

1  
00:00:01,899 --> 00:00:06,380  
[Music]

2  
00:00:07,009 --> 00:00:15,359  
your guide to constellations deep-sky

3  
00:00:10,250 --> 00:00:18,609  
objects planets and events tonight's sky

4  
00:00:15,359 --> 00:00:35,079  
highlights of the October sky

5  
00:00:18,609 --> 00:00:37,960  
[Music]

6  
00:00:35,079 --> 00:00:42,189  
planets begin to depart the evening sky

7  
00:00:37,960 --> 00:00:44,620  
as chilly October winds blow Mars and

8  
00:00:42,189 --> 00:00:47,969  
Saturn still dominate the southern sky

9  
00:00:44,619 --> 00:00:51,789  
Mars in Capricornus and Saturn in

10  
00:00:47,969 --> 00:00:53,948  
Sagittarius the waxing moon travels

11  
00:00:51,789 --> 00:00:57,128  
between the two in the middle of the

12  
00:00:53,948 --> 00:01:01,238  
month a modest telescope reveals the

13  
00:00:57,128 --> 00:01:04,149  
Rings orbiting Saturn the orange disk of

14  
00:01:01,238 --> 00:01:06,670  
Mars decreases in size and its features

15  
00:01:04,149 --> 00:01:09,129  
fade from view as its distance from

16  
00:01:06,670 --> 00:01:11,368  
Earth increases over the course of the

17  
00:01:09,129 --> 00:01:11,368  
month

18  
00:01:12,540 --> 00:01:16,849  
[Music]

19  
00:01:19,769 --> 00:01:32,488  
[Music]

20  
00:01:32,719 --> 00:01:38,578  
Pegasus the great winged horse of Greek

21  
00:01:36,030 --> 00:01:43,140  
mythology prances across the autumn

22  
00:01:38,578 --> 00:01:46,629  
night sky his body is denoted by a large

23  
00:01:43,140 --> 00:01:48,799  
area of stars known as the Great Square

24  
00:01:46,629 --> 00:01:53,039  
[Music]

25  
00:01:48,799 --> 00:01:55,200  
Pegasus hosts 51 pegasi the first

26  
00:01:53,039 --> 00:01:59,460  
sun-like star known to have an

27  
00:01:55,200 --> 00:02:02,728  
extrasolar planet the brightest corner

28  
00:01:59,459 --> 00:02:04,639  
of the great square alpheratz is also

29

00:02:02,728 --> 00:02:06,340  
the brightest star in the constellation

30  
00:02:04,640 --> 00:02:12,248  
Andromeda

31  
00:02:06,340 --> 00:02:12,248  
[Music]

32  
00:02:16,699 --> 00:02:22,858  
in Greek mythology this princess was

33  
00:02:20,459 --> 00:02:26,009  
chained to a rock near the sea to

34  
00:02:22,859 --> 00:02:29,010  
appease a sea monster within Andromeda's

35  
00:02:26,009 --> 00:02:33,090  
boundaries look for m31 the Andromeda

36  
00:02:29,009 --> 00:02:36,688  
galaxy an island of billions of stars on

37  
00:02:33,090 --> 00:02:40,859  
a clear dark night it appears as a faint

38  
00:02:36,688 --> 00:02:42,919  
smudge of light approximately 2.5

39  
00:02:40,859 --> 00:02:47,219  
million light years away

40  
00:02:42,919 --> 00:02:50,039  
m31 is the closest spiral galaxy to our

41  
00:02:47,218 --> 00:02:52,289  
own Milky Way galaxy and the most

42  
00:02:50,039 --> 00:02:55,259  
distant object you can see with your

43  
00:02:52,289 --> 00:02:58,620

eyes alone binoculars and small

44

00:02:55,259 --> 00:03:02,280

telescopes reveal m30 ones glowing

45

00:02:58,620 --> 00:03:06,780

nucleus and spiral arms a smaller

46

00:03:02,280 --> 00:03:10,639

companion galaxy m110 appears as a faint

47

00:03:06,780 --> 00:03:14,280

spot near the large galaxy the Andromeda

48

00:03:10,639 --> 00:03:17,129

galaxy is slowly pulling in and will

49

00:03:14,280 --> 00:03:20,580

eventually consume another one of its

50

00:03:17,128 --> 00:03:32,379

small companion galaxies m32

51

00:03:20,580 --> 00:03:35,750

[Music]

52

00:03:32,379 --> 00:03:39,340

the Orionid meteor shower peaks on the

53

00:03:35,750 --> 00:03:42,469

night of October 21st to the 22nd

54

00:03:39,340 --> 00:03:45,530

however the bright light of the nearly

55

00:03:42,469 --> 00:03:49,460

full moon may wash out all but the

56

00:03:45,530 --> 00:03:51,500

brightest meteors after midnight look to

57

00:03:49,460 --> 00:03:55,969

the east where the constellation Orion

58  
00:03:51,500 --> 00:03:59,330  
is rising every few minutes you may spy

59  
00:03:55,969 --> 00:04:03,229  
a tiny remnant of Halley's comet burning

60  
00:03:59,330 --> 00:04:06,060  
up high in the atmosphere the night sky

61  
00:04:03,229 --> 00:04:08,889  
is always a celestial showcase

62  
00:04:06,060 --> 00:04:11,210  
[Music]

63  
00:04:08,889 --> 00:04:12,829  
explore its wonders from your own

64  
00:04:11,210 --> 00:04:31,079  
backyard

65  
00:04:12,830 --> 00:04:33,139  
[Music]

66  
00:04:31,079 --> 00:04:33,139  
you