

Interactive comment on “Methane emission from tropical savanna *Trachypogon sp.* grasses” by E. Sanhueza and L. Donoso

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Both referees point out a critical issue with this paper, which is to lump all measurements into one single number. This is indeed scientifically questionable, since the measurements carried out in October and November are clearly different, thus this must be addressed by the authors. It is also obvious from the data, and mentioned by referee number 2, that the (in my view) main finding of the paper, i.e. that the measurements show independent evidence for CH₄ emissions from plants, is at least valid for the October samples. However, the evaluation has to be done for the individual groups of samples separately, and a statistical analysis should reveal whether significant signals can also be obtained from the second period.

This will affect also the general concern raised by referee 2, namely the global extrap-

Interactive
Comment

olations. Given that even on this one plot the emission/consumption rates are strongly variable, it is very hard to make a global up-scaling based on those measurements. The authors themselves suggest that higher emissions may be found in the dry season, which adds another uncertainty. At least this must be stated very clearly, or the up-scaling should be avoided at all.

In this case, the paper could much more concentrate on its main significance, namely that the measurements reported can be interpreted as positive evidence for emissions of CH₄ from plants. Since this issue of vegetation emissions of methane is controversial and given that new measurements are not available yet, this is an important message for the scientific community.

If the authors can take those points into account and revise the manuscript accordingly, the manuscript can be considered again for publication in ACP. The minor points suggested by the referees should also be incorporated into a revised version.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 6841, 2006.

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