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Prediction of the magnitude of an earthquake from foreshocks

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ABSTRACT

Largest foreshock versus main shock studies have been done for different regions from different earthquake sequences. The study shows that this correlation is positive for slight to moderate earthquakes and negative for moderate to great earthquakes. Nepal-India border region gave a negative correlation throughout. The study, therefore, reveals that the foreshock activity is generally confined to moderate earthquakes while the great earthquakes are free from such an activity. Great events will occur quiescently in this sub-continent and the foreshock activity in their case will be beyond our detection capability.

Mathematical relations have been computed and a nomogram has been prepared for each region by which the magnitude of an earthquake can easily be predicted.