

1
00:00:06,919 --> 00:00:10,460
Your guide to constellations, deep-sky objects,

2
00:00:10,460 --> 00:00:15,660
planets, and events.

3
00:00:15,660 --> 00:00:23,759
Tonight's Sky, highlights of the October Sky.

4
00:00:34,240 --> 00:00:43,700
Saturn is the highlight of early evenings in October.

5
00:00:52,679 --> 00:00:55,759
Find it shining in the southwestern sky,

6
00:00:55,759 --> 00:01:04,079
then use a telescope to spy its beautiful rings.

7
00:01:22,140 --> 00:01:25,980
Pegasus, the great winged horse of Greek mythology,

8
00:01:25,980 --> 00:01:29,799
prances across the autumn night sky.

9
00:01:29,799 --> 00:01:34,459
His body is denoted by a large area of stars known as

10
00:01:34,459 --> 00:01:38,359
the "Great Square."

11
00:01:38,359 --> 00:01:44,039
Pegasus hosts 51-Pegasi, the first Sun-like star

12
00:01:44,040 --> 00:01:47,220
known to have an extra-solar planet.

13
00:01:47,219 --> 00:01:51,379
The brightest corner of the Great Square, Alpheratz,

14
00:01:51,379 --> 00:01:53,780
is also the brightest star in the

15
00:01:53,780 --> 00:01:58,680
constellation Andromeda.

16
00:02:04,719 --> 00:02:08,960
In Greek mythology, this princess was chained to a rock

17
00:02:08,960 --> 00:02:12,820
near the sea to appease a sea monster.

18
00:02:12,819 --> 00:02:17,000
Within Andromeda's boundaries, look for
M31,

19
00:02:17,000 --> 00:02:22,259
the Andromeda Galaxy, an island of billions of stars.

20
00:02:22,259 --> 00:02:24,239
On a clear, dark night

21
00:02:24,240 --> 00:02:28,120
it appears as a faint smudge of light.

22
00:02:28,120 --> 00:02:32,300
Approximately 2.5 million light-years away,

23
00:02:32,300 --> 00:02:36,360
M31 is the closest spiral galaxy

24
00:02:36,360 --> 00:02:40,040
to our own Milky Way Galaxy and the most

25
00:02:40,039 --> 00:02:43,620
distant object you can see with your eyes alone.

26
00:02:43,620 --> 00:02:48,219
Binoculars and small telescopes reveal M31's

27
00:02:48,219 --> 00:02:51,520
glowing nucleus and spiral arms.

28
00:02:51,520 --> 00:02:55,380
A smaller companion galaxy, M110,

29
00:02:55,379 --> 00:02:59,759
appears as a faint spot near the large galaxy.

30
00:02:59,759 --> 00:03:04,159
The Andromeda Galaxy is slowly pulling in,

31
00:03:04,159 --> 00:03:06,599
and will eventually consume,

32
00:03:06,599 --> 00:03:16,240
another one of its small companion galaxies, M32.

33
00:03:23,180 --> 00:03:27,540
In early October, Mars and Venus rise together

34
00:03:27,539 --> 00:03:34,259
in the eastern sky before dawn.

35
00:03:38,740 --> 00:03:41,939
The two planets appear to converge on the morning of

36
00:03:41,939 --> 00:03:50,960
October 5 but slowly move apart as the month goes on.

37
00:04:02,360 --> 00:04:05,800
The Orionid meteor shower peaks on the night of

38
00:04:05,800 --> 00:04:11,340
October 21st to the 22nd.

39
00:04:14,560 --> 00:04:17,280
After midnight, look to the east,

40
00:04:17,279 --> 00:04:23,839
where the constellation Orion is rising.

41
00:04:23,839 --> 00:04:28,159
Every few minutes you may spy a tiny remnant of

42
00:04:28,160 --> 00:04:35,860
Halley's Comet burning up high in the atmosphere.

43

00:04:37,240 --> 00:04:44,300

The night sky is always a celestial showcase.

44

00:04:44,300 --> 00:04:53,620

Explore its wonders from your own backyard.