

Supplementary Material:

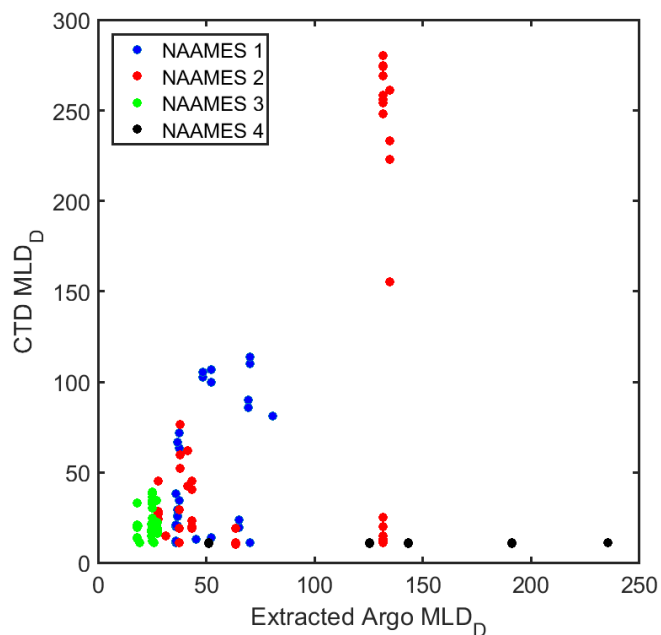


Figure S1: Scatter plot comparing *in situ* CTD estimates of mixed layer depth (MLD) with MLDs extracted from Argo data (climatological MLDs). MLDs were detected using the density algorithm (Holte and Talley, 2009; Holte et al., 2017)

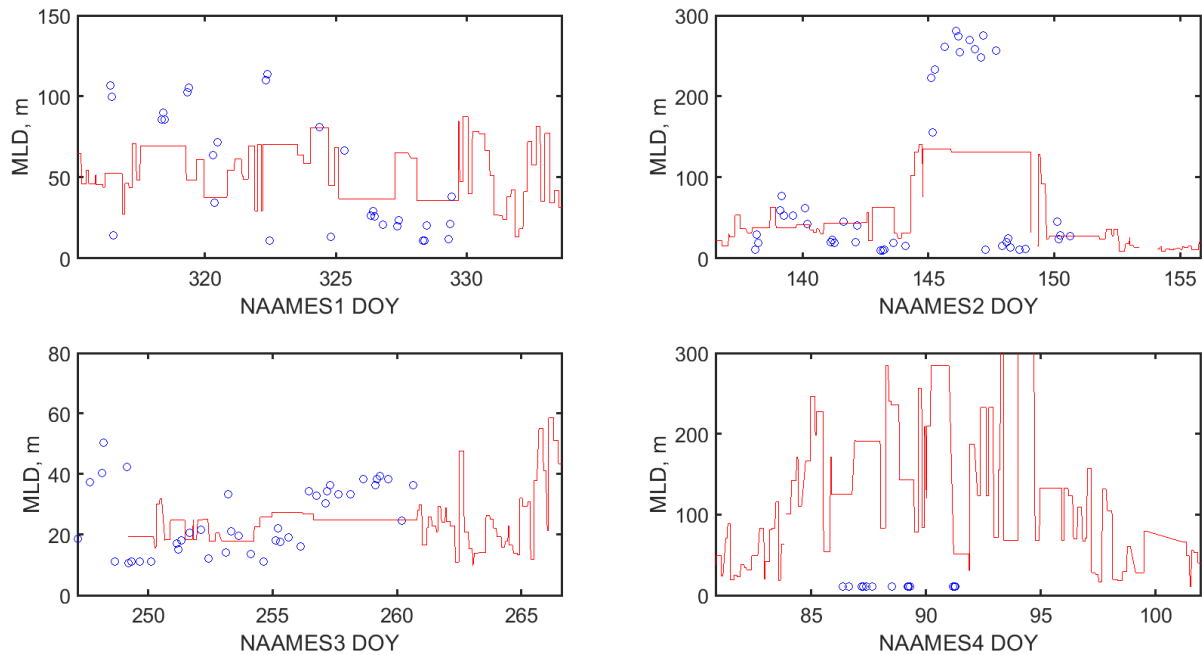


Figure S2: Timeseries comparison of *in situ* CTD estimates of mixed layer depth (MLD, blue circles) with MLDs extracted from Argo data (climatological MLD, red line) for each NAAMES cruise. MLDs were detected using the density algorithm (Holte and Talley, 2009; Holte et al., 2017).

References:

Holte, J., and Talley, L.: A new algorithm for finding mixed layer depths with applications to Argo data and subantarctic mode water formation, *Journal of Atmospheric and Oceanic Technology*, 26, 1920-1939, [10.1175/2009jtecho543.1](https://doi.org/10.1175/2009jtecho543.1), 2009.

Holte, J., Talley, L. D., Gilson, J., and Roemmich, D.: An Argo mixed layer climatology and database, *Geophysical Research Letters*, 44, 5618-5626, [doi:10.1002/2017GL073426](https://doi.org/10.1002/2017GL073426), 2017.