

NEW ORLEANS FORECAST DISTRICT

Southeast storm warnings for the Texas coast were issued on the 9th, at 8:20 p. m., because of a disturbance over the Rio Grande Valley; and winds of verifying velocity occurred after midnight. Northwest storm warnings, issued on the morning of the 24th, for the east coast of Texas, failed of verification; in this instance an area of high pressure was expected to cause strong winds but lost intensity as it extended southeastward. This warning was lowered at 8 p. m.

Small-craft warnings were issued for the Texas coast on the 1st, 3d, and 21st, and for the west coast of Texas on the 24th, and were mostly justified.

Warnings of freezing temperature in the northwestern or northern portions of the district were issued on the 2d and 3d; and warnings of frost in portions of Arkansas, Oklahoma, and north Texas were issued on the 7th, 8th, 11th, 12th, 14th, 15th, 18th, 19th, 23d, 24th, and 27th.—*R. A. Dyke.*

DENVER FORECAST DISTRICT

The month was remarkably warm in all but the extreme southeastern portion of this district, on account of low pressures being rather more persistent than usual over the Southwest and the Pacific slope during the first two weeks, and numerous widespread Lows moving along the Canadian border during the second two, the HIGHS in the meantime drifting rapidly southeastward from Montana with diminishing intensity. Precipitation was generally below normal east of the Continental Divide and in northern Utah. In Arizona and southwestern Colorado, however, unusually stormy conditions prevailed with precipitation far above normal. No cold waves or other severe weather occurred and no warnings of that character were issued. Warnings of frost and freezing temperature, most of which were verified, were issued frequently for northern New Mexico and the western Colorado fruit valleys throughout the month and for Utah after the middle of the month. Daily advices of minimum temperatures to be expected at the fruit district key stations, Roswell and El Paso, were issued as usual, and daily temperature forecasts for the benefit of orchardists in the Gunnison Valley were furnished to the special observer at Delta, Colo., beginning on the 28th, fruit in that region having then reached the critical stage.—*E. B. Gittings, jr.*

SAN FRANCISCO FORECAST DISTRICT

At the beginning of the month a disturbance of the Plateau type caused unsettled weather throughout the far western states. This continued for several days, and rains became general in Oregon and Washington on the 2d and 3d. On the 2d a disturbance about midway between the California coast and the Hawaiian Islands showed a marked development, while the usual HIGH over the northeastern North Pacific was noticeably weakened. Consequently, the special bulletin quoted below was issued on that date, constituting the first prediction of general rains for California in 40 days. As the drought was becoming serious, this forecast was given wide and prominent notice by news agencies.

A disturbance of increasing intensity is shown by vessel weather reports to be central this morning in latitude 30° N. and longitude 145° W., and moving eastward. It will be productive of unsettled weather to be followed by general rains in the State of California the first part of the coming week. It is probable that the rains will be in amounts sufficient to materially benefit grain and other growing crops.—*E. H. Bowie.*

The storm reached the coast on Sunday, April 4, and by the morning of the 5th had covered the entire State with rain, the amounts in most cases being unusually heavy. No serious gales occurred in connection with this disturbance, but there were fresh to strong winds along the southern California coast on the night of the 4th and on the 5th. Rain continued throughout California on the 6th, when the storm had passed inland to the Plateau and Middle Rockies. Meanwhile a new disturbance had developed, and the following bulletin was issued at 10 a. m. of the 6th:

The disturbance referred to in a special bulletin issued April 2 has passed inland and this morning its center is over Utah. It has caused general and in many cases excessive rains in the State of California during the last three days. The rains were notably heavy over southern California, where the fall in instances exceeded 6 inches, while at Mount Wilson the fall was more than 9.50 inches. The heavy rains greatly relieved the drought situation in the coastal regions and valleys of northern California.

Another storm of considerable intensity has formed some distance off the California coast and it will advance eastward and bring about another period of rains over all parts of the State of California within the next 48 hours.—*E. H. Bowie.*

This storm moved onto the northern California coast during the following night and southeast storm warnings were displayed on the morning of the 7th at all seaports from Point Conception to Cape Flattery. It was an unusually severe disturbance for the season in such low latitudes, the center when off the northern California coast having pressures of about 29 inches. Moderately heavy to heavy rains ensued throughout California, with southerly gales along and off the coast. In southern California the rainfall in the mountains and in places in the lowlands was excessive. The total amount for the two storms, April 4 to 9, inclusive, was, at Los Angeles, over 7 inches, exceeding any previously recorded April rainfall at that place. Mount Wilson reported a total for the same period of 15.60 inches. Amounts in northern California were also unusually heavy, San Francisco receiving more than in any April since 1896, while April rainfall records were exceeded at numerous other places. All danger to crops from deficient moisture was removed, storage reservoirs were filled, and the enormous benefits accruing to agriculture and related industries much more than offset the relatively insignificant damage caused by floods and washouts.

Although the termination of the rainy period was anticipated in the morning forecasts of April 8, some one, doubtless a self-constituted long-range weather forecaster, announced the advent of further storms on April 9 which would affect the whole Pacific coast. As a consequence, the Los Angeles County Flood Control Committee wired the district forecast center on that date:

Newspaper reports here announce violent storm on way. Please wire collect forecast.

The following reply was sent:

No grounds for report of approaching storm. Fair weather indicated for southern California next several days.

Aside from light and local rains associated with disturbances developing or moving southward over the Plateau, no further rains occurred in California until the 17th. On the 10th an area of high pressure moving in from the Pacific Ocean began to influence the far Western States, and by the 12th and 13th produced rather warm weather in nearly all sections except the immediate coast, especially in northern California and western Washington and Oregon. Its influence lasted until the 14th.