



1.6 Review of AOPC – 28 actions

Peter Thorne



**GLOBAL CLIMATE
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AOPC-28 closed actions

| n | action | responsibility | By when |
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| A1 | Discuss with the marine community about potential reference ocean stations which are measuring temperature at surface | TT-GSRN co-chairs | |
| A2 | GSRN, GRUAN and BSRN to have a discussion about reference surface radiation measurements to make sure that we are working together and not duplicating efforts | GCOS Secretariat | Dec 2023 |
| A6 | Discuss with GGGW to have an ex-officio post for AOPC | GCOS Secretariat | December 2023 |
| A11 | Forward to WGClimate the recommendation from AOPC28 for Actions B1.3; B1.5 and D4.1 | GCOS Secretariat | Next WGClimate-GCOS meeting |
| A12 | ECV Stewards to undertake initial entries into table A1.1 | ECV Stewards | Dec 2023 |
| A13 | ECV Stewards to undertake initial entries into table C1.1 | ECV Stewards | June 2024 |
| A14 | ECV Stewards to undertake initial entries into table D2.1 | ECV Stewards | Dec 2023 |
| A15 | Follow up about data from wind farms: are there any data made publicly available? Invite wind industry representative to present at a future panel virtual meeting (IP Action B9-meeting requirements for PBL) | AOPC Chair | September 2023 |

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| A16 | ECV Rationalization: Caterina to identify volunteers for the group that will work on the ECV rationalization. These volunteers should regularly report back to the panel | GCOS Secretariat | Report at next AOPC |
| A20 | Review the Climate Monitoring Principles | Imke, Rainer and Stephan | October 2023 |
| A22 | Encourage more precipitation in situ observations that would help resolve the difficult areas, encourage more international transmission of precipitation data w/o restrictions. | ECV Stewards on precipitation | Report at next AOPC |
| A23 | Invite WGClimate to consider the role of new and novel technologies and novel orbital configurations to address persistent spatio-temporal gaps in satellite observations | GCOS Sec | Next WGClimate |

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| A27 | Produce a working document to track AOPC relevant documents. | GCOS Secretariat | October 2023 |
| A28 | Caterina to provide input on ECV Inventory to WGClimate as drafted and agreed during the meeting | GCOS Secretariat | Next WGClimate-GCOS meeting |

AOPC-28 with agenda items

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| A4 | Panel members to reach out to their countries about the operational implementation of CLIMAT (daily) Raise up the issue to operational implementation of CLIMAT at SC-ON | Blair for Australia; Imke for US AOPC Chair | Discussed at Meeting with NCEI. Reported in agenda item 1.5 |
| A7 | Discuss with the marine community about extending the in-situ monitoring of atmospheric composition over the ocean (IP Action B4) | Paolo and Liz | Agenda Item 4.2 |
| A8 | ECV stewards to undertake an audit to capture relevant data products and how they are maintained. Initially, Liz will complete an example and share this with all AOPC ECV Stewards. (IP Action C3) | Liz Kent ECV Stewards | Agenda item 4.4 |
| A9 | Produce a best practices paper, highlighting some of the best practices used for in situ data sets creation. | | Agenda Item 4.4 |
| A10 | NCEI to provide monitoring on surface hourly data holdings (GCHN) to demonstrate the impact of GBON (IP Action F1.3) | Imke Durre | Discussed at Meeting with NCEI. Reported in agenda item 1.5 |

AOPC-28 with agenda items

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| A17 | CPG Air-Sea fluxes: Contribute to the drafting of the document: Liz, Carmen, to contribute to writing a report and preparing a workplan. | Liz and Carmen | Agenda item 1.3 |
| A18 | CPG on Data centers: Imke, Stephan and Rainer to continue to engage with this group. Imke to lead this group and report back to AOPC. | Imke, Stephan and Rainer | Agenda Item 3.3 |
| A24 | GCOS 144: relevant ECV stewards to undertake a review of the document with a view of producing an updated version. | Tim to coordinate; ECV stewards | Agenda Item BOG.1 |

AOPC-28 Actions – to be discussed

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| A3 | GCOS Secretariat will work with WMO to contact countries to request existing thunder day records to be delivered to the Copernicus repository. | GCOS Secretariat | Dec 2023 |
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1. Caterina and Tim engaged with Kruno to know how to ask Members to make TD available to a central repository
2. Kruno suggested a letter to the PRs asking this. However, the approach was not approved.
3. Meeting with Earle, Steve and Tim to decide how to target countries to be contacted. At the meeting it was decided to contact targeted countries, starting with the ones for which we have informal contacts (such as AOPC members). The request will be sent together with a letter explaining the background. Letter has been prepared, Simon Noone has provided the link to access the repository.
4. Before sending the letter to the specific countries, we need to have an inventory on what is already in the repository (there is no inventory) and to assess the usability of the data before asking for some more data. A Masters student from Peter's course will (potentially) start to work on the inventory and then we will decide whether to send the letter.

As of the 8th of July, this work has not been completed and needs an alternative approach.

AOPC-28 Actions – to be discussed

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| A21 | Contact C3S to see whether they can host parallel data holdings in a unified and usable manner | Chiara and Blair | Next AOPC |
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Some progress

Document prepared to explain the importance of parallel data holdings

Contacts with Enric Aguilar and Emily Wallis – some data shared but there is no repository

Contact with SC-MINT and C3S: no substantive progress. Meetings held but no concrete plans or follow-on activities

AOPC-28 Actions – to be discussed

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| A25 | GCOS 143: Blair is going to review and check whether this is now captured within other WMO publications | Blair | October 2023 |
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Blair: 143 is largely satellite-based and could do with a review from someone with expertise in that field, but it is fairly general and on an initial reading not obviously outdated. Nor is there any meaningful overlap with the Guide to Climatological Practices.

Stephan (29/04):

Suggest to start with the **hypothesis that it is no longer needed** since it has served a purpose, especially in the satellite community (see eg. Documents | CEOS | Committee on Earth Observation Satellites) and has been superseded by more recent, refined guidance material

Can we find evidence for this? In

1. The GCOS IP 2022 (Terminology for FCDR etc)
2. Papers such as Hollmann et al. (2013, <https://doi.org/10.1175/BAMS-D-11-00254.1>), Wooliams et al. (Applying Metrological Techniques to Satellite Fundamental Climate Data Records - IOPscience) and references
3. WMO WIGOS manuals, Guides to Climatological practices or successor docs where GCOS-143 may have been mainstreamed?

Ask the “user” community such as WG Climate or AOPC whether they believe the document needs an update

September 2024

Blair – I think the key point here is the '12 needs' table in GCOS-143, this is not really covered in either WIGOS or the Guide)

AOPC-28 Actions – to be discussed

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| A26 | GCOS 127: Blair is going to review and check whether WMO is planning to publish a guidance. | Blair | October 2023 |
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September 2024

Blair: GCOS 127 covers guidance for compiling CLIMAT reports. WMO is currently developing (more slowly than hoped) guidelines around the implementation of the daily CLIMAT, once these are available we will be in a position to reassess whether an update to GCOS 127 is needed or whether WMO documentation is sufficient.

Propose no action for now and reassess once WMO daily CLIMAT guidance is available

AOPC-28 Actions – to be discussed

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| A19 | Scope out a draft of an ECV product for UV-radiation: Paolo proposed to go back to Joanna and report that we need an ECV product related to radiation and a better justification for making it an ECV product. | Paolo | Hold until decision on rationalization |
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Do we want to keep this action for the future?