



1  
00:00:00,500 --> 00:00:01,501  
NASA Jet Propulsion Laboratory

2  
00:00:01,501 --> 00:00:02,502  
California Institute  
of Technology

3  
00:00:02,502 --> 00:00:04,872  
Cassini's First Dive Between  
Saturn and Its Rings

4  
00:00:04,872 --> 00:00:06,006  
[ ■ ]

5  
00:00:06,006 --> 00:00:08,008  
[ Linda Spilker, Cassini  
Project Scientist ]

6  
00:00:08,008 --> 00:00:12,346  
Cassini dove in between  
the rings and the planet

7  
00:00:12,346 --> 00:00:13,480  
for the very first time.

8  
00:00:13,480 --> 00:00:16,450  
So at midnight tonight  
will be the first time

9  
00:00:16,450 --> 00:00:18,685  
Cassini turns back to the Earth,

10  
00:00:18,685 --> 00:00:21,021  
sends a signal and lets us know

11  
00:00:21,021 --> 00:00:24,358  
that is successfully  
navigated through this gap

12

00:00:24,358 --> 00:00:27,494

where it's flown for the  
very, very first time.

13

00:00:27,494 --> 00:00:30,497

[ mission control chatter ]

14

00:00:36,036 --> 00:00:37,938

Systems, radio science...

15

00:00:37,938 --> 00:00:40,741

We have X-band carrier  
signal detection.

16

00:00:40,741 --> 00:00:45,045

[ applause ]

17

00:00:45,045 --> 00:00:47,047

[ Earl Maize, Cassini  
Project Manager ]

18

00:00:47,047 --> 00:00:49,149

Um, we've got a booming carrier.

19

00:00:49,149 --> 00:00:50,284

Everything looks great.

20

00:00:50,284 --> 00:00:51,652

We're just now  
waiting for the data.

21

00:00:51,652 --> 00:00:55,455

[ quiet chatter ]

22

00:00:55,455 --> 00:00:57,557

[ Ace ] Ansco systems,  
Cassini Ace.

23

00:00:57,557 --> 00:00:59,626

I can confirm we  
have a good lock on

24

00:00:59,626 --> 00:01:02,729

the 66360 bit rate  
data at this time.

25

00:01:02,729 --> 00:01:03,563

You should see it!

26

00:01:03,563 --> 00:01:06,566

[ applause ]

27

00:01:09,002 --> 00:01:11,705

Cassini Ace. I confirm  
that the science playback

28

00:01:11,705 --> 00:01:13,440

is in lock and starting to run.

29

00:01:13,440 --> 00:01:14,741

[ cheers ]

30

00:01:14,741 --> 00:01:15,375

Copy.

31

00:01:15,375 --> 00:01:18,378

[ applause ]

32

00:01:21,081 --> 00:01:23,583

Cassini is safely  
sending back data!

33

00:01:23,583 --> 00:01:25,285

[ Actual raw images ]

34

00:01:25,285 --> 00:01:27,955

[ Jim Green, NASA Planetary

Science Division Director ]

35

00:01:27,955 --> 00:01:29,589

Cassini is a mission of firsts.

36

00:01:29,589 --> 00:01:32,159

Time and time again it has  
continued to surprise us.

37

00:01:32,159 --> 00:01:34,695

Astounding observations!

38

00:01:34,695 --> 00:01:37,998

It has changed our  
thinking irrevocably.

39

00:01:39,333 --> 00:01:41,401

[ Spilker ] Onward to  
the Grand Finale!

40

00:01:41,401 --> 00:01:44,404

[ cheers, applause ]