WGCV 38 Plenary Sep 30<sup>th</sup> – Oct 2<sup>nd</sup>, 2014

# WGCV Chair Report

Satish Srivastava

**Canadian Space Agency** 



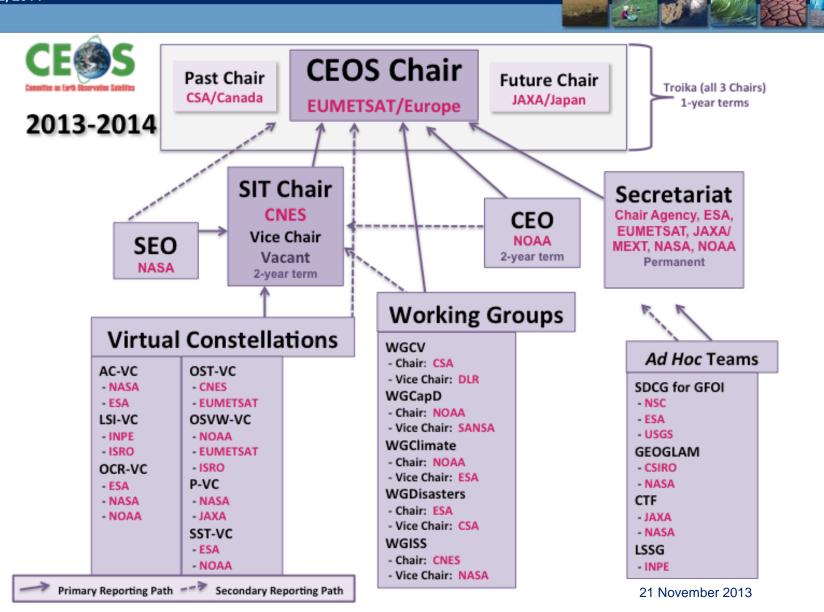


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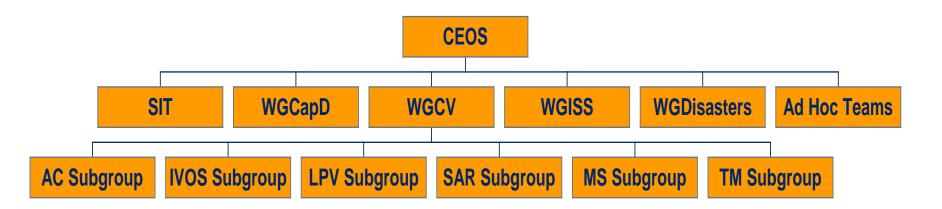
# **CEOS Structure**





College Park, MD, USA Sep 30 – Oct 2, 2014 WGCV Structure





- CEOS (http://www.ceos.org)
  - Working Group on Calibration and Validation (WGCV) (<u>http://wgcv.ceos.org</u>)





• CEOS SIT-29 April 9-10, 2014

Presented for decision by SIT:

- WGCV / SST-VC Joint Detailed Plans for two Projects (CEOS Plenary Action 27-21)
- Action 27-21: "WGCV to develop detailed plans for the way forward on the SST Comparison Campaign and SST Operational Validation Project for consideration by SIT-29."

#### **Outcome:**

- 1. Approval obtained to proceed with <u>**Project 1**</u> (SST Comparison Campaign), thanks to ESA for agreeing to provide funding support
- 2. Approval obtained to proceed with ESA funded feasibility study for <u>**Project 2**</u> (SST Operational Validation)

Action 27-21Closed.





• CEOS SIT Technical Workshop 2014 September 17-18, 2014

Presented on following topics:

- WGCV Updates on CEOS 2014-2016 Work Plan Deliverables
- WGCV-38 Planning
- WGCV-Land Product Validation (LPV) Information Items
- WGCV and VC Interactions:
  - Successes and Potential Concerns
  - Product and Services available from WGCV subgroups



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### WGCV and VC Interactions Sea Surface and Land Surface Temperature Cal/Val Work

#### Success story: Interaction of WGCV and SST-VC



General Approach: Experts from both groups work together to define scope and range of calibration activities and range of conditions to be evaluated

#### **Role of SST-VC:**

- discusses specific validation and calibration needs in its own community and communicates its requirements to WGCV
- SST-VC representative regularly attends WGCV plenary and sub-group meetings (here IVOS) to ascertain latest developments from other fields, pass on details on its activities and specifically its calibration needs.
- carries out its own specific product validation activities using QA best practises learnt from CEOS WGCV e.g. QA4EO principles

#### **Role of WGCV:**

- reports requirements to CEOS
- organises calibration and post launch comparison activities (e.g. Miami series on behalf of SST-VC) via its sub-groups (here IVOS)
- responsible for and discusses pre-flight calibration aspects, along with post-launch cal/val of radiometric properties of satellite sensors measuring SST/LST (includes different subgroups)

#### Combined Roles of SST-VC and CEOS WGCV

• Responsible for validation activities associated with LST measurements after field instrument radiometric calibration.



### WGCV and VC Interactions Areas of Concern



#### **Observation:**

- WGCV, specifically sub-groups, are carrying tremendous effort in development of calibration methods, inter-comparison, and harmonization; etc. For validation of data products.
- Usually, experts joined meetings in the past of sub-groups for knowledge exchange.
- Some virtual constellations tend to implement sub-groups or teams with dedicated task for calibration and characterization of in-situ and satellite sensors excluding the similarity to other sensors in use for other applications.

#### **Concern:**

- Duplication of effort
- Potential of different calibration on the same sensors used for different products
- Added meetings for agency staff
- Inefficient planning and coordination of activities between agencies
- Potential confusion among the EO community at large

WGCV would like to foster better coordination of cal/val work to avoid duplication of effort and to strongly encourage other groups working in cal/val to communicate with WGCV as it is the central point of reference on matters of cal/val within CEOS.





• CEOS SIT Technical Workshop 2014

### **Outcomes:**

- SST-VC and WGCV collaboration was well perceived at SIT Workshop 2014 and is considered <u>a leading success story</u>.
- Action was taken to promote WG and VC interactions across CEOS.
- SIT also recommends to highlight such success stories at next CEOS Plenary.

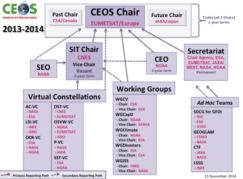


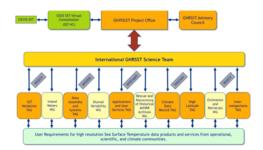


### • Excerpt from VC/WG Day Wrap Up presented by SIT at SIT Workshop 2014:



- Action: Better physical connections between VC, WG and CEOS "core" must be stimulated if the full potential of CEOS is to be realized.
  - Example: SST-VC has representatives within WG WGCV and WGClimate
  - Example: WGCV+SST-VC working to improve Fiducial Reference Measurements (FRM) for SST and LST: ESA is funding the FRM4CEOS project (400KEuros)
- This will lead to better outcomes and positive examples of "CEOS in Action"

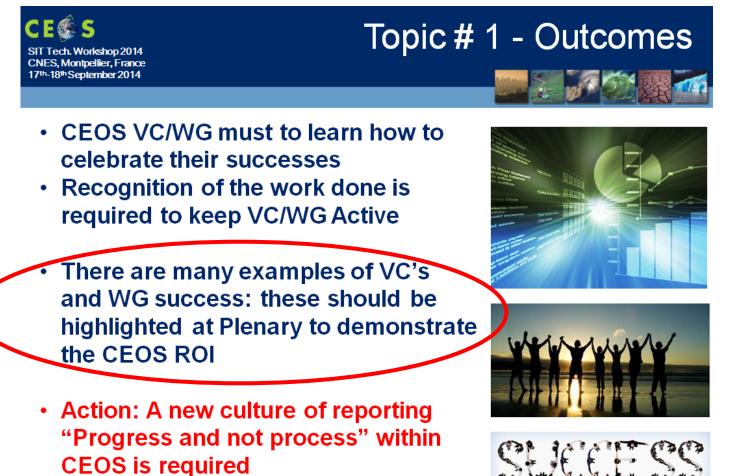








#### • Excerpt from VC/WG Day Wrap Up presented by SIT at SIT Workshop 2014:





# **CEOS Meeting Documentation**



All CEOS meeting minutes and presentations are available on the CEOS website (under the Meetings section):

http://www.ceos.org/

Meetings referred to in this Chair's Report:

- CEOS-27 Plenary
- SIT-29
- SIT Workshop 2014





- SEC Meetings led by CEOS Chair Team
  – monthly telecon, since November 2012
  - Regular updates provided by WGCV-Chair to CEOS.
- SIT-WGCV Tag-Up Telecon, June 2, 2014
  - Updates provided by WGCV on working group activities
  - Issue raised, on behalf of WGCV-LPV, on procedures and guidelines to follow for publication/citation of LAI Validation Protocol.
    - SIT accepted to study the issue further
- WGCV telecons with Subgroup Chairs:
  - Regular telecons were held with WGCV Subgroup Chairs on Mar 19, Jun 13 and Aug 28, 2014.
  - Discussed and reported on various topics including: CEOS 2014-16 Work Plan, Carbon Task Force, Action items from WGCV-37, WGCV-38 planning, SIT-29 and SIT Workshop, etc.



## **Other CEOS Updates**



### • CEOS 2014-16 Work Plan

- Released on June 4, 2014
- WGCV defined 12 deliverables (CV1 to CV12) under the theme "Capacity Building, Data Access, Availability and Quality"
- Great effort was done by the Working Group to synthesize and prioritize deliverables from an initial list of over 25 objectives.

### • Carbon Strategy Implementation Study Team (CSIST)

• WGCV Vice-Chair (Albrecht von Bargen) was nominated to represent both his agency (DLR), and WGCV, on the Carbon Strategy Implementation ST.



### **Recent and Planned WGCV Plenaries**

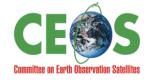


- WGCV-34 CSIRO/TERN/others, Brisbane, Australia, February 6-10, 2012
- Joint WGCV-35 / WGISS-34, NRSC, ISRO, Hyderabad, India, September 24-28, 2012
- WGCV-36 AOE-CAS, Shanghai, China, May 13-17, 2013
- WGCV-37 ESRIN/ESA, Frascati, Italy, Feb 17-20, 2014
- WGCV-38 USGS, NOAA and NASA, College Park, MD, USA, Sep 30-Oct 2, 2014
- WGCV-39 DLR, Germany, May 2015 (TBC)

### WGCV 38 Plenary Sep 30<sup>th</sup> – Oct 2<sup>nd</sup>, 2014

# Thank You!





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