

Interactive comment on "A first chronology for the NEEM ice core" by S. O. Rasmussen et al.

S. O. Rasmussen et al.

olander@gfy.ku.dk

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Since the submission of the manuscript, the apparent tephra mismatch described in the section starting on line 3 of page 2982 in the CPD paper and ending on line 16 of page 2983 has been reinvestigated and new data have been obtained. The new data show that the horizons at NGRIP 2066.95 m (previously published in Davies et al. 2010) and NEEM 1757.10 m correlate, which is in perfect agreement with the ECM-based match. NGRIP 2066.95 m was not previously considered as a potential correlative to NEEM 1757.1 m due to offsets in the elements of FeO_{tot} , TiO_2 and CaO. The former sample was analysed with a different analytical set-up to the tephras reported in this publication. Here we employ new operating conditions specifically for small tephra grains. Re-analysis of the NGRIP 2066.95 m with the new setup confirms that the original data suffered from calibration problems on certain elements. Secondary standard data have been scrutinised for all tephra data presented in this manuscript and

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no further problems have been found. The section from I. 3/p. 2982 to I. 16/p. 2983 therefore no longer applies and can therefore be disregarded in the review. We will provide information on the new data in a later revised version of the manuscript and in a separate paper which is already under review for publication in Journal of Quaternary Science. We apologize for any confusion in this connection, but unfortunately the new measurements could not be completed in time for the submission of the first version of the manuscript.

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