# Thursday 9<sup>th</sup> May / 2.00 PM – 3.30 PM

# **Attendees**

Chair: Andy Hogg

Rapporteur: Lauren Vieira

Members: Kelsey Druken, Martin Dix, Rachel Law, Claire Vincent, Ben Evans, Laurie Menviel, Tilo

Ziehn, Charmaine Franklin, Simon Alexander, Ariaan Purich, Adele Morrison

**Observers**: Paige Martin

Apologies: Victoria Allen, Claire Carouge, Natalia Bateman

Welcome & Acknowledgment of Country

# Item 2: Previous Minutes of SAC Meeting 21st March

The previous minutes have been approved and uploaded on the ACCESS-NRI website.

### Item 3: Matters Arising from March SAC Meeting

# A15.1 – Have survey reports ready for the ACCESS workshop program committee – ACCESS-NRI

Update from first meeting of ACCESS Workshop Program Committee.

(We are happy to accept additional members and would appreciate suggestions from a student member, or somebody located in Hobart.) We have discussed goals for the meeting, which will include:

- Building community around the models.
- Learning about new components developed for ACCESS.
- Showcasing innovative science and modelling approaches.
- Interaction and sharing knowledge between working groups, not just within working groups.

The format will be similar to our 2023 workshop, with two days of workshop bracketed by a training day and working group day. We are considering potential session themes and breakout topics before our next meeting.

- Only major changes are COSIMA will hold their Working Group meeting at the OMO conference in July.
- Please send any suggestions to ACCESS-NRI.

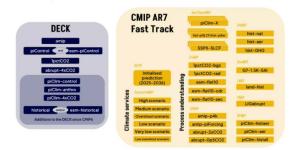
# A.14.1 – Members would prefer email calendar invites to keep track of meetings as HIVE links are difficult to track. ACCESS-NRI to respond by next meeting.

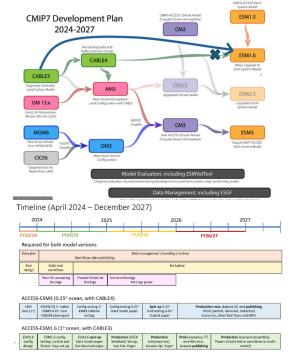
Update: We now have a way to add calendar links to announcements on the forum. It has been used successfully in the announcements of some working group meetings. We are going through a last round of testing by community members to assess it meets the requirements. If these last tests work, the method should be advertised later next week.

• The SAC agreed that these changes and thanked the ACCESS-NRI team member who created this system.

# Item 4: ACCESS-NRI Updates 4.1 CMIP7 update

- The Fast Track program's community survey was processed and found the most useful experiments to include in the CCP assessment report.
- Deck experiments are the entry pass into CMIP.
- The Fast Track and timing of Fast Track experiments are at this stage need to be done by end of 2026.
- The wider CMIP effort are community MIPS, old and new.
- With the timeline of Fast Track now known, the selection of models has begun.
- ESM1.6 version would be an upgrade from the current ESM1.5, and is being planned as a fall-back option for the tight Fast Track program.
- Meanwhile we are continuing ESM3 development.
- ESM1.6 aiming for 1 degree ocean with CABLE3.
- ESM3 aiming for 0.25 degree MOM6-CICE6 ocean, and updated CABLE.
- Governance of data management still requires planning, as well as building in evaluation tools early on.
- 12 months of configuration testing has been built into the ESM3 timeline, which is a prerequisite for quality simulations.





# Comments

- A lot of work has been put into how MOM6 uses Wombat, with the intention of migrating MOM6 with the new Wombat development. Two versions of Wombat could be difficult to manage.
- Could MOM6 be coupled with ESM1.6? It was viewed that migrating generic tracers to MOM5 would be simpler.
- 2025 will be spent working on the 1 degree version of ESM3, it will be slower as the atmosphere has a complex aerosol scheme.
- Feedback to be shared for ESM1.5. Noted that ESM1.X will be an essential paleo tool going forward
- Advantages of MOM6 is a possible pathway to an offline spin up of biogeochemistry, currently being explored by CLEX CMS team.

Action: A16.1 – Add ESM1.6 feedback topic to HIVE for discussion.

#### 4.2 Ice Sheet Model Selection

- Expert panel meeting on 13<sup>th</sup> May for selection of an ice sheet model/models.
- 3 shortlisted models.
- Information from the community assessment survey and developer survey will be used in the selection process.
- The panel hope to successfully select a model, and then seek approval from the ACESS-NRI Board in June.
- The long term goal is to have an Earth System Model (ESM) with an ice-sheet component.
- Early stages, within two years, would be to have the Ice-Sheet Model (ISM) coupled with the Atmosphere and Ocean, and will fed into the longer term goals of coupling the ISM to other systems.
- The in-depth process of the ISM selection has brought the small cryosphere community together by remaining completely transparent and encouraging community involvement.
- Input can still be made here;
- <a href="https://forum.access-hive.org.au/t/provide-your-feedback-ice-sheet-model-ism-community-assessment-now-open/2062">https://forum.access-hive.org.au/t/provide-your-feedback-ice-sheet-model-ism-community-assessment-now-open/2062</a>

#### Recruitment Update

 ACCESS-NRI have recently filled Team Lead positions for Ocean Modelling, Ice-Sheet Modelling, Coastal & Regional Modelling, Software Transformation, and User Training teams.

### 4.3 Presentation from ACCESS-NRI User Training Team

- User Training team is currently gathering information for the training day topics for the ACCESS-NRI Workshop.
- Reviewing and testing documentation to ensure consistency across the ACCESS tools.
- Working on implementing a PhD program;
  - o 3 month Internship at ACCESS-NRI, for PhD students to gain industry experience.
  - o In the testing phase and creating a pitch for applications.
  - o Commencing with the ANU, and then branching out to other institutions.
  - o This will be possible because ACCESS-NRI are recognised as industry, not education.
- Developing the best ways to provide user support.

#### Discussion

SAC members expressed interest in developing and providing user support for undergraduate students. Although ACCESS-NRI are not funded to train undergrads, it could be useful for NCRIS workforce ambitions and positively benefit staff recruitment in the long term.

#### Item 5: Update from Working Groups

#### Forecasting & Prediction

• Support document for Machine Learning (ML) is posted on the HIVE – comments can be made on the google doc. ML will be calling on the Software Transformation Team.

# Atmospheric Modelling

- Joint Working Group with Forecasting & Prediction and Atmosphere.
- Great dynamic and interactions will aim to set up more joint meetings in the future.

- Low usage of compute allocation, however many proposed experiments with Aus2200 are about to be made.
- Thanks to ACCESS-NRI team member for the calendar invite system.

#### Coupled and Earth System Modelling

- Working Group meeting was held this morning, with good attendance of 20.
- David Hutchinson is the new Co-Chair (replacing Laurie Menviel).
- High usage of compute allocation many experiments being run. Will use other Working Groups allocations if they aren't being used.
- Discussions involved the low resolution version accessom2 and N48.

# Ocean-Sea Ice Modelling

- 25 people attend weekly which includes science talks.
- COSIMA Working Group meeting being held Monday 1st July at the ANU.
- Compute allocation is nearly exhausted and will apply for more storage next quarter.

#### Land Surface

- CABLE-CM3 work is progressing.
- Unfortunate timing of several workshops clashing in September means there will not be a Land Working Group meeting at ACCESS-NRI workshop.

# Item 6: Any Other Business

Momentum Partnership (formerly UM Partnership) – The Bureau and CSIRO remain as core partners. ACCESS-NRI are still in talks with the MET Office with regards to becoming a Research Partner.

Momentum – Shared Platform Workshop: 9<sup>th</sup> May 2024.

Momentum Users Workshop: 17 June week. 17:30 – 22:00 AEST daily. https://forum.access-hive.org.au/t/momentum-users-workshop-2024-register-now/2063

Action: A16.2 – ACCESS-NRI to send out information on Momentum Users Workshop – (possible ESMValTool presentation)

#### Item 7: Next Meeting

20 June 2024 2.00pm - 3.30pm

End of meeting.

#### **Action Items**

Action: A16.1 – Add ESM1.5 feedback topic to HIVE for discussion.

Action: A16.2 – ACCESS-NRI to send out information on Momentum Users Workshop – (possible ESMValTool presentation)