



October 11-13, just after dark

1
00:00:00,000 --> 00:00:02,000
Music.

2
00:00:02,000 --> 00:00:07,000
Jane Houston Jones: What's Up for October. Juno's Earth flyby, International Observe the Moon Night

3
00:00:07,000 --> 00:00:10,000
and how to view the moon's far side.

4
00:00:10,000 --> 00:00:16,000
Hello and welcome. I'm Jane Houston Jones from NASA's Jet Propulsion Laboratory in Pasadena, California.

5
00:00:16,000 --> 00:00:17,000
Sound effect.

6
00:00:17,000 --> 00:00:24,000
Jones: On October 9 at 3:21 p.m. Eastern time, or 19:21 Universal Coordinated Time,

7
00:00:24,000 --> 00:00:29,000
NASA's Juno spacecraft performs a close flyby of Earth.

8
00:00:29,000 --> 00:00:39,000
At closest approach, Juno will come to within 347 miles or 559 kilometers of our planet's surface.

9
00:00:39,000 --> 00:00:46,000
This flyby will provide a gravity assist to the spacecraft, allowing it to pick up the extra speed it needs

10
00:00:46,000 --> 00:00:50,000
in order to get to its destination: the giant planet Jupiter.

11
00:00:50,000 --> 00:00:52,000
Sound effect.

12
00:00:52,000 --> 00:00:58,000
Jones: October 12 is International Observe the Moon Night, and the moon will be visible before sunset.

13
00:00:58,000 --> 00:01:03,000

It's a night dedicated to encouraging people to look up and take notice of our nearest neighbor.

14

00:01:03,000 --> 00:01:09,000

As the moon sets in the west at midnight, Jupiter is just rising in the East.

15

00:01:09,000 --> 00:01:14,000

On the 25th you'll find Jupiter above the moon.

16

00:01:14,000 --> 00:01:19,000

Most people think we see the same 50 per cent of the lunar surface every month.

17

00:01:19,000 --> 00:01:23,000

But a gentle wobble of the moon in the Earth's sky lets us peek at

18

00:01:23,000 --> 00:01:26,000

an additional 9 per cent of the moon's surface.

19

00:01:26,000 --> 00:01:32,000

This wobble, or libration, lets us occasionally see a bit around the east and west limb of the moon

20

00:01:32,000 --> 00:01:36,000

and over the north and south poles.

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00:01:36,000 --> 00:01:41,000

This phenomenon becomes apparent when viewing Mare Frigoris in the north

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00:01:41,000 --> 00:01:45,000

and Mare Crisium on the moon's east limb over time.

23

00:01:45,000 --> 00:01:50,000

Catch a glimpse of the far side's Mare Orientale on the western limb near the first of the month.

24

00:01:50,000 --> 00:01:54,000

It's the youngest impact crater on the moon.

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00:01:54,000 --> 00:02:00,000

Mare Marginis, Smithii and Australe are all visible after dark on the 11th through the 13th.

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00:02:00,000 --> 00:02:06,000

Try spotting them through any size telescope during International Observe the Moon Night.

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00:02:06,000 --> 00:02:10,000

You can read about all of NASA's missions, including lunar missions and Juno,

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00:02:10,000 --> 00:02:13,000

at www.nasa.gov.