

# Science Leads Meeting

## Update on OBS4MIPs (R. Saunders)

Roger is part of the Obs4MIPS oversight panel which meets virtually once a month to decide on which datasets are to be approved for inclusion on the Obs4MIPS dataset. Most CCI teams have submitted their datasets to Obs4MIPS and the mature end of CCI phase 2 datasets will be accepted for inclusion in Obs4MIPS.

## Update on SAF-CCI interactions (R. Hollman)

EUMETSAT has agreed next phase of SAFs. CM-SAF mainly covers climate. Ozone SAF is now AC-SAF with CDRs generated. H-SAF is doing CDRs for soil moisture. J. Schulz is main interface between CCI and SAFs.

## CCI Portal(V. Bennett)

Portal is now live on [cci.esa.int](http://cci.esa.int) with dashboard. Various options to search dataset , on variables, time periods, faceted search also on categories. Need to have tags that are recognised to show up in search. The data can be downloaded on the ESGF which climate modellers will use. Encouraged to play with it.

Question over what download access is required and the contact details if any. Concerns were expressed over the terms and conditions on use of dataset and the need to give citations. Various options were proposed to help this. Forums and WiKi sites may also help communication with users. The future users of CCI data in the CCI+ era needs to be defined with ESA as some of the teams may be disbanded. There is no plan to make available old versions which is still a requirement and was a concern expressed by the group to be raised with ESA.

## CCI Tool Box (C. Brockmann)

The toolbox makes it easy to work between different ECV datasets. CCI teams use it but there are many other teams who could use it. Clouds, Glaciers and SSTs are champions of this tool box and represent different types of data. Other non-CCI datasets can also be configured to combine with the CCI data.

Will have new releases on the open data portal every 3 months for users to provide feedback. Question of how access to pre-operational and operational datasets should be enabled and how it will be different. The former is like having beta testers for datasets.

## CCI+ Discussion (All)

Concern if ESA abandons current CCI projects as for prospective users it doesn't give the new users the right message.

There needs to be seamless access through C3S for users.

We shouldn't have gaps in the data or service.

## Papers Status

### CCI uncertainty paper (C. Merchant)

Good progress made last Autumn but some ECVs have not responded and we need clarity on this. There is a draft text already but differing views in some cases so it will be a generic paper. Chris will make a google doc of what he has from each team to make it clear which contributions are needed. *Action: Chris Merchant*

### Special CCI issue on EO data for global climate observation in Remote Sensing of Environment (Emilio, Michael)

Deadline for submitting papers was end of September but a lot of last minute emails requesting an extension and 15 October is now official deadline. There are 42 accepted abstracts covering all ECVs. Eight papers are already uploaded. It was suggested end of October should be an extended deadline if the journal agrees (papers need to be very good).

### Discuss potential topics of collaboration between ECVs for cross-related papers. (Emilio)

One aim of CCI is to bring together cross disciplines and some publications in this area should be encouraged. The sea level project is a good example of cross ECV work and a collection of papers from the ISSI meeting in 2015 will be published and many papers are directly related to CCI datasets. There will also be a book. It seems a dedicated workshop is a good way to initiate this kind of activity. Could plant seeds for this at the next Integration meeting.

## Exploitation of CCI datasets (All)

*1. As we move from CCI to CCI+ what mechanisms would you suggest are put in place to ensure the teams who generated the CCI datasets have the opportunity to exploit these data to answer scientific questions. This should consider existing ECV projects and those potentially in CCI+.*

Teams of course need funding but many have ideas on how to exploit the datasets as not only data provider but exploiter. Need to advertise datasets to national and European funding agencies to increase funding. Deliverables should also be submitted papers to peer reviewed journals. Living Planet fellowships are another mechanism. Once the tool box is available more can be done with less effort. CCI internships might be another mechanism. Scientists move from one ECV to another perhaps. CCNs on existing projects is another way if there is a defined project and remaining budget.

## Exploitation of CCI datasets (All)

*2. Since one of the proposed CCI+ themes is dedicated to Cross-ECV activities can you please provide suggestions (ideally specific) of the types of projects that should be supported here - typical examples include CMUG, Sea Level Budget Closure, and a potential activity in support of RECCAP-2 ( regional carbon cycle budgets). Such projects/ suggestions should be multi-ECV, linked to a major international exercise or international research programme and/or aimed at tackling a key scientific question on climate/climate change.*

Anny mentioned a sea-level budget closure project proposed to ESA with 8 teams for 1M€ which is not CCI+. Ice mass balance, carbon budget (GHG, fire, soil moisture, etc.) are other topics. Aerosol, clouds, radiation closure. Contribution to state of climate from CCI datasets for last year. NOAA lead this at present through NCEI.

*Action: Roger to inform group on how to publish within the BAMS state of the climate and give points of contact.*

## Exploitation of CCI datasets (All)

*3. During CCI an additional mechanism for exploitation was developed through the CCI Living Planet Fellowship scheme. It is intended that this scheme will form part of CCI+ so please can you consider what changes if any you would like to see in how this scheme works (required funding, project types, call frequency, length of contract).*

Need flexibility here, would like to open to non-Europeans to apply. Internship as mentioned above is another proposal.

# CCI+ proposal



Proposal for CCI+ cross-ECV activity / activities:

## “Improved quantification of land and ocean carbon sources and sinks”

- **Goal:** Improved quantification of regional land & ocean carbon sources and sinks using satellite ECV data products and inverse modelling / assimilation / CCDAS
- **ECVs:** GHG (CO<sub>2</sub>, CH<sub>4</sub>), fire, SM, LC, OC, SST, ..., (Biomass, FAPAR, ...)
- **International programme:** WCRP, ...
  - WCRP Grand Challenge “Carbon feedbacks in the climate system”:
    - Questions:
      - Q1: What are the drivers of land and ocean carbon sinks ?
      - Contributions to Q2 (feedbacks) and Q3 (vulnerable reservoirs)
    - Research:
      - R3 (learning from the existing record; satellite data explicitly mentioned)
      - Contributions to R1 (process understanding land), R2 (process understanding ocean) and R4 (improved projections)
- Integrated analysis/assessments via (inverse) modelling / assimilation; will highly benefit from improved satellite data (accuracy, spatio-temporal coverage, new ECVs, ...)

## CMUG-CCI Integration Meeting in Paris 13-14 Feb 2017

What are our expectations? (e.g. Format) for CMUG Meeting Less than half of ECVs in phase 2 will be finished.

May be a good time to discuss CCI+?

Good time for inputs to 'State of the Climate' discussion

Other topics:

- Cross ECV issues,
- Demonstrations of usage of datasets
- Meeting of Science Leads.
- Request for talks on on sea-level comparisons with climate models at the meeting.
- More?