

Data and services from the EPOS Near Fault Observatory community

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'he EPOS SP project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 871121 📑

NFO Mission and Status



- **NFO** is a community with EPOS.
- They are advanced multidisciplinary laboratories on the field, based on multi-parametric networks.
- They monitor the chemical and physical processes in and around active faults, related with earthquake generation.
- NFO are built on *dense networks of sensors in the near-fault distance (within 10-20 km)*
- 6 NFOs in TCS consortium INFO, Taboo, CRL, Vrancea, Marmara, Valais; 1 Observer: SLO-Karst



DATA AND DATA PRODUCTS



Seismic catalogues Vp/vs Repeaters Source parameters Shaking information Strain maps

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NFO Portfolio



Distributed data

DDSS	Category	Data - Product	Platform
WP09-DDSS-001	Seismological data	Velocimetric Waveforms Continuous	EIDA
WP09-DDSS-001b	Seismological data	Seismic Station Information	EIDA (VN) – FRIDGE - ICS
WP09-DDSS-002	Seismological data	Accelerometric waveforms Continuous	EIDA
WP09-DDSS-006	Seismological data	Earthquakes parameters	FRIDGE - ICS
WP09-DDSS-009	Seismological data	V _P /V _s (Time series)	FRIDGE
WP09-DDSS-029	Seismological data	Historical EQ Catalogue	FRIDGE - AHEAD
WP09-DDSS-004	Geophysical data	Infrasound waveforms	EIDA
WP09-DDSS-004b	Geophysical data	Infrasound station info	EIDA – FRIDGE - ICS
WP09-DDSS-024	Geochemical data	Radon Decay Counts	FRIDGE - ICS
WP09-DDSS-035	Geophysical data	Strainmeter (water level, pressure)	EIDA
WP09-DDSS-035b	Geophysical data	Strainmeter Station info	EIDA – FRIDGE - ICS
WP09-DDSS-024b	Geochemical data	Radon Station info	FRIDGE - ICS
WP09-DDSS-025	Geochemical data	Meteo parameters	FRIDGE - ICS
WP09-DDSS-028	Geochemical data	CO2 dynamic concentration	FRIDGE - ICS
WP09-DDSS-028b	Geochemical data	CO2 station info	FRIDGE - ICS
WP09-DDSS-034	Data services	FRIDGE - NFO Federated specific data gateway and VL	FRIDGE
WP09-DDSS-037	Geodetic data	GNSS Site and Station information	FRIDGE – GLASS (VN)





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ACTIVITY AND AND PROVAT DAY

FRIDGE – EU NFO Federated specific data products gateway and Virtual Laboratory

ED



CREW – Testing Facility



Stakeholders



EXISTING USERS

• Research Institutes and Agencies (*e.g. IRSN, IFP, OGS, ICDP-IODP*)

POTENTIAL USERS

- Students
- Citizens
- Local-National Authorities
- Civil Protections
- Industrial consortia, SME Private Companies (for new instruments/technologies and EEW applications)
- Broader Scientific Community



TA – Access to Laboratories CRL – Corinth Rift Lab INFO – Irpinia NFO





GeoInquire EU project

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Workflow and ICS-D





- Enhancing seismicity
- Comparing time-series
- Mechanical processes
- Virtual Lab

DT-GEO EU project

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Conclusions

- NFO Community will provide scientists, civil protection agencies and other stakeholders with
- high-resolution, multidisciplinary data and products to promote leading-edge research and advanced monitoring in Earth science
- best practices in instrumentation, monitoring and tools for data analysis
- access to laboratories
- real time processing and facilities.

