

# WCRP Working Group on Coupled Models (WGCM)

Co-chairs: Gerald Meehl and Sandrine Bony

WGCM promotes balance between  
simulation – evaluation – understanding

# WGCM Missions

- **Review and foster the development of coupled climate models (AOGCMs) and Earth System Models (ESMs, usually defined as an AOGCM with at least a coupled carbon cycle, can also have dynamic vegetation, chemistry, aerosols, etc.)**  
Connect to IGBP AIMES (carbon cycle, ESM development), WGNE (processes and atmospheric model improvement), WGSIP (decadal climate prediction)
- **Coordinate model experiments and inter-comparisons:**
  - better understand natural climate variability
  - predict the climate response to natural & anthropogenic perturbations
  - assess the climate predictability at the decadal timescaleCMIP (with many MIPs/partners), CMIP Panel in WGCM, PMIP (with IGBP/PAGES), CFMIP  
Decadal Climate Prediction Panel (WGSIP/WGCM)  
Transpose-AMIP (WGNE/WGCM),  
CORDEX (JSC/WGCM)
- **Promote and facilitate model validation and diagnosis of shortcomings, and understanding processes and feedbacks in the climate system**
  - joint WCRP-WWRP-THORPEX “survey on model evaluation and improvement”
    - Metrics panel (WGNE/WGCM)
    - facilitating connections between global modelling / observations / processes

# WGCM/WGSIP interface

Decadal climate prediction

Experimental design for CMIP5 (and a possible CMIP6)

Decadal climate prediction Panel (Joint between WGCM and WGSIP) designed to oversee decadal climate prediction experiments and issues that arise in CMIP5, and to more broadly deal with questions related to decadal climate prediction:

George Boer (WGSIP, chair)

Ron Stouffer (WGCM)

Mojib Latif

Ben Kirtman (WGSIP)

Gerald Meehl (WGCM)

Doug Smith

Scott Power