Comment on amt-2021-104
Anonymous Referee #2

Referee comment on "Comparison of mid-latitude single and mixed-phase cloud optical depth from co-located infrared spectrometer and backscatter LiDAR measurements" by Gianluca Di Natale et al., Atmos. Meas. Tech. Discuss., https://doi.org/10.5194/amt-2021-104-RC2, 2021

The work is very interesting and innovative. It would also have been interesting to have high spectral resolution lidar measurements of water vapor and temperature. In general this approach opens the possibility to retrieve the cloud ODs from large datasets of LiDAR measurements, which can be used to determine the climatology of this parameter. This aspect makes the work very important also for future studies.