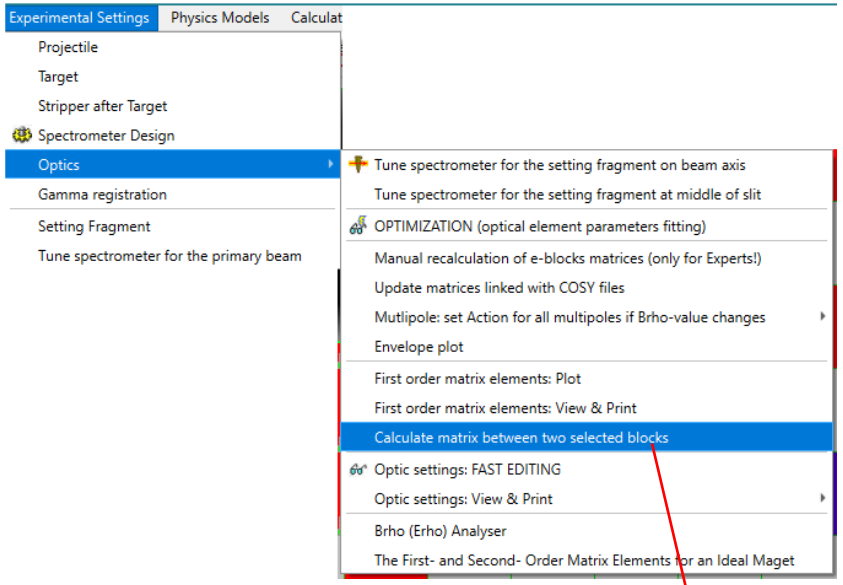
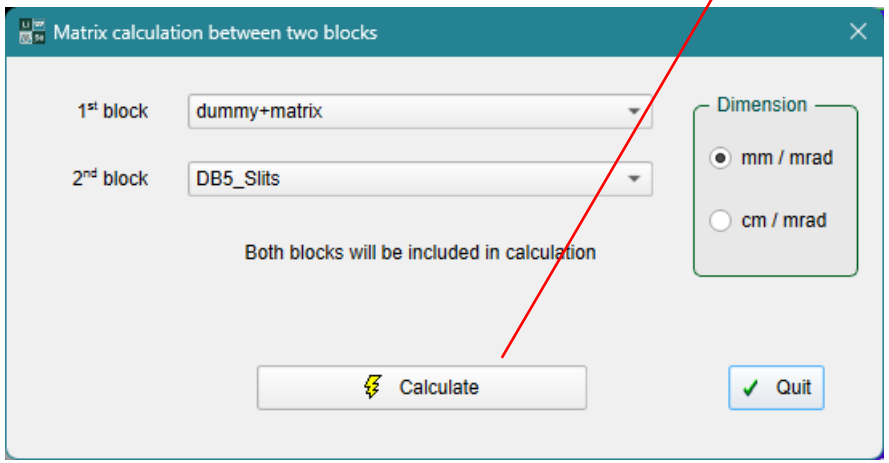
LISE development v.16.14.1 – v.16.14.20

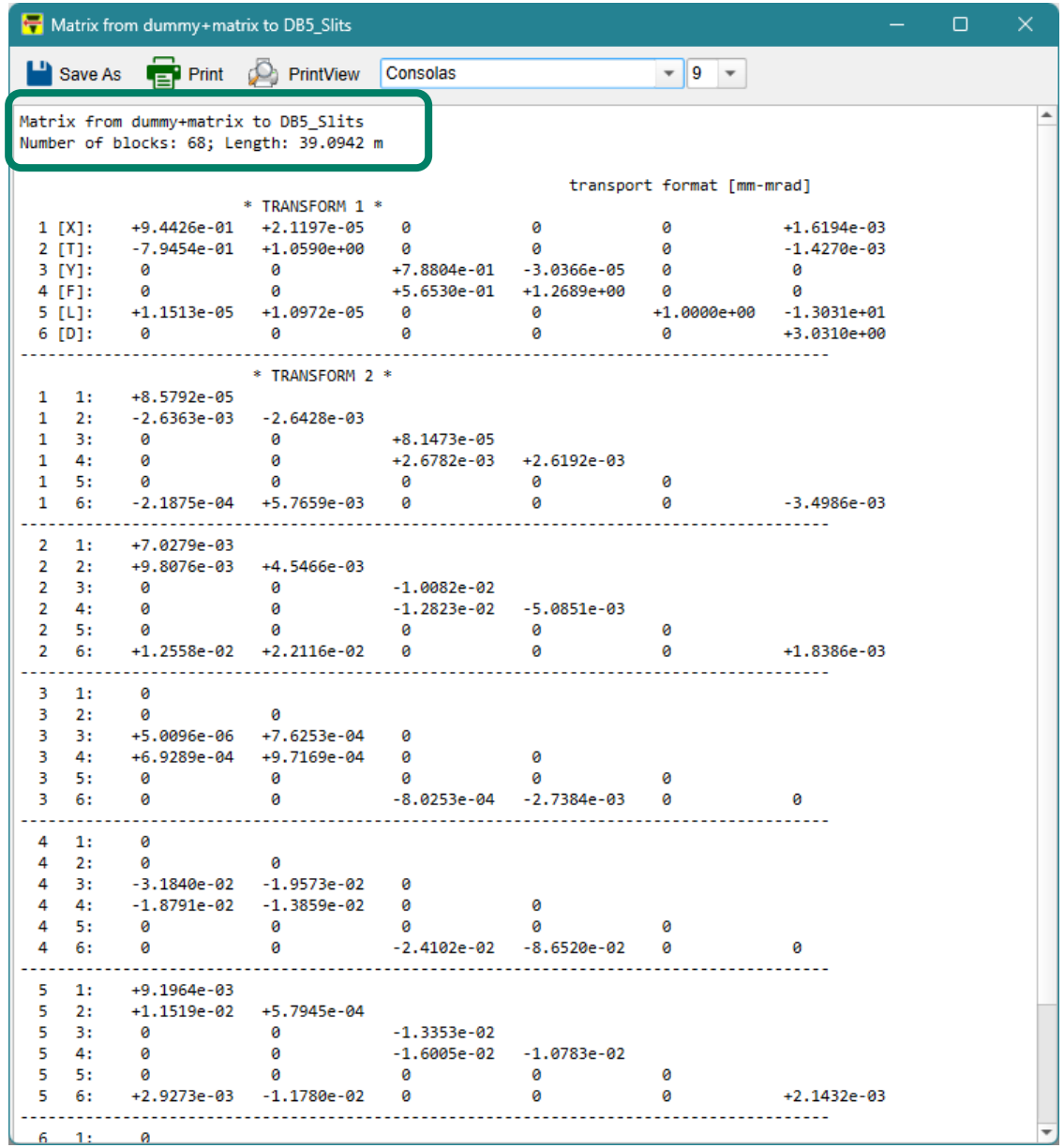
- Calculation of matrix between two selected blocks
- The “New version check” dialog update for SSL
- Effective dipole radius information (corresponds to B) in dipole dialogs
- LISE development assistance team
- Loading ARIS experimental settings (savesets)
  https://lise.nscl.msu.edu/16/16_14_14_ARIS_savest.pdf
- Migration to Qt 6.5 LTS
- Update of ARIS dipole calibrations (by Shane)

Calculation of matrix between two selected blocks

We need this utility to create ARIS reconstruction maps







“New version check” dialog update for SSL [1]

Sasha’s project

- Adaption of the SSL Qt(v.6.5) example to reach the LISE site
- It’s adaptation of this solution to the LISE code source
- Utility source quality improvement with substitution of char* style with reliable QString & QStringList classes
- but then the work stalled... the connection does not work in the LISE program

Week 17 (04/24/2023)

Sasha

- Complete migration to Qt 6.5
- Merge official and local versions
- Improve Weekly report quality to clarify purpose, completed steps, next steps, problems
- Find out why Ssl is not supported in the LISE project though it is supported by all Qt network examples (not more than 4 hours)
  - Google
  - Play with openSsl
- Create “http” executable release version, which creates output resultfile in the LISE files folder
- Update LISE to read “http” result file in order to get new version information
- Then Instead “http” executable release version create “http” dll version and connect to LISE

“New version check” dialog update for SSL [2]

https://wiki.qt.io/Deploy_an_Application_on_Windows

If the library is missing, then the message to send to the user, but not in this case

Initial deployment (Quick and dirty)

1. Close Qt Creator.
2. Copy the following into C:\Deployment\
   1. The *release version* of **MyApp.exe**
   2. All the **.dll files** from C:\Qt\5.2.1\mingw48_32\bin\
   3. All the **folders** from C:\Qt\5.2.1\mingw48_32\plugins\
   4. (If you used QML) All the **folders** from C:\Qt\5.2.1\mingw48_32\qml\
3. Rename C:\Qt\ to C:\QtHidden\ (This turns your PC into a clean environment, just like one that doesn't have Qt installed).
4. Launch C:\Deployment\MyApp.exe.

If your app worked correctly, congratulations! You are almost ready for deployment. You don't want to ship a 1.5GB package though, so it's time to clean up unused files.

If it didn't work correctly, ask for help (see the Appendix)

Final deployment (Cleaned up)

Do the deletion steps below in C:\Deployment\ and all of its subdirectories. After each deletion, launch C:\Deployment\MyApp.exe and test it. If it stops working, restore tl

1. Launch MyApp.exe. While it is running, try to delete all DLLs. The DLLs that aren't used will go to the recycle bin, leaving behind only the DLLs that you need. (This t
2. (If you used QML) Delete a few .qml files and try relaunching MyApp.exe. Repeat until you try all .qml files.
3. (If you used QML) Delete *qmldir* files from the folders that have no more DLLs or .qml files

When you have removed all the files that you don't need,

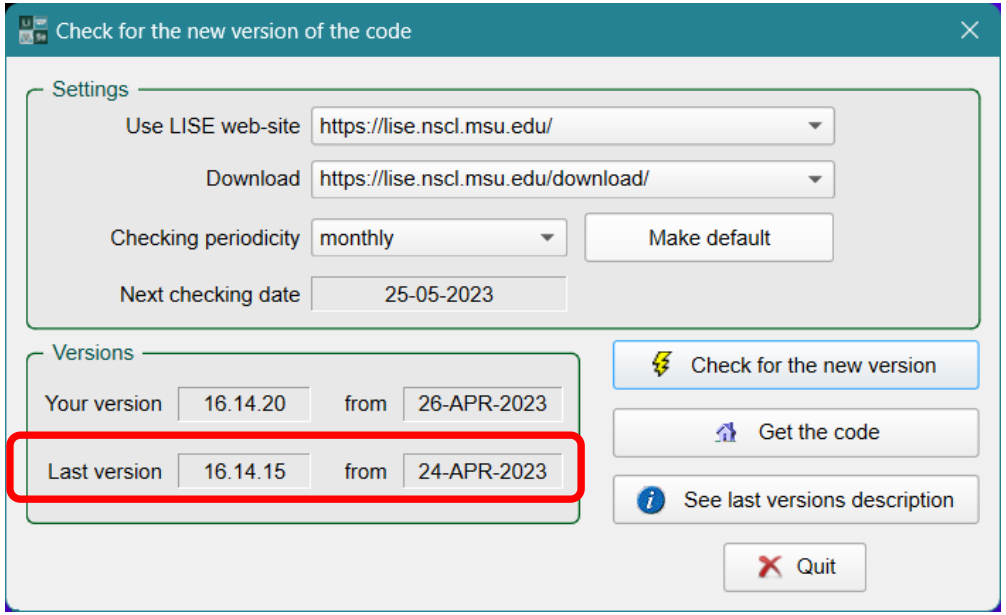
1. Rename C:\QtHidden\ back to C:\Qt\ to restore your installation.
2. Distribute your app.

c:\Deployment*.*

Name	Ext	Size	Date
[..]		<DIR>	04/25/2023
[imageformats]		<DIR>	04/24/2023
[platforms]		<DIR>	04/24/2023
[styles]		<DIR>	04/24/2023
[tls]		<DIR>	04/24/2023
Charge	exe	232,448	04/24/2023
lisepp	ini	0	04/24/2023
Qt6Svg	dll	359,600	03/25/2023
Qt6Widgets	dll	6,640,304	03/25/2023
Qt6PrintSupport	dll	406,192	03/25/2023
Qt6Network	dll	1,660,592	03/25/2023
Qt6Gui	dll	9,728,176	03/25/2023
Qt6Core	dll	6,510,776	03/25/2023
libwinpthread-1	dll	53,248	11/16/2021
libstdc++-6			
libgcc_s_seh-1			

c:\Deployment\tls*.*

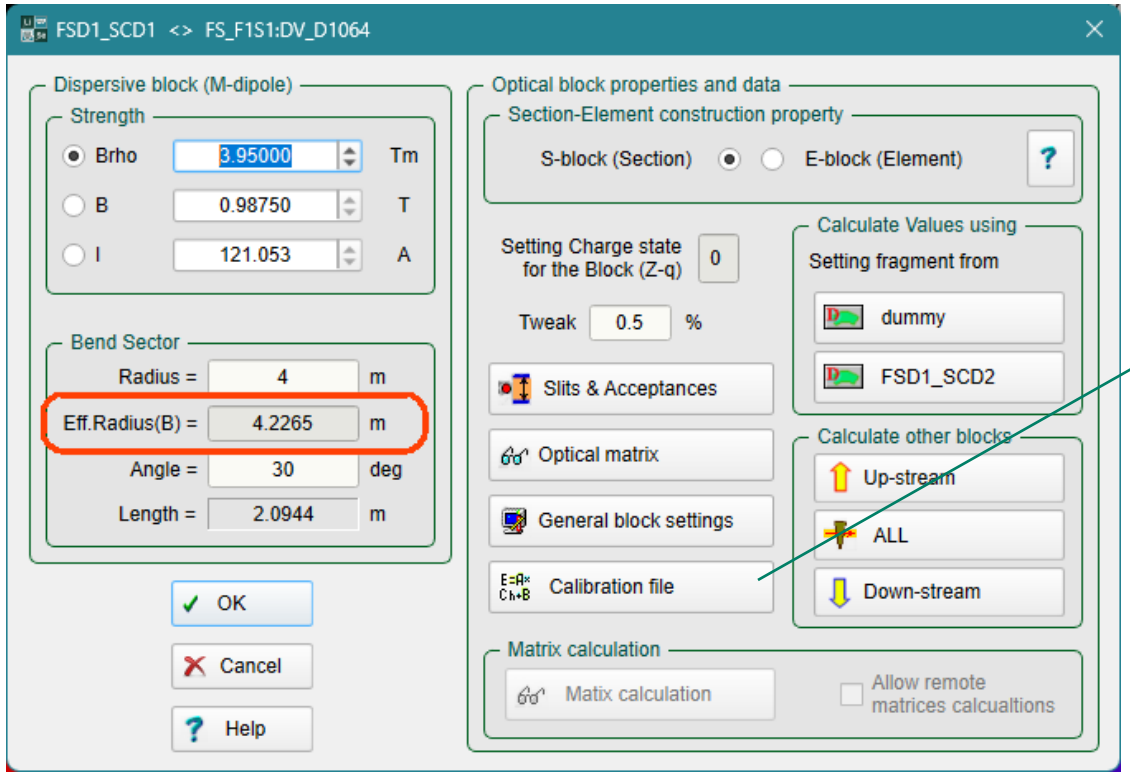
Name	Ext	Size
[..]		<DIR>
qschannelbackend	dll	231,616
qopensslbackend	dll	342,720
qcertonlybackend	dll	105,152

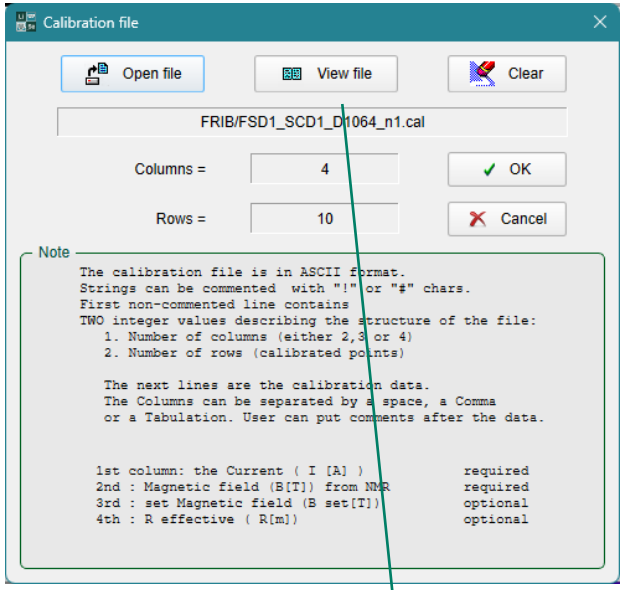


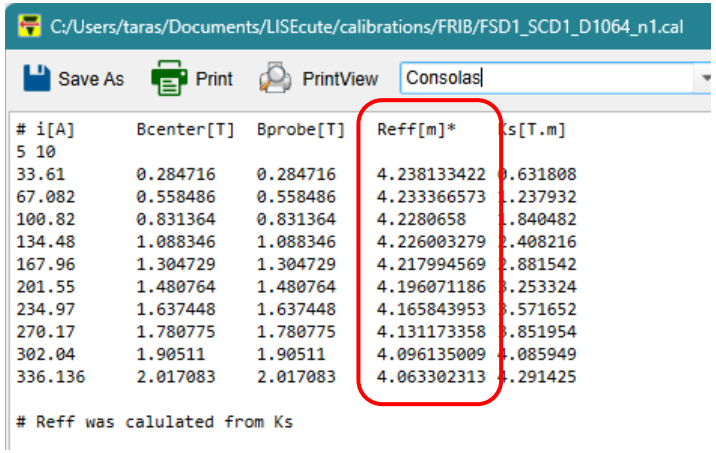
Project completed

Effective dipole radius information (corresponds to B) in dipole dialogs

- Works if the calibration file contains the 4th column Reff
- Implemented for all ARIS dipoles (Shane)
- Reff is extrapolated as a function of B (field)
- It is supposed to develop a Reff use option for Bρ and block matrix calculations







LISE development assistance team

https://lise.nscl.msu.edu/porting/porting_team.html#assistance

The LISE^{++} Assistance Team

Members assisting on the LISE^{++} code development

S. Watters	PHY/MSU grad	• ARIS extended configuration and calibration files • LISE optical utilities benchmarks
D. Kaloyanov	PHY/MSU undergrad	• migration of the LISE databases from DBF to MDB
A.O. Tarasova	CSE/MSU undergrad	• Adaptation of the LISE "new version" utility to SSL connection
A. Elkin	CSE/MSU undergrad	• LISE site statistics analysis