



GOES-R GRB Direct Readout at NWS National Centers



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NWS Office of Dissemination
Ground Readiness Project

- WxConnect™ is a powerful, reliable, and scalable delivery platform for your mission critical satellite imagery needs.
- With WxConnect™, you will discover the value of more timely and higher resolution new generation imagery.
- WxConnect™ is easily adaptable to emerging mission needs; e.g., now supporting GOES-R GRB and HimawariCast.

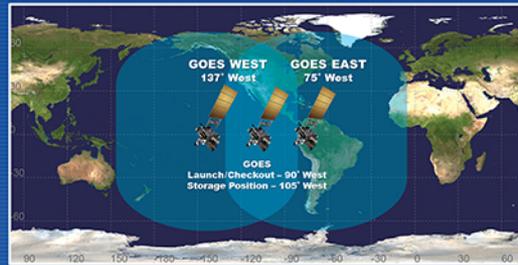
New Generation GOES-R Series Satellites

GOES-R Rebroadcast (GRB)

In 2016, NOAA will launch the first of the new generation of GOES satellites. The GOES-R series satellites will provide significantly improved imaging resolution and more timely updates. As a result, the current GOES VARIABLE (GVAR) service will be replaced with the new-generation GOES-R Rebroadcast (GRB) system.

GOES-R GRB Solutions for the National Weather Service

GOES-R GRB Coverage



Centralized Remote Monitoring Portal



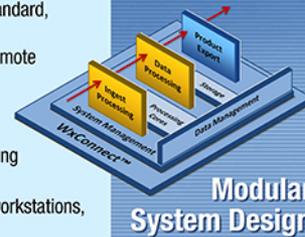
Harris WxConnect™ Direct Readout Systems

WxConnect™-GRB Reception

- High efficiency GOES-R GRB L-band RF waveguide feed, with adjacent band interference mitigation and exceptional G/T performance
- Matched high data rate GOES-R GRB dual channel demodulator
- Remote monitoring of feed and demodulator functions
- 6.5 meter tracking antennas to support automation of optimal antenna positioning and extra reliable edge-of-beam coverage
- High wind and extreme temperature tolerance

WxConnect™-GRB Architecture

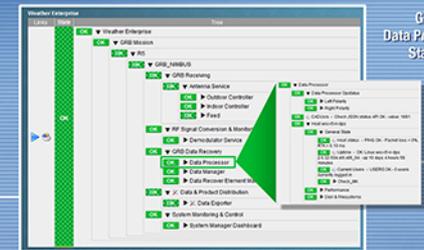
- Automated turnkey lights out system
- Affordable architecture based on industry-standard, enterprise class components
- Integrated system management, including remote system administration
- Integrated data storage management
- Integrated network interfaces
- Fault detection, alerting, and remote monitoring
- System performance dashboard
- Configurable product export to exploitation workstations, storage, or product distribution servers



Local Monitoring,
Multiple Systems
Per Site



Tiered Service Model



GRB
Data Processor
Status

WxConnect™ Dashboard



6.5m NWS antenna shown;
Other options available



Configurable Open Source

Log Management

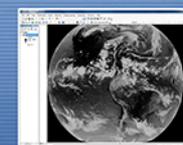
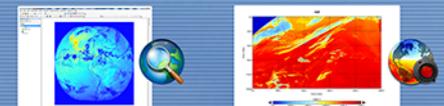
Performance Management

Product Processing, Storage & Distribution

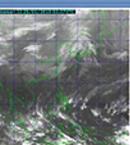
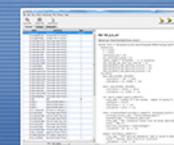
- Scalable low latency processing
- Open standards-based product formats
- Options that include:
 - Multi-day data storage buffer, expandable to mission life-cycle archive store
 - Prioritized, configurable, and secure product distribution

Output Products

- GOES-R ABI, GLM, SUVI, EXIS, MAG, SEISS, GRB Info
 - NetCDF & FITS Formats
 - Level 2 Scalability
- HimawariCast-AHI HRIT, LRIT
- Open Standards



GOES-R ABI



HimawariCast

High Availability, High Performance, Modular & Scalable
Open Standards-based