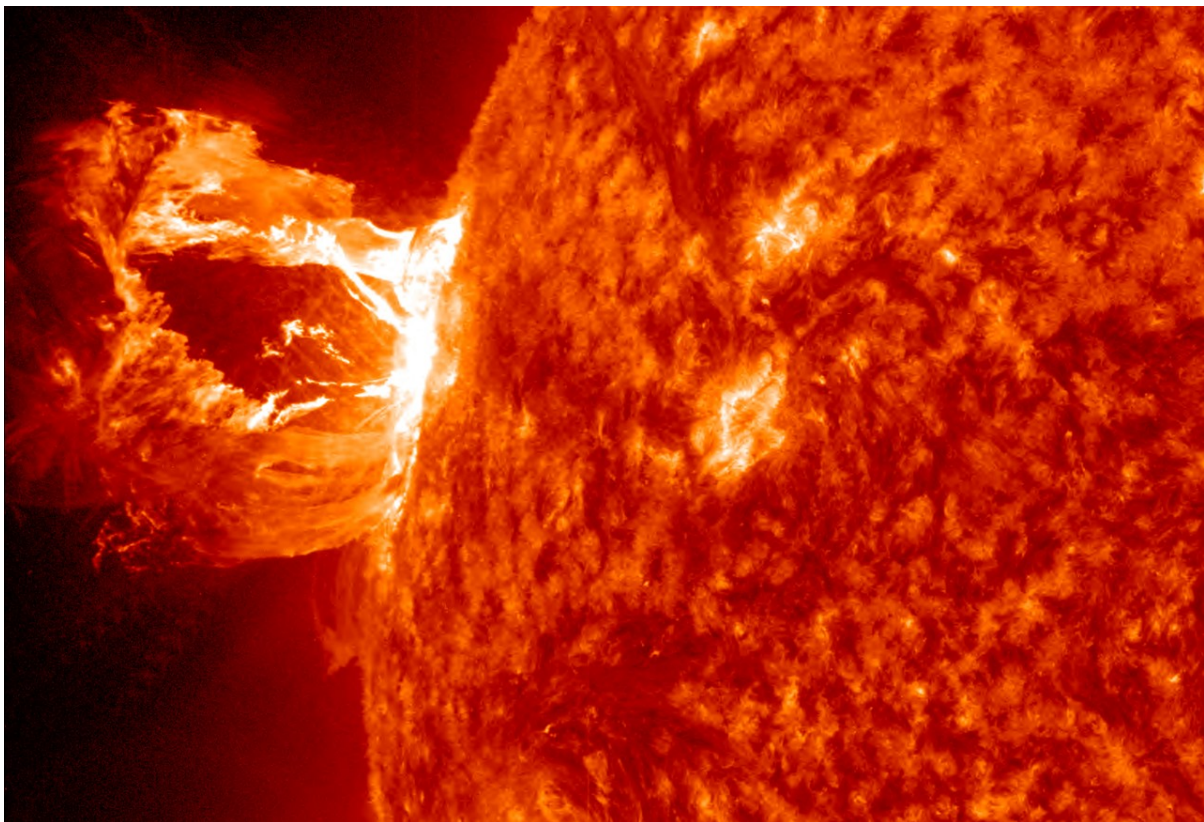




Radio Red Dwarf Broadcasts All Night and Day

April 25, 2016



Have you ever heard of solar flares? A solar flare is a giant explosion on the surface of the Sun. It blows billions of particles into space.

When some of those charged particles arrive at Earth, they produce beautiful auroras (also known as the northern or southern lights). But the particles can also disturb radio communications or damage electrical power stations and satellites.

You would expect flares on a tiny dwarf star to have less energy than those on a bigger star like our Sun. But the ALMA telescope has discovered extremely powerful flares on a red dwarf star that is ten times less massive than the Sun.

During the flares, the red dwarf shoots out powerful radio waves that have 10,000 times more energy than radio waves from our Sun.

Radio waves are produced by particles moving incredibly fast. There's only one way this tiny red dwarf could produce such energetic radio waves: giant flares must be shooting out of the star non-stop!

Many red dwarf stars have planets, but let's hope that this one doesn't. Life on a planet around this star would be quickly wiped out by the huge doses of deadly radiation!

COOL FACT

Red dwarfs are red because they are not as hot as some other stars. Think of a gas flame: the coolest part of the fire near the top of the flame glows red and the hottest part near the fuel glows blue.

This Space Scoop is based on a Press Release from [ALMA](#).

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