

NORTH PACIFIC OCEAN, JUNE 1936

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Atmospheric pressure.—Average barometer departures from normal were unimportant over the North Pacific Ocean for June 1936. In the Aleutian region, however, pressures were 0.05 to 0.08 above normal, while at Juneau the departure was -0.09 , the values lessening southward to -0.03 at San Francisco, and to 0.00 at Mazatlan. There was little range in pressure over northern and central waters of the North Pacific, as shown by the difference between 29.95, the average at Dutch Harbor, and 30.10, the average at Midway Island, near the center of the oceanic high-pressure region. In the Tropics the lowest average pressure was 29.70 inches at Hong Kong.

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

Stations	Average pressure	Departure from normal	Highest	Date	Lowest	Date
	<i>Inches</i>	<i>Inch</i>	<i>Inches</i>		<i>Inches</i>	
Point Barrow.....	29.97	-0.02	30.32	4	29.50	18
Dutch Harbor.....	29.95	$+0.05$	30.38	22	29.50	11
St. Paul.....	29.94	$+0.08$	30.30	22	29.44	11
Kodiak.....	29.96	$+0.05$	30.26	21	29.54	17
Juneau.....	29.92	-0.09	30.19	21	20.41	17
Tatoosh Island.....	29.98	-0.04	30.25	28	29.54	7
San Francisco.....	29.93	-0.03	30.13	8	29.69	11
Mazatlan.....	29.83	.00	29.92	{ 26, 27, 28 }	29.76	17
Honolulu.....	30.04	.00	30.15	28	29.94	8
Midway Island.....	30.10	$+0.05$	30.26	27, 28	29.96	4
Guam.....	29.84	-0.03	29.94	1	29.76	13, 24
Manila.....	29.78	$+0.03$	29.84	{ 1, 11, 29, 30 }	29.62	7
Hong Kong.....	29.70		29.79	12, 24	29.53	3, 8
Naha.....	29.77	$+0.02$	29.90	29	29.52	8
Chichishima.....	29.89	-0.02	30.06	28	29.64	5
Nemuro ¹						

¹ Data incomplete.

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.—Although there were some movements of cyclones in the Aleutian region and over most extratropical waters east of the one-hundred and eightieth meridian this month, the weather over this great area was for the most part quiet, with few moderate gales reported by ships and only two of force 8.

The only important extratropical cyclone of the month was the continuation of a storm that appeared off the

north Japanese coast on May 31. This storm was central on June 1 near 40° N., 155° E., with lowest reported pressure 28.87 inches. Two ships in the southern quadrants of the storm encountered westerly gales of force 11 on this date. On the 2d the disturbance had moved considerably to the northeastward toward the Aleutians; but was causing local gales to the southeastward, the highest of which was of force 10, near 38° N., 171° E.

Subsequently to the 2d the highest wind reported outside the Tropics was of force 9, near 39° N., 152° E., on the 29th.

Tropical disturbances.—On June 8 there were signs of development of a tropical disturbance southwest of the Gulf of Tehuantepec. The steamer *Anniston City* reported a west-northwest gale of force 7 in the afternoon, but the ship's lowest pressure was 29.70, observed at 2 a. m. of the 9th in $14^{\circ}08'$ N., $96^{\circ}35'$ W. During the 9th the Danish motorship *Nordhval* and the American steamship *Constance Chandler* encountered gales of force 10, the former from south-southeast and the latter from southwest, with considerable depression of the barometer within the area of approximately 13° N., $92\frac{1}{2}^{\circ}$ W. Following the 9th the cyclone system apparently disorganized, as is frequently the case in these waters. Conditions remained disturbed south of the Gulf of Tehuantepec until the 12th, on which date the American steamship *Ensley City* experienced a north gale of force 8, barometer 29.67. However, on the 11th, lowered pressures and heavy rains over Guatemala and southern Mexico indicated some movement of the disturbed condition across Central America to the western Caribbean where a moderate cyclone developed as described elsewhere in this issue of the REVIEW.

On the 22d a further apparently immature storm development occurred at some distance south of Acapulco; but the only available evidence of its existence is that contained in the report of the steamship *Steel Ranger*, which shows that a southwest gale of force 8 was experienced, with accompanying barometer depressed to 29.49 inches, in $13^{\circ}58'$ N., $102^{\circ}17'$ W.

Fog.—As is usual in June in these waters, frequent fog occurred along the western half of the northern trans-Pacific routes, the percentage ranging from about 20 in upper midocean, to 60 off the east coast of Hokushu Island. Some fog was also met along most of the length of the middle routes. Along the American coast there were 6 days with fog off southern California, and 14 days with fog off Lower California.