

## ***Interactive comment on “Characterisation of the magmatic signature in gas emissions from Turrialba volcano, Costa Rica” by Y. Moussallam et al.***

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I think we agree here, the  $H_2/H_2O$  ratio carries a large uncertainty so it isn't used to compute the redox state, the  $CO/CO_2$  is. Also we determined the  $H_2O$  content of the plume using the OP-FTIR values not the MultiGas ones the  $H_2O/SO_2$  plot in Fig.5 is the one used for the reported composition in Table 2.

I realise I forgot to join the new Fig.6 to the earlier answer (with respect to your last comment), please find it attached. Figure 6 caption: Computed relationship between equilibrium temperature and oxygen fugacity (expressed as deviation from the quartz-fayalite-magnetite buffer) for the measured  $CO_2/CO$  ratio in the gas emissions from

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the mixed plume. \*Range of  $fO_2$  for Masaya volcano measured by de Moor et al., (2013) in matrix glass from basaltic scoria.

Please also note the supplement to this comment:

<http://www.solid-earth-discuss.net/6/C1063/2014/sed-6-C1063-2014-supplement.pdf>

Interactive comment on Solid Earth Discuss., 6, 2293, 2014.

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