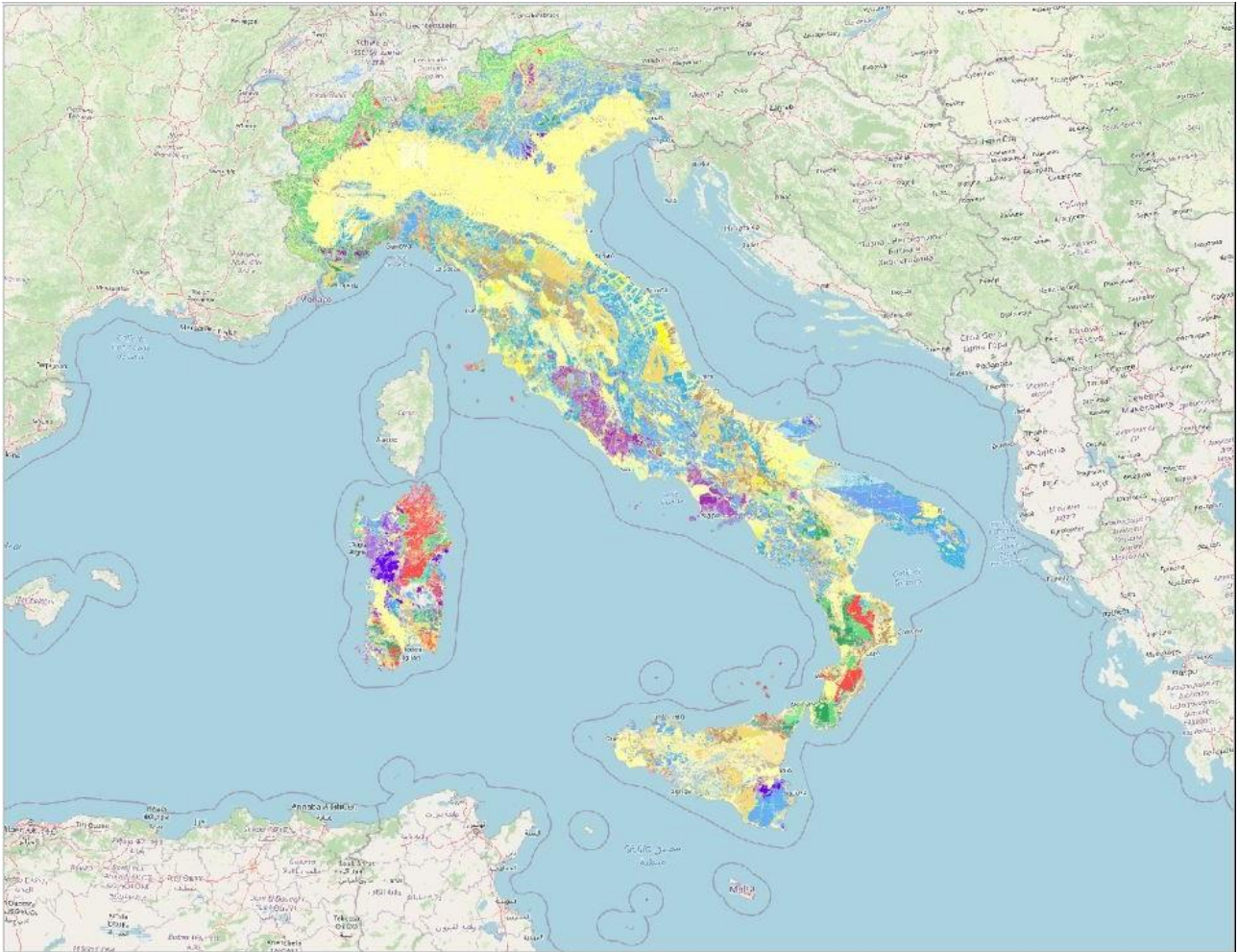


# The harmonised geological map of Italy 1:100,000 scale

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DOI: <https://doi.org/10.15161/oar.it/77089>



The INSPIRE Directive establishes a European infrastructure for spatial information to support the environmental policies of the European Union. Thirty-four different themes representing various environmental information have been identified. Geology theme is modelled conforming specific data structure that is Geology, Geophysics, Hydrogeology, which is further divided into three subthemes. Geology is in "priority dataset" list as it provides fundamental knowledge about the physical properties and composition of rocks and sediments, their structure, and their age, as depicted in geological maps, including geomorphological features and it represents the base map for geological phenomenon monitoring.

In the INSPIRE data model, specific codelists have been reused in the different field types to satisfy the compliance to the geological information content. Some of the codelists fully comply with the features contained in the 1:100,000 geological map database is integrated in the semantic harmonization process.

In 2021-22, the dataset was further harmonized in accordance with the INSPIRE and GeoSciML data models.

The Geological Map of Italy at a scale of 1:100,000 is currently the most comprehensive and detailed geological map available for Italy. It consists of a compilation of 277 sheets and was created over a period exceeding 100 years, with certain sheets having two editions. In the late 1990s, the map was converted into a vector database through the digitization of raster format data. The dataset underwent revision, integration, and correction by the Geological Survey of Italy between 2005 and 2009.

The dataset is served through a specific online resource allows the visualization of the Geologic Map of Italy 1:100,000 scale, in a digital format. The geology has been grouped based on the lower age of the geological units. Additionally, the service allows for the visualization of tectonic features).

The map has been harmonized in the framework of the activity of the Geological Survey of Italy with a support by the Joint Research Unit EPOS Italia (2020-2022).

Access Dataset Metadata:

[https://catalogosgi.isprambiente.it/geoportal2/catalog/search/resource/details.page?uuid=ispra\\_rm%3AMD\\_GE\\_100k\\_VS](https://catalogosgi.isprambiente.it/geoportal2/catalog/search/resource/details.page?uuid=ispra_rm%3AMD_GE_100k_VS)