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**Title:** *When will the Summer Arctic be Nearly Sea Ice Free?*

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The observed rapid loss of thick, multi-year sea ice over the last six years and September 2012 Arctic sea ice extent reduction of 49% relative to a 1979-2000 climatology are inconsistent with projections of a nearly sea ice free summer Arctic of 2070 and beyond made just a few years ago. Three scientific approaches to projections in the scientific literature are: extrapolation of sea ice volume data, assuming several more rapid loss events such as 2007 and 2012, and climate model projections. Time horizons for a nearly sea ice free September (<1.0 M km<sup>2</sup>) for these three approaches are roughly 2020, 2030, and 2040. Loss estimates from models are based on a subset of the most rapid ensemble members. It is not possible to choose one approach over another depending on relative weights given to data versus models. Observations and citations support the conclusion that current rapid Arctic change is likely out of sample for most Global Climate Models' results in the CMIP5 archive. Recent data and expert opinion should be considered in addition to model results in suggesting near term decadal sea ice predictions (2025-2040).