

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS

551.506 (261.1)

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The following table shows the average sea-level pressure for the month at a number of land stations on the coast and islands of the North Atlantic. The readings are for 8 a. m., 75th meridian time, and the departures are only approximate, as the normals were taken from the Pilot Chart and are based on Greenwich mean noon observations, which correspond to those taken at 7 a. m., 75th meridian time.

Station	Average pressure	Departure
	Inches	Inches
St. Johns, Newfoundland.....	29.91	-0.09
Nantucket.....	29.87	-0.13
Hatteras.....	29.92	-0.08
Key West.....	29.97	-0.02
New Orleans.....	29.97	+0.02
Swan Island.....	29.86	-0.01
Turks Island.....	30.03	+0.05
Bermuda.....	30.10	+0.02
Horta, Azores.....	30.18	+0.04
Lerwick, Shetland Islands.....	29.85	+0.05
Valencia, Ireland.....	29.80	-0.15
London.....	29.89	-0.03

It will be noticed that comparatively small departures were the rule at the greater number of stations, including Horta and Bermuda. The Azores HIGH varied considerably during the month, reaching its greatest intensity during the periods from the 6th to 9th and 14th to 16th. The highest barometer readings recorded at Horta were 30.44 inches on the 8th and 30.46 inches on the 15th, and the lowest reading, 29.64 inches on the 20th.

Over the greater part of the ocean there was a decided decrease in the number of days with winds of gale force, as compared with April. Judging from reports received the number of gales along the middle and eastern sections of the northern steamer lanes was somewhat less than the normal shown on the Pilot Chart, while moderate weather was the rule off the European coast. In the territory between the 40th and 45th parallels, and the 40th and 50th meridians, however, heavy winds were more frequent than usual, as they were reported on from 5 to 6 days, and along the American coast in the vicinity of Hatteras, on 4 days.

Fog was unusually prevalent over the region between the 40th and 50th parallels, and the 40th meridian and American coast, the greatest amount occurring in the 5-degree square between the 40th and 45th parallels and the 60th and 65th meridians, where it was recorded on 21 days. Fog was also reported on from 5 to 8 days off the European coast, while the eastern section of the steamer lanes was comparatively clear. No fog was reported from the Gulf of Mexico, which was in marked contrast with April, when it was encountered on 9 days in this region.

On the 1st there were three moderate disturbances over the ocean, the first central near Portland, Me., the second near latitude 47° N., longitude 32° W., and the third about 3 degrees west of the Irish coast. On the 2d the first low was near Halifax, N. S., while the second had apparently disappeared, and the third, having decreased in intensity, covered Ireland and the west coast of England.

On the 4th the region between Madeira and Gibraltar was occupied by a depression that moved slowly east-

ward, entering the Mediterranean by the 7th. It reached its greatest intensity on the 5th when a number of vessels between Madeira and the Azores experienced northerly gales. Storm log.

American S. S. *Steel Traveler*:

Gale began on the 4th, wind NE. Lowest barometer 29.75 inches at 8 a. m. on the 4th, wind NE., 4, in latitude 35° 56' N., longitude 16° 38' W. End on the 6th, wind N. Highest force of wind 8; shifts NE.-N.

On the 5th there was evidently a well developed disturbance over the eastern section of the steamer lanes, although it was impossible to locate its position on account of lack of observations. Storm log.

British S. S. *Bay State*:

Gale began on the 7th, wind SSE. Lowest barometer 29.61 inches at 8 a. m. on the 8th, wind S., 6, in latitude 55° 39' N., longitude 20° 44' W. End on the 8th, wind variable. Highest force of wind 10; shifts S.-W.

On the 9th moderate northwesterly gales prevailed over a limited area near latitude 45° N., longitude 33° W.; this disturbance increased considerably in extent and intensity during the next 24 hours, and by the 10th the storm area extended over a narrow belt between the 40th and 45th parallels and the 25th and 50th meridians, which was swept by westerly winds of force 7 to 11. Storm log.

Italian S. S. *Capena*:

Gale began on the 10th wind SSW. Lowest barometer 29.66 inches at 10 a. m. on the 10th, wind SSW., 11, in latitude 44° 55' N., longitude 28° W. End on the 10th, wind SSE. Highest force of wind 11; shifts 7 points.

On the 12th a depression covered the middle and eastern sections of the steamer lanes, and vessels between the 48th and 51st parallels and 30th and 40th meridians reported moderate northwesterly gales, accompanied by snow. On the 13th, with no especially well developed low on the map, a few storm reports were received from vessels in widely scattered localities, west of the 35th meridian.

From the 15th to 20th, moderate weather prevailed over the ocean with the following exceptions. On the 15th, near latitude 43° N., longitude 40° W., southerly wind, force 7. 17th, between the 33d and 40th parallels and the 60th and 65th meridians, wind south to west, force 7. 18th, near Bermuda, wind southwest, force 7; latitude 45° N., longitude 43° W., wind west, force 7 with fog. 19th, between 40th and 46th parallels and the 32d and 40th meridians, wind W.-WNW., force 7. 20th, at Father Point, Quebec, wind W., force 7.

On the 21st there was a fairly well developed disturbance central near latitude 55° N., longitude 25° W.; this drifted slowly eastward, and by the 25th surrounded Ireland and the greater part of England, having by that time lost a great deal of its intensity. Storm log.

American S. S. *E. R. Kemp*:

Gale began on the 23d, wind NW. Lowest barometer 29.57 inches at 2 a. m. on the 23d, wind W., 7, in latitude 49° 43' N., longitude 17° 10' W. End on the 24th, wind NW. Highest force of wind 9; shifts NW.-W.

On the 23d Sydney, N. S., was near the center of a low that on the 25th was central near latitude 50° N., longitude 40° W. On the latter date a second disturbance was off Nantucket that moved northeastward a long the coast and reached Newfoundland on the 26th.

Between the 23d and 26th heavy weather prevailed over the western section of the ocean, although a number

of reports was also received from vessels in these waters that experienced moderate conditions. Storm logs.

American S. S. Balsam:

Gale began on the 25th, wind S. Lowest barometer 29.67 inches at 6 p. m. on the 25th, wind S., 10, in latitude 39° 24' N., longitude 64° W. End on the 26th, wind WSW. Highest force of wind 10, S.; shifts S.-SW.-WSW.

Dutch S. S. Burgerdijk:

Gale began on the 25th, wind WNW. Lowest barometer 29.91 inches at 2 a. m. on the 25th, wind WNW., 8, in latitude 43° 24' N., longitude 39° 49' W. End on the 26th, wind WNW. Highest force of wind 9; shifts WNW.-WSW.

At the time of observation on the 27th, moderate conditions were the rule over the ocean with the following exceptions. Latitude 40° N., longitude 50° W., wind NW., force 7, increased later in the day to SW., 9. Latitude 43° N., longitude 25° W., NW., 7. Latitude 46° N., longitude 36° W., W., 5; increased to NW., 8 at 10 p. m. on the 27th.

Charts VIII to XI cover the period from the 28th to 31st inclusive. Storm logs.

British S. S. Denham:

Gale began on the 28th, wind NW. Lowest barometer 29.38 inches at 2.30 a. m. on the 28th, wind NW., 9, in latitude 50° 33' N., longitude 42° 36' W. End on the 29th, wind WSW. Highest force of wind 9; shifts S.-SW.-WSW.

Belgian S. S. Elzasier:

Gale began on the 29th, wind S. Lowest barometer 29.73 inches on the 31st, wind SSW., in latitude 38° 14' N., longitude 47° 30' W. End on the 31st, wind SW. Highest force of wind 11; shifts S.-SW.

551.506 (265.2)
NORTH PACIFIC OCEAN

By WILLIS E. HURD

The weather of May, like that of the preceding month, was generally rather quiet over the North Pacific. Storms of marked severity were rare, and more trouble perhaps was experienced by vessels from the frequent cloudiness and fog than from any other meteorological source.

Fog showed a considerable increase in percentage over that of April, especially over the eastern half of the ocean where, in higher latitudes, the phenomenon was as frequent as to the westward of the 180th meridian. In both cases it occurred on approximately 50 per cent of the days. Fog was noted on several days along the American coast, particularly to the northward of the 30th parallel, and also reported on a few days along the China coast. Along the northern routes snow fell occasionally, and as late as the 23d the American S. S. *West Himrod* encountered snow squalls in latitude 46° 57' N., longitude 168° 14' E., temperature 36°, while on the 24th snow was reported a degree and a half farther south by the American S. S. *Las Vegas*.

In the Hawaiian region the weather was practically normal for the season, except that, as indicated by Honolulu, the rainfall was much less than average. The prevailing wind was east at Honolulu, and the maximum velocity was 31 miles from the east on the 14th.

Pressure distribution over the eastern part of the ocean, as shown by observations at the island stations, was without special significance. At Dutch Harbor the average pressure, based on p. m. observations, was 29.75 inches, or 0.08 inch below normal. The principal deficiency occurred during the period from the 19th to the 29th, inclusive. The highest pressure, 30.16, occurred on the 1st and 15th; the lowest, 29.06, on the 24th. At Midway Island the average pressure was 30.08 inches,

or 0.01 inch below normal. The highest reading, 30.26, was recorded on the 12th; the lowest, 29.82, on the 1st. At Honolulu the average, based on p. m. observations, was 30.05 inches, or normal. The highest reading, 30.12, was recorded on the 24th; the lowest, 29.95, on the 6th.

The great areas of high and low pressure—the North Pacific HIGH of western longitudes and the Aleutian LOW—were fairly well developed over the greater part of the month. Both areas fluctuated considerably. The center of the cyclonic disturbance, however, was more frequently east than west of Dutch Harbor, but on the 23d and 24th, the period of its greatest intensity, the center was south of the central Aleutians.

The HIGH was most seriously disturbed from the 12th to the 16th. During this period cyclonic conditions, central at about 45° N., 140° W., entered the area, pushed to the southward apparently by an anticyclone from Alaska. By the 14th the low had been forced to about 35° N., 145° W., where it remained until its disappearance on the 16th. The southward-moving anticyclone meanwhile covered the entire Gulf of Alaska and banked along the American coast to the 40th parallel from the 14th until the 17th. On the 18th low pressure again began moving in from the westward and the normal cyclonic and anticyclonic conditions were gradually restored.

In the Far East the continental HIGH disappeared with April, and a succession of LOWS was maintained in Chinese and Japanese waters throughout May. So far as our present data reveal, none of these lows were typhoons, and most if not all of them seem to have been of land origin. The strongest cyclones emanating from this region were those of the 19th–20th over southern Japan and of the 8th, 16th, and 23d to 27th over and to the eastward of northern Japan.

Ship observers reported only two days with gales to the westward of 130° east longitude. One was the 5th, when the American S. S. *Anna E. Morse* fell in with a northeast gale, force 8, pressure 29.80 inches, in 33° 54' N., 128° E. The other was the 20th, when the British S. S. *Bradford City* encountered a northwest gale, force 8, in 27° 09' N., 125° 30' E.

On the 6th to 11th gales occurred over scattered portions of the area bounded by the 40th and 50th parallels, meridian 175° W., and the Japanese coast. This stretch of ocean was the scene of a considerable barometric depression throughout the period. On the 8th the pressure at Nemuro was 29.18. The cyclone producing it advanced into the ocean on the 9th. The maximum wind force was 9, recorded by three vessels as follows:

7th.—British S. S. *Tamaha*, in 47° 50' N., 178° 39' W.
9th.—American S. S. *William Champion*, in 46° 07' N., 154° 32' E. The latter vessel also recorded at the same time the lowest corrected pressure, 28.60 inches, noted on the ocean for the month. 10th.—American S. S. *Anna E. Morse*, in 43° N., 149° 15' E., lowest pressure 28.89.

In west longitudes gales not exceeding 8 in force occurred over scattered localities on several dates.

On the 21st and 22d gales of force 8 were experienced by vessels in the neighborhood of 40° N., 150° E. On the 24th to 27th an active cyclone prevailed over and to the eastward of Japan. Reports indicate its greatest intensity to have been on the 24th, on which date the British S. S. *Bradford City* weathered a southerly gale of force 10, in 36° 56' N., 145° 07' E. On the 24th and 25th the British S. S. *La Crescenta*, while steaming along the Japanese east coast, hove to for some hours with