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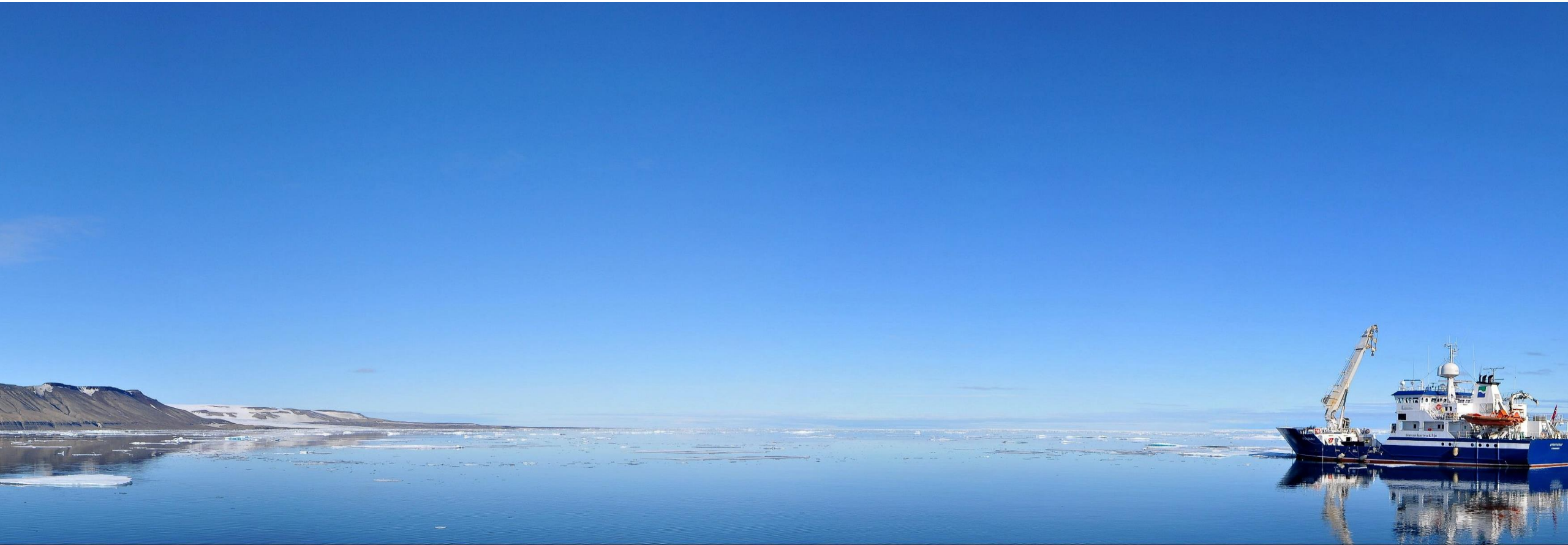
Status

AICCWG

10th Arctic Regional Hydrographic Commission Meeting 13-14
August 2020 Video Teleconferencing (VTC)

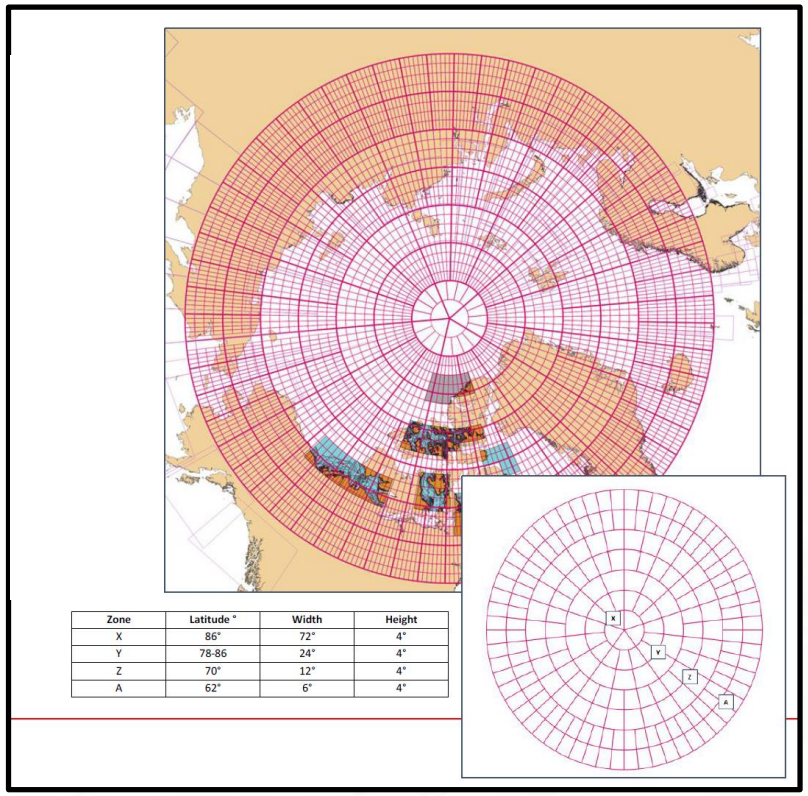


ENC Grid Scheme VTC Meeting

- The Canadian Hydrographic Service (CHS) commissioned a study of Arctic charting .
- IIC Technologies conducted the study and provided a very informative analysis of regional Arctic grid proposals.
- The key information from this study was shared with AICCWG members and other interested parties at a VTC meeting 2 June 2020.
- Three potential grid options outlined:

1: Rectangular-Rectilinear Grid:

- The most 'traditional' grid based approach.
- Based on the dimensions of the proposed Canadian Grid - 4 degrees of division.
- The highest resolutions are very similar to those of the largest scale charts from both Canada and Norway.
- Covers the entire Arctic region and includes a 'polar cap' divided into 72-degree 'wedges'.



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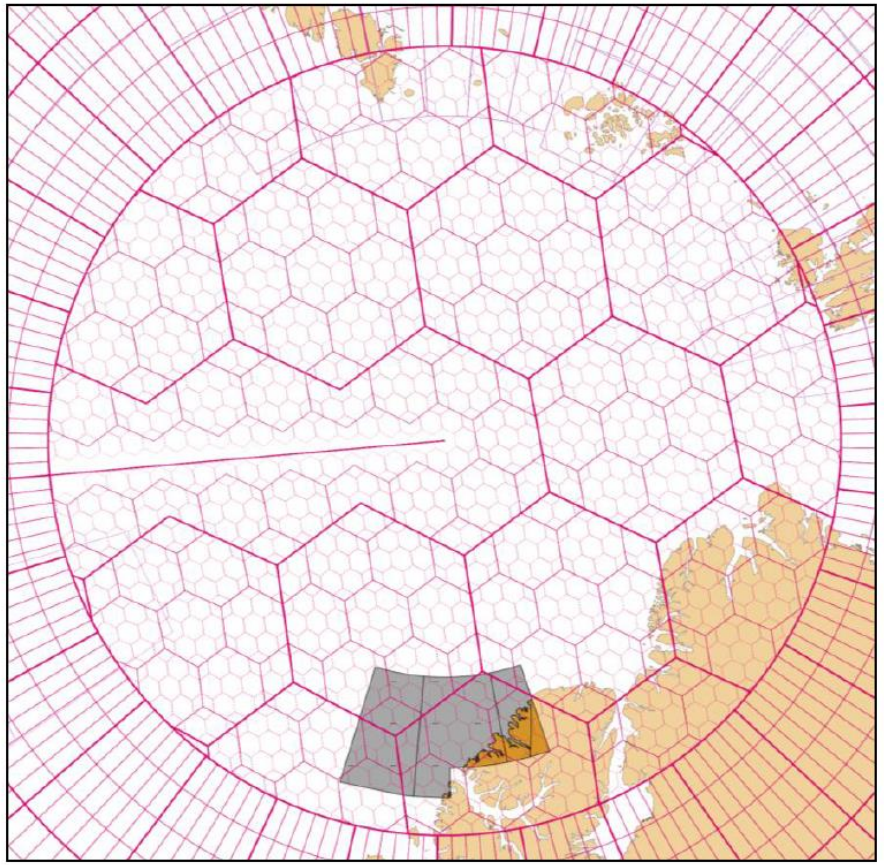
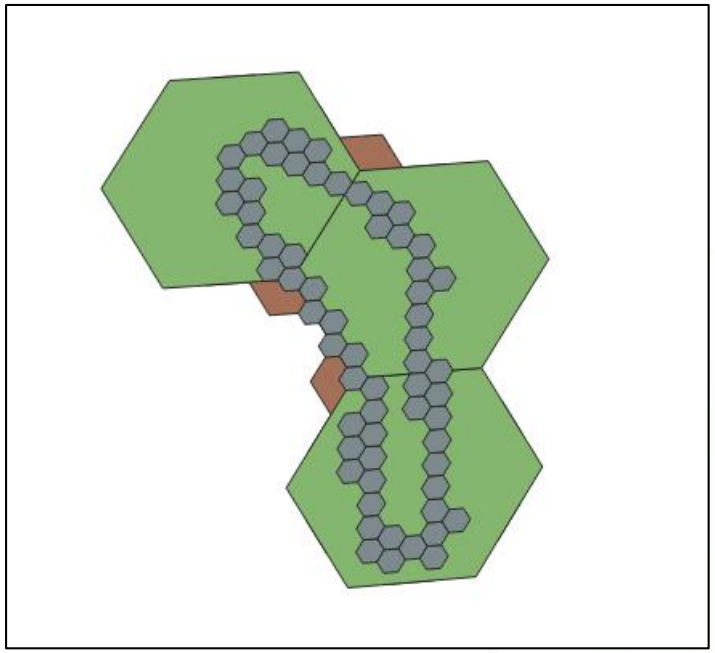
2: DGGS Hexagonal:

- Grid comprised of hexagonal cells at three different resolutions.

- All the cells within a resolution band are exactly the same size -benefits for wider usage applications.





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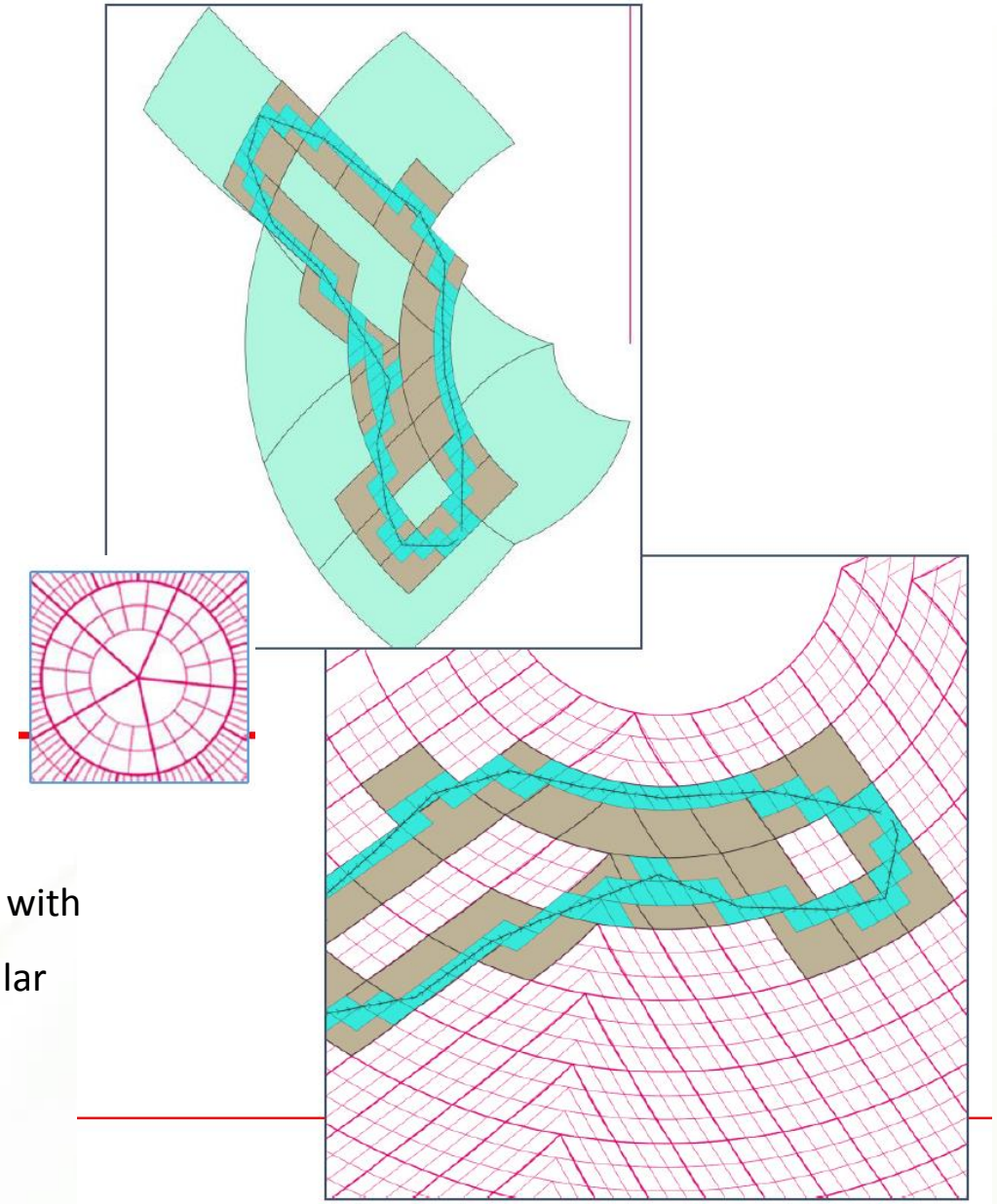
3: DGGS rHealPix:

- Middle ground solution.
- Consists of a polar cap, quadrilateral based cells, as well as some irregularly shaped 'dart' cells.
- Each cell has same area – benefits fro broader applicaiton.
- Uses Iso-lattitude projection – can be clipped to a more traditional rectangualr grid south of limiting lattitude

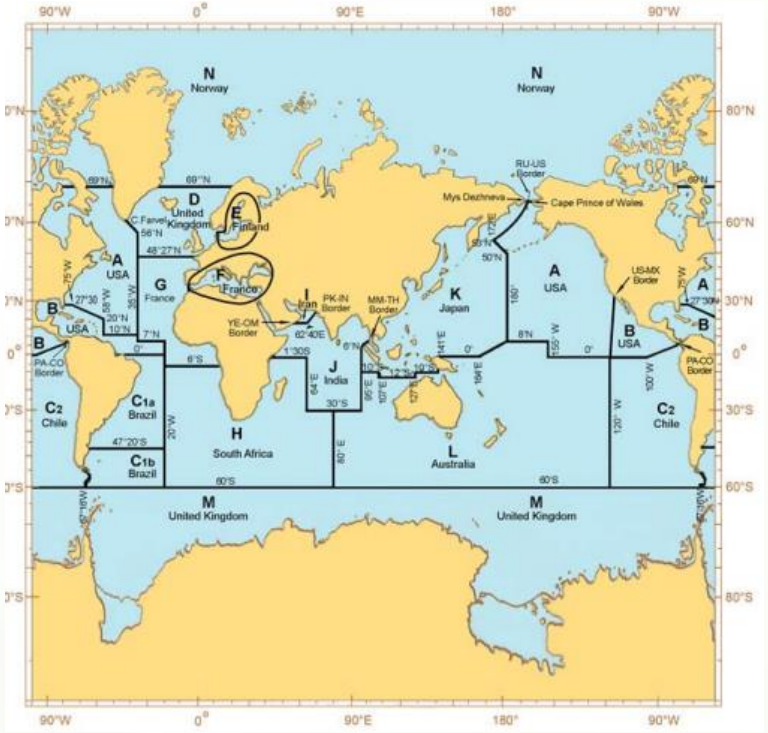


A hybrid solution could also be possible consisting of a central polar cap tiled with hexagonal cells at three different resolutions with a more traditional rectangular grid south of the limiting latitude.

Next Steps

- ARHC to define scope for the project
  - Location extents –Region N boundary / other?
  - Data Content.

- HO’s to begin testing and provide use case feedback.
- Schedule new meeting to discuss use case examples and.
- Prepare a more concrete grid proposal.



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