Preliminary Model Results for the 23 June, 2001 Peruvian tsunami

Shunichi Koshimura[1,2] and Vasily V. Titov[1]

[1] ***U.S. Geological Survey, Menlo Park, California, U.S.A.***

Abstract. A tsunami generated by the 23 June 2001 Peruvian earthquake devastated the Peruvian coast near the epicenter and was recorded throughout the Pacific by coastal tide gages. This widespread impact motivated modeling efforts to produce a realistic tsunami simulation of this event as soon as possible. The TIME center has two resident numerical models, TUNAMI-2 and MOST. Both models were used to produce a preliminary simulation shortly after the earthquake, and the first results were posted on the Internet a day after the event. These numerical results aimed to quantify the magnitude of the tsunami and, to a certain extent, to guide the post-tsunami survey. These first simulations were updated several times when new source data became available. Preliminary results and lessons of using numerical models in near-real-time mode will be presented.

[1]Center for Tsunami Inundation Mapping Efforts (TIME), Pacific Marine Environmental Laboratory, NOAA, 7600 Sand Point Way NE, Bldg. 3, Seattle, WA 98115-6349, U.S.A. (titov@pmel.noaa.gov, koshi@pmel.noaa.gov)

[2]Center for Tsunami Inundation Mapping Efforts (TIME), Pacific Marine Environmental Laboratory, NOAA, 7600 Sand Point Way NE, Bldg. 3, Seattle, WA 98115-6349, U.S.A.