

## SUMMARY OF NCAR OCEAN MODELING ACTIVITIES

- Setup, integration, analysis, and documentation of the Community Climate System Model version 4 (CCSM4) simulations.
- Atlantic Meridional Overturning Circulation (AMOC) decadal variability and its mechanisms.
- CORE-2 interannually varying forcing (hindcast) experiments.
- Creation of an ocean data assimilation system based on the Data Assimilation Research Testbed (DART).
- Development of a framework for embedding a high resolution regional ocean model (ROMS) within the CCSM.
- Model sensitivity studies to various subgrid scale parameterizations and their parameter choices.

- Studies with eddy-permitting ocean model resolution.
- Active participation in the two, new Climate Process Team (CPT) projects. These projects concern internal wave driven ocean mixing and ocean mixing processes associated with high spatial heterogeneity of sea-ice.
- Model for Prediction Across Scales (MPAS).