



ACCESS-NRI Scientific Advisory Committee Meeting #20

Thursday 24th October 2.00 – 3.30pm

Attendees

Chair: Andy Hogg

Rapporteur: Lauren Vieira

Members: Charmaine Franklin, Rachel Law, Laurie Menviel, Paul Spence, Claire Vincent, Ben Evans, Tilo Ziehn, Oscar Alves, Adele Morrison, Kelsey Druken, Martin Dix

Observers: Clare Richards, Natalia Bateman

Apologies: Victoria Allen, Ariaan Purich, Simon Alexander

Item 2: Previous Minutes of SAC Meeting 1st August

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

Item 3: ACCESS-NRI Updates

3.1 National Digital Research Infrastructure (NDRI) update

NCRIS released their NDRI Strategy in August – a small working group has been formed to develop an investment plan, based on consultation with the wider community. The working group is research agencies, pro vice-chancellors, and NCRIS directors to hear reviews on process and investment ideas. ACCESS-NRI will submit these recommendations within a two-page pitch;

- CMIP7 – requesting funding to extend our existing CMIP7 activity in partnership with TERN, and to incorporate NCI. This item may include a request for compute allocations and the funding of the Earth System Grid Federation (to store a local copy of the global CMIP7 archive), as well as enough storage space for high-res MIPs. We are pitching for 3 years of funding.
- CoastRI – a large IMOS-led program currently under discussion with the Department of Education and is partly aligned with NDRI. This program involves 12 other NCRIS projects. ACCESS-NRI's component relates to the coastal ocean modelling commons and support for a nationwide coastal modelling project – ANCOMS.
- Extreme-scale software transformation – in collaboration with NCI, Pawsey, AuScope and AAL we are investigating a cross-NCRIS program to prepare the research community to take advantage of new technology, such as Machine Learning, GPUs and Data Assimilation.
- AUCRI – Australian Urban Climate Research Initiative, led by AURIN.

In addition, ACCESS-NRI is engaged in discussions with other NCRIS projects around:

- The future trajectory of high-performance computing and a national research data storage system that spans NCI and Pawsey, and thereby reduces the overhead of research collaboration.
- A national strategy for data management, being led by ARDC, that involves both NCI and Pawsey.
- Digital research skills program for the NRI workforce, being led by ARDC with interest from many NCRIS facilities.

3.2 CMIP7 Update

- The oversight committee were updated on progress and resource status, which is currently fragile.

- NESP is organising a 'brains trust' to work on the Australian submission of the ACCESS CMIP7 model, with NPCP to collaborate on how to achieve maximum value from our participation.
- Model development is progressing, aiming for ESM1.6 initial runs by the end of 2024.
- ESM3 development; piecing together all elements into something that can run – top of energy, atmosphere, energy balance, and coupled systems.
- The CMIP7 Hackathon evaluation session during the ACCESS Community Workshop useful to those working on CABLE4.

3.3 2025 ACCESS Community Workshop

- A tentative plan for the 2025 workshop has been devised.
- Held in Melbourne 8th – 12th September at Melbourne Connect in Carlton.
- For the parallel sessions, we are considering calling for Working Groups to propose joint sessions (e.g. ocean-ice sheet, regional atmosphere/ocean, etc), with abstract submissions encouraging targeted presentations.
- We also hope to encourage more student/ECR attendance.
- Program committee to be formed early 2025.

Comments / Suggestions

- We need to find a way to include ECR's into the workshop.
- COSIMA do many social activities which help ECRs feel confident to participate.
- Student travel grants could be offered, as well as actively promoting the workshop across Universities.
- The ESM Working Group could be held on the Monday. This year's benefit was that it didn't compete with other working group meetings.
- Timescales could be used as a cross-collaboration sessions.
- Parallel sessions could also be formulated to more attractive to the observational community – need to plan how to integrate these within existing program.
- SAC members agreed the cost of hybrid would be more beneficial reallocating to travel grants for in-person attendance.
- SAC members gave positive feedback regarding the proposed structure of the workshop.

Item 4: Merit Allocations for Reference Datasets

- ACCESS-NRI presented the proposed approach for the merit allocation support of reference datasets for endorsement by the SAC.
- The aim of the approach is to provide ACCESS-NRI Scientific Advisory Committee (SAC) with sufficient information and to have full oversight of how the resource is being allocated without adding unnecessary workload for the community Working Groups (WGs) and the SAC.
- Details of the proposed streamlined approach were provided in advance to members as part of the agenda attachments ([also attached here with the minutes](#)).
- Next steps include (1) updating the public merit allocation guidelines on the website, (2) reviewing dataset priorities with the individual WGs, (3) identifying any existing collections hosted at NCI for support and (4) working on a high-level plan for managing the prerelease datasets in collaboration with WGs and internal ACCESS-NRI teams.

Comments

The SAC discussion highlighted the importance of clarity in the information provided to the community so that they are aware of how the scheme will operate and that ACCESS-NRI is not a long-term archival option to users.

The merit allocation process for reference data has been endorsed by SAC members.

Item 5: Working Group Updates

Coupled & ESM

- ESM finding it difficult to maintain current format of fortnightly science presentations
- Option is to bring in more focused component – CMIP7 FastTrack, and include FastTrack runs into WG meeting.

- There is interest in low-res fast models from Dietmar – which was also part of discussion at ACCESS Community workshop
- ESM WG meeting at the workshop was excellent.

Atmosphere Modelling

- Monthly meeting was held yesterday, including an interesting science presentation
- ACCESS-NRI gave update on datasets
- A half day tutorial on CSET was held as part of The Bureau's workshop – a convective scale model evaluation tool used by the Met Office.
- Presentations were also held on the Nesting Suite, cloud microphysics parameterisations, and AUS2200 model output.

Land Surface

- Two-day Land WG workshop held in October at CSIRO was well attended.
- The first day was presentation and discussions.
- The second day was working bee day, working on common topics including similar configurations of CABLE and JULES.
- Decisions were made on inputs for CMIP editions.
- Starting to learn about the ANTS system – ancillary inputs for the UM.
- Plans for CABLE ancillary tools based on ANTS.

Machine Learning

- NDRI WG meeting focused on what the community needs, today's session was about AI and the data for AI and GPUs.
- New Machine Learning WG progressing nicely, new ideas, workflows that ACCESS-NRI supports will likely be brought to the SAC in the future.

Cryosphere

- Recent interviews round- new staff member to commence soon.
- Still in the process of signing on AAD as partner.

Item 6: Any Other Business

Oscar attended an NDRI WG meeting focused on what the community needs. Today's session was about AI and the data for AI and GPUs, as well as platforms for training.

Planned SAC meetings for 2025.

Date	Location
13 th February Public Holidays 10/2 TAS (at that time of yr unlikely to take the week off)	Online
27 th March	Online
15 th May - Avoids Public Holidays below Pub Hol 2/5 TAS, 5/5 QLD	Online
19 th June	Online
31 st July	Online
11 th Sept	In person - Workshop week Melbourne
30 th October - Avoids Public Holidays below Pub Hol 17/10 & 23/10 TAS	Online
11 th December	Online

Item 7: Next Meeting

12th December 2.00 – 3.30pm
End of meeting.