



1
00:00:00,669 --> 00:00:04,920

"Here's some of the stories trending This
Week at NASA!"

2
00:00:04,920 --> 00:00:10,360

The Global Precipitation Measurement, or GPM
mission's Core Observatory launched from Japan's

3
00:00:10,360 --> 00:00:15,110

Tanegashima Space Center on February 27, Eastern
Standard Time.

4
00:00:15,110 --> 00:00:20,380

The joint NASA and Japan Aerospace Exploration
Agency effort uses the Core Observatory as

5
00:00:20,380 --> 00:00:25,490

the anchor of the first coordinated network
of international satellites, providing near

6
00:00:25,490 --> 00:00:29,900

real-time observations of rain and snowfall
around the globe.

7
00:00:29,900 --> 00:00:33,969

Data from the Core Observatory will be the
measuring stick by which observations from

8
00:00:33,969 --> 00:00:40,399

partner satellites are combined into unified
data sets, to study climate change, freshwater

9
00:00:40,399 --> 00:00:45,870

resources, and natural hazards such as floods,
droughts, and hurricanes.

10
00:00:45,870 --> 00:00:50,859

NASA and the California Department of Water
Resources briefed the media at an event in

11
00:00:50,859 --> 00:00:56,940
Sacramento on plans to use the agency's Earth observing satellites and airborne remote sensing

12
00:00:56,940 --> 00:01:03,589
assets to help California better manage water resources and respond to its severe drought.

13
00:01:03,589 --> 00:01:08,869
In January, following two straight years of drought conditions, Governor Jerry Brown declared

14
00:01:08,869 --> 00:01:11,860
a Drought State of Emergency in California.

15
00:01:11,860 --> 00:01:17,320
NASA monitors Earth's vital signs from land, air and space and shares the data with the

16
00:01:17,320 --> 00:01:22,479
global community to better understand and protect our home planet.

17
00:01:22,479 --> 00:01:27,340
The mishap investigation board that conducted the independent investigation into the cause

18
00:01:27,340 --> 00:01:33,130
of the water leak inside astronaut Luca Parmitano's helmet during last July's spacewalk outside

19
00:01:33,130 --> 00:01:38,469
the International Space Station, has documented its findings in a formal report.

20
00:01:38,469 --> 00:01:43,960
Although the board and the ISS program team uncovered evidence of particulate contamination

21

00:01:43,960 --> 00:01:49,179
clogging holes in the spacesuit's fan pump
separator, a root cause of the contamination

22

00:01:49,179 --> 00:01:50,729
could not be determined.

23

00:01:50,729 --> 00:01:56,530
However, the ISS program investigation team
will continue to search for the root cause.

24

00:01:56,530 --> 00:02:03,139
A mock-up of NASA's Orion spacecraft recently
arrived at Langley Research Center in preparation

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00:02:03,139 --> 00:02:07,780
for future testing at the Landing and Impact
Research Facility.

26

00:02:07,780 --> 00:02:12,760
Testing will give engineers insight into how
the capsule performs under a variety of water

27

00:02:12,760 --> 00:02:14,599
landing conditions.

28

00:02:14,599 --> 00:02:20,180
This Fall, Orion is scheduled to complete
its first mission, Exploration Flight Test-1,

29

00:02:20,180 --> 00:02:24,480
with a splashdown landing in the Pacific Ocean.

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00:02:24,480 --> 00:02:31,030
Data from NASA's Kepler mission verifies there
are 715 new planets outside our solar system

31

00:02:31,030 --> 00:02:35,430
-- nearly doubling the collection of known
planets in our galaxy.

32
00:02:35,430 --> 00:02:41,319
After studying two years' worth of data, researchers found that planetary systems with multiple,

33
00:02:41,319 --> 00:02:46,189
small planets in flat, circular orbits, like those found in our inner solar system, are

34
00:02:46,189 --> 00:02:48,390
common in the Milky Way.

35
00:02:48,390 --> 00:02:53,739
This discovery marks a significant increase in the number of known small-sized planets

36
00:02:53,739 --> 00:02:59,330
more akin to Earth than previously identified exoplanets, which are planets outside our

37
00:02:59,330 --> 00:03:00,959
solar system.

38
00:03:00,959 --> 00:03:07,099
Kepler's total tally of confirmed planets discovered now stands at 961.

39
00:03:07,099 --> 00:03:12,420
This composite image captured by the Hubble Space Telescope is of a supernova explosion

40
00:03:12,420 --> 00:03:15,070
in the galaxy, M82.

41
00:03:15,070 --> 00:03:21,780
Some 11-point-five million light-years from Earth, the supernova, designated SN 2014J,

42
00:03:21,780 --> 00:03:26,489

is the closest of its type discovered in the past 42 years.

43
00:03:26,489 --> 00:03:32,450
It was discovered on January 21 of this year and the Hubble photo was taken ten days later

44
00:03:32,450 --> 00:03:36,500
as the supernova approached its peak brightness.

45
00:03:36,500 --> 00:03:38,689
And that's what's up ... This Week at NASA.