

Reply to SC2: Ian Duddy, A review of:

“Technical note: TRACKFlow, a new versatile microscope system for fission track analysis”

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We thank Dr. Ian Duddy for his time to review our manuscript. We however disagree with his judgement, stating that “I do not believe that it is appropriate to publish this paper in this journal.” and formulate a reply to the three posed major problems:

1. We acknowledge that we did not supply information on the time it takes to perform an analysis. We first emphasize that the main focus of this system is to provide a set of automated protocols for specific actions (e.g. scanning of a sample, glass ED or standard). Automated image *analysis* for fission track research is at this moment not included, as is mentioned as such, apart for D_{par} measurements (which indeed does not require a sophisticated system, but which is more an additional module of TRACKFlow. As speed of counting of fission tracks is highly subjective, depending both on the (experience of the) analyst (or software package) and the sample, the relation to the system is marginal and thus not of importance for this note. We do also acknowledge that we did not provide the time for image acquisition. Foremost because of the fact that this acquisition time differs depending on the chosen protocol, the enabled options and on the linked computer. We suggest to solve this issue by providing information on the time it takes to acquire images of a regular sample and 100 spots on a Durango crystal with the prototype system. We will include such data in the revision of the manuscript.
2. We agree that this is a difficult problem which occurs in every occasion when new hardware-dependent software is discussed. Therefore we will provide demonstrations, for example at dedicated conferences or workshops. Furthermore, we suggest that the posting of a video may at least partially deal with this issue.
3. We regret that our manuscript comes across as an advertisement, as this was by no means the intention. This may be related to an overlap of the goal: informing about a product for scientific research. Indeed, in other academic–private ventures technical notes and brochures are sometimes published in parallel, whereas the former is formulated to *report* and *describe* the system and the latter is designed with a sales purpose (by a sales department). It is our understanding that the “technical note” section of this journal was intended to convey such a report and description, and we thought it was the ideal communication forum for it. Our aim in writing this manuscript was hence limited to inform and describe this system and how it can serve as a link in the long chain between sample preparation and thermal history reconstruction. In our opinion, this is the main goal of a technical note.
On the topic of conflict of interest we indeed first followed the example of broadly similar publications in the field, with authors affiliated to commercial companies. This issue was however resolved not long after the publication of the discussion paper (See EC1).

Yours sincerely,

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