# Optimization to work with extended configurations

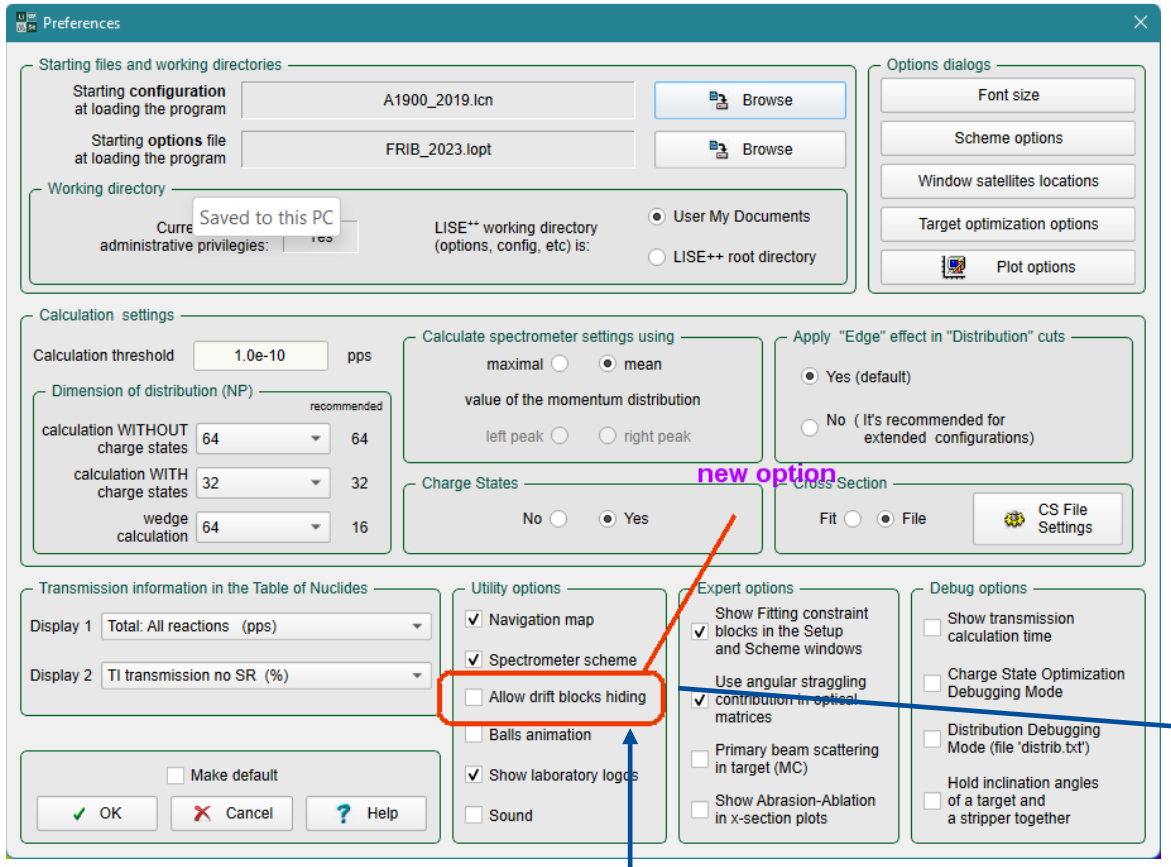
**v.16.11.16**
02/08/23

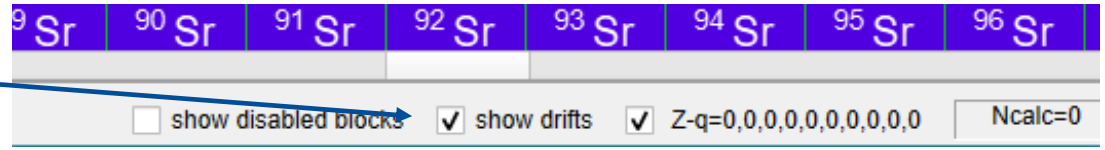
It's hard to select a block of interest because of big amount of blocks in total. Mainly they are drift blocks are not used for plot selection

Example of 5 "regular" drift blocks in row


| | | | | |
|---|---|---|---|---|
| Target | PSW_VD1 | CIQT4A | Q_D1639 | Lm |
| Stripper | PSW_SLV | Lpp | L1647 | DB5_Slits |
| dummy | L1184 | CIQT4B | Q_D1646 | |
| LS1a1 | slits_PS_WED | Lpp | Lh | |
| shield | Wedge001 | CIQT4C | DB3_Slits | |
| LS1a3 | L1192 | Lf | Wedge002 | |
| GV | to_flange | to FP | Li | |
| LS1a5 | CIQT1A | PS_I_slits | Q_D1674 | |
| WIQ1 | gap | dummy | L1684 | |
| L1018 | CIQT1B | La | Q_D1682 | |
| FRNT-SHLD | gap | Q_D1476 | L1694 | |
| WIQ2 | CIQT1C | L1477 | Q_D1691 | |
| L1030 | to_flange | Q_D1484 | Lj | |
| WIQ3 | L1225 | L1486 | FSDA_3 | |
| L1040 | FSD2_SCD3 | Q_D1492 | Lk | |
| Ltv1 | L1274 | Lb | Q_D1733 | |
| TV-SHLD | to_flange | DH_D1513 | L1743 | |
| Ltv2 | CIQT2A | Lc | Q_D1740 | |
| L1051 | gap | Q_D1538 | L1752 | |
| FSD1_SCD1 | CIQT2B | L1544 | Q_D1748 | |
| toBDaxis | gap | Q_D1545 | Lj | |
| to IMG1 | CIQT2C | L1554 | DB4_Slits | |
| slit_IMG1 | to_flange | Q_D1553 | Wedge003 | |
| toBDexit | Lmid1 | Ld | Lk | |
| toL1088 | Lmid2 | DB2_Slits | Q_D1767 | |
| FSS2_space | to_flange | Wedge001 | L1777 | |
| L1096 | CIQT3A | Le | Q_D1775 | |
| FSD1_SCD2 | gap | Q_D1573 | L1787 | |
| L1133 | CIQT3B | L1580 | Q_D1783 | |
| WIQ4 | gap | Q_D1580 | Ll | |
| L1142 | CIQT3C | L1589 | DH_D1807 | |
| WIQ5 | to_flange | Q_D1588 | Lm | |
| L1153 | L1385 | Lf | Q_D1827 | |
| FSQ6_space | FSD2_SCD4 | DH_D1608 | L1843 | |
| L1164 | L1421 | Lg | Q_D1835 | |
| WIQ7 | L1421 | Q_D1629 | L1852 | |
| toVD1 | Lf | L1638 | Q_D1843 | |

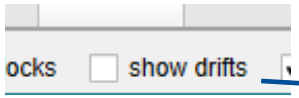
# The Option dialog



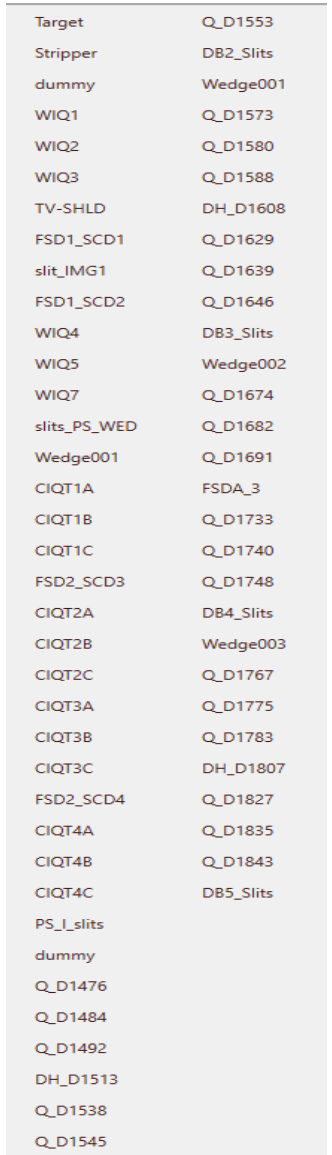



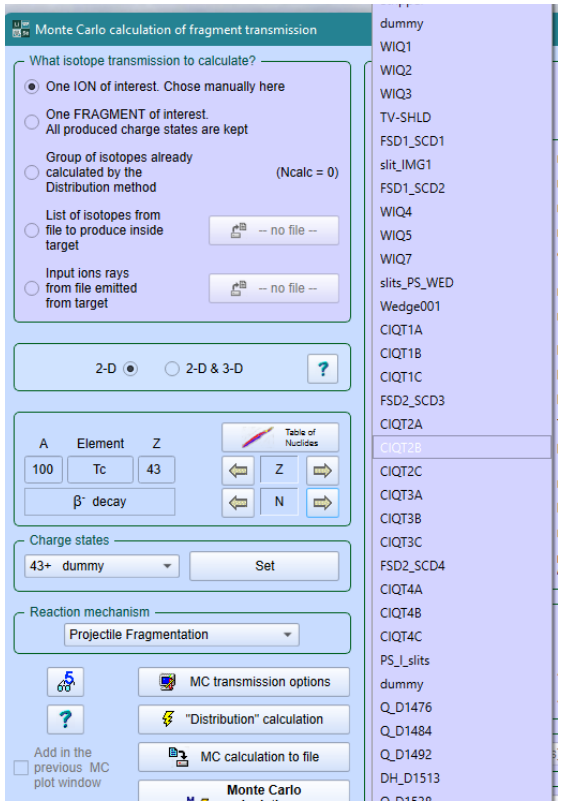

Check box to permit “show drifts” check box in the statusbar

# Hiding non-zero length drift blocks




Compare with the menu list in the first slide




It's applied for:

- left block panel
- Top plot menu and toolbar
- MC dialog block selection

# v.16 modifications

// 16.11.2 01/15/23 // crash in Radiation Calculator  issue in GetHalfLifeForRadiationDecay -> min ValueErr
// 16.11.4 01/18/23 // correction in SElement : use for min separation energy only enable channels

// 16.11.5 01/19/23 //Fixed: bug in atima for energy loss higher than 110 -- crush // precalculated_lindhard, precalculated_lindhard_X
// 16.11.6 01/19/23 //Fixed: bug in atima for energy loss higher than 110 -- crush //void global_eqdist(int zp,double ein,int zt,double *f){
// 16.11.7 01/19/23 // new class TSecTarDebugDlg to plot statistics during calculations // modification in TSeccondaryTargetDlg
modification in s_ST_option to add showDebug value

// 16.11.8 01/19/23 // class TSecTarDebugDlg connection to CalcArea and CalcAll // ST_option->showDebug to start
// 16.11.9 01/19/23 // dialog SecTarDebugDlg shifted with new command in class
// 16.11.10 01/19/23 // modification due to reaction in materials in void Ccalc::CalcPowerDeposition(double CS_NAG)
// 16.11.11 01/19/23 // modification due to energy loss in void Ccalc::CalcPowerDeposition(double CS_NAG)
// 16.11.12 01/21/23 // modification due to reaction loss in materials in void Ccalc::CalcPowerDeposition(double CS_NAG) // Power Deposition can be used now for fragments produced in materials

// 16.11.13 01/21/23 // implementation of ARIS calibration files, // an extended files with block names and calibrations
// 16.11.14 01/22/23 // Change default settings for Quad bounds, FPinM. // COSY-disactivated message in Optics fit dialog
// 16.11.15 02/08/23 // new options ShowDrift and PermitShowDrift // for left setup panel, menu, MC_dialog
// 16.11.16 02/08/23 // Gauge at creation of blocks, if block number > 50