

This little manual can be heartily recommended to anyone wishing to obtain a clear exposition of the fundamental principles of the science of seismology.

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THE SORSOGON EARTHQUAKE. By Rev. Miguel Saderra Maso, S.J., *Weather Bulletin*, November, 1912.

The Rev. Miguel Saderra Maso, S.J., Assistant Director of the Philippine Weather Bureau, describes in the *Weather Bulletin* for November, 1912, the earthquake which occurred in the Province of Sorsogon, southeast of Luzon, on November 8, 1912. There were three slight shocks from early morning till midday; and in the afternoon at 15 h. 48 m. there was another shock. Seven minutes later (15 h. 54 m. 30 s.) the principal shock occurred. The damage done was considerable. The High School, a building of squared concrete blocks bound to each other with iron clamps, was cracked in many places, while the portico of reinforced concrete was also fissured. In the Constabulary Barracks, a new stone building, the east wall fell out, other walls were cracked, and the old stone fence facing north was thrown down. Practically all the old stone buildings in the town were badly damaged, but Father Maso states that the construction of these buildings was faulty. A large fissure opened in the road between Sorsogon and Gubat, six kilometers east from Sorsogon; and there were many landslides among the hills. While the water in the bay was somewhat agitated, there was no seismic wave.

Father Maso draws the isoseismic lines and shows that the meizoseismic area comprised the southern two-thirds of the land that stretches from the Bay of Sorsogon to the Gulf of Albay, occupied by an irregular series of hills and volcanic cones, known as Pocdol. The northern coasts appear to have been beyond the meizoseismic area.

A detailed list of the preliminary tremors, foreshocks and repetitions is given. The disturbance was in effect the maximum phase of a seismic period that lasted from November 5th until December 26th. The seismographs at Manila and Baguio, distant from the epicenter 360 and 520 kilometers, recorded all the seismic shocks that had an intensity of IV or more. The principal earthquake was recorded in all the observatories of the Far East, of Asiatic Russia,