

EGU23-14290, updated on 07 Jan 2024

<https://doi.org/10.5194/egusphere-egu23-14290>

EGU General Assembly 2023

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## Future change in atmospheric synoptic variability : impact on ocean circulation and primary productivity

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Climate change impacts atmospheric properties and circulation at different time scales, ranging from daily to millennial. We specifically assess here the impact of a change in atmospheric synoptic variability (ASV) (0-1 month) on mean upper ocean properties. In a first step, we disentangle the ASV and low frequency part in atmospheric fields originating from a climate change experiment performed by the Kiel Climate Model. In a second step, we use these fields to perform a set of sensitivity experiments to the change in ASV by employing a NEMO-PISCES configuration. We show that a decrease in ASV results in a slowdown of the mean ocean circulation and a global decrease in primary productivity. Our study highlights the need for more precise quantifications of the atmospheric synoptic variability in climate models and observations.