

Dear authors,

thank you for very carefully addressing the comments of the reviewers and by extending your analysis to one year of data instead of one month! You also nicely included some additional topics (adding the post-fit residuals).

[KW] Dear Editor, thank you for the comments. We answer below. The changes are marked in text in blue. Figures 3-6 are replaced with figures with new axes labelling.

I only have some small, technical corrections:

* please add the explanation of the colour coding for your box plots in Fig. 5

[KW] We added the explanation to Fig.5.

* in quite a number of figures (3, 4, 5, 6), the x-axis represent the "station number", and stations are numbered by latitude. Those figures would provide more information if the unit of the x-axis would be latitude directly (with a non-equidistant labeling).

[KW] We replaced Figures 3-6. In the new figures, the labels are referring to the latitude.

* at line 236, you write "Not all studies consistently conclude ...". Please give some references for such studies here.

[KW] We added the references.