



An initial look at stratospheric aerosol measurements by SAGE III aboard ISS

Larry Thomason

NASA Langley Research Center, Science Directorate, Hampton, United States (l.w.thomason@nasa.gov)

The Stratospheric Aerosol and Gas Experiment (SAGE III) is currently flying aboard the International Space Station. A key of its mission is the measurement 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 long break between SAGE missions. In addition, we will show some interesting measurements from these early measurements including observations of the August 2017 British Columbia pyrocumulus event.