

A platform for routine and automatic moment tensor inversion testing – concept and first synthetic data applications.

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Routine and automatic moment tensor analysis is more and more developing and used by several agencies, Universities and surveys. Systematic global and regional moment tensor services are becoming a standard in many countries, and different catalogs are provided for the community. Software toolboxes offer standard moment tensor tools – but results depend very much on the data pre-processing and data selection. Often, quality criteria for the processing and method implementation are not easily available or not provided. Systematic comparison between moment tensor routines are not easily possible, and comparison of catalogs indicate systematic differences, for instance in seismic moments or centroid depths.

The main aim of the IASPEI working group on routine moment tensor solutions is to develop and implement a benchmark and verification platform for automatic moment tensor procedures, and to publish recommendations for the scientific community on how to use the testing structure.

The poster presentation introduces the concept and functionality of the web-based platform. First examples comprise synthetic earthquake catalogs and how to configure, download and use simulated real-time data-streams for a user-configured testing. First versions of a testing procedure and report are discussed. We wish to receive feedback and suggestions for the future developments.