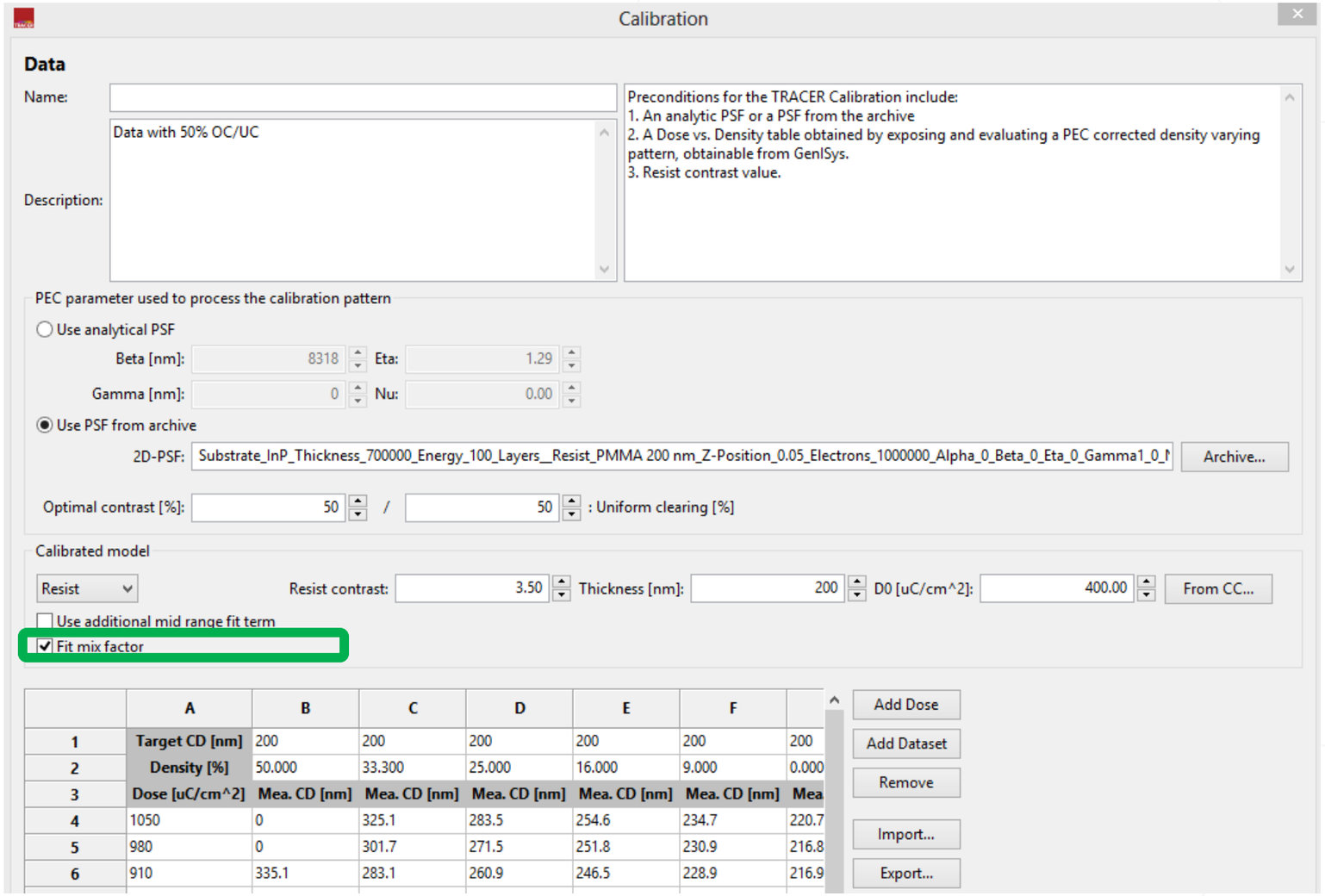
GenISys
Advancing the Standard

TRACER

What‘s New in 2.8.0

Process Calibration

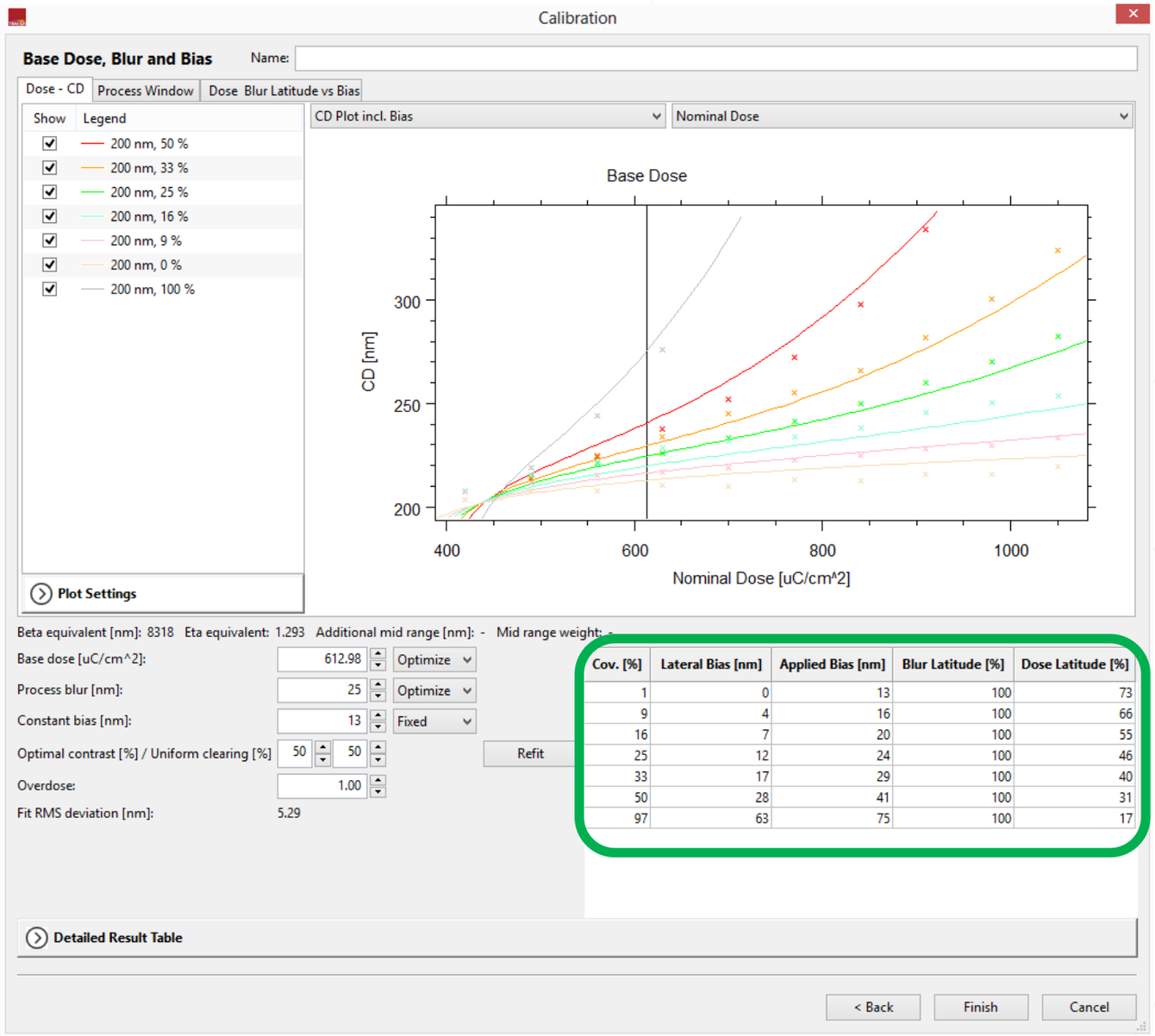
Fitting Mix Factor – OC / UC



	A	B	C	D	E	F	
1	Target CD [nm]	200	200	200	200	200	200
2	Density [%]	50.000	33.300	25.000	16.000	9.000	0.000
3	Dose [uC/cm^2]	Mea. CD [nm]	Mea. CD [nm]	Mea. CD [nm]	Mea. CD [nm]	Mea. CD [nm]	Mea
4	1050	0	325.1	283.5	254.6	234.7	220.7
5	980	0	301.7	271.5	251.8	230.9	216.8
6	910	335.1	283.1	260.9	246.5	228.9	216.9

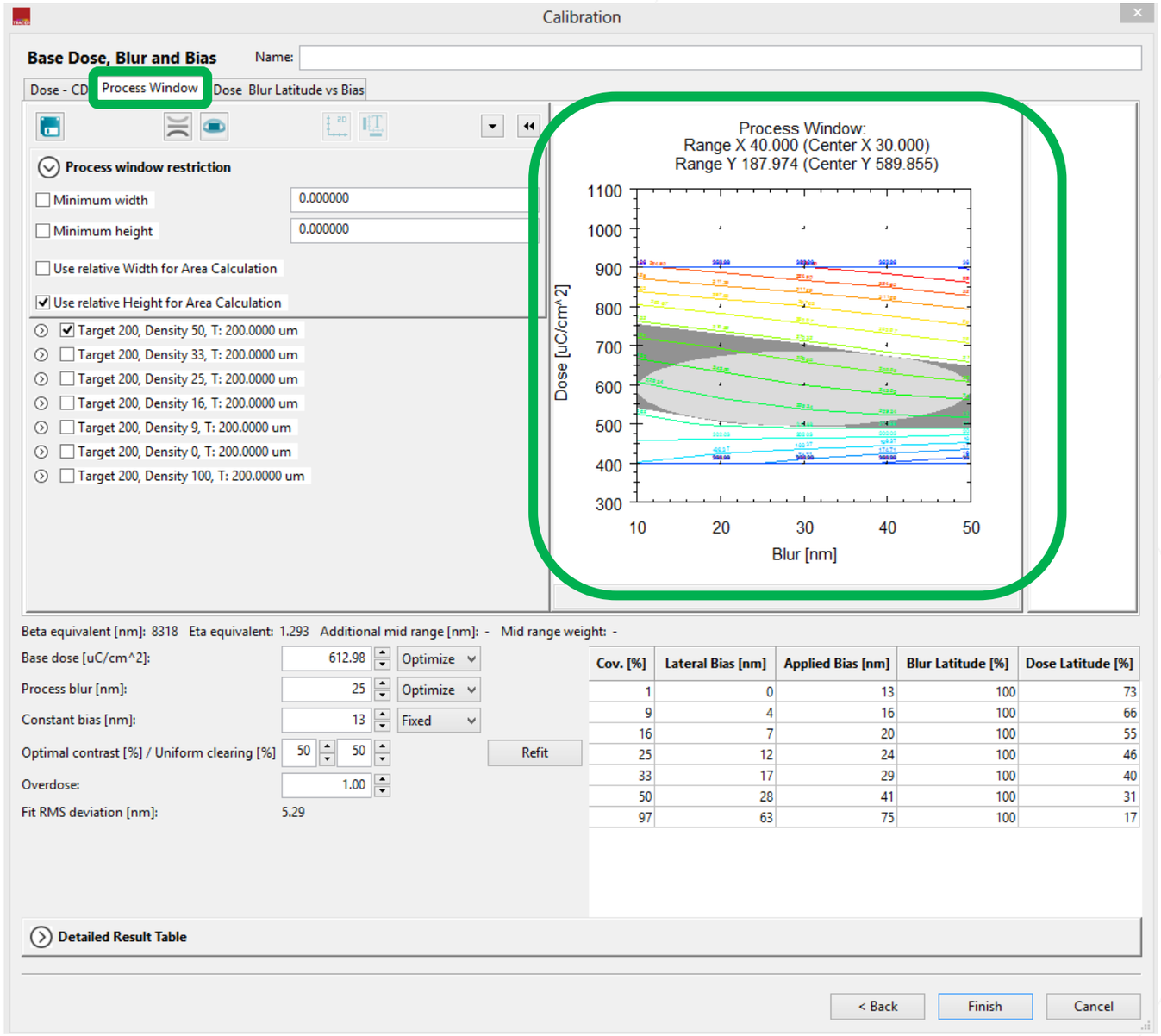
- In process calibration, the additional fit option is added for optimization:
  - mix factor for optimal contrast and uniform clearing composition in PEC. The mix factor fit shows its advantage when the calibration has difficulty in matching both isolated and dense patterns.

Improved Visualization of Calibration Results



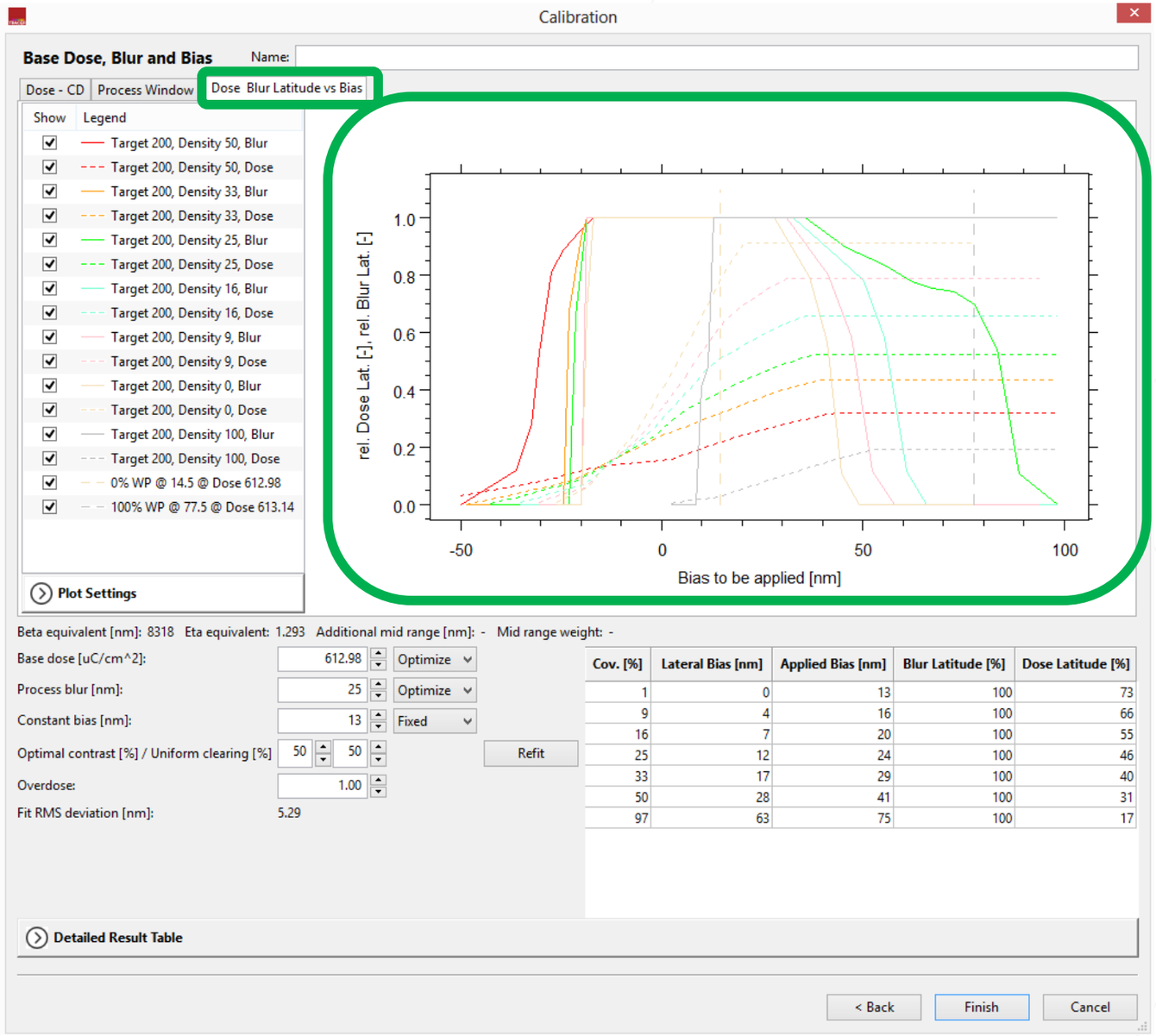
- The results of the calibration are summarized in an condensed table.
  - The details help users understand the influence of parameters in calibration by changing them one at a time.
  - Lateral bias, blur and dose latitude are listed for corresponding coverage density.

Visualization of Process Window



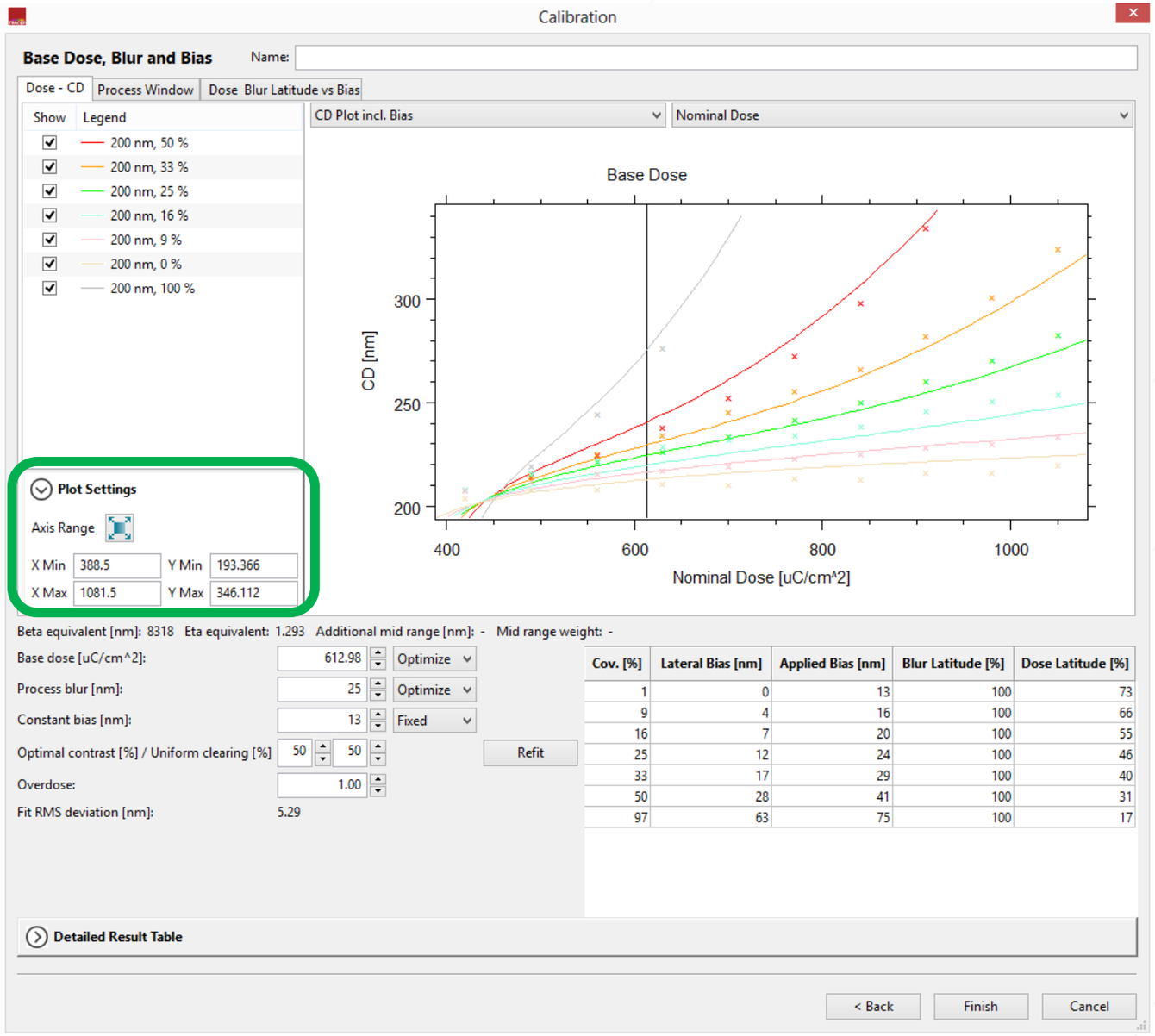
- Details of the process calibration result can be visualized:
  - Dose/blur process window is calculated for each pattern density.
  - The process window has the CD range to be ±10% of the expected CD including bias.

Dose/Blur Latitude vs Bias



- Details of the process calibration result can be visualized:
  - Relative dose/blur latitude vs applied bias is calculated from the process window.
  - The goal of the calibration is to find optimized process work points for iso and dense structures. They are merged into one proximity effect correction (PEC) by adjusting the optimal contrast/uniform clearing dose range.

Enhanced Plot Control



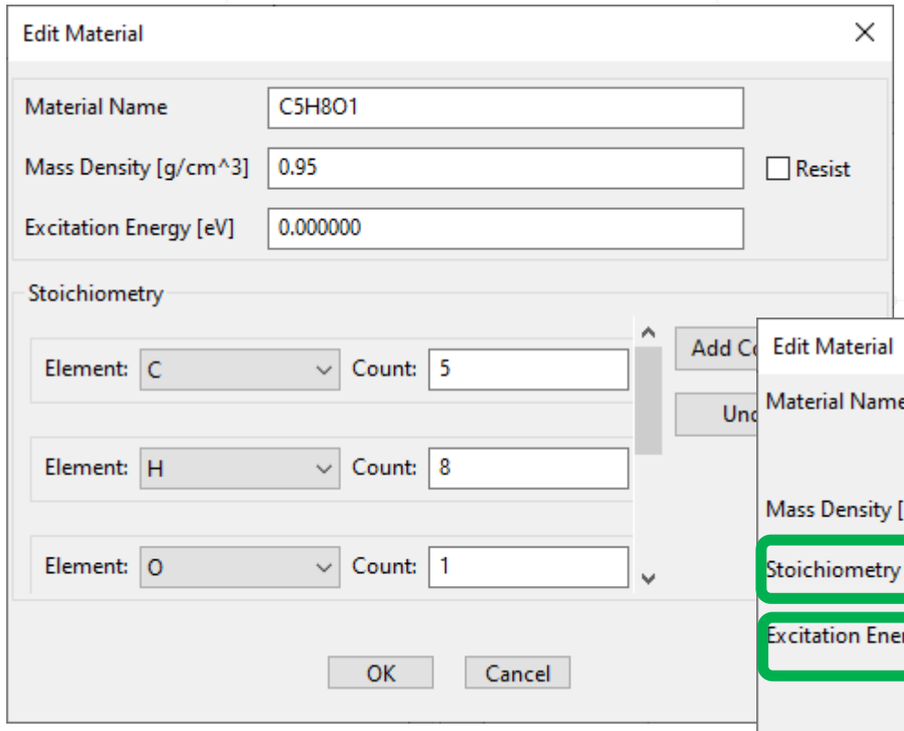
- The plot range is controlable:
  - The x axis and y axis can be set via „Plot Settings“.
  - The zoom via mouse works in all plot views.

User Interface

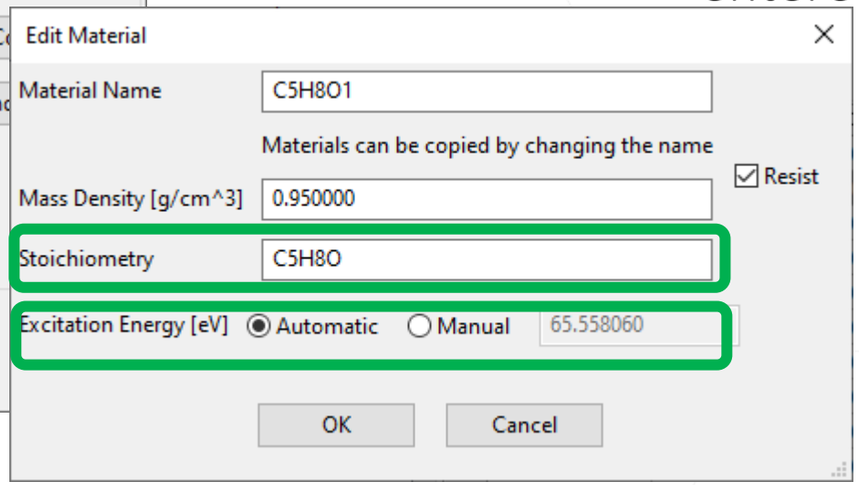
Improved Interface for Adding Material

- When a new material is added in Material Archive, the user interface is enhanced for convenience.
  - The stoichiometry composition is simplified as shown in the example.
  - The excitation energy of the material can be either calculated automatically or entered manually.

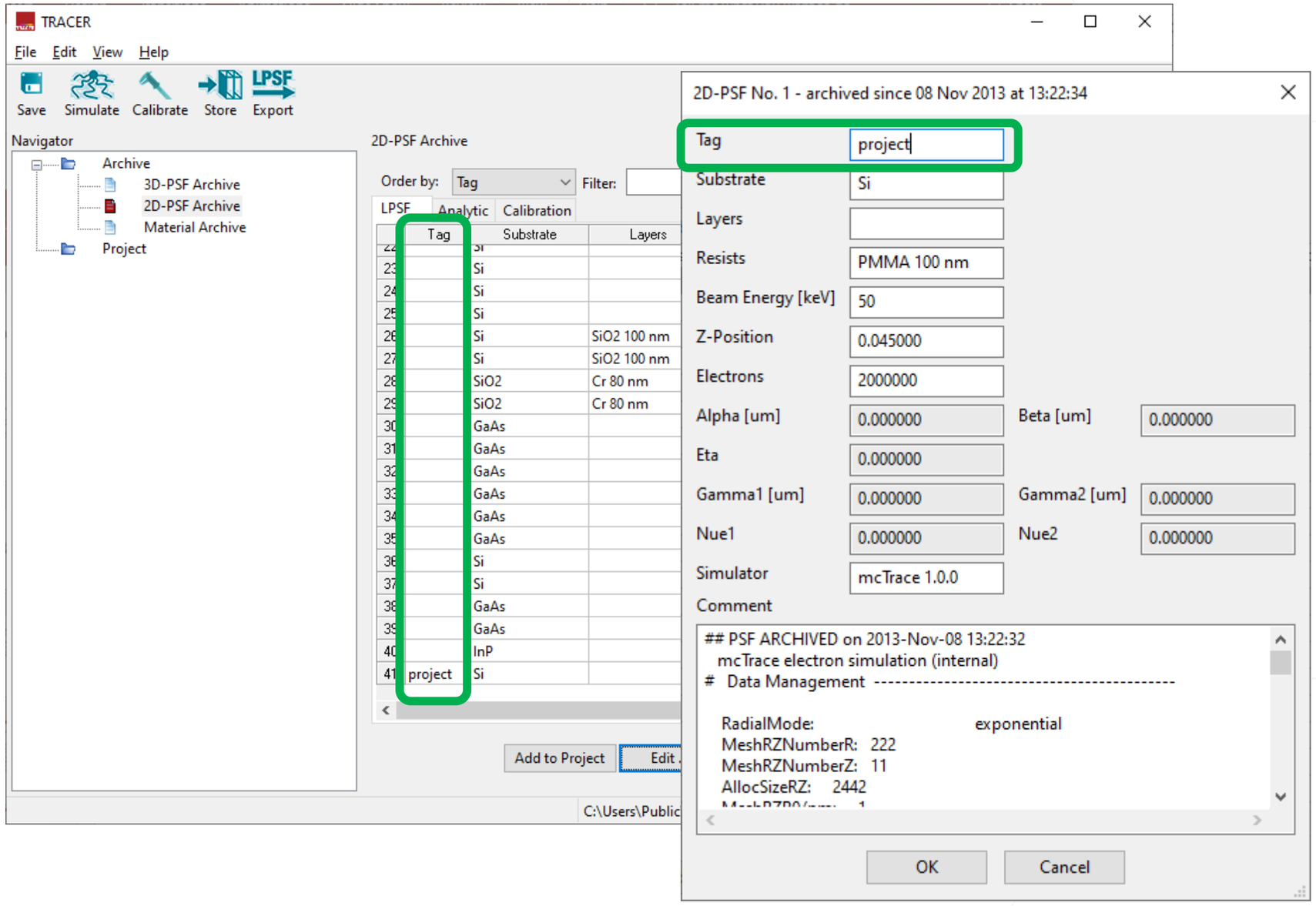
Old version



Tracer 2.8

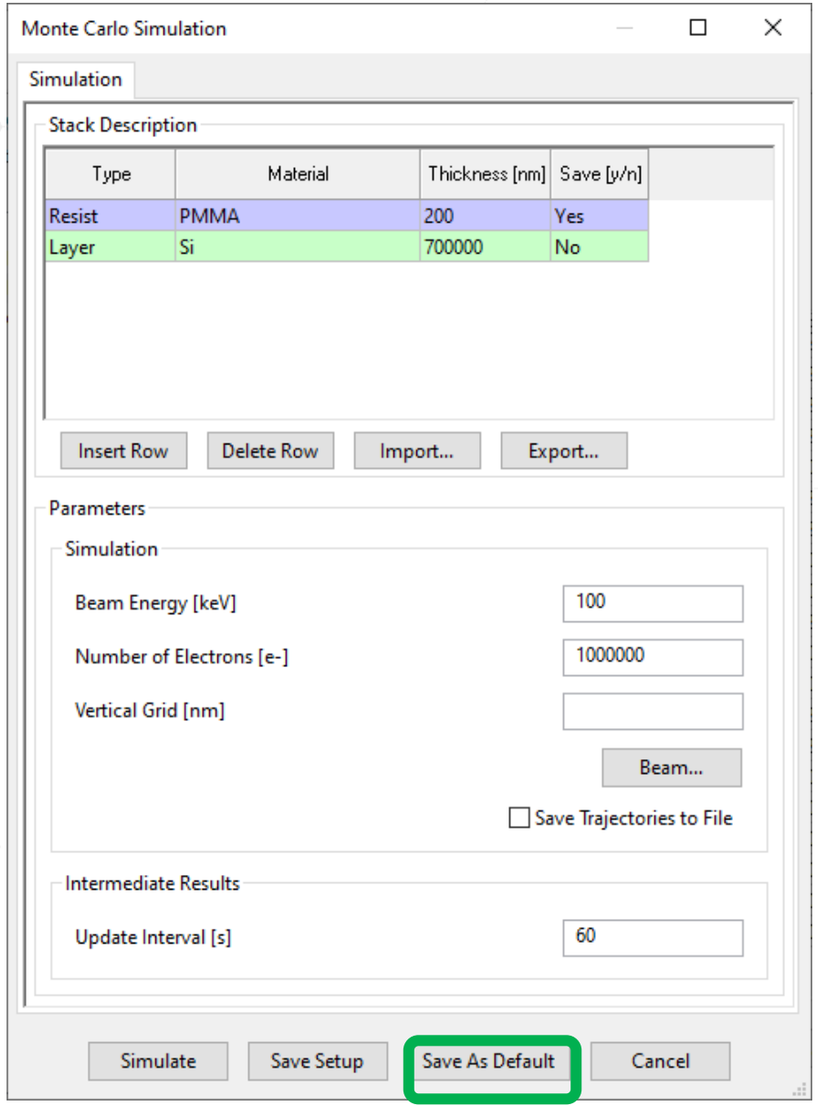


Custom Tag



- A customer tag can be added for each 2D PSF. Thus user can easier recognize the desired PSF in the 2D-PSF Archive.

Save Default for Monte Carlo Simulation



- In Monte Carlo simulation dialog, the „Save As Default“ button is added to save the simulation parameters: beam parameters and update Intervals

License Management

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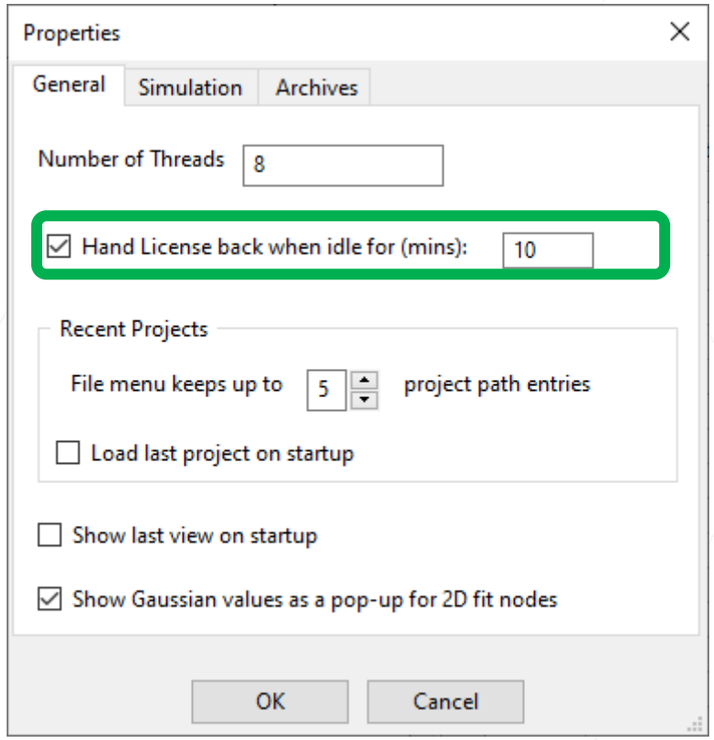
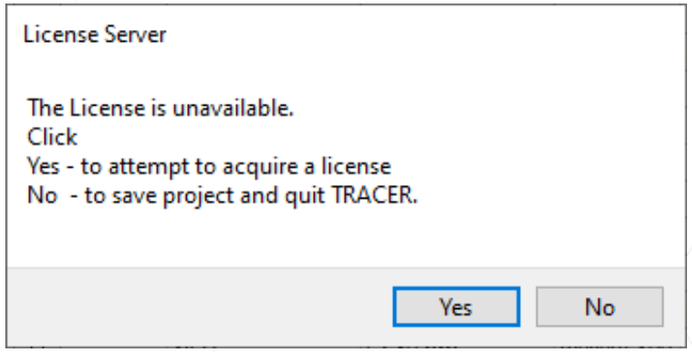


- License hand back
  - License idle timeout can be activated via
    File->Properties dialog.
  - When Tracer is not used for the assigned time, the license is released with a warning dialog.
  - The user can re-take the license to save the project, or close the program.



Thank You!

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