

**Wednesday, May 2**

## Chair/speaker

**Welcome**

Opening  
Welcome by host

Jay Al-Saadi (NASA) & Ben Veihelmann (ESA)  
Shoba Kondragunta & Larry Flynn (NOAA)

**Greenhouse Gas Session****Dave Crisp (JPL)**

Status and plans of greenhouse gas missions. Ground-based or aircraft programs providing validation data. Discussion on AC-VC GHG White Paper.

GOSAT and GOSAT-2  
OCO-2 and OCO-3  
S5P CH4 retrieval  
TanSat, FY-3D/3F and the Chinese GHG program  
GaoFen-5 GHG Monitoring Instrument  
French activities on GHG (incl. ground based?) <tb>  
Status of IASI FM 3 and latest progress on IASI-NG project development  
GeoCARB  
European Commission's plans towards a European anthropogenic GHG emission monitoring and verification support capacity  
status High-Priority Candidate Copernicus Mission for CO2  
ARRHENIUS – GEO GHG Observations for Africa and Europe  
CMS Flux Contributions to Carbon Cycle Science  
Observing methane emissions from space with the next generation of satellite instruments: from global OH monitoring down to individual point sources  
GHG whitepaper

Key Shiomi (JAXA)  
Dave Crisp (NASA)  
Claus Zehner (ESA)  
Yi Liu (CAS) and Peng Zhang (CMA)  
Mingmin Zou (CAS)  
Carole Deniel (CNES)  
Francois Bermudo (CNES)  
Berrien Moore (University of Oklahoma)  
Hugo Zunker (EC)  
Yasjka Meijer (ESA)  
Andre Butz (Heidelberg)  
Kevin Bowman (NASA)  
Daniel Jacob (Harvard)  
all

**Combined Poster Session (Posters to remain up all week)**

Thursday, May 3

#### Ozone profiles

Gordon Labow (NASA) and Diego Loyola (DLR)

#### Status and plans of ozone profile products. Consistent long-term data sets.

LOTUS - merging limb instrument data

Stacey Frith (NASA)

CCI nadir profiles

Michel Van Roozendaal (BIRA)

SBUV/OMPS Present & Future work

Stacey Frith & Natalya Kramarova (NASA)

IASI ozone profiles

Cathy Clerbaux (LATMOS/IPSL)

AIRS + OMI merged ozone profile

Kevin Bowman (NASA)

Ozone from new missions: TROPOMI/S5P

Diego Loyola (DLR)

Ozone from new missions: SAGE III

Dave Flittner (NASA)

#### AQ gas

Ben Veihelmann (ESA) and Jay Al-Saadi (NASA)

#### Status and plans of air quality missions. Focus on S5P. Validation needs and strategies, needs document for GeoAQ constellation.

GEMS

Jhoon Kim (Yonsei University)

Sentinel-4

Ben Veihelmann (ESA)

TEMPO

Kelly Chance (SAO)

Sentinel-5 Precursor

Pepijn Veefkind / Henk Eskes (KNMI)

Sentinel-5 Precursor

Claus Zehner (ESA)

IASI for AQ - what's new since the last CEOS meeting

Cathy Clerbaux (LATMOS/IPSL)

GaoFen-5 EMI

Liangfu Chen (CAS)

S5P automated validation facility

Jean-Christopher Lambert (BIRA)

Pandora Global Network status and plans <tb>

Bob Swap, Alexander Cede (NASA) <tb>

AQ-related Fiducial Reference Method projects, Pandonia <tb>

Michel Van Roozendaal (BIRA) <tb>

Cal/Val Needs GEMS/S4/TEMPO document

all

#### Interdisciplinary items

GSICS UV-Vis

Larry Flynn (NOAA)

CAMS

Richard Engelen (CAMS/ECMWF)

Making better use of high-resolution data in data assimilation

Henk Eskes (KNMI)

**Friday, May 4**

**Morning Session**

**AQ/GHG co-benefits** Kevin Bowman (JPL)

**Multi-constituent data assimilation and OSSEs**

Inferring coupling between reactive gases and terrestrial ecosystems/agriculture through OSSE	Danica Lombardozzi (NCAR)
Multi-constituent AQ and AQ/GHG OSSEs	Kazuyuki Miyazaki (JAMSTEC)
synergy AQ and CO <sub>2</sub>	Hugo Zunker (EC) on behalf of Maathout (JRC)
<title TBC>	Lesley Ott (NASA)
<title TBC>	Arlindo da Silva (NASA)
Observational Constraints of Anthropogenic Combustion from Space: Opportunities for Monitoring Efficiency	Ave Arellano (U. Arizona)
<title TBC>	Dylan Jones (U. Toronto)
Case studies of CO and NO <sub>2</sub> as indicators of anthropogenic CO <sub>2</sub> : Germany vs. India	Julia Marshall
Carbon Human Emissions (CHE) overview	Richard Engelen (CAM5/ECMWF)

**Afternoon Session**

**AQ aerosol** Omar Torres (NASA) and Ben Veihelmann (ESA)

**How to make the most from satellite observations of aerosol for air quality? What do we learn from the operational met imagers?**

Legacy GOES vs GOES-R Series	Shobha Kondragunta, Istvan Lazlo (NOAA)
GOES-16 ABI AOD Algorithm and Product Validation	Istvan Lazlo, Mi Zhou (NOAA)
Report of TEMPO Aerosol Workshop	Omar Torres (NASA)
GOES-R/TEMPO Synergy	Pubu Ciren, Shobha Kondragunta (NOAA)
Approaches to scale AOD to PM <sub>2.5</sub>	Shobha Kondragunta (NOAA)
AQ Forecasting Applications of GOES-16 data	Amy Huff (Pennsylvania State U.)
Aerosol and PM retrieval COMS GOCI	Jhoon Kim (Yonsei University)
Assimilation of Radiances for Aerosol Monitoring	Gareth Thomas (RAL)
Assimilation of radiances for AQ applications	Patricia Castellanos (NASA)
Surface-based aerosol observations	Sangwoo Kim (Seoul National University)
AOD-PM <sub>2.5</sub> relationships in different time and spatial scales	Mian Chin (NASA)
Adding high temporal resolution to the global long-term aerosol data record: A synergy of LEO and GEO	Rob Levy (NASA)

**AOB**

Wrapup, next meeting, AOB