

Interactive comment on “Intermittency of Arctic-midlatitude teleconnections: stratospheric pathway between autumn sea ice and the winter NAO” by P. Y. F. Siew et al.

Anonymous Referee #1

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The authors have examined in great detail the causal linkage between autumn Barents-Kara Sea ice anomalies and winter surface climate. The paper is well written and the logic is sound.

A piece of potentially useful information missing is why November is selected as the source timing and February as the resulting timing, given that October Barents-Kara Sea ice is even better correlated with January NAO variability than the November sea ice - February NAO counterparts. In addition, NAO variability is larger in January than in February, which makes better sense to explore the October-January pathway.

In addition, the sea ice-NAO linkage is sensitive to the investigation period, i.e., 1979-

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2010 vs 1979-2018 as in Fig.1. There seem a few possibilities that might explain such non-robustness. Fore example, the time it takes from the sea ice to the NAO might vary in different periods (not always being three months). Alternatively, the timing might shift over time, e.g., due to changes in the seasonal cycle of the stratospheric jet strength in response to anthropogenic forcing.

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