

Supplement 1

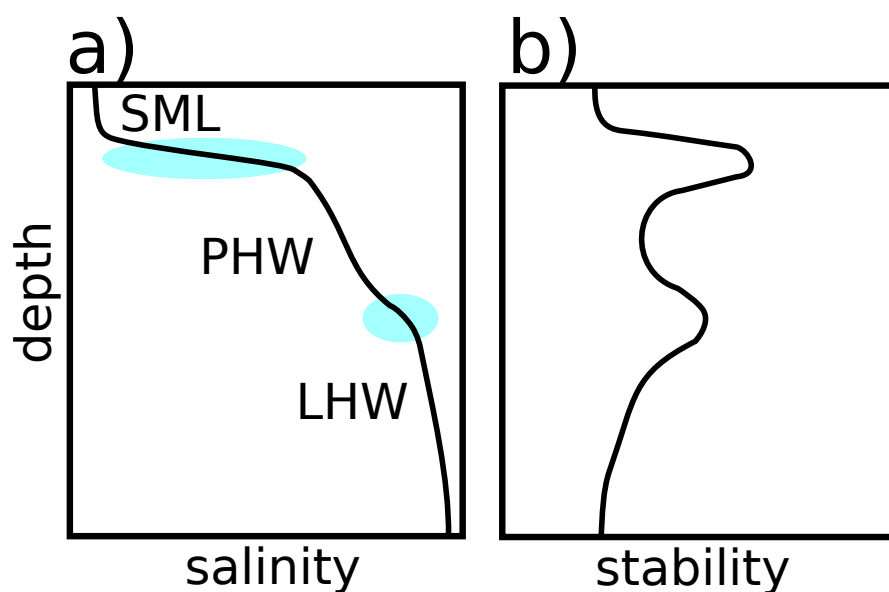


Figure S1. Schematic salinity (a) and stability (b) profile in the Canada Basin. Blue shadings in (a) indicate an increase in salinity below the surface mixed layer (SML) associated with the Pacific Halocline Water (PHW) and another increase associated with the Lower Halocline Water (LHW) below the PHW. These salinity gradients result in two distinct local stability maxima between the surface and the Atlantic Water below the LHW (b). The salinity profiles in (a) are similar to the ones in Shimada et al. (2005). Supplement 2 shows similar profiles for salinity and stability from ITP-41 in the Canada Basin and also includes temperature profiles.