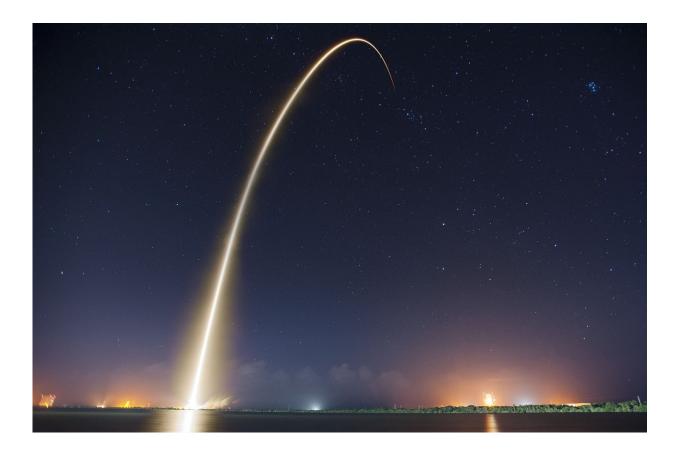


## While Artemis scrubs, SpaceX treats Space Coast to launches

September 5 2022, by Richard Tribou, Orlando Sentinel



Credit: CC0 Public Domain

While hundreds of thousands of people made their way to the Space Coast two weekends in a row for a shot to see the most powerful rocket to ever lift off from Earth, a couple of scrubs for NASA's Artemis I



mission left them disappointed.

But for those who were making a weekend out of their efforts, there was at least one rocket that lit up the sky for those who hung around.

SpaceX has continued its frenetic pace of Falcon 9 launches including a couple of Starlink missions that took flight: one right before midnight last weekend on Aug. 27, about 32 hours before NASA called off its first Artemis I attempt; and then again Sunday night about 32 hours after NASA was aiming for its second try to send up its Space Launch System rocket with the Orion capsule to the moon.

So while NASA may eventually have to roll back the Artemis I hardware capable of 8.8 million pounds of thrust on liftoff to the Vehicle Assembly Building, SpaceX keeps sending up its 1.7 million pounds of thrust servings.

For SpaceX, its most recent launch brings it to 40 for the year, sending up 51 of its Starlink internet satellites as well as an orbital transfer vehicle for company Spaceflight. It lifted off from Space Launch Complex 40 at Cape Canaveral Space Force Station at 10:09 p.m. Sunday. Once again, the company was able to land the first stage booster, which flew for the seventh time.

Last week it had also launched a Starlink mission from Cape Canaveral.

Casey Dreier, the chief advocate and senior space policy adviser for The Planetary Society who was in town for the first SLS attempt, said on the nonprofit organization's podcast, that he was happy to see what he called a "contingency launch."

"Beautiful view. It lit up the clouds from beneath and I saw—you could make out the rocket, the whole shape of it, and that's just a modest little



Falcon 9." he said. "So I did see a launch, even if I didn't see the SLS go itself."

To date, SpaceX has sent up 61 Starlink flights, including 26 this year, since the first operational deployment in 2019, with more than 3,200 satellites sent to orbit, according to statistics tracked by astronomer Jonathan McDowell.

The growing constellation is on target to reach its 4,408 target with about 20 more launches, although it's looking for Federal Communications Commission approval to grow to about 30,000 with future launches on board its in-the-works Starship rocket.

SpaceX, which already blew past its then record 31 launches it had in 2021 back in July, is on pace to surpass 52 launches before the end of 2022. While it uses Vandenberg Space Force Base for some, most come from either Kennedy Space Center's Launch Pad 39-A or Cape Canaveral SFS. This year that includes now 12 from KSC including two with human passengers—the private Axiom 1 flight and NASA Crew 4 flight aboard Crew Dragons to the International Space Station. It has another, the Crew-5 flight, slated for as early as Oct. 3.

The other 19 have been from Canaveral, which also has seen five launches from United Launch Alliance Atlas V rockets and two from Astra Space. Another company, Relativity Space, is close to attempting its first ever launch from Canaveral, or anywhere for that matter, with its 3D-printed Terran 1 that's on the launch pad right now.

All companies combined have already put 38 rockets into space from the Space Coast this year.

So while Artemis I has been the headliner, now postponed twice and looking at possibly looking at mid-October for its next attempt, the



undercards keep lining up to keep the launch cadence busy.

NASA's Jim Free, associate administrator for the Exploration Systems Development Mission Directorate said in July that scrubs were certainly a possibility, noting what NASA Deputy Administrator Pam Melroy would tell her family when they came to see her during her launches when she was an astronaut.

"She said plan a seven-day vacation to Florida, and you might see a launch in there too," Free said.

Dreier said that although he didn't get the big show, he lauded the drive behind the Artemis program.

"It goes to the point that there's something profound about this endeavor that even in our cynical age motivates people to travel literally across the world," he said. "This intrinsic desire to be a part of something, and to be part of something grand—that Carl Sagan word that I'm so in love with, 'numinosity'—space presents this rare opportunity for this in our culture and in our world these days. You just really feel that, even if it doesn't launch."

The first scrub brought out between 100,000 and 200,000 people, according to the Brevard County Emergency Operations Center. It had predicted with the second attempt falling on the weekend, the Space Coast crowds could have grown to 400,000.

"There clearly is something, because again, we're looking at the manifestation of whatever that thing is, it's what brings those hundreds of thousands of people to get up, to drag their butts out of bed at 2 in the morning, and sit in these like mosquito-infested swamps for hours and baking in the Florida sun in the hopes of that this rocket goes up, that tells you something," Dreier said.



While spectators will feel and hear the power of SLS when it goes up, it's not without competition. SpaceX has continued work on its Starship with Super Heavy rocket at its Texas Starbase facility, awaiting final approval for its first orbital launch. When that rocket goes up, it will blow SLS away in terms of power generating more than 16 million pounds of thrust.

From NASA's point of view, though, it's not a competition, just part of an international effort to pursue the end goal of returning humans to the lunar surface and then onto Mars. A version of Starship will even be used for that first lunar landing that will include the first woman on the moon for Artemis III as early as 2025.

But Starship is still a prototype while SLS and Orion, even though behind schedule and over budget, is near ready to fly.

"We shouldn't dismiss the fact that we have a moon <u>rocket</u> sitting on a pad right now," said Dreier. "We shouldn't so easily say that something else could be better because we haven't seen anything else ever succeed."

2022 Orlando Sentinel

Distributed by Tribune Content Agency, LLC.

Citation: While Artemis scrubs, SpaceX treats Space Coast to launches (2022, September 5) retrieved 3 June 2024 from <a href="https://phys.org/news/2022-09-artemis-spacex-space-coast.html">https://phys.org/news/2022-09-artemis-spacex-space-coast.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.