

9th Atmospheric Limb Workshop

June 12-14, 2017, Saskatoon, Saskatchewan, Canada

Sheraton Cavalier Saskatoon Hotel, Centre Room



Day 1 - Monday, June 12, 2017

7:30 AM - 9:00 AM Breakfast (Centre Room)

9:00 AM - 9:30 AM Adam Bourassa Opening Session

Session 1: Missions and Instrumentation (Chair - Adam Bourassa)

9:30 AM - 9:45 AM Ted Lewellyn A Short History of Limb Observations at Saskatchewan

9:45 AM - 10:10 AM David Flittner (presented by Robert Damadeo) Earth Science with the Stratospheric Aerosol and Gas Experiment III (SAGE III) on the International Space Station: Status Update

10:10 AM - 10:35 AM Doug Degenstein The OSIRIS Mission Update

10:35 AM - 11:00 AM Coffee Break

Session 1: Missions and Instrumentation (Chair - Adam Bourassa)

11:00 AM - 11:15 AM Chris Boone Mission Overview and Recent Results for the Atmospheric Chemistry Experiment (ACE)

11:15 AM - 11:30 AM Craig Haley Limb Scatter Instrument Development at Honeywell - CATS and ALI

11:30 AM - 11:45 AM Arvid Hammar Development of the Imagers for the MATS Satellite

11:45 AM - 12:00 PM Kaley Walker Overview of Validation for the Atmospheric Chemistry Experiment

12:00 PM - 12:15 PM Nathaniel Livesey The Looming Chasm in Spaceborne Limb Sounding Observations of Atmospheric Composition and Challenges to Filling It

12:15 PM - 1:30 PM Lunch

Session 2: Stratosphere (Chair - Kaley Walker)

1:30 PM - 1:45 PM Donal Murtagh Reprocessing of the Odin/SMR Dataset

1:45 PM - 2:00 PM Christine Bingen (presented by Charles Robert) GOMOS Retrieval of Stratospheric Aerosols and Gases Using AerGOM: Current Activities and Perspectives

2:00 PM - 2:15 PM Steffen Dörner Spectral Characterization of SCHIAMACHY Spatial Straylight

2:15 PM - 2:30 PM Jeremy Harrison Satellite Observations of Phosgene (COCl₂) and Comparisons with SLIMCAT Chemical Transport Model Calculations

2:30 PM - 2:45 PM Farahnaz Khosrawi Arctic winter 2015/2016: Denitrification, Dehydration and Ozone Loss as Simulated with the Chemistry-Climate Model EMAC and Observed by Aura/MLS

2:45 PM - 3:00 PM Natalya Kramarova Validation of Ozone Profile Retrievals from NASA GSFC version 2.5 Against the Correlative Satellite Measurements

3:00 PM - 3:15 PM Carlo Arosio Retrieval of Stratospheric Ozone Profiles from OMPS Measurements in Limb Viewing Geometry

3:15 PM - 3:45 PM Coffee Break

Session 2: Stratosphere (Chair - Kaley Walker)

3:45 PM - 4:10 PM Larry Thomason The SAGE III/ISS Mission and the Global Space-Based Stratospheric Aerosol Climatology

4:10 PM - 4:25 PM Alexandra Laeng Analyses of Intraseasonal Ozone Variations

4:25 PM - 4:40 PM Elizaveta Malinina Partical Size Distribution of Stratospheric Aerosol Retrieved from SCHIAMACHY Limb Data

4:40 PM - 4:55 PM Chris McLinden Assessing the Impact of Limb Sounding on the Monitoring of Surface Nitrogen Dioxide

4:55 PM - 5:10 PM Ghassan Taha Assessment of OMPS Limb Profiler Aerosol Extinction Measurements

6:00 PM - 8:30 PM Ice Breaker (Metric Garden Lounge, Delta Bessborough Hotel)

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Day 2 - Tuesday, June 13, 2017

7:30 AM - 9:00 AM Breakfast (Centre Room)

Session 3: UTLS (Chair - Doug Degenstein)

9:00 AM - 9:25 AM William Randel Variations of Stratospheric Reactive Nitrogen and Ozone Related to the QBO

9:25 AM - 9:40 AM Michael Hoepfner Airborne Limb-Imaging Investigations of the Lowermost Stratosphere with GLORIA on HALO in Winter 2015/16

9:40 AM - 9:55 AM Jeffery Langille Exploring the Sensitivity and Sampling Capabilities of the Spatial Heterodyne Observations of Water (SHOW) Instrument from a High Altitude Aircraft

9:55 AM - 10:10 AM Alexei Rozanov Improved Ozone Retrieval from SCHIAMACHY Limb Measurements

10:10 AM - 10:25 AM Robert Loughman Aerosol Characterization Through the Combination of Occultation and Limb Scattering Observations

10:25 AM - 10:55 AM Coffee Break

Session 3: UTLS (Chair - Doug Degenstein)

10:55 AM - 11:20 AM Michelle Santee Characterizing the climatological composition and intraseasonal and interannual variability of the Asian summer monsoon anticyclone based on 12 years of Aura Microwave Limb Sounder measurements

11:20 AM - 11:35 AM Chris Roth Ozone trends from SAGE II, OSIRIS and OMPS

11:35 AM - 11:50 AM Patrick Sheese 2016: A Stratospheric HCN Oddity

11:50 AM - 12:05 PM Chris Sioris OSIRIS Observations of Upper Tropospheric NO₂ in the Northern Extratropics: Importance of Aircraft NO_x

12:05 PM - 12:20 PM Christian von Savigny On a Potential Solar 27-day Signature in Tropospheric Clouds

12:20 PM - 1:00 PM Bagged Lunch

1:00 PM - 5:00 PM *Excursions or Free Time (various options)*

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Day 3 - Wednesday, June 14, 2017

7:30 AM - 9:00 AM Breakfast (Centre Room)

Session 4: Agencies and Programmes (Chair - Nick Lloyd)

9:00 AM - 9:15 AM Pawan Bhartia A Saunter Through the Labyrinth of Limb Scattering Technique

9:15 AM - 9:30 AM Fiona Tummon The Stratosphere-troposphere Processes And their Role in Climate (SPARC) Project

9:30 AM - 9:45 AM Thomas von Clarmann Towards Unified Error Reporting (TUNER)

9:45 AM - 10:00 AM Gabriele Stiller The SPARC Water Vapour Assessment (WAVAS) Activity, Phase II: Goals, Methods and Status

10:00 AM - 10:15 AM Marcus Dejmek Presentation from the Canadian Space Agency

10:15 AM - 10:30 AM Rob Damadeo The SPARC LOTUS Initiative

10:30 AM - 11:00 AM Coffee Break

Session 5: Mesosphere (Chair - Thomas von Clarmann)

11:00 AM - 11:25 AM Ole Martin Christensen Tomography in the Mesosphere

11:25 AM - 11:50 AM Bernd Funke Energetic Particle Impacts on the Atmosphere: Observational Constraints

11:50 AM - 12:05 PM Stefan Bender O₂(1Σ) and O₂(1Δ) volume emission rates in the mesosphere and lower thermosphere derived from SCIAMACHY MLT limb scans

12:05 PM - 12:20 PM Lina Broman Combining Noctilucent Cloud Data from OSIRIS Limb Tomography and CIPS Nadir Imaging: Challenges and Opportunities

12:20 PM - 1:30 PM Lunch

Session 5: Mesosphere (Chair - Thomas von Clarmann)

1:30 PM - 1:55 PM Christian von Savigny Studying Mesospheric Physics and Chemistry Using Limb Observations of Airglow Emissions

1:55 PM - 2:10 PM Stefan Bender Mesospheric Nitric Oxide (NO) Time Series from SCIAMACHY and Analysis

2:10 PM - 2:25 PM Matthew DeLand PMC Observations with the Suomi NPP OMPS Limb Profiler

2:25 PM - 2:40 PM Joonas Kiviranta SANOMA - Applications of an Empirical Model of Nitric Oxide in the Upper Mesosphere and Lower Thermosphere

2:40 PM - 3:10 PM Final Discussion

3:10 PM - 5:00 PM *Coffee Break & Poster Session*

6:00 PM - 9:00 PM **Banquet (Top of the Inn, Sheraton Cavalier)**