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Title: Low-frequency sea level variability in the Labrador Sea from altimetr WOCE data (Invited by Prof. C.K. Shum, the convener of IWG3C)

Abstract:

Interannual sea level variability in the Labrador Sea is studied using TOPEX/Poseidon altimeter data and hydrographic data from a WOCE repeated section. The altimetric sea level in the deep western Labrad shows significant (moderate) interannual variation in fall/winter (sum The winter sea level variation is correlated with the winter air temper with a significant time lag, in response to intensification and relaxatio deep convection in the Labrador Sea. The summer variation is correla with the summer air temperature, presumably as a result of thermoh expansion/contraction of the seawater. The sea level measured by the altimeter is in good qualitative and fair quantitative agreement with t steric height computed from the WOCE data, but with notable discrep in some years. A North Atlantic wind-driven model is used to examine dynamic effects associated with large-scale barotropic ocean circulati interannual sea level variability is further discussed in the context of North Atlantic Oscillation.

Presentation Mode: Oral

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Status: Pending.

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