

Mesoscale Eddy Mixing Across the Antarctic Shelf Break

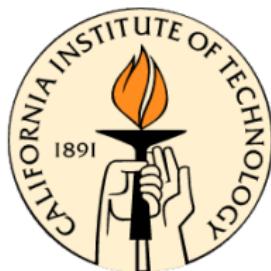
Andrew L. Stewart¹ and Andrew F. Thompson²

¹ Atmospheric and Oceanic Sciences,
University of California, Los Angeles

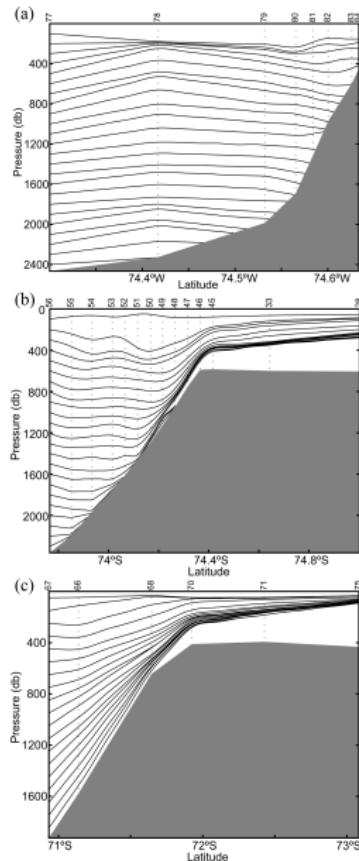
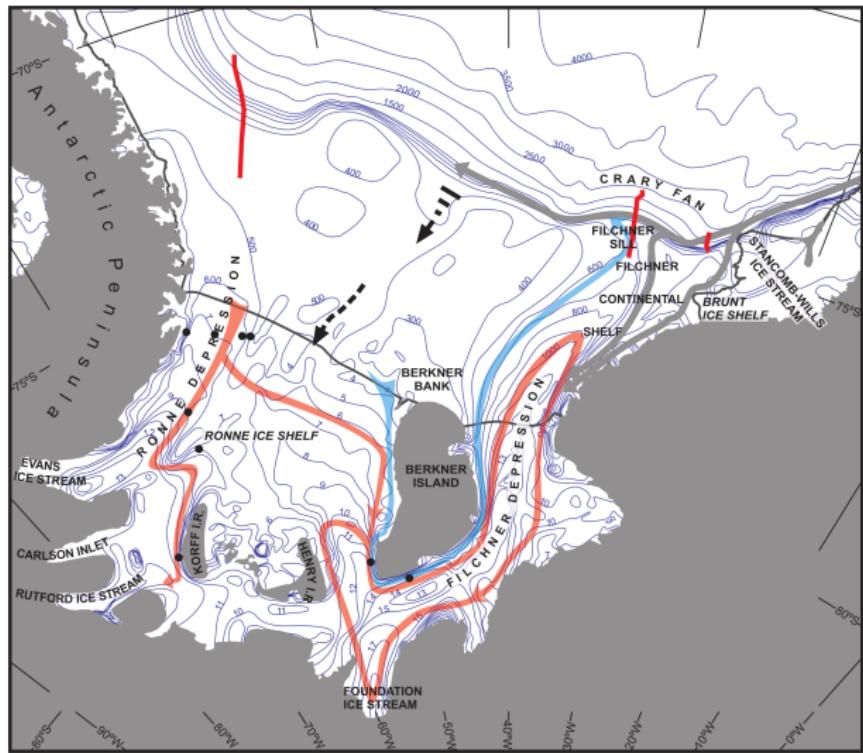
² Environmental Science and Engineering,
California Institute of Technology

February 4, 2015

UCLA

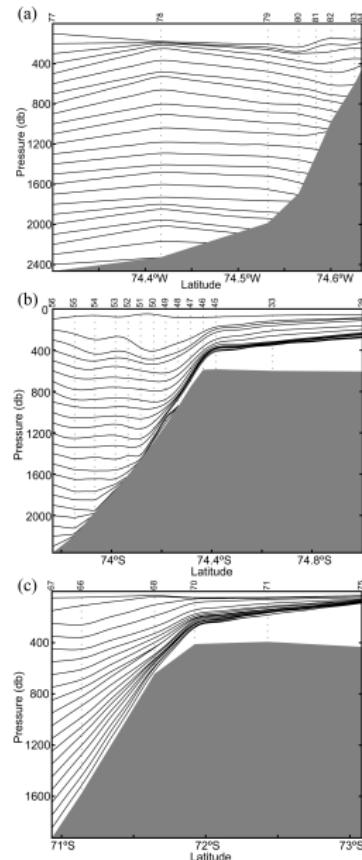
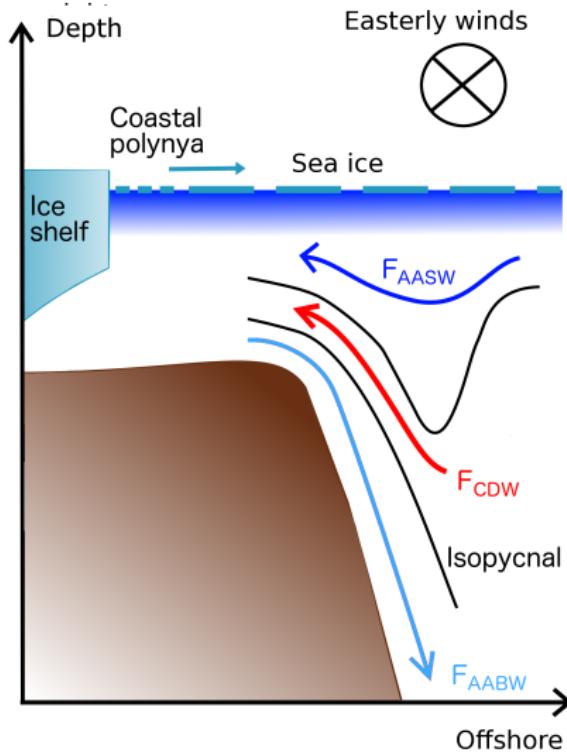


Exchanges across the Antarctic continental slope

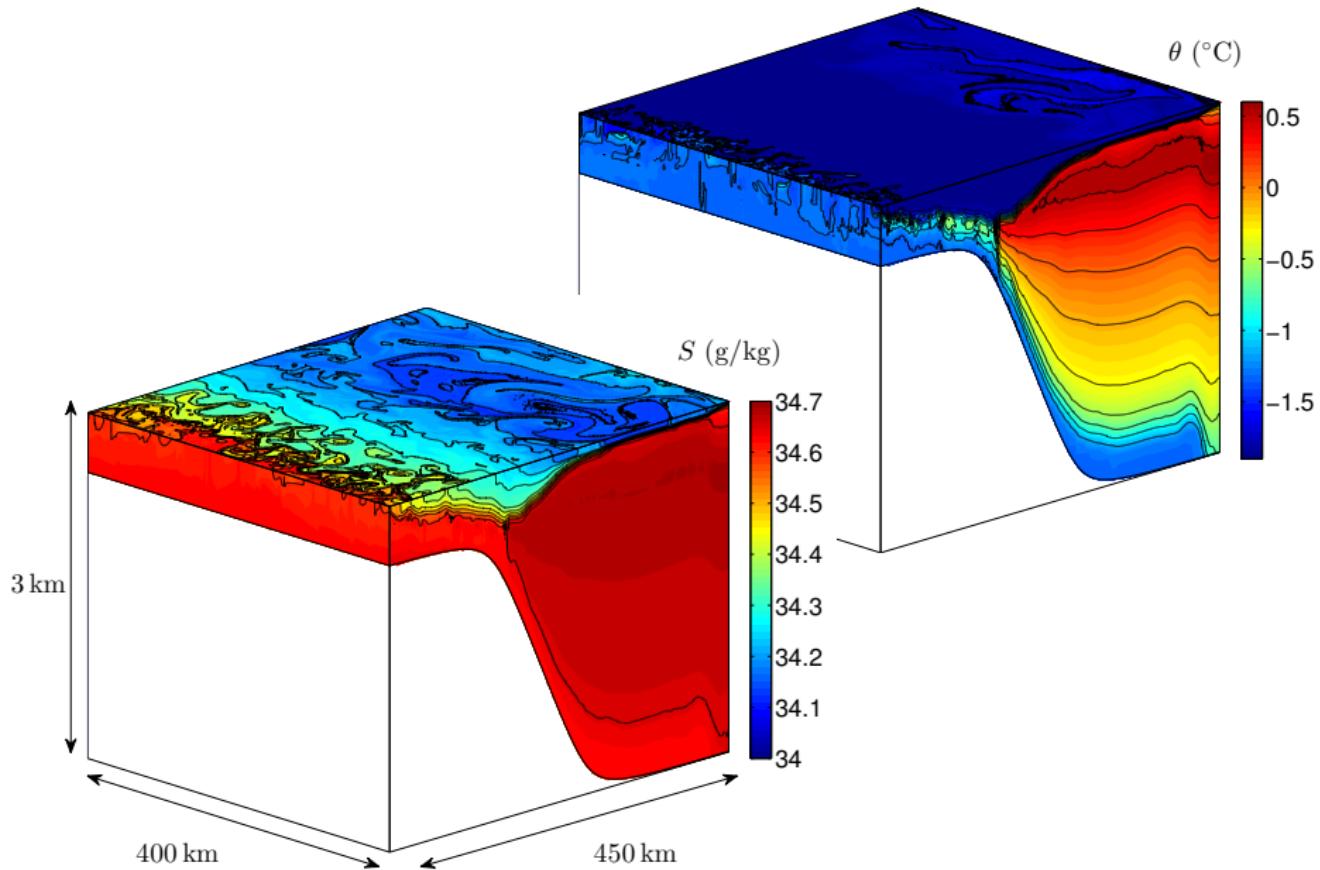


(Nicholls et al., 2009)

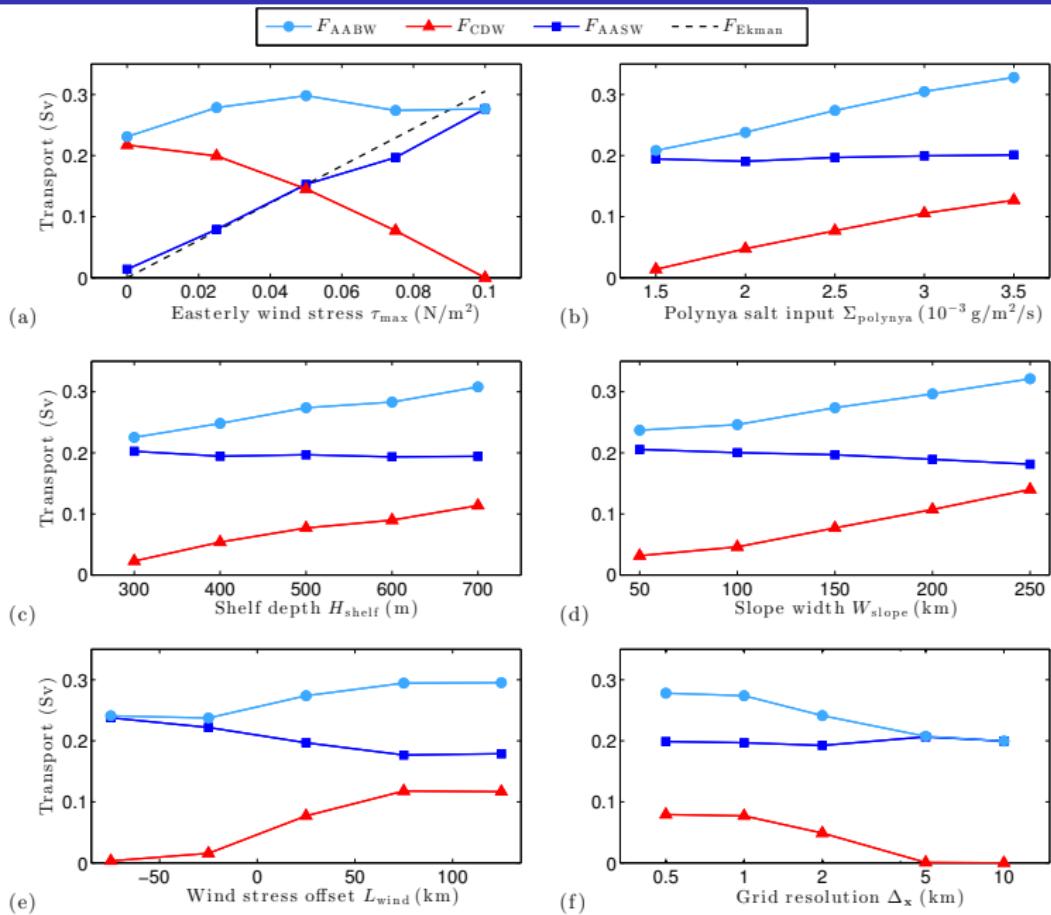
Exchanges across the Antarctic continental slope



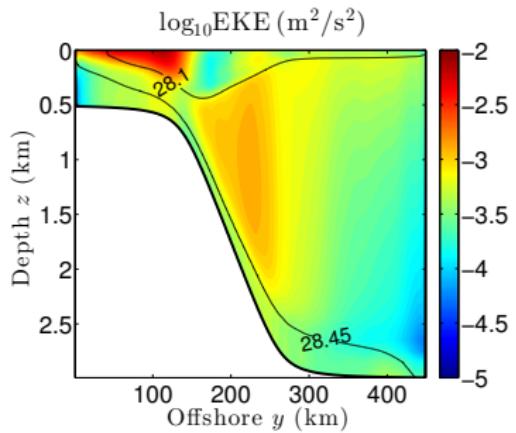
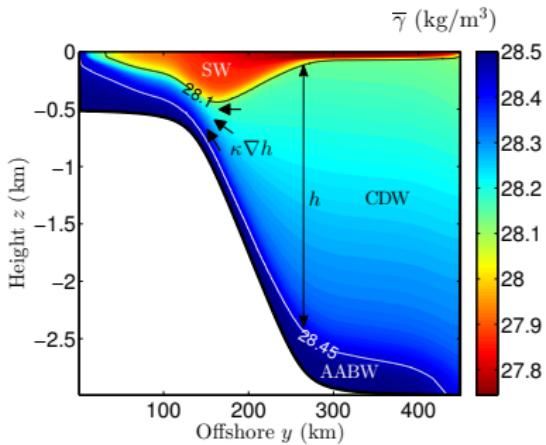
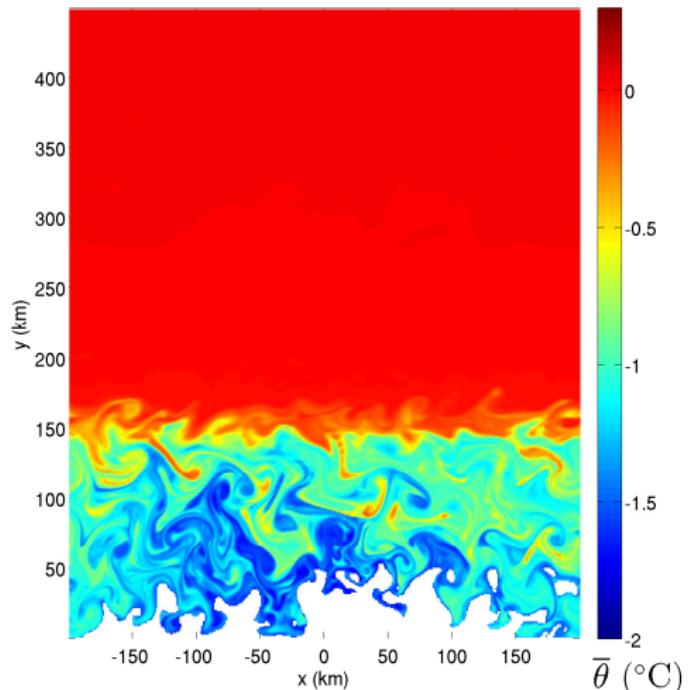
An eddy-resolving model of the ASF



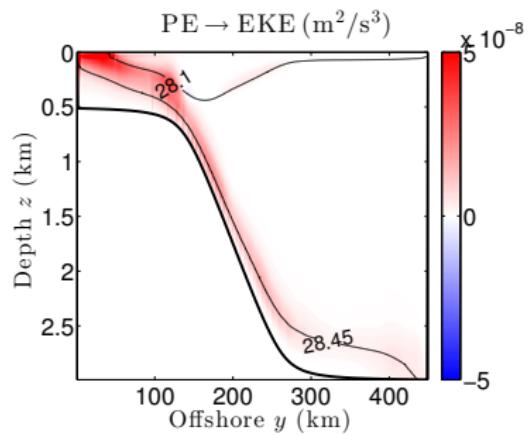
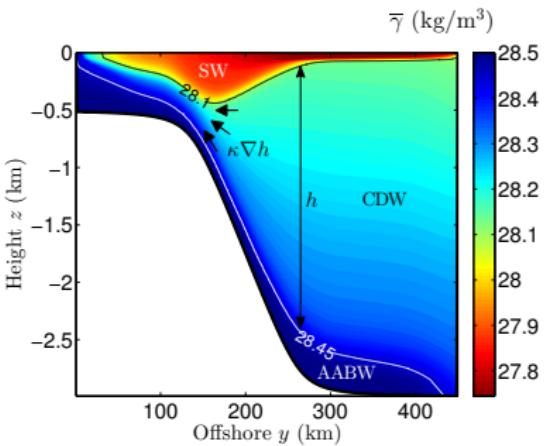
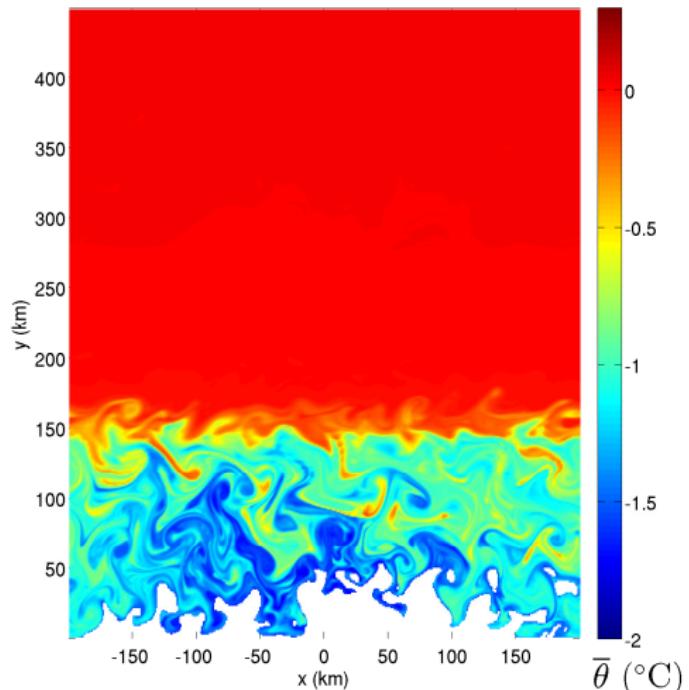
Sensitivity to surface forcing and slope geometry



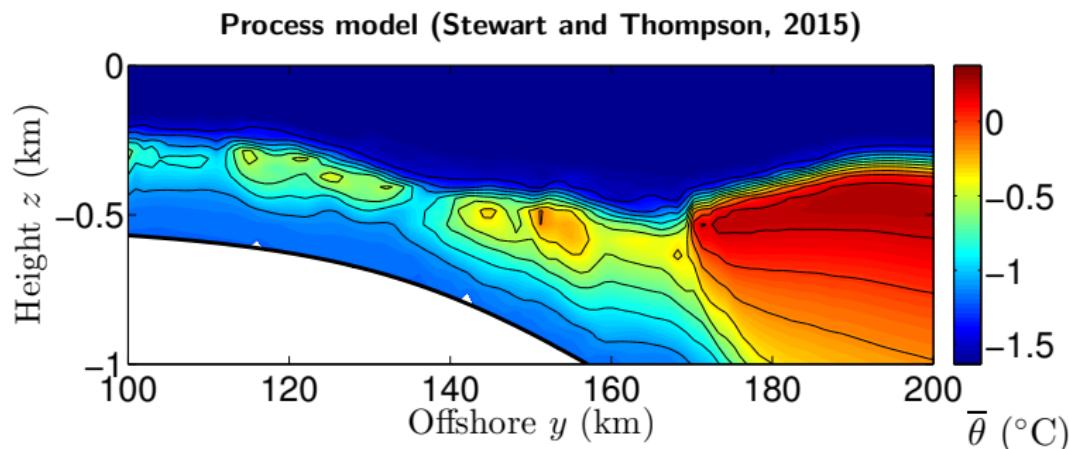
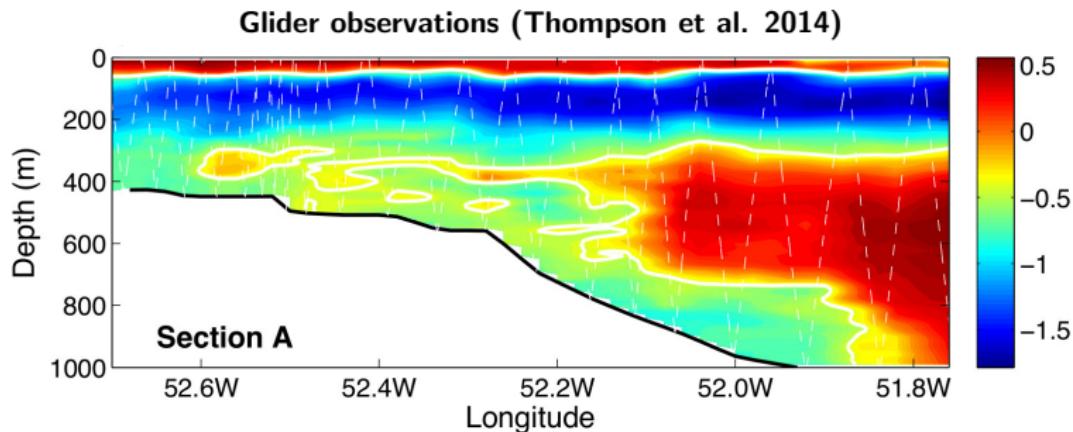
Onshore eddy transport of CDW



Onshore eddy transport of CDW



Observed/modeled temperature snapshots



1/48° Weddell Sea model (from Dimitris Menemenlis)

