



Gap Analysis for Integrated Atmospheric ECV CLimate Monitoring

First User Workshop

Objectives of GAIA-Clim



A critical component of the Copernicus framework is the provision of high-quality observational datasets from satellites. These need to be ***calibrated and validated to standards*** that enable them to be used with confidence for applications across a broad range of sectors.

- ⇒ GAIA-Clim aims at supporting Copernicus by establishing ***prioritized needs for further observational sub-orbital capacity*** targeted at enhancing satellite calibration and validation capabilities.
- ⇒ ***Enhance ability*** to utilize, truly reference quality traceable measurements in support of satellite data characterisation.

Objectives of the Workshop



Interaction with users and the community is very important

Therefore, objectives are :

- To present outcomes of a first survey of user needs
⇒ refine user needs
- To present an initial analysis of gaps in the sub-orbital EO system
⇒ get feedback and complete
(see also template for inputs)
- To present first ideas for developing a 'Virtual Observatory'
⇒ get feedback and adjust to user needs

- Thanks to local organisers: F. Fierli, F. Madonna, M. Rosoldi (CNR)
- Offered by GAIA-Clim:
 - Coffee breaks outside the room
 - Lunch at CNR canteine (lunch tickets will be distributed)

Programme



9:00 Welcome and introduction, M. De Mazière

9:15 Presentation of the GAIA-Clim project, P. Thorne, coordinator

9:35 Presentation of the Results of a User Survey, G. de Leeuw (FMI)

10:05 – 10:30 **Coffee / Tea break**

10:30 Presentation of the first version of the Gaps Assessment and Impacts Document, M. van Weele (KNMI)

11:00 Discussion with all participants; moderators: G. de Leeuw and M. van Weele; rapporteur: A. Mikalsen (NERSC)

12:00 – 13:00 **Lunch**

13:00 – 14:30 Presentations from selected users



- H. Eskes (KNMI): Use of surface in-situ, surface remote sensing, aircraft, balloon and satellite measurements for the validation of the MACC services: a wish list
- I. Aben (SRON): Needs for satellite validation of Greenhouse (related) gases, CO₂, CH₄, CO
- B. Hassler (NOAA): Ground-truthing long-term ozone trends from satellites
- R. Dirksen (DWD): The road towards a globally distributed network of reference observations of temperature and water vapor
- J. A. Añel (Uni Vigo): Needs for improved knowledge of phenomena affecting UTLS and lower stratosphere
- 14:30 Let's start talking about uncertainties, B. Langerock & Tijl Verhoelst (BIRA-IASB)
- 15:00 – 15:20 **Coffee/ Tea break**



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15:20 Initial Ideas for the Virtual Observatory, J. Schulz
(EUMETSAT)

15:50 Discussion with all participants; moderators: M. De Mazière
& P. Thorne; rapporteur: K. Kreher (BKS)

16:45 Conclusions and way forward, M. De Mazière & P. Thorne

17:00 **End of meeting**

What is expected from you ?



- Be active and critical !
- Provide feedback preferably during discussion sessions, or afterwards
- Test the VO at a later stage (if feasible)
- Identify yourself and your community;
communicate with colleagues and inform them about the possibility to participate in future workshops and per Email

Schedule:

- 2nd User Workshop (Webex ?) around October 2016
- Final User Workshop around end of 2017

Questions



- Does the proposed tool serve your needs or do you find this kind of service already elsewhere ? Do you use other existing services / tools of this kind like BEAT, TAMP, PROVS, ICARE, ...
- Are you looking forward to it (or to something similar) or will you anyway use your own tools because you are reluctant to use 'black boxes' ? Would you use it a first quick-look tool ?
- What should be changed to make you really use it ?
- Do you believe/trust that it will become an operational tool that is up-to-date with the evolution of the data sources and your needs, knowing that the needs are very diverse and the evolution rather fast ?
- is any important utility missing ?
- in what form do you want to see the documentation ? open source code ? help functionalities ? documents and readme files ? a discussion forum ?
- Uncertainties: any question ?
- ***Any other question or comment ?***