Interactive comment on "HoloGondel: in-situ cloud observations on a cable car in the Swiss Alps using a holographic imager" *by* Alexander Beck et al.

D. Baumgardner (Referee)

darrel.baumgardner@gmail.com

The use of cable cars to acquire cloud data helps expand the information on micro-physical characteristics beyond what is possible from fixed mountain top observatories. With holographic measurements these characteristics can be examined in detail and help better understand processes like riming, aggregation, Bergeron-Findeison, etc.

The supplementary material is an annotated manuscript with minor comments and questions. To still be addressed:

1) It is mentioned that there is a link between background noise and number concentration. What is the maximum concentration that is practical to measure?

2) Droplets and ice crystals melting on the heated windows may leave residue, particularly if if there is ambient pollution from wood fire burning or BC from diesel generators producing the electricity.

3) What limits the spatial resolution that can be measured between drops/xtals?

4) How long does it take to process a single hologram?

5) Long term measurements are mentioned but where do the thousands if not millions of terabytes get stored?

Please also note the supplement to this comment:
http://www.atmos-meas-tech-discuss.net/amt-2016-216/amt-2016-216-RC1-supplement.pdf

———————————————