



Impact of the December 26, 2004 Indian ocean tsunami on the Bangladesh coast

M. Ioualalen (1), P. Watts (2), A. Deschamps (1), M. Vallee (1), and E. Pelinovsky (3)

(1) "Geosciences Azur", France, (2) Applied Fluids Eng., Long Beach, CA, USA, (3) Laboratory of Hydrophysics and Nonlinear Acoustics, Institute of Applied Physics, Russian Academy of Sciences, Nizhny Novgorod, Russia.

The December 26, 2004 Indian ocean tsunami did not impact significantly the Bangladesh coast. compared to the rest of the indian ocean Basin. The propagation of the tsunami is simulated here with the Geowave fully nonlinear Boussinesq equations model. Several features that are likely to dissipate and attenuate the wave offshore Bangladesh are investigated : the presence of the extended Bangladesh continental shelf, the non-radiative direction of propagation onto the Bangladesh coast that has been reached mainly by edge waves, and finally the possible defocalisation effects of the Nicobar and Andaman islands.