Minor comments:

1. (Page 8, Line 22) If the observation error of Z_h is larger than the error investigated in Kawabata et al. 2018, the authors should address that the value of 15 dBZ is conservative one. Why do the authors use such a larger error?

2. (Page 8, Line 22) Are the observational errors homogeneous spatially or different depending on the distance from the radar site?

3. (Page 1, Line 9) The authors revised so that the word "implemented" is used twice in this sentence. The sentence may need to be polished.

4. (Page 3, Lines 8-15) The authors revised to remove the phrase "cloud water". There are words to be expressed as singular form.

5. (Page 11, Line 14) Start a new line for Brandes et al. (2002).

6. (Page 11, Line 29) Remove this line.

7. (Pages 11-13) Use italic for journal titles.