



which you do it are crucial, so pay attention to the cd's and syntax.

```
% cd $iraf      (if this doesn't work it's because you didn't do step 5 right)
% cat ../as.pcix.gen.gz | zcat | tar -xpf -
% cd $iraf/bin.macintel
% cat ../../ib.macx.x86.gz | zcat | tar -xpf -
% cd $iraf/noao/bin.macintel
% cat ../../nb.macx.x86.gz | zcat | tar -xpf -
```

8. You are now ready for a trial dry run of the install script. The "-n" option in the install script (see below) means that the installation will not actually happen, even though all the messages coming out will make it look like the installation is happening. The point here is that you don't want any errors in the trial run. If there are errors then the real installation won't work either and there is no point in going forward with it until the errors are resolved.

```
% cd $iraf/unix/hlib
% source irafuser.csh
% sudo ./install -n
```

You will be asked to specify the iraf root directory, the root image storage directory, and the local unix commands directory. If you did all the preceding steps correctly, the default values will be /iraf/iraf, /iraf/indirs, and /usr/local/bin, respectively, and you can accept these defaults by just hitting return. You then get a bunch of messages about "verifying system settings." You want everything to say "OK" on the right side. If all is well you are then asked if you want to proceed with the installation. You can say "yes"-- but remember that because you specified "-n" the installation is not actually happening. In response to your "yes" you will get a large number of status messages, and again you want to make sure they are all OK. (But you only really care about the first set of "OK"s - nothing really matters after that, so you can quit without running the second set.)

9. If the dry run completed with no errors, you can do the real installation. Assuming you are still in the hlib directory, do

```
% sudo ./install
```

and answer the questions as before. When the installation is done you will be asked if you want to proceed to post-installation configuration. You can reply "no" and skip this step.

10. Now you should be able to log out of the iraf account, and not log in again until you want to install a new version or add external packages. Go back to your own account, and go to an appropriate directory. You should be able to run 'mkiraf' in the usual way, and then start iraf with 'cl'.

11. In order for plots to appear correctly, we need to use an xgterm instead of an xterm, which is not included in the standard iraf distribution.

Go to <http://iraf.net/ftp/iraf/x11iraf/> and download the file x11iraf-v1.5DEV.macintel.tar.gz to your desktop.

```
% cd ~/Desktop
% gtar -xvzf x11iraf-v1.5DEV.macintel.tar.gz
% sudo mv bin.macintel/xgterm /usr/local/bin/
```

After you do this you can trash the tarball and the folders that the tarball created.

12. I added the following two lines to my .cshrc file (located in the home directory - you may need to create it. aka .tcshrc for the t-shell):

```
alias newxg "xgterm -geometry 85x50+100+100 -bg black -fg white &"
alias iraf "xgterm -geometry 85x50+300+200 -bg black -fg white -e cl &"
```

The first line just allows you to bring up a new xg terminal. The second automatically opens iraf in that terminal.