Benthic Ecosystem Response to Changing Ice Cover in the Bering Sea (BEST)



Objectives

- track spring production to benthos
- carbon supply via sediment oxygen uptake rates
- benthic infaunal population structure and biomass
- benthic camera for epifauna walrus-prey patch dynamics (BSIERP)
- sediment tracers (TOC, chl a, Be-7, grain size)

Work integrated within BSIERP Patch Dynamics



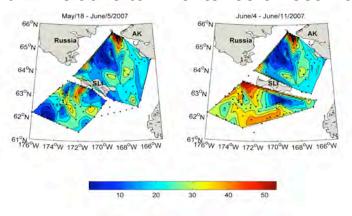


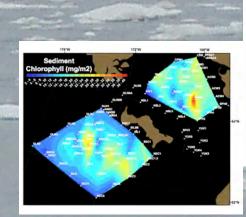
PIs: Jackie Grebmeier and Lee Cooper, University of Maryland Center for Environmental Science

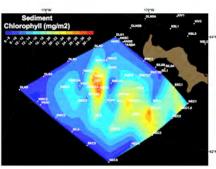




Dynamics of chlorophyll sinking in water column relative to inventories on sea floor







Stable oxygen isotope composition of seawater to determine freshwater components derived from sea ice and runoff

Beryllium-7 inventories in sea ice relative to appearance on sea floor



Primary
shelf
sampling:Ca
mera use
<150 m; van
Veen grabs
<500 m

