

Supplemental figures

Seasonal Anomaly NCEP/NCAR R1 925mb Air Temperature 70N-90N;0E-360E vs NCEP/NCAR R1 925mb Air Temperature -90S-90N;0E-360E Jan to Dec Average(Climo 1981-2010)

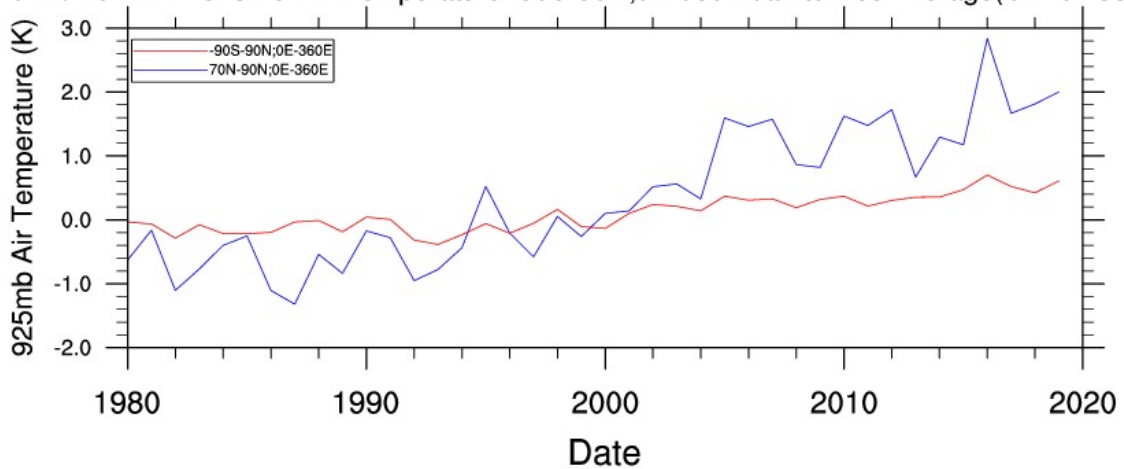


Figure S1: Anomalies in 925 hPa air temperatures (K) for the globe (red) and the Arctic (north of 70°N, blue). Image provided by the NOAA-ESRL Physical Sciences Laboratory, Boulder Colorado from their Web site at <https://www.esrl.noaa.gov/>.

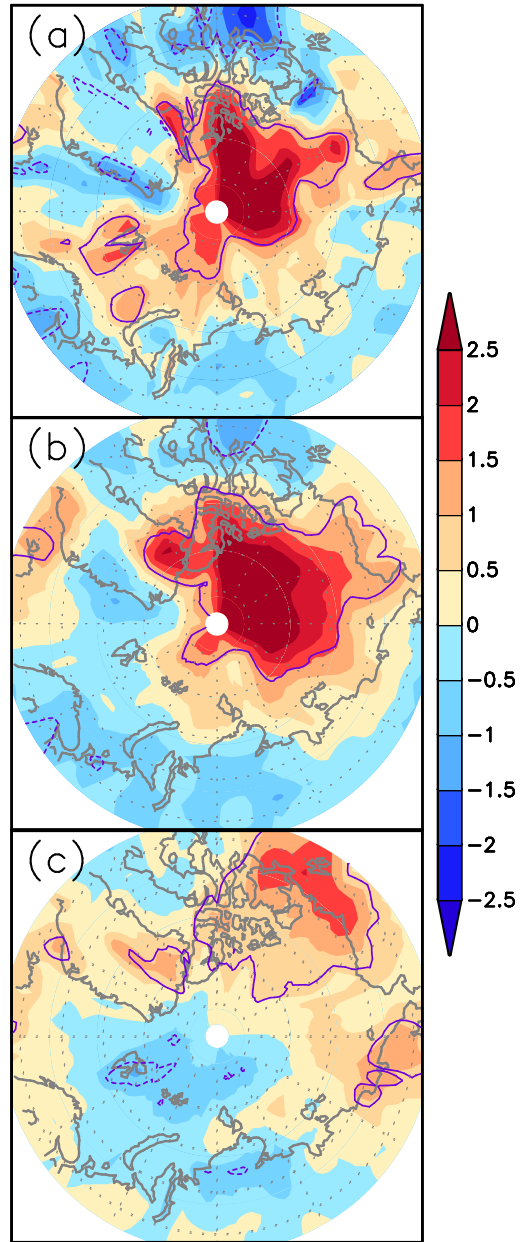


Figure S2: Summer (JJA) cloud cover anomalies (%) from 1979 to 2019 in (a) low cloud, (b) middle cloud, and (c) high cloud, derived from a linear regression on normalized PC2, the purple contours denote the 95% confidence level. Data are from the NCEP/NCAR reanalysis.

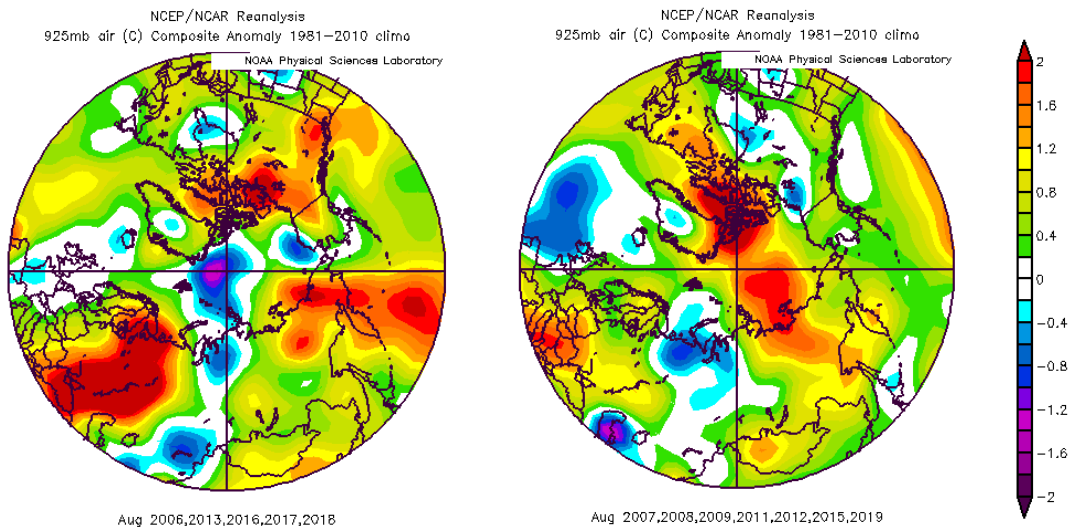


Figure S3: As in Fig. 5 but for air temperature anomalies at 925 hPa.

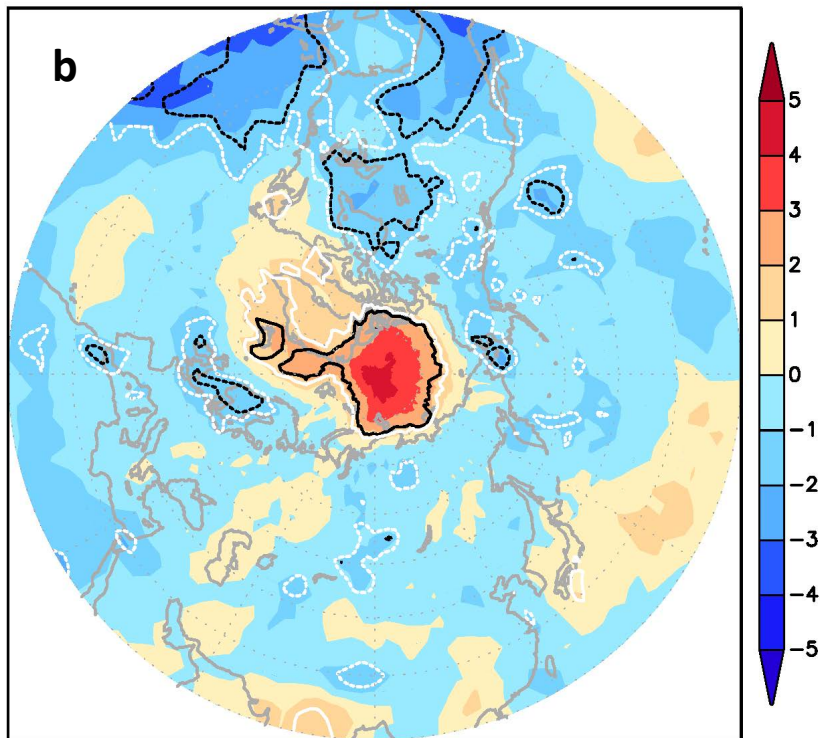
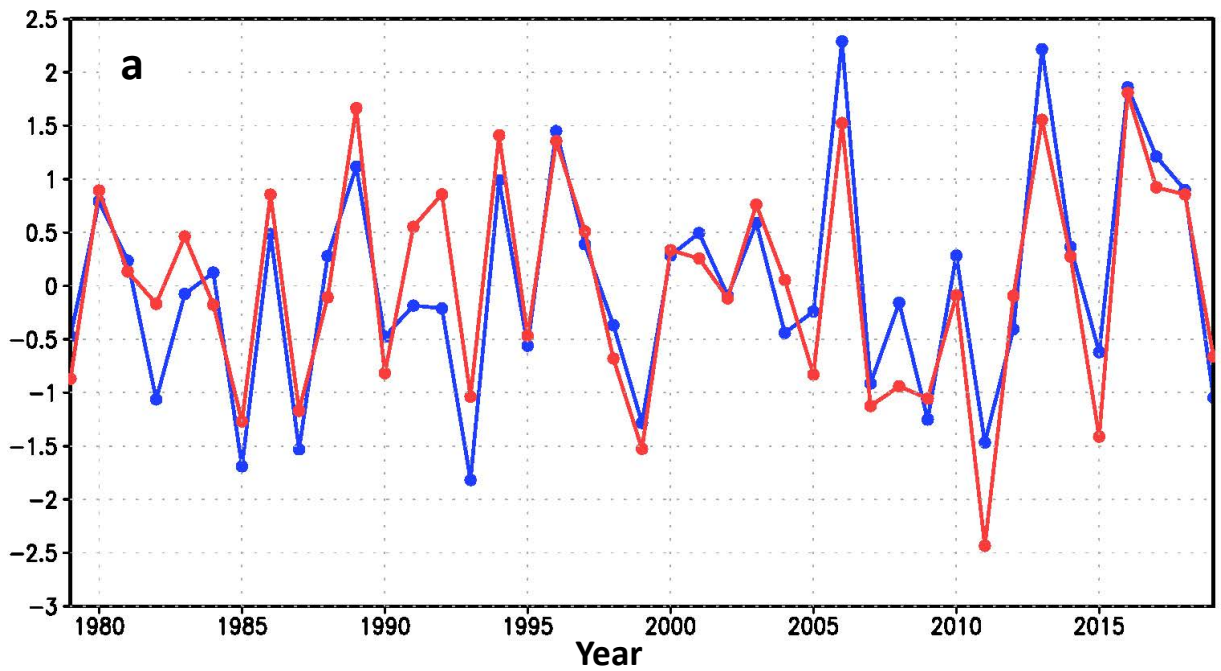
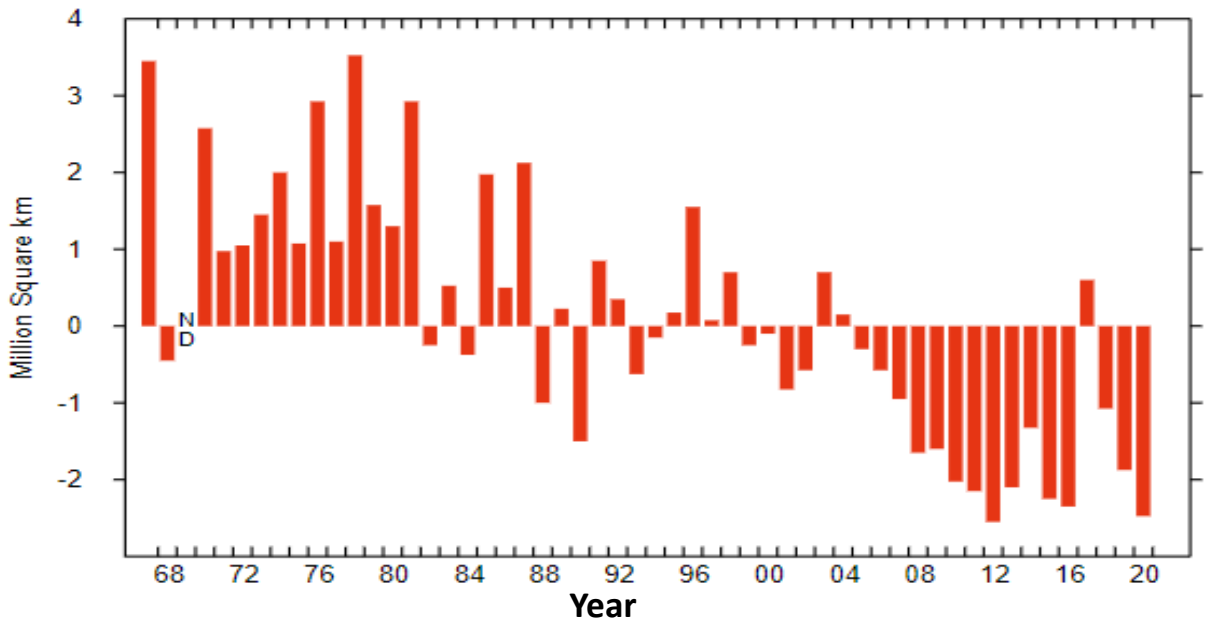


Figure S4: (a) Time series of PC2 (blue) and the Arctic Westerly Index (AWI, red) during summer from 1979-2019. (b) Summer SLP anomalies (hPa) regressed onto the Arctic Wind Index. White and black contours denote 95% and 99% confidence levels.

Eurasian Snow Cover Anomalies
1967-2020 June



North American Snow Cover Anomalies
1967-2020 June

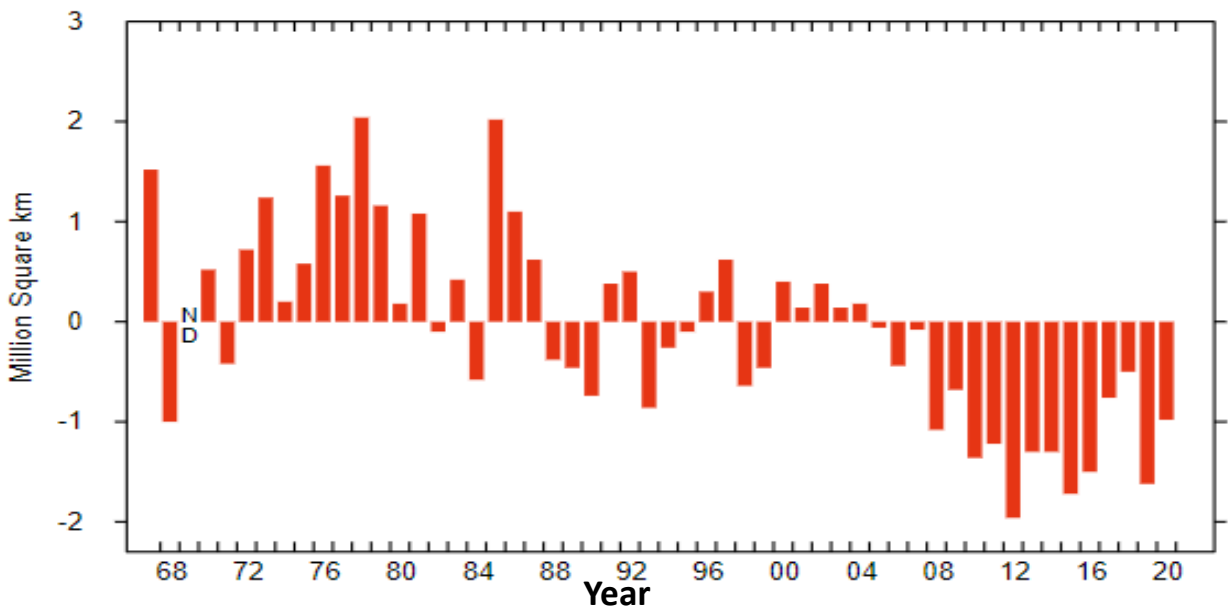


Figure S5: Snow-cover anomalies (millions of km²) during June over Eurasia (top) and North America (bottom) from 1967-2020. Reproduced with permission from The Snow Lab at Rutgers University: Robinson (2020), <https://climate.rutgers.edu/snowcover/>