



The INGV National Earthquake Centre research infrastructure to study the plate boundary deformation in the Central Mediterranean.

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To understand the complex kinematics within the plate boundary zone between Africa and Eurasia in the central Mediterranean, INGV has installed a monitoring system based on broad-band seismometers. Established since early 80's with some tens of short period seismometers and analogue transmission, now the network consists of more than 250 real time broad-band seismometers connected to different centres of acquisition. 140 CGPS instruments (of which 100 co-located) and about 80 strong motion sensors complete the system. The Network is integrated by local networks, whose data help to cover important areas of seismological interest, e.g. western and eastern Alps. A dedicated disaster recovery guarantees continuity of acquisition and data sharing among centres. On a wider scale, since 1990 INGV run the Mediterranean Network (MedNet), that presently comprises 22 operating very broadband seismic stations installed and maintained in cooperation with 13 geophysical institutions in Italy and in most of the countries adjacent to Mediterranean Sea. All the stations are equipped with state of art instrumentation.

Data produced by the Italian and the Mediterranean Networks are open and represent a unique research opportunity, because of the deep insight they offer of such interesting tectonic and seismically active regions. We present the networks, from the sites to the acquisition centres, and the level of the seismic and geodetic products and the primary scientific targets addressed when designing the networks.

Beside essential services connected to Italian Civil Protection agency and basic research, we ensure a relevant participation to European projects (NERIES and NERA) and to initiatives of data centers integration, such as EIDA (the European Integrated Data Archive), and strongly support the seismological research infrastructure of the EPOS initiative.