Experiment with drawing catzoc area on top of depth areas using a depth area colour but with a transparent fill.

Hugh Astle Teledyne CARIS Oct 4, 2017

The following images were created using CARIS S-57 Composer.

An area object using feature class NEWOBJ created to overlap various depth areas.

The symbol instruction (SYMINS) attribute was populated with the desired presentation. For example

AC(DEPVS,3);LS(DASH,1,CHMGD)

The AC command is a colour fill using the colour token DEPVS (Depth very shallow) the '3' transparency option represents 75% transparent. The LS command is drawing a 1 pixel dashed line using chart magenta colour.



The current lookup table for simplified presentation is drawing NEWOBJ at priority 6 which is on top of the soundings. We want to have it draw on top of the depth areas but not the other features so we want to draw it in priority 2.

I set the Class name (CLSNAM) attribute of my NEWOBJ feature to 'catzoc'.

Then I added an entry to the simplified area lookup table (asymrefs.dic)

## "NEWOBJ", "CLSNAMcatzoc", "", "2", "S", "STANDARD", "21020"



Changing the transparency to 25% AC(DEPVS,1)

Now set the colour to Medium Shallow blue with 50% transparency. AC(DEPMS,2)



When drawn on top of the very shallow water the medium shallow overlay has a tendency to make the shallow water appear more like the deeper colour. So if using a visual overlay method then only the very shallow blue should be used.



Following is a screenshot with the catzoc area at 50% very shallow blue.

It does not affect the already very shallow areas but tends to make the rest of the depth areas appear to be shallower.

## S-57/S-52 vs S-100

In S-52 the options to test attributes of the MQUAL are limited to testing exact attribute value matches but in S-100 more complicated logic can be used.

In S-100 portrayal there is currently no option to use topological logic to test underlying depth areas when assigning portrayal. If during production the depth areas were cut up by CATZOC limits then the CATZOC information could be carried as attributes of the depth area or a related Information Object type and then the portrayal could choose different fill colours for a depth area based on the CATZOC info and the current mariner settings for vessel draught.