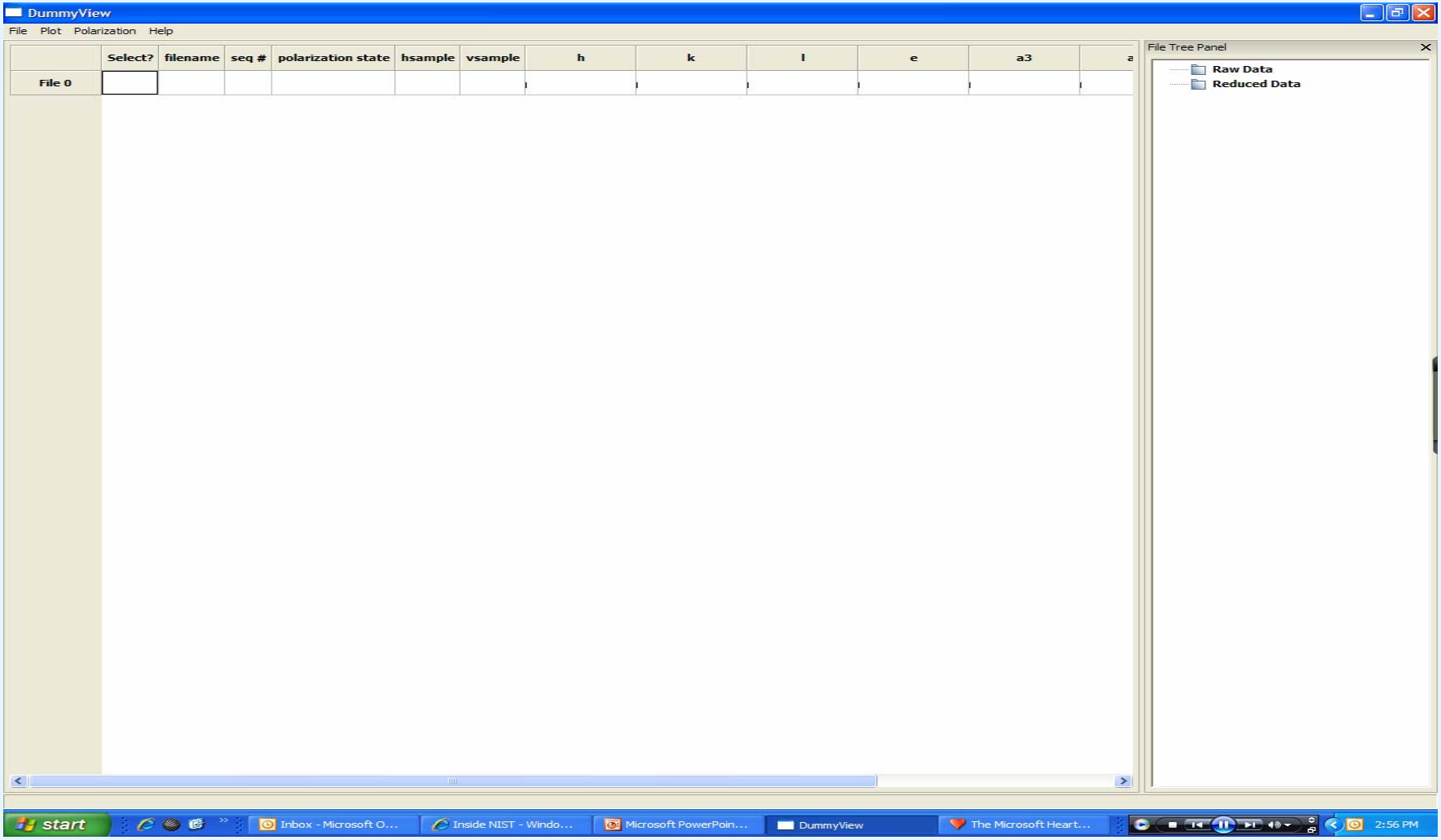
User Manual

Triple Axis Reduction Software
with Polarized He-3 Correction

Acquire Software

- Go to www.ncnr.nist.gov
- Go to Triple Axis website
- Download latest version of PolAppSetup.exe to c:/ drive
- Executable should install on c:/ drive into Polcorrector folder
- Double click PolApp.exe to run software
- Panel will appear

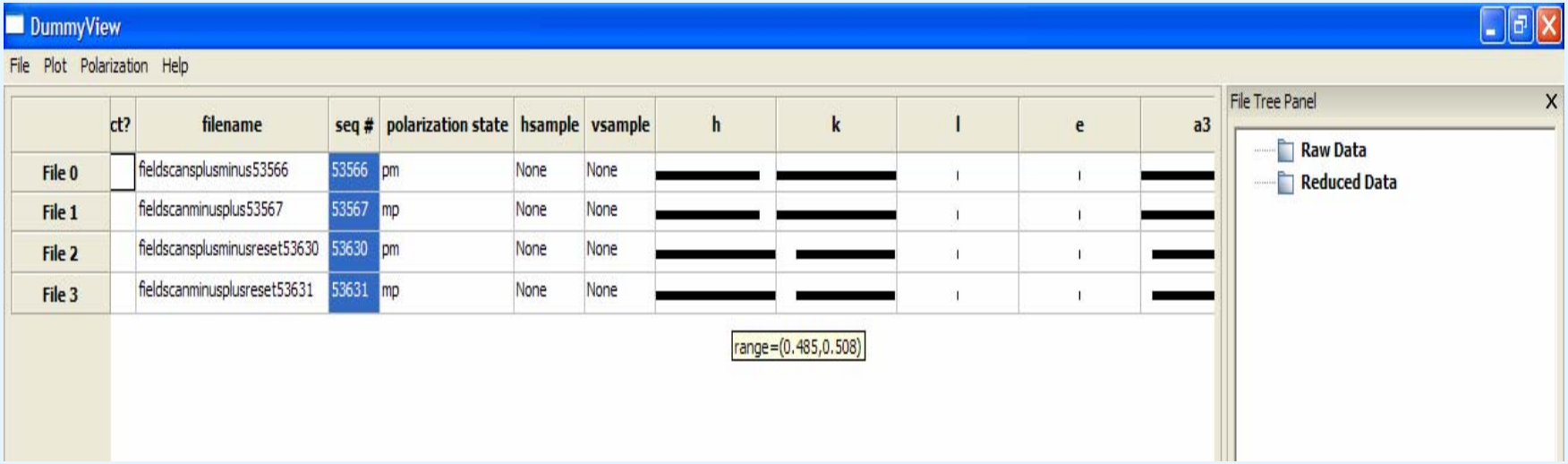
Software Panel



Load Data

- Choose Polarization menu located at top left
- Choose Load Data and select data to be reduced
- Files can be sorted by double clicking on a column header
- Sample Data files are available for instruction

Data Loaded



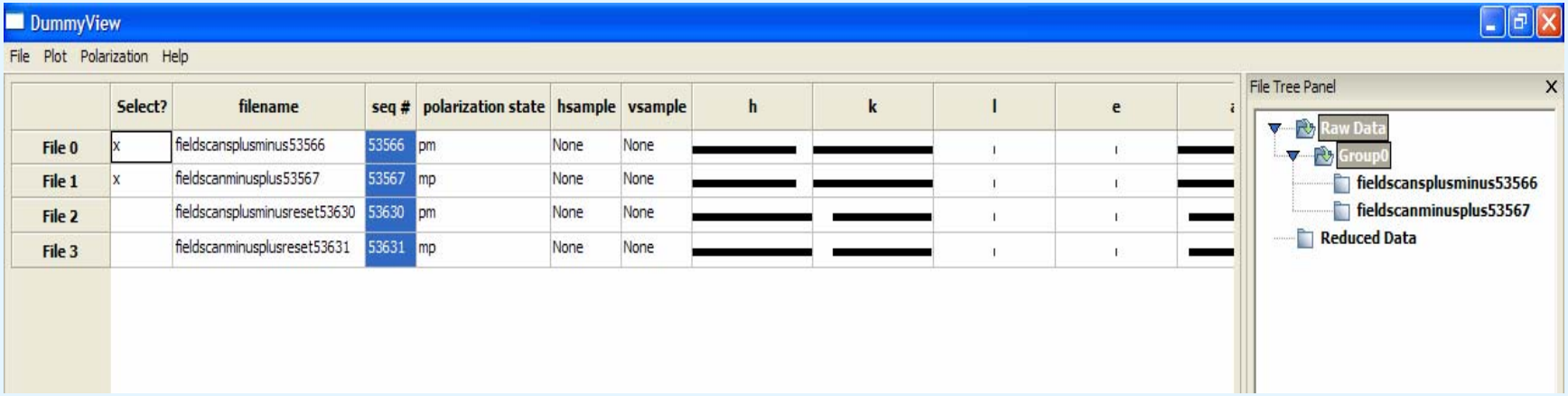
- Placing the cursor over a column value shows the parameter range over which the data was taken
- Ex. Panel above shows the range in ‘h’ for file 3 when the cursor is placed over the black bar

Column Labels

File #	Name and number given to loaded file
Select	Shows which files are selected for reduction
Filename	Name of file loaded
Polarization state	m = minus, p = plus (ex. mp means minus (flipper off), plus (flipper on) scattering)
hsample	Horizontal sample applied field
Vsample	Vertical sample applied field
h, k, l	Orientation of crystal plane relative to detector
e	Energy transfer (note: no values in the column represents elastic scattering)
a3	
a4	
Temp	Sample temperature of measurement
Magfield	Applied magnetic field during measurement

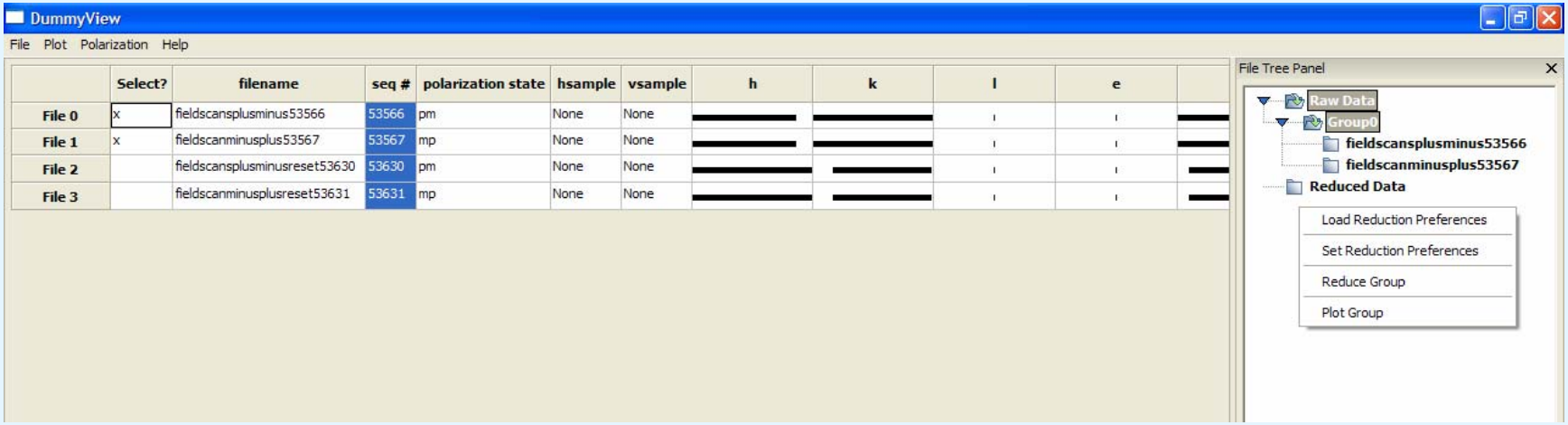
More parameters can be seen at one time by dragging the bar between the data and file tree panels

Select Data for Reduction



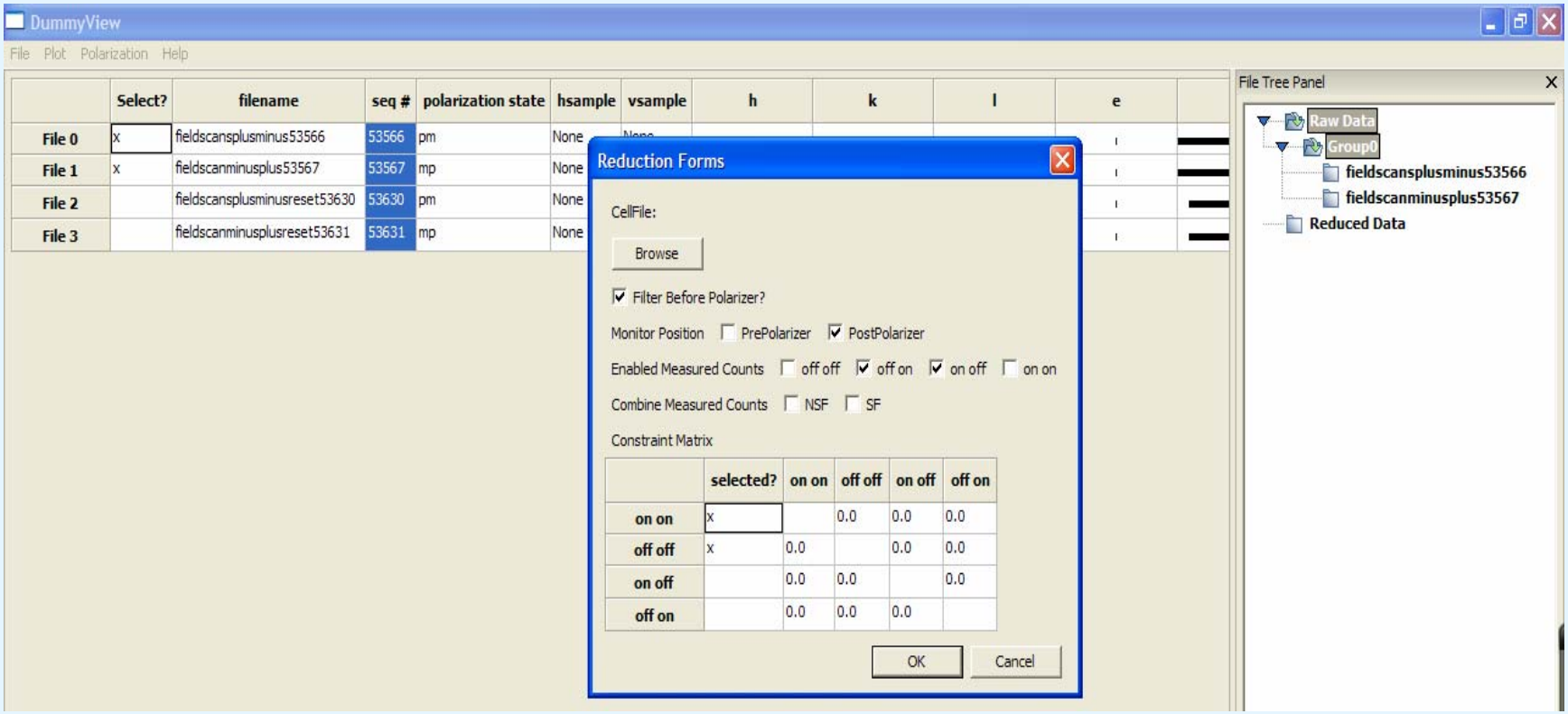
- Click the box under Select next to the data you want to reduce
- Right click anywhere in that panel and select 'Send group for reduction'
- Data will appear under the Raw Data tab in the File Tree Panel to the right

Data Reduction → Options



- Right click in File Tree Panel to see reduction options
- Choose Load Reduction Preferences to use previously saved settings
- Choose Set Reduction Preferences to set reduction parameters

Data Reduction → Set Preferences

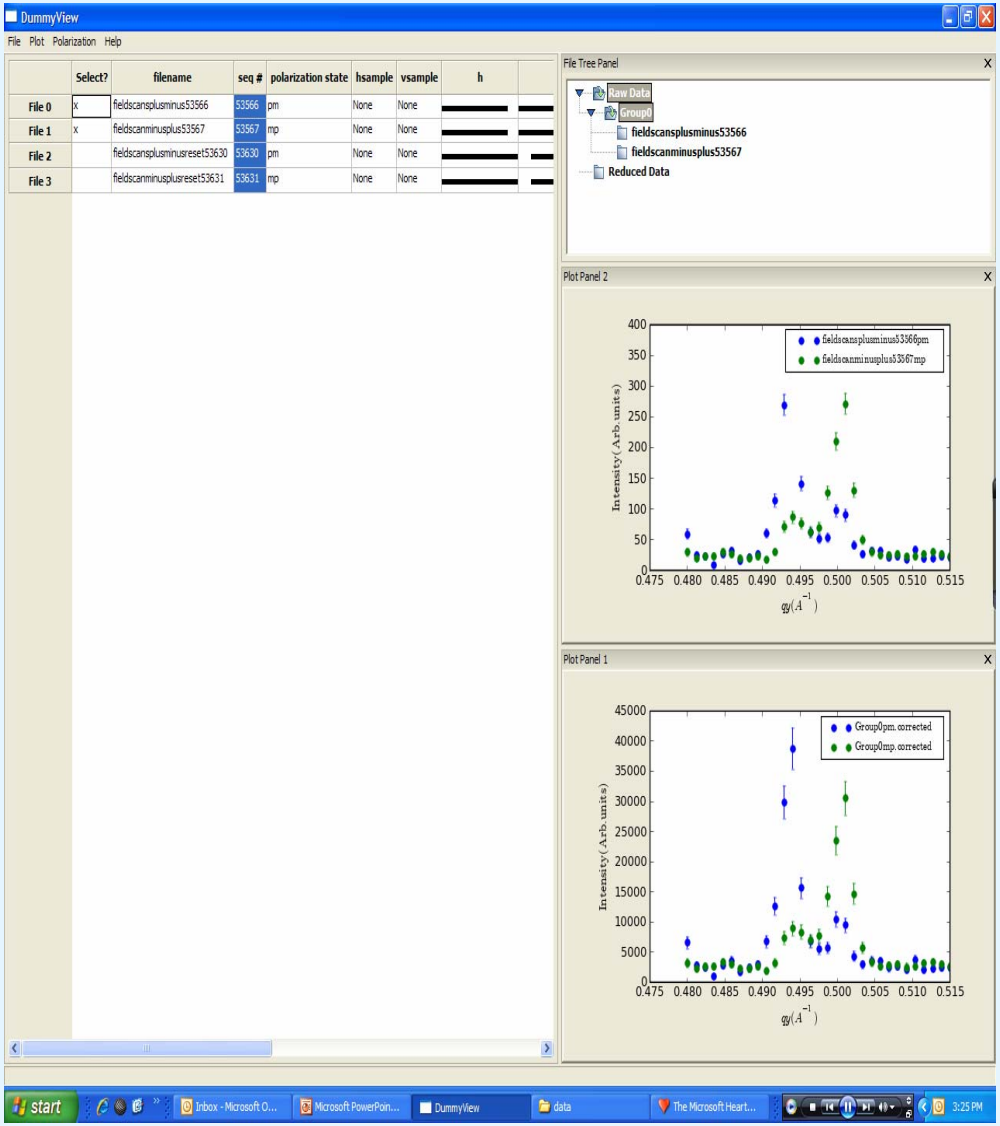


- In Reduction Forms panel
  - Use Browse tab to load He-3 polarization correction information for cells (ex. cells.txt)
  - Select parameters that apply to experiment

Data Reduction → Reduction Forms

Filter Before Polarizer	Check box if a filter before the polarizer
Monitor Position	Check appropriate box
Enable Measured Counts	Flipper combination
Combine Measured Counts	Will combine data for both SF cross sections or NSF cross sections
Constraint Matrix	User inputs constraints for each cross section

Reduce Group



- After setting reduction parameters → right click and select Reduce Group
- Plots will appear of raw data and corrected data
- Individual panels can be dragged outside the main panel for enlargement

Save Info

- Right click on individual plot panels to save a text file of the plot and/or plot image
- Note that after using the “reduce group” option a “.out” file will be made with the reduced data in an “ICE” format. The corrected data will be in the detector_corrected and detector_errs_corrected columns