Data Analysis Software

Anthony Lim, Tom Jubb and
Ewan Cook

Muon user's meeting,

July 2018

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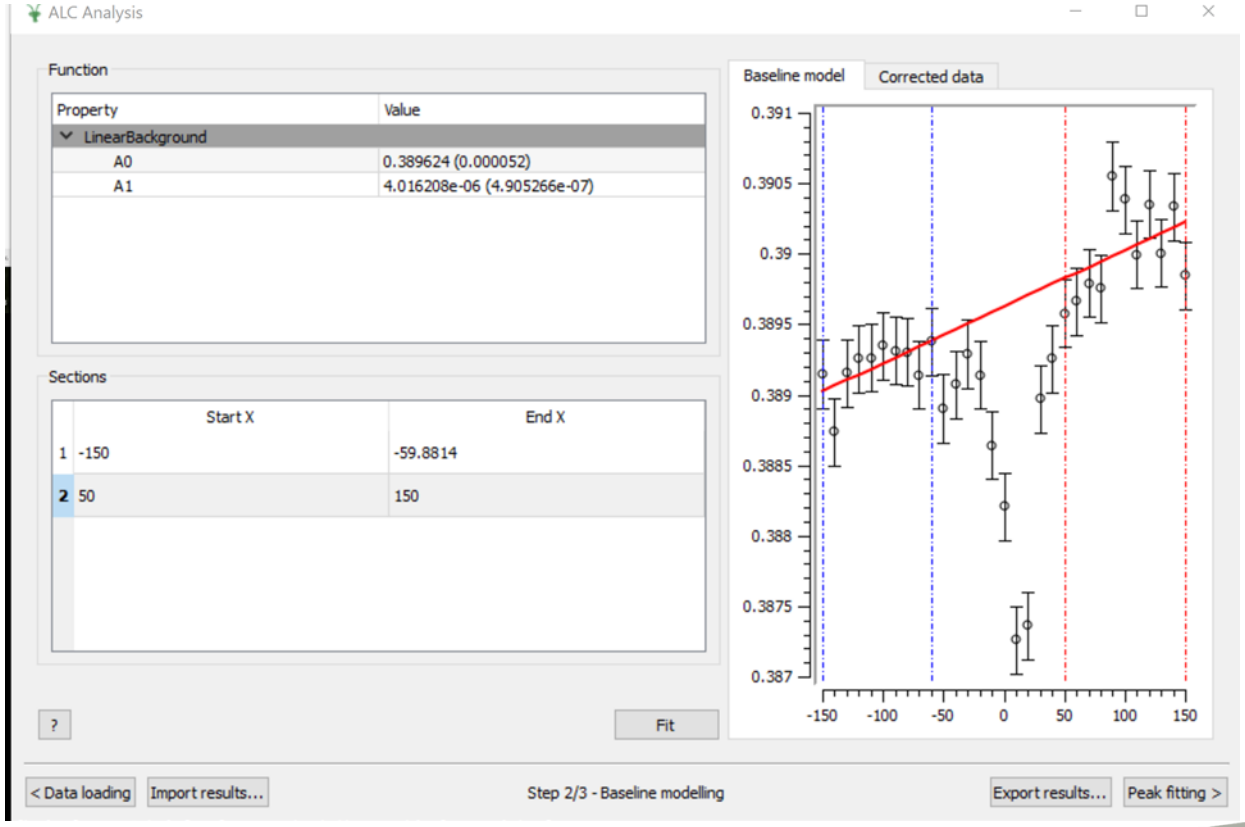
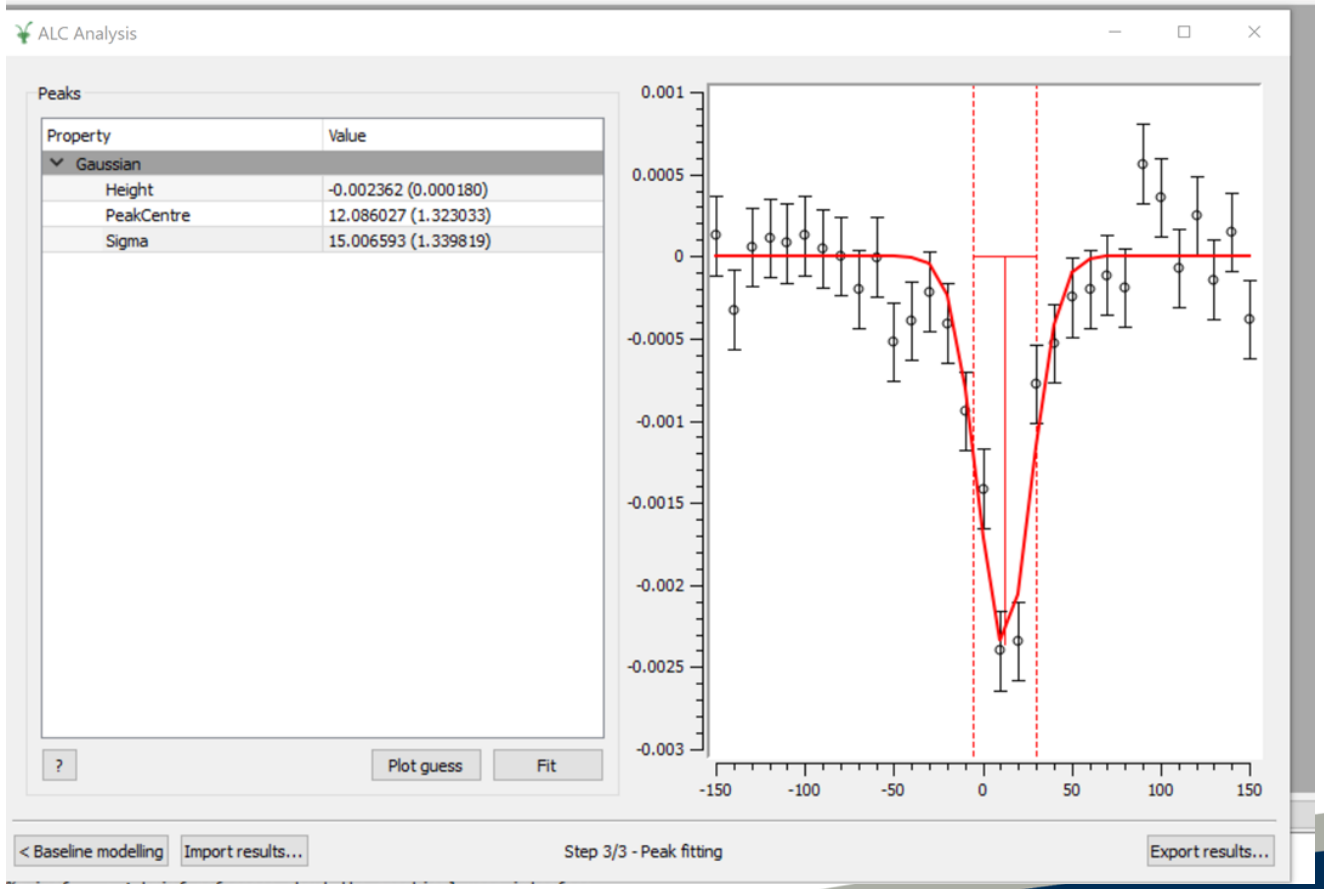
Avoided level crossings (ALC)

- For looking at scans of data.
- Can fit to the base line.



Avoided level crossings (ALC)

- Can the fit peak to remaining data.



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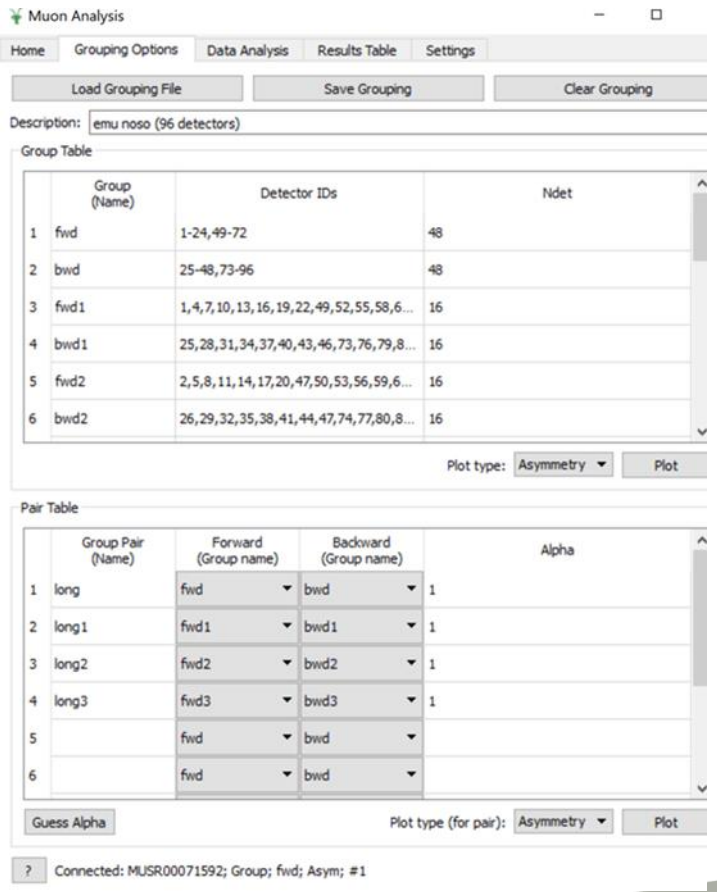
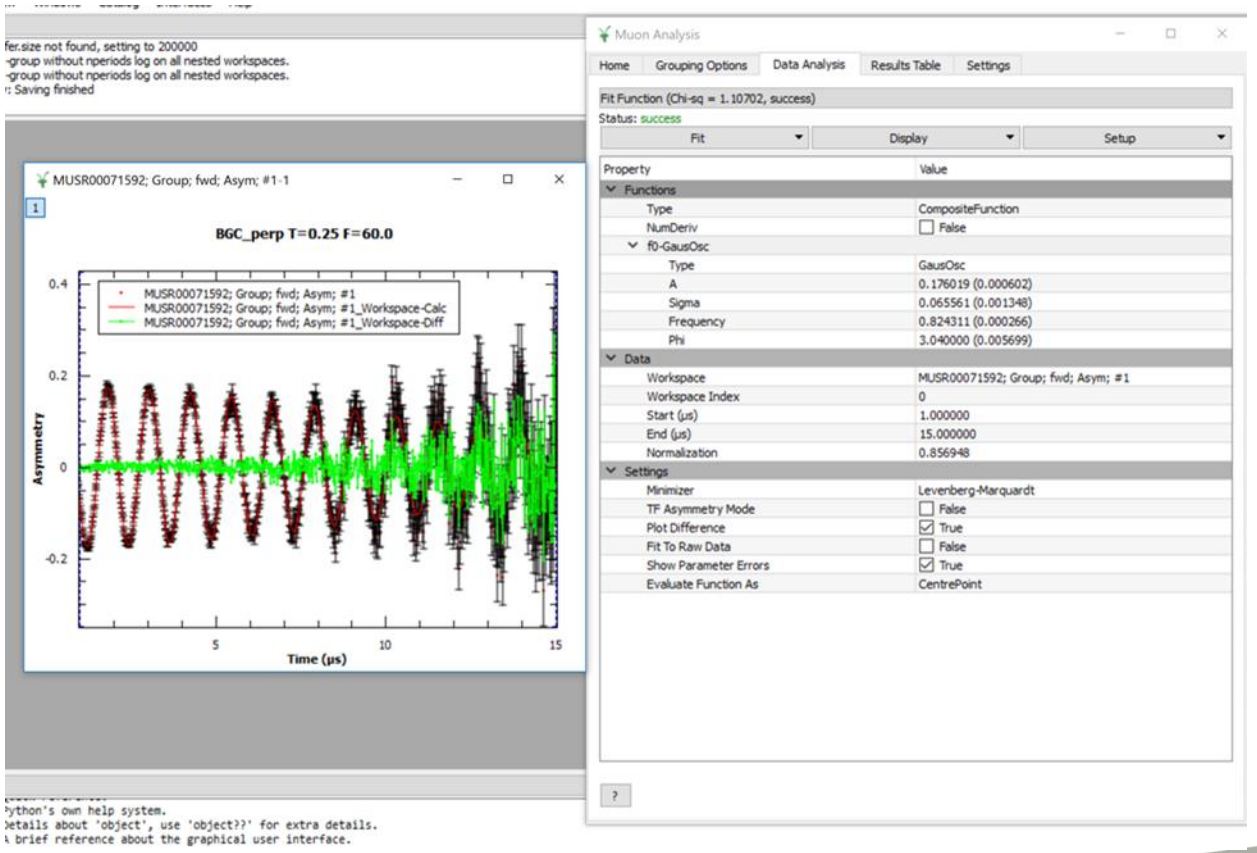
Muon Analysis

- For looking at time domain data.
- Can easily change the group/pair of detectors.



Muon Analysis

- Graphical interface for fitting.
- Shows the data, fit and the difference.



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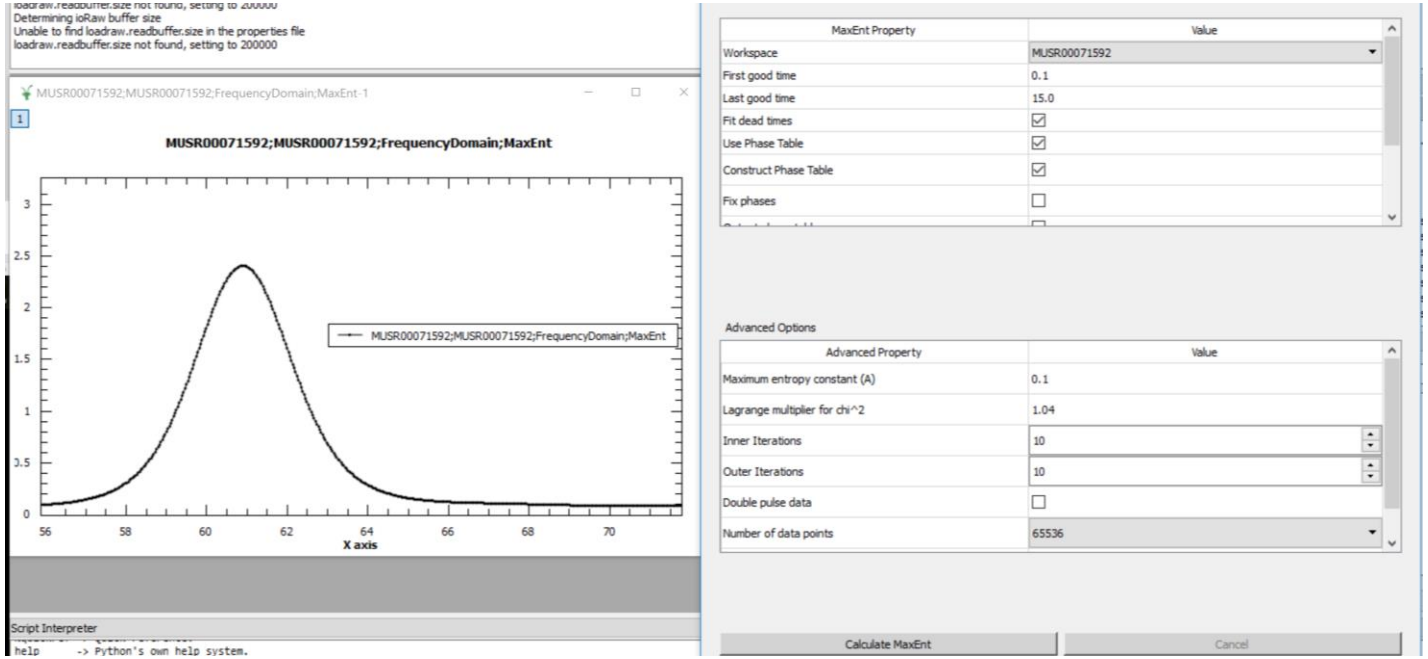
Frequency Domain Analysis

- Currently needs the data to be prepared in Muon Analysis.
- Can do both maximum entropy and FFT.



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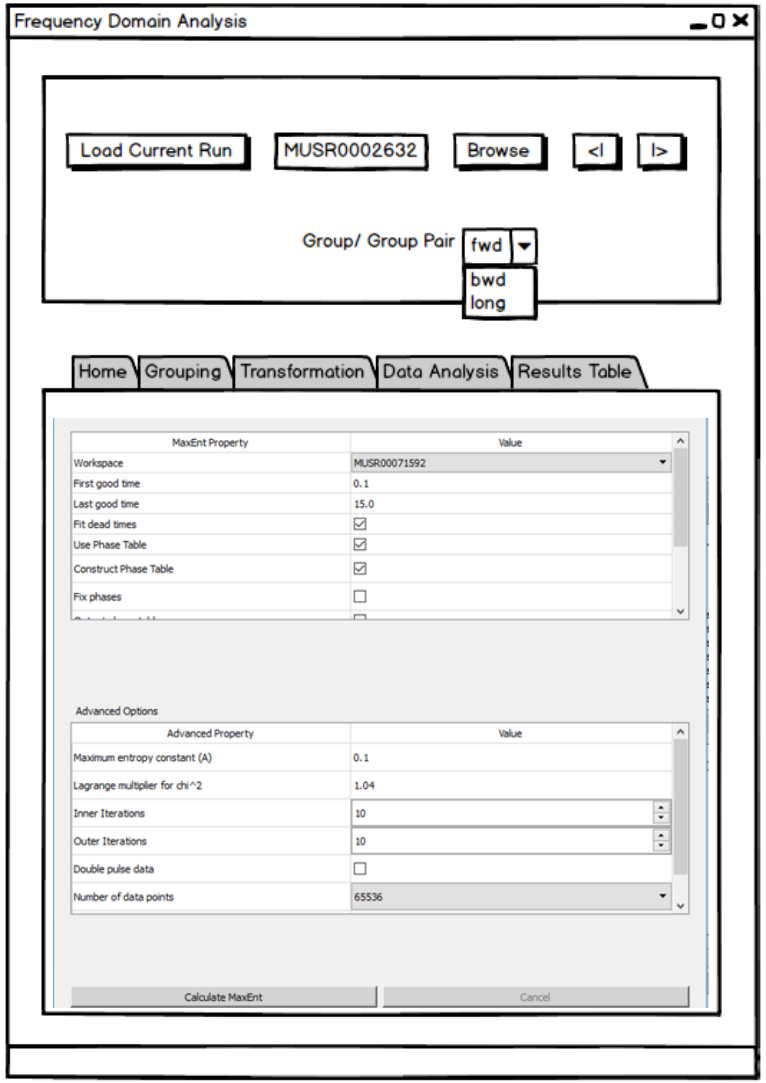
The future

- Currently adding a data loader for PSI data.
- Upgrade of Muon Analysis.
- Complete stand alone Frequency Domain Analysis.
- Elemental Analysis (negative muons).
- Save state of interfaces.

Muon and Frequency Domain Analysis



- Muon Analysis is being rewritten to improve stability.
- It will share code with Frequency Domain Analysis.
- Rewrite will allow for automated testing.

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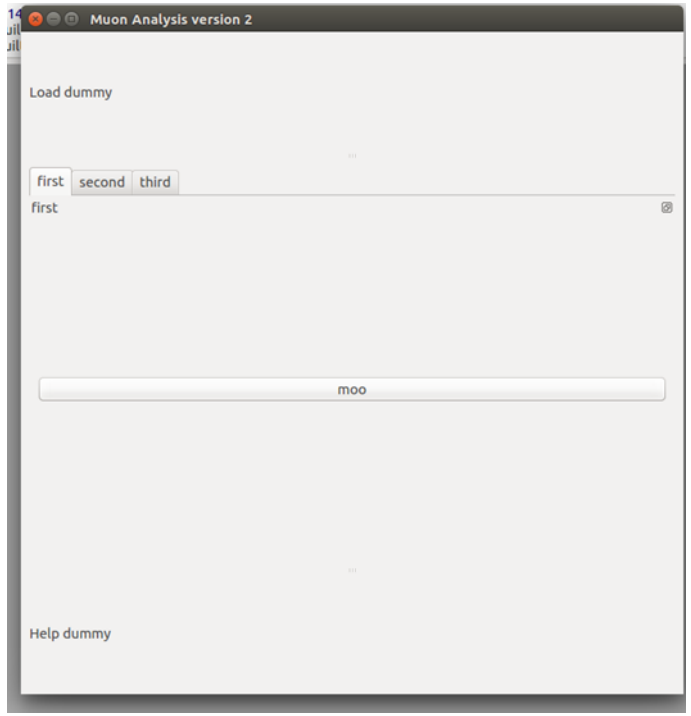
Muon and Frequency Domain Analysis



- Will be able to eject the tabs.

Muon and Frequency Domain Analysis

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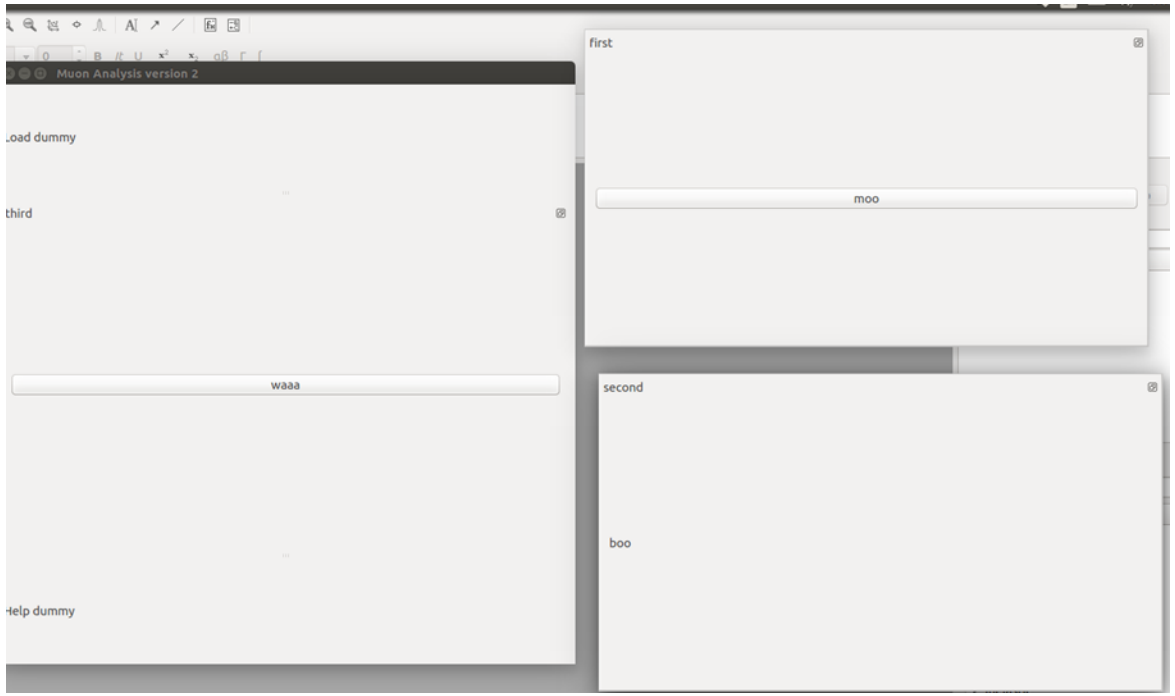
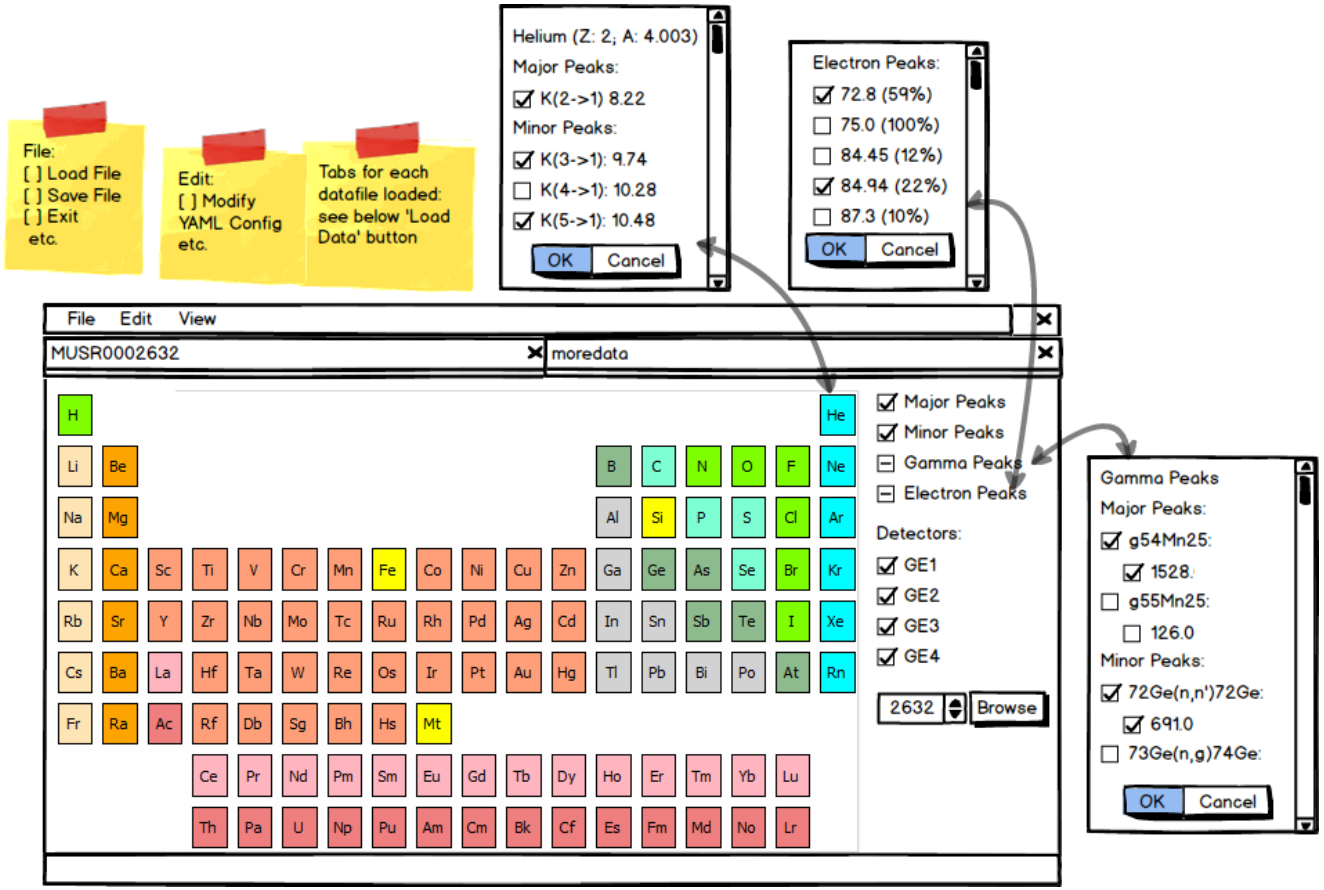


Elemental Analysis



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How to be involved

- Share information about crashes.
- Talk to me (anthony.lim@stfc.ac.uk).
- Use the Mantid forum (requests and bugs) http://forum.mantidproject.org/ .