



NOAA Current and Future Meteorological Satellite Programs

*Mark S. Paese, Deputy Assistant Administrator
NOAA Satellite and Information Service*

The Sixth Asia/Oceania Meteorological Satellite Users' Conference
Tokyo, Japan

November 10, 2015

NOAA Satellite and Information Service



Supporting NOAA's Mission

Supporting NOAA's Mission

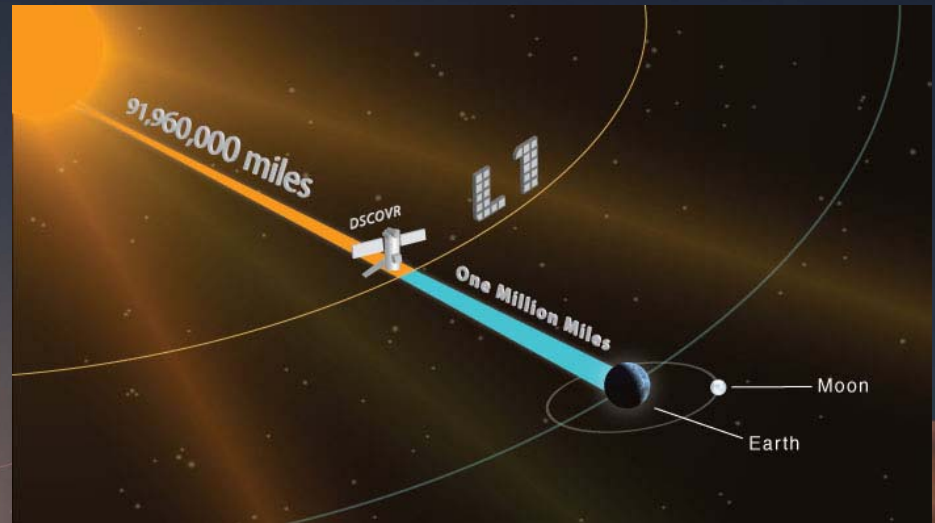
NOAA is a science-based services agency engaged with the entire Earth system science enterprise.

NOAA's Top Four Priorities:

- To provide information and services to make communities more resilient
- To evolve the National Weather Service
- To invest in observational infrastructure
- To achieve organizational excellence



Space Weather Observations: DSCOVR

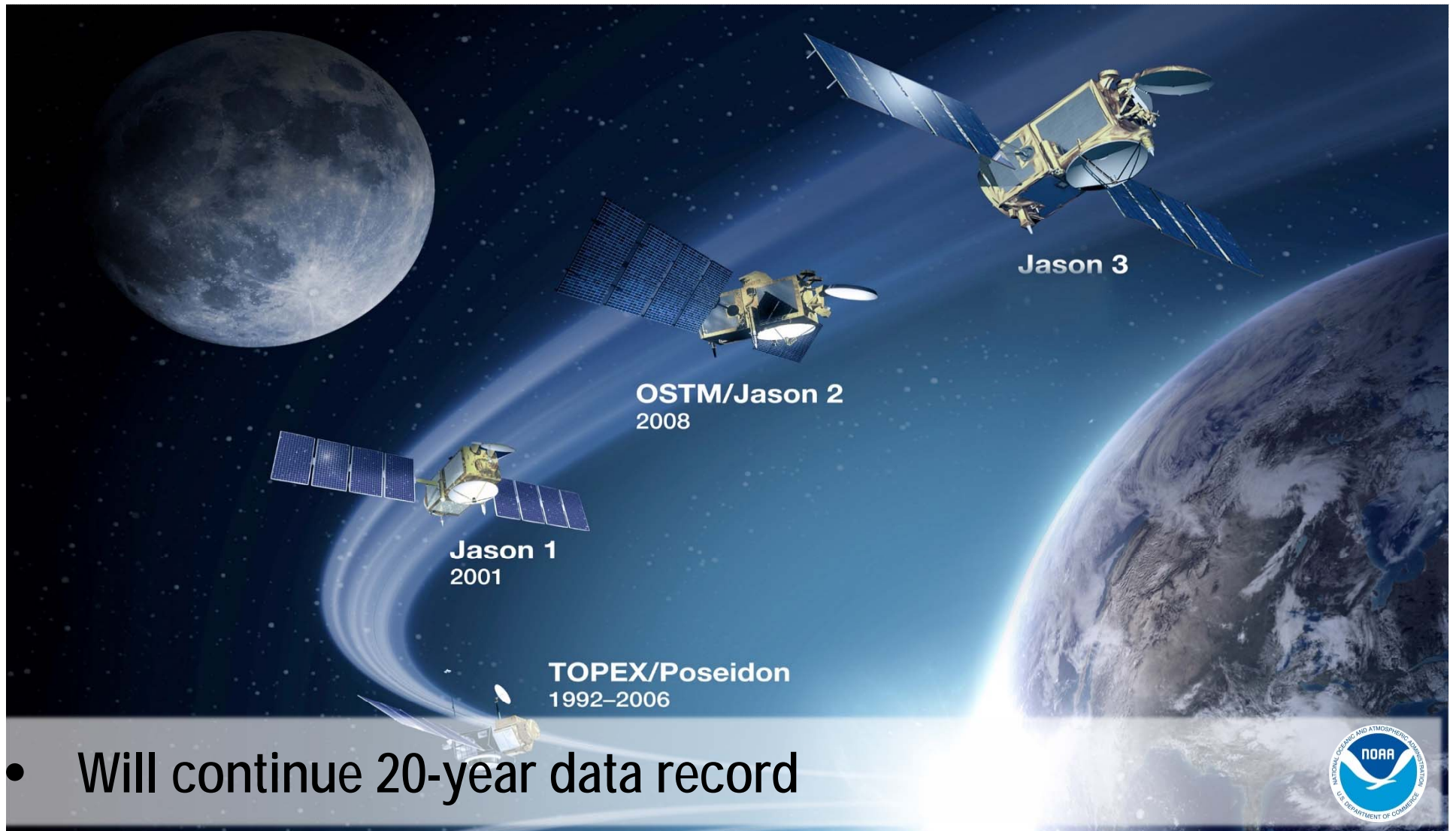


- **DSCOVR Launched 11 February 2015**
- **Reached L1 on 8 June 2015**

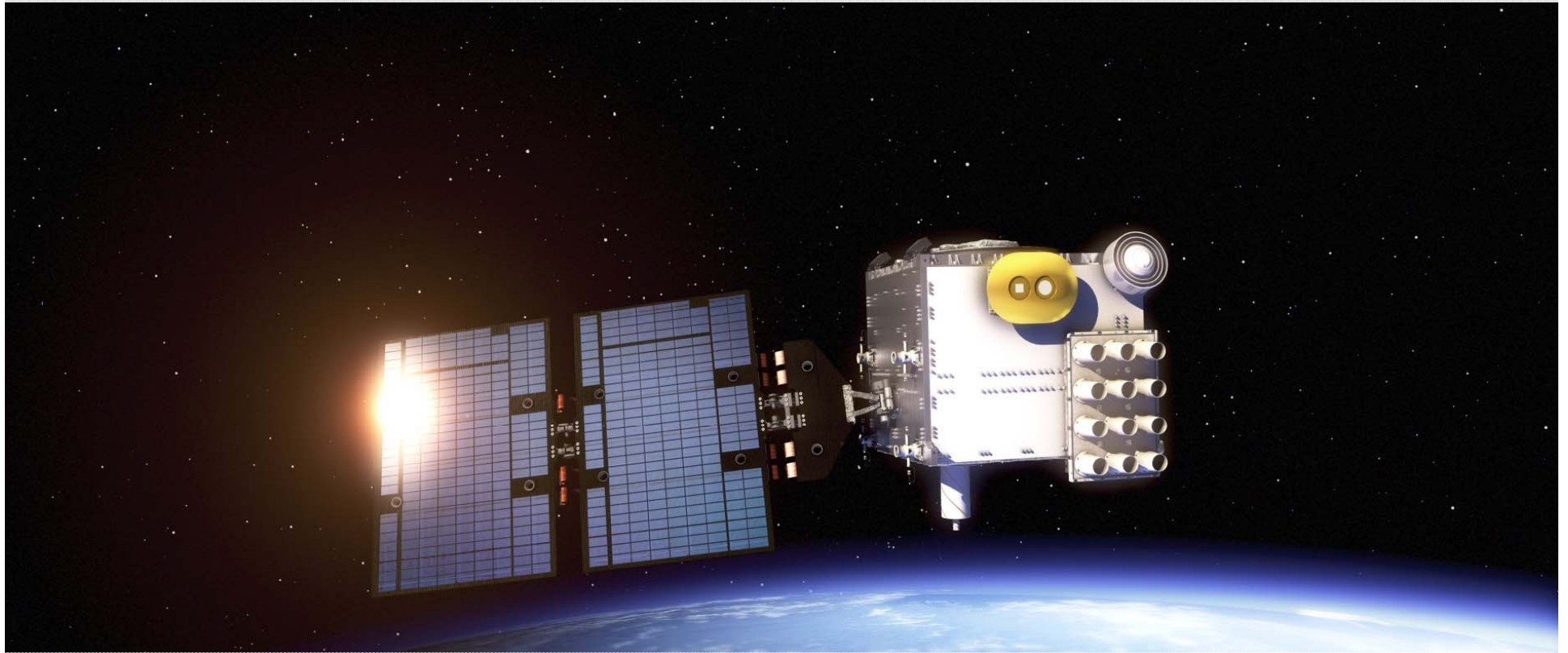
Credit: SpaceX



JASON-3: Ocean Altimetry



COSMIC-2



- Launch of first six COSMIC-2 satellites 2016



THE FUTURE OF FORECASTING: GOES-R

3X MORE CHANNELS



Improves every product from current GOES Imager and will offer new products for severe weather forecasting, fire and smoke monitoring, volcanic ash advisories, and more.

4X BETTER RESOLUTION



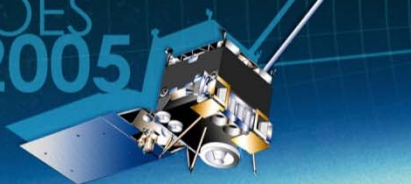
The GOES-R series of satellites will offer images with greater clarity and 4x better resolution than earlier GOES satellites.

5X FASTER SCANS



Faster scans every 30 seconds of severe weather events and can scan the entire full disk of the Earth 5x faster than before.

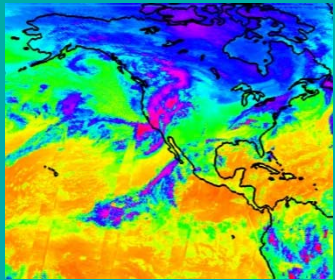
GOES
2005



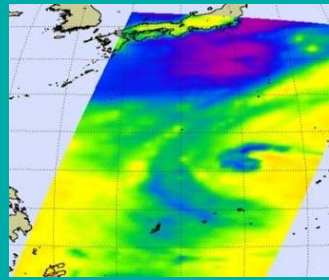
GOES-R
2016



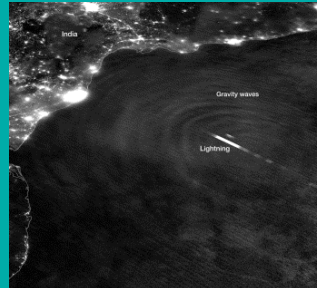
THE FUTURE OF FORECASTING: JPSS



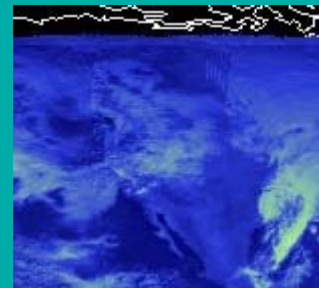
CrIS



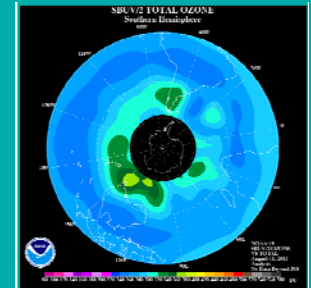
ATMS



VIIRS



CERES



OMPS



Environmental Information

National Climatic Data Center

National Ocean Data Center

National Geophysical Data Center

Maximize the Return on Investment of the Nation's Earth Observing Satellites Systems

Ensure a high scientific quality satellite data stream

Develop science to maximize the utilization of the different satellite data

Analyze and interpret data for decision making purposes

NOAA NATIONAL CENTERS FOR ENVIRONMENTAL INFORMATION
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
formerly the National Geophysical Data Center (NGDC) [more on NCEI](#)

Home | About | Contacts | Data | Education | News | Site Map

Data by Discipline

- Bathymetry & Global Relief
- Earth Observations from Space
- Geomagnetic Data & Models
- Marine Geology & Geophysics
- Natural Hazards
- Space Weather & Solar Events

Featured Services

- » [Declination Viewer](#)
- » [Geospatial Maps & Web Services](#)

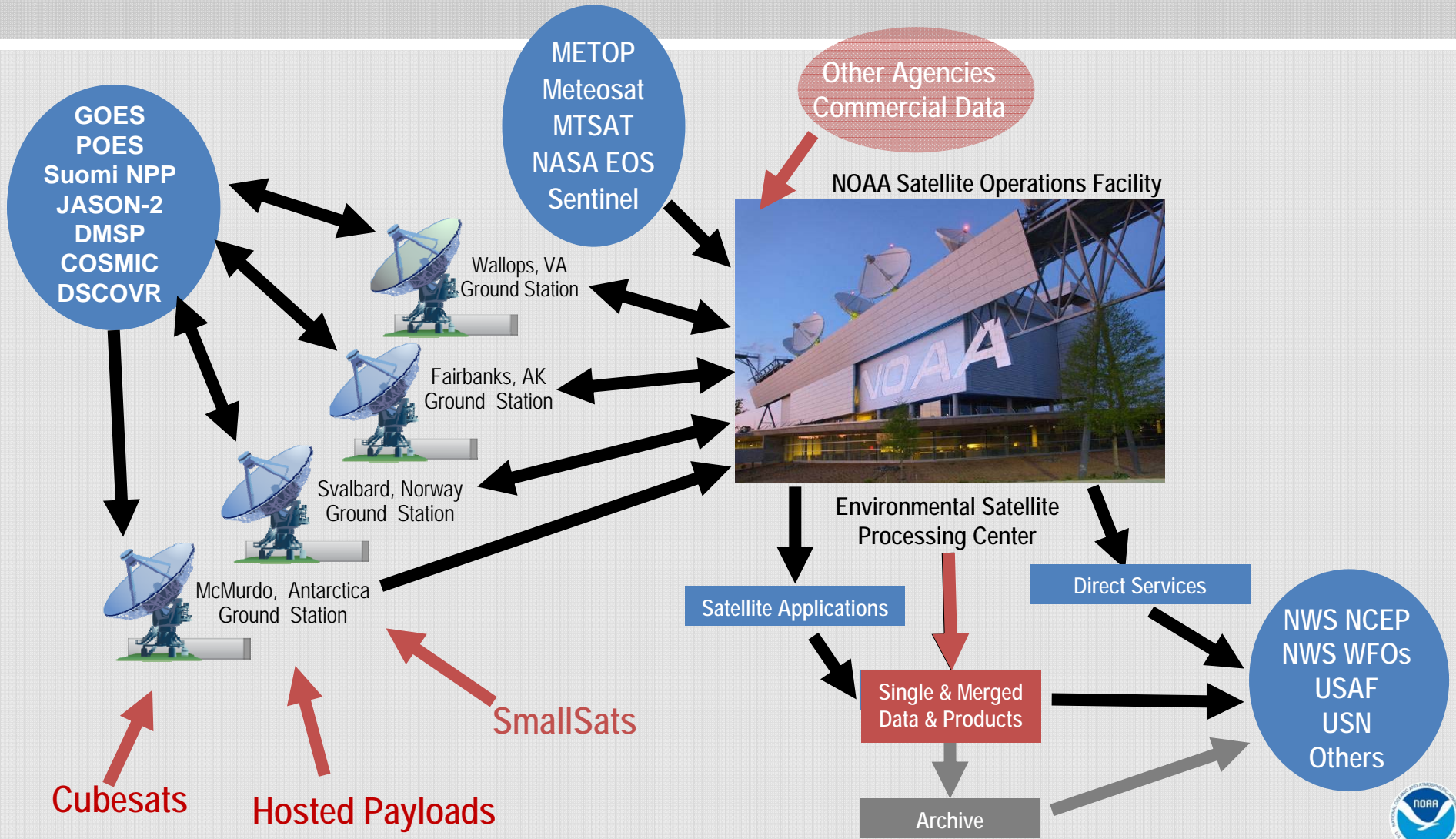
National Centers for Environmental Information

NOAA's former three data centers have merged into the National Centers for Environmental Information (NCEI).

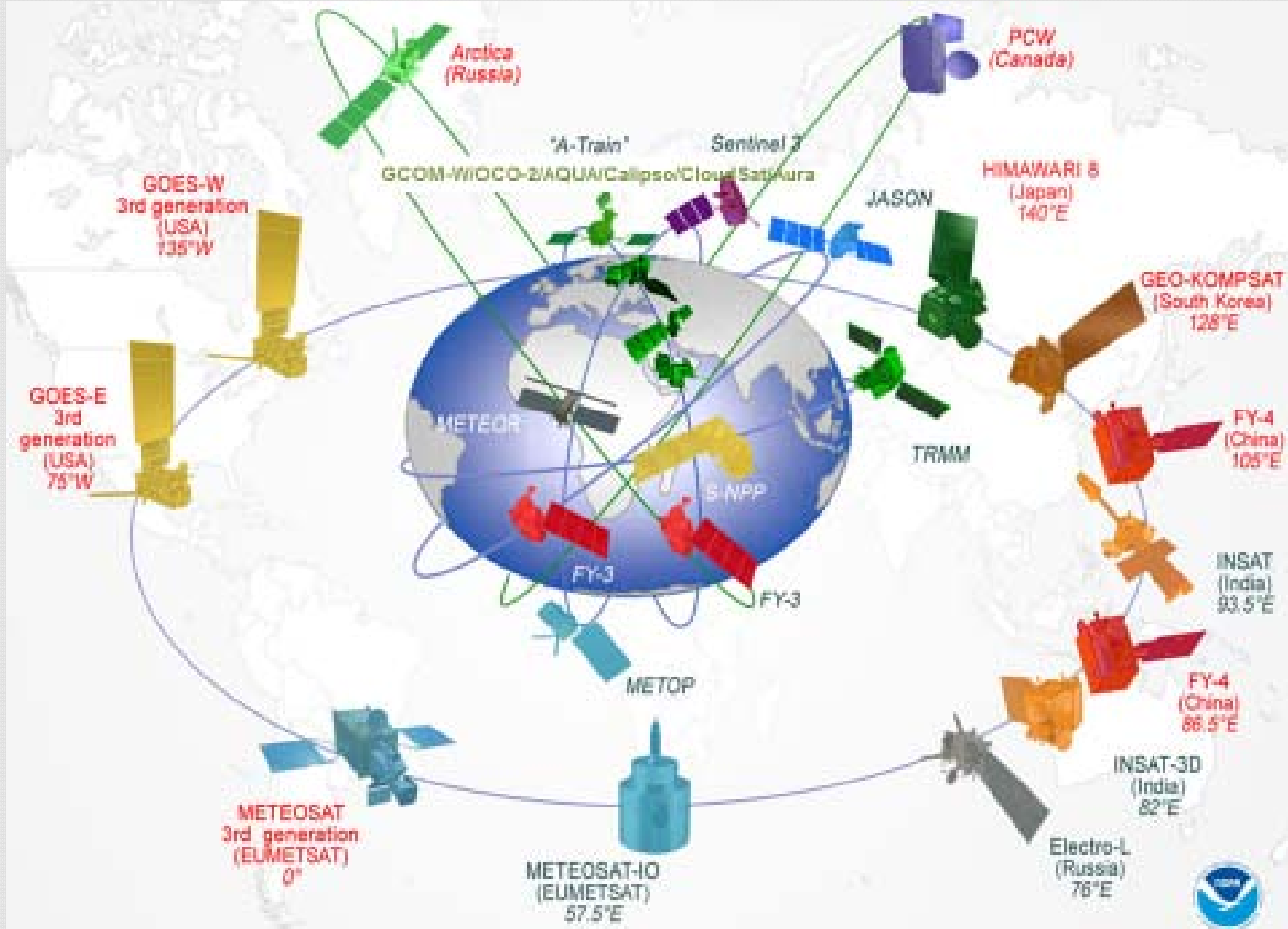
<https://www.ncei.noaa.gov/>



NESDIS Architecture



Global Observing System



Recent Contributions to the Global Observing System

Himawari-8



FY-2G



2015 NOAA Satellite Conference



- **Satellite user conferences strengthen user readiness and international collaboration**



Big Data

- Cooperative Research and Development Agreement (CRADA)
- 3-year Project
- Developing Prototypes


INSIDE NOAA
News from the Office of the Administrator

Secretary Pritzker Announces Big Data Partnership

April 21, 2015

Greetings:

From the surface of the sun to the depths of the ocean floor, NOAA works to keep citizens informed about the changing environment around them. Our vast network of observational systems – from radars to satellites to buoys and supercomputers – provides critical information that's used to keep track of the health of our planet. As we continue to witness changes to our planet, the demand for our data is only increasing.



Of the 20 terabytes of data NOAA gathers each day – twice the data of the entire printed collection of the United States Library of Congress – only a small percentage is easily accessible to the public. Last year, we announced a **Request for Information** to leverage the power of American businesses to help us turn this untapped information into usable products or services.

Today, during a keynote address at the American Meteorological Society's Washington Forum, Secretary Pritzker announced that NOAA is joining with Amazon Web Services, Microsoft Azure, IBM, Google, and the Open Cloud Consortium to create five data alliances that will bring our agency closer to our goal of unleashing its incredible resources of environmental data.

This effort, structured through a Cooperative Research and Development Agreement (CRADA), will...

U.S. hurricane forecasters in Mexico & Caribbean this week on preparedness mission. [Read More...](#)

Gulf spill, 5 years later: NOAA provides update on progress...

Logos for Amazon Web Services, Google Cloud Platform, IBM, Microsoft, and Open Cloud Consortium (OCC).

<https://data-alliance.noaa.gov/>



NOAA Going Forward



- **Strengthening NESDIS**
- **Common Ground Services**
- **More robust systems architecture**



Thank you

