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Is the Atlantic meridional overturning circulation changing?

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Analyses of ocean observations and model simulations suggest considerable changes in the Atlantic meridional overturning circulation (AMOC) during the last century. These changes are likely to be the result of natural multidecadal climate variability and driven by low-frequency variations of the North Atlantic Oscillation (NAO) through changes in Labrador Sea convection. Indications of an anthropogenic weakening of the AMOC are not seen during the last few decades. Instead a strengthening since the 1980s is observed. The combined assessment of ocean hydrography data and model results indicates that the expected anthropogenic weakening of the AMOC will remain within the range of natural variability during the next several decades.