File paths on CHESS DAQ:

Raw data for a BTR is in: /nfs/chess/raw/[run cycle ID]/id3a/[BTR ID]

Auxiliary files (metadata, etc) is in: /nfs/chess/aux/cycles/[run cycle ID]/id3a/[BTR ID]

Some spec basics:

spec.log for a given sample is saved in /nfs/chess/raw/[run cycle ID]/id3a/[userid-file ID]/[sample ID]

`ascan [motor] [start] [stop] [#steps] [count time]` is an absolute position scan of [motor]

`dscan [motor] [relative start] [relative stop] [#steps] [count time]` is a relative position scan of [motor]

`d2scan` does a dscan of 2 motors simultaneously

`lup [motor]` … is identical to dscan

`umv [motor] [position]` is an absolute move of [motor] to [position]

`umvr [motor] [relative position]` is a relative move

`tw [motor] [step size]` gives you a prompt to move [motor] by relative +/- [step size]. Within the prompt hit enter to do the move, type + or – to change directions, type a new step size to change step sizes; type anything else to exit tweak mode

`wm [motor]` reports [motor]'s current position, and also displays [motor]'s limits

`we` prints all motor positions

`ct [count time]` counts for [count time] and displays the resulting ion chamber counts

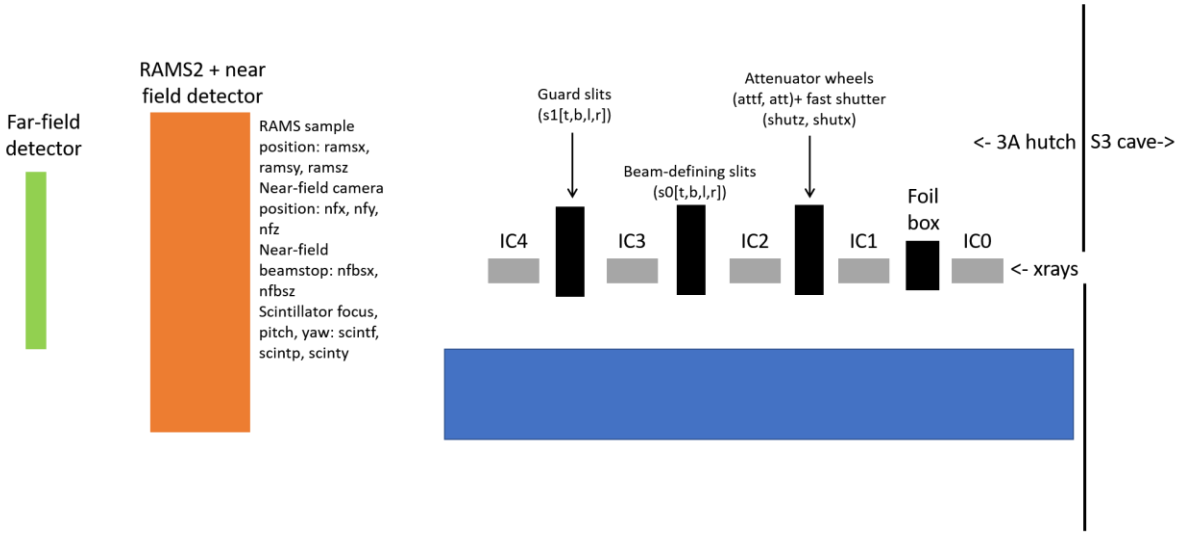
To change variable plotted on the y-axis in yellow spec graph: `plotselect [counter]` , then `splot`

`prdef [macro name]` displays the definition of the macro, including the filename where it's located

`qdo [macro name]` recompiles a macro file

`newsample` prompts you to define a new sample name

FAST layout at a glance (not to scale):



Checking and setting the beam width and height:

- `get_beam_width` returns the width of the beam-defining slits (s0l, s0r) in mm
- `get_beam_height` returns the height of the beam-defining slits (s0t, s0b) in mm
- `set_beam_width` sets the width of the beam-defining slits
- `set_beam_height` sets the height of the beam-defining slits
- similar macros `get_guard_width`, etc exist to check or set the guard slits (s1t,b,l,r)

Absorption foil utilities:

- `insert_foil [1,2,3,4]` inserts Sn (29.200 keV), Pr (41.991 keV), Tb (51.996 keV), Yb (61.332 keV)
- `remove_foils` removes all foils
- `where_foils` tells you what foil is currently in as well as the monochromator energy

Attenuation:

- `atten [thickness]` inserts [thickness] mm of steel; range is 0-20 mm in 0.25 mm steps
- `watt` returns the current attenuator thickness

RAMS2 loading:

- `mvr_screw [displacement] [block] [velocity] [acceleration]` moves the screw head by [displacement] mm, at corresponding [velocity] and [acceleration]. Almost always set [block] = 1 to have mvr_screw block the spec terminal until motion is complete. [displacement] > 0 for tension, < 0 for compression. [velocity] and [acceleration] should be given as absolute values.