

Review of paper titled "Offshore wind profile characteristics and their impact on floating wind turbine power production" by Nikolas Angelou et al. (wes-2026-20)

August 11, 2026

We thank the authors for taking into consideration all our comments and significantly revising the manuscript. We suggest the manuscript be accepted in its current version for publication with some minor corrections, more on the technical side.

Specific/Technical comments

- L5-6: Break into two sentences, it does not read well currently.
- L27: The 'mainly' is too much and can be deleted.
- L45: This sentence is confusing to me. For easier readability I would consider rephrasing to:
Thus, it is still unclear how the motions over six degrees of freedom, coupled with the wind profile characteristics, affect the power production of a FOWT.'
- L74: Although not as much as onshore measurements, there are several campaigns and publications across several wind farms over the North Sea, I would refrain from using the word rare.
- L107: Please include a reference for the stability dependence of the dynamic turbine motions.
- L121: Even when the turbine is not tilted, I would say that the furthest range gates would lie outside the rotor plane, is that not the case? The tilt does change the scanning location, but the furthest range gates are too far outside in the y-plane for the tilt to make a difference, correct me if I am wrong.
- L139: The 'data' is too much and should be deleted.
- L146: Include final number of cases here, after mentioning the reduction of cases due to data availability.
- L210 and Fig3: Here the mention of veer it still present (figure title). Please change it here also or create a term that could concisely describe this quantity, maybe veer* or something similar to but not the same as veer.
- L285: LLJ?
- Section 4.4: You use shear and veer again in this chapter. Is this now the gradient of the horizontal wind speed and estimated wind direction, or again gradients of u and v ?
- L336: 'The variation of the produced power is...'

- Fig. 8: (b) and (c) sub-figures seem to have the same curves for positive shear (solid black lines), without any minor differences as the points look to be identical in (b) and (c). Does this happen by chance due to low differences or is there a mistake in the plotted curves?