



Application of AATSR aerosol retrieval to new data from SLSTR onboard Sentinel-3 satellite

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Satellite data records of aerosol optical properties become increasingly useful for climate modelling and model assimilation. Such applications require global multi-annual data sets with well characterised uncertainties. Within the framework of the ESA Climate Change Initiative project a long term data set of 17 years of aerosol properties and associated uncertainties has been generated using (A)ATSR data onboard the ERS-2 and ENVISAT satellites. The results have undergone extensive independent validation against Aeronet ground based data and intercomparison with other retrievals and satellite products. Many of these results have already been presented previously and the latest validation of the uncertainties will also be presented by Kerstin Strebel in this session. With the launch of Sentinel 3A in February 2016 a new generation of instruments for long term monitoring of aerosol and surface properties becomes available. These Sentinel missions will consist of multiple satellites of identical instrumentation to provide continuous data sets for the next decade. One of the instruments onboard the satellite is the Sea and Land Surface Temperature Radiometer (SLSTR), which is a slightly modified version of the well known AATSR instrument and it will have similar capabilities for the retrieval of global aerosol properties. We have adopted our AATSR aerosol retrieval algorithm and presently apply it to the new SLSTR L1 data. Here we will present the new aerosol data products and discuss these first results.