Response to RC3:

Dear Mr. Tobias-Hunefeld,

Thank you for taking the time to go through this review. We appreciate the positive feedback and are happy that you evaluate the manuscript to be in a publishable state after some minor revisions.

Here are our responses to your comments.

L81 - many times repeated statements, remove superflous sentence: Our OMZ treatment thus had two levels: low NOx- and very low NOx-.

- This is a fair point. We removed that sentence and slightly modified the preceding one to improve readability.

L320-329 - You are presenting results here for the first time, this should be in the results section.

- This paragraph indeed reads as if results were presented for the first time.
- There are two pieces of text which could be regarded as results. One is: "We did not find a correlation between the 5-fold drop in biogenic silica ballasting and mean particle sinking velocities." This is in fact a main result and is already covered in the Results section (lines 276-277).
- The other piece is: "Using Stokes' law (Stokes, 1851), we calculated The effect of different opal ballasting on the sinking velocity of idealized particles. […]" We believe this is the part that you suggest moving to the Results section. However, this is not an empirical result, but a purely theoretical calculation to augment our discussion. Nevertheless, it is written as if it were a result, which makes it ambiguous. We therefore re-wrote this part of the paragraph so it now reads:
  "The effect of different opal ballasting on the sinking velocity of idealized particles can be calculated using Stokes' law (Stokes, 1851). Let us assume two spherical particles with 100 µm diameter that consist of POC and BSi exclusively (densities of 1.06 and 2.1 g cm-3, respectively, Klaas and Archer, 2002). One has an opal contribution of 25 %, the other of 5 %, which represents values from before and after the opal drop during phase II. The sinking velocities will be 137 and 40 m d-1 for the 25 % and 5 % opal particle, respectively."
- We hope that you agree with us that the Stokes' law calculation is not an empirical result but rather an additional consideration and can remain in the Discussion paragraph in its revised form.

Thank you for your time and consideration.

With kind regards,

Moritz Baumann