

(User File name)

User files specified in a drop down menu. Should be exportable.

Exact user file equivalent format? Should Load as Table Workspace probably.

Location where files will be loaded from

Data Directory

scattering
sample

scattering
empty cell

transmission
empty cell

blocked-beam

direct-beam

Individual rows can be run, or the entire lot.

We may need to Patch values in the file. However, there should be secondary table for this as the table here relates to reduction parameters!

sample, background, empty beam, blocked beam.
Translates to:
sample, cell, direct, blocked beam, AND Options tab

Reload

Reduce 1D

Reduce 2D

Patch Value(s)

Debug mode puts all workspaces from a DataProcessing run into a GroupWorkspace

Memory options

- ☐ wipe ws
- ☐ debug mode
- ☐ dir for output

Debug mode has an associated configuration where you can select what workspaces will be generated (kept) in debug mode

Options

☐ Plot Results ☐ Verbose

Save options

☐ Nexus ☐ ASCII

Save

Save Other

Reduction settings

☐ Account for gravity

Beam Stop Radius

radius,
roi,
mask

Wavelength

Min

Max

Step

Linear



Qxy

Min

Max

Step

Tie min and max together
change min = -max

Transmission Fitting Settings

☐ Fit transmission

Min

Max

Polynomial 2



Spectrum Shape Correction File ☐ Use

Flood Correction File ☐ Use

Checked by
default.
Read only.
Specified in user
file

Transmission

Radius (mm)

Region of Interest file(s)

Mask file(s)

Scaling

Detector Bank

front-separte
rear
merged

IF front-separte collected, the
beam center finding should be
disabled.

Same scaling
as ISIS

Scaling and Shift
widget needs to
appear twice for
topbottom and
leftright if we are
running in 'merge'
mode

Call it 'Q-
range for fit'

Masking

Display Launches Instrument, Mask

MaskBins needs to consume an xml file that can include both the detectors and the TOF-ranges. This should be the first step.

Instrument View. Mask bins. Needs to snap to bin edges. Data must be in histogram mode. This feature is needed.

Note from Owen: It was discussed that the Masking and Geometry Tabs should be combined.

Geometry settings

Sample Geometry

Same as the ISIS one, used to calculate/re-calculate sample volume.

This CAN depend sample to sample, so best not to do here.
Better to patch?

Beam Center Finder

Same as ISIS, but we don't need to specify the detectors. Always rear detector.

Priority: Lower

Beam center finding needs to be proven to work for the Bilby data first

Patching

File 1

File 2

File 3

Bilby tar files

name of parameter	value of parameter	original value
x	1	1
y	1	2

Select the file to see the parameters that can be patched. File come from table in previous table.

view patches applied to the files to be read. Doesn't cause problems in Mantid as we simply need to reload the files after they have been patched. We can use the modification date? A SaveBBY or PatchBBY algorithm will be needed!


Launches a save as dialog exported files have a default filled name, this can be changed.

date	user-name	name of parameter	new value


How to get the user-name?

Note from Owen: I believe this tab should also be used for editing patches.

Patching/editing/viewing of values in the file is separate from editing viewing of reduction parameters.

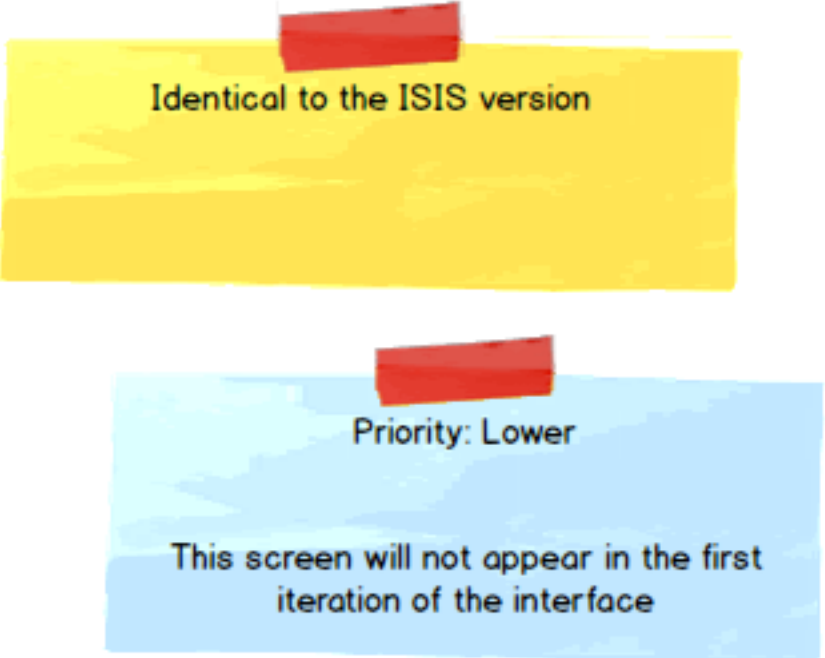


Todo. We want to do event pulse-time offsets as part of addition. Maybe want to run a SaveBBY algorithm.



Priority: Lower

This screen will not appear in the first iteration of the interface



Identical to the ISIS version

Priority: Lower

This screen will not appear in the first
iteration of the interface

Outputs of time slicing/filtering are fed back into the main table. Filtering methodology needs to be decided.

Note from Owen: I suggest you evaluate the need to do this via a GUI. It would be hard to create a GUI that was flexible enough to handle all the possible filtering cases.

We have a prototype UI for event filtering in Mantid, and I've asked the developer to extend that so that it could be reused elsewhere, such as here.

Priority: Lower

Filtering can always be achieved externally in Mantid. This might be better.