



**Vesta spherical projection:
Rainbow color scheme goes from highest (red) to lowest (purple) topography.**

1
00:00:05,749 --> 00:00:04,070
the purpose of the dawn mission is to

2
00:00:07,670 --> 00:00:05,759
understand what was happening in the

3
00:00:09,950 --> 00:00:07,680
opening chapter of our solar system's

4
00:00:12,440 --> 00:00:09,960
history to do that we are going to

5
00:00:16,460 --> 00:00:12,450
explore the two most massive objects in

6
00:00:18,019 --> 00:00:16,470
the asteroid belt Vesta and Ceres which

7
00:00:20,779 --> 00:00:18,029
are time capsules from that early

8
00:00:23,900 --> 00:00:20,789
chapter Don is going to arrive at Vesta

9
00:00:26,390 --> 00:00:23,910
in July 2011 go into orbit around it and

10
00:00:27,830 --> 00:00:26,400
map its surface even with images from

11
00:00:30,290 --> 00:00:27,840
the Hubble Space Telescope and

12
00:00:32,630 --> 00:00:30,300
ground-based telescopes scientists have

13
00:00:34,790 --> 00:00:32,640

only a fuzzy view of what Vesta looks

14

00:00:36,620 --> 00:00:34,800

like we won't really know what the

15

00:00:39,020 --> 00:00:36,630

surface of Vesta looks like until Don

16

00:00:40,970 --> 00:00:39,030

gets there this video shows one of the

17

00:00:43,580 --> 00:00:40,980

best guesses so far about the lumpy

18

00:00:45,529 --> 00:00:43,590

shape of Vesta it also shows the type of

19

00:00:47,779 --> 00:00:45,539

craters that we might expect to find

20

00:00:50,119 --> 00:00:47,789

based on what we see on earth moon

21

00:00:51,799 --> 00:00:50,129

another version of the Vesta surface was

22

00:00:56,049 --> 00:00:51,809

constructed using a different technique

23

00:00:59,450 --> 00:00:56,059

as seen in this series of still images

24

00:01:01,310 --> 00:00:59,460

these two versions of Vesta surface came

25

00:01:03,619 --> 00:01:01,320

from an exercise that the dawn team

26

00:01:06,350 --> 00:01:03,629

conducted to practice mapping the

27

00:01:08,179 --> 00:01:06,360

topography of Vesta the exercise helped

28

00:01:10,310 --> 00:01:08,189

on science planners tweak the imaging

29

00:01:11,960 --> 00:01:10,320

plans to improve the resolution of the

30

00:01:14,570 --> 00:01:11,970

topographic maps we will make when we

31

00:01:17,300 --> 00:01:14,580

get to vesta the virtual vesta

32

00:01:18,950 --> 00:01:17,310

simulation has been fun and helpful but

33

00:01:20,929 --> 00:01:18,960

we can't wait to see what the real vesta

34

00:01:22,850 --> 00:01:20,939

looks like stay tuned for Dawn's