

I appreciate the authors' efforts in addressing my previous comments and revising the manuscript accordingly. The clarity of the paper has improved. Only a few minor points remain, which are detailed below.

Lines 65-68: The final version of this part in the manuscript is slightly different from the one indicated in the authors' reply to my comments, but this is fine, as the main suggestion has been implemented.

Lines 170-172: The authors stated that here they prefer using "bioregion" instead of "cluster" because this sentence refers to their latitudinal distribution. I understand this motivation; however, for the reader this is the first explicit reference to the obtained bioregions, which are shown in Fig. 2a, but have not yet been introduced (the previous sentence refers to the clusters in Fig. 1). To improve readability, I suggest explicitly referring to Fig. 2a at the beginning of the sentence, e.g., "These patterns, corresponding to the bioregions in Fig. 2a, range from no clear seasonality (bioregion 1), ... typical of blooms in temperate and high-latitude systems."

Line 212, Figure 3: I appreciate the new version of the figure. Upon closer inspection, there may be an error in the computation of the interquartile range. According to the text, this range should encompass the statistics for 26 threshold values $\times$ 10 years of estimates (black dots) within each of the two decadal periods. However, the figure shows substantial discrepancies; for example, the error bars in Bioregion 2 extend well beyond the distribution of all black dots. If a different definition of the interquartile range was used, I suggest specifying it more clearly.

Lines 238-239: There is a possible typo in the sentence: "Minor changes, associated with an area inferior to 0.1% of the global ocean, are not represented". I believe that the authors may have meant 0.01%.

Lines 220-222, Figure 4: I suggest rephrasing panel (b) to maintain grammatical parallelism with panel (a), e.g.: "(b) Latitudinal distribution of bioregions for the 2015-2024 decadal period (filled), compared with the 1998-2007 decadal period (red line)."