

Line numbers are from the tracked-changes version

line 761: σ_{θ} is the potential density anomaly (not the specific volume anomaly).

Corrected.

Strictly, PSU is not accepted (but it is still seen in some papers). Practical Salinity (unitless) is given in the practical salinity scale. In the introduction, Li 47 gives the salinity gradient in PSU m⁻¹, whereas line 66 refers to literature with Absolute Salinity (in units of g kg⁻¹). The latter is the standard we encourage; however, the use of Practical Salinity is accepted as long as this is stated clearly. Because the gradient will be the same (and you are using an approximate sign), I suggest you replace 0.5 PSU m⁻¹ to 0.5 g kg⁻¹ m⁻¹. Or specify as "salinity measured in practical salinity scale (0.5 m⁻¹)".

Thank you for pointing this out. It is true that we could have used absolute salinity and conservative temperature from the outset of this study, but for reasons of characterizing water masses and comparing with the literature, we preferred to stick with the practical EOS-80 scales. We have made the necessary corrections to remove the reference to PSU.

Line 156: replace salinity with practical salinity.

Corrected.

In line 158, insert, "The practical salinity is measured in the practical salinity scale."

Corrected.

Li 185: for practical salinity

Corrected.

Li 210, 412: consider removing PSU

Corrected.

Ideally, we do not want PSU in the figures, but because the required changes are substantial, I leave this up to you.

All the relevant figures have been corrected.

Where you use σ_{-1} , in figure captions, please specify as "potential density anomaly, σ_{-1} referenced to 1000 dbar pressure".

Corrected.

Figure 13 seems like σ_0 . Please specify as "potential density anomaly, σ_0 referenced to the surface pressure".

Corrected.