Interactive comment on “Clear-air lidar dark band” by Paolo Di Girolamo et al.

Anonymous Referee #2

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General Comments

This paper is very well written and deals with a unique lidar aerosol observation. The case is made for subtle growth by condensation of water on a narrow size distribution of aerosol. Under very specific atmospheric conditions the growth can result in a Mie backscatter minimum at a certain altitude. The lidar and radiosonde data are brought together to make a consistent argument for being able to see this occurrence. This paper is appropriate for ACP and can be published with minor corrections.

Specific comments

Abstract: no comments

Page 2: Line 23: These eleven detected signals allow(s) determining . . .

Page 3: Line 15: This minimum persist(s) albeit . . .

C1

Page 5: Line 1: Figure 7 reveals . . . Shouldn’t that be Figure 6?

Figure 7: end of caption: 1.064 micrometers not millimeters

C2