Appendix-A

The samples for this study were processed in the laboratory of the Geological Survey of India, Kolkata, after obtaining permission from the Director General, GSI, Kolkata, West Bengal. The samples were prepared using standard separation, grinding and polishing techniques. All the samples were prepared for the external detector method. AFT mounts were etched with 70% HNO₃ at room temperature for 30 s and were irradiated in the thermal facilities of FRM II at Garching, Germany together with dosimeter glass IRMM-540R (15ppm). Mica sheets were etched using 48% HF at room temperature for 19 min. The fission tracks were counted under a total magnification of 1000x. The calibrated area of one grid is $0.64 \times 10^{-6} \text{ cm}^2$. The length and D par were measured using a stage micrometer and an ocular micrometer, with total magnification of 1000X.

Durango apatites were used as the age standard mineral, which was provided by Prof. Barry Paul Kohn, University of Melbourne, Australia. A copy of the HeFTy software was provided by Prof. Richard Ketcham, Texas University, U.S.A.