THE TYPHOON OF VISAYAS, DECEMBER 5-6, 1931

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[Weather Bureau, Manila, P. I.]

The afternoon weather map of December 4, 1931, shows an area of low pressure extending over southern Visayas, Mindanao, and Palawan. The rapid drop of the barometer east of Samar early in the morning of December 5, left no doubt but that a typhoon had developed in the eastern sector of the depression and it was fast approaching Samar. Typhoon warnings were sent immediately to all the Provinces and stations likely to be affected, and, on account of the peculiar period of the milling season, to all the sugar centrals of Visayas. The typhoon moved so fast that shortly after noon of December 5, it passed south of and very close to Catbalogan, Samar, where the barometer dropped from 756.91 mm. at 8 a. m. to 734.67 mm. 18 minutes past noon. Government offices at

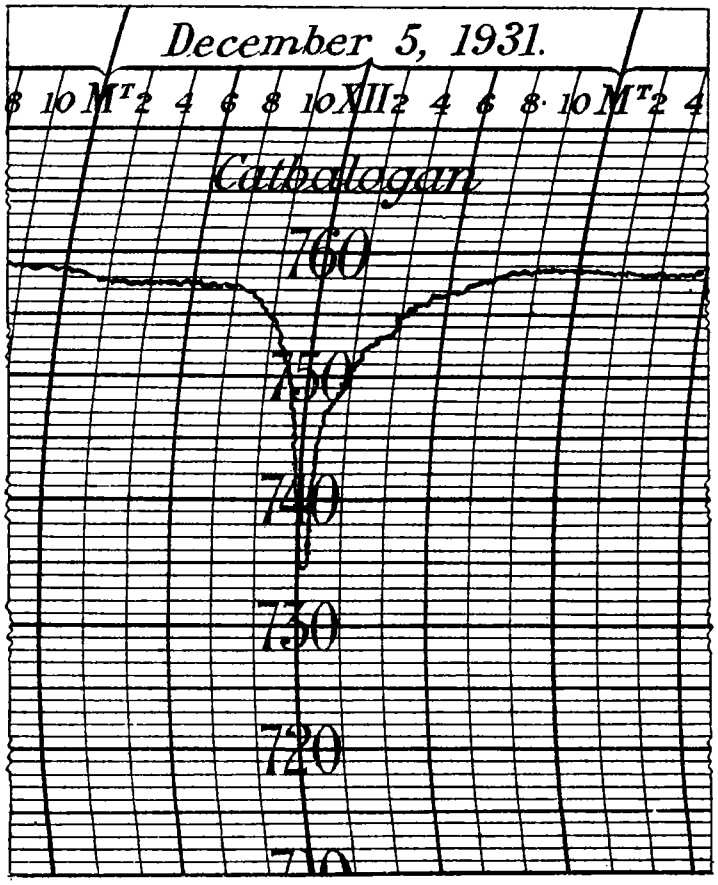

FIGURE 1.—Barogram of the typhoon of December 5, 1931, at Catbalogan, west coast of Samar

Catbalogan were closed at 11 a. m. and the employees sent home to prepare for the storm. The quick dissemination of typhoon warnings by means of the police and the town crier minimized the damages that otherwise would have taken place, yet 28 fish corrals were reported destroyed, over a hundred houses of light materials were damaged, and two persons were found drowned in the barrios of Catbalogan. Taking a west by northwest direction, the typhoon passed north of Capiz at 7 p. m. causing a barometric minimum of 744.66 mm. and southwesterly gusts of force 11. One hour and a half after midnight, the typhoon passed close to and north of the Culion Leper Colony and was located in the China Sea about 130 miles to the westward on the morning weather map of December 6.

The typhoon was treacherous on account of the high velocity of its translation and the narrowness of its diameter. The 530 kilometers that separated Catbalogan from Culion were covered by the typhoon in 13 hours and 15 minutes, giving a velocity of 40 kilometers, or almost 25 miles, per hour.

The narrowness of the storm's diameter is evident from the fact that, * * * although the wind was very strong in the proximity of the center, yet in some places like Culion and southern Mindoro, four hours before and after the barometric minimum the wind was no more than a gentle breeze with clear or partly cloudy sky. The motor boat *Siruma* was washed ashore and completely destroyed on the eastern coast of Sibuyan and the *Virginia*, on the western coast of Busuanga. The barogram from Catbalogan, presented herewith, shows the limited extent, but steepness of gradient, of the typhoon.

BUCKET OBSERVATIONS OF SEA-SURFACE TEMPERATURES

By GILES SLOCUM

STRAITS OF FLORIDA AND CARIBBEAN SEA

Table 1 shows the average temperatures for the Caribbean Sea and the Straits of Florida for December of each year from 1919 to 1930, inclusive, and Table 2 summarizes the temperatures for December, 1930, in the same areas. The chart shows the number of observations taken in December, 1930, within each 1° square, and mean temperature data for subdivisions of the area considered.

The surface temperatures of the Straits of Florida fall rapidly during December, but the seasonal downward trend frequently is interrupted by alternations of warmer and cooler quarter-months, especially in the latter part of the month. This fluctuation of mean temperature is a winter condition, and is in contrast with the fairly steady and persistent drop of autumn. By the end of the month, the transition from autumn to winter is well advanced, and normal temperatures characteristic of winter prevail, with the water temperatures usually not far from the normal annual minimum.

During December the season has not progressed so far in the Caribbean, where autumn conditions still persist, as it has in the straits. This month is in the midst of the period of most rapid drop in normal temperature over all parts of the Caribbean Sea, where the winter season of relatively low temperatures, with little or no upward or downward trend, is delayed until late January and lasts until early March.

December, 1930, was the warmest December in the Caribbean during the term of years covered (1920–1930) and the coolest in the Straits of Florida. For this month as a whole nearly all parts of the Caribbean were unprecedentedly warm and *all* distinctly above their average temperatures for the 11-year period. The third quarter of this month was relatively the coolest, when the mean temperature of the Caribbean was a trifle below that of the same period in 1926. The other three quarters were record-breaking or record-equaling. In the Straits of Florida, only the first quarter of this month was near the seasonal average. The second, third, and fourth quarters were cooler than the hitherto coolest corresponding periods.

Current charts[1] indicate that the water flowing through the Yucatan Channel between November and January divides into three main branches. The weakest, in the

[1] Cf. Hydrographic Office of the Navy Department of the United States. Pilot Chart of the Central American Waters. Washington, D. C. Published monthly.