

Haiti of works relating to the former colony—nor in the library of the American Philosophical Society, at Philadelphia, though both of these libraries contain the first volume.

Cotte's "Mémoires", Tome II, includes results from the following stations:

Station.	Latitude.	Observer.
	° /	
Camp-de-Louise	19 42	Thouas.
Le Cap	19 45	Chabaud.
Léogane	19 52	
Tivoli	18 35	Lefebure des Hayes.

The results for Léogane are copied from Les Affiches Américaines (a colonial newspaper) of October 9, 1784. The name of the observer is not given.

The following are brief abstracts of the text and tables in Cotte's work:

Camp-de-Louise.—The plantation of M. de Ladebat, on which the observations were made, is on the north coast of the island, some leagues from Cap Français. There are mountains to the west and south [of Cap Français. The location of the station with respect to the town is not stated]. For the period June, 1775–September, 1776, the highest temperature was 26.2° R. [32.8° C.]; lowest, 16.5° R. [20.6° C.]; mean daily (from terdaily observations), 20.1° R. [25.1° C.]; highest barometer, 28 inches, 4 $\frac{1}{2}$ lines [767.7 mm.]; lowest, 28 inches, 0 line [758.0 mm.]; mean (from terdaily observations), 28 inches, 2 $\frac{1}{2}$ lines [762.7 mm.]; number of days with rain, 110; number of days with thunder, 27.

*Cap*⁹ [i. e., Cap Français, now Cap Haïtien]. Rainfall:

1783.			1784.		
Months.	Inches, lines.	Milli-meters	Months.	Inches, lines.	Milli-meters.
April	15 5	[417]	January	35 10	[970]
May	24 11	[647]	February	28 6	[772]
June	3 4	[90]	March	12 0	[325]
July	16 0	[433]	April	0 3	[7]
September	12 4	[334]	May	46 7	[1261]
November	51 4	[1390]			
December	15 0	[406]			

Léogane.—Twenty years' observations (1761–1780) on a plantation near the town. Mean annual rainfall, 49.85 inches [1349 mm.]. Mean number of days with rain in the year, 99. Rain fell more often at night than by day. Heaviest rainfall accompanying a thunderstorm (duration not stated), 5 inches 6 lines [149 mm.]. During the hottest weather the temperature was 23° R. [29° C.] in the morning, 27°, rarely 28° R. [34°–35° C.] in the afternoon, and 24° R. [30° C.] in the evening. During the coldest weather the temperature was 16° R. [20° C.] in the morning, 20° R. [25° C.] in the afternoon, and 18° R. [22 $\frac{1}{2}$ ° C.] in the evening. Hence he deduces a mean annual temperature of about 21° R. [26° C.].

Tivoli.—This was the name of the private estate of the Chevalier des Hayes, situated in the parish of Jérémie and the canton of Plymouth, in a valley 221 toises [431 meters] above sea level. Regular observations were made during the years 1772–1782, inclusive, but a part of the results failed to reach the Abbé Cotte, who, in his computations, used only the years 1772 and 1774, the first five months of 1775, the last seven months of 1778, and the years 1779, 1781, and 1782.¹⁰ From the tables published by Cotte it appears that the mean annual rainfall at Tivoli during the years 1781 and 1782 was about 101 inches [2734 mm.], and the average number of days with

⁹ These observations at Cap Français are rejected as "entièrement fausses" by Alexandre Moreau de Jonnés in his "Histoire physique des Antilles Françaises" (Paris, 1822), p. 300.

¹⁰ Some of the same data, together with portions of the record not used in Cotte's "Mémoires," were published in the Histoire de la Société royale de Médecine. (Paris, 1779, etc.)

rain 138. The mean annual pressure was 26 inches 7 $\frac{5}{8}$ lines [720.6 mm.]. Cotte rejects the observer's record of temperature, on account of the faulty exposure of his thermometers.

[Cf. Moreau de St. Méry's figures for the rainfall of this canton in 1783 and 1784, under "Parish of Jérémie," above].

The "Voyage d'un Suisse" (see above) contains the abstract of a meteorological journal kept "aux environs du Cap" from May 24, 1782, to the end of April 1783—covering therefore about a year. Observations were made regularly four times a day; viz., at 7 a. m., noon, 3 p. m., and 7 p. m.; the means and extremes of pressure and the means and maxima of temperature being deduced therefrom. The minima of temperature were obtained from an extra observation of the thermometer made immediately before sunrise. The pressure is reduced to sea level.

In the accompanying Table 1 the original figures for the pressure have been converted from French inches and lines to millimeters, and those for the temperature from the Réaumur to the centigrade scale. The last column gives the corrected or true daily means of the temperature, obtained from the means of the observations by the use of corrections derived from Hann's values for the diurnal variation at Port au Prince.¹¹ The mean of readings at 7 a. m., noon, 3 p. m. and 7 p. m., is 1.5° higher, on an average, than the true daily mean. The greatest departure is +1.8° in July; the least +1.3 in December.

TABLE 1.—Meteorological observations made in the vicinity of Cap Français, island of Santo Domingo.

	Pressure.			Temperature.			
	Highest.	Lowest.	Mean.	Highest.	Lowest.	Mean.	Corrected mean.
1782.	<i>mm.</i>	<i>mm.</i>	<i>mm.</i>	° C.	° C.	° C.	° C.
May 24–31	763.0	760.2	761.7	31.9	23.8	29.5	27.9
June	765.3	760.2	763.6	32.5	23.1	28.9	27.8
July	764.2	759.6	762.1	33.4	23.8	29.5	27.7
August	762.8	759.5	761.3	33.1	23.8	30.0	28.8
September	763.0	758.3	760.6	33.4	22.5	28.6	27.0
October	764.7	756.3	760.2	30.9	22.5	27.8	26.4
November	764.7	758.5	761.7	30.6	19.2	25.9	24.5
December	764.2	759.8	762.5	28.4	18.8	25.0	23.7
1783.							
January	766.6	761.0	763.4	28.4	19.1	25.9	24.5
February	767.5	762.1	765.5	28.8	20.0	25.9	24.3
March	767.7	762.5	764.5	29.1	20.0	25.5	23.9
April	767.5	760.8	763.8	30.0	19.7	25.9	24.2
Year	767.7	756.3	762.6	33.4	18.8	27.4	25.9

MEAN ANNUAL RAIN MAP OF NEW SOUTH WALES.

We have lately received a very neat map showing by isohyetal lines the mean annual rainfall of New South Wales. This map was compiled at the meteorological office of the Sydney Observatory; it is published without accompanying text, and will doubtless be called for and used by thousands. It is limited to the territory of New South Wales, and shows that in general from 8 to 10 inches of rainfall may be expected on the western border of that state, increasing thence eastward, at first slowly and afterwards rapidly, up to 70 inches in the northeast corner and to 34 inches in the southeast corner, with numerous local irregularities as we pass along the eastern coast. The maximum annual rainfalls seem to be 64.20 at Alanora, 59.13 at Lawson, 61.19 at Camden Haven, 59.41 at St. Georges Head, 65.71 at Woolkoolga, and 77.70 at Callbyron. According to a footnote on this map, these and similar station means are computed from all yearly records available, generally covering a period of from 20 to 40 years. It is, however, very important that a rainfall map should uniformly represent some fundamental interval of time, so that all the data may be strictly comparable throughout the whole map. The reduction of a short series or a long series to such a fundamental interval is done as shown on page 216 of the MONTHLY WEATHER REVIEW for April, 1902.

¹¹ Hann, J. Der tägliche Gang der Temperatur in der inneren Tropenzone. Wien. 1905, p. 33.