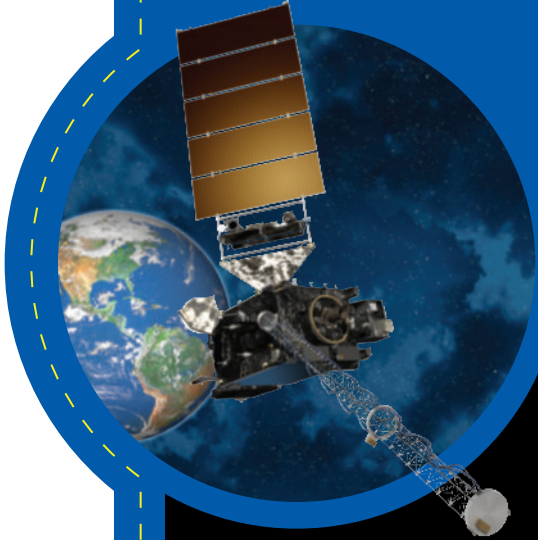


# GOES-R



## The GOES-R Series

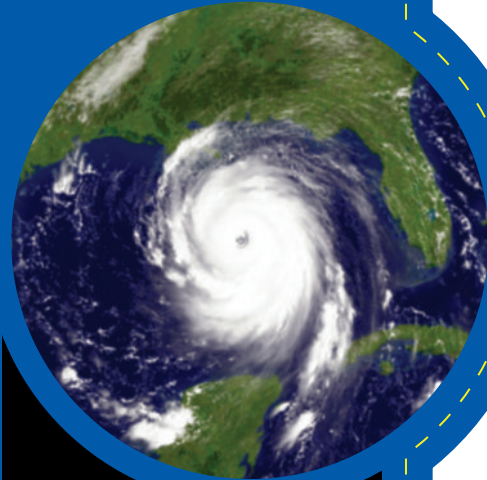
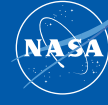
NOAA's next generation of Geostationary Operational Environmental Satellites (GOES), known as the GOES-R series, will provide advanced imaging and atmospheric measurements of Earth's Western Hemisphere in near real-time for more accurate forecasts and warnings.

The GOES-R series imager will offer 3x more spectral channels with 4x better resolution, and it can scan 5x faster than the current system. GOES-R will also carry the first operational lightning mapper flown in geostationary orbit, as well as a suite of enhanced solar imaging and space weather monitoring instruments.

The GOES-R Series Program is a collaborative effort between NOAA and NASA. The GOES-R series (GOES-R, S, T and U) will extend the GOES operational system through 2036.

[www.GOES-R.gov](http://www.GOES-R.gov)

Image Courtesy of Lockheed Martin.



## Why GOES-R?

- Improved hurricane tracking and intensity forecasts
- Increased thunderstorm and tornado warning lead time
- Improved aviation flight route planning
- Improved air quality warnings and alerts
- Better fire detection and intensity estimation
- Better detection of heavy rainfall and flash flooding risks
- Better data for long-term climate variability studies
- Improved detection of solar eruptions for increased warning of communications, navigation and power grid disruptions
- More accurate monitoring of energetic particles responsible for radiation hazards to humans and spacecraft

[www.noaa.gov](http://www.noaa.gov)

[www.nasa.gov](http://www.nasa.gov)