**THE OMPS and SAGE III Story, A Historical Perspective**

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The Ozone Mapping and Profiler Suite (OMPS) on board the Suomi National Polar-orbiting Partnership (NPP) satellite was launched on October 28, 2011. The Limb Profiler (LP) instrument on OMPS provides high vertical resolution ozone and aerosol profiles from measurements of the scattered solar radiation in the 290 – 1000 nm spectral range. OMPS LP collected its first Earth limb radiance measurements on January 10, 2012, and continues to provide daily, global measurements that enable ozone profile retrievals from cloud top to approximately 60 km and aerosol profile retrievals from cloud top to approximately 40 km. OMPS was conceived to extend the 25 year-plus record of both total column and profile ozone and currently produces these 2 operational products.

The latest Stratospheric Aerosol and Gas Experiment III (SAGE III) will be mounted on the International Space Station (ISS) in December 2016. This SAGE III instrument is the fourth generation of a series of NASA Earth-observing instruments that uses the occultation measurement technique. The first SAGE III instrument was launched on the Russian Meteor-3M in December 2001. SAGE III will measure high vertical resolution profiles of ozone, water vapor, aerosols and other stratospheric constituents that are important in ozone chemistry and will extend the long ozone, water vapor and aerosol record of its predecessors. SAGE III will also have a limb-scattering research mode that will be ideal for validation and process studies. We discuss the historical perspective of both OMPS and SAGE III in the context of high quality ozone and aerosol measurements and present a validation plan through direct comparisons of these 2 instruments after the SAGE III launch.