

Overall comment

The manuscript would benefit from further methodological clarification before publication. In particular, the source, native resolution and processing of imagery for each site and year and a clearer, reproducible explanation of how dune fronts and precipitation ridges were identified and migration rates calculated.

L328 – Is the 1.05 to 1.25 m resolution the downloaded image pixel size from Google Earth rather than the native resolution at which the data was captured? I am querying this because the data for Bahia Creek in 2003 for example (a reported year in the methods,) appears to be Landsat Data (Figure 1) with a native image on the order of 30 m (<https://dataspace.copernicus.eu/news/2026-3-6-guide-landsat-8-9-copernicus-data-space-ecosystem>). Please provide further detail how images were imported from Google Earth to ArcGIS and a table (perhaps in the appendices) of the exact imagery used for each site.



Figure 1 – Bahia Creek appears to only have Landsat data available for 2003 (pixel resolution approx. 30 m rather than 1.05 to 1.25 m reported.)

L336 – The amended text in the method for selecting dune ridges states that “*Dune fronts and selected precipitation ridges from unvegetated dunes were drawn manually where vegetation begins at the bottom of the slipface, using measurement techniques similar to Tsoar and Blumberg (2002), Yao et al. (2007), Ding et al. (2020).*”

I’m not sure how in unvegetated dunes fields (like the examples used in this manuscript), it is possible to use “*vegetation at the bottom of the slipface*” to define dune fronts and precipitation ridges, as many sites little/no vegetation is present. More detail is required here.

Additionally, the three sources cited to justify the methodological approach in the revisions use substantially different techniques for defining the precipitation ridge. For example, Yao et al. (2007) manually traced polygons to define ridge lines based on differences in the brightness of various dune features, while Ding et al. (2020) used an SBAS-based time-series inversion algorithm to measure dune displacement. Much more specific detail and clarity about how this study measured dune displacement is required.

Finally, no response to the reviewers recommendation in the original manuscript to include “*An illustrative figure showing how dune fronts were identified and how migration rates were calculated*” was received. The reviewer continues to believe this would be a valuable addition to the manuscript to assist the reader in understanding and reproducing the methodology.

L534: It is still not clear what is meant by the term “wind intensity”.

L527: The revised text cites Tsoar (2005), however it does not adequately engage with the concept. Hysteresis does not simply refer to vegetation expansion below a DP threshold of 1,000 units but it describes the relationship between wind power and dune state. Dunes may become vegetated when wind power declines sufficiently, but once vegetation is established, considerably greater wind stress may be required to remove the vegetation and reactivate the dunes. I suggest this section should be revised to distinguish between the proposed DP threshold for vegetation establishment and the broader hysteretic behaviour of the dune system.