







World Climate Research Programme

WCRP Modelling Advisory Council (WMAC)

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Chair, WCRP Joint Scientific Committee











WCRP Organization

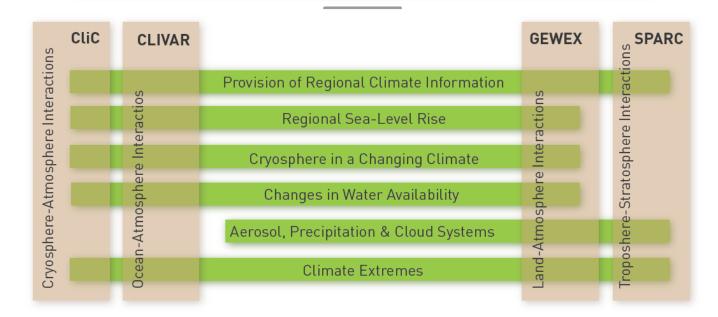
Joint Scientific Committee

Joint Plannig Staff

Modeling Advisory Council

Data Advisory Council

Working Groups on: Coupled Modelling (WGCM), Regional Climate (WGRC), Seasonal to Interannual Prediction (WGSIP), Numerical Experimentation (WGNE)











Background

- Modelling is a core activity for WCRP.
- Models are the main climate diagnosis and prediction tool.
- The three modelling and prediction groups, WGCM, WGSIP and WCRP/CAS WGNE oversee the development of various types of modelling.
- Every WCRP project has a set of modelling activities.
- The WCRP Modelling Advisory Council (WMAC) will coordinate high-level aspects of modelling across the WCRP, ensuring cooperation with main WCRP partners such as IGBP and WWRP, and act as a single entry point for all WCRP modelling activities.
- The WMAC will work with the WCRP Data Advisory Council to promote effective use of models with observations and address aspects of modelling in data assimilation, reanalysis, Observing System Simulation Experiments and in paleoclimatic research.









Terms of Reference:

- To act as a focal point for climate modelling in WCRP
- To advise JSC and WCRP Projects on issues pertaining to modelling.
- To help identify modelling aspects of the Grand Challenges and advance them.
- To help coordinate modelling activities by identifying gaps and reducing unnecessary duplication.
- To assess strategic priority aims for modelling across WCRP and to assess current capabilities for WCRP, in collaboration with other partners, to meet these aims.
- To advise and recommend to JSC and WCRP Projects the activities to be carried out across WCRP projects and programs and collaborations to be developed between WCRP and other partners (including the weather community and IGBP) to meet the priority aims.
- To facilitate and enhance the communication and the coordination across the various WCRP modeling groups.
- To act as a clearing house for exchange of information between modelling groups and the JSC.
- To facilitate the WCRP modelling community speak from a common voice to external bodies such as IPCC, climate services or funding agencies.
- To convey modelling needs to Earth observing communities.
- To assist the modelling community deal with supercomputing challenges and advise new supercomputing centers about climate modelling needs.
- To promote scientific development of modelling aspects of data assimilation, including coupled data assimilation; coordinated development of modelling aspects of global and regional reanalyses; and paleoclimatic research.
- Promote seamless prediction system, model evaluation and metrics and use of ensembles









- Council's role is to be advisory, to inform the JSC where the gaps, redundancies and opportunities lie that need to be addressed.
- JSC does not want to be prescriptive regarding the functioning of the Council, we leave it to you to determine the best approach going forward
- In this regard the Council is a grass-roots-based entity charged with facilitating rather than governing









Expectations for the WCRP Data Advisory Council include:

- Communicate regularly by email, webinars
- Meet in person, as needed
- Encourage joint meetings of working groups and/or panels to promote communication or to launch focused joint initiatives

WMAC should have the flexibility and resources to promote action within existing WCRP projects and panels or by appointing limited duration task teams to accomplish its tasks.









Suggested areas of activity include:

- Identify modelling aspects of the Grand Challenges and advance them
- Promotion of Global Synthesis
- Coordination of atmospheric modelling
- Archival of model output
- WCRP and IGBP Task Team on Prediction of the Earth System
- Monsoon prediction within WCRP
- Cryospheric modelling