

Informal Poll Predicting September Arctic Sea Ice Extent

At the SIPN Polar Prediction Workshop in May, we carried out an informal poll asking participants for their personal guess about the extent of Arctic sea ice in September 2016. Thirty-five people responded with answers ranging from 2.9 to 5.3 million km² (**Figure 1**). The lowest prediction would set a new historical record, far below the previous low point of 3.62 set in 2012. The highest prediction would simply mark a return to the 2014 level, which is well below any observations before 2007. So no one is expecting an Arctic sea ice “recovery.”

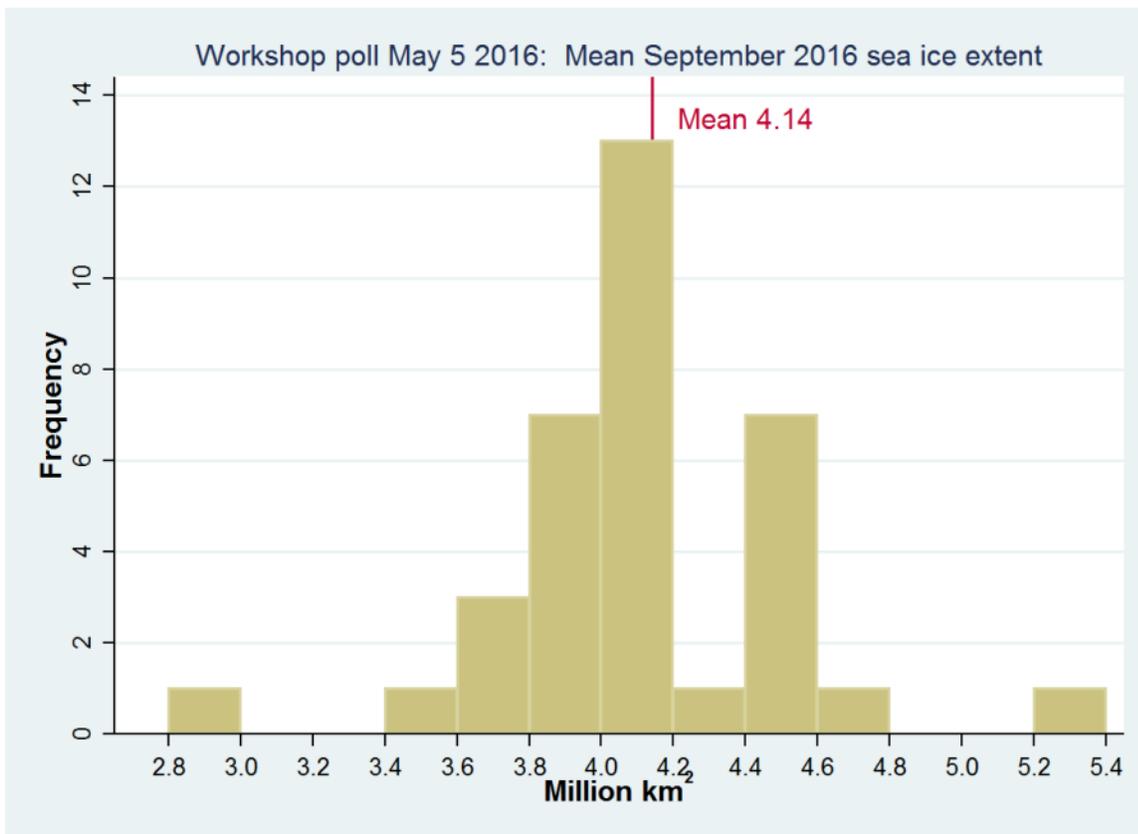


Figure 1

The average among these 35 informal predictions is 4.14 million km², which would make September 2016 the second-lowest extent we have seen. **Figure 2** tracks the complete satellite-era record for September ice extent from 1979 to 2015. Workshop predictions for 2016 are shown as a scatter of points at far right.

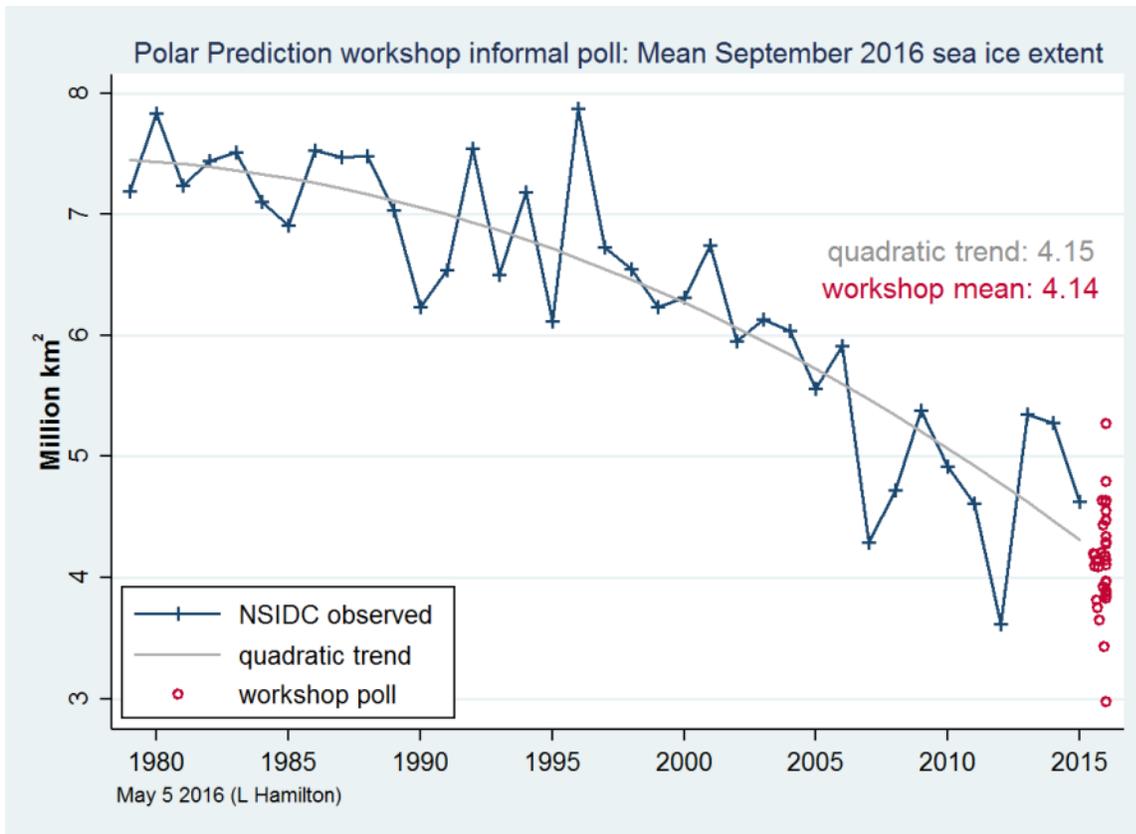


Figure 2

Figure 2 also shows that the overall pattern of Arctic sea ice change can be approximated by a *quadratic trend*, or steepening downward curve. This curve is drawn only for the years we have data, from 1979 to 2015. But if this trend is continued to 2016, it suggests 4.15 million km² as the most likely 2016 value—almost the same as the informal poll’s mean.

The informal poll contributions, written on scraps of paper, were not intended as scientific predictions. At this early point in the season, workshop participants were simply invited to submit their personal best guess, which need not be based on a detailed analysis. The fact that the collective wisdom of this poll and a simple trend line analysis so closely agree reinforces the point that from what we already know, September 2016 sea ice extent probably will be low. Arctic weather this summer will determine the end-season value, and Sea Ice Outlook reports in June, July and August will track how predictions evolve as that point approaches.