(Sat.) October 9

[POSTER 6]

Date / Time (Sat.) October 9, 2021 / 12:00-13:10 (UTC)

Session Code SAT1

Session Chair Sang Seo Park

[SAT1_1] 12:00-12:02

Internal Consistency of the IAGOS Ozone Measurements for the Last 25 Years

Romain Blot[1], Philippe Nedelec[1], Damien Boulanger[1], Pawel Wolff[1], Bastien Sauvage[1], Jean-Marc Cousin[1], Andreas Zahn[2], Hannah Clark[3], and Valérie Thouret[1]

[1]Université de Toulouse, France, [2]Karlsruhe Institute of Technology, Germany, [3]IAGOS-AISBL, Belgium

[SAT1_2] 12:02-12:04

Dobson Global Calibration System: More than Half a Century of Successful QA/QC

Ulf Köhler[1], Wolfgang Steinbrecht[1], Voltaire A. Velazco[1], Glen McConville[2], and Robert D. Evans[2]

[1]Deutscher Wetterdienst Meteorologisches Observatorium, Germany, [2]NOAA, USA

[SAT1_3] 12:04-12:06

Total Ozone Column Variability Analysis over Natal in 21st Century

Alanna Maués de Souza[1], Lucas Vaz Peres[1], Rodrigo da Silva[1], Damaris Kirsch Pinheiro[2], Hassan Bencherif[3], Francisco Raimundo da Silva[4], and Maria Paulete Pereira Martins[4]

[1]UFOPA, Brazil, [2]UFSM, Brazil, [3]LACy, France, [4]INPE, Brazil

[SAT1_4] 12:06-12:08

Comparison of Dobson and Brewer Retrieved Total Ozone Column using Different Ozone Absorption Cross Sections in the Retrieval Algorithm

Karl Voglmeier, Ulf Köhler, Voltaire A. Velazco, and Wolfgang Steinbrecht

Deutscher Wetterdienst, Germany

[SAT1_5] 12:08-12:10

Intercomparison of Total Ozone Column (TOC) Measurements in Hohenpeißenberg from Three Spectrometer Systems: Dobson, Brewer and BTS Solar

Voltaire A. Velazco[1], Ulf Köhler[1], Ralf Zuber[2], Wolfgang Steinbrecht[1], and Karl Voglmeier[1]

[1]Deutscher Wetterdienst, Germany, [2]Gigahertz Optik GmbH, Germany

[SAT1_6] 12:10-12:12

Umkehr Ozone Profile Analysis and Satellite Validation for Selected Brewer and Dobson Spectrophotometers

Konstantinos Fragkos[1,3], Koji Miyagawa[2], Panagiotis Fountoukidis[1], MariLiza Koukouli[1], Katerina Garane[1], Dimitris Balis[1], Irina Petropavlovskikh[2], and Alkiviadis Bais[1]

[1]Aritotle University of Thessaloniki, Greece, [2]NOAA, USA, [3]INOE 2000, Romania

V. Program Schedule

[SAT1_7] 12:12-12:14

Consistency of Brewer and Dobson Total Column Ozone Measurements of the World's Longest Time Series at Arosa/Davos, Switzerland

Julian Gröbner[1], Herbert Schill[1], Luca Egli[1], and René Stübi[2]
[1]PMOD/WRC, Switzerland, [2]MeteoSwiss, Switzerland

[SAT1_8] 12:14-12:16

Advanced NO_2 Retrieval Technique for the Brewer Spectrophotometer Long-Term Changes over Rome and «Lockdown Effect» over Aosta, Italy

Henri Diémoz[1], Anna Maria Siani[2], Stefano Casadio[3], Anna Maria Iannarelli[3], Giuseppe Rocco Casale[2], Francesca Frasca[2], Vladimir Savastiouk[4], Alexander Cede[5,6], Martin Tiefengraber[5,7], and Moritz Müller[5]
[1]ARPA Valle d'Aosta, Italy, [2]Sapienza University of Rome, Italy, [3]Serco Italia, Italy, [4]International Ozone Services Inc., Canada, [5]LuftBlick, Austria, [6]NASA, USA, [7]University of Innsbruck, Austria

[SAT1_9] 12:16-12:18

Harmonized Retrieval of Middle Atmospheric Ozone from Two Microwave Radiometers in Switzerland

Eric Sauvageat[1], Eliane Maillard Barras[2], Klemens Hocke[1], Alexander Haefele[2], and Axel Murk[1]
[1]University of Bern, Switzerland, [2]MeteoSwiss, Switzerland

[SAT1_10] 12:18-12:20

Traceability of Total Ozone Column Measurements with the Portable Reference Spectroradiometer for Ultraviolet Radiation (QASUME)

Luca Egli, Gregor Hülsen, and Julian Gröbner
PMOD/WRC, Switzerland

[SAT1_11] 12:20-12:22

The Reevaluated Intraday Total Column Ozone Series from the Dobson Spectrophotometer No.84 Operating at Belsk (51.84N, 20.79E), Poland, since March 23, 1963

Bonawentura Rajewska-Więch, Janusz Krzyścin, and Janusz Jarosławski
Institute of Geophysics, Poland

[SAT1_12] 12:22-12:24

Comparison of Total Ozone Column and UVI Retrieved from Brewer, PANDORA and OMI at Athens, Greece during 2018-2021

Raptis Ioannis-Panagiotis[1,2], Kouklaki Dimitra[2] ,Eleftheratos Kostas[2,3], Fountoulakis Ilias[1], and Kazadzis Stelios[4,1]
[1]National Observatory of Athens, Greece, [2]National and Kapodistrian University of Athens, Greece, [3]Academy of Athens, Greece, [4]PMOD/WRC, Switzerland

[SAT1_13] 12:24-12:26

New Millimeter-Wave Spectrometer for Simultaneous Multi-Line Observations Operating at Syowa Station

Akira Mizuno[1], Taku Nakajima[1], Tomoo Nagahama[1], Daichi Tsutsumi[1], Genma Mizoguchi[1], Naoto Sekiya[2], Takuma Hayashi[2], Yoshihiro Tomikawa[3], Mitsumu K. Ejiri[3], Masaki Tsutsumi[3], and Kaoru Sato[4]
[1]Nagoya University, Japan, [2]University of Yamanashi, Japan, [3]National Institute of Polar Research, Japan, [4]The University of Tokyo, Japan

[SAT1_15] 12:28-12:30

Continuity of the Swiss Total Ozone Column Series after Dobson Automation and the Instruments Relocation

René Stübi[1], Herbert Schill[2], Jörg Klausen[1], Eliane Maillard Barras[1], Alexander Haefele[1], Julian Gröbner[2], and Luca Egli[2]

[1]Meteoswiss, Switzerland, [2]PMOD/WRC, Switzerland

[SAT1_16] 12:30-12:32

Comparison of Total Ozone Measurements in Melbourne, Australia, Performed with a Low-Cost Microspectrometer and a Brewer MK-III

Kåre Edvardsen[1], Anders Nordli[1], Matt Tully[2], and Steve Rhodes[2]

[1]The Arctic University of Norway, Norway, [2]Bureau of Meteorology, Australia

[SAT1_17] 12:32-12:34

Comparing Lauder Total Column Ozone Retrievals from FRM4DOAS with Dobson and NIWA UV Spectrometer Retrievals

Richard Querel[1], Alex Geddes[1], Ben Liley[1], Francois Hendrick[2], Martina Friedrich[2], and Caroline Fayt[2]

[1]NIWA, New Zealand, [2]BIRA-IASB, Belgium

[SAT1_18] 12:34-12:36

Reprocessing of the RBCC-E Izaña Observatory Triad Ozone Series

Alberto Berjón[1,2], Alberto Redondas[2], Javier López-Solano[1,2], Virgilio Carreño[2], Francisco C. Parra-Rojas[2], and Sergio F. León-Luis[1,2]

[1]Tragsatec, Spain, [2]AEMET, Spain

[SAT1_19] 12:36-12:38

Total Ozone Uncertainty Model on Brewer Algorithm

Parra-Rojas F.C.[1], Redondas A.[1], Berjón A.[1,2], López-Solano J.[1,2], Carreño V.[1], and León-Luis S.F.[1,2]

[1]AEMET, Spain, [2]Tragsatec, Spain

[SAT1_20] 12:38-12:40

EUBREWNET: An Overview of Recent Advances

J. López-Solano[1,2], A. Redondas[2], J. Rimmer[3], A. Berjón[1,2], F.C. Parra-Rojas[2], V. Carreño[2], and S.F. León-Luis[1,2]

[1]Tragsatec, Spain, [2]AEMET, Spain, [3]University of Manchester, UK

[SAT1_21] 12:40-12:42

Eubrewnet Brewer Updated Algorithm, Total Ozone in Six European Stations: Sodankylä, Davos, Uccle, Thessaloniki, Madrid and Izaña

Redondas A.[1], Parra-Rojas F.C.[1], Berjón A.[2,1], López-Solano J.[2,1], Bais A.[3], Gröbner J.[4], De Bock V.[5], Karppinen T.[6], and Vilaplana JM[7]

[1]AEMET, Spain, [2]Tragsatec, Spain, [3]Aristotle University of Thessaloniki, Greece, [4]PMOD/WRC, Switzerland, [5]Royal Meteorological Institute of Belgium, Belgium, [6]Finnish Meteorological Institute, Finland, [7]National Institute for Aerospace Technology, Spain

V. Program Schedule

[SAT1_22] 12:42-12:44

Comparison of the Ozone Vertical Profiles based on the Umkehr Observations by Collocated the Dobson and Brewer Spectrophotometers at Belsk, Poland, for the Period 2011-2016

Janusz Jarosławski, Janusz Krzyścin, and Bonawentura Rajewska-Więch
Polish Academy of Sciences, Poland

[SAT1_23] 12:44-12:46

Ozone Measurement Complex in Tomsk (Russia)

Arshinov M.Y., Bazhenov O.E., Belan B.D., Belan S.B., Davydov D.K., Ivlev G.A., Kharchenko O.V., Kozlov A.V., Nevzorov A.A., Nevzorov A.V., Romanovkii O.A., and Tolmachev G.N.
V.E. Zuev Institute of Atmospheric Optics SB RAS, Russia

[SAT1_24] 12:46-12:48

Brewer Spectrophotometer Internal Spectral Stray Light Correction based on Physical Principles

Vladimir Savastiouk[1] and Henri Diémoz[2]
[1]International Ozone Services Inc., Canada, [2]ARPA Valle d'Aosta, Italy

[SAT1_25] 12:48-12:50

Implementation of the Comorian Observatory for Atmospheric Sciences: Ozone and UV Radiation Measurements

Mohamed Toihir Abdoulwahab[1], Hassan Bencherif[2], Thierry Portafaix[2], Gerrie Coetzee[3], Sivakumar Venkataraman[4], and Kevin Lamy[2]
[1]Agence Nationale de l'Aviation Civile et de la Météorologie, France, [2]LACy, France, [3]South African Weather Service, South Africa, [4]University of KwaZulu-Natal, South Africa

[SAT1_26] 12:50-12:52

Ozone Monitoring by NDACC FTIR Spectrometry: Improved Retrieval Strategy and Impact of Instrumental Line Shape Characterisation

Omaira E. García[1], Esther Sanromá[1,3], Matthias Schneider[2], Frank Hase[2], Sergio F. León-Luis[1,4], Thomas Blumenstock[2], Eliezer Sepúlveda[1], Alberto Redondas[1], Virgilio Carreño[1], Carlos Torres[1], and Natalia Prats[1]
[1]AEMET, Spain, [2]Karlsruhe Institute of Technology, Germany, [3](Now) Employment Observatory of the Canary Islands, Spain, [4](Now) Tragsatec, Spain

[SAT1_27] 12:52-12:54

Ozone Observation of Dobson Spectrophotometer in Yonsei University

Jaemin Hong, Songkang Kim, Jhoon Kim, and Ja-Ho Koo
Yonsei University, Republic of Korea

[SAT1_28] 12:54-12:56

Machine-Learning-Based Satellite-Corrected Global Stratospheric Ozone Profile Dataset from a Chemical Transport Model

Sandip Dhomse[1], Carlo Arosio[2], Mark Weber[2], and Martyn Chipperfield[1]
[1]University of Leeds, UK, [2]University of Bremen, Germany

[SAT1_29] 12:56-12:58

Homogeneity of Total Ozone Data from Three Reanalyses

Peter Krizan, Michal Kozubek, and Jan Lastovicka
Institute of the Atmospheric Physics of the Czech Academy of Science, Czech Republic

[SAT1_30] 12:58-13:00

Reanalysis of the Long-Term Atmospheric Composition Datasets from the JPL Lidars at Table Mountain Facility, California, and Mauna Loa Observatory, Hawaii

Thierry Leblanc, Mark Brewer, Fernando Chouza, Darryl Koon, and Patrick Wang
NASA, USA

[SAT1_31] 13:00-13:02

Assessment of Interannual Variability of the Ozone Column in the Upper Troposphere and Lower Stratosphere between Different Reanalysis of the S-Rip

Mateus Dias Nunes[1], Simone M. Sievert. C. Coelho[1], Paulo Yoshio Kubota[1], and Michaela I. Hegglin[2]
[1]INPE, Brazil, [2]University of Reading, UK

[SAT1_32] 13:02-13:04

Measurements of Ozone Columns by IKFS-2 Spectrometer aboard Meteor-M N2 Satellite

Yana Virolainen, Alexander Polyakov, Georgy Nerobelov, and Yury Timofeyev
St. Petersburg State University, Russia