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Presentation Type: Remotely, Oral

Topic: Chukchi Sea salinity

Title: On the link between Chukchi Sea SSS and Bering Strait inflow

Abstract: The Chukchi Sea is an Arctic marginal sea with a slightly saltier mixed layer than the surrounding open Arctic waters by a few practical salinity units. This higher salinity results from the influx of warm, salty Pacific water through the Bering Strait, suggesting that changes in properties of this inflow could affect the thermohaline characteristics of the Chukchi Sea. Recently, two additional factors have been identified as important influences: the strength of boundary currents along Siberia's coast and north-south exchanges driven by zonal wind patterns. In this presentation, we explore how combining satellite salinity data with in-situ measurements from Bering Strait buoys improves our understanding of upstream salinity influences and enhances insights into the connection between Chukchi Sea SSS and Bering Strait salinity transport.