

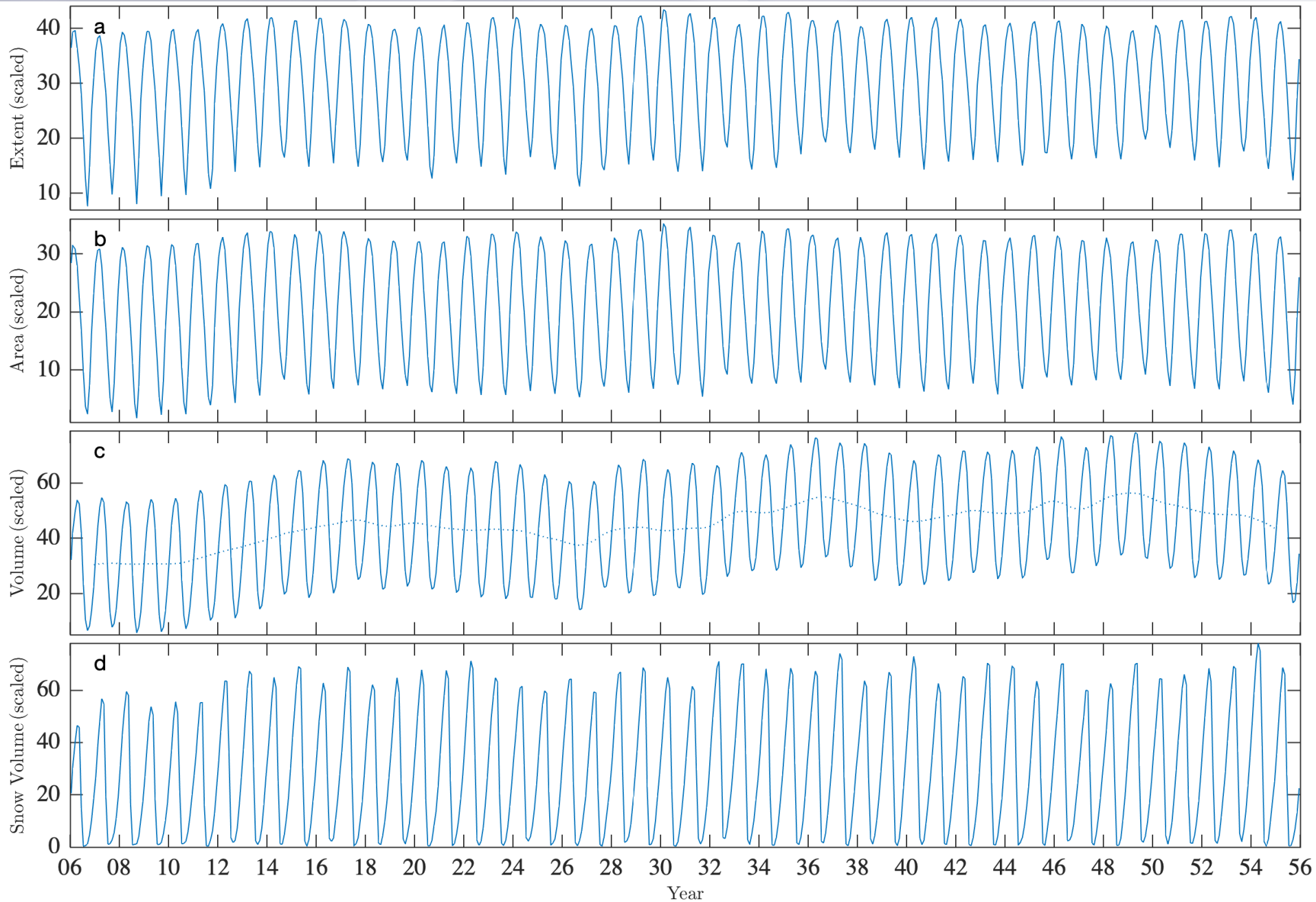
E3SM-HR V1 Sea Ice Analysis

- Commitments to the draft paper preparation
- Analysis period from an Arctic sea ice perspective
- Key locations on confluence:
 - [Sea Ice Analysis](#)
 - [High Frequency Simulation Output Plan](#)
 - [Coastline Analysis](#)

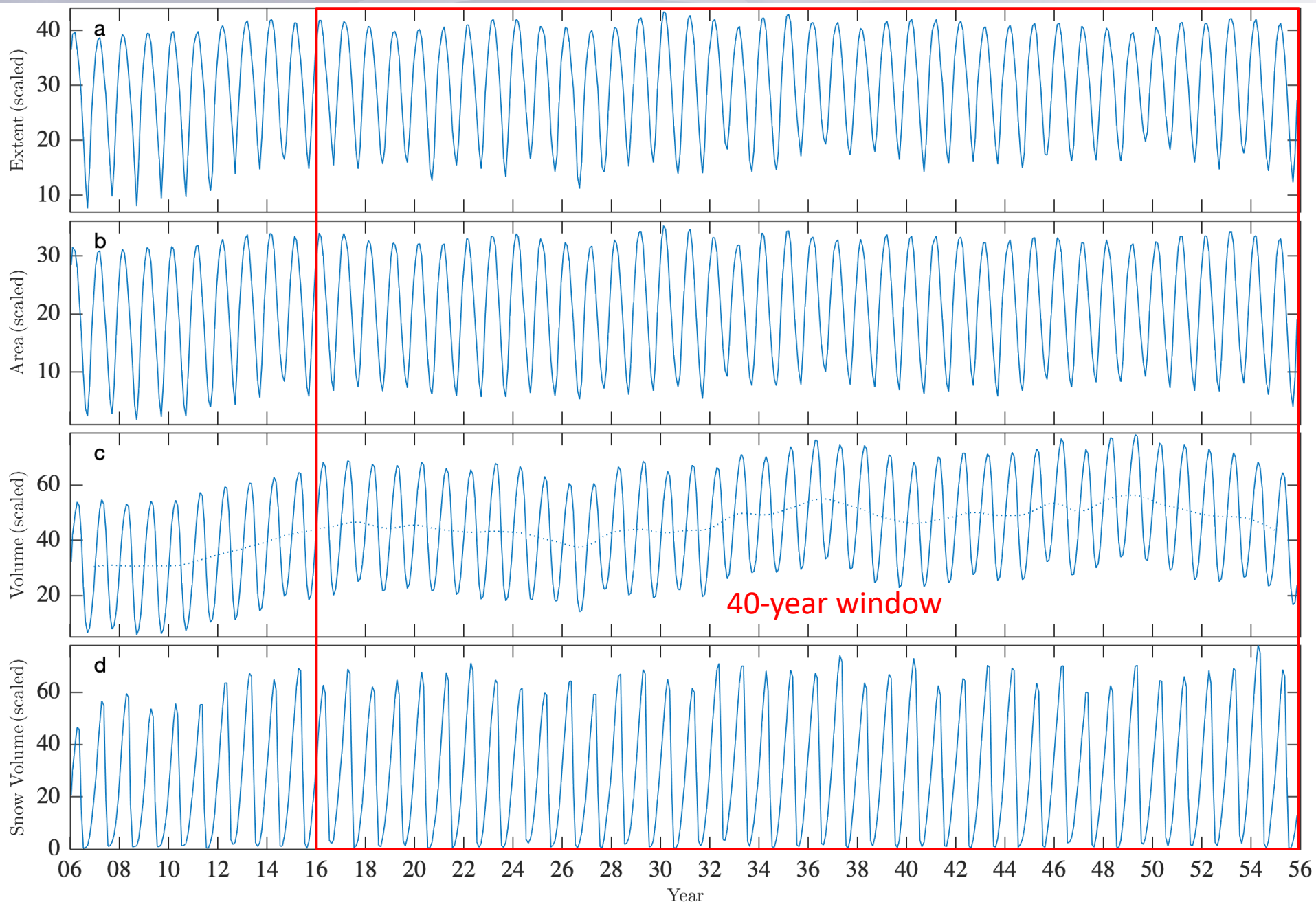
My commitments to the draft paper

- Pan-Arctic and pan-Antarctic figures relating land snow, sea ice thickness and extent, surface wind, ice drift and ocean currents
- Graphs quantifying variability in sea ice extent, area, volume and snow cover, as well as power spectral density of ice drift
- Comparisons of low- and high-resolution for all of the above
- High-frequency deformation and drift analysis of the sea ice zone
- Help with quantification of water properties in the Canada Basin, and with coastal polynya identification and analysis
- Help with surface flux analysis in the Central Arctic and Weddell Gyre
- Help interpreting runoff from Arctic rivers

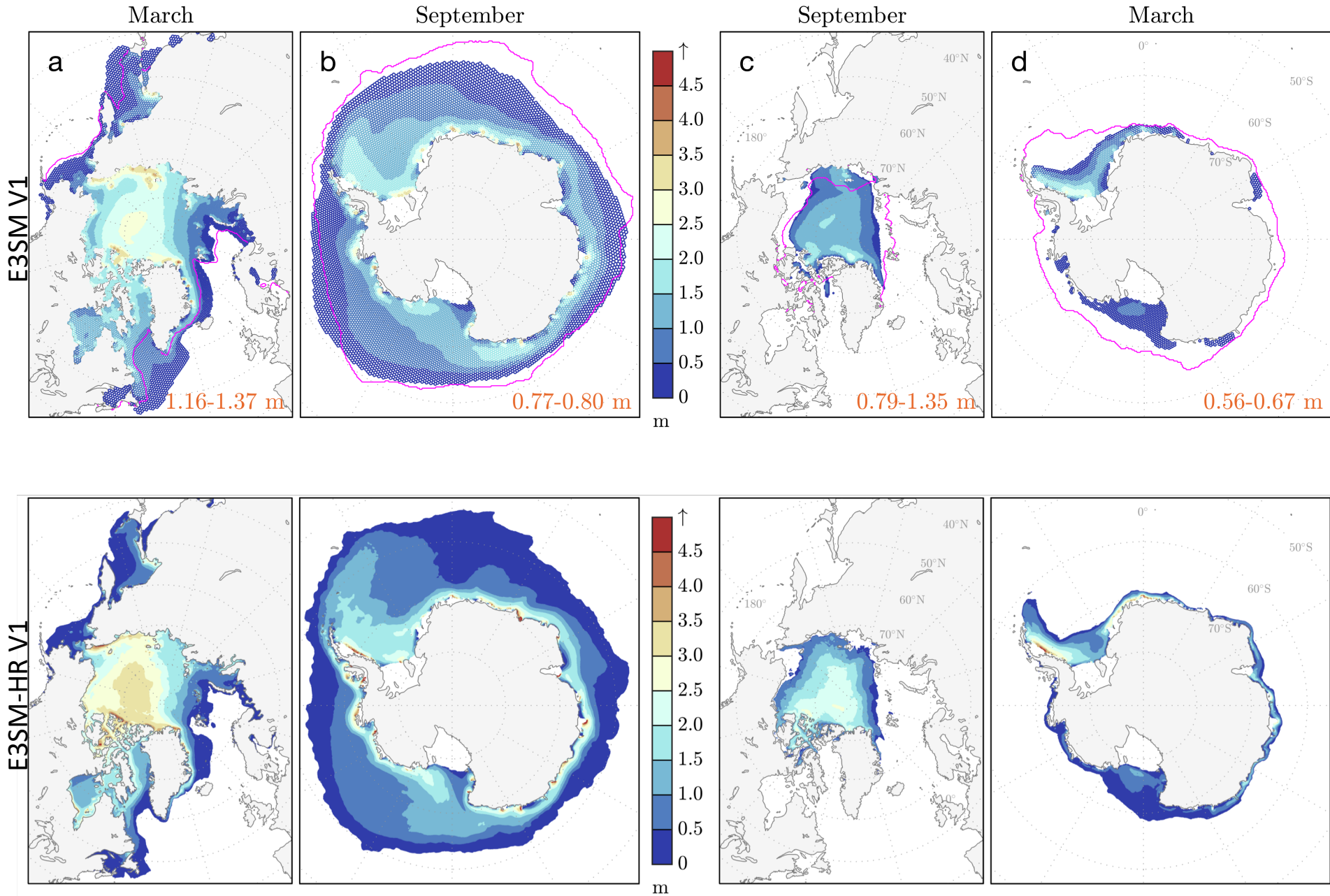
When do we start analyzing the model from a sea ice perspective?



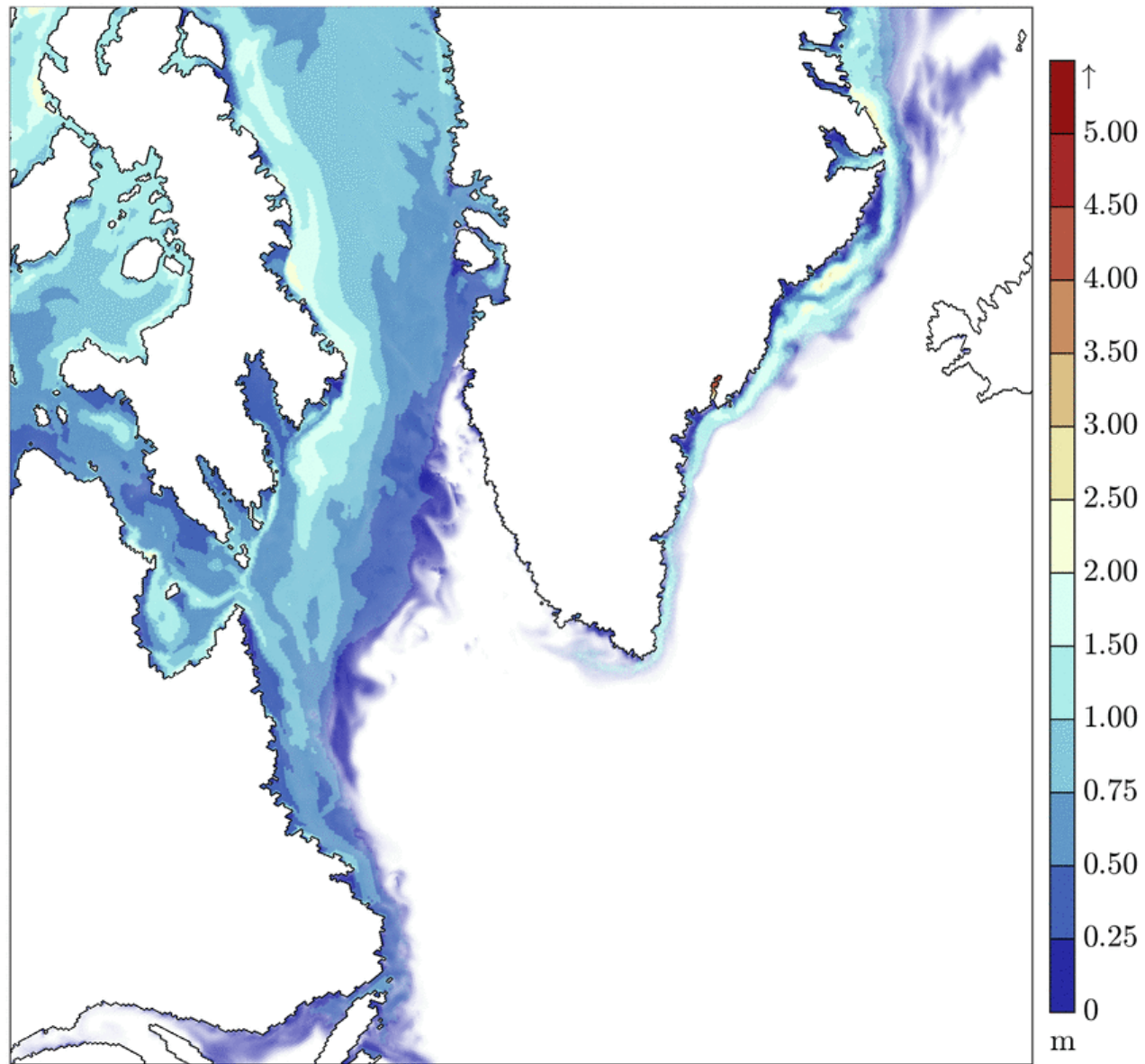
Each grid cell has an equal area weighting in these sea ice graphs



Low resolution H1-H5 Versus High Resolution 10-year mean (0046-0055)

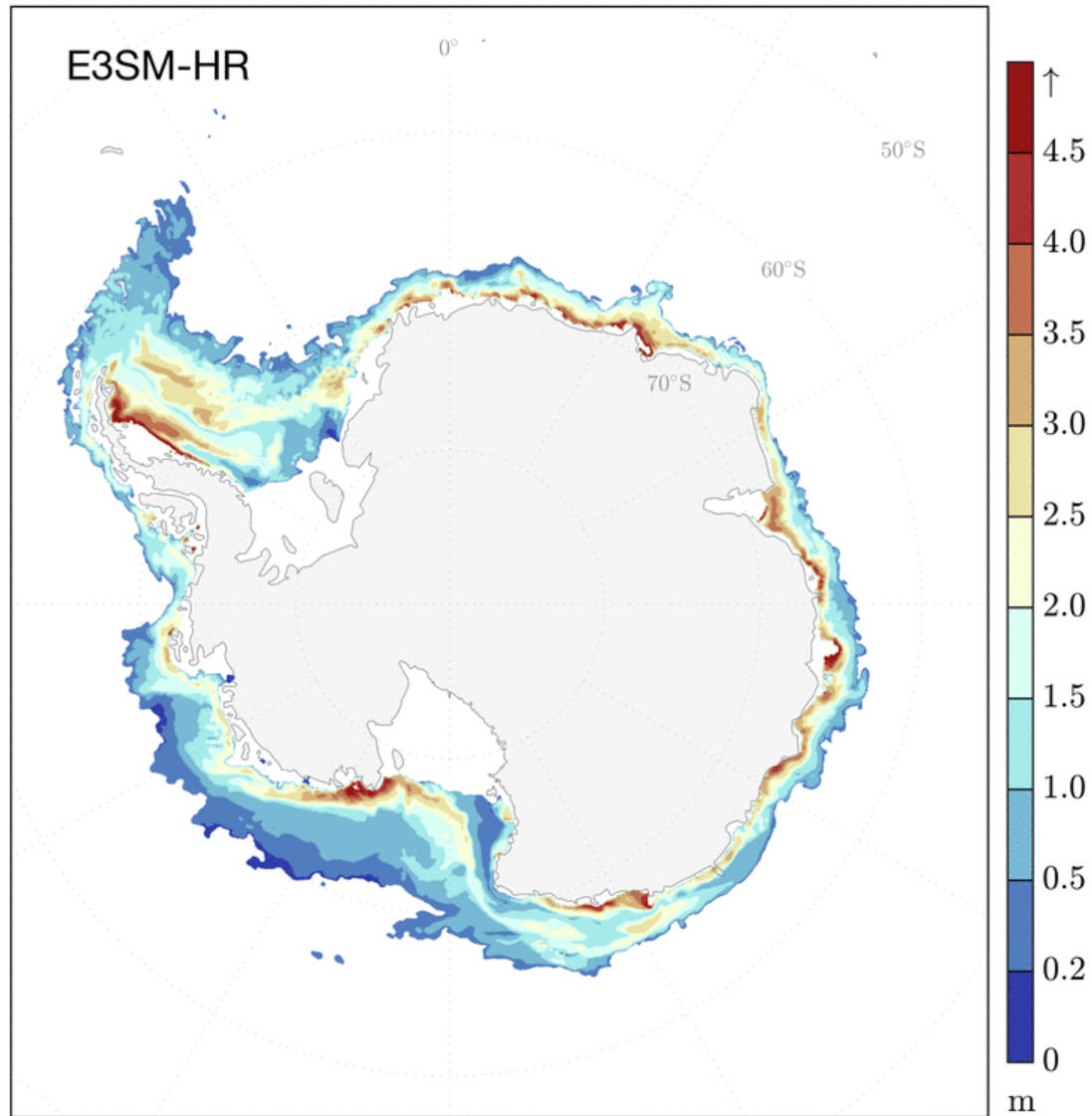
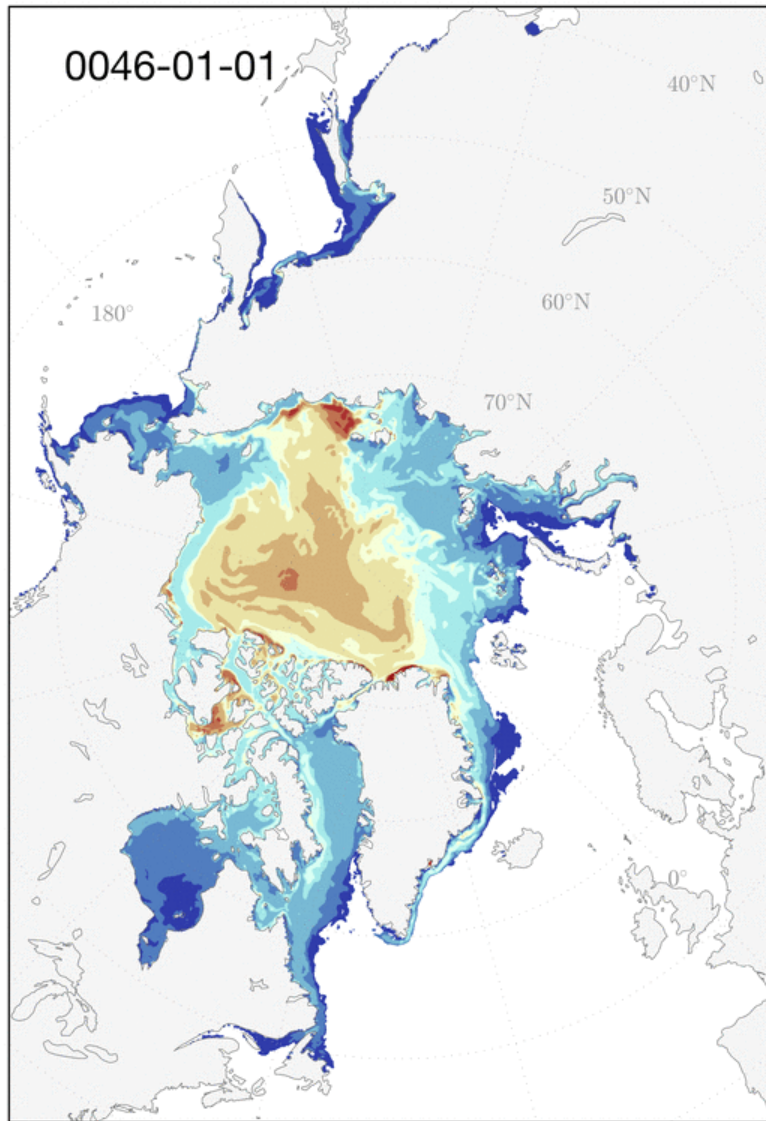


E3SM-HR V1 0046-01-01



Years 0046-0048 of E3SM-HR 1950 repeat cycle:

<https://acme-climate.atlassian.net/wiki/spaces/EWCG/pages/930908333/Labrador+Sea+Animation+Years+0046-0048>



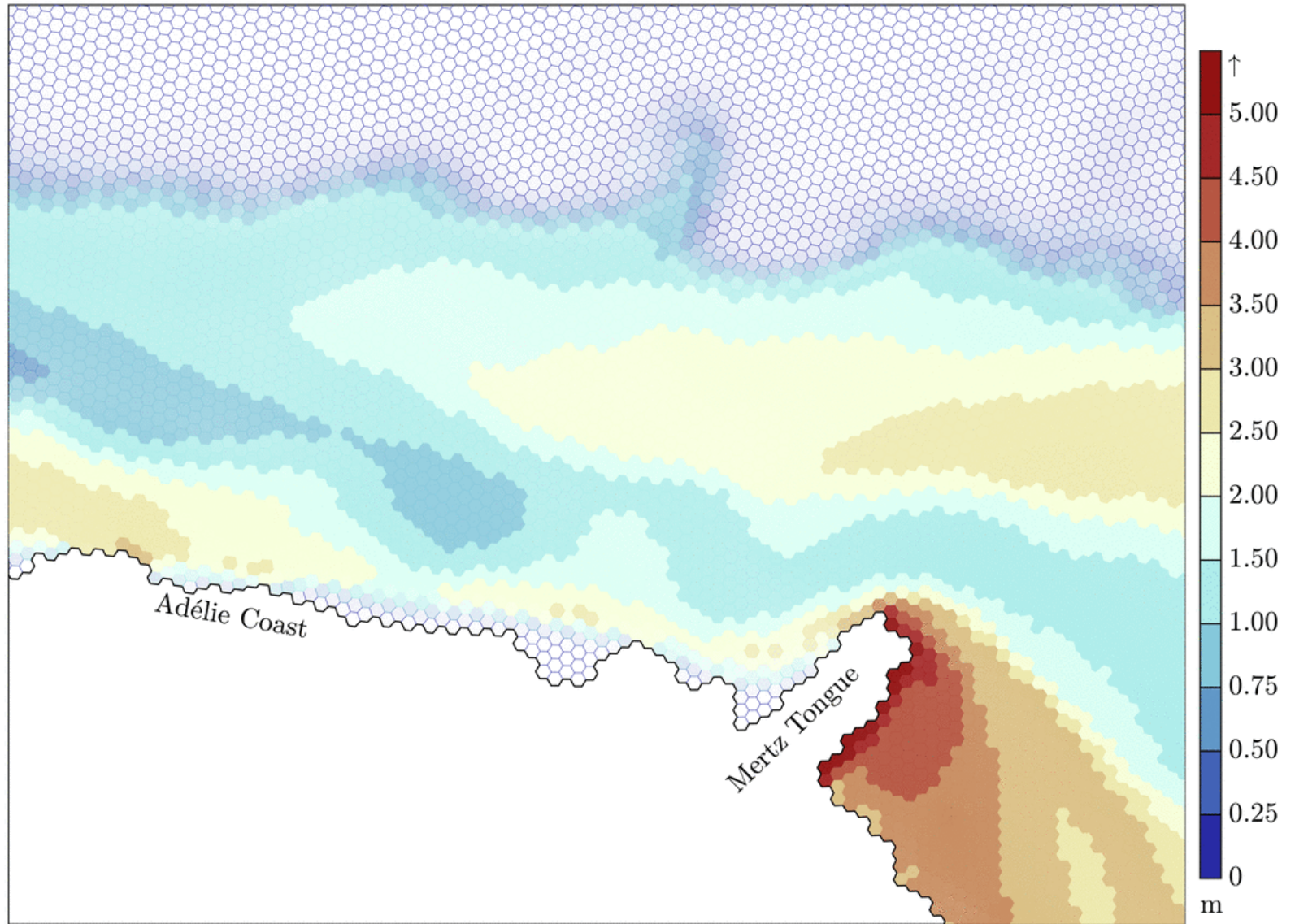
Years 0046-0055 of E3SM-HR 1950s repeat cycle:

<https://acme-climate.atlassian.net/wiki/spaces/EWCG/pages/930940260/Arctic+and+Antarctic+Sea+Ice+Thickness+Years+0046-0055>



Transect into the Mertz Glacier Polynya

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Years 0046-0055 of E3SM-HR Mertz Glacier Polynya

<https://acme-climate.atlassian.net/wiki/spaces/EWCG/pages/931201260/Mertz+Glacier+Polynya+Years+0046-055>