

## Some quick commands from the MATLAB command line

---

- **nplot [filenames]**

*Plot one or several (if can be combined) scans*

Example: `nplot 0123[45,46,50:53]` (Combine and plot 012345, 012346, 012350-012353)  
`nplot 012345 fit gauss1` (Plot, and fit one Gaussian peak)  
`nplot 012345 calc pal1+pal2-2*pal3` (Plot linear combination of polarization states)  
(For a list of available options, type `help nplot`, and see the `nplot` manual)

- **plotmultiple [filenames]**

*Plot one or several FLATCONE scans*

*Note: nplot and plotmultiple use local files if found, and automatically try to download from the instrument computer otherwise.*

- **transfer [filenames]**

*Copy one or more files from spectrometer to current local directory*

Example: `transfer 0555[10:20]` (Copy files 055510 – 055520)  
`transfer 055520:end` (Copy all files from 055520 till most recent one)

- **printscanlist [filenames]**

*Print a list of scans*

Example: `printscanlist all` (list all data files in current directory)  
`printscanlist 0555[10:20] var kf` (show also the value of kf for each scan)

- **datafile ['find'|'show'] [filename]**

*Search datafiles on the instrument computer*  
(works also from the linux command line on the instrument computer)

- **powxbu [...]**

*Create a list of powder reflections for a2/a4 alignment*

Example: `powxbu` (opens an interactive window)  
`powxbu create silicon 2.662` (calculate silicon bragg peaks for  $k_i=2.662$ )  
`powxbu writexbu powder.xbu 2:5` (write xbu-file with reflections No. 2,3,4,5)

- **powcal [...]**

*Read scan data from a4 powder scans and fit a2 and a4 zeros*

Example: `powcal` (opens an interactive window)  
`powcal readfiles 0123[45:56]` (read and fit data files 012345-012356)  
`powcal fitzeros` (determine  $z_{a2}$ ,  $z_{a4}$  from fitted data)

---

For all commands: **Type `help [command]` for more information and examples.**

Type `edit options` to change a number of options.

(You should copy the options.m file to your current own directory before editing.)