

## AC-VC#22 Agenda and Meeting Info

The 22<sup>nd</sup> meeting of the CEOS Atmospheric Composition Virtual Constellation (AC-VC <https://ceos.org/ourwork/virtual-constellations/acc/>) will take place on 1-4 June 2026 at the Space Research Organisation Netherlands (SRON) in the beautiful town of Leiden in The Netherlands. The meeting will be held jointly with the CEOS Working Group on Calibration & Validation (WGCV) / Atmospheric Composition Subgroup (ACSG) and is co-hosted by SRON and the European Space Agency (ESA).

### Registration

Please register via the meeting website <https://atpi.eventsair.com/22nd-ac-vc-mtg>

### Remote Connection

The AC-VC#22 is set up as a hybrid meeting.

**The meeting link for remote participation will be distributed to registered participants who indicated remote participation.**

Remotely connected participants are kindly requested to

- Join using an accurate name using the convention: Given\_name Family\_name (organization\_acronym).
- Raise your hand or send a chat message if you have comments or questions.
- Stay muted unless invited to speak and switch off your video connection.

Remotely connected speakers are kindly requested to

- Upload your presentation prior to the meeting.
- Connect early to resolve potential technical issues. The meeting will be started 15 minutes before the scheduled start time each day.
- The slides will be presented from a local device. Navigate by requesting “next slide” etc.
- Keep the allocated presentation time and respect the time keeping warnings.

### Upload Presentations and Material

Please upload presentations (and potential background material) **by Friday 22 May**.

**The link to upload slides will be distributed to registered speakers.**

Please name the presentations as: **AC-VC\_Talk-ID\_Last-Name\_version-number.pptx (or .pdf)** taking the Talk-ID from the meeting agenda.

Your presentations will be made publicly available on the website <https://ceos.org/meetings/ac-vc-22/>, unless you indicate otherwise.

In case you encounter problems with the uploading, please email your material to per email ([j.landgraf@sron.nl](mailto:j.landgraf@sron.nl), [ben.veihelmann@esa.int](mailto:ben.veihelmann@esa.int))

### Poster

A limited number of posters can be displayed. Please let us ([j.landgraf@sron.nl](mailto:j.landgraf@sron.nl), [ben.veihelmann@esa.int](mailto:ben.veihelmann@esa.int)) know if you wish to put up a poster.

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### Selected Time Zones

Central European Summer Time (CEST)	Japan Standard Time (JST)	US Eastern Time (EST)	US Pacific Time (PST)
9	16	3	0
11	18	5	2
13	20	7	4
15	22	9	6
17	0	11	8

### Session Schedule

CEST	Mo 1 June	Tu 2 June	We 3 June	Th 4 June
9h00		Air Quality	Cal/Val	Greenhouse Gases
12h00	Arrival & Lunch	Lunch	Lunch	Lunch
	Welcome			
13h00	Geo AC Constellation Expansion	Air Quality	Lunch	Greenhouse Gases
14h00				
15h30	Water Vapour	Air Quality	Fire & Smoke	Greenhouse Gases
17h00				
				Wrap-up
17h30	Adjourn	Adjourn	Adjourn	Adjourn
18h00-22h30	Social Event			

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### Detailed Agenda

<b>Monday 1 June 2026</b>				
ID	Time (CEST)	Title	Presenter	Duration (min)
	12:00	Doors open, Lunch		
	12:45	<b>Welcome</b>	Aaldert van Amerongen, Jochen Landgraf (SRON), Emma Knowland, Hiroshi Tanimoto, Ben Veihelmann (AC-VC co-chairs)	15
		<b>Geo AC Constellation: Towards Global Coverage</b>		
1.1	13:00	Whitepaper status	Ali Omar (NASA), Emma Knowland (NASA)	15
1.2	13:15	Fire emissions in the SH	Aihua Zhu (NOAA)	15
1.3	13:30	Satellite observations of dust and smoke in the SH	Pubu Ciren (NOAA)	15
1.4	13:45	Dust effects and the impact of geo measurements on their forecasting	Sara Basart (WMO/GAW)	15
1.5	14:00	Investigating atmospheric chemistry on the African continent: need for a GEO perspective	Pieter Levelt (NCAR)	15
1.6	14:15	AQ at high latitudes observed from inclined GEO/HEO	Ray Nassar (ECCC)	15
1.7	14:30	Benefits of GEO observations for public health (TBC)	Omar Nawaz (Cardiff University)	15
1.8	14:45	Discussion, next steps		20
	15:00	Break		40
		<b>Total Column Water Vapor (TCWV) from LEO and GEO Spectrometers</b>		
2.1	15:30	Welcome and session opening	Diego Loyola (DLR) & Jochen Landgraf (SRON)	5
2.2	15:35	GOME-2 TCWV	Luca Lelli (DLR)	15
2.3	15:50	GEMS TCWV	Hyeji Cha (Yonsei University)	15
2.4	16:05	TROPOMI/SSP TCWV	Diego Loyola (DLR)	15
2.5	16:20	TROPOMI H <sub>2</sub> O/HDO	Tobias Borsdorff (SRON)	15
2.6	16:35	OMI and TEMPO TCWV	Gonzalo Gonzalez & Huiqun Wang (SAO)	20
2.7	16:55	Sentinel-4 and Sentinel-5 TCWV	Luca Lelli (DLR)	15
2.8	17:10	Discussion		20
	17:30	Adjourn		

## AC-VC#22 Agenda and Meeting Info

Tuesday 2 June 2026				
ID	Time (CEST)	Title	Presenter	Duration (min)
		<b>Air Quality Constellation Reactive Gases</b>		
		Mission Status		
3.1	09:00	GEMS mission status	Jhoon Kim (Yonsei University)	10
3.2	09:10	TEMPO mission status	Xiong Liu (Harvard, CFA)	10
3.3	09:20	SSP mission status	Timon Hummel (ESA)	10
3.4	09:30	Status FengYun satellites	Zhao-Cheng Zeng (PKU)	10
3.5	09:40	JPSS mission update	Satya Kalluri (NOAA)	10
3.6	09:50	SPEX1/PACE update	Otto Hasekamp (SRON)	10
		Mission Preparation		
3.7	10:00	GeoXO mission update	Shobha Kondragunta (NOAA)	10
3.8	10:10	GEMS-2 mission preparation	Wonjin Lee (NIER)	10
		Newcomers		
3.9	10:20	MetOp-SG/IASI-NG & MTG-IRS	Cathy Clerbaux (LATMOS/CNRS)	10
	10:30	Break		30
3.10	11:00	Sentinel-4 mission status	Ben Veihelmann (ESA)	10
3.11	11:10	Sentinel-4 first impressions mission data	Diego Loyola (DLR)	15
3.12	11:25	Sentinel-5 mission status	Rasmus Lindstrot (EUMETSAT)	10
3.13	11:35	Sentinel-5 first impressions mission data	Richard Siddans (RAL)	15
		Constellation Consistency and Synergy		
3.14	11:50	SSP/TROPOMI highlights and synergies with the GEO Constellation	Pepijn Veefkind (KNMI)	15
3.15	12:05	PEGASOS project	Ronny Lutz (DLR)	15
3.16	12:20	Multi-mission aerosol and surface characterization	Pavel Litvinov (GRASP)	15
	12:35	Lunch		60
3.17	13:35	Synergy of instruments on MetOp-SG	Rasmus Lindstrot (EUMETSAT)	15
3.18	13:50	Urban NO <sub>x</sub> emissions from TEMPO	Shobha Kondragunta (NOAA)	15
3.19	14:05	Discussion		20
		Validation		
3.20	14:25	ASIA-AQ campaign	Jinkyul Choi (JPL)	15
3.21	14:40	Aerosol Layer Height validation	Jim Szykman (EPA) / Ruben Delgado (Hampton University)	15
3.22	14:55	GEMS validation activities	Wonjin Lee (NIER)	15
3.23	15:10	Discussion		20
	15:30	Break		30
		Data Use		
3.24	16:00	Uptake of new mission data in CAMS	Antje Inness (ECMWF)	15
3.25	16:15	Top-down estimation of NO <sub>x</sub> emissions	Daven Henze (UC Boulder)	15
3.26	16:30	Uptake of tropospheric O <sub>3</sub> and precursors in MOMO-Chem	Miyazaki Kazuyuki (JPL)	15
3.27	16:45	Discussion		15
	17:00	Adjourn		

## AC-VC#22 Agenda and Meeting Info

<b>Wednesday 3 June 2026</b>				
ID	Time (CEST)	Title	Presenter	Duration (min)
		<b>Cal/Val for the Constellations</b>		
4.1	09:00	Welcome and session opening	Jean-Christopher Lambert (BIRA-IASB)	5
		<b>CEOS Cal/Val Updates</b>		
4.2	09:05	CEOS WG on calibration and validation updates	Cody Anderson (USGS)/Medhavy Thankappan (GA)	15
4.3	09:20	Atmospheric composition Cal/Val updates	Jean-Christopher Lambert (BIRA-IASB)	15
		<b>Vicarious Calibration &amp; Calibration Validation</b>		
4.4	09:35	Vicarious calibration for SWIR-NIR sounders	Hiroshi Suto (JAXA)	10
4.5	09:45	Vicarious calibration for UV-Vis-NIR sounders	Melanie Coldewey-Egbers (DLR)	10
4.6	09:55	Calibration networks: RadCalNet	Marc Bouvet (ESA)/Nigel Fox (NPL)	10
4.7	10:05	Calibration networks: HYPERNETS	Kevin Rudick (RBINS)	10
4.8	10:15	CEOS FRMsat	Nigel Fox (NPL)/Yolanda Shea (NASA-LaRC)	10
4.9	10:25	GSICS updates	Larry Flynn (NOAA)/Rasmus Lindstrot (EUMETSAT)	10
4.10	10:35	Discussion	All	20
	10:55	<b>Break</b>		<b>30</b>
		<b>CEOS Fiducial Reference Measurements</b>		
4.11	11:25	CEOS-FRM maturity assessment framework & tool v2	Paolo Castracane (ESA/STARION)	10
4.12	11:35	CEOS-FRM assessments for atmospheric composition	Jean-Christopher Lambert (BIRA-IASB)	10
4.13	11:45	First feedback on CEOS-FRM and way forward	All	10
		<b>High Resolution (HR) Cal/Val</b>		
4.14	11:55	Validation of volcanic SO <sub>2</sub>	Thomas Wagner (MPI-C)	15
4.15	12:10	HR & New Space: ATM-MPC CCM & VH-RODA experiences	Angelika Dehn (ESA)	15
4.16	12:25	Review of GEO-AQ Validation Needs whitepaper recommendations + suggested topics: Cal/Val supersite concept(s), operational validation capacity	All	25
	12:50	<b>Lunch</b>		<b>60</b>
		<b>Fire and Smoke</b>		
5.1	14:00	LSI-VC remarks	Doug Morton (NASA) / Mark de Jong (NRCAN)	20
5.2	14:20	Fire and smoke related activities at EUMETSAT	Bertrand Fougne (EUMETSAT)	10
5.3	14:30	Fire and smoke related activities at NASA	Ian Brosnan (NASA)	10
5.4	14:40	NOAA Wildland Fire Program	Mike Pavolonis (NOAA)	10
5.5	14:50	Analysis of LA fires	Fangjun Li (South Dakota State University)	10
5.6	15:00	Toxicity from burning structures	Joost de Gouw (U. Colorado)	10
5.7	15:10	Smoke exposure hazards from wildfires	Amy Huff (NOAA)	10
5.8	15:20	Smoke and health impacts	Daniel Tong (GMU)	10
	15:30	<b>Break</b>		<b>15</b>
5.9	15:45	Using satellite data for exceptional events monitoring	Joel Dreessen (MDE)	10
5.10	15:55	Preparing communities for smoke exposure	Sara Basart (WMO)	10
5.11	16:05	Using TEMPO NO <sub>2</sub> to validate fire emissions	Fangjun Li (South Dakota State University)	10
5.12	16:15	Smoke detection from UV sensors	Pubu Ciren (NOAA)	10
5.13	16:25	EarthCARE observations of smoke	Gerd-Jan van Zadelhoff (KMNI)	10
5.14	16:35	BBURNED	Mark Parrington (ECMWF)	10
5.15	16:45	Smoke height relevance	Brian McDonald (NOAA)	10
5.16	16:55	Need for fire phase information	Jun Wang (University of Iowa)	10
5.17	17:05	Bringing QFED into VIIRS Era	Allie Collow (NASA)	10
5.18	17:15	Discussion		30
	17:30	<b>Adjourn</b>		

## AC-VC#22 Agenda and Meeting Info

Thursday 4 June 2026				
ID	Time (CEST)	Title	Presenter	Duration (min)
<b>Greenhouse Gases Observation</b>				
6.1	09:00	Welcome and session opening	Charles Miller (NASA)	10
6.2	09:10	Review of GHG Constellation - overview	Yasjka Meijer (ESA)	10
6.3	09:20	GOSAT series (1, 2 and GW) update	Hiroshi Tanimoto (NIES)	15
6.4	09:35	Update on US missions (OCO-2/3, EMIT)	Charles Miller (NASA)	15
6.5	09:50	Update on Chinese missions	Dongxu Yang (CAS)	10
6.6	10:00	Sentinel-5 Precursor	Jit Mandal (SRON)	10
6.7	10:10	Sentinel-5 GHG products	Jochen Landgraf (SRON)	10
6.8	10:20	MicroCarb update	Carole Deniel (CNES) or Denis Jouglet (CNES)	10
	10:30	Buffer/discussion		10
	10:40	Break		30
6.9	11:10	CO2M update	Yasjka Meijer (ESA) & Ruediger Lang (EUMETSAT)	5
6.10	11:15	Korean greenhouse gas microsatellite constellation	Hyejung Shin (ESC, NIER)	5
6.11		cancelled		
6.12	11:20	TANGO	Jochen Landgraf (SRON)	10
6.13	11:30	MERLIN	Diego Loyola (DLR)	5
6.14	11:35	CO2Image	Diego Loyola (DLR), Julia Marshall (DLR)	5
6.15	11:40	Validation of atmospheric GHGs over the ocean	Yasjka Meijer (ESA)	10
6.16	11:50	CO2M validation network update	Rüdiger Lang (EUMETSAT)	10
6.17	12:00	Space-based data requirements for G3W	Rüdiger Lang (EUMETSAT)	10
	12:10	Buffer/discussion		20
	12:30	Lunch		60
6.18	13:30	Common/good/best Practices for facility scale CH <sub>4</sub> emission estimation	Paul Green (NPL)	30
6.19	14:00	Engagement with IMEO	Yasjka Meijer (ESA)	30
6.20	14:30	Tip-and-cue GOSAT-GW target mode observations	Hiroshi Tanimoto (NIES)	15
6.21	14:45	Tip-and-cue system for methane observations	Yasjka Meijer (ESA)	15
6.22	15:00	Mission (dis-)continuity impact	AC-VC GHG leads	15
	15:15	Buffer/discussion observations of controlled CH <sub>4</sub> releases		10
	15:25	Break		30
6.23	15:55	Updates from the ESA Methane Emissions Detection Using Satellites Assessment (MEDUSA) project	Bram Maasackers (SRON)	10
6.24	16:05	Calibration for GOSAT/GOSAT-2	Kei Shiomi (JAXA)	10
6.25	16:15	Algorithms for intercomparison: GOSAT XCO <sub>2</sub> retrievals	Dave Crisp (Crisp Spectra) & Chris O'Dell (University of Colorado)	15
6.26	16:30	CO <sub>2</sub> synergy product from S5 + 3MI	Marcos Herreras (GRASP)	15
	16:45	Buffer/discussion		20
	16:55	Break		15
<b>Wrap-up</b>				
7.1	17:10	Discussion		20
	17:30	Adjourn		