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**NOSE**

**Plans for a “Northern Ocean” (Arctic/sub-polar gyre) “SOSE”**

## Rationale

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- Have staid away so far from regional (eddy-permitting) North Atlantic and/or Arctic estimates
- Similar experience gained from SOSE for global effort can also be expected from a “NOSE” (added complications are dominant role of sea-ice, “convection sites”, overflows, ...)
- Highly relevant in light of observed changes in the Arctic
- Specific requests in the light of several observing system efforts
  - US AMOC
  - Arctic Ocean Network

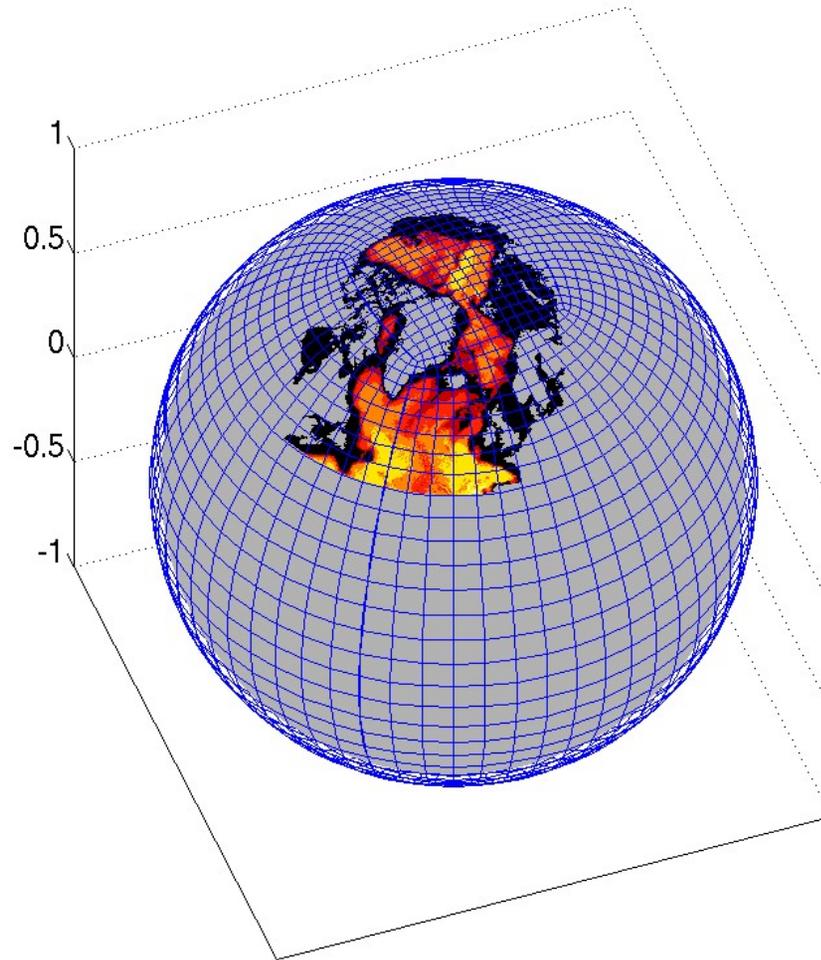
## The plan: a combined Artic/sub-polar gyre setup

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- Roughly 1/8 degree horizontal resolution (6 to 9 km)
- Grid derived from 1/48 parent grid
- Period likely 1992 to present (but question whether to extend to 1979)
- Same approach as for ECCO re. observations, i.e.
  - Need to provide prior error estimates for all obs.
  - Attempt to use all available obs., in particular for sea-ice
  - Attempt to include model parameters, both from the ocean and the sea-ice

## The domain

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Generated from  
1/48 parent grid  
(G. Forget)