Authors reply to editor

Comments to the Author:
Thank you for submitting your manuscript to GChron. I would recommend it for acceptance after revision. The deconvolution method the authors suggested is novel, which can be a practical solution to deal with spread of track lengths. The application to separate pre- and post- depositional components is also useful. The authors' responses to the referee comments were generally satisfying and helpful to clarify the discussion. So, please revise the manuscript by reflecting the two referees' comments (RC1, 2) and your answers. I am planning to ask another referee to review the revised manuscript in terms of mathematical points.

Author reply:

The author has replied to RC1, 2 in AC1-5. The replies have been revised and incorporated in the new version of the ms and marked read. To highlight the removal of old figures a comment has been placed in the right column of the manuscript.

I have an additional comment on the new title. "Age dating thermal events by de-blurring..." seems to be vague; I am afraid that some readers fail to catch meaning and significance of the contribution. In my opinion, more specific wording can make the title more appealing for fission-trackers. For example, "Dating of individual fission-track by deconvolution of the length distributions and its application to separate pre- and post- depositional components" is suggested.

Author reply:

Thanks, the title has been changed.

Non-public comments to the author:
I am planning to ask another referee to review the revised manuscript in terms of mathematical points (not the previous two reviews anymore; I have already confirmed the manuscript can be highly valued in terms of FT research). It would be greatly appreciated if you could suggest potential referees who are familiar with mathematical analysis including deconvolution. Actually, the two referees and I are fission-trackers and difficult to check mathematical appropriateness of the manuscript.

Author reply:

I suggest three experts in inversion theory:

1. Per Christian Hansen, expert in deblurring
   https://www.dtu.dk/Service/Telefonbog/Person?id=812&cpid=109370&tab=1

pcha@dtu.dk

2. Klaus Mosegaard, expert in Tarantola deconvolution theory and a geophysicist. http://www.gfy.ku.dk/~klaus/, **mosegaard@nbi.ku.dk**

3. Thomas Mejer Hansen, expert in inversion.

https://pure.au.dk/portal/en/persons/thomas-mejer-hansen(5287a4df-485d-4328-ab19-1c04e64ccd96).html, tmeha@geo.au.dk