Discussing the future of human space exploration ...

... a vital resource is confirmed on the surface of the Moon ...

and a first glimpse at asteroid Bennu ... a few of the stories to tell you about – This Week at NASA!

Vice President Mike Pence and our administrator Jim Bridenstine, visited the Johnson Space Center in Houston on Aug. 23, to discuss the future of human space exploration and the agency’s plans to return to the Moon, as a forerunner to future human missions to Mars.

“We’re on the cusp of a new golden age of exploration – I believe it with all of my heart and we’ve got the courageous astronauts that are ready to lead us there again.

Men and women of the Johnson Space Center, it’s not a question of if – it’s just a question of when (applause).

I’m going to make you a promise – soon
and very soon American astronauts will return to space on American rockets launched from American soil.”

The Vice President and the administrator’s visit included a stop at the laboratory, which houses lunar surface samples collected during the Apollo Moon missions.

They also visited the nearby Neutral Buoyancy Laboratory where astronauts train for spacewalks.

Data collected by our Moon Mineralogy Mapper instrument, which flew aboard India’s first mission to the Moon, have been used by a team of scientists to identify three specific signatures that definitively prove there is water ice within the top few millimeters of the lunar surface – in the darkest and coldest parts of our Moon’s polar regions.

Water on the lunar surface would possibly be accessible to future explorers and could be potentially easier to access than the water previously detected beneath the Moon’s surface.

Our OSIRIS-REx spacecraft has sent back its first image of asteroid Bennu.
Seen in this series of shots from a distance of about 1.4 million miles, Bennu appears as a single pixel.

It was imaged as the spacecraft began the mission's initial science operations and final approach phase toward the asteroid.

OSIRIS-REx, our first-ever asteroid sample return mission, will arrive at Bennu in December and return a sample from the asteroid in September 2023.

Our InSight spacecraft has passed the halfway point on its six-month, 300-million-mile voyage to Mars.

The spacecraft is targeted to touch down on the Red Planet this November.

The InSight team is using the time before the spacecraft's arrival at Mars to not only plan and practice for that critical day, but also to activate and check spacecraft subsystems vital to cruise, landing and surface operations, including the highly sensitive science instruments.
Insight will be the first mission to study the Red Planet's deep interior.

On Aug. 22, cameras aboard the International Space Station captured views of Hurricane Lane churning in the Pacific Ocean – south of the Hawaiian Islands.

At the time the footage was captured, the storm was a major hurricane packing winds of 155 miles per hour and was moving on a track toward the Hawaiian Islands.

That's what's up this week @NASA ...

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