Strengthening of the geophysical facility PiTOP for seismic characterization and monitoring purposes in the ECCSEL-ERIC consortium

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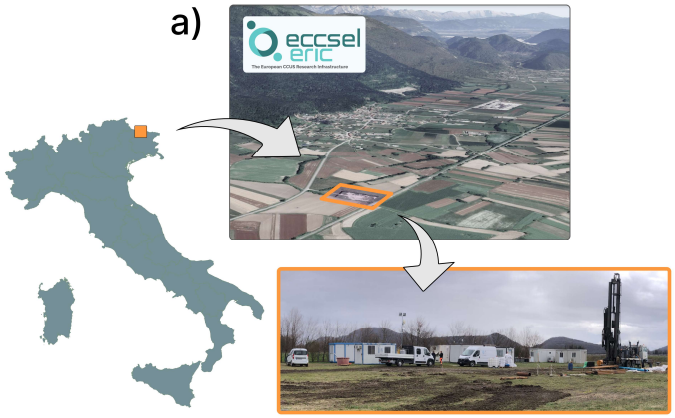
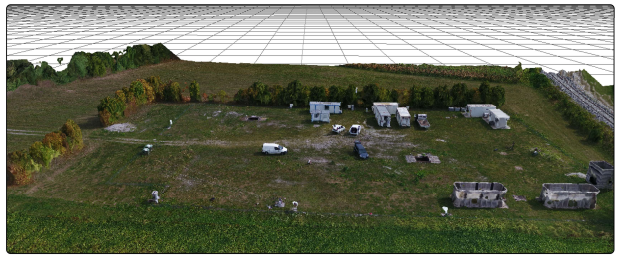
PiTOP – an OGS facility in ECCSEL-ERIC

a)

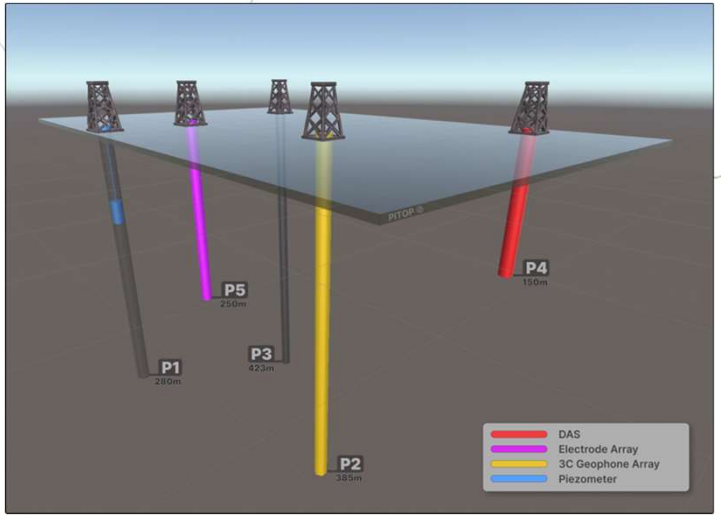


b)



PiTOP covers an area of 22,000 m^2 and it was designed and developed with the aim of providing a facility for the study and **experimentation** of **geophysical methods**, new **technologies,** including **drilling technologies,** and **borehole/surface tools** in **realistic conditions**

- ✓ Wells
- ✓ Acquisition systems
- ✓ Seismic instrumentation
- ✓ Geoelectric instrumentation



PiTOP
Sito test di geofisica di pozzo
Borehole geophysical test site

ENHANCEMENT OF PiTOP THANKS TO ITINERIS FUNDING

ITINERIS FUNDING: 1.500.000 €

- 800 wireless nodes NuSeis (1600 channels), mono and 3C
- Borehole receiver Avalon GSR-1
- Borehole Distributed Acoustic Sensing (DAS) cable
- Carina® (DAS) interrogator
- Mobile laboratory/office
- 3 technologist and 3 technicians (fixed-term contract)

All equipment has been tested (partly in collaboration with SMINO)

- NuSeis

- Borehole receiver Avalon GSR-1

Fiber optics cable for Downhole application (VSP)

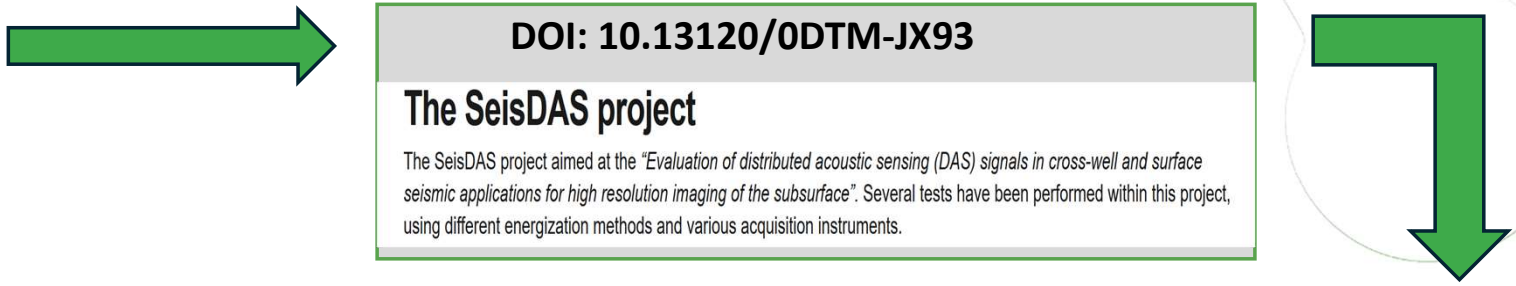
- Distributed Acoustic Sensing (DAS)

Carina® Sensing System (Silixa)

Mobile laboratory/office

PiTOP – 3 TRANSNATIONAL ACCESS in 2025 thanks to PiTOP's upgrade

- PiTOP is working to address the FAIR data principles, by starting to offer the download of **TA seismic data**



to be part (in the next future) of European distributed research infrastructures that facilitate the integrated use of data

PiTOP – TRANSNATIONAL ACCESS

- PiTOP gained visibility
- new international collaborations
- big amount of data to share with scientific community
- improve knowledge on DAS
- publish the results

PiTOP for sustainability

- ✓ Studies for **CO2 storage** site characterization and monitoring
- ✓ **Geothermal field** characterization
- ✓ **Hydrogen strorage** site characterization and monitoring
- ✓ **Water resources** applications

Sustainable environment and geoenergy

https://fiinovationblogs.wordpress.com/2014/04/18/

THANKS!

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