CMIP



Open call for Model Benchmarking TT members

Application deadline: 09:00 UTC Monday 13th January 2025

The Model Benchmarking Task Team is a CMIP Panel Task Team charged with designing and integrating systematic and comprehensive model evaluation methods and related tools into the Coupled Model Intercomparison Project (CMIP).

There are two positions available on the task team, which now has an updated set of objectives (see dedicated <u>task team page</u>). The Task team are looking for individuals with experience in use of, or developing, evaluation tools for CMIP data who have a passion for improving access, software architecture experience and/or possible new evaluation approaches.

Background

The primary objective of the Coupled Model Intercomparison Project (<u>CMIP</u>) is to better understand past, present, and future climate changes arising from natural, unforced variability or in response to changes in forcing in a multi-model context. Successive generations of CMIP have seen the project grow in scope, with increasing process-specific Model Intercomparison Projects (MIPs) to better address specific scientific questions, while continuing to play a critical role in the IPCC Assessment Reports.

Based on the outcomes of the <u>CMIP6 Community Survey</u> the CMIP panel is seeking to identify ways to increase the project's scientific and societal relevance, improve accessibility, widen participation, and reduce its own carbon footprint within the limits of available financial and human resources. This can only be achieved if a broad and diverse community, bridging traditional divides, is involved in the planning and definition of the future CMIP.

Therefore, the World Climate Research Programme (WCRP) Earth System Modelling and Observations (ESMO) project, through its Working Group on Coupled Models' (WGCM) CMIP panel and WGCM infrastructure panel (WIP), established a number of Task Teams in 2022 and early 2023, to support the design, scope, and definition of the next phase of CMIP and evolution of CMIP infrastructure and future operationalisation.

The Model Benchmarking Task Team

This task team is focused on designing and integrating systematic and comprehensive model evaluation methods and related tools into the CMIP project. A full list of the objectives of this task team can be found on the dedicated task team page.

A full integration of routine benchmarking and evaluation of the models into the CMIP publication workflow has not yet been achieved, and new challenges stemming from models with higher resolution and enhanced complexity need to be tackled. These challenges are both on the technical side (e.g.,





memory limits, increasingly unstructured and regional grids), as well as on the scientific side, in particular the need to develop innovative diagnostics, including the support of machine learning-based analysis of CMIP simulations.

The first phase of the task team concluded in summer 2024, and the CMIP Panel approved the task team mandate for another 18 months (until the end of 2025). New task team members should therefore be able to commit for 12 months as a minimum.

Open call to fill the position

The Model Benchmarking Task Team is a diverse group of experts representing the range of scientists involved in model evaluation tool development and analysis of tool outputs. Two positions on the Task Team have become available.

This open call is an invitation to enthusiastic and motivated individuals to join the CMIP7 Model Benchmarking Task Team and contribute to the future direction of CMIP.

How to apply

Applications should be submitted via this form before 09:00 UTC Monday 13th January 2025.

Remuneration

CMIP task team members are not paid. Financial support to travel and participate in person to relevant meeting may be available on a case-by-case basis.

Diversity and inclusion

WCRP embraces diversity, demands equality, and builds capacity for the future with a commitment to inclusive and representative teams across all areas of activity, including the development of the CMIP Task Teams. The Model Benchmarking Team will look initially at applications from countries and institutions not already represented on the task team.

Contact and further information

Please contact cmip-ipo@esa.int if you have any questions or require further information.