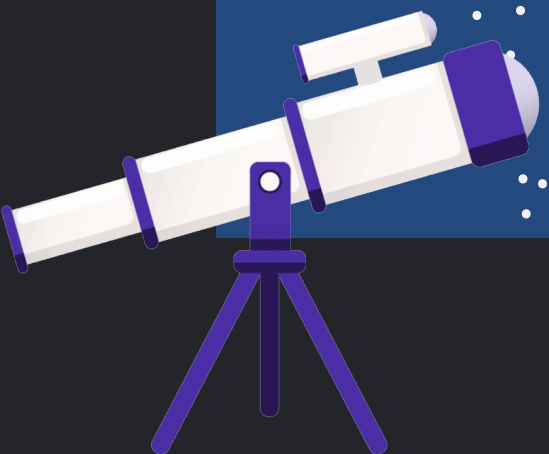


# TOUCHDOWN EARTH: SPACE MISSION PRESENTATION

## **MALAWAN PROGRAM**

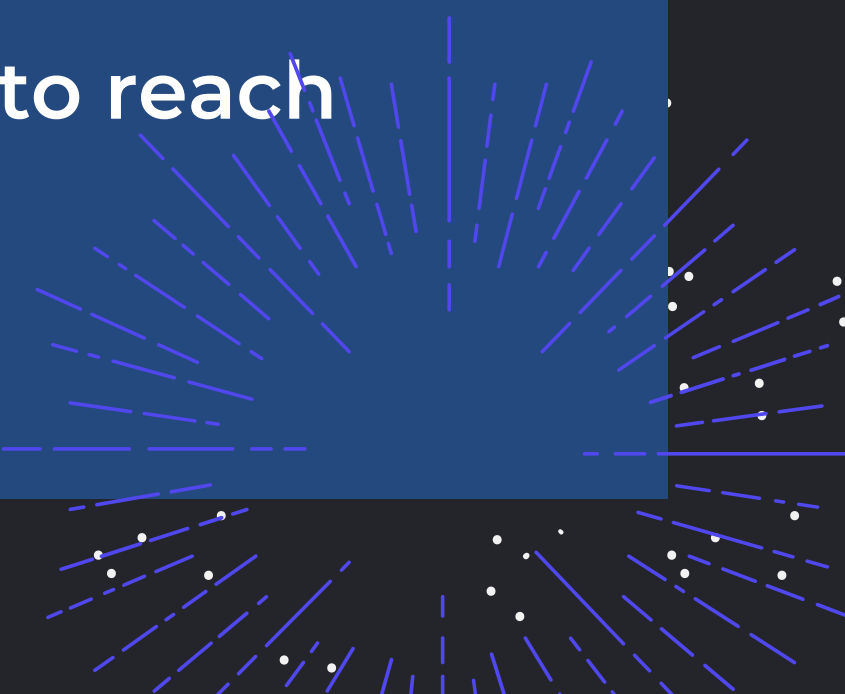
by Harry Arciga and Gabrielle Veluz  
of [Marikina Science High School](#)



## **THE MALAWAN PROGRAM**

Malawan are known as dwellers in the mythology of the indigenous Buhid Mangyan people. They are said to be spirits that live in forest lands.

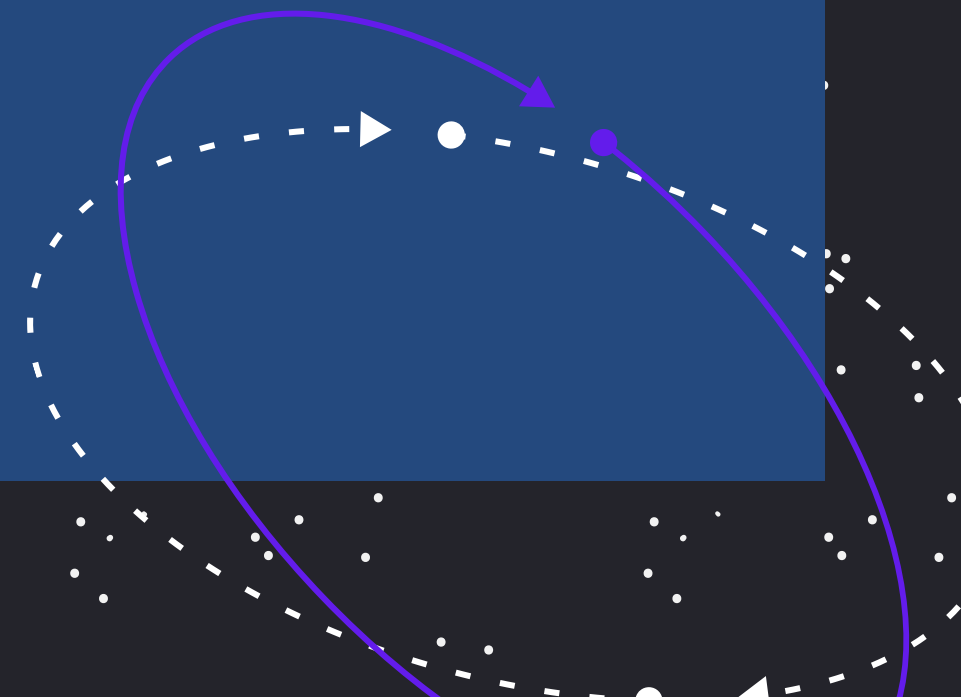
This space mission emphasizes the utilization of space science technology in creating a satellite to monitor the physical state, temperature, and humidity (water vapor) of remote forest areas. This is a stepping stone to protecting the rich forest ecosystem and resources in difficult to reach areas in the country.



# OBJECTIVES

This proposed space mission aims to:

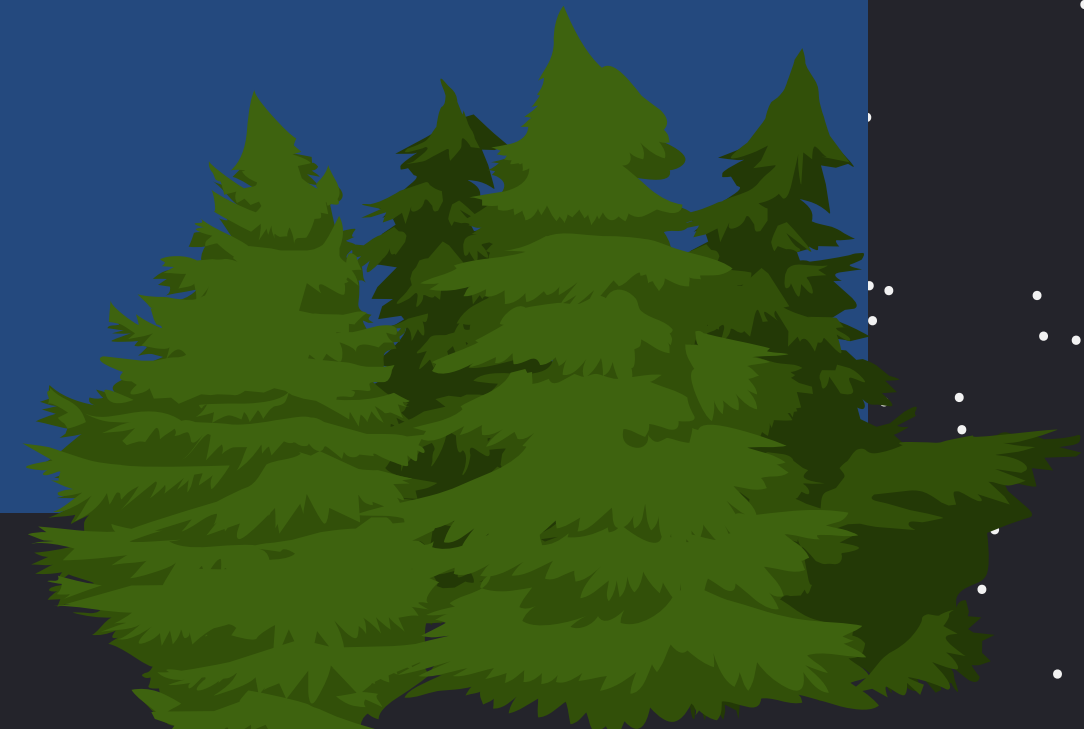
- act as a satellite that will orbit around the Earth and surveil remote forest ecosystems
- monitor the temperature and humidity of forests to warn local units of the probable formation of forest fires
- assist in the preservation of plant and animal life in forest biomes



# IMPORTANCE

## 1.Relevance to the Country's Geography

- According to the Food and Agriculture Organization of the United Nations, the Philippines has 7,665,000 hectares of forest land. 11.2% of which is biodiverse.
- This calls for the need to preserve the rich forest resources in the country to maintain sustainability.



# IMPORTANCE

## 2. Addressing the Issue of Deforestation

- According to the Global Forest Watch, the Philippines lost 158,000 hectares of forest land in the period from 2002 to 2021. This comes along with the increase in carbon dioxide emissions in the country.
- This mission will aid in developing better measures to prevent the formation of natural forest fires by monitoring its factors such as temperature and humidity.



# FEATURES

The Malawan will have the following instruments:

- Optical Payload - capturing images of remote forest areas to monitor present ecosystem
- Sensing Payload - monitoring the atmospheric temperature and humidity (water vapor)



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