



Statistical Properties of the Immediate Aftershocks of the 15 October 2013 Magnitude 7.1 Earthquake in Bohol, Philippines

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Abstract

The aftershock records of the magnitude 7.1 earthquake that hit the island of Bohol in central Philippines on 15 October 2013 is investigated in the light of previous results for the Philippines using historical earthquakes. Statistics of interevent distances and interevent times between successive aftershocks recorded for the whole month of October 2013 show marked differences from those of historical earthquakes from two Philippine catalogues of varying periods and completeness levels. In particular, the distributions closely follow only the regimes of the historical distributions that were previously attributed to the strong spatio-temporal correlations. The results therefore suggest that these correlated regimes which emerged naturally from the analyses are strongly dominated by the clustering of aftershock events.

Key words: earthquakes, interevent distances, interevent times, time series analysis.