

Figure S1. Projected precipitation changes [mm/month] for the time period 2071-2100 relative to 1971-2000. The four rows show the COSMO-CLM results driven by MPI-ESM-LR RCP2.6, RCP4.5 and RCP8.5 and EC-EARTH RCP4.5 (from top to bottom). The dark and light gray lines indicate the northern extent of an ice-free sea on at least 20% of the year in the future and historical period respectively. The numbers at the bottom left give the mean climate change signal over the domain shown.

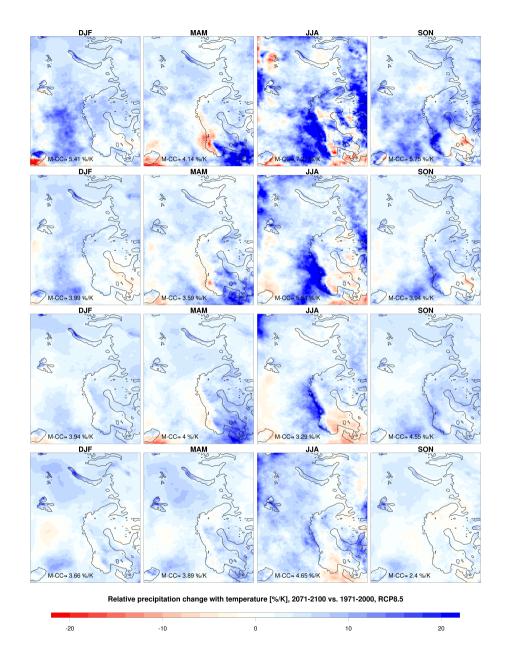


Figure S2. Relative precipitation sensitivities [%/K] in the COSMO-CLM driven by MPI-ESM-LR RCP2.6, RCP4.5 and RCP8.5 and EC-EARTH RCP4.5 (from top to bottom). The numbers at the bottom left give the mean sensitivities over the domain shown.