Sea Ice Outlook 2016 based on AMSR2 ice extent

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Executive summary

I provide a simple statistical estimate for the September sea ice extent based on the total sea ice extent measured on July 11: **4.6±0.9**. A discrepancy emerged between the uncertainty of the statistical regression and the melt scenario projections. Because of the low ice concentrations seen in the Central Arctic Basin I consider a 2012-like melt scenario still a reasonable possibility. I had to increase the confidence interval to 5σ to obtain a better match of the uncertainty given by the regression and the different scenarios based on the ice extent loss observed in previous years.
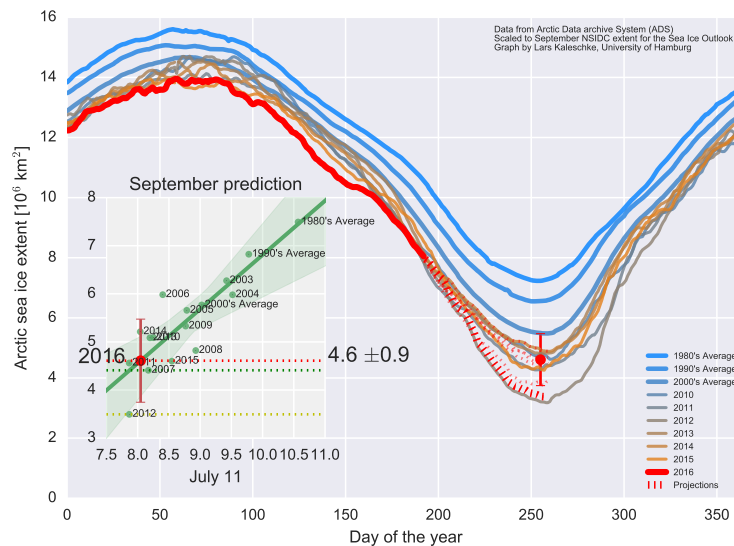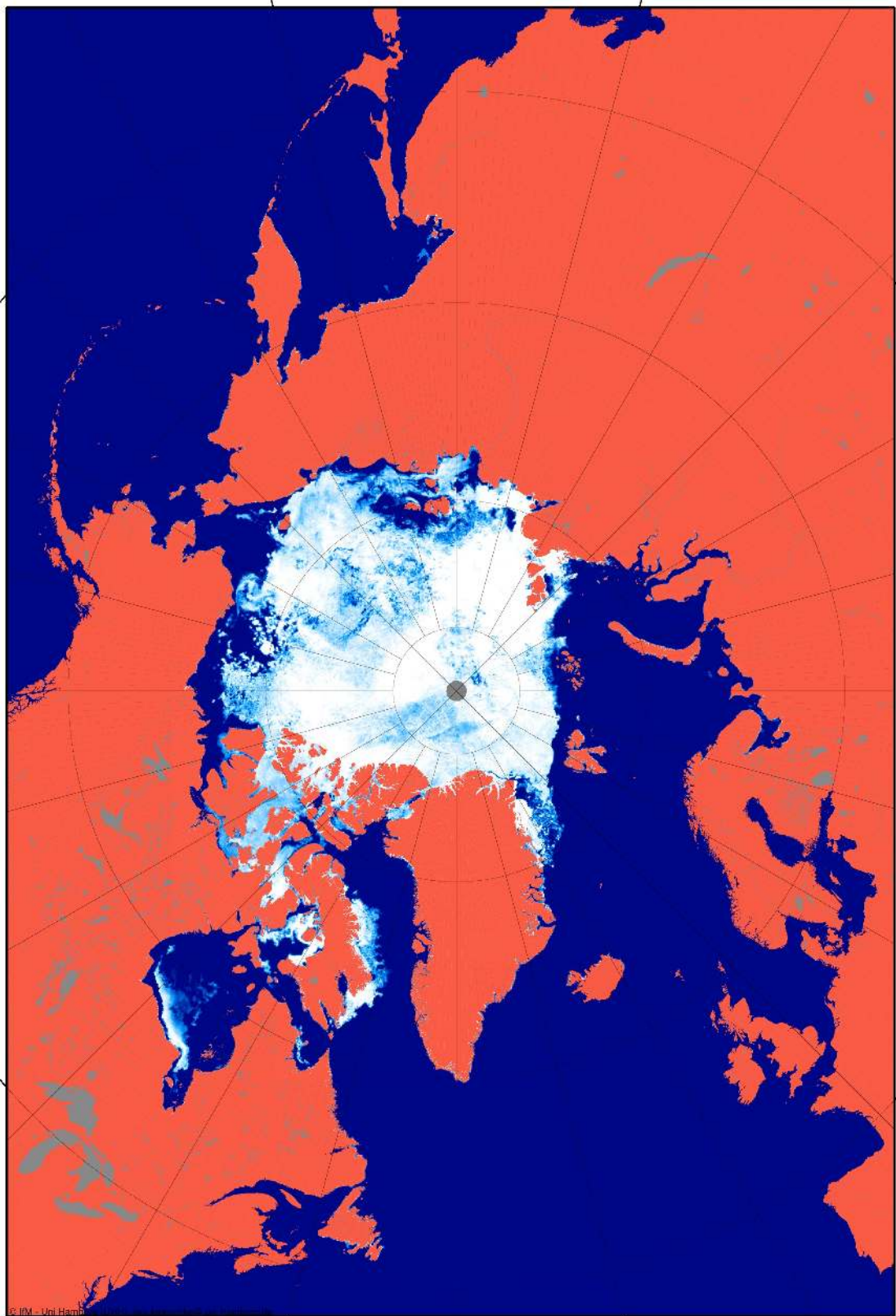
For updates follow me on Twitter `@seaice_de`.

Figure 1: Sea ice extent from ADS, projections based on past declines, and statistical regression based on July 11 (x-axis) and Sept (y-axis) scaled to NSIDC monthly values. Uncertainties are given with 5σ intervalls (increase from 3σ in June).

1

Sea ice concentration 2016-07-11

ASIv6 (AMSR2/UHH-processing), AMSR2 L1R data (JAXA)
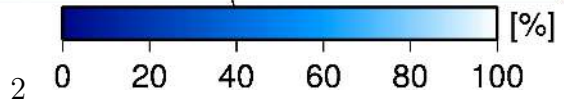
Grid: 3.125 km

[%]

0 20 40 60 80 100

Figure 2: Sea ice concentration from AMSR2 on 11 July 2016.