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

- Will continue 20-year data record
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-R 2016
THE FUTURE OF FORECASTING: JPSS

CrIS  ATMS  VIIRS  CERES  OMPS

JPSS 2017
Environmental Information

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

https://www.ncei.noaa.gov/
NESDIS Architecture

GOES
POES
Suomi NPP
JASON-2
DMSP
COSMIC
DSCOVR

METOP
Meteosat
MTSAT
NASA EOS
Sentinel

NOAA Satellite Operations Facility

Environmental Satellite Processing Center

Satellite Applications

Single & Merged Data & Products

Archive

Direct Services

NWS NCEP
NWS WFOs
USAF
USN
Others

Other Agencies
Commercial Data

Svalbard, Norway
Ground Station

McMurdo, Antarctica
Ground Station

Wallops, VA
Ground Station

Fairbanks, AK
Ground Station

Cubesats

Hosted Payloads

Small Sats

McMurdo, Antarctica
Ground Station

Wallops, VA
Ground Station

Fairbanks, AK
Ground Station

Svalbard, Norway
Ground Station

GOES
POES
Suomi NPP
JASON-2
DMSP
COSMIC
DSCOVR
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

https://data-alliance.noaa.gov/
NOAA Going Forward

• Strengthening NESDIS
• Common Ground Services
• More robust systems architecture
Thank you