



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

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Projected global warming is not spatially uniform and one of the minima in warming occurs in the North Atlantic (NA). Several models from the Coupled Model Intercomparison Project Phase 5 even projected a slight NA cooling in 2081–2100 relative to 1986–2005. Here we show that, by our simulations performed with the Bergen Climate Model (BCM), an autumn (September to November) sea-ice free Arctic (SIF) contributes to the NA warming minimum by weakening the Atlantic meridional overturning circulation (AMOC). The role of the air–sea interaction in the response to the SIF, which has not been widely discussed in the literature, has been highlighted by the results presented in this study.