

1 Event

[In 2012, another powerful solar storm narrowly missed Earth but could have caused significant damage if it had hit us 3. - Search \(bing.com\)](#)

In 2012, a powerful solar storm narrowly missed Earth. [According to NASA, the storm was the most powerful in as much as 150+ years and would have caused significant damage if it had hit us ¹. The solar storm occurred on July 23, 2012, and involved an unusually large and strong coronal mass ejection \(CME\) ². The CME tore through Earth orbit on July 23, 2012, but fortunately, Earth wasn't there. Instead, the storm cloud hit the STEREO-A spacecraft ¹. The solar storm missed Earth with a margin of approximately nine days ². If it had hit Earth, it could have caused widespread power blackouts, disabling everything that plugs into a wall socket. Analysts believe that a direct hit by an extreme CME such as the one that missed Earth in July 2012 could cause widespread power blackouts ¹.](#)

2 Event

[For example, in 2003, a massive solar flare caused a geomagnetic storm that disrupted satellite communications and power grids across North America and Europe 3 - Search \(bing.com\)](#)

[In 2003, a massive solar flare caused a **geomagnetic storm** that disrupted satellite communications and power grids across North America and Europe ¹²³. The storm was named "the Halloween Storms" by researchers and lasted for almost three full days from October 29 to 31, 2003 ¹.](#)

To protect electronic devices from solar flares, it is recommended to use a **Faraday cage**. A Faraday cage is an enclosure formed by a conductive material that blocks external static and non-static electric fields by channeling electricity along and around but not through it while providing a constant voltage on all sides of the enclosure. [Since the difference in voltage is the measure of electrical potential, no current flows through the interior of it ⁴.](#) The cheapest way to protect electrical devices from solar storms is with simple metal boxes. You need to put the items that you want to protect in metal boxes and line the metal boxes inside with something non-conductive like a plastic bag or cardboard. [Most of these items will be battery-powered or hand-cranked items so do not forget to also add the batteries and chargers into the metal boxes ⁴.](#)

3 Event

[. It caused widespread damage to telegraph systems and created auroras visible as far south as the Caribbean 3. - Search \(bing.com\)](#)

The Carrington Event was a powerful geomagnetic storm that occurred from 1 to 2 September 1859 during solar cycle 10. [It was the most intense geomagnetic storm in recorded history¹. The storm was most likely caused by a coronal mass ejection \(CME\) from the Sun colliding with Earth's magnetosphere¹. The event created strong auroral displays that were visible globally and caused sparking and even fires in multiple telegraph stations¹. The auroras were so bright that they were visible as far south as the Caribbean¹. The Carrington Event caused widespread damage to telegraph systems, which were the most advanced communication systems of the time¹.](#)