Title: The impacts of assimilating Aeolus horizontal line-of-sight winds on numerical predictions of Hurricane Ida (2021) and a mesoscale convective system over the Atlantic Ocean

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This manuscript aims at investigating the influences of assimilating Aeolus horizontal line-of sight winds on forecasts of tropical cyclones and tropical convective systems. Better track predictions, intensity forecasts, precipitation structures are obtained in case studies. Overall, this manuscript is well organized and addressed its potential to improve numerical weather predictions. I suggest to accept the manuscript after some minor revisions.

1. The homogeneous isotropic horizontal ensemble localization scale is 110 km, and the vertical localization scale is 3 grid units. Any sensitive experiment supporting your configuration? Or add some references here.
2. Units are not uniformly written(e.g., 6-h ,48-hour, 700-hPa). Please Uniform the units throughout the manuscript and add a space between the value and unit. A dot is needed in the velocity unit(e.g., $m \cdot s^{-1}$). Revise it in the text and figures.