Prospero Quick Reference Card for OSIRIS

(2005 September 8)

`Typewriter` font denotes command verbs and keywords.
Italics denote user-supplied arguments (numbers or strings).

Command Syntax

commands, keywords, & options	`command keyword=`*value* `option`
commands with numerical arguments	`command` *arg1 arg2 ...*
commands with string arguments	`command` *'an argument string ...'*

General Commands

start Prospero	`prospero`
quit Prospero	`quit`
read help for commands	`help` *command*
find command by keyword search	`apropos` *keyword*
show the last few commands	`history`
repeat the last command	`%`
repeat last command matching *pattern*	`%`*pattern*

Observing Session Startup

connect to the data-taking PCs	`startup`
nightly observing run initialization	`runinit`

Instrument Control

OSIRIS Modes:

Direct Imaging Mode	`immode`
Spectroscopic Mode	`spmode`
Acquisition Mode (from spmode)	`acqmode`

Filter & Pre-Filter Selection:

select a filter	`filter` *filter#*
select a prefilter	`prefilter` *filter#*
print the filter/prefilter table	`print filter`

Slit/Aperture Mask Selection:

select a slit	`slit` *slit#*
print the slit/aperture ID table	`print slit`

Camera Select & Focus:

select the camera lens	`camera` *cam#*
set the reimaging camera lens focus to *f*	`camfocus` *f*
set camera & focus	`setcamera camera=`*n* `camfocus=`*f*
print the camera ID table	`print camera`

Pupil Mask:

set pupil mask X position	`xpupil` *xpos* `(default=0 4m ,-50 1.5m)`
set pupil mask Y position	`ypupil` *ypos* `(default=45 4m , 49 1.5m)`

Grating Tilt:

tilt grating (encoder units)	`grating` *tilt*

Motor Resets:

to reset motor	`ie` *'motor reset'*
example:	`ie` *'camfocus reset'*
for all motors:	`ie` *'reset'*

Data Acquisition

Instrument and exposure status are continuously displayed in the status window. Green flags are OK, Red flags signal error or non-default state.

Take Integration(s):

start a single integration	`go`
take multiple integrations	`go` *#imgs*
coadd a number of integrations	`avego` *#coadds*
take multiple coadded integrations	`mavego` *#imgs #coadds*

Integtration Setup:

set integtration time to *t* seconds	`exptime` *t*
set integtration time to *t* minutes	`exptime` *t* `minutes`
this is an object named *xxx*	`object` *xxx*
this is a flat field named *xxx*	`flat` *xxx*
this is a dark frame named *xxx*	`dark` *xxx*
this is a sky image named *xxx*	`sky` *xxx*
this is a zero image named *xxx*	`bias` *xxx*
this is a bias image named *xxx*	`bias` *xxx*
enable/disable exposure bell	`exbell`
put a comment in the image header	`comment` *'comment text'*

Image File Management:

change the image filename	`filename` *filename*
change the filename extension number	`newext` *nnn*
print the name of the last file written	`lastfile`
print the name of the next file	`nextfile`
change the image directory path	`imdir` *path*
enable/disable disk storage	±`disk`

Detector Control

start continous readout mode	`movie`
stop continous readout mode	`-movie`
set IC real-time display scale	`icscale` *min= max= sat=*

Telescope Control

print telescope pointing info	`tcstatus`
find the best telescope secondary focus	`focus` *npics step foc*
set the telescope secondary focus	`change_focus` *foc*
send a raw TCS command	`tcs` *'raw command'* `twait=t`

Move the telescope...

x arcsec E/W & *y* arcsec N/S	`offset ra=`*x* `dec=`*y*
x arcsec north	`north` *x*
x arcsec south	`south` *x*
x arcsec east	`east` *x*
x arcsec west	`west` *x*

Guider Control (4m only)

enable guider	`+guider`
disable guider	`-guider`
position guide probe	`guider ra=`*hh:mm:ss.s* `dec=`*dd:mm:ss*

Error Recovery

Crash Recovery:

recover from a PC crash	`recover`
restart after a full PC crash	`restart`
flush buffers after Ctrl-C	`flush`

Update/Refresh Status Display:

update Prospero status display	`status`
update instrument status only	`istatus`
refresh (clear) the status display	`status clear`

Command Procedure Scripts

edit the procedure buffer	`pedit`
run the procedure in the buffer	`run`
call & run a procedure file	`call` *procfile*
read a procedure file from disk	`rp` *procfile*
write the procedure buffer to disk	`wp` *procfile*

Special Procedure Commands

go to sleep for *t* seconds	`sleep` *t 'sleep message'*
pause a procedure	`pause` *'pause message'*
resume a `pause`'d procedure	`continue`
suspend a procedure and wait for ⟨return⟩	`wait` *'wait message'*
repeat a message *nrep* times w/*t* sec delay	`alert` *'alert message' nrep t*

Prospero Customization

Command Aliases:

define a command alias	`alias` *synonym 'command arg1 arg2...'*
undefine an alias	`unalias` *synonym*
list all current aliases	`alias`

Working Directories:

change default directories	`setdir` *code* `dir=`*path* `ext=`*fileext*
change the working directory	`cd` *path*

Editors & Pagers:

use *vi* as the default screen editor	`seteditor` *vi*
use *emacs* as the default screen editor	`seteditor` *emacs*
use *more* as the default help pager	`setpager` *more*
use *less* as the default help pager	`setpager` *less*

Expert Commands

These commands are used for engineering-level interaction

change to expert mode	`setmode` *expert*
revert to normal mode	`setmode` *normal*
view current mode	`setmode`
edit internal device tables	`tedit` *table*
send a raw ariel command	`ar` *'cmd arg1 ...'*
send a raw WC command	`wc` *'cmd arg1 ...'*
send a raw IC command	`ic` *'cmd arg1 ...'*
send a raw IE command	`ie` *'cmd arg1 ...'*
send a raw TC command	`tc` *'cmd arg1 ...'*
send a raw CB command	`cb` *'cmd arg1 ...'*
change default communication timeouts	`settimeout proc=`*time*
view default timeouts	`settimeout`
view communications table	`setcomm`
edit communications table	`setcomm` *host*

Miscellaneous

execute a Unix command	`$` *unixcomm*
start a Unix command shell	`$`
exit the Unix shell & return to Prospero	`exit`
toggle command prompt bell on/off	`bell` *y*
ring the bell	`bell` *r*
read news messages	`news`
time a command	`time` *command arg1 arg2 ...*

Layout adapted from the TEX source for Stephen Gildea's GNU Emacs Reference Card (version 1.8).