

Supplementary figures

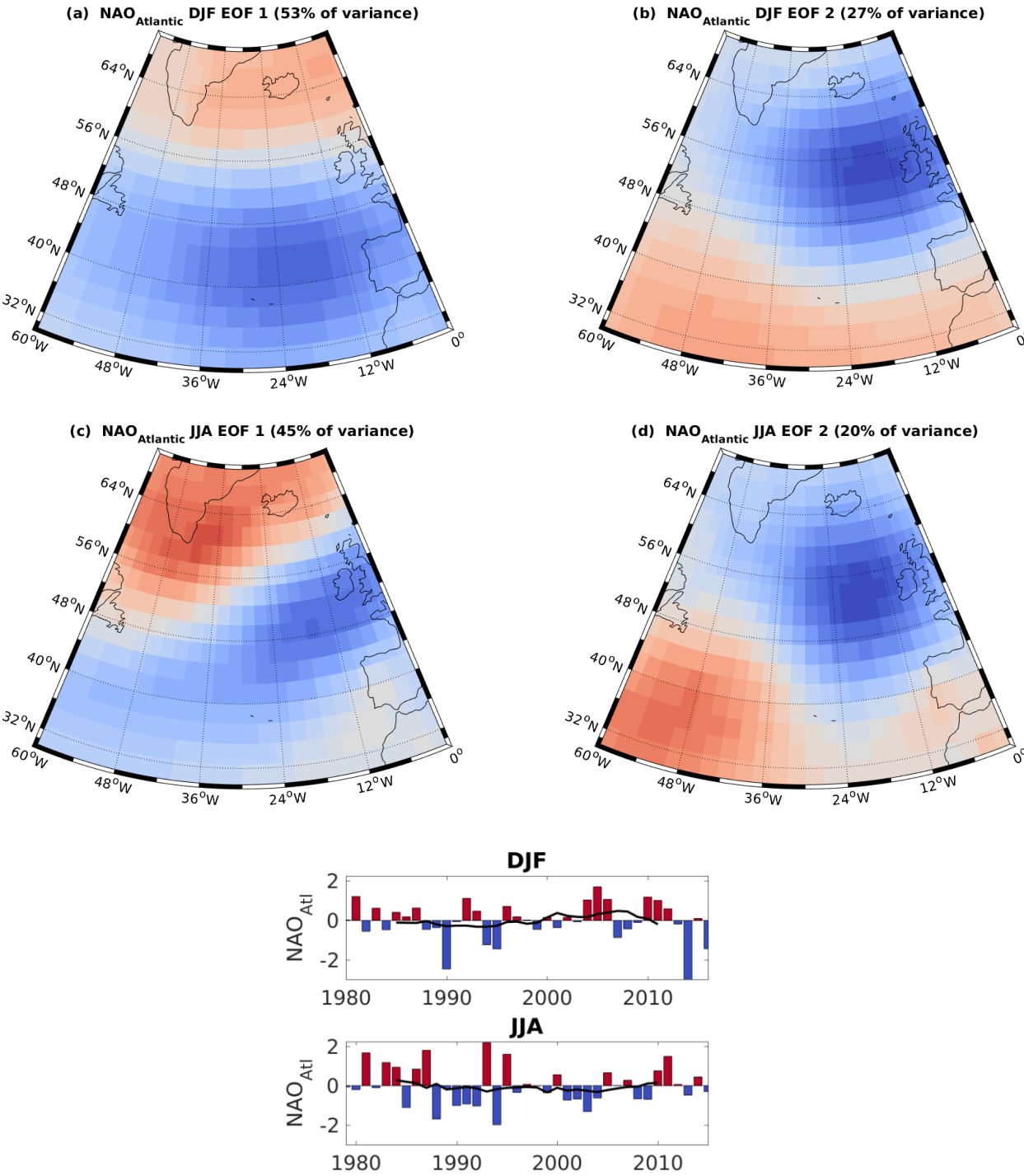


Figure S1: Seasonal EOF patterns over the region 60W-0W, 30N-70N. **Left:** EOF1. **Right:** EOF2. **Top:** DJF. **Middle:** JJA. **Bottom:** The time series corresponding to EOF 2. Otherwise identical to the corresponding PC1 plots in the second row of figure 1.

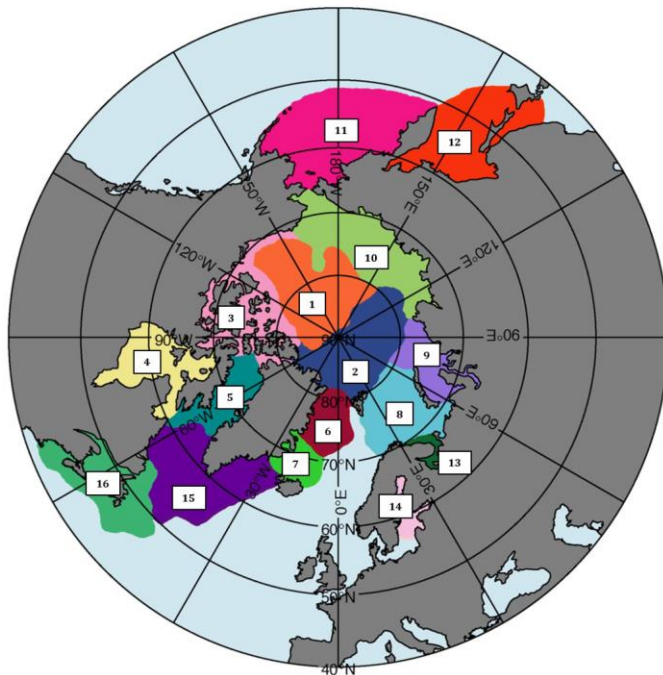


Figure S2: Arctic Ocean regions. The regions are the Amerasian Basin (1), Eurasian Basin (2), Canadian Archipelago (3), Hudson Bay & Foxe Bay (4), Baffin Bay (5), Greenland Sea (6), Iceland Sea (7), Barents Sea (8), Kara Sea (9), Siberian Shelf Seas (10), Bering Sea (11), Sea of Okhotsk (12), White Sea (13), Baltic Sea & surrounding Gulfs (14), Labrador Sea (15), and the Gulf of St Lawrence/Nova Scotia Peninsula (16). The Atlantic sector is defined as the area encompassing regions 6-9, 13, and 15-16. Figure from Tilling et al. (2015).”

Tilling, R. L., Ridout, A., Shepherd, A., and Wingham, D. J. (2015). Increased Arctic sea ice volume after anomalously low melting in 2013, *Nat.Geosci.*, 8, 643–646.