

CM02 observation-modelling interface world café

25 October 2023

Attendance

Fresh Eyes on CMIP model evaluation subgroup co-lead, Alicia Hou

About the event

This world café hybrid session was focused on developing community ideas to strengthen the observational-modelling interface towards meeting near term and emerging scientific needs, building on previous sessions at the GCOS 2022 conference. This fast-paced interactive session continued the investigation of current and emerging key challenges and further develop a provisional roadmap of practical actions which was curated at GCOS 2022 conference. This roadmap will support evolving GCOS, WCRP CMIP and ESMO and ESA work programs.

Discussions from this session built upon and added to the roadmap developed from discussions at GCOS 2022. The roadmap covers short (1-3years), medium (5 years) and long (10 years and towards 2050) terms goals, including:

- The priority actions required at each timescale to address the challenge topic.
- Key scientific, technological and capability frontiers to be advanced or evolved.
- Collaborations and partnerships required, existing and, or, to be developed.
- Game-changers -what could be done with no limits to resources.

Resources

- **Session description:** [CM02 observation-modelling interface world café](#)
- **Community roadmap:** <https://wcrp-cmip.org/om-roadmap/>
- **Roadmap idea submission form:**
<https://airtable.com/appXzXBNaTLv2GLPi/shrEAlqmSm4c3XWDy>

Overview of activities

- Attendees spread out amongst various tables covering topics: data assimilation and modelling requirements for observations, model validation and evaluation, downstream climate services, cycles and land-surface processes, tipping points/thresholds/signals, uncertainties, extremes and story lines.
- Task 1 involved assessing the list of actions/recommendations developed during the previous meeting and ranking the cross-cutting themes in order of priority
- Task 2 involved developing a roadmap for addressing a single specific challenge: at the uncertainties table, we decided to tackle the issue of a lack of consistency in error/uncertainty estimation in paleo-proxy data, which are used to inform paleoclimate model simulations
- Leads from each of the tables and the online session presented the final roadmaps developed from discussions
- The action plans and ideas have been put up on boards by the WCRP booth for participants to view and indicate which they support and to add more Ideas for action If they wish (see below)

Personal take-aways as an ECR

- It was exciting for me as an ECR, to be an active participant in a community discussion/initiative that will produce actions which will address current issues at the intersection of observational data and climate models.
- Both participating in the discussion at my table and listening to the final roadmap presentations was extremely informative, in terms of both learning about the types of challenges at the forefront of the observation-modelling interface and learning about how to develop potential solutions to these problems.
- I would highly recommend participation in similar interactive events by other ECRs (and even students).

