



Current Capabilities of High-Resolution Aerosol Retrievals: Algorithm MAIAC

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Multi-Angle Implementation of Atmospheric Correction (MAIAC) is a new generation algorithm which uses time series analysis and processing of groups of pixels for advanced cloud masking and retrieval of aerosol and surface bidirectional reflectance properties. MAIAC makes aerosol retrievals from MODIS data at high 1km resolution providing information about the fine scale aerosol variability. This information is required in different applications such as urban air quality analysis, aerosol source identification etc. We will describe the latest improvements in MAIAC and the new analysis of retrieval uncertainties over dark and bright surfaces. We will also give overview of available MAIAC datasets and its validation for different AERONET DRAGON field campaigns which present a unique spatially distributed array of in-situ aerosol measurements.