

AusSeabed Newsletter No. 32 October 2022

Dear AusSeabed community,

It has been a busy month at the Australian Hydrographic Office, as we begin work on our 2022 Hydroscheme Program. You can stay up-to-date with the progression of the Program via the AHO ArcGIS Story Map, and view upcoming surveys on the AusSeabed Data Portal. The field work for one of the surveys, Clarence Strait to Dundas Strait (SI 1027) has already been completed, with four others now underway, Hydrographers Passage, QLD (SI 1029), Furneaux Group LiDAR (SI 1032), Escape Shoals to Lombadina Pt, WA (SI 1025) and Booby Is to D'Arcole Is, WA (SI 1026). We are also working towards publishing the survey program for FY 23/24 – HydroScheme 2023 in late October this year. It will be placed on the AusSeabed website. Remember, the community can submit requests for surveys in upcoming programs via the Survey Coordination Tool, under HIPP requests.

Thank you to those who came to our recent AusSeabed engagements: the Annual Update and Webinars, and the October Quarterly Showcase. Recordings are now online via the AusSeabed YouTube playlist to view at your leisure. It was my pleasure to present the fantastic progress of the AusSeabed Program over the 2021/22 financial year.

If you are a user of our Multibeam Guidelines or would like to see other guidelines produced by AusSeabed, please take some time to respond to the Questionnaire on Marine Standards and Best Practices. We will publish some new Satellite Derived Bathymetry (SDB) guidelines in the near future and plan to start working on some National Airborne LIDAR Bathymetry guidelines.

CMDR Nigel Townsend,

AusSeabed Steering Committee Chair

Newsletter in a nutshell...

- Update on AusSeabed
- New East Antarctic bathymetry near the Vanderford Glacier
- New reef to be named in the Great Barrier Reef
- Questionnaire on Marine Standards and Best Practices
- Reading corner
- Upcoming Events
 - Forum for Operational Oceanography (FOO) and Australian Coastal and Ocean Modelling and Observations (ACOMO) workshop: 21-23 November 2022, Fremantle WA
 - Australian Meteorological and Oceanographic Society 2022: 28 November 2 December, Adelaide SA
 - 37th International Conference on Coastal Engineering 2022: 4-9 December, Sydney NSW
 - Association of Public Authority Surveyors Conference 2023: 20-22 March, Coffs Harbour NSW
 - o EGU Annual Meeting 2023: 23-28 April, Vienna Austria
 - o GeoHab 2023: 8-12 May, La Réunion island
 - Locate 2023: 10-12 May, Adelaide SA

Update on AusSeabed

Recently we held our Annual Update/Webinars and our Quarterly Showcase. The recordings of these events are now online and available to view on our AusSeabed YouTube playlist.

The Annual Update/Webinars included an update on the highlights of the AusSeabed program over 2021/22 year and a diverse set of talks:

- The role of the AusSeabed Early Career Ocean Professional (ECOP) from Mardi McNeil (AusSeabed ECOP)
- Global Data Sharing: where are things headed? from Phillipa Bricher (Australian Hydrographic Office)
- AusSeabed Data Hub connections from Joshua Sixsmith (Geoscience Australia)
- A two-part seabed geomorphology classification scheme by Rachel Nanson (Geoscience Australia)
- Hydroscheme Update by CMDR Nigel Townsend (Australian Hydrographic Office)
- National Areas of Interest Update by Scot Nichol (Geoscience Australia)

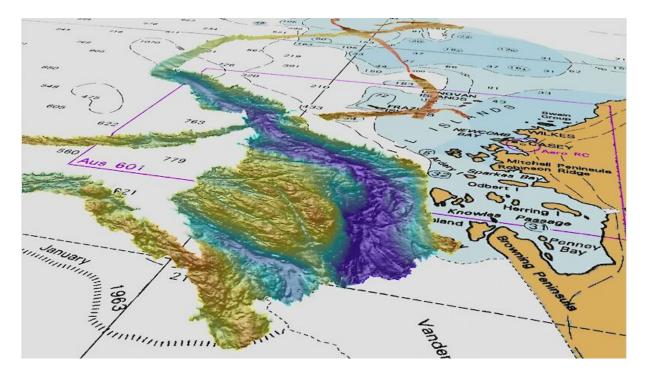
Our quarterly showcases provide a chance for us to show the AusSeabed community what we have been working on in the last quarter and reflect on what was. Based on our progress we offer the community our goals for the next quarter against our project objectives. This showcase highlighted: the recent AusSeabed webinars and workshop, an update on the National Areas of Interest project, an overview on acquisition and application of bathymetry data along the Victorian coastline, an overview of data published in the last quarter to the AusSeabed Data Portal, an introduction to the open-source processing software project and an overview of the Australia-US partnership.

New East Antarctic bathymetry near the Vanderford Glacier

Survey data from a vast underwater valley off East Antarctica, collected during icebreaker RSV Nuyina's first voyage, has been publicly released through the AusSeabed Data Portal.

The 2300 metre-deep, 2000 metre-wide and at least 55 kilometre-long valley, extending from underneath the Vanderford Glacier into the ocean, was mapped using Nuyina's multibeam echosounder, which uses sound to build a visual picture of the sea floor.

Read more about the new data on the Australian Antarctic Division website.



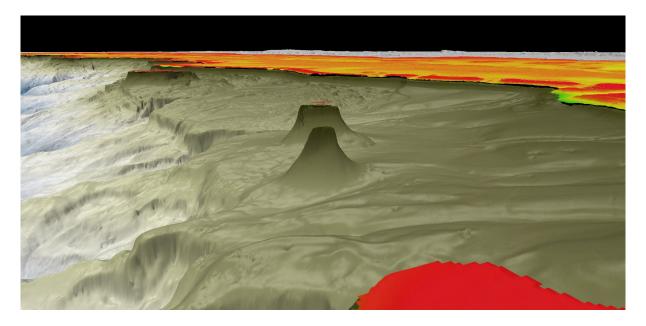
New reef to be named in the Great Barrier Reef

A 500 metre-tall reef discovered two years ago by ocean scientists is set to be formally named, sharing its name with a ship and a dragon from a classic fantasy movie.

James Cook University's Dr Robin Beaman, who helped lead the 'Northern Depths of the Great Barrier Reef' expedition https://schmidtocean.org/cruise/northern-depths-of-the-great-barrier-reef/ that discovered the reef in 2020, has proposed the name "Falkor Reef" – a hat tip to the Schmidt Ocean Institute's research vessel Falkor.

Consultation on the naming of the reef is open until 02 December 2022 at: https://haveyoursay.resources.qld.gov.au/

View a fly-through of the reef here.



Questionnaire on Marine Standards and Best Practices

Have you used the AusSeabed Multibeam guidelines, or would like more guidelines to be produced?

We're seeking your feedback on the NESP marine standard operating procedures and other Australian ocean best practices. Results will guide further actions to improve the uptake and applicability of these best practices across diverse users and to inform the development of future SOPs and how they are used. All respondents who complete the survey will have the chance to *win a \$100 gift certificate to Flora and Fauna*.

Complete the survey here.

Reading corner

Grab a cuppa and have a read of some new relevant material published in the community:

- Schumacher, M., Huvenne, V. A., Devey, C. W., Arbizu, P. M., Biastoch, A., & Meinecke, S. (2022). The Atlantic Ocean landscape: A basin-wide cluster analysis of the Atlantic near seafloor environment. *Frontiers in Marine Science*, 9. https://www.frontiersin.org/articles/10.3389/fmars.2022.936095/full
- McCarthy, J., Wiseman, C., Woo, K., Steinberg, D., O'Leary, M., Wesley, D. & Benjamin, J. (2022). Beneath the Top End: A regional assessment of submerged archaeological potential in the Northern Territory, Australia. Australian Archaeology, 88(1), 65-83. https://doi.org/10.1080/03122417.2021.1960248
- Coley, K. (2022). A Global Ocean Map is Not an Ambition, But a Necessity to Support the Ocean Decade. *Marine Technology Society Journal*, *56*(3), 9-12. https://doi.org/10.4031/MTSJ.56.3.3

Upcoming Events

Stay up-to date on upcoming events via the AusSeabed website. Please contact us if we have missed any, or you are running events or workshops that you would like to make the community aware of.

Forum for Operational Oceanography (FOO) and Australian Coastal and Ocean Modelling and Observations (ACOMO) workshop: 21-23 November 2022, Fremantle WA

The theme for the combined workshop this year is 'Improving Integration to Optimise Operational Outcomes.

The goal for this meeting is to stimulate debate about ways that our observations, and outputs from the models into which they flow, can be used to support maritime safety and security, maximise the productivity of marine industries while minimising environmental impacts, and assist in the management of biodiversity and coastal environments.

Australian Meteorological and Oceanographic Society 2022: 28 November – 2 December, Adelaide SA

AMOS 2022 will bring together leading experts in meteorology, oceanography, climate and other related sciences to focus on the latest research. The 'Critical Decade' theme highlights that the action we take during the current decade will determine whether we are able to meet the Paris Agreement targets and avoid catastrophic climate change. In meeting the challenges ahead and the real-world benefits science has, and can continue to have, through collaboration and partnerships. AMOS 2022 delegates include researchers, government representatives, NGOs, businesses, students and the media. See more information here.

37th International Conference on Coastal Engineering 2022: 4-9 Dec, Sydney NSW

WHEN 4-9 December 2022

WHERE International Convention Centre, Sydney New South Wales, Australia The goal of the ICCE is to promote academic and technical exchange on coastal related studies covering a wide range of topics including coastal waves, nearshore currents, coastal structures, sediment transport, coastal morphology, beach nourishment, natural hazards and coastal management. See more information here.

Association of Public Authority Surveyors Conference 2023: 20-22 March, Coffs Harbour NSW

APAS hosts an annual conference in the first half of each calendar year which is open to both members and non-members. The conference incorporates a theme each year and traditionally covers a wide range of topics relevant to the surveying and spatial information community. The 2023 theme is "Pirates of the Cadastre". Submissions close on Friday, 23 September 2022. See more information here.

EGU Annual Meeting 2023: 23-28 April, Vienna Austria

The General Assembly 2023 of the European Geosciences Union (EGU) will take place 23-28 April 2023 in Vienna, Austria.

The purpose of the EGU General Assembly 2023 will bring together geoscientists from all over the world to one meeting covering all disciplines of the Earth, planetary and space sciences. It aims to provide a forum where scientists, especially early career researchers, can present their work and discuss their ideas with experts in all fields of geoscience. See more information here.

GeoHab 2023: 8-12 May, La Réunion island

The GeoHab 2022 annual conference will be held in La Réunion island (Indian Ocean) from May 8 to 12th 2023. Abstract submissions open on December 1st. See more information here.

Locate 2023: 10-12 May, Adelaide SA

Each year, the Locate conference attracts national and international delegates from within and outside the spatial & surveying industry. As Australia's premier spatial & surveying conference, Locate provides guests with a unique opportunity to learn about the latest trends and applications in geospatial technologies. See more information here.

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 AusSeabed@ga.gov.au