The Spanish node of the multidisciplinary integrated e-infrastructure EPOS

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The European Plate Observation System (EPOS, https://www.epos-ip.org/) is an e-infrastructure of ESFRI, the European Strategy Forum on Research Infrastructures (https://www.esfri.eu/), aimed at facilitating and promoting the integrated use of data, data products, services and facilities from internationally distributed research infrastructures for Solid Earth Science. This e-infrastructure is greatly committed to tackle viable solutions for Solid Earth challenges. It is a long-term plan that integrates research infrastructures of different European countries into a single inter-operable platform through different thematic core services (e.g., Seismology, Satellite data, Volcano Observations, Multi-Scale Laboratories). The Spanish EPOS node is coordinated by CSIC (the Spanish National Research Council) that hosts its own institutional repository, the DIGITAL.CSIC.

CSIC has adopted the European open data mandate and supports that data archives follow the FAIR principles of data management: Findable, Accessible, Interoperable, and Reusable. Therefore, data are broadly accessible to reuse for other researchers, industry, teaching, training and for the general public. Following these principles, the Institute of Earth Sciences Jaume Almera is updating and enlarging its database (https://digital.csic.es/handle/10261/101879, last access January 2020). These datasets include, among other, geophysical data acquired in the Iberian Peninsula since the 90's. They comprise seismic studies of the structure of the crust in different geological settings, both on and offshore, and ranging from continental to exploration scale. These projects have been funded by public calls as well as from industry-funded research projects. As an example, these datasets contain data addressing the characterization of the shallow subsurface for the development of CO₂, radioactive waste geologic storage sites, and to assess geologic hazards in the nearby of active faults. These datasets provide access to data that are relevant to assess sustainable and secure exploration and exploitation of the subsurface, a key societal challenge.

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