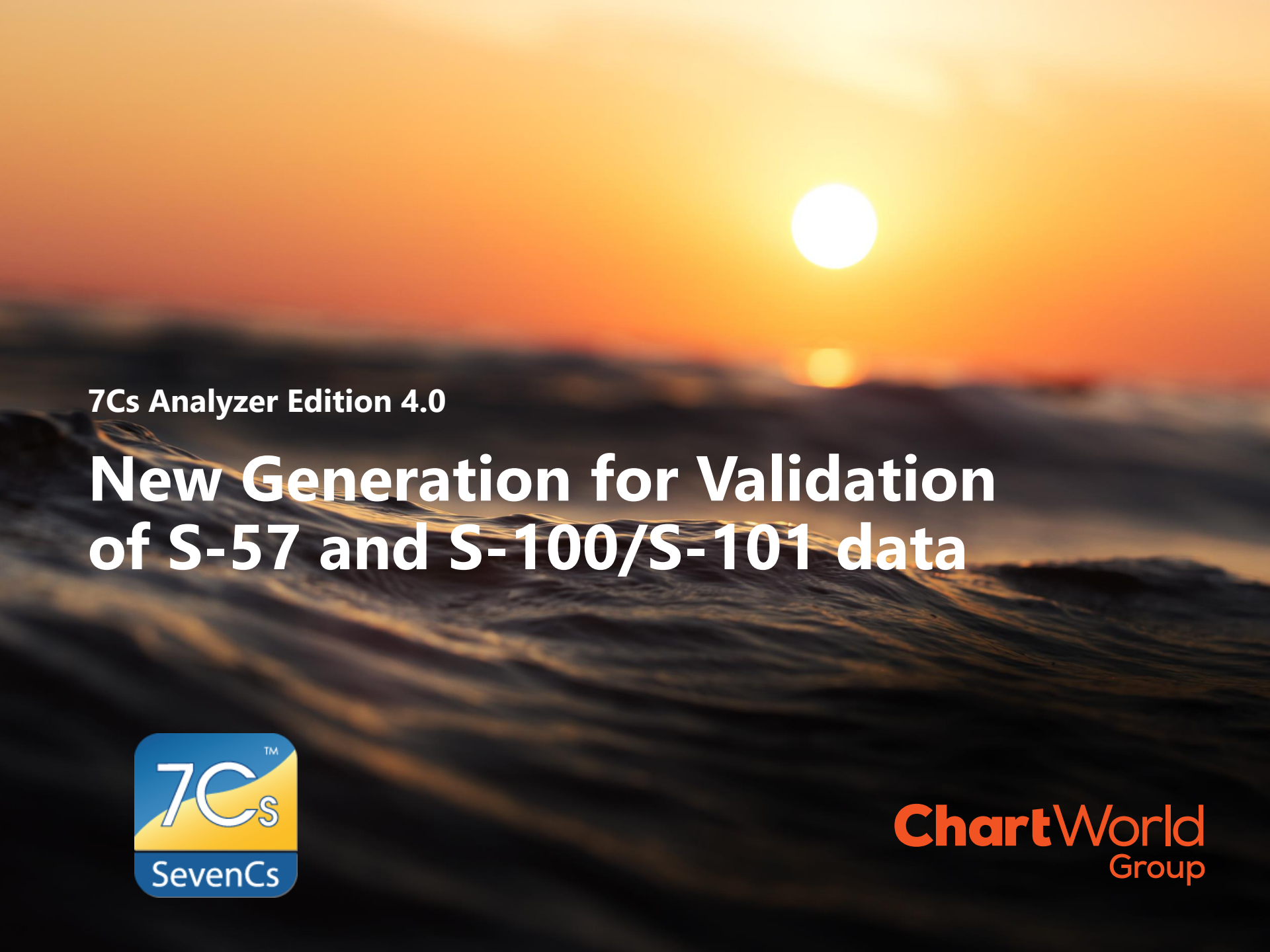

7Cs Analyzer Edition 4.0
New Generation for Validation of S-57 and S-100/S-101 data
7Cs
SevenCs
ChartWorld Group

7Cs Analyzer

- 7Cs Analyzer is an application for the validation of S-57 and S-100 datasets.
- It helps ensure that datasets are compliant with the relevant S-57 and S-100 product specifications and standards.

General Information

- 7Cs Analyzer based on Nautilus is S-100 ready
- Development from scratch (since 2014)
- Considered to be an ENC Analyzer Upgrade
- First official release Q1 2019
- Support customers get Base Module (S-57) as usual
- New licenses preferrably as annual subscription

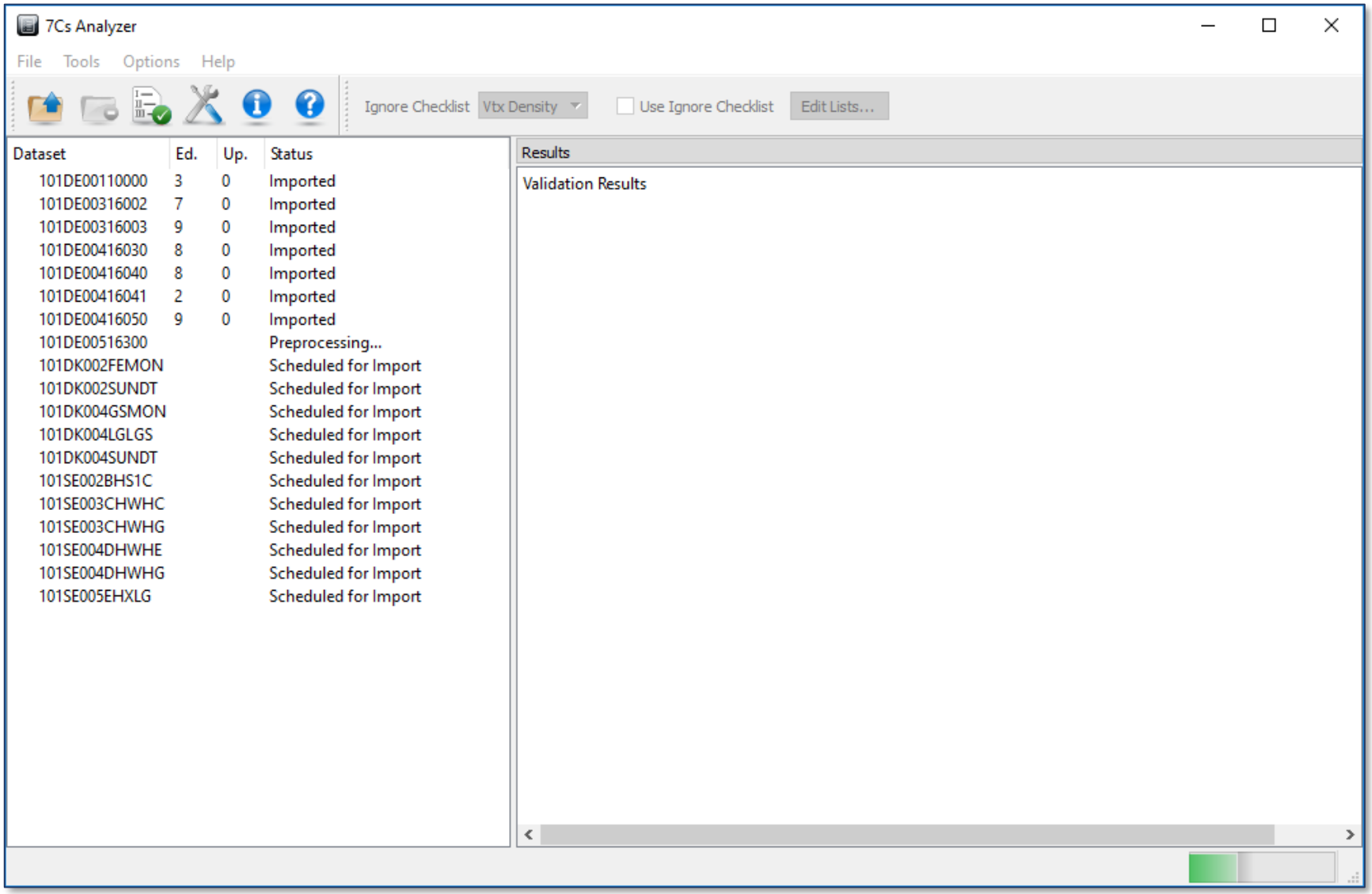
Supported Standards/Products

- Products
  - ENC (S-57, S-101),
  - IENC (S-57, 2.0, 2.1, 2.2, 2.3, 2.4)
- Validation Standards
  - S-58 ENC Validation Checks Ed. 6.1.0 (Sept. 2018)
  - Recommended Validation Checks for Inland ENC
- Related Standards
  - S-57, Use of the Object Catalogue
  - S-100, S-101

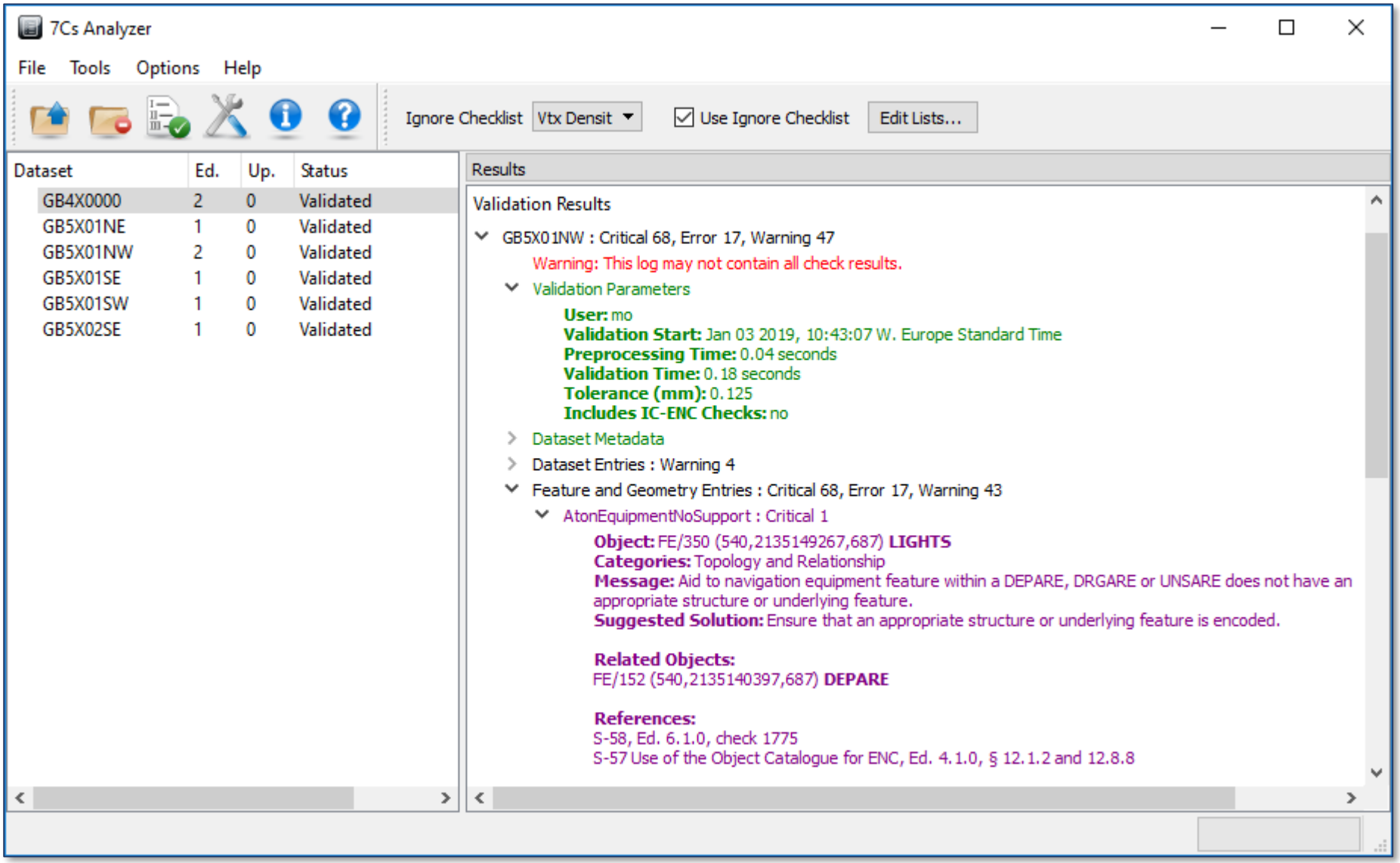
Highlights

- Validation of S-57 and S-101 nautical chart products
- Compliant with latest Ed. of IHO S-58 ENC Validation Checks
- Compliant with Recomm. Inland ENC Validation Checks 2.4
- Integrated command line mode for batch processing
- Advanced editor for definition of checks users want to ignore
- Simplified validation log output
- Improved consistency in check naming and log messages

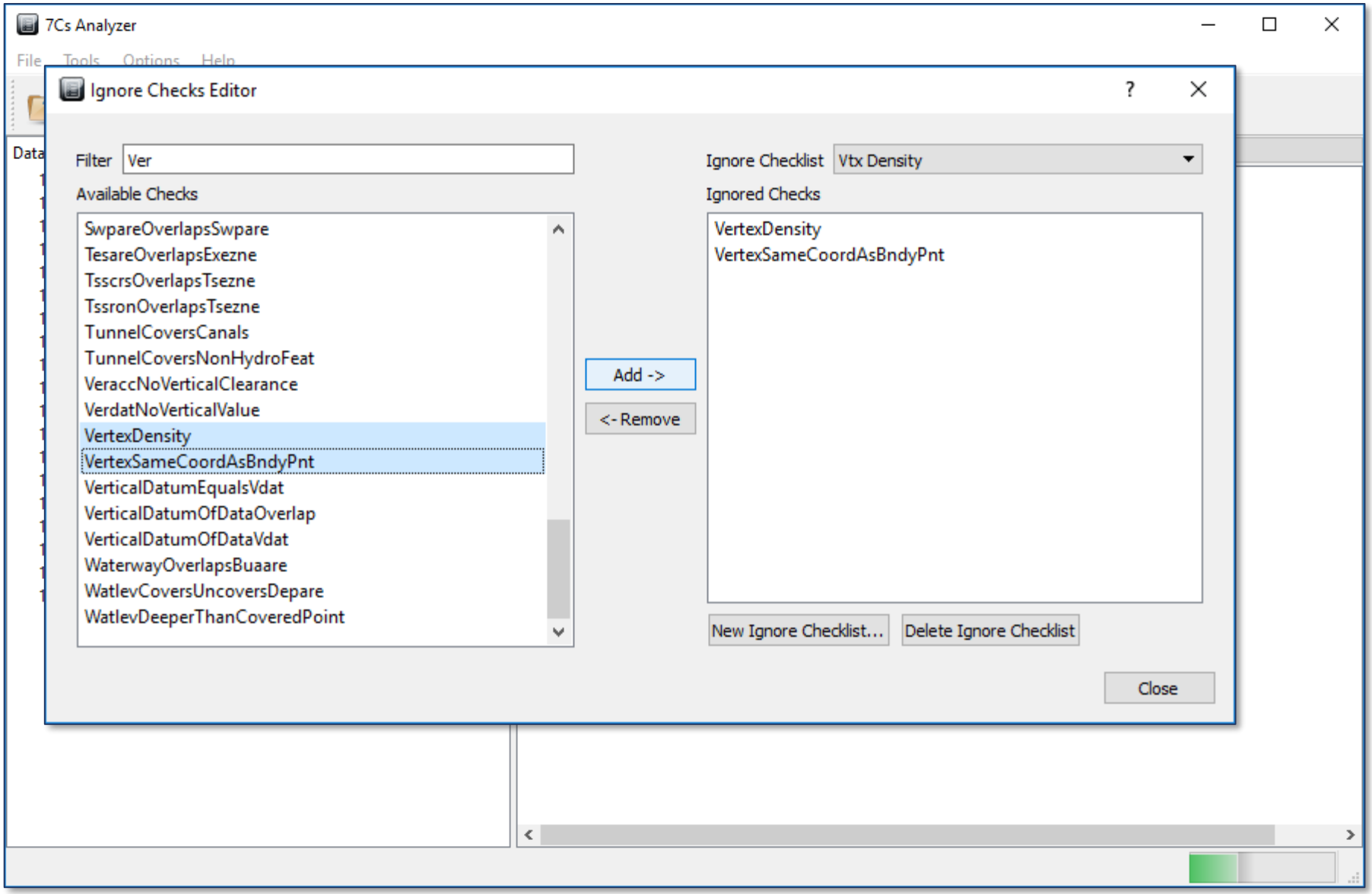
The Graphical User Interface



The Graphical User Interface

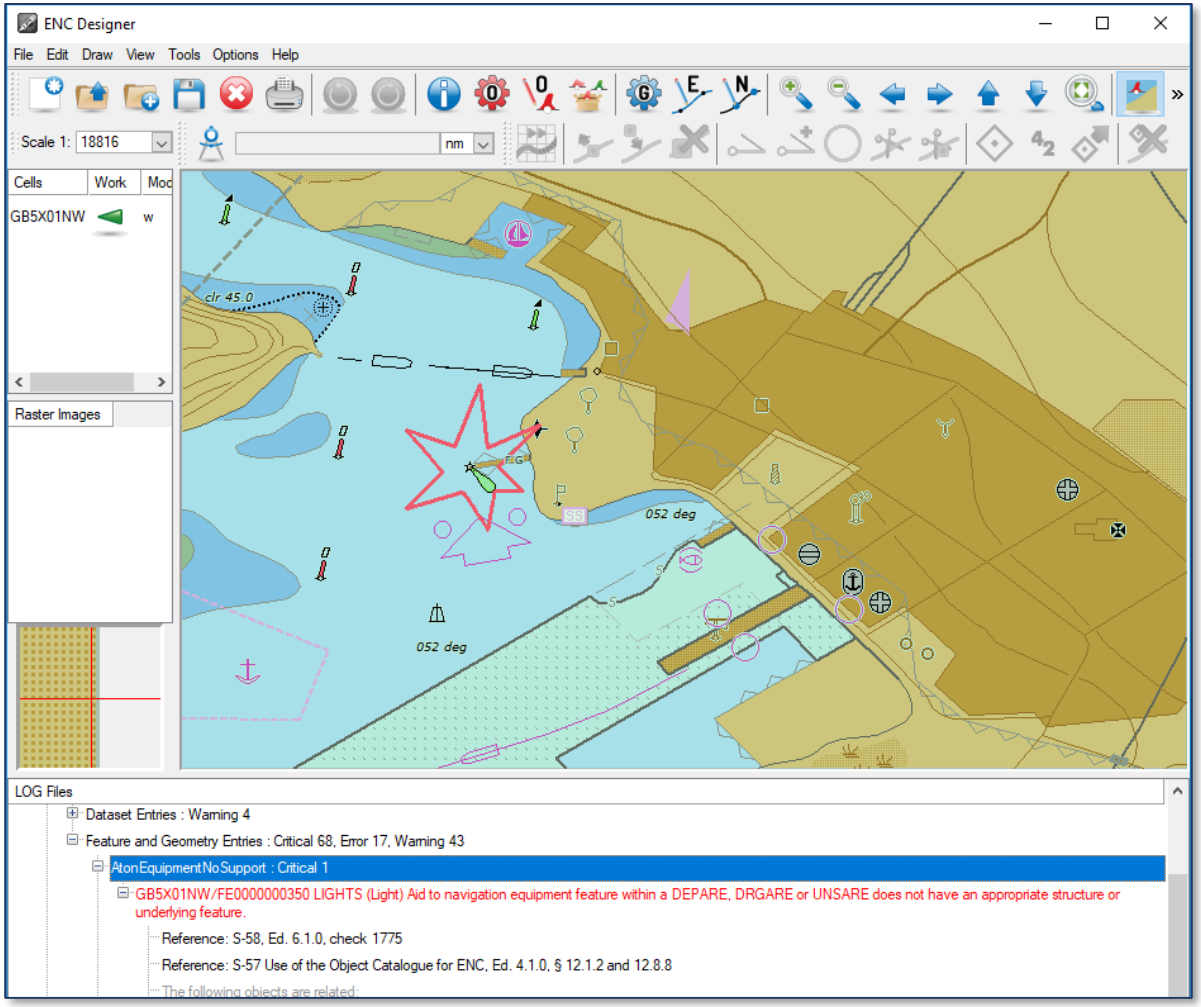


The Graphical User Interface



SevenCs ENCProduction

Review in ENC Designer



XML Log File Export

```
<?xml version="1.0" encoding="ISO-8859-1"?>
- <LogDocument Toolname="7Cs Analyzer">
    <LogGroup Title="7Cs Analyzer © 4.0.0"> </LogGroup>
    <LogGroup Title="GB5X01NW : Critical 68, Error 17, Warning 162"> </LogGroup>
  + <LogGroup Title="Validation Parameters">
  + <LogGroup Title="Dataset Metadata">
  + <LogGroup Title="Dataset Entries : Warning 4">
  - <LogGroup Title="Feature and Geometry Entries : Critical 68, Error 17, Warning 158">
      + <LogGroup Title="AtonEquipmentNoSupport : Critical 1">
      - <LogGroup Title="InvalidFeatureGeom : Critical 65">
          - <LogEntry Severity="critical">
              <Category>Data Model</Category>
            - <Message>
                - <![CDATA[
                    DEPARE must not be of geometry type Line.
                  ]]>
              </Message>
              <Reference>S-58, Ed. 6.1.0, checks 20a and 517c</Reference>
              <Reference>S-57, Ed. 3.1, Part 3 § 3.9, 4.2.1 and 6.2</Reference>
              <Reference>S-57 ENC Product Specification, Ed. 2.0, § 3.3 and 3.9</Reference>
              <Reference>S-57 Use of the Object Catalogue for ENC, Ed. 4.1.0, § 15</Reference>
              <Reference>S-57 Supplement No. 3, ch. 3 § 3.3</Reference>
            + <ObjName>
          </LogEntry>
```

Summary

- 7Cs Analyzer based on Nautilus is S-100 ready
- 7Cs Analyzer is fully compliant to the latest Edition 6.1 of S-58 ENC Validation Checks.
- 7Cs Analyzer is already capable of validating S-101 datasets to the extent that validation rules have been defined, and S-58 checks are applicable.
- 7Cs Analyzer performs hundreds of individual checks and uses the same validation engine for both S-57 and S-101 data products.
- S-101 module will be charged extra
- New licenses preferrably as annual subscription

Thank you for your attention!
Any questions?