Atmospheric
Measurement
Techniques

Open Access

EGU

Discussions

Interactive comment on "Determining Cloud Thermodynamic Phase from the Polarized Micro Pulse Lidar" by Jasper R. Lewis et al.

Anonymous Referee #1

Received and published: 12 September 2020

The manuscript presents approach for classification of ice, water and mixed-phase clouds basing on MPL polarization measurements. Authors are well known experts in the field of MPL development and data analysis and in this study they provide statistics for two years cloud phase retrievals. Due to low power of MPL, only volume depolarization ratio can be used, still authors demonstrate that significant amount of information about dependence of depolarization on the cloud temperature together with phase fraction probability can be derived. Paper is well and clearly written and scientific level of presentation is high. Paper can be published in AMT.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2020-298, 2020.