

WHAT'S UP



1
00:00:01,567 --> 00:00:03,936
[■]

2
00:00:03,936 --> 00:00:05,571
>>Jane Houston Jones:
What's Up for March.

3
00:00:05,571 --> 00:00:09,375
Jupiter, its moons
and moon shadows.

4
00:00:09,375 --> 00:00:10,176
Hello and welcome.

5
00:00:10,176 --> 00:00:11,644
I'm Jane Houston
Jones from NASA's

6
00:00:11,644 --> 00:00:15,215
Jet Propulsion Laboratory
in Pasadena, California.

7
00:00:15,381 --> 00:00:17,717
Jupiter dominates the
evening sky this month,

8
00:00:17,717 --> 00:00:20,987
rising at sunset
and setting at dawn.

9
00:00:20,987 --> 00:00:24,023
On March 8th Jupiter reaches
what is called 'opposition.'

10
00:00:24,023 --> 00:00:28,661
Imagine that Jupiter and the
sun are on opposite ends

11
00:00:28,661 --> 00:00:31,831

of a straight line
with Earth in between.

12

00:00:31,831 --> 00:00:34,767

This brings Jupiter
its closest to Earth,

13

00:00:34,767 --> 00:00:38,538

so it shines brighter and
appears larger in telescopes.

14

00:00:38,538 --> 00:00:41,574

On the nights of
March 14th and 15th,

15

00:00:41,574 --> 00:00:45,878

March 21st and 22nd
and March 29th two of

16

00:00:45,878 --> 00:00:49,349

Jupiter's moons will
cross the planet's disk.

17

00:00:50,883 --> 00:00:52,852

When the planet is
at opposition and

18

00:00:52,852 --> 00:00:55,422

the sun shines on
Jupiter's moons,

19

00:00:57,557 --> 00:01:00,593

we can see the moons'
shadows crossing the planet.

20

00:01:03,529 --> 00:01:04,797

There are actually eleven of

21

00:01:04,797 --> 00:01:06,399

these double shadow transits

22

00:01:06,399 --> 00:01:09,035
in March.

23

00:01:09,035 --> 00:01:11,938
The next 6 months will be
awesome times for you to

24

00:01:11,938 --> 00:01:14,974
image Jupiter when it's
highest in the sky■

25

00:01:14,974 --> 00:01:18,544
near midnight now and a
little earlier each night

26

00:01:18,544 --> 00:01:19,779
through the late summer.

27

00:01:19,779 --> 00:01:22,782
Even through the smallest
telescopes or binoculars

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00:01:22,782 --> 00:01:25,718
you should be able to see the
two prominent belts

29

00:01:25,718 --> 00:01:27,954
on each side of
Jupiter's equator,

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00:01:27,954 --> 00:01:32,992
the four Galilean moons: Io,
Europa, Ganymede and Callisto,

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00:01:32,992 --> 00:01:36,596
and with some difficulty
Jupiter's Red Spot,

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00:01:36,596 --> 00:01:38,431
when it's facing Earth.

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00:01:38,431 --> 00:01:39,332
[WHOOSH]

34

00:01:40,533 --> 00:01:43,069
NASA's Juno spacecraft will
arrive at Jupiter on July 4th

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00:01:43,069 --> 00:01:46,906
of this year and go into orbit
around the giant planet.

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00:01:46,906 --> 00:01:50,810
Right now the Juno mission
science team is actively seeking

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00:01:50,810 --> 00:01:53,813
amateur and professional
images of the planet.

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00:01:53,813 --> 00:01:57,083
These images are
uploaded to a Juno website,

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00:01:57,083 --> 00:02:00,686
and the public is invited to
discuss points of interest

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00:02:00,686 --> 00:02:02,555
in Jupiter's atmosphere.

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00:02:02,555 --> 00:02:04,891
Locations will
later be voted on.

42

00:02:04,891 --> 00:02:06,592
The favorites will
be targets for

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00:02:06,592 --> 00:02:09,896

JunoCam, the spacecraft's
imaging camera.

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00:02:09,896 --> 00:02:11,831

Once JunoCam has
taken the images,

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00:02:11,831 --> 00:02:14,800

they'll be posted online.

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00:02:14,800 --> 00:02:17,036

Imaging participants
can then process these

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00:02:17,036 --> 00:02:21,707

raw mission images and re-upload
them for others to view.

48

00:02:21,707 --> 00:02:24,477

You can find out
all about JunoCam at:

49

00:02:24,477 --> 00:02:31,884

www.missionjuno.swri.edu/junocam

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00:02:31,884 --> 00:02:35,555

And you can learn about all of
NASA's missions, including Juno,

51

00:02:35,555 --> 00:02:38,558

at: www.nasa.gov