

Temporal and spatial variability of the Labrador Current

G. Han

Fisheries and Oceans Canada (Email: HanG@dfo-mpo.gc.ca. Fax: 1-709-772-4188)

We synthesize TOPEX/Poseidon and Jason altimetry sea level data with hydrographic data to investigate temporal and spatial variability of the Labrador Current. For an estimation of the absolute geostrophic currents, sea level data are referenced to different geoid models. The sensitivity of the estimated currents and transport to these models are examined. The results indicate significant barotropic component in the Labrador Current. There are prominent along-stream changes of the Labrador Current. Seasonal and interannual variations are also significant. The estimated currents are evaluated against moored current measurements and model results.