Reviewer 1

General comments :

This manuscript presents an impressive new report on assessment of a Doppler radar model of TKE dissipation rate for low Richardson numbers with a UHF wind profiler. The presented work provides a physical interpretation of $\varepsilon Lout$, which would be qualitatively identical to that for neutral boundary layers. The model is well interpreted and studied. Thus, the manuscript is recommended to be published with minor revision.

We thank the reviewer for his comments.

Specific comments :

1. The quality of Figure 2 should be improved, such as font size and color bar.

Figure 2 has been redrawn for a better clarity and uniform notations.

2. Compared with stable conditions, weakly stratified or strongly sheared conditions have different turbulent scale. A discussion about relevance to the resolution of the detection instrument is recommended to added, for resolution of wind profiler is 1 min/100 m in this paper.

A discussion related to the radar limitations has been added in a new section 6 (Discussion), also required by reviewer 2.

3. In section of Conclusion, the authors might need to address in more details some limitations in the present study including data and methodology

We also included a few sentences on this topic, which continues the point made in 2).