

WEATHER ON THE NORTH PACIFIC OCEAN

By WILLIS E. HURD

Atmospheric pressure.—For the eastern part of the North Pacific, two interesting pressure anomalies are noticeable for November. At Honolulu and Midway Island, near and in the stronghold of the usual high-pressure area, the average barometer was below the normal by 0.7 to 2.7 millibars (0.02 to 0.08 inch). At Dutch Harbor, near the heart of the usual low-pressure belt, the average barometer was above the normal by 9.6 millibars (0.28 inch). The Aleutian low center this month lay in the Gulf of Alaska region, the mean pressure at Juneau being 1,006.5 millibars (29.73 inches). From this point along the coast to Mazatlan, the November barometer was close to normal. The lowest determinable pressure of the month was 966 millibars (28.53 inches), read at St. Paul Island on the 16th.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Pacific Ocean and its shores, November 1941

Station	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Millibars	Millibars	Millibars		Millibars	
Barrow.....	1,016.1	+0.5	1,032	6, 27	987	30
Dutch Harbor.....	1,011.6	+9.6	1,032	27	972	16
St. Paul.....	1,009.5	+7.5	1,033	26	966	16
Juneau.....	1,006.8	-1.0	1,030	20	978	13
Tatoosh Island.....	1,015.9	+1.0	1,034	20	992	13
San Francisco.....	1,018.3	-7	1,027	24	1,012	17
Mazatlan.....	1,011.9	-3	1,014	8, 14, 29	1,009	5, 20, 21
Honolulu.....	1,013.0	-2.7	1,019	11	1,010	17
Midway Island.....	1,017.9	-7	1,026	30	1,010	23
Guam.....	1,010.9	-3	1,020	16	1,007	19

NOTE.—Data based on 1 daily observation only, except those for Juneau, Tatoosh Island, San Francisco, and Honolulu, which are based on 2 observations. Departures are computed from best available normals related to time of observations.

Extratropical cyclones and gales.—On the 2d and again on the 16th-17th deep cyclones appeared over the Aleutian Islands. Central pressures were well below 982 millibars (29 inches), and heavy storminess prevailed over a considerable area. Gales of force 9-10 were reported both north and south of the Alaska Peninsula on the 2d, and of force 11 south of the peninsula on the 17th.

For all western waters of the Pacific, reports are negligible to wanting, but for eastern waters, numerous cyclones of varying degrees intensity occurred in the Gulf of Alaska and on parts of the ocean between the Hawaiian Islands and the American mainland north of southern California. In middle latitudes, between about 135° and 150° W., depressions were rather frequent. They were of no great barometric depth, but caused gales of force 8 on several days between the 6th and the 30th. On the 8th and 9th, near 34°-36° N., 145°-148° W., winds of force 9 to 11 were encountered, with barometers no lower than 1,007 millibars (29.74 inches). Farther north, force 8-9 gales occurred on several days, with the highest wind, of force 11, and a low barometer of 977.7 millibars (28.87 inches), observed near 57° N., 139° W. A still lower barometer, 28.62 inches (uncorrected), was read on a ship in the midst of a force-10 gale, near 49° N., 131° W.

In near coastal waters of the United States there were several days with south to southeasterly gales ranging in force from 8 to 10. On the 2d, of force 8-9, they were mostly experienced off Washington and Oregon. Close in on the southern Oregon coast a force-10 gale was reported on the 13th, and again on the 29th, on which

date the barometer dropped to 992.2 millibars (29.30 inches). Off the central California coast a gale on the 28th attained a force of 8.

Tropical disturbances.—At least one tropical cyclone, of moderate intensity, formed in extreme southeastern waters. A ship on November 2 had a southeast wind of force 9, barometer 1,000.7 millibars (29.55 inches), near 15½° N., 108° W. On the 4th a vessel near 17° N., 113° W., had a southeasterly gale of force 8, with nearly as low barometer.

It appears that another small cyclone in low latitudes occurred also on the 3d, since a ship near 7½° N., 89° W., had an east gale of force 9, preceded by north-northeasterly and succeeded in the afternoon by south-southeasterly winds. The barometer fell to 1,004.4 millibars (29.66 inches).

Intensified trade wind.—During much of the 10th a northeast trade wind of force 8 was experienced in the vicinity of 12° N., 149° W.

Tehuantepecers.—Northerly gales in and near the Gulf of Tehuantepec were reported as follows: Of force 8 on the 13th; of force 9 on the 25th, 26th, and 27th; and of force 10 on the 24th.

Fog.—Fog was particularly frequent in near coastal waters of California, where it was reported on 15 days. The greatest concentration was along the middle coast. It was reported on 2 days off Oregon and on 3 days off Lower California. A few scattered fogs occurred well at sea during the first 6 days of the month.

RIVER STAGES AND FLOODS

By BENNETT SWENSON

The interior of the country, following a period of excessive rainfall, was relatively dry during November. However, flooding continued from the previous month in portions of the lower Mississippi and Arkansas River Basins and in the upper Red River Basin. The flooding in the Arkansas River in November reached the highest stage since June 1833 in the reach from Webbers Falls, Okla., to slightly below Van Buren, Ark.

Light to moderate floods occurred in other sections as eastern Texas, Pecos River in Texas, Willamette River in Oregon and in portions of the upper Mississippi Valley.

In the more eastern States, where both September and October were extremely dry, the rainfall in November was much below normal. The river stages in this area, showed little change, remaining well below normal.

Atlantic Slope, East Gulf of Mexico and Ohio River Drainage.—Precipitation during the month was below normal except in Florida and Mississippi. The lack of moisture, which has been prevalent during most of the year, resulted in little changes in the river stages. Some increases in stages occurred from lowered temperatures, particularly in extreme northern sections, but generally the stages were well below normal.

Upper Mississippi Basin.—Heavy rains on October 31 and November 1, resulted in light to moderate flooding at a few points. The Wisconsin River overflowed its banks slightly at Knowlton, Wis., on the 2d and 3d, with a peak stage of 12.9 feet on the 2d. Light flooding occurred also in the lower portions of the Des Moines, Rock and Meramec Rivers during the first week of the month with stages from 1 to 2 feet above flood stage. Flood damage was slight.

A slight overflow occurred in the lower Illinois River at Havana and Beardstown, Ill., from the 4th to the 22d. A rise began in the Mississippi River proper early in the