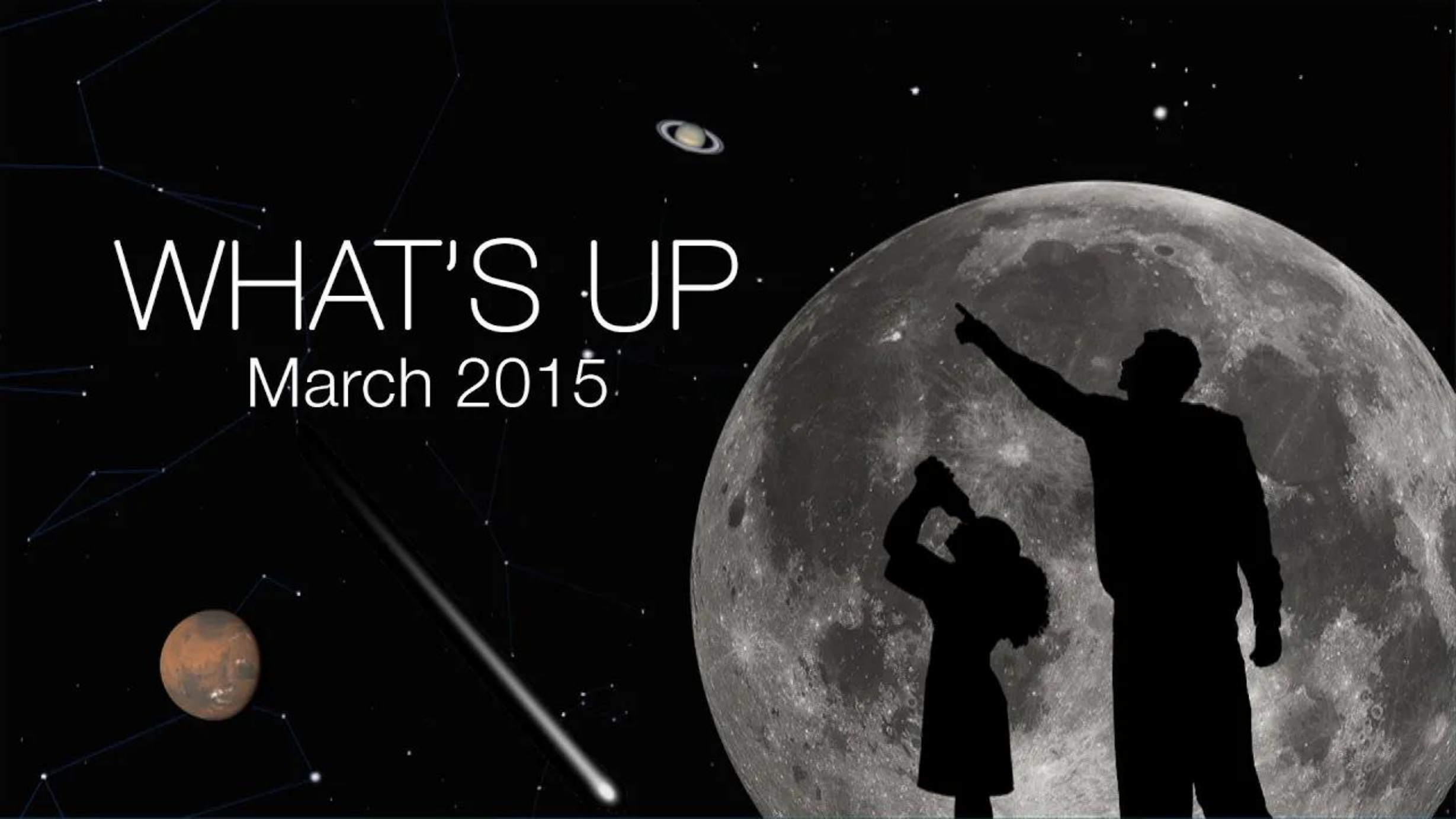


WHAT'S UP

March 2015



1
00:00:08,000 --> 00:00:05,539
what's up for march a total solar

2
00:00:11,060 --> 00:00:08,010
eclipse in the north atlantic and tips

3
00:00:13,039 --> 00:00:11,070
to prepare for the next US eclipse hello

4
00:00:14,870 --> 00:00:13,049
and welcome I'm Jane Houston Jones from

5
00:00:17,810 --> 00:00:14,880
NASA's Jet Propulsion Laboratory in

6
00:00:20,330 --> 00:00:17,820
Pasadena California total eclipses of

7
00:00:23,420 --> 00:00:20,340
the Sun have puzzled an amazed observer

8
00:00:25,550 --> 00:00:23,430
since ancient times an eclipse occurs

9
00:00:27,529 --> 00:00:25,560
when one celestial body appears to

10
00:00:30,140 --> 00:00:27,539
partially or totally block the light

11
00:00:33,709 --> 00:00:30,150
from another celestial object as seen

12
00:00:35,959 --> 00:00:33,719
from a specific location solar eclipses

13
00:00:37,490 --> 00:00:35,969

can only occur during the new moon when

14

00:00:40,610 --> 00:00:37,500

the moon is between the Earth and the

15

00:00:43,549 --> 00:00:40,620

Sun and the Earth Moon and Sun form a

16

00:00:47,450 --> 00:00:43,559

straight line there are four kinds of

17

00:00:56,720 --> 00:00:47,460

solar eclipses total partial annular and

18

00:00:58,639 --> 00:00:56,730

hybrid a total solar eclipse like the

19

00:01:02,209 --> 00:00:58,649

one this month and the one visible in

20

00:01:04,340 --> 00:01:02,219

parts of the US and 2017 can only be

21

00:01:06,890 --> 00:01:04,350

seen from within a narrow track called

22

00:01:08,929 --> 00:01:06,900

the path of totality where the moon

23

00:01:13,160 --> 00:01:08,939

completely blocks our view of the sun's

24

00:01:15,530 --> 00:01:13,170

disk the cone-shaped shadow of the moon

25

00:01:18,260 --> 00:01:15,540

becomes narrower as it extends towards

26

00:01:21,350 --> 00:01:18,270

Earth therefore the path of totality is

27

00:01:25,130 --> 00:01:21,360

narrow typically 10,000 miles long but

28

00:01:27,230 --> 00:01:25,140

only about 100 miles wide the only total

29

00:01:30,980 --> 00:01:27,240

solar eclipse is visible in the u.s. in

30

00:01:33,429 --> 00:01:30,990

the last 40 years were in 1979 visible

31

00:01:39,080 --> 00:01:33,439

in the northwest part of the country in

32

00:01:41,420 --> 00:01:39,090

1991 visible in Hawaii the Babylonians

33

00:01:45,980 --> 00:01:41,430

and ancient Chinese were able to predict

34

00:01:48,679 --> 00:01:45,990

solar eclipses as early as 2500 BC but

35

00:01:50,870 --> 00:01:48,689

it wasn't until 1605 that astronomer

36

00:01:52,990 --> 00:01:50,880

Johannes Kepler made a scientific

37

00:01:55,969 --> 00:01:53,000

observation of a total solar eclipse

38

00:01:58,700 --> 00:01:55,979

more than a century later Edmond Halley

39

00:02:00,830 --> 00:01:58,710

predicted the timing and path of a total

40

00:02:03,370 --> 00:02:00,840

solar eclipse that took place on May

41

00:02:06,290 --> 00:02:03,380

third 1715

42

00:02:08,120 --> 00:02:06,300

that's why amateur astronomers like me

43

00:02:11,180 --> 00:02:08,130

are traveling to the March twentieth

44

00:02:12,800 --> 00:02:11,190

eclipse in the Faroe Islands far out in

45

00:02:16,670 --> 00:02:12,810

the North Sea hundreds of miles from

46

00:02:19,070 --> 00:02:16,680

Iceland Norway in the UK the best place

47

00:02:22,760 --> 00:02:19,080

to find out about all eclipses and where

48

00:02:26,810 --> 00:02:22,770

they are visible is that eclipse gsf

49

00:02:29,690 --> 00:02:26,820

nasa gov learn more about where you can

50

00:02:34,310 --> 00:02:29,700

see the August 2017 eclipse in the u.s.

51

00:02:38,660 --> 00:02:34,320

at Eclipse 2017 org and you can learn

52

00:02:40,940 --> 00:02:38,670

about all of NASA's missions at WWDC gov