Add/Modify: Experiment

Type: experiment

# Overview

This document outlines the form fields and options for the "Add/Modify: Experiment" template.   
Each field is numbered and includes information about its type, available options, and instructions for completion.  
  
Template Information:  
• Name: Add/Modify: Experiment  
• Labels: ['delta', 'experiment', 'Review']  
• Total Fields: 15  
• Required Fields: 10

# Form Fields

####  
## Generic Experiment information  
  
Please fill in the information below.

1. Experiment ID \*

*Field Type: Input | Field ID: label*

Description: There are rules for constructing acceptable experiment names which can be found in this guidance document (https://doi.org/10.5281/zenodo.14929768).  
  
Note: This name must be unique across all experiments.

Placeholder text: "e.g., piClim-CH4, hist-GHG, amip-p4k"

**How to fill: Enter a single line of text. This field is required and must be filled. Use the placeholder as guidance: 'e.g., piClim-CH4, hist-GHG, amip-p4k'.**

2. Experiment Title \*

*Field Type: Input | Field ID: long\_label*

Description: A short phrase that can help in interpreting the unique experiment IDs.  
  
As examples, the CMIP6 titles are listed at https://wcrp-cmip.github.io/CMIP6\_CVs/docs/CMIP6\_experiment\_id.html in the third column labeled experiments.

Placeholder text: "e.g., AMIP plus 4K sea surface temperature"

**How to fill: Enter a single line of text. This field is required and must be filled. Use the placeholder as guidance: 'e.g., AMIP plus 4K sea surface temperature'.**

3. Description \*

*Field Type: Textarea | Field ID: description*

Description: Please provide:  
 > 1. Detailed experiment configuration  
 > 2. Required model settings  
 > 3. Experiment conditions  
 > 4. Links to relevant references  
 > 5. Similarities to CMIP6 experiments  
 > 6. Forcing differences from parent experiment

Placeholder text: "Describe the experiment configuration conditions and requirements..."

**How to fill: Enter multiple lines of text. This field is required and must be filled. Use the placeholder as guidance: 'Describe the experiment configuration conditions and requirements...'.**

4. MIP / Activity ID (registered) \*

*Field Type: Dropdown | Field ID: activity*

Description: The MIP / activity owning the experiment  
  
Please select a parent from the list below. Note: phases are not considered separate activies.

Available options:

• AerChemMIP

• C4MIP

• CFMIP

• CMIP

• DAMIP

• DCPP

• GeoMIP

• LMIP

• PMIP

• RFMIP

• ScenarioMIP

**How to fill: Select one option from the dropdown list. This field is required and must be filled.**

5. MIP / Activity ID (unregistered)

*Field Type: Input | Field ID: activity\_other*

Description: Please enter your MIP / activity ID below if it does not appear in the list above. Leave blank otherwise.

**How to fill: Enter a single line of text. This field is optional.**

####  
## Parent information and Tier

6. Parent Experiment \*

*Field Type: Dropdown | Field ID: parent\_experiment*

Description: Select the experiment that provides initial conditions.  
Please note that scenarioMIP experiment names are under discussion and are likely to change  
  
Please select a parent from the list below.

Available options:

• Custom Parent: specify in 'Parent experiment other' field

• no-parent

• 1pctCO2-bgc

• 1pctCO2-rad

• 1pctCO2

• abrupt-0p5CO2

• abrupt-0p5xCO2

• abrupt-127k

• abrupt-2xCO2

• abrupt-4xCO2-1950

• abrupt-4xCO2

• amip-m4K

• amip-p4K-SST-rad

• amip-p4K-SST-turb

• amip-p4K

• amip-piForcing

• amip

• control-1950

• dcppB-forecast-cmip6

• esm-flat10-cdr

• esm-flat10-zec

• esm-flat10

• esm-hist

• esm-piControl

• esm-up2p0-gwl2p0

• esm-up2p0

• G7-1p5K-SAI

• highres-yr2020

• highresSST-p2K-pat

• highresSST-p4K-pat

• highresSST-p4k-uni

• highresSST-present

• hist-1950

• hist-aer

• hist-GHG

• hist-irr

• hist-nat

• hist-noFire

• hist-noirr

• hist-piAer

• hist-piAQ

• hist-piSLCF

• historical

• Initialised-prediction-2025-2036

• land-hist

• LIGabrupt

• piClim-2xBVOC

• piClim-2xDMSpPMOA

• piClim-2xdust

• piClim-2xfire

• piClim-2xss

• piClim-2xWet

• piClim-4xCO2

• piClim-aer

• piClim-anthro

• piClim-AQ

• piClim-BC

• piClim-CH4

• piClim-control

• piClim-HC

• piClim-histaer

• piClim-histall

• piClim-N2O

• piClim-NH3

• piClim-NOx

• piClim-O3

• piClim-OC

• piClim-ODS

• piClim-p4K

• piClim-SO2

• piClim-VOC

• piControl

• spinup-1950

• SSPX-SLCF

**How to fill: Select one option from the dropdown list. This field is required and must be filled.**

7. Custom Parent Experiment

*Field Type: Input | Field ID: parent\_experiment\_other*

Description: Only fill this if your parent experiment is not in the list above.

Placeholder text: "e.g., new-experiment-2024"

**How to fill: Enter a single line of text. This field is optional. Use the placeholder as guidance: 'e.g., new-experiment-2024'.**

8. Sub-experiment \*

*Field Type: Input | Field ID: sub\_experiment*

Description: The list of sub-excleperiment IDs where relevant. For most experiments this will be none

Placeholder text: "e.g., none"

**How to fill: Enter a single line of text. This field is required and must be filled. Use the placeholder as guidance: 'e.g., none'.**

9. Priority Tier \*

*Field Type: Dropdown | Field ID: tier*

Description: Select the experiment's priority level:  
  
 - Tier 1: Essential to primary scientific goals  
 - Tier 2: Major scientific value  
 - Tier 3: Useful but lower priority

Available options:

• Tier 1

• Tier 2

• Tier 3

**How to fill: Select one option from the dropdown list. This field is required and must be filled.**

####  
## Model Component Requirements  
  
Select the required and optional model components for this experiment:  
  
   
   
 > \* AER : Aerosol treatment in an atmospheric model where concentrations are calculated based on emissions, transformation, and removal processes (rather than being prescribed or omitted entirely)  
 > \* AGCM : Atmospheric general circulation model run with prescribed ocean surface conditions and usually a model of the land surface  
 > \* AOGCM : Coupled atmosphere-ocean global climate model, additionally including explicit representation of at least the land and sea ice  
 > \* BGC : Biogeochemistry model component that at the very least accounts for carbon reservoirs and fluxes in the atmosphere, terrestrial biosphere, and ocean  
 > \* CHEM : Chemistry treatment in an atmospheric model that calculates atmospheric oxidant concentrations (including at least ozone), rather than prescribing them  
 > \* ISM : Ice-sheet model that includes ice-flow  
 > \* LAND : Land model run uncoupled from the atmosphere  
 > \* OGCM : Ocean general circulation model run uncoupled from an AGCM but, usually including a sea-ice model  
 > \* RAD : Radiation component of an atmospheric model run offline  
 > \* SLAB : Slab-ocean used with an AGCM in representing the atmosphere-ocean coupled system

10. Source type codes for required model components

*Field Type: Multi-Select | Field ID: required\_model\_realms*

Description: Components that must be included in models when running this experiment.  
See note 15 in https://wcrp-cmip.github.io/WGCM\_Infrastructure\_Panel/Papers/CMIP6\_global\_attributes\_filenames\_CVs\_v6.2.7.pdf for full descriptions  
  
\* Select Multiple \*

Available options (multiple selections allowed):

• AER

• AGCM

• AOGCM

• BGC

• CHEM

• gridded\_insitu

• ISM

• LAND

• OGCM

• RAD

• reanalysis

• satellite\_blended

• satellite\_retrieval

• SLAB

**How to fill: Select multiple options from the list (hold Ctrl/Cmd to select multiple). This field is optional.**

11. Source type codes for additional allowed model components

*Field Type: Multi-Select | Field ID: model\_realms*

Description: Components that may be included in models when running this experiment in addition to the required components listed above.  
See note 15 in https://wcrp-cmip.github.io/WGCM\_Infrastructure\_Panel/Papers/CMIP6\_global\_attributes\_filenames\_CVs\_v6.2.7.pdf for full description  
  
\* Select Multiple \*

Available options (multiple selections allowed):

• AER

• AGCM

• AOGCM

• BGC

• CHEM

• gridded\_insitu

• ISM

• LAND

• OGCM

• RAD

• reanalysis

• satellite\_blended

• satellite\_retrieval

• SLAB

**How to fill: Select multiple options from the list (hold Ctrl/Cmd to select multiple). This field is optional.**

####  
## Experiment duration, start and end  
Some additional information on the experiment

12. Start Date

*Field Type: Input | Field ID: start*

Description: For experiments initialized on a particular historical date, enter that date in the form YYYY-MM-DD.  
  
 If a set of sub-experiments are initialized at different times, list all the start times requested.  
  
 - For example, for an historical simulation initialized at the beginning of 1850, enter 1850-01-01.  
 - For a set of DCPP prediction runs, enter all dates of the first full forecast/hindcast year (e.g., 1960, 1970, 1980, 1990, 2000, 2010).  
 - If there is no specific start date please enter the word none

Placeholder text: "e.g., 1850-01-01 or 1960,1970,1980"

**How to fill: Enter a single line of text. This field is optional. Use the placeholder as guidance: 'e.g., 1850-01-01 or 1960,1970,1980'.**

13. (Minimum) Number of Years \*

*Field Type: Input | Field ID: min-number-yrs-per-sim*

Description: For most experiments this will be the actual length of the desired simulation.  
  
Calculation : (end\_year - start\_year + 1)  
- For example, 172 would be specified for a run initialized in 1850-01-01 and extending to 2022-01-01.

Placeholder text: "e.g., 172"

**How to fill: Enter a single line of text. This field is required and must be filled. Use the placeholder as guidance: 'e.g., 172'.**

####  
## Issue Handling Metadata  
  
The following options are only here such that the github actions know what to do with the information provided above.  
  
In almost all cases, these do not require to be changed.

14. Issue Type \*

*Field Type: Dropdown | Field ID: issue\_category*

Description: This is pre-set and cannot be changed.

Default value: 0

Available options:

• experiment

**How to fill: Select one option from the dropdown list. This field is required and must be filled.**

15. Issue Kind \*

*Field Type: Dropdown | Field ID: issue\_kind*

Description: Select whether this is a new submission or modification of existing entry.

Default value: 0

Available options:

• new

• modify

**How to fill: Select one option from the dropdown list. This field is required and must be filled.**

# Additional Information

Completion Guidelines:  
• Fields marked with an asterisk (\*) are required  
• For dropdown fields, select the most appropriate option  
• For multi-select fields, you may choose multiple options  
• For text fields, provide clear and concise information  
• If unsure about a field, refer to the description provided  
  
For technical support or questions about this template, please refer to the project documentation or contact the development team.