

Interactive comment on “New emission factors for Australian vegetation fires measured using open-path Fourier transform infrared spectroscopy – Part 2: Australian tropical savanna fires” by T. E. L. Smith et al.

Anonymous Referee #2

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Review of Smith et al. MS No.: 2013-1035

This paper presents new emission factors for Australian vegetation fires. The reported emission factors are based on in situ measurements with open path FTIR. I am not an expert in FTIR measurements – so I hope that other reviewers can specifically comment on the methods section and experimental approach. I reviewed this as a user of emission ratios in global models. The paper does not represent a ground breaking scientific contribution, but it does present new data. The results are fully described

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and placed into context with previous measurements. From my perspective, this is a well-written paper and fit for publication in Atmospheric Chemistry and Physics. My comments are very minor in nature.

Section 4.1: Is the regression used to calculate the emission ratios similar to reduced major axis (RMA) regression? Is this another term for the RMA approach?

Figure 8: Please increase the font size throughout.

Figure 11: Please increase the font size on your axes and axes labels.

Figure 12: This is a nice Figure. Please discuss how other trace species behave w/r/t MCE - i.e. do they show a similar pattern as methane with approximately the same pattern of increasing emission ratio as MCE is reduced? I would actually recommend putting similar plots for the other species in the supplemental materials.

Interactive comment on Atmos. Chem. Phys. Discuss., 14, 6311, 2014.

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