



1  
00:00:04,430 --> 00:00:01,360

[Music]

2  
00:00:06,430 --> 00:00:04,440

what's up for October a night for the

3  
00:00:10,070 --> 00:00:06,440

whole world to observe the moon and

4  
00:00:12,199 --> 00:00:10,080

hunting for ice giants international

5  
00:00:14,509 --> 00:00:12,209

observe the moon night is October 5th

6  
00:00:17,240 --> 00:00:14,519

it's an annual celebration of lunar

7  
00:00:18,710 --> 00:00:17,250

observation and exploration events are

8  
00:00:20,750 --> 00:00:18,720

scheduled in lots of places around the

9  
00:00:22,310 --> 00:00:20,760

world so there may be one near you but

10  
00:00:25,310 --> 00:00:22,320

all you really need to participate is to

11  
00:00:27,110 --> 00:00:25,320

go out and look up the event is time to

12  
00:00:29,360 --> 00:00:27,120

coincide with the first quarter moon

13  
00:00:31,310 --> 00:00:29,370

this allows for some great observing

14

00:00:32,989 --> 00:00:31,320

along the lunar Terminator the line that

15

00:00:35,060 --> 00:00:32,999

divides the day side from the night side

16

00:00:37,459 --> 00:00:35,070

with even a small pair of binoculars you

17

00:00:39,470 --> 00:00:37,469

can see some great details as features

18

00:00:41,810 --> 00:00:39,480

like mountains and craters pop up into

19

00:00:44,389 --> 00:00:41,820

the light learn more and look for events

20

00:00:48,559 --> 00:00:44,399

in your area at [moon.nasa.gov](http://moon.nasa.gov) slash

21

00:00:52,160 --> 00:00:48,569

observe October is a great time to try

22

00:00:53,840 --> 00:00:52,170

and capture an ice giant now these

23

00:00:56,180 --> 00:00:53,850

aren't mythical creatures they're

24

00:00:58,399 --> 00:00:56,190

planets the most distant of the major

25

00:01:01,099 --> 00:00:58,409

planets of our solar system Uranus and

26

00:01:03,919 --> 00:01:01,109

Neptune the four giant planets of our

27

00:01:06,950 --> 00:01:03,929

solar system are not created equal the

28

00:01:09,499 --> 00:01:06,960

gas giants Jupiter and Saturn are much

29

00:01:11,719 --> 00:01:09,509

bigger and way more massive while the

30

00:01:13,490 --> 00:01:11,729

ice giants are so named because they

31

00:01:16,160 --> 00:01:13,500

contain a much higher amount of

32

00:01:17,719 --> 00:01:16,170

materials that typically form ices in

33

00:01:19,730 --> 00:01:17,729

the frigid depths of the outer solar

34

00:01:21,830 --> 00:01:19,740

system in October

35

00:01:24,469 --> 00:01:21,840

both Uranus and Neptune are well placed

36

00:01:26,300 --> 00:01:24,479

in the late night sky in fact you can

37

00:01:27,889 --> 00:01:26,310

see all four giant planets in the same

38

00:01:30,620 --> 00:01:27,899

evening if you look for Jupiter and

39

00:01:32,510 --> 00:01:30,630

Saturn in the west after sunset and then

40

00:01:34,969 --> 00:01:32,520

come back a couple of hours later to

41

00:01:37,730 --> 00:01:34,979

spot Uranus and Neptune think of it as

42

00:01:40,039 --> 00:01:37,740

your own personal Voyager mission NASA's

43

00:01:42,319 --> 00:01:40,049

Voyager 2 is the only spacecraft to have

44

00:01:44,480 --> 00:01:42,329

visited the ice giants so far although

45

00:01:47,359 --> 00:01:44,490

scientists are eager to go back for a

46

00:01:49,639 --> 00:01:47,369

more detailed study the ice giants are

47

00:01:51,440 --> 00:01:49,649

quite faint so the best way to observe

48

00:01:53,450 --> 00:01:51,450

them is with a telescope and from

49

00:01:54,560 --> 00:01:53,460

personal experience it's much easier to

50

00:01:56,120 --> 00:01:54,570

find them if you have a

51  
00:01:57,980 --> 00:01:56,130  
computer-controlled mount that can

52  
00:02:00,380 --> 00:01:57,990  
automatically point the telescope for

53  
00:02:02,450 --> 00:02:00,390  
you if you don't have access to one find

54  
00:02:07,279 --> 00:02:02,460  
a local event with the night sky network

55  
00:02:09,259 --> 00:02:07,289  
at night sky JPL nasa.gov otherwise sky

56  
00:02:11,600 --> 00:02:09,269  
watching apps can help you star hop your

57  
00:02:12,580 --> 00:02:11,610  
way to these two incredibly distant

58  
00:02:14,830 --> 00:02:12,590  
planets

59  
00:02:17,380 --> 00:02:14,840  
now be advised because they're so far

60  
00:02:19,030 --> 00:02:17,390  
away each planet appears as just a point

61  
00:02:22,750 --> 00:02:19,040  
of light but with a modest telescope

62  
00:02:24,580 --> 00:02:22,760  
you'll see Uranus as a tiny disc you'd

63  
00:02:27,280 --> 00:02:24,590

be forgiven for mistaking Neptune as a

64

00:02:30,009 --> 00:02:27,290

star it's the same size as Uranus but

65

00:02:32,350 --> 00:02:30,019

much farther away so it's fainter the

66

00:02:33,940 --> 00:02:32,360

ice giants are elusive but well worth

67

00:02:36,910 --> 00:02:33,950

the effort to say you've seen them with

68

00:02:42,490 --> 00:02:36,920

your own eyes here are the phases of the

69

00:02:44,470 --> 00:02:42,500

Moon for October you can catch up on all

70

00:02:47,380 --> 00:02:44,480

of NASA's current and future missions at

71

00:02:49,059 --> 00:02:47,390

nasa.gov I'm Preston dykes from NASA's