Fingerprinting the AMOC and predicting a collapse

Peter Ditlevsen
University of Copenhagen, Niels Bohr Institute, Physics of Ice and Climate (PICE), Copenhagen N, Denmark
(pditlev@nbi.ku.dk)

In a recent paper [2] we predicted a collapse of the AMOC as soon as mid-century at odds with assessments based on climate model scenarios. The prediction was based on the sub polar gyre fingerprint as a proxy for the AMOC as proposed by Ceasar et al. [2]. Several other fingerprints have been proposed, all showing early warning signals of a forthcoming tipping point [3]. Here we present a statistical analysis, optimally extracting the common signal in the different fingerprints in order to further solidify the assessments.

