

1  
00:00:07,370 --> 00:00:15,449  
your guide to constellations deep-sky

2  
00:00:11,029 --> 00:00:20,570  
objects planets and events tonight's sky

3  
00:00:15,449 --> 00:00:20,570  
highlights of the October sky

4  
00:00:42,649 --> 00:00:49,539  
Venus and Saturn hang over the

5  
00:00:45,530 --> 00:00:49,539  
southwestern horizon after sunset

6  
00:00:52,719 --> 00:00:58,640  
Saturn shines higher in the sky but

7  
00:00:56,088 --> 00:01:01,460  
moves closer to Venus at the end of the

8  
00:00:58,640 --> 00:01:06,670  
month use a telescope to see the phase

9  
00:01:01,460 --> 00:01:06,670  
of Venus and to spy Saturn's rings

10  
00:01:16,129 --> 00:01:22,179  
Mars rains over the southern sky as

11  
00:01:19,280 --> 00:01:22,180  
night falls

12  
00:01:30,780 --> 00:01:37,939  
a telescope may reveal some bright and

13  
00:01:34,079 --> 00:01:37,939  
dark features on the Red Planet

14  
00:02:00,109 --> 00:02:06,420  
Pegasus the great winged horse of Greek

15  
00:02:03,510 --> 00:02:10,319  
mythology prances across the autumn

16  
00:02:06,420 --> 00:02:15,500  
night sky his body is denoted by a large

17  
00:02:10,319 --> 00:02:19,590  
area of stars known as the great square

18  
00:02:15,500 --> 00:02:21,930  
Pegasus hosts 51 pegasi the first

19  
00:02:19,590 --> 00:02:26,189  
sun-like star known to have an

20  
00:02:21,930 --> 00:02:29,610  
extrasolar planet the brightest corner

21  
00:02:26,189 --> 00:02:31,669  
of the great square alharatz is also

22  
00:02:29,610 --> 00:02:34,670  
the brightest star in the constellation

23  
00:02:31,669 --> 00:02:34,669  
Andromeda

24  
00:02:39,568 --> 00:02:45,929  
in Greek mythology this princess was

25  
00:02:43,229 --> 00:02:49,139  
chained to a rock near the sea to

26  
00:02:45,930 --> 00:02:52,530  
appease a sea monster with Andromeda's

27  
00:02:49,139 --> 00:02:57,029  
boundaries look for m31 the Andromeda

28  
00:02:52,530 --> 00:03:00,810  
galaxy an island of billions of stars on

29

00:02:57,030 --> 00:03:04,859  
a clear dark night it appears as a faint

30  
00:03:00,810 --> 00:03:07,250  
smudge of light approximately 2.5

31  
00:03:04,859 --> 00:03:12,000  
million light years away

32  
00:03:07,250 --> 00:03:15,060  
m31 is the closest spiral galaxy to our

33  
00:03:12,000 --> 00:03:17,340  
own Milky Way galaxy and the most

34  
00:03:15,060 --> 00:03:20,250  
distant object you can see with your

35  
00:03:17,340 --> 00:03:23,848  
eyes alone binoculars and small

36  
00:03:20,250 --> 00:03:27,598  
telescopes reveal m30 ones glowing

37  
00:03:23,848 --> 00:03:32,250  
nucleus and spiral arms a smaller

38  
00:03:27,598 --> 00:03:35,848  
companion galaxy m110 appears as a faint

39  
00:03:32,250 --> 00:03:40,019  
spot near the large galaxy the Andromeda

40  
00:03:35,848 --> 00:03:42,688  
galaxy is slowly pulling in and will

41  
00:03:40,019 --> 00:03:48,139  
eventually consume another one of its

42  
00:03:42,688 --> 00:03:48,138  
small companion galaxies m32

43  
00:04:03,250 --> 00:04:08,969

in the early days of october try to

44

00:04:06,250 --> 00:04:19,298

catch mercury low in the eastern sky

45

00:04:08,969 --> 00:04:22,540

right before sunrise mercury will move

46

00:04:19,298 --> 00:04:25,979

closer to the sun and become lost in the

47

00:04:22,540 --> 00:04:25,980

glare as the month progresses

48

00:04:35,939 --> 00:04:42,100

Jupiter takes Mercury's place above the

49

00:04:39,220 --> 00:04:52,630

eastern horizon in the mornings of late

50

00:04:42,100 --> 00:04:57,870

October aim a telescope at the gas

51

00:04:52,629 --> 00:04:57,870

planet to study its dark cloud bands

52

00:05:11,168 --> 00:05:19,448

the Orionid meteor shower peaks on the

53

00:05:14,360 --> 00:05:19,449

night of October 21st to the 22nd

54

00:05:19,478 --> 00:05:28,338

however bright moonlight may wash out

55

00:05:22,788 --> 00:05:30,709

all but the brightest meteors after

56

00:05:28,338 --> 00:05:34,819

midnight look to the east where the

57

00:05:30,709 --> 00:05:37,908

constellation Orion is rising every few

58  
00:05:34,819 --> 00:05:40,968  
minutes you may spy a tiny remnant of

59  
00:05:37,908 --> 00:05:43,088  
Halley's Comet burning up high in the

60  
00:05:40,968 --> 00:05:43,088  
atmosphere

61  
00:05:48,839 --> 00:05:53,319  
the night sky is always a celestial

62  
00:05:52,420 --> 00:05:55,569  
showcase

63  
00:05:53,319 --> 00:05:57,750  
explore its wonders from your own

64  
00:05:55,569 --> 00:05:57,750  
backyard

65  
00:06:14,149 --> 00:06:16,209  
you