

# SEISMIC NETWORK OF MADAGASCAR

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## Permanent Seismic Stations : Short Period : 07

Starting time : 1971

Purposes : - Seismicity of Madagascar  
- Seismic Hazard

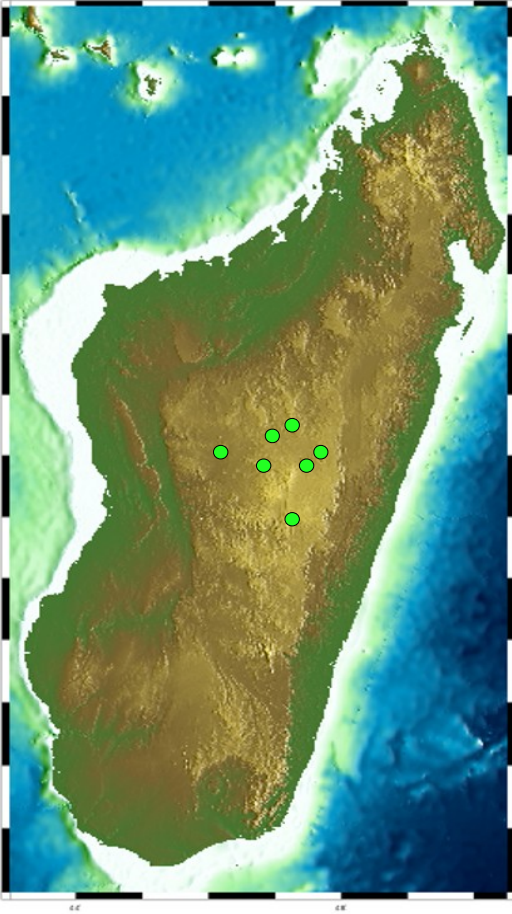
Affiliated Network : DASE

Station Code : AVY, VTY, OPO, ABM, ATG, MDSM , FIRM

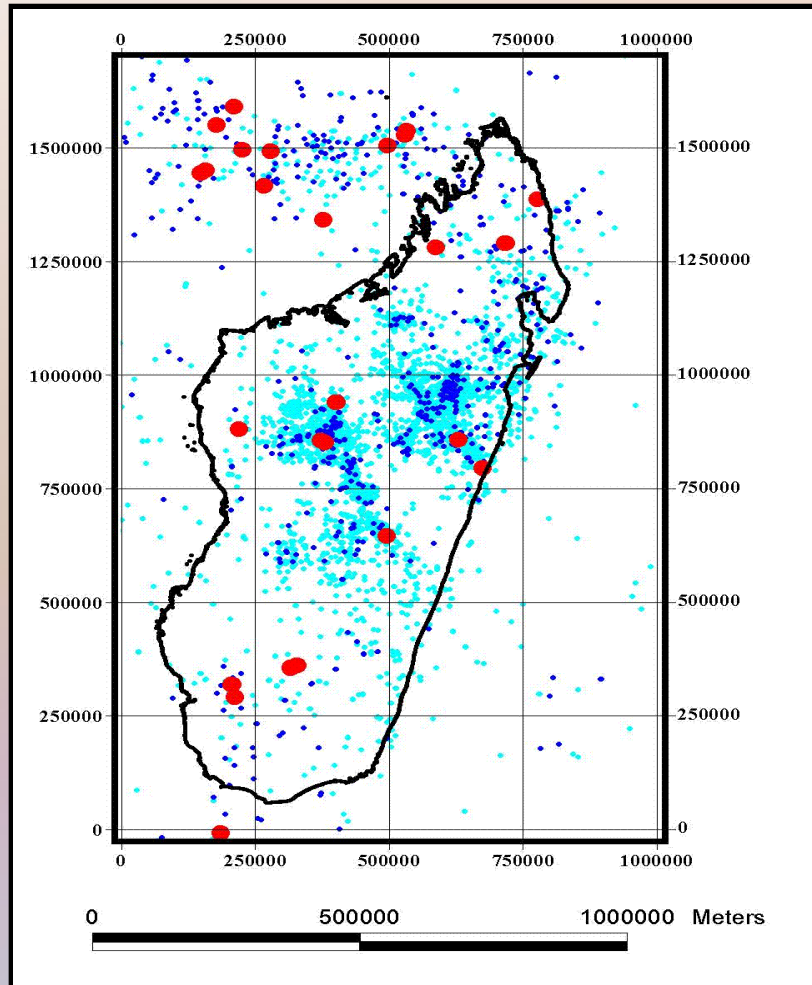
Sensor : ZM-500

Software : Onyx, JADE

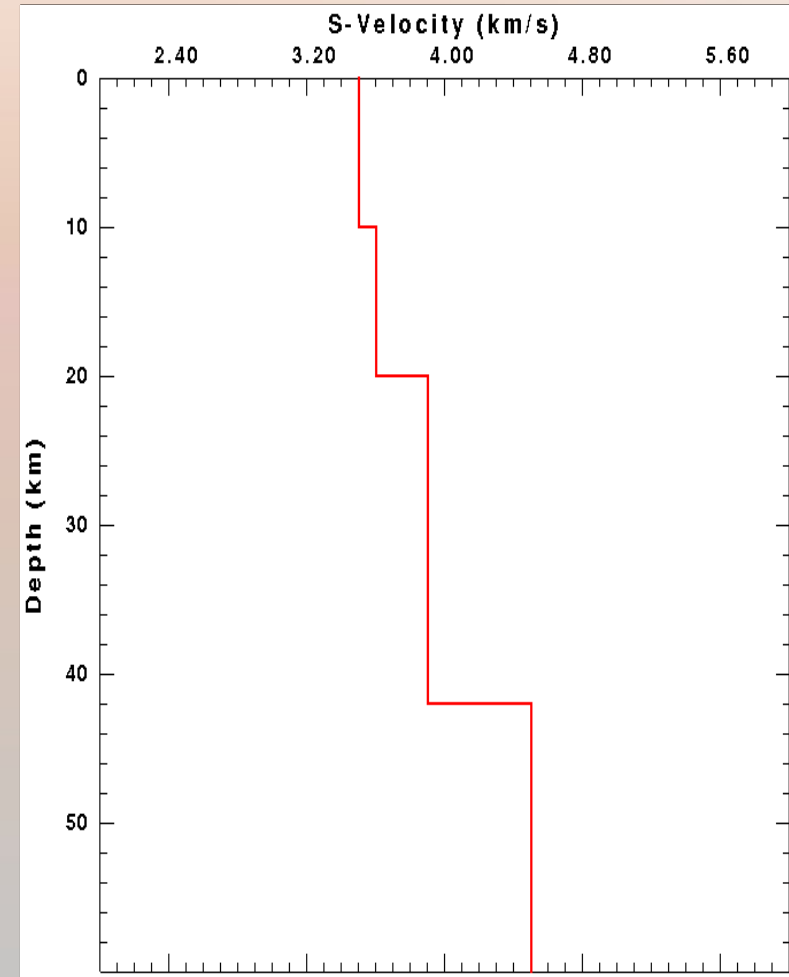
Data are transmitted from the station to NDC by antenna



## Permanent Seismic Stations :



Seismicity of Madagascar  
Seismic events (1971 - 2006)



Shear-wave velocity structure in  
the central part of Madagascar by  
local event time

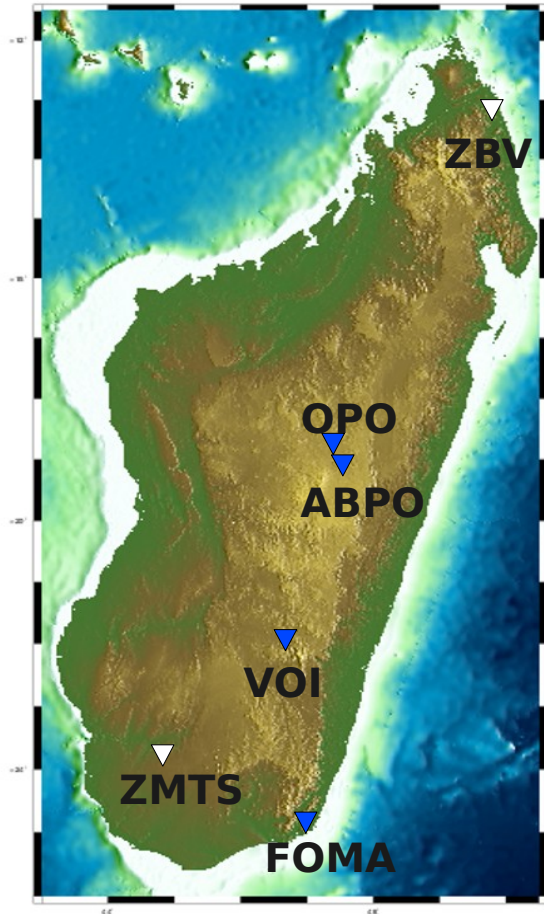
## Permanent Seismic Stations : Broadband : 06

Station code (starting date)	Affiliated network	Observations
ABPO (04/04 <sup>th</sup> /2007)	IRIS/IDA	STS-2 *
FOMA (09/01 <sup>st</sup> /2008)	GEOSCOPE	STS-2*
VOI (11/26 <sup>th</sup> /2009)	GEOFON	STS-2 *
SBV (11/19 <sup>th</sup> /2009)	GEOFON	STS-2, GPS, Meteorological *
ZMTS (10/2012)	AFRICAARRAY	Trillium120, GPS, Meteorological
OPO (10/01 <sup>st</sup> /2001)	DASE	STS-2 *

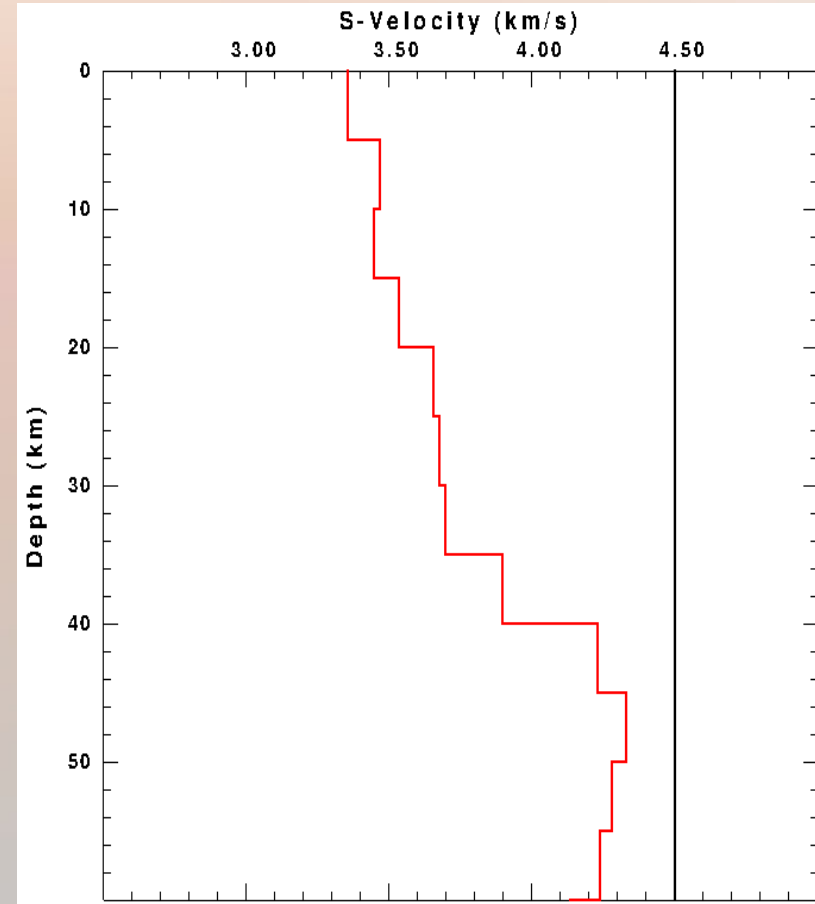
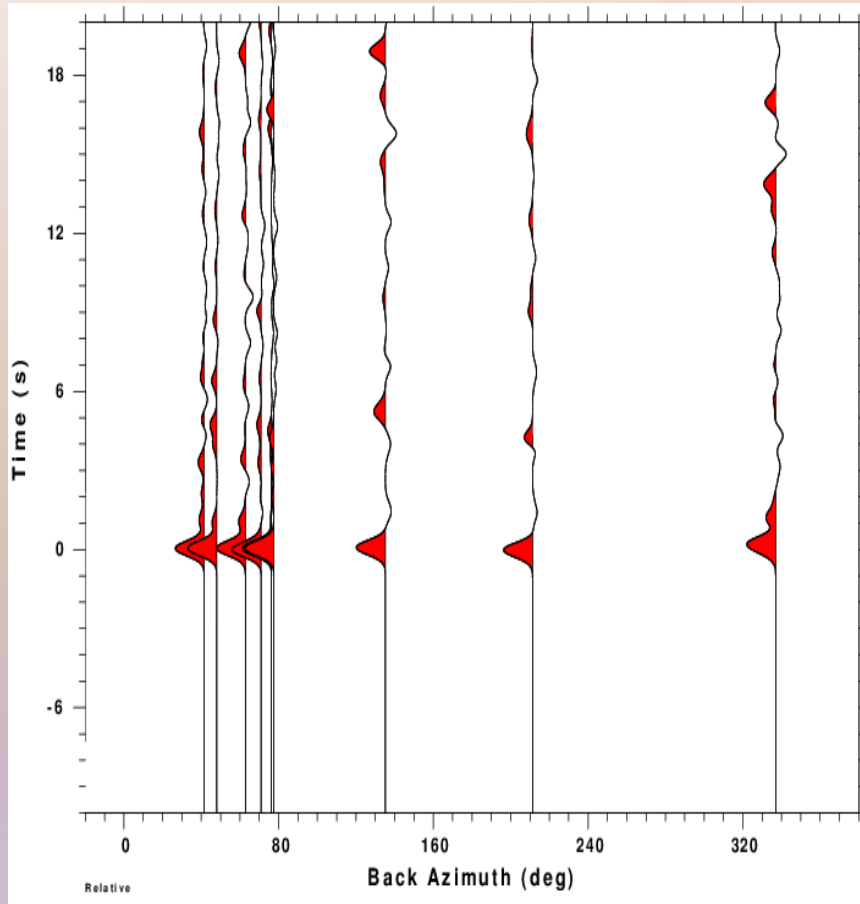
(\*) Data : available on web

**Software** : SEISCOMP 3, SEISAN, GEOTOOL

Data are transmitted from the station to NDC by : VSAT link, internet



## Permanent Seismic Stations :



Shear-wave velocity structure in the central part of Madagascar by receiver function analysis

## Temporary Seismic Stations : 26 broadband seismic stations

2 years : 2011 – 2013

**MACOMO project** : M. Wyssession, D. Wiens, A. Nyblade.

**Purpose** : Study of Madagascar Intraplate Volcanism

**First part (10) : August-September 2011**

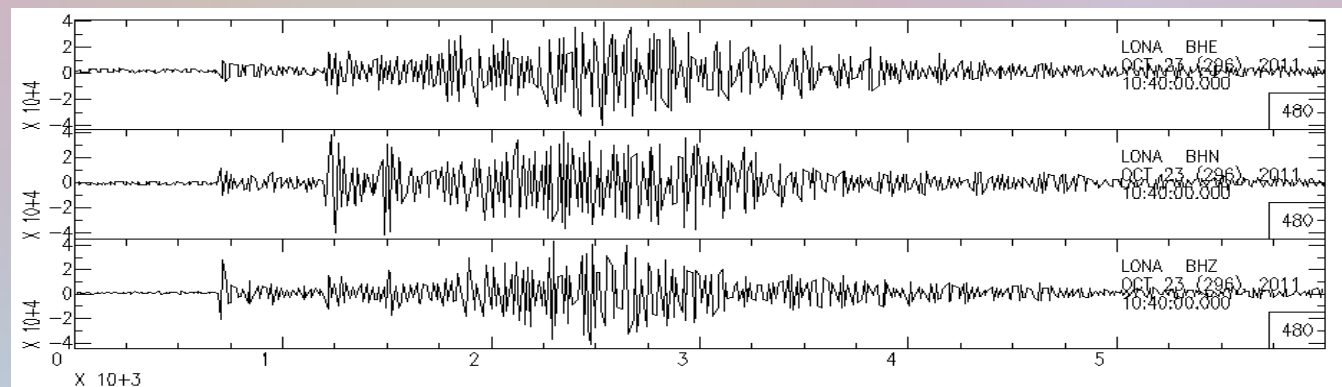
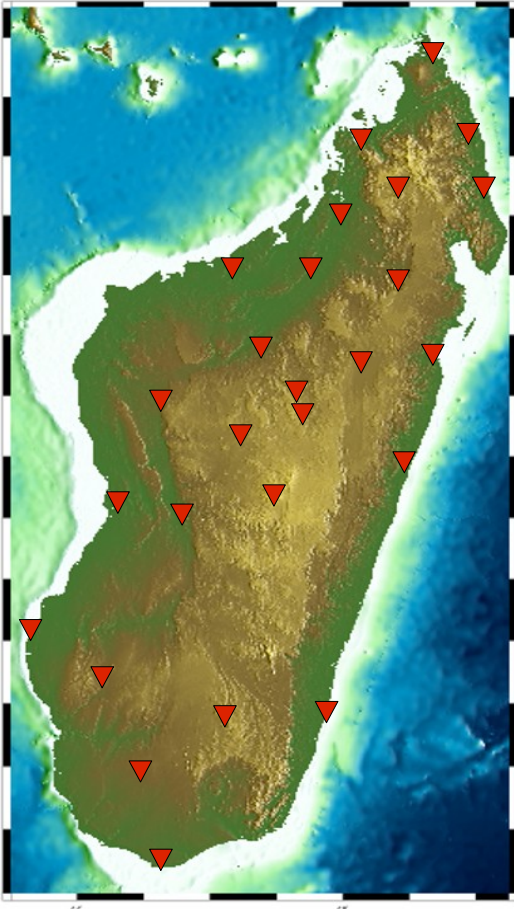
DGOS, LAHA, ANTS, MAJA, LONA, ANLA, VATO, MMBE, MARO, MAHA

**Second part (16) : July-September 2012**

BANJ, MKVA, BAEI, BERG, SOLA, BARY, ZAKA, VINA, ZOBE, TANS, BATG, BITY, BAND, BKTA, AMPY, CPSM

**Sensor** : STS-2, Guralp CMG-3T, Trillium 120

Data are collected every 12 months.



## Temporary Seismic Stations : Broadband : 25

2 years : 2011 - 2013

**Madagascar Seismic Profile** : F. Tilmann, X. Yuan.

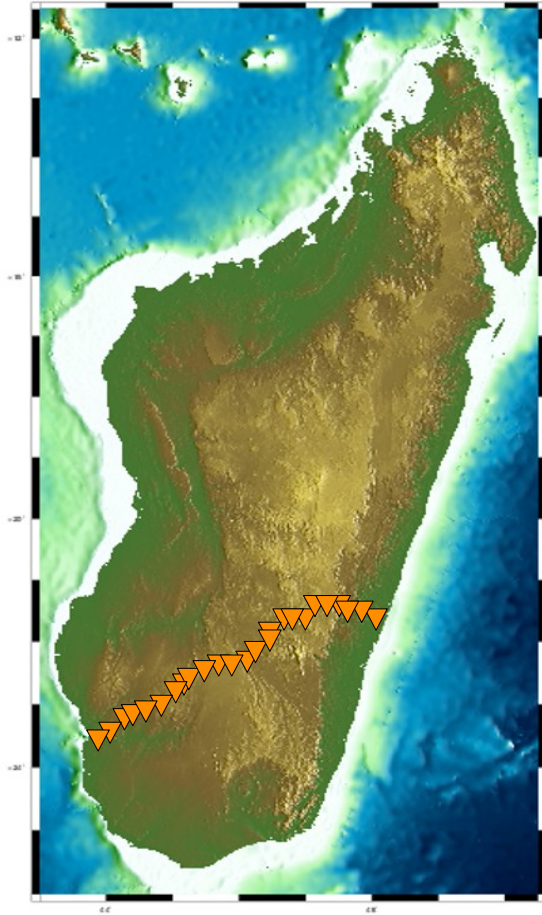
**Purpose** : Study of Ranotsara Shear-zone

**Station code** :

MS01, MS02, MS03, MS04, MS05, MS06, MS07, MS08, MS09, MS10,  
MS11, MS12, MS13, MS14, MS15, MS16, MS17, MS18, MS19, MS20,  
MS21, MS22, MS23, MS24, MS25

Sensor :

Data are collected every 03 months.



**Temporary Seismic Stations :**  
**Broadband : 05**

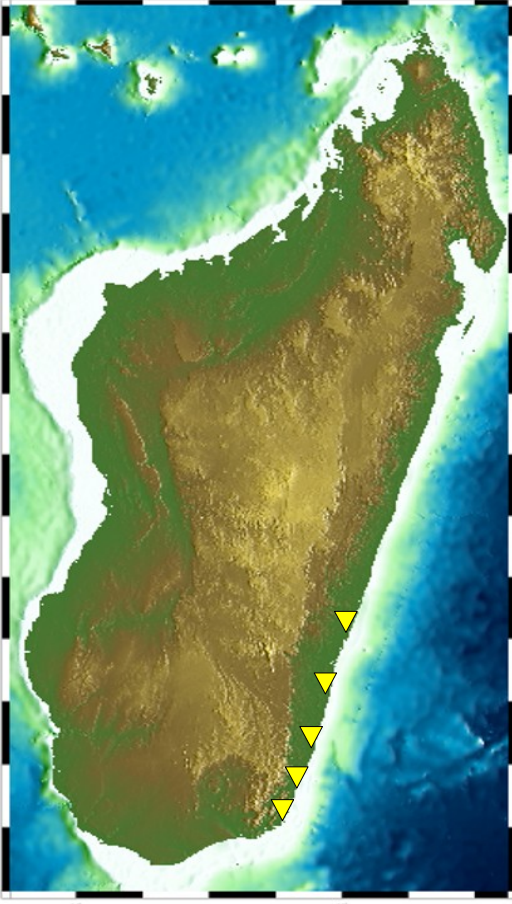
**1 year :** 2012 - 2013

**Purpose :** Study of La Reunion hot spot and to image an oceanic mantle plume beneath the island.

**RHUM-RUM project :** G. Barruol, C. Sigloch

**Station code :** RUM1, RUM2, RUM3, RUM4, RUM5

Data will be collected at the end of the project.







**THANK YOU!!!**