

## Reviewer 1

This is a suitable paper describing an approach for monitoring radar calibration offsets. The overall author response to the comments was satisfactory. The general utility of the quantitative results of the study, however, could be quite limited because they are radome and radar dependent.

Thank you very much for your insightful review. We completely agree with your observation that wet-radome attenuation is dependent on both the radome and radar characteristics. To address this, we have incorporated the following statement in the final discussion:

Future plans include testing this newly developed WRA technique at other ARM fixed sites (e.g., in more humid, marine, or oceanic environments) to assess the extent of any necessary site-specific refinements for different radars and sampling conditions, acknowledging that wet-radome attenuation is inherently dependent on both the radome and radar characteristics.

## Minor comments

Please provide Z-R best fits for both X and Ka bands in Fig.3. Also, color separation between blue (Ka-band) and black (X-band) dots is pure. Consider changing colors.

Revised as suggested.

Line 178: change “dBZ” to “dB”

Revised as suggested.

## Reviewer 2

The changes from the original manuscript have been noticed and result in much better manuscript.

I must emphasize a comment from the open review regarding the  $R^{1/3}$  dependency. My previous comment was likely unclear. Of the two radars used in the study, the KAZR has a flat radome inclined at  $4^\circ$ , and the XSACR also has a flat radome inclined at  $4^\circ$ . The Gibbs formula with its  $R^{1/3}$  dependency refers to a spherical radome. The cited works adopting this dependency (Gorgucci et al., Frasier et al., Bechini et al., and Kurri and Huuskonen 2008, Fig 1, Eq 6) refer to spherical radomes. Therefore, the radomes used in these papers are

spherical, which is a different geometry from the radomes adopted by KAZR and XSACR. I suspect that the different geometry could explain the variable performance of the fitting in Fig. 6.

However, I do not require the authors to verify this. Instead, I strongly recommend emphasizing in the manuscript, between lines 120 and 135, that the cited studies refer to systems using spherical radomes, which differ from the geometries of radomes adopted in KAZR and XSACR.

Thank you very much for this insightful comment. We have emphasized that the cited studies pertain to systems utilizing spherical radomes, which differ from the geometries of radomes used in KAZR and XSACR, as clarified in lines 120–135 of the manuscript. Additionally, we highlighted these differences in lines 378–380 when the WRA relationships are compared. Furthermore, we acknowledged in lines 597–598 that wet-radome attenuation is dependent on both the radome and radar characteristics