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Projekttitel: Mid-latitude ocean-atmosphere interaction

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Understanding natural unforced variations of climate on decadal-to-multidecadal timescales is important because of their large socio-economic impacts and potential to mask anthropogenic climate change. State-of-the-art climate models show little agreement on the nature of decadal-to-multi-decadal climate variability. Limited understanding of key processes is at the heart of the problem. The aim of this project is to further our understanding of mid-latitude ocean-atmosphere interaction through numerical experiments with climate models. We will focus on two processes:

1. The ocean-atmosphere coupling over ocean fronts, particularly those associated with mid-latitude western boundary currents.
2. The role of the stratosphere in decadal-to-multidecadal climate variability and teleconnections.

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