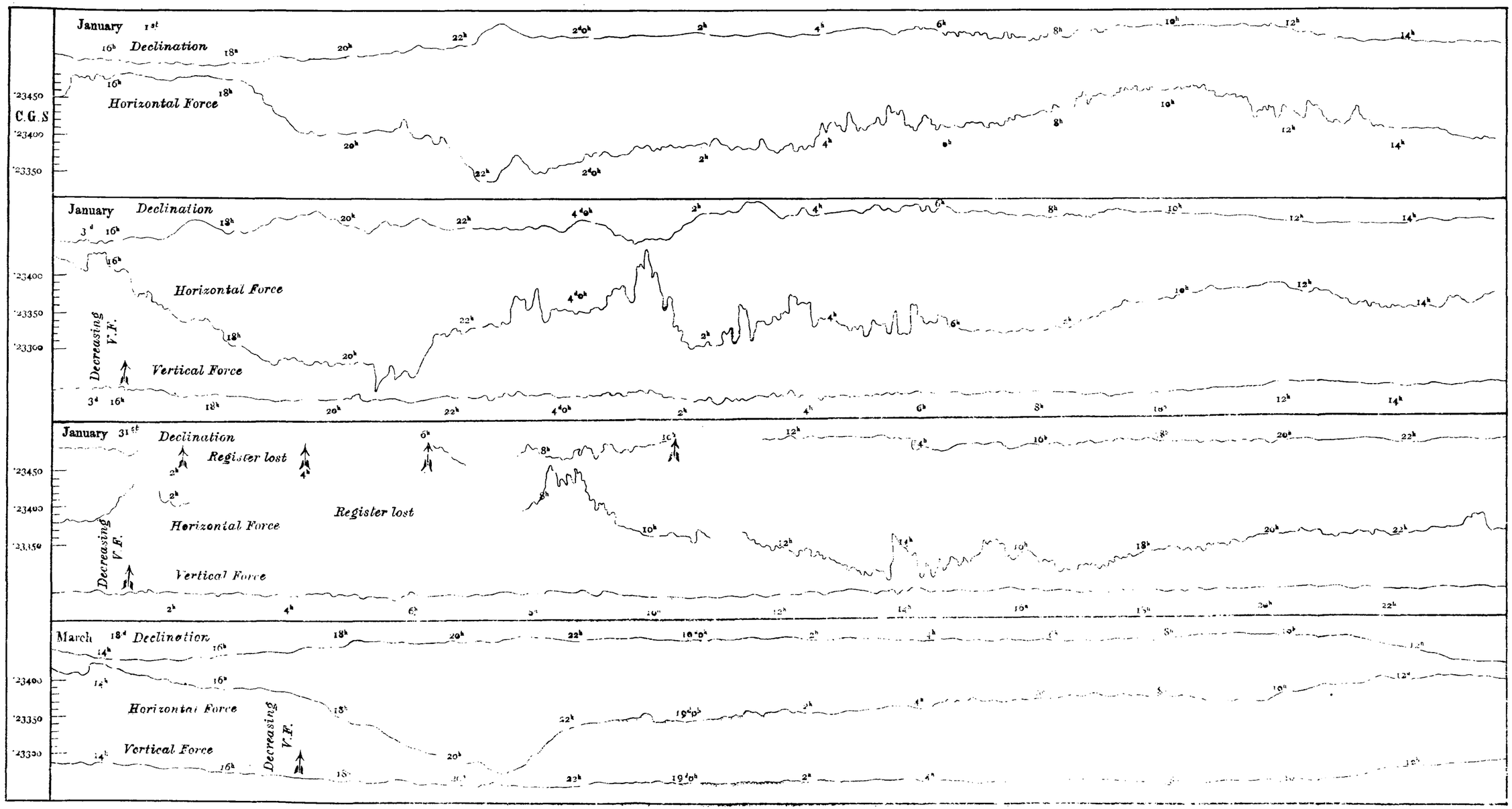
| Hour, Mauritius Standard Time. | January. | | February. | | March. | | April. | | May. | | June. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. |
| Midnight | 153 | 42 | 129 | 54 | 95 | 61 | 93 | 34 | 78 | 65 | 95 | 205 |
| 1h | 133 | 40 | 110 | 54 | 82 | 64 | 80 | 29 | 67 | 80 | 75 | 205 |
| 2 | 112 | 34 | 94 | 55 | 69 | 71 | 67 | 37 | 51 | 90 | 56 | 221 |
| 3 | 91 | 31 | 73 | 56 | 56 | 71 | 53 | 42 | 42 | 100 | 44 | 269 |
| 4 | 69 | 29 | 59 | 60 | 39 | 71 | 35 | 37 | 24 | 112 | 30 | 289 |
| 5 | 45 | 27 | 41 | 74 | 24 | 72 | 19 | 45 | 13 | 122 | 15 | 314 |
| 6 | 21 | 26 | 20 | 77 | 10 | 79 | 8 | 54 | 7 | 128 | 7 | 326 |
| 7 | 0 | 25 | 2 | 77 | 0 | 84 | 0 | 72 | 0 | 136 | 6 | 347 |
| 8 | 0 | 23 | 0 | 77 | 3 | 82 | 1 | 79 | 0 | 139 | 0 | 306 |
| 9 | 19 | 13 | 20 | 86 | 19 | 76 | 13 | 80 | 14 | 139 | 17 | 305 |
| 10 | 49 | 5 | 54 | 83 | 37 | 70 | 39 | 78 | 50 | 130 | 40 | 281 |
| 11 | 91 | 26 | 93 | 92 | 60 | 73 | 73 | 72 | 93 | 116 | 89 | 224 |
| Noon | 133 | 45 | 134 | 90 | 82 | 53 | 108 | 61 | 124 | 96 | 125 | 157 |
| 13h | 170 | 46 | 177 | 65 | 108 | 33 | 140 | 37 | 150 | 62 | 150 | 80 |
| 14 | 202 | 29 | 211 | 40 | 136 | 8 | 162 | 22 | 171 | 26 | 161 | 34 |
| 15 | 226 | 15 | 234 | 15 | 157 | 0 | 177 | 8 | 178 | 11 | 168 | 0 |
| 16 | 241 | 6 | 250 | 2 | 168 | 6 | 183 | 0 | 185 | 0 | 173 | 12 |
| 17 | 254 | 0 | 257 | 0 | 171 | 8 | 181 | 3 | 177 | 0 | 156 | 53 |
| 18 | 256 | 5 | 244 | 1 | 164 | 18 | 167 | 5 | 161 | 3 | 146 | 115 |
| 19 | 245 | 10 | 226 | 9 | 155 | 25 | 156 | 8 | 148 | 13 | 131 | 147 |
| 20 | 229 | 18 | 202 | 26 | 142 | 36 | 146 | 10 | 134 | 23 | 125 | 194 |
| 21 | 212 | 27 | 182 | 36 | 130 | 43 | 131 | 18 | 120 | 36 | 118 | 231 |
| 22 | 192 | 35 | 164 | 45 | 115 | 49 | 118 | 24 | 107 | 46 | 110 | 262 |
| 23 | 173 | 39 | 146 | 51 | 106 | 55 | 105 | 34 | 92 | 54 | 104 | 244 |
| Means | 138 | 25 | 130 | 51 | 89 | 50 | 94 | 37 | 91 | 72 | 89 | 201 |
| Number of Days employed. | 30 | | 24 | | 29 | | 29 | | 30 | | 22 | |

| Hour, Mauritius Standard Time. | July. | | August. | | September. | | October. | | November. | | December. | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. | North Component. | East Component. |
| Midnight | 51 | 30 | 89 | 53 | 58 | 102 | 38 | 101 | 26 | 80 | 56 | 60 |
| 1h | 42 | 36 | 78 | 63 | 52 | 107 | 35 | 105 | 21 | 85 | 50 | 64 |
| 2 | 33 | 43 | 65 | 69 | 44 | 114 | 31 | 110 | 14 | 87 | 43 | 67 |
| 3 | 22 | 49 | 50 | 74 | 37 | 119 | 27 | 114 | 11 | 91 | 37 | 69 |
| 4 | 15 | 57 | 38 | 82 | 31 | 124 | 23 | 117 | 10 | 93 | 23 | 75 |
| 5 | 7 | 70 | 25 | 92 | 24 | 128 | 17 | 120 | 9 | 95 | 12 | 85 |
| 6 | 3 | 86 | 9 | 102 | 18 | 131 | 12 | 122 | 6 | 100 | 4 | 88 |
| 7 | 0 | 95 | 2 | 110 | 9 | 131 | 4 | 121 | 0 | 100 | 0 | 82 |
| 8 | 4 | 96 | 0 | 110 | 3 | 125 | 0 | 118 | 3 | 95 | 4 | 74 |
| 9 | 12 | 88 | 6 | 100 | 0 | 113 | 0 | 110 | 5 | 84 | 13 | 68 |
| 10 | 27 | 76 | 20 | 88 | 21 | 90 | 7 | 95 | 10 | 71 | 33 | 52 |
| 11 | 52 | 65 | 42 | 68 | 49 | 55 | 30 | 75 | 32 | 50 | 60 | 28 |
| Noon | 68 | 50 | 62 | 49 | 57 | 31 | 64 | 56 | 49 | 30 | 78 | 12 |
| 13h | 83 | 35 | 81 | 28 | 67 | 11 | 79 | 34 | 57 | 17 | 89 | 3 |
| 14 | 94 | 13 | 101 | 13 | 72 | 5 | 79 | 13 | 60 | 8 | 98 | 1 |
| 15 | 99 | 3 | 120 | 3 | 76 | 0 | 75 | 0 | 62 | 0 | 104 | 0 |
| 16 | 102 | 0 | 131 | 0 | 83 | 7 | 78 | 3 | 63 | 5 | 109 | 1 |
| 17 | 101 | 5 | 132 | 5 | 84 | 16 | 74 | 10 | 64 | 10 | 112 | 6 |
| 18 | 96 | 11 | 129 | 12 | 83 | 28 | 71 | 22 | 64 | 24 | 109 | 11 |
| 19 | 92 | 13 | 123 | 20 | 80 | 47 | 64 | 34 | 61 | 33 | 104 | 16 |
| 20 | 84 | 17 | 116 | 26 | 76 | 65 | 60 | 50 | 54 | 42 | 98 | 25 |
| 21 | 76 | 22 | 110 | 34 | 72 | 78 | 53 | 70 | 46 | 52 | 87 | 35 |
| 22 | 69 | 25 | 103 | 40 | 67 | 89 | 47 | 83 | 39 | 62 | 76 | 44 |
| 23 | 58 | 27 | 97 | 46 | 63 | 86 | 43 | 92 | 32 | 73 | 67 | 52 |
| Means | 53 | 42 | 72 | 54 | 51 | 76 | 42 | 74 | 33 | 58 | 61 | 42 |
| Number of Days employed. | 19 | | 23 | | 18 | | 31 | | 30 | | 31 | |

# PLATE 1.

## MAGNETIC DISTURBANCES RECORDED AT THE ROYAL ALFRED OBSERVATORY, MAURITIUS.

### DURING THE YEAR 1909.



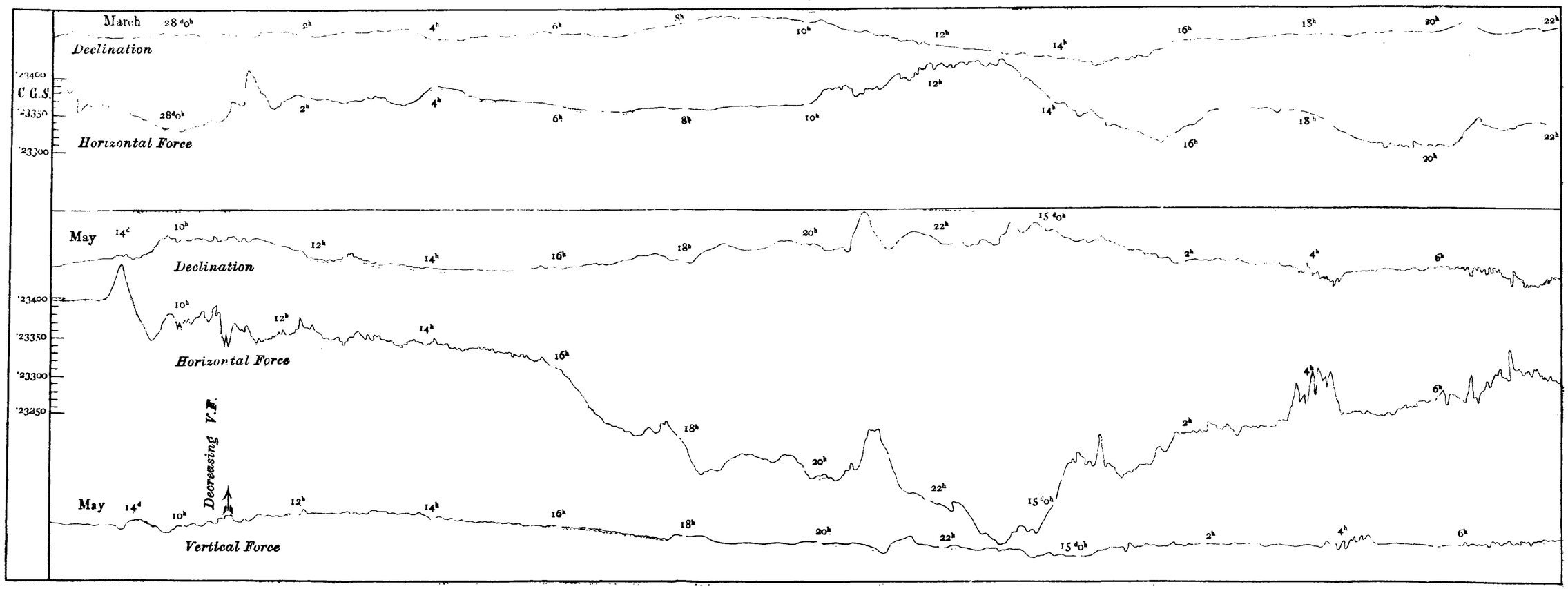

Scale in C.G.S measure (unit-[illegible]) for Vertical Force.

0 50 100 150

# PLATE 2.

## MAGNETIC DISTURBANCES RECORDED AT THE ROYAL ALFRED OBSERVATORY, MAURITIUS.

### DURING THE YEAR 1909.

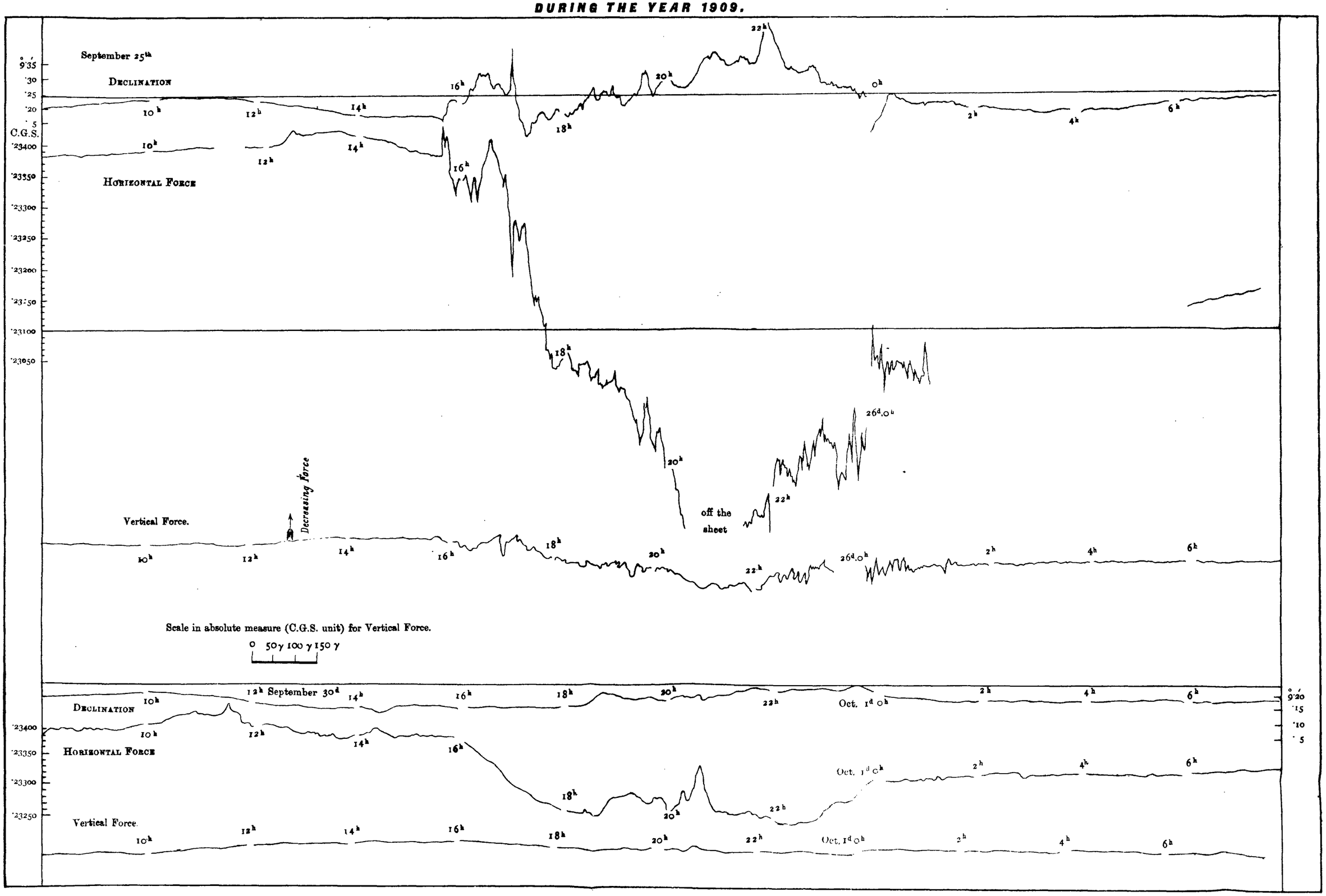



Scale in C.G.S measure (unit ·00001) for Vertical Force.

0 50 100 150

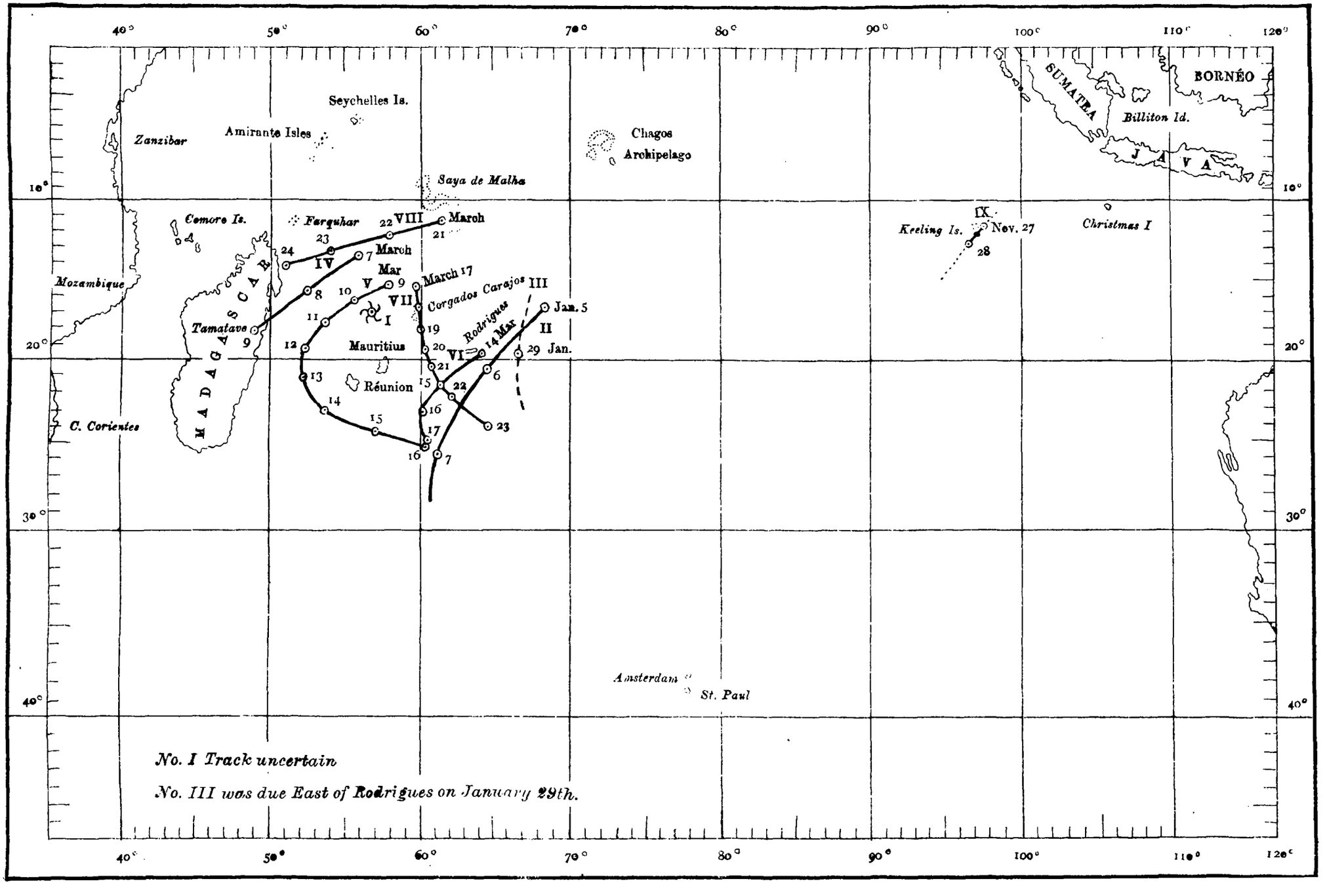
# Plate 3.

## MAGNETIC DISTURBANCES RECORDED AT THE ROYAL ALFRED OBSERVATORY MAURITIUS DURING THE YEAR 1909.



# PLATE 4

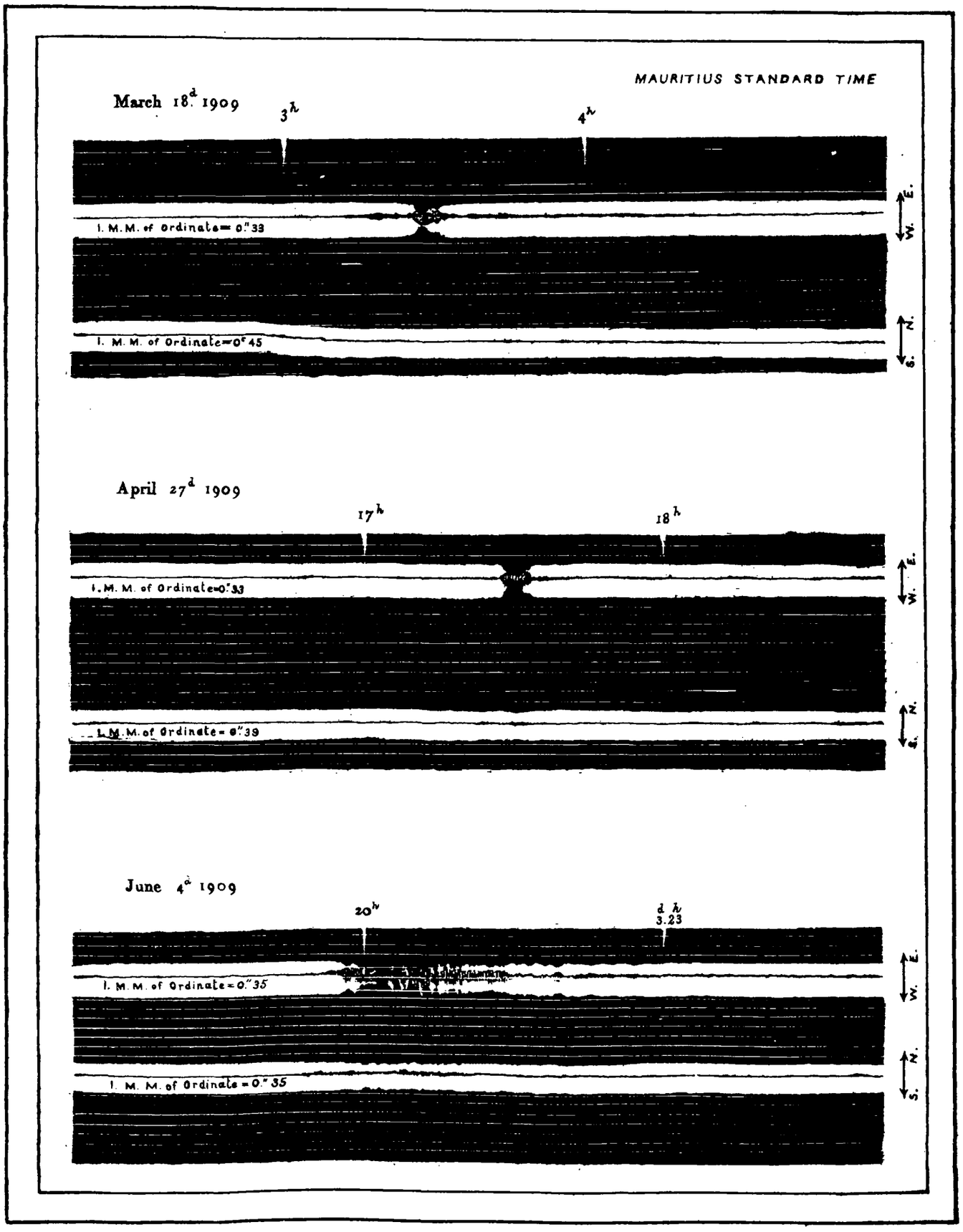
## ROYAL ALFRED OBSERVATORY, MAURITIUS. CYCLONE TRACKS IN THE SOUTH INDIAN OCEAN DURING THE YEAR 1909.



# PLATE 5.

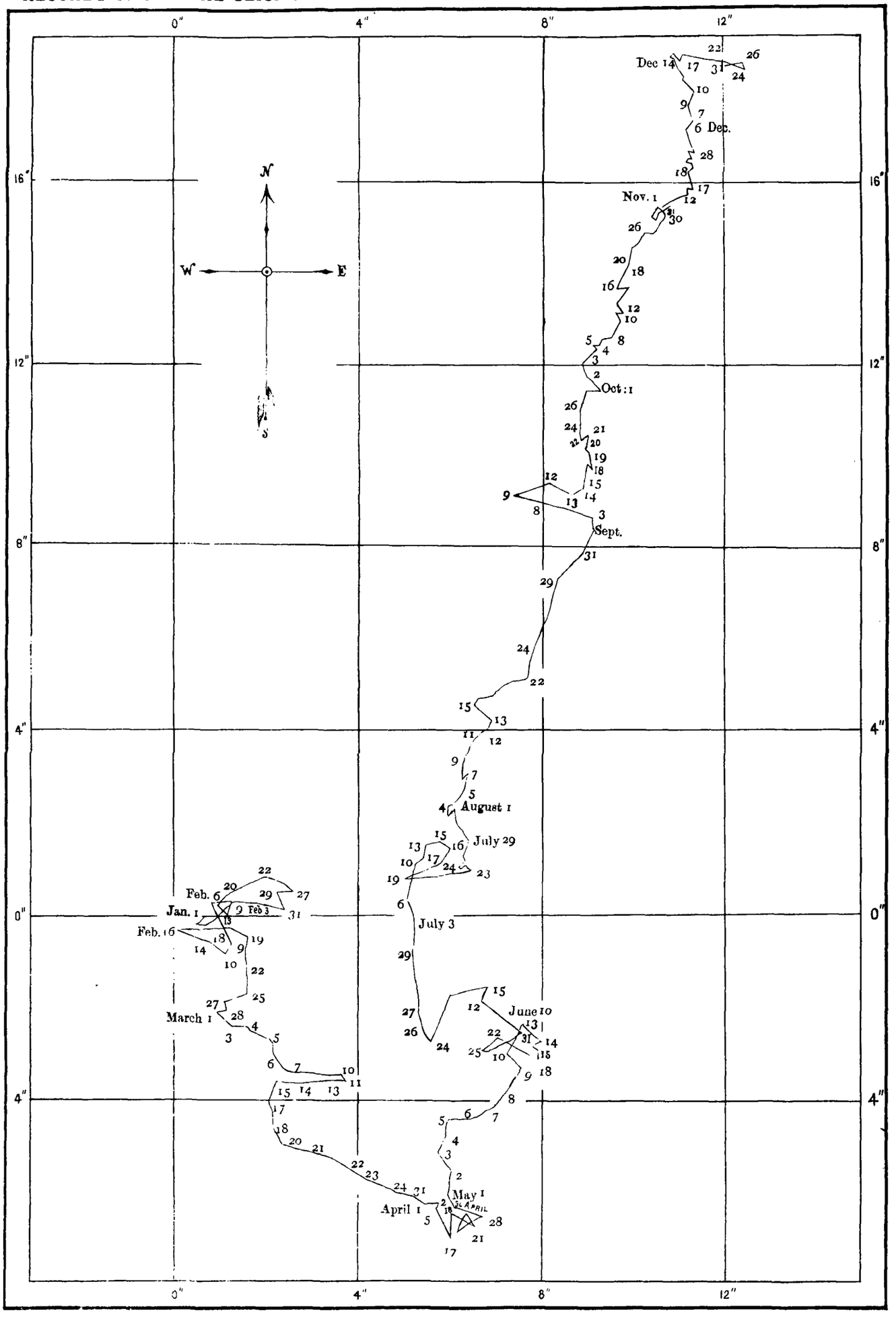
## EARTHQUAKES RECORDED AT THE ROYAL ALFRED OBSERVATORY, MAURITIUS.

### DURING THE YEAR 1909.



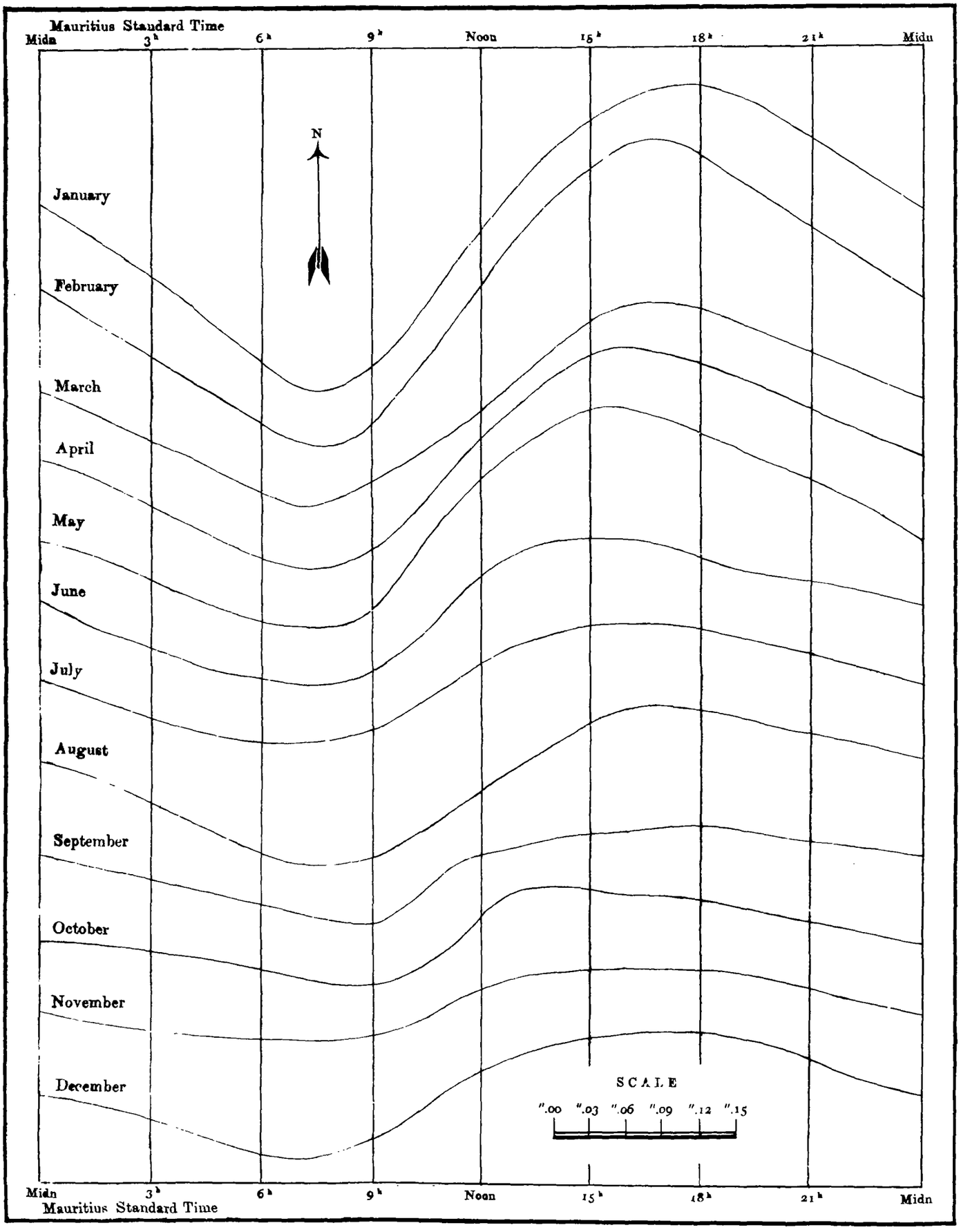
# PLATE 6.

***DIAGRAM SHOWING, THE PROGRESSIVE CHANGE OF LEVEL AT THE ROYAL ALFRED OBSERVATORY, MAURITIUS, DURING THE YEAR 1909, AS DERIVED FROM THE PHOTOGRAPHIC RECORDS OF A MILNE SEISMOGRAPH.***



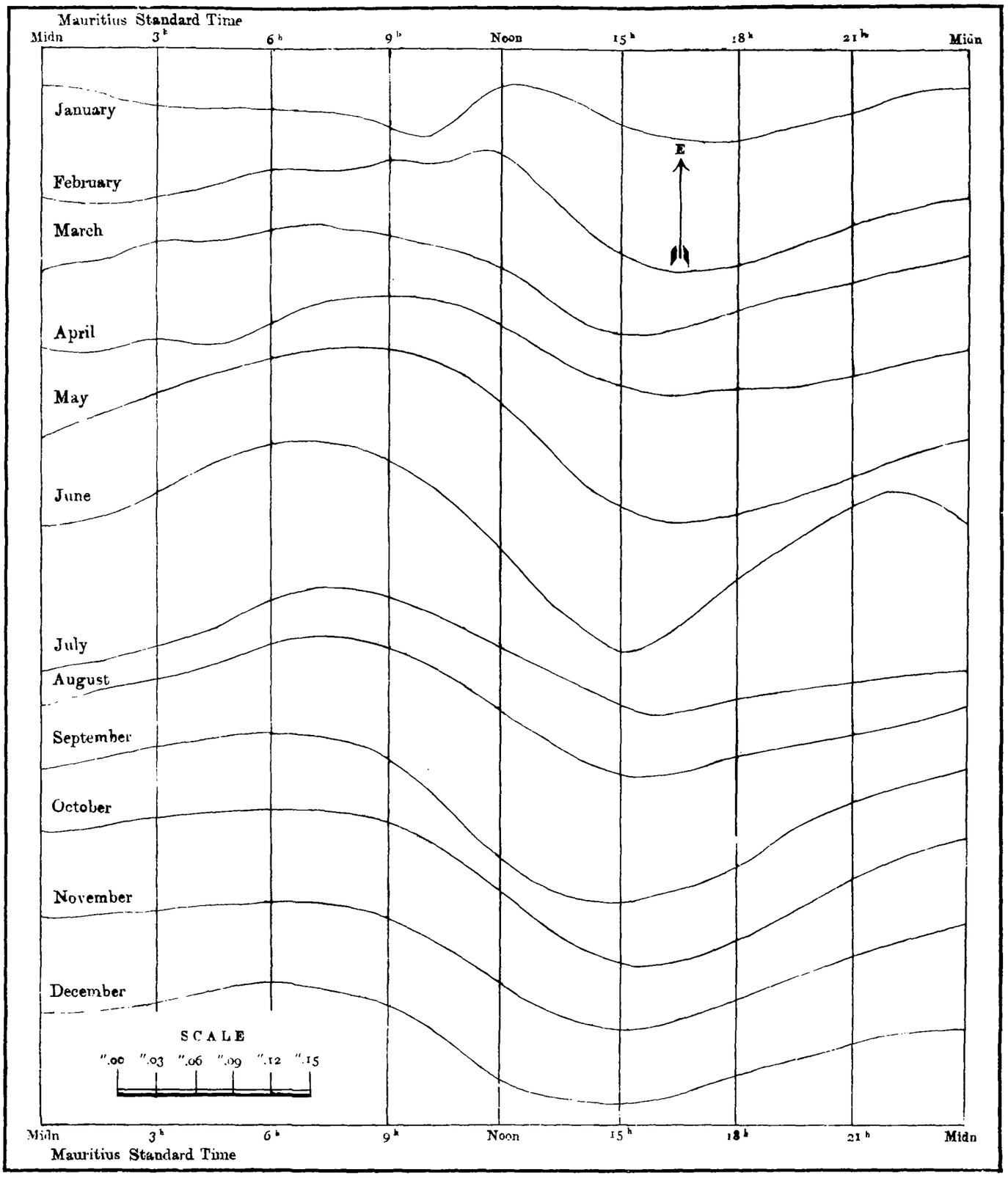
# PLATE 7.

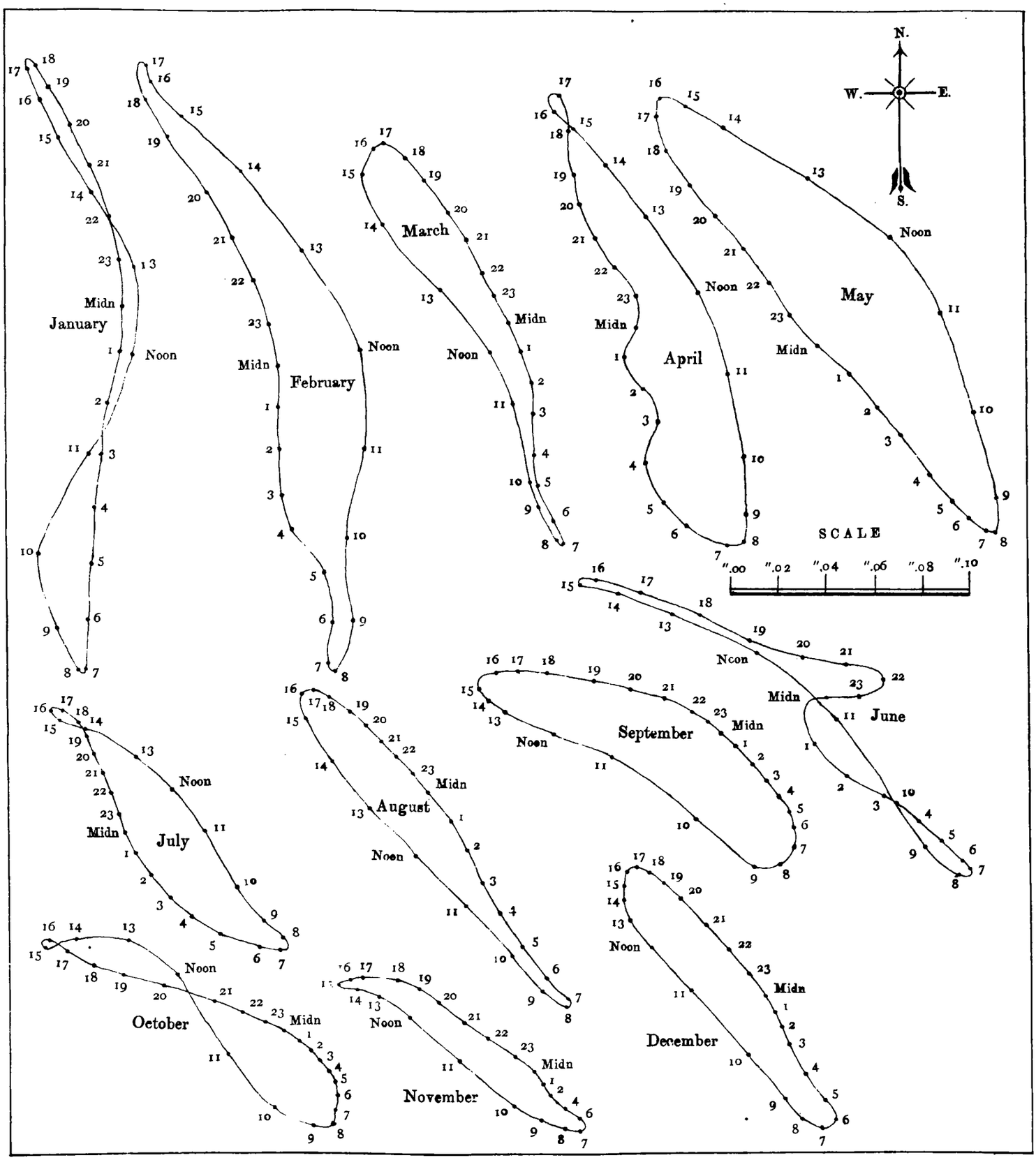
***DIAGRAM SHOWING, FOR EACH MONTH OF THE YEAR 1909, THE MEAN DIURNAL INEQUALITY OF LEVEL (NORTH COMPONENT) AT THE ROYAL ALFRED OBSERVATORY MAURITIUS AS DERIVED FROM THE PHOTOGRAPHIC RECORDS OF A MILNE SEISMOGRAPH.***



# PLATE 8.

***DIAGRAM SHOWING, FOR EACH MONTH OF THE YEAR 1909, THE DIURNAL INEQUALITY OF LEVEL (EAST COMPONENT) AT THE ROYAL ALFRED OBSERVATORY MAURITIUS AS DERIVED FROM THE PHOTOGRAPHIC RECORDS OF A MILNE SEISMOGRAPH.***



# PLATE 9.

***VECTOR DIAGRAMS SHOWING, FOR EACH MONTH OF THE YEAR 1909, THE MEAN AMOUNT AND DIRECTION OF TILT OF THE PILLAR OF THE MILNE SEISMOGRAPH FROM HOUR TO HOUR, AS DERIVED FROM THE PHOTOGRAPHIC RECORDS.***