

MISSIONE 4
ISTRUZIONE
RICERCA

MONITORING EARTH'S EVOLUTION AND TECTONICS



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e della Ricerca



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA

Panel di riferimento: *ENV*

Titolo della Proposta: **Monitoring Earth's Evolution and Tectonics**

Codice della proposta: **IR0000025**

Tipologia: **(i) - Empowering**

Proponente: **INGV**

Infrastruttura di Ricerca: **EPOS - European Plate Observing System**

Importo totale: **43.000.000,00€**

Di cui al Sud: **19.497.433,53€ (45,34%)**

Abstract:

We know more about the surface of the Moon and Mars than about the interior of our planet Earth. We drilled the Earth down to 12 km, whereas we have no direct information about the remaining 6359 km of its radius. We know how continents and oceans move but we do not know the forces behind the major geological processes. These dynamics generate earthquakes, tsunamis, volcanoes, climatic evolution, and mineral deposits, i.e., all the natural risks and resources. Therefore, it is of paramount importance for the social implications to Monitor the Earth's Evolution and its Tectonics. We need to unravel the secrets of the Earth, providing fundamental information that increases our awareness.

The proposal "Monitoring Earth's Evolution and Tectonics" (MEET) in the framework of the Research Infrastructure European Plate Observing System "EPOS" should relaunch observational systems dedicated to discovering the Earth's dynamics, focusing on the Italian territory, particularly in those regions more affected by natural hazards.

The Specific Objectives (SO) of the project concentrate on 1) increasing the data production through both the reinforcement of the national networks and focusing at the fault scale, development of multidisciplinary observational systems and upgrade of the analytical laboratories; 2) the development of computational procedures and process modelling services for the scientific community and the society; 3) implementation of innovative platforms to transfer all the acquired digital data throughout a new national earth science portal under FAIR data guidelines for proper training actions and to support integration with the national and European framework.

The overall goal is to innovate the Italian multidisciplinary observation system to provide a full open Research Infrastructure to the scientific community. MEET will contribute to

understanding natural risks with the goal to applying effective mitigation actions, improving our resilience.

Elenco partecipanti alla Proposta:

- Consiglio Nazionale delle Ricerche
- Istituto nazionale di geofisica e vulcanologia
- Istituto Nazionale di Oceanografia e di Geofisica Sperimentale
- Istituto superiore per la protezione e la ricerca ambientale
- Università degli Studi Aldo Moro - Bari
- Università degli Studi di Genova
- Università degli studi di Napoli Federico II
- Università degli Studi di Trieste
- Università degli Studi Roma TRE