PyRAF

- PyRAF is just different *interface* to IRAF, a different *theme* or *look-and-feel*. It is IRAF underneath. (There additional functionalities.)

- One can use IRAF from PyRAF the same way as from CL.

- There are a handful of minor differences that are usually easy to adapt to. (See table on next slides.)

IRAF vs PyRAF

IRAF	PyRAF
Must start CL from `~/iraf` or where the `login.cl` is located.	Can start PyRAF from anywhere as long as there is a `login.cl` in `~/iraf`.
To launch IRAF: `% cl`	To launch PyRAF: `% pyraf`

Load packages:
`cl> gemini`
`ge> gmos`
	Load packages:
	`--> gemini`
	`--> gmos`

Show tasks in package, show parameters, edit parameters:
`gm> ?`
`gm> lpar gprepare`
`gm> epar gprepare`
	Show tasks in package, show parameters, edit parameters:
	`--> ?`
	`--> lpar gprepare`
	`--> epar gprepare`
	
	The only difference is that the epar window is graphical instead of terminal-based. One could use "`tpar`" for a terminal-based interface in PyRAF.

Thursday, August 27, 15

IRAF vs PyRAF

IRAF	PyRAF

Running a task:
   `gm> gprepare N20120212S0072.fits`
   `gm> imstat N20120212S0072.fits[sci,1]`
	Running a task:
	   `--> gprepare N20120212S0072.fits`
	   `--> imstat N20120212S0072.fits[sci,1]`

Delete a file:
   `gm> del N20080808S0008.fits`
	Delete a file:
	   `--> delete N20080808S0008.fits`
	
	This is because "`del`" is a Python function and will be interpreted as such rather than being the short version of IRAF delete.

Inline arithmetics:
   `cl> =2+2`
	Inline arithmetics:
	   `--> 2+2`

Navigation:
   `cl> e`
   `cl> e gprepare`
	Navigation:
	   `<up-arrow>`
	   `<ctrl-r> gprepare`

IRAF vs PyRAF

IRAF	PyRAF

For loops on the command line:
```cl> for (i=38; i<=41; i=+1) {```
```>>> imstat('N20181010S0000+i)```
```>>>}```
	For loops on the command line:
	```--> for i in range(38, 42):```
	```... im = 'N20181010S%04d' % i```
	```... iraf.imstat(im)```
	```<return>```
	
	The for-loops are Python loops. That is probably the most drastic change going from IRAF to PyRAF.

To exit IRAF: ```cl> logout```	To exit PyRAF: ```--> .exit```
Runs CL scripts and SPP binaries.	Runs CL scripts and SPP binaries. Runs Python scripts and statements (like the Python shell).