Major hurricane Florence, seen from space ...

Our mission to size up land and sea ice on Earth ...

And “catching big air” … another successful test for our Orion spacecraft … a few of

the stories to tell you about – This Week at NASA!

A high definition camera outside the International Space Station captured a view of massive Hurricane Florence on the move in the Atlantic Ocean, on the morning of Sept. 12.

The footage was taken as Florence – then a category 4 storm, with winds near 130 miles per hour – was closing in on the U.S. East Coast.

Satellites in space also saw the storm.

This view from NOAA's GOES-East satellite shows Florence approaching the Carolinas and gives an idea of just how big the storm is.

Launched Sept 15 from Vandenberg Air Force
Base in California, our ICESat-2 mission is designed to collect a terabyte of data a day to monitor the height of Earth’s surface.

The mission uses an extremely advanced laser instrument that sends 10,000 pulses a second to Earth’s surface.

It then measures the height of ice sheets, glaciers, sea ice and vegetation by calculating the time it takes the pulses to return to the spacecraft.

ICESat-2 will enable researchers to track changes in land and sea ice with unparalleled detail.

Our Orion spacecraft’s parachute system had its final test on Sept. 12 at the U.S. Army’s Proving Ground in Yuma, Arizona, in preparation for missions with astronauts to the Moon and beyond.

The Orion test capsule was dropped from an altitude of more than six miles to verify the spacecraft’s system of 11 parachutes.
In addition to the chutes, the test verified the operation of the forward bay covers and other devices that work in sequence to slow the capsule’s descent to ensure astronauts can return safely from deep space missions.

Our administrator Jim Bridenstine has named Jody Singer director of the agency’s Marshall Space Flight Center in Huntsville, Alabama.

Singer, who is the first woman appointed to the position, has been the center’s deputy director since February 2016, and has served as acting director since the retirement of Todd May as center director in July.

“We’re going back to the Moon – and this time when we go to the Moon, we’re going to stay.

Jody is up for the job there at Marshall.

Marshall is critically important to accomplishing this objective, and we’re very excited about
A test of a deployable spacecraft heat shield technology, known as ADEPT took place Sept. 12.

ADEPT was launched on an UP Aerospace suborbital rocket at Spaceport America’s Vertical Launch Area in New Mexico, to a high enough altitude for the umbrella-like heat shield to be deployed and tested on its way back to Earth.

This concept could be used to safely deploy scientific payloads or enable long-term human exploration of Mars with the associated cargo needs of such a mission.

That's what's up this week @NASA … For more on these and other stories follow us on the web at nasa.gov/twan