

A space-themed background featuring several celestial bodies: Mars in the upper left, Saturn on the left, Jupiter on the right, and the Moon at the bottom. The text is overlaid on this scene.

WHAT'S UP

SKYWATCHING HIGHLIGHTS

JANUARY 2022



1
00:00:04,710 --> 00:00:02,790
[Music]

2
00:00:06,789 --> 00:00:04,720
what's up for january

3
00:00:08,470 --> 00:00:06,799
new year new moon

4
00:00:10,709 --> 00:00:08,480
midnight meteors

5
00:00:13,190 --> 00:00:10,719
and mars rises

6
00:00:15,110 --> 00:00:13,200
january begins with a new moon on the

7
00:00:16,870 --> 00:00:15,120
second and that means the first week of

8
00:00:18,630 --> 00:00:16,880
the month is ideal for stargazing

9
00:00:21,029 --> 00:00:18,640
because the few days before and after

10
00:00:23,349 --> 00:00:21,039
the new moon are the darkest head

11
00:00:25,509 --> 00:00:23,359
outside around 8 or 9 pm all week and

12
00:00:27,990 --> 00:00:25,519
look southward to be dazzled by all the

13
00:00:31,189 --> 00:00:28,000

bright stars of the winter circle along

14

00:00:33,430 --> 00:00:31,199

with the pleiades and orion

15

00:00:35,590 --> 00:00:33,440

the quadrantid meteor shower peaks on

16

00:00:36,709 --> 00:00:35,600

the night of january 2nd and the morning

17

00:00:38,069 --> 00:00:36,719

of the third

18

00:00:39,750 --> 00:00:38,079

this tends to be one of the better

19

00:00:41,350 --> 00:00:39,760

meteor showers of the year and often

20

00:00:42,950 --> 00:00:41,360

produces a number of bright meteors

21

00:00:44,790 --> 00:00:42,960

called fireballs

22

00:00:46,630 --> 00:00:44,800

this year the peak coincides with the

23

00:00:48,869 --> 00:00:46,640

new moon making for great viewing

24

00:00:50,549 --> 00:00:48,879

conditions provided the skies are clear

25

00:00:52,229 --> 00:00:50,559

you should be able to see a few meteors

26
00:00:53,110 --> 00:00:52,239
on the couple of nights before and after

27
00:00:55,029 --> 00:00:53,120
as well

28
00:00:56,950 --> 00:00:55,039
for the best quadranted meteor viewing

29
00:00:58,869 --> 00:00:56,960
find a dark location away from bright

30
00:01:01,270 --> 00:00:58,879
city lights point your feet roughly

31
00:01:03,110 --> 00:01:01,280
toward the northeast and look up

32
00:01:05,429 --> 00:01:03,120
the meteors appear to radiate from the

33
00:01:07,910 --> 00:01:05,439
constellation bo otis which includes the

34
00:01:09,510 --> 00:01:07,920
bright star arcturus but they can appear

35
00:01:11,190 --> 00:01:09,520
anywhere in the sky

36
00:01:13,350 --> 00:01:11,200
generally the best viewing will be after

37
00:01:14,870 --> 00:01:13,360
midnight once boots rises above your

38
00:01:16,469 --> 00:01:14,880

local horizon

39

00:01:19,990 --> 00:01:16,479

the source of the quadrantids is thought

40

00:01:22,550 --> 00:01:20,000

to be the asteroid 2003 eh1 which might

41

00:01:24,469 --> 00:01:22,560

actually be an extinct comet so start

42

00:01:27,030 --> 00:01:24,479

off your new year by catching a few

43

00:01:28,950 --> 00:01:27,040

shooting stars after midnight on january

44

00:01:30,950 --> 00:01:28,960

3rd

45

00:01:31,990 --> 00:01:30,960

finally a couple of highlights at dusk

46

00:01:34,390 --> 00:01:32,000

and dawn

47

00:01:36,310 --> 00:01:34,400

on january 5th look to the southwest

48

00:01:37,830 --> 00:01:36,320

after sunset to find the crescent moon

49

00:01:38,870 --> 00:01:37,840

in a close pairing with brilliant

50

00:01:40,550 --> 00:01:38,880

jupiter

51
00:01:42,069 --> 00:01:40,560
the two will be only about four degrees

52
00:01:44,469 --> 00:01:42,079
apart which should make them appear

53
00:01:46,789 --> 00:01:44,479
together through most binoculars then at

54
00:01:48,710 --> 00:01:46,799
the end of the month on january 29th if

55
00:01:51,109 --> 00:01:48,720
you happen to be up early you can catch

56
00:01:52,950 --> 00:01:51,119
sight of the moon near the red planet

57
00:01:55,270 --> 00:01:52,960
joining the pair in the southeastern sky

58
00:01:57,670 --> 00:01:55,280
will be venus having left the evening

59
00:02:00,550 --> 00:01:57,680
skies last month venus is now rising

60
00:02:02,630 --> 00:02:00,560
before the sun as the morning star

61
00:02:04,389 --> 00:02:02,640
now mars is slowly returning to view

62
00:02:06,950 --> 00:02:04,399
after passing behind the sun over the

63
00:02:08,550 --> 00:02:06,960

past few months in fact nasa stops

64

00:02:10,550 --> 00:02:08,560

communicating with our spacecraft at

65

00:02:12,550 --> 00:02:10,560

mars for about two weeks every two years

66

00:02:13,350 --> 00:02:12,560

when the planet is directly opposite the

67

00:02:15,589 --> 00:02:13,360

sun

68

00:02:17,589 --> 00:02:15,599

that event called solar conjunction took

69

00:02:19,750 --> 00:02:17,599

place back in october

70

00:02:21,430 --> 00:02:19,760

mars will continue to brighten and climb

71

00:02:23,430 --> 00:02:21,440

higher over the next few months where

72

00:02:25,270 --> 00:02:23,440

it'll have super close conjunctions with

73

00:02:28,630 --> 00:02:25,280

saturn and jupiter which we'll tell you

74

00:02:30,229 --> 00:02:28,640

about in future videos so stay tuned

75

00:02:33,270 --> 00:02:30,239

here are the phases of the moon for

76

00:02:36,710 --> 00:02:34,949

stay up to date with all of nasa's

77

00:02:38,869 --> 00:02:36,720

missions to explore the solar system and

78

00:02:40,470 --> 00:02:38,879

beyond at nasa.gov

79

00:02:42,390 --> 00:02:40,480

i'm preston dykes from nasa's jet