Intra-seasonal variation of cross-shore and longshore water flow of the Labrador Current using mooring data

Current meter data were obtained from the World Ocean Circulation Experiment (WOCE) to study intra-seasonal variation of the Labrador Current (LC) from 1996-1998. Current speed and direction measurements from a depth of 200m were decomposed into longshore and cross-shore components. Seasonal, monthly, and weekly current averages were calculated. Tests for variance, such as percent outliers of current speed and direction as well as a test for frequency of events, were done. Spring showed the most important trend as a variable season, with the highest readings in average current speed, frequency of events, and percentage of both speed and direction outliers. Winter also showed a common trend as it was significantly different from spring in average current speed, frequency of events, and percentage of both speed and direction outliers.