

Evaluation of convective boundary layer height estimates using radars operating at different frequency bands

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By: Anonymous Referee #2

Second Round of Revisions

General Comments

The authors are to be commended for thorough handling of my comments and suggestions. I believe the manuscript presents a compelling result and is communicated in a concise, accurate, and effective way.

Specific Comments

My only remaining suggestion is as follows: When reading through the manuscript again in its current form, the authors, perhaps inadvertently, lead the reader to believe that the ERA5 CBLH estimates are the "truth" to which the observational CBLH estimates are compared. Since the ERA5 BLH parameter is imperfect, the authors cannot make absolute statements about the over- or underestimation of radar-derived CBLH. Method-relative comparisons should be used instead. To address this subtlety, I recommend the following:

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