

RIVERS AND FLOODS

[River and Flood Division, MONTROSE W. HAYES in charge]

By W. J. MOXOM

Torrential rainfall in central and northern Texas on September 15-17 and again on September 26-27, 1936, gave unusually high floods in the Colorado and Brazos Rivers and tributaries and moderately high floods in the Trinity, Guadalupe, and Nueces Rivers. Numerous cities and towns in both the Colorado and Brazos drainage basins suffered severely from these floods. In San Angelo, Tex., on the Conchas River, a tributary of the Colorado, approximately 300 homes were swept away, a large portion of the business district and 500 houses were flooded. In the entire flooded area the loss of life was comparatively small, only four persons were reported drowned, but the property losses were very great. Close estimates of property losses are not available, but it is believed they will exceed \$5,000,000. The lower reaches of these rivers continued above flood stage at the close of the month.

The Saluda and Santee Rivers in South Carolina were in moderate flood, but losses on the main streams were negligible. Heavy rains on September 30 in northwestern South Carolina caused considerable local flooding in numerous small streams. Roads were damaged and a number of small bridges were destroyed.

Elsewhere flood stages were slightly exceeded at several river stations in widely separated areas, as shown by the table of flood stages below, with little or no losses reported.

Table of flood stages during September 1936

[All dates in September unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE					
Saluda: Pelzer, S. C.-----	Feet 6	30	(¹)	13.5	30
Santee:					
Rimini, S. C.-----	12	6	7	12.3	6
Ferguson, S. C.-----	12	11	11	12.0	11
Savannah: Ellenton, S. C.-----	14	17	20	12.5	19
		20	2	12.0	20
		1	2	15.2	1

¹ Continued into October.

Table of flood stages during September 1936—Continued

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
MISSISSIPPI SYSTEM					
<i>Missouri Basin</i>					
Big Sioux: Akron, Iowa.-----	Feet 12	16	16	13.0	16
Solomon: Beloit, Kans.-----	18	28	28	18.7	28
<i>Arkansas Basin</i>					
North Canadian:					
Woodward, Okla.-----	5	5	5	5.0	5
Canton, Okla.-----	6	13	14	6.0	13
Yukon, Okla.-----	8	14	14	6.0	14
		15	19	9.8	18
<i>Red Basin</i>					
Sulphur: Ringo Crossing, Tex.-----	20	28	Oct. 1	22.0	28
WEST GULF OF MEXICO DRAINAGE					
Elm Fork: Carrollton, Tex.-----	6	28	30	9.4	28, 29
Trinity:					
Dallas, Tex.-----	28	27	(¹)	35.2	28
Trinidad, Tex.-----	28	29	(¹)	34.0	30
Brazos:					
Rainbow, Tex.-----	20	27	29	22.0	27
Waco, Tex.-----	27	27	30	40.9	27
Valley Junction, Tex.-----	44	30	Oct. 1	47.6	Oct. 1
Colorado:					
Marble Falls, Tex.-----	21	16	23	30.0	22
		27	(¹)	28.0	27
		16	17	30.5	17
Mud, Tex.-----	25	23	23	28.6	23
		27	28	44.5	27
		16	18	25.0	17
Austin, Tex.-----	21	22	23	25.1	23
		27	28	32.9	28
Smithville, Tex.-----	25	24	25	26.2	24
		29	30	29.6	29
Columbus, Tex.-----	24	18	27	34.5	26
Wharton, Tex.-----	26	29	(¹)	34.9	30
		19	(¹)	36.6	28
Guadalupe:					
Gonzales, Tex.-----	20	17	19	28.5	18
Victoria, Tex.-----	21	29	(¹)	29.9	30
Nueces: Cotulla, Tex.-----	15	20	23	25.1	22
Rio Grande:					
Del Rio, Tex.-----	15	16	24	19.2	17
Eagle Pass, Tex.-----	16	28	28	15.5	28
		2	4	19.4	3
Brownsville, Tex.-----	18	16	19	19.5	17, 18
		21	23	19.3	22
		29	-----	-----	-----

² Gauge destroyed, readings estimated.

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

[The Marine Division, I. R. TANNEHILL in charge]

NORTH ATLANTIC OCEAN, SEPTEMBER 1936

By H. C. HUNTER

Atmospheric pressure.—The average pressure for September was near normal over practically all the western half of the North Atlantic; but was slightly to considerably above normal over the easternmost portion. The departure at Lerwick, Shetland Islands, averaged +0.18 inch, in spite of a marked deficiency there and elsewhere over most northeastern districts from the 3d to the 10th. There was a slight deficiency of the monthly pressure around southern Greenland and a marked deficiency around the Azores; in the latter area the pressure

during the second half was almost constantly below normal.

The extremes of pressure found in the regular mail reports are 30.58 and 28.49 inches, which occurred only about 42 hours and approximately 700 miles apart. The higher mark was noted on the American passenger liner *Washington*, at 8 a. m., the 16th, at latitude 41°30' N., longitude 62°24' W. The lower mark, at 12:30 a. m., the 18th, was recorded about 50 miles east of Cape Hatteras by the American steamship *Limon*, then very close to the center of the northward-moving hurricane of that date. A radio report indicates a pressure of 28.32 inches on the Swedish tankship *Nike*, as mentioned in the accompanying article on tropical disturbances.