

Dear Dr. Garrett,

I have replaced several figures with high-resolution versions; the most significant improvements are seen in Figures 1, 3, 4, 8, and 10. In addition, to better present Figure 10, right after referring to it in Section 4.2, we have added the following text: “In the upper 100 m, the characteristics structure of the CHL can be seen: the temperature is approximately uniform near the freezing point and salinity increases with depth. A distinguishing feature of this profile, however, is the temperature minimum between 50 and 100 dbar, where a local increase of salinity is observed. This subsurface layer of elevated salinity is at its freezing point (see the inset temperature-salinity diagram). This structure is a signature of local brine release, contributing to the variability in stratification in the CHL.”

Thank you very much for your efforts in evaluating the manuscript!

Best regards,
Timo Vihma