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## **ACPD**

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Interactive Comment

## Interactive comment on "Comparison of cloud statistics from spaceborne lidar systems" by S. Berthier et al.

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1) A fuller discussion of the ins-and-outs of lidar would be good. 2) Explanation of ITCZ missing. 3) Does equation (1) basically boil down to (variance of signal in window)/(expected noise variance) between 19-20 km? 4) For each k = t (or z) fit window of various widths (2n) and plot var  $s_f(k)$  vs n to give Fig.1 - doens't this depend on backscatter signal being constant vs altitude for a cloud-free atmosphere? 5) If this is basically just a comparison of signal vs. random noise, it is odd that variance as large as 1000\*sigma^2 is required. 6) How is cloud and aerosol discriminated between?

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 5269, 2008.

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Interactive Discussion

Discussion Paper

