Geophysical Research Abstracts Vol. 13, EGU2011-7096, 2011 EGU General Assembly 2011 © Author(s) 2011



Meteomarine conditions of storm surges in Hel peninsula: past, present, future and impact on flooding vulnerability.

Marzenna Sztobryn, Beata Kowalska, Jacek Lendzion, and Arkadiusz Fabrycki Institute of Meteorology and Water Management, Sea Level Forecasting Office, Gdynia, Poland (Marzenna.Sztobryn@imgw.pl)

Hel peninsula (Baltic coast of Poland) belongs to the areas prone to flooding and erosion. Because of its unique location extremely storm surges are observed and some damages were noticed in the past. In this paper statistics, trends of storm surges for period 1955-2008 and methodology of calculation of probability of high sea levels will be presented. The new form of metomarine information on web page will discuss. The impact of future climate changes on sea level rise and flooding vulnerability of Hel peninsula will be analyzed, especially for climate scenario A2, A1B and B1.Possible impact on the natural environment and living conditions will be discussed.