

Data from the Geoscope Observatory

Constanza Pardo - IPGP Data Center

Workshop for the 40th Anniversary
of the GEOSCOPE Observatory

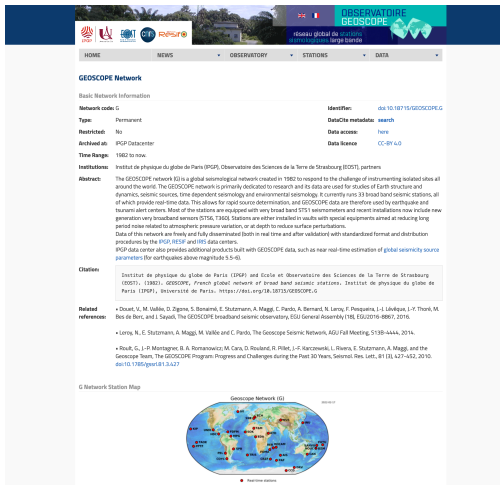
June 29-30, 2022 at the Institut de physique du globe de Paris



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...

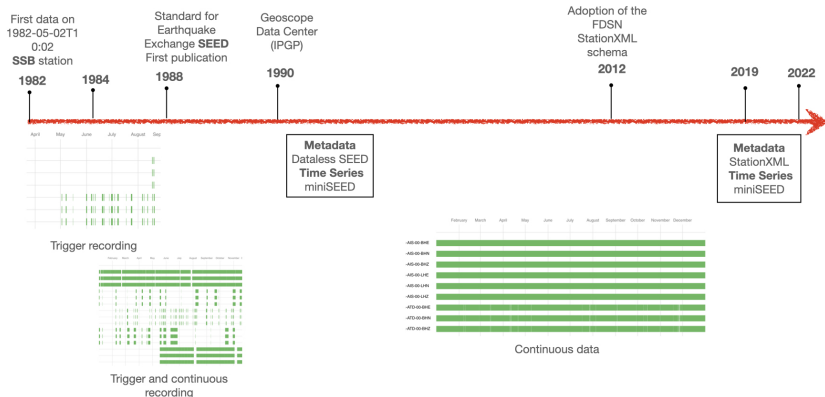


The screenshot shows the Geoscope Network website. At the top, there are logos for IPGP, EGU, CTR, and RESURF. The main header reads "OBSERVATOIRE GEOSCOPE" and "réseau global de stations sismologiques à large bande". Below the header is a navigation menu with links for HOME, NEWS, GLOSSARY, STATIONS, and DATA. The main content area is titled "GEOSCOPE Network" and provides the following information:

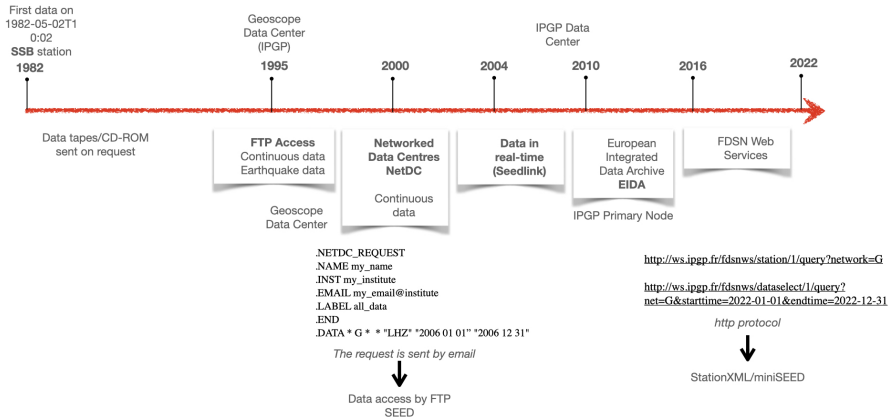
- Basic Network Information**
- Network code:** G
- Type:** Permanent
- Restricted:** No
- Archived at:** IPGP Datacenter
- Time Range:** 1962 to now
- Institutions:** Institut de physique du globe de Paris (IPGP), Observatoire des Sciences de la Terre de Strasbourg (OST), partners
- Abstract:** The GEOSCOPE network (G) is a global seismological network created in 1962 to respond to the challenge of instrumenting isolated sites all around the world. The GEOSCOPE network is primarily dedicated to research and its data are used for studies of Earth structure and dynamics, seismic sources, time dependent seismology and environmental seismology. It currently runs 33 broad band seismic stations, all of which provide real-time data. This allows for rapid source determination, and GEOSCOPE data are therefore used by earthquake and tsunami alert centers. Most of the stations are equipped with very broad band STS seismometers and recent installations now include new generation very broadband sensors (STL, T360). Stations are either installed in vaults with special equipments aimed at reducing long period noise related to atmospheric pressure variation, or at depth to reduce surface perturbations. Data of this network are freely and fully disseminated both in real time and after validation with standardized format and distribution procedures by the IPGP, RESURF and IRES data centers. IPGP Datacenter also provides additional products built with GEOSCOPE data, such as near-real-time estimation of global seismicity source parameters for earthquakes above magnitude 5.5-6.
- Station:** Institut de physique du globe de Paris (IPGP) and Ecole et Observatoire des Sciences de la Terre de Strasbourg (OST), GEOSCOPE, French global network of broad band seismic stations, Institut de physique du globe de Paris (IPGP), Université de Paris. <https://doi.org/10.18715/GEOSCOPE.G>
- Related references:**
 - Douai, V., M. Vallée, D. Zifano, S. Boninmi, E. Stutzmann, A. Maggi, C. Pardo, A. Bernard, N. Leroy, F. Penquain, I.-I. Livička, J.-Y. Thériet, M. Bes de Bernis, and J. Sayah. The GEOSCOPE broadband seismic observatory. *EGU General Assembly* 19th EGU 2016-8867, 2016.
 - Leroy, N., E. Stutzmann, A. Maggi, M. Vallée and C. Pardo, The Geoscope Seismic Network. *AGU Fall Meeting*, S130-AAAA, 2014.
 - Roubé, G., J.-P. Montagner, B. A. Romanowicz, M. Carr, D. Rouland, R. Pillet, J.-F. Karczewski, I. Rivera, E. Stutzmann, A. Maggi, and the Geoscope Team, The GEOSCOPE Program: Progress and Challenges during the Past 30 Years. *Seismol. Res. Lett.*, 81 (2), 427-432, 2010. [doi:10.1785/gsrli1.3.a.27](https://doi.org/10.1785/gsrli1.3.a.27)

At the bottom, there is a section titled "G Network Station Map" with a world map showing the locations of 33 real-time stations marked with red dots.

Data and Formats



Data access



Geoscope Portal

GEOSCOPE Network of IGPG Observatories

Department of Seismology



News	<ul style="list-style-type: none"> • Latest plots of data recorded at SSD station • Latest earthquake : • Locality: Islands January 04, 1998
Overview of GEOSCOPE	<ul style="list-style-type: none"> • General information: • Information on the Geoscope system: • Information on stations : • "Station Book", • plots and access (popup file) • plots of transfer functions • plots of seismic noise level
Access to GEOSCOPE data	<ul style="list-style-type: none"> • Secondary map • Available CDROMs • Anonymous ftp • Geoscope's website • File-ftp database (frame version) • Recent EARTHQUAKES : • data • plots of records in teletransmitted stations
Scientific section	<ul style="list-style-type: none"> • Scientific month • Software library of seismology
Other informations	<ul style="list-style-type: none"> • A list of electronic addresses of French Earth Scientists • An index for seismology networks • A link to the server of the Swiss IRST Strasbourg • How to contact every people who are working at the campus of IJUSHEU / University P. at M. CURIE, University D. DIDEROT,

If you have any comment or suggestion about this server, you can contact us by E-Mail : www.geoscope@jussieu.fr

1995: First Web Site

JUSSIEU, L. J. B. B. B. B. B.
 Université de Strasbourg
 www.geoscope@jussieu.fr

Réseau
 Geoscope
 de Seismologie
 globale

Department of Seismology and Observatories



Overview

GEOSCOPE Program
 GEOSCOPE Stations
 GEOSCOPE Geopac

- "Station Book,"
- Plots of transfer functions
- Plots of seismic noise level

Scientific studies
 software library

CNRS

INSU



GEOSCOPE Data Access

NEWS

DATABASE

- Latest plots of SSD station
- Latest earthquake :
• Locality: Islands, Hunkon, April 29th 1998
- Data with continuous V18 channel (28 ops)

Recent EARTHQUAKES

teletransmitted stations (phone line)
 Last 100 latest earthquakes
 Data

L
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S

- Electronic addresses of French Earth Scientists
- Physical addresses
- RESUME of GOCV Strasbourg
- Science on-line the Internet
- How to find me person at campus IJUSHEU / University P. at M. CURIE, University D. DIDEROT,

IPGP



Geoscope Portal

Programme GEOSCOPE
Département de Géologie
Institut de Physique du globe de Paris
4, Place Jussieu
75231 Paris cedex 05
FRANCE
Fax: 01 44 27 38 94

Dernier Séisme :Rurit Islands May 25th 2001
Séisme de Nise en France du 21 février 2001

Pour obtenir des données, veuillez utiliser [les requêtes par Web](#) ou par le [NetOC](#).

Il est préférable d'utiliser le NETOC pour les requêtes de données GEOSCOPE.
Toutes les données de 1962 à 1994 incluses sont accessibles par le web. Certaines données de 1999 sont accessibles par le web également.
L'ensemble des données de 1992 à 2010 sont accessibles par le NETOC.

Statistiques

Consultez la page de A [www.ipgp.fr/geoscope](#), [geoscope.fr](#)
Dernière modification : 1/6/10

GEOSCOPE Observatory
French Global Network of broad band seismic stations
100 - 110 TERRASSE GEOSCOPE

GEOSCOPE Observatory is a Global Network of Broad Band Seismic Stations.
These stations are recording continuously the ground motion. Data of most of the stations are arriving in real-time to the IRIS Data Center and are archived after validation.

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GEOSCOPE provides **data and information for earthquakes with magnitude larger than 5.3-6**. Similar information may be provided for smaller earthquakes, for example those located in France or in the European-Mediterranean region.

GEOSCOPE Stations

Geoscope Network 112

Download the map in PDF format

Search

News 01

Home

News

Observatory

Stations

Data

Go to search

Contact

Site Map

Web links

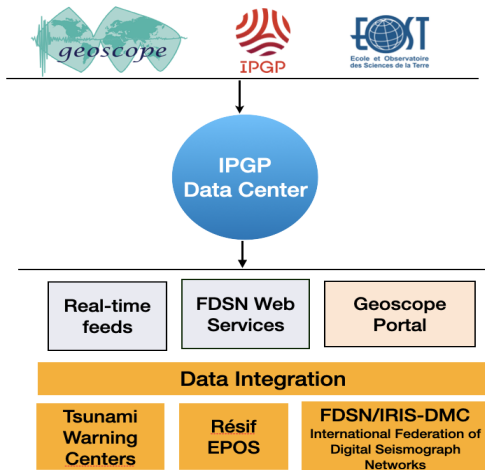
login

<http://geoscope.ipgp.fr>

Data and Services

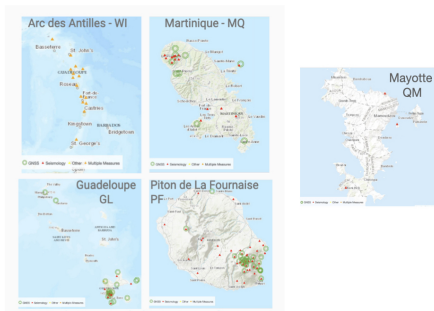
- Data Services are provided by the IPGP Data Center
- Data management : Ingest, curate and deliver the Geoscope data
 - Metadata
 - Real time feeds and Validated continuous data
 - Earthquake data and SCARDEC products released by Geoscope
 - Instrumental responses plots, data inventory, statistics
- 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



Data Expertise

Seismological and Volcano Observatories IPGP



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