
General recommendation The authors' responses to the first review are satisfactory, they have answered all questions and concerns. However, there are still some details that has to be addressed. The paper needs a minor revision. I recommend accepting the paper for publication once the following comments are addressed.

We are very grateful to the reviewer for his/her constructive critiques and comments. In the following, we state the referee's comments (in blue) followed by the response and actions taken (in black).

Major comments:

1. The Introduction section misses the section number and header. Because of this, all the section numbers and references to them are shifted.

Corrected.

2. The following paragraph shouldn't be included in the paper, for sure not in the Conclusions Section. Any sentence of such paragraph is not a conclusion of this study. "In addition to the wave model core upgrade, GLWUv2.0 features seven additional field outputs in order to be utilized in the Dangerous Seas Project over the Great Lakes Region. This project is a bilateral collaborative agreement between NOAA (EMC-OPC) and the Environment and Climate Change Canada (ECCC), to enhance scientific and operational cooperation between Canada and the United States. In this effort, a Dangerous Sea is defined as a combination of wave height, period, steepness, breaking waves, crossing seas, and rapidly changing sea state (time rate of change) that causes navigational risk (speed and course) and/or leading to, the potential loss of vessel, cargo, or crew. Mariners should avoid dangerous seas at all costs. The project has started with the Great Lakes, a basin responding to mostly the wind impact on the water surface, and will migrate the work to the open ocean where wave patterns are more complex. Additional details on this will be made available in a separate article in the future".

If anything, the first sentence "In addition to the wave model core upgrade, GLWUv2.0 features seven additional field outputs in order to be utilized in the Dangerous Seas Project over the Great Lakes Region." could be moved to section "Future implementation"

A new subsection is added to the end of manuscript and the above paragraph is moved to the "Future Development" section.

Other comments

1. Line 16. Instead of "U.S. states of" use a colon "U.S. states:"

Corrected.

2. Line 17. Instead of “two Canadian provinces of”, use a colon “two Canadian provinces:”

Corrected.

3. Lines 147. It is stated that “For Lake Champlain, the process completes in 17 minutes in the short cycle and 27 minutes in the long cycle.”, According to the running-times showed in lines 156, 162 and 169 should be “For Lake Champlain, the process completes in 16 minutes in the short cycle and 26 minutes in the long cycle.”

Corrected.

4. Lines 186-188. The statistical parameters do not introduce less accuracy and more uncertainty in the forcing field.”, replace “which introduced less accuracy and more uncertainty in the forcing field.” by “which is introduced by the forcing field.” Or other sentence that makes sense.

Corrected.

5. Line 205-206. Replace “new model features in meshes of one order of magnitude larger than” by “new model features in meshes that have one order of magnitude, in the number of nodes, larger than”.

Corrected.

comment by editorial office

Notification to the authors: Regarding figure 4: with the next revision, please add the copyright icon as follows: © Google Earth.

Corrected.