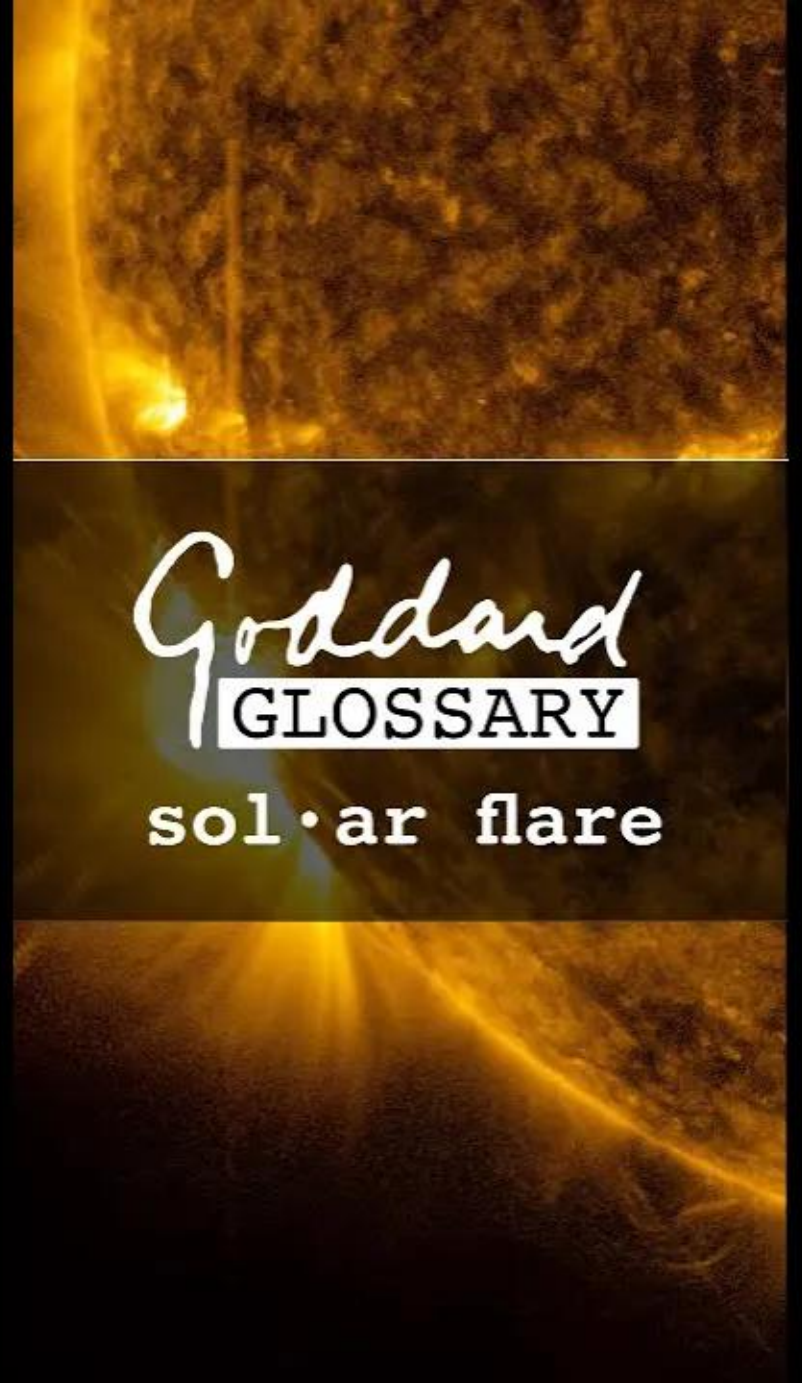
Goddard
GLOSSARY
sol·ar flare

1
00:00:00,000 --> 00:00:04,000
Solar flare. A solar flare is a sudden, intense burst of energy from the Sun's

2
00:00:04,000 --> 00:00:08,000
surface, basically, a giant explosion. The Sun is magnetically

3
00:00:08,000 --> 00:00:12,000
charged, and solar flares are caused by tangles in the magnetic field lines on the Sun’s surface.

4
00:00:12,000 --> 00:00:16,000
Solar flares are the largest explosive events in our solar system.

5
00:00:16,000 --> 00:00:20,000
They’re classified by size, with the smallest flares called A-class, followed

6
00:00:20,000 --> 00:00:24,000
by B, C, M, and X. X-class flares can create loops

7
00:00:24,000 --> 00:00:28,000
a hundred times as big as Earth. Solar flares release

8
00:00:28,000 --> 00:00:32,000
large amounts of radiation into space. M- and X-class flares can actually release

9
00:00:32,000 --> 00:00:36,000
enough energy that they can interfere with some radio communications and satellites in Earth’s

10
00:00:36,000 --> 00:00:40,000
orbit when they erupt on the Earth side of the Sun. Fortunately, our atmosphere

11
00:00:40,000 --> 00:00:44,000
protects us from harm here on the ground. The Sun goes through periods of

12
00:00:44,000 --> 00:00:48,000
more and less activity, and solar flares are more common during solar maximum.