

[POSTER 5]

Date / Time (Fri.) October 8, 2021 / 14:00-14:50 (UTC)

Session Code FRI3

Session Chair Corinne Vigouroux, Valerie Thouret

- [FRI3_1]** 14:00-14:02
Two Complementary Tropospheric Ozone Column Data Records based on Total Columns from GOME, SCIAMACHY, GOME-2, OMI and TROPOMI and Stratospheric Columns from BASCOE/MLS
Klaus-Peter Heue^{1,2}, Diego Loyola¹, Fabian Romahn¹, Melanie Coldewey-Egbers¹, Christophe Lerot³, Simon Chabrillat³, and Quentin Errera³
¹DLR, Germany, ²TUM, Germany, ³BIRA, Belgium
- [FRI3_2]** 14:02-14:04
Tropospheric Ozone Column Dataset Derived by Combination of Nadir and Limb Satellite Measurements
Viktoria F. Sofieva¹, Risto Hänninen¹, Mikhail Sofiev¹, Monika Szlag¹, Hei Shing Lee¹, Johanna Tamminen¹, and Christian Retscher²
¹Finnish Meteorological Institute, Finland, ²ESA/ESRIN, Italy
- [FRI3_3]** 14:04-14:06
Inter-Comparison and Evaluation of Tropospheric Ozone Reanalysis Products from CAMS, and TCR
Vincent Huijnen¹, Kazuyuki Miyazaki², Johannes Flemming³, Antje Inness³, and Takashi Sekiya⁴
¹KNMI, The Netherlands, ²NASA, USA, ³ECMWF, UK, ⁴JAMSTEC, Japan
- [FRI3_4]** 14:06-14:08
Evaluation of Tropospheric Ozone Reanalyses with Independent Ozone-sonde Observations in East Asia
Sunmin Park¹, Seok-Woo Son¹, Myung-II Jung¹, Jinkyung Park¹, and Sang Seo Park²
¹Seoul National University, Republic of Korea, ²UNIST, Republic of Korea
- [FRI3_5]** 14:08-14:10
Evaluation of the Total Column Ozone and Tropospheric Ozone in the CCMI1 Models over East Asia
Seo-Yeon Kim¹, Sunmin Park², and Seok-Woo Son¹
¹Seoul National University, Republic of Korea, ²Korea University, Republic of Korea

V. Program Schedule

- [FRI3_6]** 14:10-14:12
Improving the Current Understanding of Tropospheric Ozone Processes with Coordinated Ozone Profiling by the Tropospheric Ozone Lidar Network (TOLNet)
John T. Sullivan¹, Michael J. Newchurch², Timothy A. Berkoff¹, Guillaume Gronoff^{1,3}, Shi Kuang², Andrew O. Langford⁴, Christoph J. Senff^{4,5}, Raul J. Alvarez II⁴, Thierry Leblanc⁶, Fernando Chouza⁶, Jia Su⁷, M. Patrick McCormick⁷, Matthew S. Johnson¹, Kevin Strawbridge⁸, Fred Moshary⁵, Michael Shook¹, and Gao Chen¹
¹NASA, USA, ²University of Alabama, USA, ³Science Systems and Applications Inc., USA, ⁴NOAA, USA, ⁵CIRES, USA, ⁶CalTech, USA, ⁷Hampton University, USA, ⁸Environment and Climate Change Canada, Canada
- [FRI3_7]** 14:12-14:14
Stratosphere-Troposphere Exchange of Ozone and Carbon Monoxide over the North Pacific Ocean in Northern Winter using Two Chemical Reanalysis Data Sets
Haosen Xi and Masamoto Fujiwara
Hokkaido University, Japan
- [FRI3_8]** 14:14-14:16
Effect of Synoptic Scale Dynamics on the Vertical Distribution of Ozone over the Arabian Sea and Indian Ocean During the Boreal Winter of 2018
P. R. Satheesh Chandran^{1,2}, S. V. Sunilkumar¹, M. Muhsin^{1,3}, Maria Emmanuel^{1,2}, and Hemanth Kumar⁴
¹VSSC, India, ²University of Kerala, India, ³National Institute of Technology, India, ⁴NARL, India
- [FRI3_9]** 14:16-14:18
Comparison between Two Events with Ozone-Poor Masses Originating from the South Pole and the Tropics over the City of Durban, South Africa
Fabio Henrique Corrêa¹, Gabriela Dornelles Bittencourt¹, Damaris Kirsch Pinheiro¹, and Hassan Bencherif²
¹UFMS, Brazil, ²LACy, France
- [FRI3_10]** 14:18-14:20
Origin of Tropospheric Air Masses in the Tropical West Pacific Inferred from Balloon-Borne Ozone and Water Vapour Observations from Palau
Katrin Müller, Ingo Wohltmann, Peter von der Gathen, Ralph Lehmann, and Markus Rex
Alfred-Wegener-Institute, Germany
- [FRI3_11]** 14:20-14:22
Multi-Year of Dynamics of Vertical Ozone Distribution in the Troposphere over the South of Western Siberia
P.N. Antokhin, V.G. Arshinova, M.Yu. Arshinov, B.D. Belan, S.B. Belan, D.K. Davydov, A.V. Fofonov, T. M. Rasskazchikova, D.E. Savkin, D.V. Simonenkov, T.K. Sklyadneva, and G.N. Tolmachev
V.E. Zuev Institute of Atmospheric Optics r SB RAS, Russia

V. Program Schedule

[FRI3_14] 14:26-14:28

Ozone Observations over Open Oceans on R/V Mirai from 67°S to 75°N since 2012: Testing Global Chemical Reanalysis TCR-2 in terms of Arctic Processes and Low Ozone Levels at Low Latitudes

Yugo Kanaya¹, Kazuyuki Miyazaki^{2,1}, Fumikazu Taketani¹, Takuma Miyakawa¹, Hisahiro Takashima^{1,3}, Xiaole Pan^{1,4}, Saki Kato³, Kengo Sudo^{1,5}, Takashi Sekiya¹, Jun Inoue⁶, Kazutoshi Sato⁷, and Kazuhiro Oshima^{1,8}

¹JAMSTEC, Japan, ²CalTech, USA, ³Fukuoka University, Japan, ⁴Chinese Academy of Sciences, China, ⁵Nagoya University, Japan, ⁶National Institute of Polar Research, Japan, ⁷Kitami Institute of Technology, Japan, ⁸Rokkasho Institute of Environmental Sciences, Japan

[FRI3_15] 14:28-14:30

South America and Africa Biomass Burning Influence on the Seasonality of the Tropospheric Ozone over Natal, Brazil

Damaris Kirsch Pinheiro¹, Hassan Bencherif², Lucas Vaz Peres³, Gabriela Dornelles Bittencourt¹, Nelson Bègue², Maria Paulete Pereira Martins⁴, and Francisco Raimundo da Silva⁴

¹UFES, Brazil, ²LACy, France, ³UFOPA, Brazil, ⁴INPE, Brazil

[FRI3_16] 14:30-14:32

Surface Ozone Concentration over Russian Territory in 2020-2021

E.V. Stepanov¹, V.V. Andreev², M.Yu. Arshinov³, B.D. Belan³, S.B. Belan³, Chelibanov⁴, V.P. Chelibanov⁴, D.K. Davydov³, N.F. Elansky⁵, G.A. Ivlev³, A.V. Kozlov³, S.N. Kotelnikov¹, I.N. Kuznetsova⁶, V.A. Lapchenko⁷, E.A. Lezina⁸, O.V. Postilyakov⁵, D.E. Savkin³, I.A. Senik³, G.N. Tolmachev³, A.V. Fofonov³, and I.V. K.A. Shukurov⁵

¹A. M. Prokhorov General Physics Institute, RAS, Russia, ²RUDN University, Russia, ³IAO SB RAS, Russia, ⁴Instrument-Making Company OPTEK, Russia, ⁵A.M. Obukhov Institute of Atmospheric Physics RAS, Russia, ⁶Hydrometeorological Research Center of Russian Federation, Russia, ⁷Institute of Biology of the Southern Seas of RAS, Russia, ⁸Mosecomonitoring, Russia

[FRI3_17] 14:32-14:34

Application of Adjacened-Average to Analysis of Longterm Surface Ozone Courses

Eugene V. Stepanov

A. M. Prokhorov General Physics Institute, RAS, Russia

[FRI3_18] 14:34-14:36

Variation of Surface Ozone, NO_x, CO, BTEX, SO₂ and NH₃ in Kannur- A South Indian Coastal City

Nishanth T¹, Resmi CT², and Satheesh Kumar MK³

¹Sree Krishna College Guruvayur, India, ²Erode Arts and Science College, India, ³MAHE, India

V. Program Schedule

[FRI3_19] 14:36-14:38

Preliminary Study of the Characterization of Surface Ozone in the Marambio Station for the Period 2012-2018

Gerardo Carbajal Benítez, María Elena Barlasina, and Lino Fabian Condori
National Meteorological Service (SMN), Argentina

[FRI3_20] 14:38-14:40

Long-Term Changes in Seasonal Cycle of Surface Ozone over Japan with Continuous Air Quality Monitoring Records for 1980-2015

Natsumi Kawano, Tatsuya Nagashima, and Seiji Sugata
National Institute for Environmental Studies, Japan

[FRI3_21] 14:40-14:42

Surface Ozone Trends over a 21-year Period at El Arenosillo Observatory: Emission Precursors, Weather Conditions and Implications on Air Quality

José A Adame¹, Isidoro Gutierrez-Alvarez², Paolo Cristofanelli³, Alberto Notario^{4,5}, Jose A. Bogeat¹, Antonio Lopez¹, Alvaro Gómez¹, Juan P. Bolívar², and Margarita Yela¹

¹National Institute for Aerospace Technology (INTA), Spain, ²University of Huelva, Spain, ³National Research Council of Italy, Italy, ⁴Universidad de Castilla-La Mancha, Spain, ⁵ICCA-UCLM, Spain

[FRI3_22] 14:42-14:44

Patterns and Trends of Ozone and Carbon Monoxide at Ushuaia (Argentina) Observatory

José A Adame¹, Olga Puentedura¹, Laura Gómez¹, Lino Condori², Gerardo Carbajal^{2,4}, María E. Barlasina², and Margarita Yela¹

¹National Institute for Aerospace Technology (INTA), Spain, ²National Meteorological Service (SMN), Argentina, ⁴Pontificia Universidad Católica Argentina, Argentina

[FRI3_23] 14:44-14:46

Introducing New Lightning Schemes to a Chemistry Climate Model CHASER (MIROC)

Yanfeng He¹, Kengo Sudo^{1,2}, and H.M.S. Hoque¹

¹Nagoya University, Japan ²JAMSTEC, Japan

[FRI3_24] 14:46-14:48

Ozonesonde Profiles at Reunion Island (21.1°S, 55.5°E) in the Indian Ocean, and Impact of Convection on the Upper-Tropospheric Composition

Jerome Brioude¹, Stephanie Evan¹, Damien Héron², Jean-Marc Metzger³, Kevin Lamy¹, and Françoise Posny¹

¹LACy, France, ²LMD, CNRS-UMR8539, France, ³OSU-R, UMS3365, CNRS, France