Module 01 Project: Basic Sky Objects

Student’s Name

Institution

Date

**Introduction**

The study was conducted on April 5, 2019, at night between 10 pm and 11 pm using a planetarium program and Internet search engine to locate the Stellarium. The object was observed and recorded one by to ensure that a proper description is provided. The planet was observed first, then the moon followed by constellations. The detail description of the observation, therefore, provided in this paper. The explanation poor observation experienced and the ease or difficulty experienced during the study.

**The following details in the chart show the based on the observation of the sky using planetarium software.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Object** | **Date** | **Time** | **General Location** | **Notes** |
| Planet  Name: Saturn | April 5, 2019 | 10.05 | South West above the horizon | It was difficult to see the planet, Saturn. |
| Moon  Phase: Waning Gibbous | April 5, 2019 | 10.20 | Almost to the far East | It seemed to be bright and clear despite the bad weather experienced during the night. |
| Constellation  Name: Cassiopeia | April 5. 2019 | 10.35 | High North | The Draco was easily seen. |
| Constellation  Name: Draco | April 5, 2019 | 10.50 | North West | It was very easy to see most of the stars without much struggle using the software. |

**Table 1: Basic Sky Objects**

**Poor Observation**

During the observation of the moon, it was difficult to observe it clearly. The difficulty was experienced due to bad weather. It was April 5. And therefore, it was very cloudy and rainy therefore, the moon was hidden above the clouds. The sky was very bright the moon was further away on the east and this made it difficult to have a clear look of the moon. According to Smirnow (2014), the moon rotates and it experienced both day and night and therefore, it appears to far from the earth and closely to the sun. And in April it is likely that the moon is far from the earth and therefore, it is not clearly visible from the earth (Zarka, 2000).

**Ease of completing the study**

The instruments were available and therefore, it was easier to conduct the study. However, the observation of the objects was not as difficult as expected. First, the sky was a little bit cloudy but it was bright. This made it easy to see planets and constellations. The use of a planetarium program and Internet search engine to locate the Stellarium made the observation to be easy and faster. The software was used to locate location and get a proper view of the sky. The application planetarium operates just like the telescope and other powerful devices and therefore, it was used to bring close the objects to have a clear look. The time of the observation 10 pm to 11 pm was also a good time since the sky was not windy at the time.

**Difficulty**

It was a bit cloudy at night, the stars were further from the east and therefore, it took a lot of straining to get a proper observation of the planets, moon, and constellation. Although the sky was clear and bright at night, the cloudiness of the sky and being moisture made it difficult to have a proper view of the moon. As stated by Standish and William (2006) the moon and other planets could easily be sealed by the cloud and therefore, it seems the moon and other planet was clearly visible due to the cloudiness.

In brief, the assignment was experimental and enjoyable since it was involved in the use of technology to observation beautiful stars. It was a challenging task to identify planets out of several planets on the sky and therefore, it was a good learning task.

# References

Smirnov, N. (2014). *Space Debris: Hazard Evaluation and DebrisL: Solution and Applied*

*Problem.* New York: Pearson.

Standish, M. E., & Williams, J. (2006). Orbital Ephemerides of the Sun, Moon, and Planets.

*https://www.researchgate.net/publication/232203657\_Orbital\_Ephemerides\_of\_the\_Sun\_Moon\_and\_Planets*, 2-14.

Zarka, P. (2000). Radio Emissions from the Planets and their Moons. 12-38.