

## ***Interactive comment on “Research on real-time elimination of UWB radar ranging abnormal value data” by Xin Yan et al.***

**Anonymous Referee #2**

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For indoor positioning, the problems of diffraction, penetration, and ranging instability caused by UWB radar signals emerge due to the complex indoor environment and disorder of obstacles. In this paper, it focuses on the experimental analysis of a UWB-based indoor positioning system to improve the stability of UWB radar ranging data and increase the overall accuracy. By using the training distance estimation model and estimating the distance value, the ranging error obtained is nearly 50% lower than the peak and mean ranging errors in general. A few revisions are list below. 1) Please describe the type of the estimation model (such as linear model or non-linear model) mentioned in abstract, which will be more clear and concise, and easy for readers to read. 2) What is the training algorithm? Please explain it in the manuscript. 3) Some of the related symbols in the equation is not explained in the text, which is not easy

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to read. Such as in equation (1), the symbol  $\mu$  and  $\sigma^2$  are not explained. If you can explain it, which will be clearer. 4) Please explained the symbol  $\delta_x$  and  $\delta_y$  in the manuscript.

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