

Interactive comment on “LOAC: a small aerosol optical counter/sizer for ground-based and balloon measurements of the size distribution and nature of atmospheric particles – Part 2: First results from balloon and unmanned aerial vehicle flights” by J.-B. Renard et al.

Anonymous Referee #1

Received and published: 19 February 2015

An important part of the paper deals with measurements using a floating or drifting balloon. The instrument used draws air into a sensitive volume using a mechanical pump. This pump is producing aerosol particles as every pump is doing that by wear and abrasion.

The wind velocity in the environment of a drifting balloon is zero.

C142

So the pump under the balloon is creating its own "pollution" aerosol cloud. The paper is not discussing, how such a cloud is influencing the measurements, the particle size distribution. The cloud of the balloon certainly is not reflecting the undisturbed atmospheric aerosol at that altitude.

The paper should address this question and/or discuss, how the pollution by the pump is avoided or controlled.

Interactive comment on Atmos. Meas. Tech. Discuss., 8, 1261, 2015.

C143