

## ***Interactive comment on “Unstructured global to coastal wave modeling for the Energy Exascale Earth System Model using WAVEWATCHIII version 6.07” by Steven R. Brus et al.***

### **Anonymous Referee #1**

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#### General comments

The manuscript is well-written and the authors set out their objectives and results very clearly. It is suitable for publication in GMD if the following comments are addressed.

#### Specific comments

Line 25: why are phase-averaged wave models quite expensive compared to the atmospheric and oceanic dynamic models? Do you have evidences for this? By the way, are you talking about "spectral wave models" or "phase-averaged" (which is more general, e.g. XBeach).

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Line 113: please add reference Dietrich et al (2011) for completeness.

Line 188: the first order PR1/CRD-N schemes have been employed. To what extent do they influence the outcomes (i.e. less accurate) in particular the 2-degree mesh case?

Technical corrections, etc.

Line 295: 36215 -> 46215

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Interactive comment on Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2020-351>, 2020.

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