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// 14.3.11 04/03/20

// \* Creation of new class "DoubleSliderUI" (because no sliders in Qt with double values)

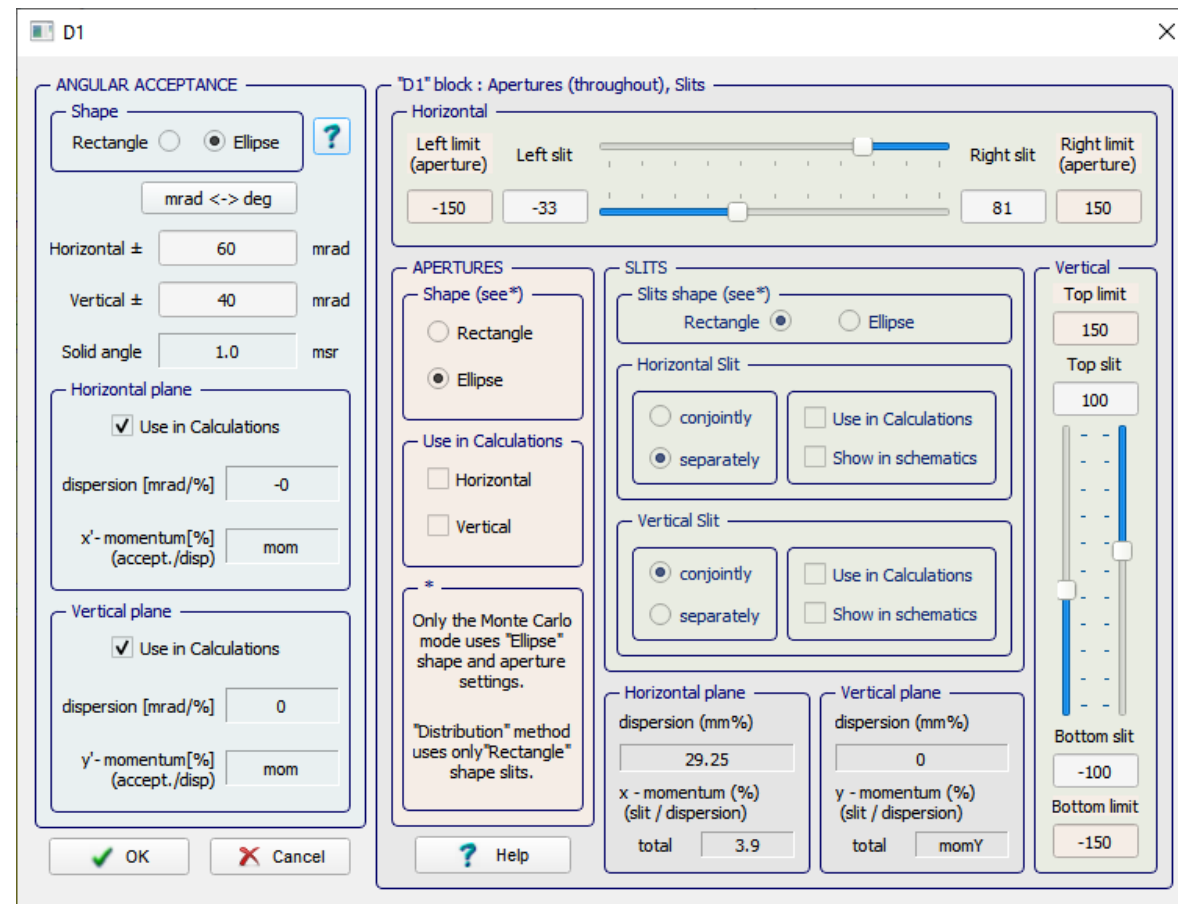
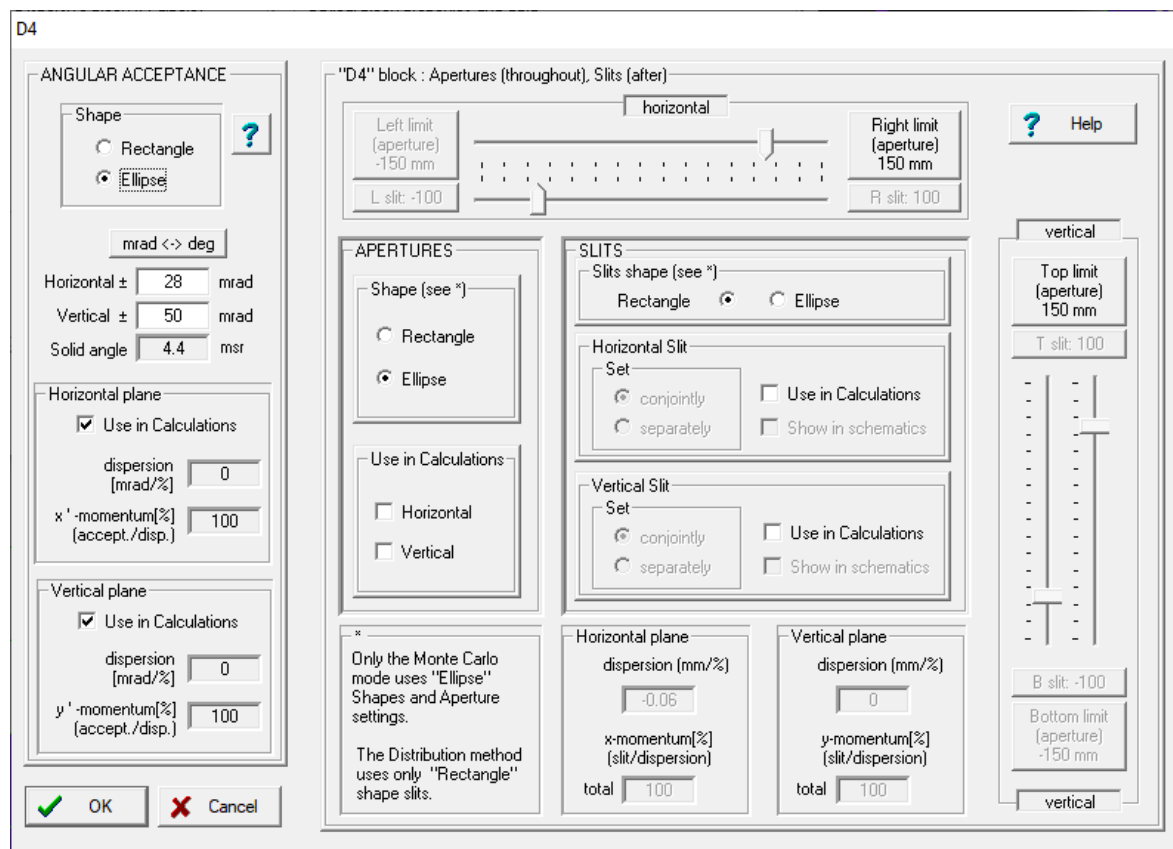
// and using this new class in "d\_Acceptance" dialog

// \* Re-design of "d\_Acceptance" dialog : no buttons (and dialogs) to enter slits and apertures values

// new edit cells for this purpose

// D\_Acceptance dialog : 100% re-design, 80% connection

examples of d\_Acceptance dialog: Qt and Borland



//-----

**// 14.3.12 04/04/20**

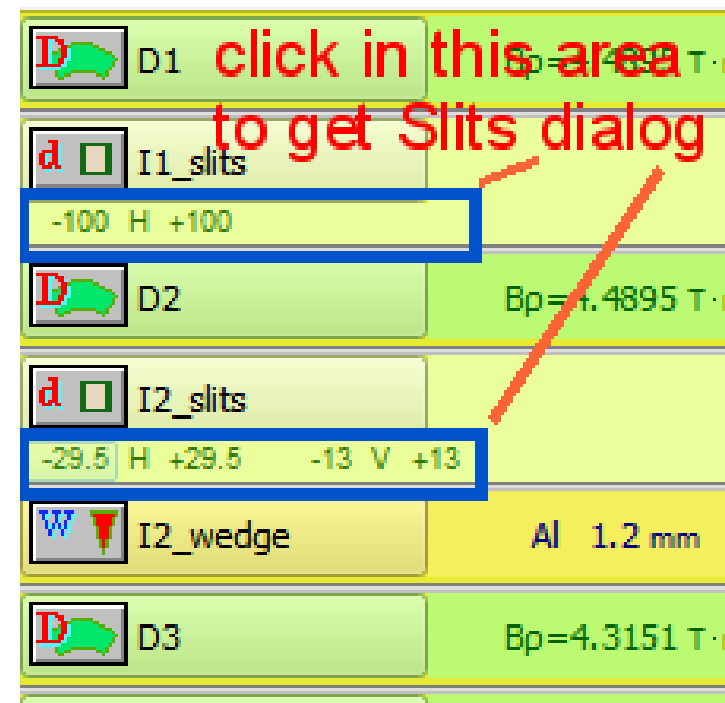
// d\_Acceptance dialog : DONE!

// d\_Acceptance\_angDegRad dialog : DONE!

// Beam dialog has been corrected

// Signal from slit table of block in ShowSetup (left panel) to run Acceptance dialog

image for the last item



//-----  
**// 14.3.13 04/05/20**  
 // \* Global revision of names of directories and files in first-level directories "o\_", "L\_"  
 // first-level directories "o\_", "L\_" -- were re-done according to the LISEcute convention of filenames  
 // \* d\_Block\_calibration dialog: 100% re-design, 60% connection

old

new

example

- folder [L\_atima]
- folder [L\_Block]
- folder [L\_calise]
- folder [L\_dbf]
- folder [L\_distribution]
- folder [L\_element]
- folder [L\_init]
- folder [L\_loss]
- folder [L\_mass]
- folder [L\_taulise]
- folder [o\_evap]
- folder [o\_fission]
- folder [o\_phys]

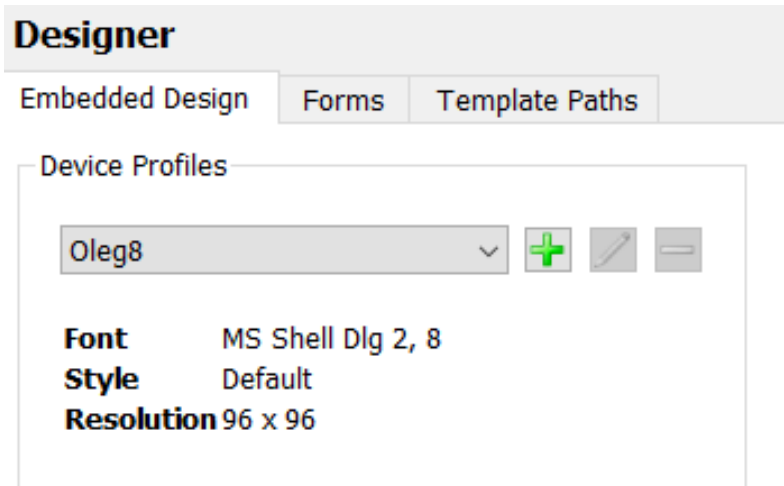
- folder [L\_Atima]
- folder [L\_Block]
- folder [L\_Calise]
- folder [L\_Dbf]
- folder [L\_Distribution]
- folder [L\_Element]
- folder [L\_Init]
- folder [L\_Loss]
- folder [L\_Mass]
- folder [L\_Taulise]
- folder [o\_Evap]
- folder [o\_Fission]
- folder [o\_Phys]

c:\LISEcute\L\_Distribution\\*.\*

↑ Name	Ext
[-.]	
L_Distr1	cpp
L_Distr1_area	cpp
L_Distr1_convolute	cpp
L_Distr1_fill	cpp
L_Distr1_interSpline	cpp
L_Distr1_minMaxSigma	cpp
L_Distr2	cpp
L_Distr2_area	cpp
L_Distr2_axis	cpp
L_Distr2_interSpline	cpp
L_Distr2_minMaxSigma	cpp
L_Distr2_prob	cpp
L_Distr2_trans	cpp
L_Distr4	cpp
L_Fourier	cpp
o_Distr1	h
o_Distr2	h
o_Distr2_prob	h
o_Distr4	h

```
//-----
// 14.3.14 04/06/20
// * d_Block_calibration dialog: 100% re-design, 80% connection
// * d_Profile_curved dialog: 100% re-design, 40% connection
// fixed fonts are used in main.cpp
```

Suddenly yesterday evening Qt-designer and LISEcute started to work with 10pt font size, though before 8pt was used.  
So, corrections in the case of Designer were done in QtCreator Options



but for LISEcute modifications were made in main.cpp

```
QFont font("MS Shell Dlg 2", 8);
qApp->setFont(font);

// https://doc.qt.io/qt-5/highdpi.html

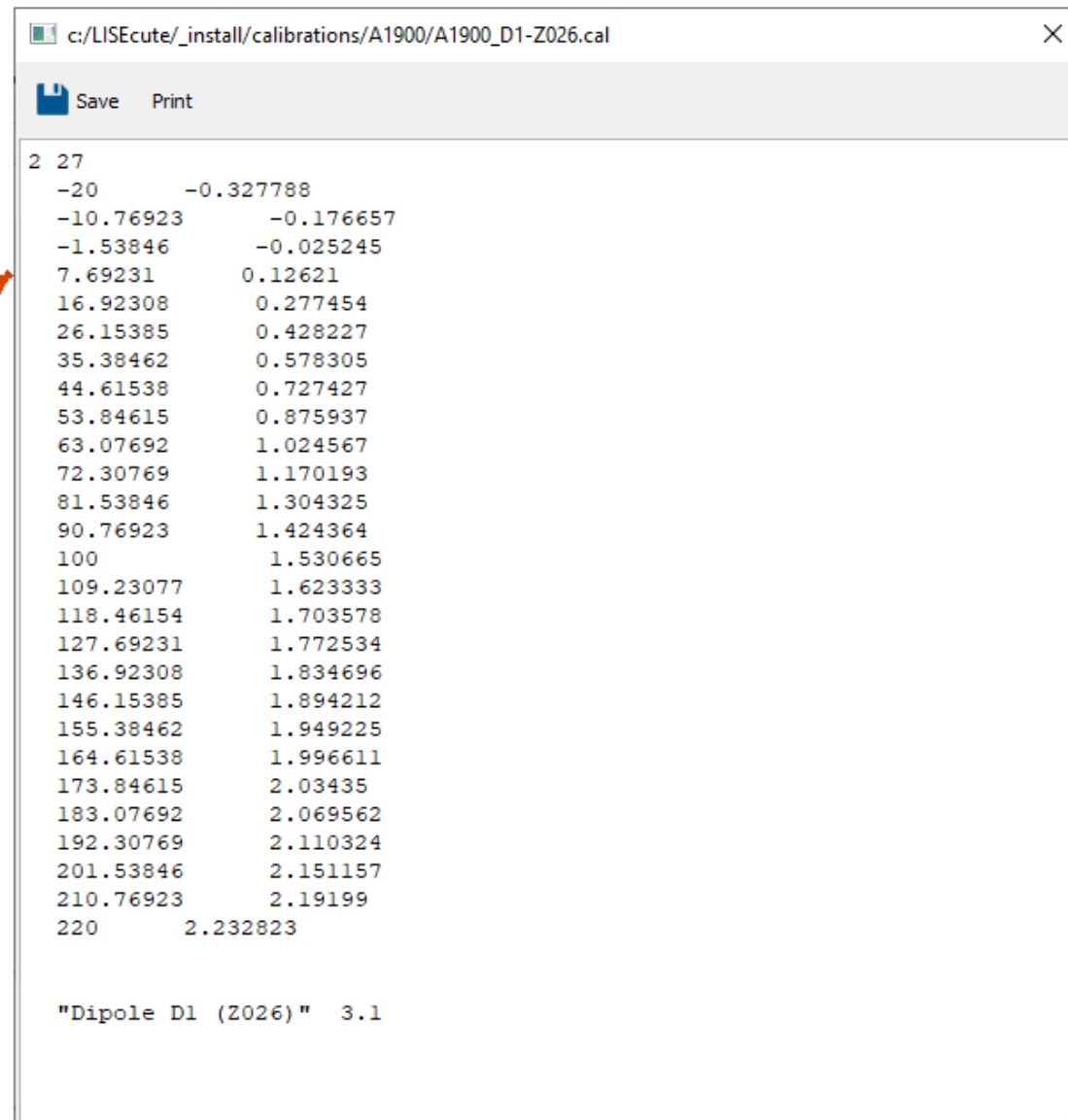
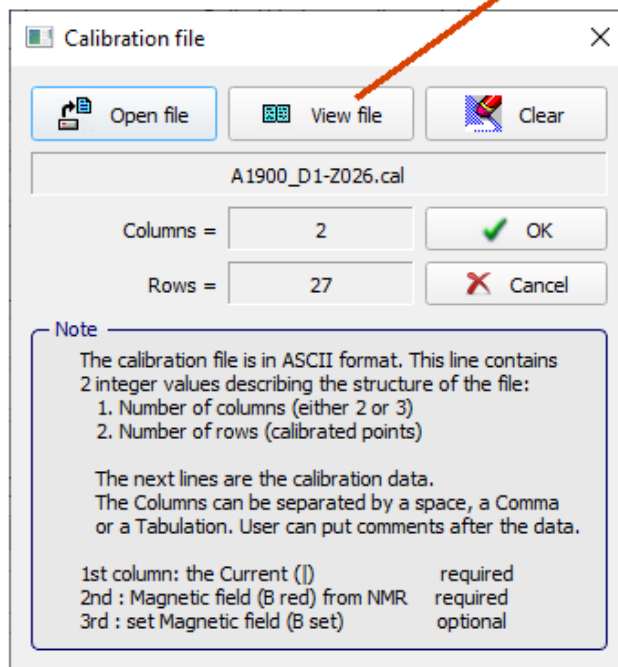
QCoreApplication::setAttribute(Qt::AA_Use96Dpi);

//Qt::AA_EnableHighDpiScaling

//Qt::AA_Use96Dpi
```

```
//-----
// 14.3.15 04/07/20
// * d_Block_calibration dialog: DONE!
// * d_Profile_curved dialog: 80% connection
//
// new two dialogs W_Listwin_file & W_Listwin_string to show results in a
// special widget
// --> analogs of LISE_Borland TListView and TListPrint
```

image : d\_Block\_calibration dialog ==> W\_Listwin\_file



//-----  
 // 14.3.16 04/08/20 -- 14.3.17 04/09/20  
 // \* d\_Profile\_curved dialog: DONE!  
 // \* d\_Profile\_custom dialog: 75% connection  
 // LISE porting schedule revision, monthly report preparation

Curved Profile degrader focal plane

**Dispersion Plane**

X (horizontal)  Y (vertical)

---

**Mode**

Choose block: to calculate an angle for the setting mode after it

D4

Calculate angles

Wedge angle (mrad)

Achromatic: -0.03

Monochromatic: -5.45

Fixed in the code: -0.7063

Current profile: -0.7063

To plot a dependence from angle

**Degrader properties**

Block: I2\_wedge

Degrader Profile: Curved profile

Setting fragment: 42S16+

-29.5 <-- slits (mm) --> +29.5

-36.59 <-- angle (mrad) --> +36.59

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**For the central trajectory**

Thickness: Al (1200 micron)

Energy before the degrader: 131.95 MeV/u

Energy after the degrader: 122.48 MeV/u

Dimension of wedge angle distributions (default 16): 32

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**Wedge angle calculations from formulae (mrad)**

Achromatic: -4.31

Monochromatic: -5.44

**Curved Profile**

Choose mode: X0: 175 mm, L: 350 mm, h: 163.22 mm, e0: 1076.39 micron

Calculate profile, Profile plot, Make it as Current

**Current profile**

= internal profile =

Method to keep the profile: Inside LISE ++ file (selected), Attached profile file

Comments, Load profile from file, Save current profile, Browse, See current profile, Erase current profile

OK, Quit, Help