

Abstract: QuakeSim and E-Decider Web Development

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We describe progress and applications of the QuakeSim and E-Decider projects, particularly efforts associated with the magnitude 9 Japan Earthquake. QuakeSim capabilities include both forward and inverse elastic methods based on geometric fault models as well as GPS time series analysis tools. We show how these were used to create geometric fault model parameters and monitor GPS station state evolutions associated with the Japan earthquake events. To increase visibility and simplify usage, the QuakeSim Web portal and Web services have been redesigned to support anonymous access through a revised, Drupal-based Web front end. For the E-Decider emergency planning and response project, we present web tools for generating damage estimate reports and maps from geometric fault models. We are developing a catalog of these for the western United States, guided by "hot spot" forecast maps produced by UC-Davis. We are also extending these catalogs to include the Great Central U.

S. Shakeout activity. Finally, we present our efforts in the E-Decider project to assist with imagery data products following the Japan earthquake and lessons learned from this activity.