



TsunaFLASH Benchmark and Its Verifications

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In the end of year 2008 TsunAWI (Tsunami unstructured mesh finite element model developed at Alfred Wegener Institute) by Behrens et al. (2006 - 2008) [Behrens, 2008], had been launched as an operational model in the German - Indonesian Tsunami EarlyWarning System (GITEWS) framework. This model has been benchmarked and verified with 2004 Sumatra-Andaman mega tsunami event [Harig et al., 2008].

A new development uses adaptive mesh refinement to improve computational efficiency and accuracy, this approach is called TsunaFLASH [Pranowo et al., 2008]. After the initial development and verification phase with stabilization efforts, and study of refinement criteria, the code is now mature enough to be validated with data.

This presentation will demonstrate results of TsunaFLASH for the experiments with diverse mesh refinement criteria, and benchmarks; in particular the problem set-1 of IWLRM, and field data of the Sumatra-Andaman 2004 event.