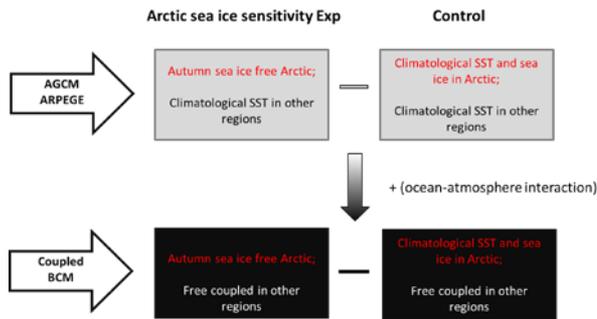


Sea-ice free Arctic contributes to the projected warming minimum in the North Atlantic

(Suo Lingling, Gao Yongqi, Guo Dong and Bethke Ingo 2017. ENVIRON RES LETT.)

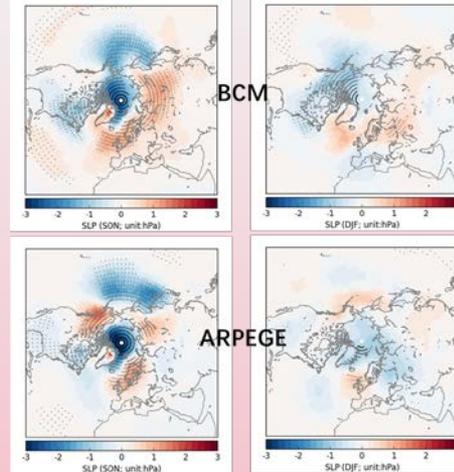
Model experiments design



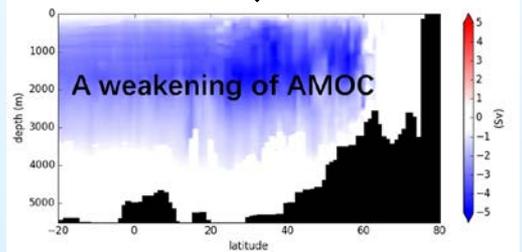
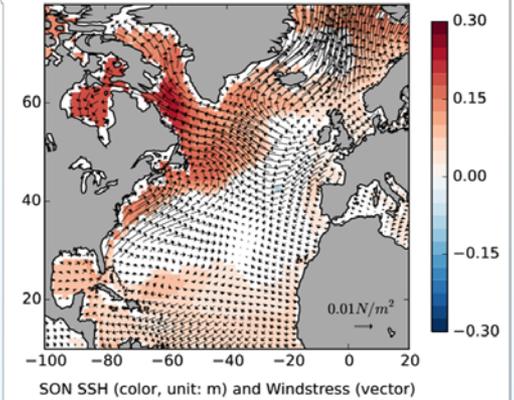
Conclusion

- Sea-Ice free Arctic contributes to the projected North Atlantic warming minimum by weakening the Atlantic Meridional Overturning Circulation (AMOC).
- The weakened AMOC is driven and sustained by the weakened wind stress over the sub polar gyre associated with a weaker Icelandic low in autumn.
- The study presented here emphasizes the role of ocean-atmosphere interaction on the sea-ice free impact, implies a lagged teleconnection through the ocean bridge.

Weakened Icelandic low



Weakened windstress and subpolar gyre



Atlantic SAT cooling in the coupled system

