

AusSeabed Quarterly Highlight Report

2022/23 Q3: January – March 2023

This report provides an update on key AusSeabed activities progressed this quarter against the [AusSeabed Strategic Goals](#) with specifics on data publication and usage statistics found in the following section titled: AusSeabed quarterly data report.

Our quarterly progress are available in this [recorded showcase](#) (April 2023). These **showcases** provide a chance for the AusSeabed operational team and collaborators to show the community what we have achieved in the last quarter, reflect on these achievements, and share the upcoming quarter goals. See the Awareness section below for more info.

The AusSeabed Steering Committee met in March to discuss next year work plan, which is shaping to be exciting and more collaborative than ever. The AusSeabed Executive Board is meeting on the 15 May to provide strategic inputs to finalise it. We expect the plan to be publicise at [World Hydro Day events](#) in Wollongong on 21-22 June. The event will include a seminar and an AusSeabed workshop, which details will appear on the AusSeabed website in the next week.

1 Products

Strategic Goal: All seabed mapping data and products in the Australian region are guided by F.A.I.R. principles (findable, accessible, interoperable and reusable) and meet the needs of users.

Published data

See the Data update in next section

Upcoming Data

Upcoming and recently published data can be found on the AusSeabed [publication schedule](#).

2 Coverage

Strategic Goal: Seabed data coverage in the Australian region provides maximum benefit to users.

Survey activities scheduled through the **Hydroscheme 2022** can be viewed via a [story map](#) created by the Australian Hydrographic Office (AHO).

The program for **HydroScheme 2023** has now been published. The AHO considers business cases for activities in future years via stakeholder submission using the HIPP request tool located within the **Survey Coordination Tool**.

Voyage activities scheduled through the Marine National Facility can be found [here](#)

3 Awareness

Strategic Goal: Seabed mapping and AusSeabed is widely understood, valued and used across Australian Governments and the community.

This quarter, AusSeabed hosted two events, the [quarterly showcase](#) (April 2023) and a [community webinar](#). The showcase includes updates on the:

- upcoming LIDAR acquisition project in WA,
- Australian Hydrographic Office roadshow on the Hydroscheme Industry Partnership Programme
- launch of the AusSeabed Marine Data Register to assist in submitting your data

The [community webinar](#) highlighted some great Australian seabed mapping initiatives:

- science in the deep sea by the Munderoo – UWA Deep Sea Centre,
- James Cook University and the crowd-source bathymetry project on the GBR,
- the Southern Coastal Research Fleet by SARDI
- the Australian Marine Spatial Information System by Geoscience Australia.

For other events you may have missed, visit the [publication and presentation webpage](#).

The AusSeabed Steering Committee hosted the UK Hydrographic Office, who provided an overview of their [UK Centre for Seabed Mapping](#), a newly launched initiative similar to AusSeabed. The groups will meet again to explore further synergies.

For more info on AusSeabed, please go to the [AusSeabed](#) website or email ausseabed@ga.gov.au



AusSeabed Quarterly Data Report

2022/23 Q3: January – March 2023

1 Newly published partner contributions to the AusSeabed Portal

From Jan to March 2023, The AusSeabed team published 5 surveys on the Marine Data Portal, covering a total of 1,303,808 km² (Figure 1 & Appendix A Table). The total area does not reflect the total new data coverage added to the Australian Region of Interest, as surveys may overlap spatially, and revised versions are included.

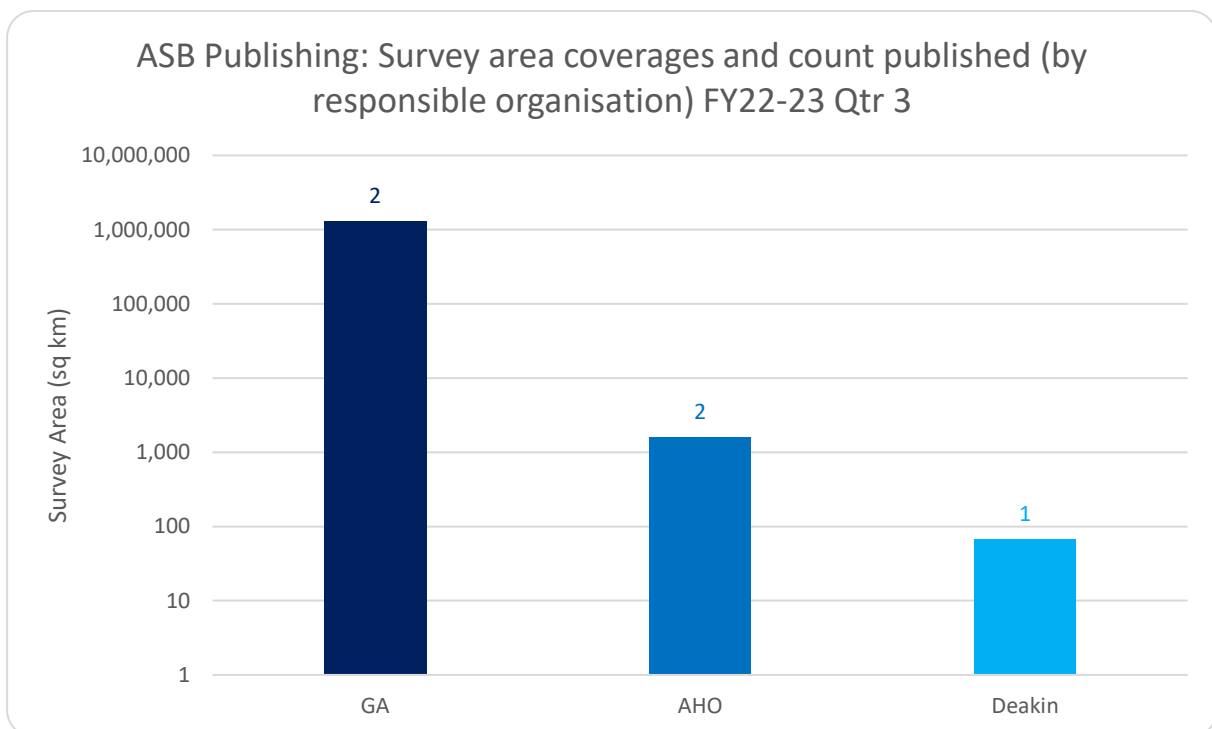


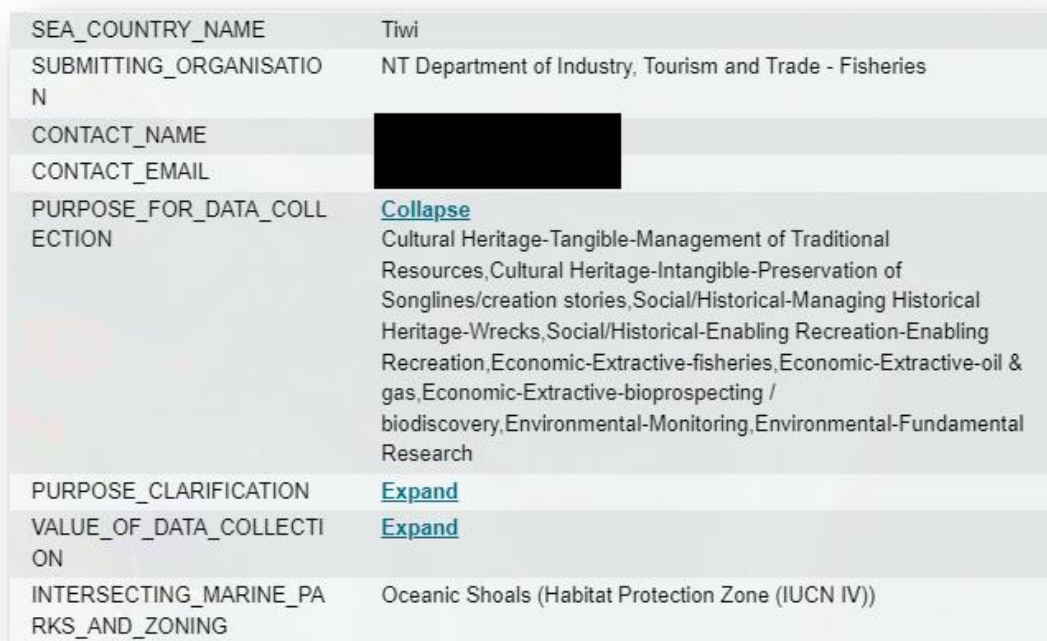
Figure 1 Survey area coverages published by organisation during period 1st Jan 2023 – 31st Mar 2023. Note that the area calculations are estimates only (due to potential projection differences) and do not always account for overlaps. The value above each organisation represents the number of surveys published.

2 Marine Sediments contributions

From Jan to Mar 2023, a total of 143 samples and 107,944 sample data properties have been added to the Geoscience Australia corporate database and will be refreshed to the Marine Sediments web service (MARS), which is also accessible on the AusSeabed Marine Data Portal.

3 AusSeabed Portal Enhancements

- Included a new Expand/Collapse feature for Attributes.



SEA_COUNTRY_NAME	Tiwi
SUBMITTING_ORGANISATION	NT Department of Industry, Tourism and Trade - Fisheries
CONTACT_NAME	[REDACTED]
CONTACT_EMAIL	[REDACTED]
PURPOSE_FOR_DATA_COLLECTION	Collapse Cultural Heritage-Tangible-Management of Traditional Resources, Cultural Heritage-Intangible-Preservation of Songlines/creation stories, Social/Historical-Managing Historical Heritage-Wrecks, Social/Historical-Enabling Recreation-Enabling Recreation, Economic-Extractive-fisheries, Economic-Extractive-oil & gas, Economic-Extractive-bioprospecting / biodiscovery, Environmental-Monitoring, Environmental-Fundamental Research
PURPOSE_CLARIFICATION	Expand
VALUE_OF_DATA_COLLECTION	Expand
INTERSECTING_MARINE_PARKS_AND_ZONING	Oceanic Shoals (Habitat Protection Zone (IUCN IV))

- Upgraded our Web Services engine GeoServer to the latest and more secure version.
- Resolved a bug related to the display of WMTS (Tiled Web Mapping Services) to support the trial of CSIRO Multi-resolution layers. Still waiting on a resolution for the Select Tool (clip, zip and ship).

4 AusSeabed Data Download Statistics

During the past quarter, there were 2,966 unique page views of the Marine Data Portal (an increase of 26.1% over the previous quarter), with an average of 9m 40s spent browsing the content (decreasing by 4.5% over the previous quarter), clipping datasets, and exploring tool usage.

AusSeabed monitors download statistics from additional sources of bathymetry data managed by GA, including the GA Product Catalogue (eCat), the Elevation Information System (ELVIS) and the National Computational Infrastructure (NCI) (Figures 2-7). Each system monitors downloading activity with different tools and with different metrics. Future work will include investigating options for generating consistent metrics.

Marine Data Portal (AusSeabed Portal)

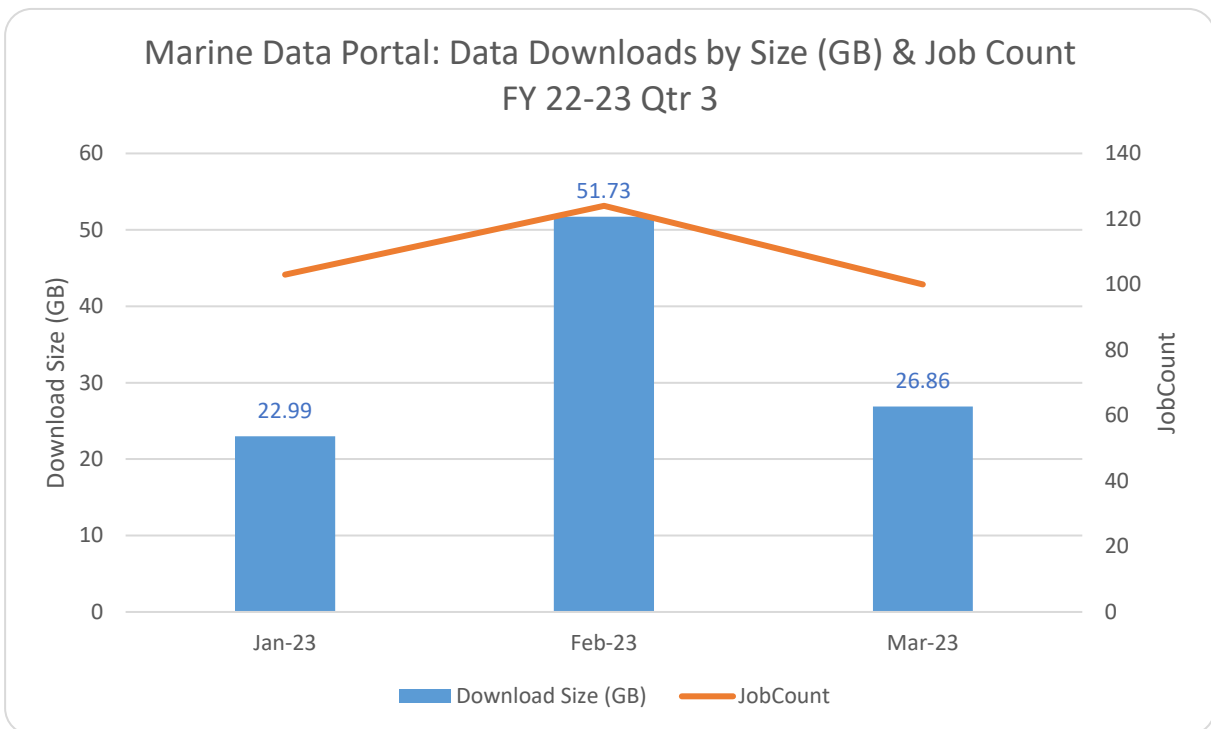


Figure 2 Marine Data Portal downloads using the Select Tool (previously known as the Clip, Zip and Ship Tool)

GA Product Catalogue (eCat)

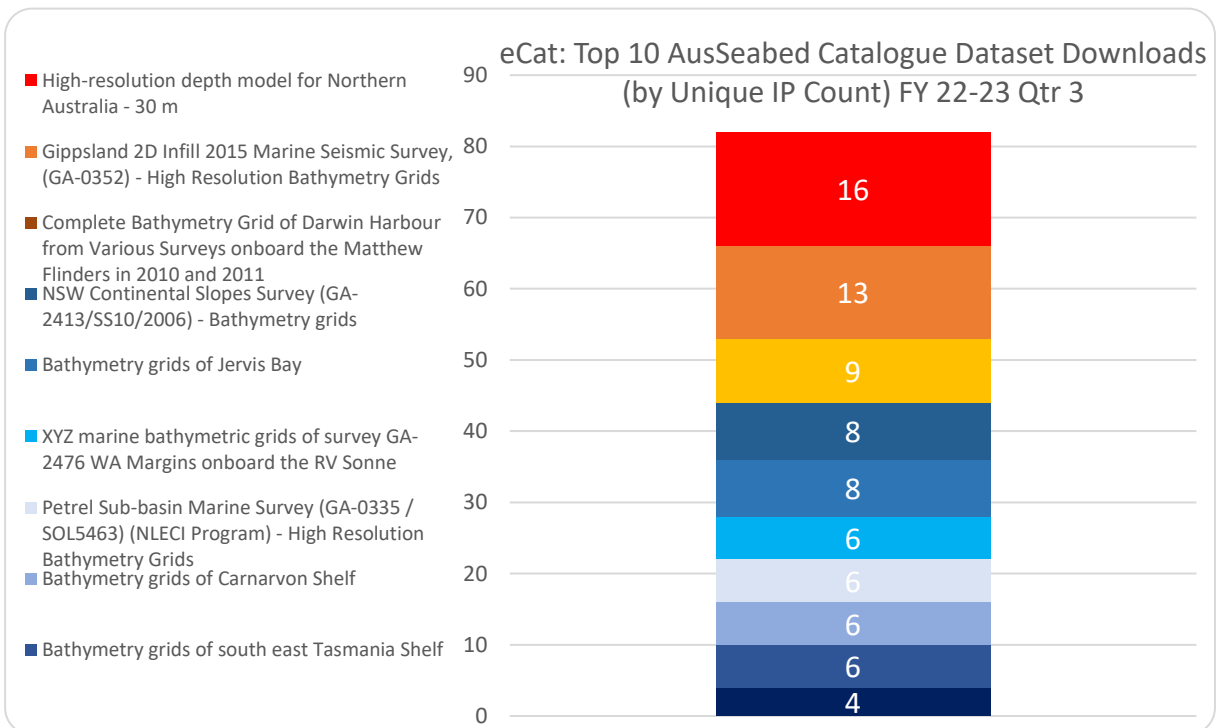


Figure 3 eCat: Top 10 Bathymetric product downloads by unique IP count

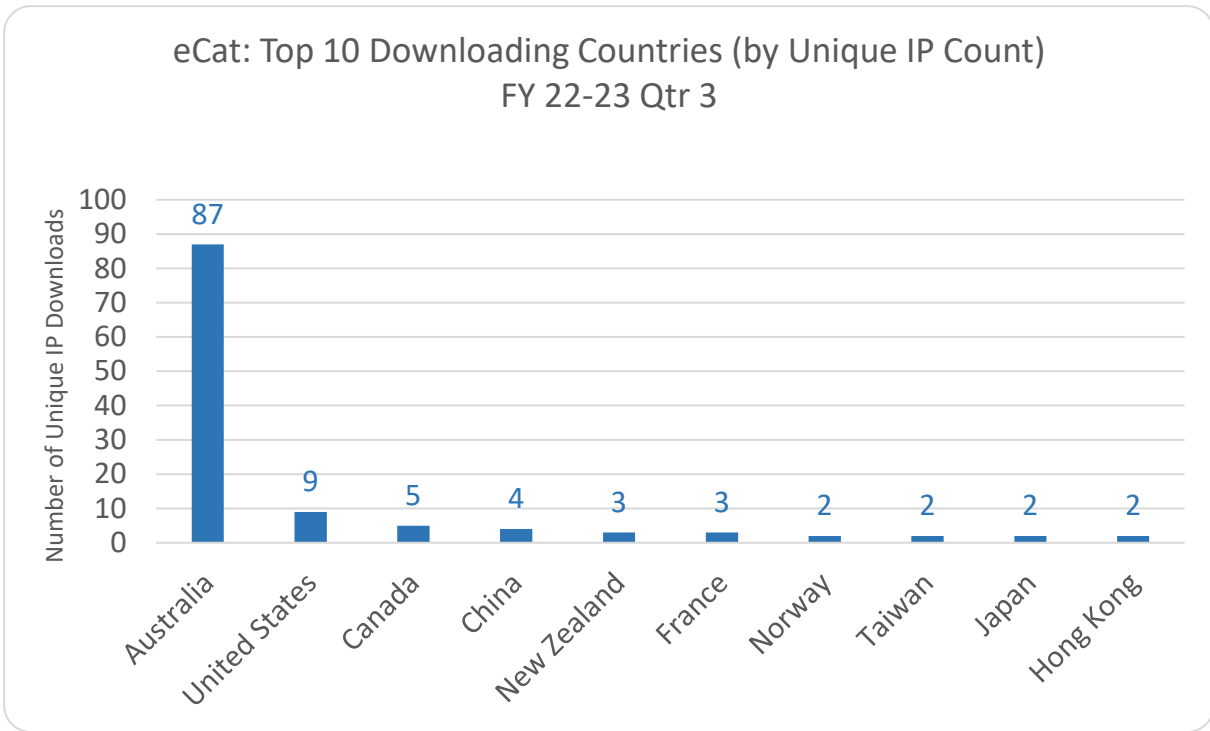


Figure 4 eCat Top 10 downloading countries of bathymetric products (by unique IP count)

Elevation Information System (ELVIS)

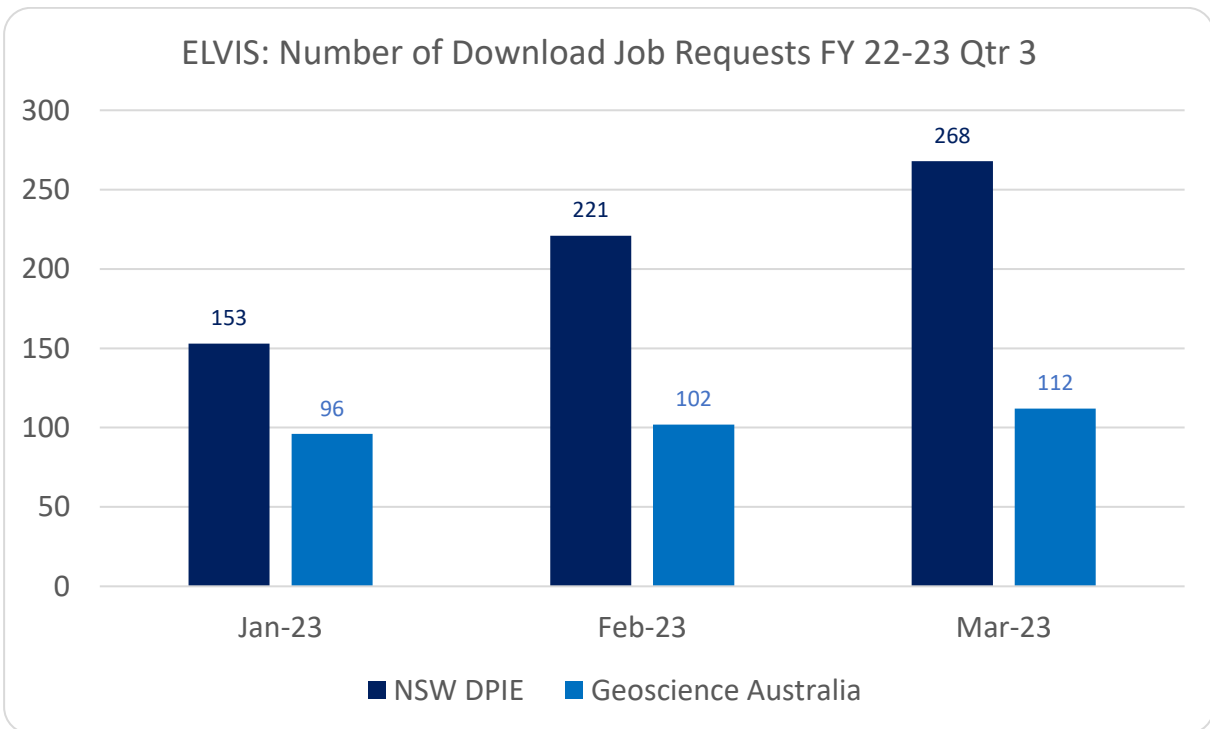


Figure 5 Number of independent job requests for bathymetric data/product downloads from the ELVIS system

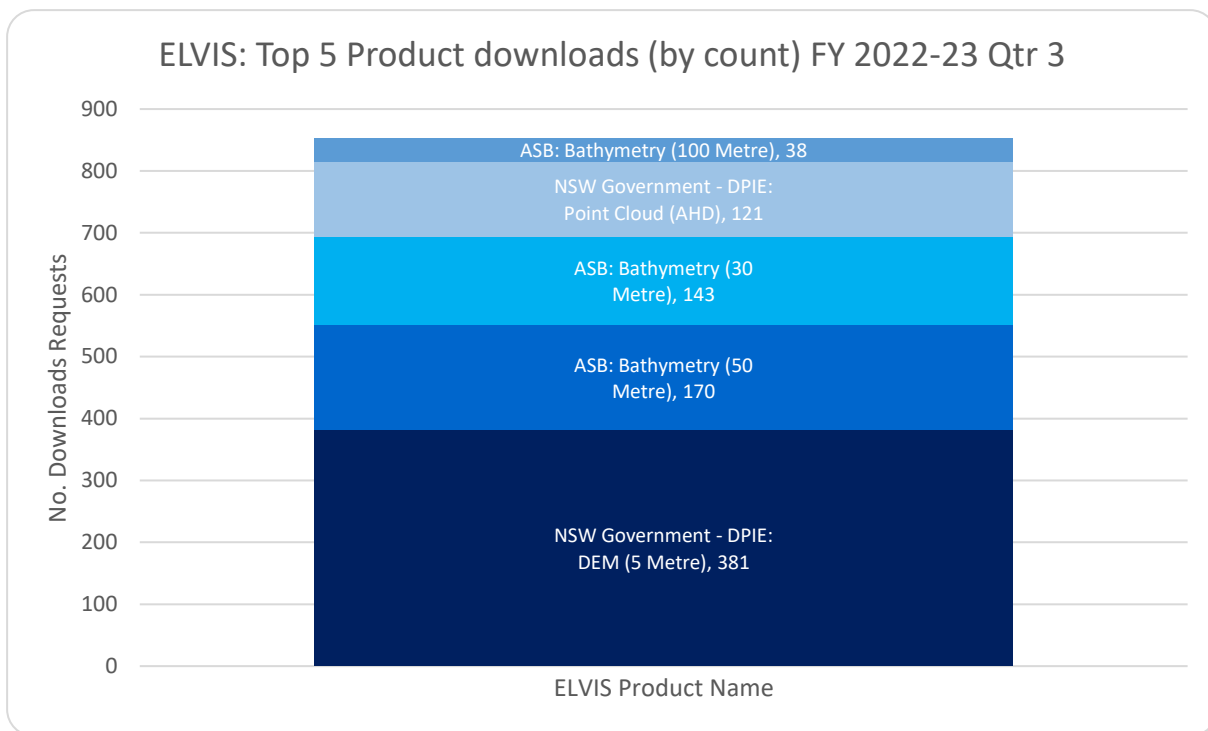


Figure 6 Top 5 bathymetric data/product downloads from the ELVIS system

National Computational Infrastructure (NCI)

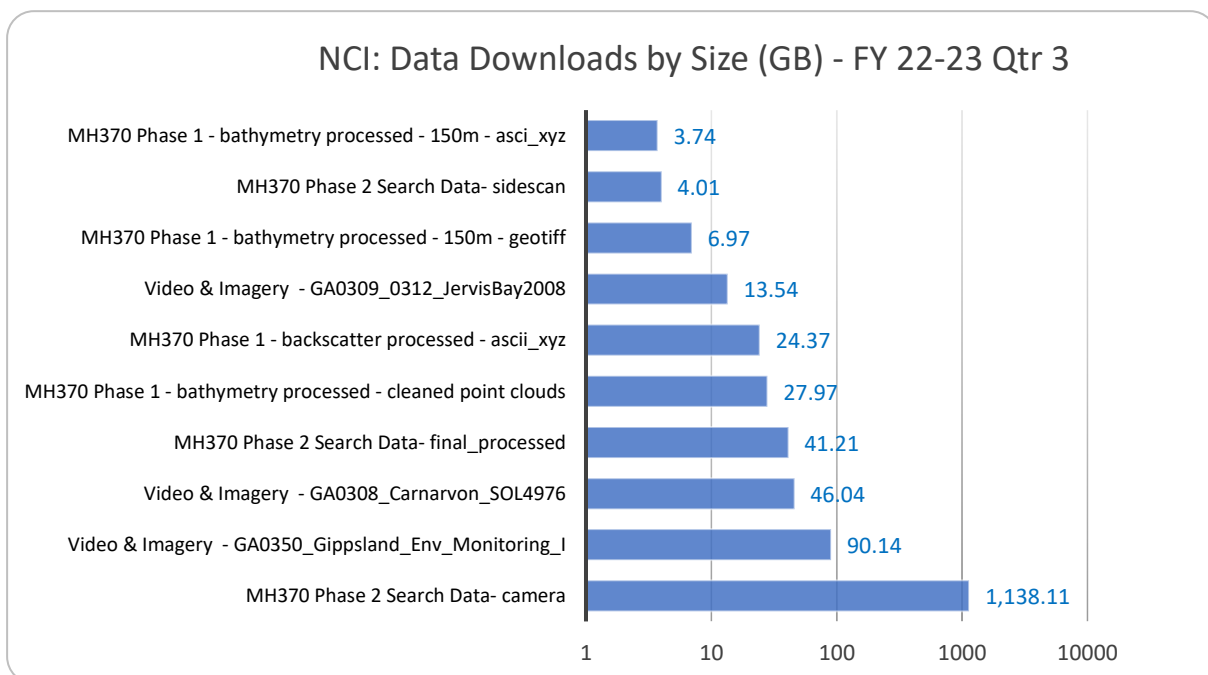


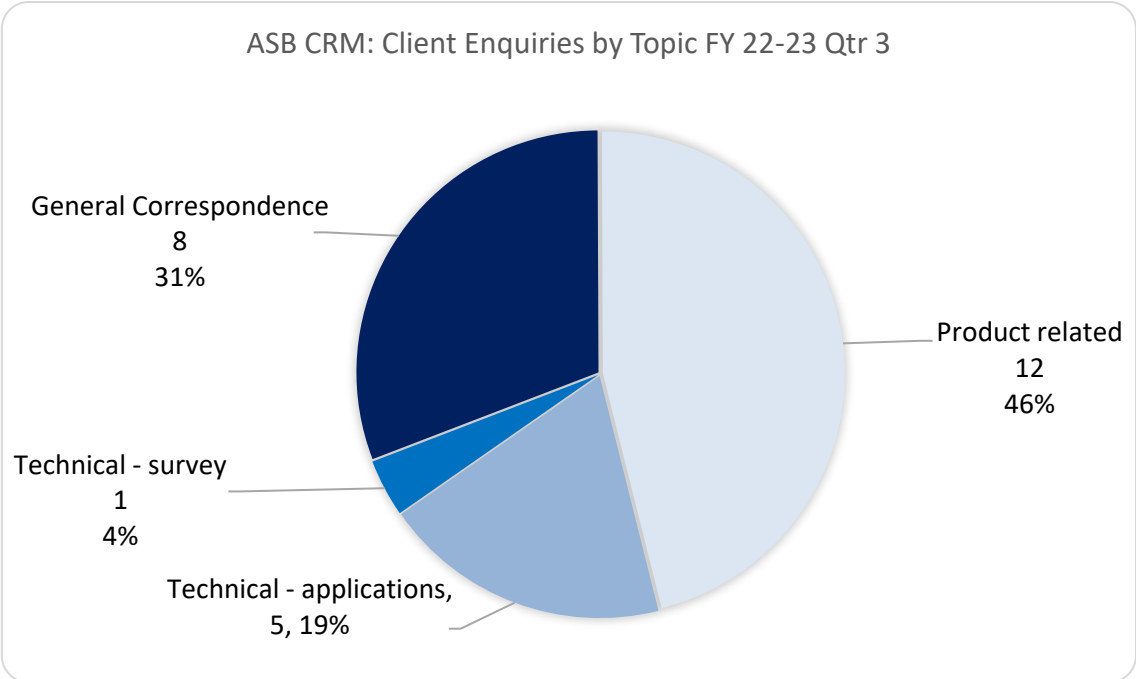
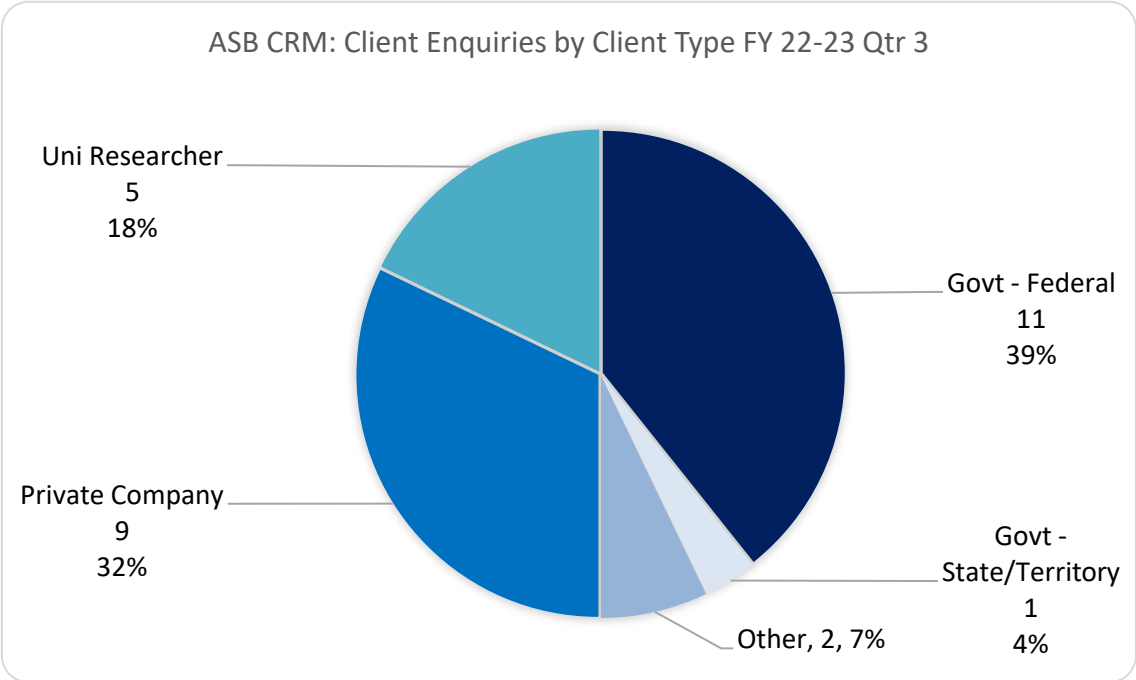
Figure 7 MH370 and Marine Imagery Products downloaded from the NCI. Note the logarithmic scale to improve the display of the smaller items. There are other products available but were not downloaded during this quarter.

5 Client Requests

AusSeabed received a total of 26 direct enquiries this quarter (Figure 8). These focused on downloading data, joining the mailing list, data supply and availability of data. On average, AusSeabed provided same day initial responses to clients and closed the enquiry within 3 days of the request.

Table 1 Total number of enquiries by month during this quarter

	Jan	Feb	Mar	Total
No of enquiries	6	10	10	26



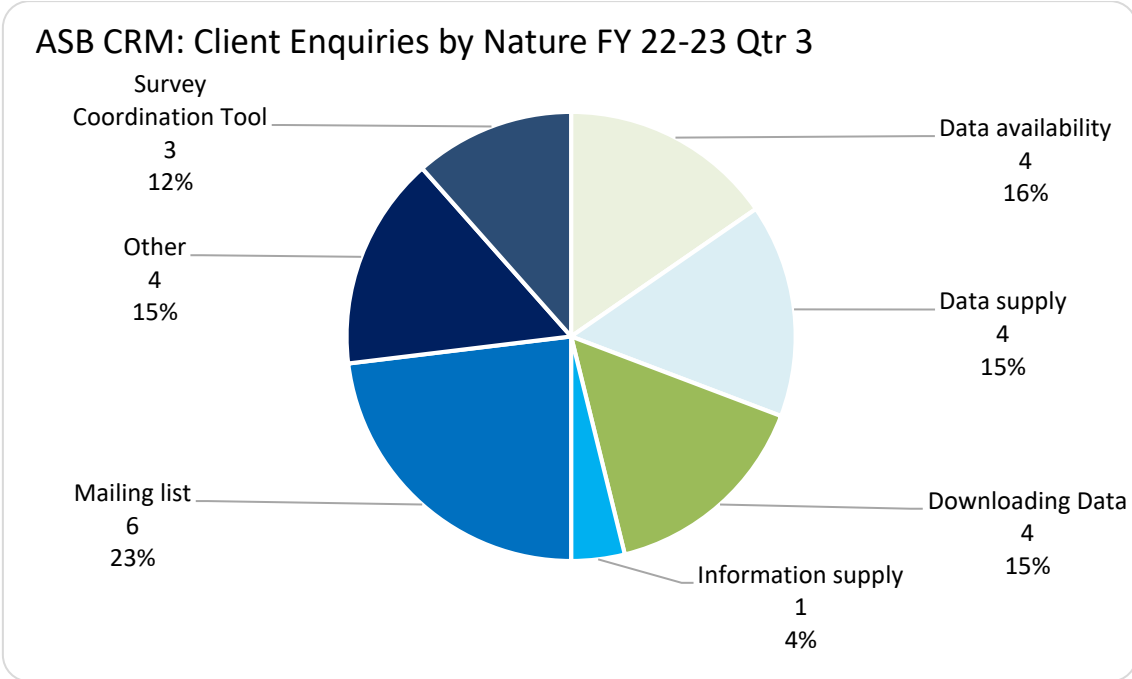


Figure 8 Distribution of client requests received during this quarter by client type, topic and by nature of enquiry.

6 AusSeabed Tool Uptake

Survey Coordination Tool (SCT)

Several client requests regarding the Survey Coordination Tool (SCT) were received and followed up during the quarter with 15 new approved registrations (Table 2). Website access statistics follow in Figure 9.

Table 2 SCT statistics on all three functionalities (blue highlight) for the quarter

Quarterly Statistics	Comment	No.
Number of new SCT registered users	A user refers to a single ID tied to an individual email address	15
Number of Active SCT users	Number of users that signed into the Survey Coordination Tool at least once over the quarter	26
Total number of registered SCT users	Total user base registered within the Survey Coordination Tool	194
National Area of Interest (NAI)*		
Total number of organisations	An organisation refers to a group of people associated with the same NAI submission. There can be multiple groups from within a single organisation	27
Total registered organisations publishing new NAIs	The number of organisations that have successfully published a new NAI	1
Total registered organisations updating published NAIs	The number of organisations that have modified or created published NAIs	1

Quarterly Statistics	Comment	No.
Total NAI submissions by organisations	The total number of submissions made by organisations via the NAI tool. Note that each submission may contain multiple areas/polygons.	96
Number of new NAIs published	Total number of areas/polygons created and published through the NAI tool.	1
Upcoming Surveys		
New Survey Plans submitted	Number of new Survey Plans submitted	7
Survey Plans Finalised	Number of Survey plans transition to Finalised (there are 3 record state categories - Draft, Under Review ad Finalised)	7
Total Number of Survey Plans	Total number of Survey Plans at the end of the current quarter (there are 4 categories of Survey Plans - Planning, Scheduled, Complete, Abandoned)	107
Number of Surveys Completed	Number of Surveys reported as completed (mapping activity)	49
HIPP request		
Number of new HIPP requests submitted	Users may request survey areas to be considered for collection through AHO HIPP Survey process. This reports the number of HIPP requests submitted	19

*N.B. NAI's can be submitted into the tool, but not published. This nuance is differentiated in this report. Previous quarterly reports did not make this distinction, so reflect higher numbers.

The following website utilisation statistics regarding the SCT (see Fig 9) represents an increase in activity on the previous quarter. Sessions rose 42%, users 54% and new users 66%.

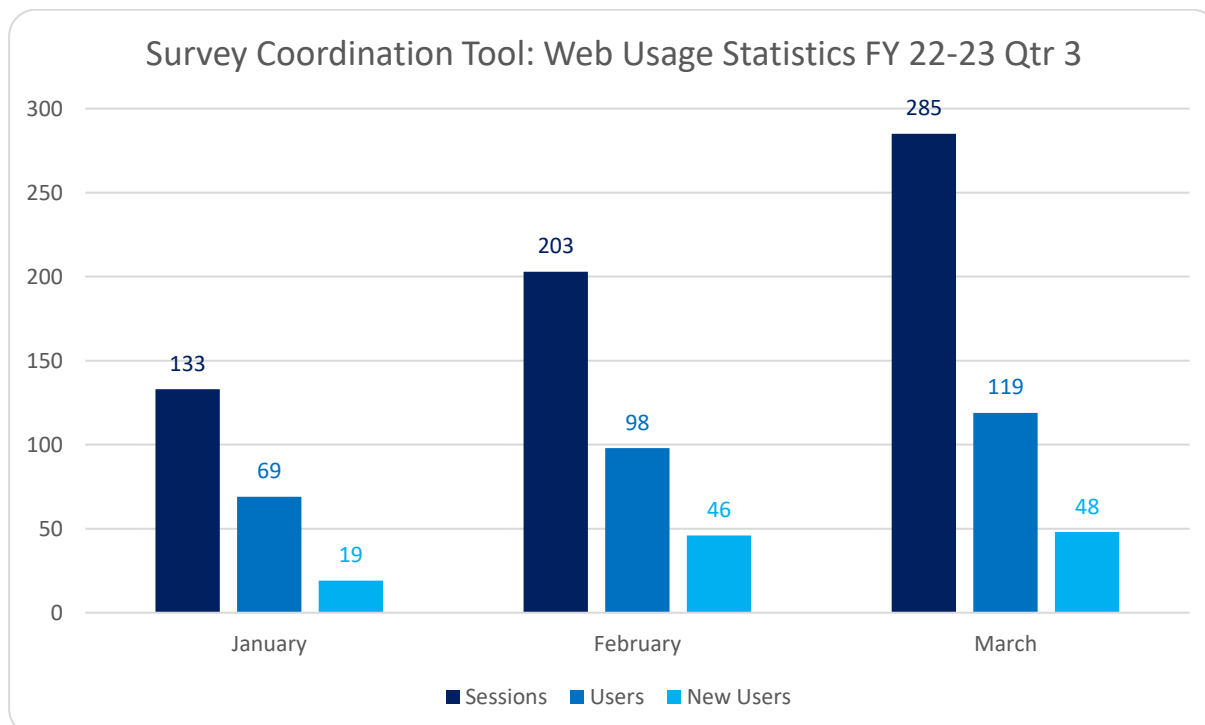


Figure 9 Number of sessions, users, and new users over the quarter for the Survey Coordination Tool from Google Analytics.

AusSeabed Website Uptake

Utilisation statistics for the AusSeabed website are slightly down on the last quarter, with an average increase of 11% across all measurements.

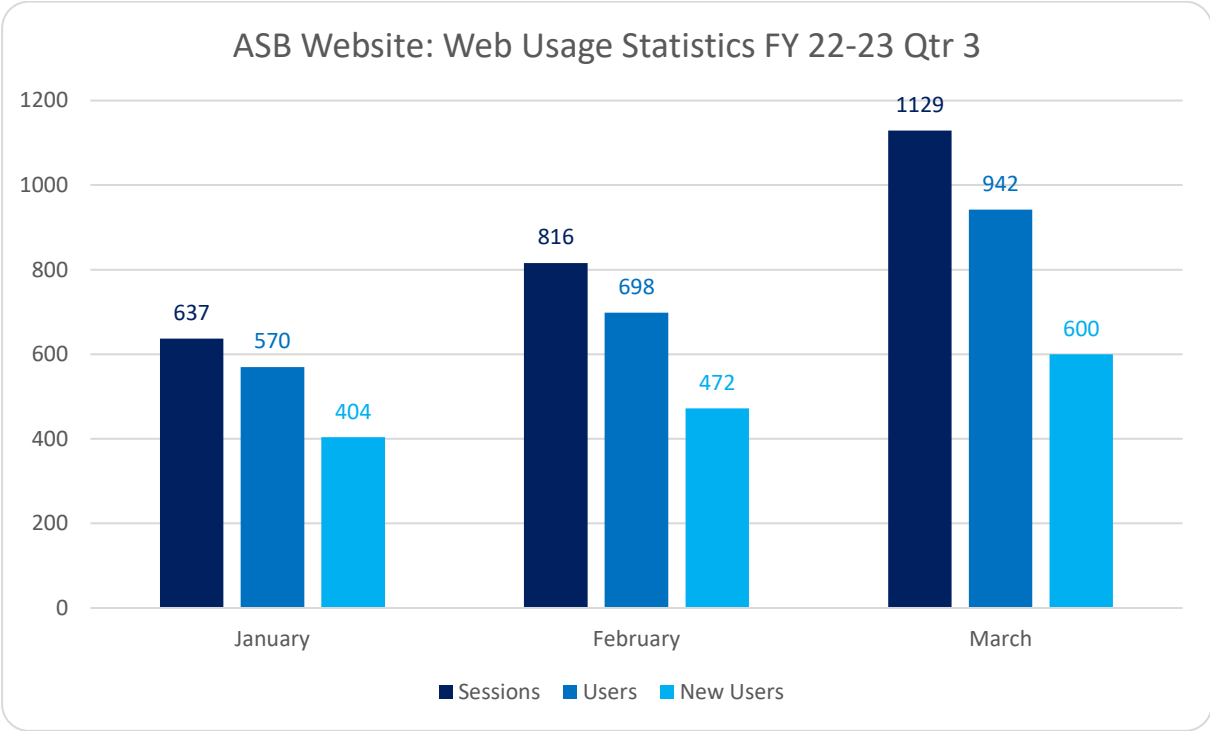


Figure 10 Number of sessions, users, and new users over the quarter for the AusSeabed webpage.

AusSeabed Marine Data Portal Uptake

Utilisation statistics for the Marine Data Portal are slightly up on the last quarter, with an increase in sessions of 30%, an increase in users of 34% and an increase of new users of 52%

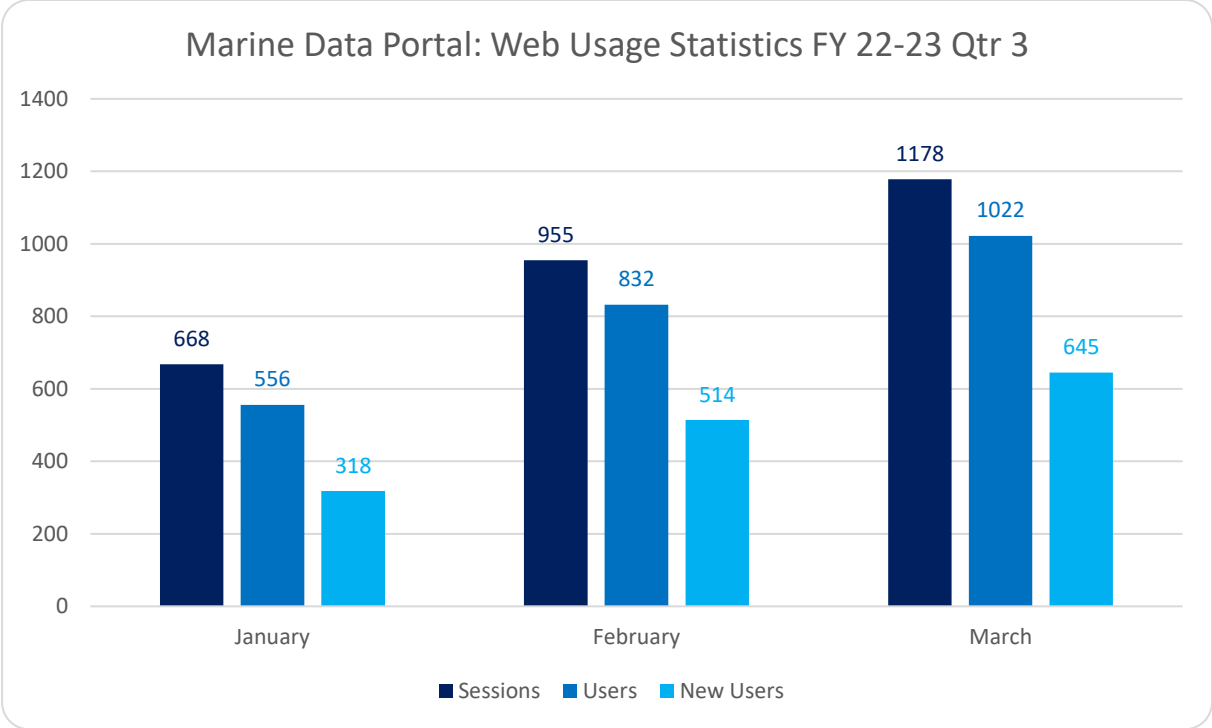


Figure 11 Number of sessions, users, and new users over the quarter for the Marine Data Portal.

7 Appendix A – Table of Published Products

FY 22-23 Quarter 3

Product Name	Entity	Persistent ID	Date Published	Status	Area Sq km
1.Port Fairy to Portland Bathymetry	Deakin	http://pid.geoscience.gov.au/dataset/ga/147365	17-Jan-2023	New	67
2.Kerguelen Plateau Bathymetry	GA	http://pid.geoscience.gov.au/dataset/ga/147703	10-Mar-2023	Revised	732,816
3.Williams Ridge Bathymetry	GA	http://pid.geoscience.gov.au/dataset/ga/147484	10-Mar-2023	New	569,320
4. Great North East Channel (South-West) (HIPP SI 1006) Bathymetry	AHO	http://pid.geoscience.gov.au/dataset/ga/147655	20-Mar-2023	New	944
5. Northern Approaches to Broome (HIPP SI 1010) Bathymetry	AHO	http://pid.geoscience.gov.au/dataset/ga/147670	20-Mar-2023	New	661
<u>Additional minor Revisions</u>					
King Island North, Bass Straight (HIPP SI 1013) Bathymetry	AHO	http://pid.geoscience.gov.au/dataset/ga/147098	30-Mar-2023	Revised	3,108
Banks Strait, TAS (HIPP SI 1020) Bathymetry	AHO	http://pid.geoscience.gov.au/dataset/ga/147082	30-Mar-2023	Revised	1,921

The two revised HIPP Surveys were re-supplied by the AHO having transformed the vertical datum from LAT to MSL.