

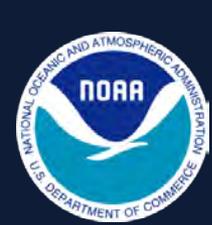


NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE

FY 2013 Budget Brief to Constituents

Mary Kicza, NESDIS Assistant Administrator
February 21, 2012





AGENDA

- Vision and Mission
- FY 2011 Accomplishments
- FY 2013 Budget Overview
- Summary of FY 2013 Program Changes





NOAA'S MISSION

To understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our nation's economic, social and environmental needs





NOAA Satellite and Information Service (NESDIS) Mission and Vision

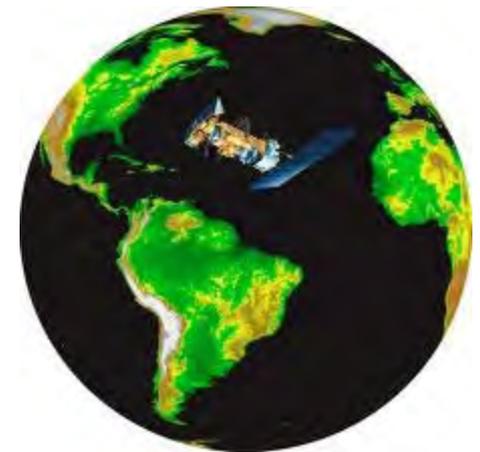
OUR VISION

To be the world's premiere source of comprehensive environmental data and information



OUR MISSION

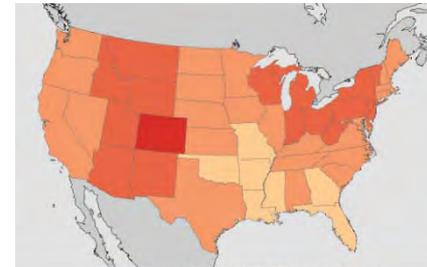
To deliver accurate, timely, and reliable satellite observations and integrated products and to provide long-term stewardship for global environmental data in support of the NOAA mission



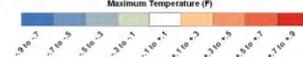


FY 2011 ACCOMPLISHMENTS

- Maintained 99.95% reliability of satellite and data operations for 17 operational satellites, during a record year of severe environmental phenomena.
- Provided data and product support to decision makers during tsunamis, tornados, volcanic eruptions, floods and severe rain, droughts and wildfires.
- Released 1981-2010 Climate Normals, *State of the Climate in 2010*.
- Developed New Arctic Ice Maps, Digital Solid Earth.
- Completed preparations for a successful launch of Suomi-NPP.



Statewide Differences Between the 1981-2010 and 1971-2000 Normals



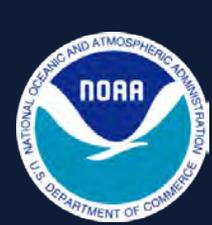
Preliminary Significant U.S. Weather and Climate Events for 2010

- WINTER STORM**: Record snowfall for Seattle; record high low temperatures across VA, northern CO, and western MT; record high of 68°F in northern WI; record low of 1°F in ND and SD.
- SEVERE STORMS**: Strong low pressure system generated heavy rain, severe thunderstorms, and tornadoes in parts of IL, WI, and CA.
- WILDFIRE**: Fourteen California fire storms evaporators of thousands and becomes conflict for its CO history (Sep 27).
- WARM**: Overhead low pressure sets an all-time high temperature record of 115.2°F (Sep 27).
- TEMPERATURE**: Average annual temperature for the contiguous US and its above normal, and daily along the national 25-year all-record.
- ICE STORM**: Unusual winter storm impacts large portions of AK, with an on "ice-bombing" snow-packed raindrops heavily damaging grid. AK's road network in ice (Nov).
- DROUGHT**: Drought in the Midwest of 2010.
- HURRICANES**: 13 named storms in Atlantic Basin; only 12 storms made US landfall in July.
- WET**: Precipitation record set for a wet summer for the Upper Midwest and Western Great Lakes.
- FLOOD**: 11.25 inches of rain fell in 24 hours, leaving \$1 billion in damage to area (May).
- COLD/WARM**: Top ten coldest on record; record warm summer for Rochester.
- FREEZE**: 10th warmest for the month of St. Petersburg Beach, FL.
- COLD**: Overhead temperature drop below 8°F (19°C) in the FL Keys, breaking an 8-year-old mark (Jan - Feb).



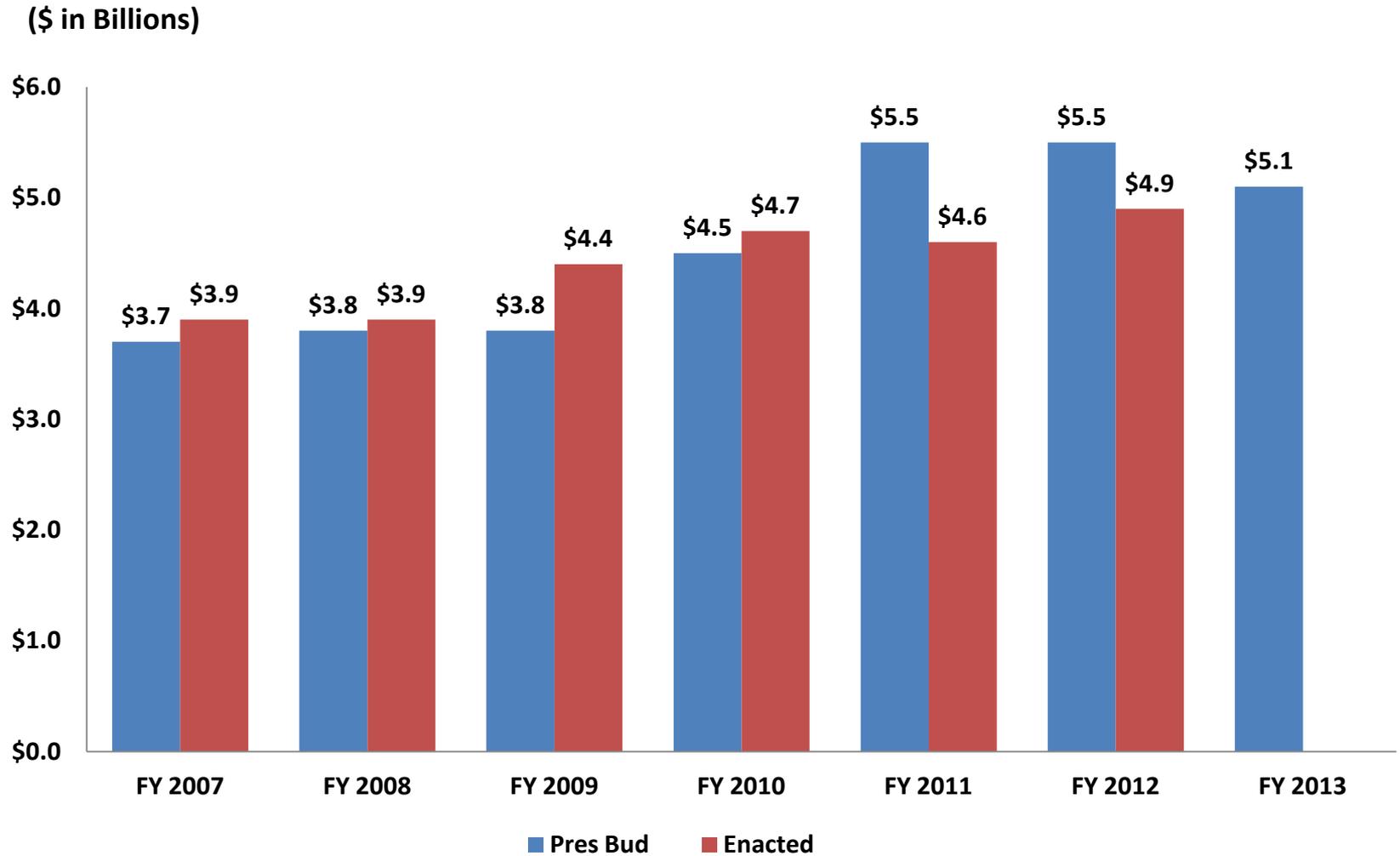
FY 2013 BUDGET OVERVIEW





NOAA Budget Trend

(FY 2007 to FY 2013)





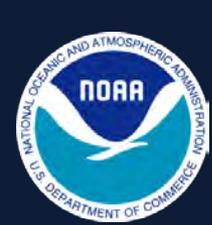
BUDGET BREAKDOWN

BY NOAA LINE OFFICE

(\$ in millions)	FY 2011 Spend Plan	FY 2012 Spend Plan	FY 2013 President's Request	% Change from FY 2012
Oceans & Coasts	\$513.4	\$490.0	\$478.1	-2.4%
Fisheries	\$944.7	\$895.0	\$880.3	-1.6%
Research & Climate	\$427.0	\$384.7	\$413.8	7.6%
Weather	\$976.5	\$992.0	\$972.2	-2.0%
Satellites	\$1,444.1	\$1,877.8	\$2,041.4	8.8%
Program Support	\$490.2	\$467.1	\$476.9	2.1%
Total (Net of Financing & Transfers)*	\$4,596.9	\$4,906.6	\$5,060.6	3.1%

*Line Office totals above include both mandatory and discretionary funding.

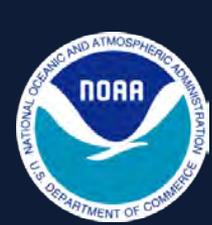
The Discretionary Appropriation total at the bottom of the table removes the mandatory amounts from the NOAA total



NESDIS BUDGET OVERVIEW

(\$ in millions)	FY 2011 Spend Plan	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
Environmental Satellite Observing Systems (ORF) Forecasts	\$114.6	\$112.5	\$9.7	\$123.2
NOAA Data Centers and Information Services	\$69.1	\$68.7	(\$1.3)	\$67.9
Subtotal ORF	\$183.7	\$181.2	\$8.3	\$191.1
Systems Acquisition	\$1,258.2	\$1,694.4	\$153.7	\$1,848.1
Construction	\$2.2	\$2.2	\$0.0	\$2.2
Subtotal PAC	\$1,260.4	\$1,696.6	\$153.7	\$1,850.3
NESDIS Total	\$1,444.1	\$1,877.8	\$162.0	\$2,041.4*

* FY 2013 total of \$2041.4 includes \$1.5M for inflationary adjustments. This yields a delta of \$163.2M from FY12 Enacted to FY13 PBR.



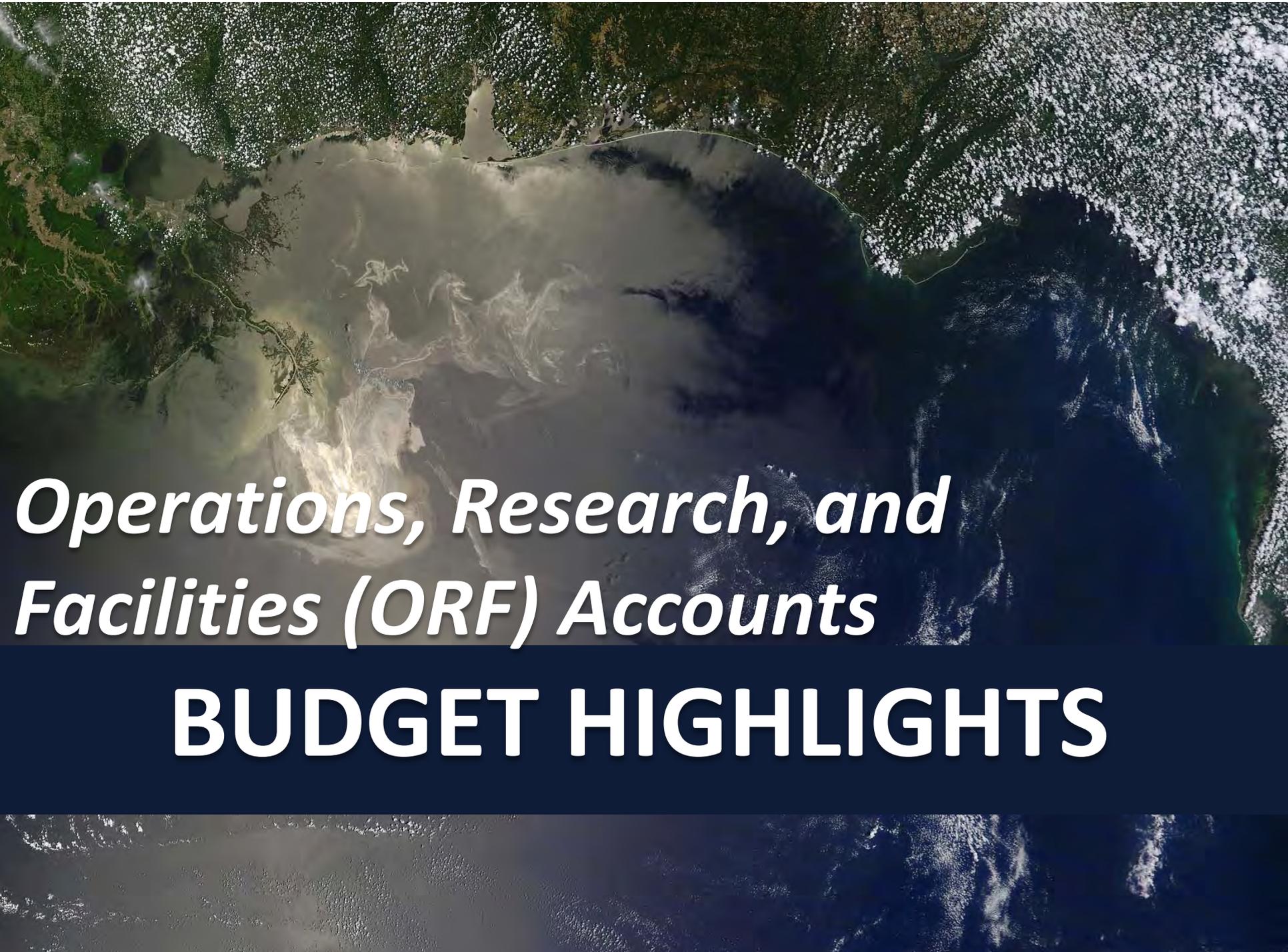
NESDIS FY 2013 BUDGET: \$2,041.4 million

- FY 2013 Budget provides \$2,041.4M for NESDIS, a \$163.6M (8.8%) increase over the FY 2012 Spend Plan. Includes \$162.0M for Program Changes and \$1.5M for Inflationary adjustments.
- This request supports the priorities of the Administration, Department of Commerce and NOAA. In meeting these priorities, the FY 2013 President's Budget:
 - Ensures the continued development of the Joint Polar Satellite System (JPSS), NOAA's next generation polar-orbiting satellite.
 - Provides the necessary resources for the Geostationary Operational Environmental Satellite R-Series to maintain a 1st Quarter FY 2016 launch date for GOES-R.
 - Continues the development of the DSCOVR space weather satellite, which will provide warnings of solar storms that could affect critical infrastructure and human health.



NESDIS FY 2013 BUDGET: \$2,041.4 million

- Continues the development of the Jason-3 satellite in partnership with EUMETSAT and CNES to provide continuity of precise measurements of sea surface heights (i.e., Altimetry)
- Funds NOAA's Data Centers within NESDIS
- Sustains satellite operations
- Provides additional resources for the processing and distribution of environmental data from the Suomi-NPP Mission to be used for operational weather forecasting

An aerial photograph of a coastal region. The top half shows a dense forest of green trees. Below the forest is a large, light-colored bay or estuary with intricate patterns of water and sediment. To the right, the dark blue ocean meets the shore, with white waves breaking. The bottom half of the image is a dark blue gradient.

*Operations, Research, and
Facilities (ORF) Accounts*

BUDGET HIGHLIGHTS



NESDIS ORF: \$191.1 million

ORF Account (\$ M)	FY 2013 President's Budget
Environmental Satellite Observing Systems	\$123.2
Data Centers and Information Services	\$67.9
Total*	\$191.1



*Numbers may not add due to rounding and excluding inflationary adjustments



Environmental Satellite Observing Systems: \$123.2 million

ORF Account (\$M)	FY 2011 Spend Plan	FY 2012 Spend Plan	Program Change	FY 2013 President's Budget
Satellite Command and Control	\$47.9	\$47.6	\$0.2	\$48.2
Product Processing and Distribution	\$36.0	\$35.9	\$9.4	\$45.7
Product Development, Readiness & Application	\$28.2	26.7	\$0.1	\$27.0
Office of Space Commercialization	\$0.7	\$0.7	\$0.0	\$0.7
Commercial Remote Sensing Licensing & Enforcement	\$1.3	\$1.1	\$0.0	\$1.1
Group on Earth Observations (GEO)	\$0.5	\$0.5	\$0.0	\$0.5
Total*	\$114.6	\$112.5	\$9.7	\$123.2

* Numbers may not add due to rounding and excluding inflationary adjustments

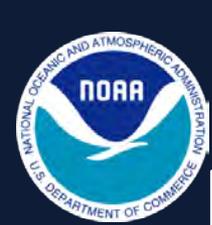


NPP and Polar Continuity Data Processing and Distribution

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Product Processing and Distribution	\$35.9	\$9.4*	\$45.7
NPP and Polar Continuity Data Processing and Distribution		\$9.4	

- Process and distribute environmental data from the Suomi-NPP mission. The Suomi-NPP satellite was successfully launched in October 2011. The checkout period under the National Aeronautics and Space Administration (NASA) will be completed during the seven months following the launch.
- Provide new environmental products from Suomi-NPP to improve the 3-7 day hurricane track forecasts, provide more accurate precipitation estimates, and pinpoint local hazards such as forest fires, volcanic ash plumes and hazardous algal blooms.
- Continue Suomi-NPP data processing and distribution using the NDE Production Environment.

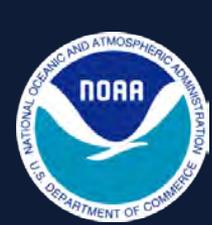
* Numbers may not add due to rounding and excluding inflationary adjustments



NOAA's Data Centers & Information Services: \$67.9 million

ORF Account (\$M)	FY 2011 Spend Plan	FY 2012 Spend Plan	Program Change	FY 2013 President's Budget
Archive, Access & Assessment	\$51.5	\$48.5	(\$0.6)	\$48.4
- NCDC	\$18.5	\$18.5	\$0.0	\$18.7
- Data Center Operations	\$0.0	\$0.7	\$5.8	\$6.5
- Climate Data Records	\$10.4	\$9.1	\$0.0	\$9.1
- NODC	\$12.3	\$12.1	(\$3.8)	\$8.4
- NGDC	\$6.2	\$6.1	(\$0.6)	\$5.6
- CDMP	\$4.1	\$2.0	(\$2.0)	\$0.0
Coastal Data Development	\$4.6	\$4.5	(\$0.5)	\$4.0
Regional Climate Services	\$3.5	\$6.8	(\$1.0)	\$5.8
Environmental Data Systems Modernization	\$9.5	\$8.9	\$0.8	\$9.7
Total*	\$69.1	\$68.7	(\$1.3)	\$67.9

* Numbers may not add due to rounding and excluding inflationary adjustments



Data Center Operations

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Archive, Access and Assessment	\$48.5	(\$0.6)*	\$48.4
Data Center Operations		\$5.8	

- In FY 2013, funding will continue to sustain the replacement archive/access core mission functions integrated into the data center operations.
- This will accommodate a projected 3,000 percent increase in data volume from the Suomi-NPP satellite. Additional increases in data volume are expected from JPSS, GOES-R, Dual-Polarization Radar, and climate/weather models.
- Also accommodated will be data from Jason, Continuously Operating Reference Stations (CORS), and the historical satellite and in-situ data already part of the data center holdings.

* Numbers may not add due to rounding and excluding inflationary adjustments



National Oceanographic Data Center (NODC)

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Archive, Access and Assessment	\$48.5	(\$0.6)*	\$48.4
National Oceanographic Data Center		(\$3.8)	

- In FY 2013, NODC will begin to consolidate its operations, centralizing Information Technology (IT) functions in Mississippi and administrative functions and sufficient IT expertise in Maryland.
- This reduction may affect NODC's current staffing level.
- The reduction of funds will reduce online delivery and decrease development of scientific products.
- NODC will maintain the ingestion and archiving of ocean and coastal data.

* Numbers may not add due to rounding and excluding inflationary adjustments



NODC: Coastal Data Development

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Coastal Data Development	\$4.5	(\$0.5)*	\$4.0
Coastal Data Development		(\$0.5)	

- This request will reduce regional project development and science contractor support at the National Coastal Data Development Center, a division of NODC .
- NODC will continue to identify and obtain coastal data sets for ingest into the national ocean and coastal archive.

* Numbers may not add due to rounding and excluding inflationary adjustments



National Geophysical Data Center (NGDC)

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Archive, Access and Assessment	\$48.5	(\$0.6)*	\$48.4
National Geophysical Data Center		(\$0.6)	

- With this reduction, NOAA will no longer be able to support the development of NOAA-specific sea ice products at the National Snow and Ice Data Center of the University of Colorado.
- This reduction may affect NGDC's current staffing levels, but any reduction in staff is anticipated to be accomplished through attrition.

* Numbers may not add due to rounding and excluding inflationary adjustments

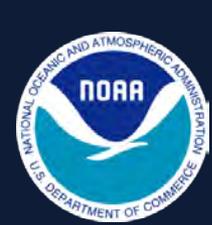


Climate Database Modernization Program (CDMP)

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Archive, Access and Assessment	\$48.5	(\$0.6)*	\$48.4
Climate Database Modernization Program		(\$2.0)	

- NOAA will terminate the CDMP program.
- This program scans images and keys data from paper and microfilm of new incoming and historical records and makes the digital data available on the web to businesses and members of the climate and environmental communities.
- The CDMP program is a partnership with four private sector contractors, currently supporting approximately 35 contractor personnel. CDMP's goal is to preserve and make available climate data going back several hundred years.
- To date, over 57 million images have been digitized for online access. Over 14 terabytes of data have been keyed and converted to digital format, extending the historical climate record back to the early 1800s, and in some cases, the 1700s.

* Numbers may not add due to rounding and excluding inflationary adjustments



Regional Climate Services

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Data Center and Information Services	\$6.8	(\$1.0)*	\$5.8
- Regional Climate Service Directors (RCSD)			
- Regional Climate Center (RCC)			

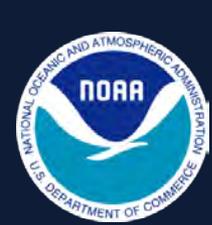
- Represents a reduction, which supported one-time, high-priority projects developed by NOAA and the Regional Climate Centers (RCC).
- NOAA will re-compete the RCCs to provide national coverage and align operations with the regional climate services programs. The Regional Climate Services Directors will be responsible for the contracts within their respective RCCs.

* Numbers may not add due to rounding and excluding inflationary adjustments

An aerial photograph of a coastal region. The top half shows a dense forest of green trees. Below the forest is a large, irregularly shaped bay or inlet. The water in the bay is a mix of dark blue and lighter, milky white, suggesting sediment or shallow water. The right side of the image shows a dark blue ocean with white-capped waves breaking against a rocky or sandy shore. The overall scene is a natural, scenic view of a coastline.

*Procurement, Acquisition, and
Construction (PAC) Accounts*

BUDGET HIGHLIGHTS



NESDIS PAC: \$1,850.3 million

PAC Account (\$ M)	FY 2013 President's Budget
Satellite Acquisitions	\$1,833.4
Data and Other Systems Investment	\$16.9
Total*	\$1,850.3



* Numbers may not add due to rounding and excluding inflationary adjustments



Satellite Acquisitions: \$1,833.4 million

PAC Account (\$M)	FY 2011 Spend Plan	FY 2012 Spend Plan	Program Change	FY 2013 President's Budget
Geostationary Operational Environmental Satellite (GOES)-N Series	\$40.5	\$32.5	(\$2.6)	\$29.9
GOES-R Series	\$662.4	\$615.6	\$186.4	\$802.0
Joint Polar Satellite System (JPSS)	\$471.9	\$924.0	(\$33.5)	\$916.4
Jason-3	\$19.9	\$19.7	\$10.3	\$30.0
Restoration of Climate Sensors	\$7.0	\$25.9	XFER to JPSS	XFER to JPSS
Polar-orbiting Operational Environmental Satellite (POES)	\$40.8	\$32.2	\$0.0	\$32.2
Deep Space Climate Observatory (DSCOVR)	\$2.0	\$29.8	(\$6.9)	\$22.9
Total*	\$1,244.4	\$1,679.7	\$153.7	\$1,833.4

* Numbers may not add due to rounding and excluding inflationary adjustments



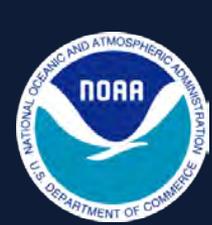
GOES-R Series

Next Generation Geostationary Environmental Satellite

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: GOES-R			
GOES-R	\$615.6	\$186.4*	\$802.0

- Provides continuity from the GOES-N series geostationary weather satellites.
- NOAA's geostationary constellation consists of two operational satellites and an on-orbit spare.
- Funding continues the development of the GOES-R instruments, spacecraft, and ground systems for 4 satellites with a launch readiness date for GOES-R in 1st Quarter FY2016
- NOAA provides overall program management and total program funding. NASA leads the space segment including instrument development and launch services. NOAA leads the ground segment.

* Numbers may not add due to rounding and excluding inflationary adjustments



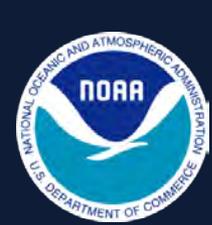
JPSS

Next Generation Polar-Orbiting Environmental Satellite

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Joint Polar Satellite System			
Joint Polar Satellite System	\$924.0	(\$33.5)*	\$916.4

- In FY 2013, Restoration of Climate Sensors funding is consolidated with the JPSS budget line item.
- Funding ensures a 2nd Quarter FY 2017 launch readiness date for JPSS-1, thereby minimizing any potential gap in satellite observations from the end-of-life of Suomi-NPP.
- We are committed to maintaining a total Life Cycle Cost (LCC) through FY 2028 of \$12.9 billion or less for the JPSS program. This is a revision from the previously submitted LCC of \$11.9 billion through FY 2024 reflecting an extended estimate of satellite performance.
- FY 2013 funding supports JPSS-1&2 spacecraft, all weather and climate instruments on JPSS-1, the Total Solar and Spectral Irradiance Sensor (TSIS), and free flyers for Advanced Data Collection System and Search and Rescue transponders.

* Numbers may not add due to rounding and excluding inflationary adjustments



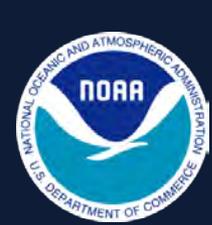
JPSS

Next Generation Polar-Orbiting Environmental Satellite

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Joint Polar Satellite System			
Joint Polar Satellite System	\$924.0	(\$33.5)*	\$916.4

- Climate sensors beyond JPSS-1 and the accommodation for TSIS are under review.
- In addition, the following items will no longer be supported:
 - DOD follow-on program for the early morning polar orbit; the JPSS program will continue to engage DOD on the follow-on program.
 - Two data processing sites for the Navy's Fleet Numerical Meteorology and Oceanography Center (FNMOC) and the Naval Oceanographic Office (NAVO).
 - 30 minute latency.

* Numbers may not add due to rounding and excluding inflationary adjustments



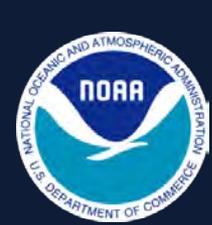
Jason-3

Altimetry Mission

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Jason-3			
Jason-3	\$19.7	\$10.3*	\$30.0

- Funding continues the development of the Jason-3 satellite, a partnership between NOAA and EUMETSAT, the European Organisation for the Exploitation of Meteorological Satellites.
- Launch vehicle options are currently under review. Launch readiness date will be updated once Launch Vehicle is selected.
- Jason-3 ensures the continuity of space-based altimetry (i.e., sea surface height) observations that started over 20 years ago with TOPEX/Poseidon, and continued with Jason-1 and Jason-2 satellites. Data from these satellites assist in measuring global sea level change that is associated with global climate change.
- Jason-3 will also provide data that are important to assess and predict hurricane intensity, surface wave forecasts, and the monitoring of the development of El Niño/La Niña events.

* Numbers may not add due to rounding and excluding inflationary adjustments



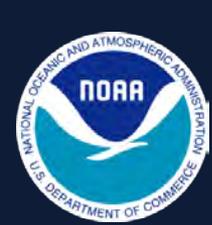
DSCOVR

Advanced Warnings of Solar Storms

(\$ in millions)	FY 2012 Spend Plan	Program Change	FY 2013 President's Request
PPA: Deep Space Climate Observatory Mission			
DSCOVR	\$29.8	(\$6.9)*	\$22.9

- Provides advanced warnings of geomagnetic storms that could adversely affect power grids, telecommunications, satellite systems, and the health and safety of astronauts and airline passengers.
- NOAA has partnered with NASA and the Air Force to refurbish and launch DSCOVR as a space weather mission with a launch readiness date of 3rd Quarter FY 2014.

* Numbers may not add due to rounding and excluding inflationary adjustments



Data and Other Systems Investment: \$16.9 million

ORF Account (\$M)	FY 2011 Spend Plan	FY 2012 Spend Plan	Program Change	FY 2013 President's Budget
Comprehensive Large Array-data Stewardship (CLASS)	\$5.5	\$6.5	\$0.0	\$6.5
EOS Archive Enhancements	\$1.0	\$1.0	\$0.0	\$1.0
Critical Single Point of Failure	\$2.8	\$2.8	\$0.0	\$2.8
NPOESS Data Exploitation	\$4.5	\$4.5	\$0.0	\$4.5
Satellite CDA Facility	\$2.2	\$2.2	\$0.0	\$2.2
Total*	\$16.0	\$16.9	\$0.0	\$16.9

* Numbers may not add due to rounding and excluding inflationary adjustments

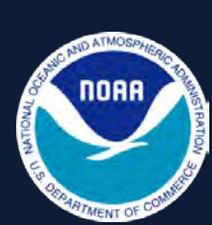


HIGHLIGHTS:

NESDIS FY 2013 BUDGET CHANGES

ORF and PAC Accounts (\$ M)	FY 2013 President's Budget
Operations, Research, and Facilities (ORF)	
• NPP and Polar Continuity Data Processing and Distribution	\$9.4
• Data Center Operations	\$5.8
• NODC	(\$3.8)
• NGDC	(\$0.6)
• Climate Database Modernization Program (CDMP)	(\$2.0)
• Coastal Data Development	(\$0.5)
• Regional Climate Services	(\$1.0)
• Environmental Data Systems Modernization	\$0.8
Procurement, Acquisition, and Construction (PAC)	
• Geostationary Operational Environmental Satellite N-Series (GOES-N)	(\$2.6)
• Geostationary Operational Environmental Satellite R-Series (GOES-R)	\$186.4
• Jason-3 (Altimetry Mission)	\$10.3
• Joint Polar Satellite System (JPSS)	(\$33.5)
• Deep Space Climate Observatory Mission (DSCOVR)	(\$6.9)
Total*	\$162.0

* Total includes \$0.2M in program changes not highlighted above.



SUMMARY:

FY 2013 NESDIS Budget

- Provides funding stability for NOAA's satellite acquisitions.
- Minimizes any potential gap in polar-orbiting environmental observations from the end-of-life of Suomi-NPP.
- Provides the necessary resources for the Geostationary Operational Environmental Satellite R-Series to maintain a 1st Quarter FY 2016 launch date for GOES-R.
- Provides new environmental products from NPP to improve the 3-7 day weather forecasts.



Thank you for your continued support of our programs



FY 2013 Budget Information

**For more information, please see the NOAA
Budget Office Website:**

<http://www.corporateservices.noaa.gov/nbo/>

or

NESDIS Homepage at:

<http://www.nesdis.noaa.gov>

or

Contact us at NESDIS.Outreach@noaa.gov