



The laboratory in brief

Heir to the Geology Laboratory of the University of Grenoble (1889), ISTerre was created in 2011 and brings together almost 300 people on the university sites of Grenoble and Chambéry. Organized into 9 research teams, our unit's scientific objective is the physical and chemical study of planet Earth. ISTerre also carries out solid Earth observation missions, and hosts and maintains national fleets of geophysical instruments, as well as a data center.



Education

ISTerre is heavily involved in university teaching in the Earth Sciences in Grenoble and Chambéry, and supervises around a hundred trainees every year. Some thirty doctoral theses are defended each year, and 95% of PhDs trained at the laboratory find a job in line with their diploma.

For further information: <https://www.isterre.fr/english/education-1275/the-fields-of-study/>



Science for all

The laboratory takes part in a wide range of science outreach activities (conferences, school visits, events for the general public, films, etc.).



Key figures

9 teams

320 staff including 1/3 doctoral students

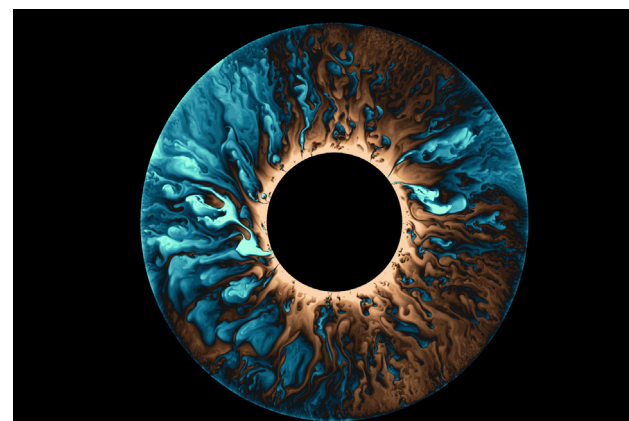
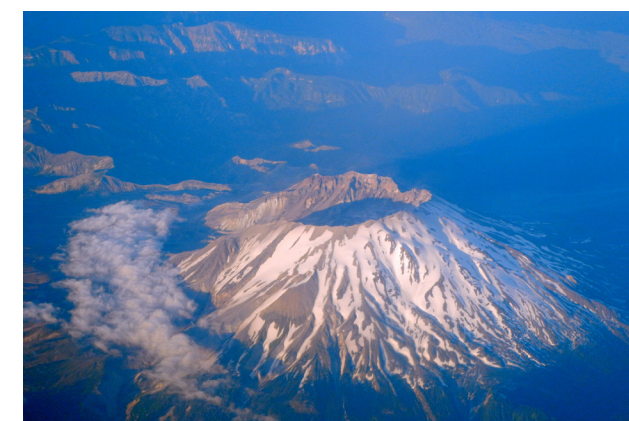
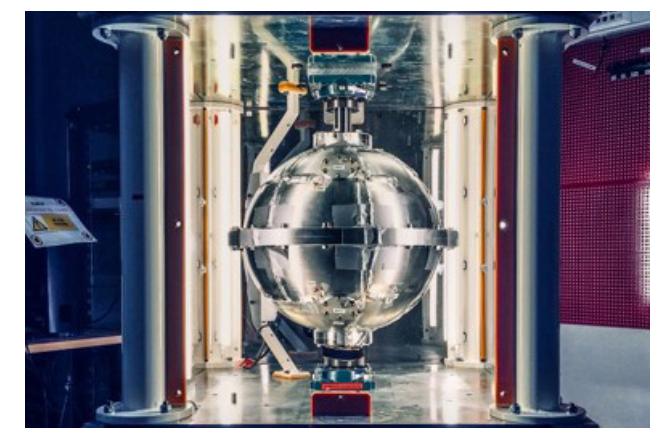
250 research publications per year

Budget **6.8 M€**

30 thesis defenses per year



Institut des Sciences de la Terre



www.isterre.fr



Grenoble site
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1381 rue de la piscine, 38400 Saint-Martin-d'Hères

Chambéry site
Campus Scientifique, bât. Belledone
73376 Le Bourget du Lac

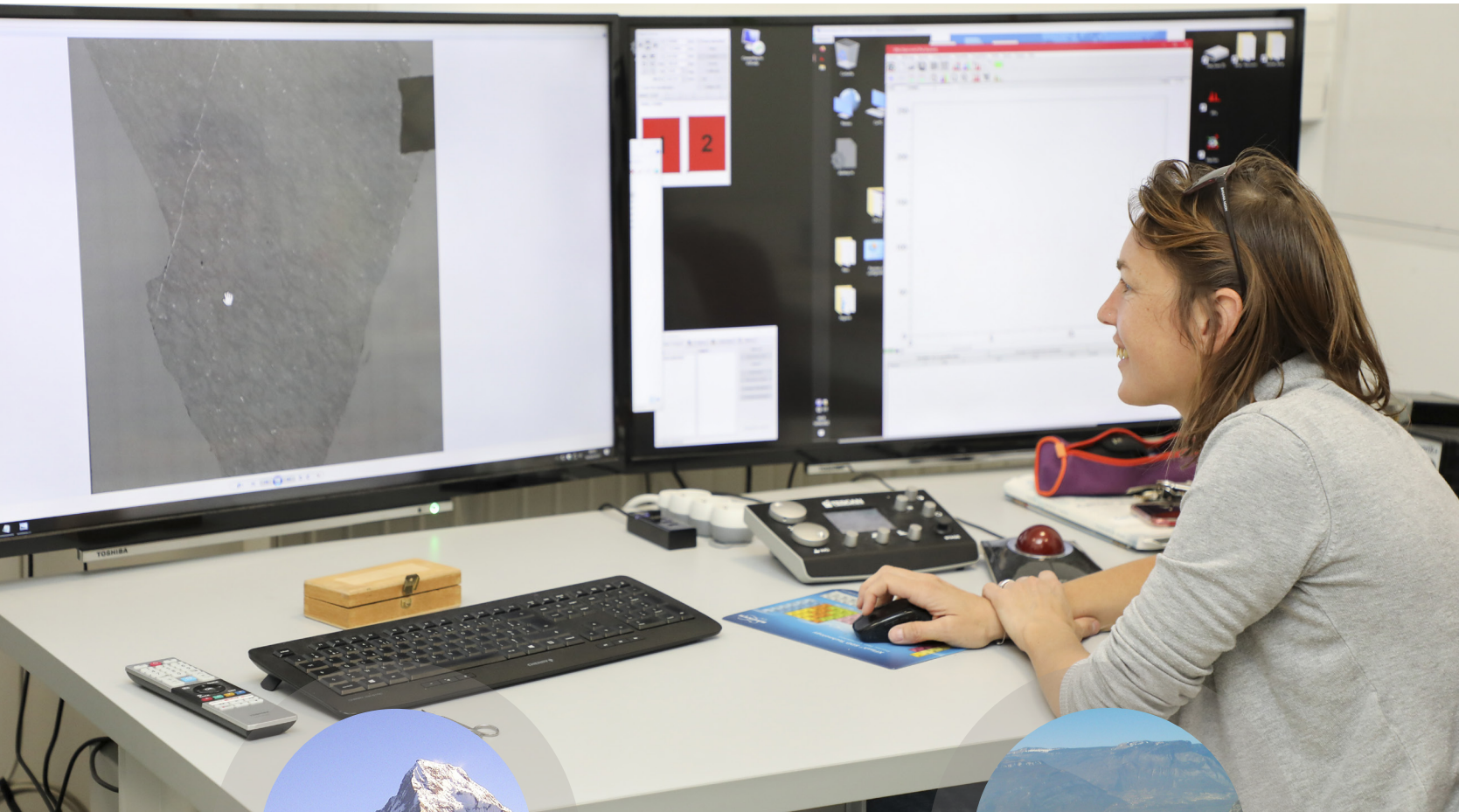
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Research at ISTerre aims to better understand the **structure and evolution** of our planet and, in particular, the coupling between **internal dynamics** and **surface processes**. Rooted in **observation**, our work covers both **fundamental** and **applied** aspects, via projects on specific sites in Southern countries and the assessment of natural hazards.



Chaîne de l'Himalaya

EXPLORE

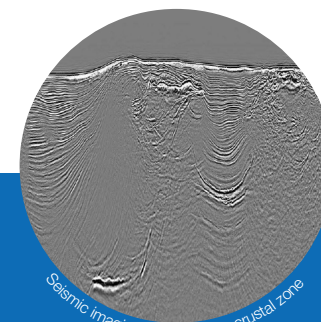
Our research relies on extensive fieldwork to study rocks formed on the surface, or brought up by volcanoes or drilling. We also explore the Earth and other planets from satellites or using robots.



GPS antenna in Saint Martin le Vinoux

OBSERVE

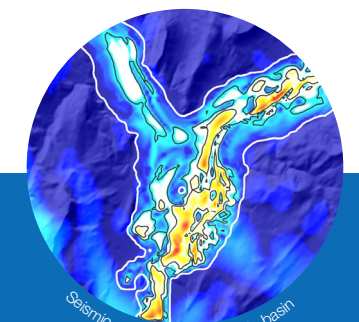
As part of the Grenoble Observatory (OSUG), ISTerre carries out long-term observation missions, hosts and maintains networks of geophysical instruments and distributes acquired data.



Seismic imaging of a complex crustal zone

ANALYZE

Using observation data and natural samples (rocks, soils, etc.), supercomputers and cutting-edge instruments (synchrotron, electron microprobe, etc.), ISTerre images the Earth's interior and reconstructs its history and activity.



Seismic waves in the Grenoble basin

MODEL

ISTerre is at the forefront of development in numerical modelling and laboratory experimentation, key assets for advancing our interpretation of geological observations.

HOW IS RELIEF CREATED?

As a site of internal geodynamics and fault activity, and subject to erosion and deposition, relief today remains a complex object, requiring dating, observations, interpretations and theories that can help discover natural resources.

HOW DO ROCKS AND SOILS EVOLVE?

We are committed to researching, characterizing and calibrating mineralogical, geochemical and geological markers of the evolution of the deep Earth and its surface. These tools open up a vast field of applications, from the origin and history of rocks to the impact of human activity on the environment (pollution, exploitation of deposits, waste storage, etc.).

HOW TO PREVENT NATURAL PHENOMENA?

Earthquakes, landslides, volcanic eruptions and geomagnetic variations... We seek to better understand these still mysterious geophysical phenomena to enrich our knowledge, but also to better prevent our societies from natural hazards.

GROUND MOVEMENTS SEDIMENTS **VOLCANISM** FAULT
 EROSION **MOUNTAIN** RISKS **SOILS** WAVES HOT POINTS
TECTONIC EARTHQUAKE **GEOMAGNETISM** CORE
RESOURCES SUBDUCTION

