

## NORTH PACIFIC OCEAN, MAY 1936

By WILLIS E. HURD

**Atmospheric pressure.**—The pressure distribution was abnormal for the season over northern and central North Pacific waters during May 1936, and constituted a distinct reversal to winter type. The Aleutian LOW was strongly developed, and at Dutch Harbor the average pressure, 29.38 inches, was 0.46 below the normal of the month. The reading is the lowest of record for May at this station.

The North Pacific anticyclone showed a high degree of development in midocean, as indicated by the record high average of 30.23 inches for May, at Midway Island.

In the Far East, pressure anomalies occurred at Naha and Chichishima; the average reading at Naha was 0.13 inch above, and at Chichishima 0.06 below, the normal.

In other parts of the ocean, near normal average pressures prevailed.

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, May 1936, at selected stations

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Point Barrow.....	29.93	-0.16	30.38	1	29.58	25
Dutch Harbor.....	29.38	-0.46	30.10	8	28.80	28, 29
St. Paul.....	29.43	-0.41	30.04	8	28.86	4
Kodiak.....	29.67	-0.17	30.18	9	28.70	4
Juneau.....	29.94	-0.05	30.34	10	29.42	4
Tatoosh Island.....	30.02	+0.01	30.55	6	29.51	26
San Francisco.....	29.98	-0.01	30.23	6	29.75	26
Mazatlan.....	29.83	-0.02	29.96	5	29.76	25, 28
Honolulu.....	30.07	+0.02	30.15	3	29.98	9
Midway Island.....	30.23	+0.18	30.36	6	30.00	27
Guam.....	29.85	-0.03	29.92	1, 31	29.80	11, 13, 14
Manila.....	29.78	+0.01	29.84	1, 2, 3	29.68	15
Hong Kong <sup>1</sup> .....						
Naha.....	29.95	+0.13	30.12	1	29.78	14, 17, 30
Chichishima.....	29.85	-0.06	29.98	6	29.64	17
Nemuro <sup>1</sup> .....						

<sup>1</sup> Data missing.

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 observation.

**Cyclones and gales.**—Despite the prevailing low pressure over the Aleutian region, in conjunction with the steady high pressure in middle latitudes to the southward, no undue storminess was experienced by steamships traversing the upper routes. On several days along the middle and western parts of these routes pressures fell to 29 inches or lower, but they were accompanied as a rule by fresh gales (force 8) to strong gales (force 9) only. Gales of force 10 occurred south of the central and western Aleutians on the 11th and 17th, and east of Honshu on the 28th. In the gales of the 28th, the British steamer *Empress of Asia* reported the lowest pressure reading, 28.78 inches, of the month. On the 19th, the Swedish steamer *Falsterbo* reported the severest May gale, force 11 from east-southeast, in connection with a small shallow disturbance south of Honshu.

To the eastward of the one hundred and sixtieth meridian of west longitude, gales of force 8-9 were reported locally on the 4th, 5th, and 12th, and over a larger area on the 13th. Those of the 4th and 5th were due to a deep

cyclone, central over and near the Alaska Peninsula, with a southeastward extension to the coast of the United States. The gale on the 4th occurred near 41° N., 132° W., and was the closest to the mainland reported for the month.

The gales of the 12th-13th occurred in connection with a depression which appeared east of the Hawaiian Islands on the 9th and thereafter moved northward toward the Gulf of Alaska. The lowest barometer reported in this disturbance was 29.09 on the 13th, near 41° N., 136° W. This day was also the stormiest, with gales experienced by several ships within the region 35°-45°N., and 138°-150° W.

Generally quiet weather prevailed in the Tropics. In the Far East the only low-latitude gale reported was of force 8, barometer 29.68, near the north end of the island of Luzon on the 20th. Off the coast of Costa Rica a northeaster of force 7 was experienced on the 1st.

**Fog.**—As usual in May, fog showed a decided seasonal increase in frequency over the western part of the northern and central steamship routes. East of Honshu and northwest of Midway Island, in two 5° squares it was reported on 5 days. From the western Aleutians southwestward toward Japan, fog was observed on from 2 to 4 days within 5° squares. East of 170° E., scattered fog occurred in higher latitudes to the American coast. There were 3 days with fog noted off the Washington and California coasts, and 4 off the Peninsula of California. Dense fog off Prince of Wales Island, Alaska, caused the temporary grounding of the American steamer *North Sea* on the 14th, according to the Maritime Register.

## SMALL TYPHOON IN THE FAR EAST, APRIL 18-22, 1936

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[Weather Bureau, Manila, P. I.]

A low-pressure area south of the Western Caroline Islands on April 18 and 19 developed into a depression April 20, central about 300 miles west by north of the Palau Islands. As this disturbance moved rapidly northwest, it developed into a small typhoon which entered Samar Island during the early morning hours of the 21st; at 6 a. m. it was located over the central part of the northern coast of that island. Continuing the same northwest course, but moving more slowly, it proceeded across southern Luzon, and the next day found it shifting to the north as it entered the Pacific Ocean, where it disappeared a short distance east of northern Luzon.

Barometric minima reported below 750 mm (29.53 inches) are as follows: Borongon, Samar, 748.26 mm (29.458 inches) with west winds force 6. Calbayog, Samar, 748.51 mm (29.468 inches) with west-northwest winds force 4. Legaspi, Albay, 745.60 mm (29.354 inches) with west-southwest winds force 5. Naga, Camarines Sur, 748.31 mm (29.461 inches) with northwest winds force 4. Daet, Camarines Norte, 743.39 mm (29.268 inches) with northeast winds force 3. The most violent winds were of force 8, from the southwest quadrant, and occurred at various stations while the center was moving away from the locality. The total loss of life was 9; 7 deaths were reported from Camarines Norte, and 2 from Samar.