

@article{Labe2019,  
abstract = {Recent modeling studies have shown an important role for stratosphere-troposphere coupling in the large-scale atmospheric response to Arctic sea ice loss. Evidence is growing that the Quasi-biennial Oscillation (QBO) can contribute to or even mitigate teleconnections from surface forcing. Here, the influence of QBO phase on the atmospheric response to projected Arctic sea ice loss is examined using an atmospheric general circulation model with a well-resolved stratosphere and a QBO prescribed from observations. The role of the QBO is determined by compositing seasons with easterly phase (QBO-E) separately from seasons with westerly phase (QBO-W). In response to the sea ice forcing in early winter, the polar vortex during QBO-E weakens with strong stratosphere-troposphere wave-1 coupling and a negative Northern Annular Mode-type response. At the surface, this results in more severe Siberian cold spells. For QBO-W, the polar vortex strengthens in response to the sea ice forcing},  
author = {Labe, Zachary and Peings, Yannick and Magnusdottir, Gudrun},  
doi = {10.1029/2019GL083095},  
file = {:Users/zlabe/Library/Application Support/Mendeley Desktop/Downloaded/Labe, Peings, Magnusdottir - 2019 - The effect of QBO phase on the atmospheric response to projected Arctic sea ice loss in early win(2).pdf:pdf},  
issn = {1944-8007},  
journal = {Geophysical Research Letters},  
keywords = {Arctic sea ice,Northern Annular Mode,QBO,climate variability,polar vortex,teleconnection},  
mendeley-tags = {Arctic sea ice,Northern Annular Mode,QBO,climate variability,polar vortex,teleconnection},  
number = {13},  
pages = {7663--7671},  
publisher = {John Wiley {\&} Sons, Ltd},  
title = {{The effect of QBO phase on the atmospheric response to projected Arctic sea ice loss in early winter}},  
url = {https://agupubs.onlinelibrary.wiley.com/doi/10.1029/2019GL083095},  
volume = {46},  
year = {2019}  
}