

Impacts of Climate Change: Sea Ice Loss

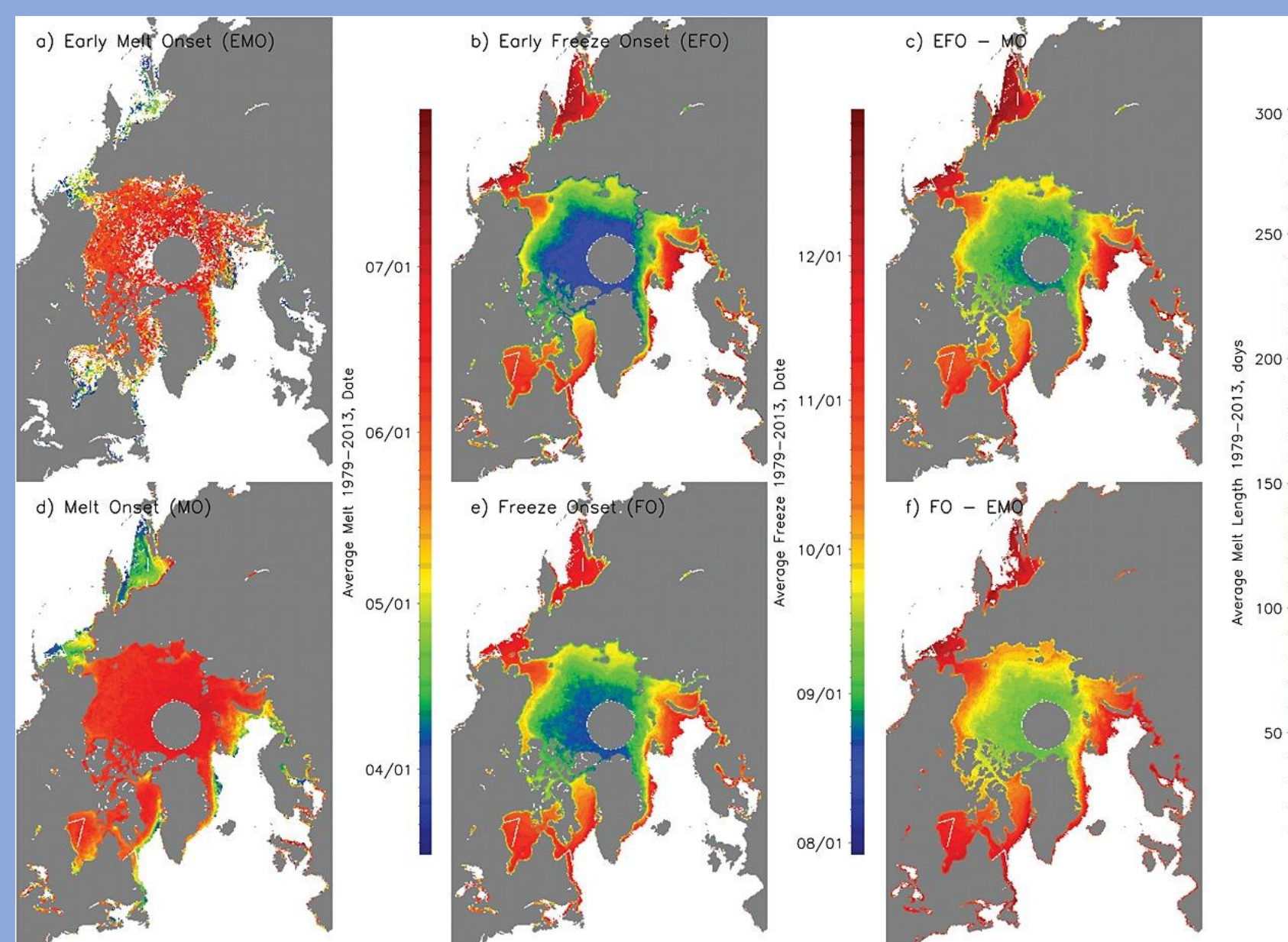
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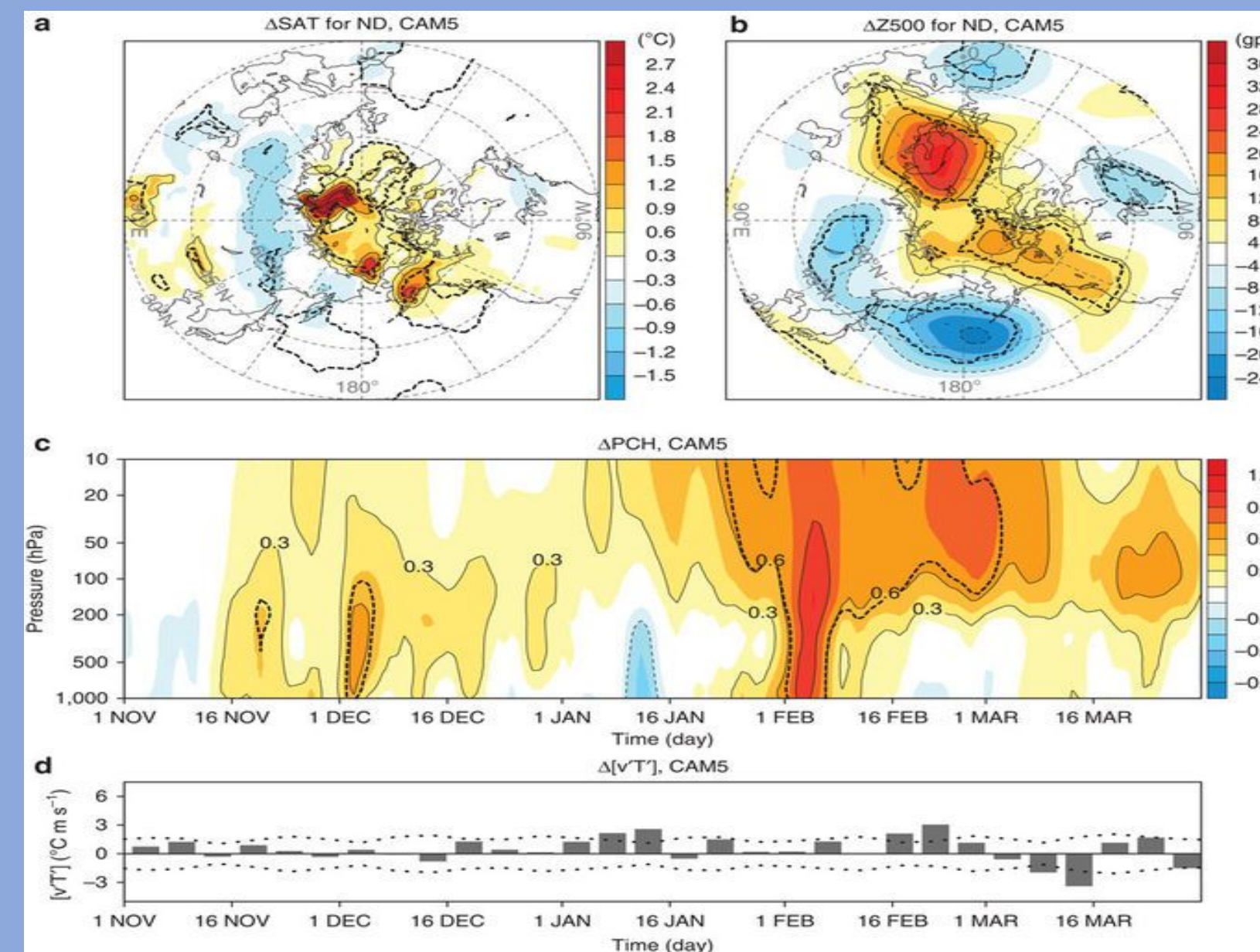
Introduction

One of the largest signs of climate change is depicted through the Arctic Sea Ice loss.

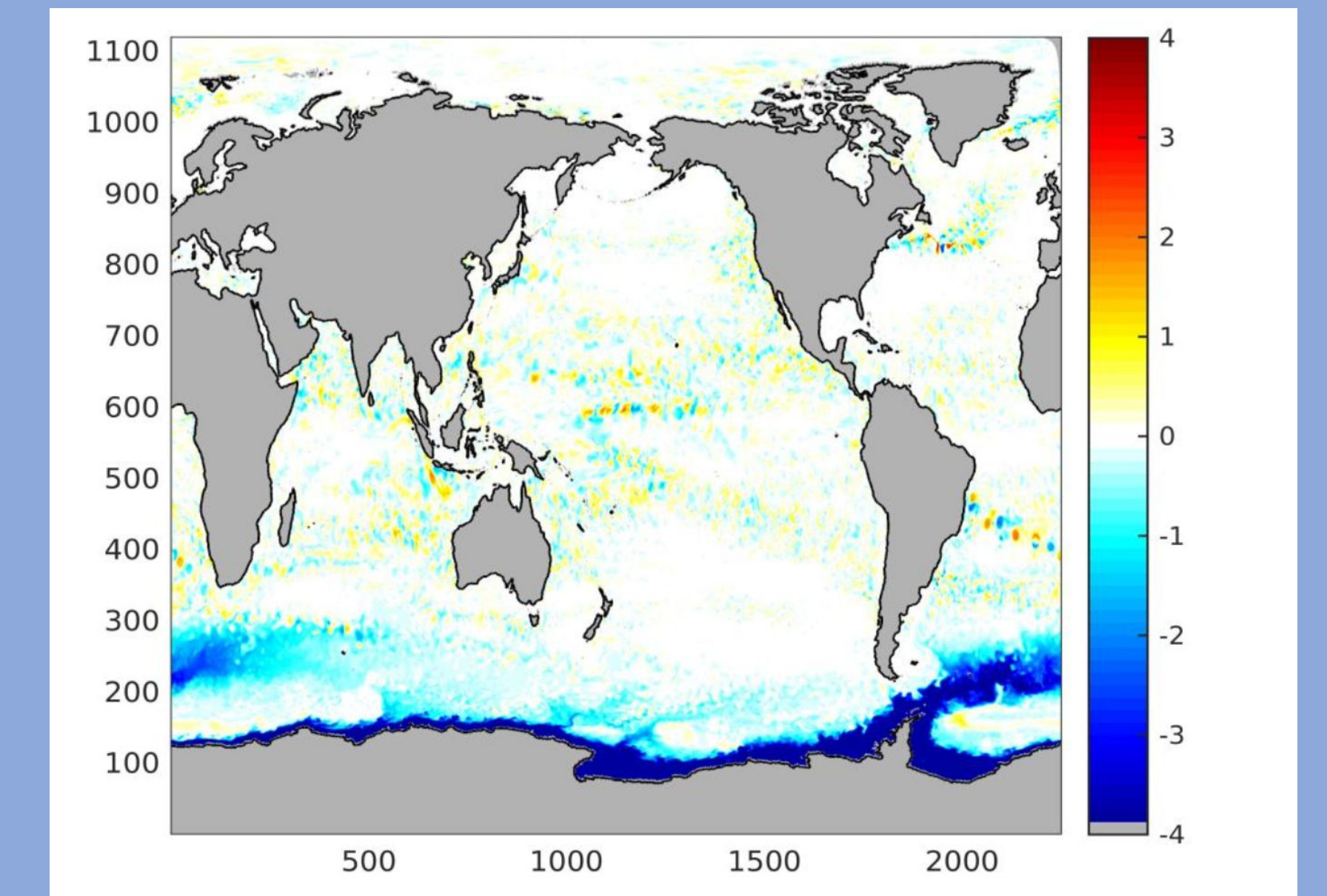
Sea Ice goes through seasonal changes of melting to a minimum amount of ice during late summer and refreezing to a maximum amount of ice during the winter. Due to the increased amounts of greenhouse gases released into the atmosphere, the Arctic Sea Ice has started to warm at a rate twice as fast as the rest of the world. This is called polar amplification. As a result, the last decade has seen some of the lowest sea ice minimums ever recorded. Some of the many issues that have arisen from Arctic Sea Ice loss include: increased sea levels, a higher rate in overall warming, and a change in standard winter weather.



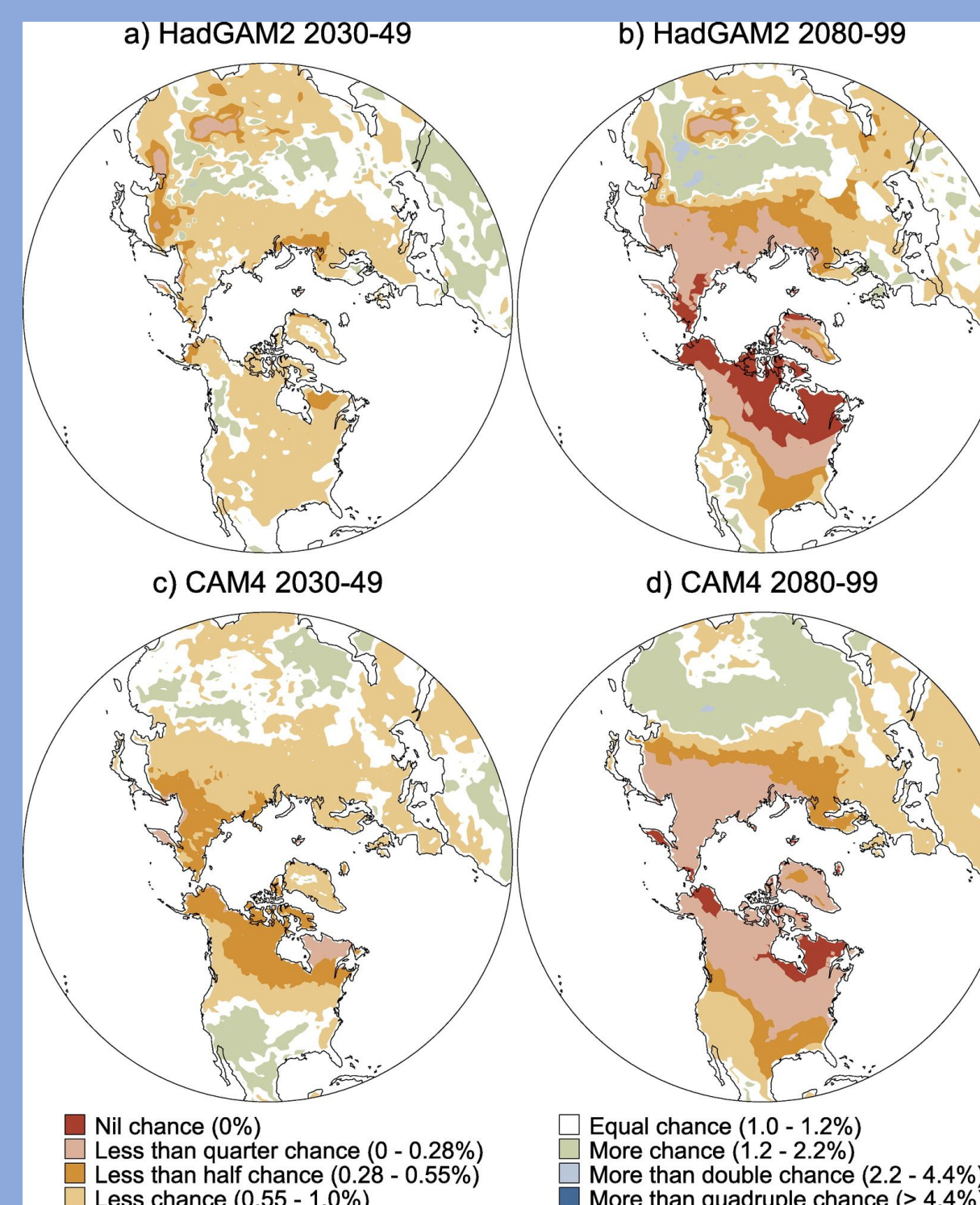
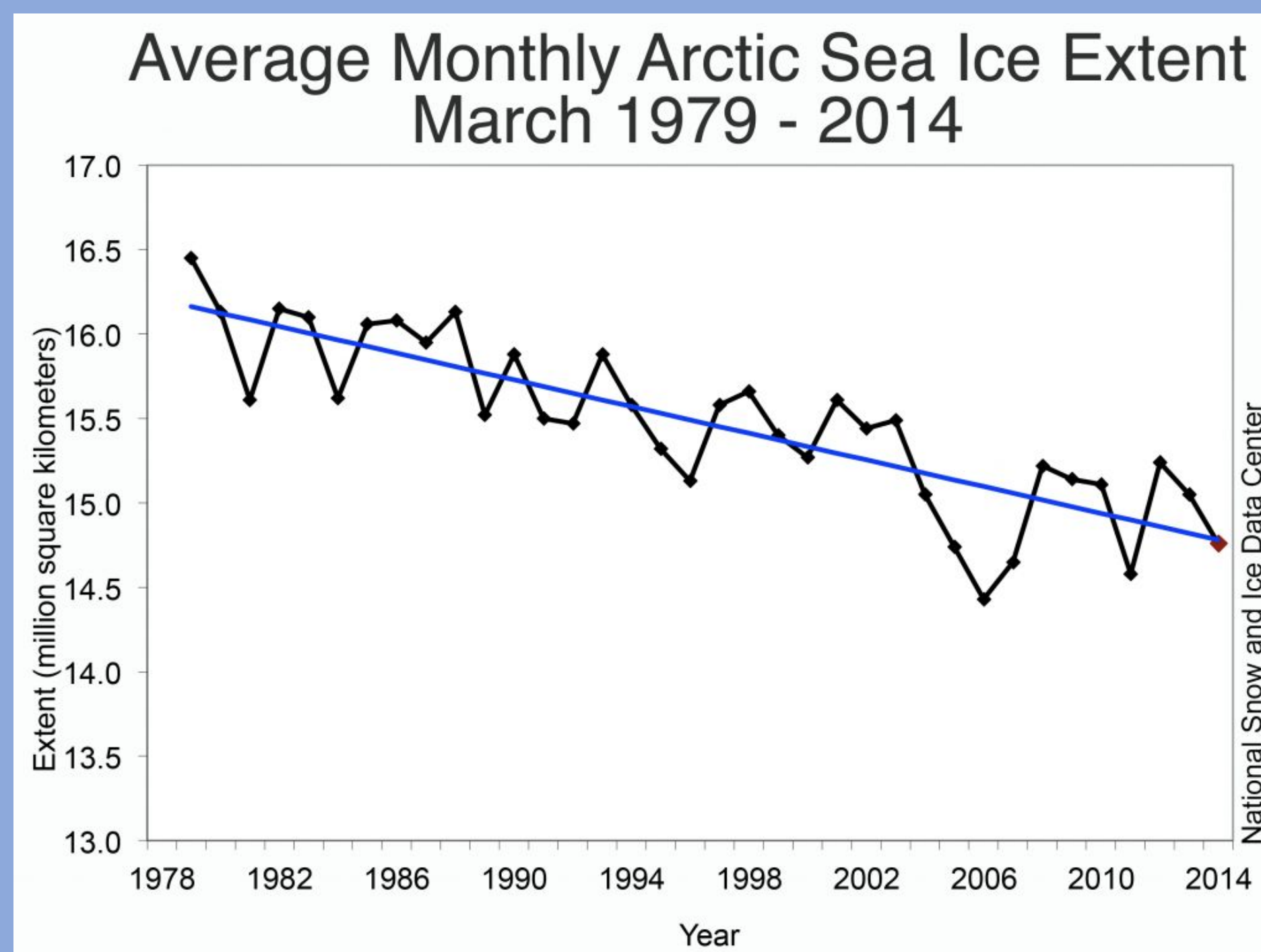
Early and continuous melt onset, early and continuous freezeup and length of the inner and outer melt season average - 1979 to 2013.



Model ensemble-mean responses for the reduced Arctic sea ice condition.



Expected change in salinity due to sea ice loss. Dark blue indicates drop in salinity.



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