



FRIB

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SpecTk 1.3.1 → 1.6.4



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6/26/2024

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Versions, Location

Versions

- [1.3.2](#)
 - Fixed 3 bugs
- [1.3.3](#)
 - Page Reordering
- [1.4.0](#)
 - Improvements to Page Reordering
 - Added a disable option
- [1.4.1](#)
 - Added the Unstick tool
 - Spectrums no longer disappear when changes are made in SpecTcl
- [1.4.2](#)
 - Added an Append option
 - Improvements to Performance
- [1.4.3](#)
 - Added Remove Appended
 - Added the Disconnect and Reconnect option to refresh SpecTcl connection
 - Added ROI Print
- [1.5.0](#)
 - Added “Safe Mode”
 - Added Purge
- [1.5.1](#)
 - Grid Button added
 - Refresh Tool added
 - Added the SpecTk logo
 - Fixed the Clear selected/page options
- [1.6.0](#)
 - Addressed a graphing bug in SpecTk
- [1.6.1 - 1.6.2](#)
 - Fixed another graph display bug
 - Fixed a bug with changed directories
- [1.6.3](#)
 - Added Xamine Import and Export options
- [1.6.4](#)
 - Added a help tool page
 - 30% improvement to config load times

Version 1.6.4 can be found [Here](#) or Locally at
I:\projects\lisedev\Projects\SpecTk_Versions
i:\projects\arisdq\SpecTk_versions\
/user/arisdq/SpecTk



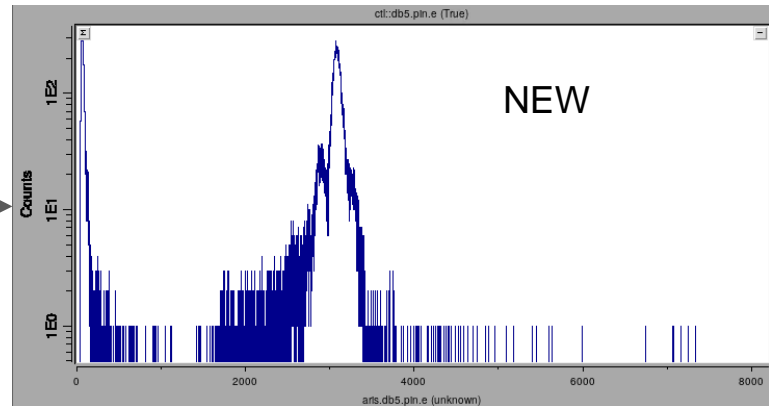
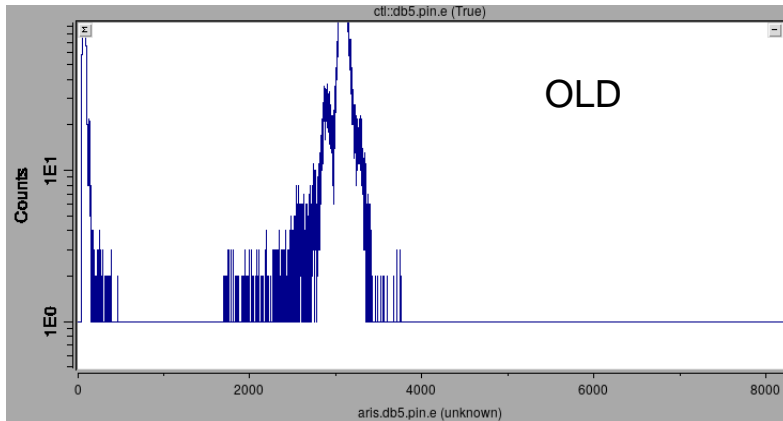
SpecTk 1.3.2

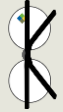
Bugs

- When Working with a 2D spectra the pressing the minus button would throw and error
- 1D log display wouldn't display properly
- 1D ROI fit

Fixes

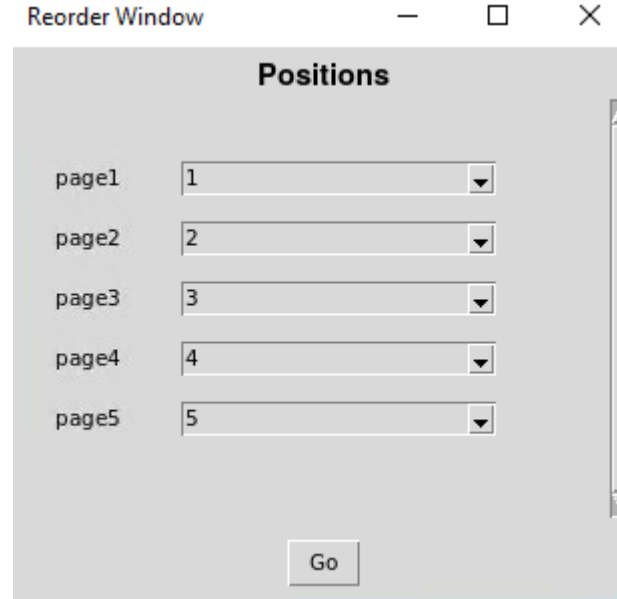
- All spectrums were renamed to no longer contain two sets of colons
- A slight offset of $1e-9$ was added to all 1D channels





Page Reordering

- Reorder
 - Opens a window that lets the user select the order they want the page tabs to appear in
 - Configs are backward and forward compatible
- Alphabetical
 - Aligns the page tabs in alphabetical order





SpecTk 1.4.0/1.4.1

Improvements

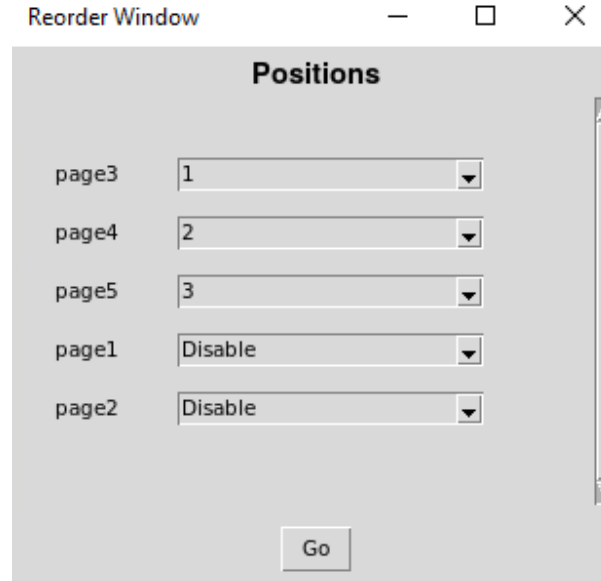
- Updates to the UI
- Added an event check to make sure no pages could have the same position
- Fixed a bug with the client code now when a change is made in SpecTcl spectrums won't disappear

Disable

- It is important to make a backup of your config before using any new features
- You can Disable as many tabs as you would like
- Enabling is as easy as going into the Reorder window and just giving them a number

Unstick

- Updates the Spectrum buttons when they get stuck





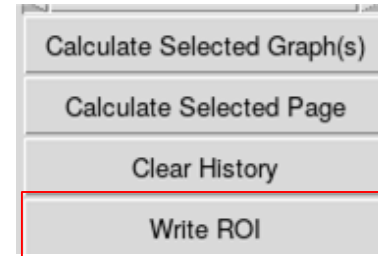
SpecTk 1.4.2/1.4.3

Append

- Before appending files there are two things to check:
 - Make sure the configs don't have matching page names
 - Make sure they don't have matching spectrums
- Appending involves going into the file menu and selecting append then selecting the file
- If a save occurs while the file is still appended the appended file will merge with the original
- You can remove the appended file with the removed appended option under the tools menu
- If a new page was added during the merge it will stay
- Append works with as many configs as desired

Additions

- Remove appended option under remove tools
- Disconnect and Reconnect option (refreshes SpecTcl connection)
- ROI Print option
 - Outputs all ROIs present to a csv file





SpecTk 1.5.0

Safe Mode

- Checks to see if there is an empty ROI in the config file and removes it
- adds very little load time
- Is on if the Safe Mode box is checked

Purge

- Located under Tools->Remove Tools
- Currently (v1.4.4 and earlier) waves are permanent
- Causes longer load time and increased memory use
- Purge will remove all waves not currently displayed, and their ROIs

| | | | | |
|---|-------------------|----------|--------|-----------------|
|  o43_08 - Copy | 2/14/2024 2:19 PM | SPK File | 412 KB | Ln 10786, Col 1 |
|  o43_08 | 2/14/2024 2:17 PM | SPK File | 723 KB | Ln 15588, Col 1 |

- 30% reduction in lines of code (config files are code)
- 45% reduction in file size

SpecTk 1.5.1

Grid Button

- Added a button that lets grids be applied to all selected displays

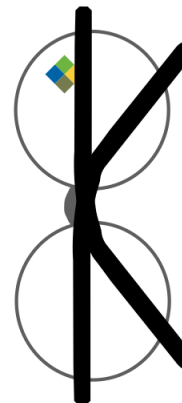
Refresh Displays

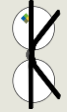
- Displays often get stuck and don't allow the user to click on displays and change them
- Added a new tool that lets the user refresh all displays on a page
- When pressed it will quickly parse through all displays refreshing them



Quality of Life

- Fixed the clear selected and clear page buttons
 - They no longer throw errors and will remove the data of selected displays/pages
- Added a dialog for ROI Write
 - Allows the user to choose file name and directory
- Created and implemented a icon for SpecTk
 - Allows the user to better recognize SpecTk in the taskbar

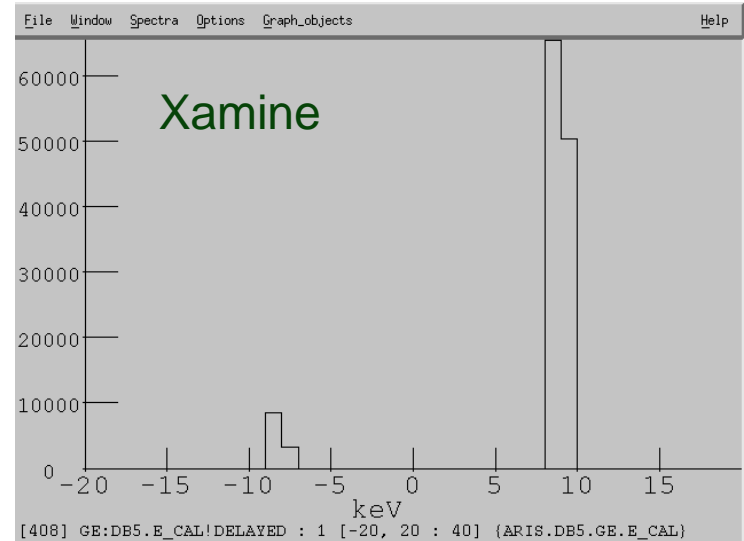
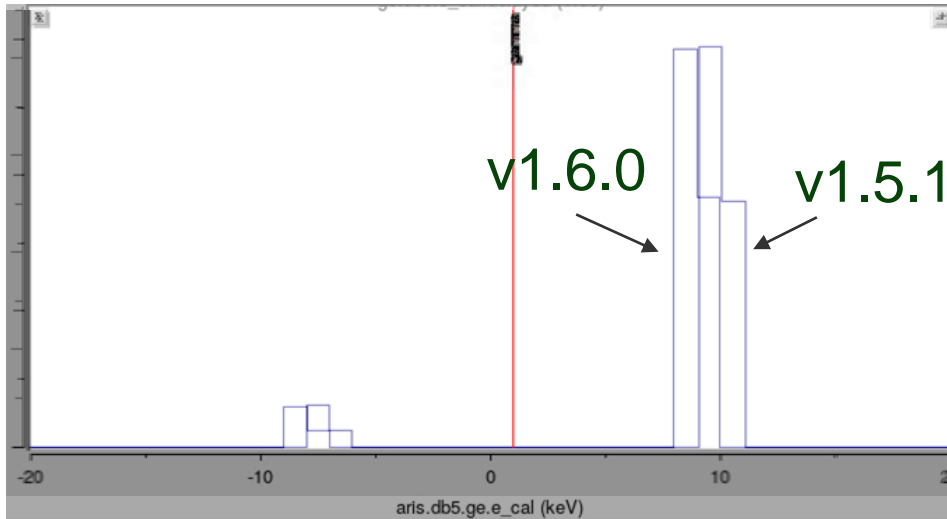


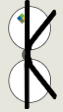


SpecTk 1.6.0

Bug

- SpecTk has been offsetting all channels by +1 in previous versions
- This was due to how the SpecTcl data in SpecTk was being processed
- It has now been corrected for both 1D and 2D spectras





SpecTk 1.6.1-1.6.2

Bug Fixes

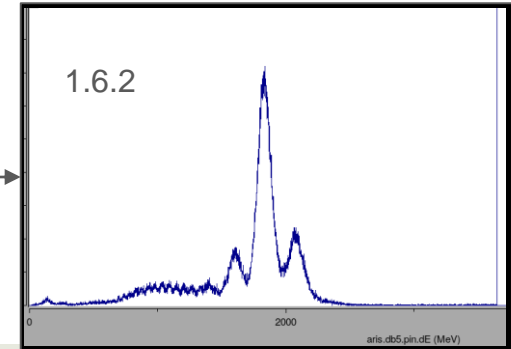
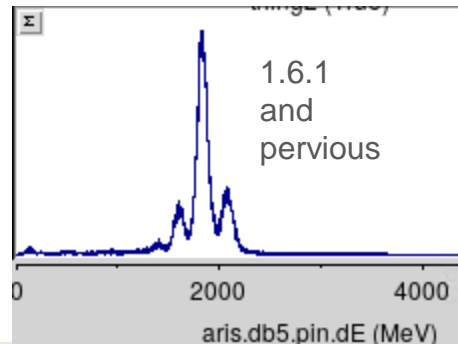
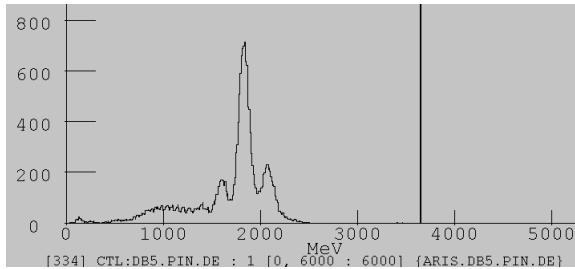
- Directory bug has been addressed
 - Occured when the directory a file pointed to changed ie.
SpecTk/1.6.2→SpecTk_Versions/1.6.2
- Graphing bugs
 - -1 index bug
 - Tail bug (The last data point of all spectra in previous versions was getting cut off because of the right shifting)

Application Error

```
Error: couldn't open "/projects/lisedev/Projects/S...  
  
couldn't open "/projects/lisedev/Projects/SpecTk/SpecTk_DAK/test/dirTest.spk": no such file or di  
rectory  
couldn't open "/projects/lisedev/Projects/SpecTk/SpecTk_DAK/test/dirTest.spk": no such file or di  
rectory
```

Application Error

```
Error: index "-1" is out of range  
  
index "-1" is out of range  
index "-1" is out of range
```

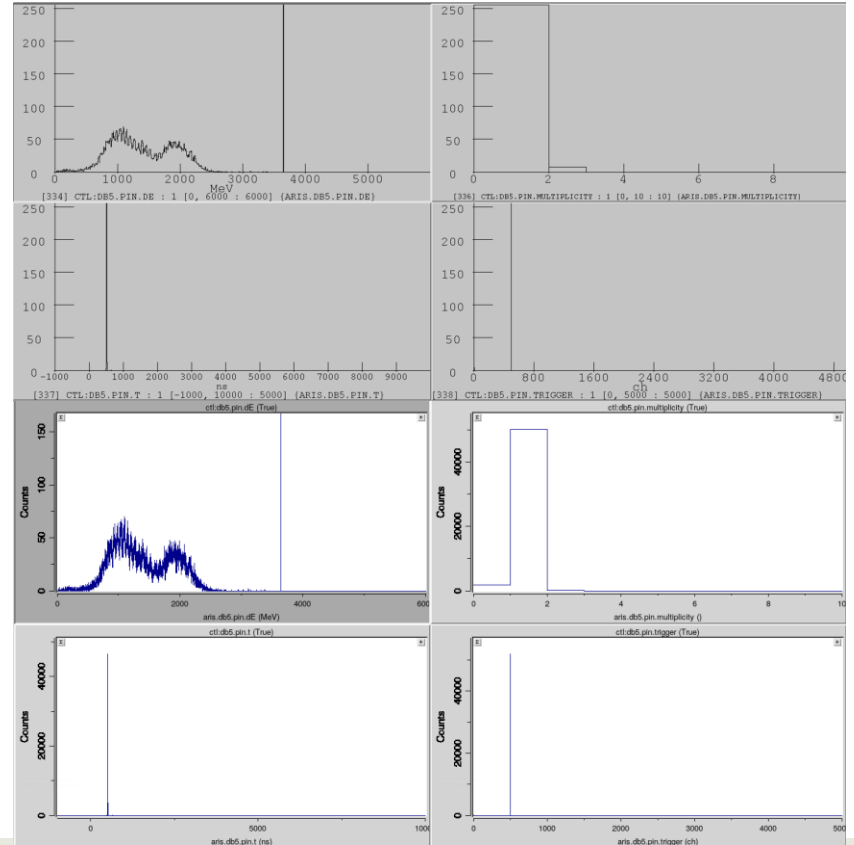




SpecTk 1.6.3

New Functions

- Xamine options added under file in SpecTk
 - To use exported saves go to Xamine->File->Restore
- Xamine Export
 - Selects the current page and exports as chosen name to the chosen directory
- Xamine Export All
 - Exports all pages to the current SpecTk directory with the name of each page as the file name
- Xamine Import
 - Chosen Xamine save is imported with the file name as the page name





Config Load Times

- Configs can take very long to load ie. o48_01 in version 1.6.3 takes about 104 seconds to load
- In version 1.6.4 that has been cut by about 30 seconds
- Further improvements are being worked on

Tool Help

- Added a Help option under tools
- The help window describes the functionality of all the tools in the Tool menu

About Tool Menu

Tool Menu Help

Menu item descriptions:

- Reorder: Reorder the tabs
- Alphabetical: Arrange tabs in alphabetical order
- Unstick: Unstick the button to the left of the display
- Remove Appended: Remove appended items
- Remove ROI: Removes all of the ROI Objects
- Purge: Purge all unused objects and data
- Refresh: Refresh the displays
- Safe Mode: Toggle safe mode on or off which checks for empty ROIs and removes them

Dismiss