

	CEOS Atmospheric Composition Virtual Constellation AC-VC-15	June 10 - 12 (Monday-Wednesday), 2019		
	Monday, June 10			
9:00-9:30	Registration			
		Chair/speaker	time (min)	status
9:30	Welcome			
9:30	Welcome by host	Teruyuki Nakajima (JAXA)	10	confirmed
9:40	Opening, meeting goals	Jay Al-Saadi (NASA) & Ben Veihelmann (ESA)	10	confirmed
9:50	Greenhouse Gas Session	Dave Crisp (JPL)		
	Mission Status Reports			
9:50	GOSAT and GOSAT-2	Kei Shiomi/Akihiko Kuze (JAXA) - TBD	15	confirmed
10:05	OCO-2 and OCO-3	David Crisp (NASA/JPL)	15	confirmed
10:20	TanSat	Yi Liu (CAS), David Crisp (NASA)	10	Presented by Dave Cr
10:30	Sentinel 5p TROPOMI Mission Status	Claus Zehner (ESA)	10	confirmed
10:40	Sentinel 5p TROPOMI CH4 results	Jochen Landgraf (SRON)	10	confirmed
10:50	MicroCarb and MERLIN (TBC)	Claude Camy-Peyret (IPSL)	15	confirmed
11:05	Coffee Break		25	
11:30	GeoCarb	Sean Crowell (OU)	15	confirmed
11:45	AIM-North mission overview	Dylan Jones (Toronto), Ray Nassar (CSA)	15	confirmed
12:00	Sentinel CO2 Mission	Valerie Fernandez (ESA)	15	confirmed
12:15	Cross Calibration of GHG Missions	Ahkihiko Kuze (JAXA, CEOS WGCV), Rose Munro (EUMETSAT, GSICS)	30	
12:45	Validation with TCCON	Isamu Morino (NIES) TBD	15	confirmed
13:00	Validation with Aircraft - CONTRAIL	Toshinobu Machida (NIES)	15	confirmed
13:15	Lunch 75 minutes		75	
	Afternoon Session - Preparing for the 2023 and 2028 Global Stocktakes			
14:30	The CEOS AC-VC GHG Initiative	David Crisp (NASA/JPL)	20	confirmed
14:50	GOSAT CO2 Intecomparison (TBD)	TBD, Aki Tsuruta (FMI) or Yosuke Niwa (NIES)	20	
15:10	Implications for bias in flux inversions	Takashi Maki (MRI/JMA)	20	confirmed
15:30	Regional scale trends from OCO-2 and GOSAT	Prabir Patra (JAMSTEC)	20	confirmed
15:50	The CO2 Human Emissions Initiative	Richard Engelen (ECMWF)	20	confirmed
16:10	Coffee Break 30 minutes		30	
16:40	NASA Carbon Monitoring System Flux (CMS-Flux) update	Kevin Bowman (NASA/JPL)	20	confirmed
17:00	The OCO-2 Flux MIP	Sean Crowell (OU)	20	confirmed
17:20	CEOS SIT Chair update on 'Carbon and Biomass'	Stephen Ward (JAXA)	10	confirmed
17:30	Discussion: Integrating Results into a Flux Product	David Crisp (NASA/JPL)	30	discussion
18:00	Adjourn			

	Tuesday, June 11			
9:00	AQ/GHG co-benefits	Kevin Bowman (JPL) and Hiroshi Tanimoto (CGER-NIES)		
	Multi-constituent data assimilation and OSSEs			
9:00	Carbon cycle and satellite data contribution to the global stocktake	Nobuko Saigusa, Hiroshi Tanimoto (CGER-NIES)	15	confirmed
9:15	Copernicus and the Global Effort for Monitoring of Anthropogenic GHG Emissions	Hugo Zunker (EC)	15	confirmed
9:30	ODIAC fossil fuel emission inventory effort and challenges of CO2 emission inventories for future monitoring support activities	Tomohiro Oda (USRA)	15	confirmed
9:45	Development of a historical emission inventory in Asia and its evaluation using inverse modeling with satellite observation	Jun-ichi Kurokawa (ACAP)	15	confirmed
10:00	NASA's Carbon Cycle OSSE Initiative	Lesley Ott (NASA)	15	
10:15	Nature runs for GHG and AQ within CHE and CAMS	Richard Engelen (ECMWF)	15	confirmed
10:30	Coffee Break 30 minutes		30	
11:00	Greenhouse Gases and Air Quality from AIM-North	Dylan Jones (U Toronto)	15	confirmed
11:15	Evaluation of relationships between urban CO2 and AQ from ground to space	Hayoung Park/Sujong Jeong (SNU)	15	confirmed
11:30	Predicting FF CO2 fluxes using top-down NOx and CO emissions estimated from multi-constituent chemical data assimilation	Kazu Miyazaki (NASA)	15	confirmed
11:45	Investigating the Utility of CO2 and CO Analysis in Tracking Fossil Fuel CO2	Ave Arellano (U Arizona)	15	confirmed
12:00	Contribution of high spatial resolution NO2 data (1km) to local CO2 flux estimation	Yugo Kanaya (JAMSTEC)	15	confirmed
12:15	Mortality from particulate matter in cities worldwide: a challenge and an opportunity for co-benefits from low carbon development	Daven Henze (U Colorado)	15	confirmed
12:30	Session wrap-up and recommendations	all	15	discussion
12:45	Lunch 75 minutes		75	
14:00	CEOS news and Interdisciplinary topics	Ben Veihelmann (ESA) and Jay Al-Saadi (NASA)	3h	
14:00	Discussion of AC-VC leadership rotation, next meeting, any other business	Jay Al-Saadi (NASA), Ben Veihelmann (ESA)	15	confirmed
14:15	IGAC and opportunities for collaboration with CEOS AC-VC	Hiroshi Tanimoto (NIES), Crawford, Melamed	15	confirmed
14:30	GSICS cal/val activities for atmospheric composition reflective measurements	Rose Munro (EUMETSAT)	15	confirmed
14:45	AQ trace gas session	Ben Veihelmann (ESA) and Jay Al-Saadi (NASA)	3h	
	Mission status and plans of air quality missions.			
14:45	Status of GEMS	Jhoon Kim (Yonsei University)	15	confirmed
15:00	Status of TEMPO	Kelly Chance (SAO), Jay Al-Saadi (NASA)	15	Presented by Jay Al-S
15:15	Status of Sentinel-4	Ben Veihelmann (ESA)	15	confirmed
15:30	Coffee Break 30 minutes		30	
16:00	Status of the S-5P Mission - Cal/Val lessons learned	Claus Zehner (ESA)	15	confirmed
16:15	S-5P Research Products	Diego Loyola (DLR)	15	confirmed
16:30	EMI data quality and in-orbit test results	Liangfu Chen (CAS)	15	confirmed

16:45	EUMETSAT Contribution to Sentinels	Rose Munro (EUMETSAT)	15	confirmed
17:00	Status of IR missions for air quality	David Edwards (NCAR)	15	confirmed
17:15	Status of the GEMS mission and air quality data analysis	Ara Cho (NIER)	15	confirmed
17:30	Japanese activity of satellite missions for the air quality	Yasuko Kasai (NICT)	15	confirmed
17:45	Adjourn			
19:00	Meeting Dinner (5 minutes walk)			
Wednesday, June 12				
9:00	AQ trace gas session (continued)	Ben Veihelmann (ESA) and Jay Al-Saadi (NASA)		
	Validation Activities			
9:00	S-5p operational validation status, lessons and perspectives for GEO-AQ and S5	Jean-Christopher Lambert (BIRA)	15	confirmed
9:15	Status and plans for FRM activities in NDACC/MAX-DOAS context	Michel Van Roozendael (BIRA)	15	confirmed
9:30	Pandora Global Network (PGN) status and plans	Michel Van Roozendael (BIRA)	15	TBC
9:45	Recent developments in ground-based networks in East Asia and strategies for GEMS validation	Sang-Woo Kim (Seoul National U)	15	confirmed
10:00	AC-VC discussion of validation needs document and possible concurrence; Next steps	Ben Veihelmann (ESA)	30	discussion
10:30	Coffee Break 30 minutes		30	
11:00	AQ aerosol	Shobha Kondragunda (NOAA), Ben Veihelmann (ESA)		
	How to make the most from satellite observations of aerosol for air quality? What do we recommend?			
11:00	Goals for the meeting and anticipated outcome including summary of 2018 meeting	Co-chairs	5	confirmed
11:05	First results from radiance assimilation for aerosols	Ben Veihelmann (ESA)	15	confirmed
11:20	Aerosol property retrievals from AHI and GOCI : Implications for AMI	Jhoon Kim (Yonsei University)	15	confirmed
11:35	The Impact of Geostationary Aerosol Observations on the GEOS Aerosol Forecasting System	Arlindo Da Silva (NASA)	15	confirmed
11:50	MAIAC algorithm for Himawari	Alexie Lyapustin (NASA)	15	confirmed
12:05	NOAA GOES-16 AOD and new approaches to scaling it to PM2.5	Shobha Kondragunta (NOAA)	15	confirmed
12:20	AOD vs. PM2.5 Compare and Contrast between USA and Asia	Amy Huff (Pennsylvania State U.)	15	confirmed
12:35	Lunch 75 minutes		75	
13:50	TBD	Dong-Won Lee (NIER)	15	TBC
	Aerosol observations for Air Quality from current and future EUMETSAT missions in LEO and GEO orbit	Rose Munro (EUMETSAT)	15	confirmed
14:05	GaoFen results	Liangfu Chen (CAS)	15	confirmed
14:20	GEO-LEO aerosol from Himawari and SGLI onboard GCOM-C	Mayumi Yoshida (JAXA)	15	confirmed
	An Overview of the Aerosol and Clouds-Convection Precipitation Study and its Relationship to the Geostationary Atmospheric Composition Virtual Constellation	Arlindo Da Silva (NASA)	15	confirmed
14:50				
15:05	Session wrap-up and recommendations	all	15	discussion
15:20	Coffee Break 25 minutes		25	

15:45	Tropospheric Ozone	Gordon Labow (NASA) and Diego Loyola (DLR)		
	Status and plans of tropospheric ozone products. Consistent long-term data sets.			
15:45	Total Ozone CEOS wrap-up	Diego Loyola (DLR)	15	confirmed
16:00	Tropospheric Ozone from OMPS and MLS	Gordon Labow (NASA)	15	confirmed
16:15	Tropospheric ozone profiles from the synergism of AIRS and OMI	Dejian Fu (NASA)	15	confirmed
16:30	Tropospheric ozone retrievals from TropOMI	Diego Loyola (DLR)	15	confirmed
16:45	Tropospheric Ozone from GOME-2	Richard Siddans (RAL)	15	confirmed
17:00	Tropospheric Ozone from IASI	Anne Boynard (LATMOS)	15	confirmed
17:15	Tropospheric Ozone from IASI + GOME-2	Juan Cuesta (LISA)	15	confirmed
17:30	The Great Tropospheric Ozone CookOff	Gordon Labow (NASA)	15	confirmed
17:45	Session wrap-up and recommendations	all	15	discussion
18:00	Meeting End			
	Tentative Poster Titles			
	Global simulations with regional refinement for assessing the GEO composition constellation	David Edwards (NCAR)		
	Concept of small satellite UV/visible imaging spectrometer optimized for tropospheric NO2 measurements in air quality monitoring	Tamaki Fujinawa (NICT)		
	Advanced analysis of satellite NO2 observations: from TROPOMI validation using MAX-DOAS/Pandora spectrometers to source identification of combustion sources common to NOx and CO2	Yugo Kanaya (JAMSTEC)		
	GHG and AQ observation at JAXA EORC	Akihiko Kuze (JAXA)		
	A high-resolution global data assimilation of multi-sensor satellite measurements including TROPOMI NO2 data	Takashi Sekiya (JAMSTEC)		
	The Copernicus Missions Sentinel-4 and Sentinel-5	Ben Veihelmann (ESA/ESTEC)		
	Recent Satellite Methane Record	Juying Warner (U Maryland and NASA/GSFC)		
	Profile of greenhouse gases in the 2018 STEAM field campaign	Cai Zhaonan (CAS)		