

## NDACC 2025 Symposium Program – Poster Presentations

Poster sessions Monday October 27, 2025 and Tuesday October 28, 2025; 4:00 to 6:00 PM  
Ocean Grand Foyer, Ocean Grand Ballroom and online

Session A: Creating and improving long-term data: Instrumentation, processing and providing past, present and future data-streams

Conveners: Wolfgang Steinbrecht, Jim Hannigan

P\_A01: **Ankie Piter**s (remote) – Twenty-five years of Paramaribo upper air observations

P\_A02: **Joshua Richards** – Data Homogenization and Improvements to the Beltsville, MD, USA, 20-year Ozone-sonde Record

P\_A03: **Wolfgang Steinbrecht** – Ozone profile time series from NDACC lidars, microwave radiometers, FTIRs, Umkehr, and sondes

P\_A04: **Eliane Maillard Barras** – Processing of the Payerne ozone-sonde timeseries with the time response correction (TRC) method: validation and post-2000 trend estimation

P\_A05: Sachiko Okamoto / **Sophie Godin-Beekmann** – Correction of the Observatoire Haute Provence electrochemical concentration cell (ECC) ozone-sonde data record

P\_A06: **Matt Tully** (remote) – Comparison of Science Pump Corporation and EnSci Ozone-sondes at Broadmeadows

P\_A07: **Voltaire A. Velazco** – From Legacy to Future: Advancing Long-Term Total Ozone Column Observations at Hohenpeissenberg

P\_A08: Coline Mahob / **Christof Jansenn** (remote) – Towards new laser-based UV absorption cross sections around 308 nm for traceable atmospheric remote sensing of ozone

P\_A09: **Yann Poltera** (remote) – Observations of water vapor in the UT/LS of unprecedented accuracy with nonequilibrium corrected low-GWP frost point hygrometers

P\_A10: **Simone Brunamonti** (remote) – ALBATROSS: a laser spectrometer for balloon-borne measurements of UTLS water vapor

P\_A11: **Pierre Fogal** (remote) – PEARL: The Polar Environment Atmospheric Research Laboratory – A platform for ground-based measurements of the High Arctic Atmosphere and Environs

## Session A (continued)

- P\_A12: **Tomoo Nagahama** (remote) – Long -term variation in isoprene column amount retrieved from the NDACC high-resolution FTIR dataset measured in Rikubetsu, Japan
- P\_A13: **Hideaki Nakajima** – First retrieval of HFC-125 by ground-based FTIR in Tsukuba, Japan
- P\_A14: Hao Fu/ **Christof Jansenn** (remote) – A new NDACC-IRWG site at Paris: More than 10 year measurements of ethane and carbon monoxide over a European megacity
- P\_A15: **Gennadi Milinevsky** (remote) – The simultaneous atmospheric ozone and carbon monoxide measurements by microwave 110/115 GHz radiometer in Changchun, northeast China
- P\_A16: **Chaonan Lv** (remote) – 2D MAX-DOAS Observation Network in China
- P\_A17: **Weiwei Hu** (remote) - Spatiotemporal distribution and formation mechanisms of HONO based on long-term observations from the MAX-DOAS network in China
- P\_A18: **Alexis Merlaud** (remote) - Towards centralized stratospheric BrO profile retrieval within the FRM4DOAS system

## Session B: Validating atmospheric measurements from satellites and from other platforms

Conveners: Jean-Christopher Lambert, Elian Maillard Barras

P\_B01: **Tijl Verhoelst** – NDACC ZSL-DOAS instruments: the backbone of satellite stratospheric NO<sub>2</sub> data record validation

P\_B02: **Meike K. Rotermund** (remote) – Validating MAX-DOAS Surface VMRs and Tropospheric Columns of NO<sub>2</sub> and HCHO in Toronto, Canada

P\_B03: **Karin Kreher** (remote) – CINDI-3 (3rd Cabauw Intercomparison of UV-Vis DOAS Instruments): Overview and Campaign Highlights

P\_B04: **Fernanda Cabello** (remote) – Estimating the cloud thermodynamic phase over King George Island during austral summer with MicroPulseLidar measurements

P\_B05: **Corinne Vigouroux** – Validation of all S5P ozone products (total columns, profiles, and tropospheric columns) using the FTIR NDACC network

P\_B06: **Gaia Pinardi** (remote) – Intercomparison of MAX-DOAS, FTIR and direct sun DOAS HCHO retrievals in Xianghe (China)

P\_B07: **Mary Cate McKee** – SAGE III/ISS Validation methods

P\_B08: **Kaley A. Walker** (remote) – More than Two Decades of the Canadian Arctic ACE/OSIRIS Validation Project at PEARL

P\_B09: **David E. Flittner** – The “Comparisons” tab: a public avenue to view SAGE III/ISS data against NDACC observations

P\_B10: **Daan Hubert** – Ground-based observations: a treasure trove to assess stratospheric ozone observations by nadir and limb-viewing sensors

P\_B11: **Gordon J. Labow** – Pandora Total Column Ozone Measurements Compared to Measurements from a Brewer Spectrophotometer

P\_B12: **Jonguk Park** – Variabilities of NO<sub>2</sub> and HCHO from Pandora observations and the assessment of their surface concentrations using ground-based in-situ observations

P\_B13: **Jean-Christopher Lambert** – A Decade of NDACC Support to the Sentinel-5P TROPOMI Operational Validation Facility

## **Session B (continued)**

P\_B14: **Thomas F Hanisco** – Validation and support of space-based measurements with the Pandora Global Network of ground-based spectrometers

Session C: NDACC synergistic environment in support of field campaigns and other chemistry and climate-observing networks

Conveners: Thierry Leblanc, Lizzy Asher

- P\_C01: **Nis Jepsen** (remote) – Autonomous Retrieval of Atmospheric Sounding Systems Using the Meteoglider Platform
- P\_C02: **Kimberly Strong** (remote) – Synergistic Network Measurements of the Arctic Atmosphere at the Polar Environment Atmospheric Research Laboratory
- P\_C03: **Joseph Hung** (remote) – Filling the polar night gap in High Arctic FTIR trace gas measurements
- P\_C04: **Bärbel Vogel** – Does the Asian summer monsoon play a role in the stratospheric aerosol budget of the Arctic?
- P\_C05: **Martine De Mazière** – NDACC showcases global interoperability for trace gas and aerosol remote sensing in the CARGO-ACT project
- P\_C06: **Tuukka Petäjä** – ACTRIS: High Quality Atmospheric data to All Users
- P\_C07: **Thierry Leblanc** – Centralized Data Processing as an added value to multi-network data integration: From standardized uncertainty budget to traceability and consistency, lessons learned from the development of the Global Lidar data Analysis Software Suite (GLASS)
- P\_C08: **Debra E. Kollonige** – Southern Hemisphere Additional Ozonesondes (SHADOZ) Network Updates: 2025 Activities and Ozone Trends Analysis
- P\_C09: **Herman G.J. Smit** (remote) – Quality Assurance of the Global Ozone Sonde Network: A Continuous Process of Reporting and Assessing the Sondes Measurement Quality on their Consistency and Uncertainties
- P\_C10: **Katherine R. Wolff** – High Quality Ozone Sonde Datasets for Ozone Trends Studies: Using NASA Wallops Flight Facility and SHADOZ Dual Soundings and Long-term Records for Demonstration
- P\_C11: **Ryan Stauffer** – Satellite, Ship, and Aircraft-based Views of US Gulf Coast Air Quality: The June and October 2024 SCOAPE-II Project
- P\_C12: **Christian Rolf** – Investigation of water vapour transport processes in the extratropical lowest stratosphere with the Juelich Modular Balloon Observatory (JUMBO)

## **Session C (continued)**

P\_C13: **Maurice Roots** - Synergistic Tropospheric Ozone Observations from Ground-Based, Airborne, and Balloon Platforms during the 2023 AGES+ Campaign

P\_C14: **Jason St. Clair** - A new US network for ground-based remote sensing of carbon dioxide, methane, and CO

Session D: Synergistic use of models with NDACC and its Cooperating Networks' data to interpret observations and support model development and verification

Conveners: Sarah Strode, Martine De Mazière

P\_D01: **Hyungyu Kang** – Comparison of Daily Ozonesonde Measurements and Chemical Reanalyses over South Korea Based on 2021 Pre-ACCLIP Data: An Ozone Intrusion Case

P\_D02: **Teaghan Knox** – Tropopause Trends Over Boulder, Colorado, and the Potential Impact on Upper Tropospheric/Lower Stratospheric Ozone Trends

P\_D03: **Erin McGee** (remote) – Using NDACC and TCCON to evaluate short-lived climate forcers in the Arctic

P\_D04: **Sieglinde Callewaert** (remote) – WRF-GHG Simulations of methane (CH<sub>4</sub>): comparing column-averaged and profile observations over East Asia

## Session E: Linking changes in atmospheric composition, climate, and air quality

Conveners: Roland Van Malderen, Bärbel Vogel

- P\_E01: **Irina Petropavlovskikh** – Tropospheric ozone trends at Boulder (2000-2022): Insights from multiple NDACC instruments
- P\_E02: **Sachiko Okamoto** (remote) – Ozone trends from ground -based measurements and merged satellite datasets at Observatoire Haute Provence (OHP)
- P\_E03: **Caroline Jonas** (remote) – Looking for ozone recovery in the Arctic
- P\_E04: **Abby Scharf** – Six decades of ozonesonde measurements over Antarctica
- P\_E05: **Jian Guan** – Human Influence on the Ozone Layer Detectable by the 1960s
- P\_E06: **Ja-Ho Koo** (remote) – Wintertime ozone vertical profile patterns in South Korea from multiple data obtained in the ASIA-AQ campaign
- P\_E07: **Reem Hannun** – Evaluating Ozone Deposition to Sensitive Ecosystems Using a Fast, High Precision Ozone Instrument
- P\_E08: **Kevin Joshy** (remote) – 25+ Years of NDACC UV-Visible Measurements at 80°N
- P\_E09: **Petra Duff** (remote) – NDACC FTIR Measurements of Tropospheric Composition in the Canadian High Arctic
- P\_E10: **Edgardo I. Sepulveda Araya** (remote) – Characterizing aerosol impact on surface radiation over the Southern Andes, East of Santiago, Chile
- P\_E11: **Akriti Masoom** – The climatological variation of NO<sub>2</sub>, its underlying cause and effect on aerosol properties measurements

Session F: Oases in the desert: Measurements that address the impending gaps in atmospheric data

Conveners: Gerald Nedoluha, Rennie Selkirk

P\_F01: **Pamela Wales** – Continuing the Goddard Earth Observing System (GEOS) Composition Reanalysis Beyond Aura MLS

P\_F02: **Richard Querel** – Past, present, and future of New Zealand's Lauder atmospheric research station

P\_F03: **Thierry Leblanc** – Validation of the Small Mobile Ozone Lidar with eXtended Capability (SMOL-X) measurements during the instrument's first NDACC Deployment in Lauder, New Zealand

P\_F04: **Justus Notholt** – FTIR and microwave trace gas observations by the University of Bremen

P\_F05: **Michael D. Himes** (remote) – A machine learning approach to continue the stratospheric water vapor record using OMPS LP measurements

P\_F06: **Henry B. Selkirk** – The Role of Frostpoint Measurements of Stratospheric Water Vapor in the Impending Stratospheric “Data Desert”

P\_F07: **Elizabeth Asher** – Balloon measurements can help address impending UTLS water vapor data gaps

P\_F08: **Gerald Nedoluha** – 33 years of ground-based microwave measurements of H<sub>2</sub>O in the middle atmosphere

P\_F09: **Robin Wing** (remote) – Using Resonance Fluorescence Lidars to Monitor Space Debris in the Upper Mesosphere and Lower Thermosphere, Case Study Falcon 9 Re-entry on 19 February 2025

P\_F10: **Jeannette D. Wild** – The NDACC Database and Web Pages – 35 years of operations