

Central Part of Madagascar Volcanism Reactivation Possibility

Tuesday, 20 June 2023 10:47 (1 minute)

Madagascar has never experienced any volcanism activity. The volcanisms dated from the cretaceous period are almost all around the coastal zones and Cenozoic at the central part and in the north. Seismically, the central part is the most active. An ancient crater even had smoke from the inside slope. The laboratory of Seismology and Infrasound at the IOGA uses the national seismic stations network to monitor earthquakes and tsunamis. The CTBTO station, OPO, has an important place for monitoring earthquakes in the area. Many seismic crises are recorded from the central volcanic areas and this station is well placed to get better detection. To study the volcanism of the central part of Madagascar, we consider the observations in site, the earthquakes history and a 3-D tomography of the lithosphere. Even though Madagascar has had no volcanic activity for millions of years, the instability of the lithosphere presents the possibility of reactivation of the recent Cenozoic volcanoes is supported by the tomography results.

E-mail

rinaranamana@gmail.com

Promotional text

Madagascar could experience a new volcanic reactivation even though the last activation was during the Cenozoic era.

Oral preference format

in-person

Primary author: Mr ANDRIANASOLO, Ramarolahy Rina (Institute and Observatory of Geophysics of Antananarivo (IOGA))

Presenter: Mr ANDRIANASOLO, Ramarolahy Rina (Institute and Observatory of Geophysics of Antananarivo (IOGA))

Session Classification: Lightning talks: P1.2-1, P3.1, P3.4, P4.5

Track Classification: Theme 1. The Earth as a Complex System: T1.2 The Solid Earth and its Structure