
Jet Propulsion Laboratory
California Institute of Technology

1
00:00:08,960 --> 00:00:07,190
hello I'm petacchi Williams welcome to

2
00:00:11,570 --> 00:00:08,970
NASA's Jet Propulsion Laboratory in

3
00:00:13,520 --> 00:00:11,580
Pasadena California I'm a maneuver

4
00:00:16,039 --> 00:00:13,530
analysts on the Cassini navigation team

5
00:00:18,800 --> 00:00:16,049
here's how you can think of my job I'm

6
00:00:20,750 --> 00:00:18,810
the person in the car with the map gave

7
00:00:22,609 --> 00:00:20,760
you the driver directions and estimating

8
00:00:25,189 --> 00:00:22,619
how much gas is left in the tank on a

9
00:00:26,929 --> 00:00:25,199
road trip the navigation team plays a

10
00:00:30,019 --> 00:00:26,939
similar role for the Cassini spacecraft

11
00:00:31,939 --> 00:00:30,029
as it flies around Saturn Cassini

12
00:00:35,450 --> 00:00:31,949
scientists are trying to figure out how

13
00:00:37,490 --> 00:00:35,460

Saturn's famous rings reform the G ring

14
00:00:40,160 --> 00:00:37,500
is one of the outer rings near the

15
00:00:42,260 --> 00:00:40,170
heavily cratered moon- Cassini

16
00:00:44,600 --> 00:00:42,270
scientists say the G ring was likely

17
00:00:47,569 --> 00:00:44,610
produced by large icy particles within a

18
00:00:49,610 --> 00:00:47,579
bright arc on an inner edge the large

19
00:00:51,650 --> 00:00:49,620
icy particles are struck by tiny

20
00:00:54,200 --> 00:00:51,660
meteoroids to create smaller finer

21
00:00:56,150 --> 00:00:54,210
particles swept out by Saturn's plasma

22
00:00:59,240 --> 00:00:56,160
drifting from the arc filling in the

23
00:01:02,720 --> 00:00:59,250
ring Cassini flew by Saturn's moon Titan

24
00:01:04,369 --> 00:01:02,730
on July 19th one of the objectives was

25
00:01:06,560 --> 00:01:04,379
to determine the nature and surface

26
00:01:09,080 --> 00:01:06,570
composition of the location just west of

27
00:01:11,270 --> 00:01:09,090
the Huygens landing site scientists also

28
00:01:14,600 --> 00:01:11,280
checked out seasonal changes on the moon

29
00:01:17,450 --> 00:01:14,610
on august 31st will be returning for

30
00:01:19,490 --> 00:01:17,460
another flyby of Titan it will be an

31
00:01:21,560 --> 00:01:19,500
opportunity for us to get images of

32
00:01:24,590 --> 00:01:21,570
Titan's surface near the Huygens landing

33
00:01:26,600 --> 00:01:24,600
site on sep tember 10th will make our

34
00:01:29,870 --> 00:01:26,610
closest flyby ever of one of Saturn's

35
00:01:31,940 --> 00:01:29,880
most intriguing moons Iapetus half of it

36
00:01:34,609 --> 00:01:31,950
looks as dark as asphalt while the other

37
00:01:36,920 --> 00:01:34,619
half appears bright as snow will be

38
00:01:38,539 --> 00:01:36,930

taking high-resolution observations so

39
00:01:40,249 --> 00:01:38,549
scientists can study the boundary

40
00:01:42,679 --> 00:01:40,259
between the light and dark regions

41
00:01:44,749 --> 00:01:42,689
they'll also check out the mountainous

42
00:01:47,690 --> 00:01:44,759
Ridge discovered by Cassini in december

43
00:01:50,539 --> 00:01:47,700
two thousand four all pretty exciting

44
00:01:52,160 --> 00:01:50,549
stuff I'm Petacchi Williams from NASA's

45
00:01:54,680 --> 00:01:52,170
Jet Propulsion Laboratory with your