

Interactive comment on “The vertical distribution of buoyant plastics at sea” by J. Reisser et al.

Anonymous Referee #2

Received and published: 29 January 2015

General

This paper represents a thoroughly designed study, which combines field data with results from laboratory experiments in a very elegant manner. The informations presented are based on a new type of sampling device, a sound sampling strategy and this study also presents new information about rise velocity of plastic pieces. The text is very clear and reads fluently. The material and method section illustrates all required informations (sampling and experimental design, sampling gear, analyses, definition of used models and their parameters) very clearly and in a comprehensive manner.

Specific comments I have three minor comments/proposals:

1) You may consider to show/to add a graph of the relationships presented in Figure 3 (normalized plastic numerical and mass concentrations under different Beaufort scales) as predicted (model of Kukulka et al., 2012) versus observed values, in order

C8362

to demonstrate the fit/differences between the two approaches.

2) Page 1625, Line 20 - 25 "Such differences evidence the importance of better predicting the vertical transport of ocean plastics to develop standard plastic load estimation methods". I agree, however you would also need detailed information about sea state zones (i.e. size and effects of convergence zones) to increase the accuracy of predictions.

3) Figure 5 B, C: I would suggest to use m s^{-1} not m/s .

Sorry for the delay.

Interactive comment on Biogeosciences Discuss., 11, 16207, 2014.

C8363