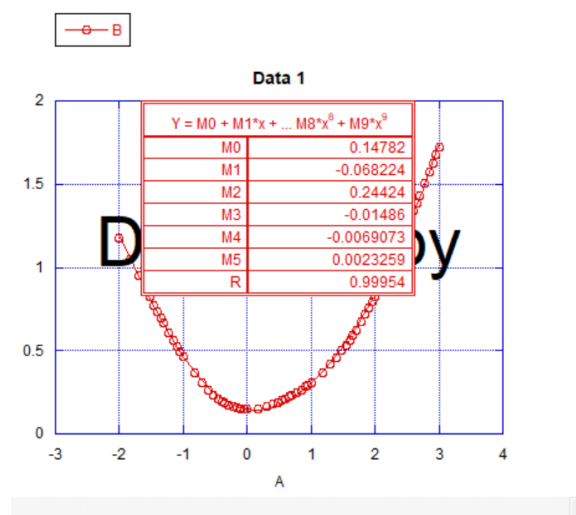
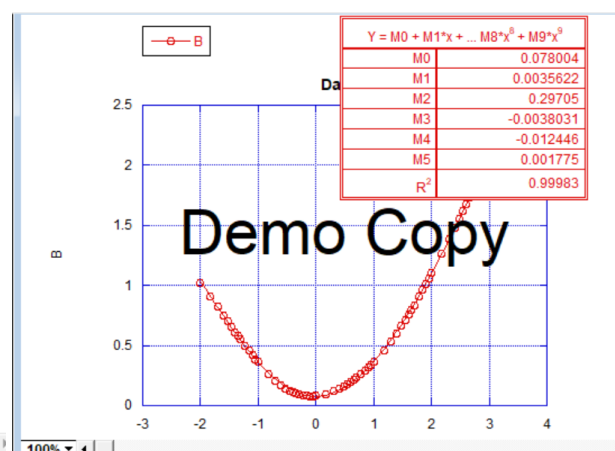


Results:

Kaliedagraph (demo version) was installed on my computer, which significantly contributed to the constructions of equations upon pairing what ideally should output in comparison to the table given by the NIST ESTAR and its total stopping power values. The track length visuals varied upon both density (g/cm^3) and energy (keV). For Ar, closer to the NIST ranges, revealed a symmetrical bell curve located at a density of 2.90 and 20keV energy. Switching over to water, a notable outcome was at 50keV with a density of 1.00. However, a well-defined, optimized, histogram reflecting minimal fluctuations is displayed at a density of 2.90 with 20keV energy. Xenon resembled this characteristic, similarly in behavior, during a density of 2.90 and 20keV energy. In all the graphs, an observation of the curvature in shape, leads to the inclination that an increase in energy makes larger CSDA predictions and forms an asymmetric distribution of the data.



Left: Xe Kaliedagraph formulation



Right: AR formulation