

Release notes for ShakeMap r1543:

This should be a relatively straightforward update for those that are already at r1394 or later. All that should be needed is “*svn -r1543 update*” and “*make*”. There may be some minor edits needed to config files – see your *make* output for specifics.

One caveat: The new code uses the JSON::PP module. This module is part of the core distribution for Perl 5.14 and later. If you are using an earlier version of Perl, you may need to install JSON::PP with your package manager or from CPAN. This installation should be fairly painless as there are no non-core dependencies.

Changes included in this release (vs. r1394):

- **info.xml is now info.json.** The info.xml file has been converted to JSON, and now contains considerably more information in a more compact format. The USGS web site now renders the info file in a nice tabular format. See, for example, <http://earthquake.usgs.gov/earthquakes/eventpage/us20005zay#shakemap> and click the “Metadata” tab. Outside of the USGS web rendering, it will be easiest to view info.json in an editor or browser with a JSON extension (like “JSONView” for Chrome).

The enhanced metadata provides a more complete paper trail of ShakeMap processing for tracking the history of events, for scenario documentation, and for financial decision makers (a growing consumer of ShakeMap products). It should also make it easier for your operations personnel to review the ShakeMap parameters for your maps.

- **Added Bradley13 GMPE for New Zealand (written by Nick Horspool)**
- **Added TusaLaner GMPEs for Italy (written by Licia Faenza)**
- **Update FM10 GMICE to include FM11 PSA factors**
- **Added new version of db2xml from Pete Lombard.** New version tries to get the most recent version of an amp if more than one exists.
- **getdyfi stopped working due to changes in the USGS web site; added getdyfi2.** Note that getdyfi2 is a Python program and requires the operator to configure a Python path in include/macros, and to do “make pyprogs” when installing ShakeMap. Contact me for additional details if you run into problems.
- **Many bug fixes and enhancements:**
 - Fix bugs in MMI bias computation
 - Fix stationlist JSON to better handle numeric station codes
 - Fix bug in Mail::Sender that caused failure on some systems
 - Change abs() to fabs() in C programs to fix problems on some systems
 - Add check for big/little endian for ESRI raster grid
 - Fix some grid mismatch problems with high resolution topography
 - Make DataArray more robust when confronted with odd stations in XML
 - Cleaned up bias computation for more efficiency; remove spurious warnings
 - Print PSA values to stationlists even if `-psa` is not specified to grind
 - Fix bug in boundcheck; fix rounding bug in `find_cut_bounds()`

- Add updated .lyr files to shape file output; add PSA .lyr files
- Change PGV contour interval from 4 to 2 in/sec (per FEMA request)
- Eliminate rounding of seconds in origin time to avoid potential cascading round ups; seconds are now truncated
- Fix depth bug in Zhao06 GMPEs
- Fix bug in geterror
- Added fixes to plotregr suggested by Licia Faenza
- Remove backslash escapes from some JSON output
- Add several properties to PDL transfer; this could help with catalog searches
- Fix bug in contour.c to better handle detection of depressions
- Fix mapping “grade” bug for scenarios
- Fix bug where mapping would crash if no contours were produced
- Increase line weight in contour JSON files (for interactive USGS maps)
- Added “description” attribute to event.xml (or source.txt); provides description for primary/alternative maps for a given event.
- Added new metadata files to shape file tarballs
- Added edit_info program that allows operator to change values in info.json
- Other fixes/changes: see the change log if interested
- Closed out 2014 and 2015 archive pages; opened 2016

These all add up to a fairly important update (especially the enhanced metadata in info.json). Please update ASAP, especially those of you who send your maps to the USGS web.

Thanks,
Bruce