

MBSHC23

S-100 Validation

30-31 March 2022

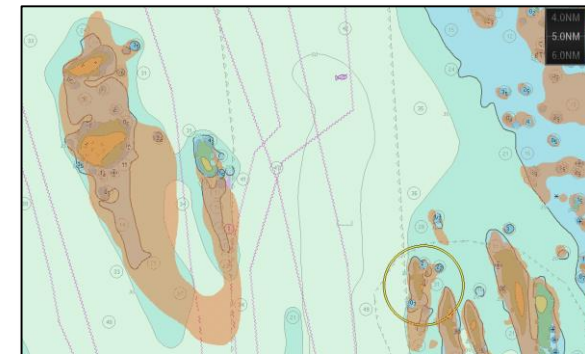
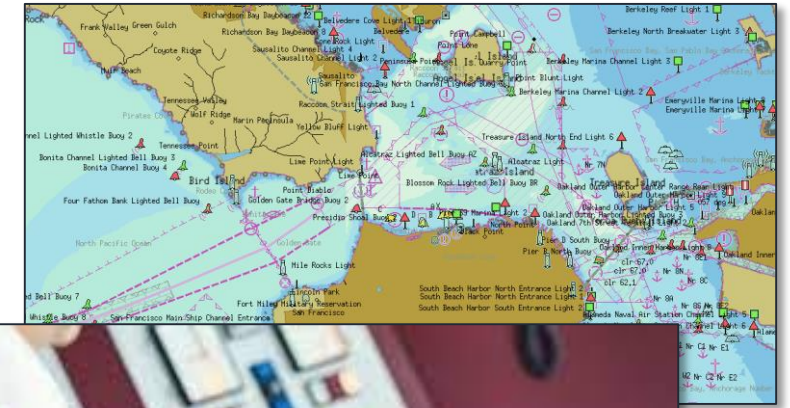
Emma Wise

SevenCs



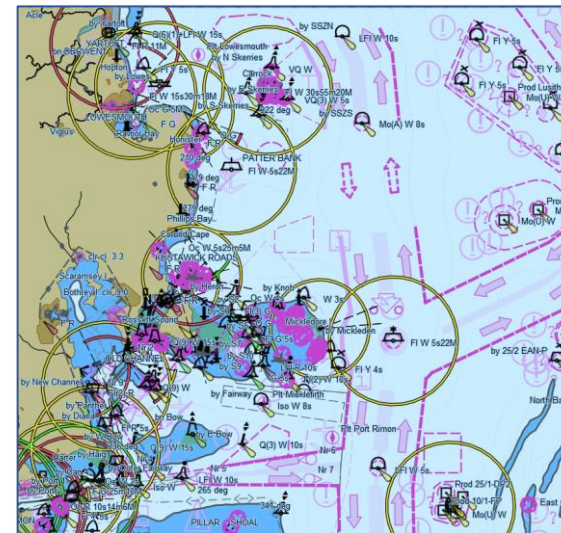
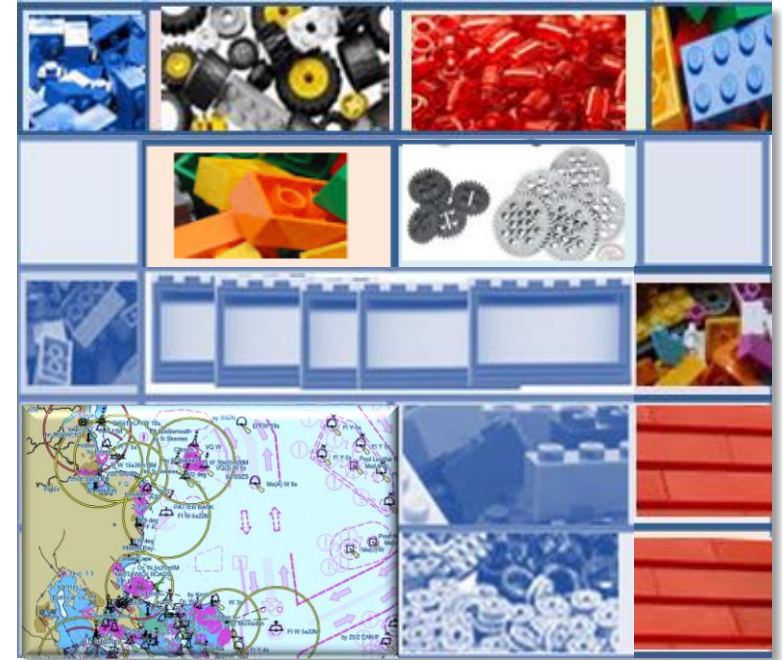
SevenCs / ChartWorld Products and Services

- Chart Distribution (incl. Nautical Publications)
- Solutions for Voyage Planning
- Fleet Monitoring
- ECDIS Kernel software
- Web based solutions for electronic charts
- Chart Production/Validation Software
- ECDIS and Navigation Software (ECS, PPU)
- Complementary data services (satellite derived shoals, T&P, Nav Areas)



Brief overview

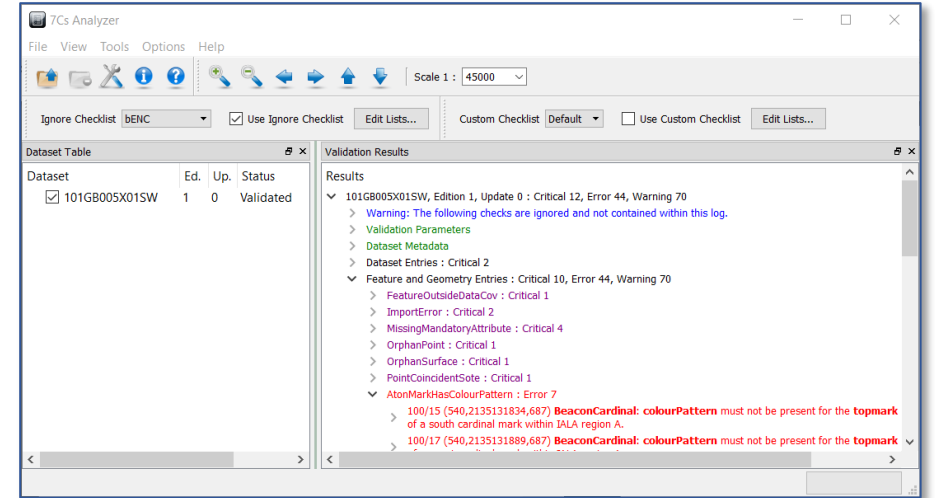
- 7Cs have an S-100 Kernel – Nautilus.
- S-101 support was implemented several years ago
- S-101 kernel was used in 7Cs Analyzer and S-101 Reader, and S-101 Writer already
- Implementation of S-101 and S-102 display and interoperability almost finished
- New version of eGlobe is currently being implemented in eGlobe ECDIS
- S-101 and S-102 display will be added to 7Cs Analyzer
- FME reader and writer S-100 functionality



S-101 Validation

S-101 Validation

- Based on existing S-58 checks
- Adjusted to honor S-101 specifics:
 - Topology model
 - Feature Catalogue (Feature Types, Information Types, Complex Attributes)
- Activities in line with development of validation checks for S-101
- S-101 custom checks can be added (e.g., to test new checks before they are approved)



UwtrocExpsou1Depare : Error 6

100/757 (540,2135172019,687) **UnderwaterAwashRock: valueOfSounding** is outside of the range the overlapping **DepthArea**.

Categories: Bathymetry and Attribute

Suggested Solution: Populate **expositionOfSounding** with the correct value.

Related Objects:

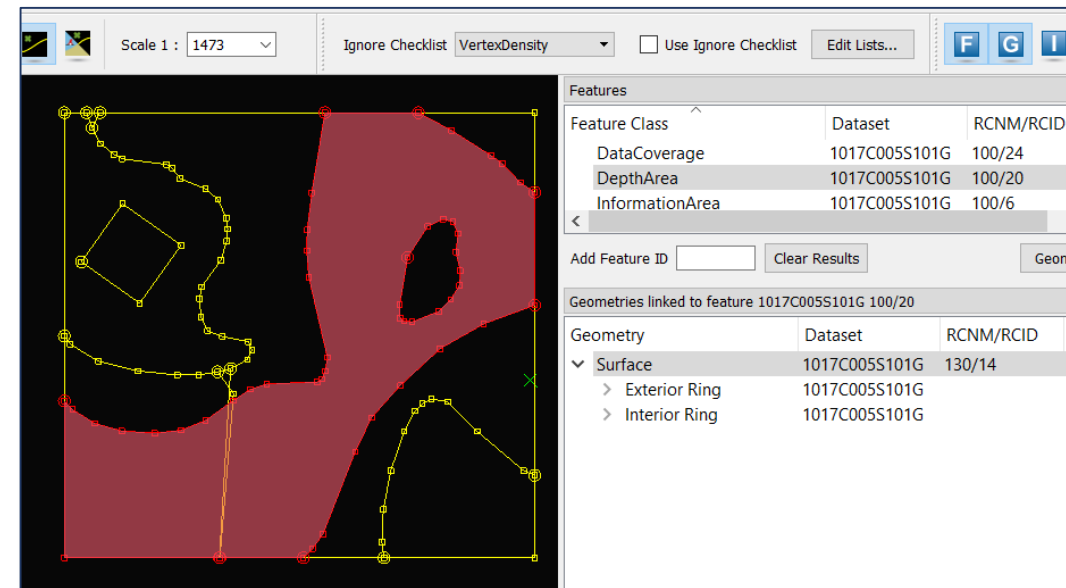
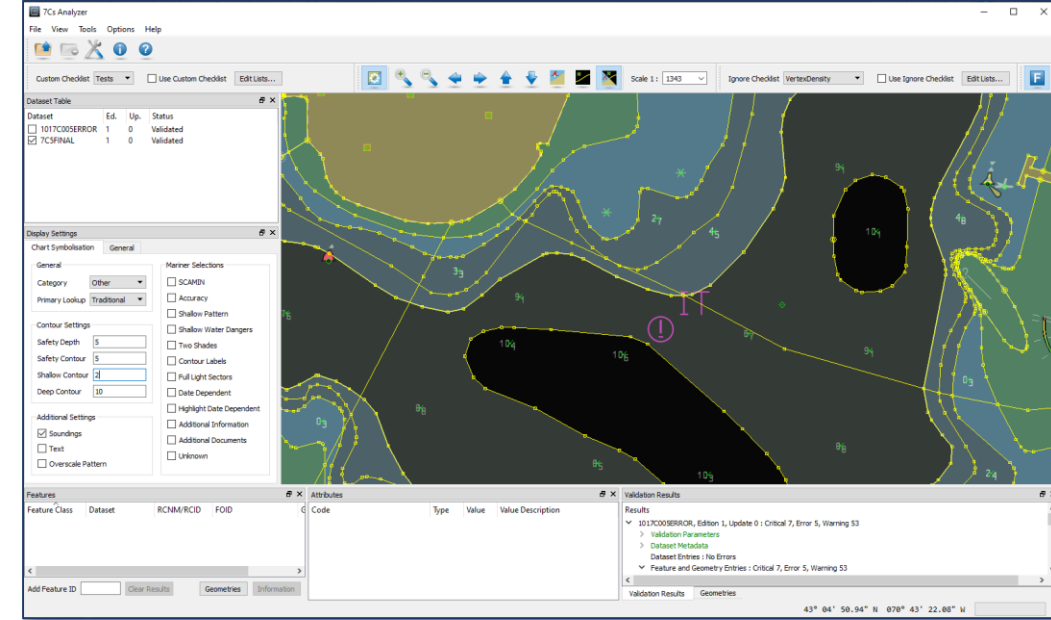
100/218 (540,2135139331,687) **DepthArea**

References:

S-101 ENC Validation Checks, Ed. 1.0.0, check 1772a

S-101 Validation, new features

- Display of S-101 geometry
- On selection of error message affected items are highlighted in chart display
- 7Cs Analyzer “unveils” the S-101 topology model
- In depth analysis of feature and spatial relations, feature attribution, feature associations
- New features in the pipeline:
 - full S-101 portrayal and S-102 support



7Cs Analyzer Service API

7Cs Analyzer Service API

- Provides a method to operate 7Cs Analyzer without human interaction
- For integration in new or existing workflows that require S-57 and/or S-10x validation
- The validation service can be accessed programmatically via a REST API
- Exists as Windows Services application
- Prototype will be made available in Q2 2022

RestApi	
PUT	<code>/api/UploadDataset</code> Upload a dataset. The dataset will be stored in an area unique to directoryName.
GET	<code>/api/ListDatasets</code> Retrieve as JSON the list of file names stored in the dataset directory under directoryName.
GET	<code>/api/ListDatasetDirectories</code> Retrieve as JSON the list of directory names stored under the dataset directory.
DELETE	<code>/api/RemoveDatasetDirectory</code> Remove the dataset directory specified by directoryName. If this directory does not exist, this endpoint does nothing.
POST	<code>/api/Analyze</code> Create tasks to analyze the datasets identified by datasetNames.
GET	<code>/api/AwaitingAnalysis</code> Determine whether a dataset is awaiting analysis.
GET	<code>/api/ListAnalyzerLogs</code> Retrieve as JSON the list of Analyzer log file names stored in the validation logs directory under directoryName.
GET	<code>/api/DownloadAnalyzerLog</code> Download the Analyzer log file specified by directoryName and analyzerLogName.

POST `/api/Analyze` Create tasks to analyze the datasets identified by datasetNames.

Parameters Cancel

No parameters

Request body multipart/form-data

directoryName * required
string Name of the directory where the datasets are stored.

datasetName * required
array Names of datasets to be analyzed.

<input type="text" value="GB4X0000.000"/>	-
<input type="text" value="GB5X01NE.000"/>	-
<input type="text" value="GB5X01NW.000"/>	-
<input type="text" value="GB5X01SE.000"/>	-
<input type="text" value="GB5X01SW.000"/>	-
<input type="text" value="GB5X01SW.001"/>	-
<input type="text" value="GB5X01SW.002"/>	-
<input type="text" value="GB5X01SW.003"/>	-

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Thank You

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