Data from the Geoscope Observatory

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The Geoscope Network today

- **FDSN Network Code** G
- **doi:**/10.18715/GEOSCOPE.G
- **54 stations (33 operational)**
- **Two data flows available**
  - real-time feeds
  - validated continuous data
- Derived products: earthquake data and SCARDEC solutions
- **Data in SEED Format:**
  - stationXML and miniSEED
- **Data access:** seedlink and FDSN Web Services standards

But let’s go back...
Data and Formats

- First data on 1982-05-02T1 0:02 SSB station
- Standard for Earthquake Exchange SEED First publication 1984
- Geoscope Data Center (IPGP) 1990
- Adoption of the FDSN StationXML schema 2012
- 2019
- 2022

Metadata
- Dataless SEED Time Series miniSEED
- StationXML Time Series miniSEED

Continuous data

Trigger recording

Trigger and continuous recording
Data access

Evolution of Data Formats and Access

First data on 1982-05-02T19:02 SSB station

1982

Data tapes/CD-ROM sent on request

1995

Geoscope Data Center (IPGP)

FTP Access
Continuous data
Earthquake data

Geoscope Data Center

Networked Data Centres NetDC
Continuous data

2000

Data in real-time (Seedlink)

IPGP Data Center

European Integrated Data Archive EIDA

2004

2010

2016

2022

FDSN Web Services

http://ws.ipgp.fr/fdsnws/station/1/query?network=G
http://ws.ipgp.fr/fdsnws/dataset/1/query?
net=G&starttime=2022-01-01&endtime=2022-12-31

http protocol

StationXML/miniSEED

The request is sent by email

Data access by FTP
SEED

.NETDC_REQUEST
.NAME my_name
.INST my_institute
.EMAIL my_email@institute
.LABEL all_data
.END
.DATA * G * "LHZ" "2006 01 01" "2006 06 31"
Evolution of Data Formats and Access

Geoscope Portal

1995: First Web Site
Evolution of Data Formats and Access

Geoscope Portal

http://geoscope.ipgp.fr
Data and Services

- Data Services are provided by the IPGP Data Center
- Data management: Ingest, curate and deliver the Geoscope data
  - Metadata
  - Real time feeds and Validated continuous data
  - Earthquake data and SCARDEC products released by Geoscope
  - Instrumental responses plots, data inventory, statistics
- Data Security
- DOI of Network G and landing page
- Geoscope Data Portal
- Data synchronization to the Résif Seismological Data Center → European Data Archive (EIDA)
- Data synchronization to IRIS-DMC
Data Flow

IPGP Data Center

Real-time feeds
FDSN Web Services
Geoscope Portal

Data Integration

Tsunami Warning Centers
Résif EPOS
FDSN/IRIS-DMC International Federation of Digital Seismograph Networks
Data Expertise

Seismological and Volcano Observatories
IPGP

- Arc des Antilles - WI
- Martinique - MQ
- Guadeloupe - GL
- Piton de La Fournaise - PF

Mayotte - QM

InSight Observatory
IPGP

- XB (2016 - 2022)
- SEIS - seismometer
  - InSight Mission
  - Elysium Planitia - Mars
Projects and Data Integration

National Level
- FOSFORE consortium (2008 - 2011)
- Résif Seismological Information System (2011 -)

European Level
- NERIES Project (2006 - 2010): European Integrated Data Archive
- IPGP Primary Node of EIDA (2010-2018)

International
- Networked Data Centers (1999 - 2016)
- IRIS Federator of Web Services