

Dear reviewer,

Thank you for your suggestions and comments that would clearly help to improve the final version of this paper. The response to each of your questions and observation are addressed below and in this version of the manuscript, which also includes the contributions suggested by two other reviewers.

**Study area, page 2, lines 31-32: Is the accuracy of the hindcast against measurements evaluated in an earlier paper? Does 'best performance' refer to the accuracy of SWH or also some other parameters and is the evaluation done at all the nodes? Please also give reference.**

Yes, the accuracy of the data was evaluated in a previous paper. The paragraph was not clear enough and it has been rewritten (page 2, lines 32-35).

**Hindcast wave data, page 3, line 14-15: Is 50 m depth deep water in the high wave events? What are typical peak periods during these events?**

Certainly, according to the data a significant percentage of the storm events (Table r2.1) have Tp values associated to transitional waters. This percentage decreases when the Tp values of the entire time series associated to each event are considered. However, the sentence has been omitted from the manuscript.

**Table r2.1. Percentage of the peak period associated to TC and Norte events that are not within deep water.**

Node	% TC	% Norte
Matamoros	94.7	57.4
Tampico	100.0	85.1
Veracruz	87.5	81.7
Coatzacoalcas	84.2	88.9
Paraiso	89.5	94.7
Campeche	73.9	90.6
Progreso	79.3	88.8
Holbox	88.9	90.6
Cancun	9.3	0
Tulum	4.3	0

**Storm definition, page 4, line 10-11: Is the minimum time between consecutive events, 48 h, based on storm characteristics in GoM? Could you further elaborate the reason behind this selection?**

The definition of storm events varies in the literature with the main parameters being i) the SWH threshold, ii) the minima duration of time during which SWH must remain over the threshold and iii) the minimum time between consecutive storms (e.g., Li, 2011; Mendoza & Jimenez, 2008).

An initial minimum time of 24 hours was selected to differentiate between independent meteorological events but, the more conservative 48 hours criteria was after adopted following previous research such as: Harley et al., (2010): Interannual variability and controls

of the Sydney wave climate. *Int. J. Climatol.*; Smits et al., (2005): Trends in storminess over the Netherlands, *Int. J. Climatol.*; or Palutikof, et al., (1999): A review of methods to calculate extreme wind speeds. *Meteorol. Appl.*.

However, the change from 24 to 48 hours did not imply significant changes in our results.

**Storm classification, page 4, line 27: Which of the nodes had the lowest/highest number of events occurring during both types of events?**

The lower number of these coincidences occurred in Tulum and Cancun (7 and 12 events, respectively) and the largest numbers in Progreso, Tampico and Veracruz (29, 21 and 21 events, respectively). This information has been included in section 5.2 page 6 lines 1-3 of the new version of the manuscript.

**Line 33: Could the wind direction criteria be used as main criteria to classify the events?**

We evaluated the wind direction as an indicator during a certain phase of our research but it was not a good indicator because it included as Norte-related events a significant number of TC-related events.

**Conclusion, page 9, line 16: I recommend removing the reference to unpublished work suggesting a link between the presented results and climate change. The paper has enough interesting content even without it.**

The reference has been removed.