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## Interactive comment on "Performance of a low-cost methane sensor for ambient concentration measurements in preliminary studies" by W. Eugster and G. W. Kling

## W. Eugster

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Received and published: 30 April 2012

We very much appreciated the detailed feedback by this reviewer and will reply to the issues in our author comment later. Also the two typos mentioned under "Technical Corrections" are acknowledged – despite the care we had taken to avoid such typos the reviewer is actually found them...

I however have one question with respect to the "highly capable but still economical laser-based sensors" that should be referenced in our revised paper. I completely agree that there are many developments going on, but we tried hard to find a wording that does **not** pretend that a cheap (we call it low-cost) solid state sensor can ever be

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compared with a high-quality instrument such as a QCL based spectrometer published by So et al. (2009). Hence we emphasized the fact that the sensor that we tested is currently only useful for **preliminary** assessments of  $CH_4$  concentrations. So, I see the challenge to adequately incorporate your welcome suggestion, but avoid the impression that a solid state sensor is at a level where mentioning it on the same line of text as a QCL based system does imply they are in any way comparable in performance. This would be a misinterpretation.

Or do you really see a possible application where we could write that e.g. 100 sensors of the low-cost type would replace one sensor of an "economical" QCL system? As an author of this paper I am hesitating to make any such comparison which could easily imply that such a comparison is useful. But maybe you could clarify this point to help us to adequately address this issues.

Interactive comment on Atmos. Meas. Tech. Discuss., 5, 2567, 2012.