



UNIVERSITY of  
TASMANIA



## February 2024 Update



### CAST PROGRAMS:

**Program 1**  
Engagement &  
Collaboration

**Program 2**  
People

**Program 3**  
Technology

**Program 4**  
Shared Data  
Resources

Dear Team,

As we start a new year, we want to provide an update on the initiatives undertaken within CAST in the second half of 2023.

*The Centre for Antarctic and Southern Ocean Technology (CAST) is a collaboration of organisations in the fields of Antarctic and Southern Ocean technology and engineering. The core CAST partners are the Australian Antarctic Division (AAD), CSIRO, and the University of Tasmania (UTAS).*

*Together, we aim to advance Antarctic and Southern Ocean research by enabling collaborative efforts in technology and engineering innovation and development, education and training, and by sharing resources.*

We've continued to build momentum since our last update, with the CAST committee meeting every two months and partners CSIRO, AAD and UTAS also meeting regularly to progress initiatives within our programs.

## Highlights of recent activities

### PROGRAM 1

#### ENGAGEMENT & COLLABORATION

This Program worked on content for the new CAST website designed by Studio Bacon, which is now live [here](#).

<https://cast-collaboration.org.au/>

Team members also worked with the CAST secretariat on guidelines for sharing equipment between the CAST organisations (more information below), as well as engagement with external stakeholders.

Keep up to date with CAST activities, news stories and seminars on the website.

<https://cast-collaboration.org.au/news/>

### PROGRAM 2

#### PEOPLE

Cross promotion of 17 seminars and masterclasses hosted by AAD, UTAS and CSIRO has broadened knowledge sharing between the CAST organisations.

We successfully recruited nine students to undertake summer internships at CSIRO, working across diverse areas including hydrochemistry, instrumentation, data acquisition and mechanical engineering. In 2023, CSIRO hosted a total of 21 students recruited through CAST.

The [Future of Antarctic and Southern Ocean Work and Workforces Conference report](#), which was published in September, highlighted key opportunities for better connecting and collaboratively supporting workforces in CAST organisations which will be explored further in 2024.

### PROGRAM 3

#### TECHNOLOGY

We worked on developing the Principles for Collaboration in Ocean Glider Technology between the CAST partner organisations to ensure benefits through interoperability, sharing of spares parts, people and training. This may be a useful model for other technologies with shared interest.

We progressed updating our capability statements, detailing the technical capabilities of each organisation.

We worked on a catalogue of specialist Engineering and Test Facilities within each organisation and considered how they may be accessed by CAST partners, which could be beneficial during engineering processes.

### PROGRAM 4

#### SHARED DATA SERVICES

The team successfully developed a prototype of its AI-assisted metadata generation tool and this is now undergoing user testing.

The work was presented at the recent [International Symposium on Data Science](#) held in Tokyo.





## BORROWING EQUIPMENT

Sharing resources, like facilities and equipment, between the CAST partners is core to developing opportunities in the Antarctic and Southern Ocean community.

An example of this within the CAST Project Schedule is how we are enabling commissioning of coring capability on AAD's RSV *Nuyina*. The team is utilising CSIRO's giant piston corer and its expertise to embed this new capability.

If you would like to borrow equipment from AAD, CSIRO or UTAS, please contact your organisation's [CAST Equipment Loan Officer](#) to discuss your requirements. If the loan request is viable, your CAST representative will work with you and the other CAST organisation to process the request.

## Thank you to the CAST Team

The work carried out in 2023 provides a strong foundation to pursue collaborative activities in 2024, and I would like to thank the CAST committee team members for their ongoing commitment.

My thanks also go to Fiona Taylor, Linda Whelan, and Lorraine Ingham from the CAST secretariat ([SM-CAST\\_secretariat@utas.edu.au](mailto:SM-CAST_secretariat@utas.edu.au)), for their contributions in supporting CAST activities throughout the year.

As we begin 2024, as always, we'll do our annual rotation of the CAST Chair. I'm pleased to announce our new 2024 Chair will be Phil Boxall of AAD. I wish Phil and our whole team all the best for another year of collaboration and excellence in Antarctic and Southern Ocean research innovation.

If you would like to learn more about CAST programs and activities, please visit our [CAST](#) website.

*Toni Moate*

2023 CAST Chair

