



## **Development of a global satellite database of wind and wave data**

Elena Sanina (1), Alexander Babanin (1), and Ian Young (2)

(1) COEST, FSET, Swinburne University of Technology, Hawthorn, VIC, Australia (esanina@swin.edu.au), (2) Australian National University, Canberra, ACT, Australia

During last almost 30 years a variety of oceanographic satellites have been operating. Data from their instruments such as altimeters (wind speed and wave height), SSMI radiometers (wind speed), scatterometers (wind speed and direction) and Synthetic Aperture Radar, SAR (full directional wave spectrum) is important for design and operation of coastal and offshore structures. In the last decade the database containing data from all these instruments over their full period of operation has been created. It contains calibration and cross-validation of the instruments including validation with the extensive buoy dataset. This study presents the development of the database with the analysis of the average spatial and temporal criteria used in the calibration and addition of interpolated data between the buoy measurements to get values at time of satellite records.