



Network of European Research Infrastructures for Earthquake Risk Assessment and Mitigation

Report

Data quality control, pre-processing and integration

Activity:	<i>JRA2: Tools for real time seismology, acquisition and mining</i>
Activity number:	<i>D12.6</i>
Deliverable:	<i>Toolbox 5: Data quality control, pre-processing and integration</i>
Deliverable number:	<i>D12.6</i>
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Seventh Framework Programme
EC project number: 262330



Summary

This report addresses the work done within the WP12 for what concerns data quality control. The toolbox software includes the procedure “msstatqc” (developed by KNMI/ORFEUS) that provides statistical information (e.g. mean, RMS, standard deviation) and basic quality parameters (gap, overlap, datalogger provided quality flags and timing) derived from mini-SEED files. The development has been carried out in close coordination with the NA2 and SA2 work packages.

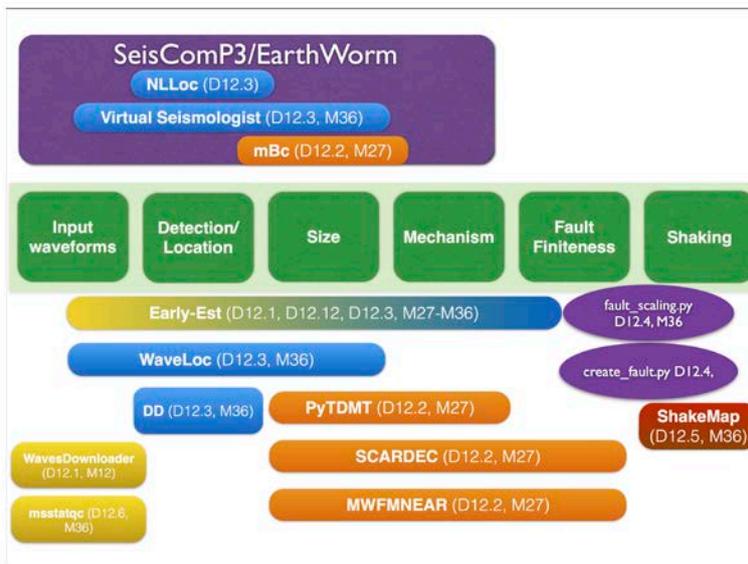


Figure 1. Simplified diagram showing the software implemented in JRA2 and the associated deliverable. The D12.6 deliverable corresponds to utility software shown in the yellow color to the bottom left.

Preamble

This deliverable is extremely concise since it refers to software available at the ORFEUS web site (<http://www.orfeus-eu.org/man/msstatqc.html>)

msstatqc

The software package 'msstatqc' provides statistical information (e.g. mean, RMS, standard deviation) and basic quality parameters (gap, overlap, datalogger provided quality flags and timing) derived from mini-SEED files. The package provides this information as json formatted output to be parsed and inserted directly into a database. A database and metadata collector tool have been developed within NA2 for this purpose, which is implemented at ODC and being tested at INGV for distribution/integration within EIDA (NA2).

The calculations of the parameters follow the definitions set in NA2 deliverable D2.3 (WP2/NA3) report 'Automatic data QC and distribution statistics for data providers'.

<http://www.orfeus-eu.org/man/msstatqc.html>

Within SA2 a webservice was developed to serve information provided by this software and database:

http://www.orfeus-eu.org/man/odcws_wfmetadataselect.html

Conclusions

The quality control parameters developed in this WP are described fully at the web pages provided above. They represent an initial important step toward dynamic descriptions of the quality parameters that can be inserted as metadata into the associated DB and be used for data selection.