

Author's response:

Find here the response to the 2 changes suggested by both reviewer #1 and the editor:

*(1) How exactly did you calculate the flux-weighted mean shell weight of *N. incompta*?*

The flux-weighted value has been calculated as described in section 3.4. The mean monthly flux for every month has been multiplied by the mean shell weight for every corresponding month and then divided by the total annual flux of the corresponding species. Reviewer #1 suggested to carefully check the values as they seemed odd for *N. incompta*. After checking, we found the mistake and the value of 3.3 μg is wrong. We apologize for the inconvenience.

The updated value is 3.9 μg , which is more in accordance with the general weight of the sediment trap populations. This change has been done in all parts of the manuscript and the corresponding numbers and interpretations have been adapted.

Changes can be found in lines: 56, 627, 633, 641, 649, 965 and 986.

(2) Please adjust the ages provided in the legend of figure 6.

This has been corrected and now, the ages and the methodology is also referenced in the figure legend.

Changes can be found in Figure 6 and lines 922, 923 and 924.

On top of that, the manuscript has been carefully checked for grammar errors, writing mistakes and spelling.