



Seasonal variation of total NO_x from MIPAS-ENVISAT

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MIPAS (Michelson Interferometer for Passive Atmospheric Sounding) is a high spectral resolution fourier transform spectrometer measuring atmospheric emission from the Earth's limb in the infra-red. It was launched aboard the ENVISAT satellite in March 2002 and is capable of detecting a wide variety of trace species at fine vertical resolution of between 1.5 and 3.0 km in the stratosphere.

Catalytic cycles involving the NO_x species constitute the principal natural processes whereby ozone is removed from the stratosphere. We observe the seasonal variation of total NO_x (NO+NO₂+2N₂O₅) on a global scale with a view to discovering the possible causes of the observed variations over the period examined (2002-2004). Improvements are made to the retrieval of N₂O₅ which is complicated by the scarcity of this gas and the fact that it is somewhat spectrally indistinct from the aerosol continuum.