

WEATHER ON THE ATLANTIC AND PACIFIC OCEANS

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

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NORTH ATLANTIC OCEAN, JANUARY 1937

Atmospheric pressure.—Pressure averaged above normal from the vicinity of southern Greenland southward and southwestward to the region of the Bahamas and the northeastern Caribbean. The Gulf of Mexico averaged slightly below normal, and the eastern half of the North Atlantic was mainly below normal; the deficiency was greater than one-third of an inch at Reykjavik, Iceland, and Valencia, Ireland. The Icelandic low was strongly developed from the 8th to the 23d, but the final 5 days of January were marked by moderately high pressure over Iceland. At Valencia pressure was almost continuously below 29.40 inches during the latter half of the month, and at Horta, in the Azores, from the 20th to the 31st the pressure was daily at least a quarter of an inch lower than normal, the center of the North Atlantic high then being much farther west than usual.

The extreme pressure readings found in available January vessel reports are 30.80 and 27.99 inches. The higher reading was noted on the American S. S. *R. G. Stewart*, not far from Nantucket, early in the morning of the 28th. The Nantucket station, it is shown in table 1, noted a slightly higher reading that day. The lower reading was made on the liner *American Banker*, about 2 p. m. of the 23d, near 48° N. 21° W.

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

Stations	Average pressure	Departure	High-est	Date	Low-est	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Julianaaba, Greenland.....	29.54	+0.11	30.02	31	28.32	23
Reykjavik, Iceland.....	29.07	-.39	30.00	29	28.26	21
Lerwick, Shetland Island.....	29.64	-.06	30.27	7	29.15	4
Valencia, Ireland.....	29.54	-.36	30.36	3	28.56	24
Lisbon, Portugal.....	30.09	-.06	30.59	5	29.04	27
Madeira.....	30.15	+ .05	30.56	5	29.56	27
Horta, Azores.....	30.06	-.10	30.68	5	29.30	29
Belle Isle, Newfoundland.....	29.83	+ .09	30.40	14	29.16	4
Halifax, Nova Scotia.....	30.23	+ .25	30.80	28	29.56	25
Nantucket.....	30.24	+ .20	30.83	28	29.67	3
Hatteras.....	30.22	+ .08	30.57	6	29.80	29
Bermuda.....	30.31	+ .15	30.50	9, 14	29.56	30
Turks Island.....	30.08	+ .03	30.16	20	30.01	2
Key West.....	30.08	-.02	30.24	10	29.97	22
New Orleans.....	30.08	-.05	30.33	29	29.82	17

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 month as a whole was marked by about the average number of gale reports for January, but the first week was comparatively free from notable storms, just as the final days of December had been. Several vessels which left the English Channel or its vicinity between the 20th and 31st of December on voyages to the West Indies or the Gulf of Mexico furnished reports showing no wind force greater than 6 encountered

on their trips, or in one instance greater than 5; such easy passages are not frequent during the midwinter period.

About the 9th to 12th, according to pressure charts, a deep low of large area occupied the northeastern Atlantic, with a noteworthy extension to the southward. During its prevalence, intense gales were met by many vessels traversing the chief steamship lanes between 35° and 15° west longitude; four instances of force 12 were reported.

The marked intrusion of a large low into latitudes near and south of 50°, during the latter part of the month, brought high winds even to the latitude of the Azores for many days. Three instances of force 12 wind are noted as occurring during the final 9 days of January, all to eastward of longitude 35°. The master of the American liner *Excambion* reported that after passing Gibraltar on the 24th, bound for Boston, severe gales and high seas were faced for an entire week, with some damage to windows and superstructure.

One important storm traversed the western North Atlantic during this time; it developed not far to the eastward of Jacksonville early on the 28th and advanced northeastward to near Hatteras, with considerable increase in force, and further increase as it moved eastward, passing not far from Bermuda on the 30th, and then continuing to join the low in the eastern Atlantic. Charts IX and X indicate conditions on the 28th and 29th, respectively.

Strong trades and northers.—About the 9th and 10th, in connection with comparatively high pressure near Bermuda, intensified trades were noted northeast of the Virgin Islands. The British S. S. *Jamaica Merchant* reported a norther of considerable strength at Veracruz on the 23d.

Fog.—In January 1937 as during the month immediately preceding, fog was of decidedly rare occurrence along the central and eastern portions of the chief steamship lanes between the United States and northwestern European ports; indeed, no reports whatever during either month indicate fog between the 40th and 15th meridians. In the vicinity of the Grand Banks very little fog was met during January, mostly about the 5th, 15th, and 19th.

On the other hand, fog was unusually frequent from the vicinity of Nova Scotia southwestward to Hatteras. The square 35° to 40° north latitude, 70° to 75° west longitude had fog on 19 January days, all before the 26th. A considerable search has failed to reveal any other instance of a 5° square in the North Atlantic south of the 40th parallel having in any 1 month records of fog on as many as 19 days.

The waters near and for moderate distances off the coast from Hatteras to the mouth of the Mississippi River experienced very little fog, which is the normal situation. In the west Gulf, however, fog was of frequent occurrence, the square 25° to 30° N., 90° to 95° W., having 11 days with fog, which is an extraordinarily large number for Gulf of Mexico waters. Fog was noted on the 18th near Veracruz, where it is decidedly uncommon.