

Fifteen years of loyal service to the seismic hazard community: the Database of Individual Seismogenic Sources, relevance and opportunities

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In July 2001 the first public version of the Database of Individual Seismogenic Sources (DISS) was released by the DISS Working Group. The Database was initially released as a limited edition in print and on CD-ROM, but in the following few years it was fully migrated to the Internet.

Over the past 15 years the Database has continuously grown in breadth and depth, delivering an ever updated view of seismogenic faulting in the Italian territory and its surroundings.

In this presentation we summarize the many facets of natural hazards explored through the use of the DISS. The adoption of user-oriented fault parameterization and rigorous standards has favored the use of geologic data as an invaluable input for many natural hazard applications, including - but not restricted to - earthquakes and tsunami. The certified and persistent versioning of the database has ensured the repeatability of experiments carried out with any of its successive releases and allow seismogenic sources to be updated in a transparent fashion when new data become available. Its contents, therefore, are 'backward-savvy', both in terms of geological/geophysical information and formats.

We discuss pros, cons, and lessons learned from the construction of the Database of Individual Seismogenic Sources (DISS). We expect this discussion will help coping with the new challenges that the natural hazard community is expected to face in the near future.