



Acoustic emission (AE), tides and degassing on the Peteroa volcano (Argentina)

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The release of acoustic emission (AE) at 200 kHz, recorded on the volcanic edifice of Peteroa, on the Andes at the border between Argentina and Chile, is investigated, and compared with similar studies carried out on Vesuvius and on Stromboli. Peteroa appears a much precise device, which can monitor several spectral lines of the Earth's tide. The comparison between such three volcanoes denotes some remarkable difference in their respective AE response and general phenomenology. Such comparatively substantially different behaviors can be used for improving our understanding of phenomena that, both in natural reality and in the laboratory, control the fatigue of materials, and the peculiarity of the feedback from different systems, while they evolve towards their eventual final catastrophic disruption.