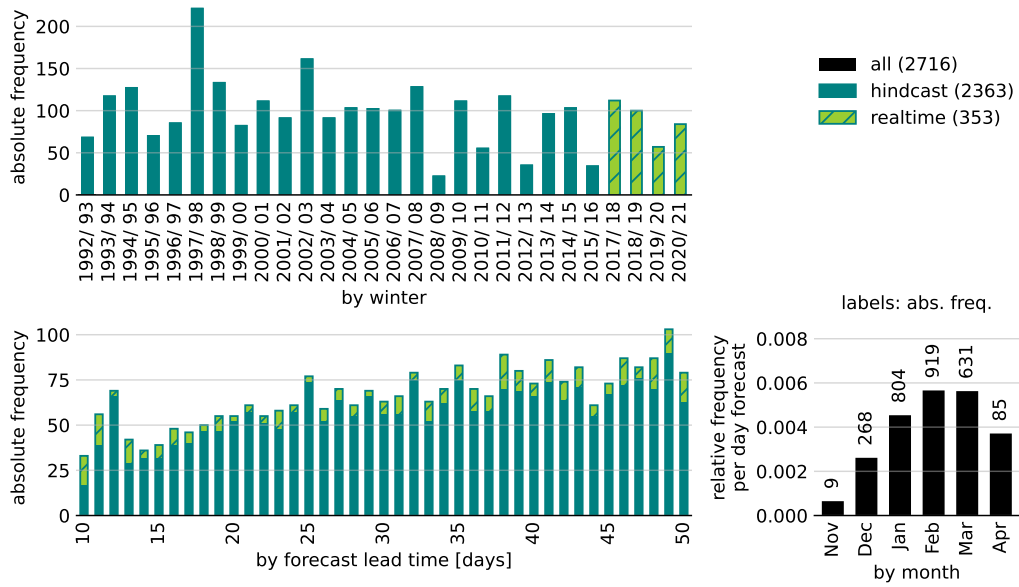# Supplement

Figure S1: As in Fig. 1, for UKMO p-SSWs.
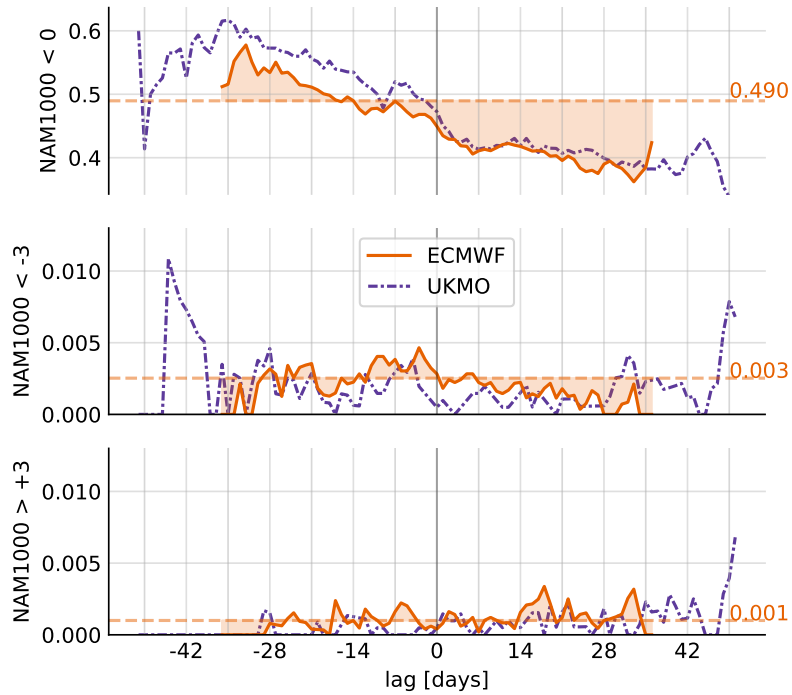
Figure S2: As in Fig. 4, for p-SPVs. Consistent with the average positive NAM1000 shift (see Fig. 9), the daily probabilities for NAM1000 < 0 and NAM1000 < −3 reduce, wheres the probability for $NAM1000 > +3$ slightly increases following p-SPVs, compared to the respective climatological baselines (horizontally dashed).
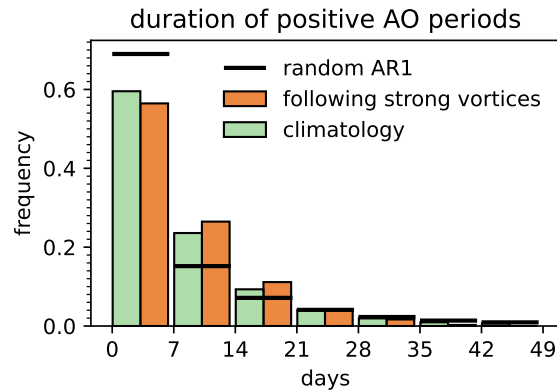

Figure S3: As in Fig. 3, for the duration of positive AO phases following p-SPVs. Compared to climatology, positive AO phases that are longer than 7 days are more likely following p-SPVs.
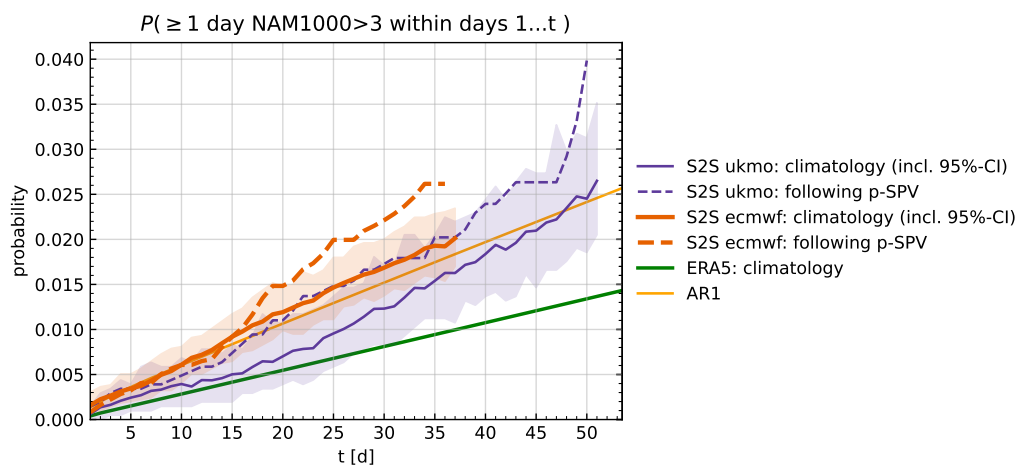
2

P(≥ 1 day NAM1000>3 within days 1...t)

Legend:
- S2S ukmo: climatology (incl. 95%-CI)
- S2S ukmo: following p-SPV
- S2S ecmwf: climatology (incl. 95%-CI)
- S2S ecmwf: following p-SPV
- ERA5: climatology
- AR1

Figure S4: As in Fig. 5, for at least one day NAM1000 $> +3$ within days 1 to t, following p-SPVs. For both, ECMWF and UKMO forecasts, the probability relative to climatology is increased following p-SPVs, however, the probabilities are generally lower in the UKMO model.