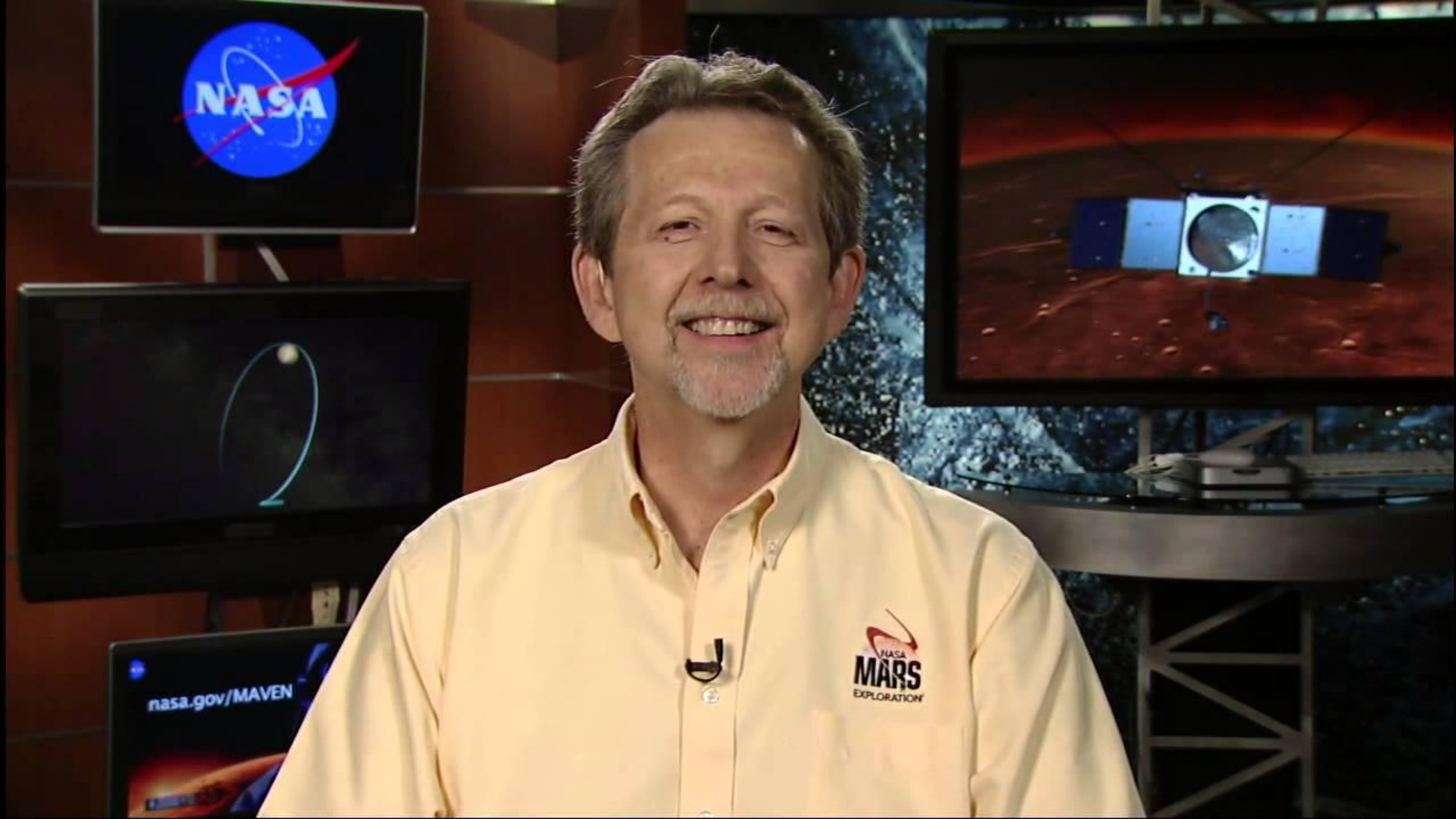
NASA
nasa.gov/MAVEN
NASA
MARS
EXPLORATION

1
00:00:00,010 --> 00:00:04,010
>>INTERVIEWER: Last November, NASA launched a new mission to Mars to investigate the mystery

2
00:00:04,030 --> 00:00:08,060
of how it became the red planet and how it may have looked in the past.

3
00:00:08,080 --> 00:00:12,060
Now, that mission is about to arrive, and here joining us from NASA's Goddard

4
00:00:12,080 --> 00:00:16,100
Space Flight Center in Greenbelt, Maryland is Planetary Science

5
00:00:16,120 --> 00:00:20,130
Division Director Dr. Jim Green. Thank you for joining us, Dr. Green.

6
00:00:20,150 --> 00:00:24,160
>>JIM: Thank you very much, Claire. >>INTERVIEWER: After nearly a year-long journey, MAVEN is finally

7
00:00:24,180 --> 00:00:28,180
arriving at Mars. Can you tell us about the MAVEN mission entering Mars'

8
00:00:28,200 --> 00:00:32,230
atmosphere? >>JIM: Well this is an incredibly exciting time, as you say

9
00:00:32,250 --> 00:00:36,260
in November of last year, we had a perfect launch for

10
00:00:36,280 --> 00:00:40,290
MAVEN. The rocket was put on the exact trajectory

11
00:00:40,310 --> 00:00:44,330
we needed. And now we're on Mars' doorstep.

12
00:00:44,350 --> 00:00:48,350
And Sunday night, we'll skew it, we'll fire the rockets

13
00:00:48,370 --> 00:00:52,380

After 33 minutes, we hope Mars' gravity will take

14
00:00:52,400 --> 00:00:56,420
over and put MAVEN into orbit.

15
00:00:56,440 --> 00:01:00,440
>>INTERVIEWER: And what will MAVEN do as it orbits Mars? >>JIM: Well MAVEN is designed

16
00:01:00,460 --> 00:01:04,450
to look at the interaction of the upper atmosphere and ionosphere with the solar wind.

17
00:01:04,470 --> 00:01:08,490
We believe the solar wind has been very extensive over

18
00:01:08,510 --> 00:01:12,510
many billions of years and has perhaps stripped away

19
00:01:12,530 --> 00:01:16,570
what we believe is the oceans and atmospheres, and made it

20
00:01:16,590 --> 00:01:20,680
much more dry and arid like it is today.

21
00:01:20,700 --> 00:01:24,710
>>INTERVIEWER: What else is NASA doing to better understand Mars, and what are

22
00:01:24,730 --> 00:01:28,750
our plans for the future? >>JIM: Well in addition to MAVEN,

23
00:01:28,770 --> 00:01:32,810
we're planning two other missions coming up. One is a

24
00:01:32,830 --> 00:01:36,850
lander that will look at how active seismicly

25
00:01:36,870 --> 00:01:40,930
Mars is. And the next one is in

26
00:01:40,950 --> 00:01:44,990
2020. It's a rover similar to Curiosity.

27
00:01:45,010 --> 00:01:49,000
>>INTERVIEWER: How does studying the red planet's evolution help us understand

28
00:01:49,020 --> 00:01:53,040
the formation of other planets, including Earth? >>JIM: Well,

29
00:01:53,060 --> 00:01:57,110
way in the past, Mars was much more Earth-like. And some sort

30
00:01:57,130 --> 00:02:01,150
of climate change occurred, where it lost its water,

31
00:02:01,170 --> 00:02:05,230
lost its atmosphere. And we want to understand those processes, because

32
00:02:05,250 --> 00:02:09,240
what happened on Mars could happen here on Earth. And so

33
00:02:09,260 --> 00:02:13,270
the study of terrestrial planets and their evolution is incredibly important

34
00:02:13,290 --> 00:02:17,310
for us. >>INTERVIEWER: Where can we learn more?

35
00:02:17,330 --> 00:02:21,320
>>JIM: To learn more, go to NASA.gov/MAVEN.

36
00:02:21,340 --> 00:02:25,350
>>INTERVIEWER: Great, Dr. Green, thank you for joining us.

37
00:02:25,370 --> 00:02:29,380
>>JIM: My pleasure, thank you Claire.