

Detailed response to referee#1's comments on: OS-2025-5187 "Horizontal transport on the continental shelf driven by periodic rotary wind stress" by Paldor and Friedland

The Referee comments are written below in black and the authors response in blue

Well written. It would be good to note that the change in direction of forced wind components at the inertial frequency was observationally verified in Weller (1981)(JGR, vol 86 C3 pages 1969-1977). A suggestion is to make it clear perhaps in lined 10-15 that the fluid is not stratified. Perhaps the abstract should include words noting northern hemisphere and homogenous fluid. For a coastal oceanographer the normal thinking might be of a surface wind-driven layer overlaying and a bottom boundary layer and the merging of the two as the water shoals. Any idea how stratification would change the solutions? and would a bottom boundary layer have a rectified current as well?

We thank the referee for accolade that our paper is well written and for his constructive suggestions. Specifically:

The discussion of Weller (1981) now appears in L42-43

A note emphasizing that our model addresses a fluid of uniform density now appears in L76 and in Abstract (L1)

A more detailed explanation of the set-up of our problem was added in L102-108