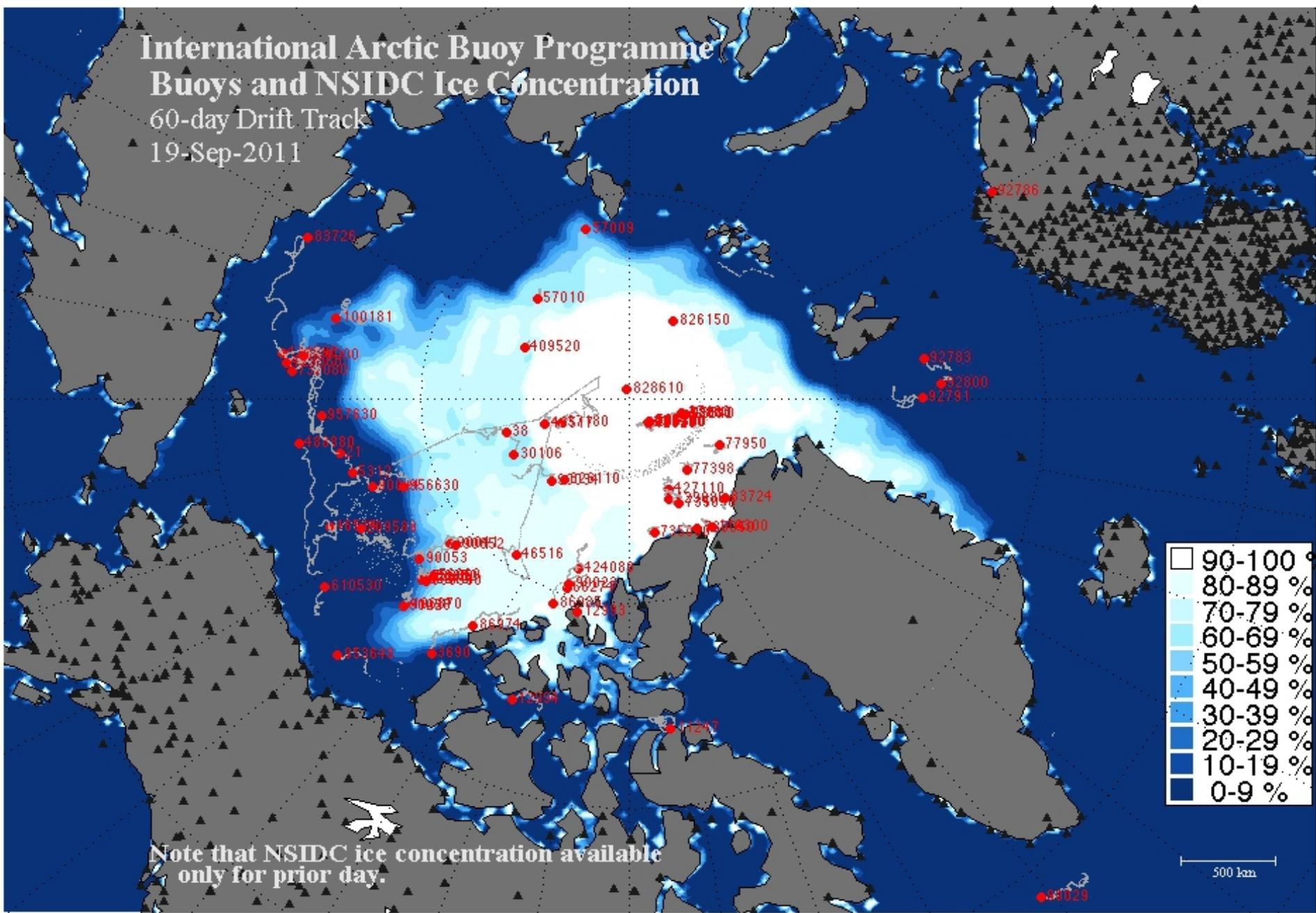


International Arctic Buoy Programme Buoys and NSIDC Ice Concentration

60-day Drift Track
19-Sep-2011

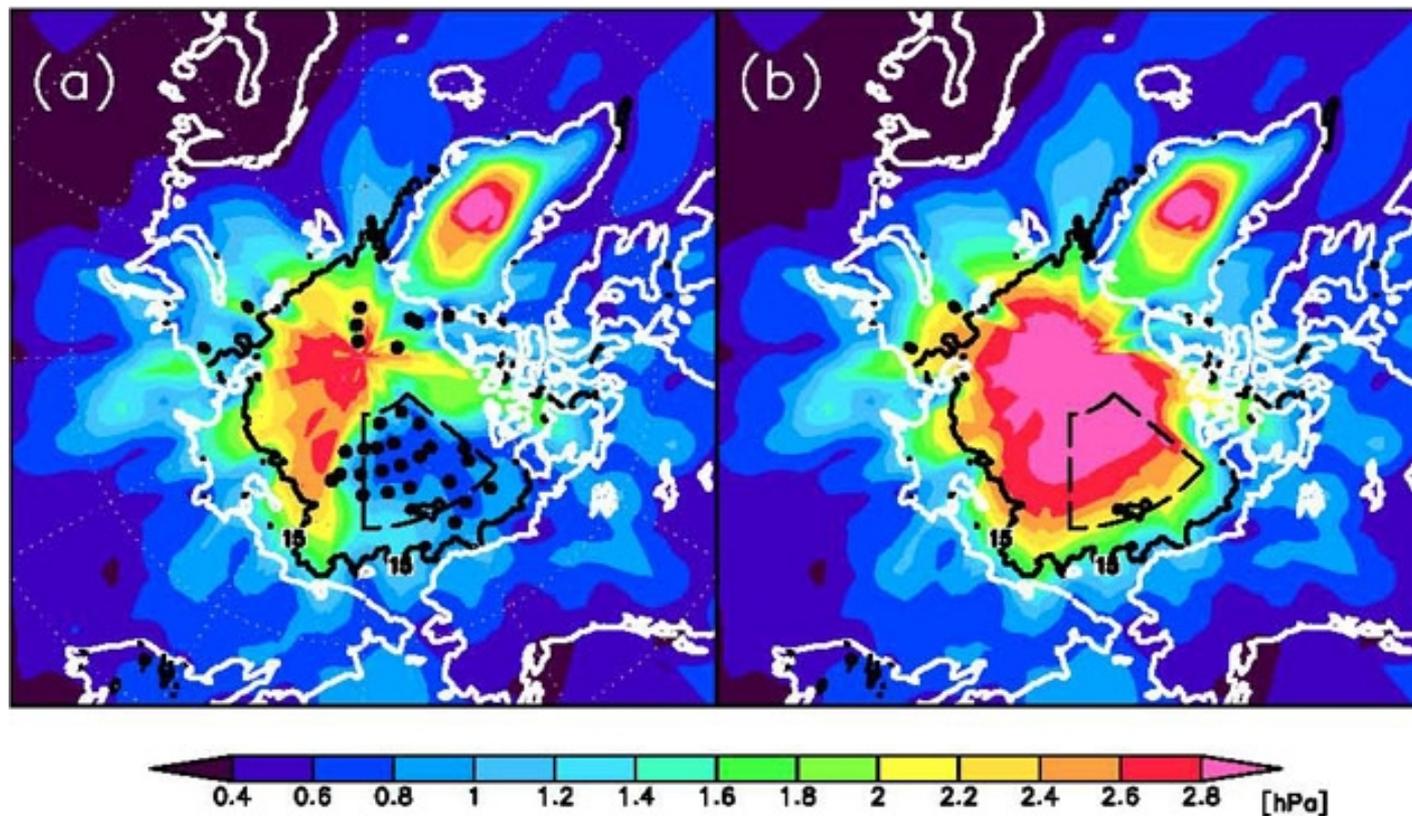


Note that NSIDC ice concentration available only for prior day.

90-100 %
80-89 %
70-79 %
60-69 %
50-59 %
40-49 %
30-39 %
20-29 %
10-19 %
0-9 %

500 km

Spread of Sea Level Pressure (SLP) Reanalyses



The spread between SLP Reanalyses is low in areas where there are buoy observations (left). The spread increases to cover the whole Arctic when the buoys are removed from the reanalyses (right). The buoy obs. also help constrain estimates of wind and heat.

(Inoue et al, 2009)



Impacts of Retreating of Arctic Sea Ice

Solar heating penetrates down into the Ocean

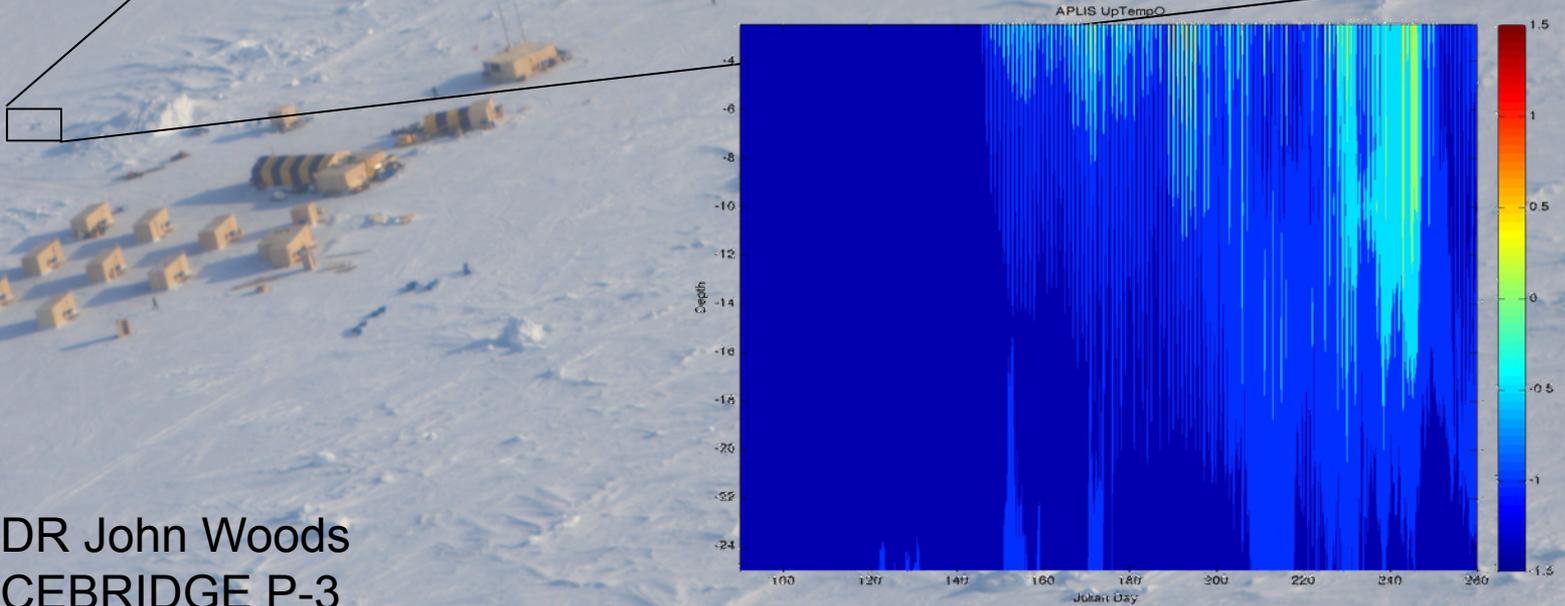
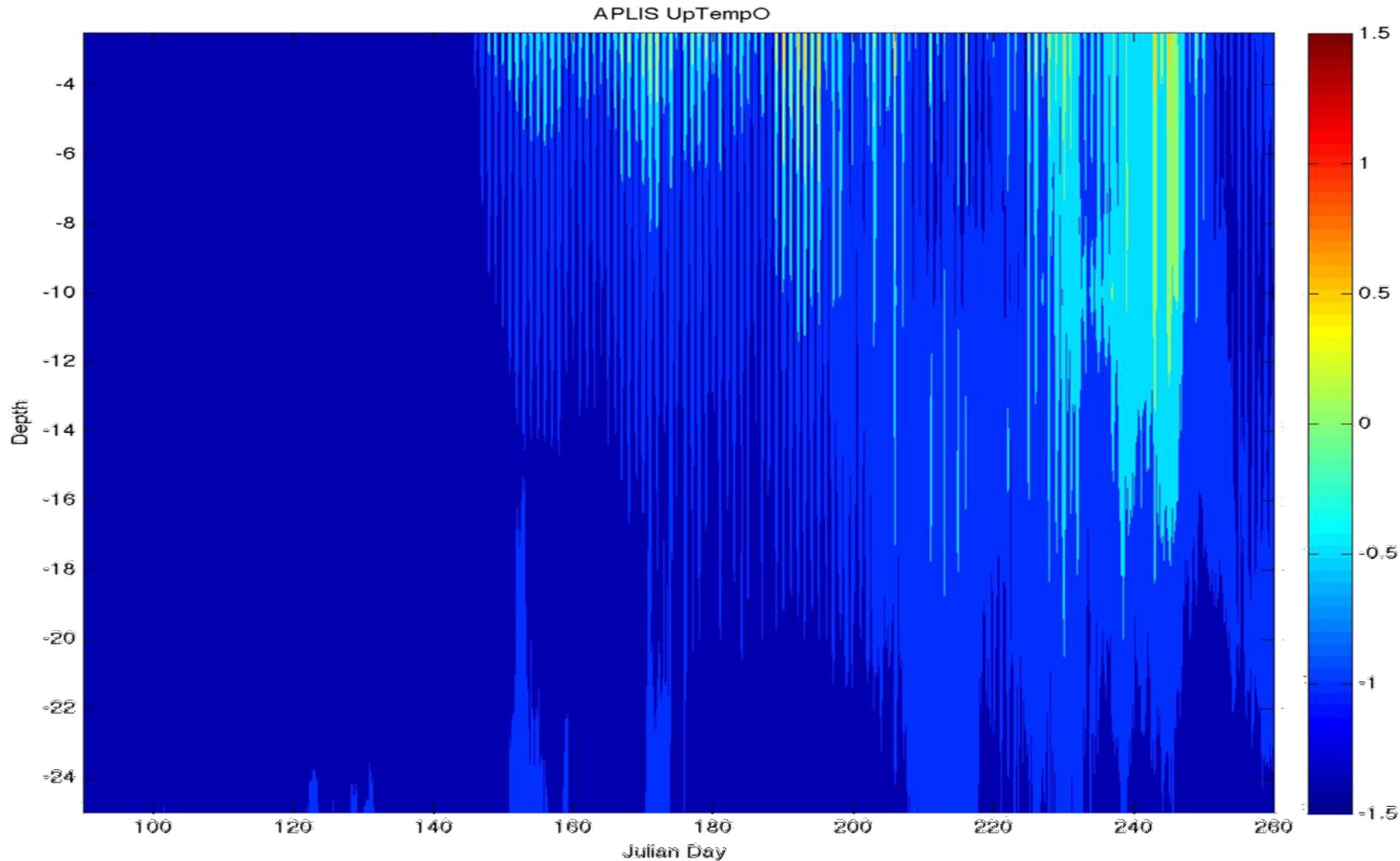


Photo by LCDR John Woods
from NASA ICEBRIDGE P-3



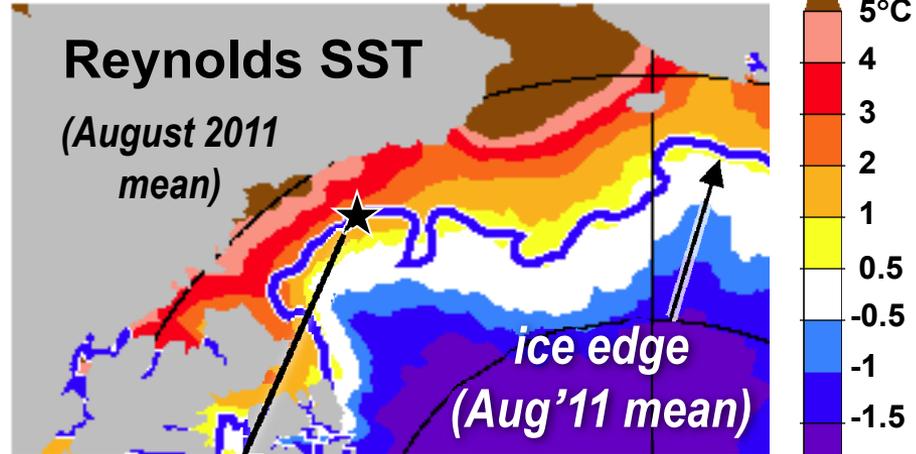
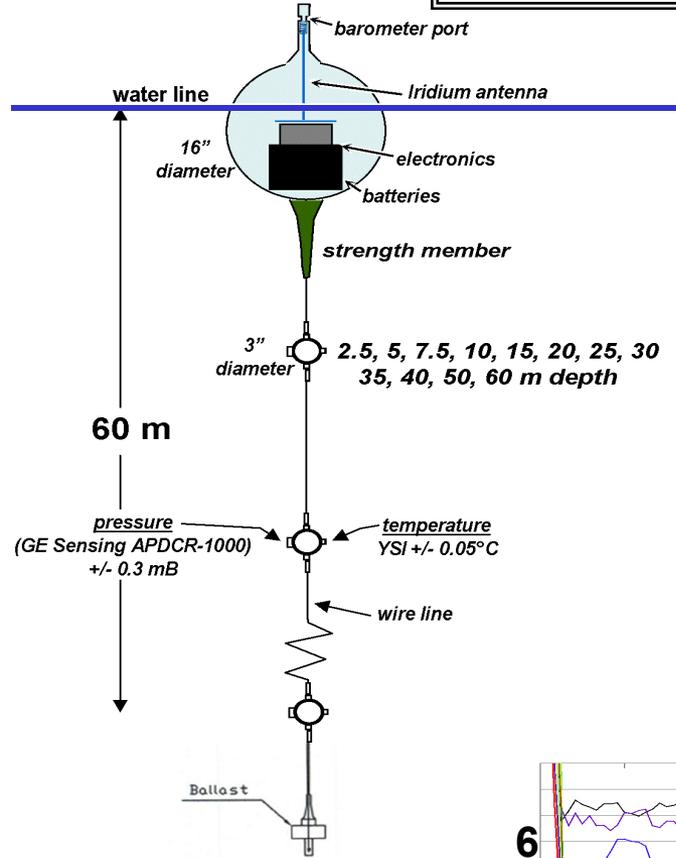
Impacts of Retreating of Arctic Sea Ice

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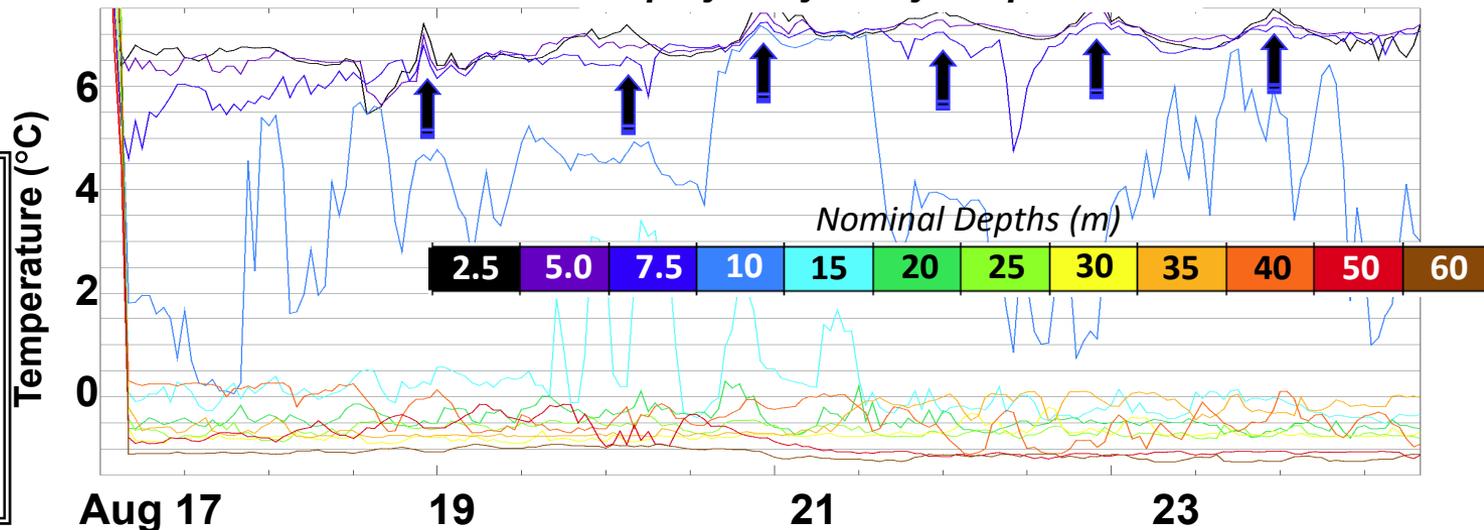


Upper Temperature of the polar Oceans: the UpTempO buoy

NSF/NOAA "Arctic Observing Network" project:
 M. Steele + I. Rigor



Deployed by Healy in open water



UpTempO:

1. Reynolds too cold?
 (more analysis....)
2. Diurnal cycle!
 (stronger under ice!)

Video of
Coast Guard
Arctic Domain Awareness
Buoy and AXCTD deployments
[YouTube](#) and [.mov](#)



Kodiak ADA 2011-8-23 AXCTD 1 Drop 1 72° 59.7' North 150° 0' West

