

We would again like to thank Professor Damien Cardinal for their thorough review of our manuscript and their helpful comments. We believe that we can address all of the comments indicated by D. Cardinal as indicated in the discussion below. Note that the italicized text represents the comments made by D. Cardinal and non-italicized/bold text is our response.

*P4 L2 vs. Table 1: in the text neb flow rate is 100 uL/min while it is 60 uL/min in Table 1. Homogenise.* **We will change the flow rate to 100 uL/min in Table 1.**

*- Fig. 4 and in the text associated. 1) In this figure, the authors compare their GEOVIDE data with the two previous studies in the North Atlantic of Brzezinski & Jones (2015) and de Souza et al. (2012). Since Brzezinski & Jones chose to correct the offset between their data and the ones of de Souza et al. by  $\pm 0.11$  pmil, I suggest the authors here clearly mention that they always use the non-corrected data (which I believe is the right way to proceed) to avoid confusion with corrected data discussed in Brzezinski & Jones. 2) Important. Provide error bars of the three slopes and intercepts. Variability of GEOVIDE dataset seems higher. This should be checked and discussed. It is particularly needed given the offset found between the three data set that remains unsolved.*

**Thank you for bringing up these important points. We will make the changes that you suggest. Indeed, the variability of the GEOVIDE data set is higher (stdev of the slope of 1.1 vs. 0.3 for the two other slopes). In addition, I noticed that one data point was missing from the supplementary table (although had been included in Fig.4) and that several data points were missing from Fig. 4 for the depth range between 1000-1500m. These data were available in the supplementary table, and my original regression calculations. I will now include them in the new Fig. 4 along with all of the data requested by the reviewer.**

*- Fig. 5d is a key figure and is much too small when printed. Moreover the DSi concentration is missing. I suggest to restrict Fig. 5 to the current panels a, b, c and to add a fig. 6 with current panel 5d + a panel with DSi concentration. Alternatively, Fig. 5 could cover a full A4 page and not just less than half of it. I agree with the reviewer that we could split Fig. 5d off as a figure of its own. I will include a new Fig. 5abc and Fig. 6.*

*- Could the authors provide a table with  $d_{30Si}$  and DSi end-members of water masses C2 as calculated from their isotopic data and the contribution based on OMP from Garcia-Ibanez et al. (2017)? This would be very useful. Yes, we can do this, we can include it as a supplementary table.*

*- Supplementary Table S1: provide in the Table caption the definition of  $Si^* = DSi - NO_3$ .* **We will make the changes recommended by the reviewer.**