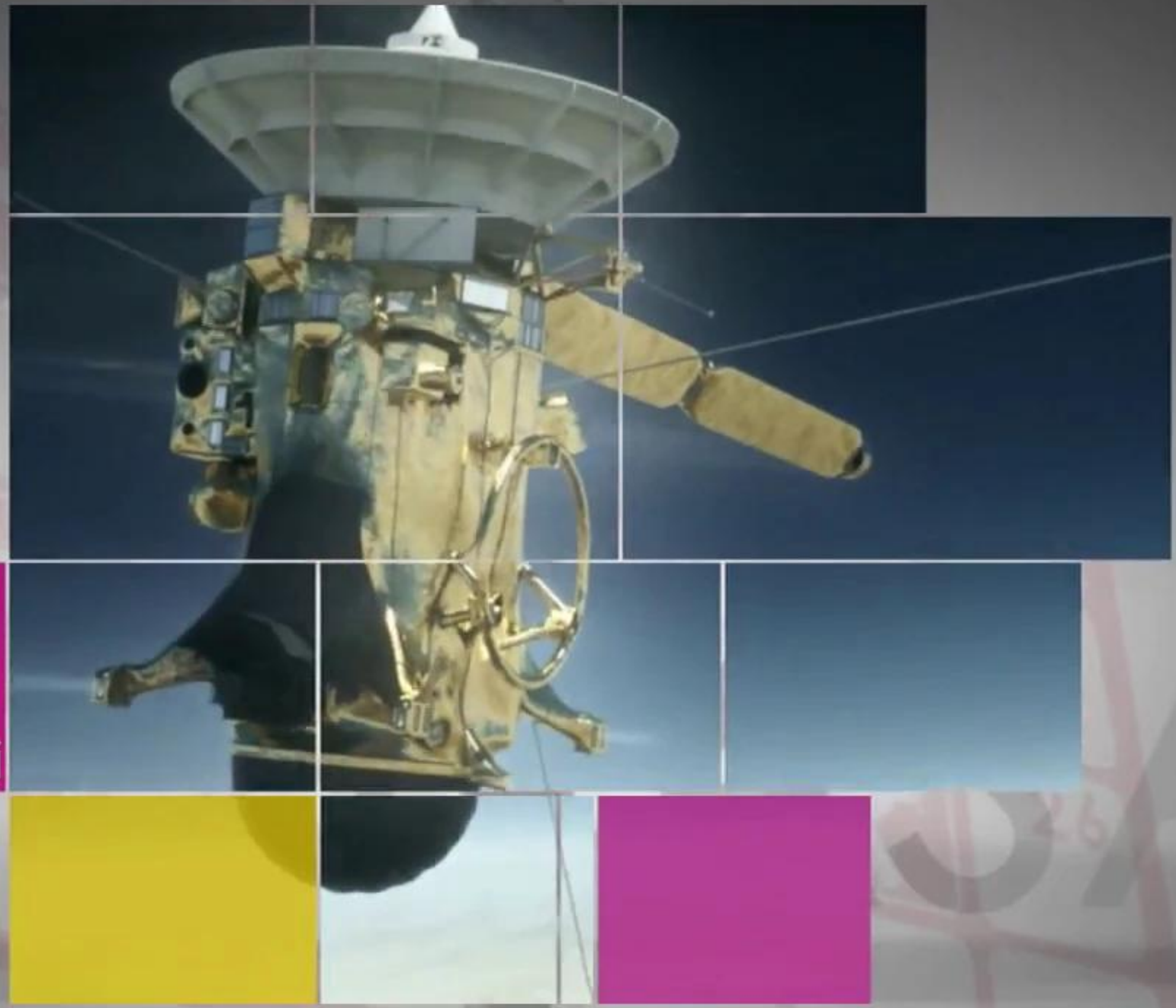

Farewell to Cassini

1
00:00:00,799 --> 00:00:03,909
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:03,909 --> 00:00:04,909
\h
\h

3
00:00:04,909 --> 00:00:10,870
On Sept. 15, our Cassini spacecraft concluded
its remarkable mission with a plunge into

4
00:00:10,870 --> 00:00:11,870
Saturn’s atmosphere.

5
00:00:11,870 --> 00:00:15,430
\h
“Just heard the signal from the spacecraft

6
00:00:15,430 --> 00:00:16,430
is gone…”

7
00:00:16,430 --> 00:00:17,430
\h
\h

8
00:00:17,430 --> 00:00:22,109
This was the last of 22 close orbits Cassini
made between Saturn and its rings as part

9
00:00:22,109 --> 00:00:24,210
of the mission’s Grand Finale.

10
00:00:24,210 --> 00:00:28,630
No other spacecraft has ever explored this
unique region.

11
00:00:28,630 --> 00:00:33,530
Although the spacecraft may be gone after

the finale, the enormous amount of data collected

12
00:00:33,530 --> 00:00:39,640
about Saturn, its magnetosphere, rings and
moons during this last dive is expected to

13
00:00:39,640 --> 00:00:42,760
yield new discoveries for decades.

14
00:00:42,760 --> 00:00:46,589
\h
The mission arrived at Saturn in 2004 as Cassini-Huygens

15
00:00:46,589 --> 00:00:52,059
-- a joint endeavor of NASA, the European
Space Agency, and the Italian Space Agency

16
00:00:52,059 --> 00:00:55,230
– to study Saturn and its moons.

17
00:00:55,230 --> 00:01:01,120
After completing its primary mission, it was
extended twice – first in 2008, and again

18
00:01:01,120 --> 00:01:02,539
in 2010.

19
00:01:02,539 --> 00:01:07,010
The mission is considered one of the most
scientifically rich voyages yet undertaken

20
00:01:07,010 --> 00:01:10,110
in our solar system.

21
00:01:10,110 --> 00:01:12,240
\h
Data from the Global Precipitation Measurement,

22
00:01:12,240 --> 00:01:17,260

or GPM, mission estimated the total amount
of rain that Hurricane Irma dropped from September

23
00:01:17,260 --> 00:01:19,890
5 to early September 12.

24
00:01:19,890 --> 00:01:24,750
During that period, Irma dropped heavy rain
along its path from the Leeward Islands until

25
00:01:24,750 --> 00:01:29,780
weakening to a post-tropical cyclone over
the southeastern United States.

26
00:01:29,780 --> 00:01:33,230
Rainfall totals were often greater than 6
inches around Irma.

27
00:01:33,230 --> 00:01:38,920
A post-storm aerial survey of our Kennedy
Space Center in Florida revealed damage to

28
00:01:38,920 --> 00:01:40,770
several facilities.

29
00:01:40,770 --> 00:01:45,490
The center also experienced interruptions
to power and water services.

30
00:01:45,490 --> 00:01:51,000
A damage assessment report will be compiled
over the next several weeks after a full inspection

31
00:01:51,000 --> 00:01:54,420
of the center has been conducted.

32
00:01:54,420 --> 00:01:55,420
\h
\h

33
00:01:55,420 --> 00:02:00,170
Our astronauts Mark Vande Hei and Joe Acaba
along with Russian cosmonaut Alexander Misurkin

34
00:02:00,170 --> 00:02:07,420
launched to the International Space Station
from Kazakhstan, at 5:17 p.m. EDT on Sept.

35
00:02:07,420 --> 00:02:08,420
12.

36
00:02:08,420 --> 00:02:13,200
The trio arrived at the station six-hours
later – and were welcomed by Commander Randy

37
00:02:13,200 --> 00:02:17,370
Bresnik, of NASA, and other members of the
crew already onboard.

38
00:02:17,370 --> 00:02:24,920
Vande Hei, Acaba, and Misurkin are scheduled
to spend five-and-a-half months on the station.

39
00:02:24,920 --> 00:02:27,091
\h
We completed a successful test of the parachute

40
00:02:27,091 --> 00:02:34,360
system for our Orion spacecraft on Sept. 13
at the U.S. Army Proving Ground in Yuma, Arizona.

41
00:02:34,360 --> 00:02:38,810
NASA is qualifying Orion’s parachutes for
missions with astronauts.

42
00:02:38,810 --> 00:02:43,870
During this test, engineers replicated a situation
that would require Orion to abort off the

43

00:02:43,870 --> 00:02:49,540
Space Launch System (SLS) rocket and bypass
part of the normal parachute deployment sequence

44
00:02:49,540 --> 00:02:54,460
that helps Orion slow down on its return to
Earth after deep space missions.

45
00:02:54,460 --> 00:03:01,069
Orion’s full parachute system includes 11
total parachutes.

46
00:03:01,069 --> 00:03:03,090
\h
Astronaut Shane Kimbrough shared imagery and

47
00:03:03,090 --> 00:03:08,630
experiences from his time in space, during
a Sept. 11 presentation at the Smithsonian’s

48
00:03:08,630 --> 00:03:11,590
National Air & Space Museum in Washington.

49
00:03:11,590 --> 00:03:17,700
Kimbrough returned to Earth in April 2017
after a 173-day mission aboard the International

50
00:03:17,700 --> 00:03:24,170
Space Station where he served as Commander
of the station’s Expedition 50 crew.

51
00:03:24,170 --> 00:03:25,170
\h
\h

52
00:03:25,170 --> 00:03:26,280
And that’s what’s up this week @NASA …