

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

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

NORTH ATLANTIC OCEAN, NOVEMBER 1937

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*Atmospheric pressure.*—Striking features of the pressure averages were the deficiencies found nearly everywhere to the southward of 45° latitude, and the above-normal pressure to northward. The monthly departures of -0.25 inch at Horta and -0.10 inch at Turks Island were unusually large for those stations. Every Turks Island reading received was lower than the monthly normal; but at Horta, as at Madeira and Lisbon, the monthly range was decidedly large for the latitude. Horta readings were notably low during the period from the 7th to 17th.

The stations showing greatest excess of mean pressure were Lerwick, Shetland Islands (0.29 inch), and Julianehaab, Greenland (0.22 inch). Readings were lower than average during most of the first week at these stations, and at Lerwick also about the 17th to 22d. At nearly all other stations the lowest readings occurred during the period from the 11th to 18th.

The extremes of pressure among vessel reports at hand are 30.67 and 28.46 inches. The former reading was reported by an unidentified vessel about 200 miles east of Atlantic City, N. J., during the forenoon of the 24th. The low reading was noted on the British steamship *Dalcross*, near 53° north latitude, 47° west longitude, about 6 a. m. of the 1st.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, November 1937

Stations	Average pressure	Departure	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Julianehaab, Greenland.....	29.78	+0.22	30.32	21	29.02	1
Reykjavik, Iceland.....	29.79	+ .17	30.48	9	28.85	3
Lerwick, Shetland Islands.....	29.99	+ .29	30.45	28	29.50	20
Valencia, Ireland.....	29.96	+ .07	30.42	12	29.06	17
Lisbon, Portugal.....	29.99	- .05	30.36	30	29.38	18
Madeira.....	29.93	- .08	30.27	30	29.50	17
Horta, Azores.....	29.88	- .25	30.34	4	29.28	14
Belle Isle, Newfoundland.....	29.88	+ .11	30.52	28	29.14	11
Hallfax, Nova Scotia.....	30.01	+ .06	30.42	13	29.38	18
Nantucket.....	30.02	- .03	30.52	1	29.35	14
Hatteras.....	30.09	- .02	30.64	24	29.51	13
Bermuda.....	30.07	- .01	30.34	24	29.66	15
Turks Island.....	29.89	- .10	29.98	24	29.74	11
Key West.....	29.98	- .04	30.24	23	29.60	12
New Orleans.....	30.11	+ .01	30.54	22	29.60	11

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.

*Cyclones and gales.*—The number of gales reported was about as great as usual in November. One noteworthy feature of their distribution was the surprisingly large proportion of the gales from the 10th onward to the end of the month encountered in latitudes lower than 40°. Gales were more numerous and more noteworthy during the first week and from the 13th to the 23d than on the other days. No report of occurrence of force 12 has been received.

When the month began, a well-developed storm with particularly low pressure at its center was located to north-eastward of Newfoundland; it traveled eastward, with center near the fifty-fifth parallel, for a time, then turned more to northeastward and was near Iceland on the 4th.

During this period several strong to whole gales were reported from comparatively high latitudes.

A slow-moving low advanced eastward over the Gulf States about the 10th, and by the night of the 11-12th was central close to the coast of western Florida, with increasing energy; thence it moved northeastward near the coast line, the center being near Hatteras early on the 13th and to eastward of Cape Cod, with less strength, by the evening of the 14th. During the 13th and 14th two steamships reported force 11 winds from a southerly direction, while off the Carolina coast. These are the only advices at hand of force 11 in strictly Atlantic waters during November, but one instance in the Gulf of Mexico is noted below. The Greek freighter *Tzenny Chandris*, out from Morehead City, N. C., sank early on the 13th as a result of meeting this storm; 9 lives were lost of the crew of 29.

A low near the Azores on the 14th, with a marked trough extending from its center in a southwesterly direction, advanced east-northeastward to near the Bay of Biscay by the 17th and on the 19th was over the British Isles, with less energy than it had displayed on the preceding days. In connection with this storm some barometer readings unusually low for the area were noted in the Azores and Madeira Islands and in ports of southwestern Europe, and three vessels met winds of force 10.

To eastward of the Carolinas on the 19th and 20th, and somewhat farther to northeastward by the evening of the 21st, an energetic storm caused strong to whole gales. From the Norwegian steamship *Nidareid*, Captain Christopherson, an interesting account has been received of the vessel's traversing the "eye of the storm," about midday of the 21st, near 36°21' N., 65°28' W. The wind, which had been from the south, about force 9, "dropped to a dead calm at 11:30 a. m., the sky cleared and the sun shone brightly." At 1:30 the wind suddenly came from the west-northwest, rising quickly to force 7, but after an hour hauling to west and decreasing.

A northward-moving disturbance in the Gulf of Mexico, from the 23d to the 26th, is described in an accompanying article. The American motorship *Point Breeze*, bound from Atreco to New Haven, met force 11 wind from the northeast on the 24th, when more than 100 miles southwest of the mouth of the Mississippi River. Chart IX shows the situation on the 25th.

*Fog.*—There was comparatively little fog, even for November, a month when fog normally is rarely met. The region from the eastern coast of New England to the farthest limits of the Grand Banks had particularly little compared with what November usually brings.

Five different squares, rather widely scattered, had fog upon 3 days each. There is found no square where it occurred upon 4 or more days. Of these 5 one is near the United States coast from New Jersey to Hatteras; two are close to southern and eastern Newfoundland; one is to eastward of the Azores; and the fifth lies to north-westward of the Bay of Biscay.

The first 3 days of November saw some fog between the Azores and Ireland. In the Grand Banks-St. Lawrence-Nova Scotia area there was no fog before the 9th and practically none after the 18th. Near the American coast from Long Island to Georgia and in the Gulf of Mexico near Louisiana, nearly all the dates of occurrence were near the end of the month.