

## IRAF (BASICS)

IRAF is writted and supported by the IRAF programming group at the National Optical Astronomy Observatories (NOAO). GENERAL AND USEFUL INFO Information and books in <http://iraf.net/irafdocs/> and a "short" 71 pages beginner giudes beguide.pdf

See also tutorials <http://iraf.noao.edu/tutorials/tutorials.html>

### SETTING UP IRAF AT YOUR LAB

put this in your .bashrcsalva or .bashrcusername or copy .bashrcmgirardi

```
. /opt/scisoft/bin/Setup.bash
alias xgterm=/opt/scisoft/bin/xgterm &
alias mkiraf='/opt/scisoft/bin/mkiraf'
export iraf=/scisoft/share/iraf/iraf/
export home=$iraf
export host=$iraf/unix/
export hlib=$iraf/unix/hlib/
export hbin=$iraf/unix/bin.linux/
export IRAFARCH=linux
#export IRAFARCH=`$iraf/unix/hlib/irafarch.sh -actual`
PATH=$PATH:$HOME/bin:/opt/scisoft/bin

# #####then write

%mkdir iraf

%cd iraf

%mkiraf ..... you should have login.cl and two directories: uparm and pixfiles

%cp login.cl loginuser.cl settle your loginuser.cl if needed

  or copy login.clmgirardi .....there is a ...      set stdimage= imt8192

%mkdir tmp

%mkdir database

Other stuff in irafSpec for the reduction

%tar -xvf template.tar

also put these files kennet and abslines.dat ablines.dat emlines.dat

#####
```

## IRAF BASICS

I strongly suggest and thank <http://www.faculty.virginia.edu/ASTR5110/assignments.html>  
[Practicum V \(Sep. 22\): Introduction to IRAF iraf\\_v5.0.pdf](#)

**xgterm** .....**make long the xgterm window**

%ds9 &

%ecl # (or cl) **lo or logout to exit**

There are packages and tasks (ordered as in a tree)

%help ccdred #to obtain info

%? #shows which are available there

### **Follow the Practicum V**

ccdred .....#to use the task ccdred \$**bye** **#to exit from the package**

display #Important commands :w o return

# :q :! :go ...you can use ds9 normally...

# use display con ngc1275.fits

imheader #put the option longheader=yes

“Desiderata” are very useful...

imcopy #try to cut ngc1275.fits

@ to use lists (we will see in the next irafSpec)

imexamine #many commands! **q to quit (make q on the image!!!)**

#? to have the list of commands

implot # q to quit, r to redraw, try p ...p to obtain peak, : .snap eps you will find  
a file.eps in iraf

imarith # we will use them in the CCD reduction

## CCD REDUCTION

[Practicum XI \(Nov. 17\): Reducing CCD Data/IRAF's CCDPROC Routine](#)  
[http://www.faculty.virginia.edu/ASTR5110/lectures/detectors/detectors\\_red.html](http://www.faculty.virginia.edu/ASTR5110/lectures/detectors/detectors_red.html)  
VirginiaCCD.pdf

I assume that you know the first part of XI from lectures of Prof.Cristiani (see also  
riassuntoCCDriduzione.pdf).

We will see an example in irafSpec with NTT data