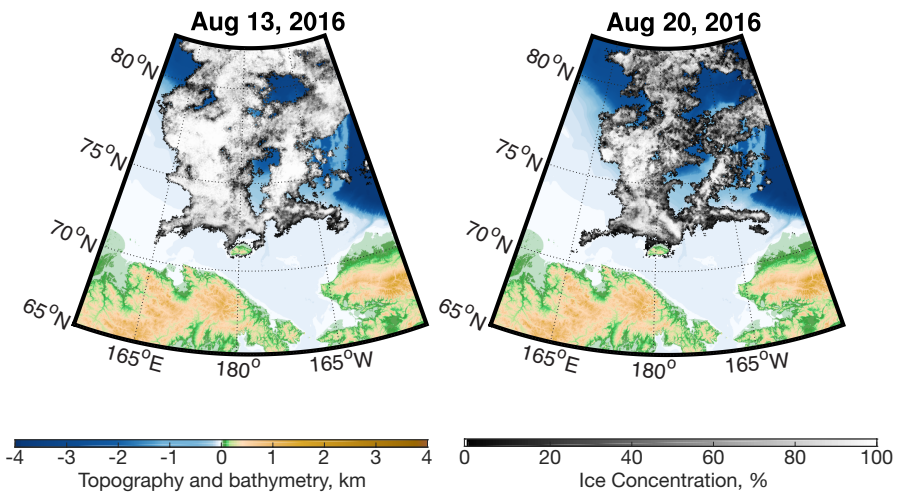
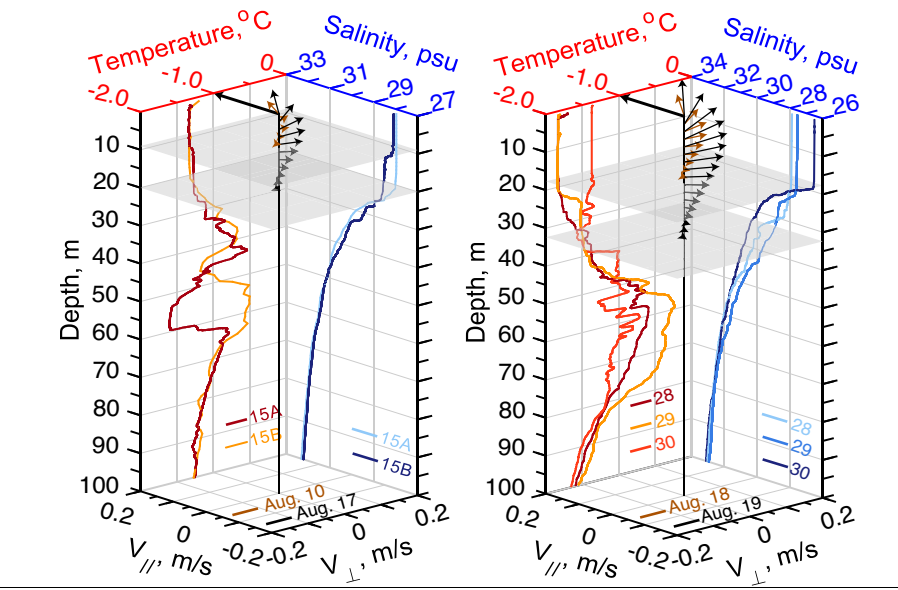
Impact of Arctic Synoptic Storms on Sea Ice



Sea ice concentrations (AMSR2) before and after two intense storms from an Arctic storm case study.



The upper ocean structures from CTD observations collected before (CTD 15A and 28) , during (CTD 15B, 29, and 30) storms.
Peng L., J.H. Kim, X. Zhang, K.Cho, B.M. Kim, S.J. Park, and Z. Wang (2018), Two Intense Arctic Storms Occurring in Summer 2016 and their Impacts on Melting Process of Sea Ice. (to be submitted)

Increased frequency of extreme storms move into the Arctic often raises great concerns.

- Storm invasions may transport heat and moisture poleward and further impact cloud covers and precipitations.
- High surface winds induced by storms may enhance upper ocean mixing and upwelling of the subsurface warm water.
- The seasonal course of the sea ice melt accelerates.

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