Geophysical Research Abstracts, Vol. 7, 07103, 2005

SRef-ID: 1607-7962/gra/EGU05-A-07103 © European Geosciences Union 2005



The Indian Ocean tsunami – preliminary model results

C.B. Harbitz (1,2), G.K. Pedersen (1,3), H.P Langtangen (4), S. Glimsdal (1,4), and F. Løvholt (1,2)

(1) International Centre for Geohazards, Oslo, Norway, (2) Norwegian Geotechnical Institute, Oslo, Norway (3) University of Oslo, Norway, (4) Simula Research Laboratory, Bærum, Norway (flo@ngi.no / Fax: +47 22230448 / Phone +47 22023043)

The tsunami hitting the coastlines of South-East Asia the 26. December is by far the most destructive tsunami in several hundred years. Preliminary numerical simulations of the 26. December event have been performed for investigating sensitivity of the parameters of importance for the tsunami generation and propagation. The simulations are compared with both models of the earthquake motion and observations of the wave. Both linear non-dispersive equations and Boussinesq type equations are used to study effects of the wave generation, and the near shore wave propagation.