



Adopting a modern approach to compiling bathymetry for nautical charts

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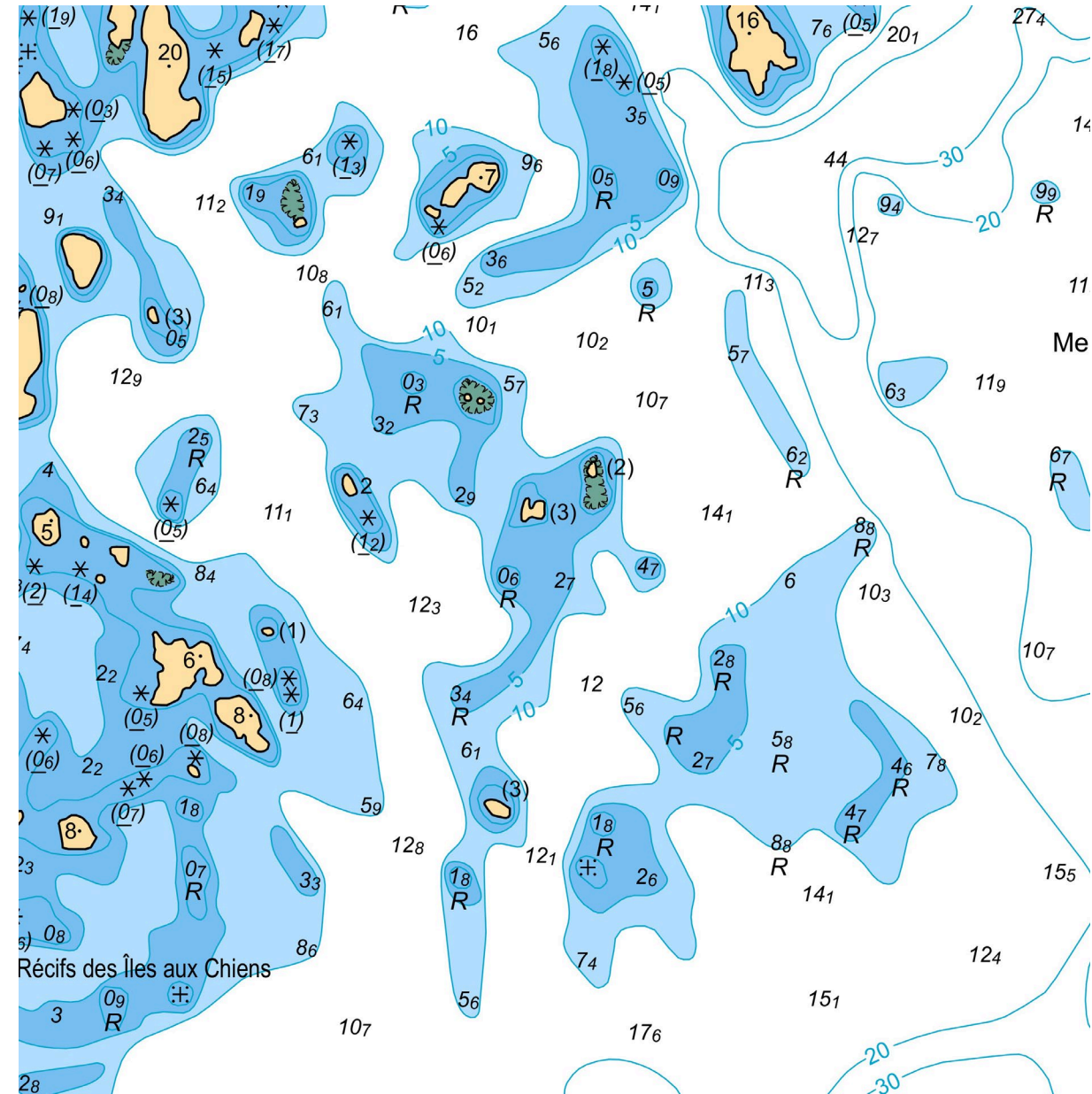
Teledyne CARIS

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Canadian Hydrographic Service

Selecting soundings

- Mostly a manual operation
- A subjective process
 - Complex
 - Time consuming
 - Prone to errors
 - Hard to standardize



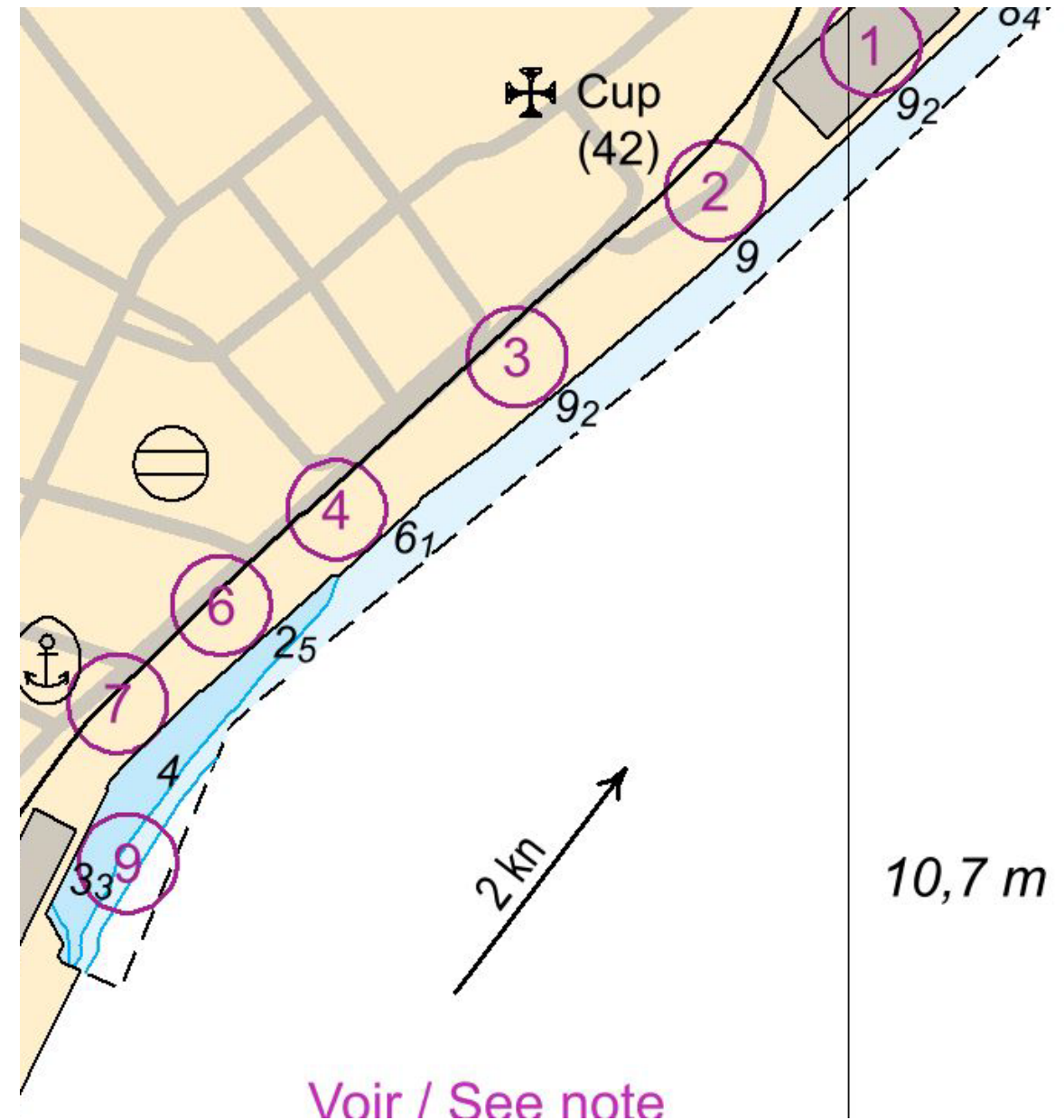
CHS Transformation

- High demand for products and services
- Growing portfolio of ENC
- Adopt IHO standards
- Improved data collection capacity
- Efficiency is needed



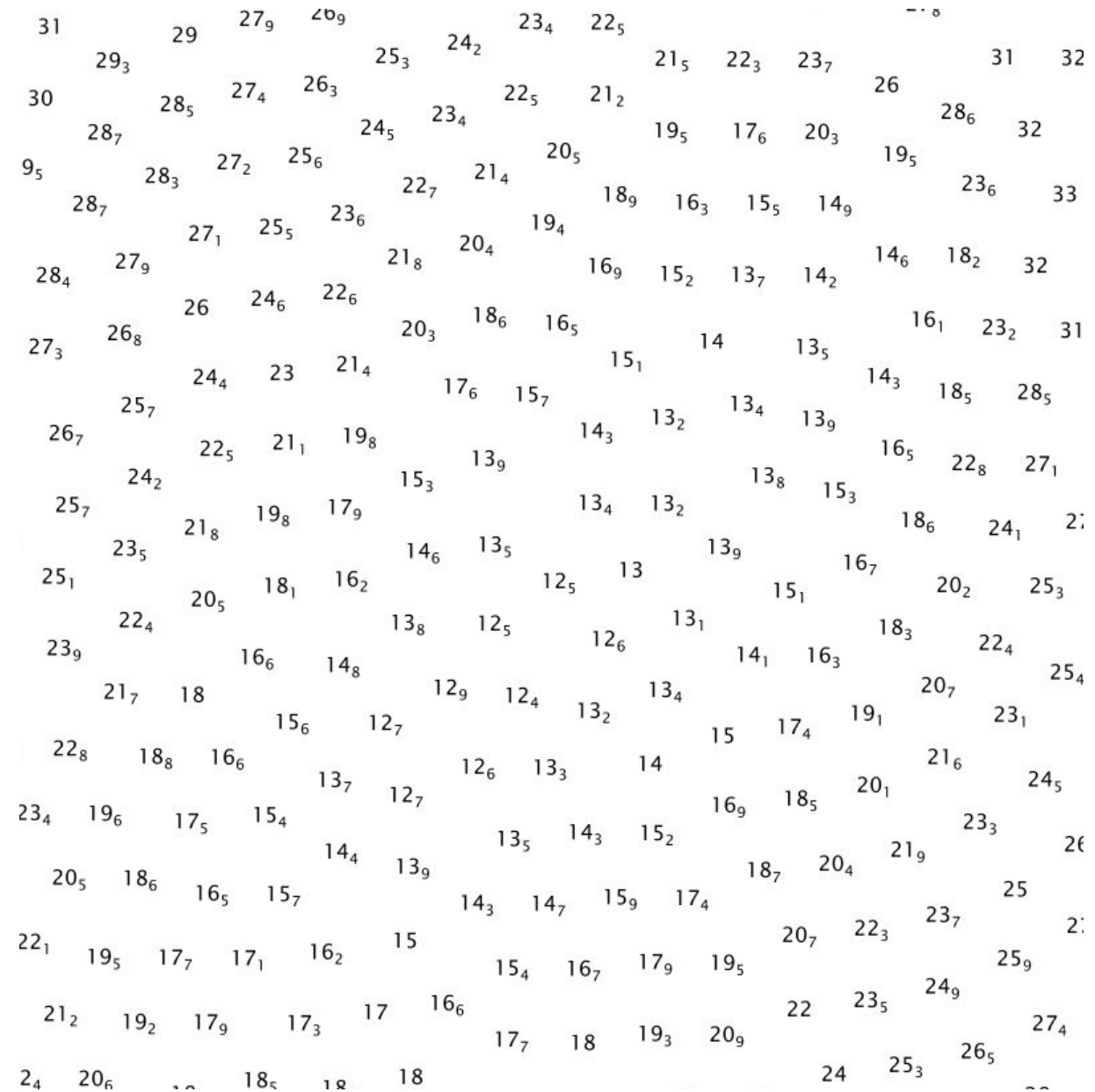
A good sounding selection...

- Is not a simple generalization of the known depths.
- Uses the chart features as guides and constraints.



Commercial solutions

- Shoal-bias sounding selection using a suppression radius
 - Selects the shoalest soundings
 - Suppress the surrounding soundings
 - Selects the next shoalest soundings
 - Suppress the surrounding soundings
 - Until all soundings are classified
- Requires the cartographer's intervention



Collaborative development

- Enhancement of the Sounding Selection tools inside CARIS Base Editor.
 - Provides an automatic workflow
 - Meets S-4 specifications.
 - Allows manual interventions

