

Atmos. Chem. Phys. Discuss., referee comment RC1  
<https://doi.org/10.5194/acp-2021-1102-RC1>, 2022  
© Author(s) 2022. This work is distributed under  
the Creative Commons Attribution 4.0 License.

## **Comment on acp-2021-1102**

Claudia Acquistapace (Referee)

---

Referee comment on "New insights on the prevalence of drizzle in marine stratocumulus clouds based on a machine learning algorithm applied to radar Doppler spectra" by Zeen Zhu et al., Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2021-1102-RC1>, 2022

---

I really enjoyed reading the manuscript, that is presenting an innovative methodology to classify drizzle presence in the clouds using a machine learning algorithm. The presented results are robust and potentially open new future studies and analyses. I find the paper well written and I only have some small minor comments regarding the exposition of some scientific concepts. Despite the completeness of the exposition, I could find a couple of open questions regarding the machine learning algorithm and the physical interpretation of the classification, that I would like to pose to the authors, to possibly improve the manuscript further. Please find below the detailed list of my comments.

Best regards

Please also note the supplement to this comment:

<https://acp.copernicus.org/preprints/acp-2021-1102/acp-2021-1102-RC1-supplement.pdf>