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

2
00:00:04,000 --> 00:00:05,000
Jane Houston Jones: What's Up for December?

3
00:00:05,000 --> 00:00:12,000
View Mars right now, and prepare for 2016, the best Mars viewing year since 2005!

4
00:00:12,000 --> 00:00:14,000
Hello and welcome. I'm Jane Houston Jones

5
00:00:14,000 --> 00:00:18,000
at NASA's Jet Propulsion Laboratory in Pasadena, California.

6
00:00:18,000 --> 00:00:22,000
Last month early risers watched small, reddish Mars

7
00:00:22,000 --> 00:00:26,000
dance with brighter Jupiter and Venus just before sunrise.

8
00:00:26,000 --> 00:00:30,000
This month Mars rises earlier-by about 2 a.m. local time.

9
00:00:30,000 --> 00:00:35,000
Its reddish color is unmistakable, even without a telescope.

10
00:00:35,000 --> 00:00:39,000
It's easy to see below the Moon and Jupiter on December 4.

11
00:00:39,000 --> 00:00:41,000
You won't see many features this month

12
00:00:41,000 --> 00:00:45,000
because the planet is almost 10 times smaller than nearby Jupiter appears

13
00:00:45,000 --> 00:00:50,000

and 350 times smaller than the Moon appears to us on Earth.

14
00:00:50,000 --> 00:00:54,000
You should be able to see Mars' north polar region this month

15
00:00:54,000 --> 00:00:57,000
because it's currently tilted towards Earth.

16
00:00:57,000 --> 00:01:02,000
You'll be amazed at the changes you'll see during 2016.

17
00:01:02,000 --> 00:01:06,000
January through December are all prime Mars observing months.

18
00:01:06,000 --> 00:01:11,000
Between January and May next year, Mars triples in apparent diameter

19
00:01:11,000 --> 00:01:15,000
as its orbit around the sun brings it closer to Earth.

20
00:01:15,000 --> 00:01:20,000
You'll even be able to see the areas on Mars where NASA's Mars landers are located.

21
00:01:20,000 --> 00:01:25,000
By October, Mars shrinks in apparent size to less than half its May diameter

22
00:01:25,000 --> 00:01:27,000
as it speeds away from Earth.

23
00:01:27,000 --> 00:01:31,000
Mars shrinks even further from October through December,

24
00:01:31,000 --> 00:01:37,000
returning to the same size we saw in January 2016 by year's end.

25
00:01:37,000 --> 00:01:41,000
So put Mars viewing on your calendar for 2016.

26
00:01:41,000 --> 00:01:44,000
You won't see Mars this size again until 2018,

27
00:01:44,000 --> 00:01:48,000
when Mars will put on an even better show.

28
00:01:48,000 --> 00:01:51,000
You might want to try sketching the features you see on the Red Planet,

29
00:01:51,000 --> 00:01:54,000
just as early astronomers did.

30
00:01:54,000 --> 00:01:57,000
It's easy to see some detail, even in the smallest telescopes,

31
00:01:57,000 --> 00:02:01,000
and it will be a fun and inexpensive souvenir.

32
00:02:01,000 --> 00:02:06,000
You can learn about NASA's #JourneytoMars missions at mars.nasa.gov

33
00:02:06,000 --> 00:02:11,000
And you can learn about all of NASA's missions at www.nasa.gov