

NASA delays the launch of its next powerful space observatory, the James Webb, by seven months

NASA has once again delayed the launch of its new powerful space observatory, the James Webb Space Telescope, mostly due to disruptions stemming from the COVID-19 pandemic. Most recently slated to fly in March of 2021, the massive telescope is now scheduled to launch on October 31st, 2021.

The Government Accountability Office, or GAO, had already predicted this delay. NASA came up with the new date after doing an extensive review to see if the March 2021 timing was actually possible. The agency attributes about three months of the delay to social distancing and other precautions that had to be put in place to keep people safe from the coronavirus. "Much of the impact, of course, comes from people not being at work, right?" Thomas Zurbuchen, the associate administrator of the Science Mission Directorate at NASA, said during a press conference. "Not touching the hardware or from having a reduced number of people available to do shifts."

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However, coronavirus isn't solely to blame. Two additional months were added to the schedule thanks to technical challenges experienced by the primary contractor, Northrop Grumman, as it pieced the telescope together and conducted testing. Northrop Grumman has already dealt with numerous technical problems during the development of the spacecraft, such as washers and screws coming loose during tests – as well as accidental tears in the vehicle's thin sunshield, which is

designed to protect the observatory from the intense heat of the Sun. NASA then added an extra two months as schedule margin, in case other unknown problems crop up between now and launch.

The James Webb Space Telescope, or JWST, has been plagued with delays throughout its entire history. The observatory, first conceived in the 1990s, was projected to cost between \$1 billion and \$3.5 billion, with a launch date somewhere between 2007 and 2011, according to the Government Accountability Office. Ever since then, the cost of the project has ballooned and the launch date has been repeatedly delayed.

In 2011, Congress replanned the entire project, creating a cap of \$8 billion on the telescope's development, with a launch in 2018. But *in* 2018, NASA delayed the project yet again, stating that \$8.8 billion was needed for the development, and that the entirety of the mission would cost \$9.66 billion, including the cost of operating the telescope in space. That year, NASA set the March 2021 launch date.

NASA does not expect to exceed that budget any further, even with the new delay. "Based on current projections, the program expects to complete the remaining work within the new schedule, without requiring additional funds," Gregory Robinson, the program director for James Webb, said during a press call, "where we use existing program funding to stay within this \$8.8 billion development cost cap."

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NASA says it has already spoken with Arianespace, the company that will launch JWST, about the delay. The company claims that the rocket's intended ride, the Ariane 5, will be ready to take the vehicle to space next Halloween. NASA is also standing firm by the October 31st date. "We're not expecting to go beyond October 31st," Robinson said. "We have high confidence in that."

The James Webb Space Telescope is destined to be the most powerful space observatory ever built when it's launched, capable of peering back in time to when the Universe first came into being 13.8 billion years ago. The telescope sports a massive gold-plated mirror, measuring 21 feet, or 6.5 meters, across, that will gather light from the distant reaches of the cosmos.

<https://www.theverge.com/2020/7/16/21327601/nasa-james-webb-space-telescope-launch-delay-october-31-2021>