

## Experiment Progress Report

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### Experiment: Lab 02 - Eccentricity of the Moon

Write at least 3 bullets under each point below.

1. What have you done over the past week?
  - Get the camera and learn how to use it
  - Look into image analysis packages
  - Check out the telescope at the library
  - Learn about the moon cycle
2. What are your achievements so far?
  - We have one measurement taken
  - We searched for the method on how to calculate the eccentricity of the moon
  - We have a schedule for when to take the data in the next few weeks
3. What problems did you run into over the past week?
  - We can't see the new moon in the past few days
  - Difficulty in locating where the moon is
  - Still unsure of how to *efficiently* count the pixel width of the moon
4. What questions do you have about your experiment/analysis/interpretation/...?
  - We are not sure about our error analysis technique.
  - We are not sure if missing a few days will really affect our data at the end. Can we do some form of interpolation to account for missing data? Compare the errors between raw data and supplemented data?
  - If we take multiple data per day, will this increase the accuracy of our calculations?
  - How will we convert the units of "pixel width" to a unit that helps us compute eccentricity.
5. What is your plan for next week? Provide a detailed timeline with goals and dates.
  - Taking data of the moon, ideally between 5:30-6:00pm when it is dark outside and the moon is bright above the trees.
  - Calculate the eccentricity of the moon with the presently acquired data. Determine if we can produce results that point in the proper direction.
  - Sources of Error - Will Counting the pixel width, possible lense defects, etc. contribute to experimental error?