

CEOS Cal/Val recent updates - summary



The CEOS (Committee on Earth Observing System) Cal/Val Portal website has been updated with new content and functionality – since Dec. 2019

- Terms and Definitions Wiki – since March 2020
- CEOS SAR Subgroup- Since June 2020
- PICS pages (March 2020); LIME Project (June 2020); “Supersites and Biomass Validation Workshop” (April 2020), WGCV-46 (July 2020)
- ACIX-II-LAND in progress

Continuous update of contents, information, news and tweets.

Terms and definitions Wiki

The Terms and Definitions Wiki is accessible, with the following differences:

- Guests can view all the definitions;
- Site members (i.e. registered users) can view, vote and provide comments;
- Members of Terms and Definitions group can, in addition, edit the definitions.

your feedback is welcome!

Input from Emma Woolliams [NPL] and Jaime Nickeson [NASA].

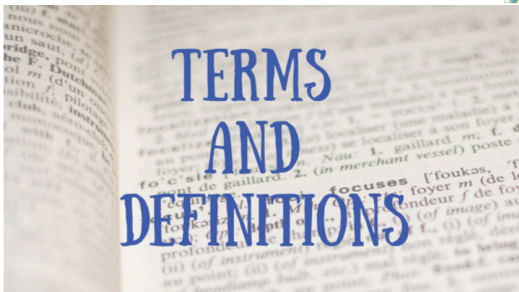
Wiki Display

FrontPage Recent Changes All Pages Orphan Pages Draft Pages

Search

FrontPage

Details Print



In this section, a list of Terms and Definitions is proposed, see pages below for details

Please note that this is work in progress and your feedback is welcome!

The "Terms and Definitions" Wiki is accessible with the following differences:

1. Guest can view all the definitions;
2. Site members (i.e. registered users) can view, vote and provide comments;
3. Member of the "Terms and Definitions" group can, in addition, edit the definitions.

Children Pages

- Accessibility
- Accuracy
- Accuracy (Atmospheric Correction Community)
- Accuracy (of measurement)
- Area (volume) of representativeness (see also representativeness)
- Availability
- Bias
- Bias correction
- Calibration
- Climate Data Record (CDR)
- Covariance matrix (measurement)
- Data fusion
- Dead band (or neutral zone)
- Detection limit
- EO data products (L0, L1, L2, L3, L4) across agencies and companies
- Error
- Essential climate variable (ECV)
- Establish
- FCDR (Fundamental Climate Data Record)
- Fiducial
- Fiducial mark
- Fiducial Reference Measurements (FRM)
- Field-of-regard
- Field-of-view

CEOS SAR Subgroup 1/2

CEOS SAR subgroup website migration to the CEOS Cal/Val portal occurred in early June 2020.

134 CEOS SAR members registered in the Cal/Val Portal

Dedicated areas for SAR members: Doc Repository and Discussion (forum)

The screenshot shows the CEOS Cal/Val Portal website. At the top, the header includes the CEOS logo, the text 'CEOS Cal/Val Portal', and 'CEOS-WGCV SAR Subgroup'. There is a search bar, a language dropdown set to 'Everything', and social media icons for Twitter and Facebook. A welcome message for 'GUEST' and a 'Sign In' link are also present. The main content area features the CEOS logo and the title 'CEOS-WGCV - SAR Subgroup' with its full name: 'The Committee on Earth Observation Satellites Working Group on Calibration and Validation Synthetic Aperture Radar Subgroup'. Below this is a section titled 'Calibration and Validation for SAR Systems' with a welcome message. Three green boxes highlight 'Workshop 2020 Announcement' (noting the event is postponed due to COVID-19), 'Past Proceedings' (linking to earlier workshops), and 'Register!' (encouraging newsletter sign-ups). A paragraph states the webpage's purpose as a central location for the subgroup's proceedings and recommendations. At the bottom, a green box outlines the 'Our mission' to foster high-quality SAR data through precision calibration. A sidebar on the right lists navigation links: 'CEOS WGCV Meeting', 'IVOS', 'LPV', 'MSSG', 'ACSG', 'SAR_subgroup' (highlighted), 'Workshop Announcement', 'About', 'Past Proceedings', 'SAR Subgroup Library', 'SAR Subgroup Doc Repository', 'Target DB', and 'Discussions'. The footer of the website shows the CEOS logo and a row of national flags.

CEOS SAR Subgroup 2/2

Public pages:

- Home
- Workshop Announcements
- About
- Past Proceedings
- SAR subgroup library
- Target DB

Coordinated with Bruce Chapman [JPL NASA]

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CEOS Cal/Val Portal
Point & Distributed Targets DB

Search: Everything [Twitter](#) [Facebook](#)
Welcome GUEST | [Sign In](#)

CEOS
The Committee on Earth Observation Satellites
Working Group on Calibration and Validation
Synthetic Aperture Radar Subgroup

Mission Point and Distributed Targets Database

Surat-Basin-Australia
ASF-corner-reflector-USA
Neustrelitz-Germany
BAE-Corner-UK
RADARSAT-Distributed-Targets
Amazon-Rain-Forest-Brazil
Bar-pattern-target-China
BGS-corner-reflectors-UK

Workshop Announcement
About
Past Proceedings
SAR Subgroup Library
SAR Subgroup Doc Repository
Target DB
Point & Distributed Targets DB
ASF corner reflectors
Amazon Rain Forest Sites
BAE Corner
Bar-pattern target
Beidou China
Neustrelitz Germany
RADARSAT Distributed Targets
Surat Basin
Queensland Australia
BGS Corner Reflectors UK
Help
Discussions

Access detailed point-target information by clicking on the marker on the map. The complete list of point-targets is also available as a [KML](#) formatted file:

[Download target coordinates as KML file](#)

LIME Project

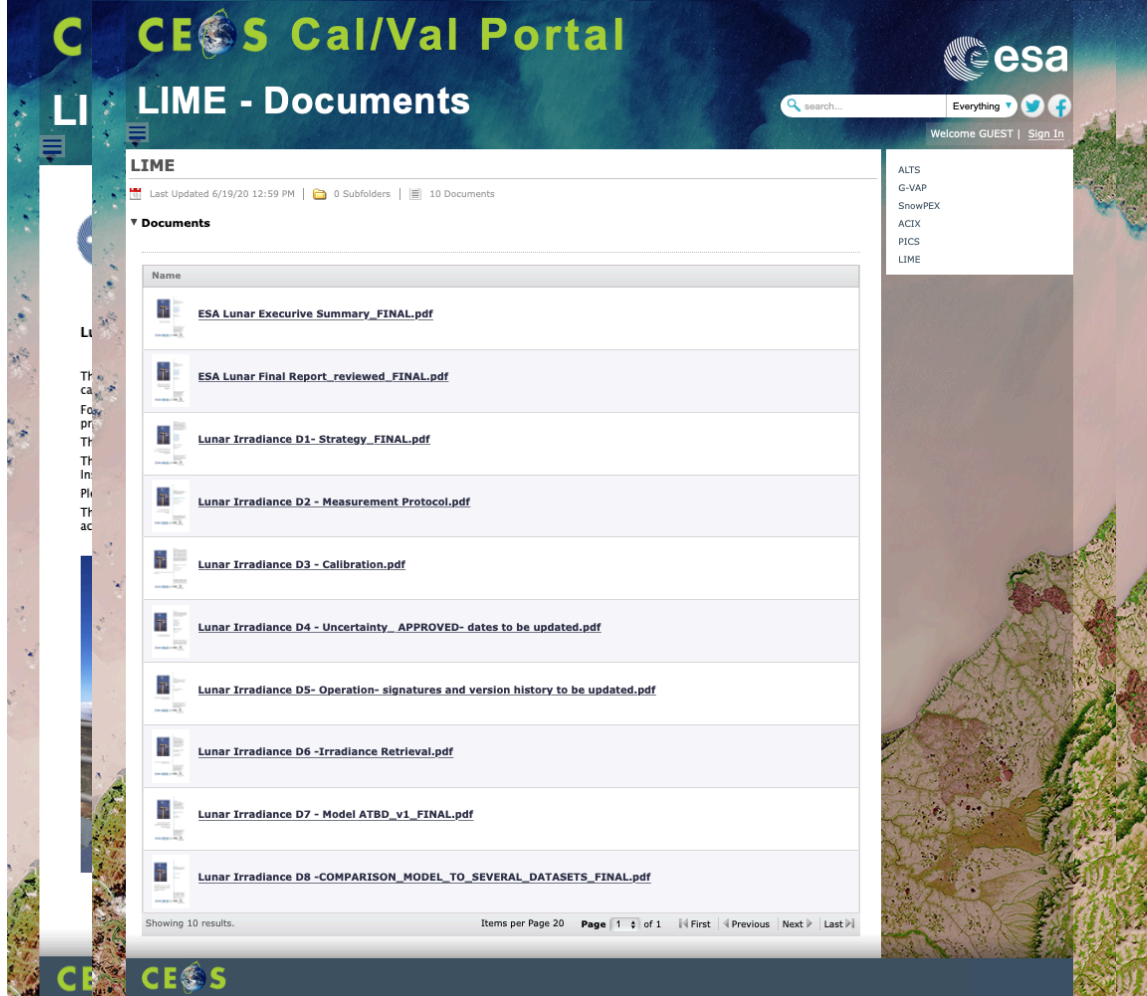
Lunar Irradiance Model

ESA: LIME

Overview and Documentation

It is accessible from
Cal/Val sites and Projects
menu

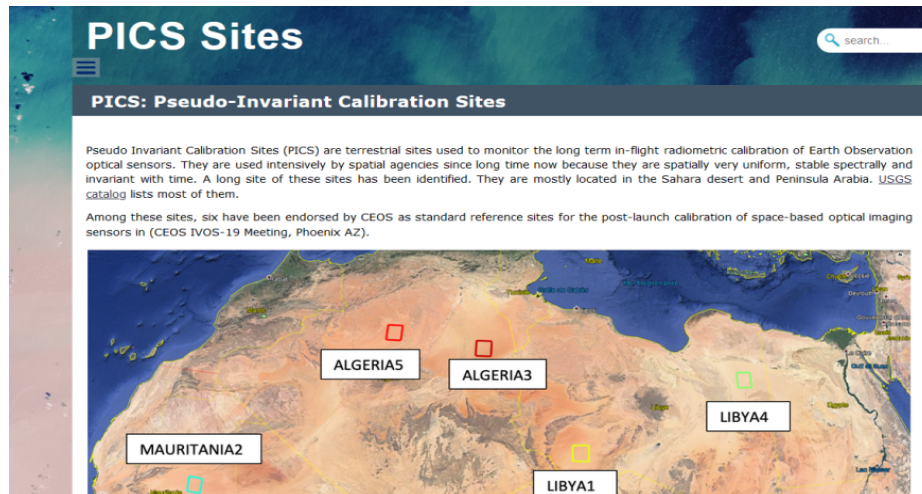
Info provided by Marc
Bouvet [ESTEC ESA]



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PICS pages has been reorganized: an entry-point PICS page provides links to PICSCAR and PICSAND projects.

Info provided by Béatrice Berthelot [Magellium] and Patrice Henry [CNES]

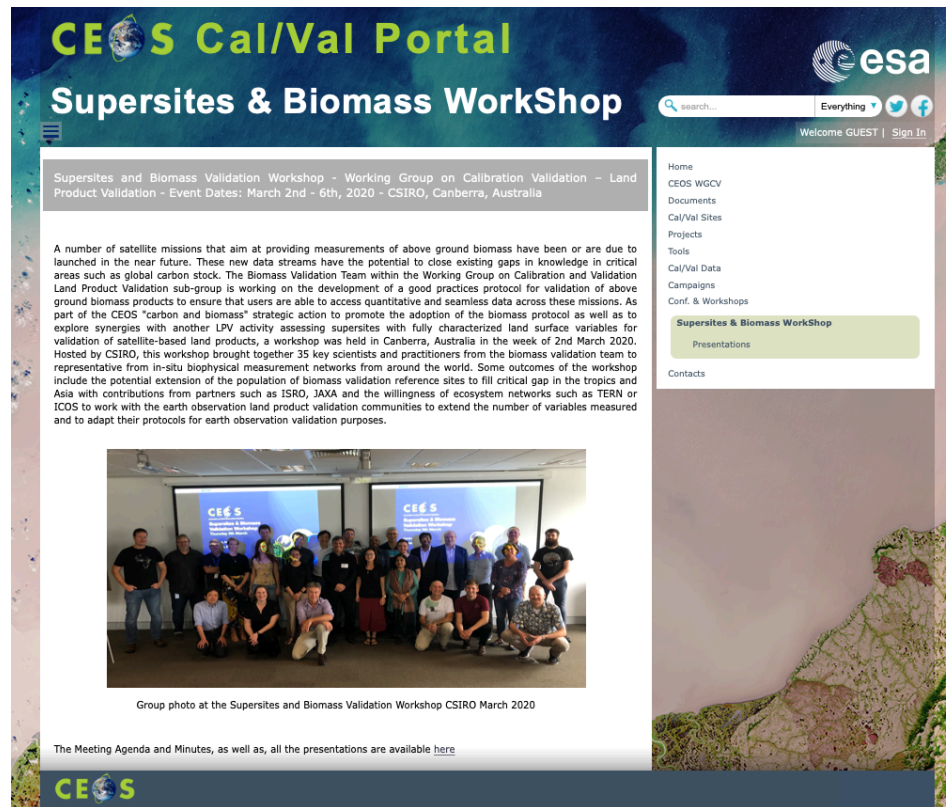


Supersites and Biomass Validation Workshop



An Overview, all the presentations, as well as, Agenda and Minutes of the “Supersites and Biomass Validation Workshop” are made available on the CEOS Cal/Val portal, Conf and Workshops menu.

Info provided by Cindy Ong [CSIRO] and Fernando Camacho [EOLAB]



WGCV 46 presentations

An Overview, all the presentations, as well as, Agenda and Minutes of the “WGCV#46 Virtual meeting” are made available on the CEOS Cal/Val portal, Conf and Workshops menu.

Info provided by Cindy Ong [CSIRO].

To be reviewed by Cindy Ong before publication

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The screenshot displays the CEOS Cal/Val Portal interface. At the top, the header reads "CEOS Cal/Val Portal" and "WGCV46 - WGCV#46 presentations". A search bar and navigation links are visible. The main content area, titled "WGCV46", shows a list of 12 documents. The documents are as follows:

Name	Size
1.0 2020.05.11_12.00_WGCV46_welcome.pdf WGCV-46 Welcome; C. Ong / A. Kuze, CSIRO / JAXA WGCV # 46; Virtual Meeting; May 11 & 15, 2020	594.2k
11.0 Summary_CMIX-Brockmann.pdf Report from CMIX; Carsten Brockmann, Jan Wevers Brockmann Consult, Sergii Skakun, NASA/Univ Maryland	2,086.8k
12.0 2020 CEOS Coastal.pdf CEOS WGV 46; CEOS COASTAL; Philippe Goryl ESA	930.3k
2.0 2020 CEOS WGCV Goryl.pdf CEOS WGV 46; Philippe Goryl ESA	3,654.7k
3.0 SAR subgroup - may 2020.pdf CEOS WGCV SAR sub-group, Bruce Chapman, Dirk Geudtner, May 2020	3,580.6k
4.0 CEOS_WGCV46_new_WP_Dong.pdf "New WP: ocean surface vector wind standards and metrics", Xiaolong DONG, National Remote Sensing Center of China (NRSC/CAS, NRSC)	392.7k
5.0 CEOS_WGCV46_TMSG-update_PS_20200522.pdf Terrain Mapping SubGroup and DEMIX Update, Peter Strobl, EC-JRC, CEOS WGCV #46, Virtual Meeting Session, 11 & 15 May 2020	950.9k
6.0 CEOS_WGCV_SRIX_wgcv46.pdf CEOS WP - CY-20-01 Surface Reflectance measurements Intercomparison eXercise for vegetation (SRIX4veg); Fernando Camacho, EOLAB, WGV LPV; Nigel Fox, NPL, WGV IVOS; Tim Malthus, CSIRO; Philippe Goryl, WGV ESA; Valentina Rocca, ESA; Joanne Nightingale, NPL; Cindy Ong, CSIRO, WGV	1,727.9k
7.0 WGV Report Status of CARD4L Peer Review.pdf Status of CARD4L Peer Reviews; Medhavi Thankaapan, PoC WGV CARD4L Peer Review; WGCV-46 Virtual 11 May 2020	13,055.6k
8.0 WGV 46 ACSG status update 20200515.pdf ACSG Status update; B. Bolkov (WGV / ACSG), J.C. Lambert (WGV / ACSG), R. Munro (CGMS / GSICs), R. Lang (WGVClimate GHG TD), A. Kuze (WGV)	3,716.2k
9.0 2020-04-22 BRIX V2.pdf BRIX-2, Second Biomass Retrieval Intercomparison eXercise; Clément Albinet (ESA) Laura Duncanson (University of Maryland) Marco Lavalle (NASA/JPL)	479.7k
WGCV46 minute final.docx WGCV46 minute final; Cindy Ong	48.1k

The interface includes pagination controls at the bottom of the list, showing "Showing 12 results." and "Items per Page 20".


ACIX II Land – work in progress

Home, Processors, Sites and
Metrics page has been prepared.

Results query page in preparation

In collaboration with Erminia De
Grandis [SERCO] and Georgia
Doxani [SERCO]

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The banner features two satellite images of coastal areas. The top image shows a coastline with a large body of water and a small peninsula. The bottom image shows a dense urban area with a river. The text 'ACIX II-Land' is prominently displayed in the center, with 'Atmospheric Correction Inter-comparison eXercise' below it.

Navigation menu: HOME, PROCESSORS, SITES, METRICS, RESULTS, CONTACT

ALTS
G-VAP
SnowPEX
ACIX
PICS
LIME

ACIX aims to bring together the developers of Atmospheric Correction (AC) processors, who are invited to generate the corresponding Bottom-Of-Atmosphere (BOA) products. The input data are Landsat-8 and Sentinel-2 imagery of various sites. A common and harmonised inter-comparison procedure is agreed and followed by all the participants.

The first ACIX experiment started in June 2016 with its description and conclusions to be summarised in Doxani et al. (2018). All the inter-comparison results can be found in the dedicated to [ACIX I web page](#). ACIX I was completed in February 2018, but the improved versions of the participating processors and the increasing interest of AC developers to be part of the experiment stimulated the continuation of ACIX and its second implementation (ACIX II).

Following the recommendations of ACIX participants and Earth Observation data users, an additional inter-comparison of cloud masking assessment was decided to be performed in parallel with ACIX. Cloud masking is a crucial step of the radiometric pre-processing of optical remotely sensed data and an important contributor to the retrieval of accurate SR within an AC process. Therefore, it was considered essential to analyse these two processing chains together.

```
graph TD
    ACIX_II[ACIX II] --> ACIX_II_Land[Atmospheric Correction Inter-comparison]
    ACIX_II_Land --> Processors_Land[Processors over LAND]
    ACIX_II_Land --> Processors_Water[Processors over WATER]
    CMIX[CMIX] --> CMIX_Land[Cloud Masking Inter-comparison]
```

The test sites of the exercises are redefined and more representative cases concerning land surface and atmospheric conditions, e.g. land/water, land cover, aerosols. Particular attention will be given also to aquatic sites, i.e. coastal and inland waters, which will be analysed as a separate sub-category. All the exercises, i.e. CMIX, ACIX-Land, and ACIX-Aqua will run in parallel and follow the same timeline.