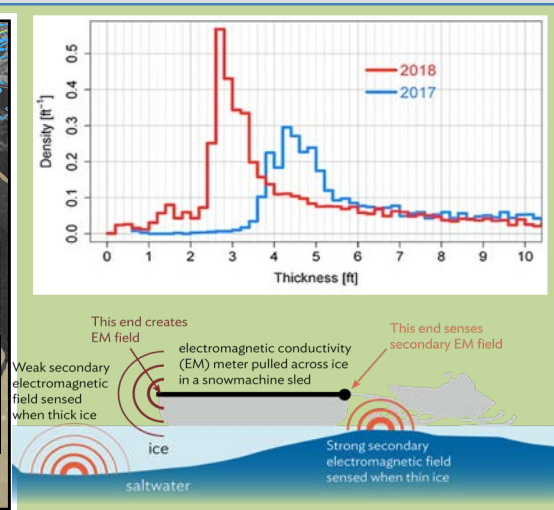
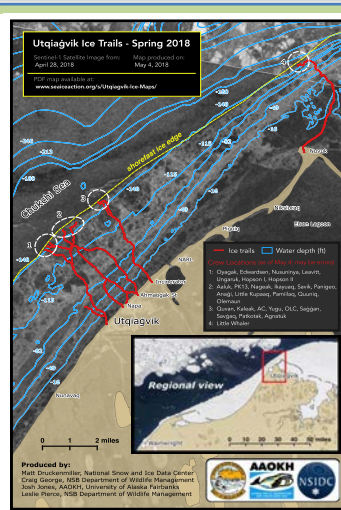
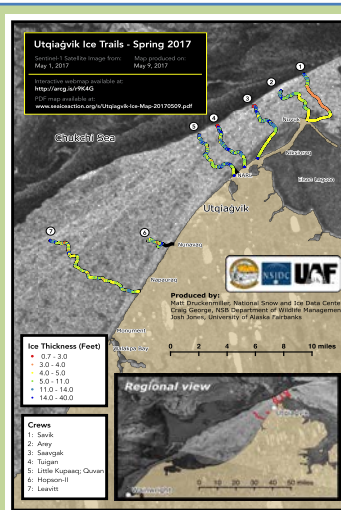
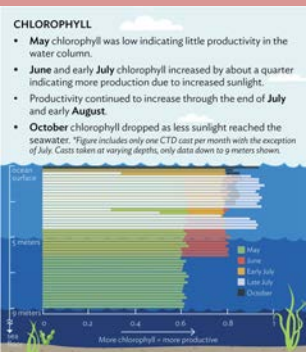
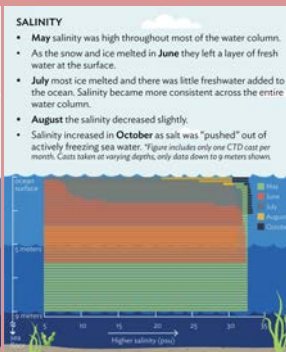
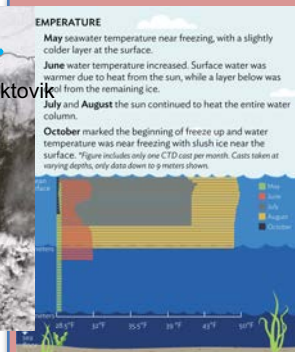
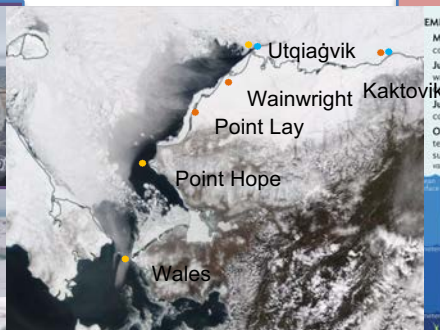


Alaska Arctic Observatory and Knowledge Hub

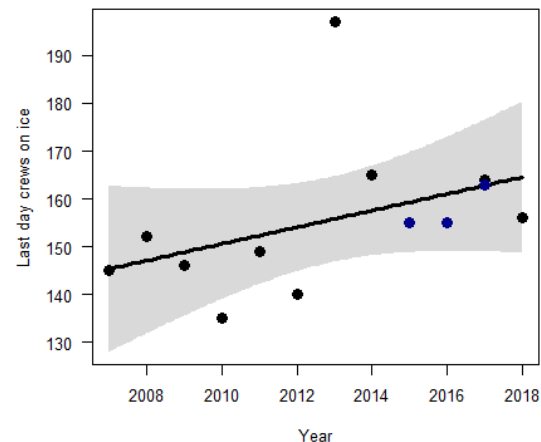
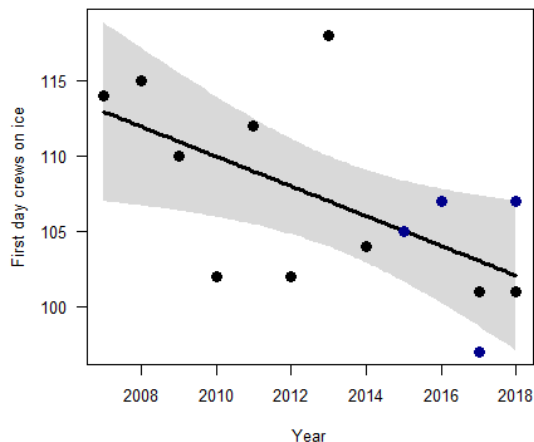
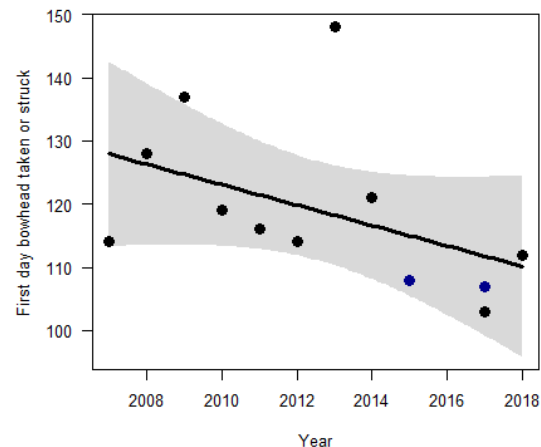
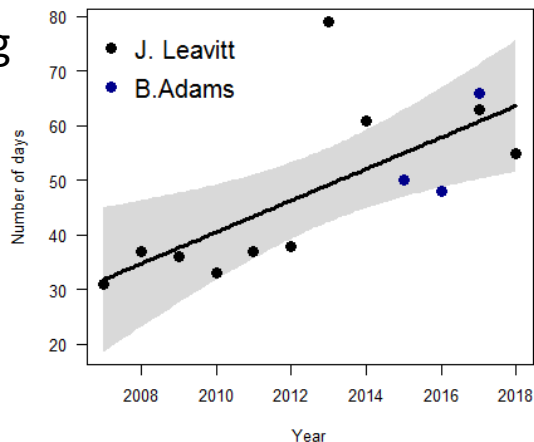
Community-based observations of changes in the seasonal cycle in Alaska's Arctic



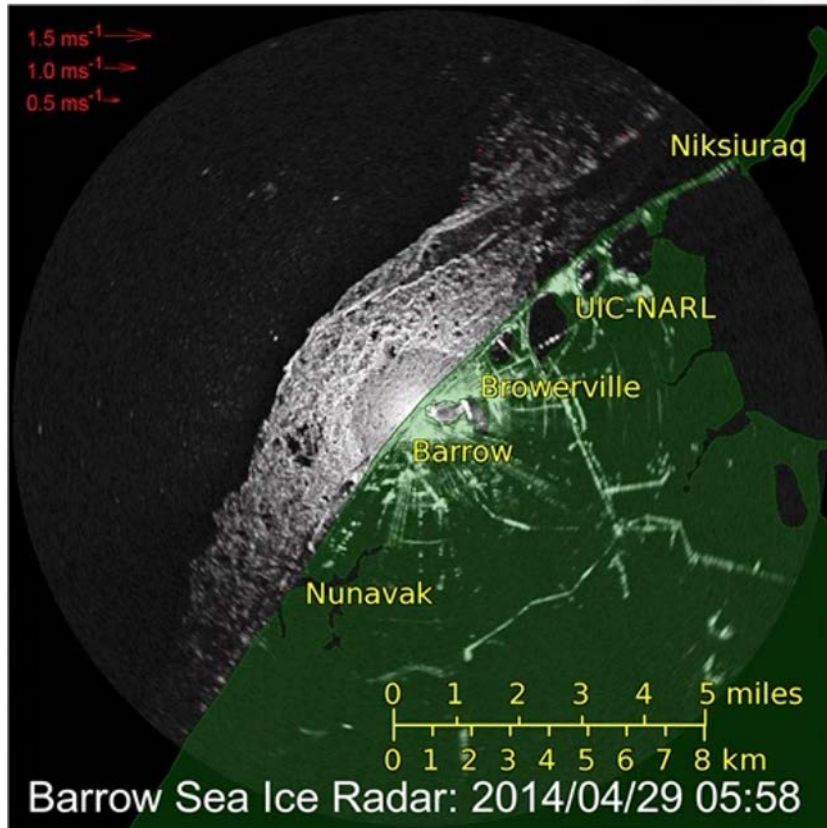
Changes in timing and length of Spring Whaling Season in Utgiaqvik (Barrow)

- Larger number of days of crews on the ice
- Earlier first day of crews hunting on the ice
- Earlier first day of Bowhead whale strike
- Later last day of crews hunting on ice

Longer Landfast Ice Whaling Season!
Earlier Whale Migration!



Sea Ice Hazards



Research Example on Fast Ice Breakout

- Determined gridded velocity field
- Calculate divergence/convergence
- Estimate ridge grounding strength (RGS)
- Compare RGS to wind and current stresses on ice, keep in mind local changes in water level
- Provides insight into ultimate causes of breakout event (normally a complicated combination)

April 29, 2014 Breakout Event Specifics

- SW current (uncommon); SW wind switched to NE
- Current switch to NE; wind switch to SW
- People stranded on mobile ice required rescue
- Local observers knew of crack at breakoff line

Sea Ice Hazards

