

AMT

"Ground-based HF to VHF radar calibration by scattering off a stratospheric balloon"

Renkowitz et al.

Answers to Reviewers

Feb 2026

Rev#1

We thank the reviewer #1 for his help in evaluating our manuscript.

Curiously we indeed missed to clearly stated the operating frequency of MAARSY. Instead we only mentioned it in the general description of the range covered by all the radar system involved in this study.

We will add this information at the introduction of MAARSY.

Rev#2

The evaluation of the submitted manuscript is very appreciated.

We agree on the lingual deficits and adapted to the suggestions, and thank for finding them.

>96.3° then eq. 1 93.7°?

Unfortunately, this was phrased too vaguely. What was meant here, is that one is the measured mean phase-offset between the antennas within the array, while the equation represents a free-space approximation. However, the two values do not differ greatly. We rephrase it accordingly.

>Fig 8: colorbar label missing (currently located in title string). 8 hexagons? Perhaps 8 antenna groups?

Correct, we didn't add a label to the colorbar in Figures 7-9 yet, but marked it in the figure titles, we will add the labels to the colorbars. The term "hexagons" is actually related to our internal name of the smallest subarray groups and it has been used as such in earlier publications, but only after a proper introduction. We correct the term for: "hexagon-shaped subarray groups".

>287: "maximum AoA coverage by SIMONE (≈ 150 km), Saura (≈ 120 km) and MAARSY (≈ 40 km) was accomplished." Would it make sense to express this coverage also

in angular units? i.e. how far off Zenith can each radar provide accurate AoA?

We agree, the given distances are likely confusing and will add the corresponding zenith angles for each distance.