



Committee on Earth Observation Satellites



WGCV/GSICS pre-flight Cal & Characterisation workshop (optical domain)



- Following previous CEOS workshop at Estec in 2004? Complemented by various regional/national workshops.
- Discussions and recommendations from CEOS WGCV IVOS ~2012 timely for new workshop
- Parallel interest from GSICS also WGCV- AC-sub group
- Agreed plan and outline strategy to hold optical sensor focussed workshop to be held in Europe in 2019 – Now revised to Q1 2020
- Small task team to initiate process consisting of CEOS and GSICS experts



- **All optical sensors (200 nm to ~50 um) if too wide prioritise solar reflective domain <~2500 nm**
 - **Pre-flight satellite**
 - **On-board cal systems (pre-flight)**
- **Radiometric/Spectral Cal and characterisation**
 - **All aspects impacting e.g. stray light, linearity. Gain...etc**
- **For whom?**
 - **Engineers/scientists**
 - **Science Pis**
 - **To some extent managers/funders**
- **Format?**
 - **Primarily Invited presentations followed by discussion?**
 - **Call for poster and some short oral on new methods?**
 - **Ideally leading to Proceedings/good practises/catalogue of methods**
 - **3 days probably independent**



- **Planning started for Q1 2020**
- **Located in Europe (baseline host CNES Toulouse)**
- **Top level committee CEOS/GSICS has been formed**
- **Establishing Technical organising committee to include industrial participation**





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WGCV/GSICS workshop on: *SI-Traceable Space-based Benchmark Sensors In Support Of Climate Observing System*



Workshop aims

The logo for the Committee on Earth Observing Satellites (CEOS), featuring the letters 'CEOS' in a bold, green, sans-serif font. The letter 'O' is replaced by a stylized blue and white globe of the Earth. The logo is set against a white circular background with a green border.

hosted by the UK Space Agency at National Physical Laboratory, London, UK,
September 9-11, 2019

- **Workshop to develop a community strategy to quantify the *benefits and consequential specifications of a space-based climate observing system* along with a roadmap to implementation**

To discuss:

- **Potential scientific and economic benefits,**
- **The state-of-the-art in establishing traceability in orbit: current technologies, methods, and missions (e.g. CLARREO and its Pathfinder, TRUTHS, and Chinese and Indian counterparts)**
- **New observation and climate-sensitivity detection capabilities and concepts**

Sessions

- *Science and societal drivers for the climate and operational communities (including economic benefits)*
- *Observations and datasets needed (measurements, timescales, and accuracies)*
- *Reference calibrations (facilities/targets, approaches, capabilities, and uncertainties)*
- *Mission/technologies/concepts under development or conceived (status, technical capabilities)*
- *Produce a report on the outcome of the workshop as a basis for a community 'white paper'.*
- **<https://ceoswmogsicsworkshop.eventbrite.co.uk>**