

On the same date the British S. S. *Comeric*, Capt. E. N. K. Blackmore, Chief Officer G. A. Fellowes, Calcutta toward Talcahuano, Chile, experienced very rough seas, barometer 29.28 inches (uncorrected), wind SW, force 8, in latitude 39° 17' S., longitude 76° 55' W.

On the 4th of October a whole gale was encountered by the Panaman S. S. *Isonomia*, Capt. G. Marcussen, Grays Harbor toward Sydney, Australia. Second Officer E. Biet reports that the vessel experienced high and very rough seas. The lowest pressure, 30.12 (uncorrected), was observed at 1 p. m., on the 4th, in latitude 31° 07' S., longitude 157° 15' E., wind SW., force 8. Gale ended on the 5th, wind SW. Highest force of wind 9.

SIX OR SEVEN TYPHOONS IN THE FAR EAST DURING SEPTEMBER, 1923.

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[Weather Bureau, Manila, P. I.]

It is much to our regret that weather telegrams from Japan, and consequently from the Bonin and the Loochoo Islands, have been missing since the disastrous Tokio earthquake of September 1. Hence, the existence of one of the typhoons of this month is given as doubtful and parts of the tracks of other Pacific typhoons can not be given as accurately as in the previous months.

Pacific typhoon of September 2 to 12.—Lack of observations from the Bonins and the Loochoos makes the track of this typhoon not altogether certain. If the typhoon followed the track as it is deduced from our incomplete daily weather maps, we must consider such a track as very peculiar and most abnormal. The typhoon appeared on the 2nd to the ENE. of Guam, in about 148° longitude E. and near 15° latitude N. It moved northwestward until the 5th, then due west on the 5th and the 6th in about 22° latitude N.; on the 7th, when near 130° longitude E., it recurved sharply to SE. and S., keeping practically this southerly direction on the 18th; finally on the 9th and 10th it inclined again westward between 17° and 19° latitude N., at the same time decreasing in intensity. On the 11th it was only a low-pressure area covering the northern part of Luzon.

Japan's typhoon, September 15.—This typhoon was shown in our weather maps of the 7th to 9th in the neighborhood of the northern Ladrone Islands not far from 147° longitude E. and 19° latitude N. It recurved to Japan between the Loochoos and the Bonins and reached the southern coast of Japan to the SE. of Kobe on the 15th, moving probably to NE., although it was inclining still more to the E. We are able to follow this part of the track from observations made on board the steamer *Steel Navigator* to the east and south of the track, and on board the steamers *President McKinley* and *President Wilson* to the north and west of same. The latter two steamers were anchored at Kobe. The lowest barometric readings observed in these steamers, although situated about 100 miles from the center, were as follows:

Steamers.	Position.	Barometric minimum. ¹	Winds.
Steel Navigator	31° 15' lat. N., 137° 12' long. E.	28.93 ins., 734.81 mm.	Veering from ESE. to SSW.
President McKinley	At Kobe	28.97 ins., 735.84 mm.	Backing from NE. to W.
President Wilson	do.	29.01 ins., 736.85 mm.	Backing from ENE. to WNW.

¹ Not corrected for gravity.

Formosa Channel typhoon, September 12 to 14.—The track of this typhoon was very peculiar and abnormal. The center appeared for the first time in our weather maps of the 11th over the Eastern Sea NE. of Formosa. As we have no observations from Japan and the Loochoos, it is impossible to ascertain whether the disturbance formed over the Eastern Sea or had come from further east. On the 12th we could notice that the typhoon was moving WSW. or SW.; and on the 13th there could be no doubt that it was really moving SSW. through the Formosa Channel close to the western coast of Formosa. In the early morning of the 15th the center was west of Balintang Channel near 118° longitude E. and 20° latitude N. There was practically no trace of the disturbance after the 15th.

Pacific typhoon, September 14 and 15.—Observations taken on board the steamer *Salina* have made it possible to mention the existence and approximate track of this typhoon. It was moving NW. or NNW. on the 14th and recurved northeastward on the 15th near 151° longitude E. and 28° latitude N. The steamer *Salina* had its barometric minimum 29.48 inches (749.03 mm.), not corrected for gravity, at 4 p. m. of the 14th, when in 149° 20' longitude E. and 24° 35' latitude N., with a strong gale from NNW., high seas and heavy rain squalls. While the barometer was rising on the 15th, the winds backed from NW. to W.

Two simultaneous depressions or typhoons, NE. and W. of Luzon at the end of September.—It is only approximately that we can give the tracks of these two disturbances. The one of the Pacific moved very slowly NW. and N. about 200 miles east of northern Luzon on the 21st to 24th or 26th; then it seems to have inclined west toward the Batanes Islands, and finally recurved northeastward and filled up to the east of southern Formosa on October 1. The other depression or typhoon of the China Sea appeared on the 21st and 22nd about 100 miles west of central Luzon and moved very slowly westward, until it probably filled up on the 28th near or over the Paracels.

Besides the above mentioned typhoons of this month, the observations of Yap and Guam showed another center of typhoon on the 20th to 22nd moving probably westward from the northern part of the Ladrone Islands. It is impossible with the data at hand to decide whether the typhoon filled up in the Pacific or went on recurring toward Japan.

Observations from Formosa and Basco (Batanes Islands) seem to show another atmospheric disturbance to the east of southern Formosa and south of the Loochoos on September 12th to 14th, but we have no means at present to ascertain its existence and track.