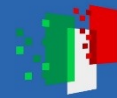




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Consiglio Nazionale
delle Ricerche

WP7 Geosphere and Landsurface

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ITINERIS Italian Integrated Environmental Research Infrastructures System



WP7: Geosphere and Landsurface

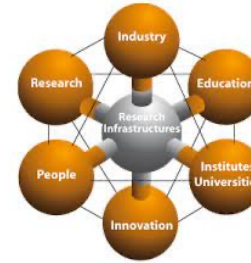
WP7 will provide the scientific community, the public, and decision-makers with a wealth of **multi-disciplinary open digital datasets on environmental observations of the Geosphere and landsurface by**

- **Integrating key Research Infrastructure capabilities & related datasets including: SMINO, ATLaS, ECORD-ICDP, & EUFAR**
- **Testing cutting-edge technologies in three pilot sites: the Friuli Venezia Giulia region, Tito and Potenza in the Basilicata region**

Pilot sites



WP7: Main Research Infrastructures



SMINO

Northeast Italy monitoring system

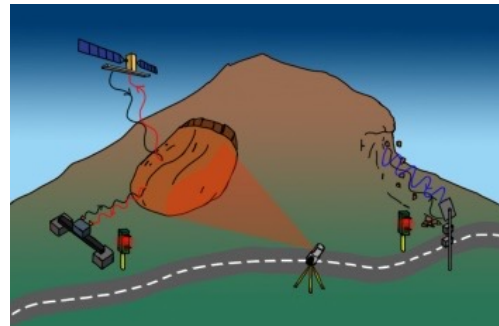
<https://www.ogs.it/en/northeast-italy-monitoring-system-smino>



ATLaS

Advanced technologies for landslides

<https://flore.unifi.it/handle/2158/1103761?mode=full.1254>



ECORD



<http://www.iodp-italia.cnr.it/index.php/it/>



EUFAR



WP7: 5 Objectives

2 FAIR data objectives from the RIs

Objective 1: harmonize the data following international standards (Activities 7.1-7.9);

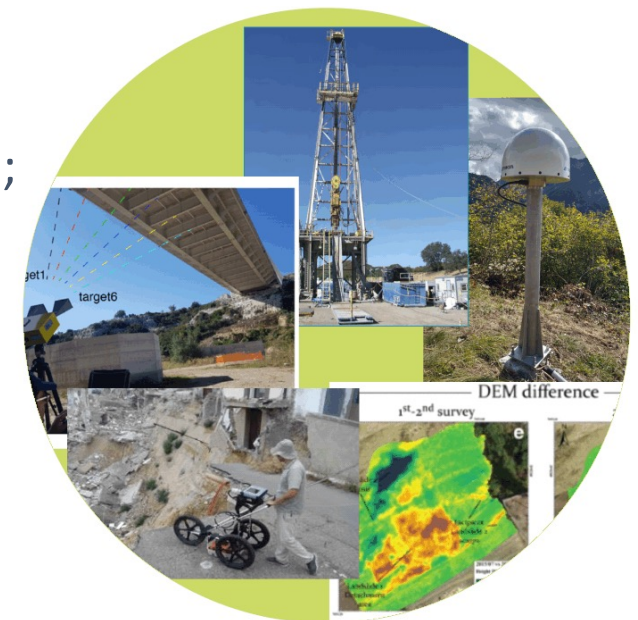
Objective 2: making the data FAIR (Findable, Accessible, Interoperable, and Reusable (Activities 7.1-7.9);

3 specific objectives

Objective 3: focus on deep earth-drilling (ECORD, IODP, ICDP) (Activities 7.1-7.3);

Objective 4: focus on near-surface processes by integrating geochemical, geophysical, geological and seismological data (SMINO, ATLaS, Activities 7.4-7.8);

Objective 5: enhance multi-parameter observations of surface processes, with spaceborne and airborne SAR infrastructures (SMINO, ATLaS, EUFAR, Activities 7.4-7.6 and 7.9).



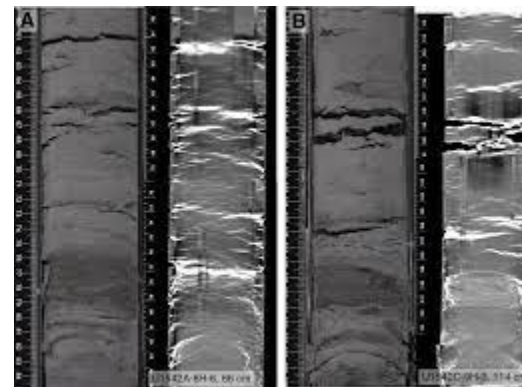
WP7: Participants in the WP

- OGS-CRS: Centro di Ricerche sismologiche OGS – Udine **RI SMINO**
- OGS-GEO: Sezione di Geofisica OGS – Trieste **RI ECORD**
- CNR-ISMARBO Istituto di Scienze Marine - Bologna **RI ECORD**
- INGV-Roma **RI ECORD**
- CNR-IMAA Istituto di Metodologie per l'Analisi Ambientale CNR
- CNR-IREA Istituto per il Rilevamento Elettromagnetico dell'Ambiente CNR
- UNIFI-CPC Centro per la Protezione Civile – **RI ATLaS**



WP7: Summary of the activities

- 7.1 Improving the access to the ECORD infrastructure and enabling scientific drilling micro-analysis, geochemical and site survey data sharing;
- 7.2 Improving the access to the ICDP infrastructure;
- 7.3 Improving the access to IODP scientific borehole geophysics, subsurface structural data, and stratigraphic/lithologic samples-data sharing;



WP7: Summary of the activities






- 7.4 Upgrade and networking of the **ground-based and airborne facilities for geophysical exploration and land surface monitoring**; Contribution to **ATLaS, SMINO & EUFR**
- 7.5 Earth Observation infrastructure based on **airborne X/L Band SAR and in-situ geophysical data**; Contribution to **ATLaS, SMINO & EUFR**
- 7.6 Integrated platform for surface movements monitoring; **ATLaS**

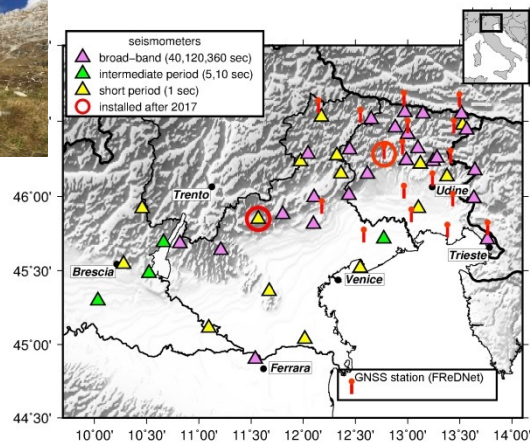


ATLaS



WP7: Summary of the activities

- 7.7 Integrated facility for the access to SMINO observations;  OGS-CRS  SMINO
Contribution to **ATLaS**
- 7.8 Data integrated facility for the access to geophysical observations on the subsurface;  OGS-GEO
Contribution to **SMINO, ATLaS**
- 7.9 Integrated facility for accessible airborne geophysical observations.  OGS-GEO
Contribution to  **EUFAR**, **SMINO, ATLaS**



WP7: Major expected outcomes

We will release existing and new terrestrial, airborne and scientific drilling data, while also developing and testing cutting-edge tools for geosphere and landsurface research.

Asset 1- Provide cutting edge equipment for **SMINO, ATLaS, EUFAR & ECORD-ICDP to:**

1. transform **EUFAR** capabilities enabling new **shallow to deeper crustal studies**
2. increase **ATLaS** capabilities in **landslide monitoring and early warning**
3. improve **SMINO** with a **MEDA Buoy & new fiber cable capabilities** and enhance **samples analysis & geophysical logging for scientific drilling (ECORD-ICDP)**

Asset 2- Develop 3 pilot sites (Friuli Venezia Giulia, Potenza and Tito) as open laboratories for urban geophysics, by testing DAS technology & providing demonstrators for stakeholders and general public

Asset 3- Next generation researchers and FAIR data access

Recruit next-generation researchers & technologists and fellowships.

WP7: Inter-relation with other WPs

