1
00:00:00,000 --> 00:00:04,100
Music

2
00:00:04,120 --> 00:00:08,210
Just as the sun is

3
00:00:08,230 --> 00:00:12,310
part of weather on Earth; it also affects weather in space.

4
00:00:12,330 --> 00:00:16,430
The sun creates solar wind by steadily releasing a flow of plasma particles in all

5
00:00:16,450 --> 00:00:20,570
directions around it. Sometimes the sun gives of a flash of light in x-rays.

6
00:00:20,590 --> 00:00:24,670
This is known as a solar flare. When mass of

7
00:00:24,690 --> 00:00:28,770
burst of particles explode into space, we call it a coronal mass ejection or

8
00:00:28,790 --> 00:00:32,870
CME. When a CME is directed toward earth it hits

9
00:00:32,890 --> 00:00:36,970
the magnetosphere, the magnetic field around our planet that protects us. If the storm

10
00:00:36,990 --> 00:00:41,060
is large we may even get to enjoy a light display in the sky called the auroras.

11
00:00:41,080 --> 00:00:45,120
In space, satellites may be damaged,

12
00:00:45,140 --> 00:00:49,180
and astronauts should take cover. On earth, people do not feel any

13
00:00:49,200 --> 00:00:53,230

physical effects. You may loose electricity in some areas. Polar flights may be rerouted

14
00:00:53,250 --> 00:00:57,290
and satellite services may be disrupted. While these situations aren't

15
00:00:57,310 --> 00:01:01,330
ideal, they are rare and fixable.

16
00:01:01,350 --> 00:01:05,420
This is why we will continue to study the sun and its interactions with earth,

17
00:01:05,440 --> 00:01:09,550
and the solar system.