Assessing Capital and Maintenance Dredging Requirements using Navigate Hydrographic at Eastland Port

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Navigate Hydrographic

Eastland Port – Gisborne, New Zealand

- New Zealand's most easterly port
- Located at the mouth of the Turanganui River system
- Severely impacted by Cyclone Gabrielle (Feb 2023)

Navigate Hydrographic

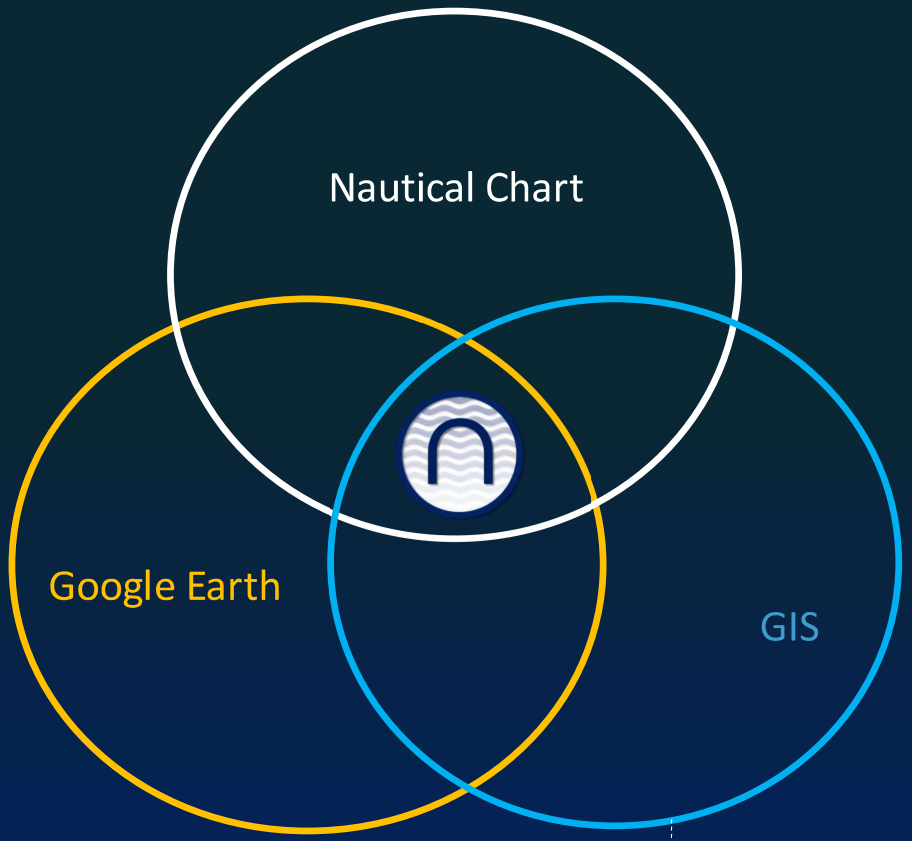
Hydrographic Requirements

- Significant sedimentary flows and dynamic seafloor changes
- Eastland Port have recently adopted Multibeam Echosounder (MBES) hydrographic surveys
- Regular dredging campaigns

Navigate Hydrographic

Navigate Hydrographic

- Australian based software for Hydrographic data visualisation
- Designed for end users of hydrographic data – ports, engineers, pilots, harbour masters
- Volume calculations, least depth assessment



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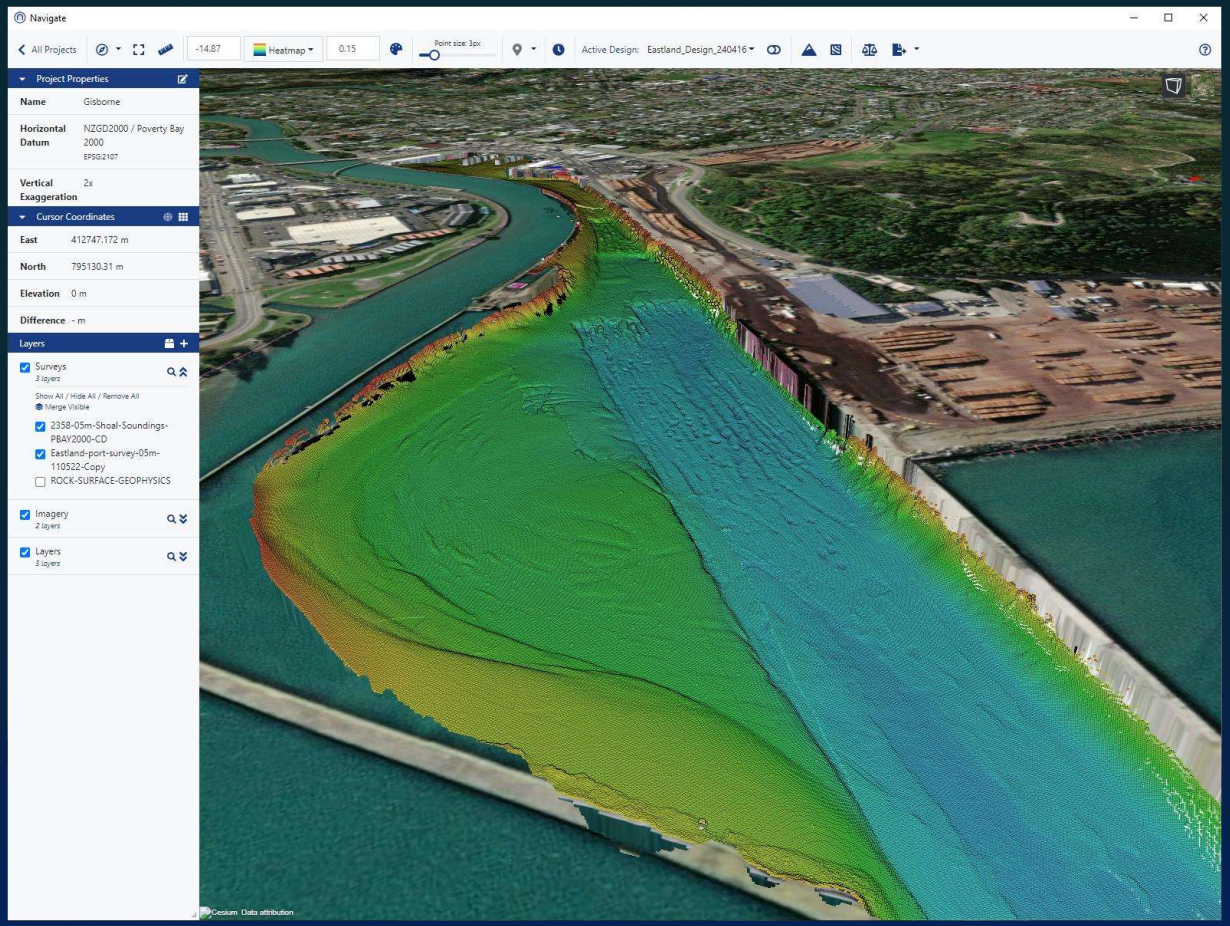


New Workflow

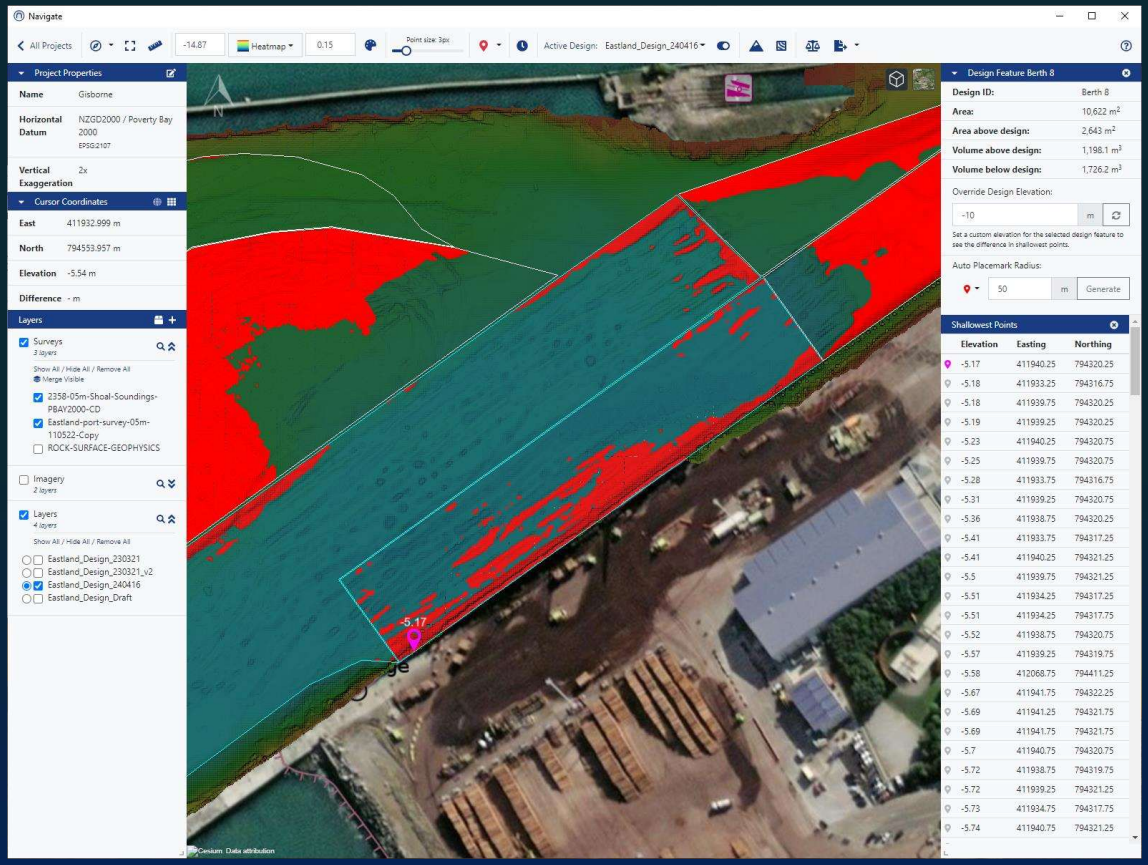
- Latest survey data is imported straight into Navigate

- Time Saving

Navigate Hydrographic

Maintenance Dredging

- Planning
- Budgeting
- Methodology
- Communication
- Comparisons / Progress Assessment
- Validation



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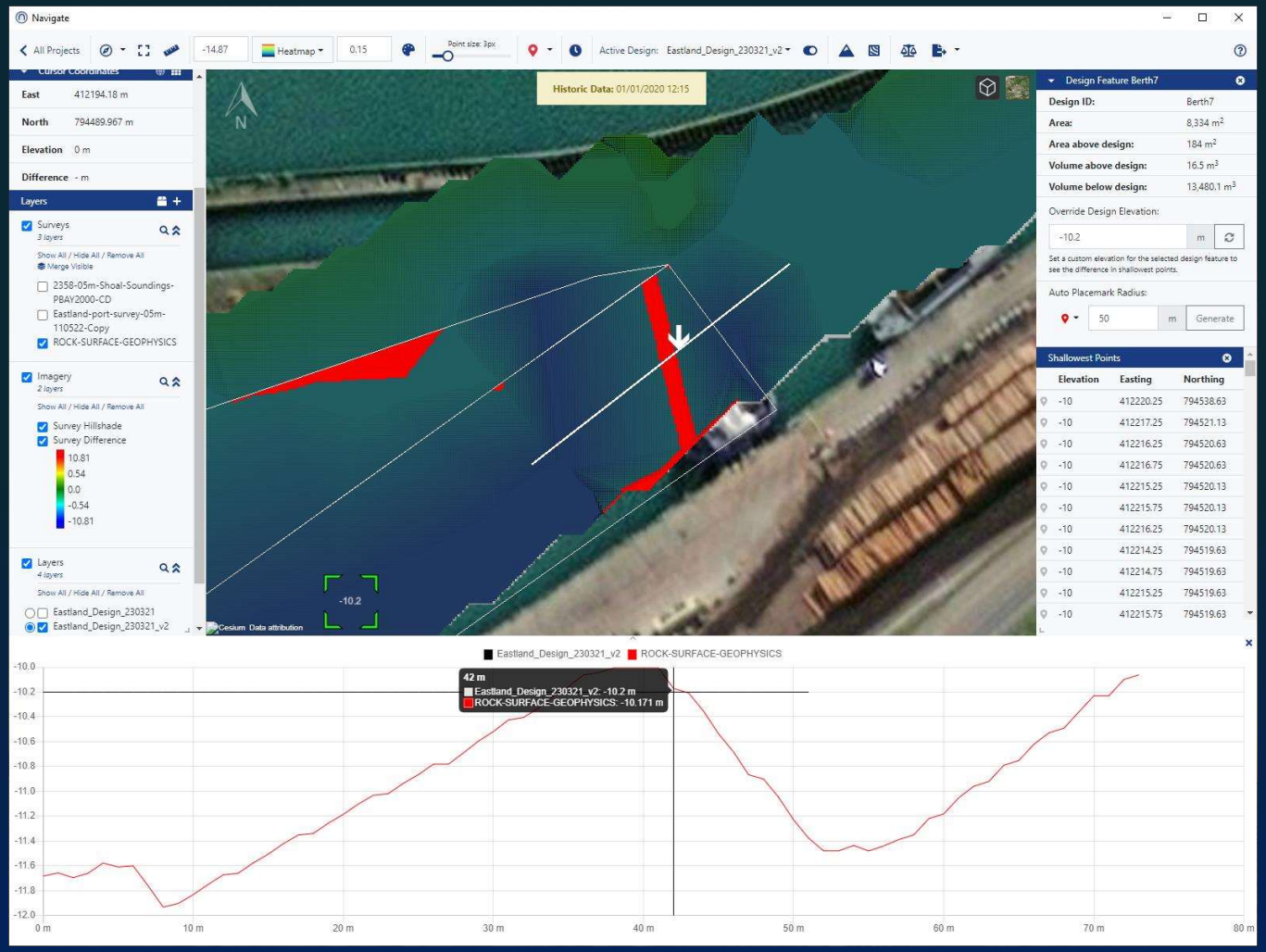

Capital Dredging

- Import geophysical layer as a ‘survey’ to assess volume of bed rock / harder material above a desired design.

Navigate Hydrographic

Benefits

- Cleary see what the seafloor is doing in a dynamic environment
- Calculate volumes quickly and efficiently to save time
- Increased the in-house knowledge and expertise at the port, avoiding relying on consultants ($$$ saving)
- Allows the port to clearly identify capital and maintenance works

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Another case study…

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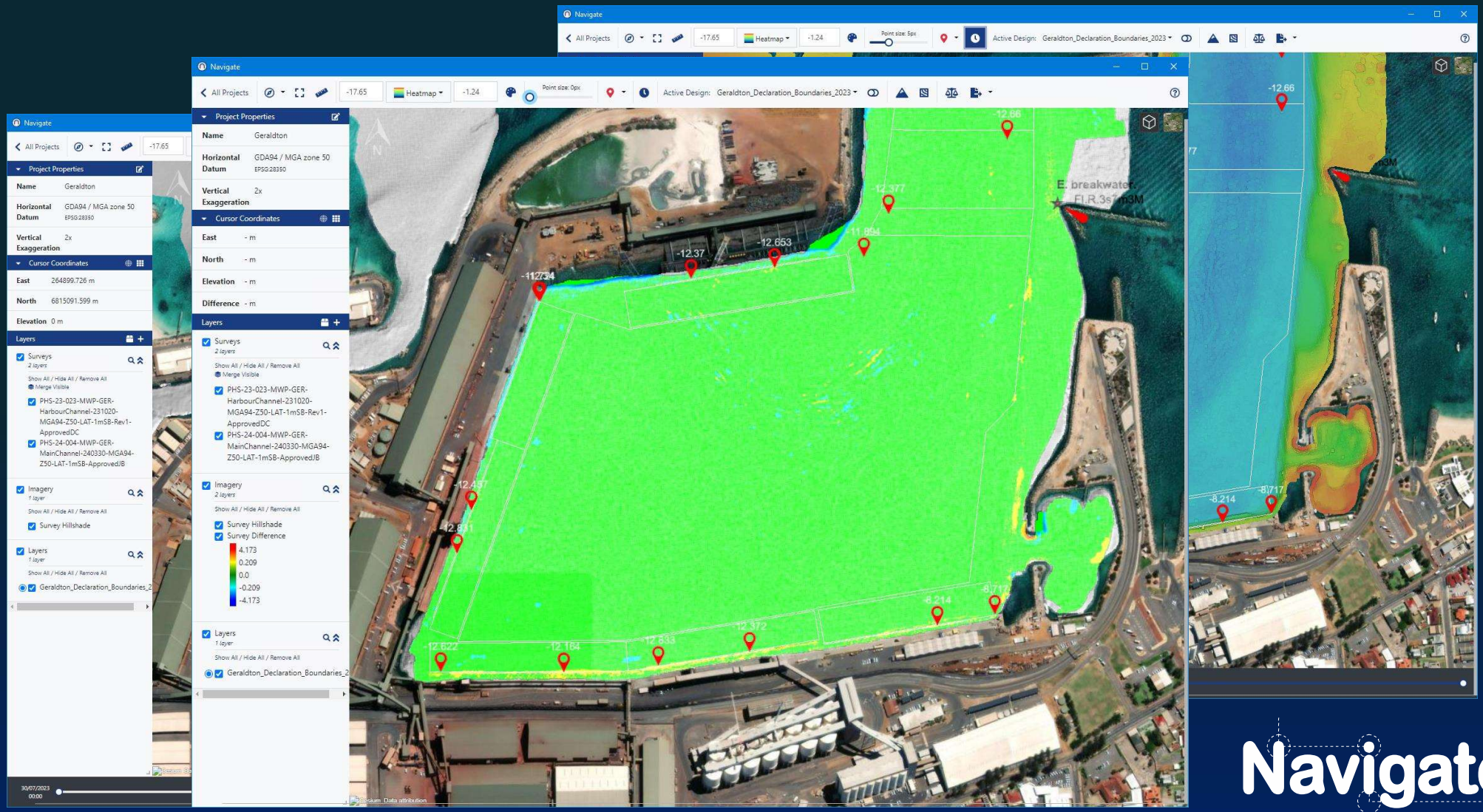

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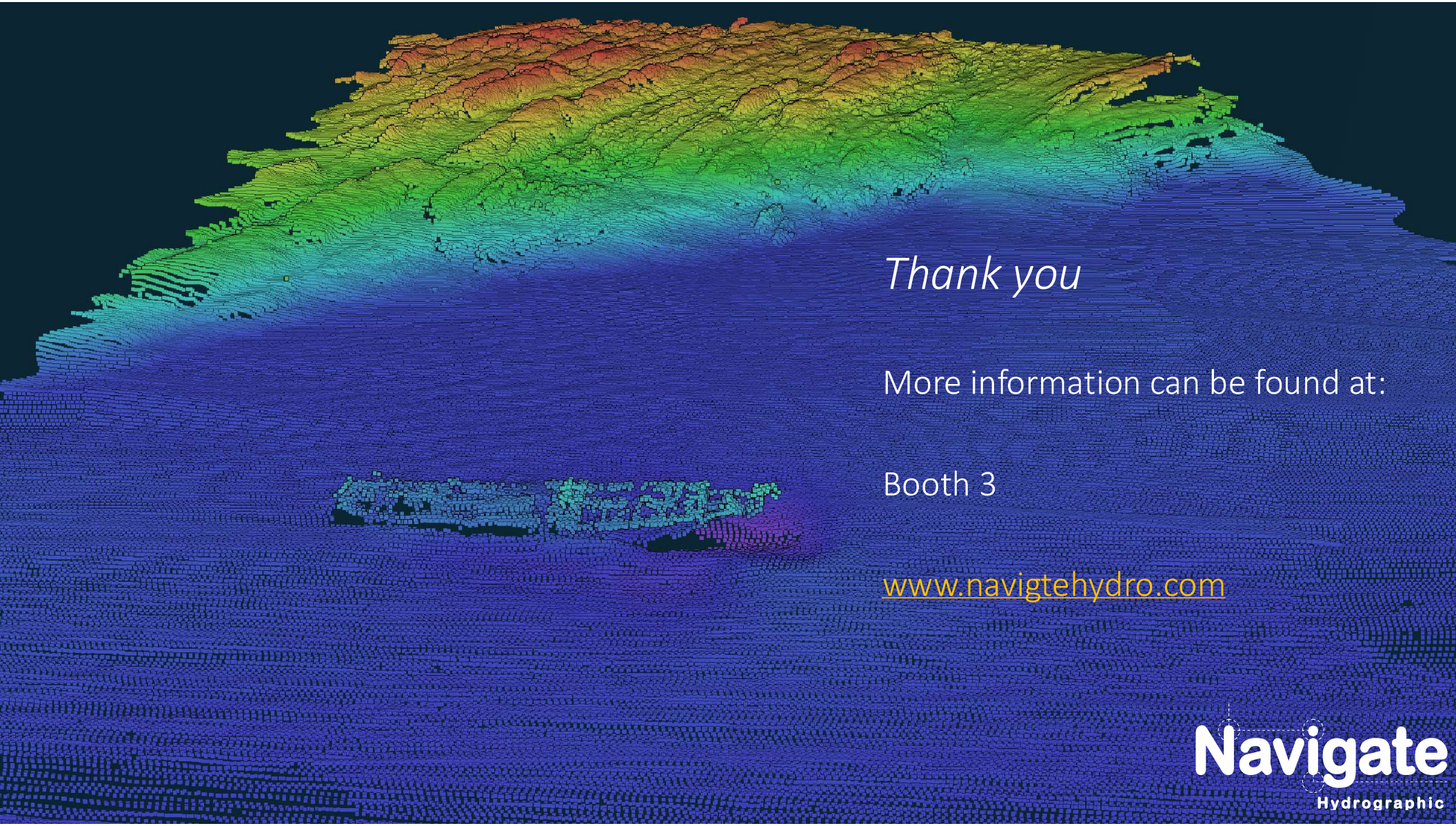
Benefits

- Easily assess changes in navigable depth between surveys
- Allow Harbour Masters to declare berths/channels ‘in real time’
- See areas of accretion and erosion and what effect that has on navigable depth.
- Provides a clear customisable map rather than paper chart

Navigate Hydrographic



Thank you

More information can be found at:

Booth 3

www.navigtehydro.com

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