Ocean Sci. Discuss., https://doi.org/10.5194/os-2017-71-RC2, 2017 © Author(s) 2017. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "The density-salinity relation of standard seawater" by Hannes Schmidt et al.

Anonymous Referee #1

Received and published: 22 September 2017

The authors have done a good job in responding to my concerns. I just have 2 minor comments:

- 1) I think it would be good in the paper to briefly mention other measurements in addition to density that might be recommended to be made on standard seawater, especially measurements that might help interpret changes in density. The authors point out that silicate is in this category. Since the variations in density they are considering are of similar magnitude to variations due to isotopic composition, it seems like that would be another especially since I believe isotopic composition measurements on water are now fairly routine due to their importance in geoscience.
- 2) If the proposed formulation does not obey the correct physical boundary condition at zero density, that should be mentioned. It is probably of little practical relevance, since C1

I think the authors do not anticipate using their relationship at salinities below 5 or 10, but a brief statement might keep other people in the future from trying to use it at dilute conditions where its behavior is not quite correct.

Interactive comment on Ocean Sci. Discuss., https://doi.org/10.5194/os-2017-71, 2017.