

New US satellite to boost weather forecasts poised to launch

March 1 2018, by Kerry Sheridan



A new US satellite, GOES-S, promises to deliver high resolutions of storms like Hurricane Irma, seen here bearing down on Miami September 9, 2017

A new US satellite that offers speedy, high-resolution images of storms and may save lives by making forecasts more accurate is poised to

launch from a NASA launchpad Thursday, officials said.

A two-hour launch window opens at 5:02 pm (2202 GMT) for the liftoff of the Geostationary Operational Environmental Satellite-S (GOES-S), owned by the National Oceanic and Atmospheric Administration (NOAA).

The [satellite](#) will blast off atop a United Launch Alliance Atlas V rocket from Space Launch Complex 41 at Cape Canaveral Air Force Station in Florida.

GOES-S is the latest in a series of advanced weather satellites for NOAA.

Its predecessor, GOES-R, launched in November 2016 and has already helped improve forecasts of last year's monster hurricanes in the Atlantic and Caribbean, Harvey, Maria and Irma, experts say.

Stephen Volz, director for satellite and information services at NOAA, told reporters this week that these satellites present "a quantum leap above" prior generations.

GOES-R, which was renamed GOES-16 upon reaching orbit, "it is already proving to be a game-changer with much more refined, higher quality data for faster, more accurate weather forecasts, warnings and alerts," Volz said.

"This means quite frankly more lives are saved and better environmental information is made available for state and local officials who, for example, may need to make decisions about when to call for evacuations when life-threatening storms and wildfires occur."

GOES-S will be renamed GOES-17 once it reaches space, and will

"provide faster, more accurate data for tracking wildfires, tropical cyclones, fog and other storm systems and hazards that threaten the western United States, including Hawaii and Alaska, Mexico, Central America and the Pacific Ocean, all the way to New Zealand," NOAA said in a statement.

'Most sophisticated ever flown'

The satellite should help improve forecasts for storms forming in the Pacific, and allow experts to see storms churning in high resolution.

The primary customer for the data from the GOES satellites is the US Weather Service, but the information they beam to Earth is also shared openly with meteorologists around the world, NOAA said.

"These satellites are giving us the ability to look at storms as often as every 30 seconds, allowing forecasters to see storms as they are developing instead of as they have already taken place," said Tim Walsh, acting GOES-R system program director at NOAA.

"The advanced baseline imager, the ABI, is taking some of the most vivid pictures of weather, climate and oceans in the western hemisphere that we have ever seen," he added.

"The ABI has 16 spectral bands compared to five in our previous GOES satellites," and offers four times the resolution of last-generation imagers."

After it launches, GOES-S will undergo six months of tests, then be operational late 2018.

Two more are scheduled for launch in the coming years: GOES-T in 2020 and GOES-U 2024.

"Coupled with the use of our Japanese partner's advanced Himawari satellite, we are able to cover more than half the planet with the most sophisticated weather forecast technology and observations ever flown from space," Volz said.

© 2018 AFP

Citation: New US satellite to boost weather forecasts poised to launch (2018, March 1) retrieved 28 April 2024 from <https://phys.org/news/2018-03-satellite-boost-weather-poised.html>

<p>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.</p>
--