

MONTHLY WEATHER REVIEW.

(GENERAL WEATHER SERVICE OF THE UNITED STATES.)

WASHINGTON, D. C., AUGUST, 1882.

WAR DEPARTMENT,
OFFICE OF THE CHIEF SIGNAL OFFICER,

DIVISION OF TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

This REVIEW presents a general summary of meteorological data collected by the Signal Service during the month of August, 1882.

One of the most noteworthy meteorological conditions observed, was the unusually high maximum temperatures which occurred in the northern plateau district, during the 7th, 8th, and 9th, when the temperatures were higher than have been recorded in that section of the country since the establishment of Signal Service stations. In the southern slope, a marked decrease in the mean temperature has occurred, with correspondingly low maximum temperatures. In the interior of the country, no unusually high temperatures have occurred, and the mean is generally below the average.

But few storms were reported during the month, none of which were particularly severe.

Heavy rains in various sections have caused damaging floods, the most serious being that which occurred in the vicinity of Fort Concho, Texas.

The severe drought which prevailed in New England during July, has continued during the present month. Drought has also prevailed during August in parts of Kansas and Nebraska.

The condition of the crops is generally reported to be favorable, although some damage has resulted from the heavy rains, which have checked, to some extent, harvesting operations.

The small number of reports that have been received from vessels encountering icebergs, indicate that the north Atlantic ocean is comparatively free of ice, and therefore the chart showing the limits of icebergs, which has accompanied previous REVIEWS, is not issued with the present number.

That part of the REVIEW referring to International Meteorology presents the general weather conditions which prevailed over the northern hemisphere during the month of June, 1880, the most marked feature being the low mean temperature, which was generally below the normal throughout central Europe. Heavy rains, causing floods and loss of life and property, occurred in parts of Germany and Austria. Chart v. exhibits the tracks of barometric minima for September, 1880, traced from simultaneous observations taken at 7:35 a. m., Washington mean time, and will be found interesting as

showing the tracks of four typhoons which occurred in the China sea during that month.

In the preparation of this REVIEW, the following data received up to September 20th, have been used, viz: the regular tri-daily weather charts, containing the data of simultaneous observations taken at one hundred and thirty-seven Signal Service stations and thirteen Canadian stations, as telegraphed to this office; one hundred and eighty-four monthly journals and one hundred and eighty-one monthly means from the former, and thirteen monthly means from the latter; one hundred and eighty-seven monthly registers from voluntary observers; fifty-four 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 reports from the local weather services of Kansas, Nebraska, and Missouri, and of the Central Pacific railway company; trustworthy newspaper extracts; special reports.

BAROMETRIC PRESSURE.

[Readings expressed in inches and hundredths.]

The distribution of mean atmospheric pressure for the month of August, 1882, is shown by isobarometric lines, in black, on chart number ii. The area of lowest mean pressure occupies about the same position as that of the previous month, the isobar of 29.85, inclosing Arizona, and portions of California, Nevada, Utah and New Mexico. The lowest mean pressure for the month, (29.80) is reported from Fort Apache. From this region the pressure gradually increases, and is highest in the north Pacific coast region, Florida, and on the middle Atlantic coast; the highest monthly means reported, being 30.07 at Cedar Keys and 30.08 at Portland, Oregon. Compared with the previous month, the pressure ranges from 0.01 to 0.06 below at stations on the Pacific coast; from 0.04 below to 0.03 above in the plateau districts; from normal to 0.10 above on the eastern slope of the Rocky mountains; from 0.03 to 0.08 above in the extreme northwest; from 0.04 below to 0.04 above in the upper Mississippi and Missouri valleys; from 0.03 below to 0.06 above in the lake region; from 0.05 below to 0.01 above in the west Gulf states; from 0.01 to 0.05 below in the Ohio valley, Tennessee, the south Atlantic and east Gulf states; from 0.03 to 0.07 above in New England; from 0.03 below to 0.04 above in the middle Atlantic states; and from 0.01 to 0.04 below in Florida.