



1
00:00:08,340 --> 00:00:04,170

[music]

2
00:00:08,360 --> 00:00:12,530

upper atmosphere. If you imagine Mars as having had a thicker,

3
00:00:12,550 --> 00:00:16,640

warmer atmosphere earlier in its history, where did the atmosphere go? Where

4
00:00:16,660 --> 00:00:20,720

did the water go? And there are only two places it can go--the atmosphere can go down

5
00:00:20,740 --> 00:00:24,800

or it can go up and be lost to space. MAVEN is

6
00:00:24,820 --> 00:00:28,890

the Mars Atmosphere and Volatile Evolution Mission. We're trying to understand

7
00:00:28,910 --> 00:00:32,960

basically why the climate changed on Mars--why Mars appears

8
00:00:32,980 --> 00:00:37,010

to have gone from an environment that was habitable--to microorganisms,

9
00:00:37,030 --> 00:00:41,050

at least--to one that is the cold, dry, uninhabitable environment

10
00:00:41,070 --> 00:00:45,070

we see today. By looking at the nature of the upper

11
00:00:45,090 --> 00:00:49,240

atmosphere today, and how gases can be lost out of the atmosphere

12
00:00:49,260 --> 00:00:53,400

to space today, we learn about the processes that control the

13
00:00:53,420 --> 00:00:57,530

atmosphere, and we're gonna have a good understanding of what the history of

14

00:00:57,550 --> 00:01:01,600

the atmosphere has been. [music]

15

00:01:13,750 --> 00:01:05,670

[music]

16

00:01:21,850 --> 00:01:17,800

[beeping]