1
00:00:07,909 --> 00:00:05,269
nasa is returning to mars

2
00:00:10,790 --> 00:00:07,919
why well to help solve one of the big

3
00:00:12,790 --> 00:00:10,800
martian mysteries where did all of that

4
00:00:15,110 --> 00:00:12,800
mars water go

5
00:00:16,790 --> 00:00:15,120
nasa's mars atmosphere and volatile

6
00:00:19,750 --> 00:00:16,800
evolution mission or

7
00:00:21,510 --> 00:00:19,760
maven will explore mars climate history

8
00:00:24,310 --> 00:00:21,520
and gather clues about the question

9
00:00:26,390 --> 00:00:24,320
scientists have been asking for decades

10
00:00:28,310 --> 00:00:26,400
maven will look at specific processes on

11
00:00:30,790 --> 00:00:28,320
mars that led to the loss of much of its

12
00:00:32,709 --> 00:00:30,800
atmosphere and maven data could tell

13
00:00:35,510 --> 00:00:32,719

scientists a lot about the history of

14
00:00:37,910 --> 00:00:35,520
climate change on the red planet

15
00:00:40,630 --> 00:00:37,920
billions of years ago mars probably

16
00:00:42,709 --> 00:00:40,640
looked more like the earth large flowing

17
00:00:45,190 --> 00:00:42,719
oceans or lakes an atmosphere as thick

18
00:00:47,430 --> 00:00:45,200
as our planets and perhaps life

19
00:00:49,590 --> 00:00:47,440
recently nasa confirmed evidence of a

20
00:00:52,150 --> 00:00:49,600
past environment on mars well suited to

21
00:00:54,310 --> 00:00:52,160
support microbial life

22
00:00:56,790 --> 00:00:54,320
but something has happened most of the

23
00:00:58,830 --> 00:00:56,800
atmosphere is gone the planet is cold

24
00:01:01,430 --> 00:00:58,840
and dry at the surface and decidedly

25
00:01:04,789 --> 00:01:01,440
inhospitable to life

26
00:01:07,270 --> 00:01:04,799
now the most likely culprit is the sun

27
00:01:09,190 --> 00:01:07,280
and maven data will tell us a lot about

28
00:01:10,630 --> 00:01:09,200
how the sun interacts with planets and

29
00:01:12,950 --> 00:01:10,640
their atmospheres

30
00:01:14,950 --> 00:01:12,960
maven will take a significant step

31
00:01:18,149 --> 00:01:14,960
towards solving the planetary puzzle

32
00:01:21,270 --> 00:01:18,159
about mars past and present environments

33
00:01:23,910 --> 00:01:21,280
and by comparison may reveal some clues

34
00:01:25,830 --> 00:01:23,920
about earth as well

35
00:01:29,109 --> 00:01:25,840
when maven arrives at mars in september

36
00:01:30,149 --> 00:01:29,119
2014 it will join ongoing nasa missions

37
00:01:34,469 --> 00:01:30,159
odyssey

38
00:01:36,390 --> 00:01:34,479

opportunity mro and curiosity

39
00:01:39,109 --> 00:01:36,400
that continue to improve our

40
00:01:41,270 --> 00:01:39,119
understanding of mars and the evolution

41
00:01:44,710 --> 00:01:41,280
of our solar system

42
00:01:46,789 --> 00:01:44,720
nasa is committed to a program of mars

43
00:01:49,270 --> 00:01:46,799
exploration with the goal of sending

44
00:01:51,910 --> 00:01:49,280
humans in the 2030s

45
00:01:54,469 --> 00:01:51,920
the data from these missions and those

46
00:01:56,710 --> 00:01:54,479
to come later this decade will inform

47
00:01:59,350 --> 00:01:56,720
future human exploration

48
00:02:00,950 --> 00:01:59,360
as well as provide textbook changing

49
00:02:03,510 --> 00:02:00,960
science

50
00:02:06,230 --> 00:02:03,520
the next step in our exploration of the

51
00:02:09,589 --> 00:02:06,240
red planet is maple and the mystery of

52
00:02:12,070 --> 00:02:09,599
the missing atmosphere and maybe someday

53
00:02:14,630 --> 00:02:12,080
nasa robotic martian detectives

54
00:02:16,630 --> 00:02:14,640
partnered with human scientists we'll

55
00:02:18,309 --> 00:02:16,640
answer the age-old question

56
00:02:19,350 --> 00:02:18,319
was there ever