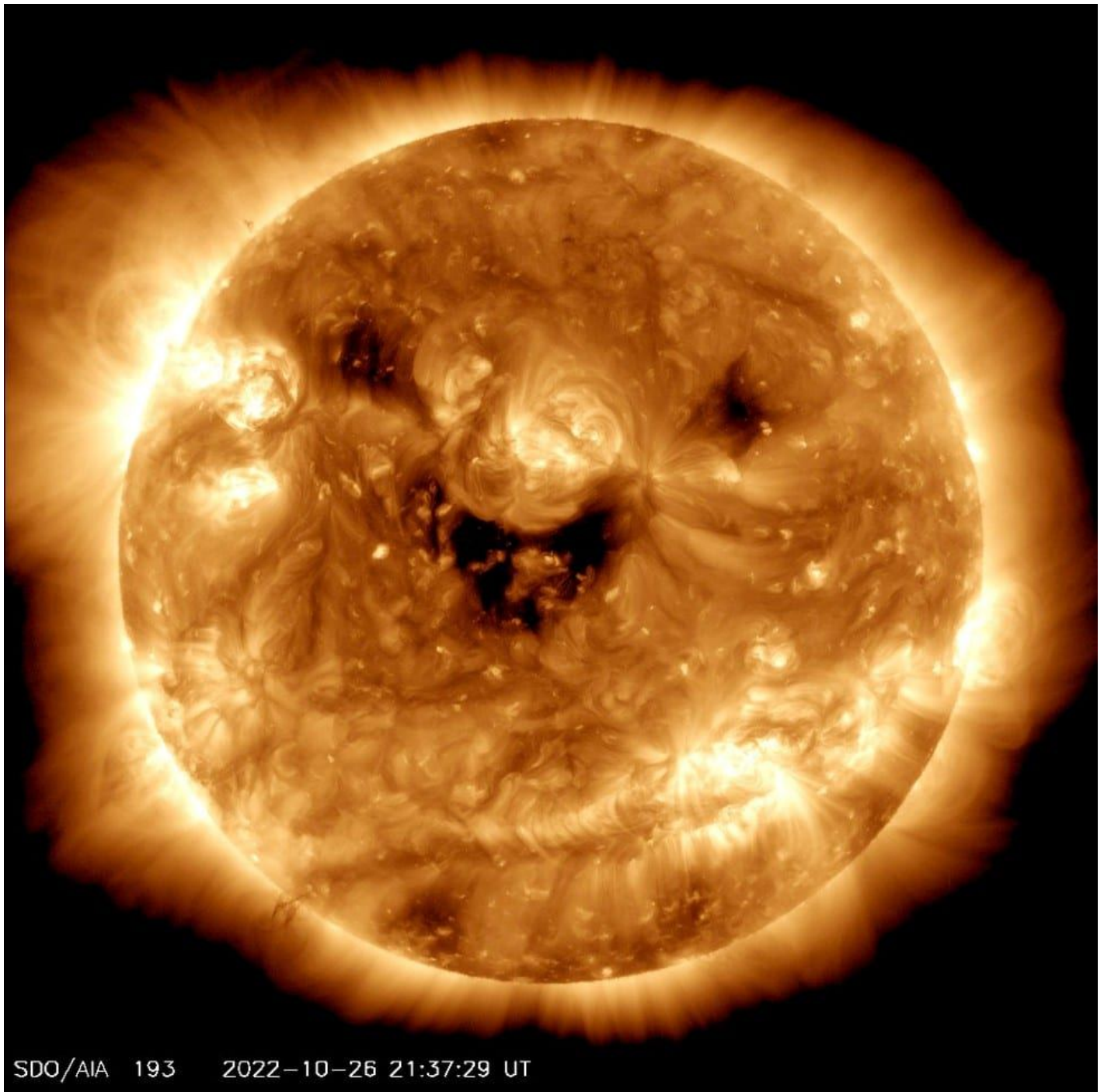


Coronal Holes

November 3, 2022 • vajiramandravi.com



About Coronal Holes:

- These are regions on the sun's surface from where fast solar wind gushes out into space. Because they contain little solar material, they have lower temperatures and thus appear much darker than their

surroundings.

- Here, the magnetic field is open to interplanetary space, sending solar material out in a high-speed stream of solar wind.
- Coronal holes can last between a **few weeks to months**.
- The holes are not a unique phenomenon, appearing throughout the sun's approximately 11-year solar cycle.
- They can last much longer during solar minimum – a period of time when activity on the Sun is substantially diminished, according to NASA.

Causes:

- While it is unclear what causes coronal holes, they correlate to areas on the sun where magnetic fields soar up and away, without looping back down to the surface as they do elsewhere.

Impacts:

- These 'coronal holes' are important to understanding the space environment around the earth.
- Scientists study these fast solar wind streams because they sometimes interact with earth's magnetic field, creating what's called a **geomagnetic storm**, which can expose satellites to radiation and interfere with communications signals.

Source : Indian Express

Source: <https://vajiramandravi.com/current-affairs/coronal-holes/>

© Vajiram & Ravi. For personal use only.