

OCEAN GALES AND STORMS, OCTOBER, 1927

Table with columns: Vessel, Voyage (From, To), Position at time of lowest barometer (Latitude, Longitude), Gale began, Time of lowest barometer, Gale ended, Lowest barometer (Inches), Direction of wind when gale began, Direction and force of wind at time of lowest barometer, Direction of wind when gale ended, Highest force of wind and direction, Shifts of wind near time of lowest barometer. The table is divided into 'NORTH ATLANTIC OCEAN' and 'NORTH PACIFIC OCEAN' sections.

Ocean gales and storms, October, 1927—Continued

Vessel	Voyage		Position at time of lowest barometer		Gale began	Time of lowest barometer	Gale ended	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH PACIFIC OCEAN—Continued													
Steel Mariner, Am. S. S.	Kobe.....	Port Townsend.....	47 50 N.	172 15 W.	25.....	Noon, 30.....	31.....	Inches 29.04	ENE..	NNE.....	WNW..	N., 9.....	NE.-N.
Columbia Maru, Jap. S. S.	Yokohama.....	Seattle.....	42 29 N.	158 21 E.	27.....	6a., 29.....	Nov. 1.....	29.48	NW.....	NNE.....	NNW..	NNE., 8.....	1 pt.
Mayebashi Maru, Jap. S. S.	do.....	San Francisco	46 02 N.	146 53 W.	29.....	5p., 31.....	1.....	29.45	E.....	SW., 7.....	W.....	SE., 8.....	SW.-WSW.
SOUTH PACIFIC OCEAN													
Sonoma, Am. S. S.	San Francisco	Sydney.....	30 29 S.	158 32 E.	5.....	8a., 5.....	Oct. 5.....	29.70	SSW..	SSW., 6.....	S.....	SSW., 11.....	Steady.
San Nazario, Br. S. S.	Buenos Aires.	San Pedro.....	52 28 S.	70 10 W.	10.....	8a., 11.....	12.....	29.48	NW.....	WNW., 9.....	W.....	WNW., 10.....	WNW.-SW.
SOUTH ATLANTIC OCEAN													
San Nazario, Br. S. S.	Buenos Aires.	San Pedro.....	47 00 S.	63 55 W.	7.....	4a., 8.....	8.....	29.39	N.....	WNW.....	WNW..	N., 8.....	

NORTH PACIFIC OCEAN

By WILLIS E. HURD

Strong wintry conditions visited the upper latitudes of the North Pacific Ocean in October, 1927. Snow and hail squalls occurred over the lower waters of the Gulf of Alaska on the 14th and 15th, and exceptionally stormy weather prevailed north of the 40th parallel during a full third of the month. A glance at the "Gale and storm report" will show that heavy weather in the Temperate Zone began in earnest about the 8th, rose to a peak on the 19th to 21st, then declined somewhat until the 26th, after which, except for an isolated tropical gale, the ocean experienced comparative quiet. From the 14th to the 21st, and on the 26th, full storm to hurricane winds were encountered over great areas between the 135th meridian of west longitude and the 160th meridian east. On the 20th and 21st, the days of most widespread storm violence, the gale-swept region stretched south of the Aleutian Islands for a latitudinal width of more than 500 miles, between longitudes 155° W. and 170° E. In addition, on the 3d and 29th, hurricane velocities from typhoons were elsewhere experienced. Thus, in all, winds in excess of force 10 are known to have occurred on 11 days this month on the open waters of the Pacific. Gales of force 8 to 10 were further experienced by vessels somewhere in the ocean on most other dates, except the 4th to the 7th, which was a period of quiet.

Barometric pressures on the average were not abnormally low for the month except in the Gulf of Alaska, where the principal concentration of the Aleutian cyclone lay, with minor fluctuations, from the 6th until the 28th. The mean pressure at Kodiak, the center of the disturbance, was 29.39 inches, which is 0.20 inch below the normal. The lowest daily reading here was 28.14 inches, on the 14th, on which date and the one following occurred the strongest gales in the gulf. On the 16th and 17th a center secondary to the main low formed near 40° to 45° N., 135° to 140° W., and on both dates this position was near the scene of wind forces rising to 11 and 12. On the 18th to 21st pressures, in addition to being low over the Alaskan Gulf, were very low far to the westward, where an intense cyclone had developed and was traveling eastward toward the primary storm center. It was on the 19th, in the midst of the violent gales of this storm—then definitely joining the low to the east-

ward—that the American Steamer *President Jefferson*, in 50° N., 176° 25' E., reported a pressure reading of 28.07 inches, which was the lowest for the month in connection with an extratropical storm.

Cyclonic offshots from the low in the gulf entered the American Continent on the 6th, 8th, 12th, 16th, 18th, 20th, 23d, and 28th.

Owing to the considerable cyclonic activity in middle and higher latitudes, the North Pacific HIGH was well developed only during the first few days and a part of the last decade of the month, being pushed to the south-eastward and partly disintegrated during much of the intervening time. From the 24th to the 27th it was pushed back from the California coast by an intruding offshoot of the northern cyclone which had forced its way southward. The offshoot, however, became disconnected from the parent low, although it developed sufficiently to cause gales of maximum force 10 along the eastern half of the San Francisco-Honolulu route on the 25th and 26th.

Pressure data for several island and coast stations in west longitudes are given in the following table:

TABLE 1.—Averages, departures, and extremes of atmospheric pressure at sea level at indicated hours, North Pacific Ocean, October, 1927

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
Dutch Harbor ^{1 2}	Inches 29.70	Inch +0.01	Inches 30.42	1st.....	Inches 28.76	20th.
St. Paul ²	29.71	+0.05	30.18	26th.....	28.94	7th.
Kodiak ^{1 2}	29.39	-0.20	30.36	3d.....	28.14	14th.
Midway ^{1 2}	29.95	-0.10	30.22	14th ⁴	29.74	29th.
Honolulu ²	30.03	+0.03	30.15	28th.....	29.88	1st.
Juneau ¹	29.69	-0.18	30.24	2d.....	28.90	15th.
Tatoosh Island ^{2 4}	29.97	-0.06	30.35	7th.....	29.48	16th.
San Francisco ^{2 4}	29.97	-0.03	30.15	29th.....	29.72	31st.
San Diego ^{2 4}	29.93	0.00	30.10	29th.....	29.70	31st.

¹ For 30 days. ² P. m. observations only. ³ A. m. and p. m. observations.
⁴ Corrected to 24-hour mean. ⁵ On other dates.

Several typhoons occurred in the Far East during October. These are discussed in the immediately following article by Rev. José Coronas, of the Philippine Weather Bureau, and it is necessary to supplement his report by only a few additional facts. The "first Pacific typhoon," noted as moving E. by N. on October 1,