ACCESS-NRI Scientific Advisory Committee Meeting Minutes #21

Thursday 12th December / 2.00 PM – 3.30 PM

Attendees

Chair: Andy Hogg
Rapporteur: Natalia Bateman
Members: Kelsey Druken, Martin Dix, Rachel Law, Claire Vincent, Ben Evans, Laurie Menviel, Tilo Ziehn, Charmaine Franklin, Simon Alexander, Ariaan Purich, Adele Morrison
Observers: Romain Beucher, Owen Kaluza
Apologies: Ben Evans, Victoria Allen

Welcome & Acknowledgment of Country

Item 2: Previous Minutes of SAC Meeting 21st October

The previous minutes have been approved and uploaded on the [ACCESS-NRI website](#).

Matters Arising from October SAC Meeting: None

Item 3: ACCESS-NRI Updates

3.1 National Digital Research Infrastructure Update

- Working group took submissions and the draft investment plan will be released very soon, highlighting the areas that will receive funding and levels of funding. Guidelines expected to be approved this week by the minister. If they are released before holidays, some help from SAC members might be required to put together the proposals.
- We don't know if Gadi will be replaced, extended or refreshed.

3.2. CMIP7 Update

- CSIRO Internal communications around NCI and expiration of the collaboration agreement has raised concerns for CMIP work. Availability of Bureau's compute was raised. Bureau's Australis 2 is an operational machine but the Bureau is getting a second machine, Sentinel, which may be available for research (outside disaster recovery) so other organisations can buy time to use it. Sentinel is a disaster recovery machine, higher security than NCI – perhaps more constraints of who can use it.
- Planning a hackathon next Tuesday to finalise ESM1.6, aiming to have something to spin up during quiet time over the summer.
- CSIRO continues to advocate for the value of the CMIP7 work- this was discussed at the NPCP plenary and a subsequent high-level effort initiated by NESP to produce a 2-page pitch.
- Tilo presented to the Climate Change Authority on CMIP and ACCESS.
- Evaluation updates: meetings with people using ESMval tool in Europe, started a series of recipes, diagnostics for CMIP7, rapid evaluation framework, release the list of diagnostics for the Fast Track experiments.

3.3 Data Update

Storage usage:

Summary:

- Total Approved (TB): 225
- Unallocated (TB): 9975

Scheme total for FY2024-25 is 1200 TB (Reference Datasets)

Note: storage usage reported is for the reference datasets as a subset of the total available for the merit allocation scheme

New releases:

- AUS2200 (16 datasets): https://dx.doi.org/10.25914/w95d-q328

New approvals:

- ISMIP6 Ice Sheet Model Data Collection (8 datasets, 15 TBs)
- Further detail (proposals and dataset list)
  SAC Sharepoint: https://anu365.sharepoint.com/:f:/r/sites/ACCESS-NRIScientificAdvisoryCommittee/Shared%20Documents/4.%20Other%20Information/6.%20Reference%20Datasets?csf=1&web=1&e=wciste
- Working on the storage scheme over the summer.

3.4 Recruitment Update

- Manodeep Sinha has joined the Software transformation team and Ed Yang (Ice Sheet Modelling) and Lawrence Bird are starting early next year.

- Lauren Vieira has departed, and we will be recruiting another person for that space.

Item 4: ACCESS-NRI release of visualisation tools

Presentation from Owen Kaluza from the MED team: working on high quality visualisations, including simulations of Ozone, Antarctica, side by side rendering of the poles, notebooks and tutorials on using the recently-released ACCESS visualisation tools.

Upcoming projects: Southern Ocean AABW remake, AUS2200: full domain. More interactive and web-based visualisation/data tools.

Comments/Suggestions:

- What are the criteria to create new visualisations? – open to ideas from the community through the Hive post, people need to have time to commit to help Owen to understand the data.

- It will be useful to help people running models to understand what outputs, what variable/data you need to save to make new visualisations.

- Very nice to prepare tools for the community to create their own visualisations – training will be run quarterly and a tutorial during the workshop – investigating how we can get a GPU per person.

Item 5: Working Group Updates
Coupled & ESM

- We had to cancel last meeting and still struggling with science presentations. Rachel will give an update every second meeting on everything related to CMIP7. Also, expecting more interest from attendees once CMIP7 runs have started.

- Strong interest in evaluation, output available so people can use.
- Things are going well, attendance numbers have been maintained.

Atmosphere Modelling
- We met last week, a joint meeting with AUS2200
- Heidi gave a presentation on the ACCESS-NRI work plan for next year, ACCESS-NRI to expect some proposals for new simulations next year.

Ocean-Sea Ice Modelling
- COSIMA Leads day (5 people) work in a bunch of things. Including:
  - Movie – intro to COSIMA to encourage people to contribute and participate.
  - Updated COSIMA ethics statement, attribution, keeping track of attribution and co-authorships.
- Meetings are going well.
- ECRs are collecting stats on our diversity, showing we need to do more as there was only 20% female speakers/participating by asking questions. Creating a diversity survey. Starting the COSIMA meeting with five minutes of questions from ECRs, a great suggestion for other WGs.

Land Surface
- Rachel Law gave a talk about sensitivity to root distribution.
- Ongoing work for dataset for AUS simulation run with Jules and CABLE.
- Urban side of the group is growing. Andy mentioned ICRI side event (AUCRI proposal)

Cryosphere
- Fair bit of activity at Monash and UTas, preparing for the new ice sheet modelling team.

Machine Learning
- Group has started up. The group met several times, good attendance (32 last time) presentation from the Bureau on verification methods, group assigned the quarterly allocation – organise processes for fair allocation. Few new initiatives, new papers, more visibility.
- The Bureau put forwards a proposal for Edit, now called PyEarthTools, an open-source machine learning platform for Earth system science. We aim to make it available to the community, including having tutorials and release. Tennessee provided a proposal, in which we will take the initial steps and the SAC can decide whether to endorse the proposal next year. We will then take the proposal to the Board as a supported configuration.

Item 6: Any Other Business

- WG chairs: we will need some advice /input from this group, as soon as the summer ends on ssuggestions on parallel sessions for the ACCESS Community Workshop next year. This will allow to create a rough structure of the program, so people can submit abstracts to a particular session.

Next Meeting: 13th February 2025 2.00 – 3.30pm