

## ***Interactive comment on “Global and regional temperature-change potentials for near-term climate forcings” by W. J. Collins et al.***

**W. J. Collins et al.**

w.collins@reading.ac.uk

Received and published: 30 December 2012

We would like to thank Referee #2 for their useful comments and helpful suggestions on the wording.

No southern hemisphere sources

We now acknowledge this lack in the text and describe briefly that we would expect the latitudinal patterns to be reversed for southern hemisphere sources.

Policy implications

We have added further explanations of the policy implications to the paper.

Technical suggestions

C11151

Pg 23262, line 18: We now spell out ARTP line 19: We have removed the sentence on the 100 year ARTPs from the abstract as the effects are so small after 100 years.

Pg 23266, line 25-27: We now make sure that CH<sub>4</sub> is consistently used as a superscript in  $\Delta B^{\text{CH}_4}$ . We have decided to use  $B^{\text{CH}_4}$  rather than  $B_0^{\text{CH}_4}$  as the baseline burden as this does not vary by experiment.

Pg 23267, line 15: We have expanded the description of how the methane lifetimes and consequent methane forcing are calculated.

Pg 23268, eq 3: Yes, we have now changed  $\alpha_i$  to be  $\alpha_i^{\text{CO}_2}$

Pg 23270, line 5-8: Yes, this is a surprising finding at first glance. We now explain why this is so in the text.

Pg 23273, line 10: We have adopted your wording change.

Pg 23274, line 7: We have corrected the typo.

Pg 23276, line 20: We have made your suggested change.

Pg 23277, line 13-15: We have adopted your wording change.

---

Interactive comment on Atmos. Chem. Phys. Discuss., 12, 23261, 2012.

C11152