

## Usefulness of long-term monitoring of volcanic eruptions by synthetic aperture radar

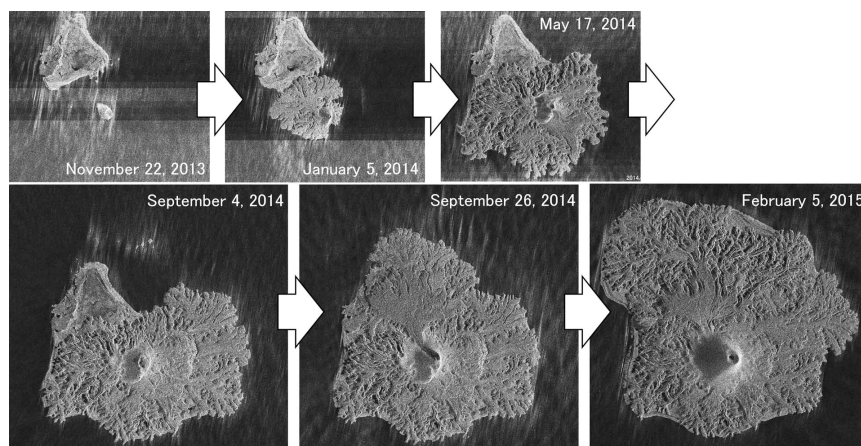
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Nishinoshima is desert island located in about 1000km south from Tokyo. In November 20, 2013, a new eruption was confirmed in the southeast about 500m of the location of Nishinoshima Island, and integrated with the Nishinoshima Island in December 26, 2013, and most of Nishinoshima Island covered by lava in October, 2014. Like these, the active eruption with overflow of lava is also continuing now. However, because Nishinoshima Island is about 130km far from the nearest inhabited islands Ogasawara, it is difficult to observe all the time by eyesight and observation machinery. Although it is possible to monitor from the sky by an aircraft, the aircraft fault is also concerned with the eruption.

The authors, for the purpose of precisely recording the development form of volcanic island, and long term observed using a synthetic aperture radar satellites can be safely and periodically observed.

Keywords: Synthetic aperture radar, Volcano monitoring



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