



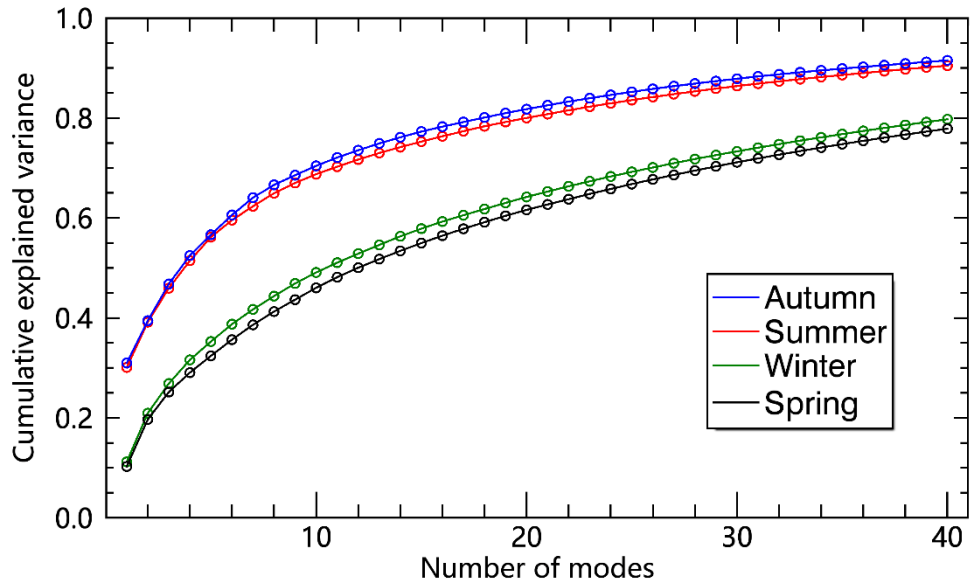
*Supplement of*

## **Reassessing seasonal sea ice predictability of the Pacific-Arctic sector using a Markov model**

**Yunhe Wang et al.**

*Correspondence to:* Xiaojun Yuan (xyuan@ldeo.columbia.edu)

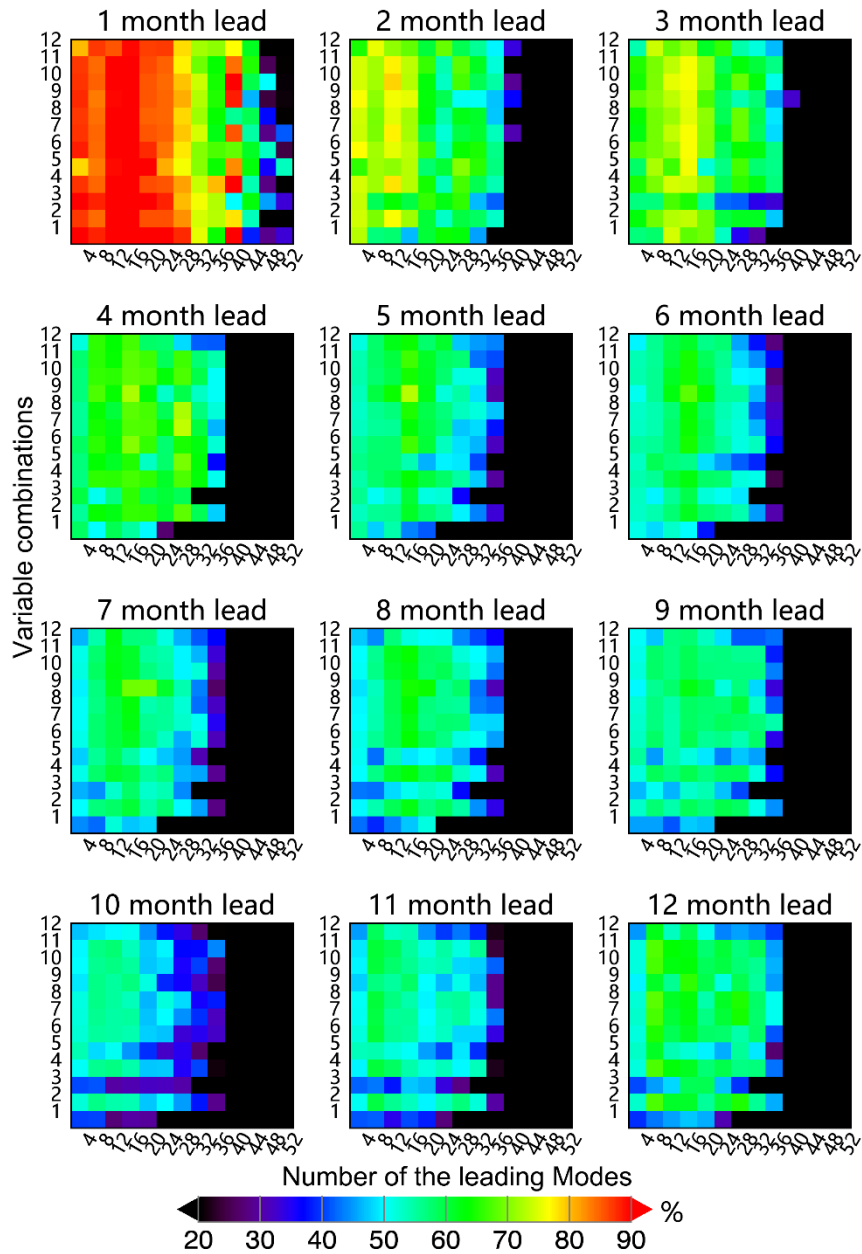
The copyright of individual parts of the supplement might differ from the article licence.



16

17 **Figure S1.** The cumulative explained variance as a function of the number of  
18 leading EOF modes of seasonal SIC for the period of 1979-2020.

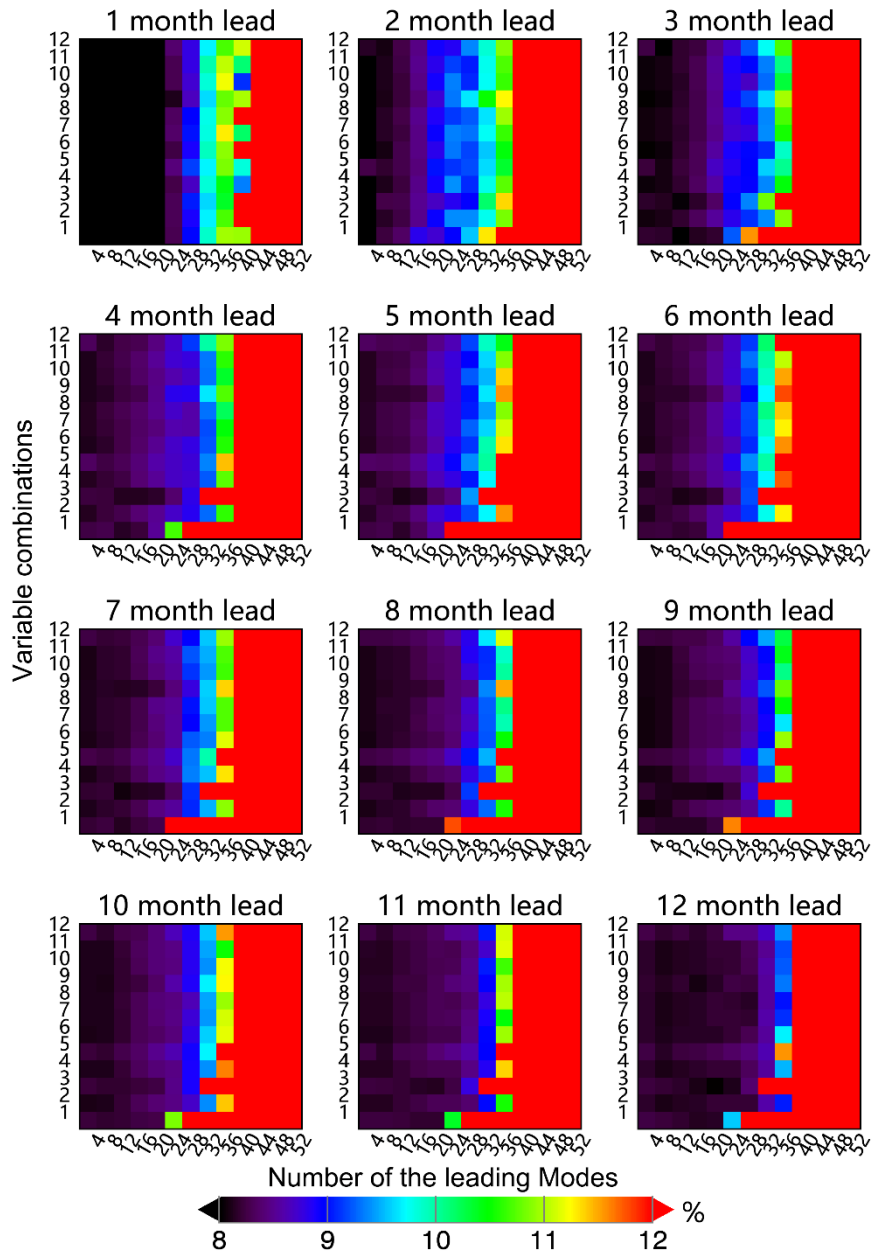
19



20

21 **Figure S2.** PGS is based on the anomaly correlation between the observed and  
 22 predicted SICs in winter as a function of variables and MEOF modes for 1- to 12-  
 23 month lead. The x-axis represents the number of MEOF modes, and the y-axis  
 24 represents the combination of the variables corresponding to table 1.

25

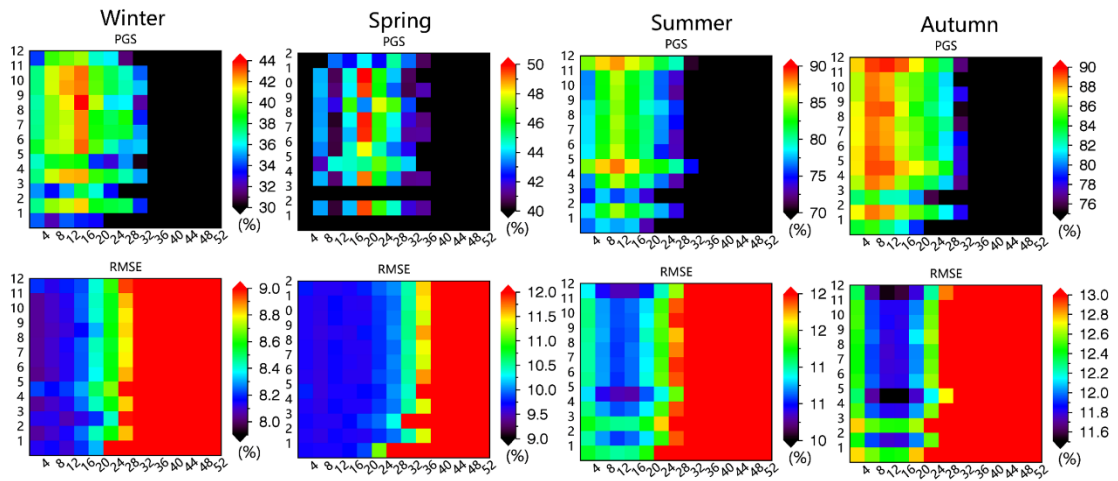


26

27

**Figure S3.** Same as Figure S2 except for RMSE.

28



29

30 **Figure S4.** Mean PGS and mean RMSE between the observations and predictions.

31 The first column panels show the winter model skills obtained by averaging all lead  
 32 months in Figure S2 and Figure S3 respectively. The 2<sup>nd</sup>-4<sup>th</sup> column panels are the  
 33 same as the first column but for spring, summer, and autumn respectively. The  
 34 interval between modes is 4.

35