Splinter Session
Climate Science and Other <u>User Perspectives</u>

Chairs: Wolfgang Wagner & Pierre Philippe Mathieu

Overarching Questions Posed by ESA

How operational are the CCI ECVs?

- Define the key criteria for being operational

- Assess the current status with respect to these criteria

- Define the main steps necessary to become operational and the time scale

Specific Questions - Climate Science Applications

- How many users have downloaded you data?
- Which areas are they from?
- What feedback have you received from your users?
- How do you assess impact on your user communities so far?
- How to best measure the user impact?
- How dependent are users on your data?
- What user base constitutes an operational service?
- Do you foresee different users when you become operational?
- Do you track access to your data?
- Do you require password control and user registration?
- Do you track publications of other groups using your data?
- How relevant is your data to the IPCC, CMIP and other climate assessment processes?
- Do you consider your current data access adequate? What else is needed?
- Link to Data group – how are you providing data access? What downloads are you expecting?
- How important is it for your ECV record to include the most up to date information (e.g. last month)? (Also important for non-climate users).
- Uptake by climate modellers: how well adapted are your data – how well linked to Obs4MIPS are you?
- Interaction between ECVs – is the CCI Community making the most of the programme? What do users want in terms of consistency (once consistency has been defined :)
- What specific requirement (if any) do climate services impose on ECV Data products? Is there a specific need to modify or update existing ECV products?

Specific Questions - Non-climate Science Applications

- Are your data currently used in different domain than Climate Research

- How important are the non-climate science users within the different projects?

- Do these users have different requirements?

- Are there presently any commercial uses? E.g. insurance companies, oil/gas sector?

- Are there any presently non-research public entities users?

- How can this data be best used for educational purpose (school, universities, public)?

- What do we need to do to the ECVs to make them more easily useable for these groups? E.g. provide tools, more explanations, more real-time data, better promotion within these communities, different data formats, etc.?

Discussion Points

- **What does Operations Mean?**
  - Meeting Service Level Agreements
  - Complying with the URD
  - Meeting accuracy goals
  - Different for every ECV

- **Key Criteria**

- **Can we deliver tomorrow?**
  - Tomorrow = after CCI Phase 2)

- **Unique Selling Positions**
  - Are there free and open data sets from other organisations (NASA, ...)

Yes!

Key Criteria

- Potential Impact/added-value of variable
- Well defined data sets and procedures for quality control, delivery, reviewing and updating
  - Bates Maturity Matrix
- Ease of access
- Sustainability
  - Strong science
  - Stable and supportive international cooperation network
  - Storing data in repositories
- Automatic processing lines
- ~~Data set has a DOI~~
- ~~Number of users~~
- ~~Outreach in media~~
- ~~Strong team behind the production~~

Unique Selling Positions

- **Aerosols**: 17 years, quality

- **Cloud:** optimised retrieval and consistency

- **Fire:** small fire detection, validation

- **GHG:** unique data sets, documentation

- **Glaciers:** Global team, standardisation

- **Ice Sheets:** European satellites, national funding

- **Land Cover:** consistency accross epochs

- **Ocean Colour:** novel methods, better coverage

- **Ozone:** high precision, unique altitude coverage

- **Sea Ice:** quality control, errors

- **Sea Level:** uncertainty, global team

- **SST:** timeliness and consistency over long time

- **Soil Moisture:** unique multi-satellite data, established cooperation team