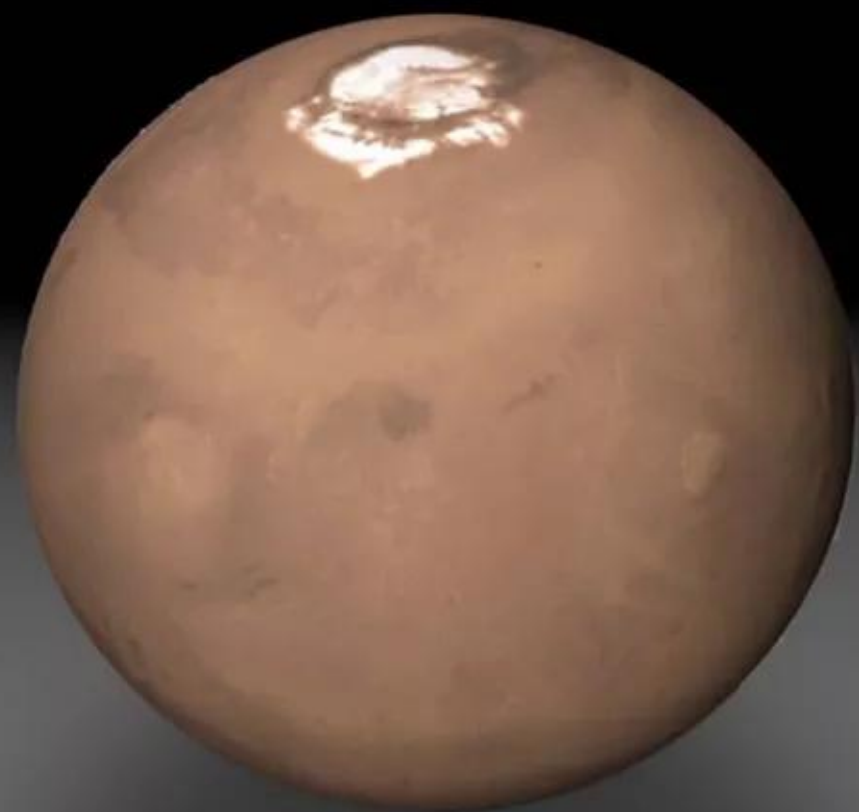
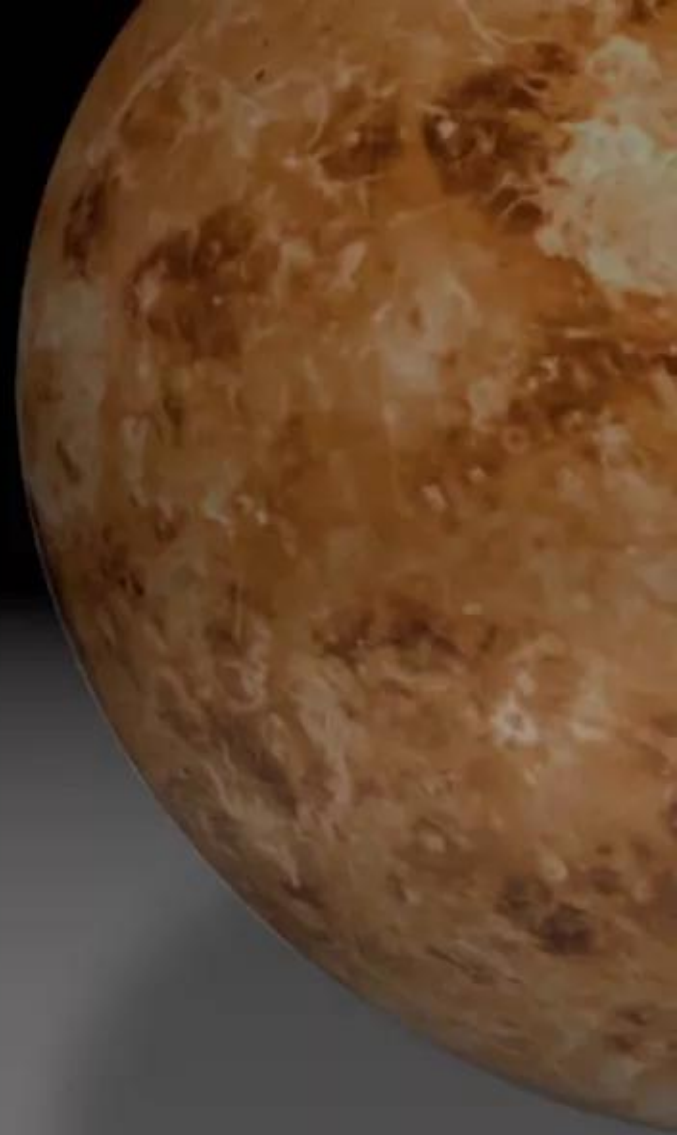




ry



**Mars**



1  
00:00:00,690 --> 00:00:05,130

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

2  
00:00:05,130 --> 00:00:09,990

The Oct. 10th spacewalk outside the International  
Space Station was the second in less than

3  
00:00:09,990 --> 00:00:15,869

a week by NASA’s Randy Bresnik and Mark  
Vande Hei – and one of three U.S. spacewalks

4  
00:00:15,869 --> 00:00:17,820

planned for October.

5  
00:00:17,820 --> 00:00:22,190

The astronauts lubricated the new latching  
end effector they installed on the Canadarm2

6  
00:00:22,190 --> 00:00:24,610

robotic arm on Oct. 5.

7  
00:00:24,610 --> 00:00:29,820

They also replaced a faulty camera system  
and completed several other tasks.

8  
00:00:29,820 --> 00:00:37,109

Joe Acaba will join Bresnik for the next spacewalk  
– currently scheduled for Oct. 20.

9  
00:00:37,109 --> 00:00:42,629

On Oct. 9, NASA's Aqua satellite captured  
this natural-color image of several wildfires

10  
00:00:42,629 --> 00:00:44,579

burning in Northern California.

11  
00:00:44,579 --> 00:00:50,899

Heat, low humidity and intense winds complicated

the ability of firefighters to control these

12  
00:00:50,899 --> 00:00:56,819  
fires, several of which were burning in Sonoma Valley and Napa Valley, the heart of California's

13  
00:00:56,819 --> 00:00:59,389  
wine country.

14  
00:00:59,389 --> 00:01:05,190  
Data from several satellites – including our Orbiting Carbon Observatory-2 (OCO-2),

15  
00:01:05,190 --> 00:01:10,400  
show that the impacts of heat and drought during the last El Nino on Earth's tropical

16  
00:01:10,400 --> 00:01:17,320  
regions, caused the record spike in global atmospheric carbon dioxide (CO2) levels in

17  
00:01:17,320 --> 00:01:19,510  
2015 and 2016.

18  
00:01:19,510 --> 00:01:24,720  
Our planet's three largest tropical forests each responded to the El Nino differently,

19  
00:01:24,720 --> 00:01:30,540  
but all added to the largest annual increases in atmospheric carbon dioxide concentration

20  
00:01:30,540 --> 00:01:34,160  
seen in at least 2,000 years.

21  
00:01:34,160 --> 00:01:39,830  
NASA's InSight lander is headed to Mars next year, and it could carry your name with

22

00:01:39,830 --> 00:01:40,830

it.

23

00:01:40,830 --> 00:01:48,210

Visit [mars.nasa.gov/syn](https://mars.nasa.gov/syn) by November 1 to add your name to a silicon microchip that will

24

00:01:48,210 --> 00:01:54,190

hitch a ride to the Red Planet – joining another microchip filled with nearly 827,000

25

00:01:54,190 --> 00:01:56,520

names back in 2015.

26

00:01:56,520 --> 00:02:01,430

Be sure to also check out details about the frequent flier program at the site, and other

27

00:02:01,430 --> 00:02:05,650

ways you can participate in NASA's exploration of Mars.

28

00:02:05,650 --> 00:02:11,600

InSight will be the first mission to explore far below the Martian surface.

29

00:02:11,600 --> 00:02:17,430

Oct. 14 marks the 70th anniversary of the first piloted supersonic flight – made by

30

00:02:17,430 --> 00:02:20,040

Air Force pilot Chuck Yeager.

31

00:02:20,040 --> 00:02:25,170

During the historic flight, Yeager's X-1 experimental research aircraft flew at around

32

00:02:25,170 --> 00:02:28,840

700 miles an hour in the skies above California.

33  
00:02:28,840 --> 00:02:34,280  
The X-plane legacy continues today at NASA,  
where we're designing a supersonic demonstration

34  
00:02:34,280 --> 00:02:42,310  
aircraft that aims to quiet the loud sonic  
boom associated with supersonic flight today.

35  
00:02:42,310 --> 00:02:47,700  
On Oct. 12, the close approach to Earth of  
a small asteroid provided an opportunity for

36  
00:02:47,700 --> 00:02:53,000  
asteroid trackers around the world to test  
their ability to operate as a coordinated

37  
00:02:53,000 --> 00:02:55,940  
international asteroid warning network.

38  
00:02:55,940 --> 00:03:03,280  
The asteroid – 2012 TC4 – flew by at a  
safe distance of approximately 26,000 miles.

39  
00:03:03,280 --> 00:03:08,540  
This test of a global asteroid-impact and  
early-warning system is a volunteer project,

40  
00:03:08,540 --> 00:03:14,849  
conceived and organized by NASA-funded asteroid  
observers and supported by the agency's

41  
00:03:14,849 --> 00:03:19,660  
Planetary Defense Coordination Office (PDCO).

42  
00:03:19,660 --> 00:03:21,640  
And that's what's up this week @NASA ...