Geophysical Research Abstracts, Vol. 8, 10235, 2006 SRef-ID: 1607-7962/gra/EGU06-A-10235 © European Geosciences Union 2006



Improved parameterization of the drag coefficient in NEDWAM

M.A.G. den Ouden, J.W. de Vries, M. Stam, V.K. Makin

Royal Netherlands Meteorological Institute (KNMI), De Bilt, The Netherlands

The NEDWAM model is a regional version of the WAM model adapted especially for wave forecasts in the North Sea area. A new parameterization of the wind input, dissipation, and sea drag based on a wind-over-waves coupling theory, has been implemented in the model. Furthermore an error in the wind wave/swell separation scheme has been corrected. The performance of different configurations of the model was assessed for the period September 2003 – April 2004, which is characterized by periods of strong winds. The model output for swell and wind sea wave parameters is compared to observations from buoys. A detailed analysis of the results is given.