



NOAA Future Observing Systems Report

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Next-Generation JPSS and GOES-R



JPSS

- **CrIS:** significantly improved temperature and water vapor information than POES HIRS
- **ATMS:** improved global coverage and spatial resolution than AMSU
- **VIIRS:** superior imagery and more spectral bands than AVHRR
- **OMPS:** improved spatial resolution, coverage and vertical profiling than SBUV
- **CERES:** provides fundamental energy budget climate measurements

JPSS-1 Launch: 2Q FY2017
JPSS-2 Launch: 1Q FY 2022

GOES-R

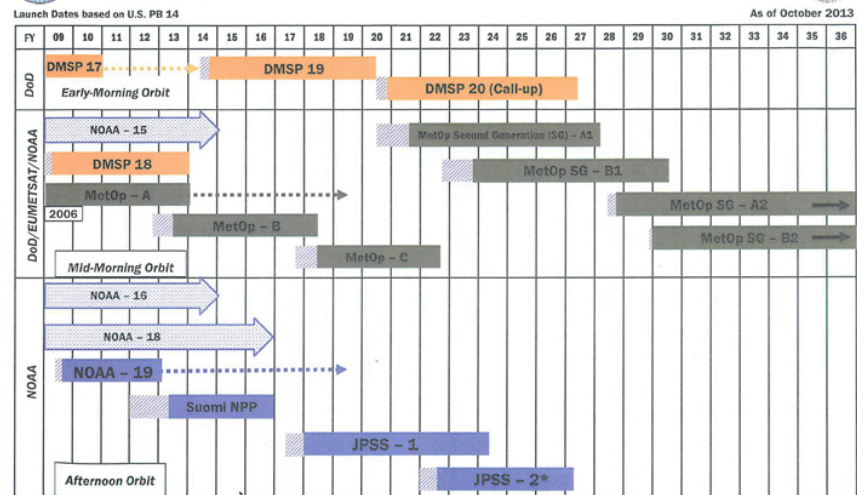
- **ABI:** superior imagery and more spectral bands than the GOES imager
 - » Improved temporal sampling, CONUS every 5 minutes, full disk every 15 minutes and selected 1000 x 1000 km area at 30 seconds
- **GLM:** first ever geostationary lightning mapper
- **SEISS/SUVI/EXIS:** significantly improved space weather coverage
 - » Monitors solar radiation, locates solar flares and coronal mass ejections, detects solar irradiance

GOES-R Launch: 2Q FY2016
GOES-S Launch: 3Q FY2017

With new instruments comes an increase in data and changes in data distribution.



Continuity of NOAA's Polar (Primary) Operational Weather Satellite Programs

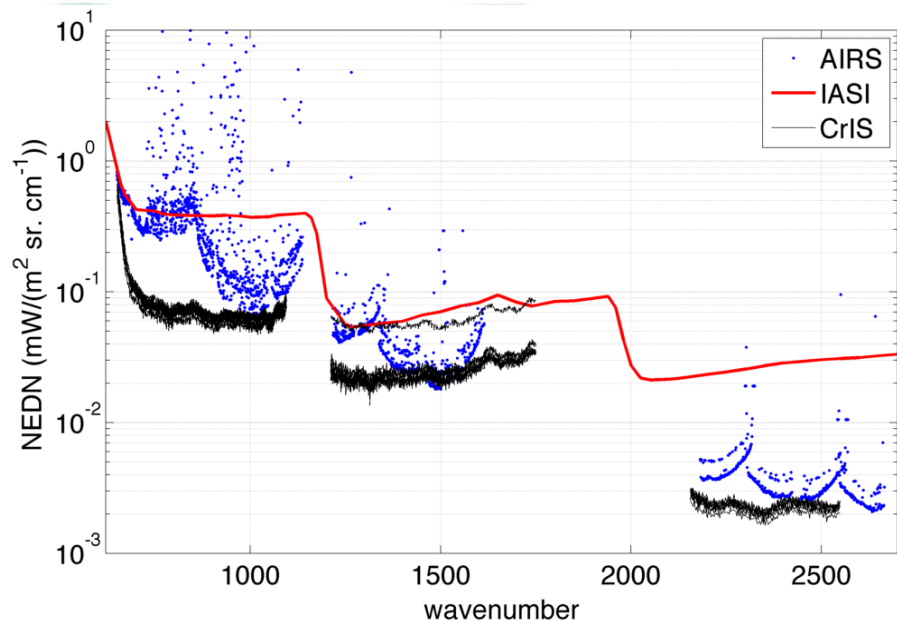


Approved: *Mary E. Kujawa*
Assistant Administrator for Satellite and Information Services

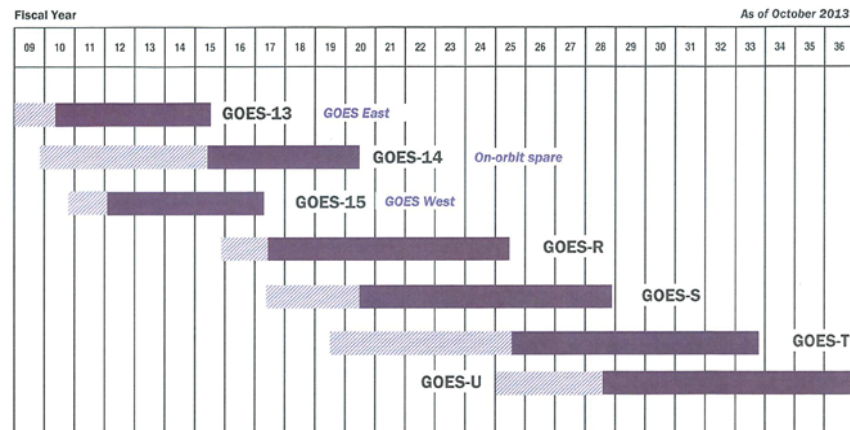
* Program funding provided through FY2025. The follow-on Program will provide funding for operations post 2025.

DMSP: Defense Meteorological Satellite Program
JPSS: Jost Polar Satellite Program
Suomi NPP: Suomi National Polar Partnership

Post Launch Test
Operational
Operational beyond FY 2036
Secondary
Predicted Extended Mission Life

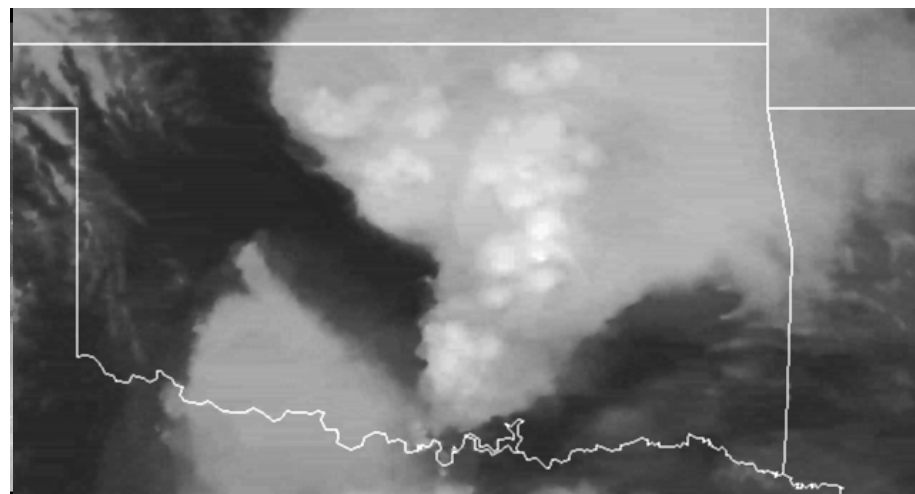


Continuity of GOES Mission



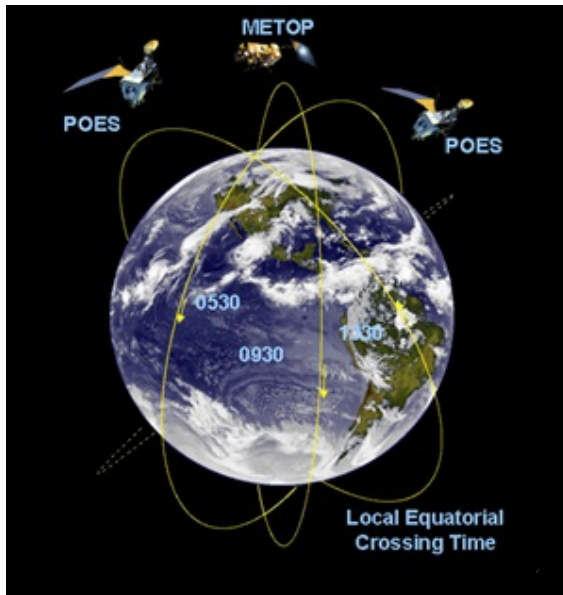
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GOES: Geostationary Operational Environmental Satellite
On-orbit storage
Operational
Operational beyond design life



Simulation of GLM lightning detection capabilities during tornado outbreak in Oklahoma

Other NOAA/Partner Satellite Contributions



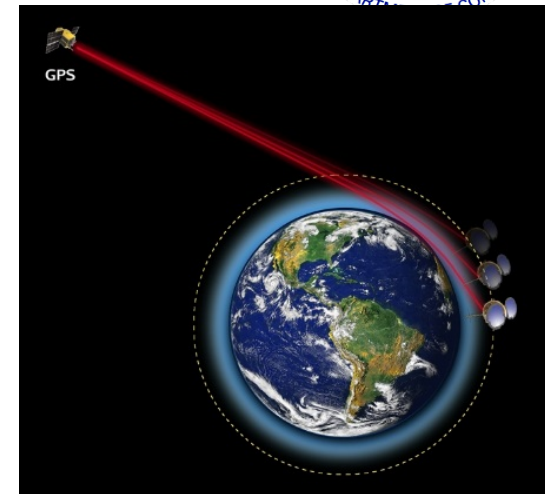
JPSS and Metop: Complementary Orbits

JPSS program (next-gen POES satellites) implements U.S. civil commitment, interagency and international agreements to afford 3-orbit global coverage.

Following COSMIC, the GNSS-RO mission will provide global radio-occultation measurements of ionosphere, temperature and water vapor information for weather and climate applications.

JASON-3 will continue the legacy of altimetry measurements of sea-level, along with supporting ocean circulation modeling and hurricane intensity predictions.

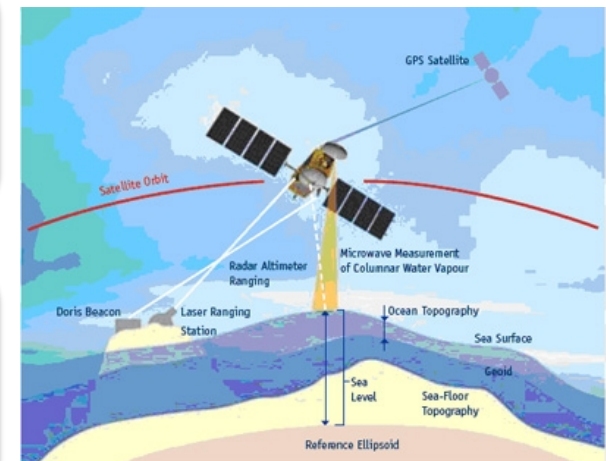
DSCOVR will provide space weather observations from L1 orbit for up to 60 minute lead time and maintain the nation's solar wind observations.



GNSS-RO Launch: 2015/2016



DSCOVR Launch: 2014/2015



Jason-3 Launch: March 2015

