
Indian Ocean InSAR Observatory (OI2) – Routine Interferometric Monitoring of a Volcanic Island, the Piton de la Fournaise

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Résumé

The Indian Ocean InSAR Observatory (OI²) is a component of the National Services of Volcanological Observations, one of the 20 National Services of the French National Institut of Earth and Space Sciences of CNRS. One of the main goals of OI² is the regular production and diffusion of ground displacement measurements, related to volcanic activity at Piton de la Fournaise, La Réunion Island. The displacement measurements are obtained from radar interferometric remote sensing data. They are exploited both in a near-real time operational framework, as a component of the geophysical dataset used by the Piton de la Fournaise Volcano Observatory scientists to monitor the volcano activity and for more fundamental research interested either in methodological developments or in improving our understanding of the way the volcano works. On this poster, we first give a short description of the Piton de la Fournaise geological context, then we describe the OI² missions, operations and database. Finally we present some examples of scientific exploitation of the OI² data, with results related to the recent activity at Piton de la Fournaise (between april 2007 and July 2017).
Keywords: Piton de la Fournaise, Volcanology, Geodesy, Radar Interferometry, InSAR.

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