

A space-themed background featuring several planets: Mars in the upper left, Saturn on the left, Jupiter on the right, and the Earth's horizon at the bottom. The text is overlaid on this scene.

# WHAT'S UP

SKYWATCHING HIGHLIGHTS

JULY 2023



1  
00:00:04,370 --> 00:00:01,969

[Music]

2  
00:00:07,150 --> 00:00:04,380

what's up for July

3  
00:00:09,830 --> 00:00:07,160

Mars and Venus go their separate ways

4  
00:00:12,709 --> 00:00:09,840

Saturn cruises with a Dusty young star

5  
00:00:14,810 --> 00:00:12,719

and it's prime time for the Milky Way

6  
00:00:17,570 --> 00:00:14,820

you'll find Venus and Mars in the West

7  
00:00:19,730 --> 00:00:17,580

after Sunset throughout July the pair

8  
00:00:21,769 --> 00:00:19,740

moved ever closer in the sky during June

9  
00:00:23,750 --> 00:00:21,779

and they begin July appearing quite near

10  
00:00:25,009 --> 00:00:23,760

to each other but it's time for them to

11  
00:00:26,870 --> 00:00:25,019

part company

12  
00:00:28,910 --> 00:00:26,880

you'll notice them trending lower as the

13  
00:00:31,070 --> 00:00:28,920

month goes on with Venus in particular

14

00:00:32,830 --> 00:00:31,080

being noticeably lower each night

15

00:00:35,150 --> 00:00:32,840

during the second week of July

16

00:00:37,729 --> 00:00:35,160

reddish-colored Mars will appear very

17

00:00:39,709 --> 00:00:37,739

close to the blue white star regulus

18

00:00:41,690 --> 00:00:39,719

Mars is quite distant from Earth right

19

00:00:43,610 --> 00:00:41,700

now and appears at its dimmest for the

20

00:00:45,770 --> 00:00:43,620

year in July and August

21

00:00:47,930 --> 00:00:45,780

this month it appears at about the same

22

00:00:49,670 --> 00:00:47,940

brightness as regulus and you should

23

00:00:51,590 --> 00:00:49,680

easily be able to see the difference in

24

00:00:54,170 --> 00:00:51,600

their color with your eyes or a pair of

25

00:00:57,290 --> 00:00:54,180

binoculars they're closest together on

26

00:00:59,389 --> 00:00:57,300

July 9th and 10th and on the 20th the

27

00:01:02,569 --> 00:00:59,399

moon will pass through appearing just

28

00:01:04,369 --> 00:01:02,579

next to Mars Mercury also pops up quite

29

00:01:08,390 --> 00:01:04,379

low in the sky in the second half of

30

00:01:10,850 --> 00:01:08,400

July for those with views of the horizon

31

00:01:12,710 --> 00:01:10,860

during July you'll have giant planets

32

00:01:14,390 --> 00:01:12,720

Jupiter and Saturn keeping you company

33

00:01:17,030 --> 00:01:14,400

in the late night and early morning

34

00:01:18,649 --> 00:01:17,040

hours and notably you'll find Jupiter

35

00:01:21,469 --> 00:01:18,659

shining brightly beneath the Crescent

36

00:01:23,870 --> 00:01:21,479

Moon on the morning of July 11th now

37

00:01:25,370 --> 00:01:23,880

Jupiter appears quite a bit brighter

38

00:01:27,770 --> 00:01:25,380

than Saturn and it's not just because

39

00:01:29,870 --> 00:01:27,780

Jupiter is a little bigger see the

40

00:01:32,210 --> 00:01:29,880

farther away something is in Space the

41

00:01:33,770 --> 00:01:32,220

fainter it tends to be and Saturn's

42

00:01:36,230 --> 00:01:33,780

certainly farther away from Earth than

43

00:01:38,690 --> 00:01:36,240

Jupiter but it's also farther away from

44

00:01:40,910 --> 00:01:38,700

the Sun and being more distant means it

45

00:01:43,249 --> 00:01:40,920

receives much less sunlight than Jupiter

46

00:01:45,289 --> 00:01:43,259

to begin with so it's a combination of

47

00:01:47,090 --> 00:01:45,299

being both farther from the Sun and

48

00:01:49,010 --> 00:01:47,100

farther from Earth that makes Saturn

49

00:01:51,410 --> 00:01:49,020

appear so much fainter

50

00:01:53,749 --> 00:01:51,420

a Saturn cruises across the sky with

51  
00:01:56,630 --> 00:01:53,759  
bright star fomalhout in July

52  
00:01:59,810 --> 00:01:56,640  
at around 440 million years old fomal

53  
00:02:02,330 --> 00:01:59,820  
hound is a fairly Young Star NASA's web

54  
00:02:04,550 --> 00:02:02,340  
Space Telescope recently revealed new

55  
00:02:07,010 --> 00:02:04,560  
details in the dusty debris disc that

56  
00:02:09,050 --> 00:02:07,020  
surrounds it Webb showed that there's

57  
00:02:11,510 --> 00:02:09,060  
much more structure in the disc than was

58  
00:02:13,850 --> 00:02:11,520  
previously known with three distinct

59  
00:02:16,190 --> 00:02:13,860  
belts made of debris from collisions of

60  
00:02:17,750 --> 00:02:16,200  
larger bodies probably not unlike the

61  
00:02:20,510 --> 00:02:17,760  
asteroids and comets in our own

62  
00:02:22,970 --> 00:02:20,520  
planetary system and researchers think

63  
00:02:25,430 --> 00:02:22,980

the belts most likely are carved by the

64

00:02:28,309 --> 00:02:25,440

gravitational forces produced by unseen

65

00:02:30,890 --> 00:02:28,319

planets it's a nice reminder that most

66

00:02:34,729 --> 00:02:30,900

stars you gaze upon represent entire

67

00:02:36,949 --> 00:02:34,739

planetary systems each one is a sun and

68

00:02:39,050 --> 00:02:36,959

most have a family of worlds in orbit

69

00:02:41,930 --> 00:02:39,060

around them

70

00:02:44,150 --> 00:02:41,940

finally a reminder that July is prime

71

00:02:47,089 --> 00:02:44,160

time for viewing the bright core of our

72

00:02:49,190 --> 00:02:47,099

home galaxy The Milky Way the Milky Way

73

00:02:51,830 --> 00:02:49,200

core is visible looking toward the south

74

00:02:54,830 --> 00:02:51,840

in July as a faint diagonal band of

75

00:02:56,809 --> 00:02:54,840

light as soon as it's fully dark packed

76

00:02:59,270 --> 00:02:56,819

with enormous numbers of stars along

77

00:03:01,430 --> 00:02:59,280

with dark clouds of dust you can view

78

00:03:04,729 --> 00:03:01,440

its faint glow with your own eyes from

79

00:03:06,770 --> 00:03:04,739

locations away from Bright Urban centers

80

00:03:08,990 --> 00:03:06,780

so if you have the opportunity to go

81

00:03:11,390 --> 00:03:09,000

camping or Sky watching away from the

82

00:03:13,490 --> 00:03:11,400

city it's truly one of the most

83

00:03:18,050 --> 00:03:13,500

awe-inspiring sights of the night sky

84

00:03:24,110 --> 00:03:21,890

are the phases of the moon for July

85

00:03:26,270 --> 00:03:24,120

stay up to date with all of nesa's

86

00:03:29,509 --> 00:03:26,280

missions to explore the solar system and

87

00:03:31,250 --> 00:03:29,519

Beyond at [nasa.gov](http://nasa.gov) I'm Preston Dykes