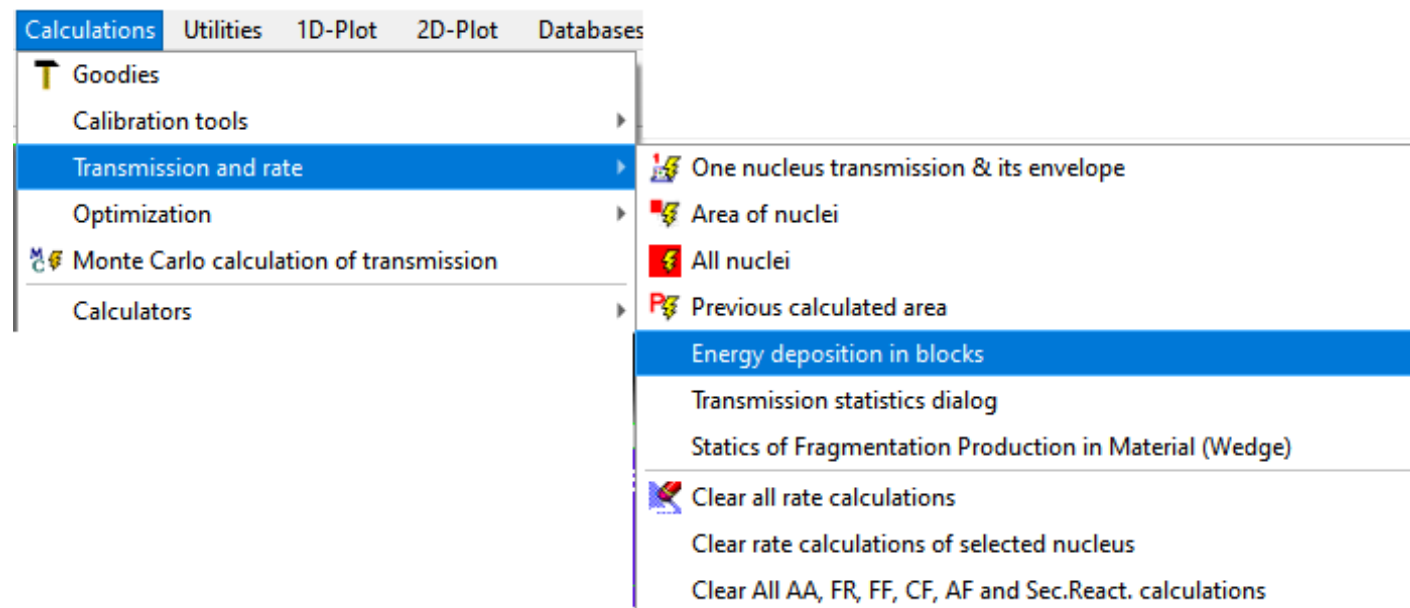
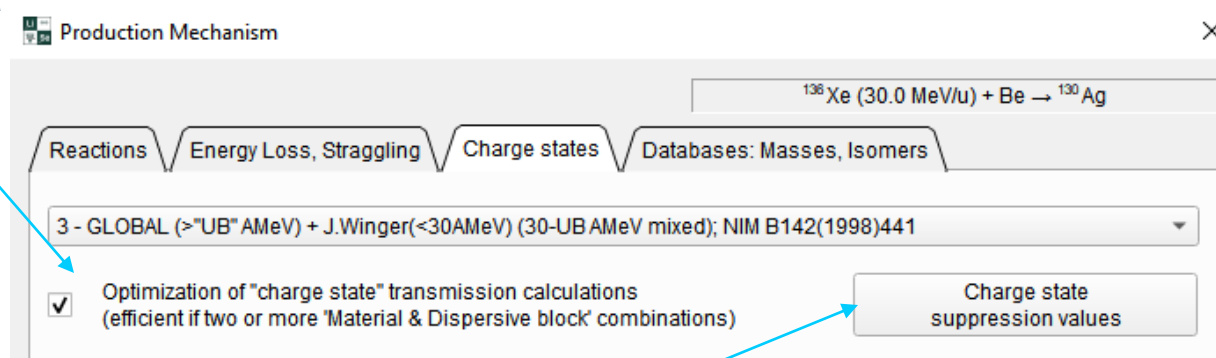


v.15.14.14
04/03/21



1. “Deposition” is accumulated in blocks during transmission calculation
2. Deposition values will be erased if the configuration was changed, or the user manually cleared transmission values (icon “Clear All rate calculation”)
3. So, Clicking twice on the beam cell in the case of zero transmission of beam ions, the user can observe double beam deposition
4. Use slits after each optical block in the preseparator to obtain more detail deposition information
5. Some non-significant deposition part in the case of fragments (not beam ions!!) can be lost with the “Optimization charge states” option set



6. Note: charge state suppression values are applied regardless of the “Optimization charge states” option
7. The Utility assumes that the ion energy can be changed only then passing materials

LISE ++ [C:\temp\EnergyDeposition.lpp]

File Options Experimental Settings Physics Models Calculations Utilities 1D-Plot 2D-Plot Databases Help

Projectile: 136 Xe 54+
30 MeV/u
100 kW
Fragment: 130 Ag 45+, 44+

Target: ⁹Be 8 mg/cm²

Stripper: C 11 μm

D1: Bp=2.1400 Tm

I1_slits: slits

D2: Bp=2.1400 Tm

I2_slits: slits

I2_wedge: Al 50 μm

D3: Bp=2.0602 Tm

D4: Bp=2.0602 Tm

FP_PPAC0: Al 2 mg/cm²

FP_PPAC1: Al 2 mg/cm²

config: A1900_2019 total
option: FRIB_2021 dp/p
version: 15.14.14 1.00%

Projectile Fragmentation (E²)

Target dialog box:

Be

Density: 1.85 g/cm³

calculate reactions in this material

Use in Q-state calculations

State of Matter: Solid Gas

Dimension: mg/cm2 & micron g/cm2 & mm

Angle: 0 degrees

Thickness at 0 degrees: 43.243243 μm

Effective Thickness: 43.243243 μm

Atoms / cm²: 5.35e+20

d/Range (beam): 0.0996

Energy Loss in target box: 9.8668 kW

Absorbed Dose

Thickness defect

OK Cancel

Energy deposition in blocks [kW]

Save As Print

#	Block	Beam	Fragments	Sum
1	Target	7.36	0	7.36
2	Stripper	2.507	0	2.507
3	D1	72.294	0.091	72.385
4	I1_slits	14.598	0.00448	14.603
5	D2	0.0016	0.00153	0.00312
6	I2_slits	2.759	0.00167	2.761
7	I2_wedge	0.038	0.000159	0.039
8	D3	0	7.16e-16	7.16e-16
9	D4	0	0	0
10	FP_PPAC0	0.00593	2.7e-15	0.00593
11	FP_PPAC1	0.006	2.88e-15	0.006
12	FP_slits	0.246	2e-14	0.246
13	FP_PIN	0	0	0
14	FP_SCI	0	0	0
Total:		99.816	0.099	99.915

“Optimization charge states” option: NO

Energy deposition in blocks [kW]

Save As Print

#	Block	Beam	Fragments	Sum
1	Target	7.36	0	7.36
2	Stripper	2.507	0	2.507
3	D1	72.294	0.016	72.31
4	I1_slits	14.598	0.0042	14.602
5	D2	0.0016	0.00153	0.00312
6	I2_slits	2.759	0.00167	2.761
7	I2_wedge	0.038	0.000159	0.039
8	D3	0	0	0
9	D4	0	0	0
10	FP_PPAC0	0.00593	0	0.00593
11	FP_PPAC1	0.006	0	0.006
12	FP_slits	0.246	0	0.246
13	FP_PIN	0	0	0
14	FP_SCI	0	0	0
Total:		99.816	0.023	99.839

“Optimization charge states” option: YES