

GROUND BASED NO<sub>2</sub> AND O<sub>3</sub> MEASUREMENTS BY VISIBLE  
SPECTROMETER AT SYOWA STATION, ANTARCTICA  
(ABSTRACT)

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The column amounts of NO<sub>2</sub> and ozone have been measured using visible spectroscopy at Syowa Station (69°S) since March 1990. Ozone was also measured at the same location with a Dobson spectrometer as well as ozonesondes being flown regularly. The characteristic features of the seasonal and diurnal variations of NO<sub>2</sub> are presented. The very low values of NO<sub>2</sub> in mid winter and early spring are consistent with the conditions predicted to be needed for heterogeneous ozone destruction in early spring. In late spring and summer of 1991, NO<sub>2</sub> amounts were considerably smaller than in 1990, presumably due to the effect of the Mt. Pinatubo eruption.

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