

Interactive comment on “An Offline Framework for High-dimensional Ensemble Kalman Filters to Reduce the Time-to-solution” by Yongjun Zheng et al.

Anonymous Referee #2

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This work seeks to reduce the time to solution of an offline EnKF via a dynamically running job scheme and a parallel IO algorithm. Numerical results show that the offline EnKF is significantly faster than the online EnKF in terms of time-to-solution.

This reviewer finds the paper to be well written, and the ideas proposed to be novel. Therefore I recommend acceptance after minor revisions.

Minor comments:

The existing work on parallelizing EnKF is not well represented. For a more complete view of where the field is and where the current work stands, the reviewer suggests that the authors consider at least the following references, given here by their DOI:

C1

10.1175/MWR-D-13-00011.1 10.1145/3293883.3295722 10.1137/16M1097031
10.1016/j.jocs.2017.04.005 10.1007/s10586-017-1407-1 10.1007/s10236-015-0888-9
10.5281/zenodo.1086985 10.1175/JTECH2049.1 10.1016/j.cageo.2012.10.007

Interactive comment on Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2019-132>, 2019.