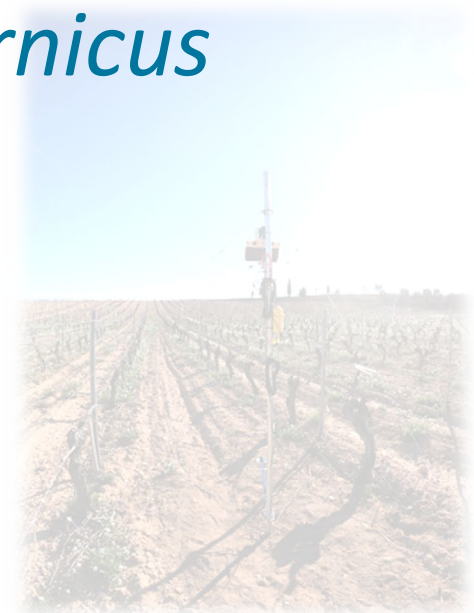




# *The future of Cal/Val for the Copernicus Programme*





### ❖ Panelists

- ❖ Peter Strobl (JRC)
- ❖ Philippe Goryl (ESA)
- ❖ Thierry Marbach (EUMETSAT)
- ❖ Martine de Mazière (IASB/BIRA)

### ❖ Moderator

- ❖ S. Clerc (ACRI-ST), CCVS project coordinator

❖ **More information about the CCVS project: <https://ccvs.eu>**

## *Fiducial Reference Measurements*

« Fiducial Reference Measurements (FRM) are needed to calibrate and validate (cal/val) satellite data products. Thanks to investments by ESA, EUMETSAT and the Copernicus Programme, significant progress have been made to define protocols and methodologies for acquiring FRM for most EO variables. However, the operational provision of FRM is often lagging behind. Do you share this assessment and how to address it? »



## *Fiducial Reference Measurements*

« Following FRM standards and protocols required for cal/val activities represent a significant effort for measurement scientists. How could we encourage more data providers to adopt FRM standards and protocols? »



## *Fiducial Reference Measurements*

« Although there are several funding sources for R&D activities on FRM, support for regular calibration and maintenance of existing infrastructure is often missing. This concerns not only funding but also technical capabilities. How should this issue be tackled? »



## *Fiducial Reference Measurements*

« It has been proposed that an official “FRM” label could be delivered by the CEOS/WGCV based on evidence provided by data providers. Do you think this could be useful for the Copernicus Programme and for EO in general? »



## *Organization and synergies*

« Similar validation activities are led by ESA and EUMETSAT on Sentinel data products and by Copernicus Services of downstream products. Do you think that a coordination within the Copernicus program could be useful to align validation methodologies and leverage synergies for reference data collection, dissemination and archiving? »



## *Organization and synergies*

« European Research Infrastructures (ERI) are powerful structures to coordinate measurement networks at European Level. Some collaboration and agreements exist between ERI and Copernicus entities. Should we aim at strengthening this collaboration? »





## *Organization and synergies*

« Cal/Val activities for Sentinel mission are often organized by mission (e.g. Sentinel Validation Teams, Quality Working Groups) while inter-comparisons between missions (in the same domain) or contextual analyses (across domains) could be highly beneficial. How could we implement cross-mission synergies practically? »

