Space Mission Warning System

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"Dark side" of the Sun

Life on Earth without the Sun is not possible. But the Sun has a dark side: every now and then, it ejects massive bursts of harmful radiation: solar storms.

We are protected by the Earth's magnetic field, but astronauts in space are not. Neither are satellites or electricity grids, which we use a lot in our daily life.

"No signal"

Sometimes when you use your mobile, you use a satellite. When this satellite is damaged by a solar storm, you won't have a signal!

Space
Rocket
Sun
Radiation
Keeping
Message
Powergrid
Launch
Harmful
Warning
Satellite
Spacecraft
Mobile
Astronauts
Safe
Earth
Mission
ISS
Sail

"Battery critical"

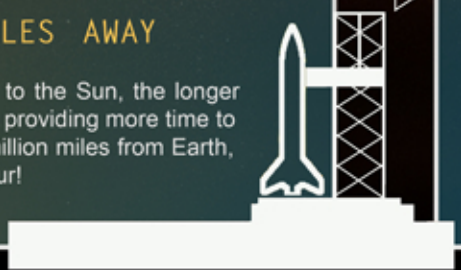
When electricity grids are affected, a blackout may result. Then, you wouldn't be able to charge your mobile when the battery is low!

Solution!

By observing the Sun from closeby, storms can be detected and a warning can be sent out. How to get close to the Sun? By going into space!!

2 million miles away

The closer a satellite is to the Sun, the longer the warning time will be, providing more time to take precautions. At 2 million miles from Earth, the warning time is 1 hour!



Sailing in space

But the Sun's gravity pulls the satellite towards it. To stay put, we use a sail to "ride" on the sunlight, like a sailboat rides on the wind, counteracting the Sun's gravity.

Working with NASA!

NASA is planning a similar mission, called "Sunjammer". We are cooperating with them, sharing our results. Hoping our work will fly on a real mission soon!