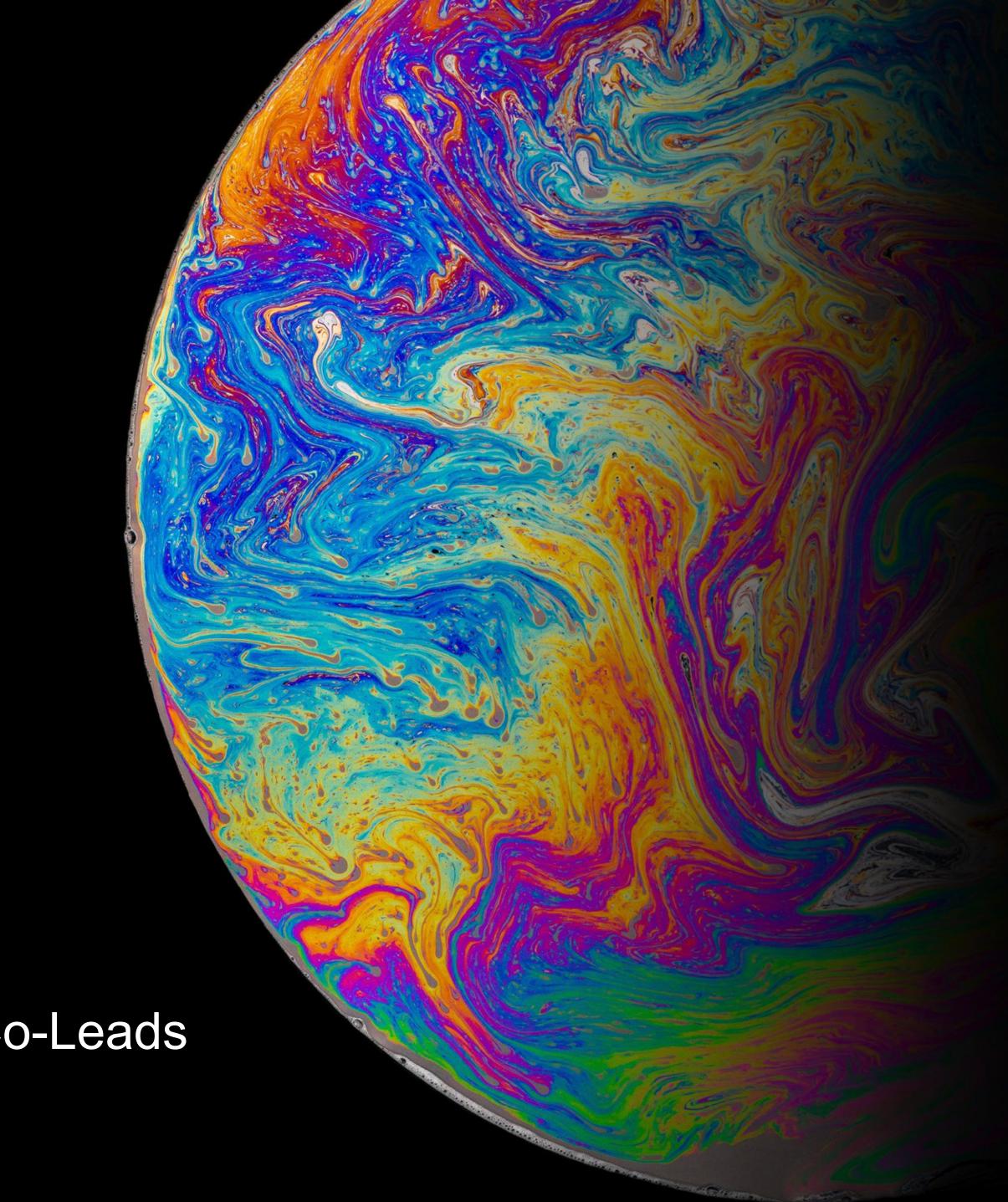


# Updates from the Model Benchmarking Task Team

Birgit Hassler and Forrest M. Hoffman, Co-Leads





CMIP

- Meeting monthly with Task Team members
- Developing two papers for the community
  - Retrospective on CMIP6 model evaluation What worked and what did not? What was novel? What tools were used?  $\rightarrow$  ideally this should be submissionready by spring 2024
  - $\circ$  Big ideas Charting the path for new advances for CMIP7  $\rightarrow$  probably submission-ready by the end of 2024
- Planning for a face-to-face meeting in spring (one week, main focus on finishing draft of retrospective paper, but maybe also to work on a new framework?)

Model Benchmarking Task Team What are we doing on what time scale? (1)









### Model Benchmarking Task Team CMIP What are we doing on what time scale? (2)

- Airtable/Cards and videos for benchmarking packages, served on the CMIP website  $\rightarrow$  work in progress right now, hopefully finished by spring 2024
- also have ECRs in the convener team)
- Presenting to the science community at WCRP OSC Convening benchmarking session at AGU, EGU, AOGS (some









## **Resources, Risks/Issues, Challenges?**

- Resources include a diverse TT membership, many with experience developing/using benchmarking tools
- Desire to build out a comprehensive evaluation framework that can run in an automated fashion as output data are published (e.g., at ESGF)
  - The community wants quick-look assessments / diagnostics Ο Unsure if we have the human resources to build them Metadata (and data!) QA/QC remains a challenge / barrier

Model Benchmarking Task Team





- We met with representatives for Fresh Eyes Subgroups
  - Data Analysis
  - Model Evaluation
- They are knowledgeable, enthusiastic and optimistic!
- We hope to engage them in
  - assessing tools / packages, Ο
  - developing/testing evaluation metrics, and Ο

Model Benchmarking Task Team **Engagement Opportunities for Fresh Eyes** 

helping to convene and giving presentations at conferences & workshops







## Model Benchmarking Task Team CMIP **Needs from CMIP Panel and/or WIP?**

- Consider encouraging better QA/QC for data / metadata
  - Improved tools for automated file checking
  - Stricter enforcement vs. ease of publication
  - Encouraging modeling centers to follow up on errata
  - Requires unified effort from TTs on Data Access, Data Citation, and Data Request
- Continued support for meetings & conference activities
- Advocacy for a framework to unify products from existing packages, possibly with funding agencies

