For research article

Response to Reviewer 5 Comments

1. Summary

Thank you very much for taking the time to review this manuscript. Please find the detailed responses below and the corresponding revisions/corrections in track changes in the resubmitted files.

2. Questions for General Evaluation	**Reviewer's Evaluation**	**Response and Revisions**
Does the introduction provide sufficient background and include all relevant references?	Can be improved	
Are all the cited references relevant to the research?	Can be improved	
Is the research design appropriate?	Yes	
Are the methods adequately described?	Yes	
Are the results clearly presented?	Can be improved	
Are the conclusions supported by the results?	Yes	

3. Point-by-point response to Comments and Suggestions for Authors

Comments 1: *Line 41 – There is no future global warming, global warming is already a fact. The authors should suppress the word "future"*

Response 1: Thank you for pointing this out. We agree with this comment. Therefore, we have revised it, see L45.

Comments 2: *Line 46 – The text should inform the year of occurrence of these typhons.*

Response 2: Thank you for pointing this out. According to the typhoon numbering rules, the number consists of four digits. The first two digits represent the year, and the last two digits are the serial number of the tropical cyclone generated in that year in the northwest Pacific Ocean. As the typhoons' number are indicated in the manuscript, there is no need to point out the year of these typhoons' occurrence.

Comments 3: *Line 68 – It is not clear what are the typhoons that impact the coastal áreas. What is the difference between them? The others are not in the coastal áreas as well?*

Response 3: Thank you for pointing this out. As mentioned in the manuscript (L231-234), The track of No.1909 Typhoon Lekima represents a typical example of passing through JC after making landfall in the south of JC; the track of No.1210 Typhoon Damrey is a representative of landfall along the northern coast of JC; No. 1810 Typhoon Ampil's track is a typical path of landfall along the southern JC. These are the difference between them. Although some typhoons do not directly pass through JC, as a relatively large-scale weather system, JC will still be affected by strong winds, as mentioned in the manuscript about typhoon Winnie and typhoon Bavi.

Comments 4: *Line 84 – It lacks a localization map of the study área.*
Response 4: Well, you can find localization map of the study area in Figure. 1b and d.
Comments 5: *Line 272 – It is not clear the date '14 days ago'*
Response 5: Thanks for your advice. As we known, one complete tidal cycle, including spring tides and neap tides, is approximately half a month, around 14 days. To eliminate ambiguity, we have revised the manuscript, please see L295-298:
"To eliminate the deviation of tidal effects on currents and SSC, the similar tidal period that occurred 14 days ago when the wind speed was relatively low (2019-07-26 22:00 UTC) was selected as the fair weather conditions."

Comments 6: *Line 378 – how was the erosion in the coastline?*
Response 6: Thank you for pointing this out. Due to the limitations of our research model, it is challenging to predict changes in the coastline after the TC's transit. We will make great efforts to improve the model or use more suitable models in the future work to study the changes in the shoreline.

Comments 7: *Line 533 – The conclusion should talk about seabed sediment dynamics, and not coastal dynamics, because the dynamics of the coastal sectors were not analyzed.*
Response 7: Thanks for your advice. We agree with the comments. Therefore, we have revised it, please see L563.
4. Response to Comments on the Quality of English Language
None.
5. Additional clarifications
None.