A Climatology of Stratospheric ClO Based on UARS MLS Measurements

M.L. Santee (1), J.W. Waters (1), G.L. Manney (1,2), W.G. Read (1), N.J. Livesey (1)

(1) Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, USA
(2) Visiting Dept of Natural Resources Management, New Mexico Highlands University, NM, USA

The Microwave Limb Sounder (MLS) onboard the Upper Atmosphere Research Satellite (UARS) made measurements of stratospheric ClO through more than eight complete annual cycles in both hemispheres (albeit with increasingly limited data coverage in later years). The MLS ClO data set is uniquely suited to studying the seasonal, interhemispheric, and interannual variations in the distribution of ClO throughout the stratosphere. This poster will present a ClO climatology derived from the MLS measurements, with a particular emphasis on ClO enhancements in the winter polar lower stratosphere and their interannual variability. In addition, an overview of the characteristics of version 5 MLS ClO data will be presented, including a brief summary of the differences between the version 4 and version 5 MLS ClO retrievals.

Corresponding address:
M.L. Santee, Jet Propulsion Laboratory, Mail Stop 183-701,
4800 Oak Grove Drive, Pasadena, CA 91109, USA.
Phone: 818-354-9424, Fax: 818-393-5065, email: mls@praxis.jpl.nasa.gov