



Tsunami generation by the motion of the underwater landslide

I. Nudner, **V. Maximov**, Yu. Mayorov

Research Center of Capital Construction, St. Petersburg, Russian Federation
(wmaximov@mail.ru)

The results of labor tests concerning tsunami generation by the motion of the underwater landslide are presented. The experiments were carried out in the wave tank with the special enclosure. The underwater landslide was modeled by the motion of semi-elliptical solid with the bulk density 1,900 kg per cubic metre. There were 5 variants of the slope angle from 10 to 45 degrees studied. The elevation of the free surface was measured at 4 places. The comparison with the numerical modeling including the linear, the non-linear, the non-linear with dispersion and full 2-d model is presented. Unfortunately all of the mentioned numerical models give too high estimate at the place of initial position of the landslide. The full model is the most proper but the most sophisticated tool. At some distances it allows to satisfactory predict the wave regime.