



DISS Working Group (2015). Database of Individual Seismogenic Sources (DISS), Version 3.2.0: A compilation of potential sources for earthquakes larger than M 5.5 in Italy and surrounding areas. <http://diss.rm.ingv.it/diss/>, © INGV 2015 - Istituto Nazionale di Geofisica e Vulcanologia - All rights reserved; DOI:10.6092/INGV.IT-DISS3.2.0.

## **Accompanying Notes**

In June 2015 we released version 3.2.0 of the *Database of Individual Seismogenic Sources*. This new release features significant improvements with respect to the previous versions, both in terms of contents and in terms of its structure. This new release benefits from the developments achieved in the construction of the European Database of Seismogenic Faults ([EDSF](#)) during the E.C. funded Project [SHARE](#).

As for contents, the new release:

- 1) features a brand-new layer for *Subduction zones (SDZ)*;
- 2) incorporates research results that have appeared in the scientific literature between June 2010 (when the previous version was released) and June 2015;
- 3) includes 5 new *Individual Seismogenic Sources (ISS)* responsible for significant earthquakes, such as :1) the 3 January 1117 *Veronese* earthquake, 2) the 19 March 1624 *Argenta* earthquake, 3) the 10 August 1893 *Gargano* earthquake, 4) the 8 September 1905 *Calabria meridionale* earthquake, and 5) the 20 May event of the 2012 *Emilia* earthquake sequence;
- 4) includes 49 new or largey revised *Composite Seismogenic Sources (CSS)* describing the tectonic activity of: 1) the western Southern Alps thrust system, 2) the Trieste Gulf, 3) the "Imperia promontory" off the coast of western Liguria, 4) the central and southern Po Plain, 5) the central Apennines extensional system, 6) the external Dinaric thrust system, 7) the Calabrian offshore, and 8) the Sicily Channel;
- 5) includes 8 new *Debated Seismogenic Sources (DSS)*;
- 6) includes modified parameters for the geometry and kinematics of 32 *ISS*;
- 7) includes modified parameters for the geometry and kinematics of 34 *CSS*;
- 8) features an improved characterization of a number of already existing *ISS* and *CSS*. All sources include improved commentaries, new pictures, and updated reference lists.

As for the structure, the new release is hosted by a more reliable web-server architecture featuring a totally revamped web-site. Navigation through the database is now improved with new web-mapping capabilities, and a new and more informative front-end that allows registered users to submit comments and suggestions on specific sources or on any of the contents of the database.

For further queries please write to: [sorgenti@ingv.it](mailto:sorgenti@ingv.it).

<b>Version</b>	<b>DISS 3.0.0</b>	<b>DISS 3.0.1</b>	<b>DISS 3.0.2</b>	<b>DISS 3.0.3</b>	<b>DISS 3.0.4</b>	<b>DISS 3.1.0</b>	<b>DISS 3.1.1</b>	<b>DISS 3.2.0</b>
<b>Release date</b>	Sep 2004	Nov 2005	Sep 2006	Jul 2007	Oct 2007	Jun 2009	Jul 2010	Jun 2015
<b>Significant improvements</b>	<ul style="list-style-type: none"> <li>● New categories of sources introduced: non-segmented, non-parameterized</li> <li>● Graphic representation of fault kinematics</li> <li>● All parameters are assigned Qualifiers &amp; Explanatory Notes</li> </ul>	<ul style="list-style-type: none"> <li>● Seismogenic Areas introduced</li> <li>● Web version implemented</li> </ul>	<ul style="list-style-type: none"> <li>● Google Earth version implemented</li> </ul>	<ul style="list-style-type: none"> <li>● 25 new "Historical sources" (Well-constrained, Poorly-constrained, Deep) based on latest Italian reference catalogue for all earthquakes of Mw 5.3 and larger</li> </ul>	<ul style="list-style-type: none"> <li>● Acknowledges the results of the research project "Assessing the seismogenic potential and the probability of strong earthquakes in Italy"</li> </ul>	<ul style="list-style-type: none"> <li>● Debated Seismogenic Sources introduced</li> <li>● Active Folds introduced</li> <li>● Thematic maps introduced</li> <li>● Web portal restyling</li> </ul>	<ul style="list-style-type: none"> <li>● Updated Questionnaire for the Debated Seismogenic Sources</li> <li>● Updated thematic maps</li> </ul>	<ul style="list-style-type: none"> <li>● New web-server architecture</li> <li>● New web site</li> <li>● New front-end allowing registered users to post comments and suggestions on database contents</li> <li>● Subduction layer introduced</li> </ul>
<b>ISS<sup>1</sup></b>	100	107 <sup>a</sup>	115 <sup>b</sup>	115	119 <sup>c</sup>	119 <sup>d</sup>	123 <sup>e</sup>	126 <sup>h</sup>
<b>CSS<sup>1</sup></b>	---	67	81	86	92	98 <sup>f</sup>	118 <sup>g</sup>	167
<b>DSS<sup>1</sup></b>	---	---	---	---	---	8	27	35
<b>SDZ<sup>1</sup></b>	---	---	---	---	---	---	---	3
<b>Refs<sup>2</sup></b>	1,720	1,944	2,063	2,063	2,218	2,476	2,670	3139
<b>Images<sup>3</sup></b>	550	683	794	794	859	1,416	1,731	2215
<b>Texts<sup>4</sup></b>	~250	~270	~300	~300	~320	~660	~730	~870

<sup>1</sup> Source types: ISS, Individual Seismogenic Source; CSS, Composite Seismogenic Source; DSS, Debated Seismogenic Source; SDZ, Subduction Zone.

<sup>2</sup> Number of independent references attached to the seismogenic sources.

<sup>3</sup> Number of independent images (original from published literature) documenting the seismogenic sources.

<sup>4</sup> Number of equivalent pages of original texts documenting the seismogenic sources.

<sup>a</sup> ISS: 14 added; 7 removed; parameters of 8 modified/improved.

<sup>b</sup> ISS: 9 added; 1 removed; parameters of 35 modified/improved.

<sup>c</sup> ISS: 7 added; 3 removed; parameters of 17 modified/improved.

<sup>d</sup> ISS: parameters of 20 modified/improved.

<sup>e</sup> ISS: 7 added; 3 removed; parameters of 5 modified/improved.

<sup>f</sup> CSS: 6 added; parameters of 24 modified/improved.

<sup>g</sup> CSS: 21 added; 1 removed; parameters of 29 modified/improved.

<sup>h</sup> ISS: 5 added; 2 removed.