The SAGE III/ISS Version 5.1 Aerosol Data Products and On-going Developments

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The Stratospheric Aerosol and Gas Experiment (SAGE III) is currently flying aboard the International Space Station. In December 2018, Version 5.1 was released and it is considered by the science team to be suitable for validation and scientific applications. A key component of this data set are measurements of stratospheric aerosol extinction coefficient at nine wavelengths between 385 and 1545 nm. These measurements follow the legacy of the 21-year SAGE II mission (1984-2005) and a previous flight of SAGE III aboard the Meteor 3M platform (2002-2005). In this presentation, we will discuss features of the measurements, an initial assessment of data quality and how it fits into long term stratospheric aerosol climatologies such as the Global Space-based Stratospheric Aerosol Climatology (GloSSAC) particularly in light of the long break between SAGE missions.