

- Expt set-up

user [name] stores the name of user in each file
sample [sample name] stores the name of the sample in each file
title [scan title] gives the scan the title
mode [*bi* or *tas*] *bi* for cradles *tas* for gonios
scan mode [*timer* or *monitor*] determines the scan counting mode

- Motors and Angles

som or *a3* returns the value of the sample table
stt or *a4* returns the position of the detector
phi or *sgu* returns the value of the upper gonio
chi or *sgl* returns the value of the lower gonio
four returns all four current angle positions

- Driving and Counting

dr [motor] [value] drives to position [value]
dr [motor1] [value1] [motor *n*] [value *n*] drives all *n* motors
stop stops all motors and scans
co [*mn* or *ti*] [counts or seconds] count for 'counts' of monitor counts or 'seconds' of time

dr opa [value] drive sgu and sgl to give out of plane angle='value' (<15°)
It is assumed that the instrument is aligned such that:
som 0: the upper gonio is parallel to the beam
stt 0: the detector is in the direct beam.

- Batch files

batchpath returns the current path
projectdir [pathName] changes the path to 'pathName'
batchrun [fileName] runs the file, found in the path with the name 'fileName'

- Scans

Center scan

cscan [motor] [pos] [step size] [# of steps each side of pos] [count time]

Step scan:

sscan [motor] [start pos] [end pos] [# of steps + 1] [count time]

sscan [motor1] [start pos1] [end pos1] [motor2] [start pos2] [end pos2] [# of steps + 1] [count time]

Cone scan:

[scan type] *oma* [start pos] [end pos] [# of steps + 1] [count time]

- Centering

peak Finds the center of your last scan
center Moves to the center of your last scan
centerref [count time] Centers the reflection in all of the angles

- Crystal calculations

<i>cell</i> ([a b c α β γ])	prints or (updates) the cell parameters
<i>spgrp</i> ([A a a a])	prints or (updates) the space group
<i>calctth</i> [h k l]	calculate two theta for the given 'h k l'
<i>calcang</i> [h k l]	calculate all angles for the given 'h k l'
<i>calchk1</i> ([stt som sgu sgl])	calculate h k l for the current or (given) angles
<i>ub</i> ([x ₁₁ x ₁₂ x ₁₃ x ₂₁ x ₂₂ x ₂₃ x ₃₁ x ₃₂ x ₃₃])	prints or (updates) the ub matrix
<i>recoub</i>	recovers previous ub matrix
<i>calcub</i> [xxxx] [xxxx] ([xxxx])	calculates a ub matrix using the reflections 'xxxx' from the reflection list, see <i>reflist</i> 2 or (3) reflections can be used

- Reference reflections

<i>reflist</i>	prints the current list of reflections
<i>refclear</i>	clears the list of reflections
<i>refdel</i> [xxxx]	delete the reflection with the ID 'xxxx' from list
<i>refhkl</i> [xxxx] [h k l]	change the hkl values of reflection 'xxxx' to 'h k l'
<i>refadd idx</i> [h k l]	add a reflection to the list with index 'h k l'
<i>refadd ang</i> ([stt som chi phi])	adds the current or (given) motor positions
<i>refadd idxang</i> [h k l] ([stt som sgu sgl])	adds the current or (given) motor positions for reflection with index 'h k l'
<i>refang</i> [xxxx] ([stt om chi phi])	adds the current or (given) motor positions at position 'xxxx'
<i>refsave</i> [fileName]	saves the reflection list to 'fileName'
<i>refload</i> [fileName]	loads a stored reflection list from 'fileName'
<i>refindex</i>	index the current reflection list with the current ub matrix where indices are rounded to the next integer

- Instrument set-up

list [motor] gives all info and commands associated with a motor

- To restart six

At the command line:

>> *killsics*

>> *startsics*

>> *exit*

Log back in...