

however, a definite depression center was located inland approximately between but slightly to the north of Salina Cruz and Acapulco.

Early on the 21st the wind circulation, the depth of the barometer, and the augmented force of the wind, showed a definite center located at sea about 70 miles southwest of Cape Corrientes. At 9 a. m. the Japanese M. S. *Hakonesan Maru*, in 19°40' N., 106°00' W., experienced a wind-force of 11 from the southeast, barometer 29.29. At 5 p. m. of that date the American steamship *Virginia*, in 20°30' N., 107°24' W., had an east-southeast wind of force 11, barometer 29.12, the lowest recorded in connection with the storm.

Near hurricane wind velocities occurred over a small area at the entrance to the Gulf of California on the 22d, as the cyclone moved slowly northwestward toward a position slightly to the westward of Cape San Lucas.

On the 23d, in 23°52' N., 112°31' W., the American S. S. *West Cactus* had a northwesterly wind of force 11, which led to the belief that the center was proceeding into the Gulf, whereas it was closely hugging the west coast of the Peninsula. After the 23d the disturbance rapidly lost energy, and on the 26th entered the California coast as a very shallow depression near Point Conception.

Fog.—Generally, over the North Pacific, there was materially less fog this month than in the preceding July. Along the Washington coast fog was reported on 4 days; along the California coast, on 7 days; and along the coast of Lower California, on 6 days. Along the northern steamship routes fog was encountered between 135° W. and 155° W., in the general neighborhood of the 50th parallel, on the 22d to 25th. The percentage of frequency increased generally to the westward, with the foggiest areas, having about 30 percent of days with fog, being those embraced within the squares 45°–50° N., 170°–175° E., and 40°–45° N., 150°–155° E.

TYPHOONS OF THE FAR EAST, AUGUST 1935

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[Weather Bureau, Manila, P. I.]

There were three typhoons during this month—possibly four, as explained below. The first one, coming early in the month, caused heavy rains over the northern part of the Archipelago. After this typhoon, came a period of high pressure during which the meteorological conditions were very similar to those of April and May. During the last 10 days of the month, the other typhoons occurred.

Typhoon of August 1 to 12.—On August 1, soon after the typhoon of July 22 to 31 had filled up over the continent, a typhoon started from a position about 600 miles east of the Balintang Channel, in a northwesterly direction toward Formosa, but changed on August 4 to a westerly course as it crossed that island. After entering the continent it soon recurved to the northeast, passed on the 8th into the Yellow Sea, crossed Korea and, finally, moving eastward, passed over the southern part of Honshu.

As this typhoon crossed Formosa, the winds weakened without an accompanying rise in pressure. Instead, the circulation over the southwestern sector increased so much that the Taihoku Observatory called this portion a secondary cyclone. When both the primary and the

secondary circulations moved into the continent, they combined about a single center.

When this storm, on approaching Formosa, was about 400 miles north-northeast of Aparri (August 3), heavy rains fell along the western coast of Luzon and over the provinces between Manila and Baguio. Since these were soon after the rains of the last typhoon of July, extensive floods resulted. Furthermore, the Agno, Pampanga, and Angat Rivers overflowed their banks because of the heavy rains in the mountains east of the plains. The loss of life was not great (265 deaths being the total given by the newspapers of August 9), considering that whole provinces were under at least 3 feet of water. Besides, there were no violent winds and after it stopped raining the water subsided very quickly. Property loss, consisting of animals and crops, was quite large, and considerable relief work was required from the Red Cross Society.

Rainfall

[24 hours beginning 6 a. m.]

	Baguio, Mountain Pr.	Dagupan, Pangan- sinan Pr.	Iba, Zam- bales Pr.	Manila, Rizal Pr.
	Inches	Inches	Inches	Inches
Aug. 1.....	25.51	3.72	3.94	4.57
Aug. 2.....	19.47	6.78	2.62	5.14
Aug. 3.....	19.38	5.21	.80	4.90
Aug. 4.....	8.76	1.61	.28	.22
Aug. 5.....	3.15	.30	.61	Trace

Typhoon of August 18 to 29.—This typhoon, which formed after an extensive and persistent high pressure began to weaken, showed its presence as a low-pressure area north of Guam on August 17 and 18. As a depression, it moved west until August 21, then changed to the northwest about 600 miles east of Luzon. It passed close to and northeast of Basco, and on the 23d over southern Formosa, and changed thereafter to a westerly course. On the 26th, it would have entered the continent, if it had continued its velocity of the preceding days. Yet, from the observations available, it apparently did not enter the continent, certainly not to any great distance. Then, on the 27th, a definite center appeared near Pratas, moved northward, crossed Formosa and filled up over the Meiao-Sima Group. During these days, Swatow did not send observations, and until these are available, the course of the typhoon or typhoons cannot be decided with certainty. It seems, however, that there was only one typhoon. It did not enter the continent. Instead of continuing on the westerly course which it had taken across the Formosa Channel, it appears to have changed to the southwest, then southeast, into a position between Pratas and Basco, where it intensified, and then on the 28th and 29th moved northeastward over Formosa.

Typhoon of August 20 to 30.—Forming northeast of Guam, this typhoon pursued its course over ocean regions, until it reached Japan. From August 22 to 24 it moved northwest, gradually changed to the north-northwest and came on the 27th close to the Nansei (Loo-choo) Islands. Over southern Japan, it changed its course to the northeast and crossed Honshu during the 29th, moving at a rapid rate toward Nemuro. In Japan, according to Manila newspapers of August 30, there were 42 deaths and much property damage.