Raw data $\xrightarrow[x(r,\phi,\theta)]{\text{3D}}$ Segment selection $\xrightarrow[x(r,\phi,\theta)]{\text{3D}}$ Azimuthal averaging $\xrightarrow[\bar{x}(r,\theta)]{\text{2D}}$ Beam aware weight calculation $\xrightarrow[\bar{x}(r,\theta)]{\text{2D}}$ Weighted bin averaging $\xrightarrow[\bar{X}_{Bin}(h)]{\text{1D}}$ Extracted Profile