

Response to referee report from Ian Brooks

We thank the reviewer for taking the time to review our manuscript once again and for the valuable comments. Below, we mention the reviewer's comments in italic letters and add then our comments.

All the reviewer comments from the initial submission appear to have been addressed satisfactorily. A few minor technical corrections are required here:

1. *Throughout the manuscript, there should be a space between 'm' and 's' in the units for velocity.*

We corrected this.

2. *line 140: 'only little' -> 'only a little'*

We changed this.

3. *line 152: 'is at 2-3 K' -> 'is 2-3 K'*

We corrected this.

4. *line 212: 'most of the data between the first 200–300m' -> 'most of the data in the first 200–300m'*

We corrected this.

5. *line 288: 'uppermost few quality-controlled wind data.' -> 'uppermost few quality-controlled wind data points.'*

We corrected this.

6. *Figure A1. I presume the vertical lines from the aircraft tracks to the surface are the dropsonde paths, but this isn't mentioned in either the figure caption or main text. Add text to make this clear."*

The vertical lines do not correspond to the dropsonde paths. They have only been added to indicate the height of the flight tracks. The longer the vertical line is, the higher the aircraft has flown at that position. We added this information in the caption of Figure A1.