

I have reviewed the manuscript 'Evolution of Wind Field in the Atmospheric Boundary Layer with using of Multiple Sources Observations during the Transit of Super Typhoon Doksuri' by Wang et al. The authors investigated the vertical structure of tropical cyclone (TC) boundary layer during Super Typhoon Doksuri using coherent Doppler lidar (CDL), radar wind profiler (RWP) and automatic weather station (AWS). The wind speed profiles obtained using a data fusion method fit well with traditional models in the lower part of the Atmospheric Boundary Layer (ABL) before wind speed changes rapidly. In general, the topic of this study is interesting; however, there are some unclear points that require clarification. I recommend it for publication after major revision. Please consider the following comments in revising the manuscript.

Major Comments:

Line 198: "The maximum wind speeds of 18 and 50m/s occurred at 11:00 LST". I don't see it from Figure 1d.

Figure 4: There is a sharp increase of wind direction at 54 m by CDL-1 and 71 m by CDL-2 at 04:00 LST on 28 July, which is not at 10 m by AWE-1 and AWE-2. It would be helpful that authors provide few sentences explaining that.

Lines 256-257: "In general, it would cause a large error (up to 73%) to describe the exact wind speed profiles with traditional models during and after the typhoon's passage, especially when the wind speed is almost constant with height or when wind shear exists". How did the authors get 73%? From Figure 8? Also, the sentence is unclear. Figure 8 indicates that the difference between the exact wind speed profiles and traditional models is large above 200 m, even before the typhoon's passage. Since this is one of the major conclusions, it would be helpful if the authors rephrase the sentence for clarity.

Minor Comments:

Line 196: "the pressured dropped ..." -> "the pressure dropped ...".