8th S-100 Working Group (S-100WG) Meeting

Status of S-1XX sample dataset and Application to S-100 Viewer

Agenda Item 6.14

13 - 17 November 2023 / Singapore

IHO

International Hydrographic Organization

INTRODUCTION / BACKGROUND

- KHOA developed and provided the S-100 Viewer and OpenS-100 for testbed support
- The S-100 edition referenced by the S-1XX product specifications is different, and the availability of sample data and FC/PC is to be different for each product.
- Aims to investigate the status of S-1XX sample data and to apply each sample data to KHOA S-100 Viewer/OpenS-100

STATUS OF S-1XX PRODUCT SPECIFICATION DEVELOPMENT

IHO

International Hydrographic Organization

- Status of each product specification

ID	Title	PS Ver.	S-100 Ver.	Status	FC	PC	DCEG	TDS
S-101	Electronic Navigational Chart	1.1.0	5.0.0	Published	O	O	O	O
S-102	Bathymetric Surface	2.2.0	5.0.0	Published	O	△	O	O
S-104	Water Level Information for Surface Navigation	1.1.0	5.0.0	Published	O	X	O	O
S-111	Surface Currents Product Specification	1.2.0	5.0.0	Published	O	X	O	O
S-121	Maritime Limits and Boundaries	1.0.0	4.0.0	Published	O	X	O	X
S-122	Marine Protected Areas	1.0.0	3.0.0	Published	O	X	O	O
S-123	Marine Radio Services	1.0.0	3.0.0	Published	O	X	O	O
S-124	Navigational Warnings	1.0.0	5.0.0	Published	O	O	X	X
S-125	Marine AtoN	0.0.3	4.0.0	Development	O	O	DCEG	O
S-127	Marine Traffic Management	1.0.0	4.0.0	Published	O	X	O	O
S-128	Catalogue of Nautical Products	1.0.0	4.0.0	Published	O	X	O	X
S-129	Under Keel Clearance Management Product Specification	1.1.0	5.0.0	StakeholderReview	O	X	O	X
S-130	Polygonal Demarcations of Global Sea Areas	1.0.0	5.0.0	Published	O	X	O	X
S-131	Marine Harbour Infrastructure	1.0.0	5.0.0	Published	O	△	X	X

IHO

International Hydrographic Organization

STATUS OF S-1XX SAMPLE DATASET

- The S-1XX TDS (S-100 Resources page)
  - S-164 TDS, KHOA TDS, UKHO MDP (Marine Data Portal), NOAA PMN (Precision Marine Navigation Program), and SHOM TDS.

  - UKHO MDP: S-101, S-102, S-104, S-111, S-121 and S-122 TDS available in UKHO's Marine Data Portal
  - NOAA PMN: NOAA's Precision Marine Navigation Program provides S-102 and S-111
  - SHOM TDS: SHOM provides TDS for S-101, S-102, S-111
  - S-164 TDS: S-101 TDS subgroup produces and supports the S-164 subgroup
  - KHOA TDS: KHOA produces S-101, S-102, S-104, S-111, S-122, S-123 and S-127 TDS

APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

International Hydrographic Organization

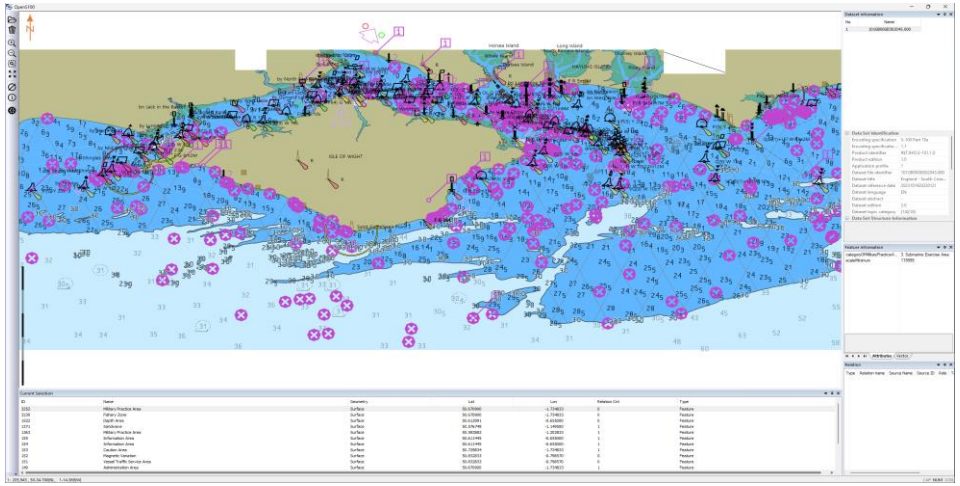
- FC/PC version applied

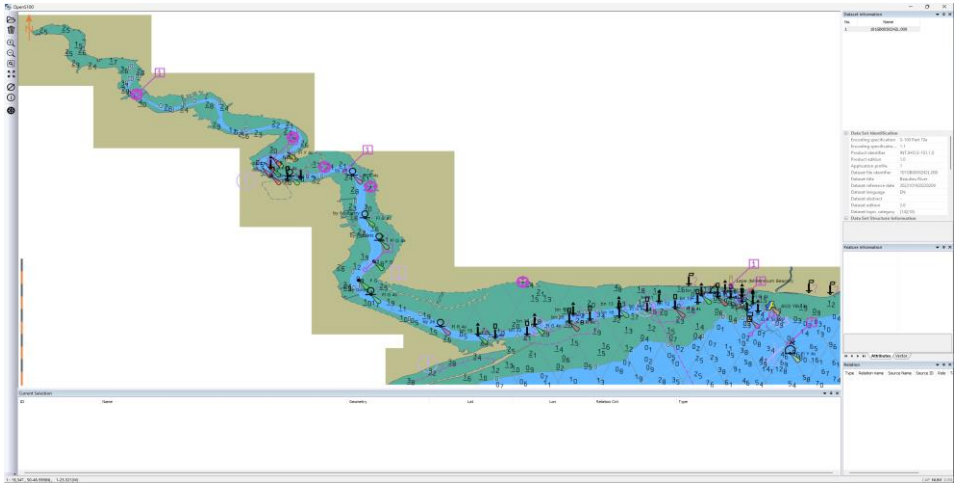
Product ID	FC Version	PC Version
S-101	1.1.0	1.1.2-Draft
S-102	2.2.0	Internal PC
S-104	1.1.0	Internal PC
S-111	1.2.0	Internal PC
S-121	1.0.0	Internal PC
S-122	1.0.0	Internal PC

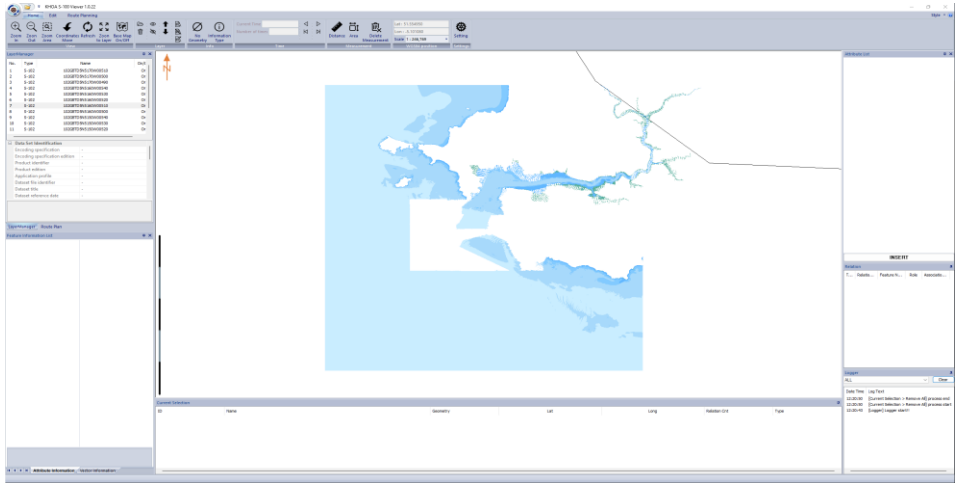
APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

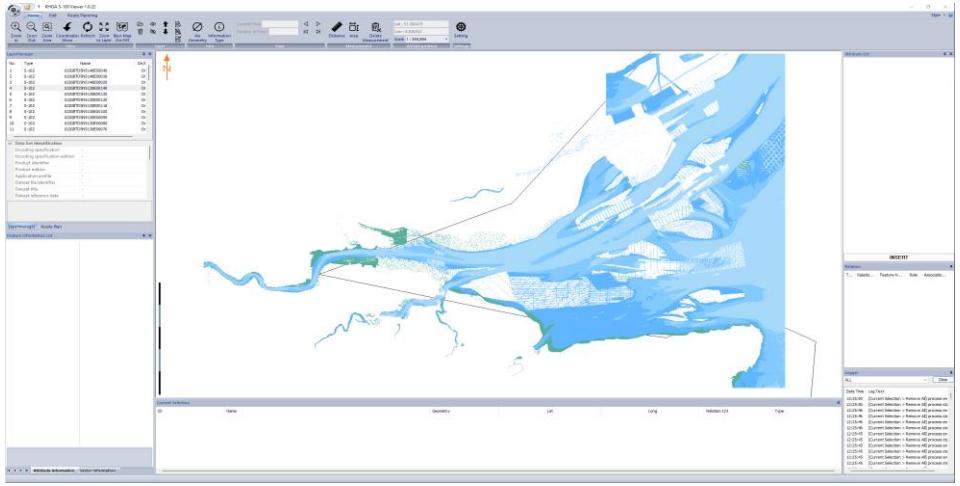
International Hydrographic Organization

- UKHO TDS
  - No issues on S-101, S-102





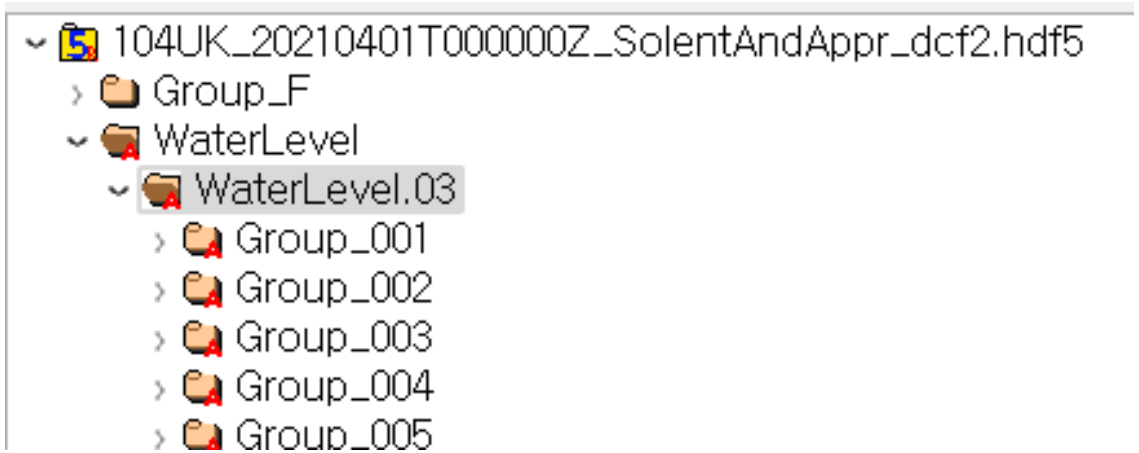


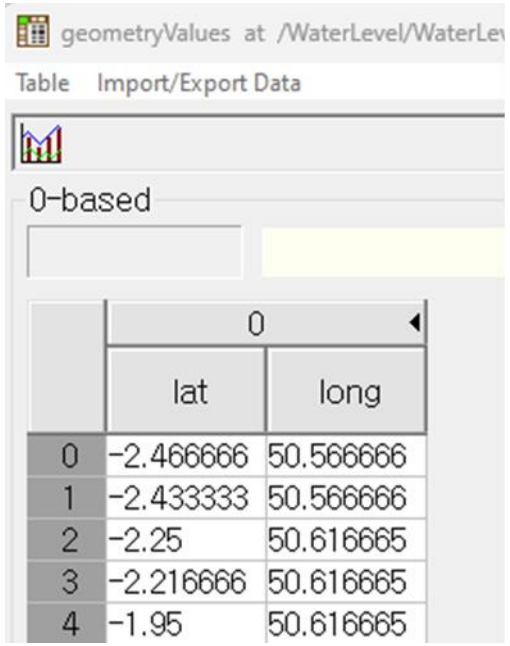


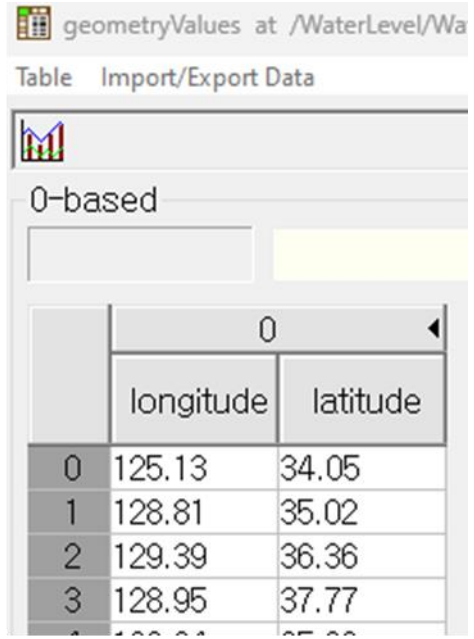
APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

International Hydrographic Organization

- UKHO TDS
  - KHOA S-100 Viewer supports only when Feature Instance ID starts with 01 (WaterLevel.01), but UKHO S-104 data starts with WaterLevel.03, so an error occurs in KHOA Viewer
  - An error occurs because the axisName attribute of S-104 is different. It is necessary to include the axisName attribute in the S-104 data and process data using this attribute value.



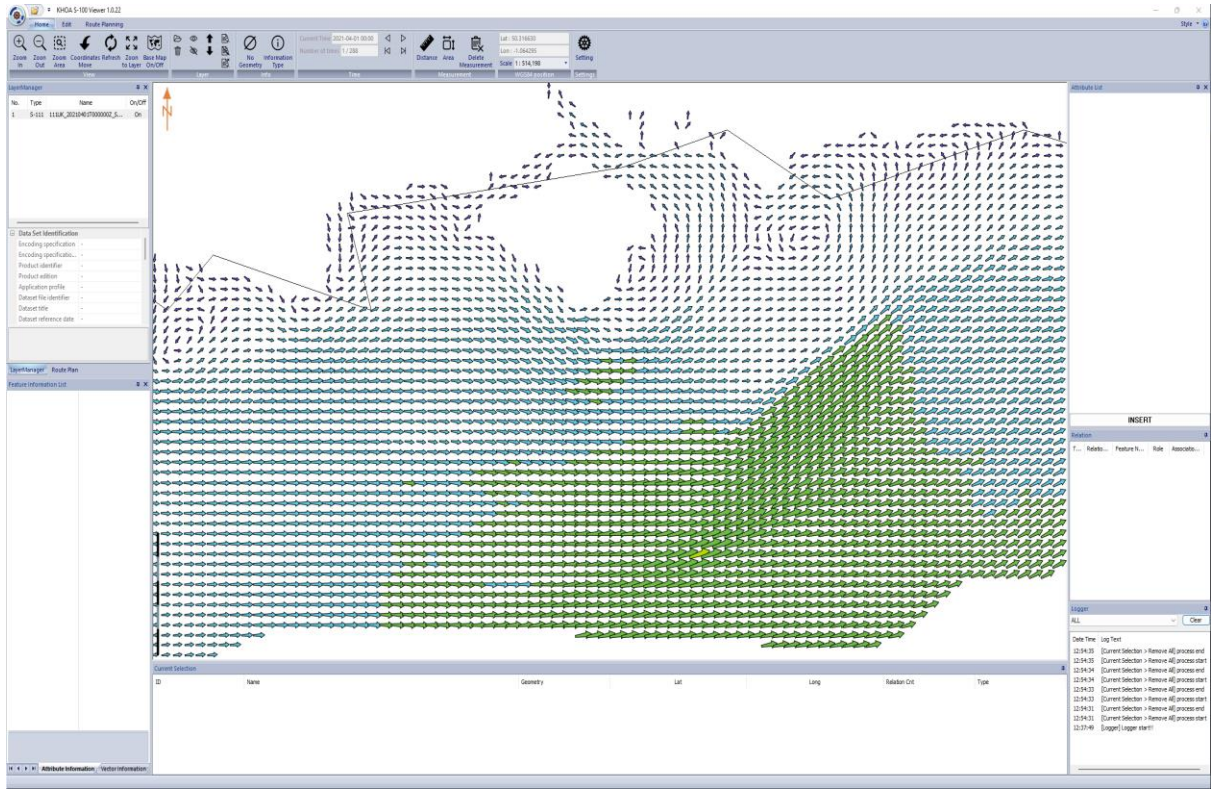


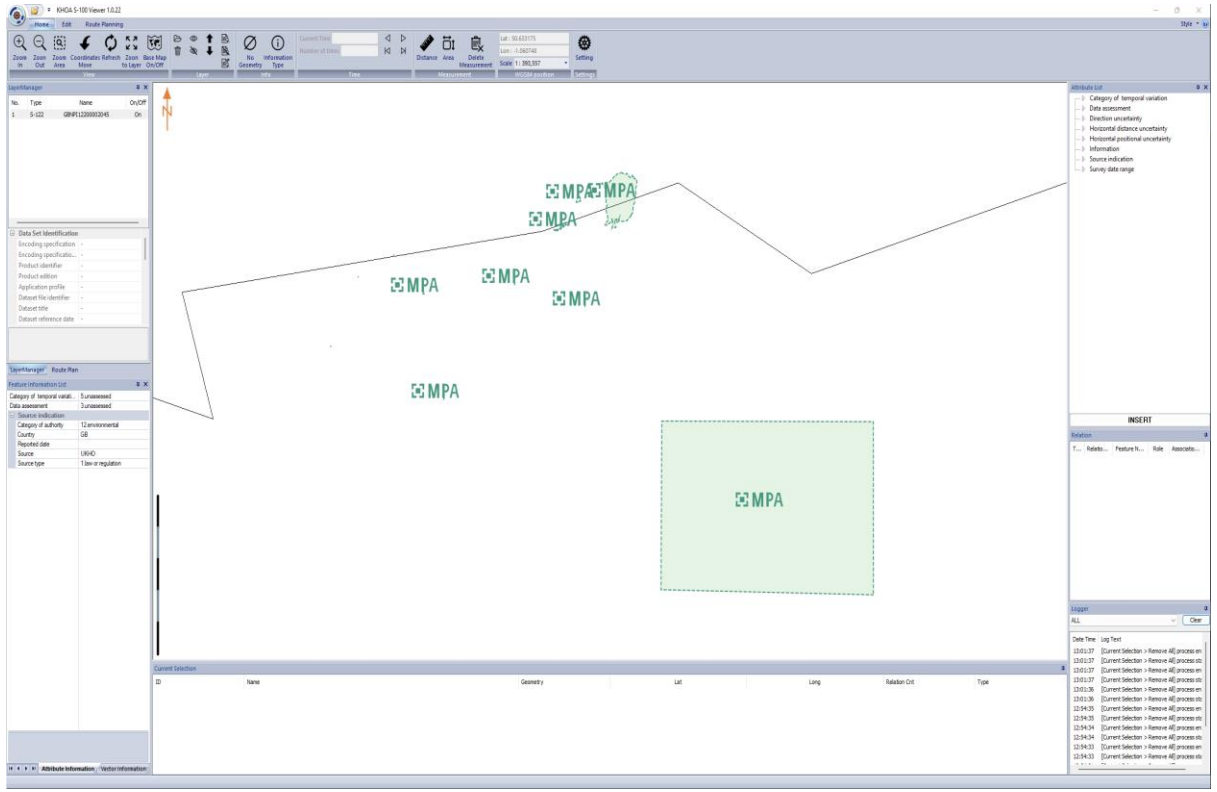


APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

International Hydrographic Organization

- UKHO TDS
  - No issues on S-111 and S-122



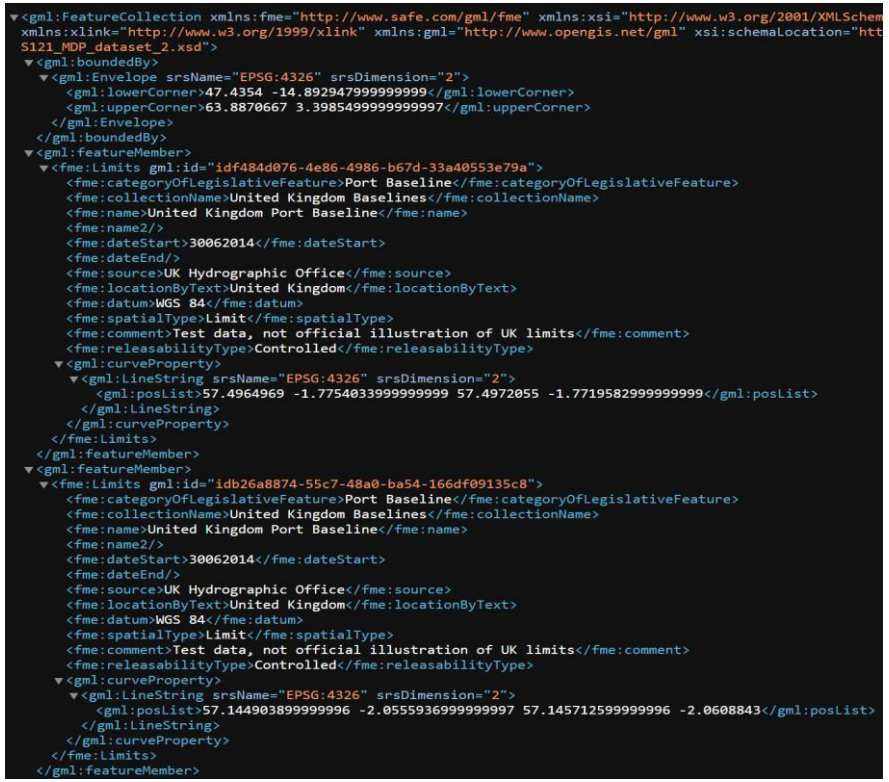


APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

IHO

International Hydrographic Organization

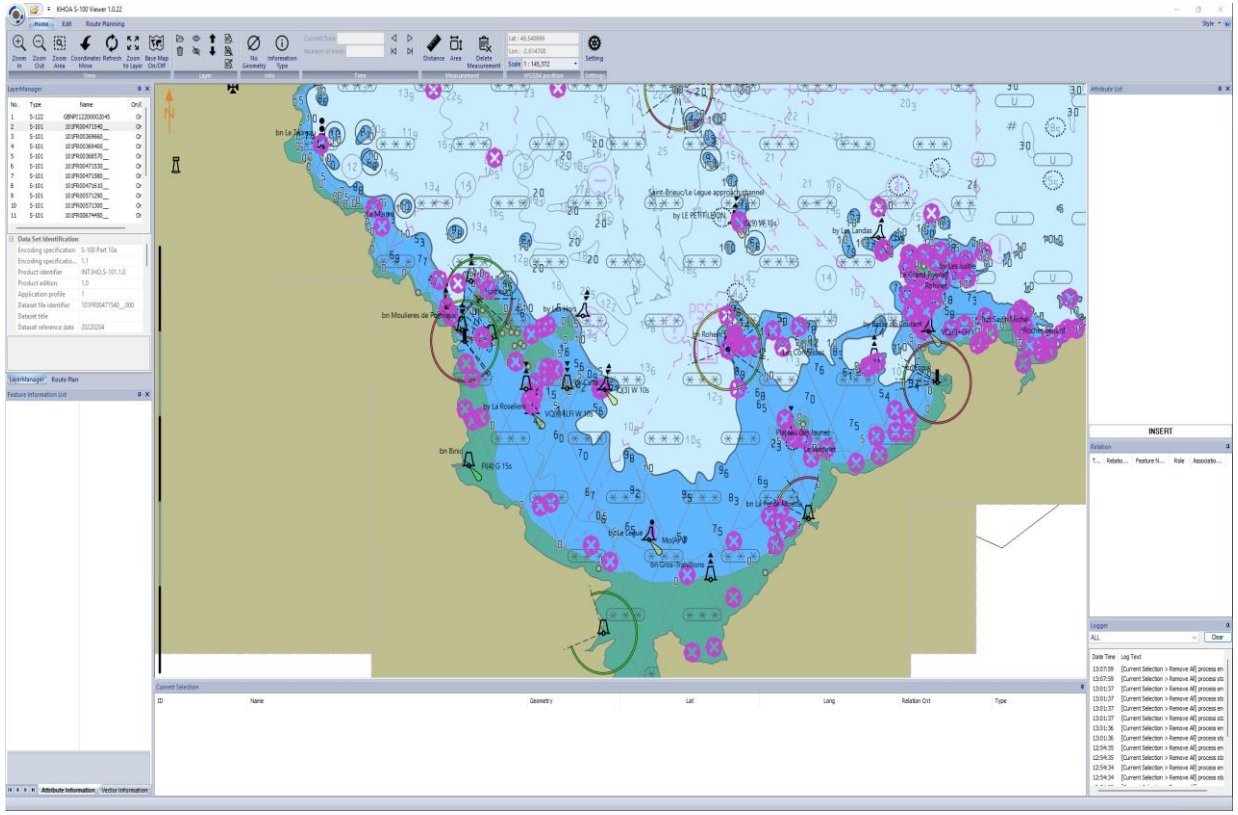
- UKHO TDS
  - For S-121, KHOA S-100 Viewer does not support the xml namespace called fme and does not support the method of including features in featureMember. The current KHOA S-100 Viewer does not support various types of prefixes

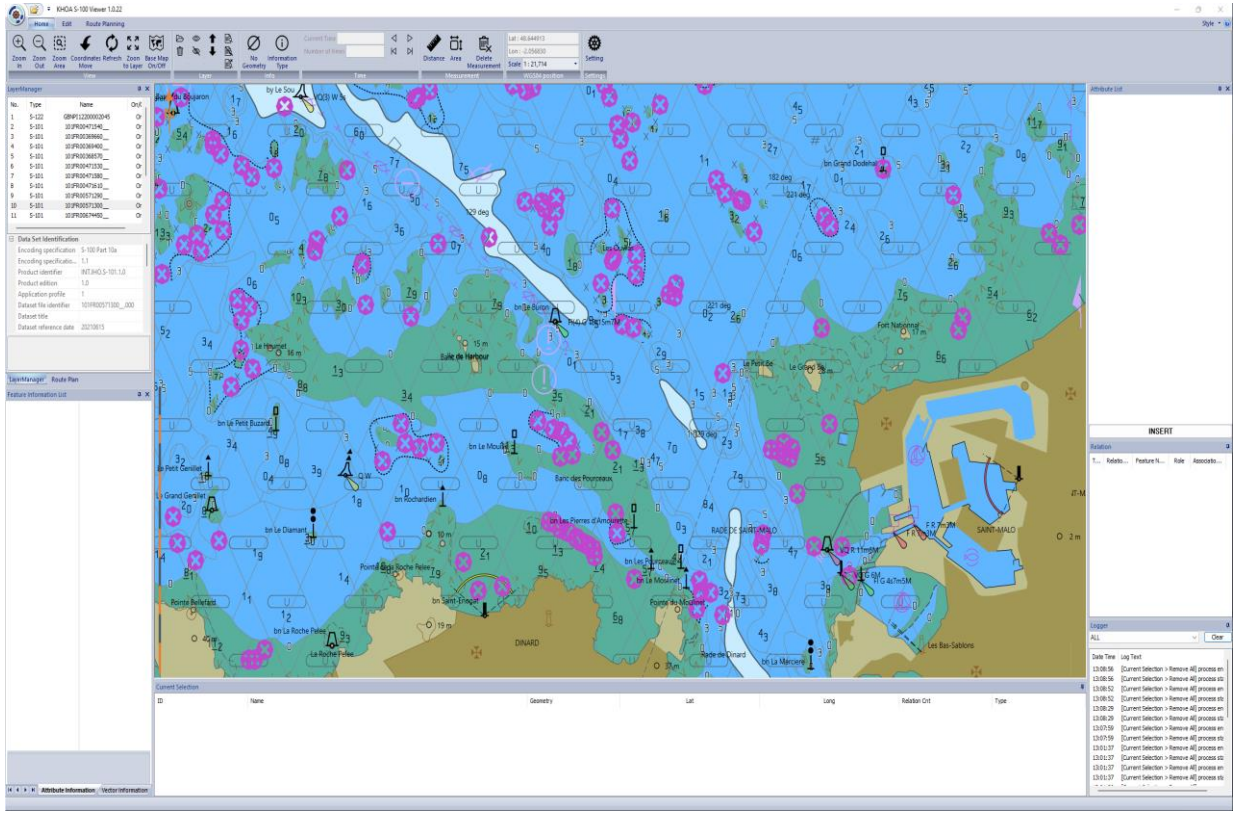


APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

International Hydrographic Organization

- SHOM TDS
  - no issues with SHOM's S-101, S-102, and S-111 TDS

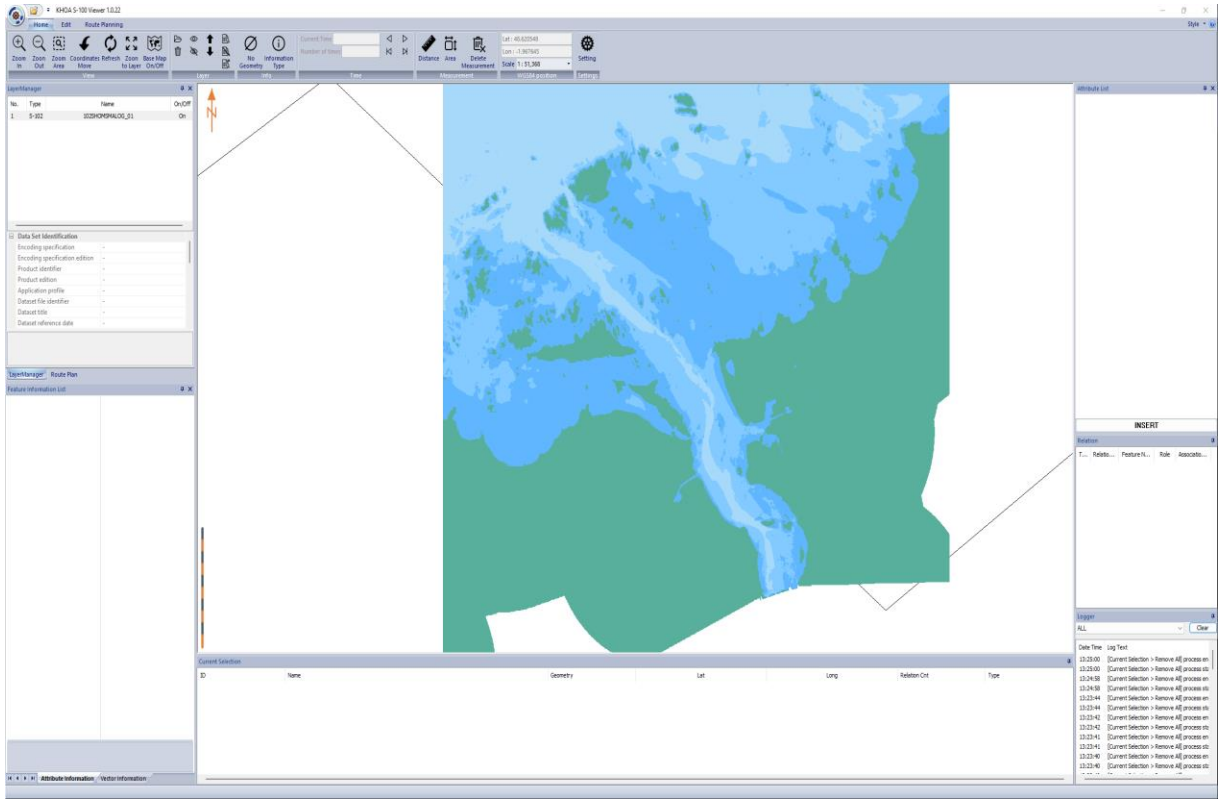


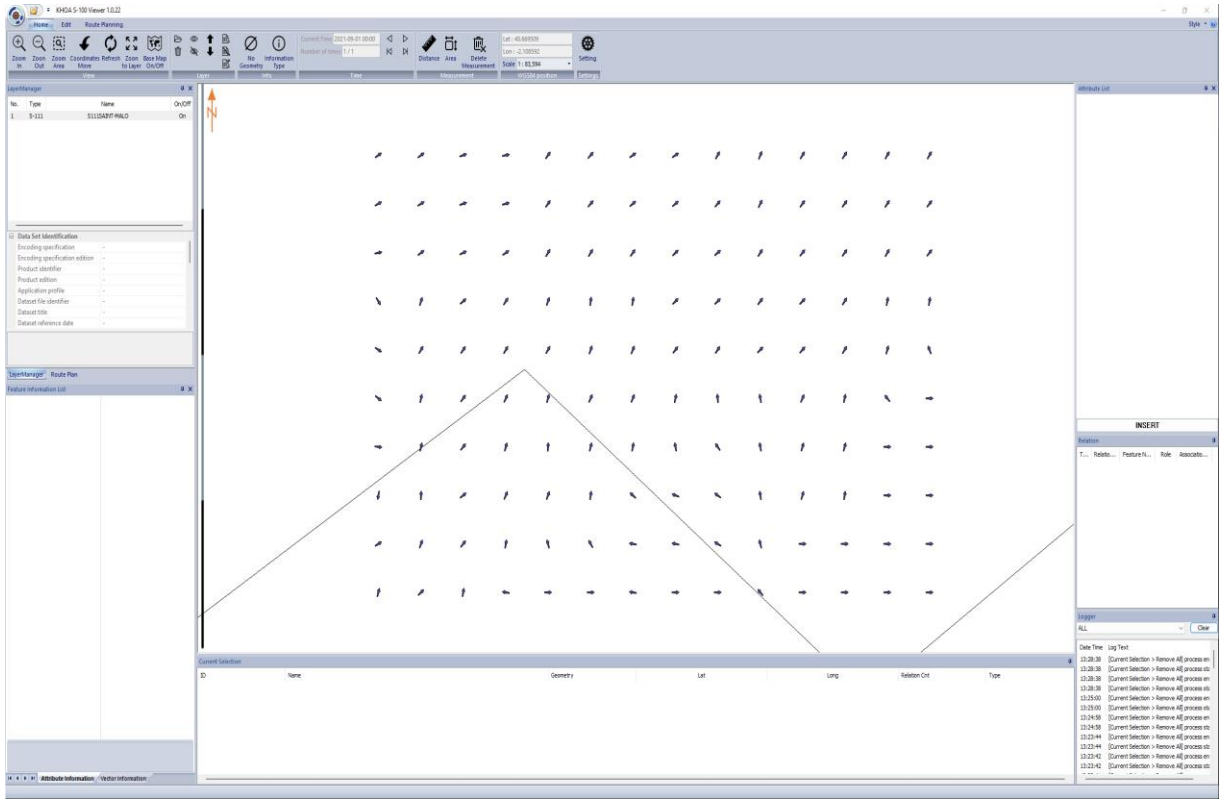


APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

International Hydrographic Organization

- SHOM TDS
  - no issues with SHOM's S-101, S-102, and S-111 TDS

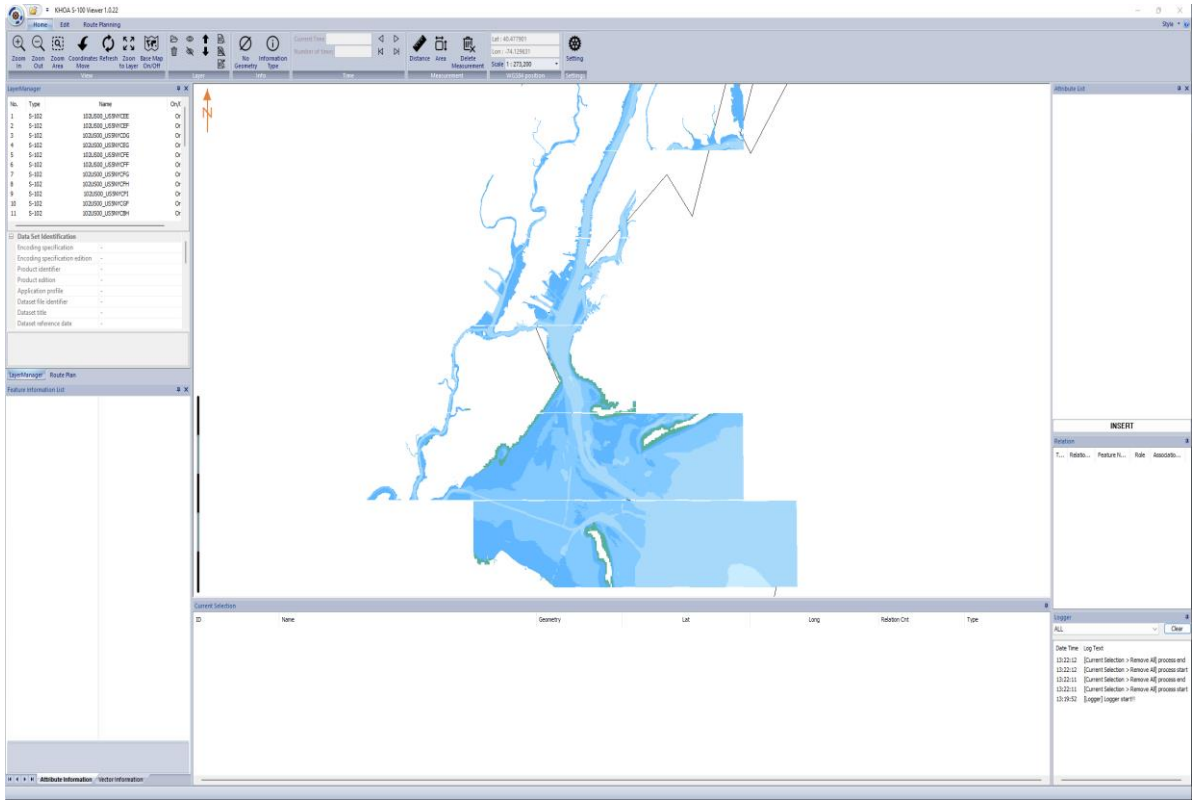


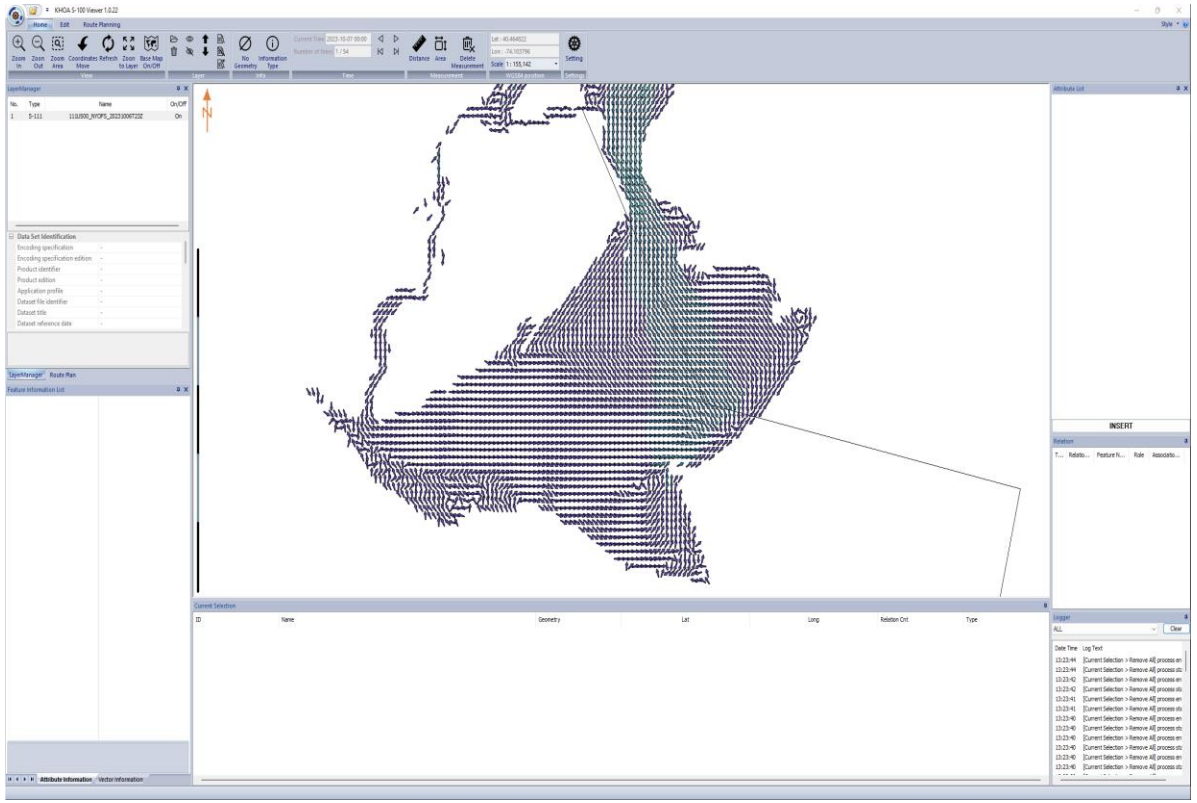


APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

International Hydrographic Organization

- NOAA TDS
  - No issues on S-102 and S-111



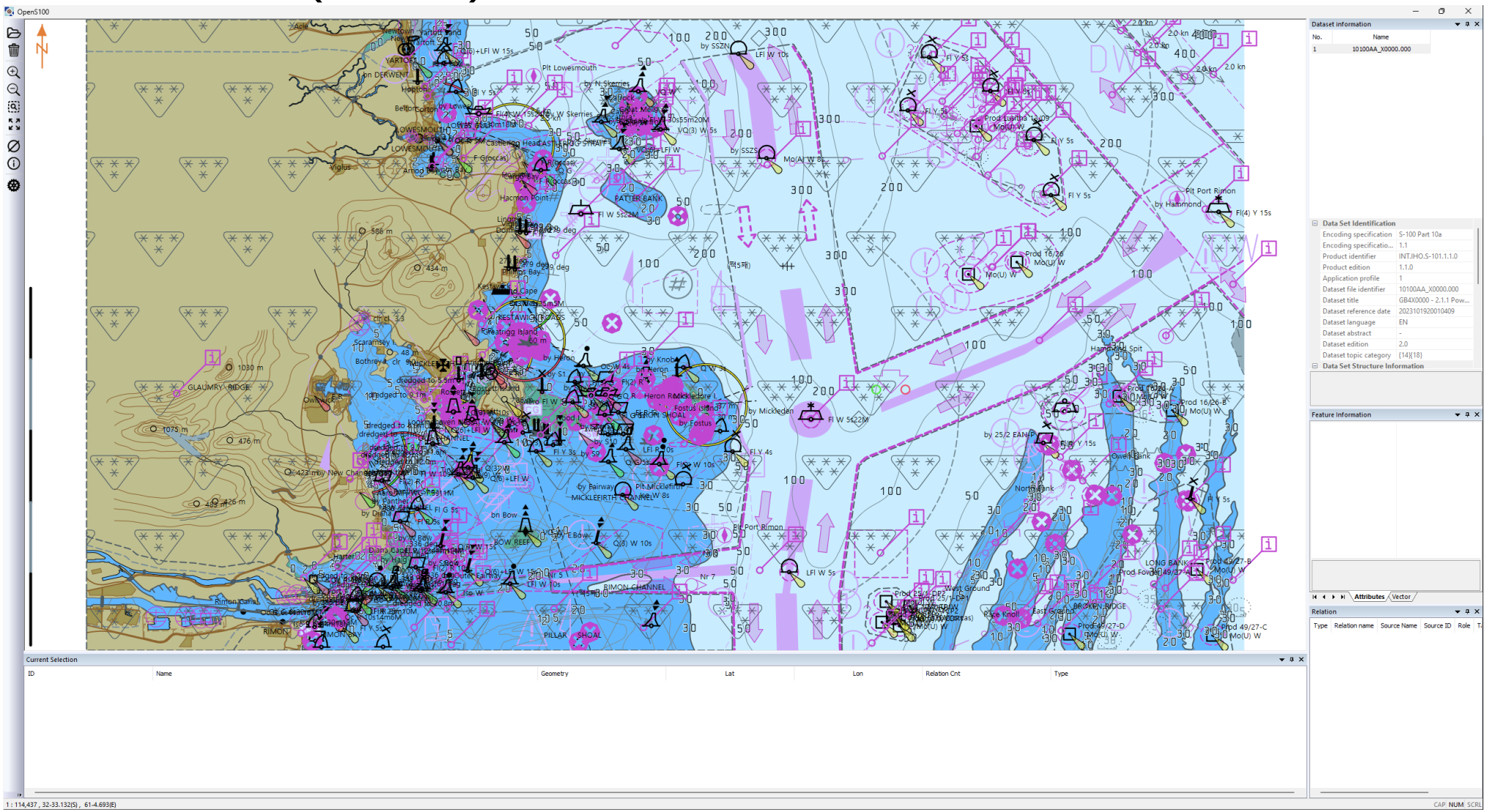


APPLICATION OF S-1XX SAMPLE DATASET TO KHOA VIEWER/OPENS-100

IHO

International Hydrographic Organization

- S-164 TDS (S-101)



- Recommendations
  - It’s recommended to refer the issues discovered during the process of applying the S-1XX sample data to KHOA S-100 Viewer/OpenS-100, and related actions are recommended if necessary.

- Action Required of S-100WG
  - The S-100WG is invited to:
    a. note the investigation and research results on the sample dataset and application to KHOA Viewer/OpenS-100
    b. note the plan of KHOA to continue the test of S-1XX TDS and FC/PC using KHOA S-100 Viewer/OpenS-100