We have addressed all the comments made by the editor – editor comments in blue, our response in black. Updated manuscript uploaded.

Editor Initial Decision: Reconsider after minor revisions (Editor review) (07 Jan 2015) by Neil Harris Comments to the Author:

One of the topics raised by the reviewers is the representativeness of the 'annual means'. You have made real efforts to make the problems associated with this clearer (and had already recognised it yourselves), but I wonder if a change in nomenclature could be used to make it even clearer. For example, could the term 'annual value' be defined when you first explain the problem – in the discussion of Mace Head measurements around line 340? You would then have to be rigorous in using this term subsequently.

Used 'Annual tropospheric value' at first explanation of this calculation and then repeated this term throughout the manuscript. Also changed in figure captions, again explained at first use.

I do not think that Scheerer 2003b should be used as a reference. A paper has not been successfully peer-reviewed if it is only in the Discussions phase and so is not part of the 'relevant formal literature' (see guidelines). If you want to refer to the data, it would be better to show some of it and, possibly, refer to a source as a private communication or add an author. In the overall context of the paper, it is not that important, so the other option is to leave out that reference.

Reference removed from body of text, Table 2 and references.

Minor

25 flown or used, not traversed (=crossed)
Changed to 'used'.

58-61 'Their current contribution is minor, Laube et al. (2008) found that at 15.2 km (the level of zero radiative heating), the) 1.4% of chlorine from organic compounds was from short-lived chlorocarbons, of which half was from CH2Cl2. This level is important because air parcels at or above this level point are likely to be transported to the stratosphere.' Done.

198-199 Sentence starting 'Precision,..' is not needed (or currently accurate). Sentence removed.

215 'essentially the same.' Otherwise it is over-qualified.

Done.

246 'The analytical precision..'

Done.

insert equation after 'Wisher et al. (2014).' More relevant and makes subsequent para easier to read.

Done.

322 insert space before 'Analysis'

Done.

357 you are not really calculating a trend – use 'difference' or 'change'

Done.

526on worth mentioning CO emissions well characterised as well

Done.

Not sure the second half of this sentence adds anything.

Second half of the sentence removed.

708 insert space before 'For'

Done.

709, 710, 793 space before sigma

Done.

723 'There is'

Done.

724on This is not a critical reference.

Reference removed from body of text, Table 2 and references.

743on Final sentence seems unnecessary

Sentence removed.

832 delete 'also'

Done.

844 'We estimate..'

Done.