

TEMPO/GEMS 2024 Joint Science Team Workshop Poster List

	First name	Last name	Affiliation	Title
1	Kangho	Bae	UNIST	Validation of GEMS operational v2.0 Total Column NO ₂ and HCHO during the GMAP/SIJAQ campaign
2	Eric	Baumann	US EPA	Update on TEMPO validation activates with Pandora Sun Spectrometers
3	Claudia	Bernier	NASA ARC	Assessing the capability of TEMPO to retrieve pollution gradients in complex environments
4	Steven	Brown	NOAA	Airborne Ozone Profiles under TEMPO during the 2023 AEROMMA and CUPiDS Campaigns
5	James	Carr	Carr Astronautics	Image Navigation and Registration for TEMPO
6	Hyeji	Cha	Yonsei University	Introduction of newly developed Level-2 products from GEMS
7	Yujin	Chai	Yonsei University	GEMS AOD retrieval: assessment of version v2.1 update
8	HOEJUN	CHOI	Pukyong National University	Monitoring greenhouse gas emissions from the CubeSats: algorithm development plans
9	Yongjoo	Choi	Hankuk University of Foreign Studies	Comparison of Tropospheric NO ₂ Vertical Profile between Remote Sensing and Airborne in-situ Measurement during SIJAQ/ASIA-AQ Campaign
10	Yoonbae	Chung	Seoul National University	Change in Air Mass Factor of GEMS domain through input updates in Chemical Transport Model
11	Jim	Crawford	NASA LaRC	Hemispheric Airborne Measurements of Air Quality: A Future Contribution to TEMPO Science-Based Validation
12	Cheng	Dang	JCSDA/UCAR	Progress and challenges in aerosol data assimilation from a CRTM perspective.
13	Mary Angelique	Demetillo	NASA LaRC	Observing urban air pollution spatiotemporal variability with remote-sensing during ASIA-AQ field study
14	Betsy	Farris	BAE Systems	Geostationary Air Quality Instruments for the Southern Hemisphere
15	Lawrence	Flynn	NOAA	TEMPO Solar Time Series Analysis
16	Sung Hyun	Gong	University of Seoul	Improvement of Geostationary Environmental Satellite Yellow Dust Products through Deep Learning Techniques
17	Eunjo	Ha	Seoul National University	Advancements of the GEMS glyoxal product
18	Jinsuk	Hong	Hanwha Systems	Development of the methane detection small satellite constellation
19	Weizhen	Hou	Smithsonian Astrophysical Observatory, Center for Astrophysics Harvard & Smithsonian	Wavelength calibration for Tropospheric Emissions: Monitoring of Pollution (TEMPO)
20	Chia-Hua	Hsu	University of Colorado Boulder	Intercomparison of top-down estimates of anthropogenic and soil NO _x emissions using TEMPO and TROPOMI NO ₂ remote sensing observations in the U.S.
21	Guanyu	Huang	Stony Brook University	Estimate ground-level NO ₂ and ozone concentrations using TEMPO observations and AI

22	Edward	Hyer	Naval Research Laboratory	Employing satellite retrievals to diagnose aerosol mass extinction efficiency parameterizations in a global aerosol model.
23	Dan	Jaffe	University of Washington	Understanding O3 dynamics with TEMPO observations
24	HAJEONG	JEON	UNIST	Development of long-term climate data algorithm based on GEMS data
25	Daewon	Kim	Institute of Environmental Studies, Pusan National University	Measurement of CO2 VMRs and emissions fluxes from industrial point sources using Raman Lidar
26	Mijeong	Kim	NIER	Spectral and Spatial Dependencies in Validation of Satellite-based AOD from GEMS using AERONET
27	Okgil	Kim	NIER	The Role of Satellite Data in Air Quality Forecasting
28	Seongyoung	Kim	Pukyong National University	Analyzing diurnal variation patterns of AOD in urban areas through GEMS and ground-based instrument
29	Serin	Kim	Pukyong National University	The SMART-s NO2 Vertical Profile Products from Pandoras during the ASIA-AQ Campaign over Seoul-metropolitan areas in South Korea
30	Joowan	Kim	Kongju National University	GEMS ozone product evaluation using ozonesonde measurements during the ACCLIP campaign
31	Jiratiwan	Kruasilp	Geoinformatics and Space Technology Development Agency	Empowering GEMS to Establish Air Pollution Decision Support System in Thailand
32	Hyeong-Ahn	Kwon	University of Suwon	MAX-DOAS measurements during ASIA-AQ and comparisons with GEMS products
33	Kwanuk	Kye	Pukyong National University	Measurement of PM10 Spatial distribution in a High Spatial Resolution in Seoul using Horizontal Scanning Aerosol LiDAR
34	DaGyo	Lee	Pukyong National University	First-time estimation of global near-surface methane mixing ratio distributions using machine learning with the TROPOMI data
35	Gangham	Lee	Pukyong National University	Development and evaluation of a machine learning-based aerosol type classification algorithm using satellite and AERONET data
36	Gitaek	Lee	Seoul National University	Evaluation of updated GEMS HCHO product
37	Subin	Lee	Pukyong National University	Enhancement of retrieving aerosol optical properties by measuring polarization over Asia
38	Tabitha	Lee	University of Houston	Observing the Spatiotemporal Variability of NO2 using TEMPO and CLustering of Atmospheric Satellite Products (CLASP)
39	Yeeun	Lee	Ewha Womans University	Characterization of GEMS Level 1B Products based on Inter-Calibration Techniques from a 4.5-Year of Operation
40	Yungon	Lee	Chungnam National University	Analysis of CO2-NO2 relationship based on GEMS and OCO-3 data in urban areas over Asia
41	Wei	Li	NOAA ARL/GMU	Evaluation of NOAA's UFS-AQM modelled NO2 and formaldehyde column against TEMPO
42	Yang	Li	Baylor University	Leveraging remote sensing and modeling to understand evolving chemistry in wildfire smoke
43	Fei	Liu	GSFC/MSU	High-resolution mapping of nitrogen oxides emissions from satellite retrievals of tropospheric nitrogen dioxide columns
44	Hazem	Mahmoud	NASA	TEMPO Data Distribution
45	Arthur	Mizzi	NASA ARC and NOAA/CIRES	CPSR Analysis of Vertical Sensitivity for TEMPO Ozone Retrieval Profiles
46	Ayano	Nakamura	NICT	Air Mass Factor Calculation in Level-2 Data Processing for GOSAT-GW NO2

47	Yujin	Oak	Harvard University	Air quality trends and perspectives in South Korea inferred from GEMS and LEO satellites
48	Sang-Ik	Oh	Seoul National University (SNU)	Constraining Tropospheric OH using GEMS products
49	Apoorva	Pandey	NASA GSFC/ UMBC	Evaluating Pandora MAX-DOAS formaldehyde observations for validating satellite retrievals
50	Gyeong	Park	Pukyong National University	Comparison between Trace gas Column Densities from GEMS and ground-based Direct sun measurements during the ASIA-AQ campaign period
51	Jeonghyeon	Park	Pukyong National University	Physical characteristics of volcanic SO ₂ obtained from hourly GEMS observations over Asia
52	Jinsoo	Park	NIER	Chemical Characteristic of Submicron Particles in the West Sea of Korea Using Airborne Measurements: Focusing on 2019-2023
53	Sehyeon	Park	Pukyong National University	Comparison of total column aerosol and trace gas observations from the Geostationary Environment Monitoring Spectrometer(GEMS) and ground-based instruments during the Asia-AQ campaign
54	Seohui	Park	GESTAR II-MSU/NASA GSFC	PM _{2.5} Estimation from GOES & TEMPO: An Ensemble Deep Learning Approach
55	Seonyeong	Park	Pukyong National University	Diurnal variation of surface Nitrogen Dioxide mixing ratios over South Korea estimated using the machine learning with the GEMS observations data
56	Bryan	Place	SciGlob LLC	Intercomparison of Pandora MAX-DOAS NO ₂ retrievals with in-situ network measurements and airborne observations across the Eastern US
57	Zhen	Qu	North Carolina State University	Advancing sectoral emission estimates using TEMPO observations
58	Beiming	Tang	NOAA ARL and GMU	Build high resolution surface estimates air pollution using TEMPO data
59	Brittany	Thomas	US EPA	Duke Forest Site TEMPO Mission Support
60	Luke	Valin	US EPA	Analysis of historical and recent ozone air monitoring data and TEMPO NO ₂ retrievals over Phoenix, Arizona
61	Jun	Wang	The University of Iowa	Assimilation of TEMPO NO ₂ for improving the forecast of diurnal variation of surface O ₃ air quality.
62	Erika	Wright	SAO	Sharing TEMPO Data with public and student audiences
63	Jin-Woo	Yu	University of Seoul	Improving GEMS Cloud and Snow Detection via Deep Learning Techniques