

Electronic Nautical Charts (ENC) and Electronic Chart Display and Information Systems (ECDIS)

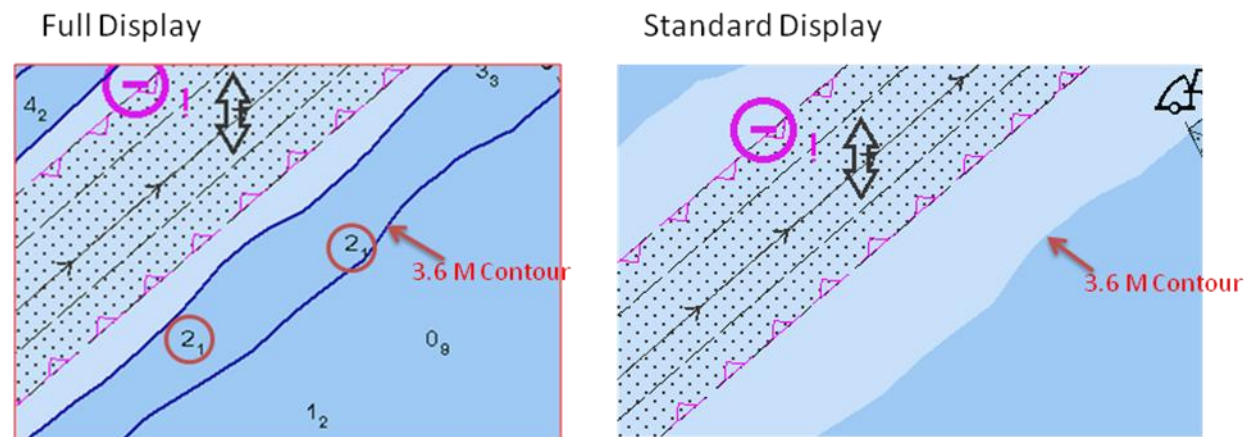
Mariners are advised that ECDIS may not display some isolated shoal depths when operating in BASE or STANDARD display mode. Route planning and monitoring alarms for these shoal depths may not always be activated. To ensure safe navigation and to confirm that a planned route is clear of such dangers, mariners should visually inspect the planned route and any deviations from it using ECDIS configured to display ALL DATA. The automated voyage planning check function should not be solely relied upon.

In February 2010 the International Hydrographic Office (IHO) informed member states of a potentially serious issue with the display of some soundings on ECDIS. When the user is utilizing either BASE or STANDARD display in an ECDIS, soundings are normally turned off. While using these display modes, if there is an isolated sounding that is shallower than the surrounding depth contours it will not be highlighted in the navigation system.

The NOAA Office of Coast Survey website has more information:
<http://www.nauticalcharts.noaa.gov/staff/headline-ecdis-issue.html>

What is the problem?

When mariners use either the BASE or STANDARD display in ECDIS, they turn off the soundings. When they use these display modes, navigation systems will not highlight isolated soundings that are shallower than the surrounding depth contours.



As shown above, ECDIS displays the isolated sounding when the display mode is FULL. The mariner can see that isolated shoals are located on the wrong side of the depth contour. ECDIS does not depict the isolated shoals in STANDARD and BASE display when the safety contour is set to 3.6 meters, in this example.

What do mariners need to do?

Since the ECDIS does not set off any type of warnings or alarms for these types of soundings in any display mode, ***it is important that the mariner turn soundings on*** during route planning and route monitoring to ensure that there are no isolated soundings in the voyage path.

The display setting should be set to: ALL DATA.

Please advise NOAA Southeast Navigation Manager Dave Elliott, David.Elliott@noaa.gov, if any specific ECDIS issues are encountered.

NOAA issues Notice to Mariner

In order to rectify this situation, NOAA is examining its entire ENC suite for these explicit cases. In the meantime, NOAA has issued the following notice to mariner:

NOAA Electronic Navigational Charts – Display of Isolated Shoal Soundings

Mariners are advised that ECDIS may not display some isolated shoal depths when operating in BASE or STANDARD display mode. Route planning and monitoring alarms for these shoal depths may not always be activated. To ensure safe navigation and to confirm that a planned route is clear of such dangers, mariners should configure the ECDIS to display ALL DATA and should visually inspect the planned route. The mariner should not solely rely on the automated voyage planning check function.

NOAA is in the process of examining its ENC data for these cases and will issue a notice to mariner for each area that has been examined and updated.

NOAA will begin by examining and correcting the following ports as its first priority:

- 1 New York, NY
- 2 LA/Long Beach, CA
- 3 Valdez, AK
- 4 Boston, MA
- 5 Philadelphia, PA
- 6 Norfolk, VA
- 7 Tampa, FL
- 8 Baltimore, MD
- 9 Portland, ME
- 10 Portland, OR
- 11 San Francisco/Oakland, CA
- 12 Seattle/Tacoma, WA
- 13 Honolulu/Pearl Harbor, HI
- 14 Anacortes, WA
- 15 Miami, FL
- 16 Port Everglades, FL
- 17 Jacksonville, FL
- 18 Paulsboro, NJ
- 19 Charleston, SC
- 20 Houston, TX
- 21 New Orleans, LA

The rest of the US ENC suite will be examined in the coming months as resources allow.