



## **OSIRIS version 7 aerosol intercomparisons**

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The Optical Spectrograph and InfraRed Imaging System (OSIRIS) was launched on board the Odin satellite in 2001, and has since provided vertical profiles of limb scattered radiance between 280 and 810 nm. These measurements have been used to provide reliable aerosol extinction measurements at 750 nm from altitudes above the tropopause to near 35 km with a vertical resolution of approximately 2 km. The relatively high sampling rate produces hundreds of measurements per day over the sunlit portion of the globe, enabling excellent spatial and temporal sampling of short-lived events. This work compares the new multi-wavelength OSIRIS version 7 aerosol retrieval with data sets from multiple instruments. Occultation measurements from SAGE III/ISS are used as a baseline to investigate general accuracy of the OSIRIS retrieval, while comparisons with CALIPSO and OMPS-LP are used to investigate differences at higher spatial and temporal resolution. Focus is given to measurements during volcanic periods to explore differences arising from spatial inhomogeneities, retrieval assumptions and measurement techniques.