

Interactive comment on “High-resolution glacial and deglacial record of atmospheric methane by continuous-flow and laser spectrometer analysis along the NEEM ice core” by J. Chappellaz et al.

Anonymous Referee #2

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This manuscript presents the methods and results of quasi-continuous CH₄ measurements on the NEEM ice core performed during the 2010 field campaign. It is very detailed and well written, and the topic and results are of large importance for ice-core and paleoclimatic communities. I praise the huge effort of the research teams that made this dataset. The manuscript should be published after minor revision for clarification.

Minor comments:

— p2520, l6-10. Replace "melting-refreezing" with just "melting". There are groups that do not use the refreezing step (e.g. Nakazawa et al., 1993, GRL). The references

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here should also (at least) include papers of Australian group and Japanese group.

— p2522, l16. Could you give a typical value of the upstream pressure?

— p2539, l6-9. This suggestions is only valid if the rates of warming and cooling are the same. Do the authors suggest it is indeed the case? If so, please clarify it in the text with appropriate citations. If not, please change the text accordingly.

Interactive comment on Clim. Past Discuss., 9, 2517, 2013.

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