MONTHLY WEATHER REVIEW.

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INTRODUCTION.

This REVIEW contains a general summary of the meteorological conditions which prevailed over the United States during June, 1884, based upon the reports from the regular and voluntary observers of the Signal Service and from co-operating state weather services.

Descriptions of the storms which occurred over the north Atlantic ocean during the month are also given and their approximate paths shown on chart i.

Under "areas of low barometer" are described six atmospheric depressions, all of which were of slight energy. The average number of areas of low barometer for the month of June during the last eleven years is nine—thus showing June, 1884, to have been less stormy than usual.

The most noteworthy meteorological feature of the month was the precipitation in California, where the June normal for the state is less than .10 inch, the average for June, 1884, being more than ten times as great. The monthly precipitation was also largely in excess of the average in the southern states east of the Mississippi river, while there was a marked deficiency in the states from Dakota and Nebraska, eastward.

The mean temperature of the month was below the average for June over the southern portions of the country, by from 1° to 6°; and over the northern portions it was above the average, the excess about corresponding with the deficiencies which occurred in the southern sections.

The local storms occurring during the month were numerous and severe; they were generally accompanied by very heavy rains, which resulted in much damage to agricultural and other interests.

The weather over the north Atlantic ocean during June was generally fine, the month passing without the occurrence of severe storms.

In the preparation of this REVIEW the following data, received up to July 20th, 1884, have been used, viz.: the regular tri-daily weather-charts, containing data of simultaneous observations taken at one hundred and twenty-two Signal Service stations and fifteen Canadian stations, as telegraphed to this office; one hundred and sixty-eight monthly journals, and one hundred and fifty-four monthly means from the former, and fifteen monthly means from the latter; two hundred and fifty-eight monthly registers from voluntary observers; forty-three monthly registers from United States Army post surgeons; marine records; international simultaneous observations; marine reports, through the co-operation of the "New York Herald Weather Service;" abstracts of ships' logs, furnished by the publishers of "The New York Maritime Register;" monthly weather reports from the local weather services of Alabama, Illinois, Louisiana, Missouri, Ohio, and Tennessee, and of the Central Pacific railway company; trustworthy newspaper extracts; and special reports.

ATMOSPHERIC PRESSURE.

[*Expressed in inches and hundredths.*]

The mean atmospheric pressure for June, 1884, determined from the tri-daily telegraphic observations of the Signal Service, is exhibited by the isobarometric lines on chart ii. This chart shows the mean pressure for the month to have been greatest on the Atlantic coast, from Massachusetts to South Carolina, in the lower lake region and in the northeastern part of the upper lake region, where the barometric means exceeded 30.05, the highest, 30.10 and 30.11, being reported from Sandy Hook, New Jersey, and New London, Connecticut, respectively To the north and east of this area of barometric maxima, the mean pressure decreased to 29.95 at Father Point, Province of Quebec; westward to the one-hundredth meridian the pressure decreased gradually to 29.9, the isobars running almost directly north and south. The lowest barometric means for the month occurred between the one hundredth and the one-hundred and fifteenth meridians, south of the fortieth parallel of latitude; Forts Apache and Grant, Arizona, reporting the lowest means, 29.74 and 29.75, respectively. Over the region between the meridians above named, and north of latitude 40°, the barometric means vary from 29.81 to 29.9, while to the westward of the one-hundred and fifteenth meridian the means were higher, as is shown by the isobar of 29.95, which is traced from the northern boundary of Washington Territory to southern California, almost parallel to the Pacific coast.

Compared with the preceding month, the mean pressure has remained unchanged over narrow areas extending from Manitoba to the Texas coast, and from southern Missouri southeastward to northern Florida. A slight decrease occurred in southern Florida and in the lower Mississippi valley; from the one-hundredth meridian to the Pacific it was also less than for May, the deficiences exceeding .05 over nearly the whole of the area named and ranging from .07 to .11 over Idaho, Montana, Utah, and Wyoming. In the south Atlantic states, and from the upper Mississippi valley eastward the mean pressure has been greater than that for May, the increase being most marked in the lake region, New England, and the middle Atlantic states, where it varied from .10 to .18.

Compared with the normal pressure for June, deficiences varying from .01 to .07 are shown in the Gulf states, northern plateau, and north Pacific coast region. In all other districts the mean pressure has been above the normal; in California, the southern plateau, Tennessee and South Carolina, the increase varied from .01 to .05; in the middle and southern slopes, Missouri and Ohio valleys, Virginia and North Carolina, from .05 to .09; and from the upper Mississippi valley eastward to the New England coast, from .10 to .16.

BAROMETRIC RANGES.

The monthly barometric ranges were greatest in New England, the maximum, .90, occurring at Portland, Maine; they were least from Arizona eastward to the Mississippi river, and in southern Florida, the smallest, .25, being reported from Fort Grant, Arizona. To the north and east of a line extending from Dakota to the south Atlantic coast, the monthly