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Cluster analysis of Very Long Period events at Stromboli Volcano recorded by the Italian National Institute of Geophysics and Volcanology INGV

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The Stromboli Volcano erupted on July 3, 2019 and August 28, 2019 after a period of modest activity. The paroxysm on July 3rd was not predicted by the monitored parameters that characterize the activity of the volcano. This motivates the study of alternative seismic parameters in the eruption period in order to identify parameters that have potential to predict paroxysms in the future using multivariate analysis techniques of wide-ranging interest for data analysis in physics. In this work we present a cluster analysis of Very Long Period signals of Stromboli volcano in the time period of the paroxysms. We show that the waveforms of the Very Long Period signals form two clusters that exhibit a strong variation in time and thus their ratio constitutes a potential parameter to characterize anomalous behavior of the volcano.

Is this abstract from experiment?

No

Is the speaker for that presentation defined?

Yes

Name of experiment and experimental site

N/A

Internet talk

Yes

Details

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