

RC C128: 'Thermodynamic Properties of Standard Seawater', Petra Spitzer, 9 June 2009

Nr	Question	Answer
1	Page 690 line 4: the claimed uncertainty seems to be a relative experimental standard uncertainty.	Already corrected as: Measurements of (p, ρ, T) properties of standard seawater with practical salinity $S \approx 35$, temperature $T = (273.14 \text{ to } 468.06) \text{ K}$ and pressures, p , up to 140 MPa are reported with the reproducibility of the density measurements observed to be in the average percent deviation range $\Delta\rho/\rho = \pm(0.01 \text{ to } 0.03) \%$.
2	Page 698 lines 9 to 11: The second sentence is not clear to me. What does 0.084 kg m^{-3} mean? Proposal: The Eqs. (6–7) describe the experimental results of density of standard seawater with a relative experimental standard uncertainty of 0.006%, the maximal deviation between measurement points and the equation of state is 0.280 kg m^{-3} .	Corrected.
3	Many figures: Too many curves. Especially the "x"-marked values referred to Millero are more or less not visible.	These all figures already discussed and decided by authors and other referees. Regarding the comparison of compressibility and expansibility values with other values by (Millero et al., 1980), the necessary amount of information was included to the manuscript. The figures 7 and 9 are only for the visual show.