

The FACTS Project: First step toward a tsunami community modeling activity

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Abstract. We will demonstrate a distributed, virtual R&D environment—the Facility for the Analysis and Comparison of Tsunami Simulations (FACTS). FACTS is designed to provide global, transparent sharing of model results and associated databases (e.g., bathymetry and topography, field observations, physical model data, model runs for test cases, etc.) that are resident on servers at participating institutions. It is the first step in establishing a Tsunami Community Modeling Activity (TCMA)—a more general enterprise that will include on-line access to models. The overall goal of the TCMA/FACTS effort is to accelerate improvements in model physics and hazard mitigation products, and facilitate the delivery of these products to end users in the emergency management community. This project will exploit the World Wide Web and other existing technologies: Ferret applications for scientific visualization, manipulation, comparison, and analysis; Distributed Ocean Data System (DODS) from the University of Rhode Island for networked scientific data communications; Live Access Server (LAS) to seamlessly link each network node. Currently, this effort is focused on R&D in direct support of the U.S. National Tsunami Hazard Mitigation Program. Thus, the planned FACTS network will include nodes at NOAA's Center for Tsunami Inundation Mapping Efforts (TIME) and at universities developing tsunami inundation maps for each of the five Pacific states.

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