



Uncertainty estimates of altimetric Global Mean Sea Level timeseries

Martin Scharffenberg (1), Michael Hemming (2), and Detlef Stammer (1)

(1) University of Hamburg, Institute for Marine Research, Remote Sensing, Hamburg, Germany
(martin.scharffenberg@zmaw.de), (2) University of East Anglia

An attempt is being presented concerned with providing uncertainty measures for global mean sea level time series. For this purpose sea surface height (SSH) fields, simulated by the high resolution STORM/NCEP model for the period 1993 - 2010, were subsampled along altimeter tracks and processed similar to techniques used by five working groups to estimate GMSL. Results suggest that the spatial and temporal resolution have a substantial impact on GMSL estimates. Major impacts can especially result from the interpolation technique or the treatment of SSH outliers and easily lead to artificial temporal variability in the resulting time series.