

Interactive comment on “Atmospheric ammonia measurements in Houston, TX using an external-cavity quantum cascade laser-based sensor” by L. Gong et al.

Anonymous Referee #1

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This is a very interesting paper on trace gas detection of ammonia in the atmosphere using photoacoustics for analysis. A sensitivity of 0.72 ppb has been achieved by averaging over 5 minutes. Meteorological parameters and relevant concentrations of other important pollutants have been considered in data analysis. The results are carefully discussed and previous work is well documented. This is a very nice piece of work!

Here are two questions that may be taken into consideration by the authors:

1. What was the background level measured in pure nitrogen. To which extend desorption of ammonia from previous measurements was a problem.

2. How the lowest concentrations of 0.2 ppb in summer and 0.1 ppb in winter have been obtained?

Interactive comment on Atmos. Chem. Phys. Discuss., 11, 16335, 2011.

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