



Newsletter from CEOS Cal/Val Portal

The CEOS (Committee on Earth Observing System) Cal/Val Portal website has been updated with new content and functionality. The user community is invited to explore the website: <http://calvalportal.ceos.org/>.

The Purpose

This newsletter aims to provide an overview of the latest portal updates in terms of both software and content.

Software update

The portal is built on Liferay®, an enterprise portal solution that has been updated to the Liferay Community Edition Portal 7.4.3.14 CE GA14 (Cavanaugh / Build 7403 / March 4, 2022). This update enabled the following activities and improvements:

- migration of all documentation and web contents;
- migration of all accounts, passwords, access definitions for all groups;
- application of security patches;
- addition of updated development features;
- improvement of performance.

Content update

WGCV subgroups

The CEOS WGCV page serves as the entry point for all subgroups within CEOS Working Group on Calibration and Validation (WGCV), namely: Atmospheric Composition (AC), Synthetic Aperture Radar (SAR), Land Product Validation (LPV), Microwave Sensors (MS), Infrared and Visible Optical Sensors (IVOS) and Terrain Mapping (TM).

The portal hosts the websites of IVOS, SAR and MS subgroups, provides links to the LPV subgroup website and connects to the CEOS pages dedicated to AC and TM.

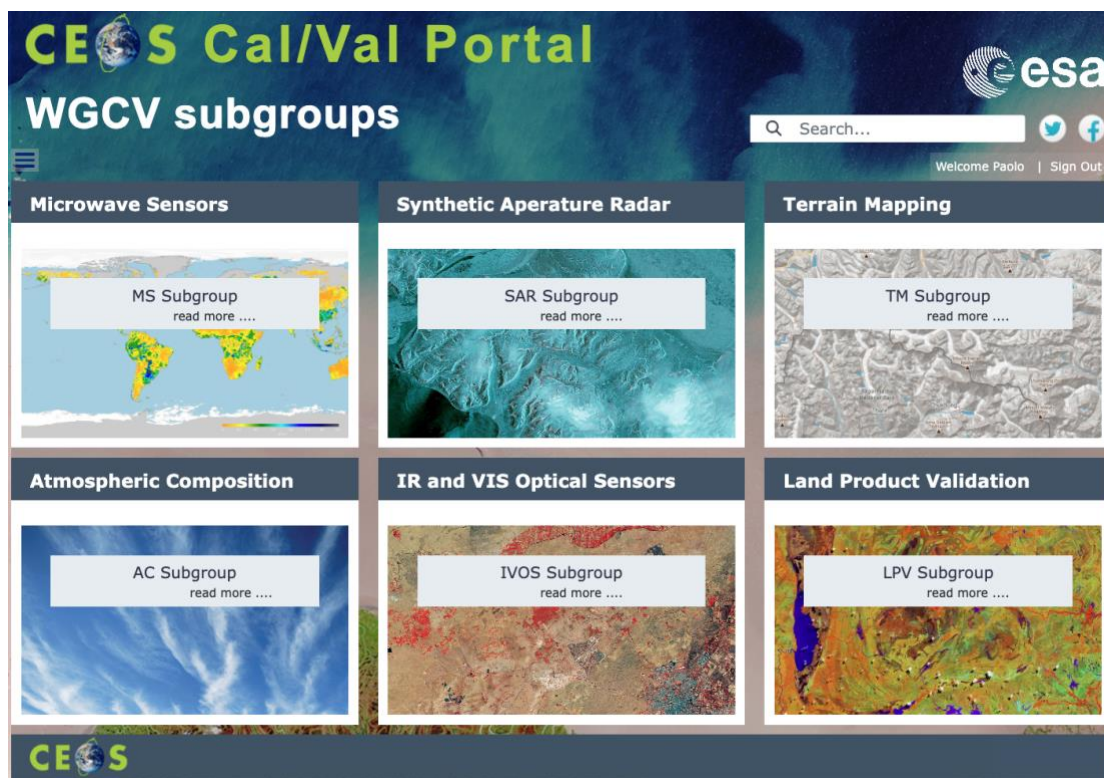


Figure 1 CEOS WGCV subgroups page: entry point

The AC subgroup provided input for [Cal/Val Sites](#) that are now aligned to those mentioned in the [NDACC Satellite Working Group website](#). There is also a plan for hosting a dedicated AC webpage on the portal. The MS subgroup [website](#) has been recently designed including pages for space-borne scatterometers and wind retrieval information, more has to come in the next period. The SAR subgroup primarily utilises the website for their annual CEOS SAR workshops including announcements, programs and presentations. The [Past Proceeding](#) section contains materials from all past workshops. A new dedicated website for SARCalNet is currently in preparation. A number of activities are related to

the IVOS subgroup, is worth to mention the update Solar Irradiance Spectrum [page](#) with the CEOS endorsed [TSIS-1 Hybrid Solar Reference Spectrum](#). Concerning the LPV the portal hosts the LPV [DIRECT 2.1 database](#) and all the information and references for the [SALVAL](#) (Surface ALbedo VALidation) tool. The TM subgroup page is currently linked to the CEOS reference website with plans to host a dedicated page featuring DEMIX material in the future.

Hyperspectral Cal/Val resources

A dedicated [page](#) for the Hyperspectral Cal/Val Resources has been recently added to the portal. In response to a request made to CEOS for guidance on Cal/Val hyperspectral reference instrumentation for land, coastal, and open ocean measurements, a comprehensive document has been created. This document includes information on current and planned networks, guidelines, measurement protocols, campaigns, inter-comparison exercises, instrumentation and hardware, as well as mission-specific resources. The overarching goal is to coordinate a global network for all satellite missions equipped with hyperspectral sensors.

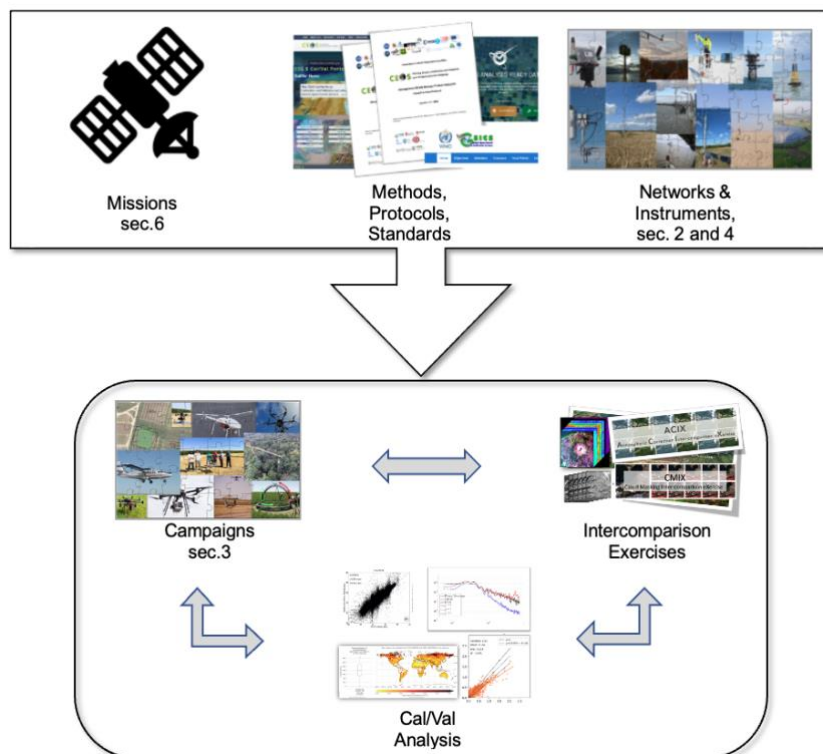


Figure 2 General Cal/Val activities for a hyperspectral mission

FRMs Assessment Requirement

In recent years, the concept of a Fiducial Reference Measurement (FRM)¹ has emerged to highlight the need for precise and well-characterised measurements tailored to the post-launch calibration and validation (Cal/Val) of Earth observation satellite missions. WGCV is now putting in place a framework to assess the maturity and compliance of a “Cal/Val reference measurement” in terms of a set of community-agreed criteria which define it to be of CEOS-FRM quality. The assessment process is based on a maturity matrix that provides a visual assessment of the state of any FRM against each of a set of given criteria, making visible where it is mature and where evolution and effort are still needed. The [document](#), available on the FRMs Assessment Framework [page](#) provides the overarching definition of what constitutes an FRM and introduces the new CEOS-FRM assessment framework.




Figure 3 FRMs Assessment Framework document first version

Outreach

An introductory video for the CEOS Cal/Val portal has been produced and published by [Symbios](#). This is the first of a series of videos that describes the platform's features and capabilities. We invite you to watch the video at the following links.

¹ Goryl, P.; Fox, N.; Donlon, C.; Castracane, P. Fiducial Reference Measurements (FRMs): What Are They? *Remote Sens.* **2023**, *15*, 5017. <https://doi.org/10.3390/rs15205017>

<p>https://ceos.org/news/cvp-video-1/ https://youtu.be/SpDvqV-4qhs</p>	
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Contacts

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