## General response

We would like to thank the editor Max Maahn and both anonymous reviewers for providing swift feedback on the revised version of the manuscript.

## Response to the Handling Editor

Dear authors, thank you for revising your manuscript. Please consider the comments by the reviewer before I can accept the paper for publication. Regards, Max Maahn

We appreciate the swift handling of the review process, and have addressed the two minor comments from RC2 in the revised version of the manuscript. We have also corrected a few typos and linguistic imprecision that we discovered in the meantime.

## Response to Referee Comment 1 (RC1)

The authors have adequately addressed all of the comments in my review of the initial version of this manuscript and I now find this manuscript suitable for publication in Atmospheric Measurement Techniques.

We are pleased that the reviewer is satisfied with the revision and now recommends publication.

## Response to Referee Comment 1 (RC2)

The manuscript has improved considerably after incorporating many of the reviewers' comments. I can accept it for publication after the incorporation of two minor comments/technical corrections:

- 1) Fig. 7: what is the reason to use different colors for the same profile in the different parameters (T, q, ws, wd). It makes it just unnecessary complicated to compare the conditions at the same time. I recommend strongly to change this in the final version.
- 2) line 230: With respect to the turbulence proxy "Details on this method are published in a separate paper."; if published, please include the reference; if not yet published, please modify the sentence correspondingly

We are pleased that the reviewer sees a significant improvement in the manuscript and now recommends publication.

- 1) We used different colour schemes to help the reader to distinguish between the four variables, but we agree that one common colour scheme facilitates comparison of the variables at the same sounding time. Hence, we modified Fig. 7 accordingly.
- 2) Since the separate manuscript on the turbulence proxy methodology has not yet been published, we deleted this setence.