

A photograph of the Orion spacecraft in space. The spacecraft is white with a gold-colored upper section and a white conical nose cone. It features the NASA logo, an American flag, and the word "ORION" on the nose cone. A large white antenna is visible on the side. The background is the blackness of space with some equipment visible in the upper left.

TW@N

THIS WEEK @ NASA

1

00:00:00,080 --> 00:00:02,750

A commercial cargo spacecraft leaves the space station ...

2

00:00:02,750 --> 00:00:05,180

Watching an Atlantic storm from space ...

3

00:00:05,180 --> 00:00:09,830

And the Artemis I rocket moves closer to launch ... a few of the stories to tell you about

4

00:00:09,830 --> 00:00:13,710

– This Week at NASA!

5

00:00:13,710 --> 00:00:18,930

On July 8, an uncrewed SpaceX Dragon cargo spacecraft undocked from the International

6

00:00:18,930 --> 00:00:25,269

Space Station with about 5,000 pounds of scientific experiments and supplies for researchers on

7

00:00:25,269 --> 00:00:26,269

Earth.

8

00:00:26,269 --> 00:00:30,990

The Dragon left the station just over a month after it delivered several tons of experiments

9

00:00:30,990 --> 00:00:33,040

and new solar arrays.

10

00:00:33,040 --> 00:00:37,720

This is the company's 22nd commercial resupply services flight for NASA.

11

00:00:37,720 --> 00:00:43,480

On July 4, space station astronaut Megan McArthur captured images of Elsa, the fifth named storm

12
00:00:43,480 --> 00:00:48,460
of the 2021 Atlantic hurricane season, as
the storm made its way through the Caribbean

13
00:00:48,460 --> 00:00:49,460
Sea.

14
00:00:49,460 --> 00:00:54,390
Elsa, the earliest-forming fifth named Atlantic
storm on record, according to our partner

15
00:00:54,390 --> 00:00:59,750
agency, NOAA, reached hurricane status but
weakened to a tropical storm before making

16
00:00:59,750 --> 00:01:04,400
landfall July 7 in the northwest portion of
Florida.

17
00:01:04,400 --> 00:01:09,870
According to a NASA-led study, in the mid-2030s
a lunar cycle will amplify rising sea levels

18
00:01:09,870 --> 00:01:16,040
caused by climate change and lead to a decade
of dramatic increases in high-tide floods

19
00:01:16,040 --> 00:01:21,990
– also called nuisance floods or sunny day
floods – for coastal cities around the U.S.

20
00:01:21,990 --> 00:01:27,240
The study also says that the floods will sometimes
occur in clusters that could last a month

21
00:01:27,240 --> 00:01:32,620
or longer, due to the gravitational pull caused
by the alignment of the Moon, Earth, and the

22

00:01:32,620 --> 00:01:34,110

Sun.

23

00:01:34,110 --> 00:01:39,260

Our Artemis I mission reached another milestone on July 5 when teams at our Kennedy Space

24

00:01:39,260 --> 00:01:45,729

Center stacked the interim cryogenic propulsion stage or (ICPS) atop the Space Launch System

25

00:01:45,729 --> 00:01:50,479

or (SLS) rocket inside the Vehicle Assembly Building.

26

00:01:50,479 --> 00:01:56,190

The ICPS's RL-10 engine will be used to send the Orion spacecraft toward the Moon.

27

00:01:56,190 --> 00:02:00,880

Launching later this year, Artemis I will be an uncrewed flight test of Orion and the SLS

28

00:02:00,880 --> 00:02:07,190

rocket as an integrated system ahead of subsequent missions to send astronauts to the Moon, including

29

00:02:07,190 --> 00:02:10,369

the first woman and the first person of color.

30

00:02:10,369 --> 00:02:16,370

July 8 marked the 10th anniversary of the launch of space shuttle Atlantis STS-135,

31

00:02:16,370 --> 00:02:19,780

the final launch of the historic space shuttle program.

32

00:02:19,780 --> 00:02:24,670

The mission delivered supplies, spare parts,
and an Italian-built multipurpose logistics

33

00:02:24,670 --> 00:02:26,860

module to the station.

34

00:02:26,860 --> 00:02:31,490

Atlantis and its crew returned to Earth in
the predawn hours of July 21 to complete the

35

00:02:31,490 --> 00:02:36,290

mission and close out an era of spaceflight
that spanned 30 years.