**Homework 1 : Eclipse Observing!**

(Due 9/11, 9 points)

Note: Websites to get timing info: https://www.timeanddate.com/eclipse; https://eclipse2024.org; http://xjubier.free.fr/ (note, this site is in UT)

1. (1 pt) Where are you going to observe the annular eclipse of October 14, 2023? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are its latitude and longitude coordinates? Lat:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Long:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Will it be annular or partial for you?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. (3 pt) What is the time of your first contact, maximum eclipse, and fourth contact?

Which website did you get your information?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time of First Contact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Beginning annularity (if appropriate): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time of Maximum coverage: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Amount covered: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (state whether magnitude or obscuration)

Altitude (deg) \_\_\_\_\_\_\_\_\_\_\_ Azimuth (deg)\_\_\_\_\_\_\_\_\_\_\_ at maximum

End of annularity (if appropriate): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time of Fourth Contact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. (1 pt) Where are you going to observe the total eclipse of April 8, 2024? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are its latitude and longitude coordinates? Lat:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Long:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Will it be total or partial for you?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. (3 pt) What is the local time of your first contact, maximum eclipse, and fourth contact?

which website did you get your information?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time of First Contact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Second contact(if appropriate): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time of Maximum eclipse: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Amount covered if not total: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(state whether magnitude or obscuration)

Altitude (deg) \_\_\_\_\_\_\_\_\_\_\_ Azimuth (deg)\_\_\_\_\_\_\_\_\_\_\_ at maximum

Third contact (if appropriate): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Time of Fourth Contact: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. (1 pt) Read the “Astronomy Activities for Elementary Students” at:

<https://mst.rice.edu/ASTR502/elementary_activities.pdf>

Look in <https://www.timeanddate.com/> Moon phase page.

When will the next new moon be? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*(note: subtract 5 hours from UT to get CDT but this site is in local time if you have put in your location).*

On the day of the next new moon, start watching for the Moon in the west,

just after sunset (but before fully dark). (Generally is not visible until 24 hours after new).

Start making daily observations of the Moon's altitude, azimuth, and shape, all at the

same time of the evening (will be turned in as Homework 3 – take a look at it now.)

Last updated 8/21/2023