

Cosmic ray effects due to meteor shower using high altitude balloon experiment

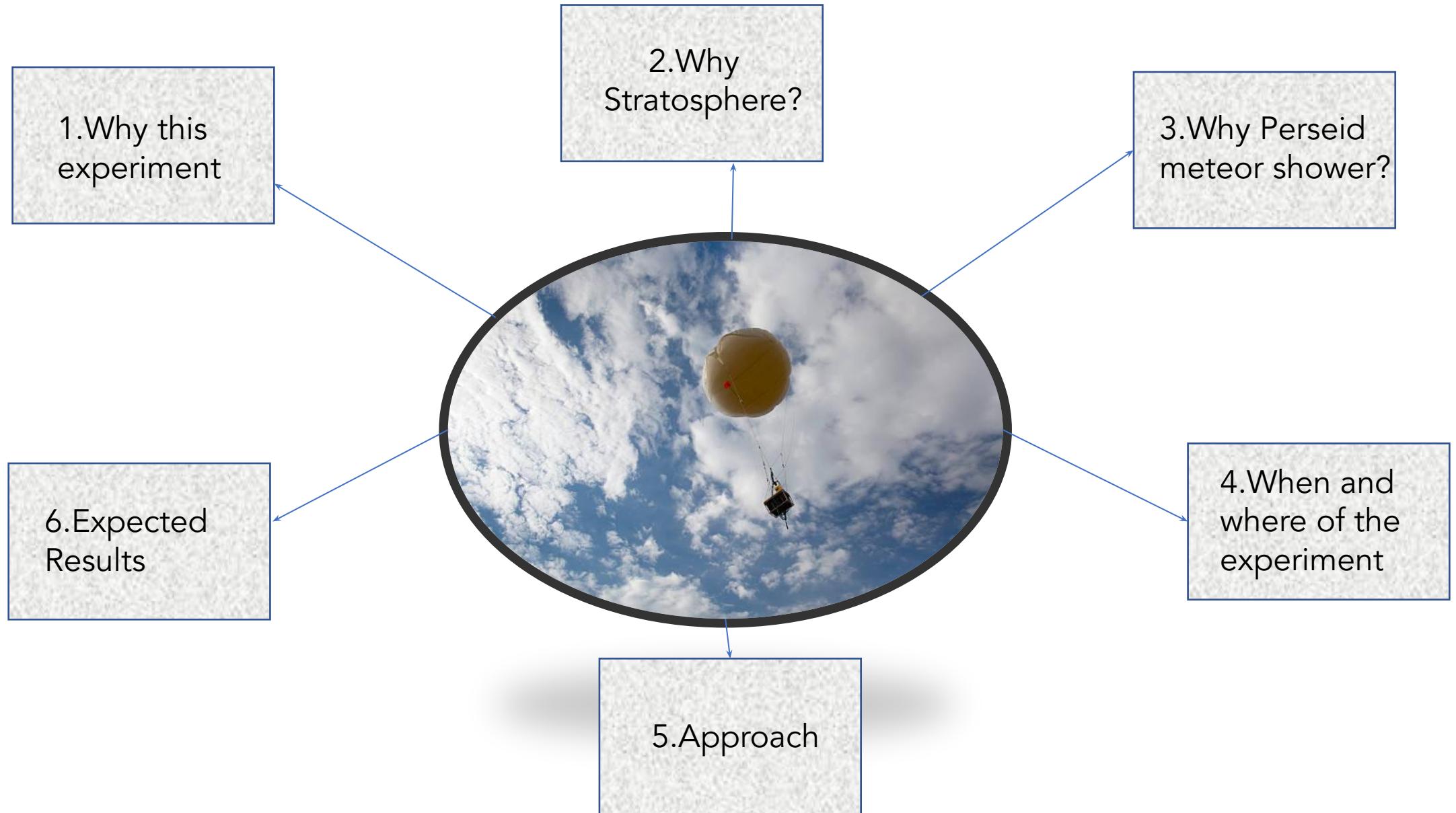
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High Altitude Balloon Payload – Team Sidereal Messenger



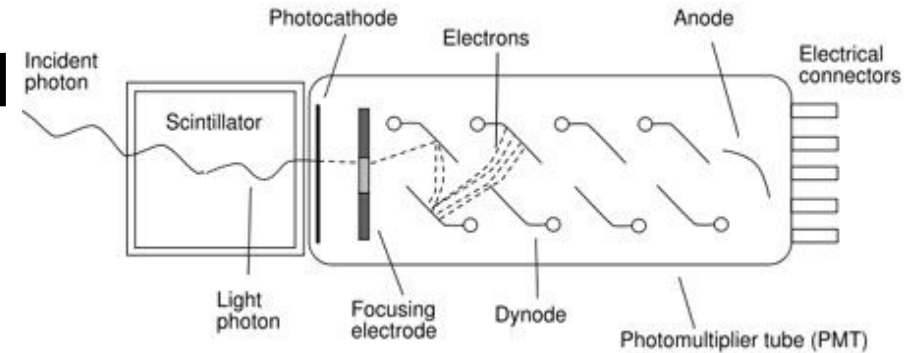
Introduction

- ❑ In past many studies are done on cosmic ray which are said to be messengers of universe
- ❑ But no one yet think to study the effects when there is a meteor showers.
- ❑ It opens a new window to study more about the universe or allows us to see the universe in a different way.



Implementation

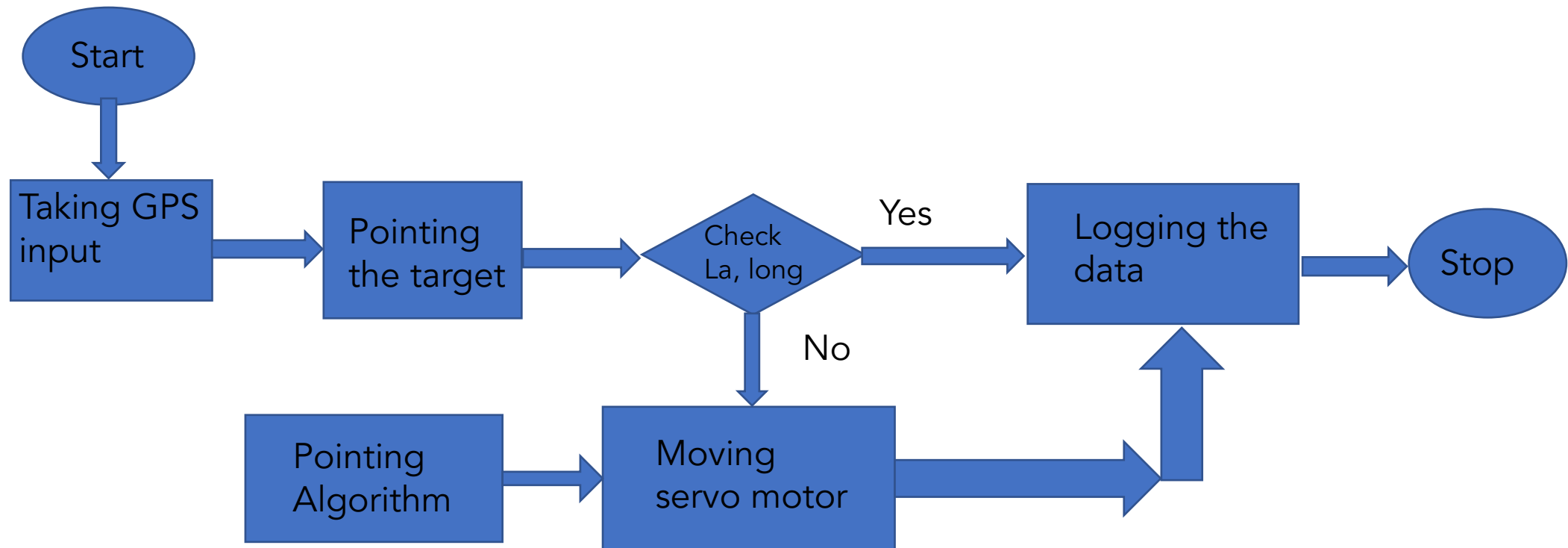
- **Detection of Cosmic Ray-** Particle detector can be used for detecting cosmic rays which consists of Scintillator and photomultipliers sensor.
- **Studying the most possible effected region-**



The effects of Meteor shower takes

place above 100 kms from sea level ,where as our balloon can reach up to the 35 to 42 kms.The effect may not be in 35 km or less in that region of detection. we use hyperspectral technique's to collect the data then, given to cosmic detector

Algorithm



Conclusion

- This experiment is not yet conducted
- Experiment is going to be conducted on August 13th 2021 in Hyderabad, Telangana, India.
- Cosmic rays are expected to behave differently in the presence of the Meteor shower.

Thank you!

-Team Sidereal Messenger