

Atmos. Meas. Tech. Discuss., referee comment RC2  
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## **Comment on amt-2021-33**

Anonymous Referee #2

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Referee comment on "VAHCOLI, a new concept for lidars: technical setup, science applications, and first measurements" by Franz-Josef Lübken and Josef Höffner, Atmos. Meas. Tech. Discuss., <https://doi.org/10.5194/amt-2021-33-RC2>, 2021

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Lübken and Höffner presenting a novel concept of distributed small lidar instruments named Vertical And Horizontal COverage by LIgars (VAHCOLI) to investigate the atmosphere as a whole. The revolutionary lidar instrument, capabilities, and technical concept are excellently presented. Even some basic knowledge has been recapitulated to guide the reader and make this part of the manuscript well understandable. The relevant science applications are presented in paragraph 5. It mainly focuses on dynamical processes of the atmosphere that are clearly described and discussed in relation to their relevance to VAHCOLI.

Overall, this manuscript is well written, the novelty of the concept, lidar instrument, and relevant science applications are presented clearly and sound. The manuscript has high significance for the community related to lidar instrumentation and atmospheric measurements.