

● (Thu.) October 7

[ORAL] Session E. Ozone Monitoring and Measurement Techniques

Date / Time (Thu.) October 7, 2021 / 12:00-12:45 (UTC)

Session Code THU1

Session Chair Andrea Pazmiño

[THU1_K] 12:00-12:15

Keynote

Ozone Monitoring and Measurement Techniques

Natalya Kramarova

NASA, Goddard Space Flight Center, Greenbelt, Maryland, USA

[THU1_1] 12:15-12:20

Version 8 Ozone Profile and Version 8 Total Column Ozone Records from the Ozone Mapping and Profiler Suites

Lawrence E. Flynn¹, Zhihua Zhang², Eric Beach², Chunhui Pan³, Irina Petropavlovskikh¹, C. Trevor Beck¹, and Ding Liang⁴

¹NOAA, USA, ²IM Systems Group, Inc., USA, ³University of Maryland, USA, ⁴Government Systems Technologies Inc., USA

[THU1_2] 12:20-12:25

Gaps and Advances in the Validation of Satellite EO Data and their Uncertainties: Case Studies on Atmospheric Ozone Data Sets

Tijl Verhoelst¹, Daan Hubert¹, Arno Keppens¹, Steven Compernelle¹, Jean-Christopher Lambert¹, Alberto Redondas², and Alexander Cede^{3,4}

¹BIRA-IASB, Belgium, ²AEMET, Spain, ³NASA, USA, ⁴LuftBlick, Austria

[THU1_3] 12:25-12:30

Satellite Data Harmonization for the TOAR-II Tropospheric Ozone Assessment

Arno Keppens, Daan Hubert, Tijl Verhoelst, Steven Compernelle, and Jean-Christopher Lambert

BIRA-IASB, Belgium

[THU1_4] 12:30-12:35

Using Machine Learning Techniques to Create the Homogenized 25 Year Data Record GOME-Type Ozone Profile Essential Climate Variable (GOP-ECV)

Diego Loyola¹, Melanie Coldewey-Egbers¹, Barry Latter², Richard Siddans², Brian Kerridge², Michel van Roozendaal³, and Christian Retscher⁴

¹DLR, Germany, ²NCEO, UK, ³BIRA-IASB, Belgium, ⁴European Space Agency, Italy

V. Program Schedule

[THU1_5] 12:35-12:40

Update of the Homogenization of the Long-Term Global Ozonesonde Records

Roeland Van Malderen¹, Deniz Poyraz¹, Herman G.J. Smit², Gonzague Romanens³, René Stübi³, Gérard Ancellet⁴, Sophie Godin-Beekmann⁴, Natalia Prats⁵, Carlos Torres⁵, Wolfgang Steinbrecht⁶, Marc Allaart⁷, Ankie Piters⁷, Ana Díaz⁵, Jose L. Hernandez⁵, Rigel Kivi⁸, Richard Querel⁹, Matt Tully¹⁰, Peter von der Gathen¹¹, Barbora Klikova¹², Martin Motl¹², Pavla Skrivankova¹², Bogumil Kois¹³, Norrie Lyall¹⁴, Michael Gill¹⁵, Nis Jepsen¹⁶, Peter Oelsner⁶, Vincenzo Rizi¹⁷, Marco Iarlori¹⁷, David W. Tarasick¹⁸, Bryan J. Johnson¹⁹, Anne M. Thompson²⁰, and Ryan M. Stauffer²⁰

¹Royal Meteorological Institute of Belgium, Belgium, ²Institute of Energy and Climate Research: Troposphere (IEK-8), Germany, ³MeteoSwiss, Switzerland, ⁴LATMOS, France, ⁵AEMET, Spain, ⁶Deutscher Wetterdienst Meteorologisches Observatorium, Germany, ⁷KNMI, The Netherlands, ⁸Finnish Meteorological Institute, Finland, ⁹NIWA, New Zealand, ¹⁰Bureau of Meteorology, Australia, ¹¹Alfred Wegener Institut, Germany, ¹²Czech Hydrometeorological Institute, Czech Republic, ¹³Institute of Meteorology and Water Management, Poland, ¹⁴British Meteorological Service, UK, ¹⁵Met Éireann Forecast, Ireland, ¹⁶Danish Meteorological Institute, Denmark, ¹⁷Università Degli Studi dell'Aquila, Italy, ¹⁸Environment and Climate Change Canada, Canada, ¹⁹NOAA, USA, ²⁰NASA, USA

[THU1_6] 12:40-12:45

On the Use of Satellite Observations to Fill Gaps in the Halley Station Total Ozone Record

Lily N. Zhang¹, Susan Solomon¹, Kane A. Stone¹, Jonathan D. Shanklin², Joshua D. Eveson², Steve Colwell², John P. Burrows³, Mark Weber³, Pieternel F. Levelt^{4,5}, Natalya A. Kramarova⁶, and David P. Haffner^{6,7}

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