

1. Please check the DOI for the ORCA1 Zenodo archive, as the DOI given in the Code and Data Availability section differs from that listed in the references. Please also update the citation for Durand et al. using the most current bibliographic information available.

The DOI given in the Code and Data Availability section referred to an older version of the Zenodo archive. We have corrected it and updated the bibliographic information for Durand et al. accordingly.

Related modifications on revised manuscript: Line 512 and 650.

2. I believe that numerical equivalence between the synchronous and asynchronous implementations is important for supporting the proposed approach, and please provide a simple quantitative comparison for at least one representative case. This would be preferable to relying only on the statement that equivalence was verified during earlier tests.

We have completed the section dedicated to asynchronous coupling with a simple quantitative comparison for one of the cases considered in the study. It provides an order-of-magnitude estimate of the difference between the synchronous and asynchronous implementations and complements the consistency checks.

Related modifications on revised manuscript: Line 359-363

3. I think that it is better to moderate the statement that the OASIS3-MCT/Eophis implementation is “optimal” in terms of time-to-solution, since the comparison is based on a limited set of benchmark cases and alternative implementations. A statement explicitly restricted to the ORCA1 benchmark would better reflect the evidence presented.

The statement has been revised accordingly and is now explicitly restricted to the ORCA1 benchmark considered in this study.

Related modifications on revised manuscript: Line 418

4. Please also perform one final proofreading pass to correct the remaining grammatical and typographical issues.

We have carefully proofread the revised manuscript and corrected the remaining grammatical and typographical issues identified during this final review.