

# Weather satellite rockets to orbit to monitor US West

March 2 2022, by Marcia Dunn

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A United Launch Alliance Atlas V rocket, carrying America's newest weather satellite, lifts off from Space Launch Complex 41 at the Cape Canaveral Space Force Station, Tuesday, March 1, 2022, in Cape Canaveral, Fla. The satellite will be designated GOES-18 and will improve wildfire and flood forecasting across the western half of the country. Credit: AP Photo/John Raoux

America's newest weather satellite blasted off Tuesday to improve wildfire and flood forecasting across the western half of the country.

It's the replacement for a [satellite](#) launched exactly four years ago, which ended up with a cooling line blockage that hindered its main camera.

The National Oceanic and Atmospheric Administration said the new model is redesigned to avoid the problem. It will be designated GOES-18 after reaching an equatorial orbit 22,000 miles (36,000 kilometers) up. The first images should come next year, following months of testing.

This is the third in a nearly \$11.7 billion series of four GOES [weather satellites](#) that are among the most advanced ever built; the cost includes decades of operation. The first soared in 2016 to track Atlantic hurricanes and other East Coast weather, while the second lifted off March 1, 2018. The fourth is set to launch in 2024.

The [first two satellites in the series captured video](#) of the rocket soaring out over the Atlantic from Cape Canaveral.

The NASA-supported satellites "provide the only continuous coverage of weather and hazardous environmental conditions in the Western Hemisphere" said NOAA program director Pam Sullivan.



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People on the beach in Cape Canaveral, Fla., watch the launch of a United Launch Alliance Atlas V rocket Tuesday afternoon, March 1, 2022, from Launch Complex 41 at Cape Canaveral Space Force Station. America's newest weather satellite has blasted off on a mission to improve wildfire and flood forecasting in the West. It's the third satellite in a nearly \$12 billion series that is considered among the world's most advanced weather monitors. Credit: Malcolm Denmark/Florida Today via AP

"Having these multiple ways of looking at the Earth gives us a lot more and a lot better information for these critical forecasts to save lives, protect property," NOAA Administrator Rick Spinrad said following liftoff.

GOES-17—which is losing as much as 10% of its data because of overheating camera detectors—will be moved aside as an orbiting spare, once the newly launched craft is ready to take its place next year over the Pacific. Each is the size of a small school bus, weighing more than 6,000 pounds (2,700 kilograms).

Besides observing conditions here on Earth, the satellites also monitor [solar flares](#) and the resulting space [weather](#).

Despite its flaw, GOES-17 beamed back stunning pictures of the Tonga volcanic eruption in January. The new satellite should provide even better images of such events, according to NOAA scientists.

Tuesday's liftoff aboard United Launch Alliance's Atlas V rocket coincided with the opening of the so-called meteorological spring. The three-month season begins March 1, as defined by meteorologists and climatologists for record-keeping. This year's spring equinox falls on March 20.

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