

ADVANCED BASELINE IMAGER (ABI)

The world's most advanced Geostationary Orbit (GEO) imaging solution

L3Harris' ABI instruments are the most sophisticated meteorological imaging instruments ever built for operational weather forecasting. They are the only weather instruments that provide flexible, custom scanning that is configurable on-orbit.

UNPARALLELED PERFORMANCE

To provide forecasters with real-time data on developing storms, U.S. and international weather satellites use L3Harris' ABI technology to constantly scan for changing atmospheric conditions. From 22,300 miles above the Earth, ABI can measure weather indicators with the same accuracy as a thermometer in your mouth, all while withstanding one of the harshest environments known to mankind.

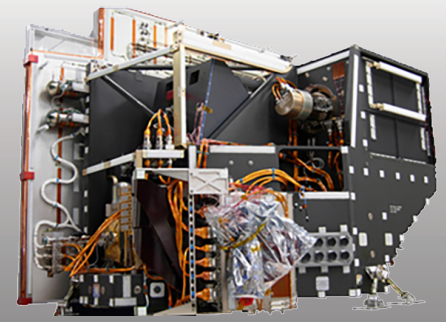
With unprecedented speed and accuracy, ABI simultaneously scans the entire western hemisphere every 10 minutes, the continental United States every five minutes and areas of rapidly developing storms every 30 seconds.

No one benefits more from ABI technology than those in the path of severe weather. Forecasters rely on ABI's timely

and detailed imagery to predict severe weather – imperative to protecting life and property.

PROVEN ON-ORBIT TECHNOLOGY

As the primary payload onboard the National Oceanic and Atmospheric Administration's (NOAA's) Geostationary Operational Environmental Satellites-R (GOES-R) Series, ABI has revolutionized weather forecasting. By monitoring evolving features like overshooting cloud tops and convective bursts that can play a significant role in rapid hurricane intensification, ABI has been instrumental in identifying severe weather as it develops and improving forecast accuracy.



BENEFITS

- > Supports low-risk incremental enhancements to meet next-generation GEO imager technology
- > Can affordably be converted into a GEO sounder
- > Facilitates GEO-like coverage of the arctic in a highly elliptical orbit without hardware changes to current technology
- > Features a modular design with responsive interleaved scanning that supports different instruments, orbits and business models
- > Integrates data processing with commercial cloud

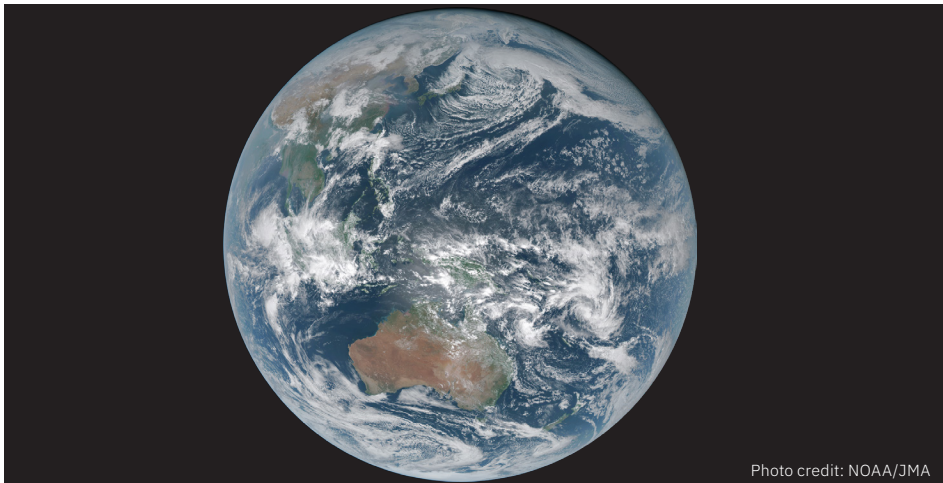


Photo credit: NOAA/JMA

In addition to supporting NOAA's weather mission, ABI technology has also proved valuable to the Japanese Meteorological Agency onboard its Himawari-8 and -9 satellites by improving numerical weather prediction accuracy and enhanced environmental monitoring. Additionally, the Korea Aerospace Research Institute is using ABI technology onboard its Geostationary Korea Multi-Purpose Satellite - 2A (GEO-KOMPSAT-2A) to strengthen South Korea's ability to monitor the environment impacting the Korean Peninsula.

SHAPING THE FUTURE OF FORECASTING

From seeing details of hurricanes never before seen, to identifying the faintest of fire hotspots and detecting thunderstorms before clouds even form, ABI's proven on-orbit performance has given us a glimpse into the future of forecasting.

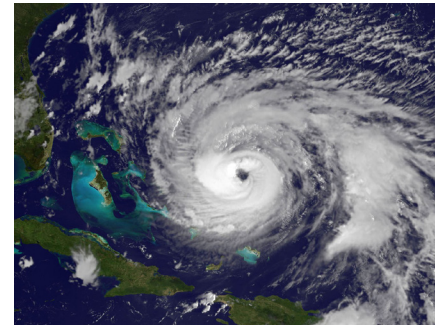
L3Harris is developing a new generation of weather technology that's even faster and more precise. Advancements to

L3Harris' ABI technology, including additional channels and even higher resolution and greater scanning flexibility, will enable even faster detection of storms, fires and severe weather.

BUILT TO EVOLVE

ABI's low-risk, high reward technology is designed to evolve. Compatible as a hosted payload, the modular design supports incremental enhancements and is adaptable to different instruments, orbits and business models. Its flexibility enables L3Harris to develop even more powerful imaging technology to meet future demands.

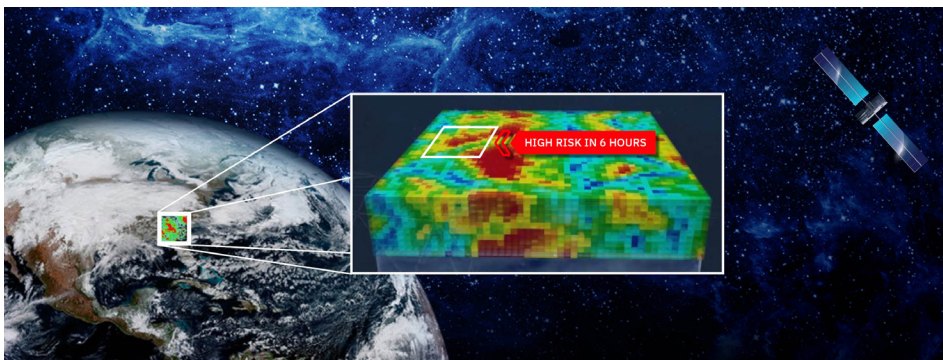
Advances in ABI technology will support a more weather resilient society by enhancing forecaster's ability to put more time between hazardous conditions and those in harm's way.



KEY APPLICATIONS

ABI is a leading source of imagery and data, including:

- > Weather forecasting
- > Fire detection and response
- > Air pollution analysis
- > Volcanic ash monitoring
- > Vegetation assessment
- > Climate change



Advanced Baseline Imager (ABI)

© 2020 L3Harris Technologies, Inc. | 11/2020 | 60561 | CB

Nonexport-controlled Information

L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



1025 W. NASA Boulevard
Melbourne, FL 32919