

Responses to the Reviewer 2's comments

(1) In the introduction add how others solved the same problem?

- The existing work assumed that all measurements are identified, so multi-target localization is not actually multi-target but several single-targets and can be easily performed. However, in this manuscript we have solved the case that all measurements are unidentified and proposed an efficient method.

(2) State on which software and computer platform the numerical simulations of the proposed algorithm were performed.

- We have used MATLAB to have simulation results and added this information. (page 8 first line)

We have used MATLAB R2020a to perform all simulation.

(3) When an abbreviation is used for the first time in the text, it is necessary to state the full name of the abbreviation (e.g. PCS, NRMSE, (Page 8)...).

- We have corrected the abbreviation appearing without the full name as suggested (e.g., PCS and NRMSE). (page 9 line 5)

Figure 4 show plots of PCS (Fig. (a)) and **normalized root mean square error (NRMSE)** (Fig. (b)) based on $\sigma_{w_{im}} = 3$ (dB) and $\sigma_{u_{im}} = \sigma_{\eta_{im}} = 5$ (deg) for a fixed number of anchor nodes, $N = 6$, as well as the number of targets $M = 2$ or 3 as the number of initial anchor nodes (K) varies from 1 to 3. In Fig. 4-a), the block-by-block approach demonstrates a better PCS than the one-by-one approach, as expected. However, in terms of NRMSE, both approaches demonstrated similar performance, as shown in Fig. 4-b).

(4) Give more information about the software and practical instructions to the reader so that the proposed algorithm can be tested.

- We have added the detailed information in Section simulation results so that readers can simulate the proposed algorithm. (page 8 line 1~6)

5. Simulation Results

We have used MATLAB R2020a to perform all simulation. All simulation parameters are set as follows: To generate the measurements, we used Equation (2) and (3). The number of Monte Carlo runs is set to 50000. The reference distance (d_0) is set to 1m. The true TP (P_0) is set to -10dBm. The true PLE (γ) is set to 2.2 for all anchor nodes. All targets and anchor nodes are randomly located inside a box with an edge length $B = 10$ m. Figure 3 is a deployment example of targets and anchor nodes that are randomly generated under $N = 6$ and $M = 2$.

(5) State the number of Monte Carlo runs used in the experiments.

- We have added not only the number of Monte Carlo runs but also the more detailed information in Section simulation results. (page 8 line 2~3)

follows. To generate the measurements, we used Equation (2) and (3). The number of Monte Carlo runs (M_C) is set to 50000. The reference distance (d_0) is set to 1m. The true TP (P_0) is set to -10dBm. The

(6) State (at the beginning of the manuscript) the exact contribution of the proposed algorithm, i.e. what was first proposed by the authors, which has not been known in science so far?

- We have added our contribution in Introduction. Unlike the existing work, we have considered the multiple target estimation in noncooperative case. (page 2 line 15~17)

performance of the single-target algorithm in the presence of severe noise. In summary, the main contribution of this paper is to present a computationally efficient localization scheme for the multiple targets from the unidentified measurements.