



AUS
SEABED

News

Seabed Engagement Lead's Note

It's hard to believe we're already in May, where has the year gone? It's been a busy and rewarding start to the year across the AusSeabed community, with strong momentum continuing across engagement and collaboration.



A key focus has been the rollout of the redeveloped Survey Coordination Tool. We're seeing a shift in how the community is using the system, with greater emphasis on refining and updating Areas of Interest. This is helping build a clearer national picture of priorities and strengthening collaboration across organisations.

It was also great to connect with many of you at Hydrospatial 2026 in Wellington. The event was a fantastic showcase of regional capability and collaboration, and I'd like to thank the Australasian Hydrographic Society for hosting such a successful conference.

We thank Anne Kennedy for her time representing industry on the AusSeabed Steering Committee and welcome Tim Garvan who has taken on Ocean Infinity's Steering Committee industry representative role.

Our working groups continue to make strong progress, particularly the Multibeam and Bathymetric LiDAR Guidelines, alongside renewed activity in the QAX and Indigenous Engagement groups.

This edition also marks the retirement of one of our OG's, Neal Evans. Neal began his career in 1997 at the then Bureau of Resource Sciences, now Geoscience Australia. Neal has made a lasting contribution to the marine geospatial community, and we thank him for his dedication over nearly three decades.



Finally, a shoutout to the next generation of hydrographers already engaging with the hydrographic community. The Prime Optimisers, a team of Year 12 students, delivered an impressive showcase presentation on their project exploring sub-bottom profiling which we are highlighting further in the newsletter for those of you that missed it. We hope to see more young talent entering the field in the future.

Looking ahead, World Hydrography Day in Wollongong will be a great opportunity to reconnect, share ideas and continue shaping the future of seabed mapping together. Look out for the AusSeabed Workshops which will be held during the course of the event. Further details will be provided in the coming weeks.

Thank you all for your continued contributions.

Cheers,
Ryan de Wet
Seabed Engagement Lead

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●	New IMOS AODN Portal improves marine a (https://communication.ga.gov.au/pub/pubT_aid=52c24800331e4279&#52c24800331e4)
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●	Upcoming Events (https://communication.ga.gov.au/pub/pubT_aid=21499ec12e975836&#21499ec12e975)
●	Training Opportunities (https://communication.ga.gov.au/pub/pubT_aid=708faa981e9672c5&#708faa981e9672)

The Prime Optimisers

We were delighted to have The Prime Optimisers present at the last AusSeabed Showcase, learning about the research and work they have undertaken during their FIRST LEGO League Challenge journey. It was also fantastic to see several members of our community involved with this team, providing information, advice and feedback.

To learn about the team's experiences keep an eye on the [AusSeabed playlist](https://youtube.com/playlist?list=PL0jP_ahe-BFmyBvLLgrRlPrMamu-oEpMP&si=mp9JhMi3tUB4MgXj) (https://youtube.com/playlist?list=PL0jP_ahe-BFmyBvLLgrRlPrMamu-oEpMP&si=mp9JhMi3tUB4MgXj), and read their article below!



The Prime Optimisers - AJ, Nina, Jason & Simon

Participating in the [FIRST LEGO League Challenge \(FLL\)](https://www.firstaustralia.org/first-lego-league-challenge) (<https://www.firstaustralia.org/first-lego-league-challenge>), was more than just a competition—it was a journey of teamwork, discovery and innovation.

During the UNEARTHED season, we met weekly over five months to develop our Innovation Project. We began by researching twelve different archaeological challenges across land and sea, and took part in over ten excursions and expert meetings with engineers, cartographers, surveyors, historians, archaeologists and filmmakers. From this, we chose to focus on maritime archaeology and mapping.

Inspired by Disney's Shipwreck Hunters, we noticed a key problem: suspected shipwrecks buried beneath coral couldn't be confirmed because sonar can't penetrate the seabed surface. Magnetometers were also limited, as they cannot detect older ships built from non-magnetic materials like wood and copper.

As we explored possible solutions, we considered Ground Penetrating Radar (GPR) and LiDAR, but found they were impractical due to water depth and clarity. A major breakthrough came when we met Perth-based geophysicist Peter Eccleston, who introduced us to marine geophysics. With his guidance, we proposed using PINGER Sub Bottom Profiling (SBP), an acoustic method that can "see" beneath the seabed—and he confirmed our idea was viable.

We then designed B-TPO, an Unmanned Surface Vessel (USV) equipped with a PINGER for remote SBP, capable of reaching difficult areas while minimising seabed disturbance. A key milestone was presenting our concept to maritime heritage specialists from the WA Department of Transport. Maritime archaeologist Patrick Morrison shared that similar SBP methods had already been successfully used on shipwrecks, confirming our approach was not just theoretical, but practical.

Encouraged by this, we built a motorised prototype of B-TPO and refined it with expert feedback. Our work led to some incredible opportunities, including a public showcase at SciTech, winning the FLL Regional Champions Award (Forrestfield), and receiving the Nationals West Core Values Award at Curtin.

The highlight came after the competition, when we were invited to present our project to over sixty professionals from Geoscience Australia at the AusSeabed Showcase. We also learned about Indigenous engagement and scientific mapping from leading experts, which was both inspiring and motivating.

As the season ends, we feel incredibly fortunate to have explored maritime archaeology, geophysics and mapping. We hope our ideas can contribute to uncovering hidden shipwrecks and help bring lost stories back into history.

With the next FLL theme launching in August, we're excited for what's ahead. Until then, we'll keep learning, collaborating and having fun—while aiming to make a positive impact.

New IMOS AODN Portal improves marine and climate data discoverability

While AusSeabed acts as central hub for bathymetry and other seabed geophysical data, Australian water column data is centrally discoverable through the Australian Ocean Data Network.

The Australian Ocean Data Network invites our community to help test their new portal and make sure it meets your needs.

The Integrated Marine Observing System (IMOS) Australian Ocean Data Network (AODN) operates online infrastructure for marine and climate data resources. It is responsible for managing the IMOS data collection and is augmented with data from other partners and data contributors. Data access is provided through the IMOS AODN Portal.

The IMOS AODN have developed a new AODN Portal which will significantly improve access to Australia's marine data. The interface has been updated to better align with website accessibility standards, making it easier for a wider range of users to explore marine data. New features include:

- **Mobile and tablet-friendly design** – a new responsive layout ensures seamless access to marine data across devices.
- **Data sub-setting feature** – allowing users to extract targeted portions of data from large datasets more efficiently.
- **Data processing migration** – improving automation and scalability.
- **Optimised cloud formats** – datasets have been re-processed into cloud-optimised formats, enabling faster and more efficient access for data science users and in machine-to-machine applications.

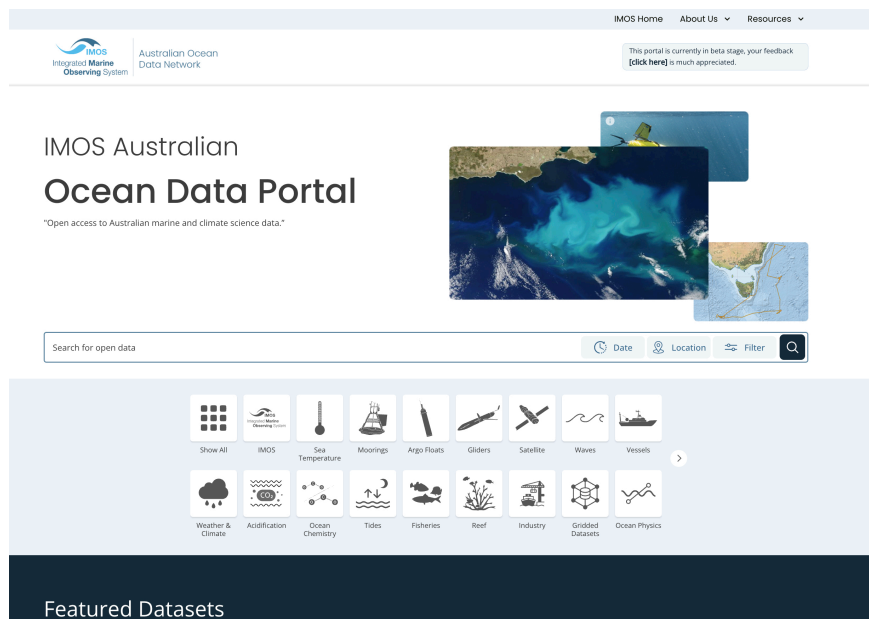
IMOS has released the new beta version of the AODN Portal and invite the community to explore its enhanced features ahead of the full launch. During this beta phase, user feedback will play an important role in refining functionality, performance and overall usability.

We encourage all users to explore the beta Portal and provide feedback via [the online form](#)

(<https://forms.office.com/pages/responsepage.aspx?id=VV3rFZEZvEaNP6sII03uClbxNcrqZItDmWw3jsls7JBUMEJTRENHV1o4QzcyWUtKUzJZU1U2SDk1US4u&route=shorturl>) to

help shape the final release.

<https://portal-beta.aodn.org.au/> (<https://portal-beta.aodn.org.au/>)

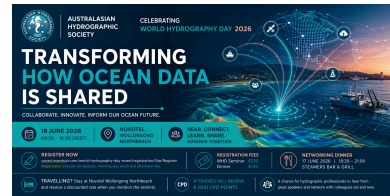


World Hydrography Day

Join the AusSeabed community in Wollongong next month to celebrate World Hydrography Day!

World Hydrography Day, 21 June, is our annual celebration of all things hydrography, bringing awareness about the importance of hydrography in all facets of ocean knowledge.

This year World Hydrography Day falls on the Sunday, so the week before has been is packed with meetings and events to advance and celebrate our community.



AusSeabed Workshops

AusSeabed will be holding a day of face-to-face workshops on the **17th of June 2026 at the Novotel Wollongong**, to coincide with the World Hydrographic Day events.

There will be several sessions covering:

- The National Seabed Mapping Plan
- Indigenous Engagement
- LiDAR Guidelines
- Multibeam Guidelines
- Education and Outreach, and
- Q&A

Observers and new members are most welcome.

To register your interest in attending some or all of the workshops please complete the **EOI for AusSeabed Workshops form** (<https://forms.cloud.microsoft/Pages/ResponsePage.aspx?id=OmFbZEymUEKXX19peH0CjUO0pYglhdIBnq5JAEvUPzZUM0xXTUcwSVc3SjdDVEEyOUkwN1ZGSEhJNy4u>).

If you are interested in the workshops, but also attending the HIPP session that day please flag that in the form.

A finalised agenda for the day will be shared with participants.

Networking Dinner

The Australasian Hydrographic Society will be hosting a networking dinner from 6:30pm, 17 June at Steamers Bar and Grill.

To register for the dinner visit the **AHS website** (<https://ahs.asn.au/event-6666599>).

Transforming how ocean data is shared

To celebrate World Hydrography Day the Australasian Hydrographic Society will be hosting their annual event 18 June at the Novotel Wollongong.

For more information or to register for the event, visit the **AHS website** (<https://ahs.asn.au/event-6666599>).

New STAR Network Hydrosatial Working Group (HWG) formed for the SW Pacific!



Several AusSeabed community members have joined forces with colleagues from our Pacific neighbours to promote hydrography throughout the region. Read on to learn about the work they will be doing and the 2026 Science, Technology, and Resources (STAR) Conference.

The **STAR Hydrospatial Working Group (HWG)** was established at the end of 2025, to inform, educate and promote hydrospatial sciences in the SW Pacific region, particularly where it supports safe navigation, coastal and urban marine development, resource management, and environmental stewardship. It is part of the **STAR Network**, an independent Pacific-led organisation.

Current members of the HWG include:

- **John Maschke** STAR HWG Chair
- **Cory Brooks** - No Humes.
- **Belen Jiminez** - Freelance Hydrographic Surveyor
- **Dr Liz Johnstone** - Revelare Hydrosatial
- **CDR Jervis Robinson** - Fiji Hydrographic Office
- **Dr Nikhil Singh** - Kahuto Pacific
- **Paul Seaton** - Fugro
- **Emily Twiggs** - EOMAP
- **Denis Hains** - H2i

The HWG is contributing to the technical content of the **2026 STAR Conference, Suva, Fiji, 16-21 Nov 2026** (https://www.star.org.fj/_files/ugd/9fa70e_3cd347ee7ae540d7a7de1f51cce595c3.pdf) and is calling for abstract submissions. Bathymetry and hydrography will be particularly relevant to the conference theme, ***“The Role of the Pacific Island Nations in the Development of their Energy, Minerals, and Geo-resources Security Through Urban Sea Systems”***.

Conference information and abstract submission here: [Conference | Star Network](https://www.star.org.fj/star-conference) (<https://www.star.org.fj/star-conference>).

Publications

You may have already met Sean Ness as part of the Marine Data Register rollout. As part of the changing of the guard in the National Seabed Mapping team, you will see and hear more from Sean about all things data management, especially in conversations where Neal played a key role.



Name	Source	Metadata link	Portal link
Henderson Perth Canyon to Henderson Bathymetry 16m 2015	Schmidt Ocean Institute	Link (https://pid.geoscience.gov.au/dataset/ga/150712)	Link (https://portal.ga.gov.au/restore/260095ea-7f55-41f1-a15a-3264cd397817)
Merri Marine Sanctuary Bathymetry 1m 2014	Deakin University	Link (https://pid.geoscience.gov.au/dataset/ga/150707)	Link (https://portal.ga.gov.au/restore/6a657e5f-b211-4753-931b-82494372d2d6)
Fremantle Southeast Indian Ridge to Port Hedland Bathymetry 128-210m 1996	Bishop Museum, Hawaii	Link (https://pid.geoscience.gov.au/dataset/ga/150709)	Link (https://portal.ga.gov.au/restore/832109d0-c81a-4742-a4c1-2c8f49f5c3d5)
Perth Canyon Bathymetry 128-210m 1994	Woods Hole Oceanographic Institution	Link (https://pid.geoscience.gov.au/dataset/ga/150795)	Link (https://portal.ga.gov.au/restore/647a84ba-b7c6-46b3-b1df-35dc30b4b944)
Fremantle Southeast Indian Ridge Hobart Bathymetry 8-210m 1995	Oregon State University	Link (https://pid.geoscience.gov.au/dataset/ga/150796)	Link (https://portal.ga.gov.au/restore/cb939703-be85-4584-b343-e95062fa538e)
Macreadie Seagrass Bathymetry 0.2m 2015	Deakin University	Link (https://pid.geoscience.gov.au/dataset/ga/150704)	Link (https://portal.ga.gov.au/restore/ac1cff8c-5216-43a2-ba63-c5037be3677a)
Port Phillip Bay Drift Algae Bathymetry 2m 2018	Deakin University	Link (https://pid.geoscience.gov.au/dataset/ga/150890)	Link (https://portal.ga.gov.au/restore/8db3ccf7-4317-4826-82b3-3a6ffc8222d0)
Hunter Marine Park Bathymetry 5m 2019	New South Wales Survey Authority, Department of Planning Industry and Environment	Link (https://pid.geoscience.gov.au/dataset/ga/150891)	Link (https://portal.ga.gov.au/restore/95ebd566-8919-44a5-b4e0-6cb642372ad2)
Forster Pacific Palms Cape Hawke, NSW Backscatter 5m 2019	Department of Climate Change, Energy, the Environment and Water	Link (https://pid.geoscience.gov.au/dataset/ga/150868)	Link (https://portal.ga.gov.au/restore/8a8ca9cb-e9a3-4652-8fa6-df77956d327d)
Forster Pacific Palms Cape Hawke, NSW Bathymetry 5m 2019	Department of Climate Change, Energy, the Environment and Water	Link (https://pid.geoscience.gov.au/dataset/ga/150868)	Link (https://portal.ga.gov.au/restore/d7b74978-d25b-441e-92c7-438de46038ab)

Crowdy Head Offshore, NSW Backscatter 5m 2021	Department of Climate Change, Energy, the Environment and Water	Link (https://pid.geoscience.gov.au/dataset/ga/150869)	Link (https://portal.ga.gov.au/restore/ab71f893-8cec-4dc9-bc1f-a9834807a5dc)
Crowdy Head Offshore, NSW Bathymetry 5m 2021	Department of Climate Change, Energy, the Environment and Water	Link (https://pid.geoscience.gov.au/dataset/ga/150869)	Link (https://portal.ga.gov.au/restore/8df96a1d-8445-4fb5-b40f-ec43f6281284)
Southern Kangaroo Island Mapping expedition Bathymetry 1m 2022	Parks Australia	Link (https://pid.geoscience.gov.au/dataset/ga/150973)	Link (https://portal.ga.gov.au/restore/36ef8a0f-7130-494c-ad15-6519c506d90f)
Southern Kangaroo Island Mapping expedition Backscatter 1m 2022	Parks Australia	Link (https://pid.geoscience.gov.au/dataset/ga/150973)	Link (https://portal.ga.gov.au/restore/c3970b69-00bf-46e3-8f93-698a46fccdbf)
CSIRO Multibeam Backscatter Mapping of the Continental Shelf Backscatter 75m	CSIRO	Link (https://pid.geoscience.gov.au/dataset/ga/151014)	Link (https://portal.ga.gov.au/restore/898053a9-f815-4198-9022-9f8acbf7fc1d)
Queensland Plateau (South-West) QLD Bathymetry HIPP SI 1047 32-128m 2024	Australian Hydrographic Office	Link (https://pid.geoscience.gov.au/dataset/ga/151053)	Link (https://portal.ga.gov.au/restore/b96be00b-8ebf-4649-a70e-ddb53ea02965)
Western Approaches to Broome Bathymetry HIPP SI 1048 30m 2024	Australian Hydrographic Office	Link (https://pid.geoscience.gov.au/dataset/ga/151054)	Link (https://portal.ga.gov.au/restore/c39993c1-7405-4470-9232-2a69b00d421c)
Cape Pasley to Pollock Reef Bathymetry HIPP SI 1054 30m 2025	Australian Hydrographic Office	Link (https://pid.geoscience.gov.au/dataset/ga/151055)	Link (https://portal.ga.gov.au/restore/e27dad36-9149-45f3-a136-d4e9729f72ff)

Working Group Updates

Indigenous Engagement

The Indigenous Engagement Working Group are busy gathering case studies and user stories, to showcase successful partnerships during seabed mapping projects on Sea Country. Once compiled, these will be shared with the wider community.

We look forward to meeting new members and hearing about experiences during our workshop at the World Hydro Day Conference in Wollongong.

If you have a story to contribute, please reach out to [Emily.Twiggs](mailto:Emily.Twiggs@eomap.com) (<mailto:Emily.Twiggs@eomap.com>) or email AusSeabed.

Multibeam Guidelines Review

The AusSeabed Multibeam Guidelines Working Group has continued progressing the 5-year review of the Multibeam Guidelines, with several productive meetings held over recent months. The Working Group has been actively reviewing technical sections of the guidelines, incorporating emerging technologies, and updated standards and guidance from the International Hydrographic Organization (IHO).

Contributions from representatives across government, academia and industry have helped strengthen the guideline update process, ensuring the revised document reflects current best practice for seabed mapping within Australia and aligns with international developments.

Bathy LiDAR Guidelines

Work has started on revision of the guidelines, addressing the changes to the original efforts in light of the ICSM update.

Those with knowledge and interest in LiDAR bathymetry are still encouraged to reach out via [email](mailto:ausseabed@ga.gov.au) (<mailto:ausseabed@ga.gov.au>).

QAX

QAX development has been reinvigorated in the FY25/26 by hiring a software developer who commenced late January 2026.

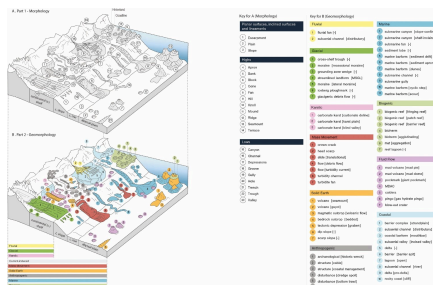
Work to date has largely been to lift the existing code base to utilise modern libraries and services with an uplifted version of QAX being internally tested over the course of May/June 2026.

The working group will be meeting again during events surrounding World Hydro Day 2026 and will be discussing the opportunities to further develop QAX over the next 12months.

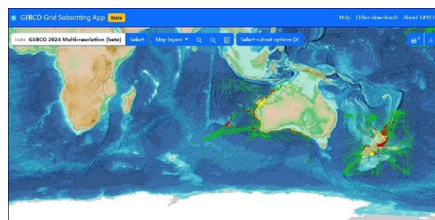
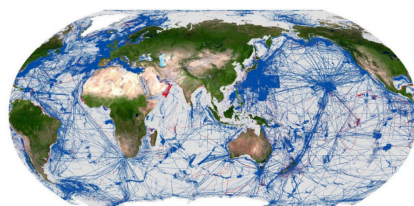
If you would like to contribute to an AusSeabed Working Group, we'd love to hear from you!

Please reach out to us at ausseabed@ga.gov.au

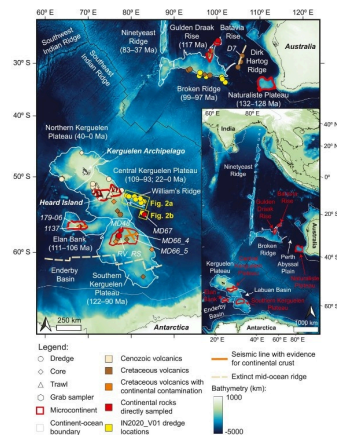
Reading Corner



Coastal to deep-marine geomorphic classification
(https://www.sciencedirect.com/science/article/pii/S001282522601ref=pdf_download&fr=RR-2&rr=9fd7dbe45931e7d1)

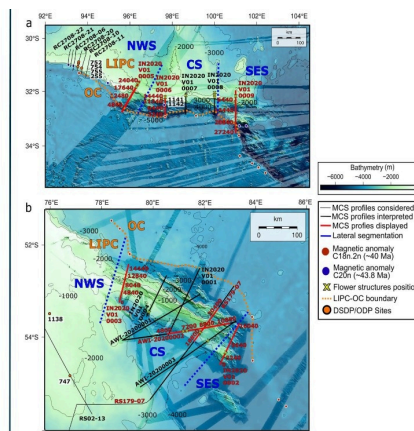


(<https://seabed2030.org/2026/04/20/global-seabed-mapping-reaches-new-milestone-as-five-million-square-kilometres-added-in-a-year/>) **GEBCO announces 28.7% of the world's ocean floor now mapped** (<https://seabed2030.org/2026/04/20/global-seabed-mapping-reaches-new-milestone-as-five-million-square-kilometres-added-in-a-year/>)



2026 GEBCO Bathymetric Grid release

(<https://www.gebco.net/news/release-gebco2026-grid>)



Discovery of the William's Ridge and Ridge System: Stratigraphic Evolution of the Kerguelen Large Seamount Microcontinents, Kerguelen Plateau Igneous Province

(<https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2023JB027493>) (<https://doi.org/10.1002/2023JB027493>) (<https://onlinelibrary.wiley.com/doi/full/10.1029/2023JB027493>)

Apply for sea time



Piggyback Applications are still open for fully-funded grants through the Marine National Facility for research on the RV Investigator.

Geoscience Australia's [Resourcing Australia's Prosperity initiative](https://www.ga.gov.au/scientific-topics/resourcing-australias-prosperity)

(<https://www.ga.gov.au/scientific-topics/resourcing-australias-prosperity>), is a Stream 1 priority for the MNF. If you are planning projects that align with the initiative please reach

out marinesurveys@ga.gov.au (<mailto:marinesurveys@ga.gov.au>) to connect with GA scientists.

For more information about applying for seetime visit the [website](https://www.csiro.au/en/about/facilities-collections/MNF/Apply-for-sea-time) (<https://www.csiro.au/en/about/facilities-collections/MNF/Apply-for-sea-time>).

Upcoming Events

World Hydrography Day Seminar & Dinner

Date: Seminar 18 June 2026, Networking dinner 17 June 2026

Location: Novotel, Wollongong NSW

[More information and registration](https://ahs.asn.au/event-6666599) (<https://ahs.asn.au/event-6666599>)

AusSeabed Workshops

Date: 17 June 2026

Location: Novotel, Wollongong NSW

[Form to register interest in attending](https://forms.cloud.microsoft/Pages/Response?id=OmFbZEymUEKXX19peH0CjUOOpYgJhldBng5JAEvUPzZUM0xXTUcwSVc3SjdI) (<https://forms.cloud.microsoft/Pages/Response?id=OmFbZEymUEKXX19peH0CjUOOpYgJhldBng5JAEvUPzZUM0xXTUcwSVc3SjdI>)

AMSA 2026

Date: 30 August - 3 September 2026

Location: Qt Canberra, ACT

[More information and registration](https://amsa2026.amsa.asn.au/)
(<https://amsa2026.amsa.asn.au/>)

STAR Conference

Date: 16 - 21 November 2025

Location: Grand Pacific Hotel, Suva Fiji

[More information and registration](https://www.star.org.fj/star-conference)
(<https://www.star.org.fj/star-conference>)

Training Opportunities

Multibeam Training Course | MBC87

The 87th Multibeam Sonar Training Course, hosted by CSIRO and Acoustic Imaging will be held in Australia for the first time since 2018.

This six-day course includes 36 lectures and provides theoretical and practical instruction on marine swath survey technology and techniques. Topics include hydrographic surveys, continental shelf boundary delimitation, offshore engineering, harbour dredging, fisheries habitat mapping, route surveys, and scientific research.

Course date and location:

Hobart: 25 - 30 May 2026

For more information, and to register for the course, visit the MBCourse website (<http://mbcourse.com/event/mbc87-hobart-australia/>).

Multibeam Crash Course | HydroOctave

HydroOctave, in collaboration with the Australasian Hydrographic Society, will deliver the Multibeam Crash Course in November 2026.

The course provides practical instruction aimed at supporting operational decision-making in the field. Theoretical content is included only where necessary to provide context for practical applications.

Course dates and locations:

Brisbane: 9 - 13 November 2026

Perth: 23 - 27 November 2026

For more information, and to register for the course, visit the HydroOctave website (<http://www.hydrooctave.com/>).



HydroOctave
CONSULTING

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