Dear Editor,

Thank you for these additional helpful comments. Please find our responses below.

- Please ensure that the format of the table follows WES guidelines.

Tables 1, 2, 3, A1, and A2 were reformatted to meet the guidelines.

- I agree with the reviewer that a von Kármán constant of 0.37 is unusually low (some would consider this value incorrect). I understand that this choice was made to remain consistent with Dieudonné et al. (2023); however, I recommend using 0.40 in the future to remain consistent with most of the scientific literature.

While the value of 0.37 was retained here for consistency with Dieudonné et al. (2023), we agree that using 0.40 is more appropriate for future studies and will follow this recommendation in future work.

- The name “von Kármán” should include the accent.

That was corrected.

- The Obukhov length should be computed using potential temperature or virtual potential temperature, not absolute temperature alone. It is unclear which temperature was used in your calculation. If absolute temperature was used, the Obukhov length estimate may be incorrect. If ultrasonic (sonic) temperature was used, this is acceptable, as sonic temperature is generally a reasonable approximation of virtual potential temperature.

Indeed, the Obukhov length was computed using the sonic temperature rather than the absolute temperature.

- WES recommend to create a BiBTex entry for the url rather than using directly the url in the manuscript as in line 49-50

We removed the URLs previously included in lines 49, 511, and 522 and in the caption of Figure 1 and replaced them by corresponding BibTeX entries in the reference list.

Bibliography:

- Dieudonné, E., Delbarre, H., Sokolov, A., Ebojie, F., Augustin, P., and Fourmentin, M.: Characteristics of the low-level jets observed over Dunkerque (North Sea French coast) using 4 years of wind lidar data, Q. J. R. Meteorol. Soc., 149, 1745–1768, https://doi.org/10.1002/qj.4480, 2023.

- Eoliennes en mer en France: https://www.eoliennesenmer.fr/facades-maritimes-en-france/facade-manche-mer-du-nord/dunkerque, 2025.

- Hersbach, H., Bell, B., Berrisford, P., Biavati, G., Horányi, A., Muñoz Sabater, J., Nicolas, J., Peubey, C., Radu, R., Rozum, I., Schepers, D., Simmons, A., Soci, C., Dee, D., and Thépaut, J.-N.: ERA5 hourly data on single levels from 1940 to present, Copernicus Climate Change Service (C3S) Climate Data Store (CDS), https://doi.org/10.24381/cds.adbb2d47, 2023.

- IGN: Géoportail, https://www.geoportail.gouv.fr/, (last access: 7 July 2025), 2025.

- SALOME project: Dynamic Monitoring of Offshore Wind Turbines Subject to Atmospheric Phenomena for Optimized Participation in Electricity Markets, https://www.salome-interreg.eu.