

We thank both of the reviewers for their thorough review of our manuscript and their constructive comments.

The abstract and the introduction were entirely modified to take into account the reviewer's suggestions in order to make them clearer. Through all the paper, modifications were made to address all of the reviewer's remarks and answer all of their questions. In particular, a new appendix was created where were moved the Figures in Section 4.1 following a suggestion of Referee #1. In addition, the Section 4.6 was strongly modified and expanded to answer one of the comments of Referee #2. This section was modified with the help of Herman Greaker who was added to the list of the authors. The conclusion was updated so that it is consistent with the modifications. Finally, in order to improve language as pointed out by the referees, a proofreading of the manuscript was done.

All the modifications appear in **red** in the marked-up version of the manuscript.