

Interactive comment on “Factors controlling the depth habitat of planktonic foraminifera in the subtropical eastern North Atlantic” by Andreia Rebotim et al.

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Received and published: 17 January 2017

Dear Dr Rebotim and co-authors,

Thank you very much for uploading your answers to the reviews by Drs Bijma and Mortyn. I think you have satisfyingly replied to their comments and improved your manuscript accordingly. Therefore, it is fit for publication in Biogeosciences after incorporating some minor issues I came across when reading the second version of your manuscript. Please incorporate them along with the changes you suggested yourself before uploading your final version.

I think it is good to incorporate (briefly) the reply to Dr Bijma's first comment (i.e. the

C1

use of a size fraction for which the mortality is in the manuscript. For example, in the beginning of the discussion (page 11, somewhere between lines 15 and 25).

Page 2, line 18: this sentence “...in the plankton (Berger, 1969.....” seems incomplete.

Page 2, line 26: consider changing “...mechanism, with buoyancy being regulated by...” into “...mechanism, which is primarily regulated by...”

Page 2, line 28: “not sufficiently known” reads better as “not fully understood”

Page 3, line 5: the word “simulating” is slightly confusing here. Consider changing into: “...internal waves, leading to apparent vertical migration...”

Page 3, line 22: “...in many species...” should be “...among species...”

Page 5, line 27: I guess in some cases it was a midi- and in others a maxi-version of the Hydrobios net. Then it would be better to state “...either a Midi- or Maxi multiple closing net...”

Page 6, line 25: please specify “satellite values”. Values for what?

Page 6, line 31: please specify “the vertical profile for each species”. Their abundance?

Page 7, line 14: replace “ones” with “variables”.

Page 9, line 9: what does “seem to vary in proportion to their ALD” mean?

Page 9, line 21: replace “to a certain degree due to the” by: “caused by an”

Page 12, line 15: “...it could also represent...” should be a separate sentence.

Page 12, line 17: delete “had”

Page 13, line 14: insert “thereby” after the second “and”.

Page 13, line 28: insert a dot after “al”

Throughout the discussion: ALDs “below” or “above” a certain value can be confusing.

C2

Please refer to ALDs that are shallower or deeper than x meters.

Page 18, line 25: replace “above” by “more than”

Page 22, lines 11-13: this sentence is unclear. Equilibrium with respect to what? I guess this mainly refers to oxygen isotopes, because e.g. Mg/Ca is never said to be “in equilibrium” with that of seawater (although the reference to Nürnberg suggests that this sentence also refers to e.g. Mg-incorporation).

Page 22, line 26: complexity in what?

Page 22, line 29-30: what is the consequence of the (potentially) variable concentrations of pigments?

Interactive comment on Biogeosciences Discuss., doi:10.5194/bg-2016-348, 2016.