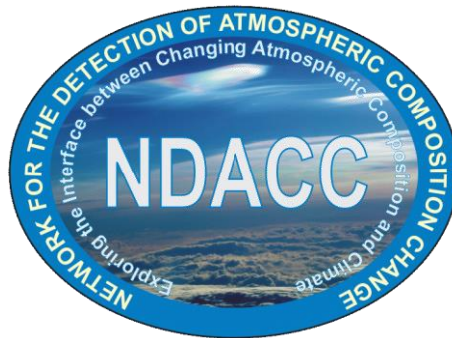




GAW



**NORS/NDACC/GAW workshop
5 to 7 November 2014
Brussels, Belgium**

Meeting Information & Programme

1. Introduction

The NORS/NDACC/GAW Workshop will be held in Brussels, Belgium, from Wednesday 5 November 2014 afternoon until Friday 7 November 2014 midday. It will be held in concert with the NDACC Steering Committee meeting from Monday 3 November 2014 until Wednesday 5 November 2014 noontime.

The workshop is open to the scientific community. Especially members of the NORS, NDACC and GAW communities are encouraged to participate.

The local host is the Belgian Institute for Space Aeronomy. The venue for the workshop will be the premises of Belspo, the Belgian Science Policy Office. It is located centrally in Brussels, and easily accessible from the main railway stations and the airport. There are a number of hotels and restaurants in the neighborhood.

Meeting Host

Martine De Mazière
NORS coordinator
Belgian Institute for Space Aeronomy (BIRA-IASB)
Ringlaan/Avenue Circulaire, 3
B-1180 Brussels, Belgium
phone: +32 2 373 03 63
fax: +32 2 374 84 23
email: martine.demaziere@aeronomie.be
web: www.aeronomie.be

Logistics & support

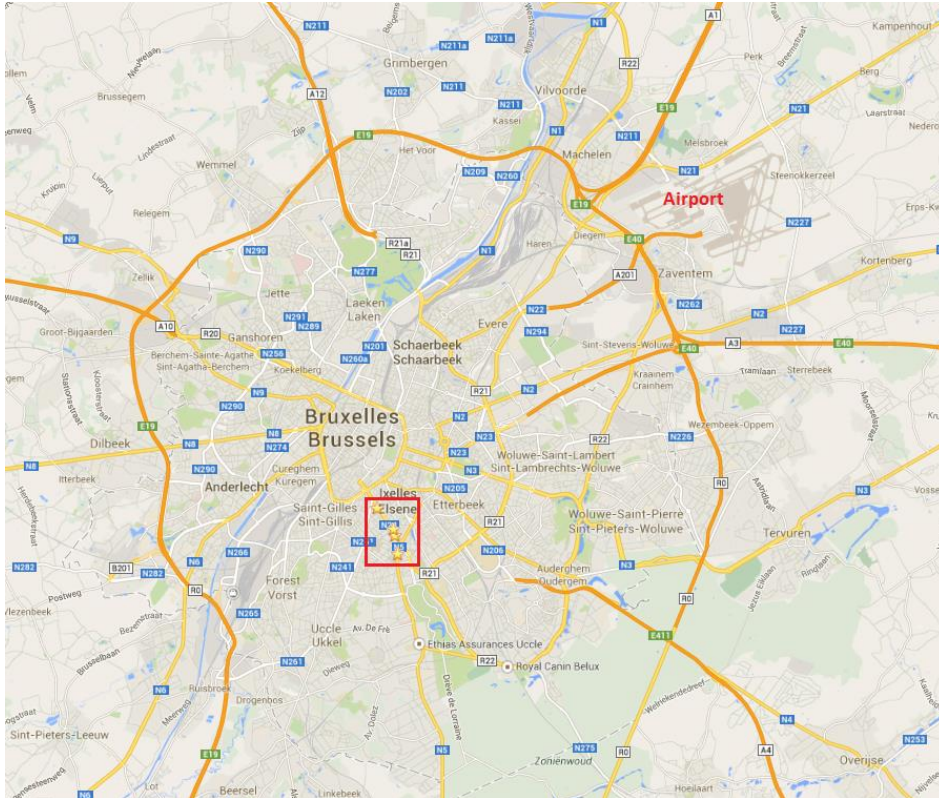
Nathalie Kalb
NORS Project Manager
Belgian Institute for Space Aeronomy (BIRA-IASB)
Ringlaan/Avenue Circulaire, 3
B-1180 Brussels, Belgium
phone: +32 2 373 04 71
fax: +32 2 373 04 86
email: nathalie.kalb@aeronomie.be
web: www.aeronomie.be

2. Venue, Accommodation & Travel Information

2.1. Accessibility

The following link describes the access to the meeting location at BELSPO (Belgian Science Policy Office), Avenue Louise 231, 1050 Brussels, Belgium:

http://www.belspo.be/belspo/organisation/contact_en.stm



2.2. Internet

Wifi in the meeting room:

Network: BELSPO-Guest

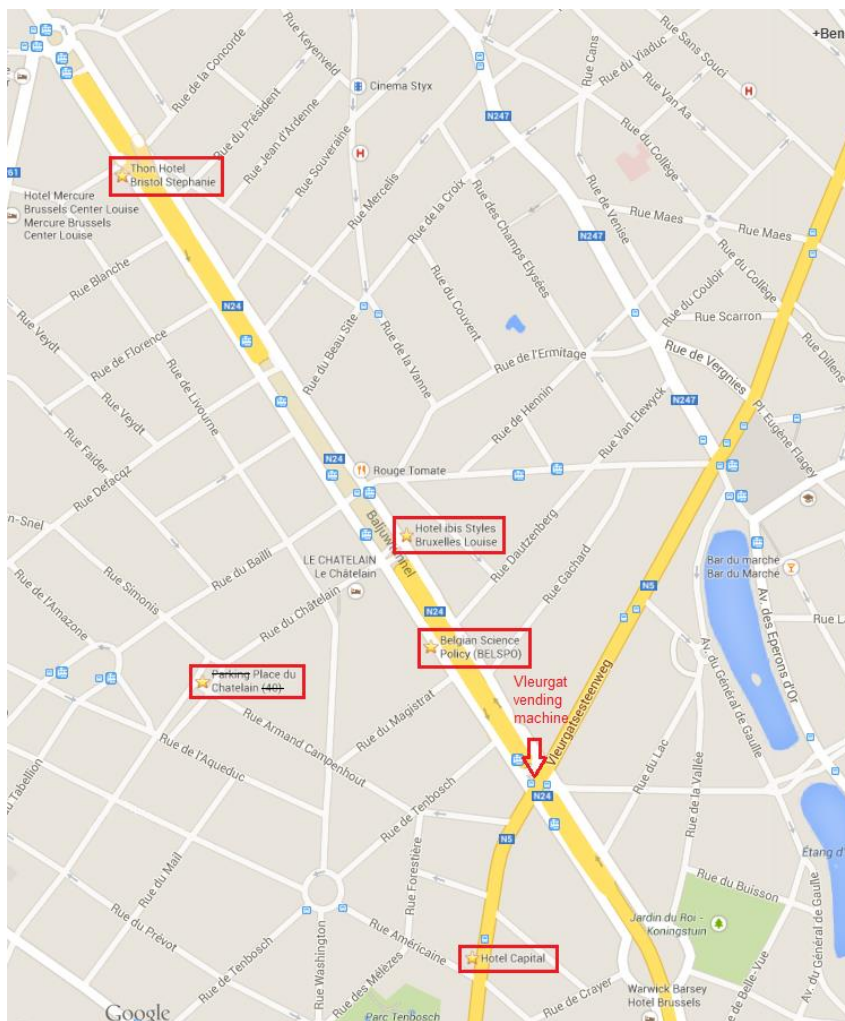
Password: belspo1050

2.3. Hotels

We recommend the following hotels located near the meeting location:

- Thon Hotel Bristol Stephanie
<http://www.thonhotels.com/hotels/countrys/belgium/brussels/hotel-bristol-stephanie/>
- Ibis Styles Brussels Louise
<http://www.accorhotels.com/gb/hotel-8915-ibis-styles-brussels-louise/index.shtml/>
- Hotel Capital
<http://www.hotelcapital.be/>

The "Place du Chatelain" near to the meeting place and the suggested hotels offers plenty of choice of restaurants for your evenings in Brussels.



2.4. Public transportation

The website of the Brussels public transportation network: <http://www.stib-mivb.be/index.htm?l=en>

You can purchase all kinds of tickets (1, 5 or 10 journeys, airport-rides, etc.) at a vending machine situated at stop VLEURGAT (see map above). In the tram or bus, only 1-journey tickets can be purchased and they are more expensive, than if you buy your ticket in advance.

2.5. Presentations

Please put your presentation on the computer in the meeting room, in the appropriate folder, before the beginning of each day of meeting.

15 minutes are foreseen per presentation: 12 min talk + 3 min discussion. Please respect the time schedule.

25 min are foreseen for the keynote talks.

2.6. Varia

If you need to print out a document (flight tickets for example), please send them to Nathalie Kalb (nathalie.kalb@aeronomie.be).

A demonstration is planned in Brussels on Thursday 6 November. No general strike is foreseen, but obviously the demonstration will cause some disturbance of the public transportation.

For those who are traveling with their spouse, it is possible to book for them an excursion to Ghent and Bruges on Thursday 6 November (<http://brussels-city-tours.be/en>). If your spouse is interested in such excursion, please contact asap Nathalie Kalb (nathalie.kalb@aeronomie.be).

3. Social event

Belgium is not only known for its beer and cheese. It is also the land of the Smurfs and Tintin. On Wednesday 5 November we invite you to discover the world of Belgian comics with a private guided tour of The Belgian Comic Strip Center, followed by a group dinner in the adjoining restaurant: <http://www.comicscenter.net/en/home>

It is no longer possible to register for the museum tour and/or group dinner.

We will leave for the museum by bus right after the end of the meeting. You will thus not have time to stop by your hotel. If you arrive on Wednesday and participate to the museum tour, we highly recommend that you drop your luggage off at your hotel before the meeting.

Directions to and from the museum using public transportation will be available at the meeting location. Only the journey from the meeting location to the museum will be organized by bus. For the return journey, we recommend that you buy a tram/bus ticket in advance (see section 2.4).

4. Attendance Fee & Other Costs

- Attendance fee (includes lunch and coffee breaks): 15€ per day
- Excursion: optional visit to The Belgian Comic Strip Center, followed by a group dinner in the adjoining restaurant: 15€
- Group dinner: 35€ for the 3 course menu and 10€ for the beverages formula

5. Participants

	Last name	First Name	Institute
1	Auriol	Frederique	Laboratoire d'Optique Atmosphérique
2	Bauwens	Maïte	Belgian Institute for Space Aeronomy (BIRA-IASB)
3	Bingen	Christine	Belgian Institute for Space Aeronomy (BIRA-IASB)
4	Blechsmidt	Anne-Marlene	IUP, University of Bremen
5	Blumenstock	Thomas	Karlsruhe Institute of Technology (KIT)
111	Botek	Edith	Belgian Institute for Space Aeronomy (BIRA-IASB)
6	Boyd	Ian	University of Massachusetts
7	Braathen	Geir	WMO
8	Breebaart	Leo	S&T
9	Brenot	Hugues	Belgian Institute for Space Aeronomy (BIRA-IASB)
10	Brognez	Colette	Laboratoire d'Optique Atmosphérique
11	Buchmann	Brigitte	Empa

12	Chabrilat	Simon	Belgian Institute for Space Aeronomy (BIRA-IASB)
13	De Backer	Hugo	Royal Meteorological Institute of Belgium (KMI-IRM)
14	De Bock	Veerle	Royal Meteorological Institute of Belgium (KMI-IRM)
15	De Mazière	Martine	Belgian Institute for Space Aeronomy (BIRA-IASB)
16	De Rudder	Anne	Belgian Institute for Space Aeronomy (BIRA-IASB)
17	Desmet	Filip	Belgian Institute for Space Aeronomy (BIRA-IASB)
112	De Wachter	Evelyn	Belgian Institute for Space Aeronomy (BIRA-IASB)
18	Drummond	James	Dalhousie University
19	Duflot	Valentin	Laboratoire de l'Atmosphère et des Cyclones - Université de la Réunion
20	Elkins	James	NOAA/ESRL/GM
21	Engelen	Richard	ECMWF
22	Errera	Quentin	Belgian Institute for Space Aeronomy (BIRA-IASB)
23	Eskes	Henk	KNMI
24	Fioletov	Vitali	Environment Canada
25	Fitzka	Michael	University of Natural Resources and Life Sciences, Vienna, Institute of Meteorology
26	Fjaeraa	Ann Mari	NILU
27	Flaud	Jean Marie	INSU/CNRS
28	Franco	Bruno	University of Liège
29	Friedrich	Martina Michaela	Centro de Ciencias de la Atmósfera UNAM
30	Frieß	Udo	Institute of Environmental Physics, University of Heidelberg
31	Ghys	Laurent	BELSPO
32	Gielen	Clio	Belgian Institute for Space Aeronomy (BIRA-IASB)
33	Gil-Ojeda	Manuel	Instituto nacional de Técnica Aeroespacial (INTA)
34	Godin-Beekmann	Sophie	LATMOS/CNRS
35	Goutail	Florence	LATMOS/CNRS
36	Gribanov	Konstantin	Ural Federal University
37	Gruzdev	Aleksandr	A.M. Obukhov Institute of Atmospheric Physics
38	Hadzimustafic	Jasmina	University of Natural Resources and Life Sciences, Vienna, Institute of Meteorology
39	Hannigan	James	NCAR
40	Hendrick	Francois	Belgian Institute for Space Aeronomy (BIRA-IASB)
41	Henne	Stephan	Empa
42	Hocke	Klemens	Institute of Applied Physics, University of Bern
43	Holla	Robert	Meteorological Observatory Hohenpeissenberg
44	Hubert	Daan	Belgian Institute for Space Aeronomy (BIRA-IASB)
45	Immler	Franz	European Commission
46	Jucks	Ken	NASA HQ
47	Kacik	Monika	Research Executive Agency
48	Kalb	Nathalie	Belgian Institute for Space Aeronomy (BIRA-IASB)
49	Kämpfer	Niklaus	Institute of Applied Physics, University of Bern
50	Kelder	Hennie	University of Technology Eindhoven

51	Keppens	Arno	Belgian Institute for Space Aeronomy (BIRA-IASB)
52	Khaykin	Sergey	LATMOS/CNRS
53	Kiel	Matthäus	Karlsruhe Institute of Technology (KIT)
55	Kurylo	Michael	USRA/GESTAR
56	Lainer	Martin	Institute of Applied Physics, University of Bern
57	Lambert	Jean-Christopher	Belgian Institute for Space Aeronomy (BIRA-IASB)
58	Langerock	Bavo	Belgian Institute for Space Aeronomy (BIRA-IASB)
59	Larsen	Niels	Danish Meteorological Institute
60	Leblanc	Thierry	California Institute of Technology
62	Mahieu	Emmanuel	University of Liège
63	Mangold	Alexander	Royal Meteorological Institute of Belgium (KMI-IRM)
64	Merlaud	Alexis	Belgian Institute for Space Aeronomy (BIRA-IASB)
65	Minvielle	Fanny	LOA-Lille1/CNRS
66	Moreira	Lorena	Institute of Applied Physics, University of Bern
67	Muller	Christian	B.USOC
68	Nakane	Hideaki	Kochi University of Technology
70	Nedoluha	Gerald	Naval Research Laboratory
71	Niemeijer	Sander	S&T
73	Pandey	Praveen	Belgian Institute for Space Aeronomy (BIRA-IASB)
74	Petri	Christof	IUP, University of Bremen
75	Pinardi	Gaia	Belgian Institute for Space Aeronomy (BIRA-IASB)
76	Piters	Ankie	KNMI
77	Pommereau	Jean-Pierre	LATMOS/CNRS
78	Portafaix	Thierry	University of Reunion Island
79	Pottiaux	Eric	Royal Observatory of Belgium (ROB)
80	Prinn	Ronald	Massachusetts Institute of Technology
81	Puentedura	Olga	Instituto nacional de Técnica Aeroespacial (INTA)
82	Remmers	Julia	MPI for Chemistry
83	Richter	Andreas	IUP, University of Bremen
84	Schanz	Ansgar	Institute of Applied Physics, University of Bern
85	Schultz	Martin	Forschungszentrum Juelich, IEK-8
86	Simon	Paul	Belgian Institute for Space Aeronomy (BIRA-IASB)
87	Stavrakou	Jenny	Belgian Institute for Space Aeronomy (BIRA-IASB)
88	Steinbrecht	Wolfgang	Deutscher Wetterdienst (DWD)
89	Strahan	Susan	NASA Goddard Space Flight Center
90	Stübi	René	MeteoSwiss
91	Tack	Frederik	Belgian Institute for Space Aeronomy (BIRA-IASB)
113	Theys	Nicolas	Belgian Institute for Space Aeronomy (BIRA-IASB)
92	Thomas	Werner	Deutscher Wetterdienst (DWD)
93	Thompson	Kathy	CSC
94	Thompson	Anne	NASA Goddard Space Flight Center
95	Thorne	Peter	NERSC
97	Van Roozendael	Michel	Belgian Institute for Space Aeronomy (BIRA-IASB)
98	van Ypersele	Jean-Pascal	UCL
99	Vandenbussche	Sophie	Belgian Institute for Space Aeronomy (BIRA-IASB)
100	Verhoelst	Tijl	Belgian Institute for Space Aeronomy (BIRA-IASB)

101	Vigouroux	Corinne	Belgian Institute for Space Aeronomy (BIRA-IASB)
102	Vlaeminck	Kristof	BELSPO
103	Volkamer	Rainer	University of Colorado
104	Wagner	Thomas	MPI for Chemistry
105	Wang	Yang	Max Planck institute for Chemistry
106	Warneke	Thorsten	IUP, University of Bremen
107	Weiss	Ray	Scripps Institution of Oceanography, UC San Diego
108	Wild	Jeannette	NOAA/NWS/NCEP/CPC
109	Zehner	Claus	ESA
110	Zerefos	Christos	Academy of Athens

6. Programme

Wednesday 5 November 2014

12:00-13:20 **Lunch**

13:20-13:35 Welcome, Logistics and Introduction
Martine De Mazière and Nathalie Kalb, BIRA-IASB

13:35-13:50 Welcome by *Martine De Mazière on behalf of the President of the Belgian Science Policy, Belspo*

Session 1: Satellite applications and validation

Chairmen: *Claus Zehner and Jean-Christopher Lambert*

13:50-14:15 Keynote Talk: The importance of validation in establishing atmospheric Essential Climate Variables
Claus Zehner (ESA - European Space Agency, Italy)

14:15-14:30 Estimation of SO₂ and NO₂ emissions from point sources using satellite retrievals
Vitali Fioletov, Environment Canada

14:30-14:45 Multi-year validation of atmospheric NO₂ measurements with the Ozone Monitoring Instrument onboard the EOS-Aura satellite using spectrometric ground-based NO₂ measurements at Zvenigorod, Russia
Aleksandr Gruzdev, A.M. Obukhov Institute of Atmospheric Physics

14:45-15:00 On the use of zenith-sky, MAXDOAS and direct-sun network observations to validate GOME-2 total and tropospheric NO₂ columns
Gaia Pinardi, BIRA-IASB

15:00-15:15 Profile retrieval of atmospheric trace gases from the UNAM MAX-DOAS network in Mexico City
Martina Michaela Friedrich, Centro de Ciencias de la Atmósfera UNAM

15:15-15:45 **Coffee/Tea**

15:45-16:00 O3S-DQA - Internal consistency of the ozonesonde network in the middle stratosphere using satellite data ensembles as reference
Daan Hubert, BIRA-IASB

16:00-16:15 Ozone_cci round-robin methodology for nadir ozone profile validation using ozonesonde and lidar network data
Arno Keppens, BIRA-IASB

- 16:15-16:30 SHADOZ (Southern Hemisphere Additional Ozonesondes): Archive Status and Comparisons with Recent OMI and Suomi/NPP OMPS Satellite Measurements
Anne Thompson, NASA
- 16:30-16:45 Error budget closure of satellite total ozone validation based on NDACC/GAW ground-based reference measurements
Tijl Verhoelst, BIRA-IASB
- 16:45-17:00 Trajectory mapping of middle atmospheric water vapor by a mini network of NDACC instruments
Martin Lainer, IAP Bern
- 17:00-17:15 GAIA-CLIM H2020 project: characterising satellite measurements using in-situ, ground-based and sub-orbital capabilities
Peter Thorne, NERSC

Posters

Accounting for spatial representativeness in comparisons of tropospheric ground-based remote sensing and surface in-situ observations – Application to FTIR and MAXDOAS observations of CO, CH₄, O₃, and NO₂

Stephan Henne, Empa

Ten years of NDACC-based support to the maturation of Envisat and TPM atmospheric composition data products

Arno Keppens, BIRA-IASB

17:15 **End of day 1**

17:30-18:00 **Trip to The Belgian Comic Strip Center**

18:15-19:15 **Private guided tour of The Belgian Comic Strip Center**

19:30 **Group dinner at the adjoining restaurant**

Thursday 6 November 2014

9:00-9:05 Welcome
Martine De Mazière, BIRA-IASB

Session 2: Validation of Copernicus Atmosphere Service products

Chairmen: *Henk Eskes and Bavo Langerock*

9:05-9:30 Keynote Talk: Validation of the MACC atmospheric composition global forecasting service
Henk Eskes (KNMI - Royal Netherlands Meteorological Institute, Netherlands)

9:30-9:45 Using MAX-DOAS measurements of tropospheric NO₂ columns for MACC-II validation
Anne-Marlene Blechschmidt, IUP, University of Bremen

- 9:45-10:00 NORS validation server: achievements and ongoing discussions
Bavo Langerock, BIRA-IASB
- 10:00-10:15 The Three Roles of the Rapid Data Delivery System of NORS
Klemens Hocke, IAP Bern
- 10:15-10:30 The diurnal cycle of stratospheric ozone in MACC reanalysis, ERA-Interim, WACCM simulation and Earth Observation Data
Ansgar Schanz, IAP Bern
- 10:30-11:00 **Coffee/Tea**

Session 3: Decadal time series for trend and climate studies

Chairmen: *Jean-Pascal van Ypersele and Wolfgang Steinbrecht*

- 11:00-11:25 Keynote Talk: Climate change, long-term observations, and IPCC
Jean-Pascal van Ypersele (UCL - Université catholique de Louvain, IPCC Vice-chair, Belgium)
- 11:25-11:40 QA4ECV: Prototyping a Quality Assurance system for Essential Climate Variables
Jean-Christopher Lambert, BIRA-IASB
- 11:40-11:55 Ground-based network assessment of the long-term stability and mutual consistency of limb/occultation ozone profile decadal data records
Daan Hubert, BIRA-IASB
- 11:55-12:10 The Dynamical Implications of Changes in mid-Stratospheric Ozone since 1991
Gerald Nedoluha, Naval Research Laboratory
- 12:10-12:25 An integrated water vapour trends analysis based on more than 15 years of world-wide GPS and GOME/SCHIAMACHY/GOME-2 retrievals
Hugues Brenot, BIRA-IASB, on behalf of Roeland Van Malderen, Royal Meteorological Institute of Belgium (KMI-IRM)
- 12:25-12:40 Have we missed an early stratospheric warning signal for the greenhouse effect?
Christos Zerefos, Academy of Athens

Poster
Archiving and preservation of long duration space experiments data in the EU FP-7 PERICLES project: a possible application to ground based networks. <i>Christian Muller, B.USOC</i>

- 12:40-13:40 **Lunch**

Session 4: Stratospheric Ozone and the Montreal Protocol

Chairmen: *Sophie Godin-Beekmann and Michel Van Roozendael*

- 13:40-14:05 Keynote Talk: Stratospheric Ozone and the Montreal Protocol
Wolfgang Steinbrecht (DWD - Deutscher Wetterdienst, Germany)
- 14:05-14:20 Hannover NDACC Spectral UV intercomparison 2014
Colette Brogniez, Laboratoire d'Optique Atmosphérique
- 14:20-14:35 Total ozone and Umkehr observations at Hoher Sonnblick 1994–2011:
Climatology and extreme events
*Michael Fitzka, University of Natural Resources and Life Sciences, Vienna,
Institute of Meteorology*
- 14:35-14:50 Comparison and merging of ozone profile data from various measurement
techniques at 4 NDACC stations
Sophie Godin-Beekmann, LATMOS/CNRS
- 14:50-15:05 Harmonization and trend analysis of the 20 years time series of stratospheric
ozone profiles observed by the GROMOS microwave radiometer at Bern
Lorena Moreira, IAP Bern
- 15:05-15:35 **Coffee/Tea**
- 15:35-15:50 Russian NDACC ozone monitoring network renewal
Jean-Pierre Pommereau, LATMOS/CNRS
- 15:50-16:05 Chlorine variability in the Antarctic vortex and implications for ozone
recovery
Susan Strahan, NASA Goddard Space Flight Center

Session 5: Aerosols, Clouds, and Trace Gases (incl. Greenhouse Gases)

Chairmen: *Martin Schultz and Simon Chabrillat*

- 16:05-16:30 Keynote Talk: Reactive gases activities in WMO/GAW
Martin Schultz, Forschungszentrum Juelich, IEK-8
- 16:30-16:45 Atmospheric Measurements in the Canadian High Arctic: The PEARL
Experience
James Drummond, Dalhousie University
- 16:45-17:00 How much can we learn about nitrous oxide emissions from background sites
and simple box models?
James Elkins, NOAA/ESRL/GM talk
- 17:00-17:15 The atmospheric composition observatory at Princess Elisabeth Station, East
Antarctica: total ozone and seasonal physical and optical aerosol properties
Alexander Mangold, Royal Meteorological Institute of Belgium (KMI-IRM)

17:15-17:30 Overview of the progress achieved by the NDACC UV-vis Working Group during the NORS project
Francois Hendrick, BIRA-IASB

17:30 **End of day 2**

Friday 7 November 2014

9:00-9:05 Welcome
Martine De Mazière, BIRA-IASB

Session 5: Aerosols, Clouds, and Trace Gases (incl. Greenhouse Gases) continued

9:05-9:20 On the ability of MAX-DOAS to detect clouds
Udo Frieß, Institute of Environmental Physics, University of Heidelberg

9:20-9:35 NO₂ seasonal evolution in the background free troposphere from MAXDOAS measurements
Manuel Gil-Ojeda, Instituto nacional de Técnica Aeroespacial (INTA)

9:35-9:50 Validation of Multi-AXis-DOAS AOD and NO₂ at Meteorological Observatory Hohenpeissenberg (MOHp)
Robert Holla, Meteorological Observatory Hohenpeissenberg

9:50-10:05 Azimuthal variability of trace gases and aerosols measured during MADCAT in summer 2013 in Mainz, Germany
Julia Remmers, MPI for Chemistry

10:05-10:20 Spatial and temporal variability of NO₂ in Athens observed by MAX-DOAS
Andreas Richter, IUP, University of Bremen

10:20-10:35 A first look at African aerosol and trace-gas emissions from the Bujumbura station.
Clio Gielen, BIRA-IASB

10:35-11:00 **Coffee/Tea**

11:00-11:15 Absolute calibration of sky radiances, colour indices and O₄ DSCDs obtained from MAX-DOAS measurements
Thomas Wagner, MPI for Chemistry

11:15-11:30 Measurements of bromine oxide, iodine oxide and oxygenated hydrocarbons in the tropical free troposphere from research aircraft and mountaintops
Rainer Volkamer, University of Colorado

- 11:30-11:45 Retrievals of formaldehyde from ground-based FTIR and MAX-DOAS observations at the Jungfraujoch station and comparisons with GEOS-Chem and IMAGES model simulations.
Bruno Franco, University of Liège
- 11:45-12:00 The possibility of NDACC infrared FTIR observations at Kourouka
Konstantin Gribanov, Ural Federal University
- 12:00-12:15 MIR and NIR comparisons of trace gas retrievals based on FTIR operation in Karlsruhe
Matthäus Kiel, Karlsruhe Institute of Technology (KIT)
- 12:15-12:30 Carbon Monoxide retrieved from Ground Based FTIR Remote Sensing in the Mid- and Near Infra-Red Spectral Region.
Christof Petri, IUP, University of Bremen

Posters
MAXDOAS observations at Belgrano II station (Antarctica, 78°S) <i>Olga Puentedura, Instituto nacional de Técnica Aeroespacial (INTA)</i>
The Total Carbon Column Observing Network (TCCON) - its relevance and its integration in the European observing system for greenhouse gases <i>Thorsten Warneke, IUP, University of Bremen</i>

12:30-13:30 **Lunch**

The NORS/NDACC/GAW Workshop ends with the lunch. The following meeting is restricted to invited people.

[NORS Final Review Meeting](#)

This meeting is restricted to the members of the NORS consortium, its Steering Committee, its reviewer and the Research Executive Agency.

- 13:30-13:50 Introduction
Martine De Mazière, BIRA-IASB
- 13:50-13:55 Summary of WP3 Rapid data delivery at 4 NDACC stations
Klemens Hocke, IAP Bern
- 13:55-14:10 Summary of WP4 Advanced characterisation of NORS data products
Andreas Richter, IUP, University of Bremen
- 14:10-14:25 Summary of WP5 Integration of tropospheric products
Stephan Henne, Empa

- 14:25-14:30 Summary of WP6 Integration of ozone products
Sophie Godin-Beekmann, LATMOS/CNRS
- 14:30-14:40 Summary of WP7 Reanalysis of ground-based time series back to 2003
Thomas Blumenstock, Karlsruhe Institute of Technology (KIT)
- 14:40-14:55 Summary of WP8 Web-based server for validation of GAS products using NORS data products
Sander Niemeijer, S&T
- 14:55-15:10 Summary of WP9 Validation of GAS products for O₃, NO₂, CO, CH₄, H₂CO, aerosol
Emmanuel Mahieu, University of Liège
- 15:10-15:40 **Coffee/Tea**
- 15:40-15:50 Summary of WP2 Project outreach
Martine De Mazière, BIRA-IASB
- 15:50-16:10 Summary of WP10 Capacity building and sustainability
Martine De Mazière, BIRA-IASB
- 16:10-16:25 Summary of WP1 & WP11 Project coordination & management
Nathalie Kalb, BIRA-IASB
- 16:25-16:55 Feedback by *Hennie Kelder, NORS reviewer*, and *Monika Kacik, REA*
- 16:55-17:15 Discussion about continuation of NORS in Copernicus Atmosphere Monitoring Service (CAMS)
Monika Kacik, REA
- 17:15 **End of meeting**