PROGRAMME AND LOGISTICAL INFORMATION

Pathway to regular and sustained delivery of climate forcing datasets

28-31 October 2024
ECMWF Reading, UK

MONDAY 28 OCTOBER	

13:00-15:00	**Session 1: CMIP7 DECK forcings focus (Chairs: Paul Durack, Vaishali Naik)**
	• TT member updates (all data providers)
	  ○ Status of dataset delivery and timeline
	  ○ Additional information and recommendations related to datasets
	• First look at v0 datasets compared to CMIP6 – Fresh Eyes led
	• Q&A/Discussion
	• Addressing any critical issues
	• Identify key data dependencies: NOAA, NASA, ESA, EUMETSAT, private entities (IEA)?

15:15-15:30	**AFTERNOON TEA BREAK**

15:30-18:00	**Session 2: Scenario forcings and harmonisation (Chairs: Jarmo Kikstra, Steve Smith)**
	• Status, plans and timeline
	• Lessons learned from RESCUE
	• Addressing challenges
	  ○ Emissions
	  ○ Land Use and Land Cover Change (LULCC)
	  ○ Carbon Dioxide Removal
	  ○ Scenarios

TUESDAY 29 OCTOBER	
09:00-12:30 (including tea break at 10:30)	**Session 3: CMIP7 DECK protocol development (Chairs: Vaishali Naik and Ben Sanderson)** • Status of v0 data implementation in models - (modelling groups) - 30 min • Summary of DECK experimental protocol in CMIP6 (Vaishali/Paul) -15 mins • Revisiting piControl/ScenarioMIP protocol related to:

	○ Volcanic baseline time period, vertical extent and scenario specification (10+3 mins) ○ Solar baseline period (10+3 mins) ○ Natural variability embedded in biomass burning emissions (10+3 mins) ○ Natural variability embedded in Ozone (10+3 mins) • Guidance development for the community (with report back to CMIP Core panel) - 45 minutes
12:30-13:30	**LUNCH**
13:30-14:30	**Community drop-in session (Chairs: Vaishali Naik, Paul Durack)** Latest update on CMIP7 DECK forcing datasets including testing and planned publication of AR7 Fast Track versions. Open to all interested with opportunity to submit questions before, during and after the session to ensure global participation is enabled.
14:30-16:00	**Session 4: Addressing Gaps and Uncertainties in Forcing Datasets (Chair: Paul Durack)** • Setting the stage – Paul Durack - 5 mins • How are historical/DECK forcings implemented in an ESM - an example of IPSL-CM6A-LR 2020 link, Thibaut Lurton (10+3 mins) • Observational gaps and uncertainties using an example forcing dataset - biomass burning/GFED (10+3 mins) • How do we identify and recommend forcings datasets for models - example of simple plume aerosols: (Stephanie Fiedler) (10+3 mins) • Alternate datasets to address missing processes in models or elucidate uncertainties in forcings ○ Freshwater from ice sheets/SOFIAMIP (10+3 mins) ○ Groundwater for irrigation (10+3 mins) ○ FireMIP alternate contributions to the BB4CMIP7 dataset (10+3 mins) • Discussions leading to decisions on inclusion of additional forcings for delivery
16:00-16:30	**AFTERNOON TEA BREAK**
16:30-18:00	**Session 5: What are the MIP needs? (Chair: Stephanie Fiedler)** • Population density data (HYDE) - highlighting the need from the models' perspective (8+ 2 mins) • Dust emissions (8+ 2 mins) • Land-only and ocean-only atmospheric forcing datasets (8+ 2 mins) • Other contributed datasets - scenarios/idealized Outcome - identify points of contact for forcing data delivery

18:00-20:00	**ICE BREAKER: Posters and drinks (ECMWF)**
WEDNESDAY 30 OCTOBER	
09:00-10:30	**Session 6: Sustained mode challenges** • Setting the stage (Zeb Nicholls) • Refining the challenges for both historical and scenario forcings. • Refining the presentation of the current process and proposed options for sustained mode for the plenary session.
10:30-11:00	**MORNING TEA BREAK and arrival of plenary participants**
11:00-12:30	**PLENARY 1: The need for sustained mode forcings (Chair: Anca Brookshaw)** • What do we mean by sustained mode? (Helene Hewitt) • User needs panel: sharing use cases and reflecting on experience of using forcing datasets. • Open floor discussion
12:30-13:30	**LUNCH**
13:30-15:30	**PLENARY 2: The current status and potential challenges for sustained mode (Chair: Eleanor O'Rourke)** • What is happening now? – the CMIP7 experience (Paul Durack and Vaishali Naik) • Summary of potential sustained mode challenges (Zeb Nicholls) • Funders panel
15:30-16:00	**AFTERNOON TEA BREAK**
16:00-18:30	**PLENARY 3: Can we address the challenges? (Chair: Claire MacIntosh)** • The research-operationalisation question • Open floor discussion • Building the vision: What are the requirements? Sensitivities?
19:30-22:00	**WORKSHOP DINNER (Location: Thames Lido)** Participants by coach directly from ECMWF at 19:00
THURSDAY 31 OCTOBER	
09:00-11:00	**PLENARY 4: Realising the vision (Chair: Carlo Buontempo)** • Reflecting and refining the vision • How can this vision be achieved?
11:00-11:30	**MORNING TEA BREAK**
11:30-13:00	**PLENARY 5: Next steps (Chair: Carlo Buontempo)**

	• What are the next steps – tangible actions with timeline and assigned responsibilities
13:00-	Wash up meetings • Forcings TT/providers • C3S-CMIP • BECCS afternoon workshop

Venue and logistics

The workshop is free to attend, however, travel, lunch and accommodation costs cannot be reimbursed and must be met by the participant. Lunch will be available for purchase on site.

ECMWF, Shinfield Park, Reading – location and travel details can be found here. We suggest in person participants stay in Reading town centre - there is a wider choice of accommodation and a regular bus service to the ECMWF site (*Reading Buses* run bus number 3 between Reading station and Wokingham, via Shinfield Road (stop at 'Shinfield Park, Weather Centre') check timetables). Tickets can be bought on the bus using cash (exact money) or contactless card payments. If booking a taxi, it might help the taxi driver if you ask for 'the Weather Centre on Shinfield Road' instead of 'ECMWF'.

Meeting dinner

The meeting dinner will take place at Thames Lido, hosted by European Space Agency, at 19:30 on Wednesday 30th October in central Reading, an Edwardian era swimming bath that has been recently renovated and reopened.

Organising committee

- CMIP Climate Forcings Task Team Co-leads Vaishali Naik (GFDL/NOAA), Paul Durack (PCMDI/LLNL) and Task Team members.
- Copernicus Climate Services - Carlo Buontempo, Anca Brookshaw, Chris Goddard
- ESA Climate and Long Term Action Division - Claire MacIntosh
- CMIP International Project Office - Eleanor O'Rourke

Questions?

If you have any questions, please contact the CMIP IPO.