

The potential role of snow cover in forcing interannual variability of the NAO/AO.

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Changes in the variance of atmospheric modes such as the NAO/AO can be due to either coupling of the atmosphere to boundary forcings (e.g. oceans, soil moisture) or external forcings (secular changes to greenhouse gases). Sea surface temperatures, the stratosphere and sea ice all have been suggested as boundary conditions, which contribute to or influence interannual variability of the NAO/AO. We suggest that snow cover should also be considered as potentially influencing the interannual variability of the NAO/AO. We will provide observational analysis that strongly suggests that snow cover not only influences the winter NAO/AO on seasonal time scales but also on interannual time scales.