

SpaceX launch equals Space Coast record for the year

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A SpaceX launch from Cape Canaveral Space Force Station on Tuesday night marked the Space Coast's 57th launch of the year, equaling the record total seen in 2022.



A Falcon 9 with 22 of SpaceX's Starlink internet satellites lifted off from Canaveral's Space Launch Complex 40 at 8:36 p.m. This was the first-stage booster's 16th flight with a recovery landing downrange on the droneship Just Read the Instructions in the Atlantic.

For SpaceX it was its 53rd mission from either Canaveral or Kennedy Space Center this year while United Launch Alliance has flown three times and Relativity Space has flown once. SpaceX is the lone launch provider this year from KSC having flown 11 times while ULA, SpaceX and Relativity combined for 46 launches from Canaveral.

The majority of SpaceX launches have been for its growing Starlink constellation. This marks the 31st Starlink launch from the Space Coast.

But SpaceX has also flown all three U.S.-based crewed missions this year with Crew-6, Axiom 2 and Crew-7 all having launched from KSC. KSC has also hosted four of the Falcon Heavy launches including last week's Psyche launch, the first time NASA has used the powerhouse rocket.

The pace between launches has picked up as well, with only an eight hour and 42 minute gap between the Psyche launch that happened Friday morning and a Starlink launch on Friday evening.

That's the shortest time between launches since four Gemini program missions that flew in 1966. Those featured double launches from two different pads on what was then Cape Kennedy.

Those would send crew up in the Gemini capsule on Titan rockets about 100 minutes after Atlas boosers had sent up Agena Target Vehicles with which they would rendezvous in space. The record remains the two launches with Gemini 11, which sent up Pete Conrad and Richard Gordon from Launch Complex 19 only 97 minutes and 25 seconds after



the Agena launch from Launch Complex 14 just over 1 mile to the south.

SpaceX itself has kept setting turnaround records for launches from SLC 40 at one point sending up two launches from the pad in under four days.

With about 11 weeks to go, the Eastern Range could end up with more than 70 launches for the year if it maintains its pace.

SpaceX has several more Starlink flights planned as well as the CRS-29 resupply mission as early as Nov. 1 and what could be the first successful launch of NASA's Commercial Lunar Payload Services (CLPS) missions on Nov. 14, which aims to send the Intuitive Machines IM-1 lunar lander on its way to the moon.

There could also be one more Falcon Heavy launch before the end of the year on the USSF-52 mission for the Space Force.

While Relativity Space was one and done with its lone launch of the 3D-printed Terran 1 rocket in March, ULA could squeeze in one more flight before the year's end with the first launch of its new Vulcan Centaur rocket. The much-delayed flight of the replacement for ULA's Atlas and Delta family of rockets could fly in December, according to ULA President and CEO Tory Bruno. It had been targeting a May liftoff this year, and was on tap to make its primary payload, Astrobotic's Peregrine lunar lander, the first CLPS moon mission.

Space Launch Delta 45 leadership said at the beginning of the year, the Space Coast could have seen up to 92 launches in 2023, and a pace of two launches per week is something expected in the coming years as more rocket companies get their hardware to the launch pads.

SpaceX's pace is not expected to slow while ULA aims to ramp up its



Vulcan Centaur flights to at least twice a month. Meanwhile, Jeff Bezos' Blue Origin hopes to bring its New Glenn heavy lift <u>rocket</u> into <u>space</u> for the first time before the end of 2024., although that might slip to 2025.

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