

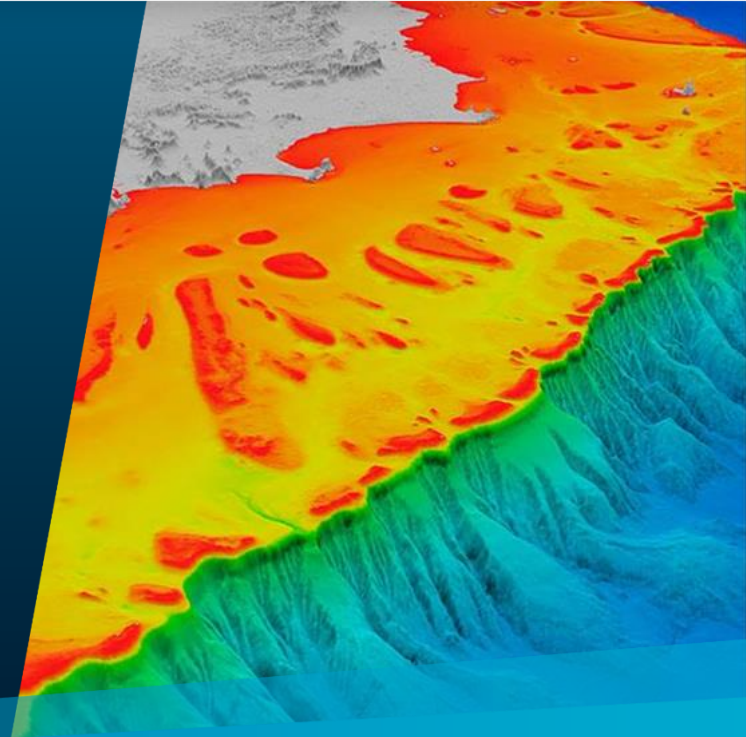


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QAX (Quality Control and Quality Assurance)
AusSeabed Webinar Series -
Webinar #2 - 30/07/2020

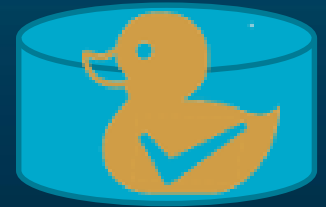




Stakeholders



Percentage of funding	Year	Category	Project Name	Project Lead	Project Description	Project Status	Project URL	Project Contact
100%	2015	Research	Development of a...	Dr. John Doe	...	Completed	...	...
100%	2016	Research	Development of a...	Dr. Jane Smith	...	Completed	...	...
100%	2017	Research	Development of a...	Dr. Michael Brown	...	Completed	...	...
100%	2018	Research	Development of a...	Dr. Sarah White	...	Completed	...	...
100%	2019	Research	Development of a...	Dr. David Black	...	Completed	...	...
100%	2020	Research	Development of a...	Dr. Emily Green	...	Completed	...	...
100%	2021	Research	Development of a...	Dr. James Blue	...	Completed	...	...
100%	2022	Research	Development of a...	Dr. Lisa Yellow	...	Completed	...	...
100%	2023	Research	Development of a...	Dr. Robert Purple	...	Completed	...	...
100%	2024	Research	Development of a...	Dr. Anna Pink	...	Completed	...	...
100%	2025	Research	Development of a...	Dr. Daniel Orange	...	Completed	...	...
100%	2026	Research	Development of a...	Dr. Grace Red	...	Completed	...	...
100%	2027	Research	Development of a...	Dr. Henry Blue	...	Completed	...	...
100%	2028	Research	Development of a...	Dr. Ivy Green	...	Completed	...	...
100%	2029	Research	Development of a...	Dr. Jack Yellow	...	Completed	...	...
100%	2030	Research	Development of a...	Dr. Karen Purple	...	Completed	...	...
100%	2031	Research	Development of a...	Dr. Leo Pink	...	Completed	...	...
100%	2032	Research	Development of a...	Dr. Mia Orange	...	Completed	...	...
100%	2033	Research	Development of a...	Dr. Noah Red	...	Completed	...	...
100%	2034	Research	Development of a...	Dr. Olivia Blue	...	Completed	...	...
100%	2035	Research	Development of a...	Dr. Peter Green	...	Completed	...	...
100%	2036	Research	Development of a...	Dr. Quinn Yellow	...	Completed	...	...
100%	2037	Research	Development of a...	Dr. Ryan Purple	...	Completed	...	...
100%	2038	Research	Development of a...	Dr. Sophia Pink	...	Completed	...	...
100%	2039	Research	Development of a...	Dr. Tyler Orange	...	Completed	...	...
100%	2040	Research	Development of a...	Dr. Victoria Red	...	Completed	...	...
100%	2041	Research	Development of a...	Dr. William Blue	...	Completed	...	...
100%	2042	Research	Development of a...	Dr. Xena Green	...	Completed	...	...
100%	2043	Research	Development of a...	Dr. Yara Yellow	...	Completed	...	...
100%	2044	Research	Development of a...	Dr. Zach Purple	...	Completed	...	...
100%	2045	Research	Development of a...	Dr. Adam Pink	...	Completed	...	...
100%	2046	Research	Development of a...	Dr. Bella Orange	...	Completed	...	...
100%	2047	Research	Development of a...	Dr. Carter Red	...	Completed	...	...
100%	2048	Research	Development of a...	Dr. Evans Blue	...	Completed	...	...
100%	2049	Research	Development of a...	Dr. Foster Green	...	Completed	...	...
100%	2050	Research	Development of a...	Dr. Gibson Yellow	...	Completed	...	...
100%	2051	Research	Development of a...	Dr. Hart Purple	...	Completed	...	...
100%	2052	Research	Development of a...	Dr. Irwin Pink	...	Completed	...	...
100%	2053	Research	Development of a...	Dr. Jenkins Orange	...	Completed	...	...
100%	2054	Research	Development of a...	Dr. Kelly Red	...	Completed	...	...
100%	2055	Research	Development of a...	Dr. Lester Blue	...	Completed	...	...
100%	2056	Research	Development of a...	Dr. Mason Green	...	Completed	...	...
100%	2057	Research	Development of a...	Dr. Norman Yellow	...	Completed	...	...
100%	2058	Research	Development of a...	Dr. Olivia Purple	...	Completed	...	...
100%	2059	Research	Development of a...	Dr. Parker Pink	...	Completed	...	...
100%	2060	Research	Development of a...	Dr. Quinn Orange	...	Completed	...	...
100%	2061	Research	Development of a...	Dr. Roman Red	...	Completed	...	...
100%	2062	Research	Development of a...	Dr. Sophia Blue	...	Completed	...	...
100%	2063	Research	Development of a...	Dr. Taylor Green	...	Completed	...	...
100%	2064	Research	Development of a...	Dr. Victoria Yellow	...	Completed	...	...
100%	2065	Research	Development of a...	Dr. William Purple	...	Completed	...	...
100%	2066	Research	Development of a...	Dr. Xena Pink	...	Completed	...	...
100%	2067	Research	Development of a...	Dr. Yara Orange	...	Completed	...	...
100%	2068	Research	Development of a...	Dr. Zach Red	...	Completed	...	...
100%	2069	Research	Development of a...	Dr. Adam Blue	...	Completed	...	...
100%	2070	Research	Development of a...	Dr. Bella Green	...	Completed	...	...
100%	2071	Research	Development of a...	Dr. Carter Yellow	...	Completed	...	...
100%	2072	Research	Development of a...	Dr. Evans Purple	...	Completed	...	...
100%	2073	Research	Development of a...	Dr. Foster Pink	...	Completed	...	...
100%	2074	Research	Development of a...	Dr. Gibson Orange	...	Completed	...	...
100%	2075	Research	Development of a...	Dr. Hart Red	...	Completed	...	...
100%	2076	Research	Development of a...	Dr. Irwin Blue	...	Completed	...	...
100%	2077	Research	Development of a...	Dr. Jenkins Green	...	Completed	...	...
100%	2078	Research	Development of a...	Dr. Kelly Yellow	...	Completed	...	...
100%	2079	Research	Development of a...	Dr. Lester Purple	...	Completed	...	...
100%	2080	Research	Development of a...	Dr. Mason Pink	...	Completed	...	...
100%	2081	Research	Development of a...	Dr. Norman Orange	...	Completed	...	...
100%	2082	Research	Development of a...	Dr. Olivia Red	...	Completed	...	...
100%	2083	Research	Development of a...	Dr. Parker Blue	...	Completed	...	...
100%	2084	Research	Development of a...	Dr. Quinn Green	...	Completed	...	...
100%	2085	Research	Development of a...	Dr. Roman Yellow	...	Completed	...	...
100%	2086	Research	Development of a...	Dr. Sophia Purple	...	Completed	...	...
100%	2087	Research	Development of a...	Dr. Taylor Pink	...	Completed	...	...
100%	2088	Research	Development of a...	Dr. Victoria Orange	...	Completed	...	...
100%	2089	Research	Development of a...	Dr. William Red	...	Completed	...	...
100%	2090	Research	Development of a...	Dr. Xena Blue	...	Completed	...	...
100%	2091	Research	Development of a...	Dr. Yara Green	...	Completed	...	...
100%	2092	Research	Development of a...	Dr. Zach Yellow	...	Completed	...	...
100%	2093	Research	Development of a...	Dr. Adam Purple	...	Completed	...	...
100%	2094	Research	Development of a...	Dr. Bella Pink	...	Completed	...	...
100%	2095	Research	Development of a...	Dr. Carter Orange	...	Completed	...	...
100%	2096	Research	Development of a...	Dr. Evans Red	...	Completed	...	...
100%	2097	Research	Development of a...	Dr. Foster Blue	...	Completed	...	...
100%	2098	Research	Development of a...	Dr. Gibson Green	...	Completed	...	...
100%	2099	Research	Development of a...	Dr. Hart Yellow	...	Completed	...	...
100%	2100	Research	Development of a...	Dr. Irwin Purple	...	Completed	...	...



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



- There a large numbers of very experienced people out there in the community
- Perhaps there are ideas for checks that the community would like to see but individuals don't have the ability or the time to code them up themselves
- This open source project can help
- Send through your ideas and we can look to implement or at least identify what is required and feasibility
- A great example of where this has worked is https://github.com/hydrooffice/hyo2_soundspeed
- Soundspeed manager from hydrooffice has enabled much more robust sound velocity profile management and is a well designed and constructed environment that enables rapidly adding different reader, writer formats and the management capabilities for these non standard file types, reporting is equally improved because of its creation



KNG

- PosMV
- Seapath
- Coda Octopus F180
- etc



Check the network attitude/velocity packet in a *.all file

Raw message length varies depending on positioning system interfaced

Establish a PosMV is interfaced so check the raw positioning messages in the position packets are GGK string

That is the case so downstream processing should be relatively easy and logical....

QAX unknown



Coverage check  

Run checks

Check execution status:

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

QAX unknown

Coverage check  

Profile Settings
Profile: AusSeabed

Check Tools:
 Mate File Finder Coverage check

Survey Products

Raw Files:
D:\ah2017_v01\swm\swm2040c\0005_20170203_224718_2bstar.a11

SVP Files:
D:\t22020_v01\8YF\1 2020-01-09 03-03-45.svp



Trueheight Files:

Data outputs (drag-and-drop the desired output folder)
Folder: C:\Users\boyl12m\AppData\Local\MydeOffice\QAX
Create project folder: File-tool sub-folders: Use default: Open folder:

Checks suite
Generate

QA JSOR:

QAX unknown

Coverage check  

Score Board

ID	Check	Input	Status	QA Pass
1 1b0c47d5-54c9-4c50-b04d-d174a892091	Backscatter Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
2 8c909ace-8759-4c2c-984a-f75f888a3821	Bathymetry Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
3 4a3f3717-3a27-4402-934f-d9ed17945002	Date checked [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
4 9639ca1-d846-484c-077a-d8ff8a493088	Eisopod Height Setup [x-1]	0005_20170203_224718_2bstar.a11	completed	✗
5 7710e8b0-1380-46fa-07de-f1f416843841	Flantern checked [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
6 0762d279-750c-4a8f-0843-0c33a6744a17	Minimum Ping count [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
7 5421f352-6a37-47d0-6783-4888bedae094	Ray Tracing Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
8 c1a85768-4c40-418c-0386-603ca962768	Runtime Parameters [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
9 9ef46266-47d1-4631-8d4c-dc1a68d80a46	Positions [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
10 e5767811-5863-4963-ba06-a73d6fca0d15	SVP File Available [x-1]	1 2020-01-09 03-03-45.svp	completed	✓

Details

Eisopod Height Setup



QX error: fail

Key: value

0005_20170203_224718_2bstar.a11

0005_20170203_224718_2bstar.a11

QAX unknown

Coverage check  

Score Board

ID	Check	Input	Status	QA Pass
1 1b0c47d5-54c9-4c50-b04d-d174a892091	Backscatter Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
2 8c909ace-8759-4c2c-984a-f75f888a3821	Bathymetry Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
3 4a3f3717-3a27-4402-934f-d9ed17945002	Date checked [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
4 9639ca1-d846-484c-077a-d8ff8a493088	Eisopod Height Setup [x-1]	0005_20170203_224718_2bstar.a11	completed	✗
5 7710e8b0-1380-46fa-07de-f1f416843841	Flantern checked [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
6 0762d279-750c-4a8f-0843-0c33a6744a17	Minimum Ping count [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
7 5421f352-6a37-47d0-6783-4888bedae094	Ray Tracing Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
8 c1a85768-4c40-418c-0386-603ca962768	Runtime Parameters [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
9 9ef46266-47d1-4631-8d4c-dc1a68d80a46	Positions [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
10 e5767811-5863-4963-ba06-a73d6fca0d15	SVP File Available [x-1]	1 2020-01-09 03-03-45.svp	completed	✓

Details

Runtime Parameters

QX error: pass



Key: value

0005_20170203_224718_2bstar.a11

0005_20170203_224718_2bstar.a11

Parameter	Value
Station	0
Center	35438
Depth	3500m
Depth	2995
CTD	3
Hour/Date	20170203
ScaleNumber	2087
CPD	0
Time	02275.474
Altitude	0.33
Beam/Depth	High-Depth
Checksum	3213
End/End/End/End/End	

QAX unknown

Coverage check  

Score Board

ID	Check	Input	Status	QA Pass
1 1b0c47d5-54c9-4c50-b04d-d174a892091	Backscatter Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
2 8c909ace-8759-4c2c-984a-f75f888a3821	Bathymetry Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
3 4a3f3717-3a27-4402-934f-d9ed17945002	Date checked [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
4 9639ca1-d846-484c-077a-d8ff8a493088	Eisopod Height Setup [x-1]	0005_20170203_224718_2bstar.a11	completed	✗
5 7710e8b0-1380-46fa-07de-f1f416843841	Flantern checked [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
6 0762d279-750c-4a8f-0843-0c33a6744a17	Minimum Ping count [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
7 5421f352-6a37-47d0-6783-4888bedae094	Ray Tracing Available [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
8 c1a85768-4c40-418c-0386-603ca962768	Runtime Parameters [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
9 9ef46266-47d1-4631-8d4c-dc1a68d80a46	Positions [x-1]	0005_20170203_224718_2bstar.a11	completed	✓
10 e5767811-5863-4963-ba06-a73d6fca0d15	SVP File Available [x-1]	1 2020-01-09 03-03-45.svp	completed	✓

Details

SVP File Available

QX error: pass

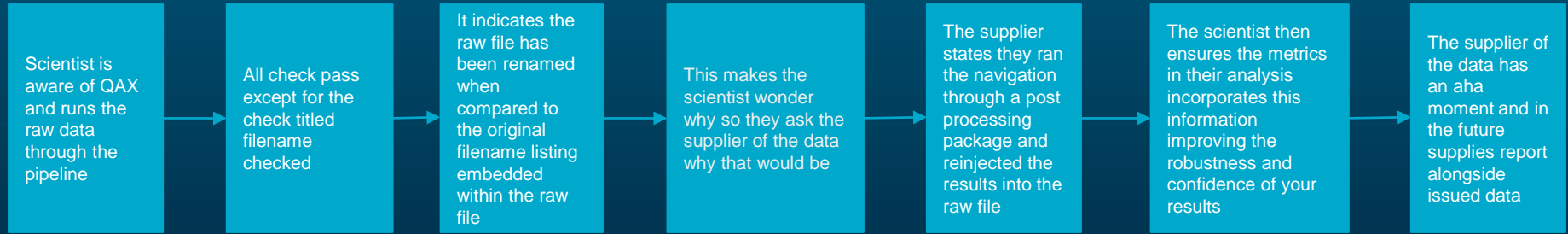
Key: value

0005_20170203_224718_2bstar.a11

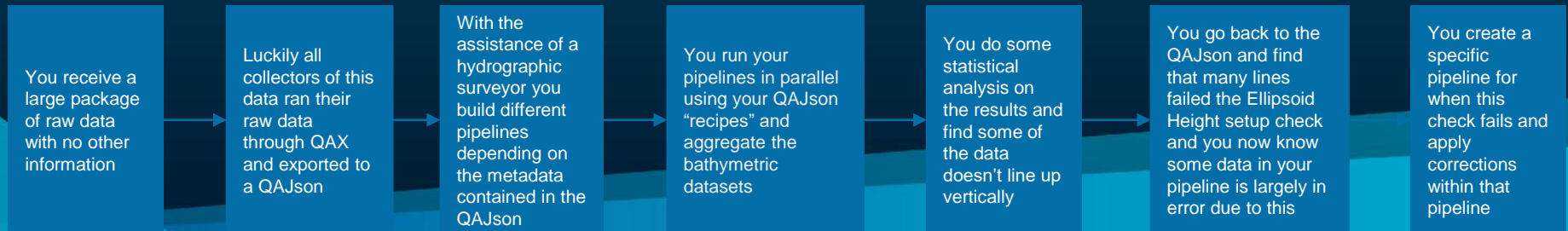
0005_20170203_224718_2bstar.a11

Input File:
D:\2020_45\8YF\1 2020-01-09 03-03-45.svp

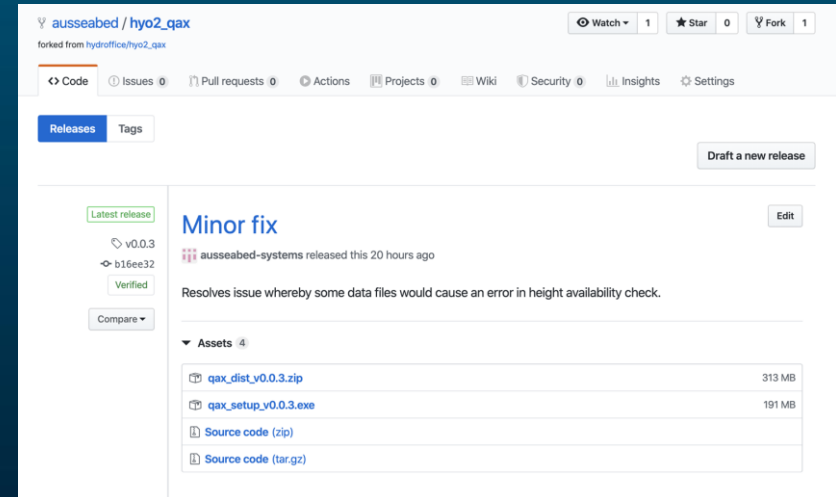
You are a scientist that has received a data package you want to do some analysis on...



You are big data pipeline developer and need to combine bathymetric datasets from different sources...



- New QAX builds available faster
- QAX installation package now built automatically for all new tags
- Automatically uploaded to GitHub releases
- As a manual process this can take several hours
- Reduces barrier to software releases
- More releases mean more testing, more user feedback
- Check out the latest release
- https://github.com/ausseabed/hyo2_qax/releases/tag/v0.1.8



The screenshot shows the GitHub release page for the repository 'ausseabed/hyo2_qax'. The release is titled 'Minor fix' and was released by 'ausseabed-systems' 20 hours ago. It resolves an issue where some data files would cause an error in height availability check. The release includes four assets: 'qax_dist_v0.0.3.zip' (313 MB), 'qax_setup_v0.0.3.exe' (191 MB), 'Source code (zip)', and 'Source code (tar.gz)'. The page also shows navigation options like Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings.

- Add in more reader formats (xtf, kmall, s7k etc.) and create checks based on their own rich metadata environment
- L3 readers and writers (bag and geotiff etc.)
- Checks to specification
- Plugins from Hydroffice (tools such as flyer finder, holiday finder, Grid QA etc.)
- With community involvement the opportunities are many!!!!

- Are there any coders out there that have libraries they think might be able to be used to the communities advantage? Get in touch....
- ausseabed@ga.gov.au

- Given there are grand plans are for this tool AusSeabed is interested in asking a question of the audience today:
 - Do you think you will use this tool?
 - A. Yes, for Calibration
 - B. Yes, for underway surveying
 - C. Yes, for office data management
 - D. No