

EGU21-12983

<https://doi.org/10.5194/egusphere-egu21-12983>

EGU General Assembly 2021

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## Coupled processes in an ocean-sea ice-wave configuration

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Marginal ice zones are areas with many interactions between ocean, surface waves, sea ice and atmosphere. Increasing computational power makes it possible to perform increasingly complex simulations of marine systems, with more components of the climate system that are more interacting. We have produced a set of increasingly coupled simulations with NEMO, CICE and WW3, exchanging more and more variables. The configuration is global at 1 degree resolution. The focus is on wave attenuation in sea ice and the impact of using modelled wave height for ocean mixing due to breaking waves. The example simulations give an idea of the possible impact on the simulated state versus the still considerable computational cost.