



Time Series Analysis of the Seismic Events Worldwide

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A time series analysis with the seismic events occurred worldwide from February 2000 to December 2011 was carried out. This analysis was done with the REB events recorded in the IMS network of CTBTO. As a whole, 344,546 events have occurred in this period and the number of REB events published by CTBTO is about 79 events each day. The numbers of events per year has been slightly increased recently, but this can be regarded as due to the newly installed IMS stations in the world. The number of large earthquakes whose magnitude is greater than or equal to 6.0 and the value of energy released by the events have stayed relatively constant. The released energy value is relatively high both in 2004, when the earthquake and tsunami occurred off the coast of Northern Sumatera on 24 December and 2011, when the Japan Fukushima Earthquake occurred on 11 March. During this 12 year period, no additional trend was found. Data collected over a longer time period may yield different results.