

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level, North Pacific Ocean, October 1935, at selected stations

Station	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	Inches	Inch	Inches		Inches	
Point Barrow	29.84	-0.09	30.44	5	29.42	2
Dutch Harbor	30.09	+0.44	30.64	25	29.88	1
St. Paul	30.05	+0.42	30.60	19, 20	29.04	1
Kodiak	29.95	+0.36	30.76	27	29.94	16
Juneau	30.01	+0.14	30.76	28	29.28	22
Tatoosh Island	30.10	+0.09	30.61	22	29.56	14
San Francisco	30.04	+0.03	30.29	17	29.77	28
Mazatlan	29.84	0	29.60	{ 7, 10, 12, 24, 25 }	29.76	28
Honolulu	29.94	-0.06	30.04	22	29.78	27
Midway Island	30.03	0	30.18	6	29.84	8, 9
Guam	29.80	-0.04	29.90	7	29.72	3
Manila	29.81	+0.01	29.88	27	29.72	3
Hong Kong	29.90		30.01	9, 31	29.74	6
Naha	29.97	+0.07	30.14	8	29.74	25
Chichishima	29.94	+0.03	30.12	7, 8	29.60	5
Nemuro	29.98		30.32	25	29.44	18

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.—October was somewhat stormier than the preceding September along the greater extent of the ocean area north of the thirty-fifth parallel. Gales were fairly well distributed on from 1 to 3 or more days in each 5° ocean square, but with greatest frequency as a rule to the southward of the central Aleutians. There were no winds reported in excess of force 10. Gales of this higher strength were experienced by the American steamships *President Jefferson* and *Bellingham* to the southeast of the Kuril Islands, and by the Danish motorship *Asia*, near 50° N., 176° E., on the 8th; by the Japanese steamship *Takaoka Maru*, near 34° N., 157° E., on the 25th; and by the American steamships *Shelton*, *Golden Mountain*, and *President Jackson* in scattered localities between 35° and 50° N., 138° and 160° W., on the 28th.

The storm field of the 8th was of wide extent between the Kurils and the central Aleutians and southward, with lowest reported pressure of 28.90 inches. There was then a rapid progression of the cyclone northward, out of the steamship lanes; and on the 9th it was central over the northern reaches of the Bering Sea, proceeding toward the Arctic Ocean.

During the 11th to 13th, scattered gales of force 8-9 occurred over a great region east of the one hundred and eightieth meridian and mostly to the northward of the forty-fifth parallel.

On the 24th to 26th, gales of force 8-10 were met between 30° and 35° N., 150° and 170° E.

On the 25th to 27th, the deepest disturbance of the month lay between the central Aleutians and latitude 40° N. Pressures well below 29 inches were widespread in that region, on the 27th especially, with the lowest barometer, 28.45, read on the Japanese motorship *Hikawa Maru* near 48° N., 177° E. No gales in excess of force 9, however, were reported from this deep disturbance.

During the period October 21 to 28 a low fluctuated over the general region between about 30° and 45° N., 180° and 145° W. It caused moderate to strong local gales within the area up to the 28th, on which date winds of force 10 occurred in several localities.

Near the American coast gales were reported as follows: On the 17th, of force 9, west of Vancouver Island; on the 20th, of force 8, off central California.

Typhoons.—Four typhoons, described in the subjoined report by the Rev. Bernard F. Doucette, S. J., of the Central Observatory, Manila, occurred in the Far East during the month. Of these typhoons, that of October 3-7, which the writer refers to as passing the one hundred and fiftieth meridian on the 7th, apparently continued

northeastward and then northward to the Arctic Ocean, and caused the gales, noted above, over the western part of the northern steamship lanes on the 8th.

Tehuantepecers.—Gales of the norther type were reported in the Gulf of Tehuantepec, as follows: Of force 8 on the 2d, 9th, and 27th; and of force 10 on the 26th.

Fog.—The greater part of the ocean fog of the month occurred during the first decade. On the northwestern part of the ocean it was observed on the 4th to 10th. In higher latitudes east of the one hundred and eightieth meridian, except on the immediate coast, it was observed on 5 days. In Washington and Oregon waters fog was reported on 3 days; in California waters, on 5 days; in Lower California waters, on 5 days.

TYPHOONS OVER THE FAR EAST, OCTOBER 1935

By BERNARD F. DOUCETTE, S. J.

[Weather Bureau, Manila, P. I.]

During the first half of the month, four typhoons appeared and affected the weather of the Far East. Brief accounts of these disturbances follow.

Typhoon, October 1 and 2.—A depression appeared October 1 south of the Paracels and moved west-northwest into Indochina. When in the continent, it intensified sufficiently to be classified as a typhoon.

Typhoon, October 1 to 8.—About 300 miles east of Samar, a depression formed October 1 and moved northwest. It quickly intensified into a typhoon, inclining to the west-northwest, approaching central Luzon. Shifting to the northwest when near Polillo Island, it passed close to and south of Baler, Tayabas Pr., crossed Luzon on the 4th-5th and passed into the China Sea, moving between Dagupan and Baguio. It continued on the northwest course until about 120 miles southwest of Pratas when it inclined to the west. On October 8, at 2 p. m., it was over the northern part of the Gulf of Tong King moving west-northwest into the continent.

Observations from the motor vessel *Jeff Davis* were of great assistance in locating and plotting the course of this typhoon as it approached the archipelago. The lowest barometric reading reported was that from Baler, Tayabas. At 9 p. m., October 4 a pressure of 740.07 mm (29.136 inches) was recorded with north-northeast winds of force 12. The loss of life was 18, as reported to the newspapers on October 8. Destruction to crops, light material houses, and roads occurred over a narrow path, as the destructive winds did not extend to a great distance from the center. Compared with other typhoons, little rain was reported as this typhoon passed.

Typhoon, October 3 to 7.—This typhoon was one of the distant ocean typhoons, far from the Philippines. It first manifested itself about 360 miles east-northeast of Guam moving northwest, October 3, at 6 a. m. After proceeding about 180 miles, it slowed up, moving 60 miles during October 4, inclining more to the north-northwest. It then moved very fast, passing to the east of the Bonins, on the 6th as it began to recurve to the north-northeast. October 7, afternoon, it passed the one hundred and fiftieth meridian, moving north-northeast.

Observations from the ships, *Comliebank*, *Brightvega*, *Elg*, *Pennsylvania*, and *Stentor* were of great assistance in locating this typhoon on October 5 and 6.

Typhoon, October 7 to 13.—A depression formed about 120 miles west-southwest of Yap on the 7th, and moved westward, gradually inclining to the west by north and then west-northwest, crossing the Visayan Islands. It moved into the China Sea October 11, still a depression. When it reached the Paracels, it shifted its course to the west and intensified into a typhoon as it entered Indochina.