

**SCATTERED SKY OBSERVATIONS OF STRATOSPHERIC
OCIO, NO₂ AND O₃ OVER
HARESTUA (NORWAY, 60°N -10°E) DURING SESAME**

M. Van Roozendael, C. Hermans, J.-C. Lambert and P. C. Simon

Belgian Institute for Space Aeronomy, 3 Av. Circulaire, B-1180 Brussels,
Belgium (michel.vanroozendael@oma.be)

Within the scope of the Second European Stratospheric Arctic and Mid-latitude Experiment (SESAME), stratospheric NO₂, O₃ and OCIO were measured by ground-based UV-visible spectroscopy in Harestua, Norway (60°N, 10°E). The measurements were carried out from the middle of January until the end of March 1994 (SESAME phase I) and from the beginning of November 1994 until the end of March 1995 (SESAME phase III). During phase I, significant OCIO signatures were observed at the end of January and at mid-March 1994. As expected, the abundance of OCIO is correlated to the potential vorticity at 475 K, the largest OCIO columns being seen inside the polar vortex. Although there is a general anticorrelation between OCIO and NO₂, the occurrence of OCIO appears to be mainly related to the stratospheric temperature. These observations are compared to preliminary results of SESAME phase III.