Atmos. Meas. Tech. Discuss., 8, C906–C907, 2015
www.atmos-meas-tech-discuss.net/8/C906/2015/

Atmospheric Measurement Techniques Discussions

Interactive comment on "Schneefernerhaus as a mountain research station for clouds and turbulence – Part 1: Flow conditions and large-scale turbulence" *by* S. Risius et al.

Anonymous Referee #3

Received and published: 29 April 2015

This is a well documented description of the research site that the authors are using to study turbulence and drops in clouds. Here the authors describe the large scale turbulence and flow conditions. Publication is recommended. The authors may want to consider the points made below.

General point: The authors argue that the the large scales are similar to laboratory flows. This is apparently to justify using the site as a high Reynolds number laboratory for cloud studies. Possibly they are trying too hard to make the laboratory connection and it would be of interest to the readers to find out what they see as significant differences to the laboratory, rather than pointing out only the similarities.

Full Screen / Esc
Printer-friendly Version
Interactive Discussion
Discussion Paper

A few specific recommendations: 1. What dates (or at lest seasons) were the photos in Figs 1 and 2 taken? 2. Fig. 3. It would be good to know this type of data for more than two years. Perhaps a web site can be provided. 3. Fig. 8. The inertial subrange is one decade, if that. Presumably resolution issues and noise then take over.There could be some mention of this. Also it would be good to have normalized frequency, or scale information as the abscissa. In the insert, there is no indication of a diurnal bump. Comment is needed. 4. Fig 12. Meteorologists like to know the value of the un-normailzed dissipation rate. Perhaps mention of typical values could be given in the text.

Interactive comment on Atmos. Meas. Tech. Discuss., 8, 541, 2015.