

Data Reduction Setup

Data reduction activities will be done by logging into Lick Observatory's data reduction computer, *duck*, from your laptop. Hence you will need to have xterm capability (e.g. XQuartz on Mac, Cygwin/X on Windows) as well as secure-shell (ssh).

Account names are userNN where NN is 01 through 20.

Passwords for the accounts are 2021workshopNN where NN is the same number as the user account name. Each workshop participant will be assigned a numbered account to use for the workshop.

You will generally be working in pairs for the data reduction activities, so each group will decide whose numbered account to use. To log into the account from an xterm on your laptop type, for example,

```
ssh -Y user02@duck.ucolick.org
```

at the password prompt you will enter 2021workshop02 in this case

Once logged into the userNN account, change to the subdirectory for the data reduction activity, e.g. for the python data reduction activity type

```
cd pythonDataReduction
```

or for the IRAF data reduction activity type

```
cd irafDataReduction
```

Data for the python data reduction activity will be from the Nickel Telescope and in the directory `/u/user00/NickelRawData/`. Data for the IRAF data reduction activity will be from the Kast spectrograph and in the directory `/u/user00/KastRawData/`.

You will want to copy the data from the user00 directories to your own data reduction directory. For example:

```
cp /u/user00/NickelRawData/*.fits pythonDataReduction/.
```

or

```
cp /u/user00/KastRawData/*.fits irafDataReduction/.
```

You'll want to be in the directory with the data do to the data reduction, so move to that directory:

```
cd pythonDataReduction
```

or

```
cd irafDataReduction
```

To start python, type

```
python
```

To start IRAF type

```
cl
```

The `cl` command is configured to start an `xgterm` to run IRAF which puts it in the `/u/userNN/iraf/` directory, so you'll need to change to the directory with the data to be reduced in the IRAF `xgterm`, e.g.

```
cd ../irafDataReduction
```

At this point you can refer to the data reduction tutorial documents for the particular data reduction activity.