

## Author's reply to the Anonymous Referees, revised submission

We thank the Referees once again for reviewing our manuscript.

### Author's reply to the Anonymous Referee #1

***We have implemented all technical corrections suggested by the Referee:***

- On line 210, add a space between the m and s in the unit  $\text{m s}^{-1}$ . Add the unit to the second time the value is mentioned (i.e., write " $0.5 \text{ m s}^{-1}$ ", instead of " $0.5^{-1}$ ").
- Line 265: change to "Underestimation of the CBLH from the C-band data"
- Line 266: change to "while underestimation from the W-band data"
- Line 266: change to "flaws in the algorithm"
- Line 288: change "K-band" to "Ka-band"
- Line 289: change to "and are chosen to be"
- Line 290: change to "in the millimeter wavelength radars"
- Line 313: change to "in some cases a time lag"
- Line 314: change to "the temperature threshold for insect flight", the word 'comfort' is a bit confusing here and so I suggest you remove it
- Line 318: change to "when precipitation would have to cease"
- Line 319: change to "where different insect flight behaviour"
- Line 331: change to "of this type of radar is lower"

### Author's reply to the Anonymous Referee #2

#### *Specific Comments*

1. Include an estimate of ERA5 BLH parameter error bars (if knowable) in Section 2.3.

***ERA5 BLH parameter error is not known, therefore we could not include it.***

***We have implemented all technical corrections and specific comments suggested by the Referee:***

2. Remove all absolute statements about radar-derived CBLH accuracy.
  - a. Line 279: Change "underestimated" to "slightly lower than the ERA5 and Halo Doppler lidar CBLH estimates."
  - b. Line 281: Change "good" to "comparable to that of the ERA5 and Halo Doppler lidar CBL estimates"
  - c. Line 303: Change "verified with" to "compared to".

#### *Technical Corrections*

Line 283 Change "Halo Doppler radar" to "Halo Doppler lidar".