

Interactive comment on “Spiky Fluctuations and Scaling in High-Resolution EPICA Ice Core Dust Fluxes” by Shaun Lovejoy and Fabrice Lambert

Anonymous Referee #2

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By using non-standard approaches, the authors analyze in this paper the 320.000 cm-long EPICA Dome C dust flux record published in Lambert et al., 2012. Glacial-interglacial cycles that are present in the EPICA record are subdivided into 8 phases showing systematic variations of their statistical properties. The interpretation of the variability of four key indicators (H, C1, qD, A) provides some interesting paleoclimatic information. I have only some concern about the interpretation of A and H exponent and their link to the size of the Patagonian ice sheet, that are reported in the attached file together with other minor comments.

I cannot judge on the statistical techniques adopted for characterizing the cycles – that I leave to expert reviewers in the field.

If the statistical part is duly revised by an expert in the field, this paper is worth to be
C1

published in CP after some minor revisions.

Please also note the supplement to this comment:
<https://www.clim-past-discuss.net/cp-2018-171/cp-2018-171-RC2-supplement.pdf>

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2018-171>, 2019.