



AusSeabed Newsletter No. 35 May 2023

Dear AusSeabed Community,

These past few months have been busy, making good progress on our activities and on target to deliver our work plan by July. If you missed the quarterly showcase, you can access the recording [here](#). I would also like to thank everyone who participated and presented in our annual webinar. The diversity of the presentations reflected the broad range of applications seabed mapping is used for.

In the past two months, the AusSeabed Steering Committee and Executive Board met to discuss next year work plan, which is shaping to be exciting and more collaborative than ever. We expect the plan to be publicised at World Hydro Day events in Wollongong on 21-22 June.

The events will include a seminar hosted by the Australian Hydrographic Office and the Geospatial Council, and a workshop by AusSeabed. The workshop will focus on establishing an agreed national approach to measuring how much of our seabed is mapped and a national seabed mapping plan.

Details will appear shortly on the AusSeabed website, but if you need information, please contact us at AusSeabed@ga.gov.au.

CMDR Nigel Townsend,

AusSeabed Steering Committee Chair

Newsletter in a nutshell...

- AusSeabed Progress Report Q3 2023
- AusSeabed SC Elections
- New Data on the Data portal – Multi-Res BETA service (CSIRO)
- The Best-practice of Best-practices: How to?
- JCU Online NMEA converter Service
- A new two-part geomorphology classification scheme to classify and map the seabed
- Showcasing UK seabed mapping to British maritime community
- Australian Scientists Unleash Discoveries at GeoHab in Reunion Island
- Developing a Vision for Improving the Discovery and Access of Bathymetric Data -
WORKING MEETING REPORT | The Nippon Foundation-GEBCO Seabed 2030
Project
- Upcoming Events:
 - PECC - The deep sea: the state of play in Asia-Pacific” 13-14 June 2023, Noumea, New Caledonia.
 - NZ Region – Australasian Hydrographic Society Webinar #14
 - The WHD event World Hydrography Day HIPPI Seminar Geospatial Council of Australia
 - 2023 Australian Institute for Maritime Archaeology (AIMA) – International Committee for Underwater Cultural Heritage (ICUCH) Conference

Update on AusSeabed

AusSeabed Progress Report Q3 2023

The AusSeabed program had a busy third quarter with several planned projects progressing significantly within this period. Leveraging the significant engagements that were undertaken in the second quarter, this period has seen the delivery of the Marine Data Register, new versions of QAX delivered in consultation with the QAX working group, and the delivery of the first draft sub-bottom profile guideline through the associated working group to name a few.

AusSeabed has been actively supporting the HIPP program during its roadshow to increase community engagement by providing a series of small updates to the Survey Coordination Tool to provide for an improved user experience. Our quarterly report is available [here](#).

Next AusSeabed Quarterly Showcase

Mid-July 2023

AusSeabed SC ELECTIONS

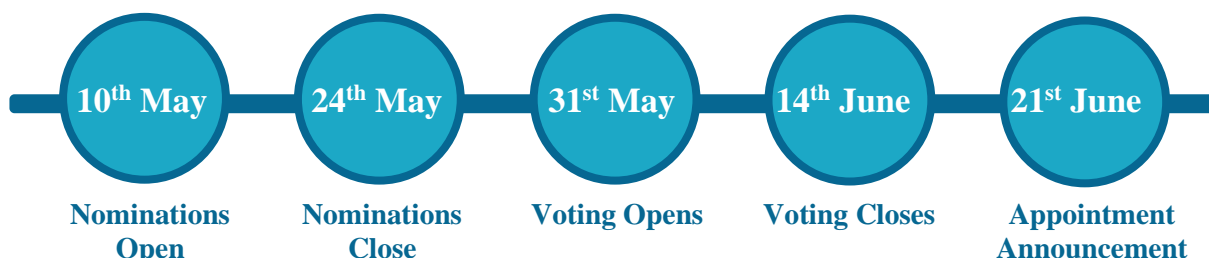
We are looking to engage members of the seabed community to sit on our Steering Committee! This will give you the opportunity to shape the development of a national seabed data collaboration that is actively influencing Australian policy and the development of the blue economy.

The positions up for election are **one academic position**, **one Federal Government** position, **two State Government** position, **two industry** positions, and **one early career ocean professional (ECOP)** position.

Don't hesitate to contact ausseabed@ga.gov.au if you require more information.

Election Timeline

Key dates for the 2023 election are outlined below. Please see our [AusSeabed Election SOPs](#) for detailed information on the election process. Note that unlike the general memberships, if contested, the ECOP position is elected by the existing Steering Committee, not the public.



Applications

Nominations will open on the 10th of May and close at 5 pm on the 24th of May. We encourage all organisations that are interested to submit a nomination. Nominations for General membership and the ECOP position can be submitted to ausseabed@ga.gov.au and will need to provide the following responses:

General Membership

1. The name of your organisation and sector position being applied for.
2. The number of AusSeabed meetings or workshops that your organisation has attended.
3. The name and pronouns of the representative from your organisation that would sit on the Steering Committee.
4. Has your organisation agreed to support the representative's participation in the Steering Committee (flights to in-person meetings, accommodation, time commitments etc.)?
5. In 75 words or fewer: Explain why your organisation should help lead AusSeabed as part of the Steering Committee.
6. Completed skills matrix.

ECOP

1. Name, pronouns, and organisation of the applicant.
2. Name of most recent degree and year graduated (or expected to graduate).
3. Why would you like to be a part of AusSeabed? (<75 words)
4. What your previous experience is with seabed mapping? (<200 words)
5. Has your organisation agreed to support the representative's participation in the Steering Committee (flights to in-person meetings, accommodation, time commitments etc.)?
6. Completed skills matrix.

New data on the Data Portal

Bathymetry – Survey Multi-resolution service (BETA)

CSIRO and AusSeabed would like your feedback on new Multi-Resolution Service.

Please email either ausseabed@ga.gov.au, or CSIRO directly cisco.navidad@csiro.au with feedback regarding the service. Suggested topics would include but NOT limited to:

- Download capability through our data_url link - DAP (Data Access Portal)
- Any missing functionality? Improvement suggestions?
- Visualisation experience with zoom levels (different resolutions)

There are currently 35 multi-resolution layer groups available for your viewing pleasure at the time of this newsletter adding over 1.5 million square kilometres in area coverage to the portal.

This multi-resolution service BETA presents individual layer geotiffs combined in a layer group each at designated resolution levels defined by depth bands. As you zoom in and out at different scales, the highest resolution possible for a particular depth range (zoom level) will be made available. Utilisation of Geoserver's internal GeoWebCache will enable pre-rendered tiles stored at the publisher's repository to better optimise visualisation on the portal.

A matrix of resolution levels versus depth ranges modified after NOAA (2019) and sourced from the Multibeam Guidelines v.2 (Figure 9) can be found in the link below:

https://www.ausseabed.gov.au/__data/assets/pdf_file/0010/95887/Multibeam-Guidelines_v2.pdf

Additionally, there is a Contour base feature layer contoured at 100m intervals (using the lowest resolution for a given tile) allowing the viewer to better examine geomorphic features in addition to the hillshade layer.

*The clip-zip-ship tool service currently is not working with the WMTS service; however, we will use direct integration through the OGC WMS once a new CSIRO AusSeabed Geoserver instance can be established before October 2023, to re-enable all the portal functionality such as clip-zip-ship.

A complete survey dataset bundle is available at data URL links on the inspection tool. The CSIRO Data Access Portal will allow the full set of L2 and L3 datasets to be downloaded for a given survey.

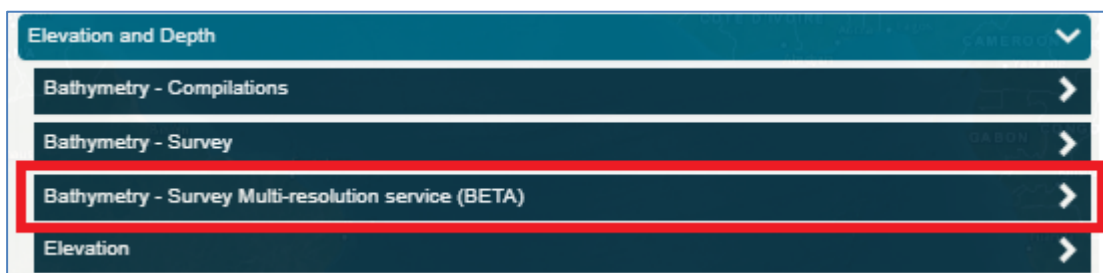


Figure 1 – New tab under Map Layers tab on <https://portal.ga.gov.au/persona/marine>

Select to activate the desired Survey Layer, and zoom to extents, if you click on the layer, the Inspection Tool panel will reveal the metadata and links available.

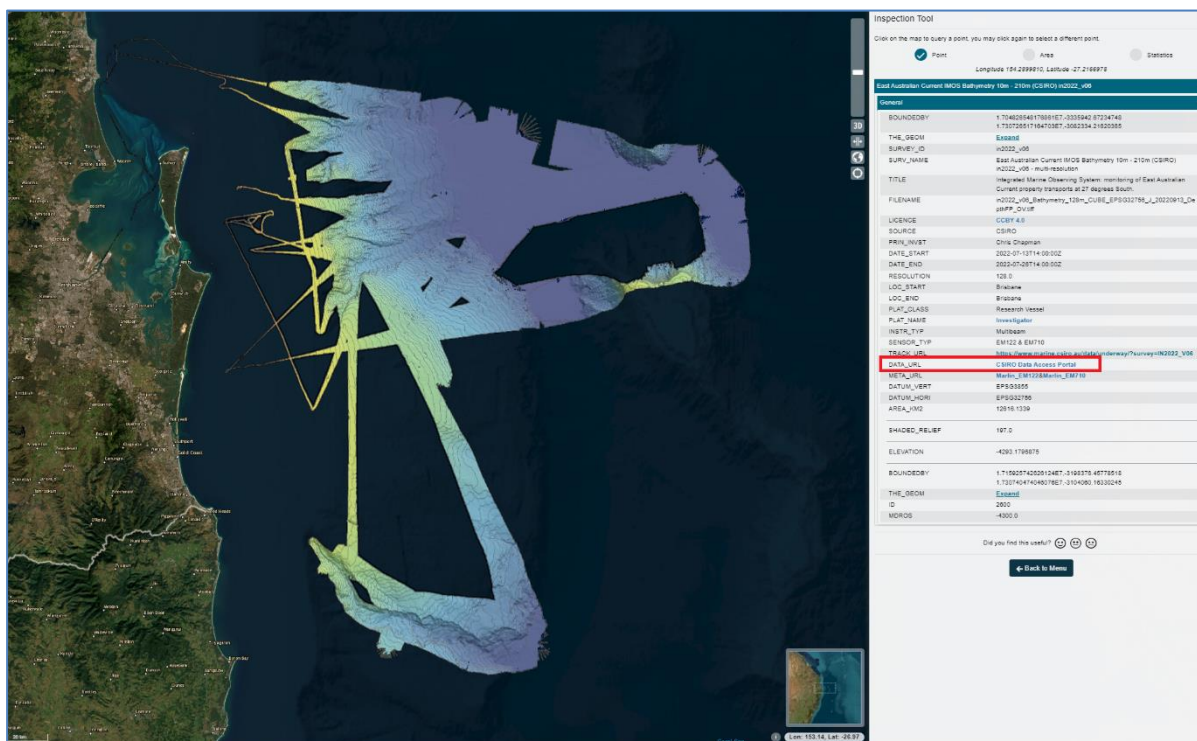


Figure 2 – Example of a new layer group and inspection tool metadata fields displayed.

The “Data URL” link to CSIRO datasets (figure 2) takes you directly to the CSIRO Data Access Portal (DAP), which hosts all the L2 and L3 products published to AusSeabed for that survey.

CSIRO DATA ACCESS PORTAL

CONTACT | HELP | API | CSIRO.AU

SEARCH | BROWSE | MY COLLECTIONS | TASKS | + NEW DEPOSIT | NAVIDAD, CISCO

Collection

IN2022_V06 East Australian Current IMOS Bathymetry 10m - 210m Multi-resolution AusSeabed products

Description | **Files 1342** | Image Gallery 33 | Services 0 | Access

About this collection

Chapman, Chris | Navidad, Cisco | Siwabessy, Justy | Boyd, Matt | Taylor, Charlie | Plunkett, Tom

Location

© OpenStreetMap contributors.

Collection description

This layer group describes multibeam echosounder data collected on RV Investigator voyage IN2022_V06 titled "Integrated Marine Operating System: (IMOS) monitoring of East Australian Current property transports at 27°S". The voyage took place between July 14 and July 30, 2022, departing from Brisbane (QLD) and arriving in Brisbane (QLD).

The purpose of the voyage was to recover an array of six full-depth current meter and property (temperature, salinity and pressure) moorings from the continental slope to the abyssal waters off Brisbane (27 degrees South).

This dataset is published with the permission of CSIRO. Not to be used for navigational purposes.

The dataset contains bathymetry grids of 10m to 210m resolution of the East Australian Current, produced from the processed EM122 and EM710 bathymetry data.

Data

Published
06 Apr 2023

Contact
Cisco Navidad
Cisco.Navidad@csiro.au

Licence
[Creative Commons Attribution 4.0 International Licence](#)

Permalink
Copy this persistent link to share this collection:
<https://doi.org/10.25919/1e57-4r84>

Cite as
Chapman, Chris; Navidad, Cisco; Siwabessy, Justy; Boyd, Matt; Taylor, Charlie; Plunkett, Tom (2022): IN2022_V06 East Australian Current IMOS Bathymetry 10m - 210m Multi-resolution AusSeabed products. v2. CSIRO. Data Collection. <https://doi.org/10.25919/1e57-4r84>

Figure 3 – CSIRO Data Access Portal download interface under files tab.

You can filter and download the datasets you require (figure 4) as multiple different resolution floating point geotiffs or other ungridded datasets such as L2 point cloud GSF's.

IN2022_V06 East Australian Current IMOS Bathymetry 10m - 210m Multi-resolution AusSeabed products

Description | Files 1342 | Image Gallery 33 | Services 0 | Access

Download

Copy this persistent link to share this collection:
<https://doi.org/10.25919/1e57-4r84>

To download files to a total volume of 2GB:

- To download the entire collection, click the 'Download' button and under 'Select a method' select 'Download all files as Zip archive'.
- To download your selected files, click the 'Download' button and under 'Select a Method' select 'Download selected files as Zip archive'.

To download files with a total volume greater than 2GB:

- Click the 'Download' button and under 'Select a method' select any method except 'Download selected files as Zip archive'.

CSIRO staff should log in for additional download options.

Please see our [help documentation](#) for further details.

INFORMATION ABOUT THE FILES [show details](#)

Show 25 entries [clear selection](#)

Filters: 15m

Folder	Name	Title	Last Modified	Size
L2	em122			
L2	em710			
XYZ ascii	em122			
XYZ ascii	em710			
L3	ASCII			
L3	BAG			
L3	Caris CSAR data			
L3	FP_Geotiff			
L3	Outputs			
L3	Metadata			
L3	Shapefile			

Showing 1 to 2 of 2 files

Figure 4 – Filter required datasets under information about files and select accordingly.

Download the datasets required using the different methods available below.

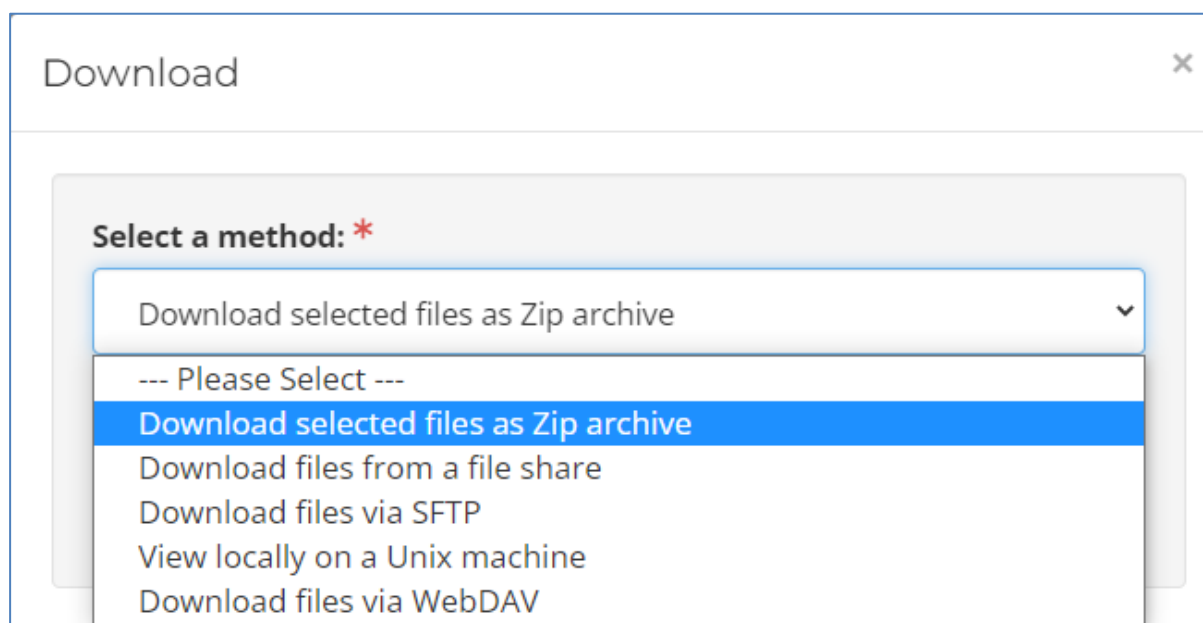


Figure 5 – Select method of download from the options provided.

The Best-practice of Best-practices: How to?

This recently published paper provides the approach to effectively creating Best-Practices for the marine community. Our [AusSeabed Multibeam Guidelines](#) is listed as one of the best-practices within the other great series developed through the [NESP Marine Sampling Field Manual Portal](#).

For more info: [Frontiers | Developing an ocean best practice: A case study of marine sampling practices from Australia \(frontiersin.org\)](#)

For a large repository of world best-practices: [Repository OceanBestPractices](#)

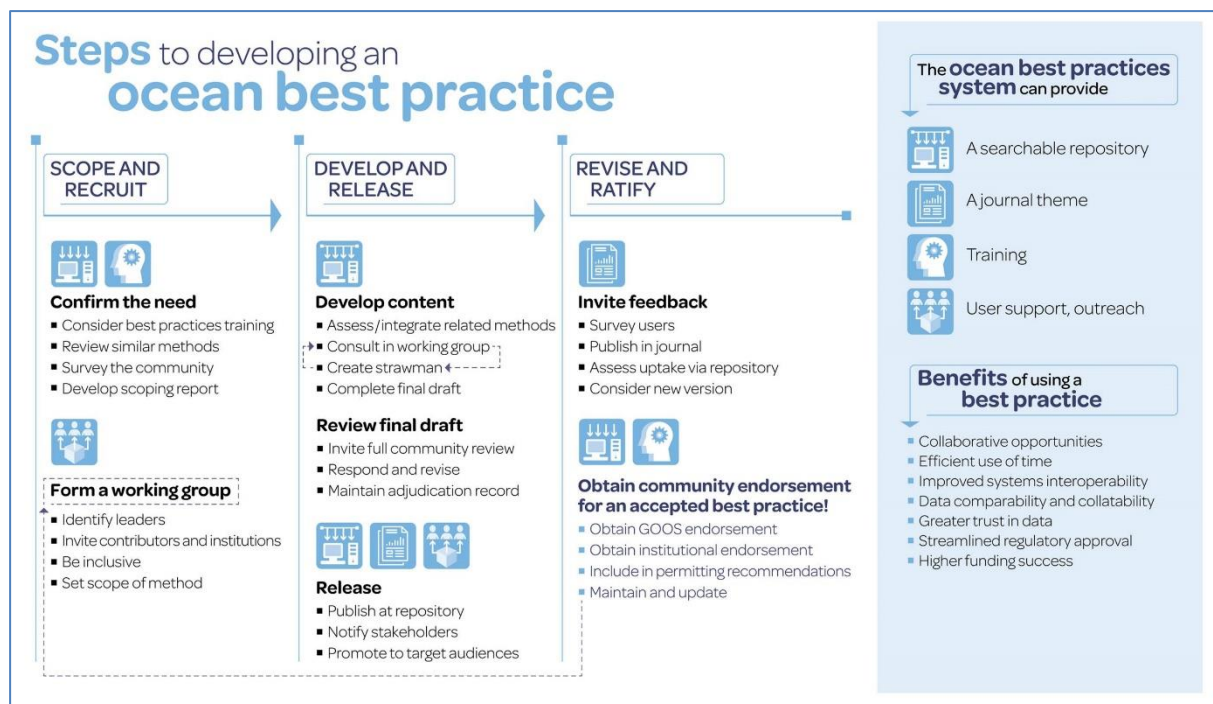


Figure 6 – The three phases and associated steps required to develop an ocean best practice. Each step is linked to icons showing the relevant part of the Ocean Best Practices System that provide support.

<https://www.frontiersin.org/articles/10.3389/fmars.2023.1173075/full>

JCU's online NMEA converter service

Online NMEA converter

With the increasing interest in crowdsourced bathymetry, and the number of data loggers able to store raw NMEA-0183 strings from a vessel's GPS and depth sounder, is a need to convert raw data into easier-to-use, generic tables of latitude, longitude, date, time, speed, course, depth.

James Cook University provides an online NMEA Converter service: <https://nmeaconv.jcu.edu.au/> where users can upload a zip file of input raw NMEA files and then output CSV tables, or an option to output NCEI-preferred CSV tables of longitude, latitude, depth, datetime.

The backend is a python script hosted on a virtual server, protected by a DMZ firewall. The script looks for cycles of both RMC and DBT (these strings must be selected in a vessel's chart plotter), and if present, looks for data within the fields and writes a record, then moves onto the next cycle.

The output tables can be used as is, or input to hydrographic software for 3D point cloud cleaning, tidal adjustment etc. Try it yourself with a [zip file](#) of NMEA-0183 data from the vessel *Flying Fish V* in the southern Great Barrier Reef:

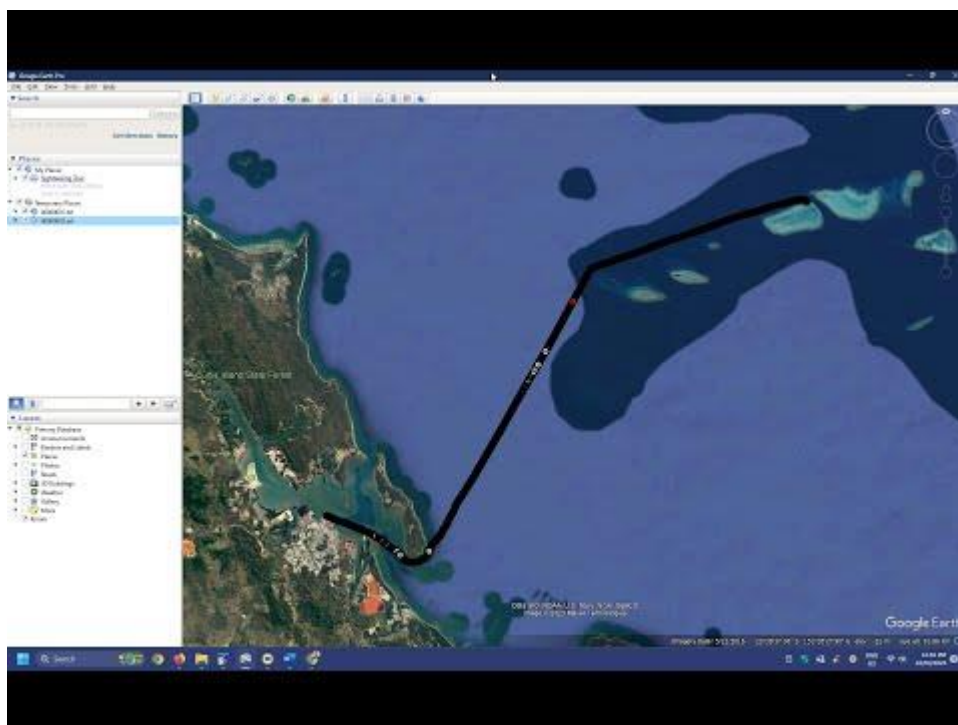


Figure 7 – An example of crowd sourced data using NMEA-0183 data from vessel *Flying Fish V*.

A new two-part geomorphology classification scheme to classify and map the seabed

Maps of seabed geomorphology provide fundamental decision-ready information for ocean planning and the sustainable management of Australia's rapidly growing ocean economy. For example, maps illustrating the distribution of seamounts, reefs and sandy bedforms can be used to infer broad habitat types and hotspots for biodiversity, as well as seabed stability and risks to infrastructure like offshore windfarms. Seabed geomorphology maps can also be used to reconstruct how sea levels and ocean currents have changed in the past, which helps scientists understand how they may respond to future climate change.

[Geoscience Australia](#) has led an international collaboration with partners at the [British Geological Survey](#), [Geological Survey Ireland](#), [Norges geologiske undersøkelse \(NGU\)](#) and [University College Cork](#) to develop a new ocean best practice standard for mapping seabed

geomorphology (Figure 1). Seabed morphology maps are created by analysing bathymetry data to map seafloor “Features” that are defined using Part 1 Morphological terms ([Dove et al, 2020](#)). Part 2 uses additional data to classify these mapped shapes with their geomorphic interpretation. The Part 2 Geomorphology report has just been released ([Nanson et al., 2023](#)) and structures hundreds of geomorphic “unit” terms into consistent classification trees representative of five geomorphic *Setting* (*Fluvial, Coastal, Marine, Glacial, Hard Rock*) and six *Process* (*Current-induced, Biogenic, Mass movement, Fluid Flow, Karst, Anthropogenic*) categories, for implementation within a GIS environment. A comprehensive glossary of these terms is also provided to support the application and uptake of the scheme by diverse users.

This standardised, multi-scalar and inter-jurisdictional two-part mapping method can be applied locally, regionally, and internationally. We are already applying it with Parks Australia to better understand the potential distribution and diversity of key seabed habitats in Australia’s Marine Parks, including habitats associated with the seamount and platform features of North Flinders Reef (Coral Sea Marine Park) (Figure 2). We look forward to seeing the approach implemented by the seabed mapping community and welcome your feedback.

Rachel Nanson, Mardi McNeil and Andrew Carroll

Geoscience Australia

Rachel.nanson@ga.gov.au

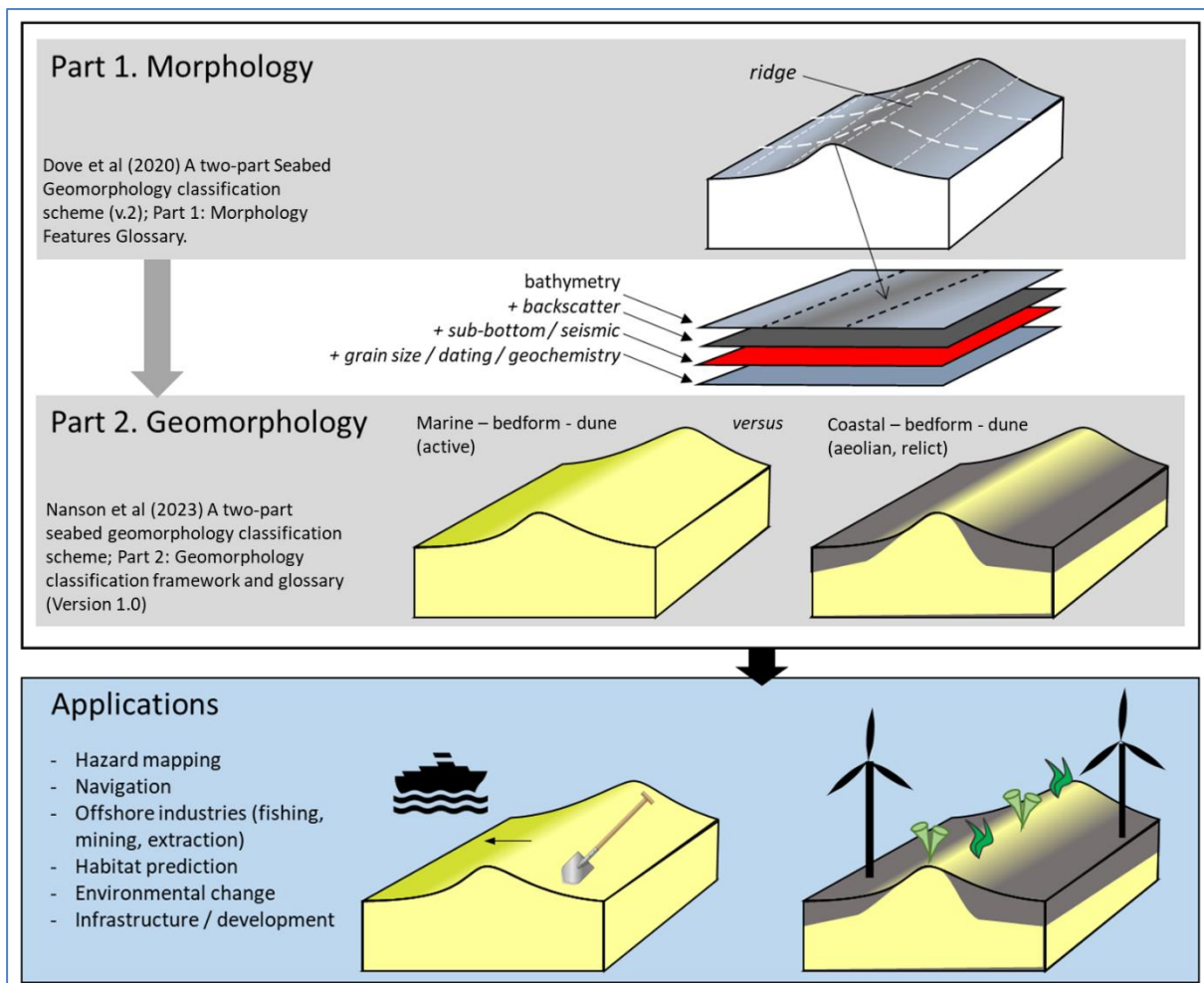


Figure 8. Seabed geomorphology mapping can be considered in two-parts and undertaken in two discrete steps.

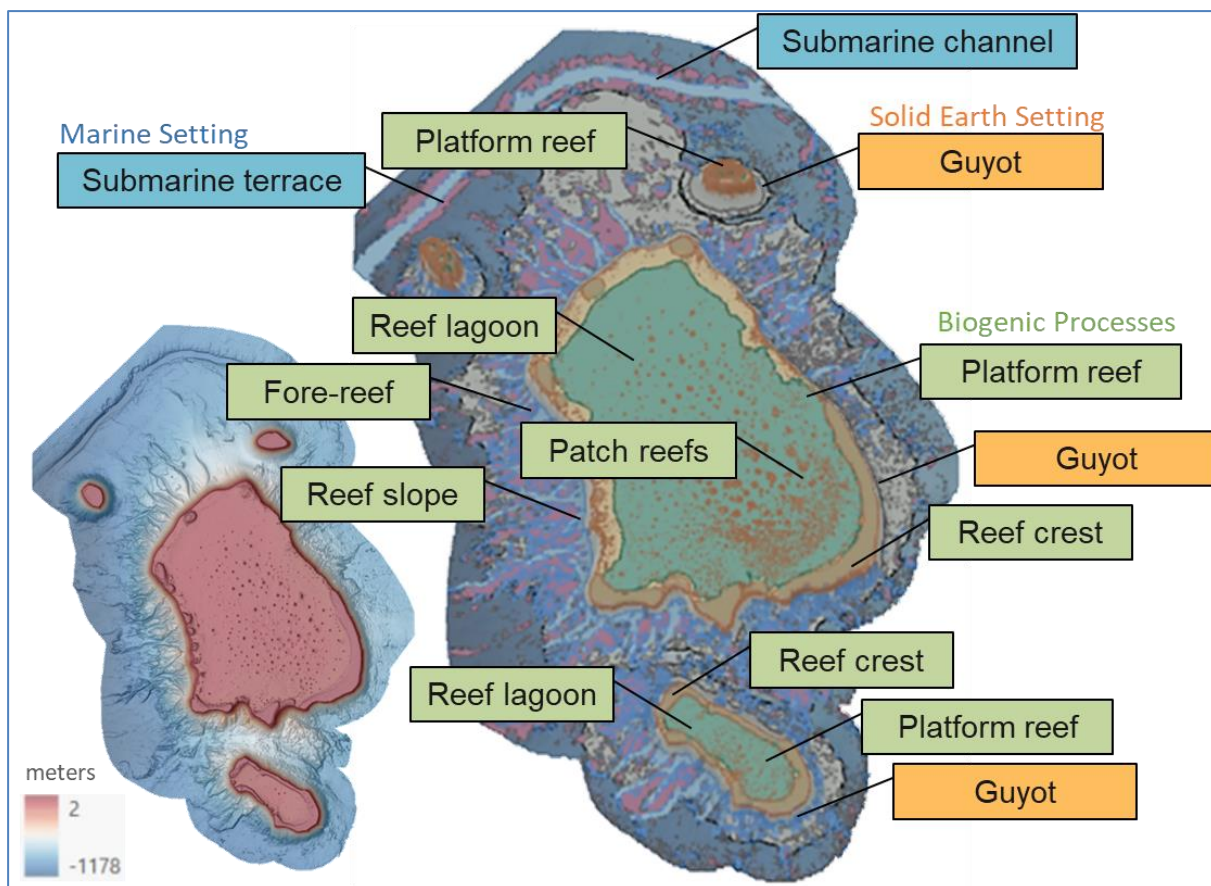


Figure 9. The geomorphology (Part 2) of North Flinders Reef in the Coral Sea.

Dove, D., Nanson, R., Bjarnadóttir, L.R., Guinan, J., Gafeira, J., Post, A., Dolan, M.F.J., Stewart, H., Arosio, R., Scott, G., 2020. *A two-part seabed geomorphology classification scheme (v.2); Part 1: morphology features glossary*. <https://zenodo.org/record/4071940>

Nanson, R., Arosio, R., Gafeira, J., McNeil, M., Dove, D., Bjarnadóttir, L., Dolan, M.F.J., Guinan, J., Post, A., Webb, J. and S. Nichol. 2022. *A two-part seabed geomorphology classification scheme. Part 2: Geomorphology classification framework and glossary*. <https://zenodo.org/record/7804019>

Showcasing UK seabed mapping to British maritime community

The AusSeabed Steering Committee hosted the UK Hydrographic Office, who provided an overview of their UK Centre for Seabed Mapping, a newly launched initiative like AusSeabed.



Figure 10 – Pictured Left to Right: Andrew Colenutt - Head of Hydrography, Maritime and Coastguard Agency; David Parker – Head of Hydrographic Programmes and Head of UK Centre for Seabed Mapping, UK Hydrographic Office; Sally-Ann Hart, MP for Hastings and Rye, Chair of the All-Party Parliamentary Group for the Ocean, and Chair of the All-Party Group for Coastal Communities; John Dillon-Leetch, Port Hydrographer at the Port of London Authority; Rear- Admiral Rhett Hatcher – National Hydrographer, UK Hydrographic Office

More effective data collection and enhanced accessibility critical to the UK's safety, security, and economic prosperity

Was there a more fitting venue for the UK Centre of Seabed Mapping (UK CSM) showcase event than at the International Maritime Organization (IMO), the beating heart of the global shipping industry? Clearly not, as anyone who joined us and the Maritime and Coastguard Agency at the illustrious IMO headquarters in Central London would agree.

Friends and colleagues across the maritime community discovered more about the UK CSM's role and purpose and had the chance to hear from some of its experts throughout the evening.

The UK CSM was launched in 2022 to enable UK public sector organisations involved in seabed mapping to build a community where members coordinate efforts to collect and share.

Enabling the ocean environment to be utilised in a safe and secure way

Following a warm welcome by UK National Hydrographer and Deputy Chief Executive of the UKHO, Rhett Hatcher, Peter Sparkes, Chief Executive of the UKHO, explained in his keynote speech how the UK CSM is an exciting evolution in the nation's long and storied relationship with the ocean environment.

Being an island nation enhances our understanding of the sea's power and potential. Peter discussed how we rely on the ocean for trade and commerce, which is critical to our security and safety, and underpins the livelihoods of millions across these isles and beyond.

The UK's marine estate is fifth largest in the world

The UK's marine estate, which includes Overseas Territories and Crown Dependencies, may be the fifth largest in the world, but only 2% of it has been mapped to modern standards. Peter attributed this to the inherent challenges of data collection, access, standards, and coordination.

It is the desire to solve these challenges, alongside the UK Government's understanding of how critical the marine environment is to our nation's future, that led to the creation of the UK CSM. Peter explained how the UKHO, through its role as secretariat of the UK CSM, was relishing the opportunity to contribute by encouraging stakeholders in the UK maritime sector to join the seabed mapping community.

UK CSM members are taking a more collaborative approach

Each member organisation brings its own world-beating expertise to the table, as all parties work together to solve the challenges of data standards and accessibility. Through a more collaborative, harmonious approach to data standards, data accessibility and data collection between members, the UK CSM will enable Armed Forces, scientists, and industry partners to utilise the ocean environment in a safe and secure way.

Peter concluded by saying that UK CSM members will be able to collectively use marine geospatial information to usher in a new era of ocean stewardship, and policymakers will be able to set the agenda on the issues that really matter to the prosperity of our oceans.



Figure 11 – UK Centre for Seabed Mapping Community.

Having set the scene for the UK CSM's exciting role in gathering and sharing critical data more effectively, Peter handed over to John Dillon-Leetch, Port Hydrographer at the Port of London Authority (PLA), who explained why the PLA invests so much in seabed mapping and what the return on that investment looks like.

John was followed by Sally-Ann Hart, MP for Hastings and Rye, Chair of the All-Party Parliamentary Group for the Ocean, and Chair of the All-Party Group for Coastal Communities. Sally-Ann outlined the critical relationship between our oceans and climate, explaining why understanding and managing climate change is critical to our future prosperity, and how [protecting and preserving our oceans helps support a thriving nation](#).

Rhett thanked the keynote speakers for their insights into seabed mapping and marine geospatial data. He closed by inviting attendees to network over drinks and to meet some of the organisations already signed up to the [UK CSM](#).

Australian Scientists Unleash Discoveries at GeoHab in Reunion Island

ChatGPT reports from GeoHab 2023



Figure 12 – Australian contingent at Piton de la Fournaise active volcano

Reunion Island, an idyllic gem in the Indian Ocean, recently witnessed an influx of brilliant minds from across the globe as it hosted the prestigious international conference, GeoHab.

Among the attendees was an esteemed Australian mapping contingent, comprising a diverse group of scientists, researchers, and cartographers, who embarked on an unforgettable journey of discovery, sharing their ground-breaking research, and embracing the island's natural wonders.

With eager anticipation, the Australian team arrived at Reunion Island, ready to immerse themselves in a week filled with intellectual exchange, collaboration, and adventure. The conference kicked off with a highly anticipated workshop on photogrammetry, a cutting-edge technique that utilizes aerial images to create precise 3D maps. With Australia's vast marine

ecosystems as their canvas, the contingent's expertise in this advanced technology promised to shed new light on the mysteries of the underwater world.

Over the course of three exhilarating days, the Australian mapping contingent took centre stage, captivating the audience with their ground-breaking research on a variety of topics. Their presentations covered a wide range of subjects, including citizen science initiatives, human impacts on seabed environments, mapping fish biodiversity, the geomorphology of volcanoes, abyssal sampling of the Tasman Rise, and the development of standard reference areas for multibeam backscatter. Their insightful findings and innovative methodologies sparked lively discussions, inspiring other participants to explore new avenues in marine mapping and conservation.

As the conference ended, the Australian team embarked on an unforgettable field trip to the crown jewel of Reunion Island's natural wonders - the Piton de la Fournaise, an active volcano boasting breathtaking landscapes and unique geological formations.

The Australian mapping contingent's participation in GeoHab not only showcased their expertise but also highlighted their commitment to advancing marine mapping and conservation efforts. By collaborating with experts from around the world, they forged new partnerships and expanded the global network of scientists dedicated to exploring and protecting the Earth's hidden frontiers.

The journey of the Australian mapping contingent at GeoHab in Reunion Island was a remarkable testament to the power of collaboration, innovation, and adventure. Through their research, they have unravelled the secrets of the underwater world, shedding light on the importance of preserving and understanding these hidden frontiers. As they return home, the Australian team carries with them a wealth of knowledge and a burning passion to continue their invaluable work in mapping our planet's vast and awe-inspiring marine landscapes.

The Nippon Foundation-GEBCO Seabed 2030 Project

Developing a Vision for Improving the Discovery and Access of Bathymetric Data - WORKING MEETING REPORT

This report summarizes the key points and outcomes of a four-part webinar series held 27 February - 01 March 2023. The webinars were designed as listening sessions focused on four complementary themes related to the management, sharing, assembly and access of bathymetry data. During each webinar, a brief introduction was provided by the hosts Jennifer Jencks (Director of the IHO DCDB) and Dr Vicki Ferrini (Head, Atlantic and Indian Oceans Regional Centre for the Nippon Foundation GEBCO Seabed 2030 Project and TSCOM

member), to summarize the goals and rationale of the webinar series and the session. Each session was led by a community member experienced with aspects of a particular topic and included 4-5 additional people who engaged in stimulating conversations providing perspectives on current barriers, opportunities, and future vision. These conversations highlighted efforts that can help achieve common goals, but also yielded input and commentary from the broader community. More than 100 participants joined the live webinars, and recordings of the webinars have been viewed more than 500 times.

Link to Webinar Report - <https://seabed2030.org/sites/default/files/documents/2023-TSCOM%20Webinar%20Series%20Report.pdf>

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.

NZ Region – Australasian Hydrographic Society Webinar #14

Upcoming event information:

NZ Region – Australasian Hydrographic Society Webinar #14

Online - Zoom

Date: 19 May 2023 12:30 NZST

Agenda:

- Opening remarks: Gary Chisholm
- NZ field experience of the airborne REIGL 840 land and hydrographic laser scanner?
Dr Justin Stout PhD. Waterways, Canterbury, NZ
Justin will talk about his experiences with setup and data collection using the airborne Reigl 840 scanner that is used on University of Canterbury and related clients' projects. The RIEGL VQ-840 is a fully integrated compact airborne laser scanner for combined bathymetric and topographic surveying. The system has an integrated IMU/GNSS system and a camera. To date it has been mounted on a helicopter and used on projects in New Zealand waterways.
- Questions / Closing remarks: Gary Chisholm

Accessing the Webinar facilitated by Zoom. Click on the link or paste it in a browser:

<https://us06web.zoom.us/j/82318202238?pwd=dkw1bjk4dHorWE8rZ25vQ0t5cUVoQT09>

Meeting ID: 823 1820 2238 Passcode: 869743

Notes:

- This webinar is cloud based so there is no need to download any applications in advance although allow 30 seconds for automatic Zoom updates
- The webinar will not be live until the moderator starts it a few minutes before the planned time.
- Audio - If your PC has speakers then that is the simplest method else a headset is needed
- We will not be able to provide IT support during the webinar.

Australasian Hydrographic Society is very active, please see their upcoming events [here](#)

PECC International Seminar (Hybrid): The deep sea: the state of play in Asia-Pacific

From June 13, 2023 until June 14, 2023

At [New-Caledonia, Noumea](#)

The deep seabed is currently caught up in a debate which exclusively focuses on the issue of its mining. The stakes are certainly massive, while the tension is increasingly acute between the energy and mineral needs of the global economy on the one hand and the need to protect marine biodiversity in the context of the fight against climate change on the other. However, this approach is reductive because the deep sea is likely to provide countless other services to humanity if approached with respect and in a logic of preservation, which is often expressed very well by the Pacific Island cultures.

On June 13 and 14, 2023, the France Pacific Territories Committee of the PECC(FPTPEC) will organize a PECC International seminar in Noumea, New Caledonia, to explore the diversity and complexity of the terms of the debate, with the participation of various stakeholders: companies, researchers, scientists, and governments, to inform and offer recommendations for the informed implementation of public policies around these still largely unknown virgin spaces. Some Pacific and Indian Ocean economies have either already obtained the expansion of their EEZ or are awaiting positive responses for their exploitation and/or protection. In this context, it would be unwise to mix exploration and exploitation, at the risk of irreparably damaging this common good of humanity; thus, it seems urgent to propose elements of thought to state decision-makers.

The aim is to draw up an inventory of the knowledge of the seabed and its potential beyond the mining aspects alone, particularly in terms of scientific research and global health, but also to shed light on the technological and economic challenges for access to this knowledge and competitiveness in these sectors. The issue of mining and energy exploitation will be

addressed from the perspective of the expectations of the countries of the region in search of materials to meet the new requirements of the fight against pollution or global warming and the environmental risks that it generates and ways to prevent them. Finally, the cultural and sociological issues will be the subject of particular attention, considering the contribution of local populations in the preservation of these spaces.

This seminar is part of the FPTPEC's work on the "blue economy", which is part of the PECC's program, and which led to a general seminar in 2022 in Tahiti. It is also in line with the French President's agenda on ocean governance, with the hosting of the United Nations Conference on the Oceans in 2025 in France, jointly with Costa Rica. Finally, it intends to contribute to the reflections of the international community within the framework of the UNESCO decade on the oceans. More Info - <https://www.fptpec.org/>

The WHD event World Hydrography Day HIPP Seminar Geospatial Council of Australia

When **21 Jun 2023** 09:00 - 17:00 (AEST)

Location City Beach Function Centre at 1 Marine Drive, Wollongong, NSW, 2500

The Australian Hydrographic Office and the Geospatial Council are organising a HydroScheme Industry Partnership Program (HIPP) Seminar taking place on World Hydrography Day. The day was adopted by the International Hydrographic Organisation as an annual celebration to publicise the work of hydrographers and the importance of hydrography.

This seminar is a chance for hydrographic professionals to hear from great speakers, network with colleagues old and new and receive six all-important CPD points. A meet and greet dinner will also be held the evening before at Steamer's Bar and Grill.

The program will be released in April but register now for this not to be missed event on the hydrographic surveying calendar!

Registration

Registration offers great value as it offers all sessions, morning tea, lunch, and afternoon tea. Tickets for the pre-seminar dinner will be on sale shortly.

The registration fee for Geospatial Council members as well as AHS (Australasian Hydrographic Society) is \$195, and non-members are \$295. Student or retired members are only \$65!

To register please visit [Geospatial Council's website](#).

2023 Australian Institute for Maritime Archaeology (AIMA) – International Committee for Underwater Cultural Heritage (ICUCH) Conference

14 -15 September 2023

The 2023 joint AIMA-ICUCH Conference is being held in Canberra, Australian Capital Territory. The conference is being held in person but is also open to online attendance.

The 2023 conference theme is Connected by water with sub themes of ratification of the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage and the archaeology and management of underwater cultural heritage. This theme and the sub themes were selected because they link to Australia progressing its consideration of ratification of the UNESCO 2001 Convention and pick up a key principle of the Convention regarding promotion of information exchange and shared heritage management.

This year's conference is an opportunity to celebrate 40 years of Australia's national Underwater Cultural Heritage Program and to reflect on the outcomes and achievements over that period. The conference is also an opportunity to promote and encourage broader regional uptake of the UNESCO 2001 Convention in the Pacific, Indian Ocean, and Southeast Asian Region.

<https://www.aima-underwater.org.au/app/events/events/view?event=5988>

Reading Corner

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

- [AusSeabed Strategy and 2025 Activities Roadmap](#)
- [AusSeabed First Nations Position Statement](#)
- [AusSeabed Annual Highlights Report](#)

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