

2026



  
**IMOS**  
Integrated Marine  
Observing System

  
**NCRIS**  
National Research  
Infrastructure for Australia  
An Australian Government Initiative

# ACOMO

The Australian Coastal and Oceans  
Modelling and Observations Workshop

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# PROGRAM

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TUESDAY 30<sup>TH</sup> JUNE

8:00 AM	Registration	
8:45 AM	Welcome to Country & Introduction	Uncle Dougie
9:00 AM	<b>Keynote</b> Uncharted Data: Maximising the Value of Existing Ocean Observations	Nicole Jones
9:40 AM	NCRIS 20 Year Celebration	
10:00 AM	Morning Tea	
10:30 AM	<b>Session 1</b> Wide-swath satellite altimetry and novel subsurface observations improve predictions in a dynamic western boundary current	Colette Kerry
10:45 AM	Going with the (Better Represented) Flow: Lagrangian Metrics for SWOT Assimilation in the East Australian Current System	Luke Matisons
11:00 AM	Freshwater Signals & Salinity Dynamics in Torres Strait	Darren Engwirda
11:15 AM	A 30-year free running hydrodynamic model (using ROMS v4.2) and daily climatology for identification of marine heatwaves and coldspells in the East Australian Current System.	Robert Mason
11:30 AM	Bridging collaborative ocean research model development onto shared operational forecast workflow: The South East Australian Coastal Ocean Forecast System (SEACOFS) pilot case.	Phellipe Pereira Couto
11:45 AM	<b>Lightning Talks</b>	
12:00 PM	Lunch	

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TUESDAY 30<sup>TH</sup> JUNE

## Session 2

1:00 PM	Deep Ekman return flow regulates seasonality of the Circumpolar Deep Water intrusions onto the continental shelf	Yuhang Liu
1:15 PM	Validating satellite-derived training data for sea surface temperature downscaling using machine learning	Ajitha Cyriac
1:30 PM	High-Resolution Numerical Modelling of North Queensland Ports: Enhancing Tide and Current Representation in Complex Coastal Environments	Christelle Auguste
1:45 PM	Shelf-break Intrusions and Cross-shelf Exchange in the Central Great Barrier Reef	Severine Choukroun
2:00 PM	Modelling support for reef-based larval restoration	Clothilde Langlais

## 2:15 PM Lightning Talks

2:30 PM Afternoon Tea

## Session 3

3:00 PM	The oceanographic game change from the SWOT satellite	Benoit Legresy
3:15 PM	Assessing Bluelink's Relocatable Ocean Atmosphere Model (ROAM) using a wide range of physical oceanographic data, from IMOS and international space agencies	David Griffin
3:30 PM	Seasonal Redistribution of Riverine Freshwater over the Western Java Sea-Sunda Shelf from High-Resolution Regional NEMO Experiments	Xingkun Xu

## 3:45 PM Lightning Talks

## 4:00 PM Posters

5:00 PM Close

6:00 PM Dinner  
University Club, Dobson Road, Sandy Bay Campus  
*Please see map over page*

imbros

Dinner is sponsored by Imbros Pty Ltd

# PROGRAM

WEDNESDAY 1<sup>ST</sup> JULY

8:00 AM	Registration	
9:00 AM	<b>Keynote</b> From Snapshot to System: Harnessing Micro-ROV Technology for Integrated Reef and Coastal Science	Gemma Galbraith
9:40 AM	Morning Tea	
10:10 AM	<b>Session 4</b> Filling the gaps between coastal tide gauges – extending it to sea level projections	Oceane Richet
10:25 AM	New observational datasets enabling nationally consistent and locally relevant assessments of the impacts of sea-level rise on Australia's coasts	Ben Hague
10:40 AM	Climate warming drives divergent larval supply trends in a connected marine population	Katie Cresswell
10:55 AM	Drivers of Non-uniform Warming Inshore Of The East Australian Current	Fernando Sobral
11:10 AM	Escalating future coral bleaching risk at Ningaloo Reef revealed by high-resolution climate projections using deep learning	Chaojiao Sun
11:25 AM	SeaScope FVON: user-friendly access to ocean data from the global Fishing Vessel Observing Network	Peter McComb
11:40 AM	<b>Lightning Talks</b>	
12:00 PM	Lunch	

# PROGRAM

WEDNESDAY 1<sup>ST</sup> JULY

<b>1:00 PM</b>	<b>Keynote</b> AI/ML: is it just another tool or a revolution for prediction systems	Gary Brassington
<b>1:40 PM</b>	<b>Session 5</b> Integrating Observations, Physics-Based Modelling and Deep Learning Remote Sensing to Assess Water Quality in the NSW Marine Estate	Jake Stanaway-dowse
<b>1:55 PM</b>	Shared workflows for cross-scale Regional and Coastal Modelling in Australia	Helen Macdonald
<b>2:10 PM</b>	Characteristics and drivers of the coastal equatorward countercurrent in the southeastern Australian shelf	Claudio Cardoso
<b>2:25 PM</b>	A new regional coupled climate model in the ACCESS model family	Ashley Barnes
<b>2:40 PM</b>	Afternoon Tea	
<b>3:00 PM</b>	Discussion: AI/ML	
<b>4:00 PM</b>	<b>Posters</b>	
<b>5:00 PM</b>	End	
<b>6:00 PM</b>	Early Career Researcher (ECR) Mixer The Metz, 217 Sandy Bay Road, Sandy Bay <i>Please see map over page</i>	

# PROGRAM

THURSDAY 2<sup>ND</sup> JULY

8:00 AM Registration

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9:00 AM CoastRI update

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## Session 6

9:15 AM Spencer Gulf's Warming, Salinification, and Shifting Currents: Initial High-Resolution Projections from Dynamical Downscaling Hugo Bastos de Oliveira

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9:30 AM eSA-Marine and particle tracking: using a regional forecasting model to manage response to harmful algal blooms Charles James

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9:45 AM Optimal policies for responding to marine heatwave impacts on fisheries Richard Takyi

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10:00 AM Coupled modelling of tropical cyclones over the Northwest Shelf of Australia Chris Bladwell

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10:15 AM Morning Tea

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## Session 7

10:45 AM Revising GBR Water Quality Targets Using new observation and advanced modelling Mathieu Mongin

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11:00 AM Hydrodynamic modelling of Macquarie Harbour, Tasmania Mike Herzfeld

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11:15 PM Adaptive Real Time Data Visualisation to Enhance Marine Operations Geoffrey Wake

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11:30 PM Discussion: Observations and Modelling for "events"

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12:15 PM Close & Awards

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12:30 PM Lunch & End

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