

# TW@N

THIS WEEK @ NASA



1  
00:00:00,320 --> 00:00:02,880  
The Vice President checks out new Earth Science work ...

2  
00:00:02,880 --> 00:00:06,560  
Two decades and counting of continuous human presence in space ...

3  
00:00:06,560 --> 00:00:10,960  
And 29 days on the edge for the Webb Space Telescope team ... a few of the

4  
00:00:10,960 --> 00:00:15,920  
stories to tell you about – This Week at NASA!

5  
00:00:15,920 --> 00:00:20,640  
Vice President Kamala Harris visited our Goddard Space Flight Center on Nov. 5 for

6  
00:00:20,640 --> 00:00:26,720  
a first-hand look at how NASA's wide array of Earth science missions provide crucial information

7  
00:00:26,720 --> 00:00:29,840  
to help address the climate challenges facing our planet.

8  
00:00:33,520 --> 00:00:38,560  
The Vice President was also on hand with NASA Administrator Bill Nelson and other officials

9  
00:00:38,560 --> 00:00:41,920  
as we unveiled the first images from Landsat 9,

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00:00:41,920 --> 00:00:47,120  
a joint mission of NASA and the U.S. Geological Survey (USGS) that launched in late September.

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00:00:47,120 --> 00:00:52,640

The images, all captured on Oct. 31, provide a preview of how the mission will help people

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00:00:52,640 --> 00:00:57,440

manage vital natural resources and track the impacts of climate change,

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00:00:57,440 --> 00:01:03,200

adding to Landsat's data record of space-based Earth observation that spans nearly 50 years.

14

00:02:11,840 --> 00:02:15,760

Learn more about NASA's Earth science work at [nasa.gov/Earth](https://nasa.gov/Earth).

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00:02:16,560 --> 00:02:22,560

Oct. 31 marked the start of the 21st straight year of humans living and working in space.

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00:02:23,200 --> 00:02:28,720

Expedition 1, the first resident crew to live and work onboard the International Space Station,

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00:02:28,720 --> 00:02:34,080

launched on Halloween in 2000. The science and technology research conducted onboard

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00:02:34,080 --> 00:02:39,120

the space station is critical to helping us understand and overcome the challenges of

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00:02:39,120 --> 00:02:44,320

long-duration spaceflight, and necessary for a long-term presence on the Moon

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00:02:44,320 --> 00:02:48,080

and missions deeper into the solar system, including to Mars.

21  
00:02:49,120 --> 00:02:53,120  
NASA is working with the U.S. Navy off the coast of San Diego, California,

22  
00:02:53,120 --> 00:02:58,640  
on the final certification run to verify and validate procedures and hardware to recover

23  
00:02:58,640 --> 00:03:04,240  
the Orion spacecraft after it splashes down in the Pacific Ocean at the end of our uncrewed

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00:03:04,240 --> 00:03:10,000  
Artemis I mission. Orion is targeted to launch atop our Space Launch System rocket on Artemis

25  
00:03:10,000 --> 00:03:14,800  
I – its first deep space mission to pave the way for future flights with astronauts.

26  
00:03:15,760 --> 00:03:20,880  
This year's launch of our James Webb Space Telescope will be followed by a rather tense

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00:03:20,880 --> 00:03:26,560  
Days on Edge" for the Webb team. During that time, thousands of parts must work correctly, and in

28  
00:03:26,560 --> 00:03:33,040  
sequence, to unfold the telescope and put it into its final configuration. With more than 300 single

29  
00:03:33,040 --> 00:03:38,640  
point failure items, this will be the most complex sequence of deployments ever attempted in a single

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00:03:38,640 --> 00:03:44,960  
space mission. Webb is targeted for launch Dec. 18 on its mission to reveal new and unexpected

31  
00:03:44,960 --> 00:03:50,560  
discoveries and help humanity understand the  
origins of the universe and our place in it.

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00:03:51,440 --> 00:03:56,400  
NASA's Double Asteroid Redirection Test or  
DART mission is currently targeted for launch

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00:03:56,400 --> 00:04:02,080  
no earlier than Nov. 24 from Vandenberg Space  
Force Base in California. The mission could help

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00:04:02,080 --> 00:04:07,520  
determine if intentionally crashing a spacecraft  
into an asteroid is an effective way to change

35  
00:04:07,520 --> 00:04:12,720  
its course, should we discover an asteroid on  
a collision course with Earth in the future.

36  
00:04:12,720 --> 00:04:17,680  
In fall 2022, DART will impact  
the asteroid moonlet Dimorphos,

37  
00:04:17,680 --> 00:04:22,560  
which orbits a larger asteroid named Didymos.  
Neither of these is a threat to Earth.