

Response to Referee 1:

We thank referee 1 for his/her comments. We provide here our responses to those comments and describe how we addressed them in the revised manuscript. The original reviewer comments are in normal black font while our answers appear in blue font.

My only remaining concern is clarity in Figure 4 and Figure 6. Currently, it's difficult to differentiate between days due to overlapping colours and colours of different shades – especially in c/d. If the aim is to highlight the days, either more subplots or mean profiles might help with clarity. However, as it is currently difficult to distinguish between days, changing all to the same colour would likely capture the same information (possibly still including a mean profile?)

We revised Figures 4 and 6 according to the referee comment. We decided to show all lines in black and added averaged profiles for each measurement day with the same colours as shown in Figure 3.

Some minor editorial comments:

- The units of momentum flux in Fig 6 need to be revised. We revised the unit of momentum flux in Figure 6 and elsewhere.
- The overbars on Fig 6 and on other would look better if they spanned the width of a'b'. We changed the overbars in all figures. Now spanning the width of a'b'.
- It is my preference for clarity in multiplots to have the distributions on the top and right of each scatter. Then they can lie flush with the plots and not have axis labels in between. We think that this is kind of personal preference and feel more comfortable in the way the distributions are shown now.
- The whitespace on Table 2 could be reduced. We revised all Tables not showing any whitespaces anymore. We now use shading to indicate whether the data is classified as katabatic or disturbed condition.
- On Table 3, I assume that d1,d2... indicates days, but this notation isn't used elsewhere, nor is it explicitly defined. We revised the chapter of Table 3 accordingly.