

Interactive comment on “Enrichment in ^{13}C of atmospheric CH_4 during the Younger Dryas termination” by J. R. Melton et al.

H. Fischer (Editor)

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Dear authors

your manuscript "Enrichment in ^{13}C of atmospheric CH_4 during the Younger Dryas Termination" has now been seen by two referees and I am happy to say that both reviews support publication of the manuscript in CP after revisions. Accordingly, I strongly encourage submission of a revised manuscript, that carefully includes the suggestions made by the referees.

From an editorial point of view the most important changes are:

- the discussion of data mismatches outside the discussed time window

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- the discussion of the limitation of the triple mass balance approach. Reviewer 1 makes the important point that your triple mass balance allows only for variations in three sources. This obviously does not cover the whole parameter space of possible source changes. These limitations should be discussed or at least acknowledged.

- the discussion of changes in the interhemispheric gradient, where it is of importance for your conclusions.

The 2 referees have opposing views on how to handle the supplement. As the handling editor I request to move all discussion of methods, data corrections, age scales etc. and related (where necessary) figures to the main text. It is in the interest of the readers of CP to have all relevant information in one document. There are no real space restrictions, so there is no reason to move something to a supplement except for the very large data tables.

In the next step please provide a point-to-point reply to the reviews, which also clarifies how you will meet the points of criticisms in a revised version of your manuscript.

Interactive comment on Clim. Past Discuss., 7, 3287, 2011.

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