

## ***Interactive comment on “Dimethylamine and ammonia measurements with ion chromatography during the CLOUD4 campaign” by A. P. Praplan et al.***

### **Anonymous Referee #2**

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This paper discusses amine and ammonia measurement in nucleation and growth experiments made in the CLOUD chamber. The topic is very important. The paper is original but needs some additions and clarifications before it can be accepted for publication. My detailed comments in this regards are given below.

The main purpose of this paper remains a bit vague after reading the abstract and introduction. Is it to evaluate the performance of ammonia and amine measurements in CLOUD chamber, or to describe a small set of such measurements, or some combination of these two issues? Some clarifications in text are needed.

The discussion on sampling efficiency in section 3.1 is difficult to follow. What is the

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main point authors are aiming to tell here? What is the desired level of sampling efficiency of this system (99%, 95% or something else)? It seems that several factors affect the sampling efficiency. How then a single value of liquid to air flow ratio determine a certain sampling efficiency?

Page 2403, lines 3-5. Considering the multiple factors affecting the sampling efficiency the procedure introduced here (multiplying by factors 1.5 or 2) seems quite a crude way of correcting the measured concentration levels. Can the authors justify this issue a bit more?

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Interactive comment on Atmos. Meas. Tech. Discuss., 5, 2395, 2012.