

GEOSTATIONARY EXTENDED OBSERVATIONS (GEOXO) IMAGER (GXI)

Revolutionizing Weather Forecasting

When it comes to extreme weather, like hurricanes, tornadoes and wildfires, early and accurate detection is essential to keeping people safe and out of harm's way.

KEEPING AN EYE ON SEVERE WEATHER FROM SPACE

As hurricanes, wildfires, tornadoes and other environmental hazards form, meteorologists rely on instruments known as imagers, onboard weather satellites in different orbits around the Earth, as their "eyes in the sky." These instruments constantly monitor the Earth in real-time for severe weather events to increase warning times and protect lives. Without space-based imagers, forecasters would be partially blind to severe weather conditions and environmental hazards, especially in areas where other measurements are sparse, like over oceans where dangerous hurricanes build and move toward populated coastal areas.

PROVEN ON-ORBIT TECHNOLOGY BUILT TO EVOLVE

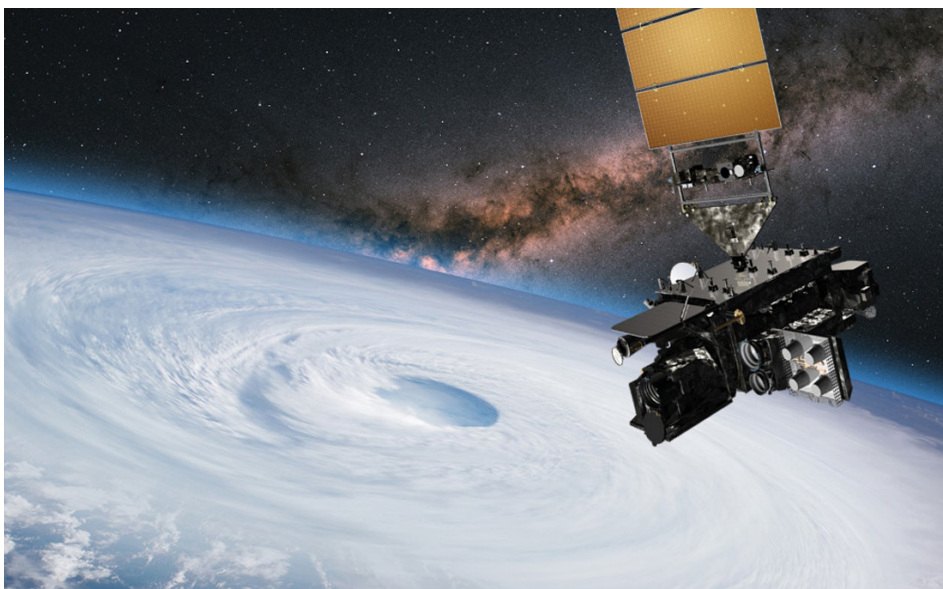
This mission-critical imaging technology is where L3Harris excels. For over 60 years, we've been at the forefront of advancing weather satellite capabilities to improve forecast accuracy, measure climate change and increase life-saving warning times. We provide the most advanced imagers (and sounders) in the world – from our proven on-orbit capabilities, like the Advanced Baseline Imager (ABI) and Cross-track Infrared Sounder (CrIS), to innovative solutions for next-generation domestic and international weather architectures. And we're continuing to advance these capabilities to stay ahead of current and future weather threats.



Image Credit: NASA Earth Observatory

BENEFITS

- > Provides real-time, high-resolution imagery to monitor the Western Hemisphere's weather, ocean and environment
- > Helps track and analyze weather patterns, environmental changes and natural hazards with greater accuracy to enable faster responses and increase public safety
- > Enhances weather forecasting capabilities and increases life-saving warning times
- > Helps scientists and policy makers understand and address climate change and its impacts



WHAT'S NEXT: THE FUTURE OF FORECASTING

As extreme weather threatens lives and livelihoods around the world, L3Harris is committed to delivering next-generation weather capabilities globally to forge a new era of preparedness.

THE GEOXO PROGRAM

When it comes to staying ahead of extreme weather threats, next-generation weather architectures like the U.S. National Oceanic and Atmospheric Administration's (NOAA) GeoXO program, are critical.

The GeoXO program will bring new capabilities to address emerging environmental issues and challenges that threaten the security and well-being of every American.

It is the follow-on to NOAA's Geostationary Operational Environmental Satellites – R (GOES-R) Series program, which currently operates a constellation of geostationary environmental satellites that help protect life and property across the Western Hemisphere.

GeoXO will watch over the Western Hemisphere as part of NOAA's observing system that supports short-term forecasts and warnings of extreme weather and environmental hazards as well as long-term planning for the effects of climate change – expanding on the capabilities provided by the GOES-R Series, like our Advanced Baseline Imager (ABI) technology.

L3HARRIS' GEOXO IMAGER (GXI)

As the primary instrument for NOAA's GeoXO mission, our GXI will be used for a wide range of applications related to severe storms, hurricanes, aviation, natural hazards, the atmosphere and ocean.

It is planned to include 18 channels, or bands, that will view Earth in visible and infrared wavelengths. Each channel will provide information about various features of Earth's surface or atmosphere, such as vegetation, water, clouds, moisture and smoke.

GXI will improve upon the GOES-R ABI by adding two new channels and improving the resolution of seven channels. These upgrades will provide more precise observations and improve water vapor measurements that allow forecasters to identify severe weather and fires sooner – ultimately providing additional time for community preparedness and faster response.

GXI continues our role with NASA and NOAA as a key provider of geostationary capabilities by adding relevant mission value to our nation's next-generation weather architecture.



Key Applications

Our advanced imagers are a leading source of life-saving imagery and data for:

- > Weather forecasting
- > Severe weather warnings
- > Fire detection and response
- > Flood detection and response
- > Drought monitoring
- > Air pollution analysis
- > Volcanic ash monitoring
- > Vegetation assessment
- > Climate change research

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