Many thank you for your time, comments and minor linguistic rectifications to improve the quality of this paper.

The latest version of the paper has been reviewed, and we are in agreement that it can now proceed. I agree with the reviewer's correction about a small edit to line 321. Please can you do that, and then the paper can go forward for typesetting.

Response: Thank you for the valuable comment. We have changed the sentence to “"surge is not sensitive to small random perturbations of the bathymetry”.

Also note, Eqn 3 is incorrect (unbalanced brackets).

Response: corrected.

There are a couple of minor grammar errors, eg arctic ->Arctic (several instances), line 519 cut "consider to".

Response: We have checked and corrected these grammar errors.

Please fill in the missing dois in the references.

Response: All the dois are added in the references.

Non-public comments to the Author:

I'm not sure if you've received the report from the reviewer, just in case here it is!

>>I thank the authors for responding to my comments.

In particular, the authors clearly show that the surge is not sensitive to the parameter estimation technique but tides and total water levels are, thereby justifying their approach to focus on parameter estimation for the tides only. I would just add that I think this is because the coastal tide gauges used here are ones located along open coastlines. For higher-resolution in more complex estuarine and river regions I would suspect that we would start to see more impact on the surge and the nonlinear interaction between surge and tide.

Response: Thank you for the valuable comment. We have added the sentence into the paper:

“Moreover, we are expected to research on the impact on the surge and the nonlinear interaction between surge and tide for higher-resolution in more complex estuarine and river regions in the future.”

>>I have one suggested technical edit:

Line 321: "surge is not sensitive to the bathymetry", change to "surge is not sensitive to small random perturbations of the bathymetry".

The water depth is very important for determining the size of the surge so I think the phrasing that surge is not sensitive to bathymetry in an absolute sense is wrong.

Response: We changed this sentence in the paper.