

the maximum in temperature anomalies over the Barents Sea, which extends deep into the continental interior in the dynamical model seasonal forecasts, may offer a cautionary tale regarding a similar pattern in climate change projections. The strong coupling between sea ice and atmosphere, possibly via convective feedback in the dynamical models, may disrupt the coupling between a warm Arctic and cold continents found in observations. These lessons from seasonal prediction indicate that rapid response of sea ice to external forcing, as expressed in past abrupt climate change (Gildor and Tziperman, 2003), may lead to future surprises in the Arctic, thus increasing the uncertainties in future climate projections for the entire Northern Hemisphere.

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