Geophysical Research Abstracts Vol. 19, EGU2017-8935, 2017 EGU General Assembly 2017 © Author(s) 2017. CC Attribution 3.0 License.



Intercalibration of C-band scatterometer records using cone metrics

Maria Belmonte Rivas, Ad Stoffelen, Anton Verhoef, Jeroen Verspeek, and Jur Vogelzang Royal Netherlands Meteorology Institute, Satellite Observations, De Bilt, Netherlands (belmonte@knmi.nl)

With an eye on the generation of a consistent long-term climate record of ocean winds, soil moisture and sea ice extents across the C-band scatterometer spans, a new calibration tool termed cone metrics has been developed. This contribution describes the new method and its application as intercalibration tool in the context of the reprocessing activities for ERS and ASCAT. Cone metrics succeeds at characterizing the temporal (seasonal and diurnal) stability of the C-band scatterometer record down to an accuracy of 0.01-0.02 dB, and establishes the corrections necessary to homogenize the ASCAT and ERS C-band records down to 0.05 dB, well in line with the GCOS requirement for the provision of a climate data record of ocean surface winds.