

autoPROC reference card	
set up (if not already done for you automatically)	
Set up for csh or tesh	<code>source /some/where/autoPROC/installed/setup.csh</code>
Set up for bash, ksh, zsh, or sh	<code>./some/where/autoPROC/installed/setup.sh</code>
autoPROC: most useful options	
Brief help message	<code>process -h</code>
Simple run (in directory containing images)	<code>process -d outputdir > log</code> - or - <code>process -d outputdir tee log</code>
Simple run (remote directory)	<code>process -d outputdir -I imagedir > log</code>
Read image header information	<code>imginfo test_0123.img</code>
Check beam centre conventions	<code>beam8.sh <beamX> <beamY> <sizeX> <sizeY></code>
Define direct beam transform	<code>process BeamCentreFrom="header:y,-x" -d outputdir > log</code>
Let autoPROC determine most likely direct beam transform	<code>process BeamCentreFrom="getbeam:init" -d outputdir > log</code> <i>(might not always work for Pilatus/Eiger images)</i>
Define direct beam position	<code>process beam="1556 1512" -d outputdir > log</code>
Identify image scans	<code>find_images -d imagedir -l</code>
Identify HDF5/Eiger scans	<code>find_images -d imagedir -l -h5</code>
Manual sweep definition	<code>process -Id "test,/where/ever/images,test_###.cbf,1,90" -d outputdir > log</code>
Manual sweep definition for HDF5/Eiger data	<code>process -Id "test,/where/ever,test_master.h5,1,900" -d outputdir > log</code>
Define cell dimensions and symmetry	<code>process cell="a b c a l b e g a" symm="P2" -d outdir > log</code>
Include "reference" file for symm, cell and test-set	<code>process -ref mtzfile -d outputdir > log</code>
List available "macros"	<code>process -M list</code>
Settings that might help difficult diffraction data	<code>process -M LowResOrTricky -d outputdir > log</code>
Process in "fast" mode	<code>process -M fast -d outputdir > log</code>
Restrict number of "processors"	<code>process -nthreads <no> -d outputdir > log</code>
Restrict resolution range	<code>process -R 50.0 2.0 -d outputdir > log</code>
List known multi-axis goniostats	<code>x_kappa -list</code>
Process multi sweep data collected with different goniostat/2-theta settings	<code>process KapparovSite="siteID" -d outputdir > log</code>
Switch off detection/exclusion of ice-ring resolution ranges	<code>process XdsExcludeIceRingsAutomatically=no -d outputdir > log</code>
Exclude all known ice-ring resolution ranges from the start	<code>process XdsExcludeIceRingsAutomatically=all -d outputdir > log</code>
Use the AIMLESS-only scaling path	<code>process -M ScalingA3 -d outputdir > log</code>
Use the XSCALE-only scaling path	<code>process -M ScalingX -d outputdir > log</code>
Process Dectris/Eiger data (HDF5 format)	<code>process -h5 /where/ever/some_master.h5 -d outdir > log</code>

autoPROC reference card	
Looking at results	
Open outputdir/summary.html in browser, e.g.	<code>firefox outputdir/summary.html</code>
Traditional (isotropic) results	<code>truncate-unique.mtz truncate-unique.table1 aimless.sca autoPROC.xml report.pdf</code>
Anisotropic (STARANISO) results	<code>staraniso_alldata-unique.mtz staraniso_alldata-unique.table1 staraniso_alldata.sca autoPROC_staraniso.xml report_staraniso.pdf</code>
helper programs and options	
Scaling module: help message	<code>aP_scale -h</code>
Simple scaling of data set with 360 batches/images	<code>aP_scale -mtz XDS_ASCII.mtz -P lyso test A -b 1-360 \ -id 01 > log</code>
More detailed scaling of 'early' and 'late' batches	<code>aP_scale -mtz XDS_ASCII.mtz \ -P lyso test early -b 1-180 \ -P lyso test late -b 181-360 \ -id 02 > log</code>
Allowing different high-resolution limit for decaying crystal	<code>aP_scale -mtz XDS_ASCII.mtz \ -P lyso test early -b 1-180,30 \ -P lyso test late -b 181-360,30 \ -id 03 > log</code>
Use XSCALE for scaling	<code>aP_scale -hkl XDS_ASCII.HKL ...</code>
Compare indexing of datasets	<code>check_indexing mtzfile1 mtzfile2 ... mtzfileN</code>
Compare orientation matrices	<code>cmpmat 01/XPARM.XDS 02/XPARM.XDS P21</code>
Combine integrated intensities from several scans manually	<code>combine_files -f 01/XDS_ASCII.mtz -P lyso test lowres \ -f 02/XDS_ASCII.HKL -P lyso test highres \ -o low-high.mtz</code>
Calculate statistics on unmerged data	<code>mrfaana INTEGRATE.HKL - or - mrfaana XDS_ASCII.HKL - or - mrfaana XDS_ASCII.mtz</code>
further information	
autoPROC homepage	http://www.globalphasing.com/autoproc/
autoPROC manual	<code>\$autoPROC_home/docs/autoproc/manual/autoPROC0.html - or - http://www.globalphasing.com/autoproc/manual/index.html</code>
autoPROC wiki	http://www.globalphasing.com/autoproc/wiki/
beamline information	http://www.globalphasing.com/autoproc/wiki/index.cgi?BeamlineSettings