

Guidance on Navigation Files for NDSF Dive Planning

To help us plan your upcoming dive and set up the navigation system, please share a folder with the dive name (Following the J2-####/AL####/sentry### format) and place all the files in there. One single cruise folder may be used if one map and set of targets is sufficient for all dives. Files to include are:

(1) *an underlay bathy file or an image file (with bounding corners)*

(2) *a targets (waypoints) file*

Guidelines for creating these input files are below.

1) Bathy files

- File Formats: .grd (georeferenced preferred), .netCDF, .xml
- <30MB file size
- Labeled descriptively (i.e. Ashes_5m_bathy) with appropriate file extension

2) Image files – if suitable .grd files are not available:

- File format: .png, .tif, or .bmp (.png currently preferred, files should be <30MB)
- Label file descriptively (contour line spacing, site name, etc.) with appropriate file extension
- Provide Lat&Long of Upper-Left and Lower-Right corners of the image for geolocating.
 - Format: Decimal-Degrees, and should be in Northings and Eastings
 - Bounding corners file – must accompany an image file

Example content:

```
[CORNERS]
LL_LAT= 9.7777
LL_LON= -104.2222
UL_LAT= 9.9999
UL_LON= -104.2222
UR_LAT= 9.9999
UR_LON= -104.1111
LR_LAT= 9.7777
LR_LON= -104.1111
```

3) Targets file – ***Please include a separate target file even if targets are overlaid on the provided bathy or image file***

- Provide in CSV format in a .txt or .csv file.
- Coordinates need to be in **Decimal-Degrees** and provided as Northings & Eastings
- Target list files should be in the following scheme: #,Lat,Long,Label
- Other attributes (i.e. depth, notes, etc.) may be added as additional columns after the label
- Example:

1	0.45912	-90.14134	WP1
2	0.45901	-90.99999	WP2
3	-0.33333	-90.44444	array_center