Atmospheric
Measurement
Techniques
Discussions

Interactive comment on "Evaluation of gridded Scanning ARM Cloud Radar reflectivity observations and vertical Doppler velocity retrievals" *by* K. Lamer et al.

Anonymous Referee #2

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The paper under review describes a method to interpolate a sequence of cross-wind RHI scans onto a cartesian grid with the coordinates x, y and time. Apparently, I already submitted most of my comments with the review of the zeroth version of the manuscript. The review below contains mostly minor comments and suggestions concerning the spelling.

The procedure of interpolation is made rather clear and reproducable. One could suggest to prepare a more thorough error analysis of horizontal wind effects on vertical-wind estimation. But this may also be subject of a follow-up publication.

List of minor and technical comments:

9580:
7: ... Range-Height Indicator ...
15: ... zenith-pointing ...
16: ... observed, and
20: ... 3-D cloud dynamical ...
22: ... more-realistic ...

9581:
11: and introduces uncertainties in retrievals for cloud properties ...
23: ...(Plane-Position Indicator) ...
26: ... cross-wind scan strategy ...
27: ... range-height indicator ...

9582:
17: ... scan strategy, and raw data ...
23: ...mid 90's...

9583:
1-4: Are there any references supporting this statement?

9584:
6: ...clouds, insects, and ground clutter
21: Please give a reference to the insect filter technique: (Kollias P., I. Jo P. Borque P., A. Tatarevic, K. Lamer, N. Bharadwaj, K., Widener, K., Johnson and E. Clothiaux 2013: Scanning ARM Cloud Radars – Part II: Data Quality Control and Processing. Accepted to J. Atmos. Oceanic Technology.)?

9585:
19-27: How is it made sure that 100

9586:
15: ...distance-dependent...
17: ...nearest-neighbour ... add hyphen to all occurrences?

9587:
18: ...a sequence of 60 of such ...
25: ...polar-coordinate...
25: ...height-along-scan....

9588:
5: ...weight on the grid point value...

9589:
16: ...smallest rectangle...?
27: ...Maximum value, mean value, ...

9590:
11: ... user-dependent...
12: ... ,grid points are...
23: ... thus varies as function ...

9591:
use 'mean-value' and 'maximum-value'? –> add hyphen to all occurrences?

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9592:
4: ...mean-value interpolation ...

9596:
21: ...range-height plane. ...

9598:
6: ...retrieval techniques...

9599:
11: ...of marine boundary layer clouds...
26: ...observations are initially post-processed...
28: ...velocity folding, and (iv) ...

9560:
1: ...polar-coordinate...

9602:
5: ... elevation angles lower than ...

9603:
4-5: What's the message of the phrase '... application of distance depending scheme based on chosen weighting function.'?