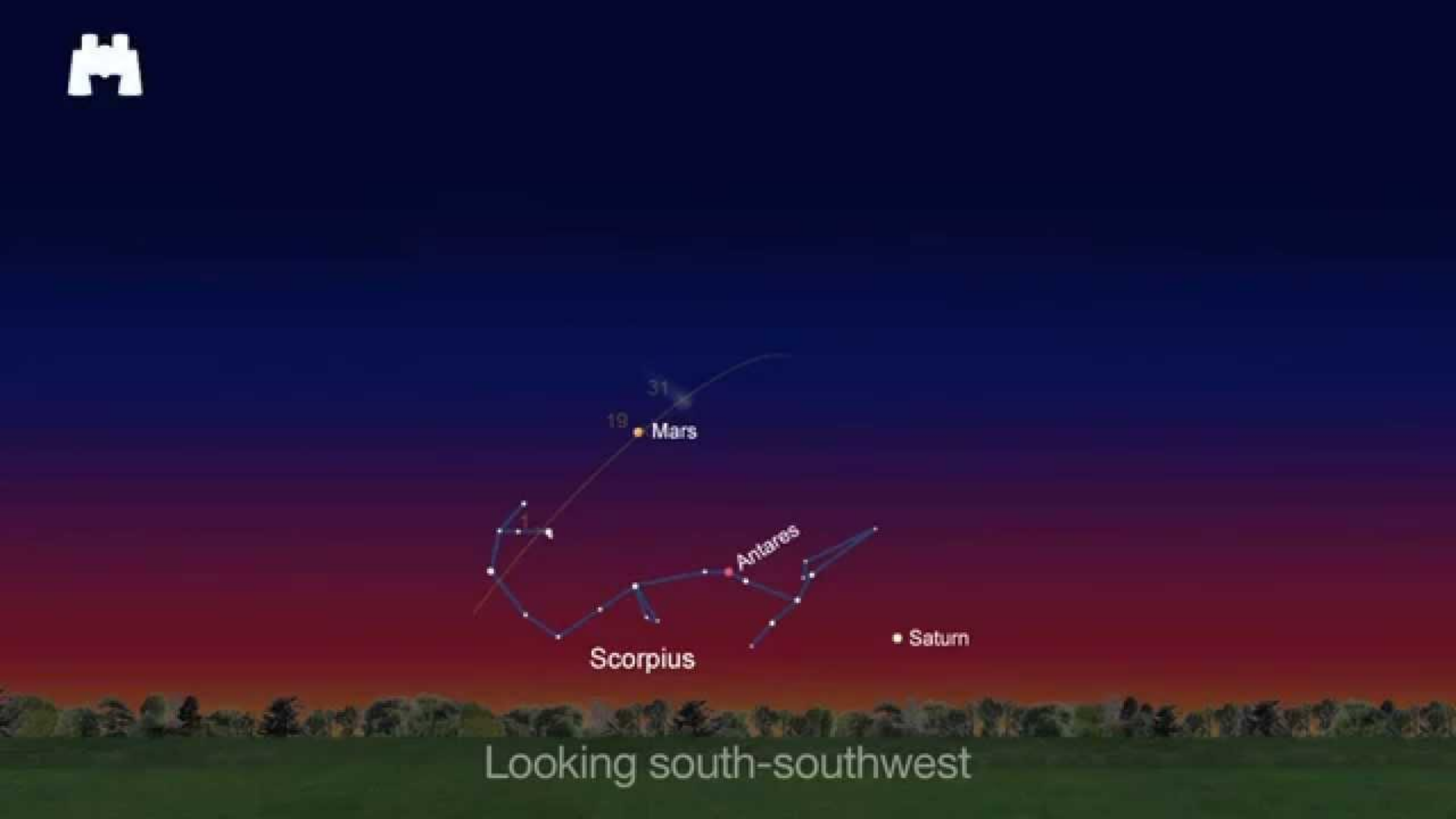
31
19
Mars
Antares
Saturn
Scorpius
Looking south-southwest

1
00:00:00,000 --> 00:00:03,000
Music.

2
00:00:03,000 --> 00:00:05,000
Jane Houston Jones: What's up for October.

3
00:00:05,000 --> 00:00:07,000
A total lunar eclipse.

4
00:00:07,000 --> 00:00:09,000
A partial solar eclipse.

5
00:00:09,000 --> 00:00:11,000
And Mars meets a comet.

6
00:00:11,000 --> 00:00:17,000
Hello and welcome. I'm Jane Houston Jones from NASA's Jet Propulsion Laboratory in Pasadena, California.

7
00:00:17,000 --> 00:00:22,000
Mars and Comet Siding Spring are moving closer to each other this month.

8
00:00:22,000 --> 00:00:28,000
On October 19, the comet and the planet pass within 81,000 miles of one another.

9
00:00:28,000 --> 00:00:33,000
You may be able to spot the comet leading up to--and after--the 19th.

10
00:00:33,000 --> 00:00:39,000
But from the U.S., you'll need an unobstructed view of the south-southwestern horizon just after sunset.

11
00:00:39,000 --> 00:00:44,000
Try spotting Mars first. It's to the upper left of the orange star Antares,

12
00:00:44,000 --> 00:00:48,000
near the horizon at about 7:30 p.m. local time.

13
00:00:48,000 --> 00:00:51,000

Then, use your binoculars to scan for the comet.

14
00:00:51,000 --> 00:00:57,000
Even through amateur telescopes, Comet Siding Spring may be just too faint to see.

15
00:00:57,000 --> 00:01:00,000
Even if it's not visible at your location,

16
00:01:00,000 --> 00:01:04,000
the comet will be visible to our missions currently at Mars. And we hope to get back images.

17
00:01:04,000 --> 00:01:06,000
Sound: Whoosh.

18
00:01:06,000 --> 00:01:11,000
Jones: Set your alarm clock for an after-midnight wakeup on the morning of October 8.

19
00:01:11,000 --> 00:01:15,000
The moon enters Earth's deep shadow for the second lunar eclipse of the year

20
00:01:15,000 --> 00:01:21,000
at 2:15 a.m. on the west coast of North America. That's 5:15 on the east coast.

21
00:01:21,000 --> 00:01:26,000
The total phase will begin at 3:15 a.m. on the west coast, or 6:15 on the east coast.

22
00:01:26,000 --> 00:01:29,000
Sound: Whoosh.

23
00:01:29,000 --> 00:01:35,000
Jones: Two weeks later, from North America, a partial solar eclipse will be visible in the late afternoon.

24
00:01:35,000 --> 00:01:39,000
On the east coast, the sun sets before the eclipse reaches its maximum,

25
00:01:39,000 --> 00:01:42,000
but observers will see a dramatic partial eclipse.

26
00:01:42,000 --> 00:01:48,000
The deepest eclipse, where the moon's silhouette extends nearly all the way across the sun,

27
00:01:48,000 --> 00:01:51,000
will be visible far to the north in the Canadian Arctic.

28
00:01:51,000 --> 00:01:57,000
On the west coast, the dark silhouette will cover about half the sun in the late afternoon.

29
00:01:57,000 --> 00:02:02,000
The eclipse is not visible in Maine, Massachusetts or Rhode Island.

30
00:02:02,000 --> 00:02:07,000
Remember: Never look directly at the sun during an eclipse--or any time.

31
00:02:07,000 --> 00:02:13,000
You can learn more about solar and lunar eclipses at eclipse dot g s f c dot nasa dot gov

32
00:02:13,000 --> 00:02:17,000
And you can learn all about Comet Siding Spring's encounter with Mars at

33
00:02:17,000 --> 00:02:23,000
mars dot nasa dot gov slash comets slash sidingspring