NEUTRONS FOR SCIENCE

Indirect ILL Reduction

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Identifying requirements for Mantid

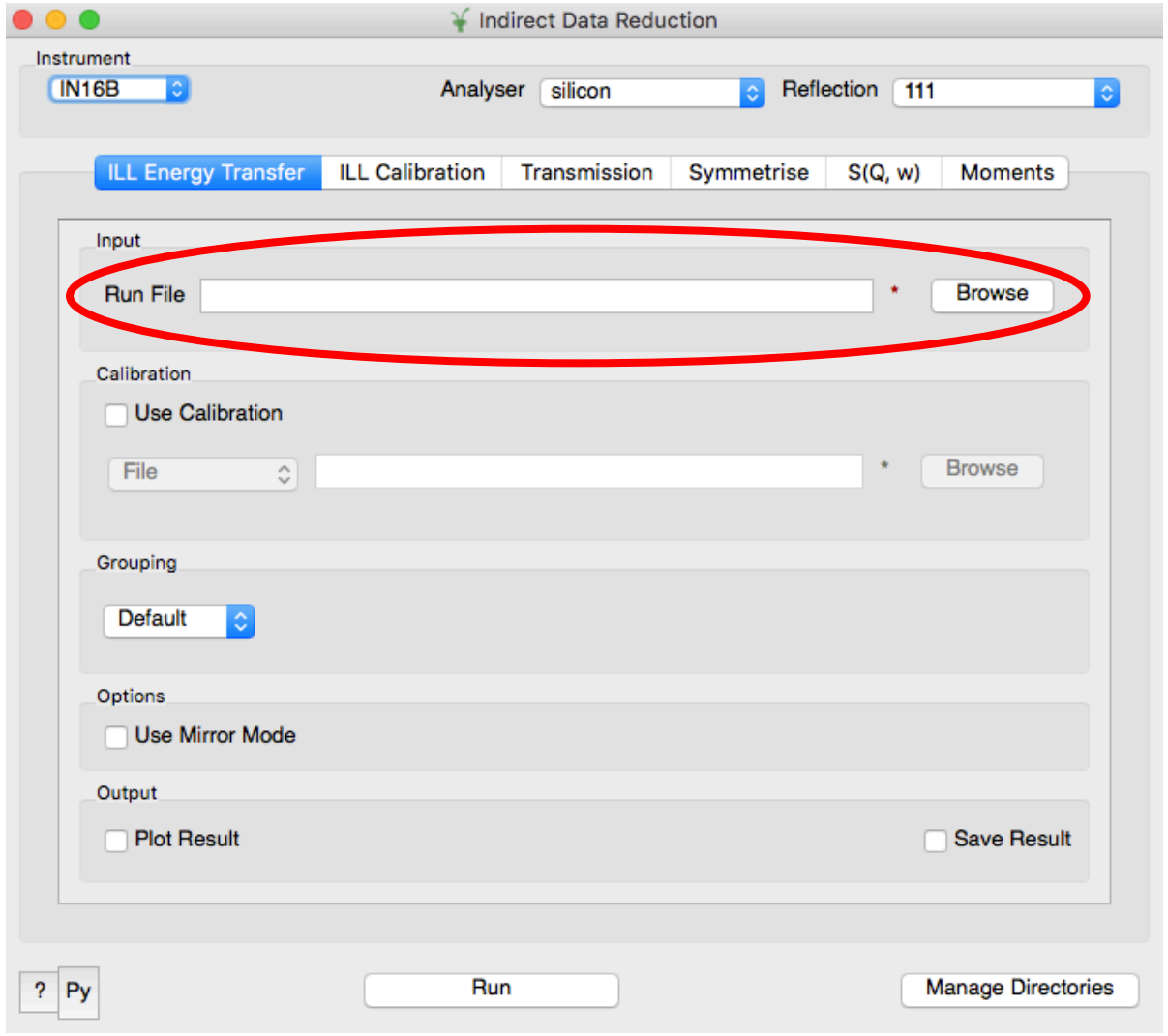
Slide #	Issue #	Description	Status
	16588	Loading of new nexus files from IN16B	Fixed, pending review
3		Loading multiple files, Conflict with naming conventions in Mantid	Identified, in progress (Gagik)
4	14179	Load multiple files from the reduction GUI	Identified
	16589	Ambiguity with two vanadium calibration scripts	One removed, comparisons to Lamp in progress (Verena)
		Correct x-axis range and label	Identified
5		Unused single detectors	Identified, to discuss
6		Cropping energy channels, when monitor is 0	Identified, to discuss
7		Implementation of unmirror options	Identified, to discuss

Loading multiple ILL files

- Mantid requires file names to have instrument prefix for multi file loading
- ILL numors don't follow this convention
- Add an attribute allowNoPrefix to ILL

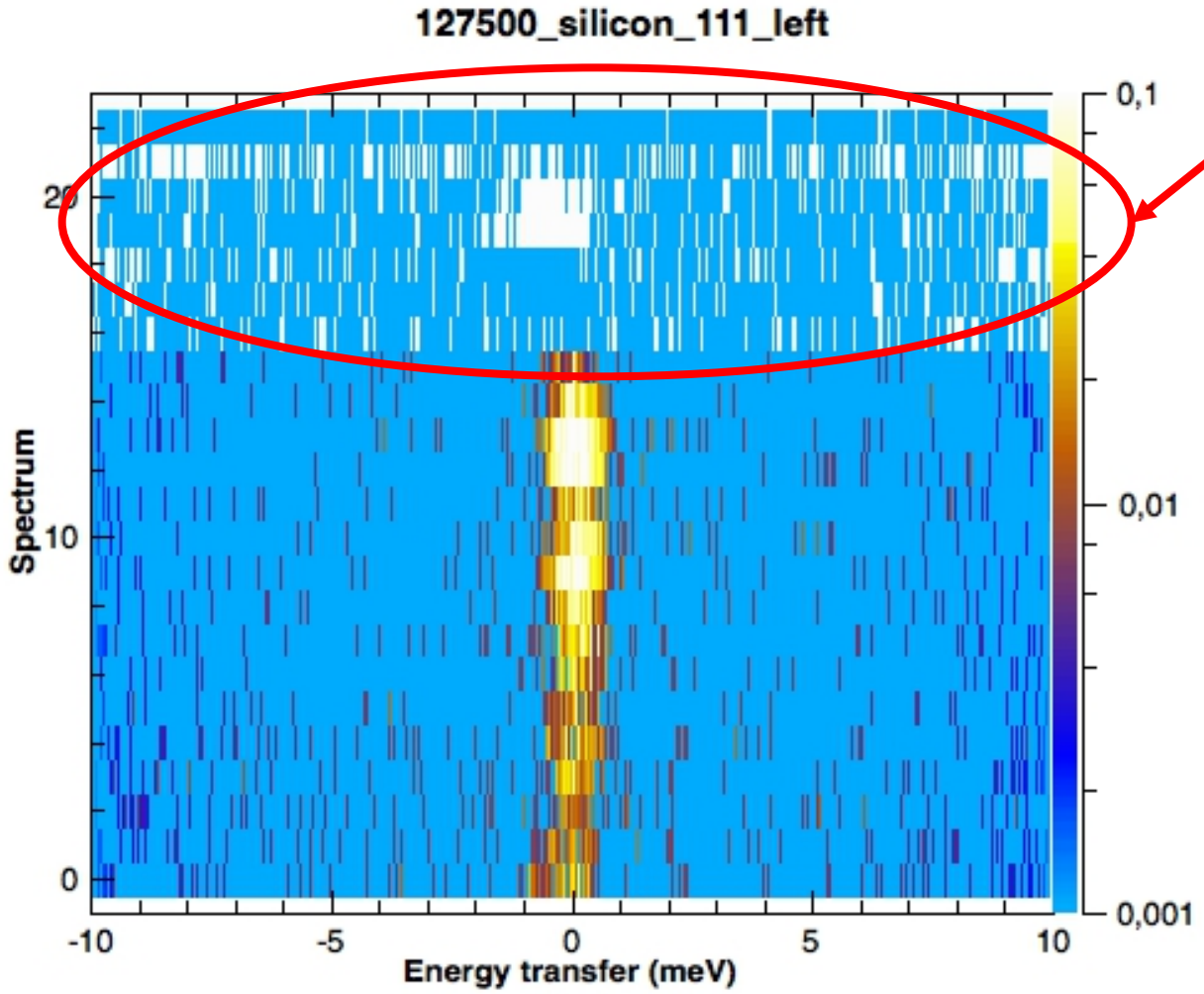
- And add a check in

Load multiple files from the reduction GUI



- **Allow multiple files**
- **Sum as default action?**

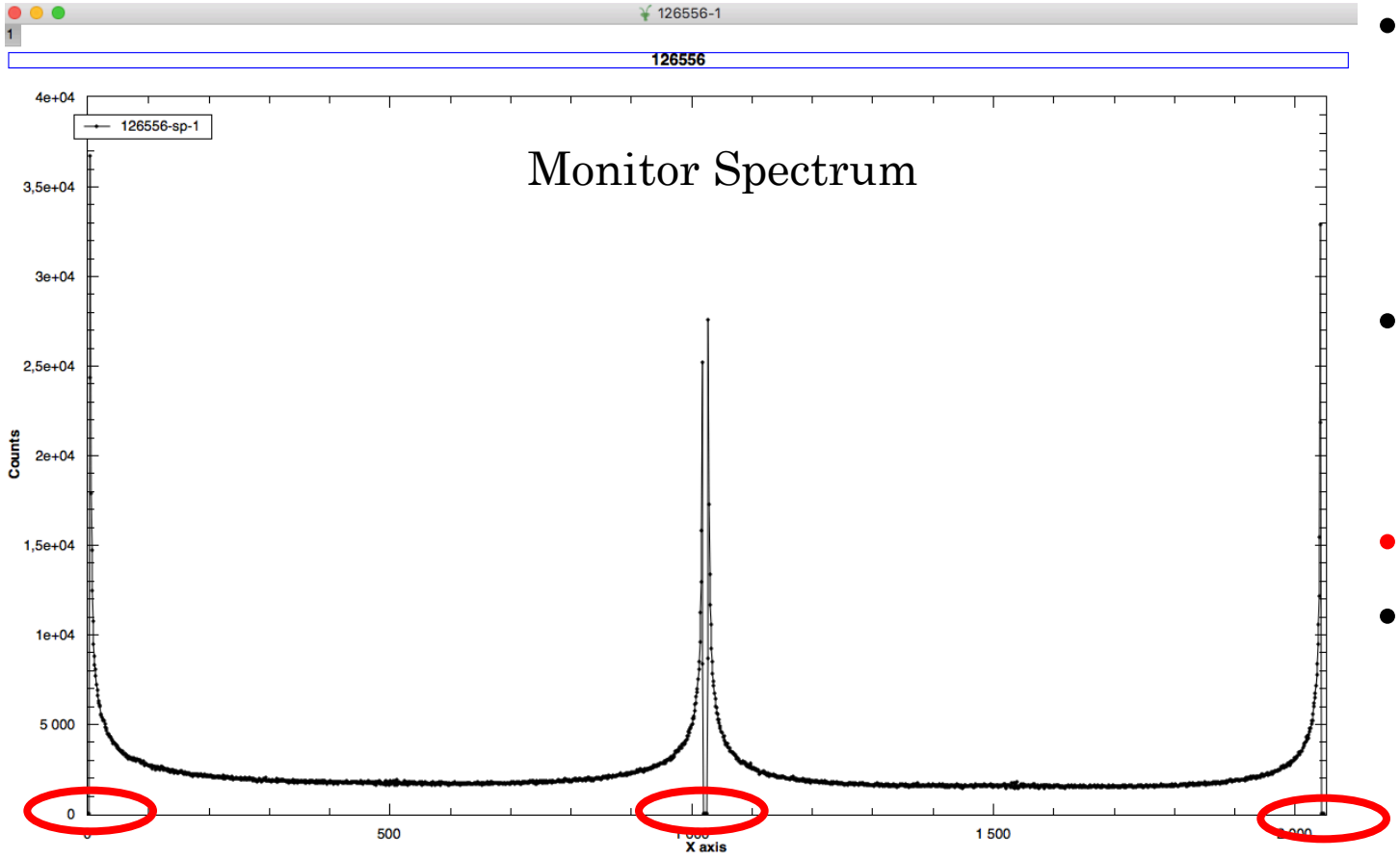
Unused single detectors



- There are 8 slots in nexus files for single detectors
- Only 1 (or 2?) are in use
- Lamp trims the rest out
- Mantid currently doesn't

- **What is the desired behaviour?**
- **What is the flag in the files to identify whether a single detector is enabled or not?**

Cropping energy channels



- The very first and last few energy channels of each wing contain 0 monitor counts
- Currently, Mantid crops the workspaces to trim them out (unlike in Lamp)
- **Is this what we want?**
- If so, needs care when implementing unmirror options

Unmirror options

Currently 8 options are supported in Lamp, **how many we actually need in Mantid?**

Option	Description	Mantid
0	No unmirroring is done	YES
1	Dumb sum of left and right wings	YES
2	Keeps left wing only	YES
3	Keeps right wing only	YES
4	Smart sum of left and right wings by shifting the right	
5	The same as 4, but fits the reference (e.g. vanadium) run	
6	Smart sum of left and right wings by positioning both at 0	
7	The same as 6, but fits the reference (e.g. vanadium) run	