

THI

20

Black  
hole blurs  
X-ray light



29

1

00:00:00,640 --> 00:00:03,120

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

2

00:00:03,120 --> 00:00:09,760

A month after its launch, the Orbiting Carbon Observatory-2, NASA's first spacecraft dedicated

3

00:00:09,760 --> 00:00:15,310

to studying atmospheric carbon dioxide – has reached its final operating orbit and returned

4

00:00:15,310 --> 00:00:16,919

its first science data.

5

00:00:16,919 --> 00:00:22,119

"First light" test data were collected on August 6 as OCO-2 flew over central New

6

00:00:22,119 --> 00:00:26,449

Guinea -- confirming the health of the spacecraft's science instrument's.

7

00:00:26,449 --> 00:00:30,419

Aboard the International Space Station, the European Space Agency's fifth and final

8

00:00:30,419 --> 00:00:37,640

Automated Transfer Vehicle cargo ship docked to the ISS on August 12.

9

00:00:37,640 --> 00:00:43,020

Named Georges Lemaitre after the 20th century Belgian astronomer, the ATV delivered about

10

00:00:43,020 --> 00:00:47,180

7 tons of supplies to the station's Expedition 40 crew.

11

00:00:47,180 --> 00:00:51,559

After a month-long stay, Orbital Sciences Corporation's Cygnus cargo craft departed

12

00:00:51,559 --> 00:00:54,710

the station August 15 loaded with trash.

13

00:00:54,710 --> 00:00:59,379

The Cygnus, dubbed the SS Janice Voss for the late astronaut, arrived at the station

14

00:00:59,379 --> 00:01:03,070

on July 16 with almost three tons of supplies.

15

00:01:03,070 --> 00:01:07,660

If you looked up in the night sky on August 10, chances are saw "it".

16

00:01:07,660 --> 00:01:10,890

It was the second and largest supermoon of the summer.

17

00:01:10,890 --> 00:01:15,610

A supermoon – occurs when the moon becomes full on the same day as its perigee — the

18

00:01:15,610 --> 00:01:19,030

point in the moon's orbit when it's closest to Earth.

19

00:01:19,030 --> 00:01:22,290

The next supermoon is September 9.

20

00:01:22,290 --> 00:01:27,530

This image from NASA's Nuclear Spectroscopic Telescope Array, or NuSTAR shows the extreme

21

00:01:27,530 --> 00:01:33,140

blurring and stretching of X-ray light from a corona, caused by the intense gravitational

22  
00:01:33,140 --> 00:01:38,570  
pull of a supermassive black hole 324 million  
light-years from Earth.

23  
00:01:38,570 --> 00:01:42,940  
Similar events have been observed before,  
but never in such detail.

24  
00:01:42,940 --> 00:01:48,009  
NuSTAR is managed by NASA's Jet Propulsion  
Laboratory for the Science Mission Directorate.

25  
00:01:48,009 --> 00:01:53,000  
Engineers at Stennis Space Center moved the  
1-point-2 million pound Main Propulsion Test

26  
00:01:53,000 --> 00:01:58,070  
Article structure previously used for propulsion  
testing with the space shuttle, to a base

27  
00:01:58,070 --> 00:02:04,119  
platform on the B-2 Test Stand in preparation  
for testing the Space Launch System core stage.

28  
00:02:04,119 --> 00:02:09,150  
Another million pounds of steel will be used  
to extend the structure so that it can accommodate

29  
00:02:09,150 --> 00:02:11,160  
the SLS core stage.

30  
00:02:11,160 --> 00:02:15,220  
NASA's Marshall Space Flight Center opened  
the agency's latest "green" building

31  
00:02:15,220 --> 00:02:18,790  
during an August 13 ribbon-cutting ceremony.

32

00:02:18,790 --> 00:02:23,280

Among those joining Center Director Patrick Sheuermann at the event were U.S. Senator

33

00:02:23,280 --> 00:02:29,090

Jeff Sessions of Alabama and U.S. Representative Mo Brooks of Alabama's 5th District.

34

00:02:29,090 --> 00:02:33,200

Marshall opened the agency's first green building in 2006.

35

00:02:33,200 --> 00:02:38,709

NASA Administrator Charlie Bolden helped recognize the best of best at NASA during the Agency

36

00:02:38,709 --> 00:02:44,400

Honor Awards August 14 at headquarters, the annual event is meant to highlight the distinguished

37

00:02:44,400 --> 00:02:49,379

contributions of the honorees and to thank them for their valued service to NASA and

38

00:02:49,379 --> 00:02:50,379

its mission.

39

00:02:50,379 --> 00:02:52,730

And that's what's up this week @NASA ...