

SPARC Data Initiative - Nimbus 7 LIMS version 6 data

Murali Natarajan[†]; Gretchen Lingenfelter; Ellis Remsberg; T. Duncan Fairlie

[†] NASA Langley Research Center, USA

Leading author: Murali.Natarajan@nasa.gov

The Nimbus 7 LIMS experiment obtained stratospheric distributions of ozone (O₃), water vapor (H₂O), nitric acid (HNO₃), and nitrogen dioxide (NO₂) for the 7 months of November 1978 through May 1979. The LIMS radiance profiles were re-processed to a Version 6 (V6) dataset that was archived recently. In support of the SPARC Data Initiative, monthly, zonally-averaged files of the species have been prepared from the LIMS Level 3 daily, zonal mean coefficients. The summation of HNO₃ and nighttime NO₂ represents a lower bound for the monthly distribution of NO_y in the stratosphere. Examples of the distributions of these species will be shown along with estimates of the uncertainties of their zonal means.