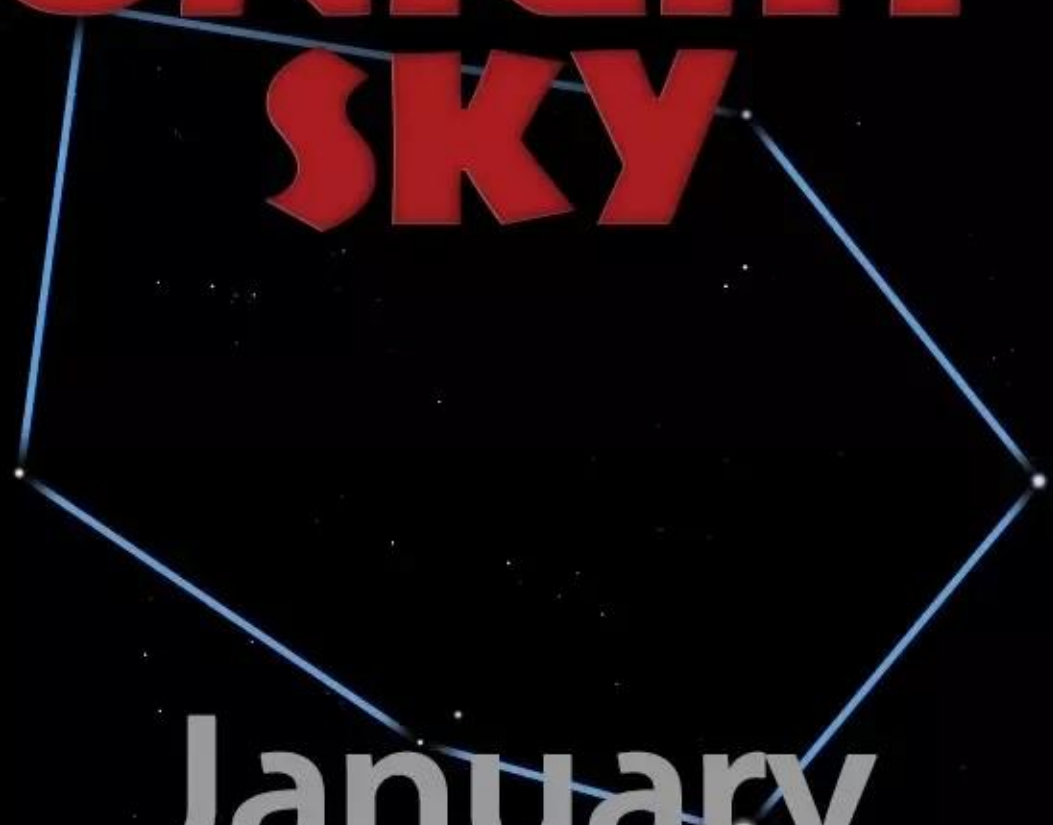
TONIGHT'S SKY



January 2018

1
00:00:06,420 --> 00:00:08,880
Your guide to constellations,

2
00:00:08,880 --> 00:00:14,500
deep-sky objects, planets, and events:

3
00:00:14,500 --> 00:00:22,460
Tonight’s Sky. Highlights of the January sky:

4
00:00:37,300 --> 00:00:44,780
The winter sky is filled with brilliant stars.

5
00:00:44,780 --> 00:00:47,500
An ancient constellation, Auriga was

6
00:00:47,500 --> 00:00:53,040
pictured as a goat herder by the Greeks and Romans.

7
00:00:53,040 --> 00:00:57,060
Auriga is a beautiful circlet of jeweled stars,

8
00:00:57,060 --> 00:01:01,860
gracing the sky overhead.

9
00:01:01,860 --> 00:01:05,120
Capella, the sixth-brightest star in the sky,

10
00:01:05,120 --> 00:01:08,160
is a double star.

11
00:01:08,160 --> 00:01:11,820
The two stars are yellow stars like our own Sun,

12
00:01:11,820 --> 00:01:14,400
but they are about 10 times larger

13
00:01:14,400 --> 00:01:20,340

and 50 and 80 times brighter.

14
00:01:33,800 --> 00:01:41,460
Near Auriga is the large constellation Taurus, the Bull.

15
00:01:41,460 --> 00:01:45,200
In Greek legend, this group of stars represented Zeus

16
00:01:45,200 --> 00:01:51,120
in the disguise of a white bull with golden horns.

17
00:01:51,120 --> 00:01:53,820
His eye is the orange Aldebaran,

18
00:01:53,820 --> 00:02:02,580
a red-giant star nearing the end of its life.

19
00:02:02,580 --> 00:02:06,400
The Bull’s V-shaped head is created by the Hyades,

20
00:02:06,400 --> 00:02:08,880
a beautiful cluster of stars,

21
00:02:08,880 --> 00:02:13,980
easily seen with the naked eye.

22
00:02:19,080 --> 00:02:25,220
The Pleiades star cluster lies near the head of the Bull.

23
00:02:25,220 --> 00:02:28,720
Large and bright, this star cluster is the

24
00:02:28,840 --> 00:02:31,400
best known in the sky and is often called

25
00:02:31,400 --> 00:02:35,360
“the Seven Sisters.”

26
00:02:35,360 --> 00:02:39,260
The unaided eye can see just six or seven stars,

27
00:02:39,260 --> 00:02:50,100
but the Pleiades cluster contains over 250.

28
00:02:50,100 --> 00:02:55,200
Binoculars showcase the cluster at its best.

29
00:02:55,200 --> 00:03:01,180
The stars in this stellar swarm are hot and young.

30
00:03:01,180 --> 00:03:08,940
They are passing through a dusty cloud that reflects their blue light.

31
00:03:24,680 --> 00:03:27,300
Saturn and Mercury rise together

32
00:03:27,300 --> 00:03:30,460
every morning before sunrise.

33
00:03:30,460 --> 00:03:33,640
Over the course of the month, the two planets shift

34
00:03:33,640 --> 00:03:37,660
position in the predawn sky.

35
00:03:37,660 --> 00:03:40,620
They appear to converge in the middle of the month,

36
00:03:40,620 --> 00:03:46,120
and then slowly swap places.

37
00:03:46,120 --> 00:03:47,900
With a backyard telescope,

38
00:03:47,900 --> 00:03:54,060

the two are easy to distinguish.

39
00:04:03,520 --> 00:04:06,040
Bright Jupiter and reddish Mars

40
00:04:06,040 --> 00:04:12,760
rise together a few hours before the Sun.

41
00:04:12,760 --> 00:04:15,140
On the morning of January 6,

42
00:04:15,140 --> 00:04:18,180
they appear less than half a degree apart,

43
00:04:18,180 --> 00:04:20,920
and can be seen in the same field of view

44
00:04:20,920 --> 00:04:27,700
in a backyard telescope.

45
00:04:41,940 --> 00:04:45,200
The Quadrantid meteor shower peaks on the night

46
00:04:45,200 --> 00:04:49,700
spanning January 3 and 4.

47
00:04:49,700 --> 00:04:53,360
Skywatchers who brave the cold might spot up to

48
00:04:53,360 --> 00:04:58,200
40 meteors per hour.