

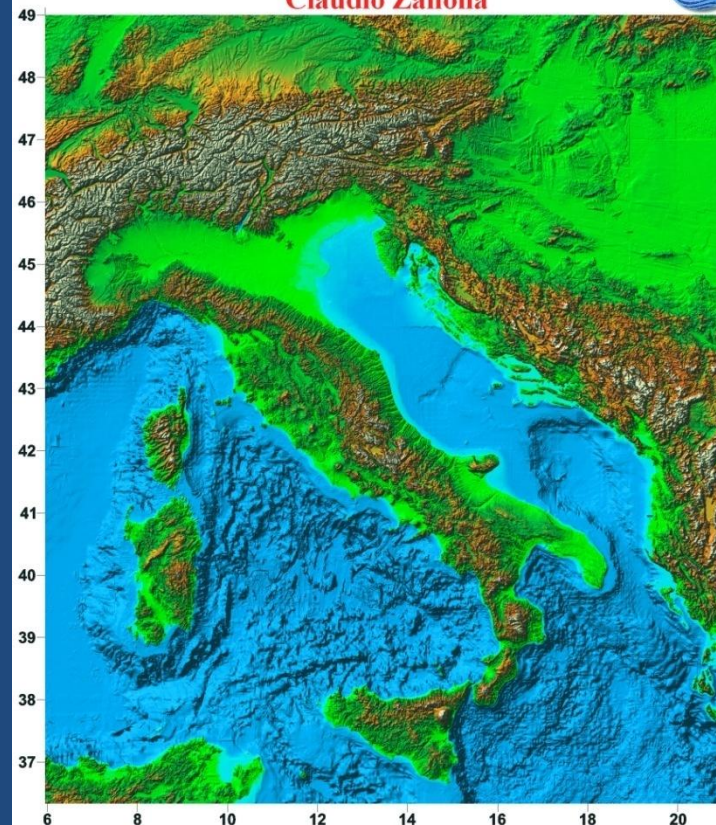
# *Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS)*



## **Morphological map of the Italian Peninsula and adjacent Seas**

*Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS) - Trieste, Italy*

**Claudio Zanolla**



## **National Institute of Oceanography and Applied Geophysics**

**Borgo Grotta Gigante 42/c Sgonico (Trieste) ITALY**

**[www.ogs.trieste.it](http://www.ogs.trieste.it)**



# OGS is a public research institute



**It is an autonomous, national Institute depending on the Minister of Education, University and Research**

**It is organized with its own rules for the management, the structure, and the financial and accounting administration.**



**It can promote and be a member of associations and joint-stock companies.**

**The OGS is headed by a Board of 3 members:** the **President** and one member are nominated by the Ministry, one is elected by the scientific staff

A **Scientific Committee** of 7 experts in oceanography and geophysical sciences, advises the Board.

# OGS has a long tradition with roots in the 18<sup>th</sup> century

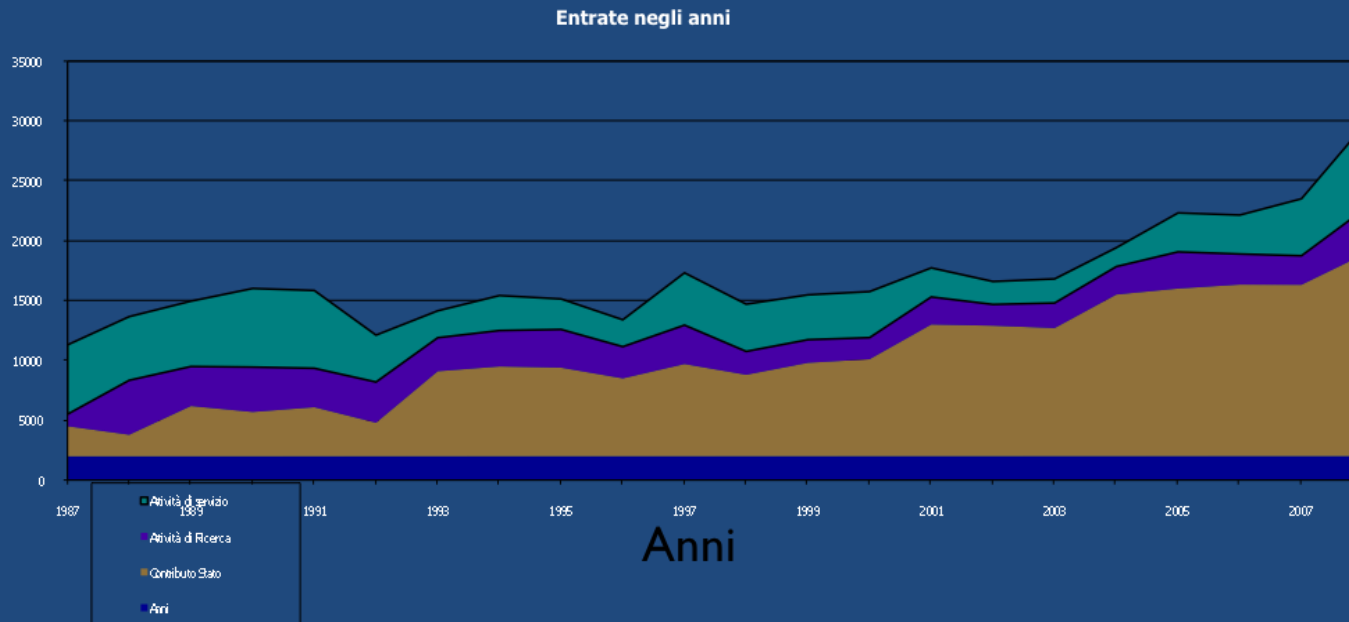




## Funding structure

Istituto Nazionale di Oceanografia e di Geofisica Sperimentale

40 % of the total income comes from research and services from: international bodies (mainly UE), national (government, local authorities) and private companies (ENI, ENEL, Norsk Hydro, Fugro, MSS).



**The Institute staf**  
**158 permanent staff**  
**54 temporary contract**  
**56 fellowships, PhD Students and Post Doc**



***It is organized in 5 scientific departments and 1 administrative unit:***

**OGA**

**Oceanography**  
**(G. Civitaresè)**

**BIO**

**Biological**  
**Oceanography**  
**(P. Del Negro)**

**RIMA**

**Development of Marine**  
**Technology and**  
**Research**  
**(R. Ramella)**

**GDL**

**Geophysics of the**  
**Lithosphere**  
**(F. Coren)**

**CRS**

**Center of Seismological**  
**Researches**  
**(P. Comelli)**

# OGS mission

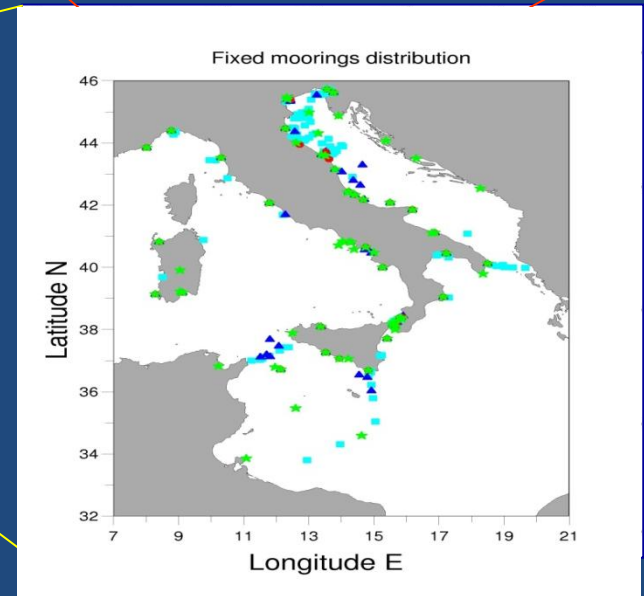
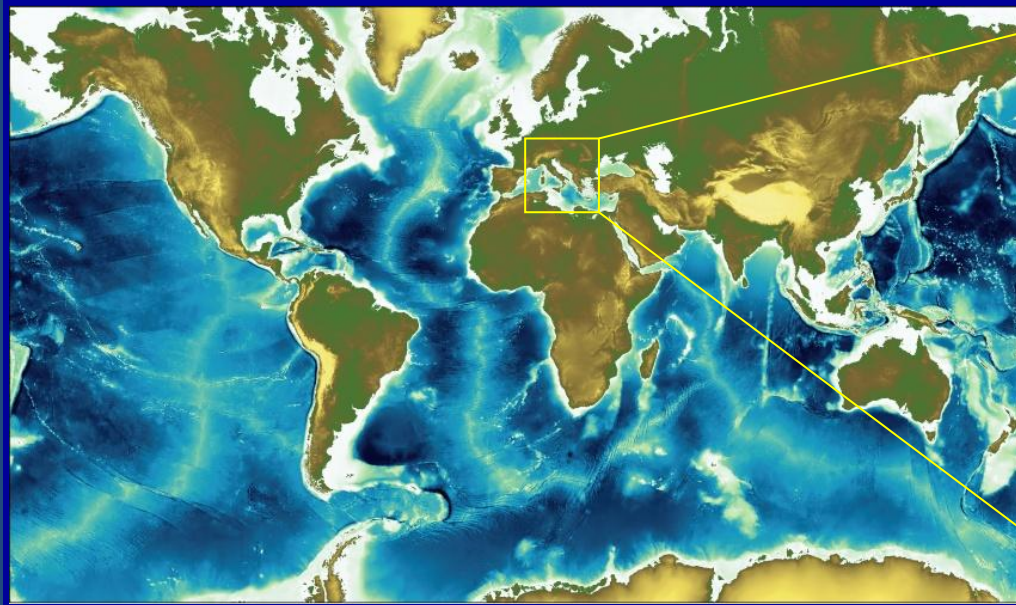
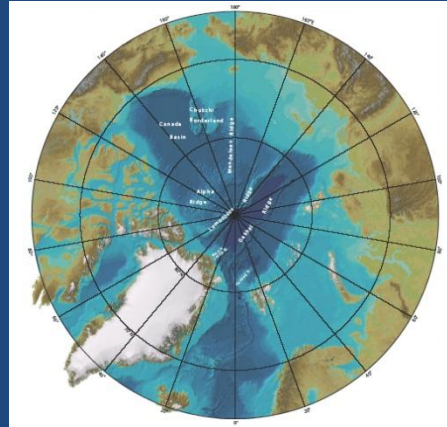
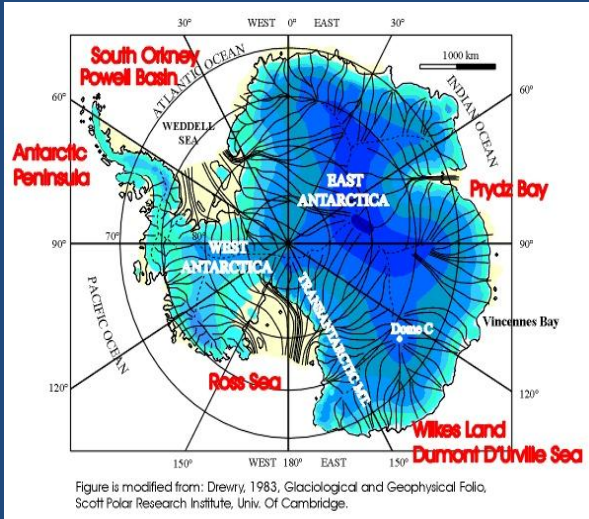


**The OGS is committed to develop scientific excellence and technological development in pure and applied Oceanography, Geophysics and Marine Geology**

**In particular OGS is asked to contribute to:**

- location and valuation of mineral and energy resources on-shore and off-shore;**
- marine sciences, with specific focus on the interaction of the oceans with the atmosphere and the lithosphere and marine biology;**
- studies of seismic, geodynamic and hydrodynamic phenomena and their influence on the environment, and also for risks assessment;**
- development s of innovative techniques for geophysical and oceanographical data acquisition, processing, interpretation and archiving.**

# Geographical areas of activity:

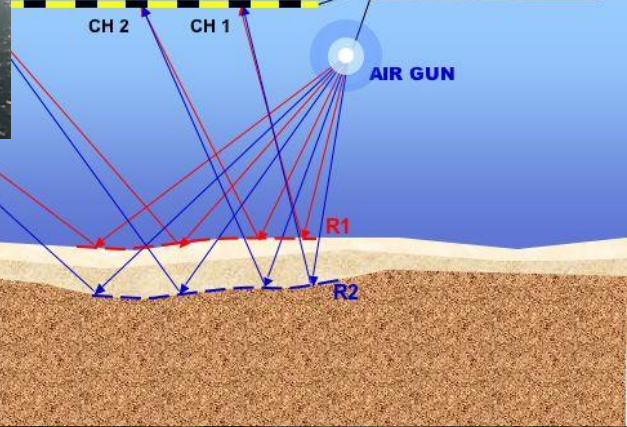
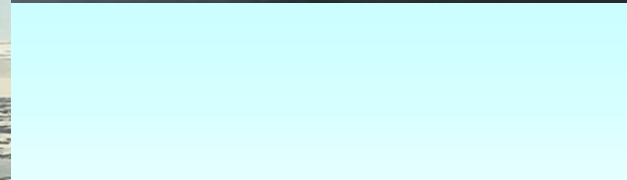
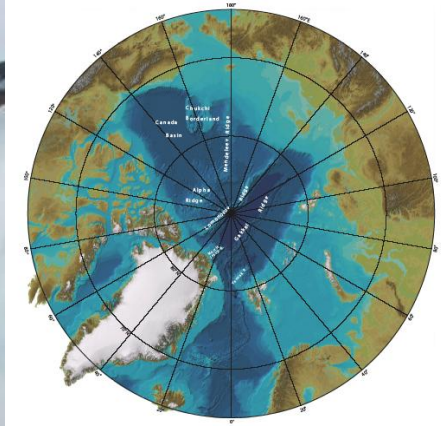
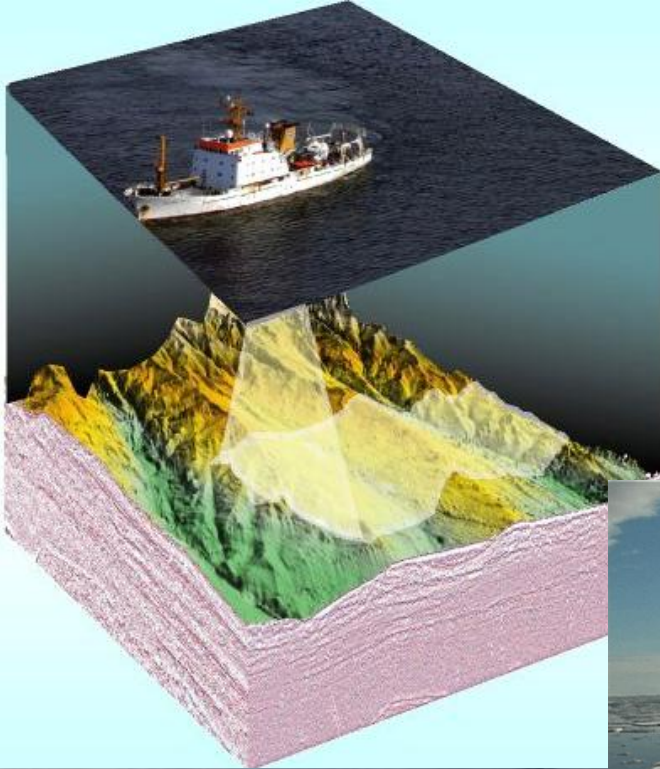


# OGS FACILITIES



RESEARCH VESSEL OGS EXPLORA  
IN USE FOR GEOPHYSICAL SURVEYS AND MARINE RESEARCH





# R/V OGS Explora

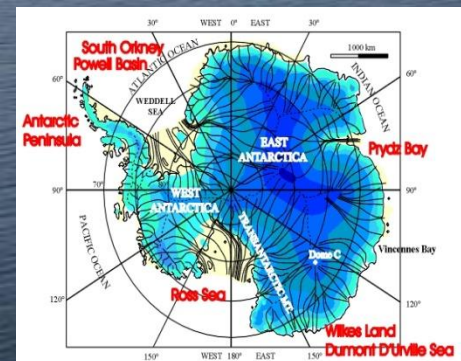


Figure is modified from: Drewry, 1983, Glaciological and Geophysical Folio, Scott Polar Research Institute, Univ. Of Cambridge.

# ARGO Floats, OCEANIC BUOYS AND GLIDERS



OGS DEVELOPS AND PRODUCES HIGH TECH MARINE BUOYS AND OPERATES FLOATS, GLIDERS AND DRIFTERS FOR OCEANOGRAPHIC STUDIES



# LIGHT AIRPLANES FOR OPTICAL REMOTE SENSING AND AIR QUALITY MAPPING



OGS CONSTANTLY USES AIRBORNE PLATFORMS FOR AIRBORNE DATA ACQUISITION AS HYPERSPPECTRAL IMAGERY, LASER SCANNING, THERMAL MEASUREMENTS AND AIR QUALITY SAMPLING.

# Operational Oceanography



OGS is strongly involved in Operational Oceanography both at European Level (GMES) and at national level (Civil Protection, etc.)

OGS is committed:

to deliver long-term datasets for the monitoring, detection and understanding of environmental changes in mediterranean basin using in situ observing infrastructures (deep-sea observatories, lagrangian buoys, etc.)

To deliver biogeochemical model-based analyses and forecast, and integration tools and products to contribute GMES services

To produce decadal reanalyses and hindcasts for the assessment of the variability of the

To provide integrated system and procedure for calibration and validation of in-situ data and models

To provide proper real-time data dissemination, qualification and dalyed-mode archiving

# Climate Change and the Marine Environment



OGS is part of relevant projects in climatic research for the marine sciences in Mediterranean area and for paleo-oceanography also in North Atlantic and the Pacific sector of Southern Ocean

OGS is committed:

To produce scenarios for the Mediterranean biogeochemistry for the XXI century and decadal projections.

To analyse the local effect of the of global change on coastal ecosystem assessing the relevance of its impacts through a downscaling and multimodel chain technique

To study the variability of the circulation in Mediterranean Sea in the last sixty year, identifying the eventual intrinsic modes of variability

To analyse the bedforms present at the bottom and in recent sediments so to infer the prevailing associated deep circulation