
Saturn
Mars

1
00:00:05,490 --> 00:00:01,760
[Music]

2
00:00:07,980 --> 00:00:05,500
what's up for July how about some moons

3
00:00:11,160 --> 00:00:07,990
with those giant planets Mars after

4
00:00:13,890 --> 00:00:11,170
midnight and are the stars of Mars the

5
00:00:16,589 --> 00:00:13,900
same as ours in the first week of July

6
00:00:17,339 --> 00:00:16,599
enjoy Jupiter Saturn and the moon late

7
00:00:19,499 --> 00:00:17,349
into the night

8
00:00:21,450 --> 00:00:19,509
the trio rises in the couple of hours

9
00:00:23,609 --> 00:00:21,460
after sunset and is well placed for

10
00:00:26,130 --> 00:00:23,619
viewing between about 10 p.m. and 2 a.m.

11
00:00:28,830 --> 00:00:26,140
they form their closest grouping over

12
00:00:30,900 --> 00:00:28,840
the July 4th weekend and as you're

13
00:00:32,880 --> 00:00:30,910

marveling at this celestial celebration

14
00:00:36,270 --> 00:00:32,890
remember you're not just looking at one

15
00:00:37,919 --> 00:00:36,280
moon but well over a hundred at present

16
00:00:40,829 --> 00:00:37,929
count Jupiter and Saturn have a hundred

17
00:00:42,630 --> 00:00:40,839
sixty-one moons between them you can see

18
00:00:44,700 --> 00:00:42,640
Jupiter's four largest moons with a

19
00:00:46,380 --> 00:00:44,710
basic pair of binoculars and at least

20
00:00:49,079 --> 00:00:46,390
one of Saturn's moons with a basic

21
00:00:51,119 --> 00:00:49,089
telescope up close these moons are

22
00:00:55,500 --> 00:00:51,129
richly varied worlds in their own right

23
00:00:58,439 --> 00:00:55,510
with ice-covered oceans volcanoes chasms

24
00:01:02,399 --> 00:00:58,449
and one with an atmosphere and seas of

25
00:01:04,259 --> 00:01:02,409
liquid hydrocarbons NASA's Mars 2020

26
00:01:06,660 --> 00:01:04,269
mission is planned to launch this summer

27
00:01:08,670 --> 00:01:06,670
sending the perseverance Rover and the

28
00:01:10,800 --> 00:01:08,680
first ever Mars helicopter to the Red

29
00:01:13,230 --> 00:01:10,810
Planet so if you're a Mars exploration

30
00:01:16,560 --> 00:01:13,240
fan this month is a great time to spot

31
00:01:18,719 --> 00:01:16,570
Mars yourself in July Mars rises just

32
00:01:21,090 --> 00:01:18,729
before midnight and is visible until

33
00:01:22,980 --> 00:01:21,100
dawn its rising earlier now than it was

34
00:01:24,719 --> 00:01:22,990
a few months ago making it easier for

35
00:01:27,780 --> 00:01:24,729
those who were more night-owls than

36
00:01:29,760 --> 00:01:27,790
early birds just look low in the east

37
00:01:32,609 --> 00:01:29,770
after midnight for a relatively bright

38
00:01:35,160 --> 00:01:32,619

object with a distinct reddish hue and

39
00:01:39,149 --> 00:01:35,170
for an extra treat take a look on July

40
00:01:40,980 --> 00:01:39,159
11th to find the moon very close by you

41
00:01:42,810 --> 00:01:40,990
might not have considered it before but

42
00:01:45,240 --> 00:01:42,820
would it surprise you that the night sky

43
00:01:47,639 --> 00:01:45,250
on Mars is quite similar to Earth's in

44
00:01:49,620 --> 00:01:47,649
many ways sure there's sometimes a lot

45
00:01:51,450 --> 00:01:49,630
of dust in the thin air and there are

46
00:01:54,719 --> 00:01:51,460
too little moons rather than one big one

47
00:01:56,880 --> 00:01:54,729
but the stars we see from Earth are so

48
00:01:58,980 --> 00:01:56,890
very distant that they appear the same

49
00:02:00,450 --> 00:01:58,990
as seen from Mars and you'd have no

50
00:02:02,580 --> 00:02:00,460
trouble finding your favorite

51
00:02:05,639 --> 00:02:02,590
constellations and asterisms like the

52
00:02:08,040 --> 00:02:05,649
Big Dipper plus with no humans there yet

53
00:02:09,450 --> 00:02:08,050
there's absolutely zero light pollution

54
00:02:10,460 --> 00:02:09,460
to interfere with your view of the Milky

55
00:02:12,050 --> 00:02:10,470
Way

56
00:02:14,870 --> 00:02:12,060
one big difference would be the

57
00:02:16,730 --> 00:02:14,880
positions of the planets in the sky and

58
00:02:18,740 --> 00:02:16,740
instead of a ruddy red planet there

59
00:02:21,620 --> 00:02:18,750
would be a dazzling bluish white one to

60
00:02:23,450 --> 00:02:21,630
try and spot while stargazing to see

61
00:02:25,580 --> 00:02:23,460
noticeable changes in the positions of

62
00:02:28,940 --> 00:02:25,590
the stars you'd have to travel much

63
00:02:31,780 --> 00:02:28,950

farther than Mars Jupiter or even Pluto

64
00:02:33,680 --> 00:02:31,790
in fact NASA's new Horizons spacecraft

65
00:02:36,140 --> 00:02:33,690
speeding through the outskirts of the

66
00:02:37,640 --> 00:02:36,150
solar system has only seen the slightest

67
00:02:38,510 --> 00:02:37,650
shift in the positions of a couple of

68
00:02:40,760 --> 00:02:38,520
nearby stars

69
00:02:42,700 --> 00:02:40,770
despite being more than four billion

70
00:02:48,640 --> 00:02:42,710
miles away from Earth

71
00:02:53,030 --> 00:02:51,050
you can catch up on all of NASA's

72
00:02:56,180 --> 00:02:53,040
missions to explore the solar system and

73
00:02:57,560 --> 00:02:56,190
beyond at nasa.gov I'm Preston dykes