

# MONTHLY WEATHER REVIEW,

JULY, 1879.

(General Weather Service of the United States.)

---

---

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

---

## INTRODUCTION.

In preparing this REVIEW the following data, received up to August 13th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at 124 Signal Service stations and 12 Canadian stations, as telegraphed to this office; monthly journals and means 137 and 140 respectively, from the former; reports from 37 Sunset stations; 223 monthly registers from Voluntary Observers; 43 monthly registers from United States Army Post Surgeons; Marine Records; International Simultaneous Observations; monthly reports from Voluntary Observers in, and the local Weather Services of, the States of Iowa and Missouri; reliable newspaper extracts; special reports.

## BAROMETRIC PRESSURE.

Upon chart No. II is shown by the isobaric lines the general distribution of atmospheric pressure, as reduced to sea-level, for the month.

*The Local Barometric Ranges* have varied as follows: Pacific Coast 0.50 at Roseburg to 0.22 at San Diego; Western Plateau, 0.41 at Virginia City to 0.24 at Boise City; Rocky Mountains, 0.33 at Denver to 0.26 at Santa Fe: summit of Pike's Peak, 0.30; Gulf States, 0.41 at Montgomery to 0.22 at Punta Rasa and Key West; Atlantic States, 0.78 at New York city to 0.43 at Jacksonville; summit of Mt. Washington, 0.63; Ohio valley and Tennessee, 0.62 at Pittsburgh to 0.38 at Cairo; Lake region, 0.79 at Rochester to 0.60 at Chicago; Northwest and Eastern Slope, 0.69 at Pembina to 0.40 at Deadwood and Leavenworth.

*Areas of High Barometer.*—Of these, three have been sufficiently marked to merit a description.

No. I.—This area, central in New York on the morning of the 1st, moved almost due south, and passed off the North Carolina coast the evening of the 2nd. Maximum abnormal barometric pressures of +0.31 at Albany morning of the 1st, and of +0.32 at Cape Henry the morning of the 2nd, were reported. Generally clear weather, with no precipitation, prevailed during its passage in the New England and Middle Atlantic States. This area caused the minima temperatures for the Southern Atlantic and a portion of the Middle Atlantic States. A minimum temperature of 38° was reported from Rockliffe the morning of the 1st, and light frost at Hector, Starkey and Niles, N. Y., and Springfield, Mass. Brisk northerly winds prevailing on the North Carolina coast the morning of the 1st, Cautionary Signals were displayed. They were lowered that afternoon, having been justified with a maximum velocity of 28 miles NE. at Cape Lookout. Maximum velocities of 25 miles on the 1st and 26 miles on the 2nd were reported from Cape May.

No. II.—From its influence on the Northwestern barometers on the 3rd, it is evident that this area was then central in Saskatchewan, and by the morning of the 4th had reached Manitoba; Bismarck barometer 0.14 abnormally high. Moving nearly due east, accompanied by light to fresh northerly winds and generally clear weather, it reached Ontario the morning of the 5th; Rockliffe barometer 30.34. At that time clear weather, with fresh NE. winds, generally prevailed on the Lower Lakes and New England; cloudy weather, with brisk north to high north winds, in Middle Atlantic, and brisk westerly winds on North Carolina coast. Maximum velocity had been reported of 25 miles W. at Hatteras, N. 26 at Barnegat, and 40 NE. at Sandy Hook. At noon Cautionary Signals were hoisted from Cape Lookout along the coast north to include Wood's Holl. Moving SE., by afternoon of the 5th the centre had passed off the New England coast;