



## **OZONE RETRIEVAL FROM SAGE III LIMB SCATTERING**

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The Stratospheric Aerosol and Gas Experiment (SAGE III) instrument has been making measurements of the Earth limb radiance in recent months. The limb is scanned at relatively low speed (1 scan / minute) and spectral data is recorded over 340 channels (spread across the UV, visible and near infrared) with a vertical resolution of 0.5 km. Initial data have been analyzed and retrieval of trace gas vertical profiles have been initiated.

Since SAGE III was specifically designed for Solar / Lunar occultations and not optimized for limb scattering, instrument issues such as stray light and attitude registration, play an important part in the data analysis, and they will be discussed in the first part of the paper. The methodologies developed to retrieve Ozone vertical profiles will then be presented and discussed. Since SAGE III is making high resolution spectral measurements over a broad range, one of the retrieval methods is based on Multiple Linear Regression. Retrieved Ozone profiles are compared with coincidental Ozone sonde measurements made during SAGE overpasses above Wallops Island, Virginia, and Lauder, New Zealand.