

# SAR Subgroup Report

Manfred Zink

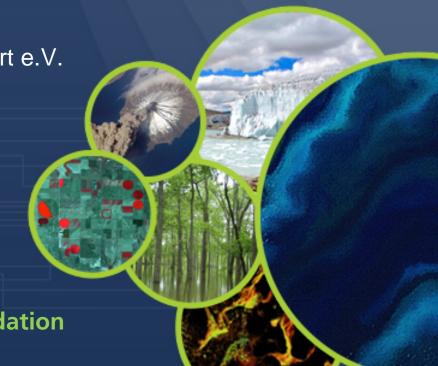
Deutsches Zentrum für Luft- und Raumfahrt e.V.

Agenda Item #

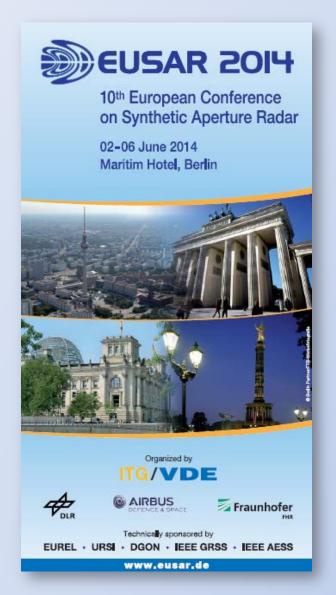
CEOS - WGCV Plenary #39

DLR, Berlin

May 06 - 08, 2015



Working Group on Calibration and Validation





combined with the **21**st CEOS SAR Calibration and Validation Workshop

- 530 participants from 37 countries
- 250 oral & 135 poster presentations





# **CEOS SAR Workshop 2015**



- Intensive discussion in dedicated CEOS sessions at ASAR 2013 and EUSAR 2014
- One full day too short
- 22<sup>nd</sup> CEOS SAR CAL/VAL WS as a standalone event
- Host/location tbd

/workshop2015

### http://sarcv.ceos.org

### Workshop 2015

The Committee on Earth Observation Satellites (CEOS) Working Group on Calibration and Validation (WGCV), SAR Subgroup, Synthetic Aperture Radar Workshop 2015 (CEOS SAR 2015) will be held at ESA-ESTEC in Noordwijk, The Netherlands, from October 27-29, 2015. The Workshop, hosted by ESA's Sentinel-1 Project team, will provide an open forum for the presentation and discussion of current and future issues related to the calibration and validation of space borne SAR sensors and data products. Please submit contributions to the following topics:

- · Calibration of new SAR missions
- · Calibration of running SAR missions
- · Calibration methodology and techniques
- · Calibration targets and sites
- · Calibration requirements and definitions
- Propagation effects
- · Processing algorithms
- · Innovative SAR concepts

#### Content

- Important Dates
- Abstract Submission
- Workshop Registration
- Travel Visa
- · Guidelines for Preparation of Presentations
- Scientific Committee
- · Organization Committee
- · Workshop Venue
- Accommodation
- · Further Questions
- Contact





October 27-29, 2015, at ESA-ESTEC in Noordwijk, The Netherlands

Hosted by





## **Workshop Topics**



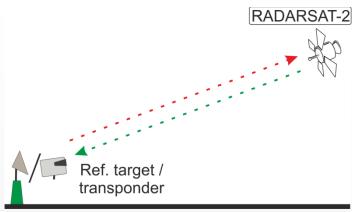
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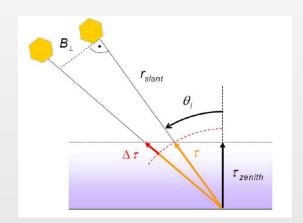


## **Current Efforts SAR SG**



- Precise transponder development & absolute radiometric calibration
- Characterisation of rain forest ongoing
- Investigation of propagation effects especially through the ionosphere
- Calibration of compact polarimetry (transmit circular and receive horizontal & vertical polarizations)
- Calibration of P-band systems







#### CEOS-WGCV - SAR Subgroup

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

### **Point and Distributed Targets Database**

The SAR Subgroup of the CEOS WGCV currently lists 4 point and 2 distributed targets in its database:



implementation in progress

CV-2: Website for SAR calibration sites and

**Targets** 

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

### Your Contribution is Needed!

The SAR Subgroup of the CEOS WGCV serves as the intermediary between different parties wanting to calibrate synthetic aperture radar (SAR) systems. To this end, the working group offers to make point target locations and alignments of different organizations and institutions publicly available to facilitate a broader long-term system monitoring across SAR missions.

This open sharing of available ressources is based on voluntary contributions by interested parties. Do you have a corner reflector or another calibration point target (rather permanently) installed and are willing to share this information? Then please get in contact with the chair of this subgroup, so that the information can be added to the database.

### **Target Collections**

Reference targets are grouped into target collections in the database. These collections are:

- · DLR (German Aerospace Center) (4 targets)
- JAXA (1 target)
- Test\_Targets (1 target)