

## ***Interactive comment on “Reducing representativeness and sampling errors in radio occultation–radiosonde comparisons” by Shay Gilpin et al.***

### **Anonymous Referee #2**

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Review on “Reducing representativeness and sampling errors in radio occultation–radiosonde comparisons” by Shay Gilpin, Therese Rieckh, and Richard Anthes

The authors tested two methods on reducing spatial sampling errors in the comparison of profiles of collocated radiosonde and GPSRO. They concluded that the “double differencing” method (by using a NWP model data) will most effectively reduce the sampling errors. And if that method is not available, restricting the comparisons to within an ellipse parallel to the wind flow will also reduce the sampling errors caused by atmospheric variability. I like this paper. But the authors discussed only the impact on root-mean-square (rms) errors, not mentioning at all the impact of the mean differ-

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ences between GPSRO and radiosonde. This authors should add plots or tables to indicate how different methods impact the mean difference. . . that is very important to studies of utilizing RO data to analyze radiosonde data accuracy.

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