

EOS Aura Science Team Meeting
1-5 October 2007
Pasadena Convention Center – Pasadena, CA
Agenda

Monday, 1 October 2007

8:00 – 9:00 *Registration*

9:00 – 12:00 *Working Group Meetings*

Meteorological Products – Gloria Manney

Aerosols – Steve Massie

Education and Public Outreach – Brooke Carter

12:15 - 1:30 *Lunch*

1:30 – 5:00 *Working Group Meetings*

Validation – Lucien Froidevaux and Anne Douglass

Data Systems – Cheryl Craig

PI DINNER – Specifics to be provided at a later date

Tuesday, 2 October 2007

8:30 – 12:00 *Working Group Meetings*

Tropospheric WG – Air Quality from Space – Bryan Duncan and Ken Pickering

Mission Operations – Angie Kelly

12:15 - 1:30 *Lunch*

Session Chair: Michelle Santee

1:30 – 1:35 Welcome and Logistics – Nathaniel Livesey

1:35 – 1:45 Introduction – Mark Schoeberl

1:45 - 2:00 NASA Headquarters – Ernie Hilsenrath

2:00 – 3:00 TES Reinhard Beer

OMI Pieter Levelt

MLS Nathaniel Livesey

HIRDLS John Gille / John Barnett

3:00 – 3:30 *Break*

3:30-3:45 Education and Public Outreach Report (Brooke Carter)

3:45-4:00 Comparison of HIRDLS and COSMIC GPS radio occultation temperature profiles (John Barnett)

4:00-4:15 OMI HCHO, BrO, and OCIO - Validation Status and Outlook (Thomas P. Kurosu)

4:15-4:30 Observing the diurnal variation of NO_x chemistry and emissions from space (Folkert Boersma)

4:30-4:45 The Atmospheric Chemistry Experiment (ACE): After Four Years In-orbit (Kaley Walker)

4:45-5:00 Intercomparison of Middle Atmospheric Water Vapor Measurements from EOS-MLS, HALOE, and WVMS (Gerald Nedoluha)

5:00-5:15 Polar winter balloon-borne observations for Aura Validation (Robert Stachnik)

5:15-5:30 Nitric acid/ozone correlations as a tool for validating Aura MLS nitric acid retrievals in the upper troposphere and lower stratosphere (Peter Popp)

Wednesday, 3 October 2007

Session Chairs: Joanna Joiner and Kevin Bowman

- 8:15-8:30 Data Systems Working Group Report (Cheryl Craig)
- 8:30-8:45 Validation of OMI Radiances in the Ultraviolet and Ozone Profiles with MLS Data (Xiong Liu)
- 8:45-9:00 Comparison of NO₂ in situ aircraft measurements with data from OMI (Eric Bucsela)
- 9:00-9:15 Validation of MLS OH measurements with FTUVS total OH column measurements at Table Mountain, California (S. Wang)
- 9:15-9:30 Direct sampling of tropospheric volcanic plumes in Ecuador and Colombia during TC4 (Simon Carn)
- 9:30-9:45 Comparison of Airborne Sunphotometer and OMI Retrievals of Aerosol Optical Depth during MILAGRO/INTEX-B (John Livingston)
- 9:45-10:00 Comparison of Aura HIRDLS and Envisat MIPAS Measurements - Case study (Christopher Hepplewhite)
- 10:00 – 10:15 *Break*
- 10:15-10:30 Mission Operations Working Group Report (Angie Kelly)
- 10:30-10:45 Balloon Borne Cryogenic Frostpoint Hygrometer Measurements in Support of Aura Water Vapor Validation (Holger Vömel)
- 10:45-11:00 North American Tropospheric Ozone Profiles from IONS (INTEX Ozonesonde Network Study, 2004, 2006): Aura Applications and Statistics for Pollution Comparisons (Anne M. Thompson)
- 11:00-11:15 HIRDLS Observations of Strat-Trop Exchange in Thin Laminae in the Sub-Tropical Jet Region (John Gille)
- 11:15-11:30 Variations in Stratospheric Cly Between 1991 and the present (David Lary)
- 11:30-11:45 Studying the subvortex in the lowermost stratosphere using new trace gas measurements from Aura MLS (Michelle Santee)
- 11:45-12:00 Stratospheric Ozone: Depletion and Recovery (Ross Salawitch)
- 12:00 - 1:30 *Lunch*
- Session Chair: Annmarie Eldering and Richard Stolarski**
- 1:30-1:45 Aerosols/Clouds/SO₂ Working Group Report (Steven Massie)
- 1:45-2:00 Temporal variability and wave activity from the tropical tropopause layer to 33 km: Radiosonde observations from Ticosonde/TC4, June-August 2007 (Henry Selkirk)
- 2:00-2:15 Impact of Recent Laboratory Measurements of the ClOOCl Absorption Cross Section On Our Understanding of Polar Ozone Chemistry (Tim Canty)
- 2:15-2:30 Tracer Correlations In the Tropopause Region Over the Pacific During INTEX-B: Statistical Comparisons of MLS and In Situ Tracer Measurement Distributions at 215 hPa (Melody Avery)
- 2:30-2:45 Gravity Waves and Equatorial Waves Observed by HIRDLS (M. Joan Alexander)
- 2:45-3:00 Validation Working Group Report (Lucien Froidevaux)
- 3:00 – 5:30 POSTER SESSION

Thursday, 4 October 2007

Session Chair: Mark Schoeberl and John Worden

- 8:15-8:30 Meteorological Products Working Group Report (Gloria Manney)
- 8:30-8:45 TES Observations of Tropospheric Ozone as a Greenhouse Gas (Helen Worden)
- 8:45-9:00 PDFs of Upper Tropospheric Humidity: Measurements and Theory (Darryn Waugh)
- 9:00-9:15 The effects of convective ice lofting on H₂O and HDO in the tropical tropopause layer (TTL) (Andrew Dessler)
- 9:15-9:30 Results from Aura MLS and the in situ hygrometers during the Costa Rica AVE campaign on the annual cycles of tropical UTLS H₂O and CO (William Read)
- 9:30-9:45 Optical effects of clouds on trace gas absorption (Joanna Joiner)
- 9:45-10:00 Global Distribution of Absorbing Aerosols as seen by OMI (Omar Torres)
- 10:00 – 10:30 *Break*
- 10:30-10:45 HIRDLS Observations of Subvisible Cirrus (Steven Massie)
- 10:45-11:00 Aerosol Properties from OMI Measurements: Potential of the Multi-wavelength Algorithm (Ben Veihelmann)
- 11:00-11:15 Evaluation of the global hydrologic cycle with HDO measurements from TES (David Noone)
- 11:15-11:30 The effect of convection on the composition of the upper tropical troposphere as seen by MLS (Leonhard Pfister)
- 11:30-11:45 Near-real time OMI NO₂ and the assimilation of satellite data with regional-scale air quality models for the Netherlands and Europe (Henk Eskes)
- 11:45-12:00 Global Ozone Determined from Assimilation of OMI and MLS Retrievals (Steven Pawson)
- 12:00 -12:15 Assessment of GEOS-Chem and GFDL AM2 models with assimilated TES observations: Implications for North American tropospheric ozone (Kevin Bowman)
- 12:15 - 1:30 *Lunch*

Session Chair: Charles Jackman (co-chair TBD)

- 1:30-1:45 An overview of trace gas retrievals from AIRS (Fredrick W. Irion)
- 1:45-2:00 Towards understanding the impact of TTL cirrus clouds on troposphere-to-stratosphere transport (Hui Su)
- 2:00-2:15 A-Train Tropospheric Chemistry Observations on 30 August 2006 over the 2006 TexAQS/GoMACCS Study Area (Wallace McMillan)
- 2:15-2:30 Convective transport of surface pollution: New observations from the "A-Train" satellites (Jonathan H. Jiang)
- 2:30-2:45 Tropospheric Chemistry Working Group Report
- 2:45-3:00 Ground-level nitrogen dioxide concentrations inferred from OMI (Randell Martin)
- 3:00 – 3:30 *Break*

- 3:30-3:45 Recent increases in Asian emissions and consequences for transpacific ozone pollution in the United States: Aura and INTEX-B observations (Lin Zhang)
- 3:45-4:00 Analysis of TES Observations from the 2006 TexAQS/GoMACCS Campaign (Gregory Osterman)
- 4:00-4:15 Elevated tropical tropospheric ozone and CO during the 2006 El Niño from TES observations and GEOS-Chem simulations (Ray Nassar)
- 4:15-4:30 Interpreting Aura MLS observations of hydrogen cyanide using a chemistry transport model (Qian Li)
- 4:30-4:45 The effects of the 2006 El Niño on tropospheric composition as revealed by data from the Tropospheric Emission Spectrometer (TES) (Jennifer Logan)
- 4:45-5:00 On inferring urban and agricultural NO_x emissions from space (Ronald Cohen)
- 5:00-5:15 TES and OMI observations to study chemical evolution of Siberian Boreal fire plumes (Sunita Verma)

Friday, 5 October 2007

Session Chair: Jacquie Witte (co-chair TBD)

- 8:15-8:30 Improved temporal constraints on and vertical injections of biomass burning emissions: Implications on global aerosol simulation (Yang Chen)
- 8:30-8:45 Convective Events OMI Tropospheric NO₂ from Lightning in Observed (Kenneth Pickering)
- 8:45-9:00 Understanding Synoptic Controls on North American Pollutant Export using TES Observations (Jennifer Hegarty)
- 9:00-9:15 Observations of The Middle East Ozone “Maximum” (John Worden)
- 9:15-9:30 Spatial distribution of isoprene emissions from North America derived from formaldehyde column measurements by the OMI satellite sensor (Dylan Millet)
- 9:30-9:45 Constraints on the lightning NO_x emissions over the USA using TES, NLDN, IONS data and the GEOS-Chem model (Line Jourdain)
- 9:45-10:00 A Satellite Perspective on the Interhemispheric Transport of Pollution (Chenxia Cai)
- 10:00-10:15 Analysis of OMI Tropospheric NO₂ data for Northwestern Europe (Pepijn Veefkind)

ACTION ITEMS FINAL ANNOUNCEMENTS

11:00 - ADJOURN