Dear Editor,

Thank you very much for your handling our manuscript "**Rapid Iodine Oxoacids Nucleation Enhanced by Dimethylamine in Broad Marine Regions**" (10.5194/egusphere-2023-1774). Following your advice, we have made the requested technical corrections to our manuscript and the point-to-point responses are summarized below:

Major Comment 1. As suggested by the referee, please move the Figure S1 to the main text and provide the relevant discussion in the main text.

Response: Thanks for the valuable suggestion. We have moved Figure S1 to the main text as Figure 1 in the revised manuscript and provide the relevant discussion in the main text in lines 120-131 of the revised manuscript as following:

"As shown in Figure 1, without performing single-point energy correction, the cluster formation rates simulated at ωB97X-D/6-311++G(3df,3pd) level of theory (the diamond points) are significantly lower than the experimental results (the circular points). Therefore, we chose to perform the single-point correction to obtain simulated cluster formation rates that agree more with the experimental results. Compared to the results of DLPNO-CCSD(T) method, the simulated cluster formation rates based on RI-CC2 method are more consistent with the experimental results at T = 263 K. Moreover, at T = 283 K, the RI-CC2 results exhibit a lower limit of cluster formation rates close to experimental results, and an upper limit of cluster formation rates overestimated by less than two orders of magnitude. Considering that the results based on RI-CC2 method agree the most with experimental results while saving computational resources, we finally chose the RI-CC2 method for single-point correction. It is important to note that this does not imply RI-CC2 results are inherently more accurate than those obtained using DLPNO-CCSD(T) method. We cautiously state that the choice of the RI-CC2 method in this study is due to its ability to effectively match the experimental results through a random cancellation of errors (details can be found in Section S2) while saving computational resources.**"**

The corresponding changes made in the manuscript have been highlighted in yellow. We are grateful for the chance to improve our work and look forward to your reply.

Sincerely,

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