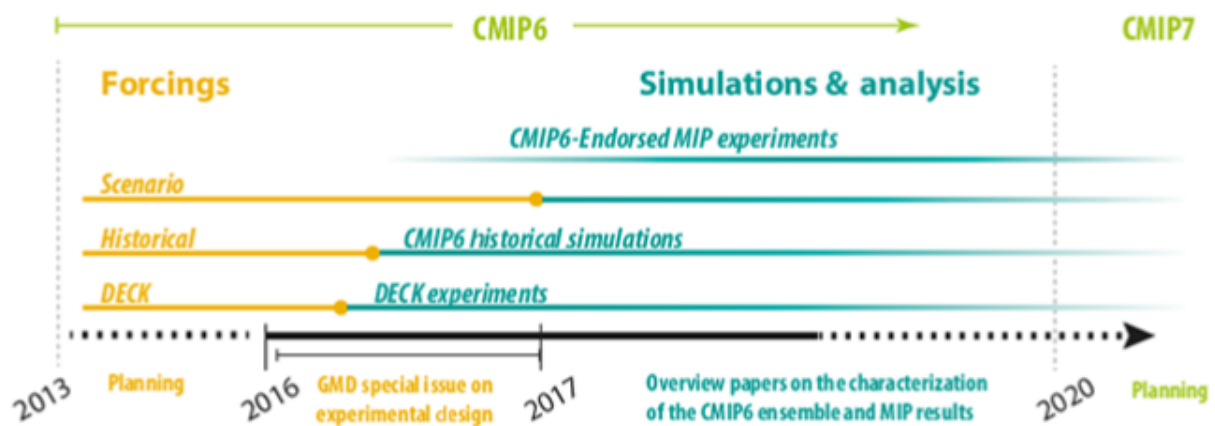


CMIP 6

Publication Overview, experimental design and organization

- organized by [WCRP](#) (World Climate Research Program)
- [Data Request](#) by WIP (WGCM (Working Group of Coupled Modeling) Infrastructure Panel)
- Access of model output through [ESGF](#) (Earth System Grid Federation), incl. DOI assignment
- Start of Simulations in 2016, finish within a few years, analysis of the results 10+ years:



- Coordination of climate model simulations of past, current and future climate
- standardised format ([CF](#), [CMOR](#)), collection, archival and publication (at ESGF) of model output
- 10+ modelling groups will take part in the tier1-experiments
- 3 major elements:
 - DECK (Diagnostic Evaluation and Characterization of Klima) & CMIP historical simulations that maintain continuity in upcoming phases of CMIP
 - common standards, coordination, infrastructure & documentation
 - ensemble of CMIP-Endorsed MIPs that build on the DECK and hist. Simulations
→ 31 Endorsed MIPs for CMIP6
- DECK & historical simulations are entry card for participating at CMIP
- 3 scientific questions to better understand past, present and future climate change:
 - How does the Earth system respond to forcing (natural, unforced variability, changes in radiative forcing)?
 - What are the origins and consequences of systematic model biases?
 - How to assess future climate changes given internal climate variability, predictability and uncertainties in scenarios?

- DECK & historical simulations:

Experiment short name	CMIP6 label	Experiment description	Forcing methods	Start year	End year	Minimum no. years per simulation	Major purpose
DECK experiments							
AMIP	<i>amip</i>	Observed SSTs and SICs prescribed	All; CO ₂ concentration prescribed	1979	2014	36	Evaluation, variability
Pre-industrial control	<i>piControl</i> or <i>esm-piControl</i>	Coupled atmosphere–ocean pre-industrial control	CO ₂ concentration prescribed or calculated	n/a	n/a	500	Evaluation, unforced variability
Abrupt quadrupling of CO ₂ concentration	<i>abrupt-4xCO2</i>	CO ₂ abruptly quadrupled and then held constant	CO ₂ concentration prescribed	n/a	n/a	150	Climate sensitivity, feedback, fast responses
1 % yr ⁻¹ CO ₂ concentration increase	<i>1pctCO2</i>	CO ₂ prescribed to increase at 1 % yr ⁻¹	CO ₂ concentration prescribed	n/a	n/a	150	Climate sensitivity, feedback, idealized benchmark
CMIP6 historical simulation							
Past ~ 1.5 centuries	<i>historical</i> or <i>esm-hist</i>	Simulation of the recent past	All; CO ₂ concentration prescribed or calculated	1850	2014	165	Evaluation

→ continuity of the DECK simulations will make it possible to track changes in performance and response characteristics over future generations of models and CMIP phases

- **piControl**: study the unforced internal variability of the climate system (prior to the onset of large-scale industrialisation in 1850)
- **AMIP**: evaluate the atmospheric model component, when atmosphere and land in the climate system are constrained by the observed ocean conditions
- **1pctCO2**: analyse the model's transient climate response (TRC)
- **abrupt4xCO2**: characterise RF arising from increase in atmospheric CO₂ and indirect changes arising due to the warming
- **historical**: assess model ability to simulate climate (incl. Variability and trends) and compare model forcing & sensitivity with observations

CMIP6-Endorsed MIPs

[WCRP Link](#)

Short name of MIP	Long name of MIP	Primary goal(s) in CMIP6	Main CMIP6 science theme
AerChemMIP	Aerosols and Chemistry Model Intercomparison Project	(a) Diagnosing forcings and feedback of tropospheric aerosols, tropospheric ozone precursors and the chemically reactive WMGHGs; (b) documenting and understanding past and future changes in the chemical composition of the atmosphere; (c) estimating the global-to-regional climate response from these changes.	Chemistry/ Aerosols
C ⁴ MIP	Coupled Climate Carbon Cycle Model Intercomparison Project	Understanding and quantifying future century-scale changes in the global carbon cycle and its feedback on the climate system, making the link between CO ₂ emissions and climate change.	Carbon cycle
CFMIP	Cloud Feedback Model Intercomparison Project	Improving assessments of cloud feedback via (a) improved understanding of cloud-climate feedback mechanisms and (b) better evaluation of clouds and cloud feedback in climate models. Also improving understanding of circulation, regional-scale precipitation, and non-linear changes.	Clouds/ Circulation
DAMIP	Detection and Attribution Model Intercomparison Project	(a) Estimating the contribution of external forcings to observed global and regional climate changes; (b) observationally constraining future climate change projections by scaling future GHG and other anthropogenic responses using regression coefficients derived for the historical period.	Characterizing forcings
DCPP	Decadal Climate Prediction Project	Predicting and understanding forced climate change and internal variability up to 10 years into the future through a coordinated set of hindcast experiments, targeted experiments to understand the physical processes, and the ongoing production of skilful decadal predictions.	Decadal prediction
FAFMIP	Flux-Anomaly-Forced Model Intercomparison Project	Explaining the model spread in climate projections of ocean climate change forced by CO ₂ increase, especially regarding the geographical patterns and magnitude of sea level change, ocean heat uptake, and thermal expansion.	Ocean/Land/ Ice
GeoMIP	Geoengineering Model Intercomparison Project	Assessing the climate system response (including on extreme events) to proposed radiation modification geoengineering schemes by evaluating their efficacies, benefits, and side effects.	Geoengineering
GMMIP	Global Monsoons Model Intercomparison Project	(a) Improving understanding of physical processes in global monsoons system; (b) better simulating the mean state, interannual variability, and long-term changes of global monsoons.	Regional phenomena
HighResMIP	High-Resolution Model Intercomparison Project	Assessing the robustness of improvements in the representation of important climate processes with weather-resolving global model resolutions (~ 25 km or finer), within a simplified framework using the physical climate system only with constrained aerosol forcing.	Regional phenomena
ISMIP6	Ice Sheet Model Intercomparison Project for CMIP6	Improving confidence in projections of the sea level rise associated with mass loss from the ice sheets of Greenland and Antarctica.	Ocean/Land/ Ice
LS3MIP	Land Surface, Snow and Soil Moisture	Providing a comprehensive assessment of land surface, snow, and soil moisture-climate feedback, and diagnosing systematic biases in the land modules of current ESMs using constrained land-module-only experiments.	Ocean/Land/ Ice
LUMIP	Land-Use Model Intercomparison Project	Quantifying the effects of land use on climate and biogeochemical cycling (past–future), and assessing the potential for alternative land management strategies to mitigate climate change.	Land use

OMIP	Ocean Model Intercomparison Project	Providing a framework for evaluating, understanding, and improving ocean, sea ice, and biogeochemical, including inert tracers, components of climate and Earth system models contributing to CMIP6. Protocols are provided to perform coordinated ocean/sea ice/tracer/biogeochemistry simulations forced with common atmospheric data sets.	Ocean/Land/ Ice
PMIP	Paleoclimate Modelling Intercomparison Project	(a) Analysing the response to forcings and major feedback for past climates outside the range of recent variability; (b) assessing the credibility of climate models used for future climate projections.	Paleo
RFMIP	Radiative Forcing Model Intercomparison Project	(a) Characterizing the global and regional effective radiative forcing for each model for historical and $4 \times \text{CO}_2$ simulations; (b) assessing the absolute accuracy of clear-sky radiative transfer parameterizations; (c) identifying the robust impacts of aerosol radiative forcing during the historical period.	Characterizing forcings
ScenarioMIP	Scenario Model Intercomparison Project	(a) Facilitating integrated research on the impact of plausible future scenarios over physical and human systems, and on mitigation and adaptation options; (b) addressing targeted studies on the effects of particular forcings in collaboration with other MIPs; (c) help quantifying projection uncertainties based on multi-model ensembles and emergent constraints.	Scenarios
VolMIP	Volcanic Forcings Model Intercomparison Project	(a) Assessing to what extent responses of the coupled ocean–atmosphere system to strong volcanic forcing are robustly simulated across state-of-the-art coupled climate models; (b) identifying the causes that limit robust simulated behaviour, especially differences in their treatment of physical processes	Characterizing forcings
CORDEX*	Coordinated Regional Climate Downscaling Experiment	Advancing and coordinating the science and application of regional climate downscaling (RCD) through statistical and dynamical downscaling of CMIP DECK, CMIP6 <i>historical</i> , and ScenarioMIP output.	Impacts
Dyn VarMIP*	Dynamics and Variability Model Intercomparison Project	Defining and analysing diagnostics that enable a mechanistic approach to confront model biases and understand the underlying causes behind circulation changes with a particular emphasis on the two-way coupling between the troposphere and the stratosphere.	Clouds/ Circulation
SIMIP*	Sea Ice Model Intercomparison Project	Understanding the role of sea ice and its response to climate change by defining and analysing a comprehensive set of variables and process-oriented diagnostics that describe the sea ice state and its atmospheric and ocean forcing.	Ocean/Land/ Ice
VIACS AB*	Vulnerability, Impacts, Adaptation and Climate Services Advisory Board	Facilitating a two-way dialogue between the CMIP6 modelling community and VIACS experts, who apply CMIP6 results for their numerous research and climate services, towards an informed construction of model scenarios and simulations and the design of online diagnostics, metrics, and visualization of relevance to society.	Impacts

See [CMIP6-EndorsedMIPs Summary 150819 Sent.pdf](#) for (much) more detail!

Other active MIPs

[Overview](#)

AEROCOM

Aerosol Comparisons between Observations and models

- impact of global aerosol on climate
- observations (eg. POLDER, MODIS, TOMS, AERONET) and results of 20+ global models
- [LINK OFFICIAL](#) [LINK WCRP](#)

AMMA ALMIP2

African Monsoon Multidisciplinary Analysis – Land surface MIP phase 2

- intra-seasonal & inter-annual variability of the west-African monsoon (WAM)
- land-atmosphere coupling, Land Surface Models (LSM)
- [LINK OFFICIAL](#) [LINK WCRP](#)

Transpose-AMIP

Atmosphere Model Intercomparison Project

- run climate models in weather-forecasts mode
- „fast-processes‘ (clouds, etc) responsible for spread in climate simulations
- examine models on this fast timescales
- [LINK OFFICIAL](#) [LINK WCRP](#) part of [SPARC](#)

CCMI

Chemistry-Climate Model Initiative

- stratosphere-troposphere resolving models with chemistry
- [LINK OFFICIAL](#) [LINK WCRP](#)

C20C

Climate of the 20th Century Project

- 20th century displayed rich spectrum of climate variations (El Nino, ENSO, Monsoons, droughts)
- result of atmospheric (internal) modes or coupled ocean-atmosphere modes or anthropogenic forcing? Use (A)GCMs to find out.
- [LINK OFFICIAL](#) [LINK WCRP](#)

CHFP

Climate-system Historical Forecast Project

- sub-seasonal to decadal complete physical climate system prediction (Atm., Oc., Land Sfc., Cryosph., ...) → merge of climate and seasonal prediction
- [LINK OFFICIAL](#) [LINK WCRP](#)

CFMIP

Cloud Feedback MIP

- evaluation of clouds, cloud feedback processes
- improve retrieval from SAT observations
- use of LES and SCMs (CGILS), CMIP5 experiments
- [LINK OFFICIAL](#) [LINK WCRP](#)

CORE

Coordinated Ocean-Ice Reference Experiment

- global ocean-sea-ice coupled simulations with specified forcings
- long (500years +) integrations and hindcasts
- [LINK OFFICIAL](#) [LINK WCRP](#)

CORDEX

Coordinated Regional Climate Downscaling Experiment

- Regional climate downscaling → improved regional climate change adaptation & impacts
- [LINK OFFICIAL](#) [LINK WCRP](#)

C4MIP

Coupled Carbon Cycle Climate MIP

- Compare&Analyze feedbacks between carbon cycle & climate in presence of external climate forcing
- run OAGCMs with terrestrial & ocean carbon cycles with and without active feedbacks
- [LINK OFFICIAL](#) [LINK WCRP](#)

CMIP

Coupled MIP

- understanding of past, present & future climate changes
- natural, unforced variability changes in radiative forcing
- multi-model context
- [LINK OFFICIAL](#)

DCPP

Decadal Climate Prediction Project

- annual-multi-annual & decadal timescales
- predictability studies, hindcasts
- [LINK OFFICIAL](#) [LINK WCRP](#)

DAMIP

Detection and Attribution MIP

- historicals
- investigate whether climate changed significantly and cause of this changes, hiatus
- AOGCMs with ALL forcings (anthropogenic, natural external forcing agents)
- [LINK WCRP](#)

DynVar

Dynamics and Variability of the Stratosphere-Troposphere System

- influence of stratospheric circulation on global climate system
- TrSph-StrSph two-way dynamical coupling
- [LINK OFFICIAL](#) [LINK WCRP](#) part of [SPARC](#)

EMDI

Ecosystem Model-Data Intercomparison

- compare terrestrial carbon fluxes (NPP & NEP, net ecosystem prod.) of a wide range of global carbon cycle models with measured net primary production (NPP)
- improve understanding of environmental controls of carbon allocation
- [LINK OFFICIAL](#) [LINK WCRP](#)

FAFMIP

Flux-anomaly-forced MIP

- projections of regional sea level change ((A)OGCMs)
- applying ocean sfc. flux perturbations in 1pctCO2 scenario (anthr. Climate change)
- [LINK OFFICIAL](#) [LINK WCRP](#)

GeoMIP

Geoengineering MIP

- climate system model responses to solar geoengineering
- vary amount of stratospheric sulfate aerosols, marine cloud brightening
- [LINK OFFICIAL](#) [LINK WCRP](#)

GABLS

GEWEX Atmospheric Boundary Layer Study

- improve representation of ABL in models
- important for complete Atm./LandSfc./Oc. Models
- [LINK WCRP](#)

GLACE-CMIP

Global Land Atmosphere Coupling Experiment – CMIP

- soil moisture-climate feedbacks in the climate system in past & future climate
- CMIP setup, prescribed soil-moisture by reference timeseries
- [LINK OFFICIAL](#) [LINK WCRP](#)

HighResMIP

High Resolution MIP

- high-res simulations with limited length
- more realistic simulation of small scale phenomena (tropical cyclones, polar lows)
- [LINK OFFICIAL](#) [LINK WCRP](#)

ICESMIP

ICE Sheet MIP

- future contribution of Greenland and Antarctic ice sheets to sea-level rise
- impact of polar ice sheets on global climate change
- dynamic ice sheet models coupled to climate models
- Endorsed by [CliC](#) (Climate&Cryosphere), [Ice2sea](#), [SeaRISE](#) (Sea level Response to Ice Sheet Evolution) [LINK WCRP](#)

ISI-MIP

Inter-Sectoral Impact MIP

- cross-sectoral (agriculture, water, biomes, ...) climate-impact MIP and evaluation
- [LINK OFFICIAL](#) [LINK WCRP](#)

LUCID

Land-Use and Climate, Identification of robust impacts

- robustness (above noise/model variability) of possible impacts of land cover changes (LCC)
- [LINK OFFICIAL](#) [LINK WCRP](#)

LUMIP

Land-Use MIP

- effects of land-use on climate, effects of global gridded land-use changes (past-future)
- [WCRP LINK](#)

MJO TF-GASS Model Experiment on Diabatic Processes

- MJO associated heating, moistening and momentum mixing processes, produced by global weather and climate models
- role of convection, cloud, radiative and dynamic processes in dev. And evolution of MJO
- [WCRP LINK](#)

nonlinMIP

Nonlinear climate responses to CO₂

- climate responses that are non-linear to CO₂-forcing at global and regional scales
- set of experiments, able to separate linear and non-linear mechanisms cleanly
- [LINK WCRP](#)

Obs4MIPs

wide variety of observationally-based datasets, used for climate model evaluation

- [LINK WCRP](#)

OCMIP

Ocean Carbon-Cycle MIP

- improve development of global-scale, 3D, ocean dynamical-biogeochemical models
- focus on model evaluation and collaboration
- [WCRP LINK](#)

PDRMIP

precipitation Driver Response MIP

- precipitation changes, energy budget analysis, precipitation extremes
- [LINK OFFICIAL](#)

PMIP

Paleoclimate MIP

- evaluate climate models under paleoclimate conditions, improve understanding of past climate
- endorsed by [IGBP](#) (International Geosphere Biosphere Project) & [WCRP](#)

RFMIP

Radiative Forcing MIP

- assessment of error sources and spread in RF for hist. & future climate studies
- forcing by aerosols, greenhouse gases & effective forcing from global model integrations
- [WCRP LINK](#)

ScenarioMIP

- defines IAM (Integrated Assessment Model) scenarios for climate models
- recommendations on how and by which models to run these simulations
- [LINK OFFICIAL](#) [LINK WCRP](#)

SolMIP

Solar MIP

- Coupled oc.-atm. Model response to variability in solar irradiance
- response to 11-year solar cycle in irradiance and ozone
- [WCRP LINK](#) part of [SPARC](#)

SPECS

Seasonal-to-decadal climate Prediction for the improvement of European Climate Services

- [LINK OFFICIAL](#)

TF HTAP

Task Force on Hemispheric Transport on Air Pollution Coordinated Model Studies

- intercontinental transport of air pollutants in the NH
- estimates of intercontinental flows of air pollutants
- [LINK OFFICIAL](#) [LINK WCRP](#)

VolMIP

MIP on the climate response to Volcanic forcing

- direct radiative effects of volc. Aerosols, dynamical alterations
- SVE (Severe Volc. Erupt.) cause decadal and longer climate anomalies
- [LINK OFFICIAL](#) [LINK WCRP](#)

YOTC

Year of Tropical Convection

- tropical convection in global atm. Models is grand challenge for numerical weather forecasts and global climate predictions
- make use of observations and high-res. Modeling
- [LINK OFFICIAL](#) [LINK WCRP](#)

Former MIPs

[Overview](#)

AOMIP

Arctic Ocean Model Intercomparison Project

- identify systematic errors in Arctic ocean models under realistic forcing
- examine ability to simulate variability on seasonal to interannual scales & qualitative and quantitative behaviour of arctic ocean models
- [LINK OFFICIAL](#) [LINK WCRP](#)

ARCMIP

Arctic Regional Climate MIP

- [LINK OFFICIAL](#) [LINK WCRP](#)

Asian-Australian Monsoon Atmospheric GCM Intercomparison Project

- intraseasonal oscillation, monsoon dynamics & hydrology, atmosphere-ocean interaction, global heat budget at TOA and SFC
- [LINK OFFICIAL](#) [LINK WCRP](#)

ACC-MIP

Atmospheric Chemistry and Climate MIP

- support IPCC AR with special simulation studies related to atm. Chemistry in TrSph & StrSph
- [WCRP LINK](#), related to [CCMVal](#) and [AEROCOM](#)

AMIP

Atmospheric MIP

- AGCMs constrained by realistic SSTs and SIC from 1979-present
- set of fields for diagnostic research
- [LINK OFFICIAL](#) [LINK WCRP](#)

TransCom

Atmospheric Tracer Transport MIP

- uncertainty in inversion calculations of the global carbon budget, resulting from errors in simulated atmospheric transport, the used CO₂ data set & the inversion method
- [LINK OFFICIAL](#) [LINK WCRP](#)

CCMLP

Carbon-Cycle Model Linkage Project

- study role of terrestrial biosphere in the earth system using TBMs (Terrestr. Biogeochem. Model)
- model responses to CO₂, climate and land use for the terrestrial carbon cycle
- [LINK OFFICIAL](#) [LINK WCRP](#)

CCMVal

Chemistry-Climate Model Validation Activity for [SPARC](#) (StrSph. Processes and their Role in Climate)

- process-oriented evaluation, discussions, coordinated analysis of science results
- improve CCMs and understanding of CCMs and their underlying GCMs
- [LINK OFFICIAL](#) [Evaluation Table](#) [LINK WCRP](#)

CIRC

Continuous Intercomparison of Radiation Codes

- reference source for GCM-type radiative transfer (RT) code evaluation
- improvement of solar and thermal RT parameterizations
- [LINK OFFICIAL](#) [LINK WCRP](#)

DYNAMO

Dynamics of North Atlantic Models

- improved simulation of the NAO circulation, its variability and seasonal time scales
- assessment of eddy-resolving models with different numerical formulations of the VCT
- [LINK WCRP](#)

EMICs

ESMs of Intermediate Complexity

- EMICs bridges the gap between 3D HighRes Models and conceptual, more inductive models
- [LINK OFFICIAL](#) [LINK WCRP](#)

ENSIP

El Nino Intercomparison Project

- compare coupled ocean-atm. Model performance in the tropical Pacific
- TOGA (Tropical Ocean Global Atmosphere) Models with high resolution at tropical ocean
- [LINK WCRP](#)

GRIPS

GCM-Reality Intercomparison Project for [SPARC](#)

- performance of middle atmosphere-climate models
- [LINK OFFICIAL](#) [LINK WCRP](#)

GCSS

GEWEX Cloud System Study

- better parameterizations of clouds, as they are greatest uncertainty in climate modeling
- [LINK WCRP](#)

GLACE

Global Land-Atmosphere Coupling Experiment

- quantify and document coupling strength of AGCMs
- dependent on interactions between process parameterizations (CBL, evapotranspiration, ...)
- [LINK WCRP](#)

GSWP

Global Soil Wetness Project

- produce global data sets of land surface fluxes, state variables and related hydrologic quantities
- develop large-scale validation, calibration and assimilation techniques over land
- compare LSS (Land Sfc. Schemes), conduct sensitivity studies of parameterizations & forcings
- [LINK OFFICIAL](#) [LINK WCRP](#)

I3RC

Intercomparison of 3D Radiation Codes

- performance of 3D RT codes
- [LINK OFFICIAL](#) [LINK WCRP](#)

ISVHE

IntraSeasonal Variability Hindcast Experiment

- coordinated intraseasonal oscillation (ISO) hindcast experiment
- intraseasonal predictability, prediction skill
- [LINK OFFICIAL](#) [LINK WCRP](#)

LBA-DMIP

Large-Scale Biosphere-Atmosphere-Data MIP

- different modeling of the Amazon in South America
- [LINK OFFICIAL](#) [LINK WCRP](#)

MMII: ST

Models and Measurements II: Stratospheric Transport

- stratospheric transport and chemistry in context of stratospheric ozone depletion
- [LINK WCRP](#)

OCMIP

Ocean Carbon-Cycle MIP

- predictive capacity and development of global-scale 3D ocean carbon-cycle models
- [LINK OFFICIAL](#) [LINK WCRP](#)

Potsdam DGVM Intercomparison Project

- response of ecosystem processes to rising atm. CO₂ concentration and climate change
- [LINK OFFICIAL](#) [LINK WCRP](#)

Potsdam NPP MIP

global terrestrial biogeochemistry models

- annual & seasonal fluxes of NPP (net primary productivity) for land biosphere
- [LINK OFFICIAL](#) [LINK WCRP](#)

PRUDENCE

Prediction of Regional scenarios and Uncertainties for Defining European Climate change risks and Effects

- reduce deficiencies in projections
- quantify confidence and uncertainties in future climate predictions and impacts
- interpret results in relation to European policies for adapting to or mitigating climate change
- [LINK OFFICIAL](#) [WCRP LINK](#)

PILPS

Project for Intercomparison of Land Surface Parameterization Schemes

- experiments to identify parameterization strengths and inadequacies
- [WCRP Link](#)

PIRCS

Project to intercompare Regional Climate Simulations

- regional models run in climate mode, intercomparison experiments focusing on Central US.
- [LINK OFFICIAL](#) [LINK WCRP](#)

RAMI

Radiative Transfer Model Intercomparison

- benchmark RT-models that are used to represent reflectance of terrestrial surfaces
- [LINK OFFICIAL](#) [LINK WCRP](#)

RMIP

Regional Climate MIP for Asia

- improve regional climate model (RCM) simulations of monsoonal climate
- [LINK OFFICIAL](#) [LINK WCRP](#)

Rhone-AGG

Rhone Aggregation Experiment

- LSS intercomparison project
- intermediate step to finally assess aggregation between global scales and river scale
- [LINK OFFICIAL](#) [LINK WCRP](#)

SIMIP

Sea-Ice MIP

- representation of sea ice in climate models, coordinated numerical experiments
- interaction of atmosphere and ocean through the moving sea ice cover
- [LINK OFFICIAL](#) [LINK WCRP](#)

SMIP & SMIP-2 HFP

Seasonal prediction MIP and SMIP-2/Historical Forecast Project

- potential seasonal predictability using observed SST (SMIP-2)
- actual predictability using forecast SST (SMIP-2/HFP)
- [LINK WCRP](#)

SnowMIP

- [LINK OFFICIAL](#) [LINK WCRP](#)

SGMIP

Stretched Grid MIP

- enhanced regional resolution over area(s) of interest
- [LINK WCRP](#)

STOIC

Study of Tropical Oceans in Coupled models

- strengths and weaknesses of models in tropical ocean regions
- complementary to ENSIP (ENSO and equatorial Pacific)
- [LINK OFFICIAL](#) [LINK WCRP](#)

TCMIP

Tropical Cyclone climate MIP

- common analysis framework for climate model simulations of tropical cyclones
- [LINK OFFICIAL](#) [LINK WCRP](#)

WCRP F11 Intercomparison

- [LINK WCRP](#)

WCRP Radon Intercomparison

- short-lived tracer transport (especially radon) in chemical transport models
- [LINK WCRP](#)

WCRP Scavenging Tracer Intercomparison

- transport of short lived gases (eg. Radon, sulfur dioxide), wet deposition
- [LINK WCRP](#)