Geophysical Research Abstracts, Vol. 7, 05940, 2005 SRef-ID: 1607-7962/gra/EGU05-A-05940 © European Geosciences Union 2005



Errors in Simulations of Dam Breach Floods

J. Michaud

University of Hawaii at Hilo, USA (jene@hawaii.edu / Phone: 808-974-7411)

This study examines errors in the simulation of hypothetical floods resulting from catastrophic dam breach. Modeling was conducted using the FLDWAV model developed by the United State's National Weather Service and a GIS-based component for producing maps of maximum depth of inundation. Possible error sources include uncertainties about the duration of the breach, inadequate resolution and representation of the topographic data, and uncertainties in roughness values. Results for two medium-sized dams suggest that flood depths are very sensitive to the duration of the breach, which is a parameter for which there is little *a priori* information. The sensitivity of simulated flood depths to the quality of topographic information varied between the two case studies.