



## **A 13-year Global OMI Record of Aerosol Absorption**

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The near-UV part of the solar spectrum offers large sensitivity to the absorption by carbonaceous aerosols, desert dust, and volcanic ash aerosols. The two-channel OMI/OMAERUV algorithm, by taking the advantage of this unique sensitivity of the top-of-atmosphere radiance measurements, retrieves qualitative and quantitative information on the columnar loading of partially light-absorbing aerosols on a global scale. In this presentation, we will discuss a 13-year long record of aerosol absorption parameters such as UV Aerosol Index (UV-AI), Aerosol Optical Depth (AOD), Single-scattering Albedo (SSA), and Aerosol Absorption Optical Depth (AAOD) retrieved from OMI. Furthermore, we will present major algorithm improvements as well as new aerosol measurement capability of deriving the optical depth of aerosols over clouds developed during OMI's thirteen year lifetime.