



Earth

Jupiter

Juno

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

2  
00:00:04,000 --> 00:00:12,000  
What's Up for May? Inner planets Venus and Mercury, then Jupiter, and Saturn with wide-open rings.

3  
00:00:12,000 --> 00:00:18,000  
Hello and welcome. I'm Jane Houston Jones from NASA's Jet Propulsion Laboratory in Pasadena, California.

4  
00:00:18,000 --> 00:00:24,000  
This month Venus and Mercury grace the west-northwest sky an hour past sunset.

5  
00:00:25,000 --> 00:00:30,000  
Elusive Mercury should be visible a little less than ten degrees above the horizon early in the month.

6  
00:00:31,000 --> 00:00:37,000  
You can measure ten degrees by holding your outstretched clenched fist against the sky.

7  
00:00:38,000 --> 00:00:43,000  
Bright Venus is easy to see another 20 degrees above Mercury.

8  
00:00:43,000 --> 00:00:44,000  
Sound: Whoosh.

9  
00:00:45,000 --> 00:00:49,000  
Jones: The giant planets Jupiter and Saturn rule the sky this month.

10  
00:00:50,000 --> 00:00:56,000  
Jupiter, the largest and brightest of our solar system's planets, has been visible for many months.

11  
00:00:56,000 --> 00:01:00,000  
If you haven't looked at Jupiter through a telescope, you're in for a real treat.

12  
00:01:01,000 --> 00:01:07,000  
Look west-northwest again and you'll find Jupiter to the upper left of bright Venus.

13  
00:01:07,000 --> 00:01:12,000

The moon passes from right to left below the two from May 20th through the 24th.

14

00:01:13,000 --> 00:01:16,000

You'll get great views of Jupiter's colorful cloud bands

15

00:01:16,000 --> 00:01:21,000

and its four largest moons, discovered over 400 years ago by Galileo.

16

00:01:21,000 --> 00:01:28,000

You can see both the cloud bands and the moons using most binoculars and telescopes of any size.

17

00:01:29,000 --> 00:01:37,000

NASA's Juno spacecraft, which launched August 11, 2011, has traveled over one and a half billion miles

18

00:01:37,000 --> 00:01:44,000

and has another 200 million miles to go before entering Jupiter orbit on July 4, 2016.

19

00:01:45,000 --> 00:01:46,000

Sound: Whoosh.

20

00:01:46,000 --> 00:01:52,000

Jones: Saturn reaches opposition on May 22, when the planet is visible all night long.

21

00:01:52,000 --> 00:01:57,000

It rises at sunset in the southeast and sets at dawn in the northwest.

22

00:01:58,000 --> 00:02:00,000

This year, the majestic rings are open-

23

00:02:00,000 --> 00:02:05,000

which means they're tilted towards Earth-more than 24 degrees,

24

00:02:05,000 --> 00:02:08,000

compared to the edgewise view we had in 2009.

25

00:02:08,000 --> 00:02:12,000

Through a telescope, you may be able to see color differences

26  
00:02:12,000 --> 00:02:16,000  
and faint bands the color of cream and butterscotch.

27  
00:02:16,000 --> 00:02:17,000  
NASA's Cassini spacecraft, in orbit around Saturn since 2004,

28  
00:02:17,000 --> 00:02:24,000  
has four close encounters with Titan,

29  
00:02:24,000 --> 00:02:26,000  
two with Dione,

30  
00:02:26,000 --> 00:02:29,000  
and three with the geyser-spewing moon Enceladus this year.

31  
00:02:30,000 --> 00:02:36,000  
And in 2016 and 2017 Cassini will fly up and over the north and south poles of Saturn

32  
00:02:36,000 --> 00:02:41,000  
and dive in-between the innermost of the planet's rings-the D ring-

33  
00:02:41,000 --> 00:02:44,000  
and the upper atmosphere of Saturn itself!

34  
00:02:45,000 --> 00:02:50,000  
You can learn all about the Cassini mission at [saturn dot nasa dot gov](http://saturn.nasa.gov)

35  
00:02:50,000 --> 00:02:57,000  
And you can learn about all of NASA's missions, including Juno, at [www dot nasa dot gov](http://www.nasa.gov)