The relationship between volcanic and seismic activity

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We analysed three “independent” data sets of three volcanoes (Katla and Hekla on Iceland and Pichincha in Equator) and global seismicity for the time span of the last 500 years. The statistical analysis of volcano eruptions and global seismic activity show that these processes are not independent and random, but they are the consequence of one global process with the prevailing periods of approximately 43, 53 and 63 years. This process will have its maximum between 2007 and 2020.

The large earthquakes precede the volcanic activity on a global scale. The Chile earthquake triggered the Eyjafjallajökull volcano activity and the Tohoku earthquake triggered the activity of volcanoes Etna (for only one week), Grímsvötn on Iceland (for only one week) and El Hiero on the Canary Islands. The seismic activity below the Katla volcano started, which means that the eruption could be expected within a period of the next couple of years.