

Table of flood stages during December 1936

[All dates in December unless otherwise specified]

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
				Feet	
ATLANTIC SLOPE DRAINAGE					
James: Columbia, Va.	10	9	9	11.1	9
Tar: Greenville, N. C.	13	17	21	13.7	20
Little: Kenly, N. C.	8	14	19	12.2	18
Neuse:					
Neuse, N. C.	14	11	13	15.9	12
Smithfield, N. C.	13	12	20	18.4	14
Goldsboro, N. C.	13	12	26	20.9	19
Kinston, N. C.	14	16	28	17.9	22
Cape Fear: Lock No. 2, Elizabethtown, N. C.	20	11	21	27.0	13
Peedee:					
Mars Bluff Bridge, S. C.	17	18	24	18.6	21
Poston, S. C.	18	24	25	18.0	24-25
Saluda:					
Pelzer, S. C.	6	20	20	6.5	20
Chappells, S. C.	15	20	21	16.4	21
Santee:					
Rimini, S. C.	12	3	6	13.0	5
		9	14	12.8	11
		17	26	13.5	24
		31	(¹)	12.2	31
		4	7	12.4	6, 7
Ferguson, S. C.	12	10	15	12.5	13
Savannah:					
Ellenton, S. C.	14	9	12	16.3	10
		17	28	13.0	21-23, 26
		18	27	20.5	23
Clyo, Ga.	13	28	(¹)	14.6	30

¹ Continued into January.

Table of flood stages during December 1936—Continued

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
				Feet	
EAST GULF OF MEXICO DRAINAGE					
Apalachicola: Blountstown, Fla.	15	22	27	17.4	24
MISSISSIPPI SYSTEM					
Ohio Basin					
West Fork of White: Anderson, Ind.	8	31	(¹)	8.7	31
Wabash: La Fayette, Ind.	11	31	Jan. 3	15.2	Jan. 1, 2
New: New River, Tenn.	18	7	7	20.4	7
French Broad: Asheville, N. C.	6	31	Jan. 1	6.2	31
Tennessee:					
Hales Bar Lock, Tenn. (Upper gage)	44	8	9	44.1	8
Decatur, Ala.	20	24	28	20.8	27
Arkansas Basin					
Poteau: Poteau, Okla.	21	28	28	21.6	28
Petit Jean: Danville, Ark.	20	6	10	22.5	8
		29	29	20.1	29
Red Basin					
Sulphur:					
Ringo Crossing, Tex.	20	6	10	23.6	7
Naples, Tex.	22	17	31	22.3	28
		27	16	24.0	14

² Estimated.

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

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

NORTH ATLANTIC OCEAN, DECEMBER 1936

By H. C. HUNTER

Atmospheric pressure.—Pressure averaged lower than normal over the north-central and the far northeastern portions of the North Atlantic. The pressure around southern Greenland was, in general, low from the 14th onward, while over the Iceland-British Isles region it was low from the 11th to the 20th. Pressure averaged slightly lower than normal in the area of the Greater Antilles and southern Florida. Elsewhere over the Atlantic high pressure was the rule, notably in the vicinity of the Maritime Provinces and Newfoundland. From Nova Scotia to Bermuda abnormally high pressure prevailed from the 19th to the end of December.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, December 1936

Station	Average pressure	Departure	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Julianehaab, Greenland	29.39	-0.09	30.28	4	28.70	19
Reykjavik, Iceland	29.36	- .11	30.28	6	28.23	20
Lerwick, Shetland Islands	29.53	- .19	30.33	26	28.32	14
Valencia, Ireland	30.01	+ .07	30.68	23, 24	28.70	14
Lisbon, Portugal	30.30	+ .19	30.56	6	30.00	11
Madeira	30.16	+ .07	30.45	31	29.94	4, 26
Horta, Azores	30.26	+ .12	30.56	8, 12	29.88	17
Belle Isle, Newfoundland	29.96	+ .22	30.88	10	29.30	18
Halifax, Nova Scotia	30.23	+ .28	30.88	9	29.52	21
Nantucket	30.22	+ .17	30.71	8	29.46	20
Hatteras	30.21	+ .08	30.66	23	29.63	17
Bermuda	30.20	+ .08	30.48	31	29.92	14, 18
Turks Island	30.01	- .02	30.08	5	29.92	12
Key West	30.07	- .01	30.26	23	29.91	2
New Orleans	30.15	+ .02	30.47	23	29.79	2

NOTE.—All data based on a. m. observations only, with departures compiled from best available normals related to time of observation, except Hatteras, Key West, Nantucket, and New Orleans, which are 24-hour corrected means.

The extremes of pressure noted in the vessel reports at hand are ¹ 30.86 and 28.44 inches. The higher reading was taken about 300 miles east of Cape Race on the American liner *Black Gull*, during the forenoon of the 10th; the lower was recorded on the American steamer *Scanstates*, at noon on the 19th, when near latitude 58° N., longitude 21° W. Readings slightly outside these limits were taken at certain of the shore stations whose figures appear in table 1, while a pressure of 28.11 is reported to have occurred at Thorshavn, Faroe Islands, on the 14th.

Cyclones and gales.—Fewer intense gales have been reported than for the average December, and the first 10 and final 10 days were less stormy, considering the whole North Atlantic, than the intervening period. Stormy conditions were, however, noted near the American coast from the 2d to 4th when a Low that was centered in the Gulf of Mexico, near Tampa, during the forenoon of the 1st, with little strength, moved northeastward near the coast line reaching Newfoundland on the 4th with much increased energy. Some vessels met fresh to whole gales in connection with this storm, particularly on the 3d. (See chart IX.)

Almost all the gales of force greater than 9 were noted during the period from the 12th to 21st, and most of these were met to eastward of midocean. Stormy weather was persistent at this time near, and far to northward and westward of, the British Isles. Two vessels on the 14th encountered hurricane winds, the American S. S. *City of Joliet* when about 500 miles west-southwest of Valencia, Ireland, and the Belgian S. S. *Katanga* about 300 miles south-southeast of Valencia.

In waters near the American coast there were some reports of whole gales and many of fresh to strong gales

¹ The international radio exchange (Rugby bulletin) of Dec. 8 contains an observation from a ship (name not given) in 44.5° N., 18.2° W., at 0600 g. m. t. of that date, with a pressure of 1,046 millibars (30.89 inches).