

Interactive comment on “Options to accelerate ozone recovery: ozone and climate benefits” by J. S. Daniel et al.

Anonymous Referee #1

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GENERAL COMMENTS

This is an excellent and very well written paper. It presents a concise and interesting analysis of various policy options to reduce future EESC (now expanded to include the effects of N₂O), and resultant impacts on global ozone and radiative forcing. I have very few comments on this paper and they are all minor. It is definitely one of the better papers I have reviewed. I apologize for not being able to find more things wrong with this paper.

SPECIFIC COMMENTS

Line 27: What does it mean for something to be a 'metric for total ozone'? We know that ozone is definitely not only influenced by stratospheric halogen loading so you

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need to be clear on this.

Lines 34-35: I don't like the phrase 'increasing trend in stratospheric ozone depletion' for two reasons, (1) an increasing trend means a non-linear change (that would be a constant trend) e.g. exponential or quadratic increases, and (2) using the word 'increasing' creates a discordant mental picture in the mind of the reader. Why not just say 'the decline in ozone'?

Line 50: By 'virtually phased out' do you mean 'almost completely phased out'? It just wasn't completely clear to me.

Lines 304-306: I don't understand this sentence. What 'background case levels' could these be where ozone has not reached these levels but where ozone is higher than in 1950?

Line 311: Where is the support for this statement that 1980 does not mark the onset of global ozone depletion?

GRAMMAR AND TYPOGRAPHICAL ERRORS

Line 219: Replace 'already cooled stratospheric temperatures' with 'already cooled the stratosphere'.

Interactive comment on Atmos. Chem. Phys. Discuss., 10, 10839, 2010.

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