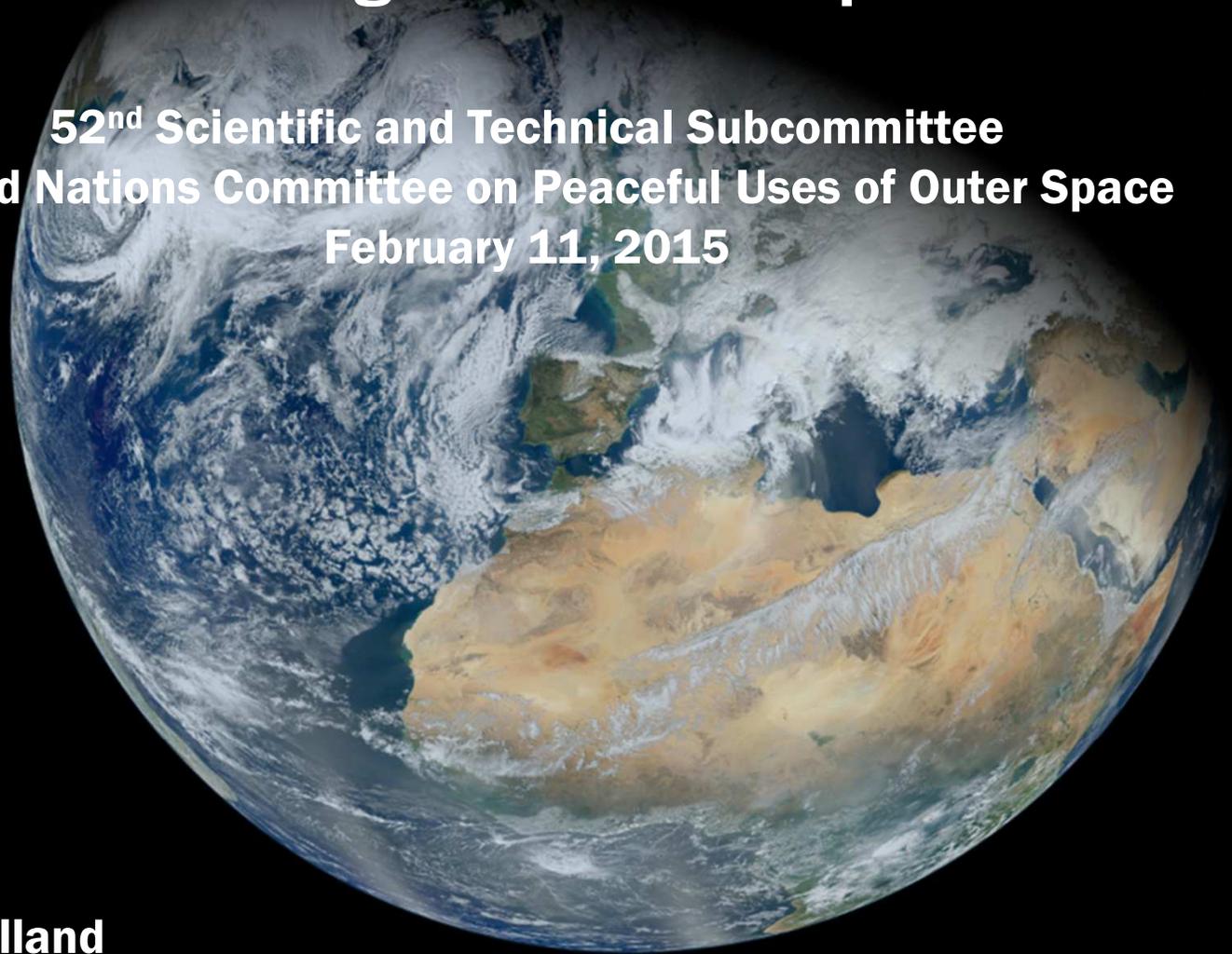


National Oceanic and Atmospheric Administration (NOAA)

Meteorological Satellite Update

**52nd Scientific and Technical Subcommittee
United Nations Committee on Peaceful Uses of Outer Space
February 11, 2015**



Presented by:

Mr. Mark Mulholland

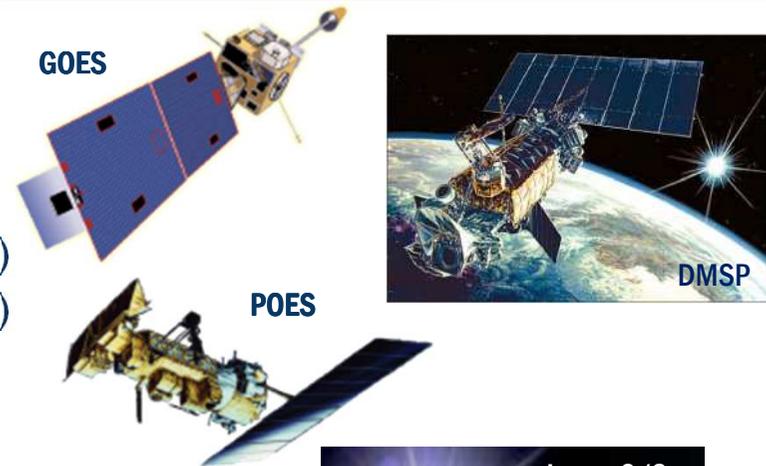
National Environmental Satellite, Data, and Information Service (NESDIS)



NESDIS Principal Activities

Conducting Meteorological Satellite Operations

- ✓ Geostationary satellites (GOES)
- ✓ Polar-orbiting satellites (POES)
- ✓ Suomi National Polar-orbiting Partnership (S-NPP)
- ✓ Defense Meteorological Satellite Program (DMSP)
- ✓ Jason-2 ocean surface topography satellite



Distributing Products and Services Worldwide

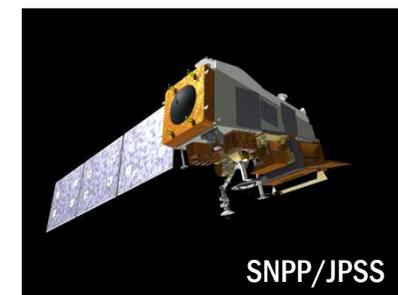
Acquiring Next Generation Satellites

- ✓ GOES-R Satellite Series
- ✓ Joint Polar Satellite System (JPSS)
- ✓ DSCOVR solar wind satellite
- ✓ Jason-3 ocean surface topography satellite
- ✓ COSMIC-2 GNS radio occultation



Providing Long Term Data Stewardship

- ✓ National Climatic Data Center
- ✓ National Oceanographic Data Center
- ✓ National Geophysical Data Center

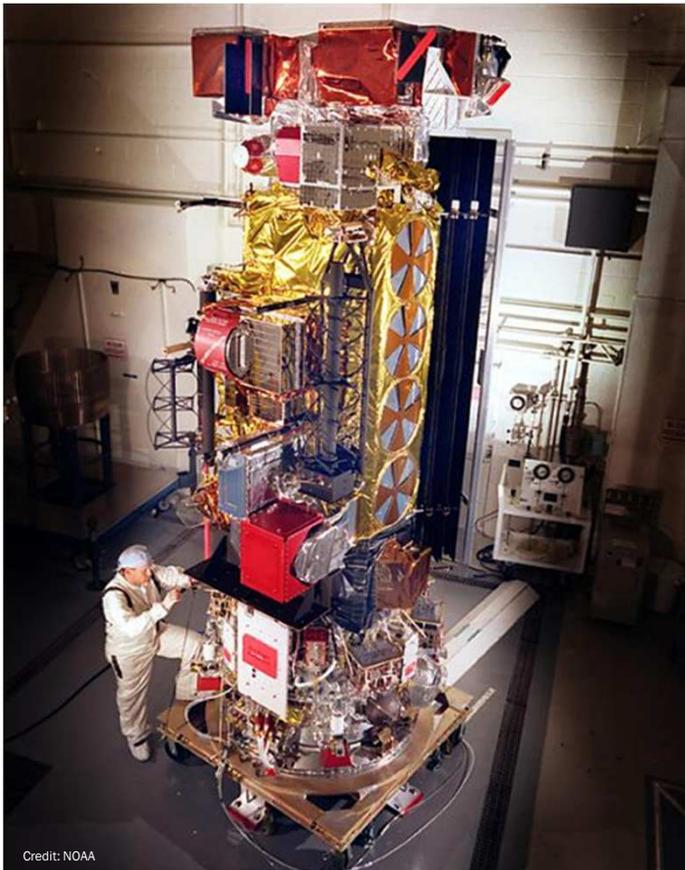




Significant Events – 2014

NOAA-16 End of Mission: June 9

- ✔ Launched: September 21, 2000
- ✔ Operational: March 30, 2001
- ✔ Design life: 3 years
- ✔ 70, 655 polar orbits
- ✔ Traveled 2.1 thousand million miles
- ✔ Imaged Hurricane Katrina landfall on August 28, 2005





Significant Events – 2014

34th Space Frequency Coordination Group (SFCG), June 3-11 2014

- ✓ NOAA hosted event in Boulder, Colorado, USA
- ✓ SFCG proposed by European Space Agency; established in January 1980
 - ✓ Multilateral technical forum for discussion of satellite-related radio frequency spectrum matters for space research, space operations, earth science and meteorological satellites
 - ✓ Develops consensus on issues discussed at International Telecommunications Union
- ✓ 29 member space agencies: 25 countries and two multinational space agencies



Credit: NOAA





Significant Events – 2014

Satellite-aided Search and Rescue (SARSAT)

- ✓ North America rescues: 240
 - ✓ Rescues at sea: 112 people rescued in 31 incidents
 - ✓ Aviation rescues: 15 people rescued in 7 incidents
 - ✓ Terrestrial rescues: 113 people rescued in 72 incidents
- ✓ Worldwide rescues: Over 700 persons in 2013 (2014 data not yet available)



MEOSAR System Development

- ✓ 2014 accomplishments
 - ✓ System evaluation testing began
 - ✓ NOAA MEOSAR ground system completed
- ✓ On schedule for 2018 Initial Operational Capability

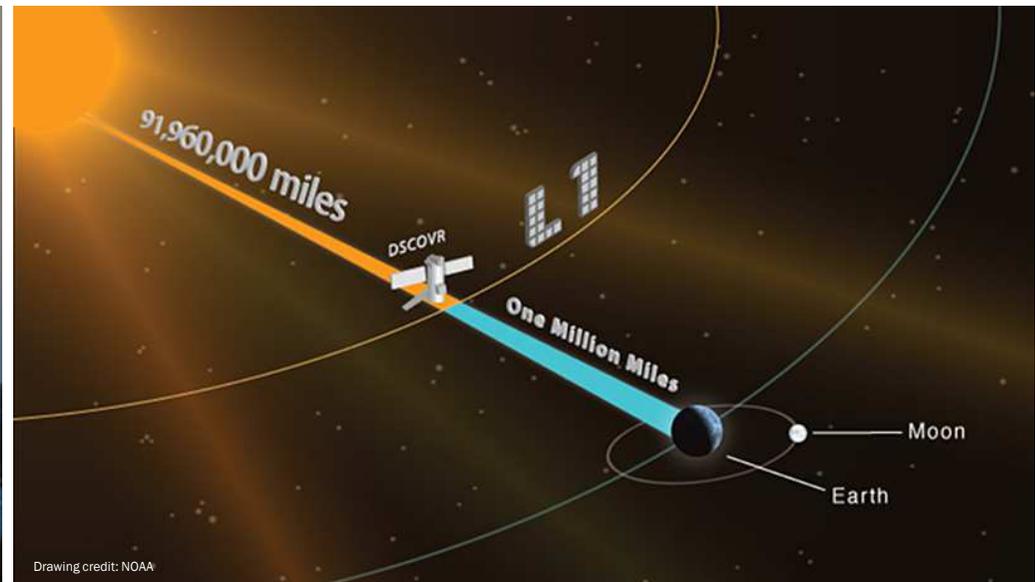




Significant Events – 2015

Deep Space Climate Observatory (DSCOVR) launch

- ✔ Liftoff occurred this morning at 00:03:32 Vienna time
- ✔ 110-day transit to Earth-Sun Lagrangian Point 1 (L-1)
- ✔ Replaces the NASA Advanced Composition Explorer satellite launched in 1997
- ✔ Improved solar wind measurements with secondary climate observations
- ✔ Provides early warning of geomagnetic storms to over 44,000 users





Significant Events – 2015

Jason-3 Launch – March 31, 2015



- ✔ Last of the current Jason series
- ✔ Continues NOAA's partnership with EUMETSAT, CNES, and NASA for ocean observations and seasonal forecasting
- ✔ Operational oceanography mission
 - ✔ Wave height
 - ✔ Wind speed
 - ✔ Sea surface topography
- ✔ Sea level rise measurements



Significant Events – 2015

National Oceanic and Atmospheric Administration
2015 NOAA SATELLITE CONFERENCE
Preparing for the Future of Environmental Satellites



April 27 - May 1, 2015 | Greenbelt, Maryland | www.satelliteconferences.noaa.gov/2015

REGISTRATION & CALL FOR POSTER ABSTRACTS ARE NOW OPEN!

- ✔ Venue for greater collaboration among the world's environmental satellite users
- ✔ Technical and scientific presentations
- ✔ NOAA and WMO workshops and training classes
- ✔ Expect participation from 40 countries
- ✔ No registration fee





Significant Events – 2015

43rd Coordination Group on Meteorological Satellites (CGMS-43), May 18-22, 2015, Boulder, Colorado

- ✓ NOAA hosting in Boulder, Colorado, USA
- ✓ CGMS background
 - ✓ Began in 1972 – informal meeting of NOAA, ESA, and JMA
 - ✓ 15 worldwide meteorological satellite agencies and intergovernmental organizations
 - ✓ Forum for the exchange of technical information on meteorological satellite systems
 - ✓ Harmonizes meteorological satellite mission parameters such as orbits, sensors, and data formats and downlink frequencies
 - ✓ Facilitates operational compatibility and possible mutual back-up through cooperative mission planning, compatible data products and services
- ✓ Membership open to:
 - ✓ Current and prospective developers and operators of meteorological satellites
 - ✓ WMO and WMO-supported international programs
 - ✓ Space agencies operating R&D satellites contributing to WMO programs





Significant Events – 2015

New NOAA Satellites Nearing Completion

- NOAA's next-generation satellites are progressing toward launches starting in early 2016:
 - GOES-R: early 2016
 - JPSS-1: early 2017
 - COSMIC-2 partnership: 2016 (first six satellites)
- Significant improvements in remote-sensing observations
- Enhance numerous terrestrial and space weather and climate products





Thank You For Your Attention!

