## [POSTER 7]

Date / Time (Sat.) October 9, 2021 / 13:20-14:30 (UTC)

Session Code SAT2

Session Chair Sang Seo Park

**[SAT2_1]** 13:20-13:22

**The Stratospheric Aerosol and Gas Experiment (SAGE) IV Pathfinder**

Robert Damadeo, Charles Hill, and Michael Obland
NASA, USA

**[SAT2_2]** 13:22-13:24

**Using Measurements from the Disturbance Monitoring Package in SAGE III/ISS Data Processing**

Marsha LaRosee[1], David Huber[3], Charles Hill[2], Kevin Leavor[1], Amy Rowell[2], Andrew Peterson[2], Robert Damadeo[2], Robert Manion[1], and David Flittner[2]
[1]Science Systems and Applications, Inc., USA, [2]NASA, USA, [3]NOAA, USA

**[SAT2_3]** 13:24-13:26

**Diurnal Scaling Factors for SAGE III/ISS: Using a 3D Model to Account for Time of Day Differences between Observing Platforms**

Sarah Strode[1,2], Ghassan Taha[1,2], Luke Oman[1], and Mark Schoeberl[3]
[1]NASA, USA, [2]USRA, USA, [3]Science and Technology Corporation, USA

**[SAT2_4]** 13:26-13:28

**Total Ozone Columns from Multiple Satellite Sensors Homogeneously Validated against Global Ground-Based Measurements**

Katerina Garane[1], Maria Elissavet Koukouli[1], Christophe Lerot[2], Tijl Verhoelst[2], Klaus-Peter Heue[3], PieterValks[3], JonasVlietinck[2], Fabian Romahn[3], Walter Zimmer[3], Dimitris Balis[1], Jean-Christopher Lambert[2], Michel van Roozendael[2], Diego Loyola[3], and Christos Zerefos[4]
[1]Aristotle University of Thessaloniki, Greece, [2]BIRA-IASB, Belgium, [3]DLR, Germany, [4]Academy of Athens, Greece

**[SAT2_5]** 13:28-13:30

**Measurements of Ozone and Related Species from Space using the Atmospheric Chemistry Experiment (ACE)**

Kaley A. Walker, Patrick E. Sheese, and Jiansheng Zou
University of Toronto, Canada

**[SAT2_6]** 13:30-13:32

**Error Budget Assessment for OMPS Limb Ozone Retrieval**

Carlo Arosio[1], Alexei Rozanov[1], Mark Weber[1], Victor Gorshelev[1], Natalya Kramarova[2], Chris Roth[3], and John P. Burrows[1]
[1]University of Bremen, Germany, [2]NASA, USA, [3]University of Saskatchewan, Canada

# V. Program Schedule

**[SAT2_7]** 13:32-13:34

**Assessment of AIRS, IASI, and CrIS Ozone Vertical Retrievals over the Central Himalaya**

Prajjwal Rawat[1,4], Manish Naja[1], Evan Fishbein[2], R. Kumar[3], P. Bhardwaj[3], S. N. Tiwari[4], S. Venkataramani[5], and S. Lal[5]

[1]Aryabhatta Research Institute of Observational Sciences, India, [2]NASA, USA, [3]NCAR, USA, [4]Deen Dayal Upadhyaya Gorakhpur University, India, [5]Physical Research Laboratory, India

**[SAT2_8]** 13:34-13:36

**Continuing Validation of Stratospheric Ozone Profiles from the EUMETSAT Atmospheric Composition SAF**

Peggy Achtert and Wolfgang Steinbrecht

Deutscher Wetterdienst Meteorologisches Observatorium, Germany

**[SAT2_9]** 13:36-13:38

**Tropical Tropospheric Ozone from Sentinel-5P TROPOMI Data: Improvements and Synergies of the CHORA and CHOVA Cloud Related Ozone Retrievals**

Kai-Uwe Eichmann, Swathi M. Satheesan, Mark Weber, and John P. Burrows

University of Bremen, Germany

**[SAT2_11]** 13:40-13:42

**Assessment of Satellite Total Ozone Retrieval Errors in Polar Regions**

David P. Haffner[1,2], Pawan K. Bhartia[2], Natalya A. Kramarova[2], Richard D. McPeters[2], Ramaswamy Tiruchirapalli[1,2], Gordon J. Labow[1,2], Jerald R. Ziemke[3,2], and Stacey M. Frith[1,2]

[1]Science Systems and Applications, Inc., USA, [2]NASA, USA, [3]Morgan State University, USA

**[SAT2_12]** 13:42-13:44

**Early Results of Retrieving BrO from the Geostationary Environment Monitoring Spectrometer**

Heesung Chong[1], Jhoon Kim[1], Gonzalo González Abad[2], Christopher Chan Miller[2], Rafael P. Fernandez[3,4], Alfonso Sáiz-López[3], Caroline Nowlan[2], Xiong Liu[2], Kelly Chance[2], Dha Hyun Ahn[1], Hyeji Cha[1], Ja-Ho Koo[1], and Sang Seo Park[5]

[1]Yonsei University, Republic of Korea, [2]Harvard–Smithsonian Center for Astrophysics, USA, [3]Institute of Physical Chemistry Rocasolano, Spain, [4]National Scientific and Technical Research Council (CONICET), Argentina, [5]UNIST, Republic of Korea

**[SAT2_13]** 13:44-13:46

**Validations of GEMS Formaldehyde Retrieval Algorithm during IOT**

Gitaek Lee[1], Rokjin J. Park[1], Hyeong-Ahn Kwon[2], Seunga Shin[1], Michel Van Roozendael[3], and Francois Hendrick[3]

[1]Seoul National University, Republic of Korea, [2]Harvard-Smithsonian Center for Astrophysics, USA, [3]BIRA-IASB, Belgium

**[SAT2_15]** 13:48-13:50

**Validations of Ozone Profiles from Satellite Remote Sensings using Ozonesonde Measurements over the Jang Bogo Station, Antarctica**

Hana Lee[1], Taejin Choi[2], Dha Hyun Ahn[1], Seong-Joong Kim[2], Jaeil Yoo[2], Natalya Alekseyevna Kramarova[3], Juseon Bak[4], Jhoon Kim[1], and Ja-Ho Koo[1]

[1]Yonsei University, Republic of Korea, [2]KOPRI, Republic of Korea, [3]NASA, USA, [4]Pusan National University, Republic of Korea

**[SAT2_16]** 13:50-13:52

**Southern Hemisphere Additional Ozonesondes (SHADOZ) Project Update: 2021 Archive, Outreach and Data Quality Assurance Activities**

Debra E. Kollonige[1], Anne M. Thompson[2], and Ryan M. Stauffer[2]

[1]Science Systems and Applications, Inc., USA, [2]NASA, USA

**[SAT2_17]** 13:52-13:54

**Long Term Ozonesonde Observations at Sodankylä**

Rigel Kivi[1], Pauli Heikkinen[1], Kenneth Nilsen[2], Roeland Van Malderen[3], Deniz Poyraz[3], Ryan M. Stauffer[4], and Herman G. J. Smit[5]

[1]Finnish Meteorological Institute, Finland, [2]University of Oulu, Finland, [3]Royal Meteorological Institute of Belgium, Belgium, [4]NASA, USA, [5]Institute of Energy and Climate Research: Troposphere (IEK-8), Germany

**[SAT2_18]** 13:54-13:56

**SHADOZ Watukosek Station Update: Comparisons between (1998-2013; 2016-2020) Ozonesonde and Satellite Vertical Profiles**

Ninong Komala[1], Habib Khirzin Al-Ghazali[1], Laily Fajarwati[1], Dian Yudha Risdiyanto[1], Dwinanda Puspitasari Harahap[1], Sigit Purnomo[1], and Anne Thompson[2]

[1]National Institute of Aeronautics and Space, Indonesia, [2]NASA, USA

**[SAT2_19]** 13:56-13:58

**Evaluating Long-Term Changes in Atmospheric Ozone**

David W. Tarasick[1], Herman G.J. Smit[2], Anne M. Thompson[3], Gary A. Morris[4], Jacquelyn C. Witte[5], Jonathan Davies[1], Tatsumi Nakano[6], Roeland Van Malderen[7], Ryan M. Stauffer[3], Bryan J. Johnson[8], René Stübi[9], Samuel J. Oltmans[8], and Holger Vömel[5]

[1]Environment and Climate Change Canada, Canada, [2]Institute of Energy and Climate Research: Troposphere (IEK-8), Germany, [3]NASA, USA, [4]St. Edward's University, USA, [5]NCAR, USA, [6]JMA, Japan, [7]Royal Meteorological Institute of Belgium, Belgium, [8]NOAA, USA, [9]MeteoSwiss, Switzerland

# V. Program Schedule

**[SAT2_20]** 13:58-14:00

**ASOPOS (Assessment of Standard Operating Procedures (SOPs) for OzoneSondes) 2.0: Ozonesonde Measurement Principles and Best Operational Practices**

Debra E. Kollonige[1,2], Anne M. Thompson[2], Herman G.J. Smit[3], Ryan M. Stauffer[2], David W. Tarasick[4], Bryan J. Johnson[5], Roeland Van Malderen[6], Holger Vömel[7], Peter von der Gathen[8], Gary Morris[9], and Richard Querel[10]

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**[SAT2_21]** 14:00-14:02

**Antarctic Ozone Depletion Measured by Davis Ozonesondes 2003-2020**

Matt Tully[1] and Andrew Klekociuk[2]

[1]Bureau of Meteorology, Australia, [2]Australian Antarctic Division, Australia

**[SAT2_22]** 14:02-14:04

**Repeated Ozone Vertical Profiles over Cyprus using Adapted Ozonesondes**

Maximilien Desservettaz[1], Christos Keleshis[1], Christos Constantinides[1], Panayiota Antoniou[1], Yunsong Liu[1], Mihalis Vrekoussis[1], Greg Kok[2], Jonathan Harnetiaux[2], and Jean Sciare[1]

[1]The Cyprus Institute, Cyprus, [2]Environmental Science, USA

**[SAT2_23]** 14:04-14:06

**New Insights from the Jülich Ozone-Sonde Intercomparison Experiments: Calibration Functions Traceable to One Ozone Reference Instrument**

Herman G.J. Smit[1], Deniz Poyraz[2], Roeland Van Malderen[2], David W. Tarasick[3], Holger Voemel[4], Bryan J. Johnson[5], Jonathan Davies[3], Rene Stuebi[6], Ryan M. Stauffer[7], Anne M. Thompson[7], Marc Allaart[8], Gary Morris[9], and Tatsumi Nakano[10]

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**[SAT2_24]** 14:06-14:08

**50 Years of Balloon-Borne Ozone Profile Measurements at Uccle, Belgium**

Hugo De Backer[1], Roeland Van Malderen[1], Dirk De Muer[1], Deniz Poyraz[1], Willem W. Verstraeten[1], Veerle De Bock[1], Andy Delcloo[1], Alexander Mangold[1], Quentin Laffineur[1], Marc Allaart[2], Frans Fierens[3], and Valérie Thouret[4]

[1]Royal Meteorological Institute of Belgium, Belgium, [2]KNMI, The Netherlands, [3]Belgian Interregional Environment Agency (IRCEL - CELINE), Belgium, [4]Université de Toulouse, France

**[SAT2_25]** 14:08-14:10

**Homogenisation of the Observation de Haute Provence ECC Ozonesonde Data Record: Comparison with Lidar and Satellite Observation**

G. Ancellet[1], S. Godin-Beekmann[1], R. Bodichon[5], A. Pazmiño[1], H.G.J. Smit[2], R.M. Stauffer[3], and R. Van Malderen[4]

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**[SAT2_26]** 14:10-14:12

**Update on Lauder Ozonesonde Homogenisation**

Richard Querel[1], Hisako Shiona[1], Alex Geddes[1], Deniz Poyraz[2], and Roeland Van Malderen[2]

[1]NIWA, New Zealand, [2]Royal Meteorological Institute of Belgium, Belgium

**[SAT2_27]** 14:12-14:14

**The Cell Temperature of ECC Ozonesondes in Relation to the Measured Pump Pemperature: Impact of Freezing and Boiling Effects Observed during JOSIE**

Deniz Poyraz[1], Herman G.J. Smit[2], Roeland Van Malderen[1], Tatsumi Nakano[3], and René Stuebi[4]

[1]Royal Meteorological Institute of Belgium, Belgium, [2]Institute of Energy and Climate Research: Troposphere (IEK-8), Germany, [3]JMA, Japan, [4]MeteoSwiss, Switzerland

**[SAT2_28]** 14:14-14:16

**South Pole Station Ozonesonde 35-Year Record 1986-2020: Altitude Layer Metrics and Potential Recovery Layers Observed**

Bryan Johnson[1], I. Petropavlovskikh[1,2], P. Cullis[1,2], and J. Booth[1]

[1]NOAA, USA, [2]CIRES, USA

**[SAT2_30]** 14:18-14:20

**Development and Testing of a Novel $SO_2$ Sonde**

Paul J. Walter[1], James H. Flynn[2], Sergio Alvarez[2], Jonathan Harnetiaux[3], Elizabth Klovenski[2], Alex Kotsakis[4], Gary A. Morris[1], Mark D. Spychala[5], and Subin Yoon[2]

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**[SAT2_31]** 14:20-14:22

**The Highest UV Index of the Marambio Station UV Time Series (2000-2020) Was Measured in November and December 2020**

Kaisa Lakkala[1], Ricardo Sanchez[2], Margit Aun[3], Jukka Kujanpää[1], Germar Bernhard[4], Rigel Kivi[1], Leif Backman[1] , Outi Meinander[1], Veijo Aaltonen[1], Eija Asmi[1], Antti Arola[1], Gustavo Copes[2], Germán Fogwill[2], Bjorn Johnsen[6], Alberto Redondas[5], Victoria Sofieva

[1]Finnish Meteorological Institute, Finland, [2]National Meteorological Service, Argentina, [3]University of Tartu, Estonia, [4]Biospherical Instruments, Inc, USA, [5]AEMET, Spain, [6]Norwegian Radiation and Nuclear Safety Authority, Norway

**[SAT2_32]** 14:22-14:24

**Comparison of SAGE III/ISS $NO_2$ Measurements with Ground-Based Observations from Lauder, NZ**

David E. Flittner[1], Kimberlee Dubé[2], and Richard Querel[3]

[1]NASA, USA, [2]University of Saskatchewan, Canada, [3]NIWA, New Zealand