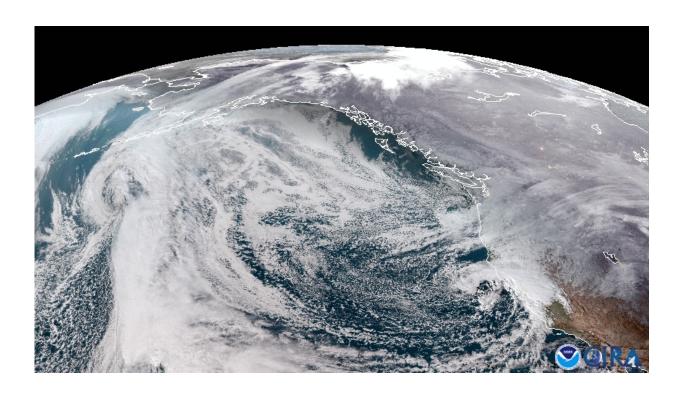


Latest weather satellite will improve forecasts for western U.S., Alaska, HawaiiFebruary 12, 2019

February 13 2019



NOAA's GOES-17 captured an active weather pattern in the Pacific Ocean with a storm hitting the West Coast on Feb. 9. The storm system, which brought heavy rain and snow to the Pacific NW, Oregon and California, continues to impact the west this week. Credit: NOAA

Today, GOES-17, the second of the National Oceanic and Atmospheric



Administration's (NOAA) next-generation geostationary weather satellites, has completed its checkout phase and is now operating in the GOES West position, providing faster, more accurate, and more detailed observations used by National Weather Service forecasters to predict Pacific storm systems, severe storms, fog, wildfires, and other environmental dangers.

"GOES-17 is the latest in a series of the most advanced weather satellites which have ever been launched into orbit," said Secretary of Commerce Wilbur Ross. "The latest GOES series of satellites play a critical role protecting the public each day, ensuring better data reaches the forecasters who safeguard countless American lives from weather-related disaster."

Launched on March 1, 2018, GOES-17 joins GOES-16, also known as GOES East, the first of NOAA's new fleet of advanced weather satellites, to deliver high-resolution visible and infrared imagery and lightning observations of more than half the globe—from the west coast of Africa to New Zealand, and from near the Arctic Circle to the Antarctic Circle.

NOAA also announced that NOAA-20, the first spacecraft in the Joint Polar Satellite System, is operating as NOAA's primary afternoon polar satellite. It features the most advanced technology NOAA has ever flown in a polar orbit to capture more precise observations of the world's atmosphere, land, and waters.

"NOAA now has both types of advanced satellites—geostationary and polar-orbiting—in operation. We're continuing to deploy and leverage the latest technology to improve observations that help us achieve the goals of the Weather Research and Forecasting Innovation Act," said Neil Jacobs, Ph.D., NOAA assistant secretary of commerce for environmental observation and prediction.



GOES-17 is providing both increased and improved data over the Pacific Ocean, where observations were previously limited, and where many weather systems that affect the continental U.S. originate. The increase in data coupled with sharper and more precise views of hazardous weather systems over the ocean is leading to better marine and aviation forecasts for those traveling across the Pacific Ocean.

"Extraordinary observations from GOES-17 are being infused into the forecast process, enabling us to offer new and improved forecasts, products, and services that save lives and property," said Louis W. Uccellini, Ph.D., director, NOAA's National Weather Service.

Fog and icy conditions often cause flight delays and impact airport operations. GOES-17 allows forecasters to predict, with greater accuracy than before, the timing of fog and cloud formation and when it will clear, helping to mitigate ground delays.

Also among the benefits of the satellite's <u>high-resolution</u> and rapid-scan capability is a significant improvement in detecting and analyzing wildfires and the extent of smoke coverage. With its new spectral bands providing high-definition images as often as every minute, GOES-17 is helping forecasters locate hot spots, detect changes in a fire's behavior, and predict a fire's motion better than before. This information helps firefighters on the ground combat fires more effectively and emergency managers plan life-saving evacuations sooner.

GOES-17 is intended to replace GOES-15, which has been operational as GOES West since December 2011. However, due to technical issues discovered during the testing phase of the Advanced Baseline Imager (ABI), NOAA will operate both satellites in unison until early July 2019. This overlap will allow for further performance assessment of GOES-17 before GOES-15 is placed in storage as a backup. NOAA has continued working tirelessly to ensure maximum performance from its <u>satellite</u>



fleet.

"The GOES-17 ABI is now projected to deliver more than 97 percent of the data it was designed to provide, a testament to the skill and dedication of the engineers and all the GOES project team members," said Stephen Volz, Ph.D., director, NOAA's Satellite and Information Service. "We are confident the GOES constellation will continue to meet the needs of forecasters across the country."

Provided by NOAA Headquarters

Citation: Latest weather satellite will improve forecasts for western U.S., Alaska, HawaiiFebruary 12, 2019 (2019, February 13) retrieved 20 April 2024 from https://phys.org/news/2019-02-latest-weather-satellite-western-alaska.html

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.