Application of hydrodynamic model of the Baltic Sea to the December 2013 storm surge representation along the Polish Baltic coast Halina Kowalewska-Kalkowska¹ and Marek Kowalewski^{2,3}

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3D operational hydrodynamic model of the Baltic Sea (M3D_UG) produced a good representation of water level changes along the Polish Baltic coast during the December 2013 storm surge. The tool generated relatively good water level forecasts and reflected properly all the phases of the storm surge.

A good approximation of water level fluctuations along the southern Baltic Sea coast during the December 2013 storm surge by the model makes it a reliable tool for forecasting storm surges. The 48hour water level forecasts for the southern Baltic Sea, the Gulf of Gdańsk and the Vistula Lagoon as well as for the Pomeranian Bay and the Szczecin Lagoon are placed daily on the University of Gdańsk website (http://model.ocean.ug.edu.pl/).