

## Reply to the Editor

Dear Dr. Yool,

Please find below our response. We submit a clarification to the first point and the response to the second one.

1. I will contact referee 1 to clarify the point below. In your response you noted that it was not entirely clear what was meant, so I will check that the referee is satisfied. You do not need to do anything at this point.

Further to the above, referee one has responded with the following comment:

*They are correct that based on observations, it is assumed that the drag should level off. But at line 27, since I read it as paraphrasing the results from Moon et al. 2004, indeed from that paper there is a decrease in surface roughness for winds above 33 m/s BUT it is not due to the effect of breaking waves (as it is clearly stated in the conclusion of Moon et al.) but simply to the coupling to the wave model (WW3) then at line 28, the authors state "for this reason, the cyclone...". It's misleading as it is not only the behaviour at very high wind speeds that dictates the evolution of the cycle but the dynamic coupling to the waves [so] I would rewrite lines 26 to 32 (As a result,... models ) as:*

*"As a result, in hurricane force wind conditions (above 33 ms<sup>-1</sup>), a positive forcing is observed from the decrease in sea surface friction arising from the coupling to the wave model.*

*Additionally, the maximum friction velocity and sea surface roughness were much larger than their counterparts in an uncoupled system, with the largest sea surface roughness located in areas with small wave ages and wind speeds of 25-33 m s<sup>-1</sup> For this reason, the cyclones that had been simulated by wind-wave coupled models developed more slowly than those simulated by non-coupled models."*

Reply: Done. The underlined lines at P3L26-32 have been rewritten according to the reviewer's recommendation.

2. I would be grateful if you could clarify whether your response to the point below involves any changes to the manuscript. It is quite possible that the manuscript already covers the points that you make, but your response is expansive enough that I just want to be clear.

Reply: Our response to the specific comment of the reviewer is solely related with the addition of the propagation and the source WAM timesteps in the Table 1 of the revised manuscript. It was a reasonable and quite important issue raised by the reviewer and we tried to address it in a rather extensive paragraph. A reference to the chosen WAM timesteps has been already included in P12L26-32. However, we decided to avoid any additional reference since it is apparently beyond the aim of this work.

The corresponding author,

Petros Katsafados