

# On the seasonal variation of the Bering Slope Current and anticyclonic eddies

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The Bering Slope Current (BSC) flows along the continental slope between the broad continental shelf and the deep basin in the Bering Sea. In this study, we consider the seasonal variability of the BSC and associated eddies by using a high-resolution model output. The BSC is strong (weak) in winter (summer), when isopycnal surfaces deepens (shoals) through the propagation of coastally trapped waves. The eddies are generated as a result of baroclinic instability when the BSC is strengthened, extracting potential energy from the BSC. The seasonality of the BSC, as well as the eddies, is controlled by the seasonal variation of the Alaskan Stream via coastally trapped waves, generation of which is attributed to the seasonal variation of winds along the Alaskan coast.

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