

Response to Editor

By Katherine L. Ackerman, Alison D. Nugent, and Chung Taing

Thank you so much for your quick responses and additional care you've taken to review our manuscript and the referees' suggestions. We are incredibly grateful to have someone so aligned with our research to review our paper. In addition to the comments provided by the two referees, we agree with your two suggestions as well.

- 1) I think Reviewer 1 Comment 4 could maybe be further clarified by reference to Figure 2. As a non-local, I'd also wonder if "Bellows" is the same as "Bellows Beach" cited in the prior study by Porter et al. If the sites are different, please clarify; if the same, it might be useful to explicitly confirm that for those of us not familiar with the sites.

Yes, Bellows is the same as Bellows beach mentioned in the Porter et al. paper! We've updated this section, as well as linking the map figure to ensure readers understand the locations we're referencing. This section now reads:

“A linear regression on almost two years' worth of data was conducted between wind speeds measured by a 12-m anemometer at Bellows beach, approximately 7 km northwest of Kaupō Bay (Bellows U12, Fig. 2) and a 10-m anemometer at Mapakpuu beach (WeatherFlow U10, Fig. 2) for trade wind days only (wind directions between 30-90°).”

- 2) While certainly not required for acceptance, I wonder why the discussion on line 53 of prior work showing a dependence of SSA on SST did not include the recent work showing this for open ocean measurements (Saliba et al. 2019, <https://doi.org/10.1073/pnas.1907574116>)?

Thank you for bringing the Saliba et al. paper to our attention – we apologize for overlooking this study previously but recognize it's a substantial piece of work adding to our knowledge of SST and seasonal effects on SSA production. Therefore, we've included this in the SST section of the introduction and are excited to explore the affiliated research in the paper even further!