

Review of paper titled "An experimental campaign to measure turbulence in the marine boundary layer" by Jakob Mann et al. (wes-2026-39)

July 15, 2026

1 Overall paper summary

Overall, the authors have significantly improved upon the earlier draft of the manuscript, with more clarity on uncertainties and campaign details. There are only some minor details that still remain unanswered from the first review that need to be addressed. We would also recommend the authors to once again go through the changed sections/lines to ensure proper grammar and clarity, some of which have been highlighted in the technical comments.

Specific comments

- The abstract still contains references to the now removed WRF comparison, please correct.
- L139ff.: In the previous round of review, we alluded to the importance of time synchronization, which could affect the analyses to which the authors commented that it was trivially achieved with UTC timestamps. While this may seem trivial, there could be software issues that could affect the system clocks, which was present in the Streamline systems before the campaign. What are the time lags here of the Windscanner systems and what is their source?
- L254: A comment from the previous round was concerning LOS measurements at hard targets. Although the authors mention that this has been removed from the manuscript, the paragraph following this line still seems to indicate a zero LOS velocity comparison at the hard target location. Please clarify this.
- In the response document, this comment was left unanswered: Table 11: The LOS velocity offsets for Sterenn and Brise show notable changes (e.g., Sterenn: -0.3 ms^{-1} pre-campaign vs. cup, compared to -0.7 ms^{-1} in the final values; Brise: -0.2 ms^{-1} vs. cup, compared to -0.4 ms^{-1} final). Please comment on the cause of these variations. Do these offsets evolve over the course of the campaign relative to the cup-based reference? How would a user downloading the data process the wind speeds for example in the middle of the campaign (since a fixed final offset is specified)?

Technical comments

- L72: In this Diagram, also section n..
- L74: description

- Table 2: Spatial resolution, not spacial
- L206: It should be noted?
- L209: Full stop missing at sentence end.
- L290: Table reference missing
- Fig 17: Fix the titles on the images, the velocity, wind direction, distances are common for both images and can be elaborated in the caption (some details are mentioned) and keep only the labels for the sub-figures