June Report: Outlook Based on May Data
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1) My projection is 4.92 million km^2, with a standard error estimate of 0.47.

2) Statistical based on the rationale in 3

3) I'm viewing the problem as one of growth of open water, rather than decline of ice cover. From this view, ice-albedo feedback is a problem in population growth. The more open water, the more the population of open water grows. As with biological populations, there is a limit to the growth, in that the area of open water can't exceed the area of ice cover before the growth began. In constructing the statistical estimate, I estimated the 'normal' ice extent (7.39 million km^2), computed the open water each year by subtracting the observed cover from 7.39, and then found a best fit exponential curve to this open water value. Since we're still on the early part of the growth curve, exponential is a fair approximation. Finishing out the full fit to the sigmoid will take more time.

As an eyeball issue, model projections and ensembles of coverage have seemed to me to be following a sigmoid. With only the exponential part of the curve, I'm estimating zero cover for September in 2022. Since I do believe the sigmoid term is present and ultimately important, 2022 is an early bound, using only extent information.