

Response to community (Chong Wang):

General comments:

The tropical cyclone is the most severe meteorological disasters in southeastern of china, the background in the introduction is described in detail. This work is co-operated with China Meteorological Administration (CMA), combining with other observation methods, no-blind zone wind speed profiles is achieved.

Here are some suggestions

1. Cloud information is important during the tropical cyclone, so, the CNRs are necessarily in the figures.

AR: Thanks for your suggestion. In the revised manuscript, the variation of CDL SNR has been added in Figure 10 and Figure 11. As the CNRs of the RWP are not provided, Figure 12 has not been revised.

2. More evolution of wind field during the tropical cyclone should be discussed.

AR: Thanks for your suggestion. We have added the following explanations in the section 4.4 and section 5.

section 4.4: “Before 20:00 LST on 27 July, the CDL-1 was not under the influence of the 34-kts wind circles and wind speeds within the ABL were basically in the range of 15 m/s ~ 20 m/s. Between 20:00 LST on 27 July and 03:00 LST on 28 July, obvious differences in wind speeds existed at different heights affected by the typhoon. High wind speeds appeared around 1000 m while low wind speeds occurred below 500 m which was consistent with the distribution characteristics of the wind speed in the typhoon boundary layer.”

section 5: “Before being affected by the 34-kts wind circles, there was little difference in wind speeds at different heights. Affected by the typhoon, high wind speeds appeared around 1000 m while low wind speeds occurred below 500 m which was consistent with the distribution characteristics of the wind speed in the typhoon boundary layer.”