



Committee on Earth Observation Satellites

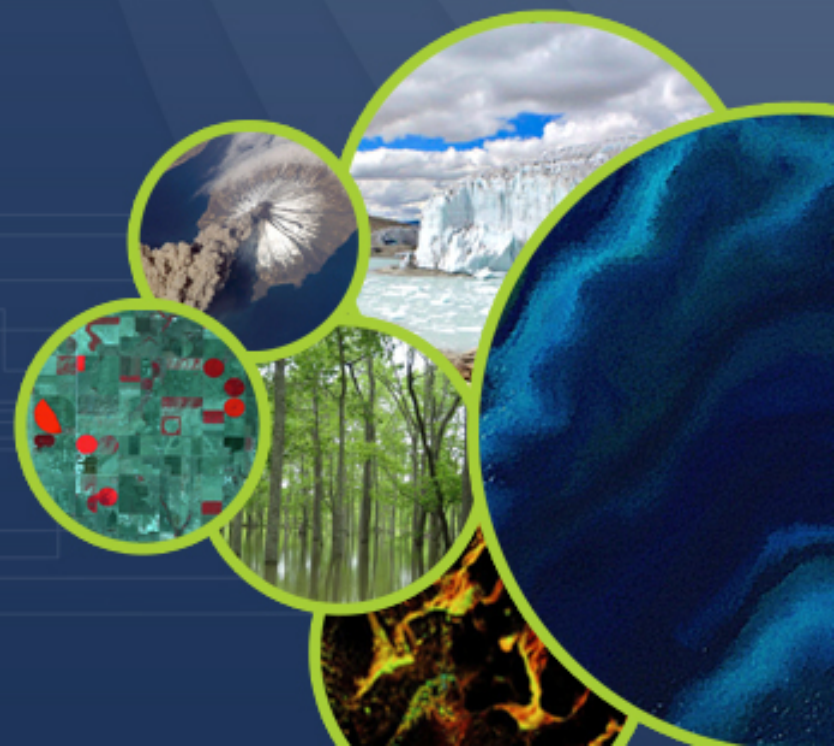
# Whitepaper Geo-AQ Validation Needs

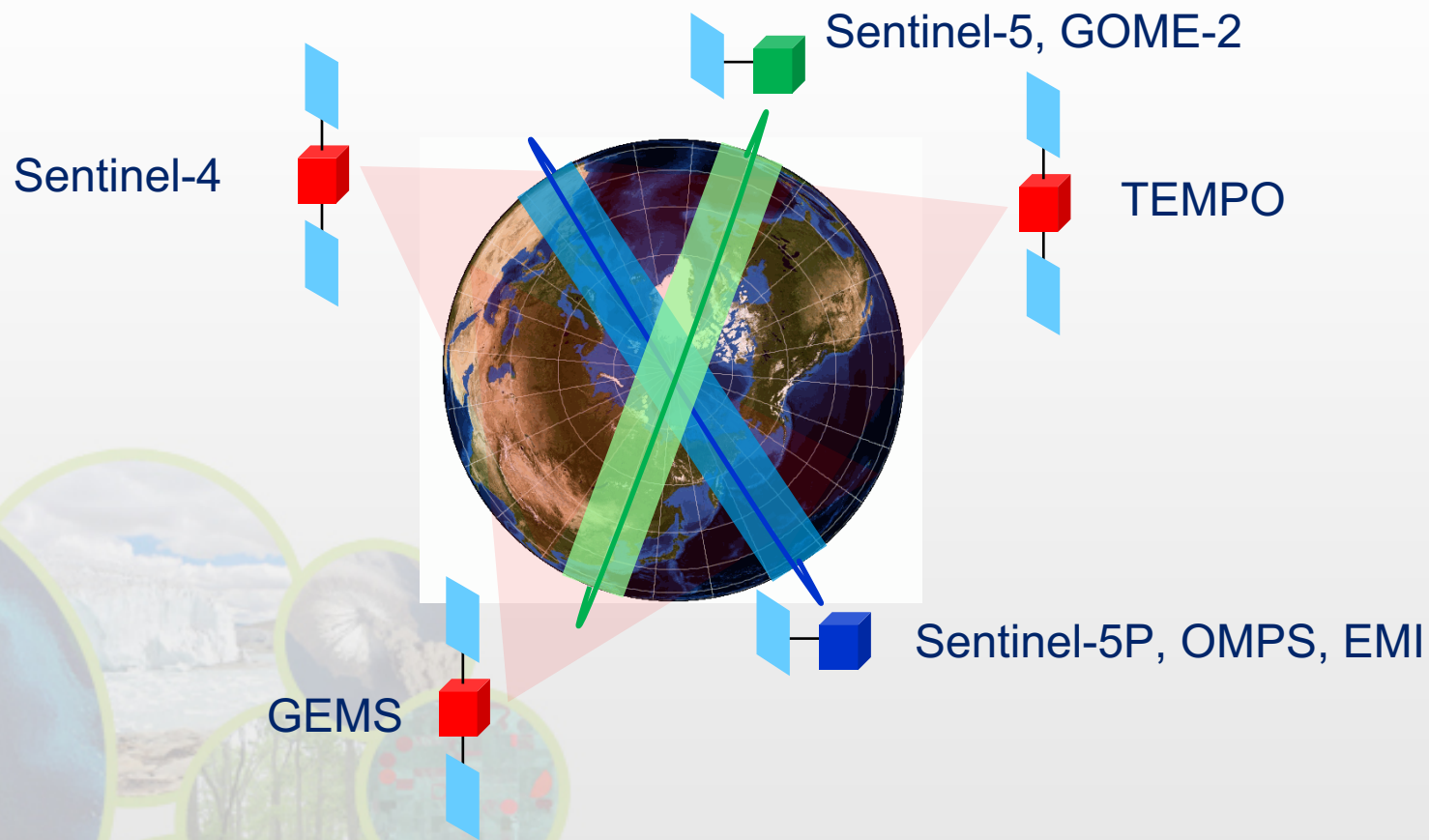
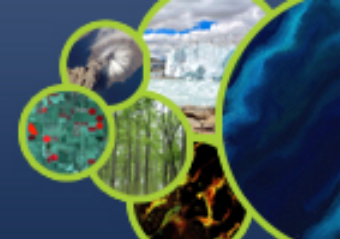
Ben Veihermann (ESA) and co-authors

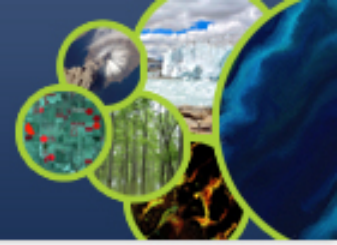
CEOS AC-VC-15

hosted by JAXA, Nakano, Tokyo, Japan

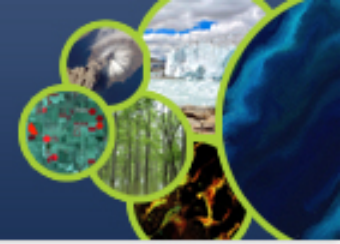
10-13 June 2019



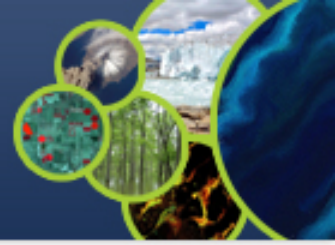




- Parent whitepaper = “A Geostationary Satellite Constellation for Observing Global Air Quality: An International Path Forward”
- Elaborates validation needs with a focus on constellation aspects
- Identifies ‘Constellation Products’
- Formulates inter-mission consistency targets
- Identifies activities needed to assess and establish this consistency
- Recommendations



1. Campaigns to validate diurnal cycle observation capability: approach? comprehensive set of reference and auxiliary data!
2. Joint campaigns with exchange of reference airborne and ground-based instruments
3. Radiometric inter-calibration: further develop approaches → GSICS
4. L2 inter-calibration approaches: LEO as travelling standard, inter-calibrated ground-based networks, exchange L1b, compare zonal means of stratospheric  $O_3$ , ...
5. L2 Constellation Products: systematically process, common algorithm
6. Harmonize reference data: open access, measurement protocols, QA protocols, data formats, data policy
7. Data centre: storage and fast exchange of all validation data
8. ...?



- Final feedback from you?
- Endorsement by AC-VC?
- Submission to CEOS for endorsement
- Start planning the implementation

