

Interactive comment on “Combining ground-based microwave radiometer and the AROME convective scale model through 1DVAR retrievals in complex terrain: an Alpine Valley case study” by Pauline Martinet et al.

Anonymous Referee #1

Received and published: 20 June 2017

Figure 16 - it is well known that the radiometer could resolve ground-based inversions but poor in depicting elevated temperature inversions. What would be the value added by 1DVAR?

One of the scientific objectives of the paper is to study the performance of radiometer in deep valley. However, the results look like similar observations have been reported for flat terrain as well. Which unique features of the measurements of the radiometer have been shown in the paper?

C1

What new features have been found for retrieval at an elevation angle/boundary layer scans?

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2017-144, 2017.

C2