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13/08/2018

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what do you understand by the term Space weather and examine the threats posed by it. How does the parker solar probe mission of NASA helps in this regard?

SPACE WEATHER:

The term Space weather refers to conditions on the sun, in the solar wind and within earth's magnetosphere, ionosphere and thermosphere that can influence the performance and reliability of space-borne and ground based technology and endanger human life on earth.

THREATS:

1) Electric Power: Large current in Ionosphere can induce current in powerline leading to massive network failure and damage to electric grid.

2) Navigation System: Disturbance in Ionosphere can cause degradation in GPS range measurement.

3) Aviation: Storms can cause lost or degraded communication, radiation hazard to crew & passengers.

4) Astronauts: Energetic particle present a health hazard to astronauts on space mission.

5) Communication: Communication at all frequency may be affected by space weather.

प्रश्न की संख्या
दीजिए

उम्मीदवारों को इस
हार्जिन में नहीं
लिखना चाहिए

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PARKER SOLAR PROBE :

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The mission seeks to collect data on Sun's structure, magnetic & electric field which would help in solve problems like

- 1) How the Solar wind is accelerated.
- 2) why the Sun's outer atmosphere, or corona is much hotter than Sun Surface
- 3) Explore Mechanisms that accelerate & transport energy particles.

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