

1
00:00:01,899 --> 00:00:09,230
[Music]

2
00:00:06,200 --> 00:00:16,289
your guide to constellations deep-sky

3
00:00:09,230 --> 00:00:20,000
objects planets and events tonight's sky

4
00:00:16,289 --> 00:00:32,620
highlights of the October sky

5
00:00:20,000 --> 00:00:32,619
[Music]

6
00:00:33,920 --> 00:00:39,179
Saturn is the highlight of early

7
00:00:36,479 --> 00:00:42,269
evenings in October

8
00:00:39,179 --> 00:00:42,269
[Music]

9
00:00:52,090 --> 00:00:58,040
find it shining in the southwestern sky

10
00:00:55,308 --> 00:01:00,169
then use a telescope to spy its

11
00:00:58,039 --> 00:01:10,069
beautiful rings

12
00:01:00,170 --> 00:01:10,069
[Music]

13
00:01:12,540 --> 00:01:16,849
[Music]

14
00:01:19,810 --> 00:01:24,978
[Music]

15
00:01:21,879 --> 00:01:27,798
Pegasus the great winged horse of Greek

16
00:01:24,978 --> 00:01:31,969
mythology prances across the autumn

17
00:01:27,799 --> 00:01:36,200
night sky his body is denoted by a large

18
00:01:31,969 --> 00:01:38,019
area of stars known as the great square

19
00:01:36,200 --> 00:01:42,469
[Music]

20
00:01:38,019 --> 00:01:44,868
Pegasus hosts 51 pegasi the first

21
00:01:42,469 --> 00:01:48,590
sun-like star known to have an

22
00:01:44,868 --> 00:01:52,069
extrasolar planet the brightest corner

23
00:01:48,590 --> 00:01:54,460
of the great square alpheratz is also

24
00:01:52,069 --> 00:01:57,460
the brightest star in the constellation

25
00:01:54,459 --> 00:01:57,459
Andromeda

26
00:02:01,200 --> 00:02:07,650
[Music]

27
00:02:03,950 --> 00:02:10,560
in Greek mythology this princess was

28
00:02:07,650 --> 00:02:13,980
chained to a rock near the sea to

29

00:02:10,560 --> 00:02:17,430
appease a sea monster within Andromeda's

30
00:02:13,979 --> 00:02:22,259
boundaries look for m31 the Andromeda

31
00:02:17,430 --> 00:02:26,010
galaxy an island of billions of stars on

32
00:02:22,259 --> 00:02:30,120
a clear dark night it appears as a faint

33
00:02:26,009 --> 00:02:32,269
smudge of light approximately 2.5

34
00:02:30,120 --> 00:02:36,659
million light years away

35
00:02:32,270 --> 00:02:39,810
m31 is the closest spiral galaxy to our

36
00:02:36,659 --> 00:02:42,419
own Milky Way galaxy and the most

37
00:02:39,810 --> 00:02:45,239
distant object you can see with your

38
00:02:42,419 --> 00:02:48,839
eyes alone binoculars and small

39
00:02:45,239 --> 00:02:52,080
telescopes reveal m30 ones glowing

40
00:02:48,840 --> 00:02:56,789
nucleus and spiral arms a smaller

41
00:02:52,080 --> 00:03:00,090
companion galaxy m110 appears as a faint

42
00:02:56,789 --> 00:03:04,798
spot near the large galaxy the Andromeda

43
00:03:00,090 --> 00:03:07,709

galaxy is slowly pulling in and will

44

00:03:04,799 --> 00:03:11,290

eventually consume another one of its

45

00:03:07,709 --> 00:03:22,330

small companion galaxies m32

46

00:03:11,289 --> 00:03:26,629

[Music]

47

00:03:22,330 --> 00:03:30,060

in early October Mars and Venus rise

48

00:03:26,629 --> 00:03:37,019

together in the eastern sky before dawn

49

00:03:30,060 --> 00:03:37,020

[Music]

50

00:03:37,960 --> 00:03:43,909

the two planets appear to converge on

51

00:03:41,270 --> 00:03:48,520

the morning of October 5th but slowly

52

00:03:43,909 --> 00:03:48,520

move apart as the month goes on

53

00:03:49,629 --> 00:04:00,709

[Music]

54

00:04:01,560 --> 00:04:15,069

the Orionid meteor shower peaks on the

55

00:04:05,169 --> 00:04:17,669

night of October 21st to the 22nd after

56

00:04:15,069 --> 00:04:24,670

midnight look to the east where the

57

00:04:17,670 --> 00:04:28,150

constellation Orion is rising every few

58
00:04:24,670 --> 00:04:31,390
minutes you may spy a tiny remnant of

59
00:04:28,149 --> 00:04:39,549
Halley's Comet burning up high in the

60
00:04:31,389 --> 00:04:41,819
atmosphere the night sky is always a

61
00:04:39,550 --> 00:04:43,980
celestial showcase

62
00:04:41,819 --> 00:04:46,540
[Music]

63
00:04:43,980 --> 00:04:48,689
explore its wonders from your own

64
00:04:46,540 --> 00:04:48,689
backyard

65
00:04:49,459 --> 00:04:53,778
[Music]

66
00:04:56,699 --> 00:05:07,870
[Music]

67
00:05:05,810 --> 00:05:07,870
you