

Interactive comment on “Spatial scales of temperature and salinity variability estimated from Argo observations” by F. Ninove et al.

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Using established statistical methods and the availability of ocean observations from the Argo network, spatial scales of T and S fields are estimated over the global ocean. The results confirm previous evaluations (for the most obtained from altimetry), although they provide for the first time estimations at depth. A clear difference between the zonal and latitudinal scales is also highlighted. Additionally, results provide a test about the dimensioning of the Argo array, obtained by comparing the 2005 and the 2013 network densities. The manuscript is clear and well written. The question is well presented and the analyses are robust and pertinent. I propose publication on Ocean Sciences, with minor revision, as following:

1. I probably miss something, but could you indicate what are black isolines on figures
C663

4,5 and 6?

2. As referee 1, I suggest to indicate somewhere in the paper the estimated scales values obtained for all the boxes of figure 3. This should be a real improvement of the paper for interested peoples.

3. Pag 1798. Line 7. As referee 1, how you obtain the value of a (3.337)??

4. Pag. 1800, line 29, remove double parentheses.

5. pag 1802, line 24 “..precise enough..”. not clear, please rephrasing

Interactive comment on Ocean Sci. Discuss., 12, 1793, 2015.