WHAT'S UP

January 2017

1
00:00:00,499 --> 00:00:03,770
■

2
00:00:03,803 --> 00:00:05,538
What's Up for January?

3
00:00:05,571 --> 00:00:08,274
Meteors from a demoted
constellation,

4
00:00:08,307 --> 00:00:09,842
Venus high,

5
00:00:09,875 --> 00:00:11,844
comet 45P low

6
00:00:11,877 --> 00:00:14,013
and the best of Vesta.

7
00:00:14,046 --> 00:00:15,348
Hello and welcome.

8
00:00:15,381 --> 00:00:18,084
I'm Jane Houston Jones from
NASA's Jet Propulsion Laboratory

9
00:00:18,117 --> 00:00:19,519
in Pasadena, California.

10
00:00:20,520 --> 00:00:22,655
The new year starts with
a beautiful view of

11
00:00:22,688 --> 00:00:24,657
the moon, Venus and Mars

12
00:00:24,690 --> 00:00:28,027
on January 1st, 2nd and 3rd.

13
00:00:28,060 --> 00:00:30,997
Venus shines at its
brightest in many years.

14
00:00:31,030 --> 00:00:36,002
Through a telescope you'll see
the disk 56% lit on January 1st,

15
00:00:36,035 --> 00:00:37,670
half lit on the 14th,

16
00:00:37,703 --> 00:00:40,506
decreasing to 40%
by month's end.

17
00:00:40,539 --> 00:00:41,240
Whoosh.

18
00:00:41,273 --> 00:00:43,843
Most meteor showers radiate from

19
00:00:43,876 --> 00:00:46,179
recognizable constellations

20
00:00:46,212 --> 00:00:48,281
like Leo's Leonids,

21
00:00:48,314 --> 00:00:50,016
Gemini's Geminids

22
00:00:50,049 --> 00:00:52,585
and Orion's Orionids.

23
00:00:52,618 --> 00:00:54,320
But the Quadrantids
are meteors that

24

00:00:54,353 --> 00:00:57,523
appear to radiate from the
location of the former

25
00:00:57,556 --> 00:01:00,026
Quadrans Muralis constellation.

26
00:01:00,059 --> 00:01:03,896
In the early 1920s the
International Astronomical Union

27
00:01:03,929 --> 00:01:07,333
divided up the sky into
official constellations.

28
00:01:07,366 --> 00:01:09,602
88 constellations remained,

29
00:01:09,635 --> 00:01:12,071
but over 30 historical
constellations

30
00:01:12,104 --> 00:01:13,539
didn't make the cut.

31
00:01:13,572 --> 00:01:16,542
The Quadrans Muralis area
of the sky is within

32
00:01:16,575 --> 00:01:20,613
the boundaries of the official
constellation Boötes.

33
00:01:20,646 --> 00:01:24,183
The Quadrantids peak lasts
for just a few hours.

34
00:01:24,216 --> 00:01:27,053
Meteor showers are usually
the residue that collects

35
00:01:27,086 --> 00:01:28,521
in the orbits of comets.

36
00:01:28,554 --> 00:01:32,391
The Quadrantids are
associated with an asteroid --

37
00:01:32,424 --> 00:01:35,161
2003 EH1.

38
00:01:35,194 --> 00:01:37,730
It is thought to be
the nucleus fragment

39
00:01:37,763 --> 00:01:40,733
from a comet break-up
in the 1490s.

40
00:01:40,766 --> 00:01:42,401
It was classified as an asteroid

41
00:01:42,434 --> 00:01:43,903
when it was discovered by

42
00:01:43,936 --> 00:01:47,773
a near-Earth asteroid
telescopic survey in 2003.

43
00:01:47,806 --> 00:01:48,841
Whoosh.

44
00:01:48,874 --> 00:01:51,210
Two other notable objects
are visible this month

45
00:01:51,243 --> 00:01:53,179
through telescopes
and binoculars.

46
00:01:53,212 --> 00:01:56,382
Comet 45P is visible
just after sunset

47
00:01:56,415 --> 00:01:57,917
at the beginning of the month

48
00:01:57,950 --> 00:02:00,453
very low in the
southwestern sky,

49
00:02:00,486 --> 00:02:04,457
and will be visible just
before sunrise by month's end.

50
00:02:04,490 --> 00:02:07,059
Vesta, the brightest of
all the asteroids,

51
00:02:07,092 --> 00:02:09,095
is visible all month long,

52
00:02:09,128 --> 00:02:11,631
reaching opposition and
its peak of brightness

53
00:02:11,664 --> 00:02:13,733
on January 17th.

54
00:02:13,766 --> 00:02:17,737
Use Gemini's twin stars Castor
and Pollux to find Vesta.

55
00:02:18,738 --> 00:02:20,773
You can catch up on
solar system missions

56
00:02:20,806 --> 00:02:25,478

and all of NASA's missions
at www.nasa.gov.

57
00:02:26,378 --> 00:02:27,446
That's all for this month,