

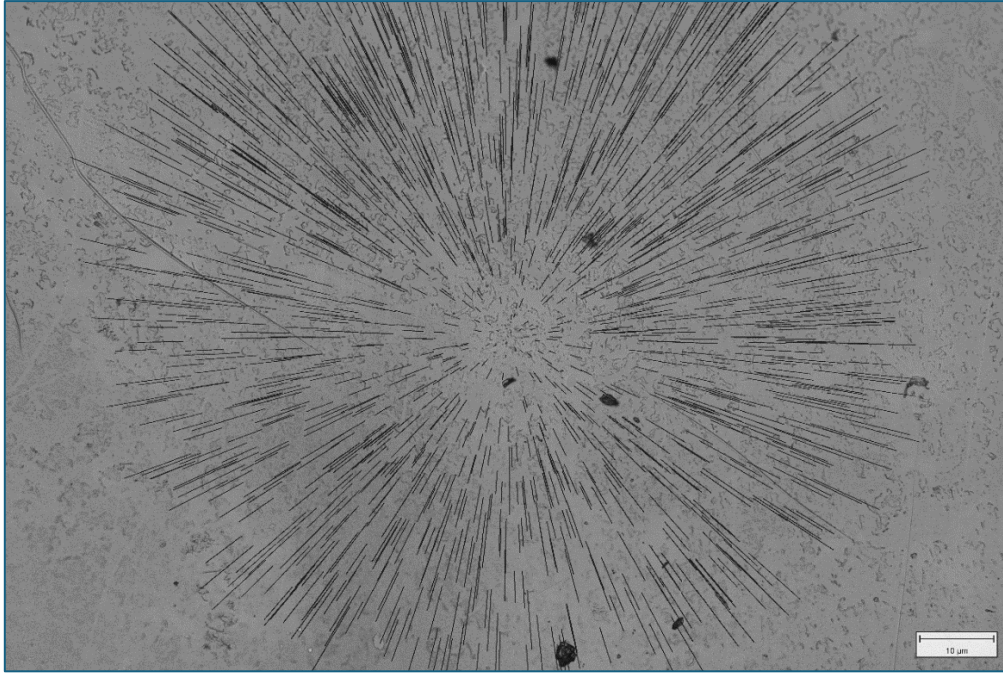


Figure 1 – Synthetic fission-track cluster image generated from the PDG (Method III) raw-data source (Bethe–Bloch electronic stopping with Barkas effective charge, plus ZBL nuclear stopping), for a single representative light/heavy fragment pair from thermal-neutron-induced ^{235}U fission — ^{95}Sr (100 MeV) / ^{138}Cs (67 MeV) — used in place of a full isotope-resolved survey so that the raw-data source is the only variable under comparison. LEXAN® SSNTD, 170 simulated fission events, 36 px/μm spatial calibration

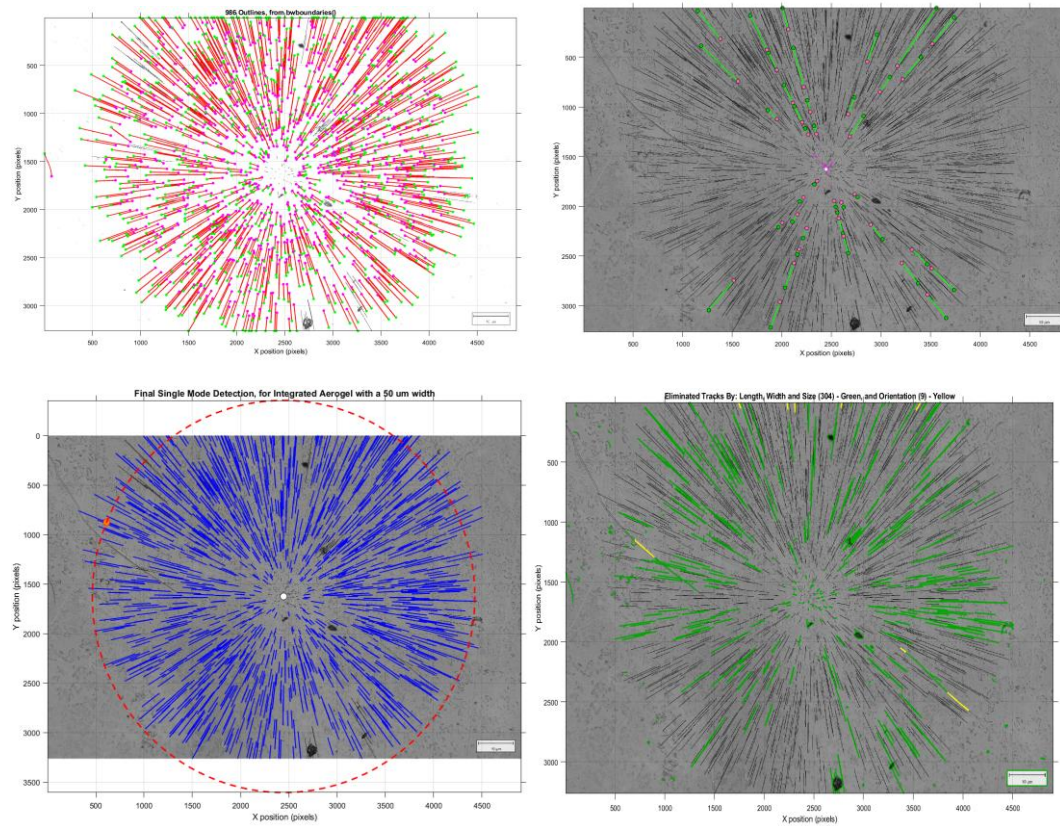


Figure 2 - FTA-Finder detection output for the PDG-sourced synthetic image of Fig. 1: intensity thresholding, Hough-line detection, and median-based fission-site estimation, showing only accepted tracks (blue) used for localization and cluster-boundary reconstruction (red, dashed)

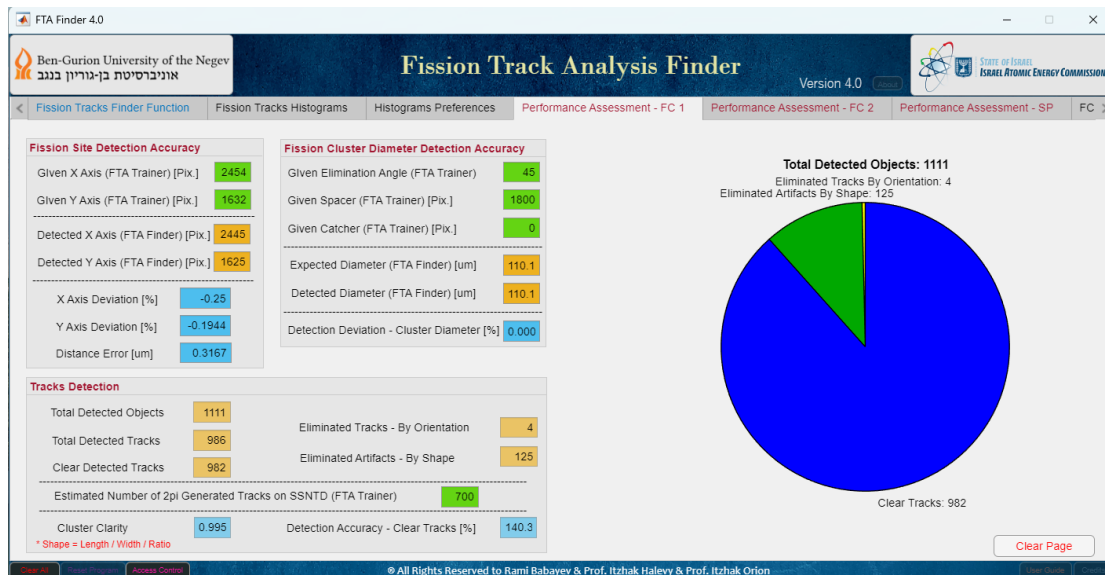


Figure 3 - FTA-Finder Detected Tracks Breakdown

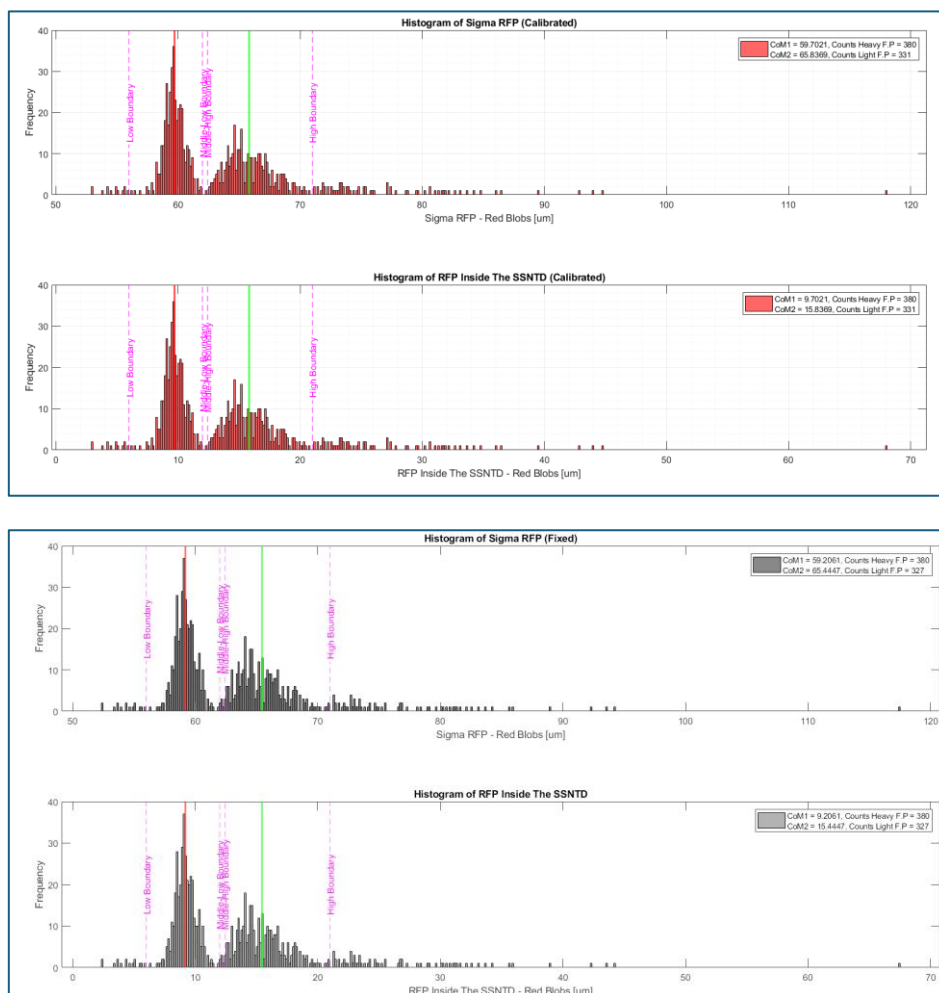


Figure 4 - FTA-Finder Reconstruction Histograms for detected Tracks