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Interactive comment on "Temperature uniformity in the CERN CLOUD chamber" by Antonio Dias et al.

Anonymous Referee #2

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The manuscript describes a set of laboratory studies of the temperature behaviour in a cloud chamber.

Temporal, spatial and chamber temperature dependence of the thermometric measurements are investigated.

Temporal and spatial variations in the temperature measurements are as little as 0.01 C but can be as much as 0.1 C when the chamber temperature is varied between -70 C and +40 C.

These are impressive temperature measurements.

The technique of calibration for the thermal sensors is a benchmark for any cloud chamber.

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As an instrumentation paper, this work is of great value.

It may be necessary to illustrate one or two examples of scientific studies one could do with such high precision measurement in the CERN CLOUD chamber.

The authors have mentioned in the text the importance of precise temperature measurements but a concrete example of an experiment that has been carried out in the CLOUD chamber will be more convincing to the readers.

In general the paper is well written although some amount of polishing on the editorial side will improve the manuscript.

I recommend publication of this manuscript with minor modifications.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2017-114, 2017.