



1
00:00:06,470 --> 00:00:03,909

[Music]

2
00:00:09,750 --> 00:00:06,480

why the world didn't end yesterday

3
00:00:12,789 --> 00:00:09,760

presented by science at nasa

4
00:00:14,549 --> 00:00:12,799

december 22nd 2012

5
00:00:15,749 --> 00:00:14,559

if you're watching this video it means

6
00:00:18,470 --> 00:00:15,759

one thing

7
00:00:20,310 --> 00:00:18,480

the world didn't end yesterday

8
00:00:22,230 --> 00:00:20,320

according to media reports of an ancient

9
00:00:25,509 --> 00:00:22,240

maya prophecy the world was supposed to

10
00:00:27,189 --> 00:00:25,519

be destroyed on december 21 2012

11
00:00:28,870 --> 00:00:27,199

but look around you

12
00:00:31,750 --> 00:00:28,880

the whole thing was a misconception from

13
00:00:32,790 --> 00:00:31,760

the very beginning says dr john carlson

14

00:00:34,950 --> 00:00:32,800

director of the center for

15

00:00:36,709 --> 00:00:34,960

archaeoastronomy

16

00:00:38,869 --> 00:00:36,719

the maya calendar did not end on

17

00:00:40,549 --> 00:00:38,879

december 21 2012

18

00:00:41,990 --> 00:00:40,559

and there were no maya prophecies for

19

00:00:43,190 --> 00:00:42,000

telling the end of the world on that

20

00:00:45,270 --> 00:00:43,200

date

21

00:00:46,950 --> 00:00:45,280

the truth he says is more interesting

22

00:00:49,430 --> 00:00:46,960

than fiction

23

00:00:51,270 --> 00:00:49,440

carlson is a hard-nosed scientist a

24

00:00:53,430 --> 00:00:51,280

radio astronomer who earned his degree

25

00:00:55,110 --> 00:00:53,440

studying distant galaxies

26

00:00:57,830 --> 00:00:55,120

he became interested in the 2012

27

00:00:59,590 --> 00:00:57,840

phenomenon 35 years ago when he attended

28

00:01:01,270 --> 00:00:59,600

a meeting of the american association

29

00:01:03,590 --> 00:01:01,280

for the advancement of science and

30

00:01:05,590 --> 00:01:03,600

learned about the maya

31

00:01:07,510 --> 00:01:05,600

where the rainforests of mesoamerica now

32

00:01:08,630 --> 00:01:07,520

stand a great civilization once

33

00:01:10,789 --> 00:01:08,640

flourished

34

00:01:12,550 --> 00:01:10,799

the people of maya society built vast

35

00:01:15,190 --> 00:01:12,560

cities with a population density

36

00:01:17,270 --> 00:01:15,200

comparable to modern los angeles county

37

00:01:19,429 --> 00:01:17,280

they mastered astronomy and developed an

38

00:01:21,350 --> 00:01:19,439

elaborate written language

39

00:01:23,270 --> 00:01:21,360

most impressive to carlson was their

40

00:01:25,350 --> 00:01:23,280

expansive sense of time

41

00:01:27,190 --> 00:01:25,360

the times mayas used dwarfed those

42

00:01:28,630 --> 00:01:27,200

currently used by modern astronomers he

43

00:01:30,630 --> 00:01:28,640

explains

44

00:01:33,510 --> 00:01:30,640

according to our science the big bang

45

00:01:35,030 --> 00:01:33,520

occurred 13.7 billion years ago

46

00:01:37,030 --> 00:01:35,040

there are dates in mayan ruins that

47

00:01:38,870 --> 00:01:37,040

stretch back a billion billion times

48

00:01:40,390 --> 00:01:38,880

farther than that

49

00:01:41,830 --> 00:01:40,400

the maya long count calendar was

50

00:01:43,030 --> 00:01:41,840

designed to keep track of such long

51
00:01:44,950 --> 00:01:43,040
intervals

52
00:01:46,550 --> 00:01:44,960
it is the most complex calendar system

53
00:01:48,789 --> 00:01:46,560
ever developed

54
00:01:50,710 --> 00:01:48,799
written using modern typography the long

55
00:01:52,069 --> 00:01:50,720
count calendar resembles the odometer in

56
00:01:54,310 --> 00:01:52,079
a car

57
00:01:56,950 --> 00:01:54,320
because the digits rotate the calendar

58
00:01:59,030 --> 00:01:56,960
can roll over and repeat itself

59
00:02:00,709 --> 00:01:59,040
this repetition is key to the 2012

60
00:02:02,950 --> 00:02:00,719
phenomenon

61
00:02:03,870 --> 00:02:02,960
according to maya theology the world was

62
00:02:07,030 --> 00:02:03,880
created

63
00:02:10,550 --> 00:02:07,040

5125 years ago on a date we would write

64

00:02:12,550 --> 00:02:10,560

august 11th 3114 bc

65

00:02:15,910 --> 00:02:12,560

at the time the maya calendar looked

66

00:02:20,470 --> 00:02:18,869

on december 21 2012 it is exactly the

67

00:02:23,030 --> 00:02:20,480

same

68

00:02:25,830 --> 00:02:23,040

in the language of maya scholars 13 bach

69

00:02:27,589 --> 00:02:25,840

tunes elapsed between the two dates

70

00:02:30,309 --> 00:02:27,599

this was a significant interval in maya

71

00:02:31,830 --> 00:02:30,319

theology but stresses carlson not a

72

00:02:34,070 --> 00:02:31,840

destructive one

73

00:02:35,910 --> 00:02:34,080

none of the thousands of ruins tablets

74

00:02:37,509 --> 00:02:35,920

and standing stones that archaeologists

75

00:02:39,190 --> 00:02:37,519

have examined for tell and end of the

76

00:02:41,270 --> 00:02:39,200

world

77

00:02:43,030 --> 00:02:41,280

modern science agrees

78

00:02:45,589 --> 00:02:43,040

nasa experts recently gathered in a

79

00:02:47,910 --> 00:02:45,599

google hangout to share their findings

80

00:02:50,150 --> 00:02:47,920

don yemens head of nasa's near earth

81

00:02:51,990 --> 00:02:50,160

object program stated that no known

82

00:02:53,750 --> 00:02:52,000

asteroids or comets were on a collision

83

00:02:55,350 --> 00:02:53,760

course with earth

84

00:02:56,630 --> 00:02:55,360

neither is a rogue planet coming to

85

00:02:58,070 --> 00:02:56,640

destroy us

86

00:02:59,990 --> 00:02:58,080

if there were anything out there like a

87

00:03:02,390 --> 00:03:00,000

planet headed for earth said nasa

88

00:03:04,149 --> 00:03:02,400

astrobiologist david morrison

89

00:03:05,589 --> 00:03:04,159

it would already be one of the brightest

90

00:03:07,589 --> 00:03:05,599

objects in the sky

91

00:03:09,830 --> 00:03:07,599

everybody on earth could see it you

92

00:03:10,869 --> 00:03:09,840

don't need to ask the government just go

93

00:03:12,710 --> 00:03:10,879

out and look

94

00:03:14,710 --> 00:03:12,720

it's not there

95

00:03:16,630 --> 00:03:14,720

lika gujarathakorta head of nasa's

96

00:03:18,710 --> 00:03:16,640

living with a star program said the sun

97

00:03:20,790 --> 00:03:18,720

is not a threat either the sun has been

98

00:03:23,270 --> 00:03:20,800

flaring for billions of years long

99

00:03:25,589 --> 00:03:23,280

before the maya even existed and it has

100

00:03:27,110 --> 00:03:25,599

never once destroyed the world

101
00:03:29,190 --> 00:03:27,120
right now the sun is approaching the

102
00:03:31,350 --> 00:03:29,200
maximum of its 11-year activity cycle

103
00:03:33,750 --> 00:03:31,360
she added but this is the wimpiest solar

104
00:03:36,869 --> 00:03:33,760
cycle of the past 50 years

105
00:03:40,229 --> 00:03:36,879
reports to the contrary are exaggerated

106
00:03:41,430 --> 00:03:40,239
to carlson december 21 2012 is not a day

107
00:03:43,190 --> 00:03:41,440
of dread

108
00:03:44,789 --> 00:03:43,200
on the contrary he says

109
00:03:47,270 --> 00:03:44,799
i have been waiting to experience this

110
00:03:50,630 --> 00:03:47,280
day for more than 30 years

111
00:03:52,149 --> 00:03:50,640
for him experiencing december 21 2012

112
00:03:54,149 --> 00:03:52,159
means visiting the maya homeland in the

113
00:03:56,710 --> 00:03:54,159

yucatan and thinking back to the height

114

00:03:58,869 --> 00:03:56,720

of maya civilization when ancient humans

115

00:04:01,589 --> 00:03:58,879

contemplated expanses of time orders of

116

00:04:03,990 --> 00:04:01,599

magnitude beyond modern horizons

117

00:04:06,470 --> 00:04:04,000

and of course appreciating the fact that

118

00:04:08,309 --> 00:04:06,480

the world didn't end yesterday

119

00:04:09,670 --> 00:04:08,319

got more questions about december 21

120

00:04:10,990 --> 00:04:09,680

2012

121

00:04:14,390 --> 00:04:11,000

check

122

00:04:16,629 --> 00:04:14,400

www.nasa.gov 2012 for answers