



Tsunamis in Guadeloupe (Lesser Antilles)

N. Zahibo (1), E. Pelinovsky (2)

(1) Université Antilles Guyane, UFR Sciences, Guadeloupe (F.W.I.) France

(2) Institute of Applied Physics, Nizhny Novgorod, Russia

Available data of tsunami manifestation in Guadeloupe (Lesser Antilles) for 500 years is analysed and discussed. Highest values of the tsunami heights have been recorded in the northern Guadeloupe (Basse-Terra Island). Numerical simulation of the wave height distribution along the coast of Guadeloupe is performed in the framework of shallow water theory for several possible locations of the tsunami sources, and also for historic 1867 and 2003 events. Results of the numerical simulations confirm that tsunami waves approached to Guadeloupe have large values in its northern part.