

Yup, Earth is still there: GOES-18 goes online, sends 1st image of planet

May 12 2022, by Joe Mario Pedersen



Credit: Pixabay/CC0 Public Domain

"Hello, world!"

A NASA tweet greeted the internet Wednesday with a beautiful image of the bluish gem-like Earth—the first image captured by the newest [weather](#) satellite orbiting the planet.

GOES-18, short for Geostationary Operational Environmental Satellite, blasted off in March from Cape Canaveral Space Force Station on a United Launch Alliance Atlas V rocket thanks to a collaboration between the National Oceanic and Atmospheric Administration and NASA along with several other partners.

GOES-18 is a weather monitoring satellite that should help meteorologists determine potential areas of disaster before they occur in the western part of the United States as well as Alaska and Hawaii, according to the NOAA. It will primarily be used to monitor and predict disaster events like hurricanes, thunderstorms, floods, dense fog and fire.

Among its utility belt of tools, GOES-18 has an Advanced Baseline Imager (ABI), which can view the Earth in 16 different kinds of spectral bands including two visible channels, four near-infrared channels and 10 infrared channels. The previous generation of GOES could only view five different bands. The ABI will help scientists predict where fires on the [west coast](#) could start before they ever form, said Pam Sullivan director of the GOES-R program.

Previously known as GOES-T, GOES-18 is replacing the GOES-17 satellite, which experienced some ABI degradation due to a thermal disruption blocking a flow of coolant, said Larry Crawford, the ABI program manager. The [hardware](#) responsible was identified and eliminated from GOES-T's construction.

Juggling even more than terrestrial weather, GOES-18 will have a hand in monitoring [space weather](#), too. Keeping an eye on solar storms that could potentially harm Earth's power grids. The satellite is equipped with

space weather tools like a particle flux sensor, [solar irradiance](#) monitor and a magnetometer, Sullivan said.

©2022 Orlando Sentinel.

Distributed by Tribune Content Agency, LLC.

Citation: Yup, Earth is still there: GOES-18 goes online, sends 1st image of planet (2022, May 12) retrieved 26 June 2024 from <https://phys.org/news/2022-05-yup-earth-goes-online-1st.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.