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

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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
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.