What We are Learning from (and About) the 10+ Year MISR Aerosol Data Record

R Kahn and the MISR Team (NASA Goddard Space Flight Center, Greenbelt MD 20771; 301-614-6193; e-mail: ralph.kahn@nasa.gov),

Having a 10+ year data record from the Multi-angle Imaging SpectroRadiometer (MISR) significantly improves our opportunities to validate the retrieved aerosol optical depth (AOD) and especially particle microphysical property products. It also begins to raise the possibility of using the data to look for changes or even trends, at least on a regional basis. Further, we have had the opportunity to expand the database of wildfire smoke plume heights derived from the multi-angle observations.

This presentation will review the latest aerosol validation results and algorithm upgrades under consideration by the MISR team, and will summarize the current status of MISR global aerosol air mass type, and regional dust transport and smoke injection height products. The strengths and limitations of these data for constraining aerosol transport model simulations will receive special emphasis.