

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.

It is correct the information provided about Bahía Creek. In that case, the image that belong to the year 2003 it is in fact a Landsat image from 1985 with 30 m spatial resolution; the following image is from 2004. However, the two studied sites for this paper are San Antonio Este and El Cóndor area (near Viedma), which have images from the mentioned years with a better resolution than the 30 m Landsat one. The images were downloaded from Google Earth with the best possible resolution and then pixel's length was verified with GIS software, resulting in the downloaded image pixel. An appendix table was included indicating each image features (Table 2). Extra information and the specific date from each image were also added (lines 311-323). *-Lines correspond to the track changes file-*.



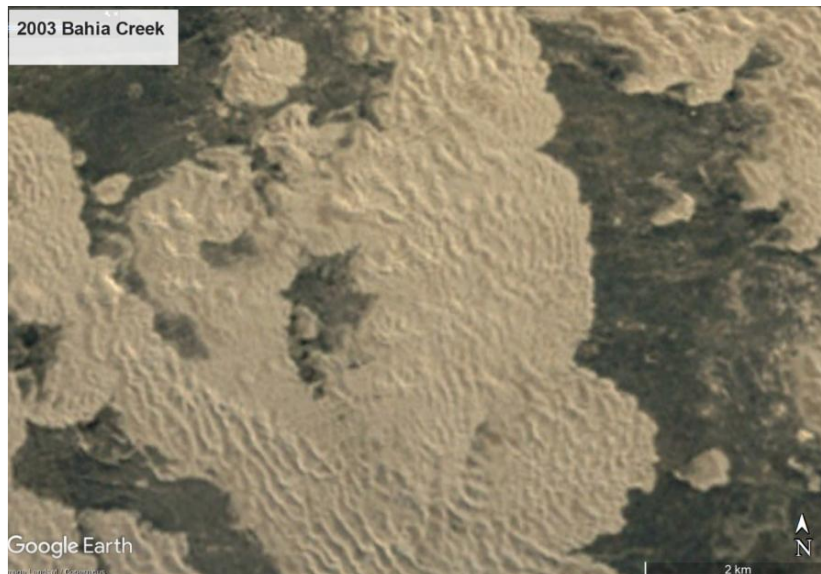


Figure 1 – Bahia Creek appears to only have Landsat data available for 2003 (pixel resolution approx. 30 m rather than 1.05 to 1.25 m reported.)

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.

The terminology was changed to be clearer. The line used to measure dune migration was the slipface toe (lines 332-334). More information regarding measurement technique was included (lines 324-338). Only measurement techniques regarding dune displacement were similar to the cited papers (lines -arrows- between two dune fronts from different years), as stated in the manuscript.

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.

An illustrative figure of how dune fronts were identified and dune migration estimated was added (Fig. 4). The figure presents a particular example from San Antonio Este dunefield.

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

It was changed for wind speed. Maybe it was a misspelling from Spanish (*intensidad*).

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.

We changed some information within this paragraph (lines 535-539) to explain better how this concept is related in the study area. Since there is a general vegetation trend and decrease in wind speed, it is difficult to certainly explain the opposite process (from fully vegetated to bare sand dunes).