

# CEOS IVOS 25

Welcome







Introductions: 20 secs

Name
Organisation
Role/expertise





#### 25 th Meeting: objectives



# Information exchange and facilitating international collaboration on Cal/Val related activities

- Review actions/progress on work plan/activities
  - All sub themes
  - Conclude on strategy to establish land network of test sites for radiometric gain
  - Progress on comparisons and methodologies
    - Particularly 'Miami 4' brightness temperature (underpinning SST)
  - Progress from and review of 'Libya 4' meeting CNES (Oct 2012)
- Interactions of IVOS with other CEOS/GEO activities
  - WG-Climate
  - Constellations
  - GEO
- Progress towards an internationally coordinated Cal/Val infrastructure
  - QA4EO
  - Portal
  - Tools/systems/databases
- workshop planning
- Membership, actions, and intra-meeting progress







#### Agenda





#### **CEOS IVOS 24**

CESS

May 8-10, 2012, Sioux Falls USA

Hosts: Gyanesh Chander (USGS)
Dennis Helder (SDSU)



Attendees ~ 32

Also:

Libya 4 meeting, CNES, Paris, Oct 4/5 2012 attendees ~ 24





#### CEOS IVOS 24 Action Items

CE	<b>95</b>
----	-----------

#	Action	Actionee	Due Date
1	Use one dataset to compare the differences in model and input for inter-comparison of absolute vicarious calibration techniques using TUZ GÖLÜ as a reference standard	Leigh/Ozen	IVOS 25
2	Provide Algeria site BRDF model to the group?	CNES	IVOS 25
3	Check with the in-Situ operators if they can add the surface reflectance measurement instruments to their network	Stensaas	IVOS 25
4	Work with the NASA SEO to get additional information on how COVE outputs the solar and view angles.	Chander	IVOS 25
5	Prepare a white paper on recommendation foe establishing strategy for long-term maintenance of CEOS test-sites e.g. cost and benefit.	Fox/Thome/Chander	Oct 2012
6	Present to the CEOS Plenary with resources (optimum instrumentation specification) and funding needed to support the instrumented CEOS reference test sites	Stensaas	Oct, 2012
7	Volunteers to help drafting of recommendations	All	August 2012
8	Using COVE, generate a list of overpass dates over the CEOS reference sites and compile a calendar of events and puttogether a list of on-going and future field campaigns on the Cal/Val portal	Burini	IVOS 25





#### Actions from IVOS 24



	campaigne on the can rai pertai	<u> </u>	
9	Compile a list of MTF targets and put them on the test site catalog	SDSU/USGS	IVOS 25
10	Encourage the use of wiki and blog on the Cal/Val portal and contribute to the newsletter	All	IVOS 25
11	Move the IVOS webpages from NPL site to the CEOS website hosted by NASA SEO	Fox	IVOS 25
12	Need help for planning the IVOS workshop (technical committee, session topics, session chair, speakers, etc.)	All	July 2012
13	Finalize the dates and venue for the next IVOS workshop.	Fox	Oct 2012
14	Nominations to IVOS chair for workshop technical committee	All	July 2012
15	Test site owners to provide Burini of calval portal dates when ground calibration campaigns are likely to take place as early as possible in advance	All but particularly (Li)	Ideally minimum of 2 months in advance
16	Potential issues with date for IVOS 25	All	June 2012







#### **IVOS MISSION** statement

#### **Mission**

"To ensure high quality calibration and validation of infrared and visible optical data from Earth observation satellites and validation of higher level products"





#### **IVOS Terms of Reference**



- 1. Promote international and national collaboration in the calibration and validation of all IVOS member sensors.
- 2. Address all sensors (ground based, airborne, and satellite) for which there is a direct link to the calibration and validation of satellite sensors;
- 3. Identify and agree on calibration and validation requirements and standard specifications for IVOS members;
- 4. Identify test sites and encourage continuing observations and inter-comparison of data from these sites;
- 5. Encourage the preservation, unencumbered and timely release of data relating to calibration and validation activities including details of pre-launch and in flight parameters.
- 6. In the context of calibration and validation encourage the full consideration of "traceability" in all activities involved in the end-to-end development of an EO product including appropriate models and algorithms.





### **IVOS: Vision**



To facilitate the provision of 'fit for purpose' information through enabling data interoperability and performance assessment through an 'operational' CEOS coordinated & internationally harmonised Cal/Val infrastructure consistent with QA4EO principles.

- Pre-flight characterisation & calibration
- Test sites
- Comparisons
- Agreed methodologies
- Interchangeable/readable formats
- Results/metadata databases

Key Infrastructure to be established and maintained independent of sensor specific projects and/or agencies



## **Operational Structure**



- Agency reports to be encouraged but not presented except in exceptional circumstances or if a new member.
- Detailed Technical theme each meeting (0.5 1 day)
- Community technical workshops ~ tri-annual
- Theme Champions

Sector themes:

- Land (reflectance) Chander USGS
- Ocean (reflectance) colour Zibordi JRC
- Surface temperature Corlett Uof Leic

Also more general activities at plenary e.g. sensor pre-flight calibration

• IVOS as Conduit for existing "community expert groups" - Need to increase engagement

- Cross-cutting
- Atmospheric corn Thome NASA
- Geo/Spatial Quality Helder UofSD
- Geometric image Quality TBD
- Sensor to Sensor biases Fox NPL
- RT code Widlowski JRC
- Communication/portal Goryl ESA

• Serving Cal/val needs of constellations - e.g. org of comparison, interface to CEOS





## Work plan for optical sensors: (land/ocean)



