Interactive comment on “Upper ocean response to two collocated typhoons” by D. B. Baranowski et al.

D. B. Baranowski et al.
dabar@igf.fuw.edu.pl

Received and published: 20 March 2014

We are grateful to the Referee for his or her review and a thorough reading through our manuscript. Below we respond to specific comments of the Referee.

p. 2264, line 22: We use quantitative definition of the MLD based on temperature profile. Quantitatively MLD is defined using temperature threshold criterion of 0.2degC with reference to 10m depth.

p. 2265, line 1: Yes, it is. Up to very recently, most of the Argo floats, including one used in this study stopped measurements at approximately 4dbar (4m). It is still the most common mode of operations in newly deployed floats.

Figure 2: Mean vertical profiles were calculated using Argo monthly climatology derived
by Roemmich and Gilson (full reference is defined in the paper). This dataset provides monthly estimates of the ocean stratification on a regular grid of 1x1 degrees. It does not provide information on how many profiles were used to calculate such monthly estimate. Mean monthly estimates for September are plotted using this dataset for years 2004-2012. Thus, 9 monthly profiles were used to calculate multiyear mean for September. Additionally, profile for the September of 2008 is plotted with thick black line.

Technical Comments and mistakes noted by the referee have been corrected, with the exception of p. 2261, line 19. Please note that on p. 2260, line 9 (original manuscript before changes to the text after the Revisions) Figures 3 and 4 were introduced. Therefore, Figure 5 is introduced later in the text. There is however another reference to Figures 3 and 4, after Figure 5 has been introduced, on which the Referee is commenting, but it is just another reference to the figures that have been previously introduced.

Question regarding Figure 1: Source of the climatology is Argo climatology by Roemmich and Gilson (2009), which is limited to Argo data only and does not provide estimates in marginal seas.

Interactive comment on Ocean Sci. Discuss., 10, 2255, 2013.