



## AusSeabed Newsletter No. 24 June 2021

Dear Seabed mapper and lovers,

This month, we are celebrating our work towards mapping the Australia's seafloor alongside World Ocean's Day and World Hydrography Day.

In the past year, we have added 878,206 km<sup>2</sup> of the seabed data to our portal. This would not have been possible without Schmidt Ocean Institute (SOI) who kept pinging through 2020, with over 200,000 km<sup>2</sup> of our seafloor mapped during 15 voyages. Thank you to SOI and the scientists, technicians, crew who made this happen and for partnering with AusSeabed.

This past month, we've also contacted you to participate in our AusSeabed Steering Committee Elections and Portal Enhancement Survey, which will help shape the new upgrade to the AusSeabed Data Portal. We appreciate you taking the time to complete the survey.

Finally, we invite you to join our next Quarterly Showcase on June 23rd to hear about our latest achievements and progress, and the next quarter goals!

See you there,

Your Steering Committee Chair,

Kim Picard

## Voting Closes June 15 for the AusSeabed Election

Voting is open until the 15<sup>th</sup> of June for our two private industry and one academic position on the AusSeabed Steering Committee. Elected members will sit on the Steering Committee for a period of two years. To vote, please fill out the [voting form](#). Remember each AusSeabed collaborator only gets one vote, so talk with your colleagues to register only a single vote for your organisation.

Congratulations to our re-elected state government and international members which have been filled without contest:

- State government representative: Western Australia Department of Transport (WA DoT, represented by Ralph Talbot-Smith)
- International representative: New Zealand National Institute of Water and Atmospheric Research (NIWA, represented by Kevin Mackay)

## AusSeabed Collaborative Head Arrangement

On May 19<sup>th</sup>, Commodore Stewart Dunne, Hydrographer of Australia with the Australian Hydrographic Office, and Maree Wilson, Branch Head at Geoscience Australia signed the AusSeabed Collaborative Head Arrangement (CHA). Also participating in the arrangement are the Australian Antarctic Division, Australian Institute of Marine Science and CSIRO. The collaboration aims to strengthen the governance of the program, which in turn will contribute to improving coordination of seabed mapping effort around Australia to more rapidly map Australia's marine jurisdiction. The collaboration also focuses on improving the quality, discoverability, and access to these fundamental hydro-spatial datasets.



## Portal Enhancement Survey closes June 18

We are updating the [Marine Data Portal](#)! The redesign process is being led by customer and stakeholder feedback to ensure that our new design reflect the priorities of the AusSeabed community.

We have created an Online Survey (<https://surveymonkey.com/r/P6333JK>) that takes about 35 minutes to complete. Anyone who uses the Portal can complete this survey and please forward to others. Thank you in advance for helping to improve your AusSeabed experience!

Please forward to other individuals that might wish to complete the survey. The survey will close at **5pm on 18/06/2021**. Thank you for helping to improve the AusSeabed experience!

If you have any questions about the Survey please send them to [ausseabed@ga.gov.au](mailto:ausseabed@ga.gov.au) with the subject line: AusSeabed Portal Enhancement Survey

## GMRT-AusSeabed Project Launch

We have officially launched the GMRT-AusSeabed ARDC platforms project. Visit the [ARDC project page](#) and read the [article](#) to learn about how we are going to piece together the puzzle of Australian seabed data.

## GEBCO Guiding Committee Meeting update

The First 2021 Intersessional Meeting of the GEBCO Guiding Committee (GGC-IS01) took place virtually on the 26 – 27 May 2021. The meeting covered a wide range of topics from governance discussions to progress updates of the various [sub-committees](#) (Regional Underwater Mapping, Technical, and Outreach & Engagement). Amongst the news, the GEBCO cookbook is getting an uplift and seeking volunteers on its editorial board; a new sub-committee on Education and Training is being established, the popular [Seabed 2030 survey](#) is being re-opened for inputs. Minutes of the meetings will be published shortly [here](#) and next meeting planned for January 2022.



The HIPP is far more than just bathymetry; with backscatter, seabed samples and water samples now routinely being collected. Long term oceanographic observations commenced recently with the installation and commissioning by EGS of specially constructed oceanographic data buoys in the Torres Strait.

Around Tasmania, EGS Survey have completed operations in the Bass Strait (SI 1013) following a very successful data gathering campaign in the seas north of King Island and the initial survey of the Hobart National Reference Surfaces. This data will go a long way to upgrading the navigational products in the area, as well as coverage of parts of the Apollo Marine Park. The Hobart NRS and will also provide a calibrated reference surface for other survey units to use while conducting equipment checks for accuracy.

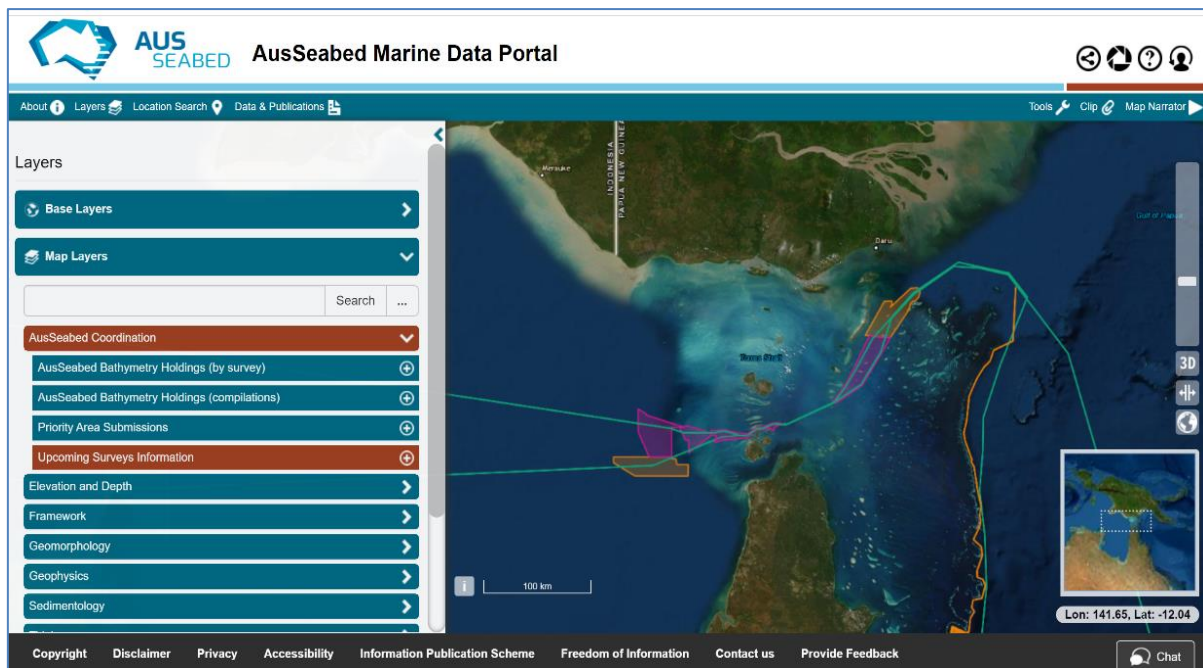
iXblue Survey have also been conducting operations in the region with SI 1020 (Banks Strait). Together with Geoscience Australia we have reached an agreement to expand the original survey area and add sub bottom profiling to this important survey area. This brings instant productivity advantages and cost savings as we are using an already mobilised vessel.

Guardian Geomatics have recently mobilising out of Darwin for SI 1016 Beagle Gulf to Clarence Strait, this survey will continue on from the original survey conducted last year and will seek to improve the quality of the charting in the approaches to Darwin and to gain a greater insight into the delicate environmental ecosystem around our top end.

We have also embarked on a pioneering three-year mission to gather data in one of the most complex maritime areas in Australia. EGS Survey have constructed a series of dedicated oceanographic buoys which will gather a vast array of oceanographic and meteorological data from key locations in the Torres Strait over the next 3 years, to allow us to develop a better understanding of the environmental conditions in this complex, and strategically vital area.

You can view upcoming HIPP surveys on the “Upcoming Survey” layer in the AusSeabed [Data Portal](#).





## Bathymetry Data Publication through AusSeabed

The AusSeabed data publication process is currently undergoing a review and we kindly ask specific users with requests to process data for an area of interest to provide us with at least **1 month advance notice**, as this will allow us to plan and prioritize the workload appropriately.

We are continually trying to release new datasets, however, if you need the request completed more urgently then let us know why and we will assess the request and let you know of the outcome.

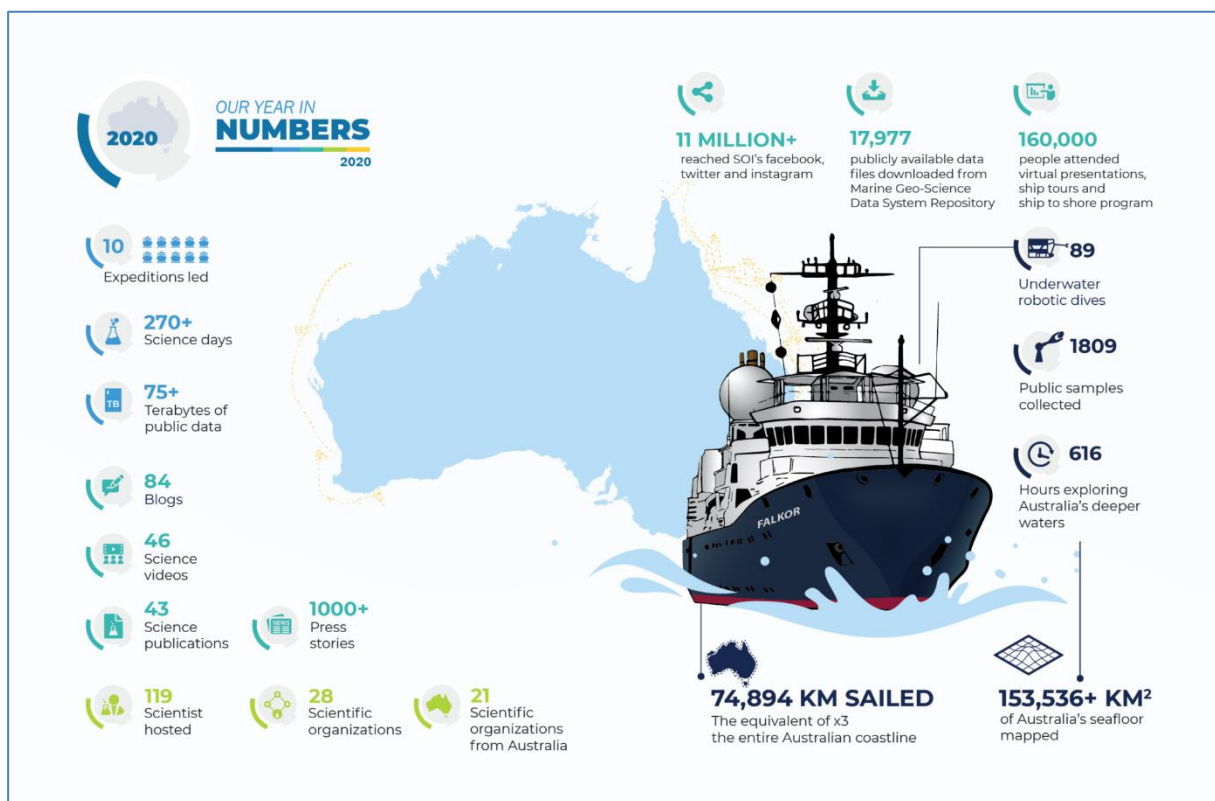
Additionally, we would appreciate it if you could include in your request the following via the [AusSeabed@ga.gov.au](mailto:AusSeabed@ga.gov.au) email:

- Name of the dataset or region:
- Reason for the request:
- Area of interest (geographic coordinates):
- Delivery format (geotiff, xyz etc):
- Expected data resolution (in metres):
- Deadline:

# Schmidt Ocean Institute releases 2020 Annual Report

The Schmidt Ocean Institute has released the 2020 Impact Report covering the RV *Falkor* voyages during 2020 exploring Australia's shelf edge, continental slope and offshore waters:

<https://schmidtocean.org/about/annual-reports/>



The report can be accessed as a PDF or through an interactive and digital-rich webpage. In particular, note the link 'Our year in numbers' showing new map data covering over 150 thousand sq km:

<https://2020annualreport.schmidtocean.org/our-year-in-numbers/>

## RV Falkor Surveying Effort

In late March, the RV *Falkor* departed Brisbane for the transit to Darwin and the start of their next expedition, finally wrapping up a full year based in Queensland. The two-week transit was an opportunity to collect additional EM302 and EM710 multibeam data by edge mapping previously collected data along the Great Barrier Reef upper continental slope and then continuously across northern Australia. Several days were also spent offshore of Cape York Peninsula completing the mapping coverage between Great Detached Reef and Saunders Reef, adding to the data previously collected during the Sep-Nov 2020 'Northern depths of the Great Barrier Reef' expedition.

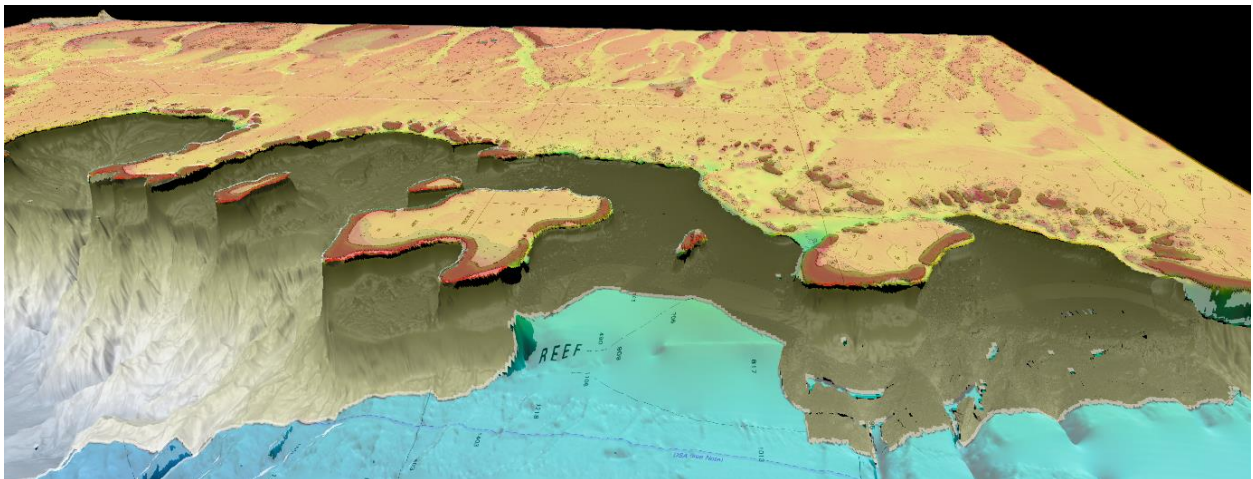


Image 2 -Screen capture of RV Falkor's mapped area around the detached reefs offshore of Cape York Peninsula.

You can read Dr Robin Beaman's reflections on the incredible year-long mapping and ROV diving effort by the Schmidt Ocean Institute's RV *Falkor* within the [Great Barrier Reef and Coral Sea](#).

We are wrapping up a successful collaboration with the Schmidt Ocean Institute (SOI).

The RV *Falkor* has conducted 15 voyages in Australian waters since January 2020. This has added more than 200,000km<sup>2</sup> in area of seafloor mapping, with most of it published through the AusSeabed Portal.





*Image3 - credit: Schmidt Ocean Institute*

The RV *Falkor* has now left Australian waters and is heading home to the Californian Coastline. Goodbye and look forward to seeing you again soon!

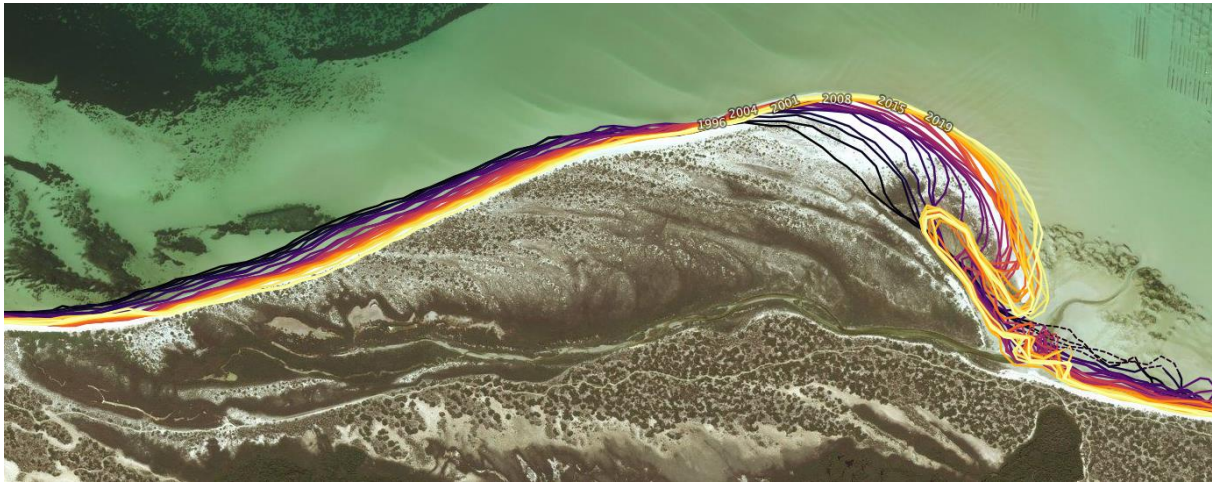
## UN World Ocean's Day

June 8 was UN World Ocean's Day. How did you celebrate? At Geoscience Australia, we hosted a viewing of the RV *Falkor*'s surveying effort. You can view beautiful videos and images of the surveys on the [SOI website](#). We hope that you all took time to reflect on everything you have achieved for the ocean over the past year. For AusSeabed, this included adding 878,206 km<sup>2</sup> of mapped ocean floor to the Portal and collaborating with SOI to explore how features such as seamounts and canyons affect seabed biodiversity. Happy World Ocean's Day!

## DEA Coastlines: revealing three decades of change

The evolution of Australia's coastlines can now be seen in unprecedented scale and detail, thanks to a new tool developed by Geoscience Australia's Digital Earth Australia (DEA) program. [DEA Coastlines](#) is a free dataset that includes annual shorelines and rates of coastal change along the entire Australian coastline from 1988 to the present. It combines satellite data with tidal modelling to map the typical location of Australia's entire 30,000 km coastline at mean sea level for each year. The tool is validated by nearly 58,000 independent measurements of coastline positions around Australia, and

was developed with the assistance of local councils, state governments, citizen science projects and academia across the country.



[Read more](#) about DEA Coastlines, see it at work on [DEA Maps](#), or ask questions to [dea@ga.gov.au](mailto:dea@ga.gov.au). See Dr Robbi Bishop-Taylor's seminar on the evolution and potential of the DEA Coastlines dataset here: [Time and Tide: Mapping Australia's dynamic coastal zone](#).

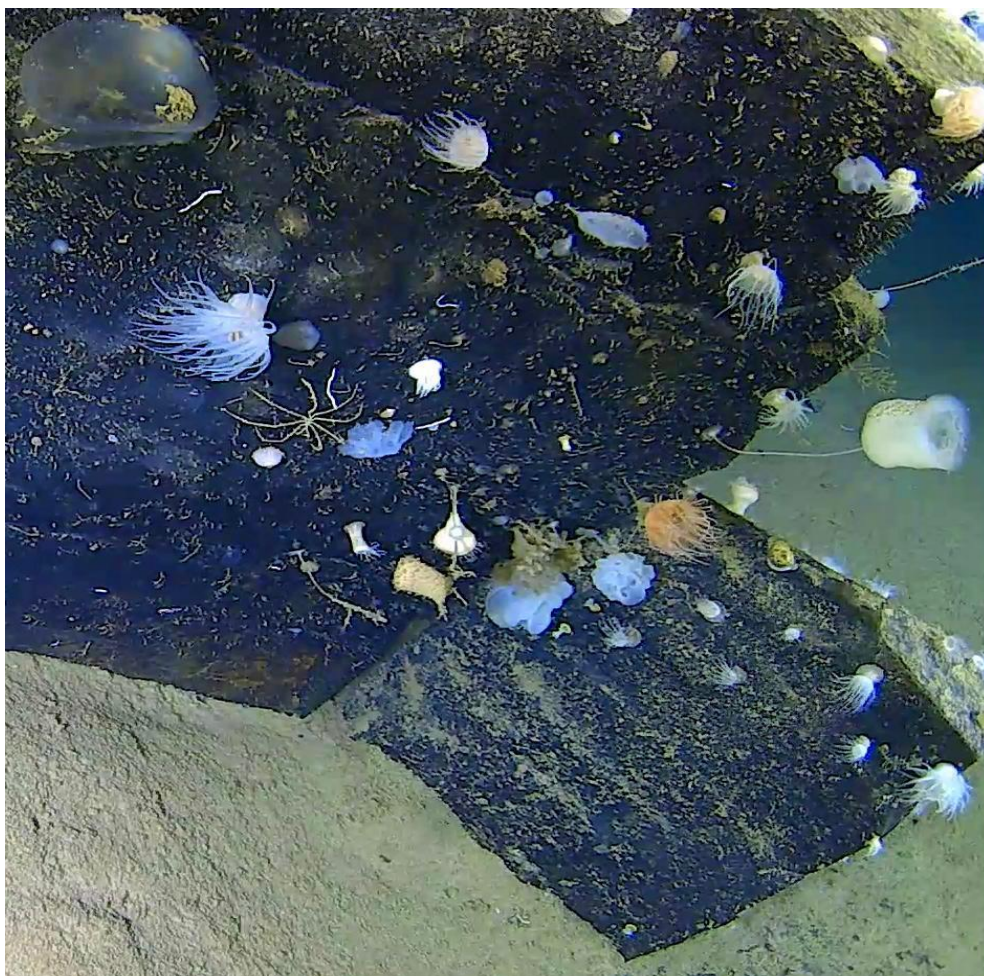
## **New Deep-Sea Research Centre in Western Australia!**

April 2021 saw the launch of the [Minderoo-UWA Deep-Sea Research Centre](#), supported with a major five-year grant from Minderoo Foundation's Flourishing Oceans initiative which aims to return the oceans to a healthy, thriving state.

The Centre, headed by Professor Alan Jamieson, will comprehensively explore and map the Indian ocean to hadal depths. Its mission is to increase knowledge of deep-sea biodiversity, ecology, habitats, ocean processes, and human impacts.

The first research expedition, aboard the DSSV Pressure Drop, has just ended, having explored the abyssal and hadal zones off the continental shelf of Western Australia. You can read more about the Centre and its work [here](#):





*Image5 - Sediment, rock outcrop, and benthic fauna at 4,700 m, North Australian Basin.*

## Upcoming Events

### AusSeabed June Quarterly Showcase

Join us for our next Quarterly Showcase! We will provide highlights and a progress update of the program.

**When:** June 23<sup>rd</sup> at 10-11 am AEST

**Where:** [Join the TEAMS meeting using this link](#) or contact us to receive an invite

### AusSeabed Fortnightly Showcases

We welcome any keen community members to join our sprint showcases to listen to what we got up! This one-hour time slot is an opportunity to follow our progress, provide

comments and raise concerns about our activities. If you want to join, please let us know.

**Time:** Every 3 weeks (next meet June 18<sup>th</sup>) 13:00-14:00 AEST/Canberra

## **AusSeabed Annual Workshops**

Keep your eyes open for upcoming information about our annual workshop to be held on July 29th and August 10th. These workshops will provide you with AusSeabed updates, including a review of the year that has been, the announcement of our new Steering Committee members, an overview of the 2021/22 work plan, and importantly, sessions to get familiar with new AusSeabed tools and provide inputs into upcoming projects. We look forward to seeing you there.

## **First Public Offering of an S-5B Hydrographic Surveyors Course in Australasia**

IIC Technologies and Deakin University are very pleased to announce they will run IIC Academy's S-5 Category B Hydrographic Surveyors program starting online in September 2021.

This course is designed for those with the desire to start or build a career in Hydrography. The course is recognized by the [FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers](#) (IBSC) and this is the first time that an S-5B accredited course has been offered to the public in Australasia.

This S-5B program will be delivered as a combination of remote learning and onsite practical's, ensuring students the knowledge and experience they need. Further, the IIC Academy S-5B program is the only S-5B to be endorsed to maximise distance learning, allowing greater flexibility and reduced costs for the student. To achieve the desire to be "by the community and for the community" IIC are working with Deakin University to partner in the delivery of the practical and assessment portions of the programme at their facilities in Warrnambool, Victoria, commencing April 2022.

If you want more information or wish to register please contact [david.crossman@iictechnologies.com](mailto:david.crossman@iictechnologies.com) or follow [the link](#).

## **First Public Offering of an S-8B Nautical Cartographers Course in Australasia**

Close on the heels of IIC's announcement of the Global Delivery of an IBSC S-5B Hydrographic Surveyors Course, IIC is very pleased to announce that it will also run an IBSC accredited S-8B Nautical Cartographers Course commencing September 2021.

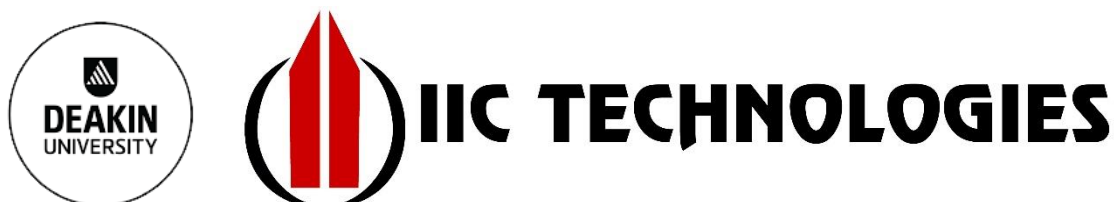
This 22-week course will provide students all the necessary theoretical and practical knowledge and skills required to undertake Nautical Chart production. The course is recognized by the [FIG/IHO/ICA International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers](#) (IBSC) and, as with the S-5B course, this is the first time that an S-8B accredited course has been offered to the public in Australasia.

This Program will be delivered to maximise remote learning methodologies, ensuring students gain the knowledge and experience they need, but in the most flexible and cost-effective manner possible.





If you want more information or wish to register please contact [david.crossman@iictechnologies.com](mailto:david.crossman@iictechnologies.com) or [nauticalcartographer@iicacademy.com](mailto:nauticalcartographer@iicacademy.com), or follow the [link](#).



## **Australian Marine Sciences Association (AMSA)**

### **2021 conference – 27 June to 2 July**

Registrations are open until 21 June 2021.

- June 28: AusSeabed will be presenting in the “Our Future Ocean: Delivering to the UN Decade of Ocean Science” Symposium
- June 29 “Applications of Seabed Mapping to Resource and Environmental Management during the Anthropocene’ Symposium

[Click here](#) for more information.

## **World Hydrography Day Seminar – 18 June**

AusSeabed will be presenting at the Hydrographic and Cadastral Survey World Hydrography Day seminar. The seminar will be held in Woolongong, NSW. The goal is to highlight the past, present, and future of hydrography by showing the important work of early hydrographers, progress in technology, and state of the art in technology. See the [event page](#) for more information.

## **Australasian Hydrographic Society HydroSpatial2021**

The Australasian Hydrographic Society is pleased to announce that its internationally recognised hydrographic conference program will return to Australia in 2021. The three-day Hydrospatial 2021 Conference is planned for the period 27-29 October 2021 and will be held in Cairns QLD at the Pullman Cairns International Hotel. The theme of

the AHS 2021 Conference is: 'Hydrography of the Future'. See the [conference website](#) for more information.

## **Share your work with the AusSeabed community**

Finally, a reminder as always that anyone with an interest in AusSeabed can sign up to the newsletter mailing list on our website, where you can also check out past issues. And please send any items for the next newsletter to [AusSeabedNews@ga.gov.au](mailto:AusSeabedNews@ga.gov.au)