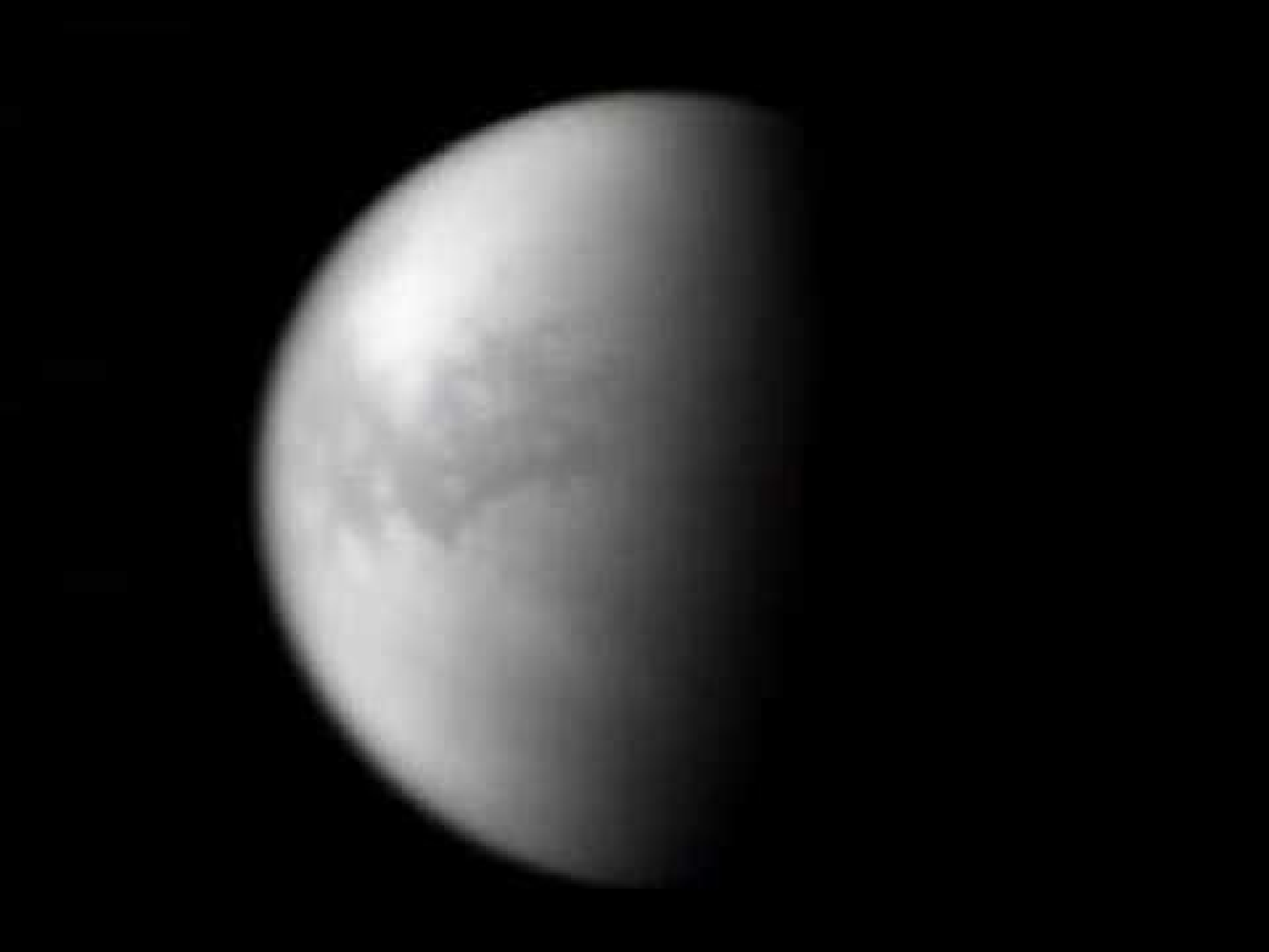

1
00:00:09,500 --> 00:00:06,650
hi and welcome to NASA's Jet Propulsion

2
00:00:11,240 --> 00:00:09,510
Laboratory in Pasadena California my

3
00:00:12,499 --> 00:00:11,250
name is Todd barber lead propulsion

4
00:00:14,060 --> 00:00:12,509
engineer on the Cassini mission to

5
00:00:16,910 --> 00:00:14,070
Saturn here with the latest news from

6
00:00:18,529 --> 00:00:16,920
the range planet as Cassini heads into

7
00:00:21,260 --> 00:00:18,539
the last few months of its four-year

8
00:00:23,450 --> 00:00:21,270
prime mission the spacecraft continues

9
00:00:25,609 --> 00:00:23,460
its campaign to crank up orbital

10
00:00:28,279 --> 00:00:25,619
inclination using a slew of clothes

11
00:00:30,439 --> 00:00:28,289
tight and flybys part of this delicate

12
00:00:32,510 --> 00:00:30,449
orbital ballet required Cassini's

13
00:00:35,209 --> 00:00:32,520

largest rocket firing in nearly three

14
00:00:37,790 --> 00:00:35,219
and a half years this burn clocked out

15
00:00:39,860 --> 00:00:37,800
successfully on February fifth exactly

16
00:00:42,619 --> 00:00:39,870
one month after our most recent Titan

17
00:00:44,690 --> 00:00:42,629
flyby this low altitude titan paths

18
00:00:46,720 --> 00:00:44,700
focused largely on infrared temperature

19
00:00:49,459 --> 00:00:46,730
mapping of the surface and atmosphere

20
00:00:52,100 --> 00:00:49,469
the search for stratospheric oxygen

21
00:00:54,189 --> 00:00:52,110
compounds and high-resolution spectral

22
00:00:56,930 --> 00:00:54,199
mapping around the Huygens landing site

23
00:00:58,880 --> 00:00:56,940
the ultraviolet camera studied titan's

24
00:01:00,740 --> 00:00:58,890
atmosphere while the visible light

25
00:01:03,889 --> 00:01:00,750
camera literally worked day and night

26
00:01:06,219 --> 00:01:03,899
with dayside mapping and nighttime

27
00:01:08,810 --> 00:01:06,229
searches for Titan Aurora and lightning

28
00:01:10,910 --> 00:01:08,820
the spacecraft has also been busy with

29
00:01:13,760 --> 00:01:10,920
other observations including wonderful

30
00:01:15,679 --> 00:01:13,770
radio science all three radio frequency

31
00:01:18,440 --> 00:01:15,689
bands were used to probe the gamut of

32
00:01:20,480 --> 00:01:18,450
Saturn's ring features scientists can

33
00:01:22,640 --> 00:01:20,490
determine fine ring particle structure

34
00:01:25,490 --> 00:01:22,650
by the blocking or attenuation of

35
00:01:27,649 --> 00:01:25,500
Cassini's downlink radio signal the

36
00:01:30,350 --> 00:01:27,659
radio science team spotted orderly lines

37
00:01:32,600 --> 00:01:30,360
of evenly spaced icy boulders within the

38
00:01:35,660 --> 00:01:32,610

Rings yet another surprising result from

39
00:01:38,749 --> 00:01:35,670
Saturn next up for Cassini is another

40
00:01:40,940 --> 00:01:38,759
Titan fly by on February 22nd the team

41
00:01:42,859 --> 00:01:40,950
is eagerly anticipating it since it will

42
00:01:45,710 --> 00:01:42,869
include radar imagery of the Huygens

43
00:01:47,319 --> 00:01:45,720
landing site our ultraviolet camera will

44
00:01:50,460 --> 00:01:47,329
also investigate titan's atmosphere

45
00:01:52,990 --> 00:01:50,470
during an outbound stellar occultation

46
00:01:55,120 --> 00:01:53,000
with your latest news from Cassini and