

Enhancement for Text Placement

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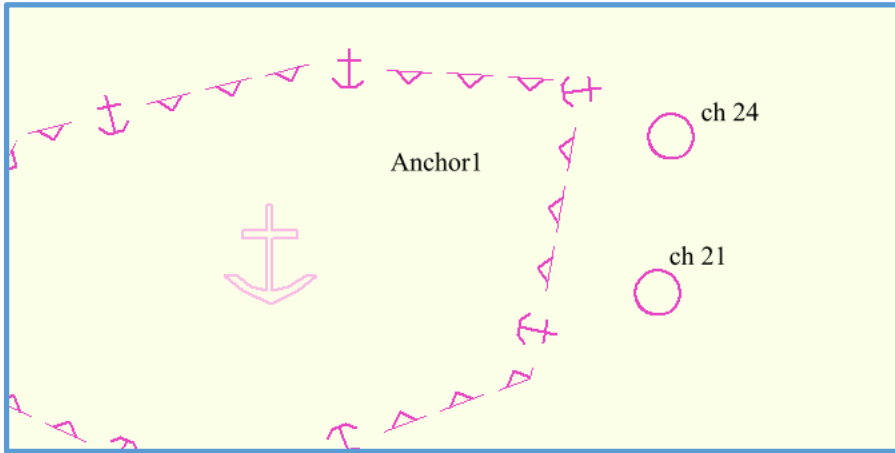
S-101 PT 7

Current Text Placement

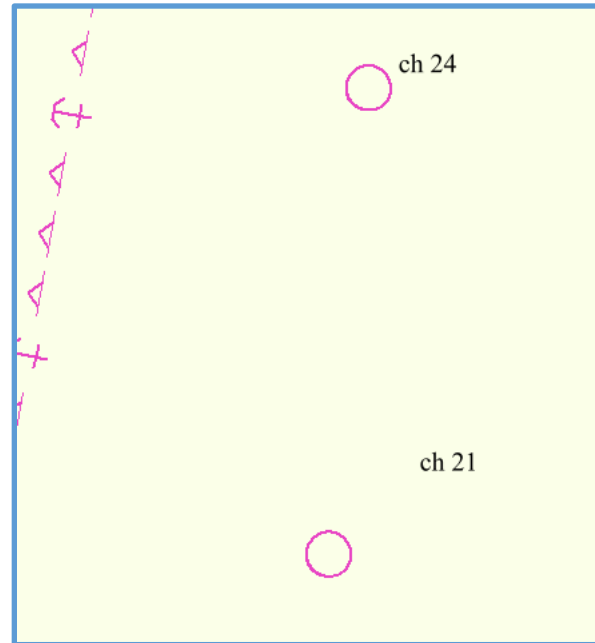
- Separate placement point feature with location used to place text for an associated real feature
- Works well with placement of text for area and line features
- Problematic for Point features
 - When zooming in the text appears to move away from the real feature
 - When zooming out the text appears to move closer to the real feature

Solution: For Point features place TextPlacement feature on same node and use attributes bearing and distance to place the text from that point.

Text Placement – Problem Zoom

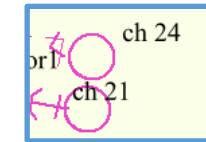


At intended scale everything ok



Zoomed in

- Top text by bearing/distance remains ok
- Bottom Text by geographic position moves away

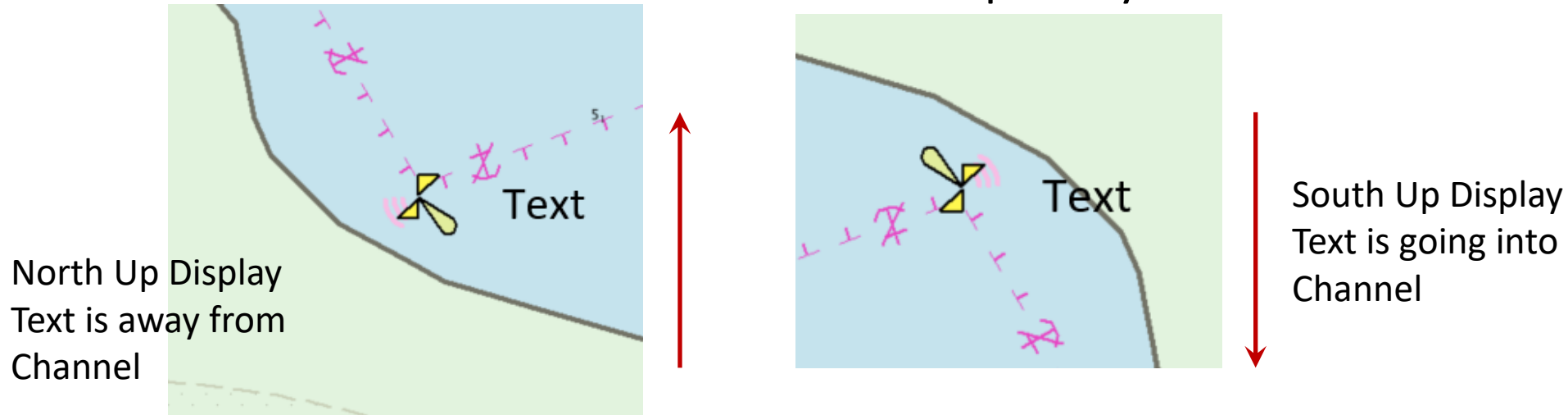


Zoomed out

- Top text by bearing/distance remains ok
- Bottom Text by geographic position moves too close

Text Placement - Problem

- On a course up (rotated) display the x,y, offset doesn't work well.
- The CRS options are geographic (metres on the ground) or Portrayal Y up.
 - The chart is rotated but the CRS for portrayal is not

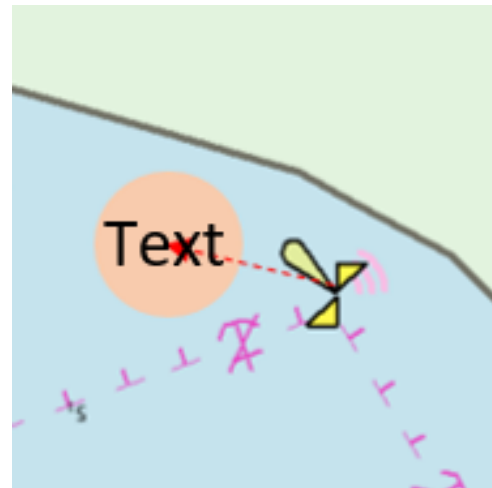


Text Placement - Solution

- Simpler to define the offset using a bearing and distance
 - Bearing is geographic (compass)
 - Distance is mm on the display



North Up, Text East of Feature



South Up, Text East of Feature

Text will remain screen up at point defined by the bearing and distance. Effectively rotating about the defined point.

Text Placement - Actions

- Enhance S-100 Part 9 portrayal to use Augmented Ray for **TextPoint**
- Add attributes to **TextPlacement** feature in DCEG
 - **bearing** attribute to identify direction from TextPlacement point to place text.
 - **distancemm** attribute to specify how far away in mm on the display.
 - Is **flipBearing** attribute needed? It is not well understood or easy to implement.
 - Change description of **textType** value **2** to be more generic. 'Characteristics' instead of 'Light Characteristic'. So it can be used for channel number etc.