from the usual course, when considered in connection with the tropical storm which preceded it, is suggestive and interesting.

No. XII was decidedly the most extensive of the month, and was attended by a continuous flow of cold northerly winds towards the Gulf, producing a rapid change of temperature in all the districts, and continuous rains in the Southern States during the latter portion of the month.

ATMOSPHERIC TEMPERATURE.

The mean temperature of the month is shown by the isothermal lines on Chart No. II. It differs but slightly from that of December, 1873, and has been from one to five degrees above the mean of the month, in the districts of the United States east of the Territories. The low temperature in the St. Lawrence valley is probably due to the relative distribution of atmospheric pressure, as the area of low barometer which developed rapidly in the North Atlantic during the month produced north and west currents, passing over this region from higher latitudes, around the west side of this depression. Reports from New Mexico show that the temperature has been lower than for many years, and that this extreme cold has been accompanied by heavy snows in the valley of the Rio Grande as far south as the northern boundary of Mexico.

PRECIPITATION.

The distribution of rain and melted snow is shown by the isohyetal lines on Chart No. III, and the amount of precipitation during the month in the several districts, as compared with the mean deduced from several years, is given in the table. It will be seen that there has been a deficiency in precipitation in nearly all the districts east of the Mississippi river and in the Northwest, and a large excess in the Southwest. There has been an excess of cloudiness in the regions north of the Eastern Gulf States, and the number of days on which rain or snow has fallen is unusually large in comparison with the amount of precipitation.

WINDS.

The mean direction of the winds at the several stations of the Signal Service is shown on Chart No. II. The total atmospheric movement for the month, independent of direction, has been as follows at the stations named below:

Boston	6,393 miles.	St. Louis	7,107 miles.	Detroit	6,282 miles.
Baltimore	4,657 "	New Orleans	5,506 "	Chicago	7,341 "
Buffalo	8,670 "	Albany	7,618 "	Memphis	3,500 "
Cleveland	8,032 "	New York	7,090 "	Charleston	5,158 "
Cincinnati	5,187 "	Pittsburgh	4,986 "		

Among the maximum total movements the following are noted:

Erie	12,260 miles.	Sandy Hook	11,993 miles.
Cape Hatteras	9,323 "	Grand Haven	9,280 "

The winds have been light at the following stations: Augusta, Ga., total movement, 2,494 miles; Lynchburg, 2,809; Nashville, 3,406.

A velocity of one hundred miles per hour occurred at Mt. Washington on the 12th.

CAUTIONARY SIGNALS AND VERIFICATION OF PREDICTIONS.

During the month ninety-eight Cautionary Signals were displayed at the stations in the United States, and thirty-six storm-warnings were sent to the Canadian stations.