(total lunar eclipse)

Credit: liquidcrash via Flickr

1
00:00:04,550 --> 00:00:02,629
[Music]

2
00:00:08,150 --> 00:00:04,560
what's up for november

3
00:00:11,110 --> 00:00:08,160
sunset planets a partial lunar eclipse

4
00:00:13,509 --> 00:00:11,120
and the return of the winter stars

5
00:00:16,070 --> 00:00:13,519
from november 6 through the 11th watch

6
00:00:17,670 --> 00:00:16,080
the moon glide past venus saturn and

7
00:00:19,189 --> 00:00:17,680
jupiter after sunset in the

8
00:00:21,029 --> 00:00:19,199
south-southwest

9
00:00:23,269 --> 00:00:21,039
in particular if you step outside for a

10
00:00:25,589 --> 00:00:23,279
look on november 7th you'll find the

11
00:00:27,910 --> 00:00:25,599
four-day-old crescent moon just about

12
00:00:30,470 --> 00:00:27,920
two degrees away from venus should be

13
00:00:32,229 --> 00:00:30,480

really pretty so don't miss it and now

14
00:00:34,069 --> 00:00:32,239
through early december you'll find

15
00:00:37,430 --> 00:00:34,079
jupiter and saturn drawing a little

16
00:00:39,910 --> 00:00:37,440
closer to venus each night

17
00:00:42,310 --> 00:00:39,920
a partial lunar eclipse is on the way

18
00:00:44,310 --> 00:00:42,320
taking place overnight on november 18th

19
00:00:46,869 --> 00:00:44,320
and 19th when the moon slips into

20
00:00:48,549 --> 00:00:46,879
earth's shadow for a couple of hours

21
00:00:50,389 --> 00:00:48,559
weather permitting the eclipse will be

22
00:00:51,990 --> 00:00:50,399
visible from any location where the moon

23
00:00:54,150 --> 00:00:52,000
appears above the horizon during the

24
00:00:55,990 --> 00:00:54,160
eclipse depending on your time zone

25
00:00:58,310 --> 00:00:56,000
it'll occur earlier or later in the

26
00:00:59,750 --> 00:00:58,320
evening for you now that's a huge swath

27
00:01:01,990 --> 00:00:59,760
of the planet that will be able to see

28
00:01:04,630 --> 00:01:02,000
at least part of the eclipse including

29
00:01:06,870 --> 00:01:04,640
north and south america eastern asia

30
00:01:08,630 --> 00:01:06,880
australia and the pacific region so

31
00:01:09,990 --> 00:01:08,640
check the timing of its visibility for

32
00:01:12,469 --> 00:01:10,000
your area

33
00:01:14,630 --> 00:01:12,479
for u.s east coast observers the partial

34
00:01:17,270 --> 00:01:14,640
eclipse begins a little after 2 am

35
00:01:19,030 --> 00:01:17,280
reaching its maximum at 4 in the morning

36
00:01:21,270 --> 00:01:19,040
for observers on the west coast that

37
00:01:23,510 --> 00:01:21,280
translates to beginning just after 11 pm

38
00:01:25,510 --> 00:01:23,520

with a maximum at 1 am

39
00:01:27,590 --> 00:01:25,520
partial lunar eclipses might not be

40
00:01:29,590 --> 00:01:27,600
quite as spectacular as total lunar

41
00:01:31,910 --> 00:01:29,600
eclipses where the moon is completely

42
00:01:34,230 --> 00:01:31,920
covered in earth's shadow but they occur

43
00:01:36,230 --> 00:01:34,240
more frequently and that just means more

44
00:01:38,469 --> 00:01:36,240
opportunities to witness little changes

45
00:01:41,190 --> 00:01:38,479
in our solar system that sometimes occur

46
00:01:43,270 --> 00:01:41,200
right before our eyes

47
00:01:45,350 --> 00:01:43,280
all month long if you're up late and

48
00:01:47,270 --> 00:01:45,360
cast your gaze toward the east you'll

49
00:01:49,510 --> 00:01:47,280
notice some familiar companions have

50
00:01:51,749 --> 00:01:49,520
begun rising late in the night

51
00:01:54,149 --> 00:01:51,759
the familiar stars of northern winter

52
00:01:56,630 --> 00:01:54,159
skies are returning rising late at night

53
00:01:58,709 --> 00:01:56,640
and sitting high in the south by dawn

54
00:02:00,789 --> 00:01:58,719
you'll find the pleiades star cluster

55
00:02:03,590 --> 00:02:00,799
leading the constellations taurus the

56
00:02:05,990 --> 00:02:03,600
bull and the hunter orion followed by

57
00:02:07,670 --> 00:02:06,000
the brightest star in the sky sirius

58
00:02:09,190 --> 00:02:07,680
all of them back to keep us company on

59
00:02:10,790 --> 00:02:09,200
the long winter nights here in the

60
00:02:12,470 --> 00:02:10,800
northern hemisphere

61
00:02:14,309 --> 00:02:12,480
and for those in the southern hemisphere

62
00:02:16,229 --> 00:02:14,319
they're keeping you company on shorter

63
00:02:17,270 --> 00:02:16,239

nights as spring gives way to summer

64
00:02:19,110 --> 00:02:17,280
there

65
00:02:21,270 --> 00:02:19,120
a fun note about the pleiades this month

66
00:02:23,750 --> 00:02:21,280
is that several of the eight asteroids

67
00:02:26,229 --> 00:02:23,760
to be visited by nasa's lucy mission are

68
00:02:28,390 --> 00:02:26,239
located in that part of the sky the lucy

69
00:02:30,309 --> 00:02:28,400
spacecraft launched on october 16th on

70
00:02:32,470 --> 00:02:30,319
its 12-year mission to visit a bunch of

71
00:02:34,309 --> 00:02:32,480
special asteroids called the trojans

72
00:02:35,670 --> 00:02:34,319
they share the orbit of jupiter with a

73
00:02:37,670 --> 00:02:35,680
group of them leading the planet and

74
00:02:39,670 --> 00:02:37,680
another group following behind it

75
00:02:41,910 --> 00:02:39,680
lucy will be the first space mission to

76
00:02:43,430 --> 00:02:41,920
explore this unique group of asteroids

77
00:02:45,509 --> 00:02:43,440
providing new insights about the

78
00:02:47,270 --> 00:02:45,519
formation and early history of our solar

79
00:02:48,869 --> 00:02:47,280
system

80
00:02:51,750 --> 00:02:48,879
here are the phases of the moon for

81
00:02:53,430 --> 00:02:51,760
november

82
00:02:55,270 --> 00:02:53,440
you can catch up on all of nasa's

83
00:02:57,670 --> 00:02:55,280
missions to explore the solar system and

84
00:02:59,270 --> 00:02:57,680
beyond at nasa.gov

85
00:03:01,350 --> 00:02:59,280
i'm preston dykes from nasa's jet

86
00:03:03,080 --> 00:03:01,360
propulsion laboratory and that's what's