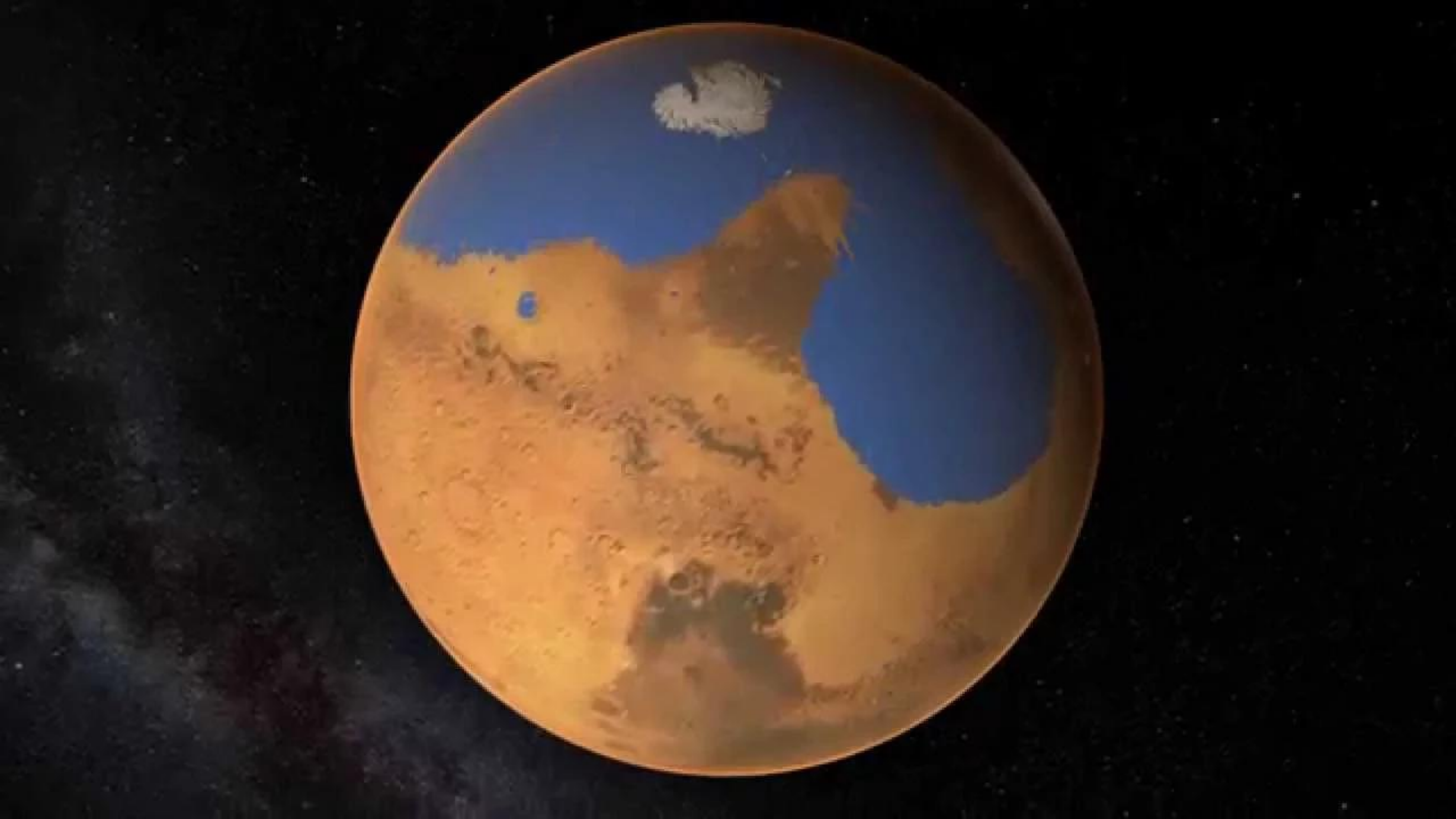

1
00:00:06,769 --> 00:00:04,730
Scientists have always presumed that

2
00:00:08,509 --> 00:00:06,779
Mars had a much warmer and

3
00:00:10,459 --> 00:00:08,519
more watery past, but

4
00:00:12,770 --> 00:00:10,469
estimates of how much water Mars has lost

5
00:00:12,770 --> 00:00:13,430
since its formation 4.5 billion years ago

6
00:00:17,720 --> 00:00:15,619
are extremely low. Now

7
00:00:19,490 --> 00:00:17,730
researchers at the NASA Goddard

8
00:00:21,170 --> 00:00:19,500
Space Flight Center have obtained the

9
00:00:22,640 --> 00:00:21,180
most accurate measurement when measuring the

10
00:00:24,830 --> 00:00:22,650
proportion of heavy water on Tuesday

11
00:00:26,630 --> 00:00:24,840
especially in regions near the

12
00:00:28,880 --> 00:00:26,640
polar caps the new measurements

13
00:00:31,010 --> 00:00:28,890

suggest that at least 20% of the

14
00:00:32,479 --> 00:00:31,020
planet was covered by water with

15
00:00:35,419 --> 00:00:32,489
some regions with depths of

16
00:00:37,790 --> 00:00:35,429
more than a kilometer over time Nearly

17
00:00:39,739 --> 00:00:37,800
90% of this ocean was lost to

18
00:00:40,520 --> 00:00:39,749
space with the remainder currently

19
00:00:42,020 --> 00:00:40,530
stored

20
00:00:44,239 --> 00:00:42,030
mainly in the polar caps on

21
00:00:46,099 --> 00:00:44,249
Tuesday. This new image of Mars is

22
00:00:48,139 --> 00:00:46,109
considerably wetter than

23
00:00:49,849 --> 00:00:48,149
estimated from isotopic measurements and would

24
00:00:51,770 --> 00:00:49,859
suggest that water may have

25
00:00:53,989 --> 00:00:51,780
persisted longer. throughout