

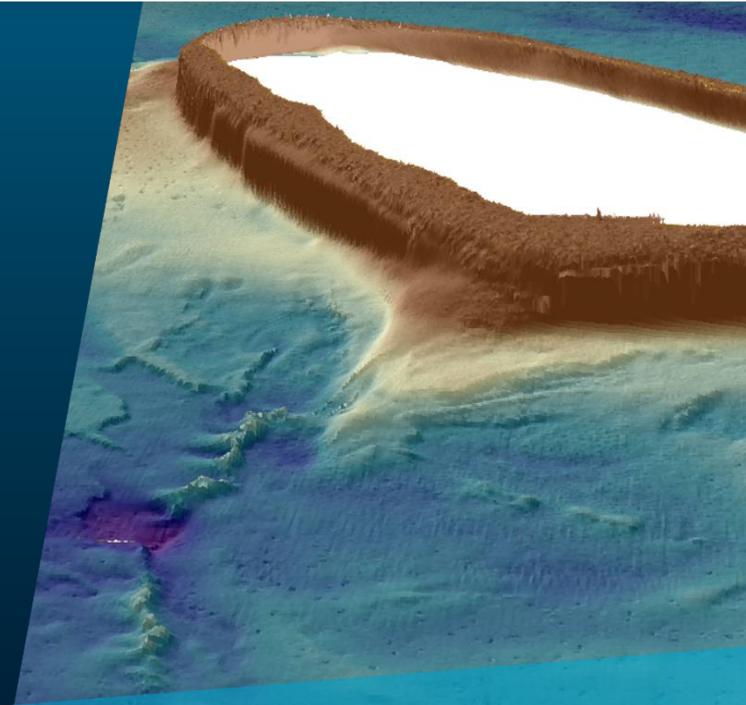


AusSeabed Quarterly Showcase

Aug – Nov 2020

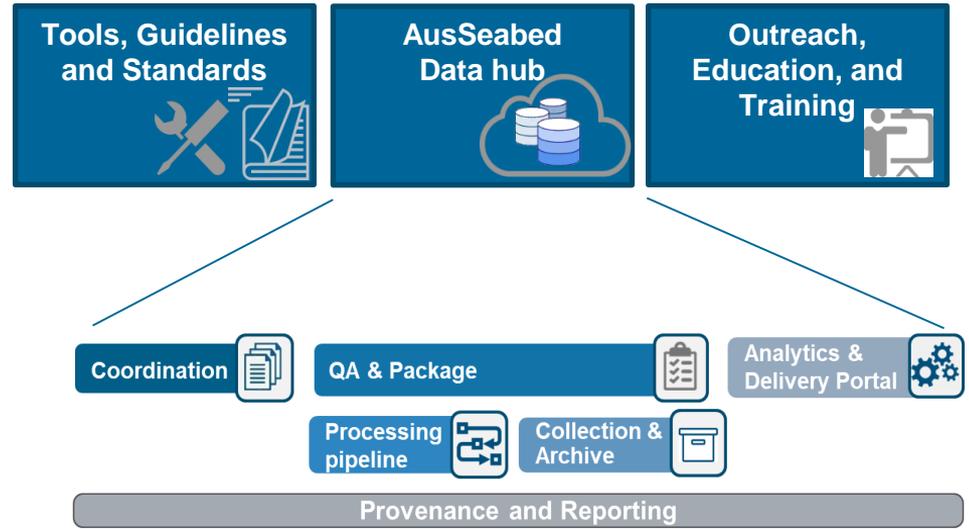
Kim and everyone

23 November 2020



Agenda

- Welcome and Introduction
- Outreach
- Data Hub
 - Survey Coordination Tool
 - Quality Assessment Tool (QAX)
 - Cloud infrastructure
 - Data Warehouse and Data Processing
 - Data Publication to Portal
 - Data Hub Policy and Management
- Next PI vision
- Open Discussion

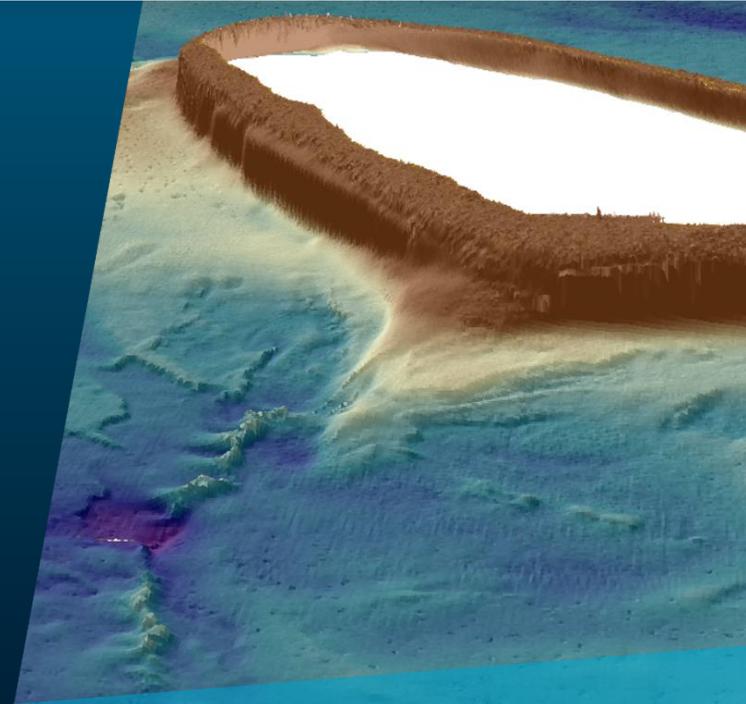




From Ship to Shore to Portal

Infrastructure for Rapid Publication

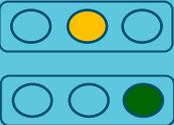
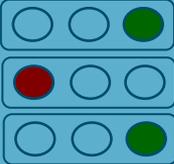
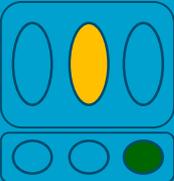
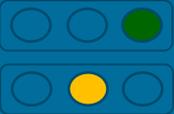
AusSeabed Quarterly Showcase - Aug to Nov 20



Program objectives



Program Increment Goals

Program Objectives	PI Goals	Status
Improve coordination of activities relating to seabed mapping.	<ol style="list-style-type: none">1. National Prioritisation Framework revisited2. AusSeabed welcoming new collaborators and partners	
Expand the number of bathymetric products openly accessible through the AusSeabed platform.	<ol style="list-style-type: none">1. Increase in data published on portal2. HIPP data published in time to celebrate the 100th3. Operational federated hub (CSIRO-GA)	
Secure an enduring AusSeabed program to continue realising benefits to the community relying on seabed mapping.	<ol style="list-style-type: none">1. Collaborative agreement signed by EB members2. AusSeabed 10 year plan published3. Economic Benefit Analysis delivered4. Program Communication Strategy published5. Webinar series successfully delivered	
Deliver products and services focused on the needs of key stakeholders and end-users.	<ol style="list-style-type: none">1. End-users analysis leading to new portal functionalities2. QA tools (QAX) delivered providing efficiency-gain and consistency	

Data Hub: Status update



Coordination tool – Upcoming surveys; next AHO request and National Priorities



Processing pipeline – AWS run



QA & Package – QA tools on Github; MBES-centric



Collection & Archive – Data strategy, AWS, Portal connected



Provenance and Reporting



Analytics & Delivery Portal – Marine persona of GA Portal; UX design



Outreach

AusSeabed Quarterly Showcase

Aero Leplastrier | Hannah Evans | Ralph Talbot-Smith | Tim Ingleton

November 2020



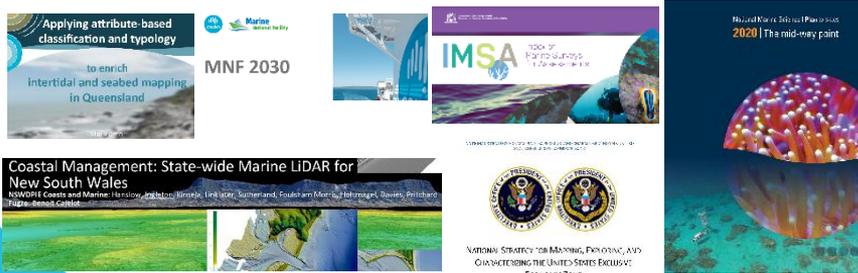
Key Outreach highlights July–October

- Delivered the AusSeabed Webinar Series
- Drafted a First Nations Collaboration Plan
- Drafted an Outreach and Communications Strategy

AusSeabed Webinar Series: Bringing the Seabed to you

Purpose: to inform and engage the seabed mapping community in the absence of the AMSA conference.

Description: 4 sessions from June-September 2020 that included 20 talks and 5 workshop activities



Topics: Ntl-Intl. perspectives on seabed mapping, Mapping for Management, Data Sharing and Collaboration, Applications of Seabed Mapping

Impact:

- Strengthened dom. and intl. networks
- Publicised tools, standards and digital infrastructure delivered through the AusSeabed program.



260 participants

117 organisations

20 countries

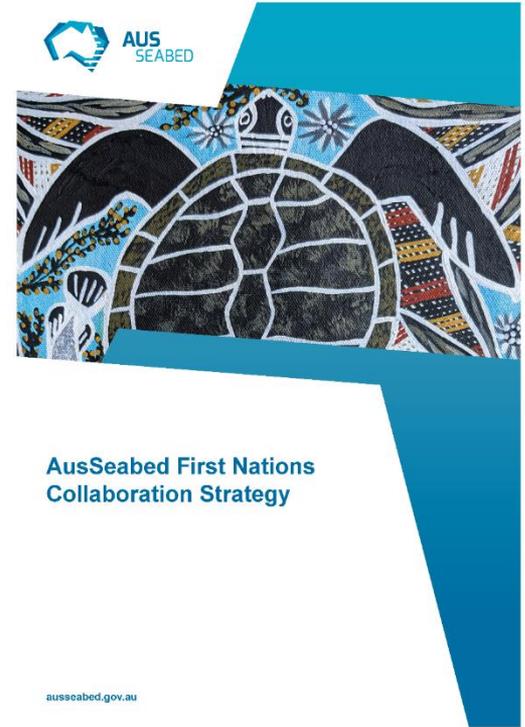
First Nations Collaboration Strategy

Purpose: Develop a guiding set of principles that encourage respectful and impactful knowledge sharing and collaboration with First nations peoples across Sea Country.

Progress & Next steps: The first draft completed and circulated for review with the SC. Workshop draft with wider community

Desired Outcomes:

- Improve collaboration with Sea Country Custodians
- Increase data benefit to support cultural heritage by building awareness and improving accessibility for Traditional Custodians



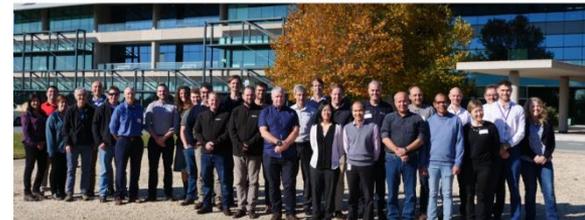
AusSeabed Communications and Engagement Strategy

Purpose:

- Maximise impact and boost efficiency of internal and external communications
- Continue building a community of supportive stakeholders and active collaborators
- Empower AusSeabed community to confidently champion the AusSeabed program.

Progress & Next steps: The first draft is almost complete and will be circulated for review with the SC in Dec. for endorsement and finalisation in February

Desired Impacts: Increase in number of active collaborators
Greater awareness and familiarity of AusSeabed activities and resources



AusSeabed Communications and Engagement Strategy

2020-2025

ausseabed.com.au

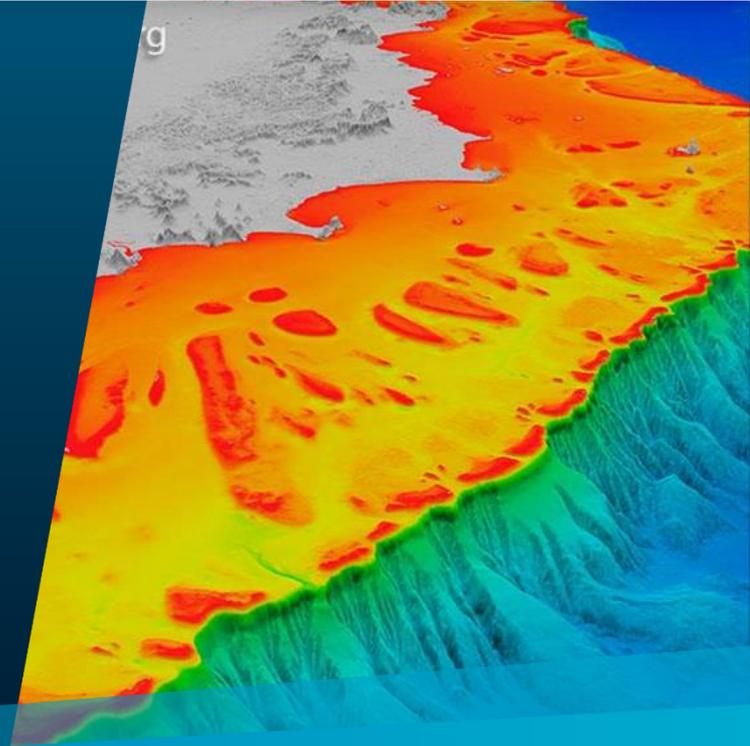


ASB Survey Coordination Tool

AusSeabed Quarterly Showcase

Lachlan Hurst | Natalie Lennard

November 2020



New Plan

Basic

Survey name

Name of data collection survey

Public

Make survey plan visible to all users

Survey ID

Optional Status

Planning Scheduled

Survey plan custodian(s)

Commissioning organisation(s)

Other organisations (if not list)

Optional Contact person

PRIORITY AREA REGISTRATION | PRIORITY AREAS | SUBMISSION CONFIRMATION

Submitting organisation

Organisation that is submitting

Contact Person

Contact person from the company

Contact Email

Ideally, provide a group email

Citation

Use above details

Cited Organisation

Organisation cited in the publication

Cited Contact Name

Contact person from the company

Cited Contact Email

email that will appear in the publication

The HydroScheme Industry Partnership Program (HIPP) is an enduring partnership, with a request timeframe domain of 5-10 years. It aims to boost Australia's hydrographic industry capability allowing partners to acquire maritime survey data for the production of digital maps of Australia's seas and coastal areas.

REQUEST REGISTRATION	REQUEST BUSINESS CASE	AREA(S) OF INTEREST	SUB-AREA DETAILS	SUB-AREA INFORMATION	REQUEST SUMMARY	REQUEST SUBMISSION DETAILS
----------------------	-----------------------	---------------------	------------------	----------------------	-----------------	----------------------------

A valid HIPP Request requires registration and the addition of at least one area of interest. Optional fields are labelled (optional). All other fields are mandatory.

Request Title

Requesting Organisation

Primary organisation submitting the request

Collaborating Organisation(s)

Organisations that are submitting the request

Contact Person

Contact person from the requesting organisation

Contact Person's Role (Title)

Contact email

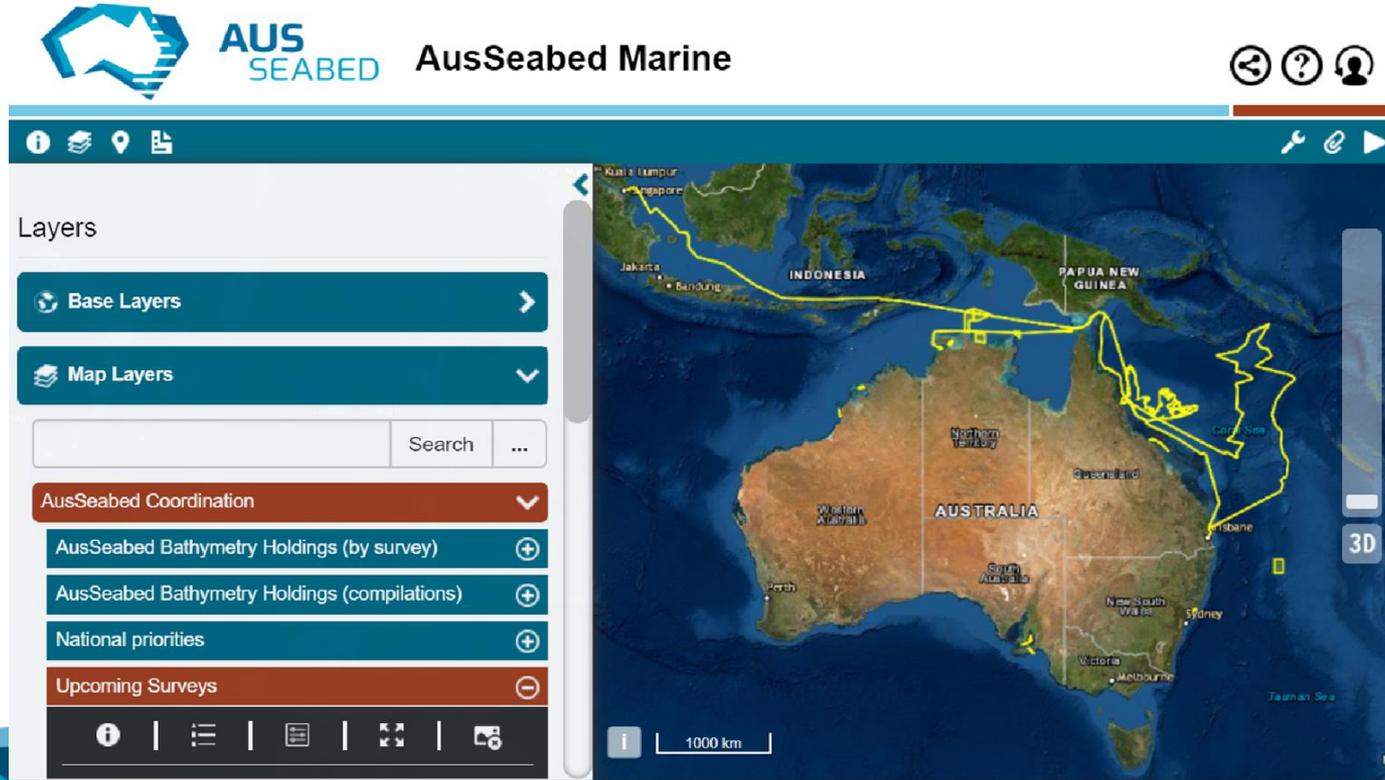
Where possible, please provide an enduring email address such as a group email for contact



2. Priority Area
3. Request

Where does the information go?

Survey Plans = Upcoming survey layer



Where does the information go?

Priorities = National Priorities Layer

The screenshot displays the AusSeabed Marine Data Portal interface. The top navigation bar includes the AUS SEABED logo, the title "AusSeabed Marine Data Portal", and utility icons for home, help, and user profile. Below the navigation bar, there are links for "About", "Layers", "Location Search", and "Data & Publications". The main content area is divided into a left-hand "Layers" panel and a central map view.

The "Layers" panel on the left lists various data layers:

- Base Layers
- Map Layers
- AusSeabed Coordination (highlighted in red)
- AusSeabed Bathymetry Holdings (by survey)
- AusSeabed Bathymetry Holdings (compilations)
- National priorities (highlighted in red)
- Upcoming Surveys (beta)
- Elevation and Depth
- Framework
- Geomorphology
- Geophysics
- Geophysical Archive Data Delivery System (GADDs)
- Sedimentology

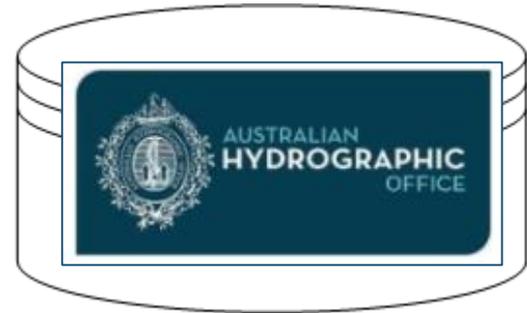
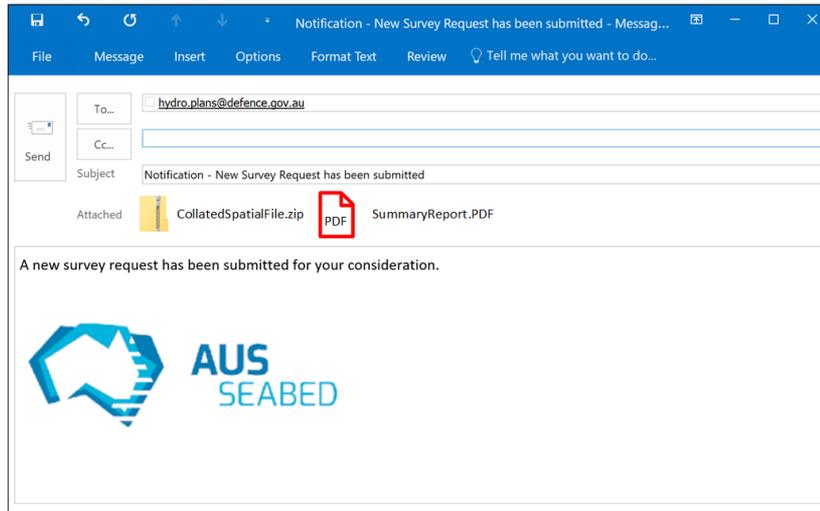
The "National priorities" layer is currently active, showing a detailed configuration panel with options for "About", "Legend", "Filter (off)", "Fit Extent", and "Remove". The "Opacity" is set to 100%, and the "Style" is set to "Set colours based on the priority attrit".

The map view shows a satellite-style map of Australia and the surrounding region, including parts of Indonesia and Papua New Guinea. The map is overlaid with various colored polygons and lines representing survey areas and priorities. Key locations like Jakarta, Bandung, Perth, Melbourne, Sydney, Brisbane, and Coral Sea are labeled. A scale bar indicates 500 km, and the current coordinates are shown as Lon: 95.95, Lat: -13.85. An inset map in the bottom right corner provides a broader geographical context.

Survey Coordination Tool

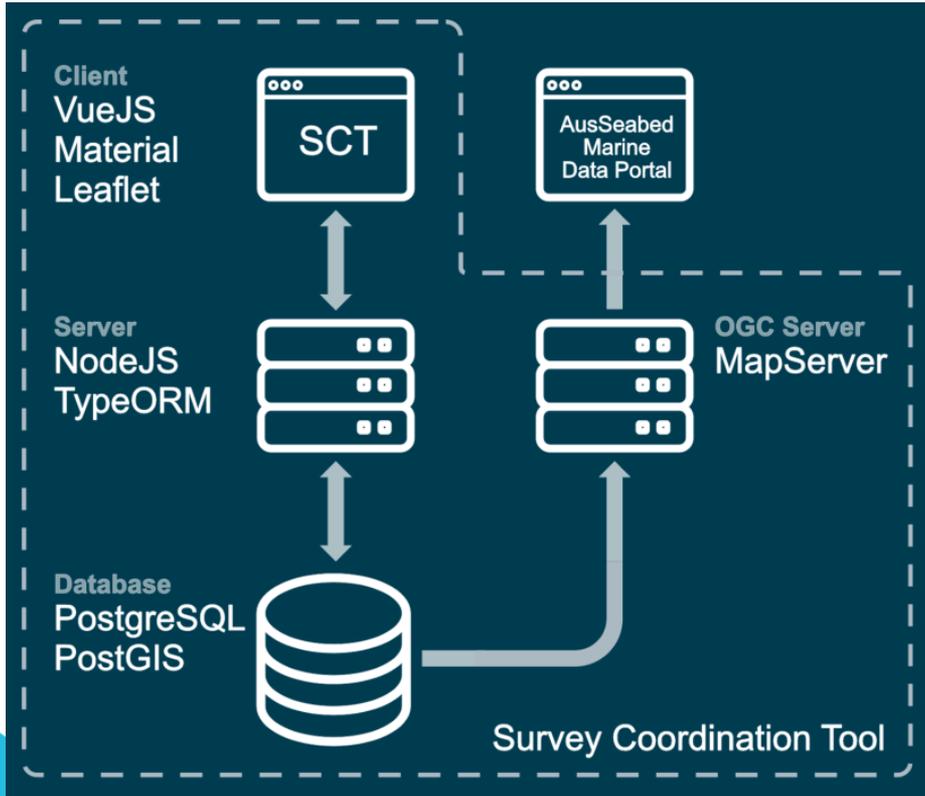
Where does the information go?

Requests = Formatted email to the AHO for consideration in their survey planning process



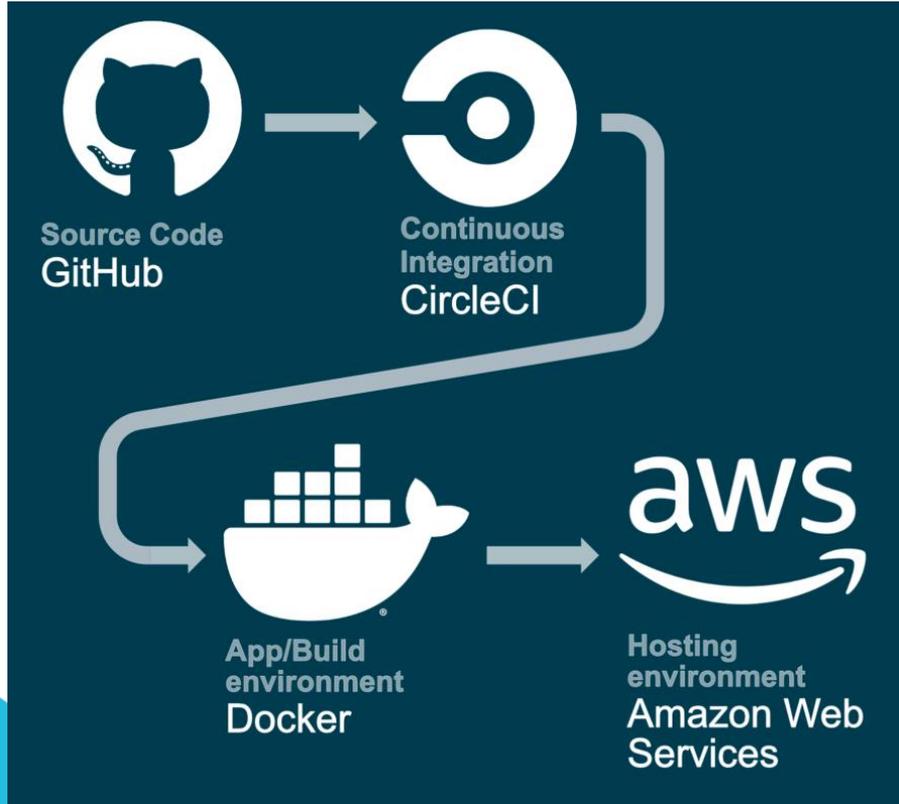
Survey Coordination Tool

Technology Stack



- Utilises a common web application technology stack
- Geospatial specifics handled by Leaflet and PostGIS
- SCT is open source as are all the libraries it uses
- MapServer publishes geospatial data stored in the SCT database via Open Geospatial Consortium (OGC) web services; specifically WMS and WFS

Survey Coordination Tool Infrastructure



- GitHub used to store source code
- Continuous Integration system (CircleCI) builds development and production releases. Development deployment is automated.
- Docker used to provide automated consistent build environments.
- Production and staging (development) instances of SCT are hosted in AWS

Survey Coordination Tool - Goals for next PI.....

- Continue to:
 - support the user base, and increase the uptake of the tool
 - develop a backlog based on user feedback to form the foundations of future releases.
 - Scoping the system requirements for supporting the National Prioritisation Framework
- 

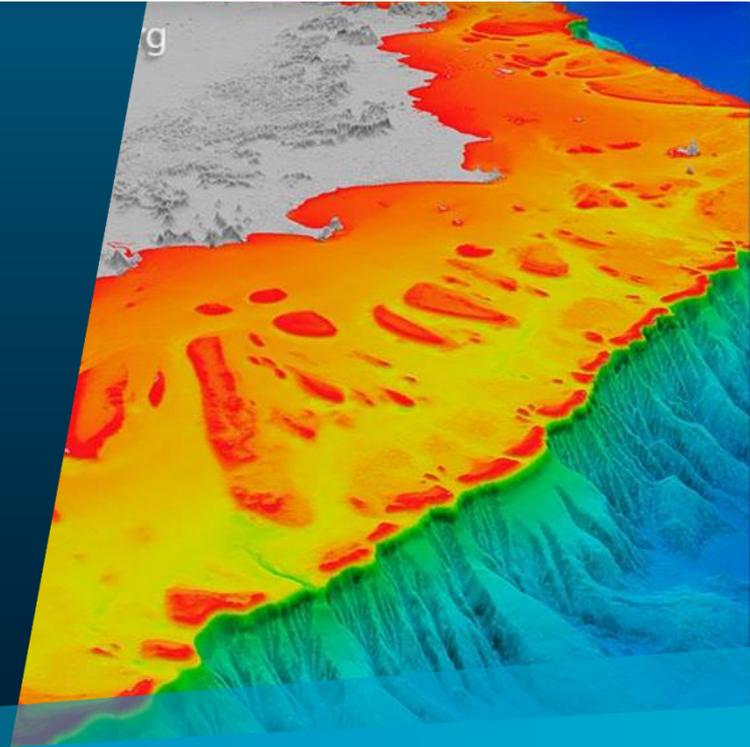


ASB Quality Assurance tools

AusSeabed Quarterly Showcase

Matt Boyd | Lachlan Hurst

November 2020



Quality Assurance tools

History

A screenshot of a complex data table with multiple columns and rows. The table has a light green and light blue background color scheme. The text is small and difficult to read, but it appears to be a detailed log or data set.

<https://www.hydroffice.org/>
https://github.com/hydroffice/hyo2_qax

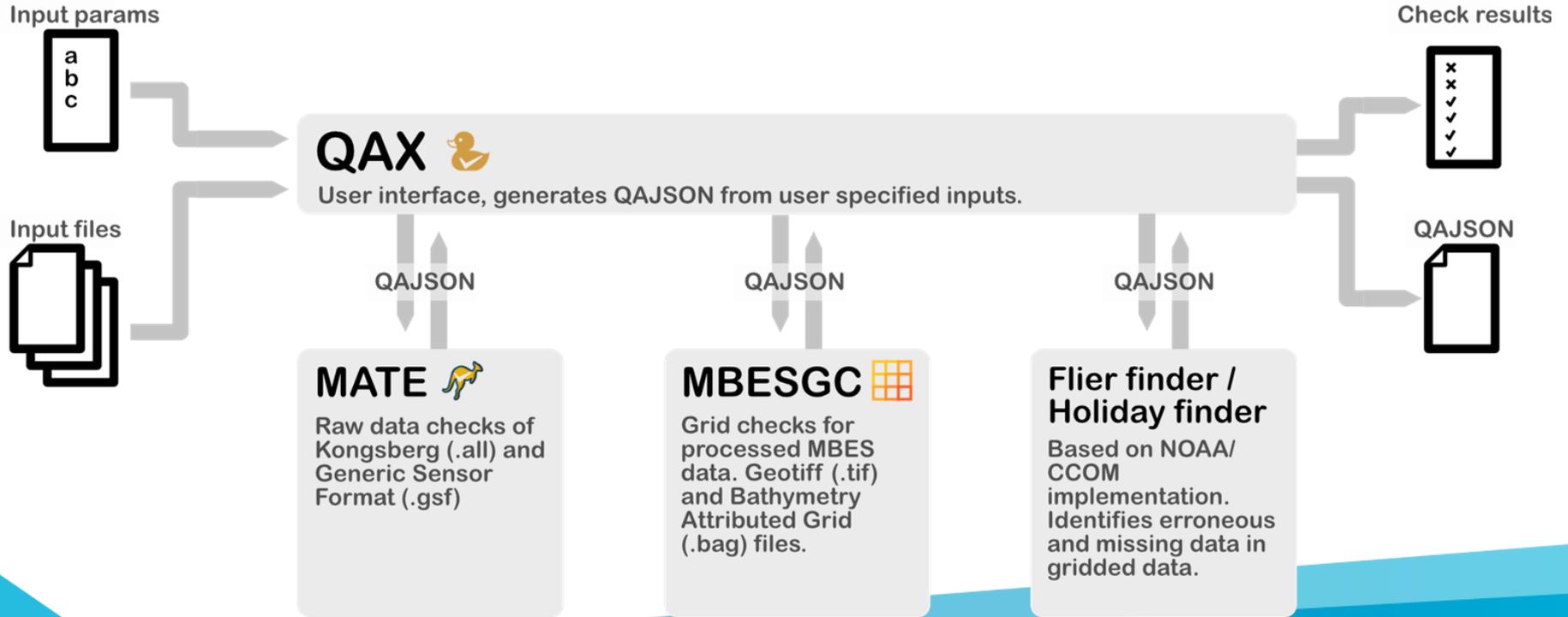
Quality Assurance tools

Open Source



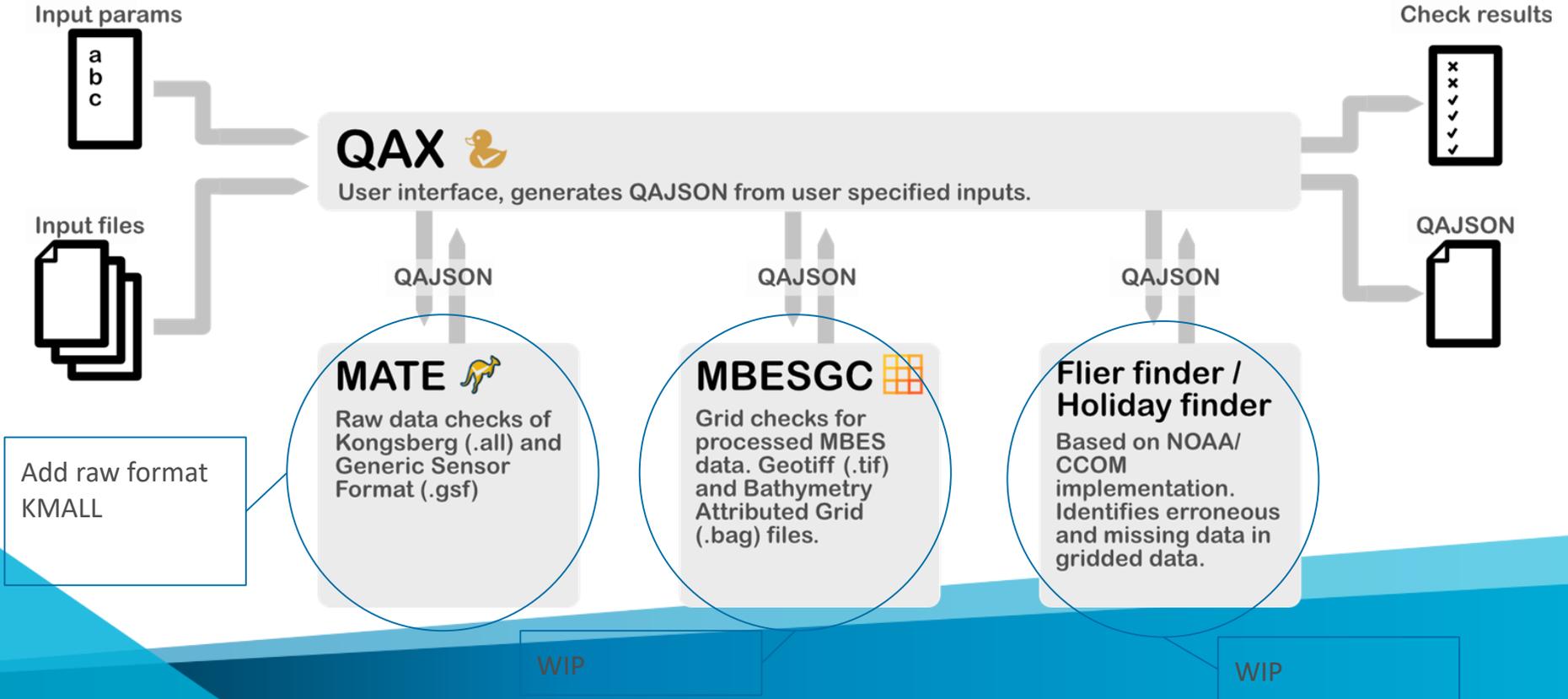
Quality Assurance tools

Overview



Quality Assurance tools

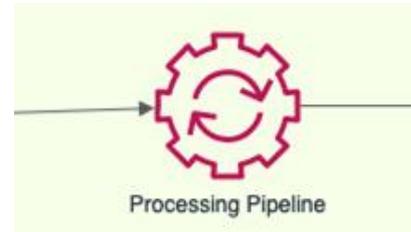
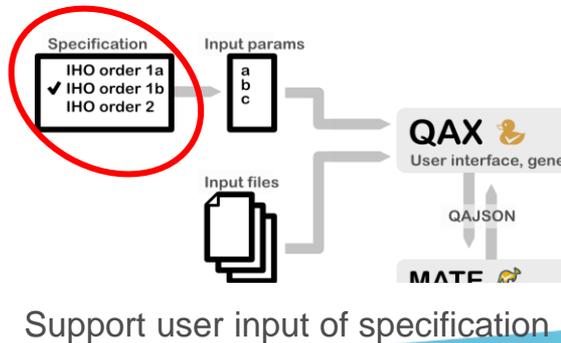
Next Steps



Quality Assurance tools

Next Steps

- Once previous is completed will have what we believe to be a minimum viable product (MVP)
- Ambitiously wanting use of MVP in January next year
- Look to obtain feedback from users
- Following that plan is to further embed the tool within automated processes.



Integration of QA tools into processing pipeline

Quality Assurance tools

QAX

Run checks

Check execution status:
Check: Mate (1/1)
Status: Complete
Progress: 100%

Score Board

ID	Check	Input	Status	QA Pass
1	180c4f05-54c9-4c50-b0e8-d174a892091	Backscatter Available [x-1]	completed ✓	completed ✓
2	8c90f9ce-8759-4c2c-986a-f1f988bc021	Bathymetry Available [x-1]	completed ✓	completed ✓
3	4a39371f-3a21-44d2-93d4-d9ed19d5002	Date checked [x-1]	completed ✓	completed ✓
4	9639ca1-d8a6-4816-8716-d8f68493808	Ellipsoid Height Setup [x-1]	completed ✓	completed ✗
5	771618db-1380-4816-a76a-f1f941038541	Filename checked [x-1]	completed ✓	completed ✓
6	47629279-756c-4a4f-a9d2-e5c361744d7	Minimum Prog count [x-1]	completed ✓	completed ✓
7	5421f932-6e37-4760-bf83-488bbe0ae994	Ray Tracing Available [x-1]	completed ✓	completed ✓
8	c1a8576d-4c50-418c-4c86-60bca962768	Runtime Parameters [x-1]	completed ✓	completed ✓
9	9ef60266-4761-4831-b04c-dc1c6a1800a6	Positions [x-1]	completed ✓	completed ✓
10	e57b7811-5963-49b3-ba06-a73d6ca0815	SVP File Available [x-1]	completed ✓	completed ✓

Details

Ellipsoid Height Setup

Ellipsoid heights not being tagged change your position input to a GSK string.
Input file: D:\ah2017_v01\sw_em2040c\0005_20170203_224718_Abstar.all

Score Board

ID	Check	Input	Status	QA Pass
1	180c4f05-54c9-4c50-b0e8-d174a892091	Backscatter Available [x-1]	completed ✓	completed ✓
2	8c90f9ce-8759-4c2c-986a-f1f988bc021	Bathymetry Available [x-1]	completed ✓	completed ✓
3	4a39371f-3a21-44d2-93d4-d9ed19d5002	Date checked [x-1]	completed ✓	completed ✓
4	9639ca1-d8a6-4816-8716-d8f68493808	Ellipsoid Height Setup [x-1]	completed ✓	completed ✗
5	771618db-1380-4816-a76a-f1f941038541	Filename checked [x-1]	completed ✓	completed ✓
6	47629279-756c-4a4f-a9d2-e5c361744d7	Minimum Prog count [x-1]	completed ✓	completed ✓
7	5421f932-6e37-4760-bf83-488bbe0ae994	Ray Tracing Available [x-1]	completed ✓	completed ✓
8	c1a8576d-4c50-418c-4c86-60bca962768	Runtime Parameters [x-1]	completed ✓	completed ✓
9	9ef60266-4761-4831-b04c-dc1c6a1800a6	Positions [x-1]	completed ✓	completed ✓
10	e57b7811-5963-49b3-ba06-a73d6ca0815	SVP File Available [x-1]	completed ✓	completed ✓

Details

Runtime Parameters

Message: 14 Runtime Parameters (x-1) datagram found in file.
Input file: D:\ah2017_v01\sw_em2040c\0005_20170203_224718_Abstar.all

Map View

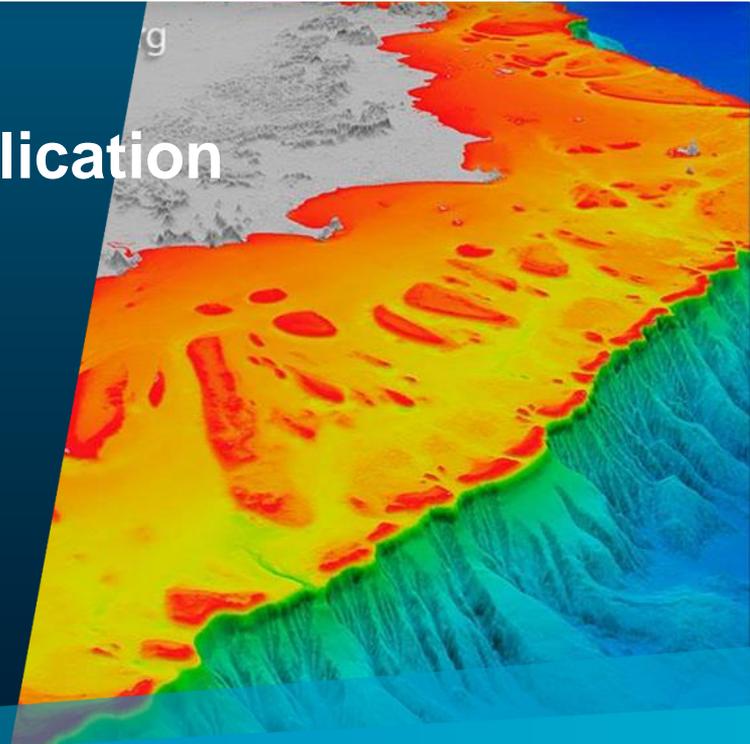
Key: value
Coordinate: 35438
Depth: 3500m
Elevation: 2995
CTD: 3
Hour: 20070203
CTD: 2
SerialNumber: 2087
Platform: C20
Time: 02225.474
Altitude: 0.55
BeamSpacing: 3
BeamDir: High density
Checksum: 3213
GeoReferencePoint

Data Processing, Delivery and Publication

AusSeabed Quarterly Showcase

Maggie Arnold | David Penton | Justy Siwabessy |
Michele Spinoccia | Natalie Lennard |

November 2020



Data Delivery Processing and Publication

- **Publication Schedule** now on the AusSeabed website

Publication Schedule

Bathymetry Publication Schedule

The AusSeabed Publication Schedule is a list of seabed mapping surveys that are intended for publication on the [AusSeabed Marine Data Portal](#). Currently, this process is a collaboration between Geoscience Australia and CSIRO, but is intended to expand in future with more AusSeabed data collaborators.

While AusSeabed aims to publish data to the level of adherence based on the requirements stated in the [AusSeabed multibeam guidelines](#) (version 1), we will also publish interim products (version 0) that are currently available, but have not yet been standardised (version 1). Users should be aware that V1 products will always supersede V0 products.

The status of each survey indicates the level of completeness, ranging from:

- **New:** The survey has been newly added to the schedule and has not yet progressed in the publication queue.
- **On Hold:** The survey has not yet progressed in the publication queue.
- **In Progress:** The survey is in progress of being published.
- **Published:** The survey is published on the AusSeabed Marine Data Portal and is available for viewing and downloading.
- **Not Applicable (N/A):** The survey has been published at a standardised level (version 1), and does not need to be published at a version 0 level.

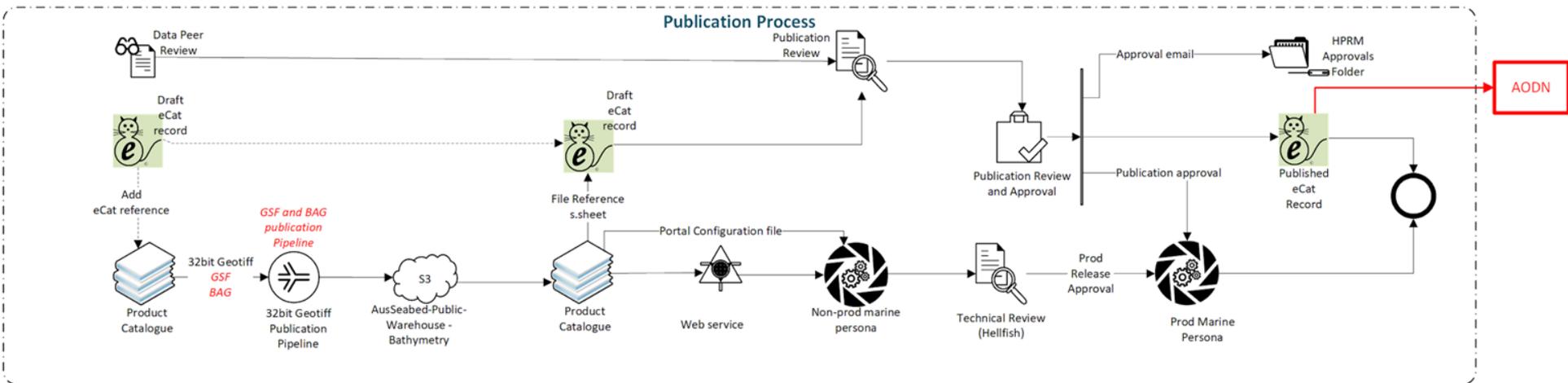
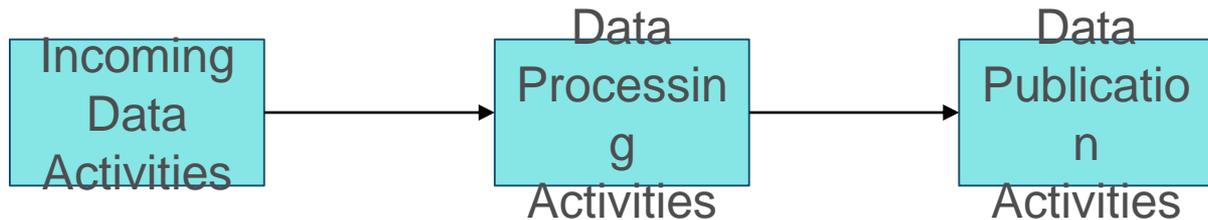
The Publication Schedule is updated weekly and once surveys are published on the AusSeabed Marine Data Portal, they will be removed from the table after a fortnight.

If you are interested in more information or would like to become an AusSeabed collaborator, please contact us at ausseabed@ga.gov.au.

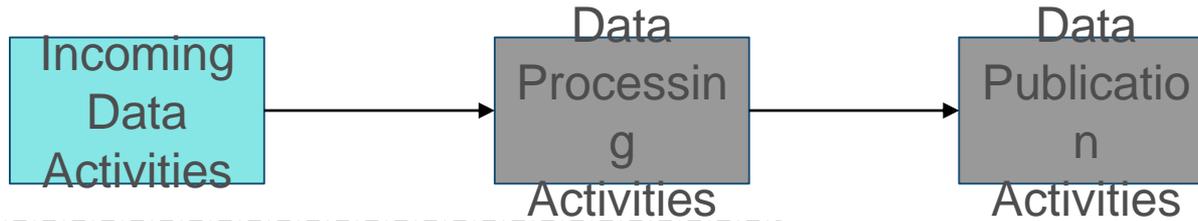
Publication Schedule for GA and CSIRO bathymetry data : AusSeabed website

Estimated date of release	Entity to release	Dataset label	Collecting Entity	Survey year	Status
24 October 2020	GA	Elizabeth Middleton reefs V1	NESP	2020	In Progress
24 October 2020	GA	Outer Darwin Harbour V1	GA/NT/AIMS	2015	In Progress
30 October 2020	GA	Bynoe Harbour V1	GA/AIMS/NT	2016	In Progress
20 November 2020	GA	Davis Coast Survey 2017 V1	GA/AAD/AHO	2017	On Hold

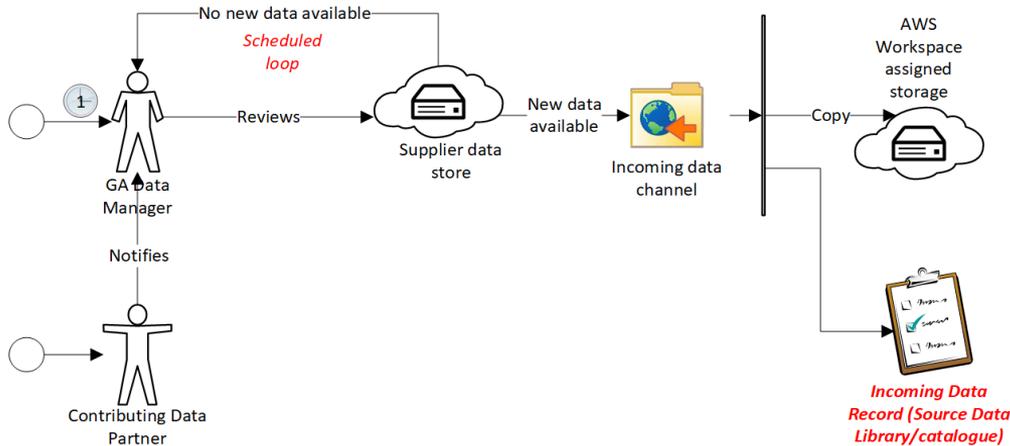
Data Delivery Processing and Publication



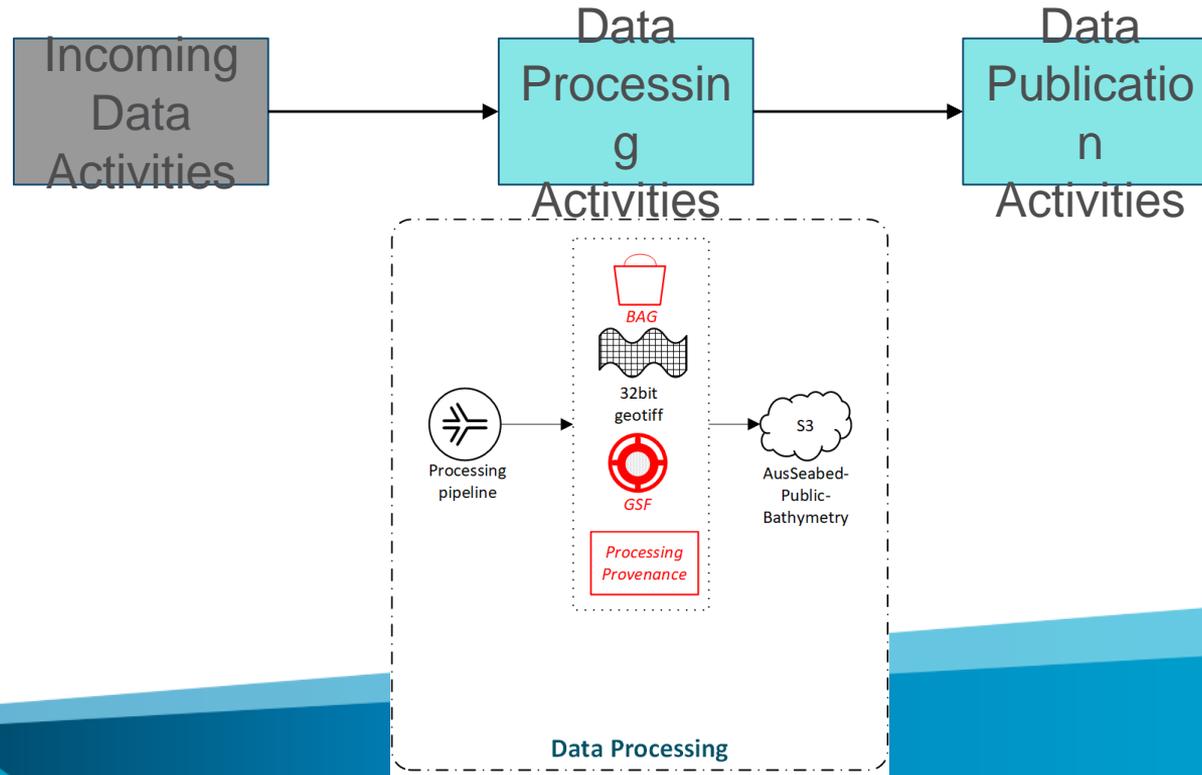
Data Delivery Processing and Publication



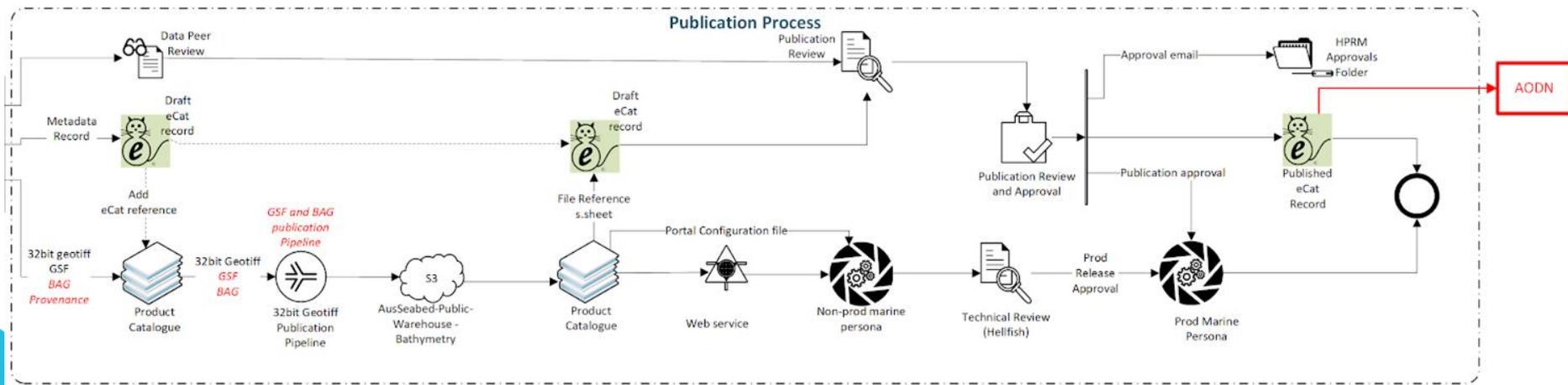
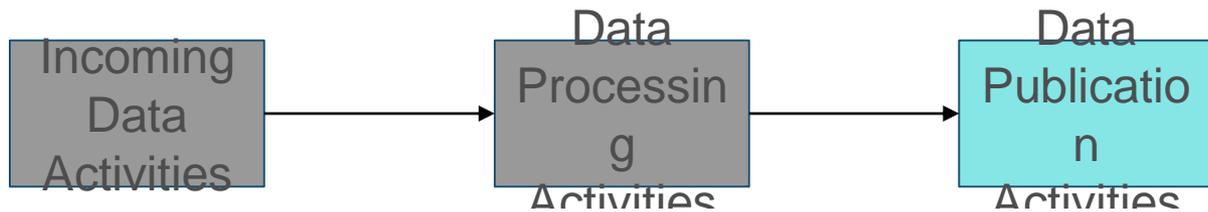
Incoming Data Processes



Data Delivery Processing and Publication

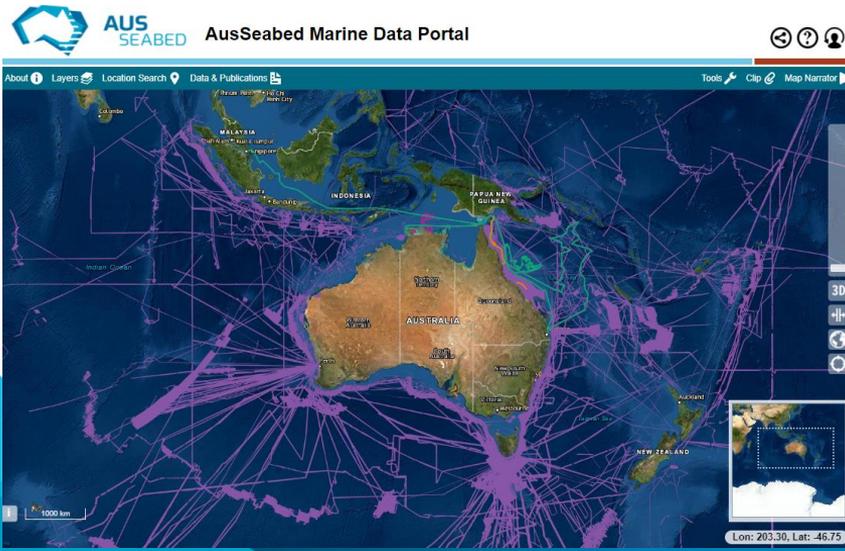


Data Delivery Processing and Publication



AusSeabed Marine Data Portal update

- **Portal enhancements:** Improved download functionality (WCS), 3D visualisation, Map narrator, Profile Tool to include bathymetry grids, Clip-Zip-Ship, User authentication.
- External contributor data publication pipeline



Becoming a Contributing Data Partner Profile Form

Contributing Data Partner Profile

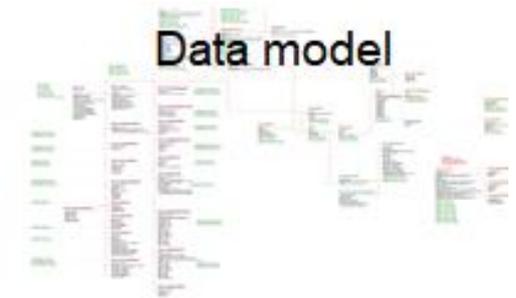
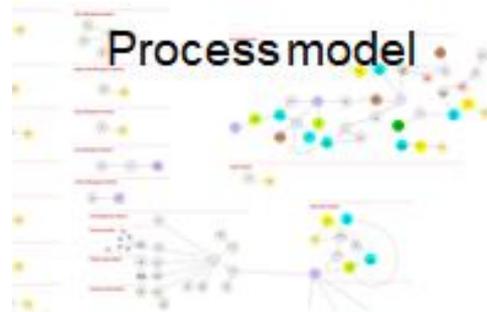
Data Provision

Please provide the contact details for the organisation that will be providing data to the GA Local Hub.

Organisation Name:

Commission Representative (contact name):

User Needs Analysis



Screen designs



Take home points

- The next PI will be focussed on **gathering user feedback** for the Portal
- Publishing what we promised to publish on the **Publication Schedule**
 - Focus on **Publishing** our data holdings
 - Refining external contributing partners publication pipeline
- **Usage statistics** to be gathered from Portal Clip tool
- Portal Wireframe progression



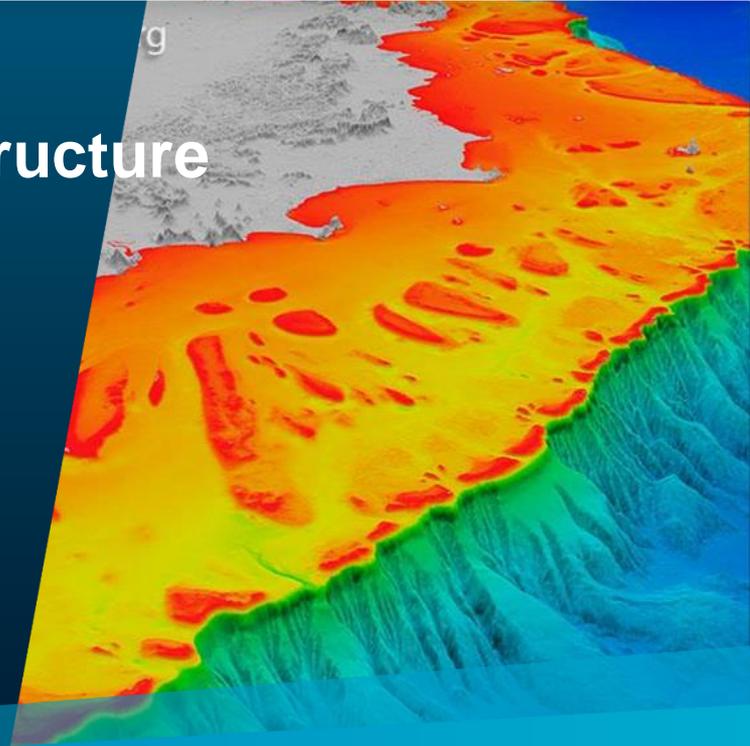
AUS
SEABED

Data Warehouse and Cloud Infrastructure

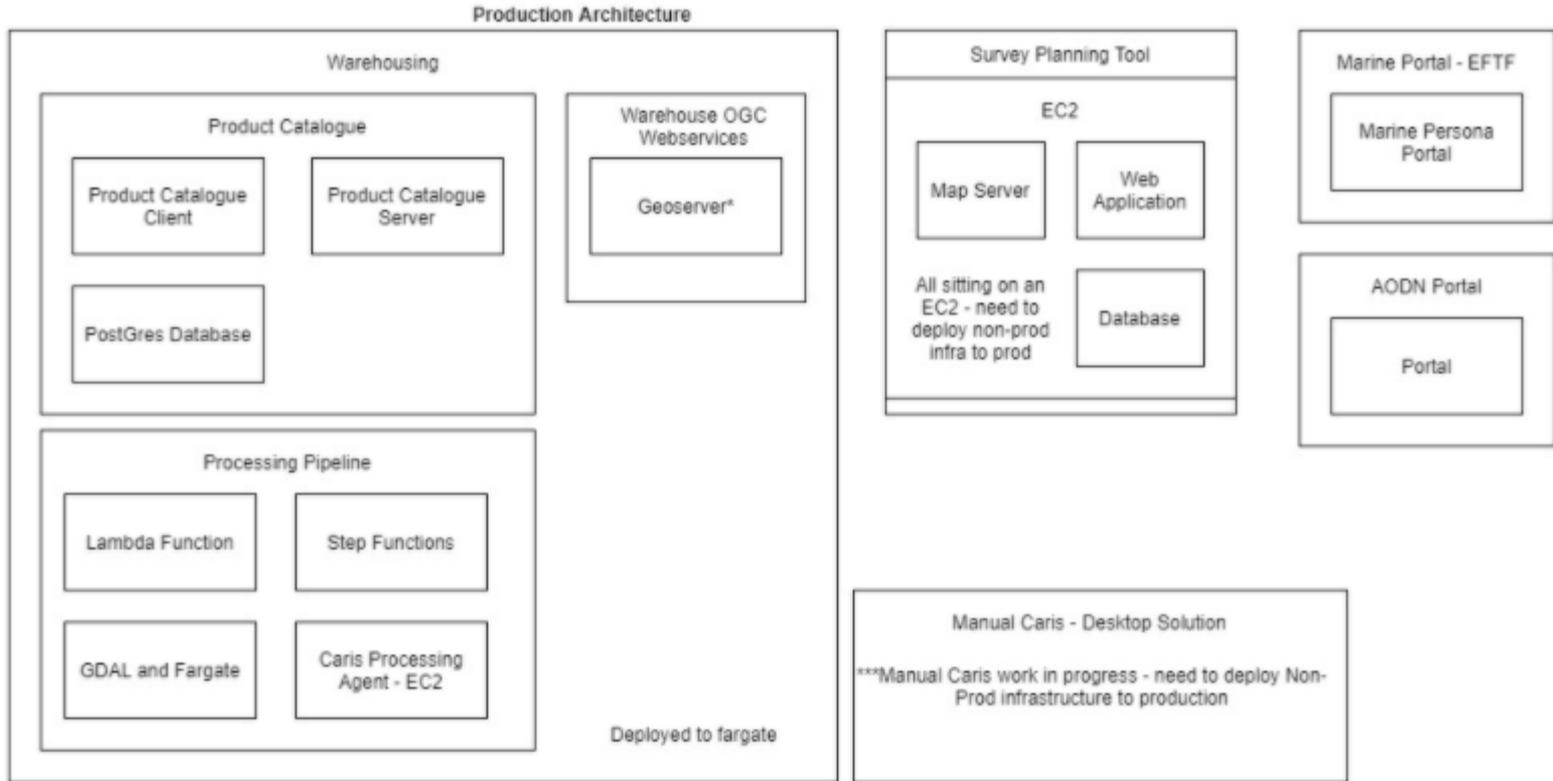
AusSeabed Quarterly Showcase

Maggie Arnold/David Penton | Ghalib Ahmad | Natalie Lennard

November 2020



Ausseabed Data Warehouse



Ausseabed Data Warehouse

- Product Catalogue update
 - Internal tool to support data publication
- Processing Pipeline for Level 3 data in place producing cloud-optimised geotiffs
- Processing Pipeline now implemented for Level 2 data

The screenshot displays the 'Ausseabed Product Catalogue' interface. The top navigation bar includes the title and version 'v1.0.10'. The user 'Maggie.Arnold@ga.gov.au' is logged in. A sidebar on the left contains navigation links: Home, Survey Datasets, Reports, Export Datasets, REST API, and Logout. The main content area shows the product details for 'Gazetteer Beagle Commonwealth Marine Reserve Bathymetry Ellipsoid'. The metadata includes a resolution of 3m, a spatial reference system of EPSG:4326, a vertical datum of Ellipsoid (Best), and a metadata persistent ID. It also lists S3 URIs for L3 Product Tif and BAG locations. At the bottom, there are 'SUBMIT' and 'CANCEL' buttons, and a section for 'Processed Products (Id=514):' listing 'Bathymetry (tif)', 'Bathymetry (bag)', and 'Hillshade' with their respective S3 URIs.

Ausseabed Product Catalogue v1.0.10

Maggie.Arnold@ga.gov.au ae23fcb7-

Home
Welcome page

Survey Datasets
Add or remove information about bathymetry products

Reports
Identify files that are missing

Export Datasets
Export dataset information for use in the Marine Portal

REST API
Directly access the REST API to the Product Catalogue

Logout
Logout of the system

Quasar v1.12.13

Gazetteer
Beagle Commonwealth Marine Reserve Bathymetry Ellipsoid

Resolution
3m

Spatial Reference System
EPSG:4326

Vertical Datum
Ellipsoid (Best)

Metadata Persistent Id
http://pid.geoscience.gov.au/dataset/ga/130301

uri

L3 Product Tif Location
s3://ausseabed-public-bathymetry/L3/0364_beagle_park/esri_grid/ga-0364_ausseabed_cube_03m_epsg-4326_20200824_ellipsoid.tif

s3 uri

L3 Product BAG Location

s3 uri

SUBMIT **CANCEL**

Processed Products (Id=514):

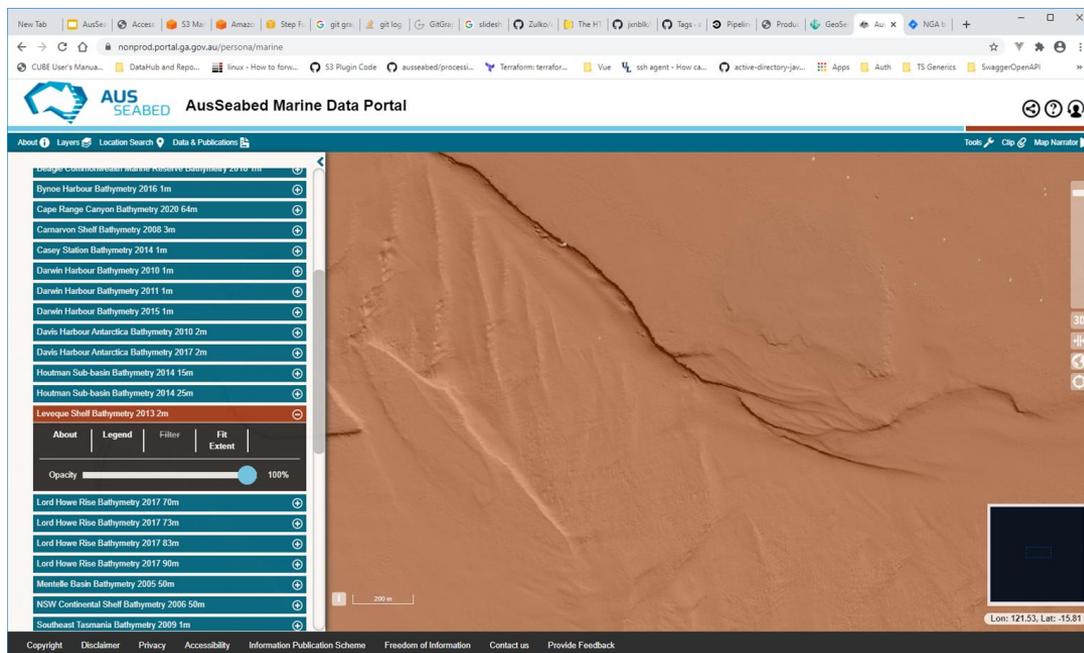
Bathymetry (tif): s3://ausseabed-public-warehouse-bathymetry/L3/a7b46b25-40af-4271-98f3-326b6c864bed/Beagle_Commonwea

Bathymetry (bag):

Hillshade: s3://ausseabed-public-warehouse-bathymetry/L3/a7b46b25-40af-4271-98f3-326b6c864bed/Beagle_Commonwea

Ausseabed Data Warehouse

- Publishing bathymetry as webservice
 - Increasing access to Ausseabed survey and compilation data
- Publishing bathymetry to the Portal
 - Increasing multibeam data available to our users
 - Different download options
- AODN linkage



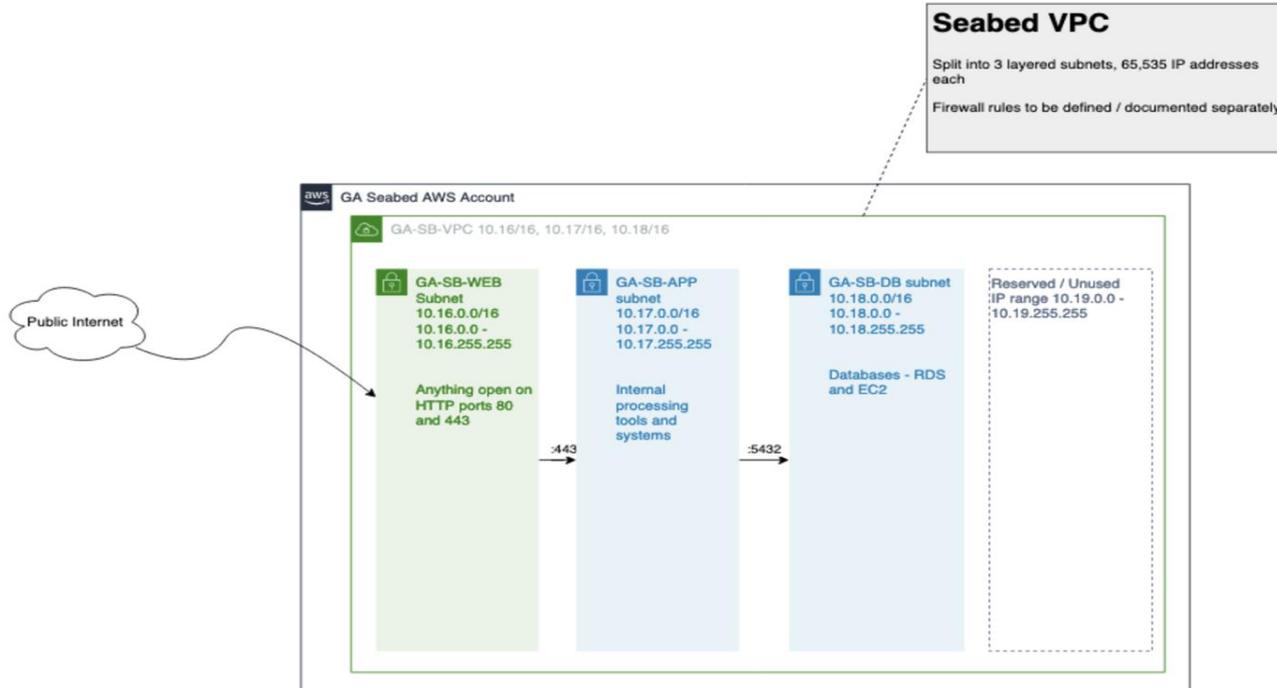
Cloud Infrastructure

Goals for the last PI:

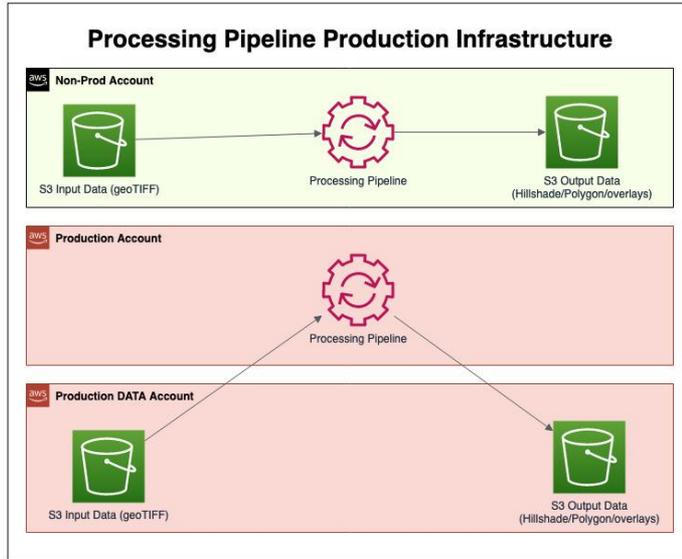
1. Data Management and processing in the cloud ✓
2. Deploying CARIS in the cloud ✓

Cloud Network Model

Seabed AWS Network Diagram - High Level

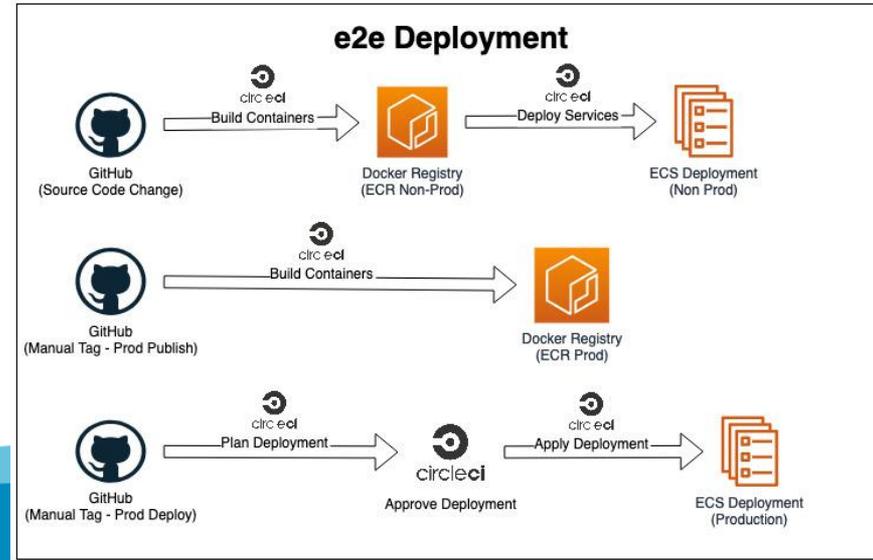


Processing Pipeline Infrastructure



- Cloud processing and data management infrastructure established
 - Segregation of non-prod and production accounts to ensure production environments integrity
 - Segregation of production processing and data management to ensure data integrity and persistence

- Fully automated deployment pipeline established:
 - Provides for rapid deployment,
 - Consistency in deployment process (fewer errors), and
 - Rapid engagement of new resources through use of industry best practice.



CARIS in the Cloud

The image displays an Amazon WorkSpaces desktop environment. The desktop background is dark blue with the Amazon WorkSpaces logo in the bottom right. A taskbar at the bottom shows various application icons. On the left side, there is a vertical list of application shortcuts including Recycle Bin, Sonar Record Viewer, Amazon WAM, WinSCP, Convert To RINEX, Install Amazon..., Firefox, Google Chrome, MATLAB R2020b, and POSPac MMS 8.3. In the center of the desktop, the text "32GB RAM, 2TB of associated storage" is displayed in white. An Amazon WorkSpaces login window is open in the foreground, showing the login interface with fields for username (justy-powerpro) and password, a "Sign In" button, and a "Forgot Password?" link. The "Keep me logged in" checkbox is checked. The window title bar reads "Amazon WorkSpaces" and includes "View", "Settings", and "Support" options.

32GB RAM,
2TB of associated storage

amazon WorkSpaces

amazon WorkSpaces

Please log in with your ausseabed-poc credentials

justy-powerpro

Password

Sign In

Forgot Password?

Keep me logged in

[Change Registration Code](#)

Access your desktop anywhere, anytime, from any device

Amazon WorkSpaces View Settings Support

Amazon WorkSpaces Settings Support

Recycle Bin Sonar Record Viewer

Amazon WAM WinSCP

Convert To RINEX Install Amazon...

Firefox

Google Chrome

MATLAB R2020b

POSPac MMS 8.3

9:57 AM

ENG 9:57 AM

CARIS on Workspaces in the Cloud

The image shows a Windows desktop environment. On the left, a Command Prompt window is open, displaying the execution of the 'carisbatch.exe' command with various parameters for importing HIPS data. The parameters include input format, CRS, gap, height, and file paths. The Command Prompt shows the execution of the command multiple times, with the output of the 'date /t' and 'time /t' commands being displayed.

```
d:\>rem carisbatch.exe --run ImportHIPSFromAuxiliary --input-format APP_POSMV --allow-partial --maximum-gap 1000sec "d:\bathy\Caris\L0\Falkor\posmv\FK200802\2020*.*)" --input-crs EPSG:4326 --gps-height 0sec --gps-height-rms 0sec "file:///d:\bathy\Caris\HDCS_Data\GA-0365\GA-0365.hips?Vessel=RV_Falkor_EM302;Day=2020-219" >> "d:\bathy\Caris\HDCS_Data\GA-0365\process_log.txt" 2>> "d:\bathy\Caris\HDCS_Data\GA-0365\error_log.txt"
```

On the right, the CARIS HIPS and SIPS software interface is open. The interface shows a map with red track lines. The 'Layers' panel on the left lists 'All Critical Soundings', 'GA-0365 Critical Soundings', 'All Track Lines', 'GA-0365 Track Lines', and 'All Contacts'. The 'Active Track Lines' panel shows a search for track lines and a list of active track lines for the vessel 'RV_Falkor_EM302' on days '2020-214', '2020-215', and '2020-216'. The 'Properties - Track Lines' panel on the right shows the properties for the selected track line, including HIPS file, Vessel, Day, Line Name, Line Path, Min Time, Max Time, Total Time, Resolution, Locked, Input CRS, and Modified time. The 'Log Viewer' panel at the bottom right shows the log of the current operation, including the command used to import the HIPS data.

HIPS file	Vessel	Day	Line Name	Line Path
GA-0365	RV_Falkor...	2020-215	0021_2020...	F:\justy\b...
GA-0365	RV_Falkor...	2020-239	1812_2020...	F:\justy\b...
GA-0365	RV_Falkor...	2020-215	0013_2020...	F:\justy\b...

Where to next:

Data Warehouse:

- Technical Lead recruitment in progress = **Continued investment in innovation**
- Other data types to incorporate into the Publishing pipeline
 - Backscatter = **Expanding into other data types**
- Marine Sediments dynamic webservice = **bringing new versions of services online**
- Resolution of Technical debt = **continued investment in improvement**
- AODN linkage = **connecting with others**

Cloud infrastructure:

- Maturation of the processing pipeline for all levels (delivery of L2 processing in the cloud) = **new processing pathway to broaden the products available**
- Development of cloud based incoming pathway for consistent data submission = **consistent method for adding data to the GA ASB Hub**

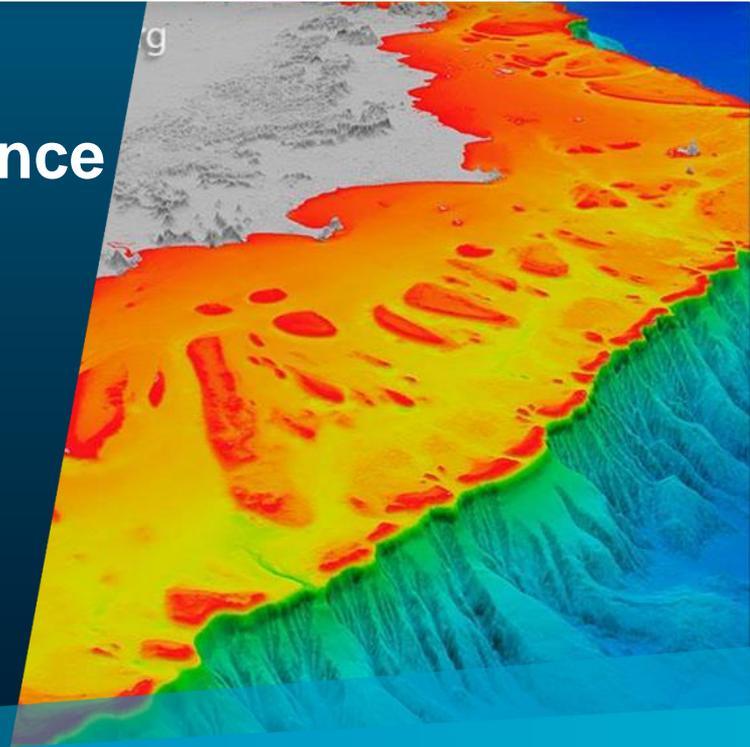


Data Hub Policy and Data Governance

AusSeabed Quarterly Showcase

Natalie Lennard

November 2020



Data Hub Policy and Data Management

Goals for the last PI:

1. Establish our core data management policies: ✓
 - a. Incoming data Policies
 - b. Data storage policies
 - c. Data distribution Policies
2. Establish the supporting business processes to implement agreed policies ✓
3. Implement the policies ✓
4. Distribute the information to the team and community ✓

- AusSeabed Data Management Documentation
 - GA Local Hub Metadata Requirements
 - GA Contributing Hub Data Distribution Policies
 - GA Local Hub Publication Process
 - GA Local Hub Prioritisation Process
 - Updating the Publication Schedule
 - eCat and the Publication of Contributing Data ...
 - Review process of Nonproduction Ausseabed ...
 - GA Contributing Hub Storage Model
 - GA Contributing Hub Web Content
 - What kind of contributor are you?
 - How to register for the Survey Coordination Tool
 - AusSeabed Local Hub Technical Requirements
 - AusSeabed Survey Coordination Tool
 - Document Checklist

AusSeabed Local Hub Technical Requirements

Created by D Penton
Last updated Oct 19, 2020 • 6 min read

The Local Hub must provide three services:

- publication of ISO19115-3 metadata through a catalogue service - nominally GeoNetwork
- publication of Web Mapping Service and Web Coverage Service according to AusSeabed protocols
- direct download of Local Hub products through HTTP protocol

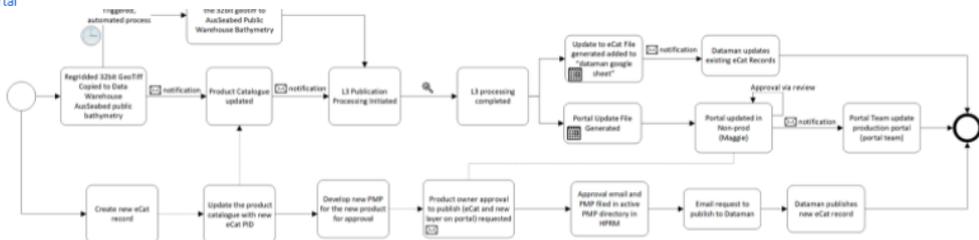
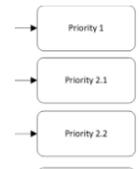
The Local Hub must also provide a description of their holdings in an Excel format that can be read by the

both new incoming data processing
ion will be relevant until such time
erships are put into place.

mitted funding specifically for
ership program. Under this model,
resources that is also provided by

To be available through the AusSeabed website in the next PI.

- Publication of ISO19115-3 metadata
 - General Background
 - Technical Details
- AusSeabed protocols for publishing Web Mapping Service and Web Coverage Services
 - Naming of layers
 - Bathymetry
 - Hillshade
 - Extent Polygon
- Direct download of Local Hub products
- Description of holdings for inclusion in EFTF Portal
 - Display names on the portal



- Archived pages
 - GA Local Hub Metadata Requirements
 - GA Contributing Hub Data Distribution Policies
 - GA Local Hub Publication Process
 - GA Local Hub Prioritisation Process
 - Updating the Publication Schedule

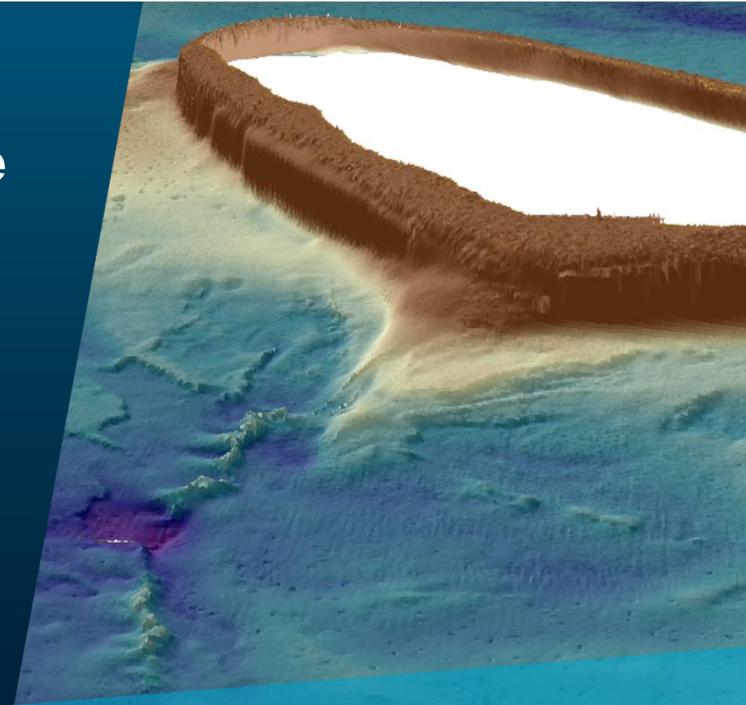
Data Hub Policy and Data Management - Goals for next PI.....

1. Finalise the content and publish the policies to the community = **focussing on connecting other hubs/collecting other data!**
2. Transition to sections operations team:
 - a. BAU for Survey Coordination tool = **operational services**
 - b. BAU for L3 publication = **operational services**
3. Continue to develop supporting policies and procedures as required/identified = **continued investment in improvement**

More Data from Everywhere and Everyone

Linking contributing hubs

AusSeabed Quarterly Showcase – Nov 20 to Feb 21



Program Increment Goals

Program Objectives	PI Goals	Status
Improve coordination of activities relating to seabed mapping.	<ol style="list-style-type: none">1. Engagement plan in place to progress Aus-US collaboration (GA, CSIRO, NOAA)2. National Prioritisation Framework workshop delivered	
Expand the number of bathymetric products openly accessible through the AusSeabed platform.	<ol style="list-style-type: none">1. Finalise CSIRO hub integration2. Two new contributing hubs underway (1. IMSA-PAWSEY; 2. TBD)3. Continue data publication of Falkor ongoing surveys in Aus4. GA fully transitioned to cloud-based processing (workstation)5. Operational Cloud Automated Processing Pipeline for key data levels	
Secure an enduring AusSeabed program to continue realising benefits to the community relying on seabed mapping.	<ol style="list-style-type: none">1. Collaborative agreement between EB signed2. Key agreements signed between CSIRO, AHO3. Communication and Engagement Strategy published	
Deliver products and services focused on the needs of key stakeholders and end-users.	<ol style="list-style-type: none">1. QA tools (QAX) in testing with volunteered HIPP contractors2. Portal wireframe report delivered and socialised with key stakeholders	

Thank you



Visit: www.usseabed.gov.au or
Email: usseabed@ga.gov.au