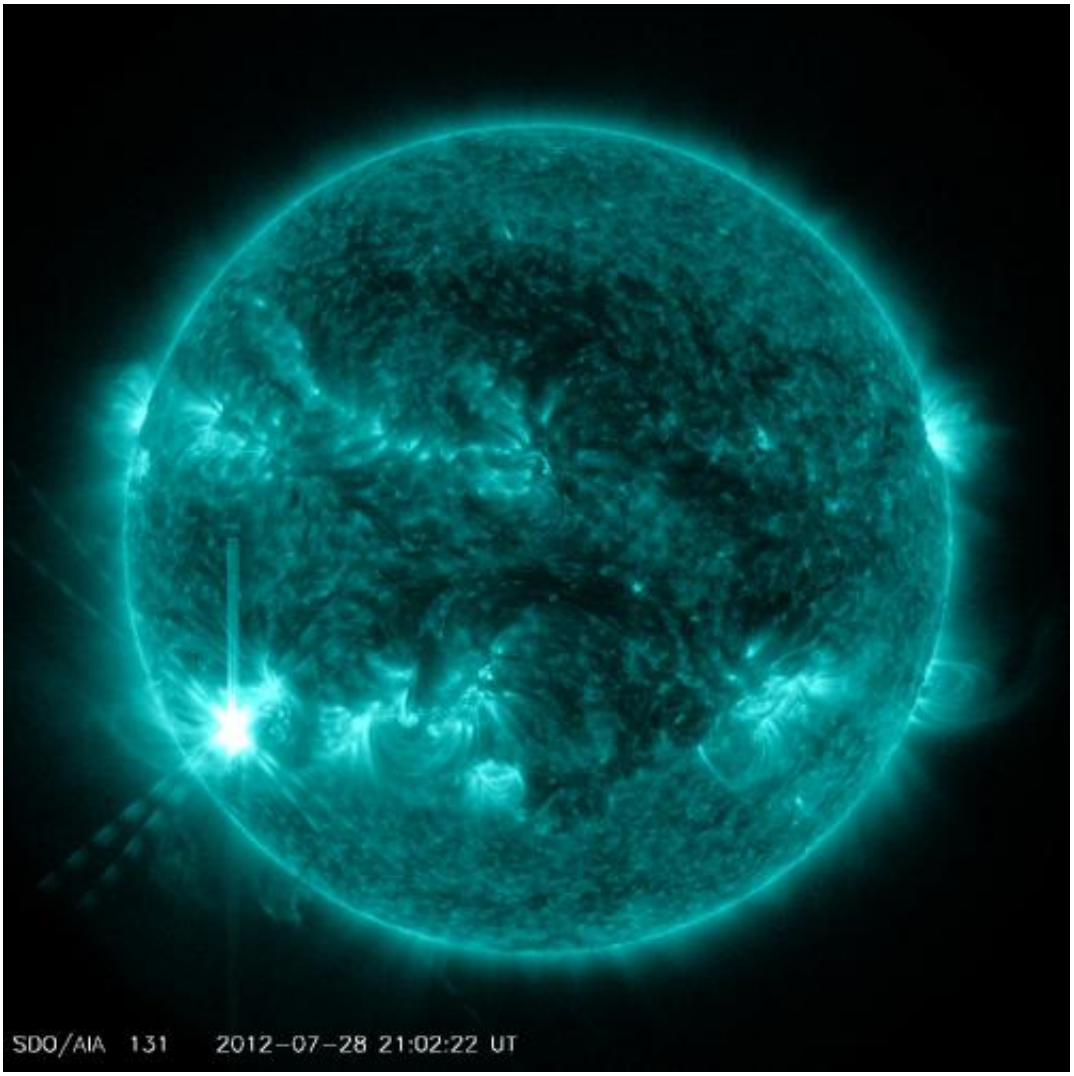
Sun emits a medium-intensity solar flare

July 31 2012, By Karen C. Fox



(Phys.org) -- The sun emitted a mid-level flare, peaking at 4:55 PM EDT

on July 28, 2012.

Solar flares are powerful bursts of radiation. Harmful radiation from a flare cannot pass through Earth's atmosphere to affect humans on the ground, however -- when intense enough -- they can disturb the atmosphere in the layer where GPS and communications signals travel. This disrupts the radio signals for as long as the flare is ongoing, anywhere from minutes to hours.

This flare is classified as an M6.2 flare. M-class flares are the weakest flares that can still cause some space weather effects near Earth. They can cause brief radio blackouts at the poles.

Increased numbers of flares are quite common at the moment, since the sun's normal 11-year activity cycle is ramping up toward solar maximum, which is expected in 2013.

Updates will be provided as needed.

What is a solar flare? What is a coronal mass ejection?

For answers to these and other space weather questions, please visit the Spaceweather Frequently Asked Questions page.

Provided by NASA