



External Source Data

How to prepare data for nautical charting?

External Source Data (ESD), defined as data with potential value for nautical charting applications, but was not acquired or contracted by Coast Survey for this specific purpose, is a critical input to NOAA's nautical charting mission. ESD is obtained from data archives, or in some cases, directly from established ESD providers. If you wish to best prepare your hydrographic data as ESD for nautical chart application, here are some guidelines to follow.

Most importantly, ensure you have included the [required metadata](#) to accompany your ESD, otherwise it may have very limited, if any, value.

If it's not already licensed, [select a data license](#) to define any restrictions. Note that some of the licenses will prohibit nautical chart application.

Adequacy of the data for charting is determined by the Category of Zone of Confidence in Data (CATZOC), well-defined in the [IHO S-67 publication](#), and summarized in this presentation, "[Publishing Data Quality](#)."

It is not a requirement, but in order to be charted as CATZOC A1, the data must meet IHO Order 1a as defined in the [IHO S-44 publication](#). Most critical questions to answer:

- Was there complete or partial coverage within the survey area?
- Were all features identified (or disproved) with a system capable of detecting and measuring least depths?
- What is the positional accuracy of the soundings?
- What is the depth accuracy of the soundings?

Please submit any processed data, and final products (e.g. bathymetric grids and feature files), in addition to raw data.

Questions? Please contact esd.team@noaa.gov.

Thank you!

