Variables critical to performance that are set in the program

{variable} = default value in program

These are parameters that cannot be changed via the GUI but can potentially impact performance

Pattern screen aspect ratio
{pAspRatio} = 884/1024 [height/width]

Maximum dwell time allowed in exposure file for “segment” element
{tdMax_FEI} = 4.6 [ms]

Dwell time for “pillar” element
{tdPillar} = 0.1.*floor({tdMax_FEI}/0.1) [ms]

Minimum dwell time allowed in exposure file
{PIA} = 1.6 [μs]

NVPE option, constant dwell time
{tdMax_NVPE} = 0.5 [ms]

Maximum number of 3D object vertices
{NumVertices_Limit} = 1000

Maximum number of exposure levels
{NumExpLevels_Limit} = 500

Maximum number of elements per exposure level
{NumSegsPerLevel_Limit} = 100

Maximum number of pixel exposure positions
NumShots_Limit = 100000

Maximum number of element spacing bins that can be submitted to the vertex histogram
{MaxNumBins} = 20

Maximum number of elements connections per vertex for auto-segment detection
{MaxNumSegsPerNode} = 10

Maximum number of segments per level during auto-segment detection
{MaxNumSegsPerLevel} = 100

Intensity (i.e., counts) maximum for the number of vertex spacings per bin displayed in the vertex spacing histogram – in other words, the x-axis maximum limit.
{xAxisMaxHistogram} = 10

Maximum number of remeshing operations that can be applied during segment bending compensation
{NumReMeshOps} = 20

FEBID model evolution: time step used during the calibration curve fitting procedure
{dTau} = 1.0 [ms]

FEBID model evolution: maximum time simulated for the calibration curve fitting
{TauMaxFit} = 100 [ms]

FEBID model evolution: maximum number of surface nodes for growing deposit
{SurfaceNodes} = 200

Calibration curve (τ_d vs ζ) plot axes range [xMin(ms) xMax(ms) yMin(degrees) yMax(degrees)]
{tzAxesLimits} = [0 80 0 80] %[ms,degrees]

Calibration curve x–axis (τ_d) major tick positions
{tzAxesYTick} = [0 20 40 60 80] %[ms]

Parameter with range limitations

Dwell time multiplication factor for all segments (see {f_tDe}). This multiplication factor is applied to all “segment” type elements in an exposure file f_tDe× τ_d
{f_tDe_MinMax} = [0; 2]

Diverging segments proximity correction range (see {PrxCi}). The initial length of segment (length projected into the focal plane) not exposed when more than one segment emanates from a single design vertex. Applied to all segments diverging from the vertex-of-interest
{PrxCi_MinMax} = [0; 10] [nm]

Converging segments proximity correction (see {PrxCf}). The final length of segment (length projected into the focal plane) not exposed when more than one segment converges at a single design vertex. Applied to all segments converging at the vertex-of-interest
{PrxCf_MinMax} = [0; 10] [nm]

Sample exposure level segment exposure order every {sPerLevel} loops through the level
{sPerLevel_MinMax} = [1; 50]

Fitting parameter for calibration curve simulation. Imparts observed delay in segment take-off for calibration curve (see {rN})
rN_MinMax = [0.1; 2] [nm]

Primary electron beam size (see {FWHM})
FWHM_MinMax = [1; 50] [nm]

NVPE dwell time (see {tdMax_NVPE})
tdMax_NVPE_MinMax = [0; 1] [ms]

Fitting constraint relieved for {Rule_1_Max} data points. Specifies the number of experimental data points for which the fitting constraint is relieved.
Rule_1_Max_MinMax = [0; 10]