



What We Can Say from MISR About Aerosol Optical Depth, Aerosol Type, and Plume Height

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As the time-series of observations from the NASA Earth Observing System's Multi-angle Imaging SpectroRadiometer (MISR) instrument has grown to about 13 years, the value of these data for global and regional studies has increased immensely. The record of coincident, suborbital validation data has also increased steadily, making it possible to progressively improve the satellite retrieval algorithms, and in particular, the constraints on aerosol type. We have focused on refining the aerosol products, as well as applying them toward better representing wildfire smoke, desert dust, volcanic ash, and urban pollution in climate models. This presentation will highlight advances over the past several years in each of these areas, including the strengths and limitations for each application.