

The authors did an excellent observational analysis on dust devil; however, further clarifications are needed to get the paper published:

- 1) The authors mentioned the structure of dust devil (DD)'s zone of weak winds is similar to the eye of tropical cyclone. However, according to figure 1b in the paper, the center of dust devil has strong upward motion, which is different from the hurricane eye (Figure 1R) or tornado center (Figure 2R) described in textbook, which has weak subsidence in their center. How to justify this inconsistency?

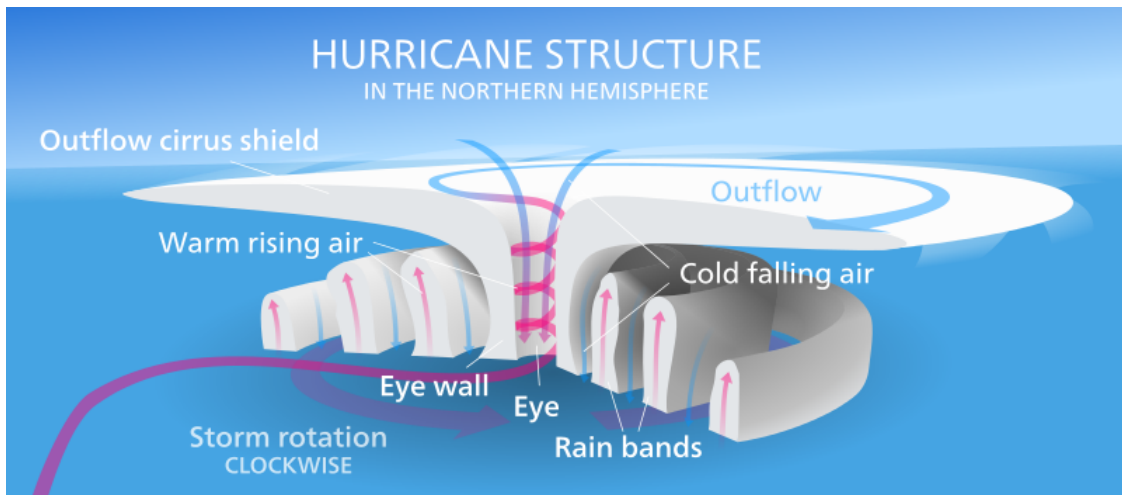


Figure 1R schematic of hurricane structure from <https://upload.wikimedia.org/wikipedia/commons/thumb/4/4f/Hurricane-en.svg/800px-Hurricane-en.svg.png>

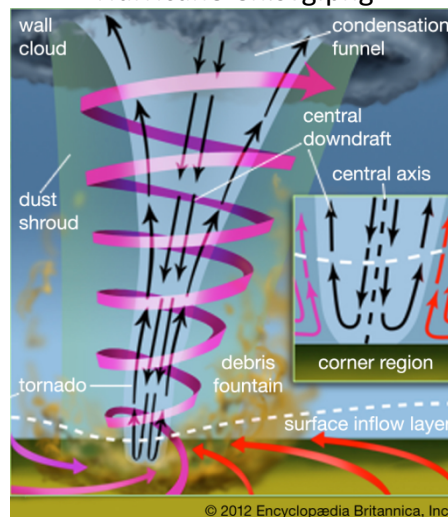


Figure 2R schematic of tornado structure from <https://www.britannica.com/media/full/599941/19397>

2) It is true that the center of dust devil can has weak horizontal wind (e.g. the schematic drawing of dust devil from NASA website <http://science.ksc.nasa.gov/mars/ops/dustdevil.gif>); and similar study (e.g., Zhang et. al. 2015) also confirmed that. However, no eye (or subsidence) was claimed in all these previous studies. The reader of the paper may wonder whether the authors' current results are consistent with the results of previous studies.

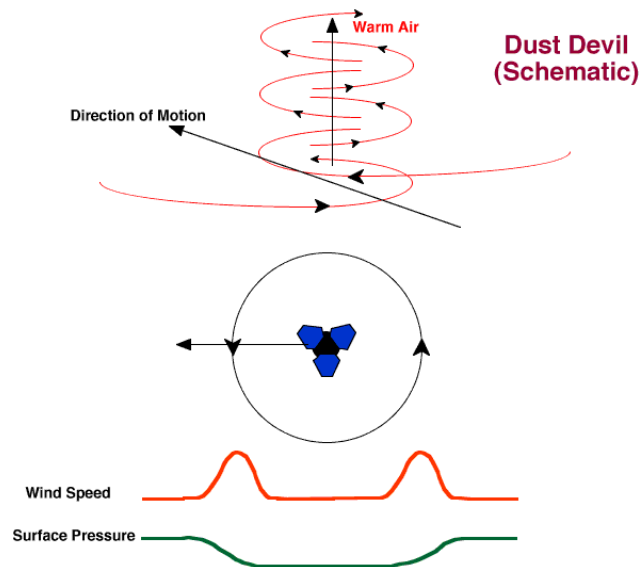


Figure 3R schematic of dust devil

Reference mentioned in this review:

Zhang, M., X. Luo, T. Li, L. Zhang, X. Meng, K. Kase, S. Wada, C. W. Yu, and Z. Gu, 2016: From dust devil to sustainable swirling wind energy, *Nature*, 8322, doi:10.1038/srep08322.