

Interactive comment on “High precision dual-inlet IRMS measurements of the stable isotopes of CO₂ and the N₂O/CO₂ ratio from polar ice core samples” by T. K. Bauska et al.

Anonymous Referee #1

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The manuscript describes high precision measurements of d13C-CO₂, d18O-CO₂ and N₂O/CO₂ ratio of gases extracted from ice cores. High precision measurements of isotopic ratios of CO₂ in ice core have been proven to be difficult to attain. Bauska et al. show a reproducibility of less than 0.02 per mil and a total uncertainty of 0.04 per mil. The study is an interesting piece of experimental work. The results are well described and significant.

I suggest a number of minor changes reported as comments in the attached pdf file.

Please also note the supplement to this comment:

C1783

<http://www.atmos-meas-tech-discuss.net/7/C1783/2014/amtd-7-C1783-2014-supplement.pdf>

Interactive comment on Atmos. Meas. Tech. Discuss., 7, 6529, 2014.