



A dynamical analysis of the seismic activity of Llaima volcano (Chile) during 2007-2008 eruption

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Although Llaima volcano in Chile is one of the most active in the southern Andes, the literature studying its seismic activity is relatively scarce. An interesting problem recently tackled is the possibility for a regional tectonic stress to trigger a change in the volcanic activity of this basaltic to basaltic-andesitic volcano, which is in turn reflected in the time evolution of the properly volcanic seismicity, especially in the form of a continuous volcanic tremor. In this work, we conduct a spectral, dynamical and statistical analysis of the seismicity recorded during September-October 2000 and May-December 2007, in order to characterize the anomalous behaviour of the volcano before the January 2008 eruption. The observed dynamical transitions are compared with remote sensing and visual observations describing the changes in the eruptive style of the volcano.