

We thank the editor for suggesting final technical corrections in the abstract and conclusion. The corrections are found in blue font below.

Editor suggestion:

The clarifications in the introduction and body of the text are very clear, while further main clarification in the abstract and conclusions will be useful for clarity. For example, "This study introduces the High Spectral Resolution Lidar" could be changed in "This study introduces the nadir High Spectral Resolution Lidar".

Response:

Thank you for bringing this up. We have included the mention of “nadir” in the lines below.

Abstract:

Original: “To provide these measurements, this study introduces and evaluates a new surface wind speed data product from NASA Langley Research Center’s High Spectral Resolution Lidar – generation 2 (HSRL-2) using data collected as part of NASA’s Aerosol Cloud meTeorology Interactions oVer the western ATlantic Experiment (ACTIVATE) mission.”

Modified: “To provide these measurements, this study introduces and evaluates a new surface wind speed data product from NASA Langley Research Center’s **nadir-viewing** High Spectral Resolution Lidar – generation 2 (HSRL-2) using data collected as part of NASA’s Aerosol Cloud meTeorology Interactions oVer the western ATlantic Experiment (ACTIVATE) mission.”

Conclusion:

Original: “This study introduces the High Spectral Resolution Lidar – generation 2 (HSRL-2) surface wind speed retrieval method, demonstrates its use, and evaluates its accuracy using NCAR AVAPS dropsonde data collected during the NASA ACTIVATE field campaign.”

Modified: “This study introduces a new 10 m surface wind speed product from NASA Langley Research Center’s (LaRC’s) **nadir-viewing** High Spectral Resolution Lidar – generation 2 (HSRL-2) instrument and demonstrates its use and accuracy. The HSRL-2 retrievals are evaluated using NCAR AVAPS dropsonde surface wind speed data collected during the NASA ACTIVATE field campaign.”