EGU22-5999, updated on 13 Aug 2022
https://doi.org/10.5194/egusphere-egu22-5999
EGU General Assembly 2022


# AMOC Early-Warning Signals in CMIP6

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The Atlantic Meridional Overturning Circulation (AMOC) is a vital part of the global climate that has been suggested to exhibit bi-stability. A collapse from its current strong state to the weak one would have significant consequences for the climate system. Early-warning signals (EWS) for such a transition have recently been found in observational fingerprints for the AMOC.

Some uncertainty in our understanding of the AMOC and its recent evolution is due to the varying quality of its representation in state-of-the-art models. In this work we examine the historical AMOC simulations in the 6th Coupled Model Intercomparison Project (CMIP6) by analyzing the AMOC strength in the models both directly and through the sea-surface temperature fingerprint. As well as examining the evolution of these AMOC time-series in the models, we calculate their associated EWS and use these to evaluate the models in terms of their representation of the AMOC.