MS #: bg-2016-139 R2

MS Title: Environmental drivers of coccolithophore abundance and calcification across Drake Passage (Southern Ocean)

MS Authors: Charalampopoulou et al.

30th September 2016

Dear Dr K Suzuki,

Please find below the response to reviewer 1 and yourself.

Best wishes,

Alex Poulton and co-authors

Referee #1

Charalampopoulou et al. provided a (new) revised high quality and well written version of the manuscript: “Environmental drivers of coccolithophore abundance and calcification across Drake Passage (Southern Ocean)”. As I mentioned in the first review, it is actually a very interesting piece of work.

I went through both reviews (including responses) and checked carefully the new version of the manuscript, and I consider that the authors took into consideration all the suggestions provided. Charalampopoulou et al. extensively replied to the majority of the comments and convincingly rebutted the rest. They even improved by adding updated information from the Great Calcite Belt (Balch et al., 2016), just published last month.

I was a bit confused with the number lines included in the “response to the Anonymous Referee #1”, because they do not match with those in the last version of the manuscript (e.g. in the 2nd response line 550 should be 536, 643 should be 631). However, I do not think this is relevant.

I would only comment on:

Line 913: Double check if you need “pp.” before the number of pages.

Response: We have no reformatted all the references to follow the Copernicus Publications References (as asked by the Editor). We apologise for this oversight in the previous drafts of the paper.

Line 925: The year is missing.

Response: Corrected

Fig. 5: I would enlarge the dashed line from A to D (instead only to C). That will make it easier for the reader.

Response: Done (we made a slight mistake in reformatting the plot that hid the dashed lines from panel D, now corrected).

Editor

Below are a few technical corrections.

Line 147: Please use the math symbol “×”, not alphabet “X”.

Response: Corrected.

References: Please follow the Copernicus Publications Reference Types described below. For example, please insert “and” between the last author and the second from the last. Journal names are generally abbreviated. Also please use comma, not period, before publication year.

Response: References have all been reformatted following the Copernicus Publications Reference Types document.