



1

00:00:00,810 --> 00:00:05,750

“Here’s some of the stories trending This Week at NASA!”

2

00:00:05,750 --> 00:00:10,290

A July 24 update at NASA headquarters, featured new surprising imagery and science results

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00:00:10,290 --> 00:00:14,740

from the recent flyby of Pluto, by the New Horizons spacecraft.

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00:00:14,740 --> 00:00:19,179

This image, from the Long Range Reconnaissance Imager or (LORRI) – looking back at Pluto

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00:00:19,179 --> 00:00:24,429

– hours after the historic flyby revealed a haze in the planet’s sunlit atmosphere

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00:00:24,429 --> 00:00:30,270

that extends as high as 80 miles above Pluto’s surface – much higher than expected.

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00:00:30,270 --> 00:00:36,310

Models suggest that the hazes form when ultraviolet sunlight breaks apart methane gas.

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00:00:36,310 --> 00:00:41,020

LORRI images also show evidence that exotic ices have flowed – and may still be flowing

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00:00:41,020 --> 00:00:45,280

across Pluto’s surface, similar to glacial movement on Earth.

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00:00:45,280 --> 00:00:50,460

This unpredicted sign of present-day geologic activity was detected in Sputnik Planum – an

11
00:00:50,460 --> 00:00:54,510
area in the western part of Pluto's heart-shaped
Tombaugh Regio.

12
00:00:54,510 --> 00:00:59,030
Additionally, new compositional data from
New Horizons' Ralph instrument indicate

13
00:00:59,030 --> 00:01:04,180
that the center of Sputnik Planum is rich
in nitrogen, carbon monoxide, and methane

14
00:01:04,180 --> 00:01:06,520
ices.

15
00:01:06,520 --> 00:01:11,380
NASA's Kepler mission has confirmed the first
near-Earth-size planet orbiting a sun-like

16
00:01:11,380 --> 00:01:16,210
star's "habitable zone" -- the range of
distances from a star where liquid water might

17
00:01:16,210 --> 00:01:18,509
pool on a planet's surface.

18
00:01:18,509 --> 00:01:23,119
While smaller planets have previously been
found in the rare habitable zone, the newly

19
00:01:23,119 --> 00:01:29,540
discovered Kepler-452b is the first orbiting
around a star like our own sun.

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00:01:29,540 --> 00:01:35,130
NASA's Kjell Lindgren and Expedition 44
crewmates Oleg Kononenko of the Russian Federal

21
00:01:35,130 --> 00:01:40,829

Space Agency and Japan Aerospace Exploration Agency astronaut Kimiya Yui launched from

22

00:01:40,829 --> 00:01:46,930

Kazakhstan aboard a Soyuz spacecraft July 22 to begin a five-month mission on the International

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00:01:46,930 --> 00:01:48,249

Space Station.

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00:01:48,249 --> 00:01:52,670

When they reached the station six-hours later, they were greeted by station commander Gennady

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00:01:52,670 --> 00:01:58,170

Padalka of Roscosmos, NASA Flight Engineer Scott Kelly and Russian Flight Engineer Mikhail

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00:01:58,170 --> 00:02:00,700

Kornienko.

27

00:02:00,700 --> 00:02:05,649

A NASA camera on the (DISCOVER) satellite has returned its first view of the entire sunlit

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00:02:05,649 --> 00:02:08,890

side of Earth from one million miles away.

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00:02:08,890 --> 00:02:14,620

The Earth Polychromatic Imaging Camera or (EPIC) takes a series of 10 images using different

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00:02:14,620 --> 00:02:21,319

narrowband from ultraviolet to near infrared filters to produce a variety of science products.

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00:02:21,319 --> 00:02:25,970

The bluish tint of the initial images is a characteristic effect of sunlight scattered

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00:02:25,970 --> 00:02:27,890

by air molecules.

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00:02:27,890 --> 00:02:33,150

The EPIC team expects to have daily images posted to a dedicated web page by September.

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00:02:33,150 --> 00:02:38,900

DSCOVR is a partnership between NASA, NOAA and the U.S. Air Force to maintain real-time

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00:02:38,900 --> 00:02:42,930

solar wind monitoring capabilities.

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00:02:42,930 --> 00:02:47,950

NASA Deputy Administrator Dava Newman continues to visit NASA Centers to meet the NASA family

37

00:02:47,950 --> 00:02:52,340

and see the work being done around the country, on behalf of the agency.

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00:02:52,340 --> 00:02:57,390

During a recent trip to Ames Research Center in Northern California, Newman signed an agreement

39

00:02:57,390 --> 00:03:03,079

with U.S. Department of Agriculture Deputy Secretary Krysta Harden to increase collaboration

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00:03:03,079 --> 00:03:09,590

in Earth Science research, agriculture management and to inspire youth to pursue STEM careers.

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00:03:09,590 --> 00:03:15,620

The visit also included a demonstration highlighting NASA and USDA research data, and a town hall

42

00:03:15,620 --> 00:03:21,620

meeting with new center director Eugene Tu,
employees and students.

43
00:03:21,620 --> 00:03:26,930
NASA's Kennedy Space Center in Florida took
another step in its transformation to a 21st

44
00:03:26,930 --> 00:03:32,090
Century multi-user spaceport with the recent
completion of a new Small Class Vehicle Launch

45
00:03:32,090 --> 00:03:33,090
Pad.

46
00:03:33,090 --> 00:03:38,790
The new launch pad, designated 39C, is designed
for smaller aerospace companies and will enable

47
00:03:38,790 --> 00:03:43,329
them to develop and launch their vehicles
from Kennedy.\h

48
00:03:43,329 --> 00:03:45,230
And that's what's up this week @NASA ...