



1
00:00:00,789 --> 00:00:04,950

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

2
00:00:04,950 --> 00:00:10,400

Over twenty-two thousand Earth and space scientists,
educators, students and leaders from around

3
00:00:10,400 --> 00:00:16,000

the world connected with each other and NASA
at the American Geophysical Union's 46th

4
00:00:16,000 --> 00:00:18,990

annual fall meeting in San Francisco.

5
00:00:18,990 --> 00:00:22,380

Among some of the new revelations ...

6
00:00:22,380 --> 00:00:27,610

NASA's Mars rover Curiosity has determined
the age of a rock on Mars, accomplishing a

7
00:00:27,610 --> 00:00:31,970

fundamental and unprecedented measurement
that would have been considered unlikely when

8
00:00:31,970 --> 00:00:36,820

the mobile laboratory landed last year.\h
Curiosity also made the first measurements

9
00:00:36,820 --> 00:00:42,280

of the natural radiation environment of the
surface of Mars and determined it to be approximately

10
00:00:42,280 --> 00:00:48,470

an average of 0.67 millisieverts per day.
For comparison, radiation exposure from a

11
00:00:48,470 --> 00:00:53,320

typical chest X-ray is about 0.02 millisieverts.\h

12
00:00:53,320 --> 00:00:59,420
NASA's Mars Reconnaissance Orbiter or MRO
has detected additional liquid streaking down

13
00:00:59,420 --> 00:01:05,610
mountain slopes near the planet's equator
during the red planet's seasonal changes.

14
00:01:05,610 --> 00:01:11,700
The Cassini space probe has photographed actual
seas and lakes on Saturn's moon Titan. Although

15
00:01:11,700 --> 00:01:16,280
these bodies are filled with liquid ethane
and methane rather than liquid water, they

16
00:01:16,280 --> 00:01:23,280
do represent the only known stable lakes in
the solar system that are not on planet Earth.

17
00:01:23,280 --> 00:01:28,280
New images of the Juno spacecraft making it's
closest ever flyby with Earth were revealed

18
00:01:28,280 --> 00:01:34,470
this week as it sped away for a rendezvous
with Jupiter in July 2016.

19
00:01:34,470 --> 00:01:38,869
The NASA Glenn Research Center hosted a summit
on energy and manufacturing activities attended

20
00:01:38,869 --> 00:01:43,780
by more than two hundred representatives from
regional colleges and industry. Case Western

21
00:01:43,780 --> 00:01:48,340
Reserve University sponsored the event that

included dignitaries such as Congresswoman

22
00:01:48,340 --> 00:01:54,360
Marcy Kaptur, Dr. Ernest Moniz, Secretary
of Energy and panelist member Dr. Rebecca

23
00:01:54,360 --> 00:02:00,620
Spyke Keiser, NASA's associate deputy administrator
for strategy and policy.

24
00:02:00,620 --> 00:02:04,990
Testing on the Project Morpheus planetary
lander is underway at Kennedy Space Center's

25
00:02:04,990 --> 00:02:09,239
repurposed Shuttle Landing Facility – which
has been outfitted with rocks, craters and

26
00:02:09,239 --> 00:02:14,549
other hazards to automatically avoid. Using
“green” propellants, landers like Project

27
00:02:14,549 --> 00:02:20,260
Morpheus and NASA's Mighty Eagle could deliver
cargo to asteroids and other planetary surfaces

28
00:02:20,260 --> 00:02:23,500
on future missions.

29
00:02:23,500 --> 00:02:26,180
\h
Landsat 8 is learning more about our planet,

30
00:02:26,180 --> 00:02:31,549
including the coldest place on Earth.\h Using
data from NOAA and NASA satellites, the coldest

31
00:02:31,549 --> 00:02:38,610
recorded spot... a tall ridge on the East
Antarctic Plateau at minus 133.6 degrees Fahrenheit,

32

00:02:38,610 --> 00:02:43,779

would turn\hhot water - tossed into the air-
into shards of ice.

33

00:02:43,779 --> 00:02:49,090

At NASA's Wallops Flight Facility, Orbital
Sciences is preparing a resupply mission to

34

00:02:49,090 --> 00:02:53,159

the International Space Station. The mission
will be the first launch of its commercial

35

00:02:53,159 --> 00:02:58,730

cargo contract with NASA, and is scheduled
to launch in mid to late December to bring

36

00:02:58,730 --> 00:03:02,799

more than two tons of food, experiments and
other supplies.

37

00:03:02,799 --> 00:03:04,690

And that's what's up ... This Week at
NASA.