

Contributed short paper* from the IOGP GIGS Project

GIGS, the Geospatial Integrity of Geoscience Software, is an open-source digital testing framework designed to evaluate the capability of software in establishing and maintaining the spatial integrity of geospatial data. It is primarily aimed at geoscience applications but elements can be readily applied to any software that handles geospatial data. The testing framework comprises a series of qualitative evaluations that assess software functionality and configuration, coupled with data-driven tests that quantify the accuracy and robustness of geodetic engines and libraries, in executing coordinate operations. GIGS has recently undergone a significant revision to make it simpler to use, more flexible in its application and easier to automate within software development environments.

GIGS 2.0 incorporates major updates and enhancements to enable the efficient and robust testing of geospatial applications, including:

- Release of a web platform, containing all of the GIGS framework in one, easy to use, place.
- Simplification of all test series to drastically reduce the time and resource required for GIGS testing.
- Delivery of the test dataset in a consistent and machine-readable file format that can be readily used in a code base.
- Introduction of conditional assessment that reduces the number of overall tests needed to be undertaken and allows tests to be modularised.
- Revision of all GIGS content to ensure relevance to modern energy industry.
- Consolidation of documentation into straightforward guidance notes.
- Update of P-format versions in test dataset and alignment with latest EPSG Dataset.
- Wide variety of bug fixes and error corrections.

** When the IOGP GIGS home page is updated, this short note will be replaced by the official GIGS 2.0 landing page.*