



CMIP plans

40th Session of the WCRP Joint Scientific Committee

*Catherine Senior, WGCM co-chair
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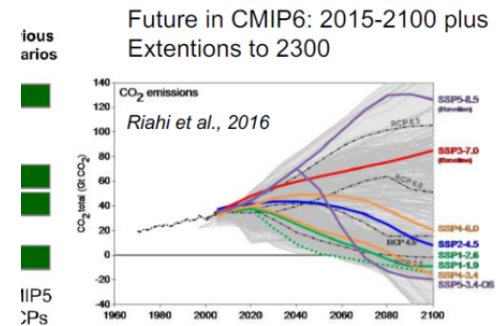
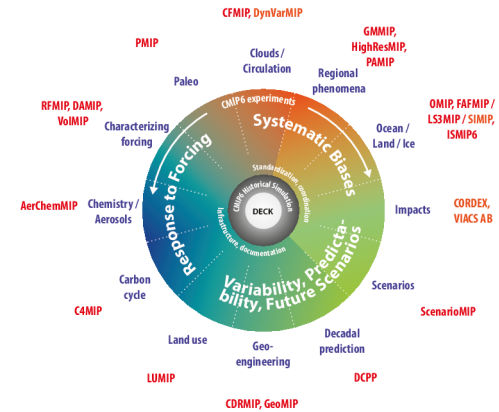


International
Science Council



CMIP role on International stage

- CMIP coordinates and defines experimental protocols for output from more than 40 climate modelling centres in 20 countries.
- CMIP results are the basis for IPCC assessments, underpin UNFCCC decisions and provide input for national adaptation strategies
- CMIP has a profound and positive impact on climate science (45% of recent papers in J. Clim, 15% of recent papers in Nature Climate Change, >1000 papers used CMIP5)
- Investment in CMIP from national science amounts to > US\$3 billion



O'Neill et al., ScenarioMIP for CMIP6, GMD, 2016

How does CMIP best fit in WCRP going forward?

- WGCM and the CMIP Panel are well situated within the WCRP structure at the moment.
- WGCM and CMIP produce some of the most visible and influential outcomes of WCRP, and leverage a huge investment by many countries.
- We have some concerns related to the Strategic Plan which must maintain (ideally improve) the visibility and effectiveness of CMIP within WGCM
- We believe that WGCM has played a crucial role in both fundamental model development and coordinated intercomparison projects, providing high-profile input to climate assessments and policy development. These activities should remain core features of the new Strategic Plan, the Implementation Plan, and any revision to the WCRP structure.

Funding for core CMIP activities

- CMIP essential infrastructure is currently delivered by volunteer efforts by the WGCM members, the CMIP Panel, and the individual scientists in often unfunded effort.
- Infrastructure includes;
 - ‘forcing data’ for climate model simulations
 - development of data formats and standards
 - documentation and software to contribute model output to the ESGF and allows users from around the world to access this massive multi-model data set.
- WGCM under the guidance of Pavel Kabat (WMO Csc) are asking WMO for financial and project support for CMIP infrastructure to put (at least) parts of CMIP on a more operational footing

Maintaining CMIP engagement

- It is clear we need to put the infrastructure support for CMIP on a sustainable footing to ensure its ongoing success
- In doing so, we must not undermine the role of the modelling centres who fund and deliver all of the data for CMIP – there is no CMIP without them
- Continued engagement of new countries building model capability builds capacity, engages scientists and their governments
- We need a careful sensitive approach that does not ‘take control’ of nationally funded efforts or force an ‘operational standard’
- Our goal must be to improve efficiency of this essential multi-model dataset