



1  
00:00:09,560 --> 00:00:06,380  
solar eclipse in the USA presented by

2  
00:00:12,230 --> 00:00:09,570  
science at NASA mark your calendar on

3  
00:00:15,079 --> 00:00:12,240  
Sunday May twentieth the Sun is going to

4  
00:00:17,570 --> 00:00:15,089  
turn into a ring of fire it's an annular

5  
00:00:20,689 --> 00:00:17,580  
solar eclipse the first one in the USA

6  
00:00:23,029 --> 00:00:20,699  
in almost 18 years an annular eclipse

7  
00:00:25,490 --> 00:00:23,039  
occurs when the moon passes directly in

8  
00:00:27,109 --> 00:00:25,500  
front of the Sun but the lunar disc is

9  
00:00:30,710 --> 00:00:27,119  
not quite wide enough to cover the

10  
00:00:33,530 --> 00:00:30,720  
entire star at maximum the moon forms a

11  
00:00:35,360 --> 00:00:33,540  
black hole in the center of the Sun the

12  
00:00:38,090 --> 00:00:35,370  
path of annual arity is a strip about

13  
00:00:40,880 --> 00:00:38,100

300 kilometers wide and thousands of

14

00:00:43,340 --> 00:00:40,890

kilometers long it stretches from China

15

00:00:45,619 --> 00:00:43,350

and Japan across the Pacific Ocean to

16

00:00:47,779 --> 00:00:45,629

the middle of north america in the

17

00:00:49,880 --> 00:00:47,789

united states the afternoon sun will

18

00:00:52,910 --> 00:00:49,890

become a luminous ring in places such as

19

00:00:55,880 --> 00:00:52,920

Medford Oregon Chico California Reno

20

00:00:58,970 --> 00:00:55,890

Nevada st. George Utah Albuquerque New

21

00:01:00,920 --> 00:00:58,980

Mexico and Lubbock Texas outside of this

22

00:01:03,290 --> 00:01:00,930

relatively narrow zone the eclipse will

23

00:01:04,789 --> 00:01:03,300

be partial observers almost everywhere

24

00:01:06,590 --> 00:01:04,799

west of the Mississippi will see a

25

00:01:09,080 --> 00:01:06,600

crescent-shaped Sun as the moon passes

26

00:01:10,789 --> 00:01:09,090

by off-center I like to compare

27

00:01:13,010 --> 00:01:10,799

different types of eclipses on a scale

28

00:01:15,380 --> 00:01:13,020

of 1 to 10 as visual spectacles says

29

00:01:16,700 --> 00:01:15,390

NASA's leading eclipse expert Fred espa

30

00:01:20,120 --> 00:01:16,710

neck of the Goddard Space Flight Center

31

00:01:23,240 --> 00:01:20,130

if a partial eclipse is a 5 then an

32

00:01:24,800 --> 00:01:23,250

annular eclipse is at nine this event

33

00:01:27,649 --> 00:01:24,810

should not be confused with the total

34

00:01:29,510 --> 00:01:27,659

eclipse in a total eclipse the moon

35

00:01:31,730 --> 00:01:29,520

covers the entire surface of the Sun

36

00:01:33,499 --> 00:01:31,740

bringing an eerie Twilight to observers

37

00:01:36,530 --> 00:01:33,509

in the path of totality and revealing

38

00:01:39,050 --> 00:01:36,540

the sun's ghostly Corona on that scale

39

00:01:41,539 --> 00:01:39,060

of one to ten he adds a total eclipse is

40

00:01:43,550 --> 00:01:41,549

a million it's completely off the charts

41

00:01:46,760 --> 00:01:43,560

compared to any other astronomical event

42

00:01:49,850 --> 00:01:46,770

the next total eclipse in the USA is in

43

00:01:52,789 --> 00:01:49,860

the year 2017 until then may twentieth

44

00:01:54,679 --> 00:01:52,799

of this year we'll have to do annular

45

00:01:57,859 --> 00:01:54,689

eclipses have a special charm all their

46

00:02:00,499 --> 00:01:57,869

own during an annular eclipse sunbeams

47

00:02:02,270 --> 00:02:00,509

turn into little rings of light the best

48

00:02:04,550 --> 00:02:02,280

place to see this is on the Sun dappled

49

00:02:06,280 --> 00:02:04,560

ground beneath the leafy tree hundreds

50

00:02:08,719 --> 00:02:06,290

of circular shadows can be found there

51  
00:02:10,430 --> 00:02:08,729  
you can also make a handy solar

52  
00:02:12,949 --> 00:02:10,440  
projector by Criss crossing your fingers

53  
00:02:13,460 --> 00:02:12,959  
waffle style rays of light beaming

54  
00:02:14,930 --> 00:02:13,470  
through the

55  
00:02:17,840 --> 00:02:14,940  
apps will have the same shape as the

56  
00:02:19,790 --> 00:02:17,850  
Eclipse son be careful when looking

57  
00:02:22,310 --> 00:02:19,800  
directly at the Eclipse son cautions s

58  
00:02:25,100 --> 00:02:22,320  
panic the ring of sunlight during annual

59  
00:02:26,660 --> 00:02:25,110  
arity is blindingly bright even though

60  
00:02:28,820 --> 00:02:26,670  
as much as ninety-four percent of the

61  
00:02:30,950 --> 00:02:28,830  
sun's disk will be covered you still

62  
00:02:33,530 --> 00:02:30,960  
need to use a solar filter or some type

63  
00:02:35,960 --> 00:02:33,540

of projection technique a number 14

64

00:02:37,400 --> 00:02:35,970

welder's glass is a good choice there

65

00:02:40,340 --> 00:02:37,410

are also many commercially available

66

00:02:42,140 --> 00:02:40,350

solar filters one of the unique things

67

00:02:44,420 --> 00:02:42,150

about this eclipse for watches in the

68

00:02:46,820 --> 00:02:44,430

USA is that the Sun will still be in

69

00:02:47,840 --> 00:02:46,830

deep partial eclipse at sunset making

70

00:02:50,660 --> 00:02:47,850

for some great photographic

71

00:02:52,940 --> 00:02:50,670

opportunities he continues in western

72

00:02:55,699 --> 00:02:52,950

Texas around Lubbock the Sun actually

73

00:02:57,400 --> 00:02:55,709

sets during the annular phase a swollen

74

00:03:00,110 --> 00:02:57,410

red Sun with a black hole in the middle

75

00:03:02,900 --> 00:03:00,120

maybe nine out of ten isn't so bad after

76

00:03:05,750 --> 00:03:02,910

all for more news about strangely shaped