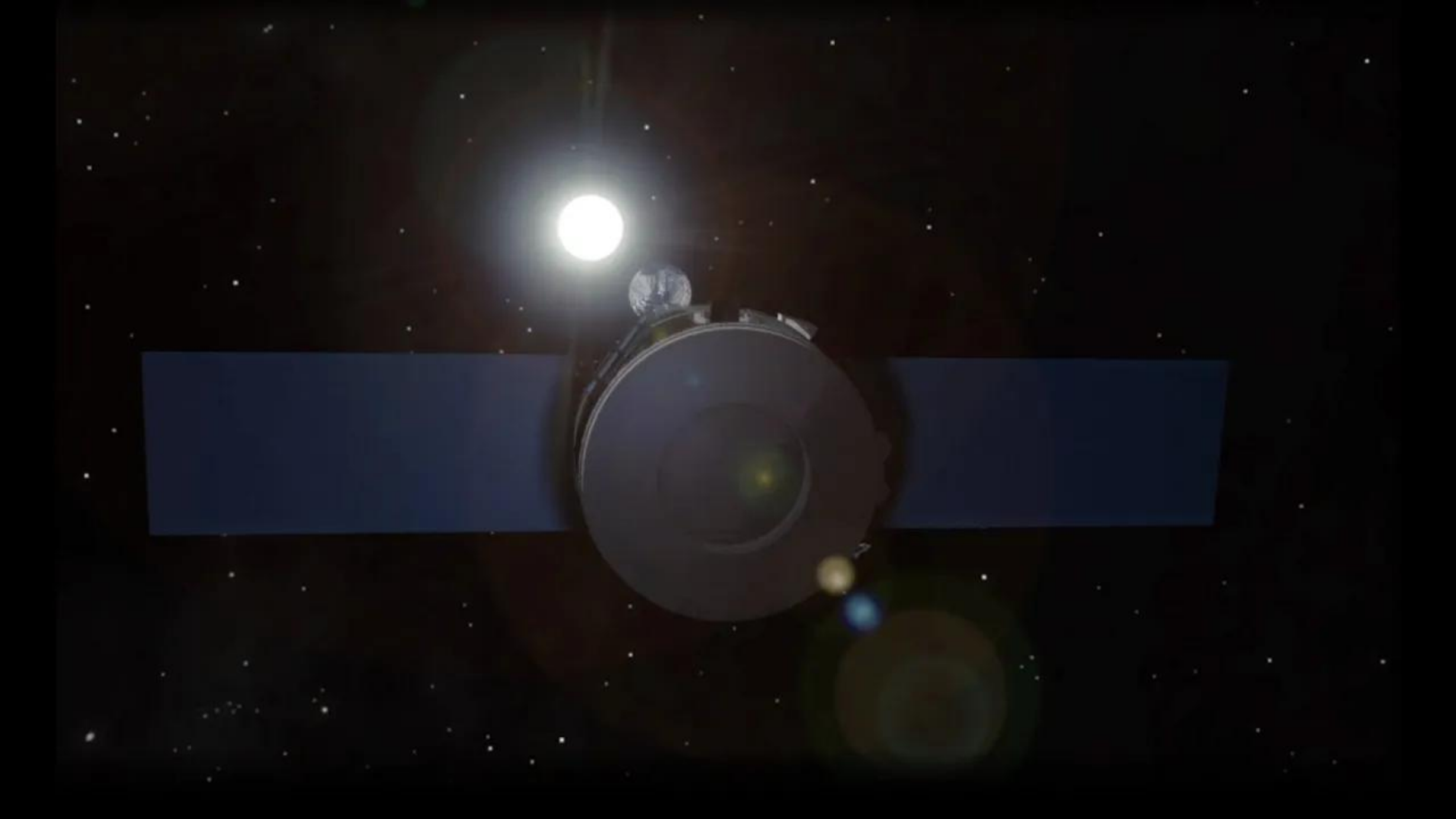

1
00:00:00,000 --> 00:00:04,010
tone

2
00:00:04,030 --> 00:00:08,080
music

3
00:00:08,100 --> 00:00:12,100
On March 11, 2015, a solar flare erupted on the sun.

4
00:00:12,120 --> 00:00:16,180
This burst of x-ray light was witnessed by IRIS, NASA's Interface

5
00:00:16,200 --> 00:00:20,240
Region Imaging Spectrograph.

6
00:00:20,260 --> 00:00:24,300
IRIS give us our first detailed image of a layer of the sun's atmosphere, call the chromosphere.

7
00:00:24,320 --> 00:00:28,320
Boasting the highest temporal and spacial resolution to date, IRIS

8
00:00:28,340 --> 00:00:32,370
provides imagery and a special kind of data call spectra.

9
00:00:32,390 --> 00:00:36,440
In this composite, the spectra is shown vertically and the image horizontally.

10
00:00:36,460 --> 00:00:40,460
To create the spectra, a spectrograph splits the light from a given point

11
00:00:40,480 --> 00:00:44,510
on the sun into its discreet wavelengths.

12
00:00:44,530 --> 00:00:48,560
This technique allows scientists to measure temperature, velocity, and density of the solar material

13
00:00:48,580 --> 00:00:52,580

behind the slit. Thanks to IRIS, we can work to better understand

14
00:00:52,600 --> 00:00:56,630
what causes these eruptions.