

Biogeosciences Discuss., referee comment RC2  
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## Comment on bg-2021-20

Anonymous Referee #2

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Referee comment on "Impact of dust addition on the metabolism of Mediterranean plankton communities and carbon export under present and future conditions of pH and temperature" by Frédéric Gazeau et al., Biogeosciences Discuss.,  
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First of all I wish to congratulate to the authors for the huge quantity of data and measurements they have presented, which makes the article interesting and stimulating. Nonetheless some observations are to be made in order to improve the manuscript and make its reading and interpretation easier.

The data presented are maybe too many and the entire manuscript is too long and difficult to follow.

Maybe it would be better to focus on some aspects of the processes described in order to achieve clarity and remove the impression of vagueness, both in the results and in the conclusions, which should be clearer and not indefinite, as they appear.

The paper often reminds to the other article (Gazeau et al. 2020) where the general situation of the stations studied is described, but this makes difficult for the reader to have a clear image of the situation, unless studying the other article.

A very short description could be useful, especially for the phytoplanktonic community, and a short description of the different characteristics of the three stations, as the authors say the change in the community depends on their initial state.

Data show a general great variability, even between the replicates, as the authors themselves underline. Is there an explanation for this? In certain cases it is quite high and might invalidate the whole experiment. If there isn't a reason to keep the replicates separate, cannot you consider to average the two replicates? This can help in the understanding of the figures, especially fig. 2, 3, 4, 6, 7.

Axis title should be enlarged to simplify the reading

The projection of what the dust impact could be in the future is very interesting, but clearer conclusions should be addressed.

Finally, the paper presents data of current interest, and deserves a clearer presentation, so it is worthy publication in Biogeosciences with the improvement suggested.