
SPACEX

1
00:00:00,669 --> 00:00:05,120
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:05,120 --> 00:00:10,070
The planet Mercury’s transit of the sun
on May 9 provided an opportunity for sky-watchers

3
00:00:10,070 --> 00:00:16,209
throughout the U.S. to witness a rare celestial
event that happens only about 13 times a century.

4
00:00:16,209 --> 00:00:21,150
Mercury’s transit, as it passed between
Earth and the sun, made it appear as a small

5
00:00:21,150 --> 00:00:23,600
dark dot against the face of the sun.

6
00:00:23,600 --> 00:00:29,090
NASA’s coverage of the event included a
televised roundtable of NASA science experts

7
00:00:29,090 --> 00:00:34,480
discussing the exceptional opportunity presented
to learn more about the atmospheric makeup

8
00:00:34,480 --> 00:00:36,679
of our solar system’s smallest planet.

9
00:00:36,679 --> 00:00:39,780
“We know there’s sodium there, we know
there’s potassium.

10
00:00:39,780 --> 00:00:44,569
There’s all types of what we call ‘trace
gases’ – argon and other things that are

11
00:00:44,569 --> 00:00:46,050

being emitted by Mercury.”

12
00:00:46,050 --> 00:00:50,170
Mercury’s next transit of the sun occurs
in 2019.

13
00:00:50,170 --> 00:00:54,999
But, those of us in the U.S. have a big celestial
event to look forward to even before that

14
00:00:54,999 --> 00:01:00,999
– a total solar eclipse, on August 21 of
2017.

15
00:01:00,999 --> 00:01:06,780
NASA's Kepler mission has verified 1,284 new
planets outside our solar system – the single

16
00:01:06,780 --> 00:01:09,719
largest finding of planets to date.

17
00:01:09,719 --> 00:01:14,990
The new confirmed planets come from a collection
of potential planets identified by the Kepler

18
00:01:14,990 --> 00:01:19,900
space telescope’s July 2015 planet catalog.

19
00:01:19,900 --> 00:01:24,539
Scientists say nine of the newly-validated
planets could be rocky, like Earth, and orbit

20
00:01:24,539 --> 00:01:29,390
in their sun's habitable zone, which is the
distance from a star where orbiting planets

21
00:01:29,390 --> 00:01:33,869
can have surface temperatures that allow liquid
water to pool.

22
00:01:33,869 --> 00:01:39,470
Of the almost 5,000 total planet candidates
found to date, more than 3,200 now have been

23
00:01:39,470 --> 00:01:46,149
verified, and 2,325 of those were discovered
by Kepler.

24
00:01:46,149 --> 00:01:51,100
A month after delivering almost 7,000 pounds
of science and cargo, including the Bigelow

25
00:01:51,100 --> 00:01:55,850
Expandable Activity Module (BEAM), to the
International Space Station, the SpaceX Dragon

26
00:01:55,850 --> 00:01:59,340
cargo spacecraft returned to Earth on May
11.

27
00:01:59,340 --> 00:02:05,119
Dragon brought back about 3,600 pounds of
cargo, experiments and biomedical samples

28
00:02:05,119 --> 00:02:10,890
from the recently completed year-long mission
of former NASA astronaut Scott Kelly and Mikhail

29
00:02:10,890 --> 00:02:14,560
Kornienko of Roscosmos.

30
00:02:14,560 --> 00:02:20,459
Several satellites operated, or jointly operated
by NASA continue to capture images from space

31
00:02:20,459 --> 00:02:26,260
of the massive Fort McMurray wildfire burning
in Canada’s Alberta province.

32

00:02:26,260 --> 00:02:31,430
Images from May 8 taken by Earth observing
spacecraft, including the Terra, Suomi NPP

33
00:02:31,430 --> 00:02:36,800
and Aqua satellites, showed smoke from the
catastrophic event wafting east – all the

34
00:02:36,800 --> 00:02:39,990
way to the Atlantic Ocean.

35
00:02:39,990 --> 00:02:44,720
For all of us on Earth it has been almost
four years since the August 5, 2012 Pacific

36
00:02:44,720 --> 00:02:47,849
Time landing on Mars of NASA’s Curiosity
rover.

37
00:02:47,849 --> 00:02:53,780
But, based on “local time” at Mars on
May 11, Curiosity completed only its second

38
00:02:53,780 --> 00:02:56,209
Martian year on the Red Planet.

39
00:02:56,209 --> 00:03:02,650
Since Mars is farther from the sun, it takes
about 687 Earth days to circle our solar system’s

40
00:03:02,650 --> 00:03:05,620
star and complete a Martian year.

41
00:03:05,620 --> 00:03:10,569
In its time on Mars, the rover has recorded
environmental patterns through two full cycles

42
00:03:10,569 --> 00:03:12,060
of Martian seasons.

43
00:03:12,060 --> 00:03:17,819
The data compiled by Curiosity can help scientists
distinguish seasonal patterns on Mars from

44
00:03:17,819 --> 00:03:21,299
otherwise sporadic environmental events.

45
00:03:21,299 --> 00:03:27,700
NASA’s Ground Systems Development and Operations
Program continues its work to retrofit NASA's

46
00:03:27,700 --> 00:03:32,829
Kennedy Space Center’s Vehicle Assembly
Building (VAB) with new platforms for processing

47
00:03:32,829 --> 00:03:37,930
of the Space Launch System rocket and Orion
spacecraft, prior to their first test flight

48
00:03:37,930 --> 00:03:39,750
in 2018.

49
00:03:39,750 --> 00:03:43,939
Several platforms have been installed in the
facility, powered on and tested.

50
00:03:43,939 --> 00:03:49,939
Once the work is completed, there will be
10 levels of platforms in the cavernous VAB

51
00:03:49,939 --> 00:03:53,290
to provide workers with access to the rocket
and spacecraft.

52
00:03:53,290 --> 00:03:56,870
And that’s what’s up this week @NASA …