



1

00:00:00,740 --> 00:00:04,010

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

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00:00:04,010 --> 00:00:09,690

“When we explore we make discoveries – and that’s really the human element.

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00:00:09,690 --> 00:00:11,889

Discovery is why we do the science.”

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00:00:11,889 --> 00:00:17,300

A major scientific discovery was announced by NASA at a Sept. 28 news conference.

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00:00:17,300 --> 00:00:22,310

From its vantage point high above the Martian surface, NASA’s Mars Reconnaissance Orbiter

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00:00:22,310 --> 00:00:24,690

(MRO) spacecraft has found the strongest evidence yet ...

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00:00:24,690 --> 00:00:30,949

“... That under certain circumstances, liquid water has been found on Mars.”

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00:00:30,949 --> 00:00:35,970

Researchers say an imaging spectrometer on MRO detected signatures of hydrated minerals

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00:00:35,970 --> 00:00:40,840

on slopes where downhill streaks, known as recurring slope lineae (RSL) are seen.

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00:00:40,840 --> 00:00:47,640

“These are dark streaks that form in late spring, grow through the summer and then disappear

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00:00:47,640 --> 00:00:48,690
by fall.”

12
00:00:48,690 --> 00:00:54,120
In the past, RSL flows have been described
as possibly related to liquid water.

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00:00:54,120 --> 00:00:58,010
But the new findings of hydrated minerals
is key evidence.

14
00:00:58,010 --> 00:01:02,670
Hydrated salts can lower the freezing point
of liquid brine – and produce liquid water.

15
00:01:02,670 --> 00:01:08,000
“The existence of liquid water, even if
it’s super salty, briny water gives the

16
00:01:08,000 --> 00:01:12,840
possibility that if there’s life on Mars,
that we have a way to describe how it might

17
00:01:12,840 --> 00:01:15,439
survive.”

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00:01:15,439 --> 00:01:20,460
NASA Chief Scientist Ellen Stofan testified
during a Sept. 29 hearing before the House

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00:01:20,460 --> 00:01:26,100
Committee on Science, Space and Technology,
about astrobiology and the prospects for finding

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00:01:26,100 --> 00:01:29,320
life beyond Earth in the next decade.

21
00:01:29,320 --> 00:01:34,140
With NASA’s fleet of robotic spacecraft,
space-based observatories and technology being

22
00:01:34,140 --> 00:01:39,119
developed, it is very possible that we could
indeed discover some form of life, in the

23
00:01:39,119 --> 00:01:44,149
next 10 to 20 years, somewhere else in our
solar system.

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00:01:44,149 --> 00:01:48,840
A special VIP screening event of the 21st
Century Fox movie, "The Martian" took

25
00:01:48,840 --> 00:01:55,929
place Oct. 29 at National Geographic's Grosvenor
Auditorium, in Washington, D.C. Real NASA

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00:01:55,929 --> 00:02:00,530
data was used to make the movie – a fictional
story about a stranded astronaut's fight

27
00:02:00,530 --> 00:02:03,409
to survive on Mars in the 2030s.

28
00:02:03,409 --> 00:02:08,369
The event featured remarks by NASA Administrator
Charlie Bolden and other dignitaries, and

29
00:02:08,369 --> 00:02:12,920
a panel discussion with agency officials and
some of the film's cast members, about how

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00:02:12,920 --> 00:02:19,030
accurately the movie reflects the challenges
NASA faces, as we prepare for real human exploration

31
00:02:19,030 --> 00:02:22,780
of the Red Planet in the 2030s.

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00:02:22,780 --> 00:02:28,650

The Japan Aerospace Exploration Agency's unpiloted HTV-5 cargo craft left the International

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00:02:28,650 --> 00:02:34,690

Space Station on Sept. 28, five weeks after delivering about five tons of supplies and

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00:02:34,690 --> 00:02:37,060

experiments to the station.

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00:02:37,060 --> 00:02:42,460

That delivery included materials for the Twins Study, a suite of investigations being conducted

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00:02:42,460 --> 00:02:47,960

on the station with NASA astronaut Mark Kelly and on Earth, at the same time with his identical

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00:02:47,960 --> 00:02:51,330

twin Mark Kelly; a retired astronaut.

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00:02:51,330 --> 00:02:56,480

A few days later, a Russian Progress resupply ship launched to the space station from the

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00:02:56,480 --> 00:02:59,210

Baikonur Cosmodrome in Kazakhstan.

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00:02:59,210 --> 00:03:04,790

About six-hours later, the Progress automatically docked to the Zvezda Service Module – delivering

41

00:03:04,790 --> 00:03:12,800

more than three tons of food, fuel and
The Sept. 27 supermoon – visible in the

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00:03:12,800 --> 00:03:17,680

U.S. and much of the world, was the first in more than 30 years to occur at the same

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00:03:17,680 --> 00:03:20,750

time as a lunar eclipse.

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00:03:20,750 --> 00:03:25,460

NASA television aired live coverage of the event during which Earth's shadow dimmed

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00:03:25,460 --> 00:03:28,700

the "larger-than-life" face of the moon for more than an hour.

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00:03:28,700 --> 00:03:34,580

This rare double-celestial treat doesn't happen again until 2033.

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00:03:34,580 --> 00:03:39,170

In recognition of National Hispanic Heritage Month, NASA's weekly web series, "Space

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00:03:39,170 --> 00:03:43,330

to Ground" will be available in Spanish through Oct. 12.

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00:03:43,330 --> 00:03:48,690

"Espacio a Tierra", like the English-language version, will update viewers about activities

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00:03:48,690 --> 00:03:51,230

aboard the International Space Station.

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00:03:51,230 --> 00:03:55,040

The effort is part of NASA's Commitment to Action for the White House Initiative on

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00:03:55,040 --> 00:04:01,930

Educational Excellence for Hispanics, which is celebrating its 25th anniversary.