

ASOM 39 PROGRAM

MONDAY (20 August 2012)

10:00 **Registration**

11:00 – 11:15 **Conference opening**

11:15 – 11:45 **Keynote lecture**

Georg Witt – *"Light emission and scattering in the upper atmosphere - new insight, new techniques, remaining, new frontiers"*

11:45 – 12:25 **Session 5** **Chairman: Tymon Zielinski**

1. **Daniel Whiter (D. Whiter, N. Partamies, B. Gustavsson, and L. Sangalli)** – *"The peak emission height of the aurora"*

12:30 – 14:00 **Lunch**

14:00 – 16:30 **Session 7** **Chairman: Krzysztof Markowicz**

1. **Victor Alpatov (V. Alpatov, V.N. Vasenev, S.S. Nikolaisvili, and J.V. Smirnov)** – *"Experiment TERMINATOR on the International Space Station"*
2. **Laureline Sangalli (B. Gustavsson, N. Partamies, K. Kauristie)** – *"Event Study of the Peak Auroral Emission Altitude from All-sky Images"*

Coffee break

3. **Iwona S. Stachlewska (I.S. Stachlewska, A. Szkop, A. Stachlewski, and A.J. Zielińska)** – *"Calibration of the CHM_15k ceilometer in clean and polluted conditions."*
4. **Artur Szkop (A. Szkop and I.S. Stachlewska)** – *"On retrieving of the lidar ratio profile from ceilometer measurements"*
5. **Dag Lorentzen (L. Baddeley, F. Sigernes, M. Dyrland, J. Moen and P. Brekke)** - *"The Longyearbyen Dynamic Coherent Radar – a Norwegian SuperDARN radar"*

TUESDAY (21 August 2012)

10:00 – 10:30 Keynote lecture

Carl-Fredrik Enell – *"Quantitative auroral imaging with CCD cameras"*

10:30 – 12:30 Session 4 Chairman: Daniel Whiter

- 1. Petr Ammosov (G.A. Gavrilieva, P.P. Ammosov, and I.I. Koltovskoi)** – *"Long-term temperature trend of the mesopause over Yakutia"*
- 2. Anatoly Semenov (A. Semenov, N. Shefov, and K. Lipatov)** – *"Studies of infrared atmospheric system emission of molecular oxygen of the terrestrial upper atmosphere"*

Coffee break

- 3. Nikloz Gudadze (N. Gudadze, G. Didebulidze, and M. Todua)** – *"Influence of seasonal variations of atomic oxygen density on the red 630.0 nm nightglow intensity observed at Abastumani (41.76°N, 42.83°E)"*
- 4. Irina Medvedeva (I. Medvedeva, V. Perminov, and A. Semenov)** – *"Studying activity of wave processes in the mesopause region according to middle-latitude measurements of OH emission"*

12:30 – 14:00 Lunch

14:00 – 16:30 Session 4 and poster presentations Chairman: Carl-Fredrik Enell

- 1. Jens Lautenbach (J. Lautenbach, J. Höffner, M. Kopp, and F.-J. Lübken)** – *"Ten-year climatology of potassium density in the mesopause region at 54°N"*
- 2. Margit Dyrland (M. Dyrland, S.E. Holmen, F. Sigernes, M. Taylor, D. Pautet, C. Hall, and M. Ttutsumi)** – *"Characteristics of atmospheric gravity waves observed in airglow images from 78°N"*
- 3. Silje E. Holmen (S. E. Holmen, M. Dyrland, and F. Sigernes)** – *"An update on the Svalbard hydroxyl temperature record"*

Posters

- 1. Michał Posyniak (M. Posyniak, S.P. Malinowski, and T. Stacewicz)** – *"Application of Kalman filter to lidar data"*
- 2. Monika E. Andersson (M.E. Andersson, P.T. Verronen, S. Wang, C.J. Rodger, M.A. Clilverd, and B.R. Carson)** – *"Precipitating radiation belt electrons and enhancements of mesospheric hydroxyl during 2004-2009"*
- 3. Paulina Sokół (P. Sokół and I.S. Stachlewska)** – *"Evaluation of the boundary layer morning transition using the CL-31 ceilometer backscattered signals"*
- 4. Martin Kannel (M. Kannel, H. Ohvri, and O. Okulov)** – *"Analysis of a broadband model for spectral aerosol optical depth calculation"*

5. **Petr Ammosov (G.A. Gavril'yeva and P. Ammosov)** – *"Semidiurnal Thermal Tide in the Mesopause Region over Yakutia"*
6. **Irina Medvedeva (I. Medvedeva, V. Perminov, A. Tatarnikov, and A. Beletsky)** – *"Comparison of ground-based OH temperature data measured at Irkutsk (52N, 103E) and Zvenigorod (56N, 37E) stations with Aura MLS v3.3"*
7. **Anna J. Zielińska (A.J. Zielinska and I.S. Stachlewska)** – *"Seasonal changes of the extinction coefficient profiles above Warsaw"*
8. **Magdalena Bloch (M. Bloch and G. Karasiński)** – *"Observation of changes in water vapour mixing ratio profiles by lidar of Polish Polar Station at Hornsund"*
9. **Anna Górka (A. Górka and I.S. Stachlewska)** – *"Klett-Fernald forward algorithm application to retrieve ceilometer backscatter coefficient profiles"*
10. **Przemysław Makuch (T. Zielinski, T. Petelski, M. Wichorowski, A. Strzalkowska, A. Smirnov, B. Holben, K. Zielinski)** – *"Aerosol optical properties studied at different marine environments"*
11. **Rosa García (E. Cuevas, V.E. Cachorro, R. Ramos, and A.M. de Frutos)** – *"Comparison between measurements and model simulations of daily solar radiation at the Baseline Surface Radiation Network Izaña site"*
12. **Tomasz Petelski (T. Zielinski, A. Rozwadowska, J. Piskozub, P. Makuch, A. Strzalkowska)** – *"Studies of the optical properties of Arctic aerosols"*
13. **Tadeusz Stacewicz (T. Stacewicz, M. Posyniak, S.P. Malinowski, A.K. Jagodnicka, S. Sitarek, and S. Arabas)** – *"Lidar investigation of aerosol particle size distribution under cumulus base"*

16:00 – 17:00

ASOM meeting

19:00

Conference dinner

WEDNESDAY (22 August 2012)

10:00 – 12:30

Invited session GEOPLANET/POLAND-AOD

Presentation of the measurement capabilities of the POLAND-AOD team

1. **Jacek Piskozub** – *”Aerosol or ocean circulation: what drives Atlantic Multidecadal Oscillation?”*
2. **Tadeusz Stacewicz** – *”Multiwavelength lidar for cumulus cloud investigation”*
3. **Krzysztof M. Markowicz** – *”Studies of direct aerosol effect within Poland-AOD Network”*
4. **Iwona S. Stachlewska** – *”A new generation lidar for unattended observations of aerosol and water vapour as a forward-looking technology of profiling atmosphere's optical properties and microphysical parameters within activities of Poland AOD”*
5. **Mirosław Darecki** – *”Satellite remote sensing of the Baltic ecosystem - looking at a sea through the atmosphere”*

12:30 – 14:00

Lunch

14:00

Visiting Old Town in Gdansk

THURSDAY (23 August 2012)

10:00 **Keynote lecture**

Christoph Ritter – *"Derivation of aerosol properties from lidar and its relevance for Climate"*

10:00 – 12:30 **Session 1** **Chairman: Mirosław Darecki**

1. **Olga Zawadzka (O. Zawadzka, K.M. Markowicz, A. Pietruczuk, T. Zielinski, and J. Jaroslawski)** – *"Impact of urban pollution emitted in Warsaw on aerosol properties"*
2. **Anna Rozwadowska (A. Rozwadowska, V. Drozdowska, D. Gutowska, J. Kowalczyk, P. Makuch, T. Petelski, A. Strzalkowska, and T. Zieliński)** – *"Preliminary results of the measurements of aerosol scattering coefficient and black carbon concentration over the Baltic Sea"*
3. **Nikloz Gudadze (N. Gudadze, G. Didebulidze, and M. Todua)** – *"Influence of seasonal variations of atomic oxygen density on the red 630.0 nm nightglow intensity observed at Abastumani (41.76°N, 42.83°E)"*
4. **Michael Gausa (M. Gausa, G. Zuguang, and S. Blindheim)** – *"The future use and interplay of airborne and ground based research platforms on Andoya 69 N, 16 E"*

Coffee break

5. **Christoph Ritter (C. Ritter, M. Stock, A. Herber, R. Neuber, and A. Hoffmann)** – *"Where does the Arctic aerosol come from?"*
6. **Krzysztof M. Markowicz (K.M. Markowicz, P. Makuch, T. Petelski, A. Rozwadowska, I.S. Stachlewska, A. Strzalkowska, O. Zawadzka, and T. Zielinski)** – *"Impact of aerosol emitted over Poland on aerosol optical properties"*

12:30 – 14:00 **Lunch**

14:00 – 16:30 **Sessions 2 and 3** **Chairman: Iwona Stachlewska**

1. **Maya Todua (M. Todua and G. Didebulidze)** – *"Cosmic factors in the vertical coupling of the lower and upper atmosphere by nightglow observations at Abastumani"*
2. **Tymon Zielinski (T. Zielinski, A. Strzalkowska, O. Zawadzka, P. Makuch, T. Zielinski, K.M. Markowicz, T. Petelski, V. Ulevicius, A. Ponczkowska, A. Rozwadowska, I. Gutowska, and I.S. Stachlewska)** – *"Studies of aerosol optical thickness with use of Microtops sun photometers"*
3. **Piotr S. Sobolewski (P.S. Sobolewski and J.W. Krzyscin)** – *"Balance of benefit and risk of solar UV radiation: the Norwegian Arctic"*

Coffee break

4. **Roland Neuber (R. Neuber, A. Lampert, C. Ritter, L. Schmidt, and I.S. Stachlewska)** – *”Aerosol and cloud observations with the Airborne Mobile Aerosol Lidar (AMALi) over the Arctic Ocean”*
5. **Victoria E. Cachorro (R. D. García, E. Cuevas, V.E. Cachorro, R. Ramos, and A.M. de Frutos)** – *”Comparison between measurements and model simulations of daily solar radiation at the Baseline Surface Radiation Network Izaña site”*
6. **Y.S. Bennouna, V. E. Cachorro, C. Toledano, A. Berjón, D. Fuertes, R. González, B. Torres and A. M. de Frutos)** – *”The annual cycle of aerosol optical properties over north-center Spain from 9 years of ground (AERONET) and satellite (MODIS) observations”*

FRIDAY (24 August 2012)

10:00 – 11:00 Session 3 Chairman: Tomasz Petelski

1. **Grzegorz Karasiński (G. Karasiński and P. Sobolewski)** – *“Observations of aerosol optical depth change during air masses transport from Poland to Spitsbergen”*
2. **Grzegorz Karasiński** – *“Lidar observations of volcanic dust over Polish Polar Station at Hornsund after eruptions of Eyjafjallajökull and Grimsvötn”*
3. **Iwona S. Stachlewska (A. Nemuc, I.S. Stachlewska, L.Belegante, S.P. Malinowski, K.M. Markowicz, D. Nicolae, M. Posyniak, T. Stacewicz, and C. Talianu)** – *“Optical properties of long-range transported volcanic ash over Romania and Poland during Eyjafjallajökull eruption in 2010”*

11:00 – 11:30 Conference closing

11:30 - 13:00 Workshops and AOB