



Seismic constraints on Sardinian Lithosphere: the LISARD project

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Improving knowledge of the geological evolution of Sardinia is key for understanding the Mediterranean geodynamics processes. Being not very active seismically, there is a lack of seismic coverage in Sardinia and, consequently, poor information on deep crustal and lithospheric mantle structure.

We installed from July 2016, a seismic array of 10 broadband seismic stations (<http://host.uniroma3.it/progetti/lisard/project.html>). We show here a preliminary model of the Sardinian lithosphere based on a joint inversion of surface-wave dispersion curve from ambient noise and receiver functions.

Our array is also recording accurately the Earthquake sequence in Central Italy and activity worldwide. The new data will allow to significantly improve the seismic coverage of the upper mantle below the Tyrrhenian Sea. The array will be also used to detect possible microevents in Sardinia.