



1
00:00:08,870 --> 00:00:06,619
what's up for August Mars and Saturn

2
00:00:12,140 --> 00:00:08,880
pair up at sunset and Venus and Jupiter

3
00:00:13,759 --> 00:00:12,150
before dawn hello and welcome I'm Jane

4
00:00:17,150 --> 00:00:13,769
Houston Jones from NASA's Jet Propulsion

5
00:00:19,279 --> 00:00:17,160
Laboratory in Pasadena California to

6
00:00:21,519 --> 00:00:19,289
planetary conjunctions are visible to

7
00:00:24,679 --> 00:00:21,529
the unaided eye everywhere this month

8
00:00:26,420 --> 00:00:24,689
Venus will be visible alone at dawn low

9
00:00:29,330 --> 00:00:26,430
on the eastern horizon for the first

10
00:00:31,659 --> 00:00:29,340
week of the month then a week later look

11
00:00:34,639 --> 00:00:31,669
for Jupiter just below brighter Venus

12
00:00:36,950 --> 00:00:34,649
the moon joins the two planets on august

13
00:00:41,119 --> 00:00:36,960

twenty-third making a pretty triangle in

14

00:00:43,400 --> 00:00:41,129

the morning sky a dramatic close pairing

15

00:00:46,790 --> 00:00:43,410

of mars and saturn unfolds all month

16

00:00:49,279 --> 00:00:46,800

long on august 1st through 4th notice

17

00:00:52,069 --> 00:00:49,289

bright mars in the southwest guy between

18

00:00:54,799 --> 00:00:52,079

fainter saturn on one side and Spica on

19

00:00:57,260 --> 00:00:54,809

the other the moon hopscotch us through

20

00:00:58,939 --> 00:00:57,270

the three objects each night moving from

21

00:01:01,209 --> 00:00:58,949

the right of spica on the first of

22

00:01:04,219 --> 00:01:01,219

august to the left of saturn on the 4th

23

00:01:06,050 --> 00:01:04,229

by the end of the month swift Mars's to

24

00:01:10,130 --> 00:01:06,060

the lower left of saturn and the moon

25

00:01:12,109 --> 00:01:10,140

joins the pair on august 31st the Milky

26
00:01:14,480 --> 00:01:12,119
Way of summer comes into view as the sky

27
00:01:16,820 --> 00:01:14,490
darkens an hour or two after sunset on

28
00:01:19,190 --> 00:01:16,830
the night of August twelfth and

29
00:01:21,140 --> 00:01:19,200
thirteenth the moon is visible all night

30
00:01:23,539 --> 00:01:21,150
long competing with the peak of the

31
00:01:25,999 --> 00:01:23,549
perseid meteor shower but don't let that

32
00:01:27,830 --> 00:01:26,009
big bright moon deter you from a fun sky

33
00:01:30,230 --> 00:01:27,840
watching and Perseid meteor watching

34
00:01:33,469 --> 00:01:30,240
night the brightest meteors will be

35
00:01:35,870 --> 00:01:33,479
easily visible despite the moonshine the

36
00:01:38,660 --> 00:01:35,880
Perseids are visible at impressive rates

37
00:01:40,510 --> 00:01:38,670
of up to about 20 per hour for two weeks

38
00:01:42,950 --> 00:01:40,520

before the peak and a week afterwards

39

00:01:45,260 --> 00:01:42,960

that gives weekend campers and

40

00:01:47,719 --> 00:01:45,270

stargazers a good opportunity to see

41

00:01:49,610 --> 00:01:47,729

plenty of Perseids on august weekends

42

00:01:52,190 --> 00:01:49,620

through the 17

43

00:01:55,220 --> 00:01:52,200

aim your binoculars at the Big Dipper

44

00:01:57,830 --> 00:01:55,230

and then star hop to Polaris and on to

45

00:02:01,220 --> 00:01:57,840

the right or east to the nearby w-shaped

46

00:02:03,110 --> 00:02:01,230

constellation cassiopeia from there keep

47

00:02:05,180 --> 00:02:03,120

scanning right and you should be able to

48

00:02:07,400 --> 00:02:05,190

spot the Andromeda galaxy with your

49

00:02:17,060 --> 00:02:07,410

binoculars in the nearby constellation

50

00:02:19,700 --> 00:02:17,070

Andromeda you can learn about how NASA

51

00:02:23,390 --> 00:02:19,710

studies galaxies meteor showers and

52

00:02:26,060 --> 00:02:23,400

about all of NASA's missions at WWDC