



CMIP AR7 Fast Track v2 consultation

The CMIP Panel would like to thank those who responded to the AR7 Fast Track v1 consultation for your considered input and suggestions. An anonymised summary of the responses can be found [here](#).

A version 2 (v2) proposal will be released for open consultation on 13th February to gather input from the MIPs, infrastructure providers, wider WCRP and climate science community, and other CMIP data users. In addition, the CMIP Panel have some specific, further questions for you, as modelling centre representatives, that will support the final definition of the AR7 Fast Track proposal to be presented to the Working Group on Coupled Modelling in March 2024.

Please read the [updated supporting information document](#) carefully before completing the survey below. We very much appreciate your time.

Data protection notice

The data collected in this form is processed and held securely by the CMIP International Project Office (IPO). Your data will be automatically deleted on closure of the CMIP IPO project at ESA, scheduled for 28th February 2027. Any personal data provided on this form will only be shared with, and handled by, the CMIP IPO, CMIP Panel, WGCM Infrastructure Panel, and WCRP Secretariat. Results from the survey may be published; however, data will be anonymised prior to publication. If information we have about you is inaccurate, out of date, or incomplete, you have the right to have it rectified. For any requests, concerns, or questions regarding this notice please contact cmip-ipo@esa.int.

I confirm I have read and understood this data protection notice *

Respondent information

Did you respond to the AR7 Fast Track v1 consultation? *

- Yes
 No

① Which CMIP modelling centre/group are you representing? *

If your centre/group is not on the list select "Other".

You can submit this form either once per modelling centre, or once per model if your answers are different for the different models you use.

+ Add model

📄 If Other, add the name of your modelling centre/group here


Name *

 Position/role *


Do you plan to contribute simulations to the CMIP AR7 Fast Track given the timeline outlined (data delivery by end 2026)? *

- Yes
- No

 If yes, when do you aim to start running spin up? *


 If yes, when do you aim to start running piControl? *

Planned model configuration


 Does your centre/group plan to run the Fast Track with a CMIP6-class model or a more recent version?

Considering for CMIP6-class models the DECK already exists whereas for a more recent version DECK would have to be re-run. Select both if you may run some experiments with a CMIP6-class model and others with a more recent version.

- CMIP6-class model
- More recent model version
- Both CMIP6 class and more recent model versions

 Which model(s) do you plan to use to run the AR7 Fast Track? (optional)

The models in the list below are the CMIP6 Source_ids. If your model is not listed, please select 'Other' from the list and type the name of your model.

 Other model *

You can submit this form either once per modelling centre, or once per model if your answers are different for the different models you use. If you are submitting separately for each model, please only select the relevant model for the answers submitted here.

🔗 What model configuration do you expect to use for CMIP7 simulations?

Please provide information on what model configuration you would use (based on the ["source type" definitions](#))

- AER
- AGCM
- AOGCM
- BGC
- CHEM
- ISM
- LAND
- OGCM
- SLAB

🔗 Is your modelling centre/group capable of running with CO2 emissions?

- Yes
- No

🔗 If yes, would you plan to run all historical/scenarios as emission forced runs or also concentration forced runs?

- Emissions forced only
- Both emissions and concentrations forced runs

🔗 What resolution do you plan to run your model at for the Fast Track?

Please provide planned model resolutions in kilometres for all model configurations and runs as relevant.

Data request

Do you expect that your output will require additional variables to accommodate new ESM capabilities in a next generation model?

You can select multiple options

- Dynamic ice sheets
- Dynamic vegetation with simulated plant production demography
- Wildfires with interactive emissions or land surface interactions
- Coupled biosphere and chemistry (e.g., isoprenes, biogenic volatile organ...)
- Ocean ecosystems (e.g., plankton, diatoms)
- Nitrogen cycle
- Other system level extensions to the the CMIP6 class of ESMs

There will likely be a limited Fast Track data request issued in 2024 and then a subsequent broader request that would satisfy all the requirements of the CMIP7 MIPs in 2026/7. How would you handle this situation?

The timeline of the AR7 Fast Track data request is subject to confirmation of CMIP and IPCC AR7 timelines.

Please select the number of the statement/s which best applies (check all that apply):

We would re-run the Fast Track once the broader harmonized data request is available.


We would not re-run the Fast Track for the second data request and would only produce the variables for the Fast Track data request.

We would not re-run the Fast Track for the second data request but would do our best to save the relevant output by following the CMIP6 data request in addition to the Fast Track request.

We would not run the Fast Track experiments on the Fast Track timeline and would wait until the full data request to run any experiments.

We would not re-run all the Fast Track experiments but would consider running additional ensemble members for some of the experiments.

- 1
- 2
- 3
- 4
- 5

 If running the AR7 Fast Track experiments, which of the following characterises your hopes for the data request? *

Please select the number of the statement which best applies:

1. A compact data request of variables which have already been configured for the CMIP6 data request
2. As above but with a small number of new variables to reflect revised community priorities.
3. Inclusion of new variables to enable analysis of new model components.
4. An extensive request to enable exploitation of simulations by a broad range of community MIPs.

- 1
- 2
- 3
- 4

If you are working on a model/s for use in CMIP Community MIPs after the Fast Track, do any of the following apply:

Please select the number of all the statements which apply:

1. We will be running our model for the DECK experiments.
2. We will be running our model for a selection of Fast Track experiments
3. We will be running our model for a selection of Community MIPs.
4. We will support Community MIPs using our model, but expect them to run the models and publish output.
5. We expect DECK experiments to run once only and to generate diagnostics for a broad range of Community MIPs

- 1
- 2
- 3
- 4
- 5

AR7 Fast Track v2 experiment feedback and prioritization

Please refer to the AR7 Fast Track [supporting information document](#) for updated details of the proposed Fast Track experiments including new experiments.

Please indicate prioritization (low, medium, high). Please only choose a maximum of four experiment groups for each prioritization category (low, medium or high). Once you have answered all questions up to RFMIP, you should have therefore selected a maximum of four experiment groups for each of low, medium or high priority. For each experiment group please also indicate the likelihood of delivery by end 2026, and any comments (including, if relevant, whether you will run with CMIP6-class or more recent model version).

DCPP priority

- Low
 Medium
 High

DCPP: run before end of 2026?

- Very likely
 Likely
 Not likely
 Do not plan to run experiments

DCPP comment

Scenarios priority

- Low
 Medium
 High

Scenarios: run before end of 2026?

- Very likely
 Likely
 Not likely
 Do not plan to run experiment

Scenarios comment

AerChemMIP priority

- Low
 Medium
 High

AerChemMIP: run before end of 2026?

- Very likely
 Likely
 Not likely
 Do not plan to run experiments

AerChemMIP comment

C4MIP priority

- Low
 Medium
 High

C4MIP : run before end of 2026?

- Very likely
 Likely
 Not likely
 Do not plan to run the experiments

C4MIP comment

CFMIP priority

- Low
 Medium
 High

CFMIP: run before end of 2026?

- Very likely
 Likely
 Not likely
 Do not plan to run experiments

CFMIP comment

DAMIP priority

- Low
- Medium
- High

DAMIP : run before end of 2026?

- Very likely
- Likely
- Not likely
- Do not plan to run the experiments

DAMIP comment

GeoMIP priority

- Low
- Medium
- High

GeoMIP : run before end of 2026?

- Very likely
- Likely
- Not likely
- Do not plan to run the experiments

GeoMIP comment

LMIP priority

- Low
- Medium
- High

LMIP : run before end of 2026?

- Very likely
- Likely
- Not likely
- Do not plan to run the experiments

LMIP comment

PMIP priority

- Low
- Medium
- High

PMIP : run before end of 2026?

- Very likely
- Likely
- Not likely
- Do not plan to run the experiments

PMIP comment

RFMIP priority

- Low
- Medium
- High

RFMIP : run before end of 2026?

- Very likely
- Likely
- Not likely
- Do not plan to run the experiments

RFMIP comment

With respect to the v2 proposed experiments above, what priority would you give to 2C and 4C Global Warming Level simulations?

- Low
- Medium
- High

With respect to the v2 proposed experiments above, what priority would you give to the prescribed vegetation type experiments described in the WhatifMIP proposal?

- Low
- Medium
- High


Does your centre/group plan to run with dynamic vegetation demography, prescribed vegetation demography, or both?


- Dynamic vegetation demography
- Prescribed vegetation demography
- Both dynamic and prescribed vegetation demography


Given the v1 consultation survey results, do you think the CMIP Panel should reduce the number of experiments to limit number of simulation years?

You can view the (anonymised) survey results [here](#).

- Yes
- No, but provide ongoing guidance to optimise compute across centres.
- No
- Other

 If yes, please enter experiments that should be removed

 If supporting reduction through coordination across modelling centres/groups please provide suggestion on format of coordination

 If no or other please explain your response


CMIP forcings

Please read the CMIP Forcings section of the [supporting information document](#) before completing this section.

Do you have any comments or concerns around the current plans for the delivery of forcing datasets?

Yes

No

 If yes, please details your comments or concerns

Requirements for guidance

As described in the AR7 Fast Track v2 [supporting information document](#) the CMIP Panel, supported by the Strategic Ensemble Design Task Team, are developing recommendations/guidance on running the DECK experiments and spin up/equilibration and branching.

Do you have any comments/suggestions for this recommendation/guidance development?

When would you require this guidance or recommendations to be delivered?

Are there any other areas that you would like the CMIP Panel to provide recommendations/guidance on?

Final comments

Please add any other feedback on the AR7 Fast Track v2 proposal or other final comments here.