1
00:00:00,499 --> 00:00:03,770
■

2
00:00:03,803 --> 00:00:05,371
What's Up for February?

3
00:00:05,404 --> 00:00:08,241
Use Venus and Mars to find
the Zodiacal Light,

4
00:00:08,274 --> 00:00:11,511
plus two comets and the
brightest asteroid.

5
00:00:12,712 --> 00:00:14,847
Hello and welcome. I'm Jane
Houston Jones from NASA's

6
00:00:14,880 --> 00:00:18,451
Jet Propulsion Laboratory
in Pasadena, California.

7
00:00:18,484 --> 00:00:21,120
On February first the
crescent moon joins

8
00:00:21,153 --> 00:00:24,824
the planets Venus, Mars and
Uranus in the southwest sky

9
00:00:24,857 --> 00:00:26,926
just after sunset.

10
00:00:26,959 --> 00:00:29,295
If you've been watching
Venus the past few months

11
00:00:29,328 --> 00:00:32,732
you can't help but notice it's

the brightest object in the sky

12
00:00:32,765 --> 00:00:34,467
(except for the
moon, of course).

13
00:00:34,500 --> 00:00:37,503
Through a telescope, you
are in for a real treat.

14
00:00:37,536 --> 00:00:40,506
As Venus' illuminated
crescent phase will thin,

15
00:00:40,539 --> 00:00:42,508
its apparent diameter increases.

16
00:00:42,541 --> 00:00:46,045
And Venus remains the same
brightness all month long.

17
00:00:46,078 --> 00:00:50,316
Just above Venus is Mars,
posing with Uranus this month.

18
00:00:50,349 --> 00:00:52,919
Mars appears significantly
brighter than Uranus,

19
00:00:52,952 --> 00:00:56,055
but you should still be
able to see both in binoculars,

20
00:00:56,088 --> 00:00:58,791
though a telescope will
reveal more detail.

21
00:00:58,824 --> 00:01:00,093
Whoosh.

22
00:01:00,126 --> 00:01:02,228
Meteors are caused
when dust particles

23
00:01:02,261 --> 00:01:06,566
from comets and asteroids burn
up in Earth's atmosphere.

24
00:01:06,599 --> 00:01:09,035
February isn't a great
meteor shower month,

25
00:01:09,068 --> 00:01:11,838
but you might see a different
kind of dust particles

26
00:01:11,871 --> 00:01:14,040
called the Zodiacal Light.

27
00:01:14,073 --> 00:01:17,009
The Zodiacal light is
a triangular glow

28
00:01:17,042 --> 00:01:19,879
caused when sunlight
reflects off dust particles

29
00:01:19,912 --> 00:01:22,615
in the plane of
our solar system.

30
00:01:22,648 --> 00:01:26,452
Use Venus and Mars as signposts
to the cone-shaped glow

31
00:01:26,485 --> 00:01:30,256
on the western horizon at sunset
in late February and March.

32

00:01:30,289 --> 00:01:31,557
Whoosh.

33
00:01:31,590 --> 00:01:35,895
Comet 45P, visible after sunset
over the last two months

34
00:01:35,928 --> 00:01:38,231
through both binoculars
and telescopes

35
00:01:38,264 --> 00:01:41,701
makes its closest approach
to Earth on February 11,

36
00:01:41,734 --> 00:01:45,671
when it will be 0.08
Astronomical Units

37
00:01:45,704 --> 00:01:48,241
(7.4 million miles) from Earth.

38
00:01:48,274 --> 00:01:50,576
It'll be visible
in the morning sky

39
00:01:50,609 --> 00:01:53,012
in the constellation Hercules.

40
00:01:53,045 --> 00:01:55,715
The comet then passes
through the constellations

41
00:01:55,748 --> 00:01:58,451
Corona Borealis (the
Northern Crown),

42
00:01:58,484 --> 00:02:00,653
Bootes (the Herdsman),

43
00:02:00,686 --> 00:02:03,656
Canes Venatici
(Bootes' hunting dogs)

44
00:02:03,689 --> 00:02:05,658
and Ursa Major.

45
00:02:05,691 --> 00:02:08,394
Then on to Leo by
the end of February.

46
00:02:08,427 --> 00:02:11,898
It moves swiftly --
9 degrees each day!

47
00:02:11,931 --> 00:02:14,834
It will return again in 2022.

48
00:02:14,867 --> 00:02:17,603
The second of several comets
visible this year through

49
00:02:17,636 --> 00:02:19,338
binoculars or telescopes,

50
00:02:19,371 --> 00:02:20,706
Comet 2P Encke,

51
00:02:20,739 --> 00:02:25,044
returns to our view after a
3.3 year orbit around the sun.

52
00:02:25,077 --> 00:02:28,214
You can find it in the
constellation Pisces.

53
00:02:28,247 --> 00:02:30,449
And you should be able to
see it through binoculars

54
00:02:30,482 --> 00:02:32,418
all month long.

55
00:02:32,451 --> 00:02:35,555
Finally, the brightest
asteroid, Vesta,

56
00:02:35,588 --> 00:02:39,125
continues to be visible near
the stars Castor and Pollux

57
00:02:39,158 --> 00:02:40,259
in Gemini.

58
00:02:40,293 --> 00:02:43,095
I found it easily a few weeks
ago in my own telescope!

59
00:02:44,163 --> 00:02:46,265
You can catch up on solar
system missions and

60
00:02:46,298 --> 00:02:50,169
all of NASA's missions at
www.nasa.gov