

# LISE <sup>++</sup><sub>cute</sub>: Blocks in 3D-envelopes



v. 17.11.30 From 02/06/25

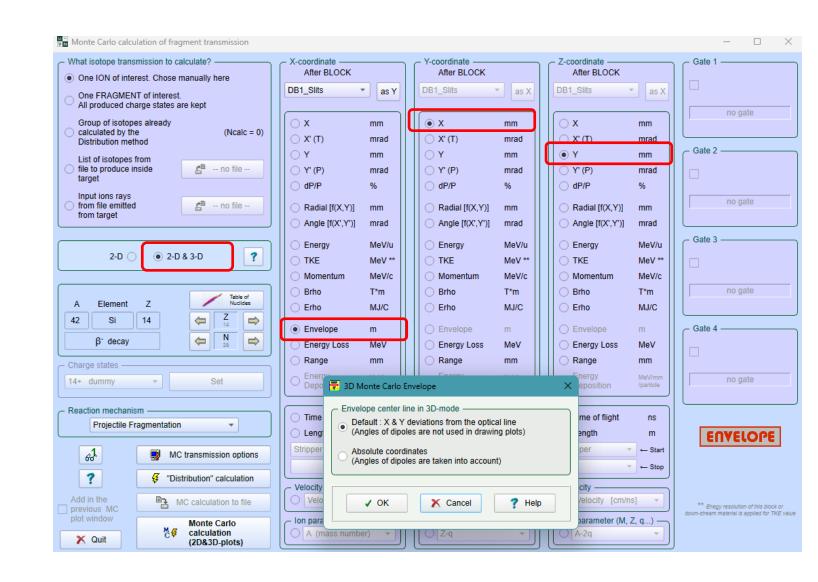
Use extended (aka elemental) configurations

Examples used in this document:

https://lise.frib.msu.edu/17/eL ARIS PS only.lpp https://lise.frib.msu.edu/17/eL ARIS k3cb2.lpp

Still under development (issues to resolve)

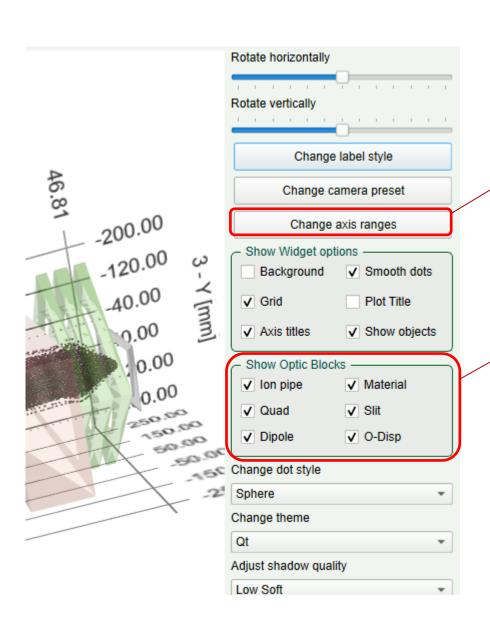
- Ion pipe, quad block axis should be changed for correct plotting in 3D-absolute coordinates
- Rotation blocks
- X-Y orientation Jump between local and absolute frames

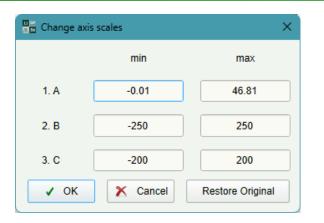


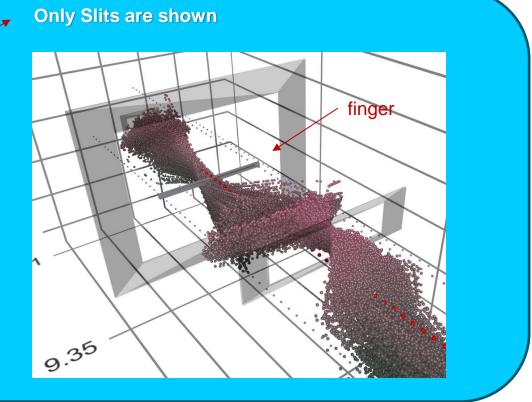


## New features of 3D-window: Envelope mode





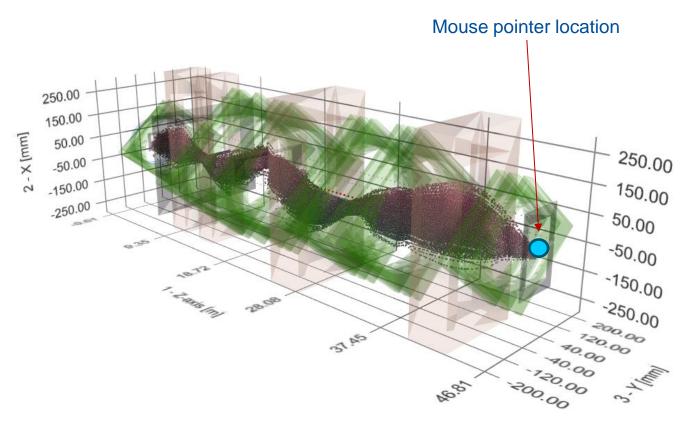






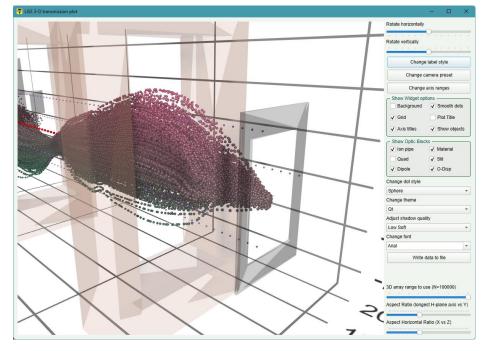
## 3D plot: zoom at selected location





- 1. Locate mouse pointer at place of interest
- 2. Rotate middle button wheel

### **Result**



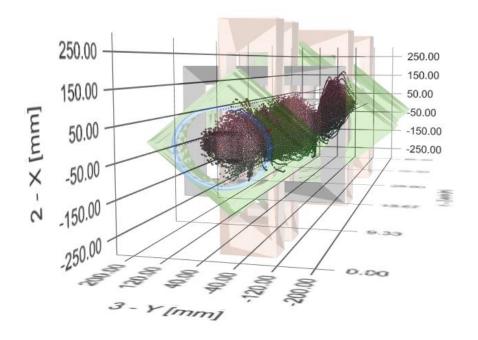
OT @ MSU 02/06/2025

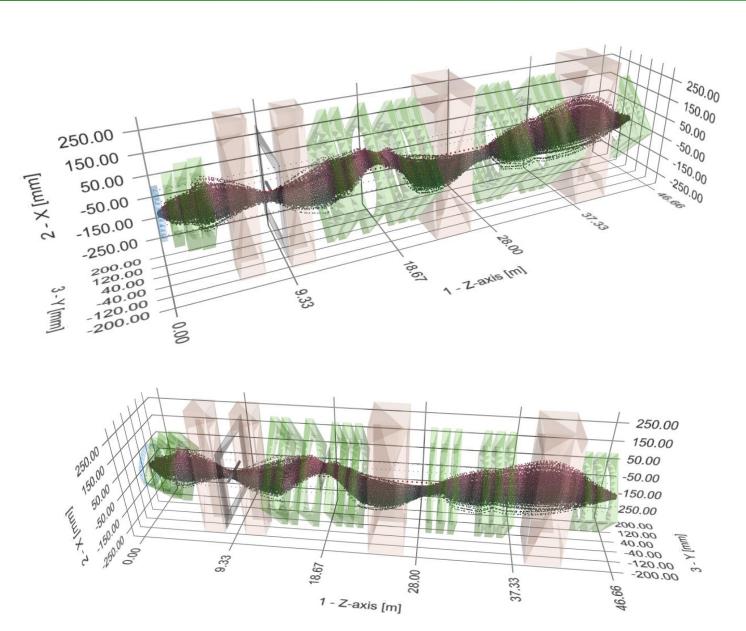


# 3D envelope (projection to central axis)



https://lise.frib.msu.edu/17/ eL\_ARIS\_PS\_only.lpp



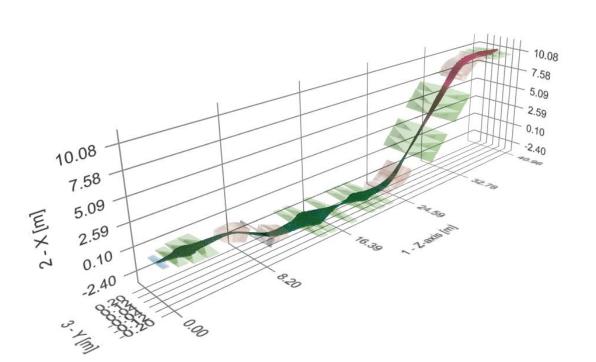




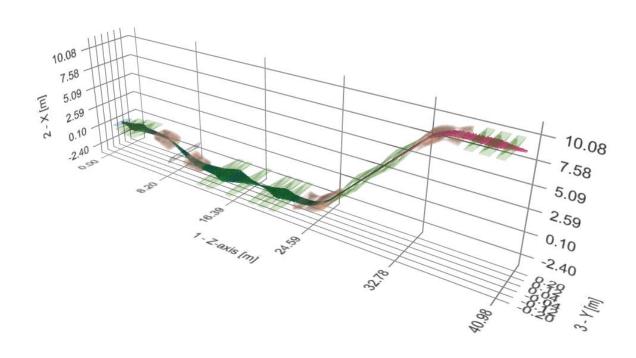
## 3D envelope: absolute coordinates

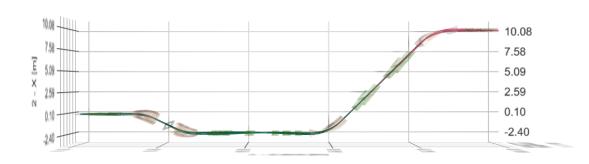


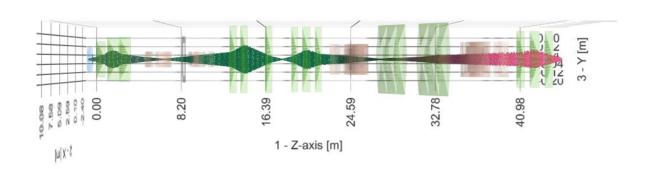
https://lise.frib.msu.edu/17/ eL ARIS PS only.lpp



## Target-DB1



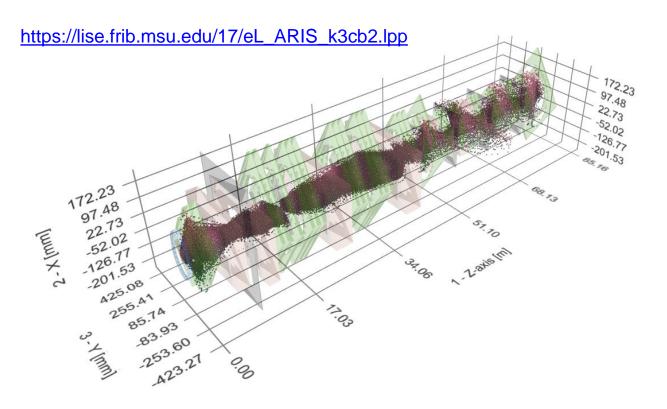


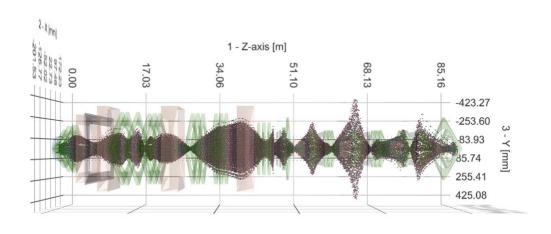




## 3D envelope (relatively to central axis)

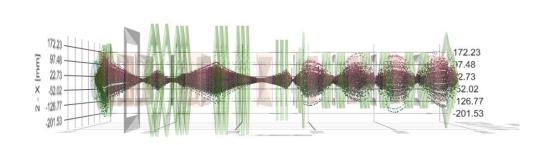






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- Rotation blocks
- X-Y orientation Jump between local and absolute frames

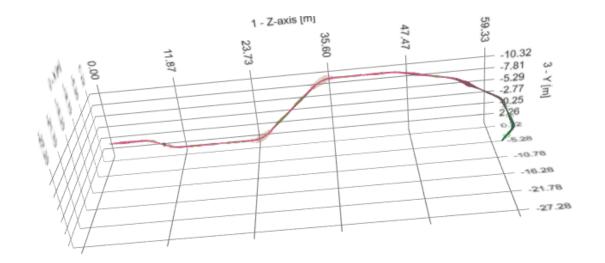




# 3D envelope (absolute coordinates)

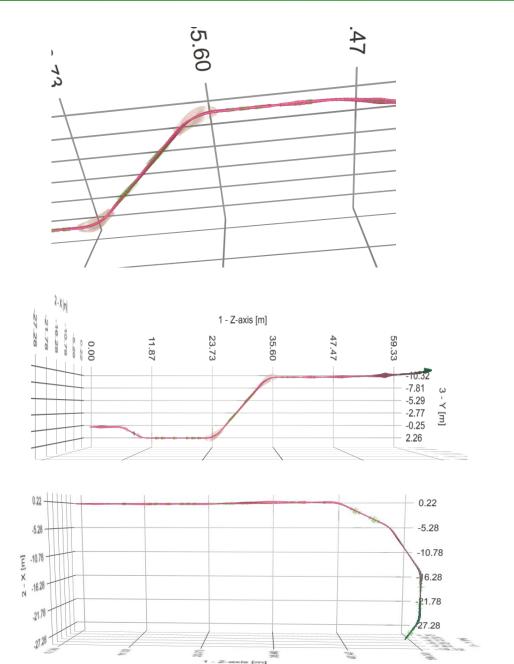


#### https://lise.frib.msu.edu/17/eL\_ARIS\_k3cb2.lpp



#### Still under development (issues to resolve)

- Ion pipe, quad block axis should be changed for correct plotting in 3D-absolute coordinates
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# LISE <sup>++</sup><sub>cute</sub>: v.17.11.22 from 03/02/2025



### Correction of QCustom3DItem X&Y proportion

### Beam Dump 3D-plot

