

First of all, a huge thanks to those who presented at the DeepMIP meeting last week, and to all who attended.

By way of a meeting summary, recordings of the talks (thanks Seb), and the public chat, and a copy of this email, are available here:

<https://www.deepmip.org/meetings/> [follow the link to “Meeting Materials”]

We have added details on accessing the DeepMIP model database here:

<https://www.deepmip.org/data/>

In terms of “next steps” (as discussed in the sessions led by Bette and Jess), a summary follows:

- Some excellent science has been presented, building on the DeepMIP model outputs. We really look forward to the associated publications....  
See here for a list of these planned papers: <https://www.deepmip.org/publications/> [scroll down to “Planned papers” and “Stage 1” ]

**\*It would be wonderful if the papers presented were able to be submitted by the end of December, or early in 2021!\***

- There were some suggestions for additional work building on the ensemble...  
These include [Note that it is DeepMIP policy that, in addition to the authors listed below, model output providers will be offered co-authorship for all papers that use output from that model downloaded from the DeepMIP model database.] :
  - Biogeochemistry and carbon cycle (Genie). Principal authors: Sarah Greene, Matt Huber, Stephen Jones.
  - Biogeochemistry and carbon cycle (PISCES). Principal authors: Yannick Donnadieu.
  - Aridification in East Asia. Principal authors: Xiangyu Li.
  - Vegetation in South America. Principal authors: Pierre Sepulchre.
  - Vegetation and BIOME4 / Koppen model-data comparisons. Principal authors: David Hutchinson, Ulrich Salzmann.
  - Paleo data assimilation with DeepMIP models. Principal authors: Jess Tierney.
  - Deep ocean temperatures. Principal authors: Martin Ziegler.
  - Atmosphere-only simulations. Principal authors: Bette Otto-Bliesner, Greg Tourte.
  - Extremes in precipitation with daily output. Principal authors: [didn’t make a note of who suggested this, sorry!]
  - Comparable 2x, 4x simulations under modern conditions for Past2Future. Principal authors: Julia Hargreaves.

See here for a list of these planned papers: <https://www.deepmip.org/publications/> [scroll down to “Planned papers” and “Stage 2”].

**\*The names above are suggested leads, based on who made the suggestions. Please let me know if these aren’t appropriate, or if there are any other suggestions. I guess the aim would be to work on these in 2021 and aim to submit by the end of 2021, if possible.\***

- Also some suggestions for single-model sensitivity studies:
  - Topography/paleogeography/gateways (Zhongshi Zhang)
  - Paleomag vs. Mantle reference frame (Zhongshi Zhang)

**\*As above\***

- We have also added single-model papers carried out in the DeepMIP framework to the website:

<https://www.deepmip.org/publications/> [see under “Peer-reviewed publications”]

So far, only Jiang’s paper is there.

**\*Please let me know if/when there are other to add...I know that several people are planning on writing up their single-model simulations.\***

- On the data side, following the meeting there have been discussions about data curation and updating of DeepMIP proxy data (and other intervals), mainly by Matt Huber, Jess Tierney, Chris Hollis, Heiko Palike, Carlos Jaramillo.

**\*Please contact them if you’d like to be involved in the discussions.\***

- Other time periods. DeepMIP-Miocene (Burlis et al, submitted) and DeepMIP-EOT (Hutchinson et al, in review) are the most mature time periods for potential expansion of DeepMIP. Other possible candidates are DeepMIP-Cretaceous, DeepMIP-Oligocene etc, but need community commitment from both modelling and data – might be best to not go too broad too soon.

**\*Dan, Natalie, Matt, and David to discuss soon how to integrate DeepMIP-Eocene, DeepMIP-Miocene, and DeepMIP-EOT.\***

Paleogeography was discussed at several points...Paul Markwick has kindly provided a summary of his thoughts on this – see here:

[https://www.paleo.bristol.ac.uk/~ggdjl/DeepMIP\\_virtual/markwick\\_gateways.pdf](https://www.paleo.bristol.ac.uk/~ggdjl/DeepMIP_virtual/markwick_gateways.pdf)

Feedback about the meeting was generally very positive, but several people suggested running for shorter time periods over a few days, with different time-zones each day. Also to have social time (random breakouts) at the beginning or in the middle of the meeting, not at the end! Will try these suggestions for the next meeting that is virtual!