

OBSIP Experiment Archive

Year:	2004
Experiment Name:	Calabria-Apennine-Tyrrhenian/Subduction Collision Accretion Network (CATSCAN) A Joint American-Italian Project to Monitor Earthquakes on the Most Active Seismic Belt in Italy
Principal Investigator(s):	Maya Tolstoy (LDEO)

Experiment Summary: (Taken from experiment website): The Italian peninsula across the Mediterranean Sea is part of the tectonic plate boundary - the accommodation zone -- between the Eurasian and the African plates, which continue to move closer to each other. This motion controls the long-term evolution of the boundary, but recent geologic changes suggest a more rapid tectonic event superimposed on the slow motion of the big plates and localized to the Apennine arc. This signature event of the Italian peninsula is most dramatically manifested in the current deformation along the Calabrian portion of the arc and is the main focus of this project.

Researchers from the Lamont-Doherty Earth Observatory, Istituto Nazionale di Geofisica e Vulcanologia, and the Universita Della Calabria are working to deploy 40 portable digital broadband seismographs throughout southern Italy. These instruments will record both global and regional earthquakes for 18 months. Researchers are also working to deploy an additional 10 digital broad-band ocean-bottom seismometers (OBS) offshore for a period of 12 months. Researchers will use signals from distant earthquakes to develop a catscan, or a three dimensional image, of the Earth's crust and mantle beneath the Italian Peninsula of the earth. *Continued Next Page*



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Cruises:

10/1/2004 - 10/2/2004:

10 LDEO broadband ocean bottom seismographs were deployed on board the R/V *Universitatis*.

8/24/2005 - 8/27/2005:

At least 4 LDEO broadband ocean bottom seismographs were recovered on board the R/V *Universitatis*.

Data:

Data from all instruments deployed are archived under temporary network code [YD](#) at the IRIS DMC.

Downloads/Links:

[Experiment Website](#)