

2c Cryosphere-atmosphere - Climate - Cross-ECVs



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- 27 projects
- 6 cryosphere
- 5 ocean
- 5 atmosphere
- 7 land
- 2 cross-ECV
- CMUG, toolbox

- ECV Products
 - Atmospheric Physics
 - Atmospheric composition
 - Ocean
 - Land hydrology & cryosphere
 - Land biosphere
- Quality Controlled Observations
- Data Rescue

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Temperature goal
Limit the global rise to as close as possible to 1.5 °C.



Pre-2020 action and support
Encourage action between now and 2020 by all actors, including non-Party stakeholders.



Transparency and the global stocktake
Robust transparency and accounting, supported by international review and global stocktakes.



Finance, technology and capacity-building
International cooperation to support a low-carbon and climate-resilient future.



Mitigation and voluntary cooperation
All Parties must prepare nationally determined contributions (NDCs) and work to achieve them, reporting on progress, and regularly enhancing ambition.



Adaptation and loss and damage
Strengthen national adaptation efforts and support vulnerable countries to cope with climate change effects.



1. How to further combine individual ECVs in a more system focussed approach?

2. Which cross-ECV do we want to support but need further input, both in terms of existing ECVs' contribution and new ECVs

3. How could we in future put ECVs into clusters?

4. How could projects facilitate benefits for society e.g. provisions around scaling/regional challenges faced by potential operational users?

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1. How to further combine individual ECVs in a more system focused approach?

- Where are the key similarities that are currently not integrated ?

- * coupling w/ atmosphere on retrieval algorithms, one aspect to combine variables (e.g. cloud/snow discrimination);
- * coupling with atmosphere: temp : over ice sheet, precipitation, +temp to look at mass balance.

- * Technology : e.g. altimetry used in many cryospheric ECVs
- * Technologies look similar (e.g. ice velocity) but there are some differences as well.

- * missing high-res snow information on Glaciers: linking Snow and Glaciers. New ECV product.
- * Ice sheets, Glaciers, a lot of synergy to be harvested (albedo / reflectance).

- What are the strengths and weaknesses of combining ?

- * We do not want too many ECVs after this process. Snow must stay snow (whether on Land or Glaciers).

- Are you in favour of combining ?

- * Q: Combine our ECVs as Cryosphere? Sea Ice traditionally in Ocean.
- * We could combine by technique (velocity tracking), technology (e.g. gravimetry, altimetry), also with Ocean.



3. How could we in future put ECVs into clusters?

Cluster type	Examples	Strengths	Weaknesses	Vote
Geographical (by partner)				
Technical				-----
Topical				XXXXXXXX
Challenge-led				XXXXXXXXXXXX
Other?				

Outcome: Cluster by Topical or by Challenge, but all see the need for a coordination of the technology/missions aspects.

2. Which cross-ECV do we want to support but need further input, both in terms of existing ECVs' contribution and new ECVs

- How effective are cross-ECV projects (strengths / weaknesses) ?

* **Success: Sea Level Closure, and IMBIE good examples, with contribution from Cryosphere, they should continue.**

- What are the key projects within and beyond CCI cryosphere ?

- Are there projects that could contribute to CCI+ strategic objectives ?

- **Snow, Glaciers, Ice Sheet (compute albedo, reflectance), towards energy balance/cycles;**

4. How could projects facilitate benefits for society e.g. provisions around scaling/regional challenges faced by potential operational users?

- **What are the societal benefits of cryo-ECV's ?**
- **Has the societal benefit been realised by CCI ?**
- **What are the societal-benefit challenges for CCI+ ?**

NOT TOUCHED UPON