1
00:00:00,930 --> 00:00:03,330
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:03,330 --> 00:00:04,799
The Science of Eclipse-Like Events

3
00:00:04,799 --> 00:00:05,799
(VO)

4
00:00:05,799 --> 00:00:12,240
Natural phenomena such as the Aug. 21, 2017
solar eclipse can inspire awe, but scientists

5
00:00:12,240 --> 00:00:16,400
can also use eclipse-like events to learn
more about the universe.

6
00:00:16,400 --> 00:00:22,340
For instance, a total eclipse, or an occultation
in scientific terms – happens when a celestial

7
00:00:22,340 --> 00:00:26,250
body completely blocks light from a star,
like our sun.

8
00:00:26,250 --> 00:00:31,660
This type of event can help astronomers learn
more about an object’s atmosphere, including

9
00:00:31,660 --> 00:00:36,070
whether it might be surrounded by rings or
other planetary matter.

10
00:00:36,070 --> 00:00:41,440
During a similar event, called a transit,
variations in light that result when a closer

11
00:00:41,440 --> 00:00:46,649

object passes in front of a star, but only
blocks a small part of the star, have been

12
00:00:46,649 --> 00:00:51,780
used by missions such as our Kepler space
telescope, to discover new planets outside

13
00:00:51,780 --> 00:00:52,920
our solar system.

14
00:00:52,920 --> 00:00:55,450
SpaceX Launches Science, Supplies to Space
Station

15
00:00:55,450 --> 00:00:56,450
(VO)

16
00:00:56,450 --> 00:01:00,489
On Aug. 14 SpaceX launched an unpiloted Dragon
cargo spacecraft to the International Space

17
00:01:00,489 --> 00:01:05,670
Station from Launch Complex 39A at the Kennedy
Space Center, in Florida.

18
00:01:05,670 --> 00:01:11,221
Two days later the Dragon arrived at the station
with more than 6,400 pounds of cargo, supplies

19
00:01:11,221 --> 00:01:17,150
and research – including experiments to
better understand Parkinson’s disease and

20
00:01:17,150 --> 00:01:19,600
the origin of cosmic rays.

21
00:01:19,600 --> 00:01:23,280
This is SpaceX’s 12th commercial resupply
mission to the station.

22
00:01:23,280 --> 00:01:24,500
New Communications Satellite Launched

23
00:01:24,500 --> 00:01:25,500
(VO)

24
00:01:25,500 --> 00:01:30,320
On Aug. 18, we launched our third generation
Tracking and Data Relay Satellite, known as

25
00:01:30,320 --> 00:01:34,570
TDRS-M, from Cape Canaveral Air Force Station,
in Florida.

26
00:01:34,570 --> 00:01:39,960
TDRS-M will join the fleet of satellites that
provides critical high data-rate communications

27
00:01:39,960 --> 00:01:45,910
to a host of spacecraft including the International
Space Station and its resupply vehicles, the

28
00:01:45,910 --> 00:01:49,320
Hubble Space Telescope and many of NASA’s
Earth-observing spacecraft.

29
00:01:49,320 --> 00:01:51,910
Cassini Begins Final Five Orbits around Saturn

30
00:01:51,910 --> 00:01:52,910
(VO)

31
00:01:52,910 --> 00:01:57,759
On Aug. 14 our Cassini spacecraft began its
last five orbits around Saturn.

32
00:01:57,759 --> 00:02:02,369
The spacecraft is in the Grand Finale phase
of its mission and has embarked on a set of

33
00:02:02,369 --> 00:02:09,549
ultra-close passes that will bring it to between
1,010 to 1,060 miles above Saturn’s cloud

34
00:02:09,549 --> 00:02:10,549
tops.

35
00:02:10,549 --> 00:02:14,989
The mission is scheduled to end on Sept. 15
with Cassini collecting a wealth of science

36
00:02:14,989 --> 00:02:17,639
data as it plunges into the planet’s atmosphere.

37
00:02:17,639 --> 00:02:19,419
Spacewalk aboard the Space Station

38
00:02:19,419 --> 00:02:20,419
(VO)

39
00:02:20,419 --> 00:02:25,870
On Aug. 17, cosmonauts Fyodor Yurchikhin and
Sergey Ryazanskiy of the Russian space agency,

40
00:02:25,870 --> 00:02:30,830
Roscosmos conducted a spacewalk outside the
International Space Station.

41
00:02:30,830 --> 00:02:35,689
The goal of the outing was to check on the
condition of the exterior of the Russian segment

42
00:02:35,689 --> 00:02:42,019
of the station, to install struts and handrails
for future spacewalks and to deploy five small

43
00:02:42,019 --> 00:02:45,319
scientific nanosatellite investigations.

44
00:02:45,319 --> 00:02:50,819
This was the 202nd spacewalk in support of space station assembly and maintenance.

45
00:02:50,819 --> 00:02:54,709
And that’s what’s up this week @NASA …