General comments:

The manuscript performed a study of eight Warm Sector Heavy Rainfall (WSHR) events in 2019 using wind profiler radar and other ground-based observations. Four selected precursor signals of WSHR are analyzed along with the impact of monsoon activities and topography considered. Despite the analysis is quite detailed, many are known. The novel part may be the time evolution of precursor signals and the implications for nowcasting. However, the number of cases is so few that the time estimation given in section 5.2 is not so meaningful. In addition, with only 8 WSHR events in total, I am not convinced any solid and general conclusions can be made in terms of the different mechanisms in western, eastern and central regions.

Technical comments:

Quality of figures needs to be improved, such as resolution, font size, and missing x or y axis.

L36: front -> frontal

L49: a noun is missed after “southerly”

L56: 2022a?

L70: “a precipitation” -> precipitation

L75: “profiler” -> profilers

L89: explain “c-averaged”

L106: The two requirements in (3) appear redundant and conflicting. Please clarify.

L160: σ_w^3?

L162: two θ

L234: what does “3 earlier” mean?

Fig.6: do the numbers on the x axis indicate UTC hour? Add x axis and descriptions in the caption.

Fig. 7 The definitions of “high altitude” and “low altitude” are unclear.

L256: “the all” -> all the

Fig. 9. The BLH in blue line appear fixed at 400 most of the time. Is that real? Also, red line indicates after in your legend, but the figure caption states “after (blue)”.

Fig. 11. Why do VWS, ALI and BLH look so similar before and after the onset time for the western region?

Fig. 17. This is not “As in Figure 16” as you stated in the caption.