

**P3** Coupled modeling of the Southern Ocean using the COAWST modeling system.

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The Coupled Ocean-Atmosphere-Wave-Sediment-Transport (COAWST) system has been adapted to model the coupled atmosphere-ocean-sea ice conditions in the Southern Ocean. The components are the polar version of the Weather Research and Forecasting (Polar WRF) model, the Regional Ocean Modeling System (ROMS), the Budgell sea ice model that is part of ROMS, and the Community Land Model (CLM) representing land and Antarctic ice. The wave and sediment transport options are not activated. The COAWST system has been run on a circumpolar domain covering the region roughly south of 45°S for 2010 and forced by the ERA-Interim global reanalysis at the lateral and top model boundaries. Simulations results compared to observations will be presented at the workshop.