

CORRIGENDUM

A. PROTAT

*Centre for Australian and Weather and Climate Research, Melbourne, Victoria, Australia, and Laboratoire
Atmosphère, Milieux, et Observations Spatiales, Vélizy, France*

J. DELANOË AND E. J. O'CONNOR

University of Reading, Reading, United Kingdom

T. S. L'ECUYER

Colorado State University, Fort Collins, Colorado

(Manuscript received and in final form 2 June 2010)

An error in the labeling of Fig. 1 has been discovered in Protat et al. (2010). The labeling between the radar-only and radar–lidar parts of the ice cloud microphysical retrieval was inverted. The new figure and caption should be as in Fig. 1 below. The discussion of Fig. 1 also needs to be slightly revised, since it relies on the previous wrong labeling of Fig. 1 in Protat et al. (2010). The new Fig. 1 shows that the radar-only part of the Delanoë and Hogan (2008) retrieval actually dominates the statistics below 12-km height. However, we still believe that although the radar–lidar part of the retrieval is not the dominant part in the statistics below 12 km, the ground-based retrievals can be taken as the reference for the evaluation of the *CloudSat* ice microphysical products. The main reason for that is that the Delanoë and Hogan (2008) radar-only retrieval is an adaptive procedure, which makes use of the radar–lidar part of the retrieval

to refine the radar-only retrieval on a cloud-to-cloud basis. It is also clearly obtained in Protat et al. (2010, see their Fig. 5) that the radar–lidar and radar-only parts of the Delanoë and Hogan (2008) retrieval methods do produce very similar statistical microphysical properties, in much better agreement than between the ground-based and *CloudSat* ice microphysics retrievals.

REFERENCES

- Delanoë, J., and R. J. Hogan, 2008: A variational scheme for retrieving ice cloud properties from combined radar, lidar, and infrared radiometer. *J. Geophys. Res.*, **113**, D07204, doi:10.1029/2007JD009000.
- Protat, A., J. Delanoë, E. O'Connor, and T. L'Ecuyer, 2010: The evaluation of *CloudSat* and CALIPSO ice microphysical products using ground-based cloud radar and lidar observations. *J. Atmos. Oceanic Technol.*, **27**, 793–810.

Corresponding author address: Alain Protat, Centre for Australian Weather and Climate Research, 700 Collins St., Docklands, Melbourne, VIC 3008, Australia.

E-mail: a.protat@bom.gov.au

DOI: 10.1175/2010JTECHA1504.1

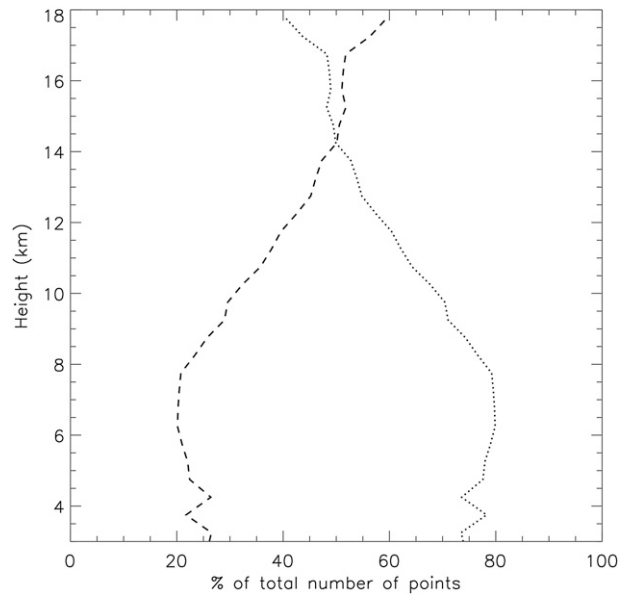


FIG. 1. Vertical profile of the percentage of radar-lidar (dashed) and radar-only (dotted) parts of the Delanoë and Hogan (2008) retrieval. This has been obtained from the 3 yr of Darwin radar-lidar observations used in Protat et al. (2010).