


Proceedings of the 10th Workshop “Seabed Acoustics”, Presentation P01:

Current Hydrographic Projects at BSH

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Opening Address - Current Hydrographic Projects at BSH

Thomas Dehling



Presentation at 10th Workshop „Seabed Acoustics“ November 2022

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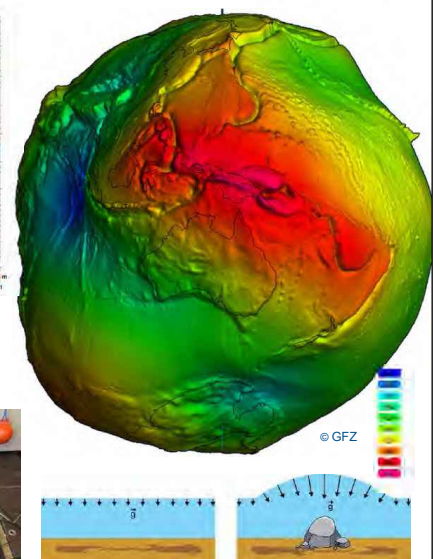
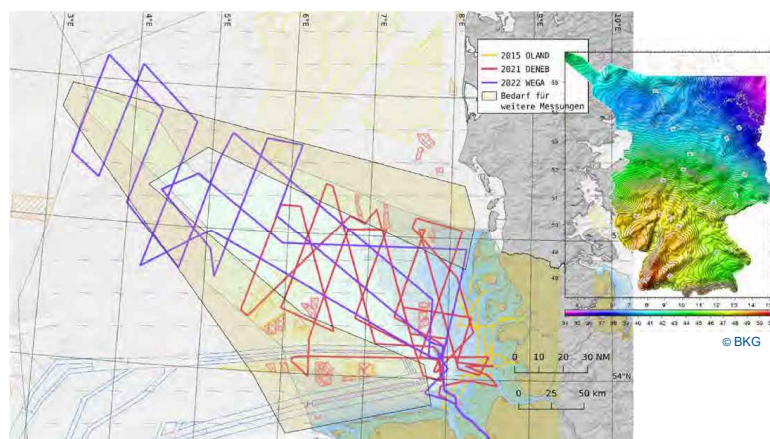
- Geodetic spatial reference
- Online access to hydrographic survey data
- Complementary measurement techniques
- Mission planning
- Data processing
- S-100 developments



Current hydrographic projects at BSH



Geodetic spatial reference Shipborne gravimetric survey in 2022

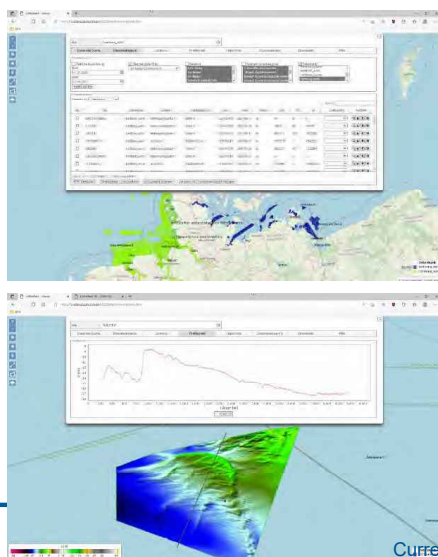


Liebsch, G., Westfeld, P., Förste, C., Schröder, L., Schwabe, J., Bauer, T. P., Stolarczuk, N.: Seevermessung mal anders - Zehn Tage Schweremessungen mit dem VWFS Deneb auf der Nordsee im Juni und Juli 2021. *Journal of Applied Hydrography - Hydrographische Nachrichten*, S. 38-45, DOI: 10.23784/HN120-05, 2021.

Online access to hydrographic survey data R&D project ,UnDaWatA'



Unstructured Data – Webservices and Technical Analysis



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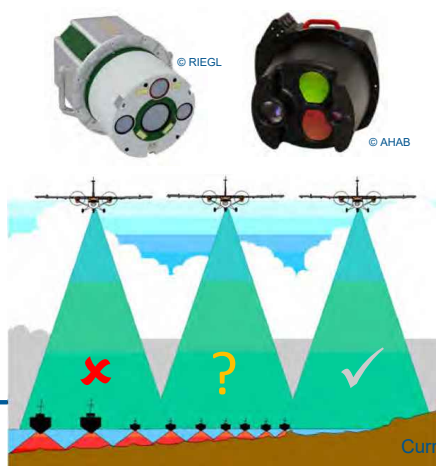


**UnDa
WatA**
mFUND
Das Startkapital für die Mobilität 4.0

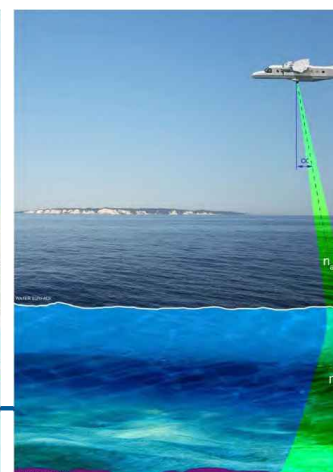
Complementary measurement techniques R&D project 'ALB-Nordsee' (1)

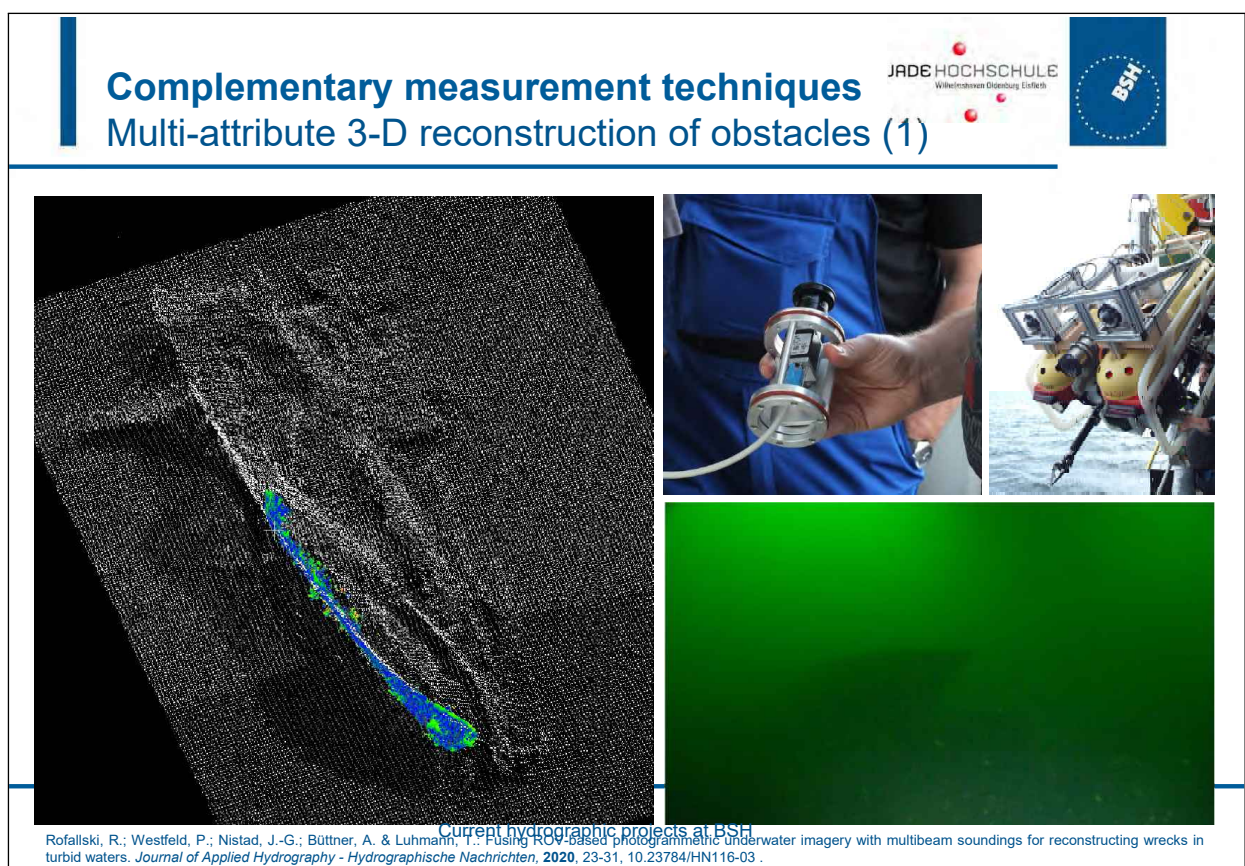
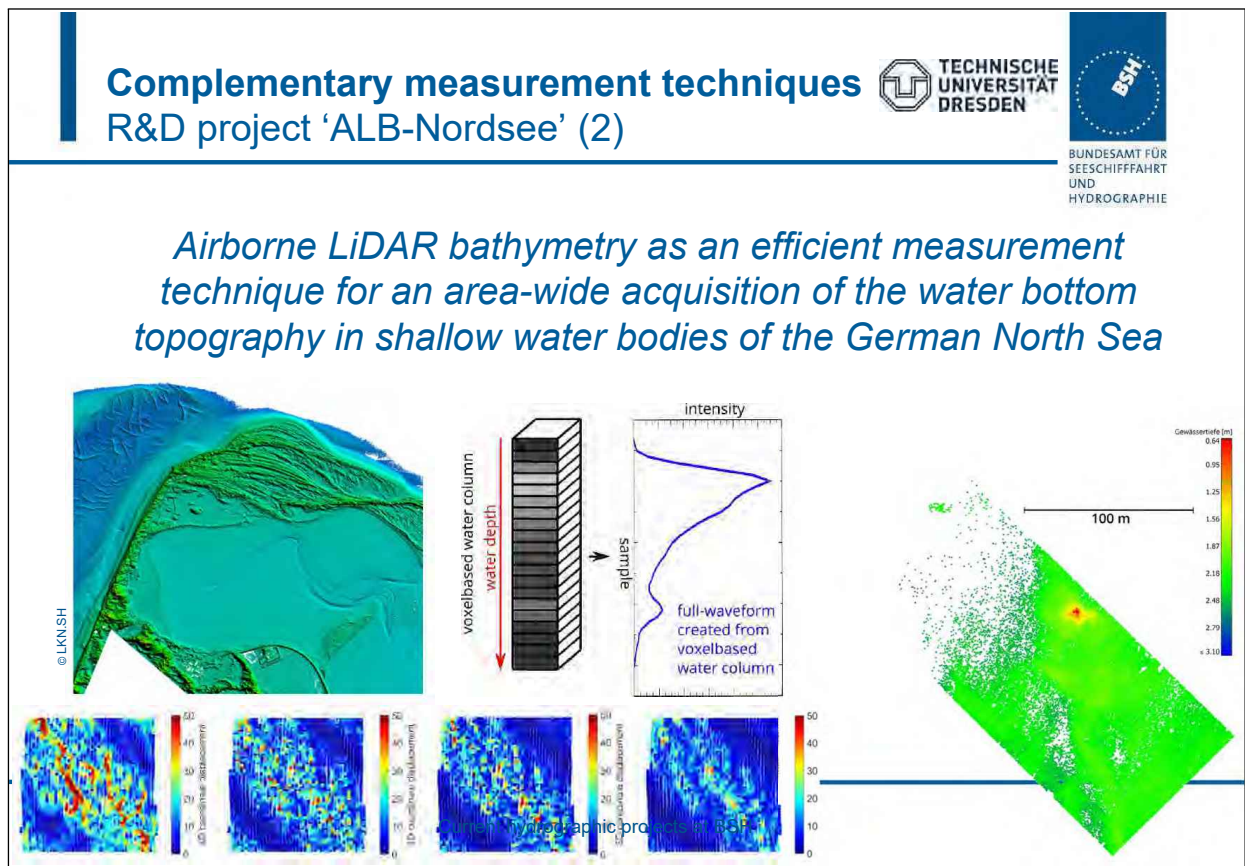


Airborne LiDAR bathymetry as an efficient measurement technique for an area-wide acquisition of the water bottom topography in shallow water bodies of the German North Sea



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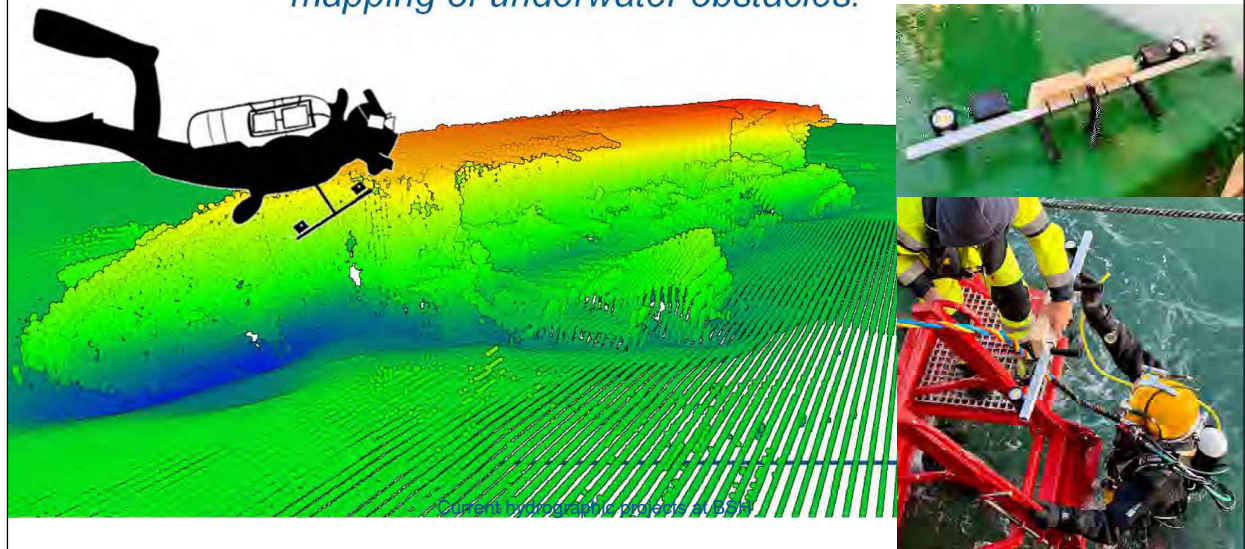




Complementary measurement techniques

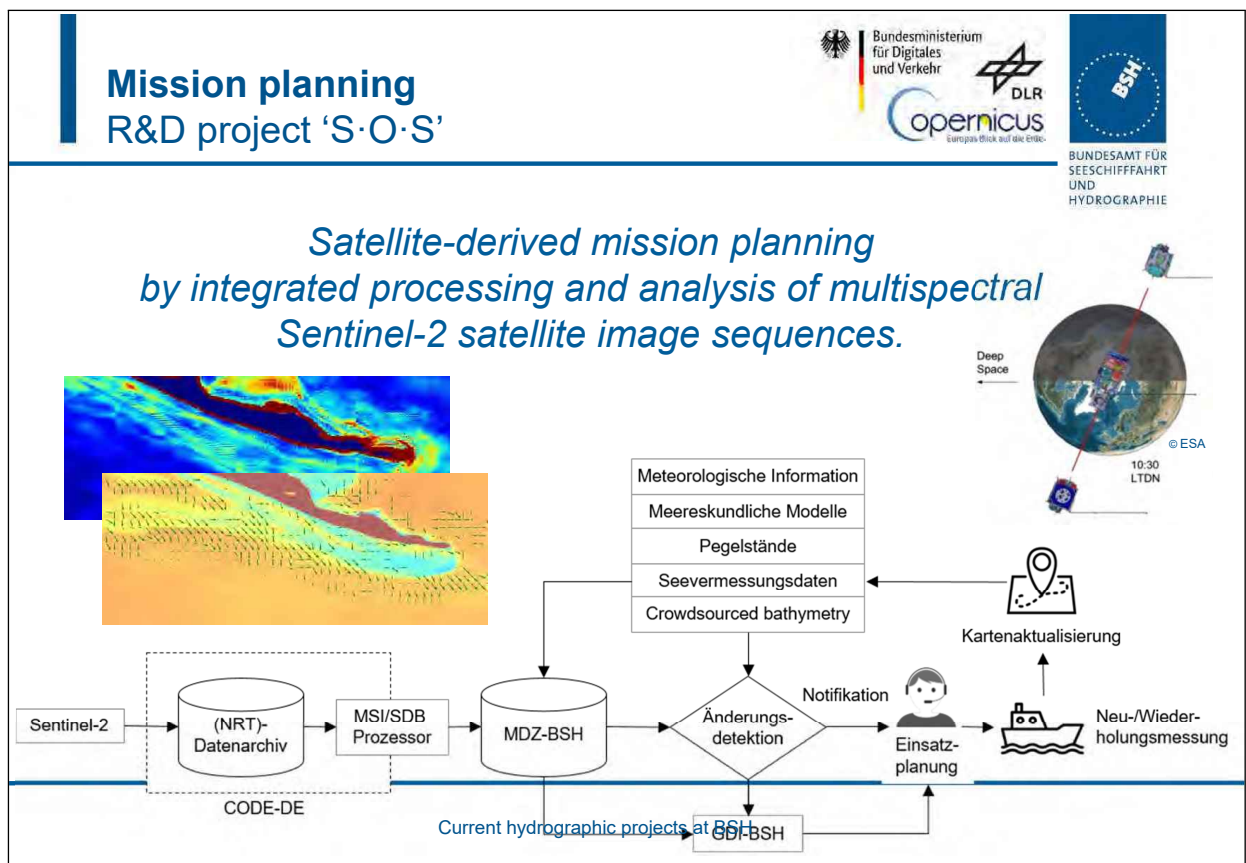
Multi-attribute 3-D reconstruction of obstacles (2)

Development of a diver-borne photogrammetric stereo camera measurement system for high-accuracy 3-D mapping of underwater obstacles.




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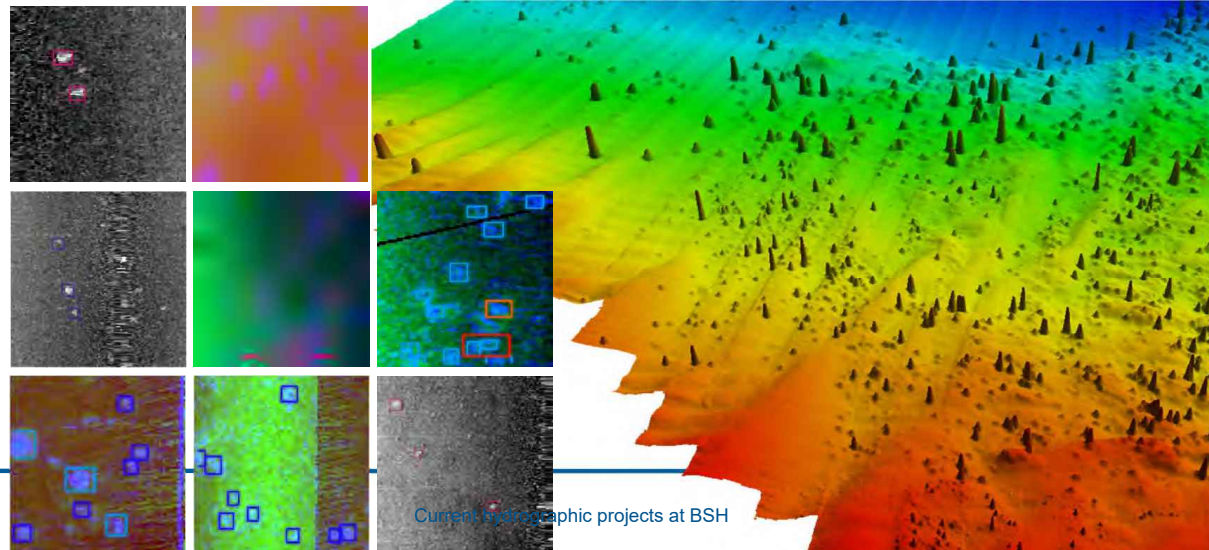


Data processing

R&D project 'OTC-Stone' (1)




Automatic localization and measurement of boulders in acoustic datasets based on neural networks



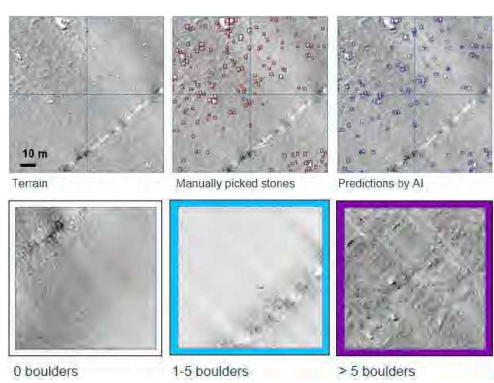
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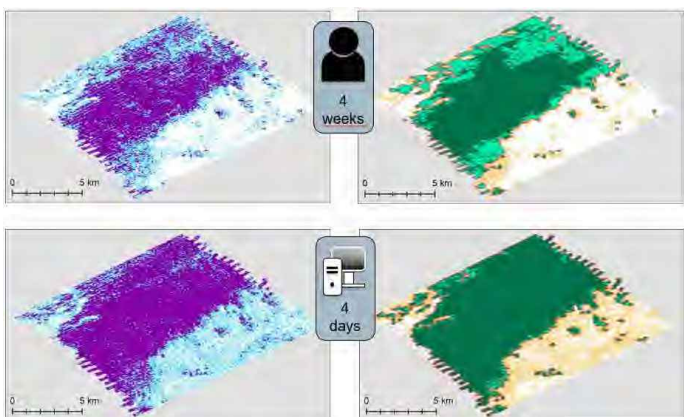
Data processing

R&D project 'OTC-Stone' (2)



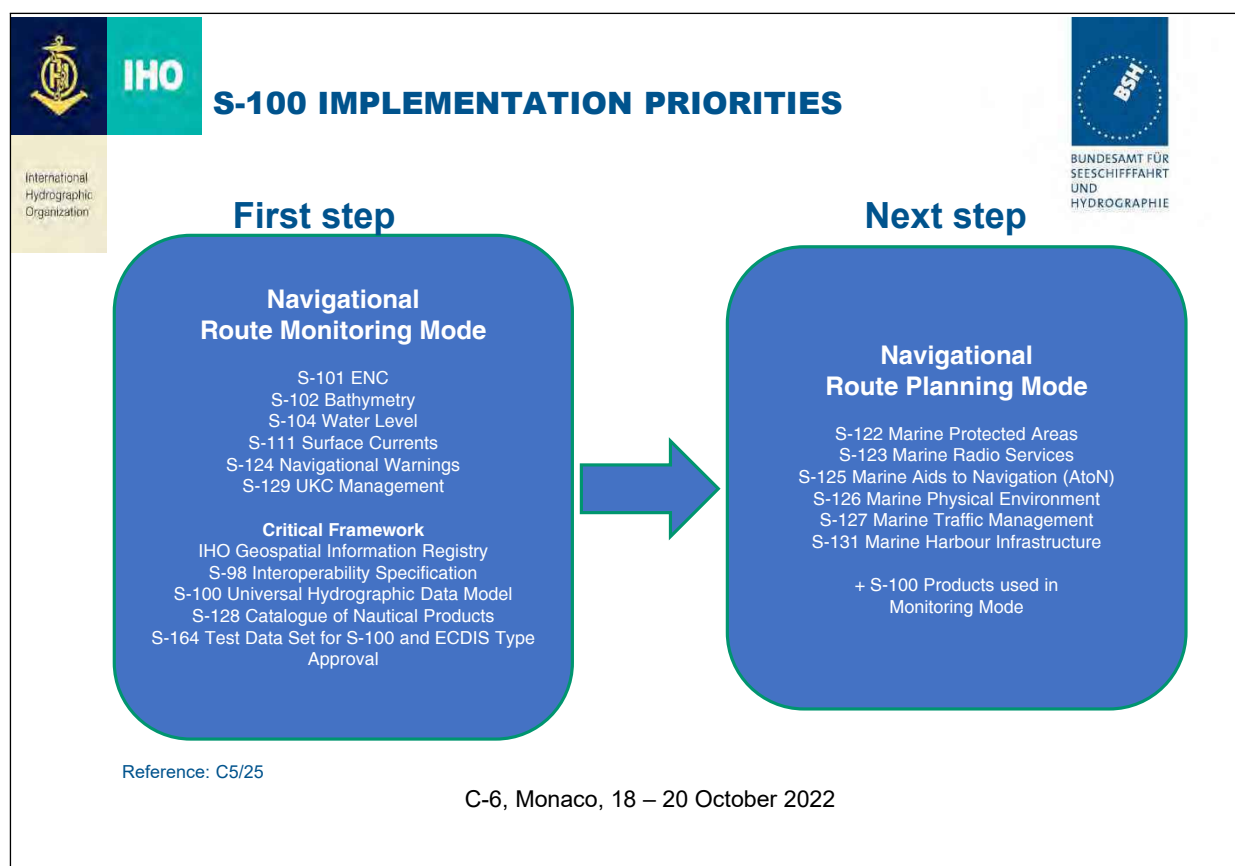
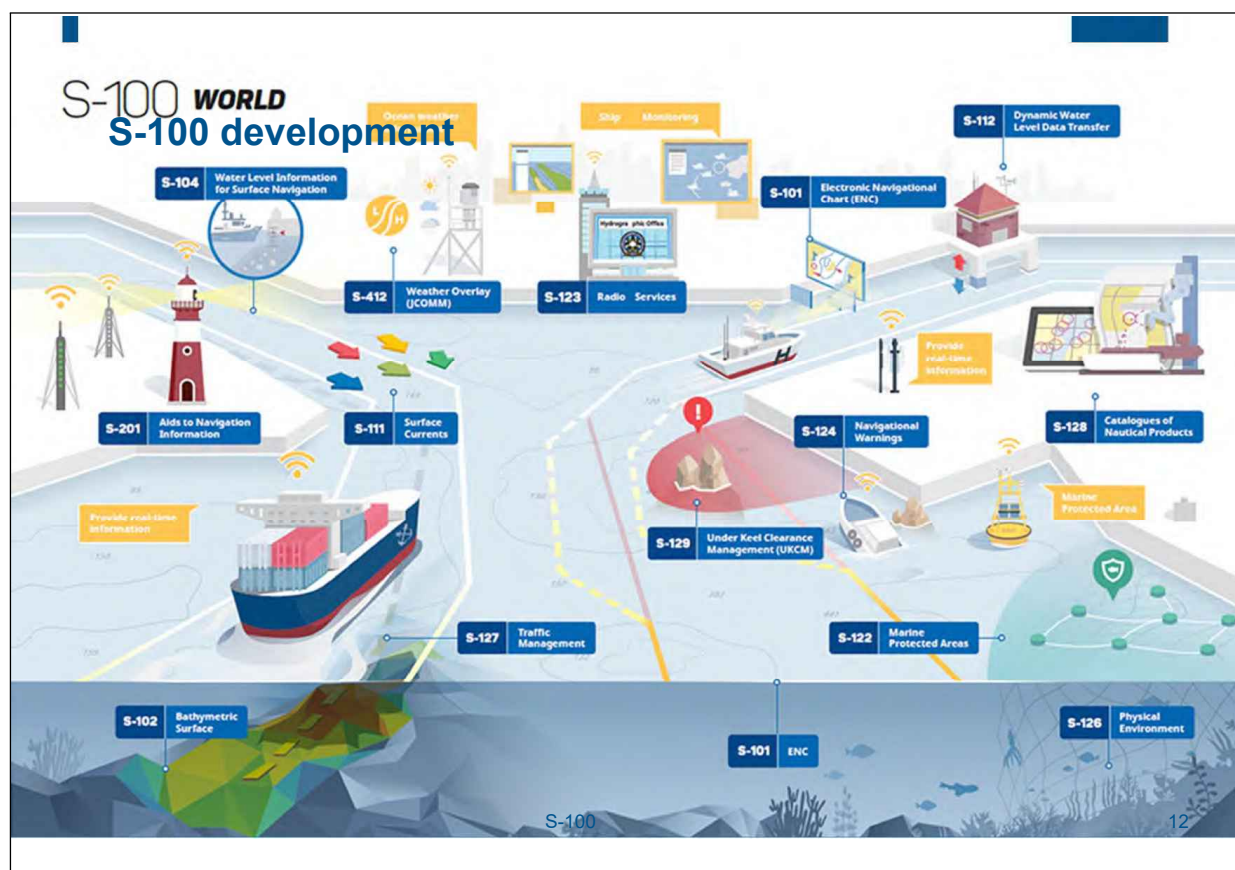
Automatic localization and measurement of boulders in acoustic datasets based on neural networks

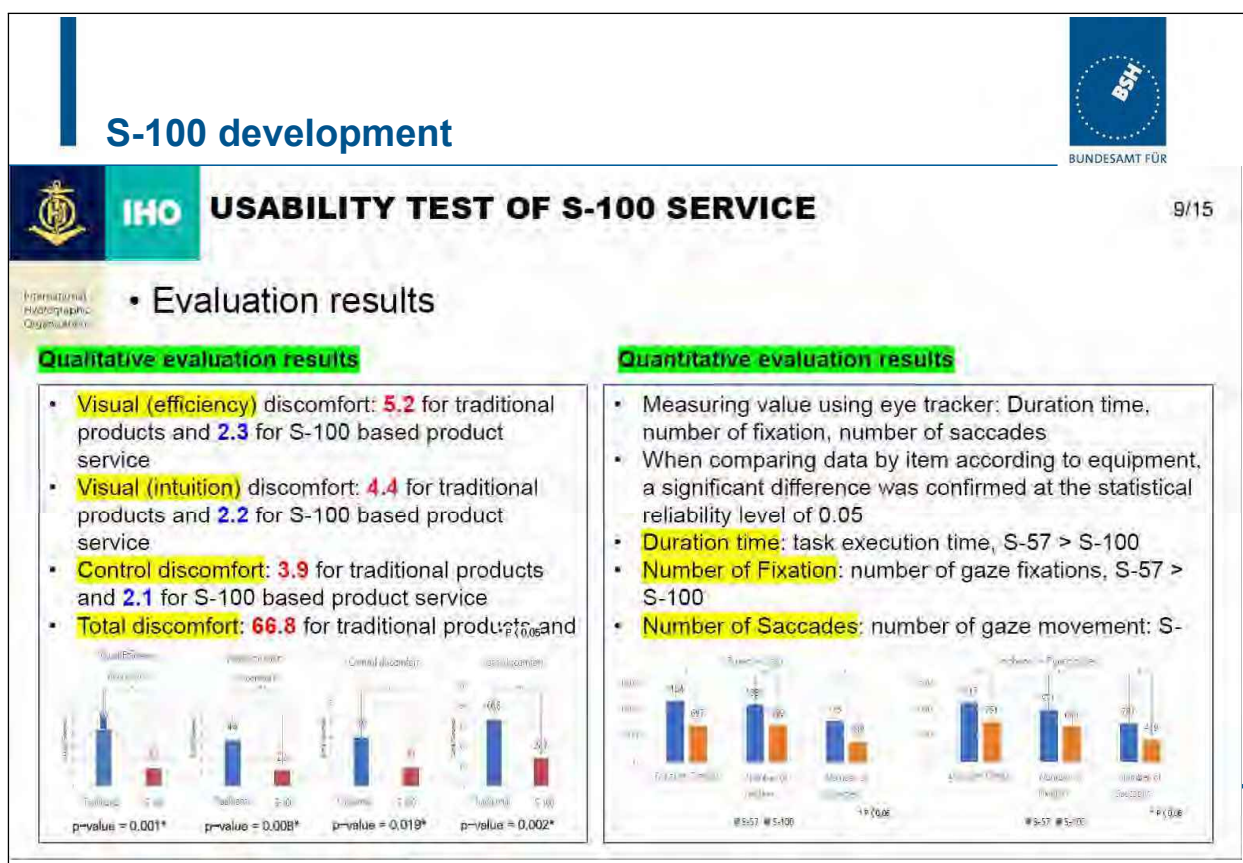
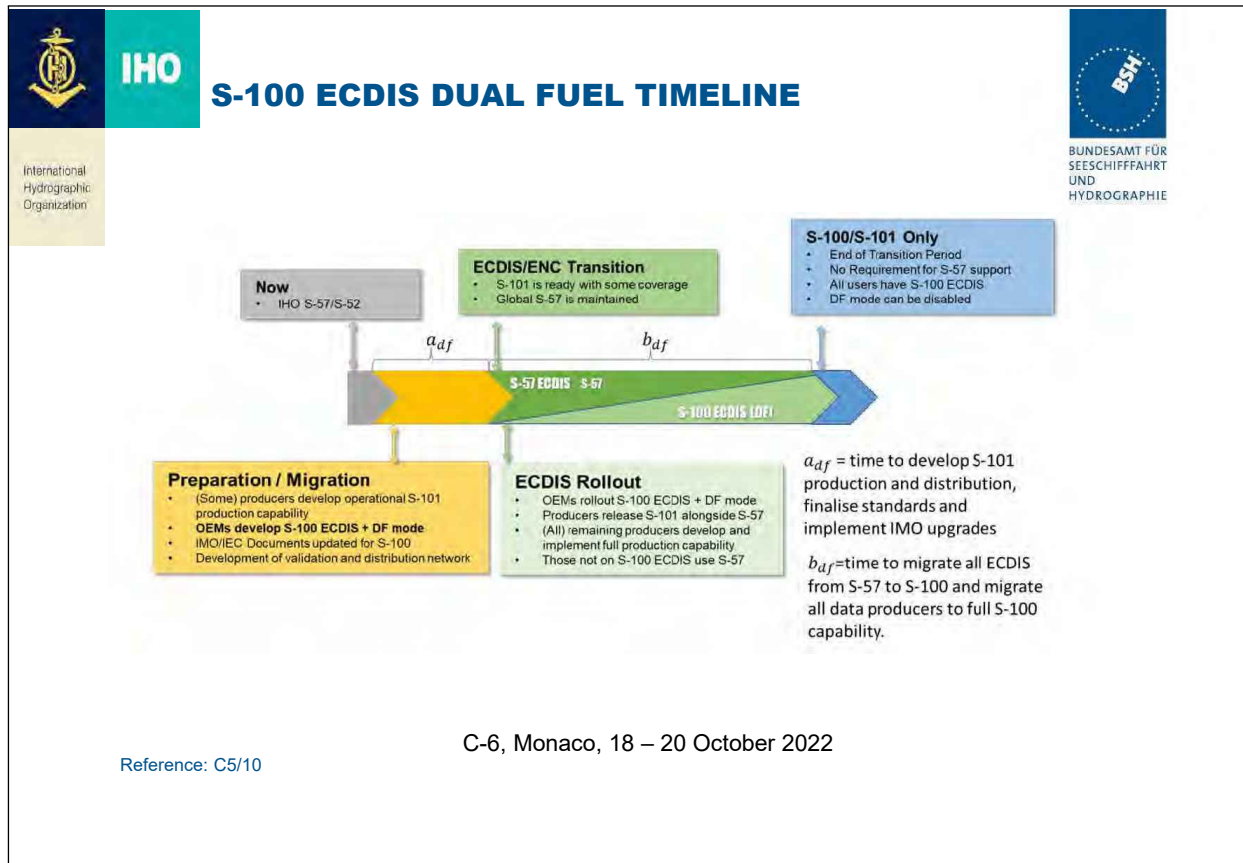





Feldens, P.; Westfeld, P.; Valerius, J.; Feldens, A. & Papenmeier, S.: Automatic detection of boulders by neural networks - A comparison of multibeam echo sounder and side-scan sonar performance. *Journal of Applied Hydrography - Hydrographische Nachrichten*, **2021**, 6-17, 10.23784/HN119-01.

Hinz, M.; Feldens, A.; Papenmeier, S.; Feldens, P.; Themann, S.; Westfeld, P.: Automatic localization & measurement of stones in acoustic datasets with neural networks. *Posterbeitrag zum OTC Clustertreffen*, 21.-22.06.2022, Rostock.








IHO

International Hydrographic Organization


IMO ENDORSEMENT ON S-100 IN ECDIS PERFORMANCE STANDARDS



- The IHO organized drafting group consisted of relevant parts of the HSSC Chair group, CIRM, IEC, INTERTANKO and a few other relevant stakeholders.
- The drafting group was chaired by the IHO Technical Director and a draft redline version was submitted by IHO, cosponsored by CIRM and Intertanko, to the IMO NCSR9 meeting, held in June 2022.
- With the exception of the withdrawal of functionalities for route exchange all other proposed changes were endorsed by NCSR9. To be approved by IMO MSC106 in November 2022.
- A transition period was agreed upon, meaning that S-100 ECDIS will be legal to use after **1 January 2026** and from **1 January 2029** new systems must comply with the new IMO Resolution on ECDIS Performance Standards.

Reference: C5/11

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I wish you all a fruitful meeting!



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