



Validation of ozone and NO₂ retrievals from MAESTRO instrument on SCISAT 1

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Measurements of Aerosol Extinction in the Stratosphere and Troposphere Retrieved by Occultation (MAESTRO) was launched on August 12, 2003 aboard the Canadian Space Agency's SCISAT 1 along with a Fourier Transform Spectrometer (ACE-FTS). MAESTRO is a diode array spectrophotometer and measures the atmospheric extinction in the occultation mode in the wavelength range 270-1040 nm. Vertical profiles of ozone and NO₂ mixing ratios are currently being retrieved from these measurements and are now publicly available for analysis. We shall present results from intercomparison of these ozone and NO₂ profiles with coincident measurements by ozonesondes, the ACE-FTS, SAGE III and POAM III. In general ozone mixing ratios measured by MAESTRO and the other coincident measurements agree within about 10% between 15-50 km. Further the MAESTRO measurements capture the vertical structures in the mixing ratio profiles. The NO₂ mixing ratios retrieved by MAESTRO agree with most of the correlative measurements within about 10-20% between 20-40 km.