1
00:00:05,250 --> 00:00:01,639
[Music]

2
00:00:08,850 --> 00:00:05,260
what's up for February the best time to

3
00:00:12,029 --> 00:00:08,860
spot Mercury Mars disappears and what's

4
00:00:14,400 --> 00:00:12,039
going on with Betelgeuse the first week

5
00:00:17,130 --> 00:00:14,410
or so of February is a good time to try

6
00:00:18,660 --> 00:00:17,140
and spot the planet Mercury the

7
00:00:20,730 --> 00:00:18,670
innermost planet will be at its highest

8
00:00:22,249 --> 00:00:20,740
elevation above the horizon for the year

9
00:00:25,050 --> 00:00:22,259
for viewers in the northern hemisphere

10
00:00:27,419 --> 00:00:25,060
look very low in the West about half an

11
00:00:28,769 --> 00:00:27,429
hour after sunset the best viewing is at

12
00:00:31,019 --> 00:00:28,779
the end of the first week around

13
00:00:33,930 --> 00:00:31,029

February 6th and 7th when the planet

14
00:00:36,420 --> 00:00:33,940
will be at its brightest on the morning

15
00:00:39,119 --> 00:00:36,430
of February 18th sky watchers in North

16
00:00:41,520 --> 00:00:39,129
America can watch as Mars disappears

17
00:00:44,189 --> 00:00:41,530
behind the moon for about an hour in an

18
00:00:46,170 --> 00:00:44,199
event called an occultation moon mars

19
00:00:48,240 --> 00:00:46,180
occultation czar visible from somewhere

20
00:00:49,889 --> 00:00:48,250
on earth about twice per year but like

21
00:00:51,689 --> 00:00:49,899
eclipses you have to be in the right

22
00:00:53,610 --> 00:00:51,699
place at the right time to catch them

23
00:00:55,830 --> 00:00:53,620
the pair have to be high enough in the

24
00:00:57,599 --> 00:00:55,840
sky to be easily seen and if it's after

25
00:01:00,119 --> 00:00:57,609
sunrise where you are you'll need a

26
00:01:02,279 --> 00:01:00,129
telescope for viewers in the Eastern

27
00:01:04,590 --> 00:01:02,289
time zone the occultation begins soon

28
00:01:06,359 --> 00:01:04,600
after local sunrise but you may be able

29
00:01:08,160 --> 00:01:06,369
to see Mars disappearing behind the moon

30
00:01:10,230 --> 00:01:08,170
with a telescope or good binoculars and

31
00:01:12,690 --> 00:01:10,240
it's still worth looking just before

32
00:01:15,210 --> 00:01:12,700
dawn to see Mars extremely close to the

33
00:01:16,499 --> 00:01:15,220
crescent moon observers in the central

34
00:01:17,940 --> 00:01:16,509
time zone will be able to watch the

35
00:01:20,219 --> 00:01:17,950
beginning of the occultation in the

36
00:01:22,469 --> 00:01:20,229
pre-dawn sky as Mars slips behind the

37
00:01:25,109 --> 00:01:22,479
moon the end of the occultation takes

38
00:01:26,880 --> 00:01:25,119

place after sunrise for you the Mountain

39
00:01:28,560 --> 00:01:26,890
Time Zone has the best viewing as both

40
00:01:30,330 --> 00:01:28,570
the beginning and end of the occultation

41
00:01:32,580 --> 00:01:30,340
take place in your sky before dawn

42
00:01:35,039 --> 00:01:32,590
although the pair will be close to the

43
00:01:36,810 --> 00:01:35,049
horizon at the start of the event and in

44
00:01:38,819 --> 00:01:36,820
the Pacific time zone you'll be able to

45
00:01:40,469 --> 00:01:38,829
see the end of the occultation as Mars

46
00:01:42,359 --> 00:01:40,479
pops back into view from behind the

47
00:01:44,429 --> 00:01:42,369
moon's dark side you'll just need a

48
00:01:47,789 --> 00:01:44,439
clear view low in the southeast sky to

49
00:01:49,440 --> 00:01:47,799
see it finally this month there's been

50
00:01:52,050 --> 00:01:49,450
lots of interest lately in the left

51
00:01:54,090 --> 00:01:52,060
shoulder of Orion specifically the

52
00:01:57,480 --> 00:01:54,100
bright red giant star known as

53
00:01:58,980 --> 00:01:57,490
Betelgeuse in late 2019 Betelgeuse which

54
00:01:59,730 --> 00:01:58,990
is normally one of the brightest stars

55
00:02:02,550 --> 00:01:59,740
in the sky

56
00:02:04,200 --> 00:02:02,560
dimmed quite a bit since this massive

57
00:02:05,819 --> 00:02:04,210
star is known to be of the type that

58
00:02:08,610 --> 00:02:05,829
eventually ends its life in a supernova

59
00:02:10,200 --> 00:02:08,620
explosion many folks have wondered if

60
00:02:12,199 --> 00:02:10,210
the recent dimming is a warning that

61
00:02:14,959 --> 00:02:12,209
Betelgeuse is about to blow

62
00:02:15,440 --> 00:02:14,969
well astronomers say don't hold your

63
00:02:17,630 --> 00:02:15,450

breath

64
00:02:19,459 --> 00:02:17,640
although it could explode tomorrow

65
00:02:21,470 --> 00:02:19,469
astronomers think it's more likely to

66
00:02:23,000 --> 00:02:21,480
happen on a longer timeline probably

67
00:02:25,009 --> 00:02:23,010
more like a hundred thousand years from

68
00:02:26,259 --> 00:02:25,019
now and it's unlikely to signal its

69
00:02:28,429 --> 00:02:26,269
demise in advance

70
00:02:30,289 --> 00:02:28,439
fortunately Betelgeuse is far enough

71
00:02:32,119 --> 00:02:30,299
away that when it does go supernova

72
00:02:34,309 --> 00:02:32,129
we won't experience any negative effects

73
00:02:36,940 --> 00:02:34,319
from it like radiation but it will be

74
00:02:39,199 --> 00:02:36,950
quite brilliant in the skies for weeks

75
00:02:44,000 --> 00:02:39,209
here are the phases of the Moon for

76
00:02:45,770 --> 00:02:44,010
February you can catch up on all of

77
00:02:48,559 --> 00:02:45,780
NASA's current and future missions at

78
00:02:50,089 --> 00:02:48,569
nasa.gov I'm Preston dykes from NASA's

79
00:02:51,230 --> 00:02:50,099
Jet Propulsion Laboratory and that's

80
00:02:58,880 --> 00:02:51,240
what's up for this month