

## Between Infrasound and Rainfall

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A thunderstorm is a well-known and permanent source of infrasound events. Infrasound signal propagation is known as well to be dictated by atmospheric parameters like temperature and wind. In a tropical region like Madagascar, rainfall pattern is one possible technique used to explain seasonal variation of International Monitoring System infrasound network detectability. In this study, 20 years of I33MG infrasonic station bulletin was correlated to rainfall data. Infrasound bulletin is obtained from DTKPMCC software in NIAB collection, atmospheric variations are derived from ECMWF ERA5 data and precipitation data are from the local meteorological service of Madagascar. Observation of rainfall as well as infrasound bulletin from 2003 to 2022 shows a correlation between precipitation and infrasound events.

### E-mail

ahramanantsoa@gmail.com

### Promotional text

This work aims to emphasize the expertise of NDC, the scientific impacts in the society of infrasound technology and the impact of infrasound on daily life.

### Oral preference format

in-person

**Primary author:** RAMANANTSOA, Andry Harifidy (Institute and Observatory of Geophysics of Antananarivo (IOGA))

**Co-authors:** RANDRIANARINOSY, Fanomezana (Institute and Observatory of Geophysics of Antananarivo (IOGA)); Mr RAMBOLAMANANA, Gerard (CTBTO Preparatory Commission); ANDRIANAIVOARISOA, Jean Bernardo (Institute and Observatory of Geophysics of Antananarivo (IOGA)); Ms RAZAFIMAMONJY, Sandra (Institute and Observatory of Geophysics of Antananarivo (IOGA)); Mr RAKOTOARISOA, Tahina (Institute and Observatory of Geophysics of Antananarivo (IOGA))

**Presenter:** RAMANANTSOA, Andry Harifidy (Institute and Observatory of Geophysics of Antananarivo (IOGA))

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