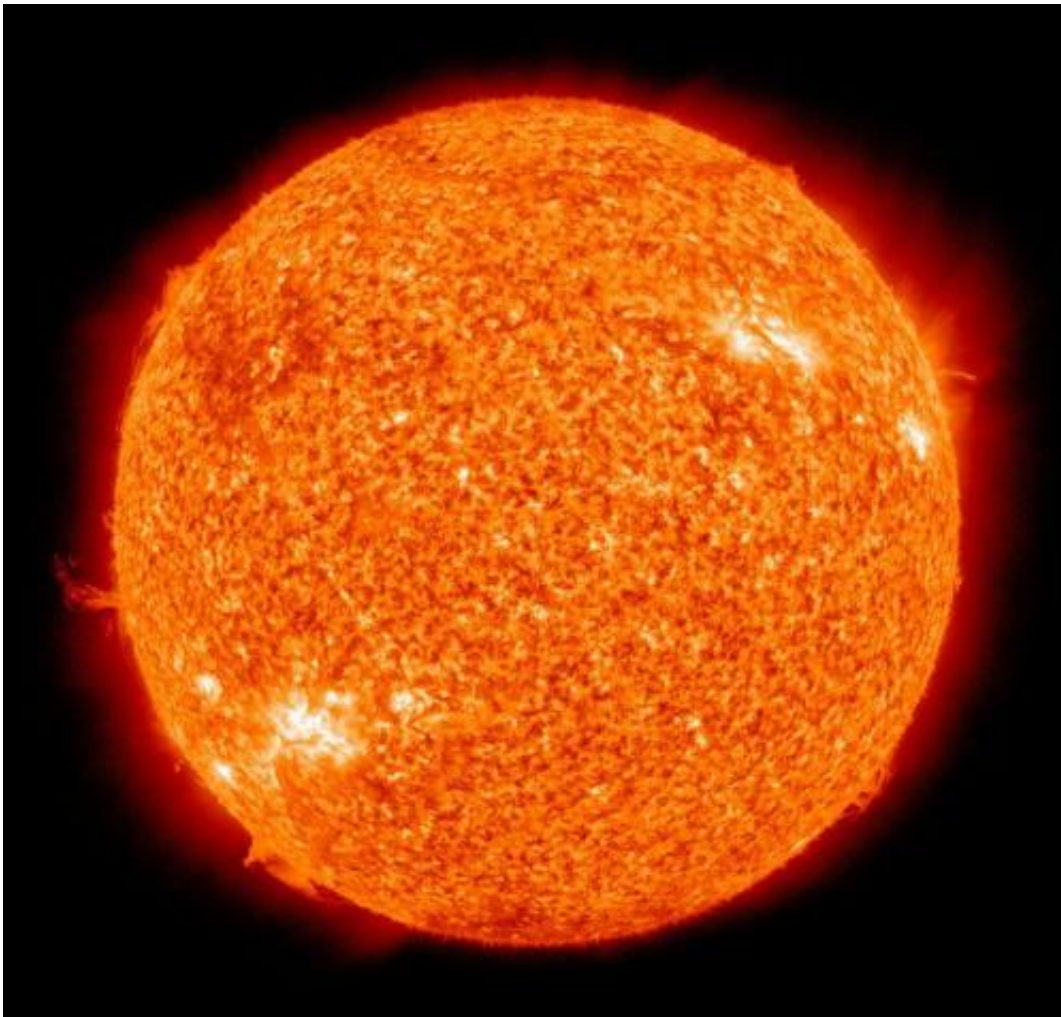


Scientists: Strong solar storm heading to Earth (Update)

September 10 2014, by Seth Borenstein



The Sun by the Atmospheric Imaging Assembly of NASA's Solar Dynamics Observatory. Credit: NASA

A strong solar flare is blasting its way to Earth, but the worst of its power looks like it will barely skim above the planet and not cause many problems.

It has been several years since Earth has had a solar storm of this size coming from sunspots smack in the middle of the sun, said Tom Berger, director of the Space Weather Prediction Center in Boulder, Colorado. The flare on the sun barely hits the "extreme" on forecasters' scale, but with its worst effects missing Earth it is only looking "potentially strong" at most when it arrives at Earth as a solar storm, he said.

New calculations from satellite data show that the worst of the energetic particles streaming from the sun likely will go north or above Earth this time, Berger said late Wednesday.

So while the power grid may see fluctuations because the storm will cause changes in Earth's magnetic field, it won't knock power systems off line, Berger said. It may cause slight disturbances in satellites and radio transmissions but nothing major.

"We're not scared of this one," Berger said.

The storm is moving medium fast, about 2.5 million mph (4.02 million kph), meaning the soonest it could arrive is early Friday. But it could be later, Berger said.

Solar storms occur often, especially during peaks in the solar cycle, and don't directly harm people.

"There's been a giant magnetic explosion on the sun," Berger said. "Because it's pointed right at us, we'll at least catch some of the cloud" of highly energized and magnetized plasma that can disrupt Earth's magnetic sphere, which sometimes leads to temporary power grid

problems.

On the plus side, sun flares expand the colorful northern lights so people farther south can see them. But don't expect them too far south, Berger said.

More information: Space Weather Prediction Center:
www.swpc.noaa.gov/index.html

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