



Accompanying Notes

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In June 2009 we released version 3.1.0 of the *Database of Individual Seismogenic Sources*. With respect to the previous version the new release contains various improvements concerning its structure, and its contents have been substantially increased. In particular, the new release:

- 1) incorporates research results that appeared in the scientific literature between October 2007 (when the previous version was released) and May 2009;
- 2) includes 6 new *Composite Sources* describing sections of the external Dinaric thrust system that affect the eastern side of the Adriatic foreland;
- 3) includes modified parameters concerning the geometry and kinematics of 20 *Individual Sources* and of 24 *Composite Sources*;
- 4) focuses on a better characterization of the already existing *Individual Sources* and *Composite Sources*. All sources now have their own commentary, related pictures, and updated references;
- 5) introduces a new layer concerning *Debated Seismogenic Sources*, active faults that have been proposed in the literature as potential seismogenic sources but were not considered reliable enough to be included in the database. This new layer contains an original critical review of the available data and of the reasons in favor and against the given active fault being considered a *Seismogenic Source*;
- 6) includes a new layer concerning active folds axes. Similarly to the pre-existing active faults layer, this new layer contains only tectonic features with documented Late Pleistocene-Holocene activity. The graphical objects in these two layers are associated with both *Individual* and *Composite Sources*;
- 7) proposes a series of new thematic maps;

- 8) introduces various improvements of the web interface. Both data access and database navigation have been made easier via the restructuring of auxiliary information associated with the sources, a new organization of current layers, and the improvement of poorly resolved background information (e.g., the DEM);
- 9) includes the restyled DISS web portal; W3C (html 4.01, css) validation was obtained for all pages. The overall look of the web site now complies with most of the requirements of the Italian Law n. 4 of 9 January 2004 - Provisions to support the access to information technologies for the disabled (also known as "Stanca Act").

For further queries please write to: sorgenti@ingv.it.

| <i>Version</i> | <i>DISS 3.0.0</i> | <i>DISS 3.0.1</i> | <i>DISS 3.0.2</i> | <i>DISS 3.0.3</i> | <i>DISS 3.0.4</i> | <i>DISS 3.1.0</i> |
|---|---|---|---|--|--|---|
| Date Released | <i>Sep 2004</i> | <i>Nov 2005</i> | <i>Sep 2006</i> | <i>Jul 2007</i> | <i>Oct 2007</i> | <i>Jun 2009</i> |
| Significant improvements | <ul style="list-style-type: none"> • <i>New categories of sources introduced: non-segmented, non parameterized</i> • <i>Graphic representation of fault kinematics</i> • <i>All parameters are assigned Qualifiers & Explanatory Notes</i> | <ul style="list-style-type: none"> • <i>Seismogenic Areas introduced</i> • <i>Web version implemented</i> | <ul style="list-style-type: none"> • <i>Google Earth version implemented</i> | <ul style="list-style-type: none"> • <i>25 new "Historical sources" (Well-constrained, Poorly-constrained, Deep) based on latest Italian reference catalogue for all earthquakes of Mw 5.3 and larger</i> | <ul style="list-style-type: none"> • <i>Acknowledges the results of the research project "Assessing the seismogenic potential and the probability of strong earthquakes in Italy"</i> | <ul style="list-style-type: none"> • <i>Debated Seismogenic Sources introduced</i> • <i>Active Folds introduced</i> • <i>Thematic maps introduced</i> • <i>Web portal restyling</i> |
| IS sources¹ | <i>100</i> | <i>107*</i> | <i>115**</i> | <i>115</i> | <i>119***</i> | <i>119****</i> |
| CS sources¹ | <i>---</i> | <i>67</i> | <i>81</i> | <i>86</i> | <i>92</i> | <i>98****</i> |
| DS sources¹ | <i>---</i> | <i>---</i> | <i>---</i> | <i>---</i> | <i>---</i> | <i>8</i> |
| Support data: References² | <i>1,720</i> | <i>1,944</i> | <i>2,063</i> | <i>2,063</i> | <i>2,218</i> | <i>2,476</i> |
| Support data: Images³ | <i>550</i> | <i>683</i> | <i>794</i> | <i>794</i> | <i>859</i> | <i>1416</i> |
| Support data: Texts⁴ | <i>~250</i> | <i>~270</i> | <i>~300</i> | <i>~300</i> | <i>~320</i> | <i>~660</i> |

¹ Seismogenic Source types: IS, Individual Source; CS, Composite Source; DS, Debated Source.

² Number of independent references attached to the seismogenic sources.

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

⁴ Number of equivalent pages of original texts documenting the seismogenic sources.

* IS: 14 added; 7 removed; parameters of 8 modified/improved.

** IS: 9 added; 1 removed; parameters of 35 modified/improved.

*** IS: 7 added; 3 removed; parameters of 17 modified/improved.

**** IS: parameters of 20 modified/improved.

***** CS: 6 added; parameters of 24 modified/improved.