

ACCESS CMIP7 Hackathon Agenda

Tuesday 12th (including online)

10.30am - 11.00am Sign in at Reception. Tea/coffee and light refreshments in the Canteen.

11am - 11.15am Welcome and Housekeeping (Rachel Law)

11.15am-12pm Set the Scene and Looking Back (Rachel Law & Tilo Ziehn)

- What we are trying to achieve through Hackathon (Rachel Law & Nicola Maher)
- What we did for CMIP6 (Martin Dix)
- Current evaluation practice when developing models - perspectives from different areas/components - 1 slide each.
- CMIP7 timeline and status of ACCESS model components (Julie Arblaster and Rachel Law)

12pm-12.45pm Discussion around evaluation workflow (Rachel Law and Nicola Maher)

- Hierarchy of evaluation? E.g. drift, conservation
- Sanity check vs systematic evaluation. What is needed when?
- Thinking about how to use evaluation to improve model - getting to process understanding from metrics.
- How do we proceed? How do we facilitate involvement across institutions? How does the evaluation process work?
- Discuss input from outside the core group running the model. What is most useful and timely from the model developers for those who want to help with evaluation?

12.45pm-2pm Lunch

2pm - 3pm Model Evaluation support from ACCESS-NRI (*Romain Beucher ACCESS-NRI*)

3pm-3.30pm Break

3.30pm-5pm Breakout session #1

- Break into 4 domain-specific groups:
 - General diagnostics (e.g. drift/conservation) & Coupled (modes of variability) (*Chair: Yann Planton*)
 - Ocean & Ice (*Chair: Pearse Buchanan*)
 - Land & Carbon Cycle (*Chair: Tamas Loughran*)
 - Atmosphere (*Chair: Kim Reid*)
- Goals: meet other group members, discuss breakout group logistics for the rest of the event, think about big picture questions around model evaluation for ACCESS in CMIP7 (group chairs will have prompt questions)

Tuesday note takers: Sramana Neogi

Wednesday 13th (in-person only)

9am - 10.45am Introduction to ESMValTool - Code Running and Examples (*Romain Beucher ACCESS-NRI*)

10.45am-11.15am Coffee

11.15am-12.45pm Breakout session #2

- Break into the same 4 domain-specific groups
- Goals: Explore what ESMValTool has to offer for your domain and what might be missing/could be updated (chairs will have prompt questions)

12.45pm-1.30pm Lunch

1.30pm-2pm Context and discussion of model runs for evaluation (Rachel Law, Romain Beucher, Dave Bi)

2pm - 5pm Breakout session #3 (including informal break)

- Self-organize into smaller groups of 2-4 people to test ESMValTool recipes and diagnostics. This is hands-on hacking time!

5pm - 6pm 'Clean up' and report back

6.30pm - Group dinner

Wednesday note taker: Dhric Bhagtani

Thursday 14th

9am - 11am Breakout session #4 (including informal break)

- Continue to hack in self-organized smaller groups to test ESMValTool recipes and diagnostics

11am - 12pm Breakout session #5

- Gather back into the 4 domain-specific breakout groups
- Goals: discuss the primary issues/needs/barriers to model evaluation for CMIP7 in Australia and, importantly, prioritize this list of needs/action items (chairs/note takers will have a chart to record these prioritized needs)

12pm-1pm Lunch

1pm-3pm Summary/Group Discussion, finalisation of Hackathon (including online) (Chair: Nicola Maher)

Thursday note taker: Aditya Sen Gupta