

## Week 2 Lab Journal

### MONDAY 4/08/2019

#### Activity of the day via python

- a) Season best to observe the object
  - i) During Autumnal Equinox
    - 1) You can check in jSkyCalc
- b) April 16th 2019 how many hours can you have at APO
  - i) 8.1 hours (8.5 hours)
- c) If you observe at 31st dec, will the moon interfere. What is the moon phase
  - i) 21%
  - ii) Moon phase about 2.0
  - iii) You can also use eso.org  
<https://www.eso.org/sci/observing/tools/calendar/observability.html>
- d) How many hours can you observe at dec 31
  - i) ~4 hours

### PROPOSAL

(May 1 - May 15) 2019

CTIO

### WEDNESDAY 4/10/2019

- a) Converting tsv to csv
  - i) Just file type from .tsv to .csv
- b) CATALOGS
  - i) HEARSAC
  - ii) SIMBAD
- c) *Separating strings to columns(refer to code)*
- d) Conversion between deg to hourangle
  - i) We don't need to convert it directly, but instead create a code that can make a range and separate them for visible period, May 1 to May 15
  - ii) 40.10804 deg - 53.8043 deg

### FRIDAY 4/12/2019

- a) Separating/ taking out the chunk that we needed from a table.
  - i) Code = **catalog.query('(RA > 40.10804) & (RA < 53.8043)')**
  - ii) Don't forget to make sure that your RA should be in hourangle
  - iii) Deg to hour angle, divide by 15
- b) Know that the catalog should be more be accordingly to your observatory
  - i) Southern Hemisphere, if the object dec is above 60, they should not be observable.