

Atmospheric Science Conference

Programme

Day 1, Monday 7 September 2009		
09:00-09:30	Registration	
09:30-09:40	Welcome	Claus Zehner (ESA)
09:40-09:50	Conference Goals	Claus Zehner (ESA)
09:50-10:10	Envisat and ERS Status and Future	Henri Laur (ESA)
10:10-10:30	ESA Climate Change Initiative	Claus Zehner (ESA)
10:30-11:00	COFFEE BREAK	
Data Quality		Chair: D. Loyola
11:00-11:20	Status of the ENVISAT Atmospheric Chemistry Mission	Thorsten Fehr (ESA)
11:20-11:40	Long-term Validation of MIPAS products based on balloon measurements	Hermann Oelhaf (Karlsruhe Institute of Technology (KIT))
Data Quality - continuation		Chair: D. Loyola
11:40-11:55	ENVISAT / SCIAMACHY Validation with the LPMA / DOAS Balloon Gondola: Comparison of O ₃ , NO ₂ and BrO Profiles	Sebastian Kreytcy (University Heidelberg)
11:55-12:10	Statistical comparison of night-time NO ₂ observations in 2003-2006 from GOMOS and MIPAS instruments	Pekka T. Verronen (Finnish Meteorological Institute) presented by Johanna Tamminen
12:10-12:25	Multi-Mission Validation by Radio Occultation: System Setup and Initial Results on GOMOS and MIPAS Validation	Stefan Koerner (University of Graz)
12:25-12:40	Comparison of GOME-2 and OMI sulfur dioxide retrievals	Arlin Krueger (UMBC)
12:40-12:55	Status of GOSAT post-launch calibration	Kei Shiomi (Japan Aerospace Exploration Agency)
12:55-14:00	LUNCH	
Stratosphere		Chair: E. Kyrola, C. Zerefos
14:00-14:20	GOMOS/ENVISAT overview	Erkki Kyrölä (Finnish Meteorological Institute)

Stratosphere - continuation		Chair: E. Kyrola, C. Zerefos
14:20-14:35	Response of tropical stratospheric ozone and NO ₂ profiles to the equatorial quasi biennial oscillation as seen from GOMOS on board ENVISAT	Alain Hauchecorne (CNRS)
14:35-14:50	Water vapor measurements in the stratosphere at 936 nm by stellar occultations with GOMOS/Envisat.	Jean-Loup Bertaux (LATMOS)
14:50-15:05	Recent evolution of stratospheric water vapour, ozone and related species derived from satellite measurements	Joachim Urban (Chalmers University of Technology)
15:05-15:20	Ozone monitoring with GOMOS-ENVISAT experiment version 6	Philippe Keckhut (LATMOS-IPSL) presented by Alain Hauchecorne
15:20-15:35	Impact of Horizontal Temperature Gradient on CFC-11 Fields Retrieved from MIPAS LIMB Sounding: One-Dimensional Approach Versus Two-Dimensional Tomography	Enrico Arnone (University of Bologna)
15:35-15:50	The Atmospheric Chemistry Experiment (ACE): Status and Latest Results	Peter Bernath (University of York)
15:50-16:30	COFFEE BREAK	
Stratosphere - continuation		Chair: E. Kyrola, C. Zerefos
16:30-16:50	MIPAS aboard ENVISAT: More than 6 years of trace gas and particle measurements	H. Fischer and the MIPAS team (Forschungszentrum/University Karlsruhe)
Stratosphere - continuation		Chair: E. Kyrola, C. Zerefos
16:50-17:05	Convective Troposphere-to-Stratosphere Transport in the Tropics as seen by ODIN, CALIPSO, GOMOS, and TRMM satellite observations	Jean-Pierre Pommereau (CNRS LATMOS)
17:05-17:20	Equatorial transport from the troposphere to the stratosphere as diagnosed from nitrous oxide variability	Philippe Ricaud (Laboratoire d'Aérodologie)
17:20-17:35	GDP 5.0 – Improved Total Ozone Columns from GOME based on the GODFIT Algorithm	Michel Van Roozendaal (BIRA-IASB)
17:35-17:50	Total Ozone Trends Derived from the 14-Year Combined	Diego Loyola (German Aerospace Center (DLR))

	GOME/SCIAMACHY/GOME-2 Satellite Data Record	
17:50-18:05	Can we use water isotopologues to determine Age of Air?	Donal Murtagh (Chalmers tekniska högskola)
18:05-18:20	Time series of global mean age of stratospheric air from MIPAS for 2002 to present	Gabriele P. Stiller (Forschungszentrum Karlsruhe)
18:20-20:00	WELCOME DRINK	
Day 2, Tuesday 8 September 2009		
Stratosphere		Chair: E. Hilsenrath, H. Fischer
09:00-09:15	2D Tomography for SCIAMACHY Limb Measurements of Scattered Sunlight	Janis Pukite (Max Planck Institute for Chemistry)
09:15-09:30	Trend Analysis of Stratospheric BrO: Comparison between SCIAMACHY LIMB and Ground-Based UV-Visible Observations	Francois Hendrick (BIRA-IASB)
09:30-09:45	Retrievals of the water vapor content in the upper troposphere and the lower stratosphere from SCIAMACHY limb measurements	Alexei Rozanov (University of Bremen)
09:45-10:00	HOCl chemistry in the Antarctic Stratospheric Vortex 2002, as observed with the Michelson Interferometer for Passive Atmospheric Sounding (MIPAS)	Thomas von Clarmann (Forschungszentrum Karlsruhe/Karlsruhe University)
10:00-10:15	Retrieval of H15NO3/H14NO3 vertical distribution from MIPAS / ENVISAT limb-emission measurements.	Bianca Maria Dinelli (ISAC-CNR)
10:15-10:30	New atmospheric species retrievable from MIPAS	Anu Dudhia (University of Oxford)
10:30-11:00	COFFEE BREAK	
Stratosphere - continuation		Chair: E. Hilsenrath, H. Fischer
11:00-11:15	Climatology of stratospheric bromine nitrate (BrONO2) by MIPAS	Michael Hoepfner (Karlsruhe Institute of Technology)
11:15-11:30	Can MIPAS HDO observations be used to determine the role of convection for moistening the stratosphere?	Joerg Steinwagner (University Utrecht)
11:30-12:00	DISCUSSION	
Troposphere/Air Quality		Chair: J. Gleason, A. Richter

12:00-12:20	Recent results from GOME and SCIAMACHY: tropospheric trace gases	John P. Burrows (University of Bremen)
12:20-12:40	Study of Tropospheric Ozone from Space	Pawan Bhartia (NASA Goddard Space Flight Center)
Troposphere/Air Quality - continuation		Chair: J. Gleason, A. Richter
12:40-12:55	Tropospheric Chemistry from Space: TES Highlights and Ideas for the Future	Annmarie Eldering (JPL/Caltech)
13:00-14:00	LUNCH	
Troposphere/Air Quality - continuation		Chair: J. Gleason, A. Richter
14:00-14:15	Tropospheric ozone from IASI	Maxim Eremenko (LISA - CNRS/Univ Paris 12 & 7) presented by Johannes Orphal
14:15-14:30	Air quality measurements during the 2008 Olympic Games from the GOME-2 instrument on MetOp	Nan Hao (German Aerospace Centre)
14:30-14:45	Monitoring vegetation using DOAS satellite observations	Ellen Eigemeier (Max-Planck-Institute for Chemistry)
14:45-15:00	Global observations of C ₂ H ₂ as an indicator for biomass burning from MIPAS L1B spectra	Robert Parker (University Of Leicester)
15:00-15:15	Weekly cycle of NO ₂ revisited	Steffen Beirle (MPI Chemistry Mainz)
15:15-15:30	Combined formaldehyde and glyoxal observations from GOME-2 backscattered light measurements.	Christophe Lerot (Belgian Institute for Space Aeronomy)
15:30-15:45	MIPAS Observations of Organic compounds in the Upper Troposphere	John Remedios (University of Leicester)
15:45-16:00	First global observation of organic compounds from the IASI infrared sounder	Federico Karagulian (Univeristé Libre de Bruxelles (ULB))
16:00-16:30	COFFEE BREAK	
Troposphere/Air Quality - continuation		Chair: J. Gleason, A. Richter
16:30-16:45	Interannual variability of CO and its relation to long-range transport and biomass burning as seen by SCIAMACHY	Annemieke Gloudemans (SRON Netherlands Institute for Space Research)
16:45-17:00	MIPAS observations of CO in the upper troposphere and lower stratosphere	Bernd Funke (Instituto de Astrofísica de Andalucía (CSIC))

17:00-17:15	A long-term tropospheric SO ₂ record from GOME and SCIAMACHY	Andreas Richter (University of Bremen)
17:15-17:30	First retrievals of volcanic SO ₂ heights from hyper-spectral satellite UV measurements	Kai Yang (GSFC/NASA and GEST/UMBC)
17:30-18:00	DISCUSSION	
Day 3, Wednesday 9 September 2009		
Clouds/Aerosols		Chair: U. Schumann, P. Bernath
09:00-09:15	MIPclouds: A Cloud Processor for MIPAS/Envisat	Reinhold Spang (Research Centre Juelich)
09:15-09:30	Effects of 3-dimensional cloud structures on satellite observations of the Ring effect, trace gas absorptions and radiance	Thomas Wagner (MPI for Chemistry) presented by Steffen Beirle
09:30-09:45	Global cloud top heights and thermodynamic phase classification as derived from SCIAMACHY visible and near infrared limb spectra: Verification and examples	Kai-Uwe Eichmann (University of Bremen)
09:45-10:00	Radiative Forcing from Cirrus and Contrail Cirrus	Ulrich Schumann (DLR)
10:00-10:15	A-Train Observations of Atmospheric Composition and Polar Stratospheric Cloud Formation	Alyn Lambert (Jet Propulsion Laboratory, CalTech)
10:15-10:30	Cloud Climatology from ATSR	Caroline Poulsen (Rutherford appleton laboratory)
10:30-11:00	COFFEE BREAK	
Clouds/Aerosols - continuation		Chair: U. Schumann, P. Bernath
11:00-11:15	GlobAerosol: A long term aerosol record from European satellite instruments.	Gareth Thomas (University of Oxford)
11:15-11:30	An assessment of GlobAer products	Stefan Kinne (MPI-Meteorology) presented by M. Schulz
11:30-11:45	Aerosol Profile Retrieval using SCIAMACHY Polarization Data?	Patricia Liebing (IUP Bremen)
11:45-12:00	Utilization of synergetic aerosol retrieval from ENVISAT and METOP	Thomas Holzer-Popp (DLR)
12:00-12:15	Synergetic use of satellite instruments: Combining information from MODIS and AIRS for cirrus	Mathias Schreier (NASA-JPL/UCLA)

	characterization by using accurate pre-launch calibration	
12:15-12:30	Retrieval of aerosol optical thickness in Arctic region using dual-view AATSR observations	Larysa Istomina (University of Bremen)
12:30-12:45	A new global climatology of different types of aerosols in the stratosphere by GOMOS-Envisat data treated with the LPC2E processor	Veronica Salazar (CNRS)
12:45-13:10	DISCUSSION	
13:10-14:00	LUNCH	
14:00-18:00	POSTER SESSION	
Poster Session - Data Quality		
	On the consistency of ozone profile data from Envisat, historical satellites and the NDACC network	Coralie De Clercq (Belgian Institute for Space Aeronomy)
	Trends in tropospheric NO ₂ over megacities in the Mediterranean and Middle East from SCIAMACHY	Andreas Hilboll (University of Bremen)
	Satellite validation with lidar	J.A.E. van Gijzel (RIVM)
	The ENVISAT Atmospheric Chemistry missions: monitoring status and evolution	Lidia Saavedra de Miguel (SERCO S.p.A)
	JEM/SMILES limb sounder: the L2 research project	Philippe Baron (NICT)
	SCIAMACHY Instrument Status - from 2009 to 2013	Manfred Gottwald (German Aerospace Center (DLR))
	The SCIAMACHY Consolidated Level 0 Master Archive	Manfred Gottwald (German Aerospace Center (DLR))
	Venus Observations with SCIAMACHY	Manfred Gottwald (German Aerospace Center (DLR))
	GECA: ESA's next generation validation data centre	Yasjka Meijer (ESA/ESRIN)
	Validation of different configurations of the GODFIT/GDP5 algorithm using ground-based total ozone data	MariLiza Koukouli (Laboratory of Atmospheric Physics)
	Revised polarisation calibration of SCIAMACHY	J.M. Krijger (SRON)
	In-flight calibration of the bidirectional reflectance distribution function of the SCIAMACHY ESM diffuser	R.C. Snel (SRON Netherlands Institute for Space Research)
	Impact of Level 1 quality on BIRRA CO retrieval	Günter Lichtenberg (German Aerospace Center)
	SCIAMACHY Monitoring Factors: Observation and End-to-End Correction of Instrument Performance Degradation.	Klaus Bramstedt (University of Bremen)

Retrieval of GOMOS bright limb ozone profiles	Simo Tukiainen (Finnish Meteorological Institute)
Recent results on the validation of the total ozone data obtained by remote sensing techniques	Chris Tzanis (University of Athens)
ESA's Operational Atmospheric Validation Strategy and Results	Thorsten Fehr (ESA)
ENVISAT Status and Future – The ESA ENVISAT 2010+ Project	Sergio Vazzana (ESA)
ESA's Operational Atmospheric Validation Strategy and Results	Ewa Kwiatkowska (ESA)
Intercomparison of Carbon Monoxide Retrievals from SCIAMACHY and AIRS Nadir Observations	Franz Schreier (DLR - German Aerospace Center)
Seven years of data quality of the ENVISAT Atmospheric-Chemistry missions: highlights, lessons learned and perspectives	Fabrizio Niro (Serco S.p.A.)
Development of SCIAMACHY operational ESA level 2 products towards version 5	Heinrich Bovensmann (University of Bremen, FB1)
Calibration approaches and quality aspects for the ENVISAT Atmospheric-Chemistry instruments	Angelika Dehn (Serco)
Performance of the Spanish Brewer Network assessed using satellite data from TOMS, GOME, OMI and GOME-2 instruments	Manuel Anton (Universidad de Extremadura)
Surface ultraviolet solar irradiance from Ozone Monitoring Instrument versus Brewer ground-based measurements at El Arenosillo (South-Western Spain)	Manuel Anton (Universidad de Extremadura)
The new GOME/ERS-2 Level 1 data with GDP_01 version 4	Bernd Aberle (German Aerospace Center (DLR), Oberpfaffenhofen)
Validation of satellite total ozone and NO2 data with ground-based SAOZ network	Florence Goutail (LATMOS/CNRS)
An Improved Scanner Model for Sciamachy	R.C. Snel (SRON Netherlands Institute for Space Research)
Poster Session - Troposphere/Air Quality	
Dynamic processes governing the isotopic composition of water vapor as observed from space and ground	Christian Frankenberg (SRON - Netherlands Institute for Space Research)
Sources and trends of Tropospheric Formaldehyde (HCHO) derived from GOME-1 and -2, and SCIAMACHY	Thierry Marbach (Max-Planck Institute for Chemistry)
SO2 Measurements from GOME-2: An Optimal Estimation Approach	Caroline R. Nowlan (Harvard-Smithsonian Center for Astrophysics)

Assessing acetone and PAN measurements in the UTLS from the MIPAS-E instrument	David Moore (University of Leicester)
Upper tropospheric pollution observed by MIPAS HCN and C ₂ H ₆ global distributions	Norbert Glatthor (Forschungszentrum/Universität Karlsruhe)
The Potential Role of Tropospheric CO and NO _x in the Ozone chemistry	Satheesh Kumar (Kannur University)
Detecting Volatile Organic Compounds from Orbit	Jeremy Harrison (University of York)
Weighting aerosol with MERIS	Alexander Kokhanovsky (University of Bremen)
Water vapour trends from GOME and SCIAMACHY satellite measurements	Sebastian Mieruch (University of Bremen)
A new opportunity to survey the global water vapour distribution: the 2.3-micron channel of SCIAMACHY	Hans Schrijver (SRON Netherlands Institute for Space Research)
Tropospheric ozone from GOME-2 NNORSY retrievals	Martin Felder (ZSW)
Satellite Observations of anthropogenic and volcanic SO ₂ using GOME-2 measurements	Christoph Hörmann (University of Heidelberg)
Analysis of long-range transport of aerosols for Portugal using a 3D Chemical Transport Model and OMI measurements	O. Tchepel (University of Aveiro)
Intercomparison of Carbon Monoxide Retrievals from SCIAMACHY and AIRS Nadir Observations	Franz Schreier (DLR - German Aerospace Center)
Ground-based FTIR and MAX-DOAS observations of formaldehyde at Réunion Island and comparisons with SCIAMACHY and the CTM IMAGES	Corinne Vigouroux (Belgian Institute for Space Aeronomy (BIRA-IASB))
Cloud and albedo effects in tropospheric NO ₂ estimations using zenith observations	Oleg Postolyakov (Institute of Atmospheric Physics, RAS)
Operational GOME-2 trace gas column measurements of NO ₂ , BrO and SO ₂	Pieter Valks (DLR)
Upper Tropospheric Composition Measurements with ACE-FTS: HNO ₃ and C ₂ H ₄	C Wespes (SCQP/ULB)
Multi axis hyper spectral measurements of tropospheric compounds with ground based and satellite equipments	Ana Domingues (Geophysics Centre of Evora)
ICSU/WMO World Data Center for Remote Sensing of the Atmosphere (WDC-RSAT)	Michael Bittner (German Aerospace Center (DLR))
Monitoring of Atmospheric Composition with the IASI/METOP Sounder: CO and Ozone Distributions	Maya George (LATMOS/IPSL, CNRS)

Evaluation of SCIAMACHY CO total columns with MOPITT CO and FTIR measurements	Jos De Laat (Royal Netherlands Meteorological Institute (KNMI))
Reconstructing ozone chemistry during transport of boreal fire plumes over Northern Pacific with satellite, aircraft measurement, and modeling	Richard Dupont (Jet Propulsion Laboratory)
Inter-comparison of TES HDO/H ₂ O Ratio with In Situ HDO and H ₂ O from the 2008 Mauna Loa Campaign	John Worden (Jet Propulsion Laboratory)
NO ₂ Total and Tropospheric Vertical Column Densities from OMI on EOS Aura	J. F. Gleason (GSFC)
Poster Session - Upper Atmosphere	
Overview of MIPAS observations of the middle and upper atmosphere	Manuel López-Puertas (Instituto de Astrofísica de Andalucía (CSIC))
Atomic Hydrogen Abundance During the Declining Phase of Solar Cycle 23	Martin Kaufmann (Forschungszentrum Juelich)
Constrained regularization methods for ozone profile retrieval from UV/VIS nadir spectrometers	Olena Schüssler (Institute of Remote Sensing, DLR)
Observations of thermospheric NO and kinetic temperature from 5.3 um emission measured by MIPAS on Envisat	Diego Bermejo-Pantaleón (Instituto de Astrofísica de Andalucía, CSIC)
Operational and scientific limb retrieval for the SCIAMACHY instrument	Serhiy Hrechanyy (Institute of Remote Sensing, DLR)
Water Vapor Profiles from SCIAMACHY lunar occultation measurements	Faiza Azam (Institute Of Environmental Physics)
Validation of Envisat Tracer measurements using balloon borne whole air sampler data	Andreas Engel (University of Frankfurt)
Poster Session - Clouds/Aerosols	
Technique to retrieve the spectral aerosol optical thickness using fast radiative transfer code and its application to MERIS data	Eleonora Zege (B. I. Stepanov Institute of Physics, National Acad)
Relationship Between Wind Speed and Aerosol Optical Thickness over Remote Ocean	HAIYAN HUANG (University of Oxford)
Using MODIS and GRAPE data to investigate the correlations between aerosol and cloud properties in a synoptic context	Benjamin Grandey (University of Oxford)
A model evaluation of aerosol products from the GlobAEROSOL project	Paul Palmer (University of Edinburgh)
Odin-SMR measurements of tropical upper tropospheric water	Bengt Rydberg (Chalmers University of Technology)

Satellite retrieval of cloud properties from the O2 A-band for air quality and climate applications	Ping Wang (KNMI)
Radiative Transfer in Highly Variable Cloud Scenarios	Sebastián Gimeno García (DLR)
Aerosol optical depths in the ECMWF/GEMS model: Comparisons with the GlobAerosol dataset.	Carole Peubey (ECMWF)
SCIAMACHY aerosol extinction profile retrieval	Ghassan Taha (Science Systems and Applications, Inc.)
Appraising the Direct Impacts of Aerosol on Climate (ADIANT)	Roy Grainger (University of Oxford)
Study of the water quality of Alqueva reservoir in the south of Portugal using MERIS data	Miguel Potes (Centro Geofísica de Évora (CGE))
Retrieval of stratospheric aerosol distributions from SCIAMACHY limb measurements: first steps and methodology	Florian Ernst (IUP University of Bremen)
Tunguska-1908 Explosion and Global Warming	Boris German (Institute of Physics of the Academy of Sciences)
Broadband_Clouds: A Tool for 2D Representation of Clouds in MIPAS/ENVISAT Scenario, Description and Applications	Elisa Castelli (IAC-CNR)
Atmospheric aerosol in the Amazon: results from the ORAC retrieval algorithm using AATSR	Andrew Sayer (University of Oxford)
Aerosol Optical Depth and Single Scattering Albedo climatology inferred from OMI and MODIS compared with ground data of AERONET-RIMA - El Arenosillo station	Yasmine Bennouna (Grupo de Óptica Atmosférica - UVA)
The potential for improved trace gas retrievals from MIPAS in the presence of clouds	Alison Waterfall (Rutherford Appleton Laboratory)
Comparison of atmospheric properties retrieved from MERIS and obtained from modelling studies	Dina Santos (Évora Geophysics Centre)
Global Retrieval of ATSR Cloud Parameters and Evaluation [GRAPE]: Temporal and spatial patterns in cloud and aerosol properties derived using the Oxford-RAL aerosol and cloud [ORAC] retrieval scheme.	Christopher Arnold (Oxford University)
More on SCIAMACHY PMD Identification of Clouds and Ice/snow method (SPICI): Degradation correction	J.M. Krijger (SRON)
Poster Session - Applications/Data Assimilation	
On the role of VIS radiation for the ozone information retrieval from SCIAMACHY data by means of Neural Network algorithms	Pasquale Sellitto (Tor Vergata University)

Water vapour distribution at urban scale using high-resolution numerical weather model and spaceborne SAR interferometric data	Ferretti Rossella (University of L'Aquila)
An evaluation of the MM5/CAMx system for Europe	Ioannis Kioutsioukis (Aristotle University of Thessaloniki)
Tomographic Analysis of the Stratosphere and Upper Troposphere from 2002 to 2008 Using MIPAS2D	Enzo Papandrea (University of Bologna)
Atmospheric Composition with Google Earth	J.M. Krijger (SRON)
Optimal use of the information provided by indirect measurements of atmospheric vertical profiles	Piera Raspollini (IFAC-CNR)
MIPAS-ENVISAT and IASI-METOP data fusion using the Measurement Space Solution method	Ugo Cortesi (Istituto di Fisica Applicata N. Carrara (IFAC-CNR))
Neural network algorithms for height resolved ozone retrievals from OMI Level 1b data	Pasquale Sellitto (Tor Vergata University)
Technique development for estimation of carbon dioxide concentration using radiative transfer modeling at 1.6 and 2.0 μm spectral window	Prabhunath Prasad (DDU Gorakhpur University)
Impact of different assimilated satellite geometries on tropospheric ozone simulations	Palmira Messina (Italian National Research Council (CNR))
Operational monitoring of SO ₂ emissions using the GOME-2 satellite instrument	Meike Rix (German Aerospace Center)
Validating global atmospheric models using Odin satellite data	Samuel Brohede (Chalmers University of Technology)
Non-linear inverse problems in satellite remote sensing	Johanna Tamminen (Finnish Meteorological Institute)
The PROMOTE ozone profile record assimilation project: validation and model cross-comparison	Frank Baier (German Aerospace Center)
Emission Factors from the satellite measurements?	Iryna Khlystova (IUP-Bremen)
Poster Session - Future Mission Studies	
ESA CAMELOT study: Challenges in future operational missions for GMES atmospheric monitoring, Sentinel 4 and 5	Pepijn Veefkind (KNMI)
Poster Session - Greenhouse Gases	
CO ₂ and CH ₄ Retrievals from GOSAT	Hartmut Boesch (University of Leicester)
Towards an improved CO ₂ retrieval algorithm for SCIAMACHY on ENVISAT	Michael Buchwitz (University of Bremen FB1)
Present status of data processing and validation of Greenhouse gases Observing SATellite (GOSAT)	Tatsuya Yokota (National Institute for Environmental Studies)

A Comparison of methane data products from Chemistry Transport Models, SCIAMACHY and a quasi-global network of FTIR stations	Bart Dils (Belgian Institute for Space Aeronomy, BIRA-IASB)
Carbon Monoxide and Methane Retrievals from SCIAMACHY Infrared Channels	Sebastián Gimeno García (DLR)
Poster Session - Stratosphere	
Quantifying gravity waves and turbulence in the stratosphere using GOMOS/Envisat measurements of stellar scintillation	Viktoria Sofieva (Finnish Meteorological Institute)
Modulations of the 27-day solar cycle signal in stratospheric ozone from SCIAMACHY	Sebastian Dikty (University of Bremen)
Polar chemical ozone loss as observed from SCIAMACHY limb measurements.	Thiranan Sonkaew (Institute of Environmental Physics)
Two-Dimensional Sensitivity Analysis of MIPAS observations	Massimo Carlotti (Universita' di Bologna)
Stratospheric composition changes caused by energetic particle precipitation: What have we learned from MIPAS?	B Funke (Instituto de Astrofísica de Andalucía (CSIC))
Stratospheric profiles of NO ₂ , BrO and OClO: Observations by SCIAMACHY and comparisons to ECHAM5/MESy1	Sven Kuehl (MPI fuer Chemie, Mainz)
Comparison of OMI-DOAS satellite total ozone column observations with ground-based data from direct and diffuse solar irradiance in the Southwest Iberian Peninsula	Manuel Anton (Universidad de Extremadura)
Diagnosing the permeability of dynamical barriers in the stratosphere from satellite observations of long-lived tracers	Elisa Palazzi (ISAC-CNR)
Water Vapour Profiles from SCIAMACHY Solar Occultation Measurements derived with Onion Peeling DOAS	Stefan Noël (University of Bremen)
Solar UV/visible/IR irradiance changes in terrestrial atmospheric bands derived from SUSIM, SCIAMACHY, and SIM satellite observations	Joseph Pagarán (Institute of Environmental Physics)
Superconducting Submillimeter-Wave Limb-Emission Sounder (JEM/SMILES), Instrument Performance and Observation Plan from ISS	SATOSHI OCHIAI (NICT)
Lifetime Validation of SCIAMACHY and MIPAS aboard ENVISAT (ENVIVAL-LIFE)	Mark Weber (University of Bremen)
Seven years of stratospheric BrO observations from SCIAMACHY	Alexei Rozanov (University of Bremen)

Validation of limb scatter ozone profiles from SCIAMACHY (2002-present) by comparison with HALOE, SAGE, MLS and ACE		Sebastian Mieruch (University of Bremen)
Simultaneous measurements of OClO, NO ₂ and O ₃ in the Arctic polar vortex by the GOMOS instrument		Cédric Tétard (BIRA-IASB)
Day 4, Thursday 10 September 2009		
Upper Atmosphere		Chair: D. Fussen, M. Lopez Puertas
09:00-09:15	Measurements of noctilucent clouds in infrared emission by MIPAS/ENVISAT	Manuel López-Puertas (Instituto de Astrofísica de Andalucía (CSIC))
09:15-09:30	First evidence of a 27-day signature in noctilucent cloud occurrence frequency	Charles Robert (University of Bremen)
09:30-09:45	First Climatology of Polar Mesospheric Clouds From GOMOS / ENVISAT Stellar Occultation Instrument	Kristell Pérot (LATMOS / IPSL / CNRS)
09:45-10:00	Comparison of strato-mesospheric CO measured by Odin and KIMRA	U. Raffalski (Institute of Space Physics)
10:00-10:15	Comparison of OSIRIS derived NO concentrations with coincident ACE-FTS NO measurements in the Antarctic Winter upper mesosphere	Edward Llewellyn (University of Saskatchewan) presented by Doug Degenstein
10:15-10:30	OSIRIS Retrievals of Daytime Mesospheric Ozone	Patrick Sheese (York University)
10:30-11:00	COFFEE BREAK	
Upper Atmosphere - continuation		Chair: D. Fussen, M. Lopez Puertas
11:00-11:15	A global picture of the mesospheric sodium layer by the GOMOS instrument	Didier Fussen (BIRA-IASB)
11:15-11:30	MIPAS middle atmosphere water vapor distributions	Maya Garcia-Comas (Instituto de Astrofísica de Andalucía-CSIC)
11:30-12:00	DISCUSSION	
Applications/Data Assimilation		Chair: A. Houcheorne, B.J. Kerridge
12:00-12:15	Data assimilation: adding value to Envisat chemistry observations	William Lahoz (NILU)
12:15-12:30	Assimilated total ozone record from 30 year of UV-VIS satellite observations	Ronald van der A (KNMI)

12:30-12:45	BASCOE Ozone and Cly analyses provided in the framework of PROMOTE	Quentin Errera (BIRA-IASB)
12:45-13:00	Assimilation of stratospheric ozone GOMOS data the isentropic transport model MIMOSA: Comparison between sub-optimal Kalman filter and kriging.	Charles Cot (UVSQ, UPMC, CNRS)
13:00-14:00	LUNCH	
Applications/Data Assimilation - continuation		Chair: A. Houcheorne, B.J. Kerridge
14:00-14:15	Sensitivity analysis for the assimilation procedure of satellite-based aerosol measurements in a chemical transport model using aerosol component information	Dmytro Martynenko (German Aerospace Centre)
14:15-14:30	The APOLLO (monitoring Atmospheric POLLution with earth Observations) project: an integrated platform for air quality monitoring over Italy	Fabio Del Frate (Tor Vergata University) presented by Pasquale Sellitto
14:30-14:45	NMVOC emissions over China estimated from HCHO and CHOCHO GOME-2 data	Jean-Francois Muller (Belgian Institute for Space Aeronomy)
14:45-15:00	Estimating Ship emitted NO ₂ in the Indian Ocean using satellite data	Heinrich Bovensmann (University of Bremen, FB1)
15:00-15:30	DISCUSSION	
15:30-16:00	COFFEE BREAK	
Greenhouse Gases		Chair: D. Crisp, G. Kirchengast
16:00-16:15	Information Content of Space Based CO ₂ Measurements	David Crisp (Jet Propulsion Laboratory/Caltech)
16:15-16:30	Methane and carbon dioxide column-averaged mixing ratios from SCIAMACHY on ENVISAT	Oliver Schneising (University of Bremen FB1) presented by Michael Buchwitz
16:30-16:45	Long-term analysis of methane as retrieved from SCIAMACHY	Christian Frankenberg (SRON - Netherlands Institute for Space Research)
16:45-17:00	Long-term time series of water vapour total columns from GOME, SCIAMACHY and GOME-2	Stefan Noël (University of Bremen)
17:00-17:15	The result of the initial functional verification on orbit of GOSAT	Masakatsu Nakajima (JAXA)

17:15-17:30	Preliminary results of the column abundances of global carbon dioxide and methane obtained from Greenhouse gases Observing SATellite (GOSAT)	Yukio Yoshida (National Institute for Environmental Studies)
17:30-18:00	DISCUSSION	
Day 5, Friday 11 September 2009		
Future Mission Studies		Chair: R. Munro, D. Murtagh
09:00-09:15	Mission requirements for GMES Sentinels 4 and 5	Joerg Langen (ESA)
09:15-09:30	Trace Gas Performance of Sentinel 4 UVN on Meteosat Third Generation	Heinrich Bovensmann (University of Bremen, FB1)
09:30-09:45	ADM-Aeolus: ESA's Wind Lidar Mission	Paul Ingmann (ESA/ESTEC) presented by Joerg Langen
09:45-10:00	QB50, an international network of 50 CubeSats for multi-point, in-situ measurements in the lower thermosphere and re-entry research	Jean-Marie Muylaert (von Karman Institute)
10:00-10:15	ACCURATE: Climate Benchmark Profiling of Greenhouse Gases, Thermodynamic Variables, and Wind from Space by Combined MW and IR-laser Occultation	Gottfried Kirchengast (University of Graz)
10:15-10:30	PREMIER: a proposed satellite mission to observe processes controlling atmospheric composition in the height range most important to climate	Brian Kerridge (Rutherford Appleton Laboratory)
10:30-11:00	COFFEE BREAK	
Future Mission Studies - continuation		Chair: R. Munro, D. Murtagh
11:00-11:15	Retrieval of vegetation chlorophyll fluorescence from FLEX spaceborne measurements in the O2A and O2B absorption bands	Luis Guanter (GFZ Potsdam)
11:15-11:30	Aerosol retrieval for the Multi-Spectral Imager (MSI) on EarthCARE	Wolfgang von Hoyningen-Huene (University of Bremen)
11:30-11:45	Discussion	
11:45-12:00	Summary on Trace Gases in the Stratosphere	

12:00-12:15	Summary on Troposphere/Air Quality	
12:15-12:30	Summary on Clouds/Aerosols	
12:30-12:45	Summary on Data Assimilation/Applications	
12:45-13:00	Summary on Upper Atmosphere	
13:00-13:15	Summary on GHGs	
13:00-13:15	Summary on Future Missions	
13:15-13:30	Concluding Remarks	