

## FORECAST DIVISION.

Prof. E. B. GARRIOTT, in charge.

## RIVERS AND FLOODS.

The floods that occurred during the year were discussed in the Reviews for the appropriate months, and need no further mention here other than the simple statement that they were forecast with the usual timeliness and accuracy over all districts where river and flood service is maintained.

The total number of river forecasting districts has been increased from 47 to 48 by the division of the district of Charleston, S. C., and the assignment of the supervision of the Santee and Edisto watersheds to Columbia, S. C., which was established as a river district center on July 1, 1906. On the same date the supervision of the district of California was transferred from San Francisco to Sacramento, Cal. The total number of stations of observation remains practically the same as during the year 1905, altho quite a number of changes were made during the year. A detailed statement follows:

## RIVER STATIONS ESTABLISHED.

Station.	District.
Birds Bridge, Tenn	Knoxville, Tenn.
Catawba, S. C.	Columbia, S. C.
Denison, Tex.	Shreveport, La.
Electra, Cal.	Sacramento, Cal.
Firebaugh, Cal.	Sacramento, Cal.
Fort Ripley, Minn.	Minneapolis, Minn.
Jacksonville, Cal.	Sacramento, Cal.
Jenny Lind, Cal.	Sacramento, Cal.
Melones, Cal.	Sacramento, Cal.
Merced Falls, Cal.	Sacramento, Cal.
Merrill, Iowa.	Sioux City, Iowa.
Monroeville, Cal.	Sacramento, Cal.
Pearl River, La.	Meridian, Miss.
Pollasky, Cal.	Sacramento, Cal.
Prowers, Colo.	Denver, Colo.
Rimini, S. C.	Columbia, S. C.
St. John, Cal.	Sacramento, Cal.
Salida, Colo.	Denver, Colo.

River observations also began on July 1, 1906, at Reno, Nev., in the district of Sacramento, Cal.

The stations were changed from special rainfall to special river at the following places:

Station.	District.
Mendota, Va.	Knoxville, Tenn.
Newport, Tenn.	Knoxville, Tenn.
Pelzer, S. C.	Columbia, S. C.
Santa Rosa, N. Mex.	Denver, Colo.

At the following stations in the district of Sacramento, Cal., where occasional observations only were taken heretofore,

regular daily observations will be taken for seven months of each year:

Colusa, Cal.	Lathrop, Cal.
Folsom City, Cal.	Marysville, Cal. (Yuba River.)
Kennett, Cal.	Oroville, Cal.
Knights Landing, Cal.	Riovista, Cal.

## RAINFALL STATIONS ESTABLISHED.

Station.	District.
Boonton Dam, N. J. (Cooperative.)	Philadelphia, Pa.
Delta, Cal.	Sacramento, Cal.
Downeyville, Cal.	Sacramento, Cal.
La Porte, Cal.	Sacramento, Cal.
Marion, Ohio.	Columbus, Ohio.
Prattville, Cal.	Sacramento, Cal.
Stony Ford, Cal.	Sacramento, Cal.
Weston, Colo.	Denver, Colo.

The station at Vincennes, Ind., Cairo, Ill., district, was changed from a special river to a special rainfall station.

## RIVER STATIONS DISCONTINUED.

Station.	District.
Brookville, Pa.	Pittsburg, Pa.
Catlettsburg, Tenn.	Knoxville, Tenn.
Coshocton, Ohio.	Columbus, Ohio.
Glendive, Mont.	Sioux City, Iowa.
Iowa City, Iowa.	Keokuk, Iowa.
Musselshell, Mont.	Sioux City, Iowa.
Springfield, Ohio.	Columbus, Ohio.

## RAINFALL STATIONS DISCONTINUED.

Station.	District.
Batesville, Miss.	Vicksburg, Miss.
Black River Falls, Wis.	La Crosse, Wis.
Buckingham, Va.	Richmond, Va.
Catawba, N. C.	Charleston, S. C.
Dyersburg, Tenn.	Memphis, Tenn.
Fayetteville, Ark.	Little Rock, Ark.
Gaffney, S. C.	Charleston, S. C.
Glasgow, Va.	Richmond, Va.
Greenville, Tenn.	Knoxville, Tenn.
Howardsville, Va.	Richmond, Va.
Jackman, Me.	Portland, Me.
Kenton, Ohio.	Columbus, Ohio.
Marion, Kans.	Fort Smith, Ark.
Oregon, Ark.	Little Rock, Ark.
Peterson, Minn.	La Crosse, Wis.
Tercio, Colo.	Denver, Colo.
Thornton, N. Mex.	Denver, Colo.
Williamsburg, Ky.	Nashville, Tenn.

The highest and lowest stages for the year, together with the annual ranges at 256 selected stations, are shown in Table V.—H. C. Frankenfield, Professor of Meteorology.

## GENERAL CLIMATIC CONDITIONS.

By Mr. P. C. DAY, Assistant Chief, Division of Meteorological Records.

## PRESSURE.

The annual distribution of mean pressure during 1906 over the United States and Canada is graphically shown on Chart VI, and the average values and departures from the normal are shown for each station in Tables I and IV.

The normal annual distribution of atmospheric pressure shows the existence of two well-defined high areas—one over the Ohio Valley, east Gulf, and South Atlantic States, and extending eastward over the Atlantic, with the crest, 30.10 inches or above, east of the Bermudas; while the second high area covers the Pacific between the Hawaiian Islands and the coast of Oregon and northern California, extending eastward into northern California and central Oregon.

During 1906 high pressure covered the greater part of all districts east of the Mississippi Valley, except the Florida Peninsula and New England, and extended in a narrow strip westward over the lower Missouri Valley into the central Rocky Mountain and Plateau districts.

Pressure averaged unusually high over the eastern slope of the Rocky Mountains and in the upper Lake region and northward over the Province of Ontario, where the normal was exceeded from .05 to .07 inch.

In a narrow strip along the coast of southern California and over the greater part of northern California and the western portions of Oregon and Washington, also over the Florida Peninsula, the pressure averaged slightly below normal; otherwise over all districts of the United States and Canada the average for the year was above the normal.

## TEMPERATURE.

The year was one of unusual warmth over nearly all districts. Along the entire northern border from the lower Lakes westward to the Pacific the annual means averaged 2° or more above the normal, and across the border in Manitoba and surrounding districts the average for the year exceeded the normal from 3° to more than 5°.