

REFeree #1

Thank you for the revision. I have no further comments besides technical corrections listed below:

* please enlarge font size in colorbar labels (both text and tick numbers) in Fig. 9 and 10

Done. We also enlarged the font size in colorbar labels in Fig. S6 and S7.

* avoid repeated parenthesis ")))" in lines 110, 330, 379, 412

Done.

* avoid line breaks just before percent/percentile units (Fig 5 caption, line 298/299, line 430/431) by adding a non-breaking space

Done.

* add non-breaking space between Fig. and number (i.e., Fig.~\ref{...}), see e.g., line 350/351, 365/366, 369/370, 388/389, 392/393

Done.

* add punctuation to equations (commas or full stops) to make them part of the surrounding sentences

Done.

* figures feature italics in label subscripts:

- Fig. 1: r_c , r_v , r_i , r_s , r_g , r_r
- Fig. 2: excess_p , O_p , D_p (note: caption does not mention the subscripts)
- Fig. 3: excess_v , O_v , D_v , r_v (note: caption does not mention the subscripts)
- Fig. 4: r_v , O_v , O_r (note: caption mentions O_p - O_v , but plot has O_r - O_v)
- Fig. 7: O_v , O_p , excess_v , excess_p , $_{eq}$
- Fig. 8: excess_p , O_p , O_v , $_{eq}$ (both on axis labels, and in the legend)
- Fig. 9: $_{eq}$, O_p , O_e , excess_p
- Fig. 10: O_p , $_{eq}$

All these figures have been modified to avoid italics in label subscripts. The figures in the Supplementary Material have also been modified accordingly.

* in Fig. 1, consider using line width, in addition to red color, to highlight isotopic effects (for color blind or b/w printing)

Done.

* the four paragraphs above reference list should have titles (Code availability, Author contributions, Competing interests, Acknowledgements)

This was done by changing the version of the latex template, and by modifying the position of the figures. An appendix has also been created to bring together the tables containing the lists of symbols.

* references: in Ciais & Jouzel 1994, correct DOI URL (now has a bogus <https://doi.org/https://doi.org...>)

Done.