



# AMS

American Meteorological Society

## Supplemental Material

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Supplementary Material for “Mechanisms of Regional Arctic Sea  
Ice Predictability in Dynamical Seasonal Forecast Systems”

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# S1 Regional SIV IC Correlations with PIOMAS

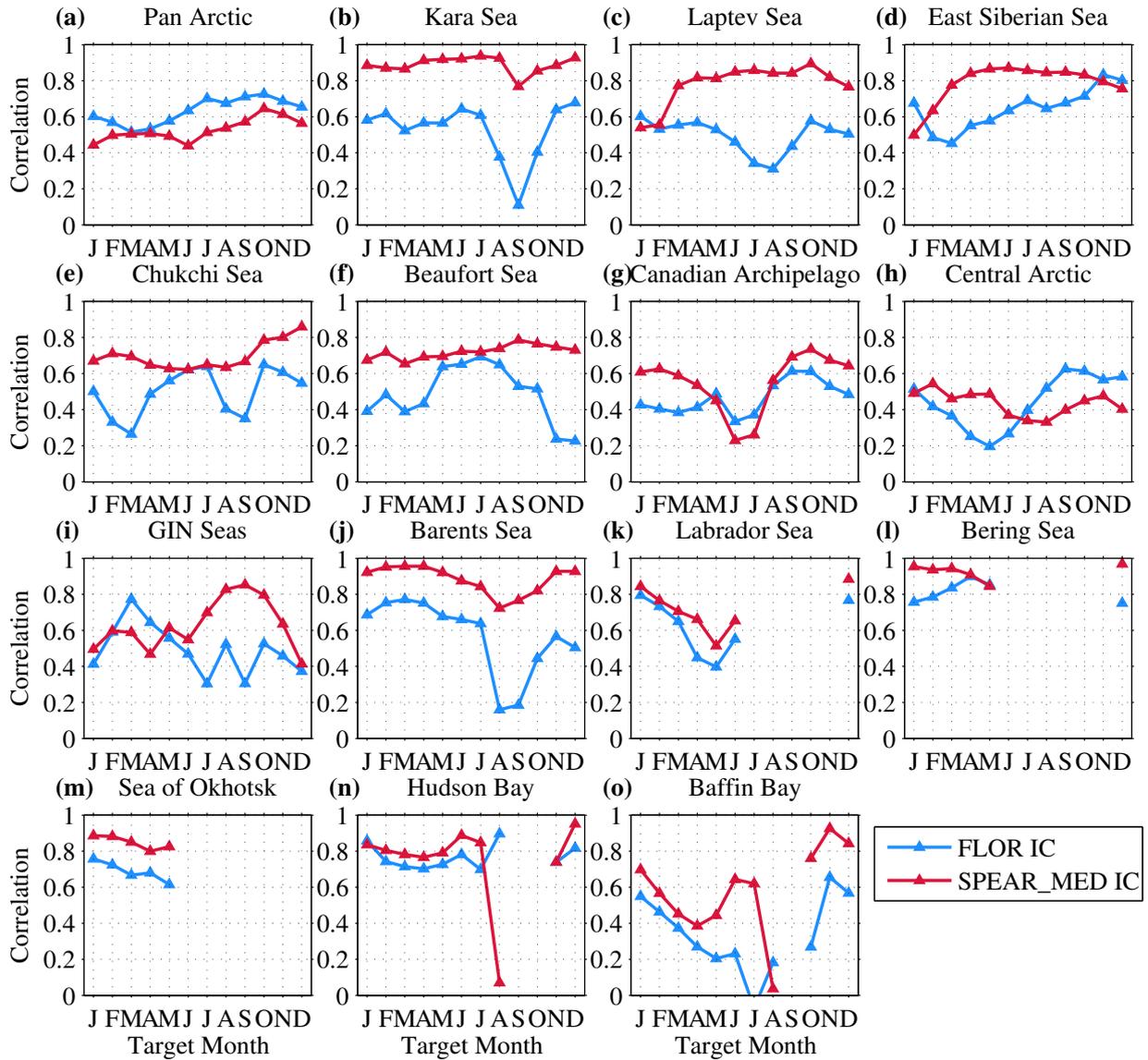


Figure S1: Regional SIV detrended correlations between FLOR (blue) and SPEAR\_MED (red) ICs and PIOMAS reanalysis. For region definitions see Figs. 6, 7.

## S2 Regional Summer SIE Prediction Skill: ACC

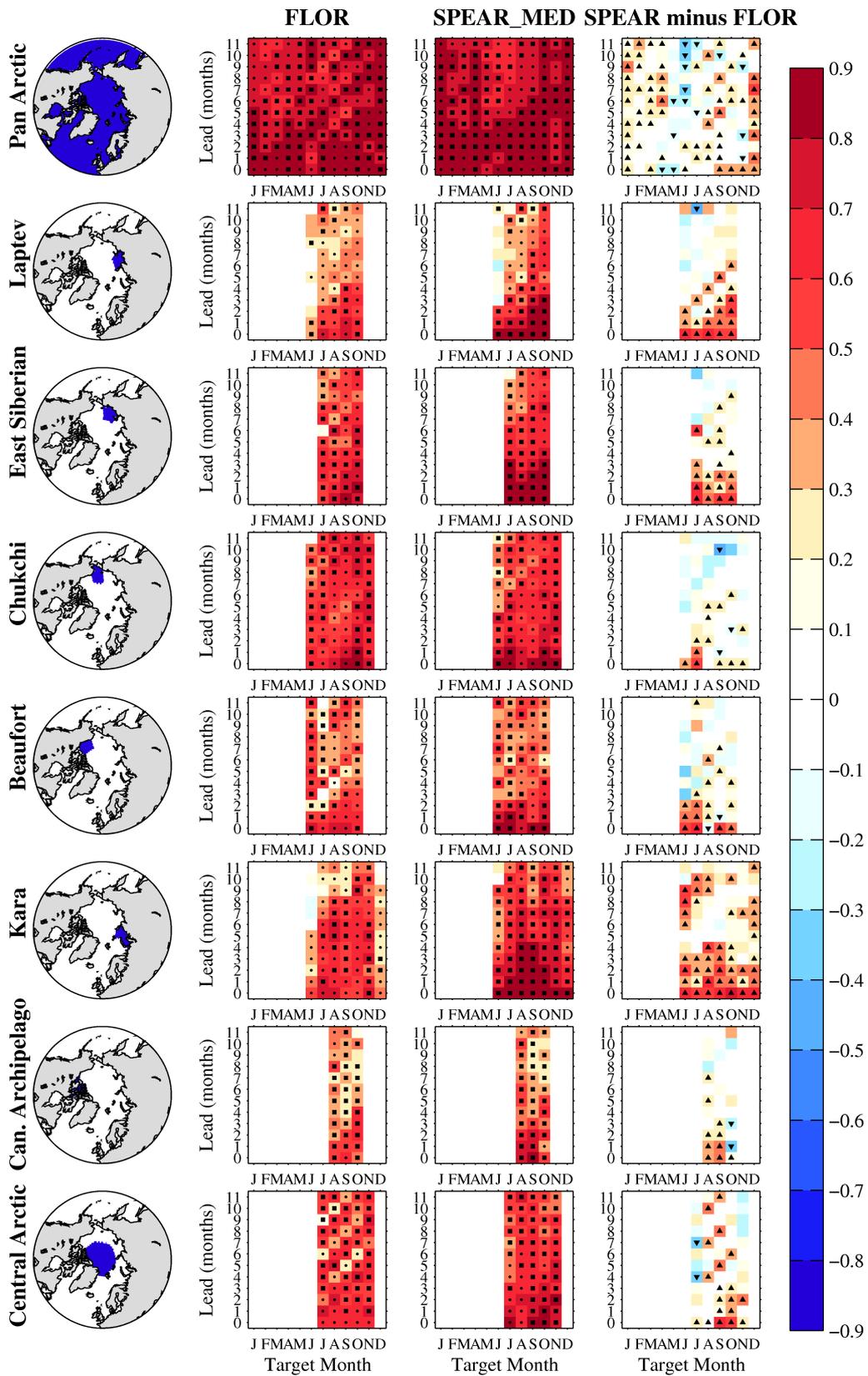


Figure S2: As in Fig. 6, but for non-detrended ACC.

### S3 Regional Winter SIE Prediction Skill: ACC

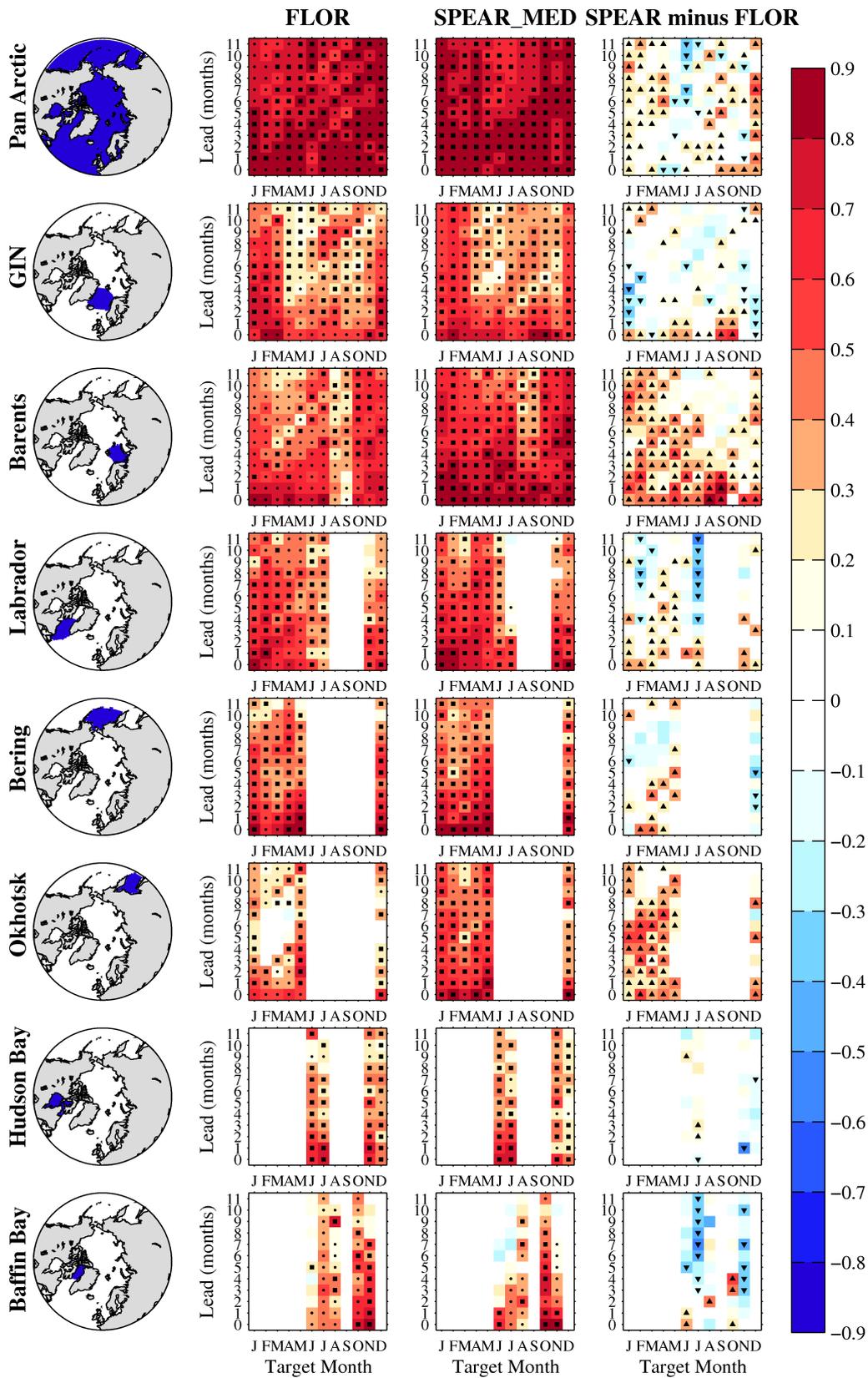


Figure S3: As in Fig. 7, but for non-detrended ACC.

# S4 Regional Summer SIE Prediction Skill: SPEAR\_LO and SPEAR\_MED

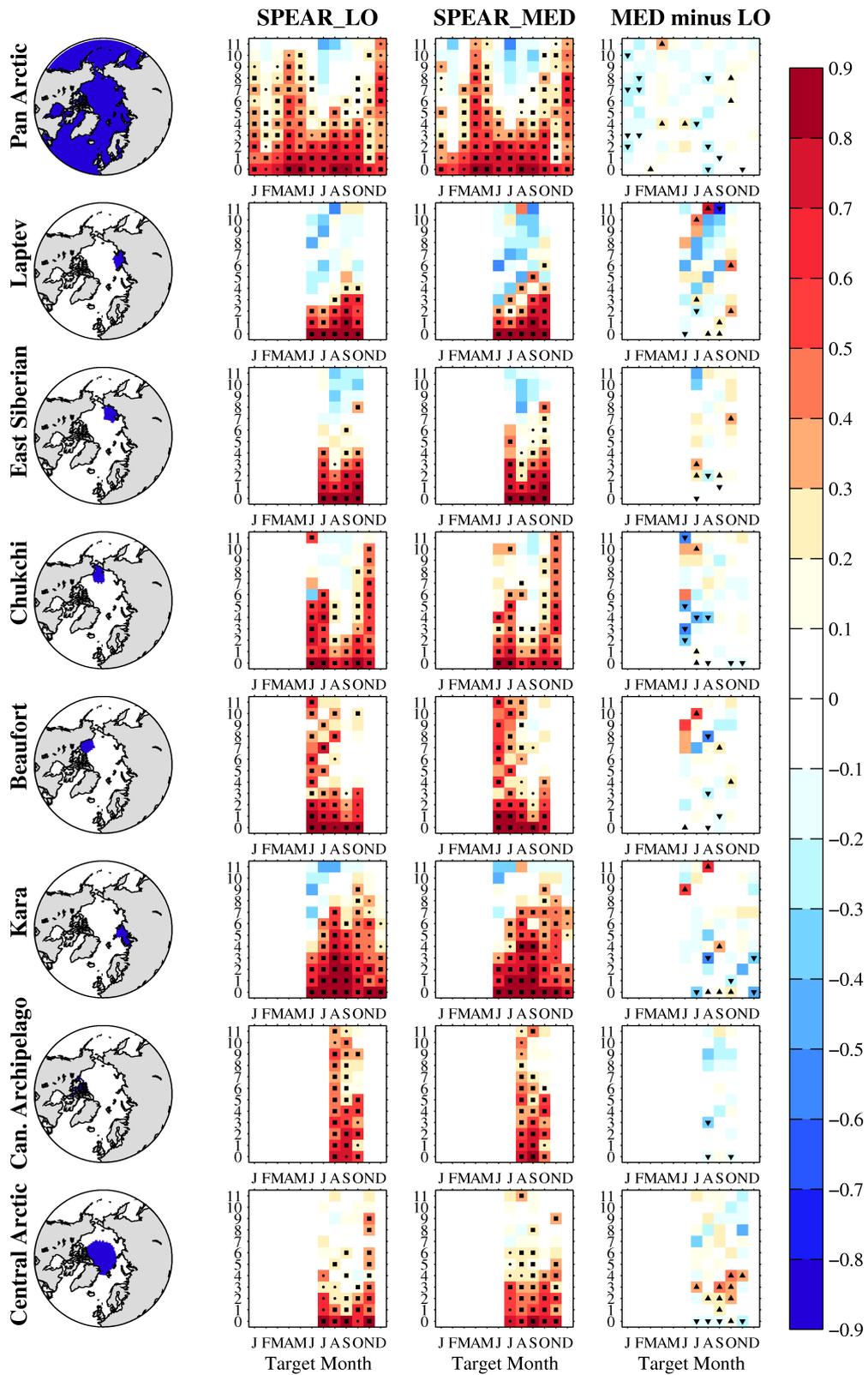


Figure S4: As in Fig. 6, but comparing SPEAR\_LO and SPEAR\_MED.

# S5 Regional Winter SIE Prediction Skill: SPEAR\_LO and SPEAR\_MED

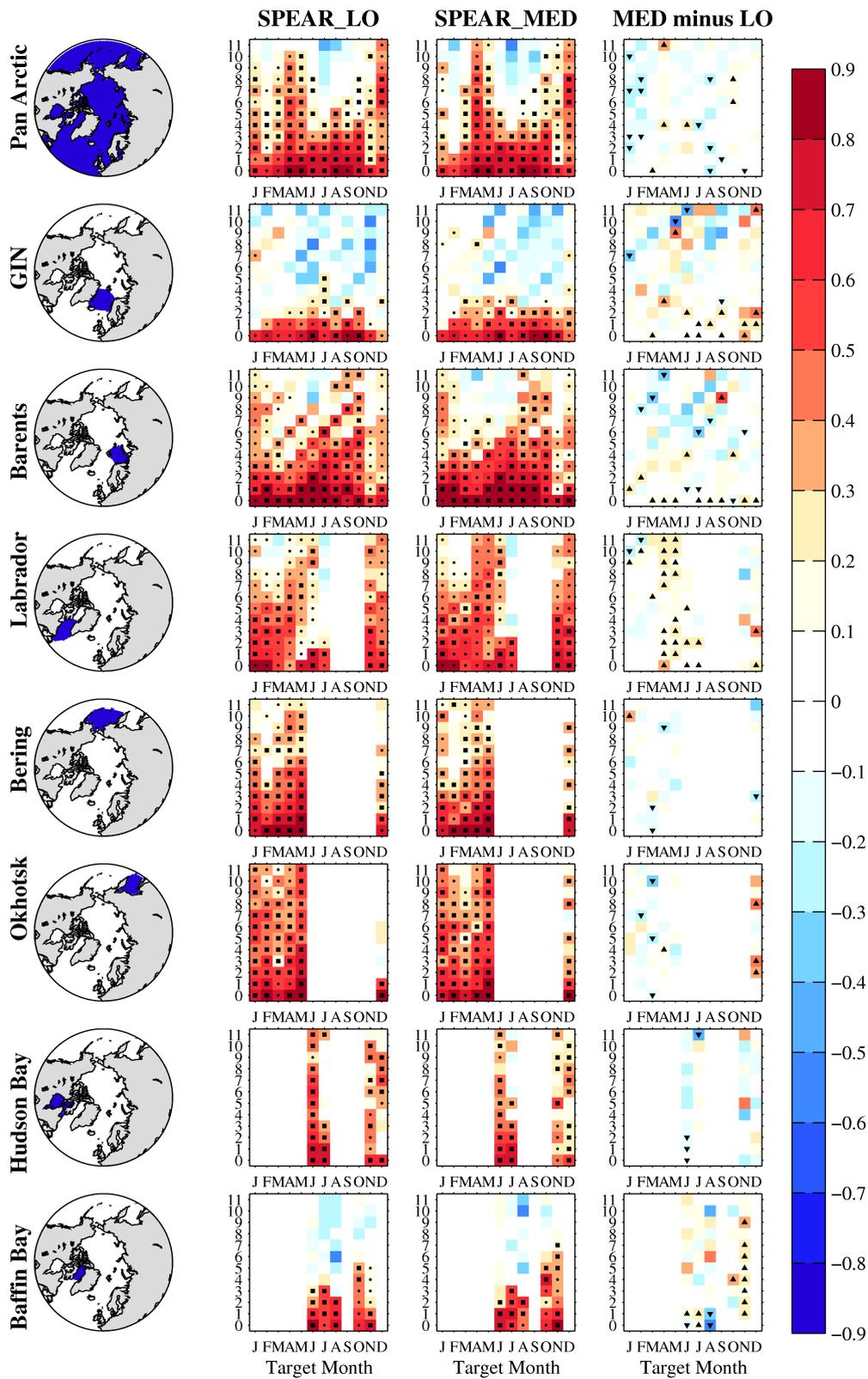


Figure S5: As in Fig. 7, but comparing SPEAR\_LO and SPEAR\_MED.

## S6 Regional Summer SIE Predictability Sources

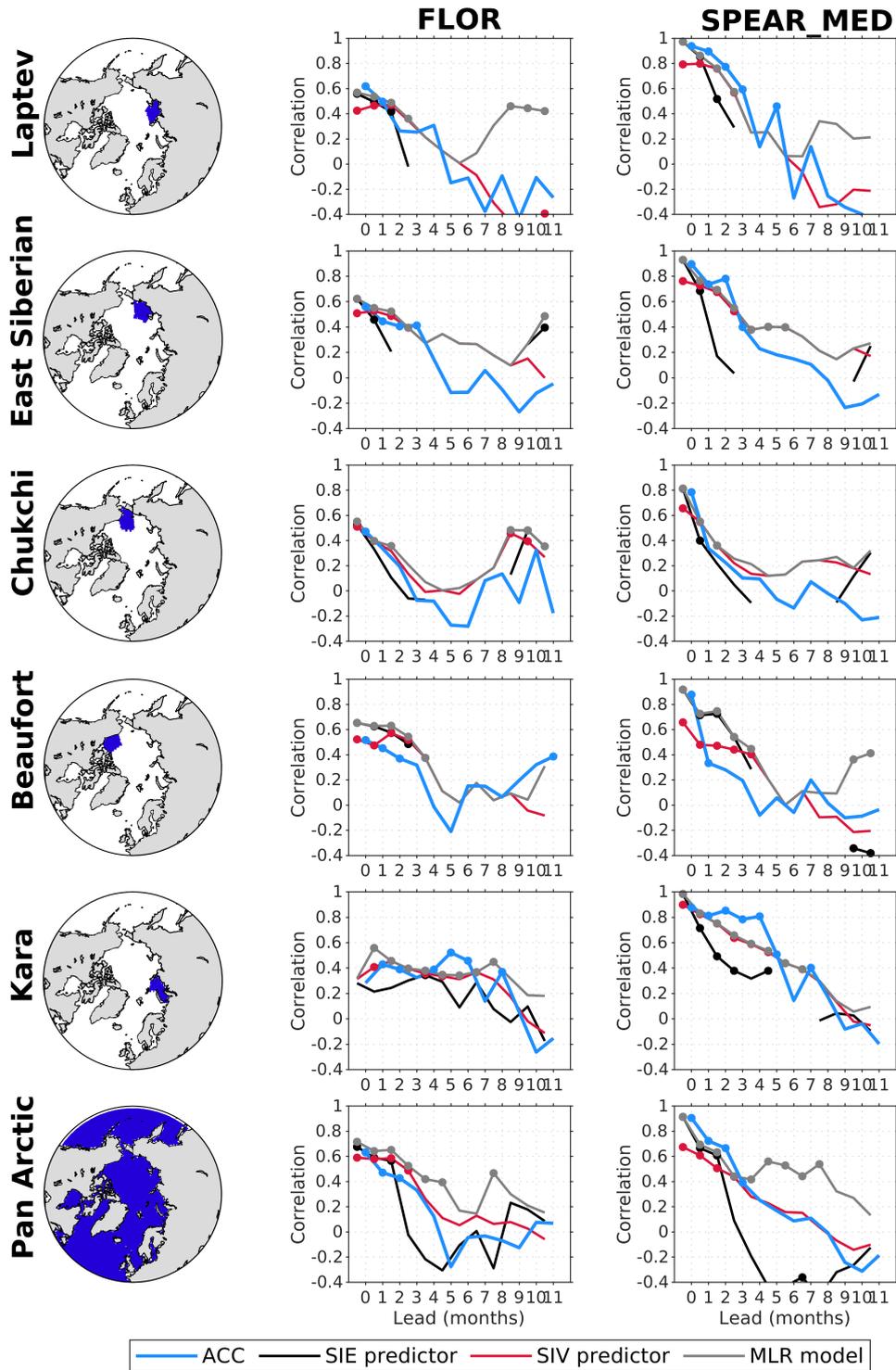


Figure S6: As in Fig. 8, but including the skill of a multi-linear regression (MLR; gray lines) model based on regional SIE and regional SIV.

## S7 Regional Winter SIE Predictability Sources

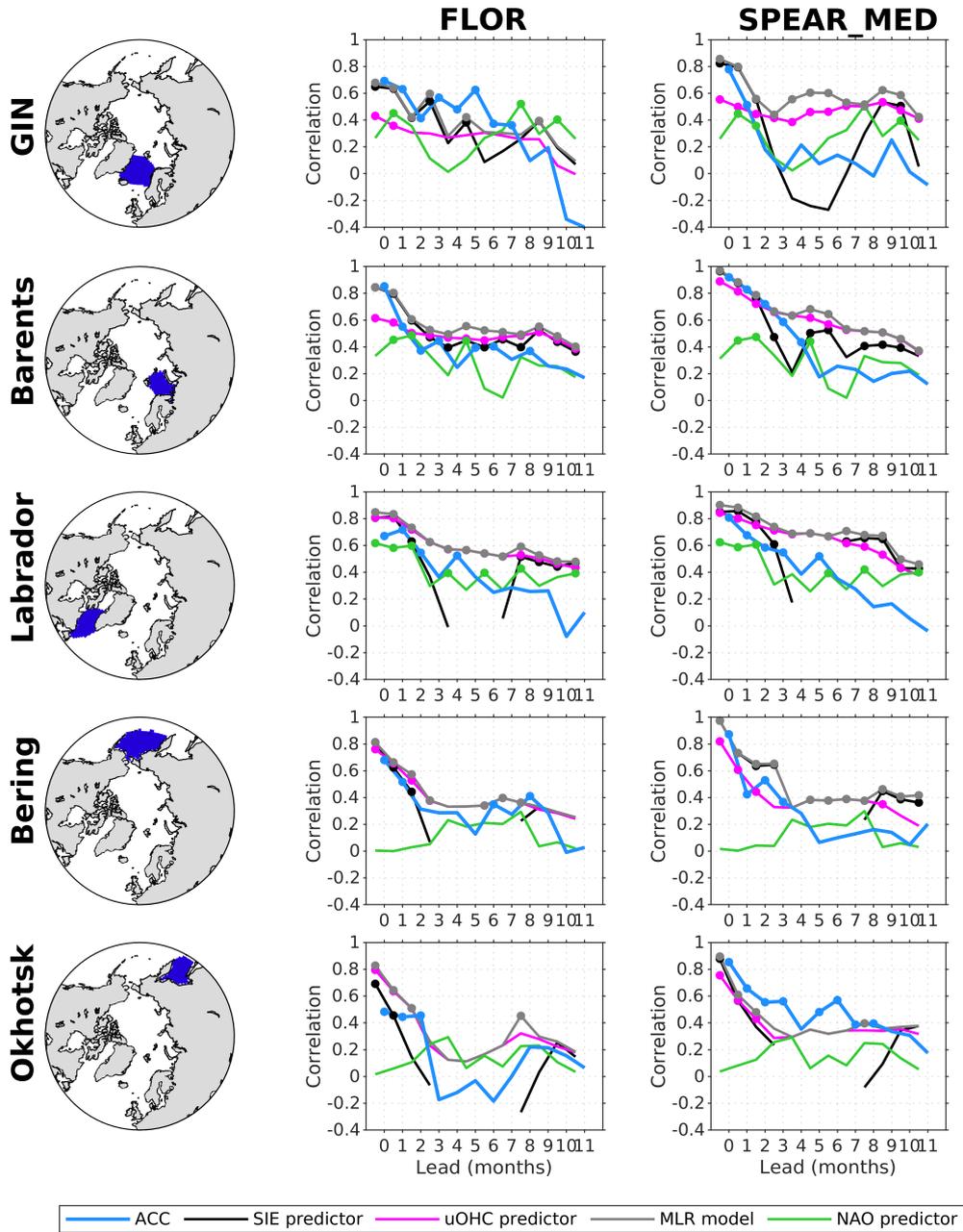


Figure S7: As in Fig. 9, but including the skill of a multi-linear regression (MLR; gray lines) model based on regional SIE and regional uOHC, and a regression model based on the NAO index (green lines). The NAO index predictor is based on the 3-month mean NAO index prior to the initialization month.