# Temperature Validation

**R.J. Sica**, (2008),**Validation of the Atmospheric Chemistry Experiment (ACE) version 2.2 temperature using ground-based and space-borne measurements**, Atmospheric Chemistry and Physics, 8, 35-62

**C2H2**

C. P. Rinsland, (2005), Atmospheric Chemistry Experiment (ACE) measurements of elevated Southern Hemisphere upper tropospheric CO, C2H6, HCN, and C2H2 mixing ratios from biomass burning emissions and long-range transport, Geophysical Research Letters, 32, L20803

**K. A. Tereszchuk**, (2011), **ACE-FTS measurements of trace species in the characterization of biomass burning plumes**, Atmospheric Chemistry and Physics, 11, 12169-12179

**C2H6**

C. P. Rinsland, (2005), Atmospheric Chemistry Experiment (ACE) measurements of elevated Southern Hemisphere upper tropospheric CO, C2H6, HCN, and C2H2 mixing ratios from biomass burning emissions and long-range transport, Geophysical Research Letters, 32, L20803

**M. Park**, (2008), **Chemical isolation in the Asian monsoon anticyclone observed in Atmospheric Chemistry Experiment (ACE-FTS) data**, Atmospheric Chemistry and Physics, 8, 757-764

**CCl2F2**

C. P. Rinsland, (2005), Trends of HF, HCl, CCl2F2, CCl3F, CHClF2 (HCFC-22), and SF6 in the lower stratosphere from Atmospheric Chemistry Experiment (ACE) and Atmospheric Trace Molecule Spectroscopy (ATMOS) measurements near 30°N latitude, Geophysical Research Letters, 32, L16S03

**A. T. Brown**, (2011), **Trends in atmospheric halogen containing gases since 2004**, Journal of Quantitative Spectroscopy and Radiative Transfer, 112, 2552-2566

# CCl3F

C. P. Rinsland, (2005), Trends of HF, HCl, CCl2F2, CCl3F, CHClF2 (HCFC-22), and SF6 in the lower stratosphere from Atmospheric Chemistry Experiment (ACE) and Atmospheric Trace Molecule Spectroscopy (ATMOS) measurements near 30°N latitude, Geophysical Research Letters, 32, L16S03

**A. T. Brown**, (2011), **Trends in atmospheric halogen containing gases since 2004**, Journal of Quantitative Spectroscopy and Radiative Transfer, 112, 2552-2566

**CCl4**

**A. T. Brown**, (2011), **Trends in atmospheric halogen containing gases since 2004**, Journal of Quantitative Spectroscopy and Radiative Transfer, 112, 2552-2566

**A. T. Brown**, (2013), **Stratospheric lifetimes of CFC-12, CCl4, CH4, CH3Cl and N2O from measurements made by the Atmospheric Chemistry Experiment-Fourier Transform Spectrometer (ACE-FTS)**, Atmospheric Chemistry and Physics, 13, 6921-6950

**CF4**

**C. P. Rinsland**, (2006), **Long-term stratospheric carbon tetrafluoride (CF4) increase inferred from 1985– 2004 infrared space-based solar occultation measurements**, Geophysical Research Letters, 33, L02808

**A. T. Brown**, (2011), **Trends in atmospheric halogen containing gases since 2004**, Journal of Quantitative Spectroscopy and Radiative Transfer, 112, 2552-2566

# CH3Cl

C. P. Rinsland, (2007), Satellite boreal measurements over Alaska and Canada during June–July 2004: Simultaneous measurements of upper tropospheric CO, C2H6, HCN, CH3Cl, CH4, C2H2, CH3OH, HCOOH, OCS, and SF6 mixing ratios, Global Biogeochemical Cycles, 21, GB3008

**M. Park**, (2008), **Chemical isolation in the Asian monsoon anticyclone observed in Atmospheric Chemistry Experiment (ACE-FTS) data**, Atmospheric Chemistry and Physics, 8, 757-764

**CH4**

C. P. Rinsland, (2007), Satellite boreal measurements over Alaska and Canada during June–July 2004: Simultaneous measurements of upper tropospheric CO, C2H6, HCN, CH3Cl, CH4, C2H2, CH3OH, HCOOH, OCS, and SF6 mixing ratios, Global Biogeochemical Cycles, 21, GB3008

**C. P. Rinsland**, (2009), **Trend of lower stratospheric methane (CH4) from atmospheric chemistry experiment (ACE) and atmospheric trace molecule spectroscopy (ATMOS) measurements**, Journal of Quantitative Spectroscopy and Radiative Transfer, 110, 1066-1071

# CHF2Cl (CHClF2)

C. P. Rinsland, (2005), Trends of HF, HCl, CCl2F2, CCl3F, CHClF2 (HCFC-22), and SF6 in the lower stratosphere from Atmospheric Chemistry Experiment (ACE) and Atmospheric Trace Molecule Spectroscopy (ATMOS) measurements near 30°N latitude, Geophysical Research Letters, 32, L16S03

**A. T. Brown**, (2011), **Trends in atmospheric halogen containing gases since 2004**, Journal of Quantitative Spectroscopy and Radiative Transfer, 112, 2552-2566

# ClONO2

**G. Dufour**, (2006), **Partitioning between the inorganic chlorine reservoirs HCl and ClONO2 during the Arctic winter 2005 from the ACE-FTS**, Atmospheric Chemistry and Physics, 6, 2355-2366

**D. J. Lary**, (2007), **Variations in stratospheric inorganic chlorine between 1991 and 2006**, Geophysical Research Letters, 34, L21811

# CO

**C. Clerbaux**, (2005), **Carbon monoxide distribution from the ACE-FTS solar occultation measurements**, Geophysical Research Letters, 32, L16S01

**G. L. Manney**, (2009), **Satellite observations and modeling of transport in the upper troposphere through the lower mesosphere during the 2006 major stratospheric sudden warming**, Atmospheric Chemistry and Physics, 9, 4775-4795

**COF2**

**A. T. Brown**, (2011), **Trends in atmospheric halogen containing gases since 2004**, Journal of Quantitative Spectroscopy and Radiative Transfer, 112, 2552-2566

**H2CO**

**P.-F. Coheur**, (2007), **ACE-FTS observation of a young biomass burning plume: first reported measurements of C2H4, C3H6O, H2CO and PAN by infrared occultation from space**, Atmospheric Chemistry and Physics, 7, 5437-5446

**G. Dufour**, (2009), **Global upper-tropospheric formaldehyde: seasonal cycles observed by the ACE-FTS satellite instrument**, Atmospheric Chemistry and Physics, 9, 3893-3910

**H2O**

**R. Nassar**, (2005), **Stratospheric abundances of water and methane based on ACE-FTS measurements**, Geophysical Research Letters, 32, L15S04

**R. Nassar**, (2007), **Variability in HDO/H2O abundance ratios in the tropical tropopause layer**, Journal of Geophysical Research: Atmospheres, 112, D21305

**H2O2**

**C. Rinsland**, (2007), **Detection of elevated tropospheric hydrogen peroxide (H2O2) mixing ratios in atmospheric chemistry experiment (ACE) subtropical infrared solar occultation spectra**, Journal of Quantitative Spectroscopy and Radiative Transfer, 107, 340-348

**N. D. Allen**, (2012), **Satellite observations of the global distribution of hydrogen peroxide (H2O2) from ACE**, Journal of Quantitative Spectroscopy and Radiative Transfer, 115, 66-77

# HCl

**D. J. Lary**, (2007), **Variations in stratospheric inorganic chlorine between 1991 and 2006**, Geophysical Research Letters, 34, L21811

C. P. Rinsland, (2005), Trends of HF, HCl, CCl2F2, CCl3F, CHClF2 (HCFC-22), and SF6 in the lower stratosphere from Atmospheric Chemistry Experiment (ACE) and Atmospheric Trace Molecule Spectroscopy (ATMOS) measurements near 30°N latitude, Geophysical Research Letters, 32, L16S03

# HCN

**M. Park**, (2008), **Chemical isolation in the Asian monsoon anticyclone observed in Atmospheric Chemistry Experiment (ACE-FTS) data**, Atmospheric Chemistry and Physics, 8, 757-764

C. P. Rinsland, (2005), Atmospheric Chemistry Experiment (ACE) measurements of elevated Southern Hemisphere upper tropospheric CO, C2H6, HCN, and C2H2 mixing ratios from biomass burning emissions and long-range transport, Geophysical Research Letters, 32, L20803

# HCOOH

**C. P. Rinsland**, (2006), **First space-based observations of formic acid (HCOOH): Atmospheric Chemistry Experiment austral spring 2004 and 2005 Southern Hemisphere tropical-mid-latitude upper tropospheric measurements**, Geophysical Research Letters, 33, L23804

G. G. Abad, (2009), Global distribution of upper tropospheric formic acid from the ACE-FTS,

Atmospheric Chemistry and Physics, 9, 8039-8047

# HF

**A. T. Brown**, (2011), **Trends in atmospheric halogen containing gases since 2004**, Journal of Quantitative Spectroscopy and Radiative Transfer, 112, 2552-2566

C. P. Rinsland, (2005), Trends of HF, HCl, CCl2F2, CCl3F, CHClF2 (HCFC-22), and SF6 in the lower stratosphere from Atmospheric Chemistry Experiment (ACE) and Atmospheric Trace Molecule Spectroscopy (ATMOS) measurements near 30°N latitude, Geophysical Research Letters, 32, L16S03

**HNO3**

**M. Park**, (2008), **Chemical isolation in the Asian monsoon anticyclone observed in Atmospheric Chemistry Experiment (ACE-FTS) data**, Atmospheric Chemistry and Physics, 8, 757-764

**A. Jones**, (2011), **A global inventory of stratospheric NOy from ACE-FTS**, Journal of Geophysical Research: Atmospheres, 116, D17304

**HO2NO2**

**A. Jones**, (2011), **A global inventory of stratospheric NOy from ACE-FTS**, Journal of Geophysical Research: Atmospheres, 116, D17304

**N2**

**A. Goldman**, (2007), **On the l ine parameters for the X1Σg+ (1–0) infrared quadrupolar transitions of 14N2**, Journal of Quantitative Spectroscopy and Radiative Transfer, 103, 168-174

**N2O**

**R. Nassar**, (2005), **ACE-FTS measurements across the edge of the winter 2004 Arctic vortex**, Geophysical Research Letters, 32, L15S05

**A. T. Brown**, (2013), **Stratospheric lifetimes of CFC-12, CCl4, CH4, CH3Cl and N2O from measurements made by the Atmospheric Chemistry Experiment-Fourier Transform Spectrometer (ACE-FTS)**, Atmospheric Chemistry and Physics, 13, 6921-6950

**N2O5**

**A. Jones**, (2011), **A global inventory of stratospheric NOy from ACE-FTS**, Journal of Geophysical Research: Atmospheres, 116, D17304

**K. A. Tereszchuk**, (2011), **ACE-FTS measurements of trace species in the characterization of biomass burning plumes**, Atmospheric Chemistry and Physics, 11, 12169-12179

# NO

**C. P. Rinsland**, (2005), **Atmospheric Chemistry Experiment (ACE) Arctic stratospheric measurements of NOx during February and March 2004: Impact of intense solar flares**, Geophysical Research Letters, 32, L16S05

**A. Jones**, (2011), **A global inventory of stratospheric NOy from ACE-FTS**, Journal of Geophysical Research: Atmospheres, 116, D17304

**NO2**

**D. G. Dufour**, (2006), **Simultaneous Measurements of Visible (400−700 nm) and Infrared ( 3. 4 μm) NO2 Absorption**, The Journal of Physical Chemistry A, 110, 12414-12418

**C. E. Randall**, (2009), **NOx descent in the Arctic middle atmosphere in early 2009**, Geophysical Research Letters, 36, L18811

**O3**

**N. R. P. Harris**, (2010), **A closer look at Arctic ozone loss and polar stratospheric clouds**, Atmospheric Chemistry and Physics, 10, 8499-8510

**C. S. Singleton**, (2007), **Quantifying Arctic ozone loss during the 2004–2005 winter using satellite observations and a chemical transport model**, Journal of Geophysical Research: Atmospheres, 112, D07304

# OCS

**M. P. Barkley**, (2008), **Global distributions of carbonyl sulfide in the upper troposphere and stratosphere**, Geophysical Research Letters, 35, L14810

**C. P. Rinsland**, (2008), **Measurements of long-term changes in atmospheric OCS (carbonyl sulfide) from infrared solar observations**, Journal of Quantitative Spectroscopy and Radiative Transfer, 109, 2679- 2686

**SF6**

C. P. Rinsland, (2007), Satellite boreal measurements over Alaska and Canada during June–July 2004: Simultaneous measurements of upper tropospheric CO, C2H6, HCN, CH3Cl, CH4, C2H2, CH3OH, HCOOH, OCS, and SF6 mixing ratios, Global Biogeochemical Cycles, 21, GB3008

**A. T. Brown**, (2011), **Trends in atmospheric halogen containing gases since 2004**, Journal of Quantitative Spectroscopy and Radiative Transfer, 112, 2552-2566