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## Findability of laboratory data in the solid Earth sciences: a portal for cross-disciplinary metadata

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The Thematic Core Service Multi-scale Laboratories (TCS MSL) is a community within the European Plate Observing System (EPOS) that includes a wide range of world-class laboratory infrastructures and that provides a cross-disciplinary, though coherent platform for virtual access to data and physical access to solid Earth science labs. The data produced at the participating laboratories are crucial to serving society's need for geo-resources exploration and for protection against geo-hazards. To model resource formation and system behaviour during exploitation, researchers need an understanding from the molecular to the continental scale, based on experimental and analytical data.

Data coming from the MSL laboratories provide the backbone for scientific publications, but they are often available only as supplementary information to research articles. Moreover, the vast majority of the collected data remain unpublished, inaccessible, and often not sustainably preserved for the long term. To allow reuse of these valuable but often neglected data, the TCS MSL developed a full publication chain to support their FAIR dissemination and sustainable accessibility. This chain consists of a community-driven metadata standard that allows multiple discipline-specific detailed descriptions, a publication tool (metadata editor), and an online community portal that gives access to DOI-referenced data publications at multiple research data repositories related to the TCS MSL context (<https://epos-msl.uu.nl/>). The portal is built on the CKAN repository toolkit and is driven by the richness of the TCS MSL metadata standard. Besides its importance for the TCS MSL community, it also provides a showcase of how to set up the CKAN environment as a cross-disciplinary catalogue for FAIR metadata exchange through a cascade of infrastructures.