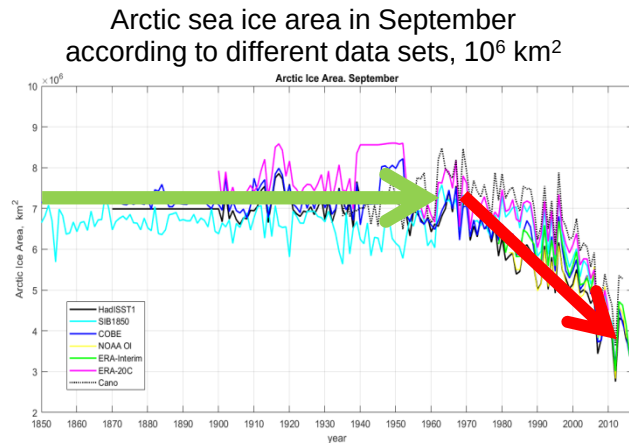


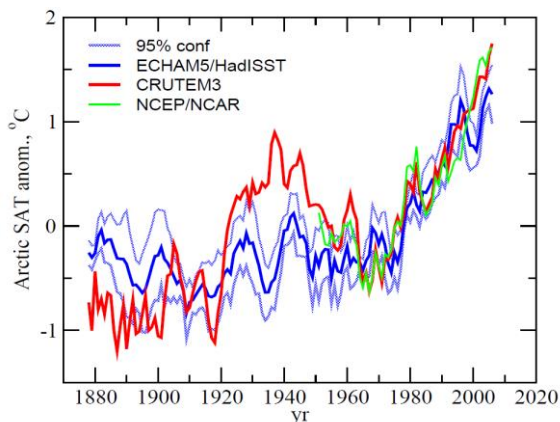
Gridded Arctic sea ice concentration reconstruction for the first half of the 20th century based on different proxy data

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Arctic (60-90N) temperature anomalies (C) as observed and simulated by AGCM forced by HadISST1 SST/sea ice data



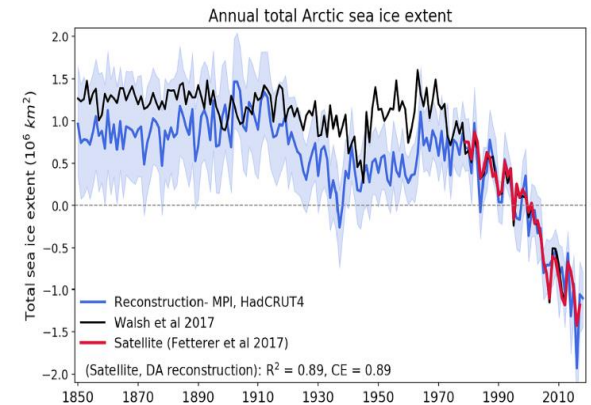
New sea ice reconstructions suggest much stronger negative sea ice anomaly in the mid-20th century period than previously thought.

Walsh et al., 2017
purely empirical, direct sea ice data, analogue method

Brennan et al., 2020
model based, assimilation of temperature data using Kalman filter

Semenov and Matveeva (2020)

Using PCs from EOF decomposed SAT, SLP, SST fields as predictors for sea ice PCs in a multiple regression model. 1953-2018 - leaning period, 1900-1952 - reconstructed period. [Semenov and Matveeva, 2020, doi: 10.1134/S0001433820050102]



Arctic sea ice area (10^6 km^2) in September and March as reconstructed (thick solid), Walsh et al. (2017) data (thin solid) and HadISST1 data (thick grey)

