

### **Reviewer 3**

Thanks for the authors great effort to address my concerns, especially the synthetic data construction. This significantly improved the robustness of this study. I only have a minor comment. Please note that the advance of current data fusion studies includes the effort to accommodate the second order moment in the fusion process by using the Triple Collocation Analysis (TCA). Nevertheless, I agree with the authors' argument that resilience/sensitivity metrics should take higher-order moment into consideration.

Thank you for taking the time with your review. We are delighted to hear that we could address your concerns with the Manuscript.

We have added a reference to the TCA method to our MS – indeed, that sounds like a very promising method to apply in our future analyses.