

From ship to shore,  
know your ocean.

# Innovative Workflow for Today's Hydrographic Office

## Qinsy

Survey planning and acquisition

## Qimera

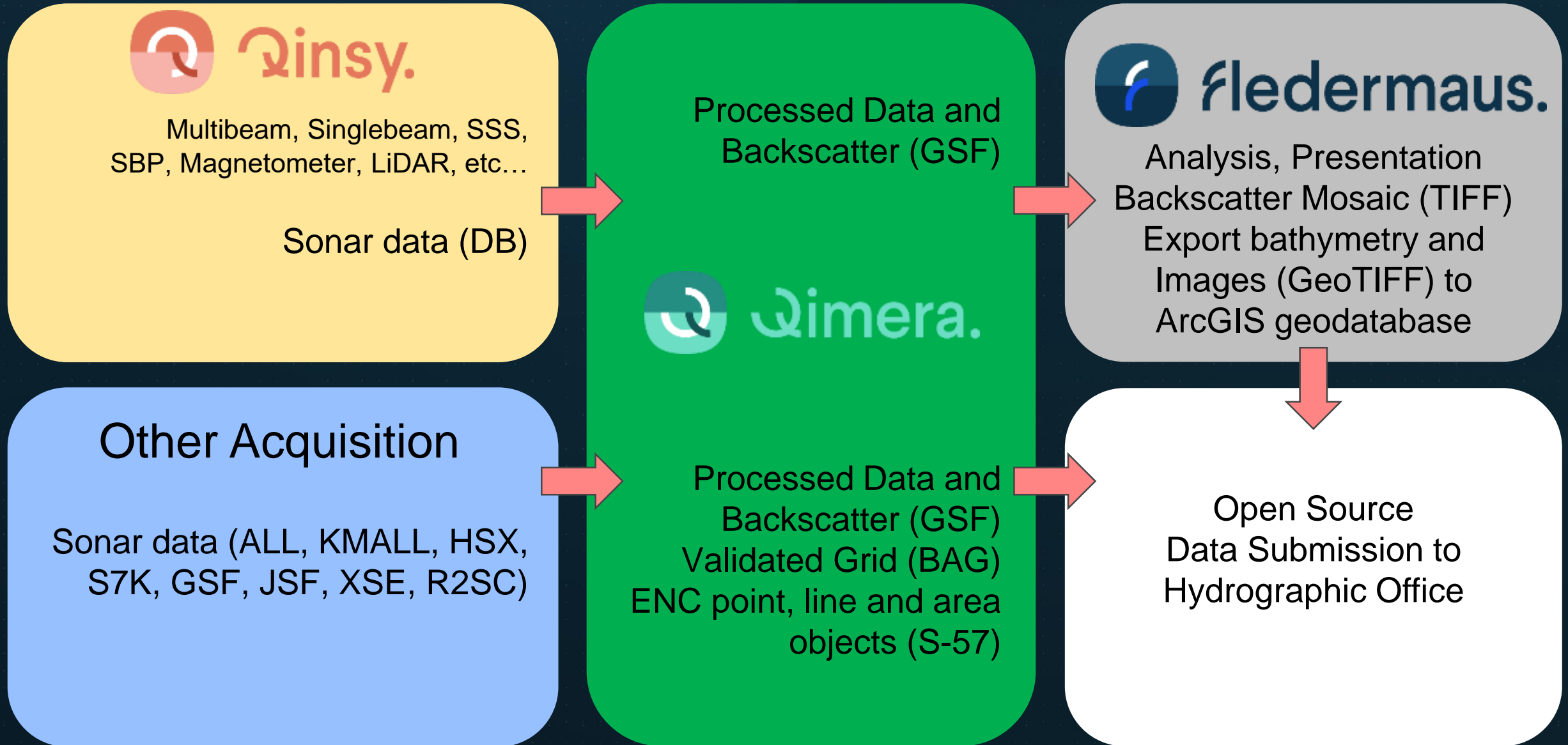
Data processing and cleaning

## Fledermaus

4D geospatial analysis and visualization



# Workflow Overview



Multibeam, Singlebeam, SSS, SBP, Magnetometer, LiDAR, etc...

Sonar data (DB)

Processed Data and Backscatter (GSF)



Processed Data and Backscatter (GSF)

Validated Grid (BAG)

ENC point, line and area objects (S-57)



Analysis, Presentation  
Backscatter Mosaic (TIFF)  
Export bathymetry and Images (GeoTIFF) to ArcGIS geodatabase

## Other Acquisition

Sonar data (ALL, KMALL, HSX, S7K, GSF, JSF, XSE, R2SC)

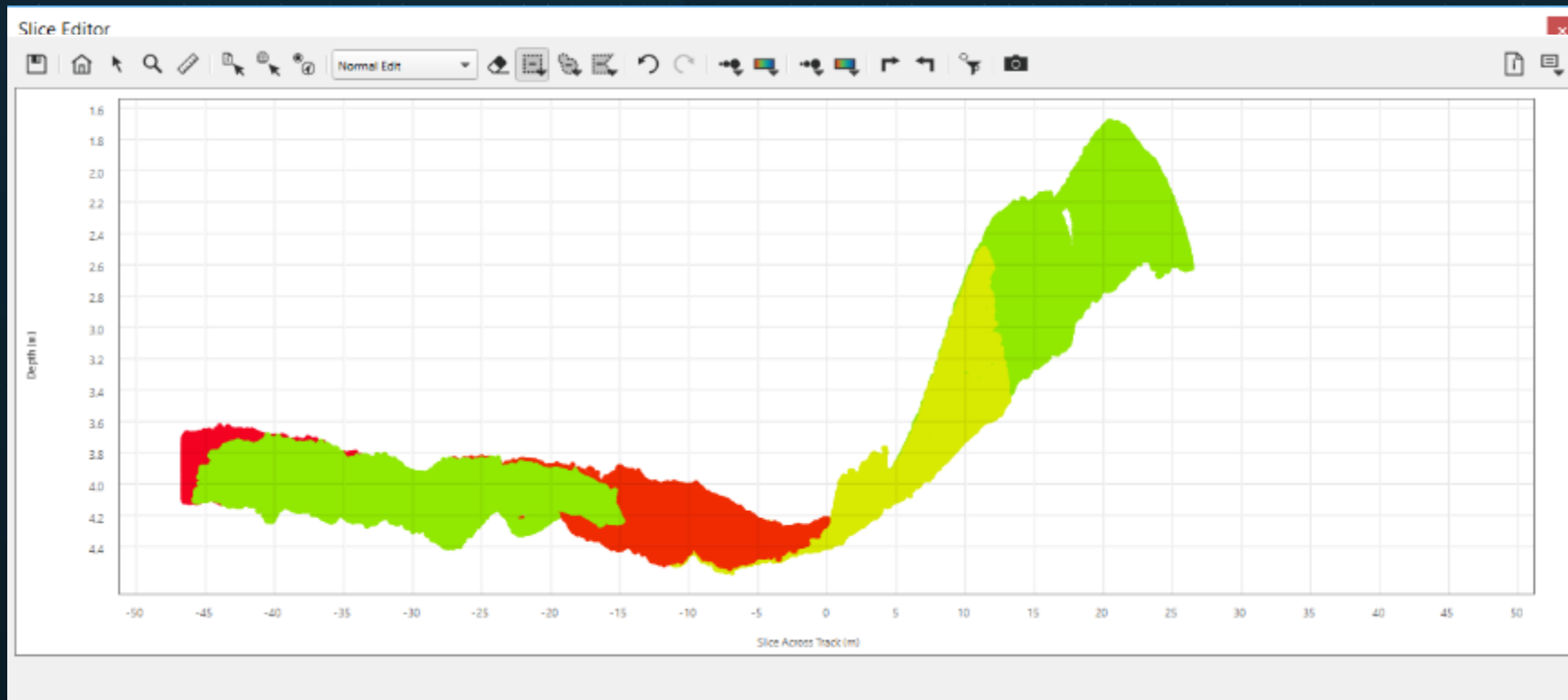
Open Source  
Data Submission to  
Hydrographic Office

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Video removed by the IHO due to space

# Qimera Filters (Spline, CUBE, ....)

“One-Click”!



# Data Filtering

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# Qimera Live

Directory monitoring for near real-time processing

Sonar files processing automatically

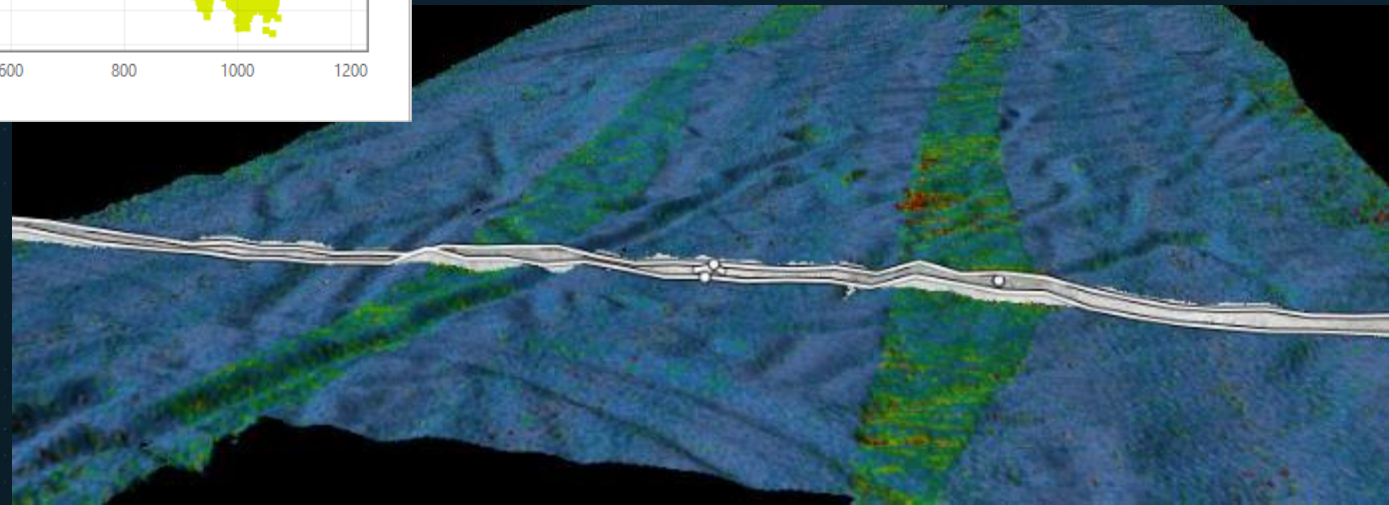
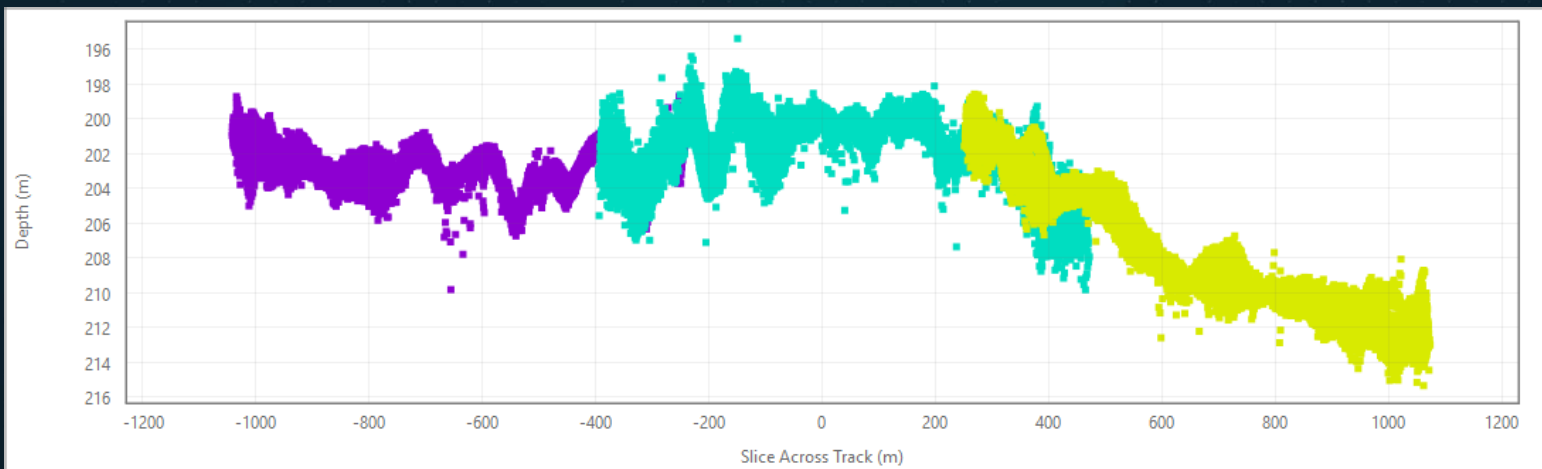
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# Qimera TU Delft sound speed inversion

Automated and repeatable

Use swath overlap to correct for refraction



# Qimera Wobble Tool

Adjust multibeam and motion sensor configuration

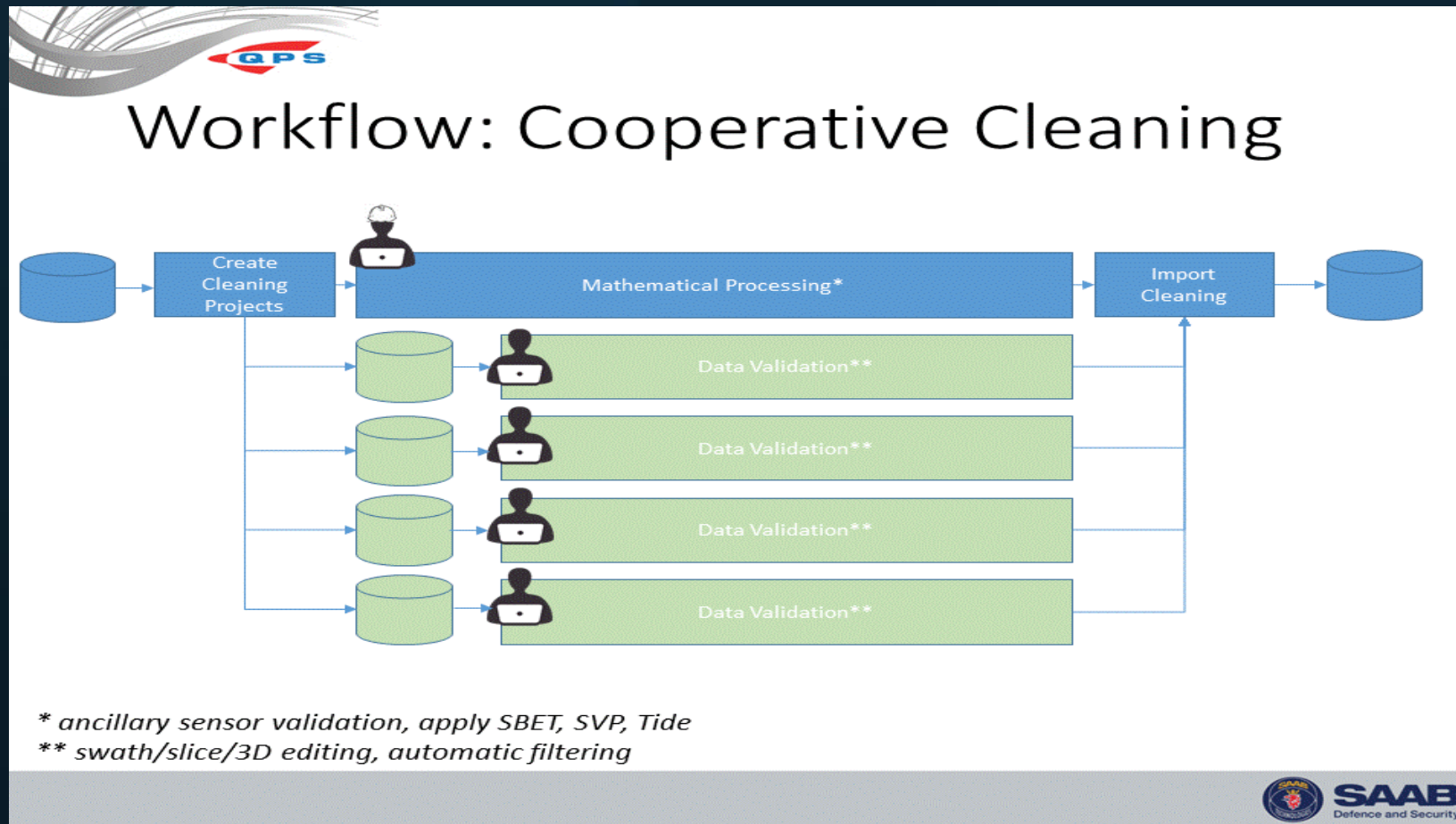
Dynamically solve for problems

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# Qimera Cooperative Cleaning

Easily divide project for improved efficiency

Work locally with faster approach



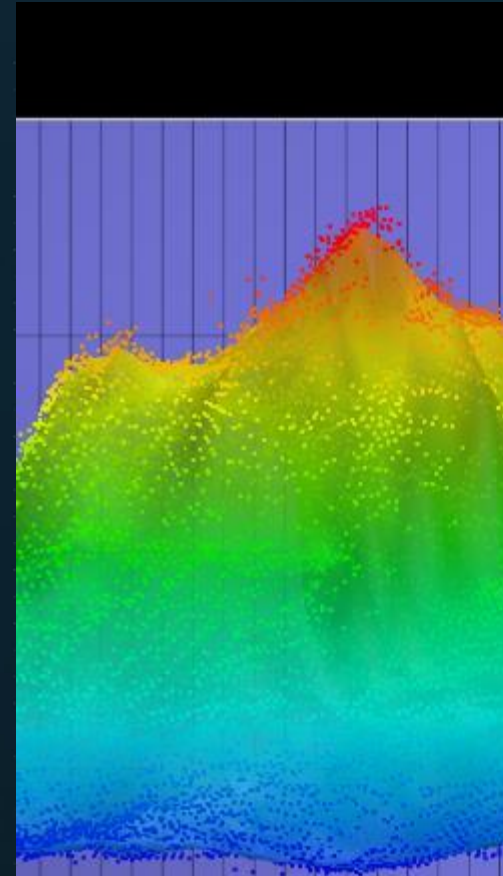
# Qimera “Connected” S-57 Workflow

## Link S-57 to bathymetry

Features update automatically after further processing

## Customize your workflow

Source the S-57 feature from a sounding, or a grid node



Create ENC Object

Feature

Object Catalogue: All Objects

Feature Class: UWTROC

Attributes

Name	Value
VALSOU	44.233
WATLEV	3 - always under water/submerged
remrks	
recomd	

Qimera Attributes

Name	Value
pickds	GridData/DynamicSurface-2/DynamicSurface-2.sd
pickly	4 - CUBE

Add/Remove Attributes

OK Cancel



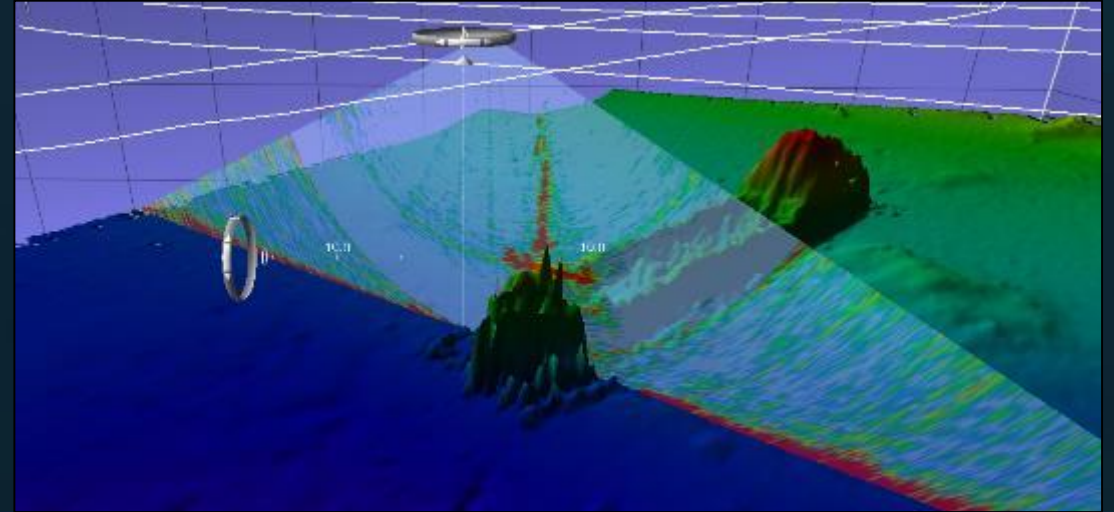
# Qimera

## Water-column processing

Easily attain safer least depths atop wrecks and obstructions

## Seamless backscatter processing

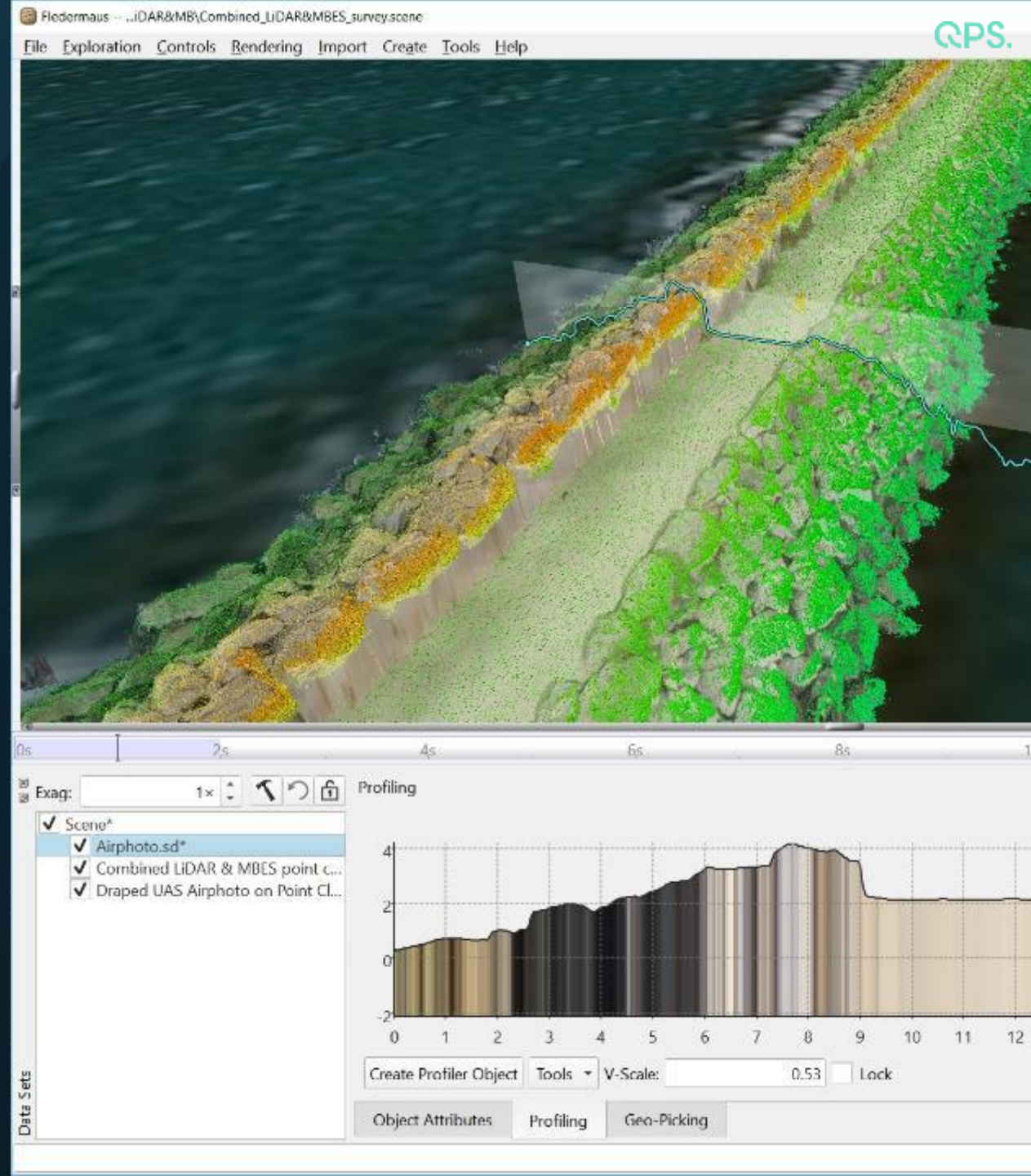
Export the GSF from Qimera for creating Backscatter Mosaics (GeoTIFF)



# Fledermaus

## Main features

- Time/space notes movie-making
- 2D, 3D and 4D data in scene
- Surface/DTM analyses tools



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Thankyou.