



1
00:00:00,750 --> 00:00:03,620

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

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00:00:03,620 --> 00:00:09,510

In an effort to better understand our changing planet and our impact on it, NASA kicked off

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00:00:09,510 --> 00:00:12,270

its Earth Expeditions campaign on March 23.

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00:00:12,270 --> 00:00:17,330

The project calls for eight major new Earth science field experiments to take place over

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00:00:17,330 --> 00:00:19,820

the next six months all around the world.

6
00:00:19,820 --> 00:00:23,680

The first of the new projects, the Oceans Melting Greenland (OMG) investigation, is

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00:00:23,680 --> 00:00:24,830

currently underway.

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00:00:24,830 --> 00:00:29,210

It’s looking at how much the oceans around Greenland are melting the edges of the ice

9
00:00:29,210 --> 00:00:30,890

sheet from below.

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00:00:30,890 --> 00:00:35,570

Updates on the campaigns will be provided on NASA’s social media channels and the

11
00:00:35,570 --> 00:00:38,190

newly launched Earth Expeditions webpage.

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00:00:38,190 --> 00:00:43,400

NASA uses ground-based field studies along with observations from space to gain a more

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00:00:43,400 --> 00:00:48,600

complete picture of how and why our planet is changing.

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00:00:48,600 --> 00:00:54,219

The 47th annual Lunar and Planetary Science Conference, March 21–25 near Houston, featured

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00:00:54,219 --> 00:00:59,700

a presentation by NASA's Director of Planetary Science, Jim Green about the agency's planetary

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00:00:59,700 --> 00:01:05,810

science activities – including this year's July 4th arrival at Jupiter of the Juno spacecraft

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00:01:05,810 --> 00:01:10,020

and the launch of the OSIRIS REx asteroid mission later this year.

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00:01:10,020 --> 00:01:13,810

Other news from the conference included the release of some highly anticipated views of

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00:01:13,810 --> 00:01:20,030

dwarf planet Ceres taken by the Dawn spacecraft from its lowest orbit yet at Ceres.

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00:01:20,030 --> 00:01:24,670

The new images reveal that one of the puzzling bright spots inside of Occator Crater appears

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00:01:24,670 --> 00:01:29,420

to be a dome, with crisscrossing fractures and other linear features.

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00:01:29,420 --> 00:01:34,280

Meanwhile, members of the New Horizons mission discussed evidence that the long-term shifts

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00:01:34,280 --> 00:01:39,000

and tilt of Pluto's orbit might have made it possible for rivers and lakes of liquid

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00:01:39,000 --> 00:01:43,950

nitrogen to exist on the surface of the dwarf planet in the past, and maybe again in the

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00:01:43,950 --> 00:01:45,270

future.

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00:01:45,270 --> 00:01:50,810

NASA's Kepler space telescope has become the first observatory to capture the super-bright

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00:01:50,810 --> 00:01:56,890

flash of an exploding star's shockwave in the optical wavelength or visible spectrum.

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00:01:56,890 --> 00:02:02,130

Researchers analyzing light captured by Kepler over a three-year period say the phenomenon,

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00:02:02,130 --> 00:02:07,090

called the "shock breakout" happened in 2011, when a red supergiant star exploded

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00:02:07,090 --> 00:02:09,060

while in Kepler's view.

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00:02:09,060 --> 00:02:14,650

The star was roughly 500 times the size of our sun and about 1.2 billion light years

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00:02:14,650 --> 00:02:16,709

away.

33
00:02:16,709 --> 00:02:22,090
On March 22, Orbital ATK's Cygnus cargo spacecraft launched to the International Space

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00:02:22,090 --> 00:02:26,879
Station from Cape Canaveral Air Force Station in Florida, atop a United Launch Alliance

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00:02:26,879 --> 00:02:28,720
Atlas V rocket.

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00:02:28,720 --> 00:02:35,000
The nearly 7,500 pounds of cargo onboard Cygnus included a large-scale fire science experiment,

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00:02:35,000 --> 00:02:40,610
a study to perform the first space-based observations of meteors entering Earth's atmosphere,

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00:02:40,610 --> 00:02:46,420
and the second generation of the 3-D printer currently being used on the station.

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00:02:46,420 --> 00:02:51,860
On March 25, NASA astronaut Scott Kelly and cosmonauts Sergey Volkov and Mikhail Kornienko

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00:02:51,860 --> 00:02:58,170
of Roscosmos participated in traditional welcoming ceremonies in Star City, Russia, several weeks

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00:02:58,170 --> 00:03:01,709
after they returned to Earth from the International Space Station.

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00:03:01,709 --> 00:03:06,000
NASA Administrator Charlie Bolden was among those on hand for the event.

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00:03:06,000 --> 00:03:11,650
Kelly and Kornienko spent 340 days in space
as part of a study on the effects of long-duration

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00:03:11,650 --> 00:03:13,840
spaceflight on the human body.

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00:03:13,840 --> 00:03:18,819
Data from the study will be used to formulate
a human mission to Mars.

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00:03:18,819 --> 00:03:24,780
NASA's International Space Apps Challenge
will take place April 22-24, with this year's

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00:03:24,780 --> 00:03:28,840
global "main stage" located in Pasadena,
California.

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00:03:28,840 --> 00:03:36,110
Participants at 193 locations in 72 countries
will use NASA data to develop mobile applications,

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00:03:36,110 --> 00:03:42,310
software, hardware, data visualizations and
platform solutions that could contribute to

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00:03:42,310 --> 00:03:45,310
space exploration missions and help improve
life on Earth.

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00:03:45,310 --> 00:03:51,790
The three-day event is considered one of the
largest hack-a-thons in the world.

52
00:03:51,790 --> 00:03:53,810
And that's what's up this week @NASA ...