



## Reventador Volcano 2005: Eruptive activity inferred from seismo-acoustic observation

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### Abstract

Reventador Volcano entered an eruptive phase in 2005 which included a wide variety of seismic and infrasonic activity. These are described and illustrated: volcano-tectonic, harmonic tremor, drumbeats, chugging and spasmodic tremor, long period and very long period events. The recording of this simultaneous activity on an array of three broadband, seismo-acoustic instruments provides detailed information of the state of the conduit and vent during this phase of volcanic eruption. Quasi-periodic tremor at Reventador is similar to that observed at other volcanoes and may be used as an indicator of vent aperture. Variations in the vibration modes of the volcano, frequency fluctuations and rapid temporal fluctuations suggest the influx of new material, choking of the vent and possible modification of the conduit geometry during explosions and effusion over a period of six weeks.

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