



**United States Department of Commerce
National Oceanic and Atmospheric Administration
(NOAA)**

**Environmental Satellite Contributions
to Global Earth Observing Programs**

**Presented to:
UN Commission on Peaceful Uses of Outer Space
Scientific and Technical Subcommittee
February 2012**

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NOAA Satellite and Information Service (NESDIS)**

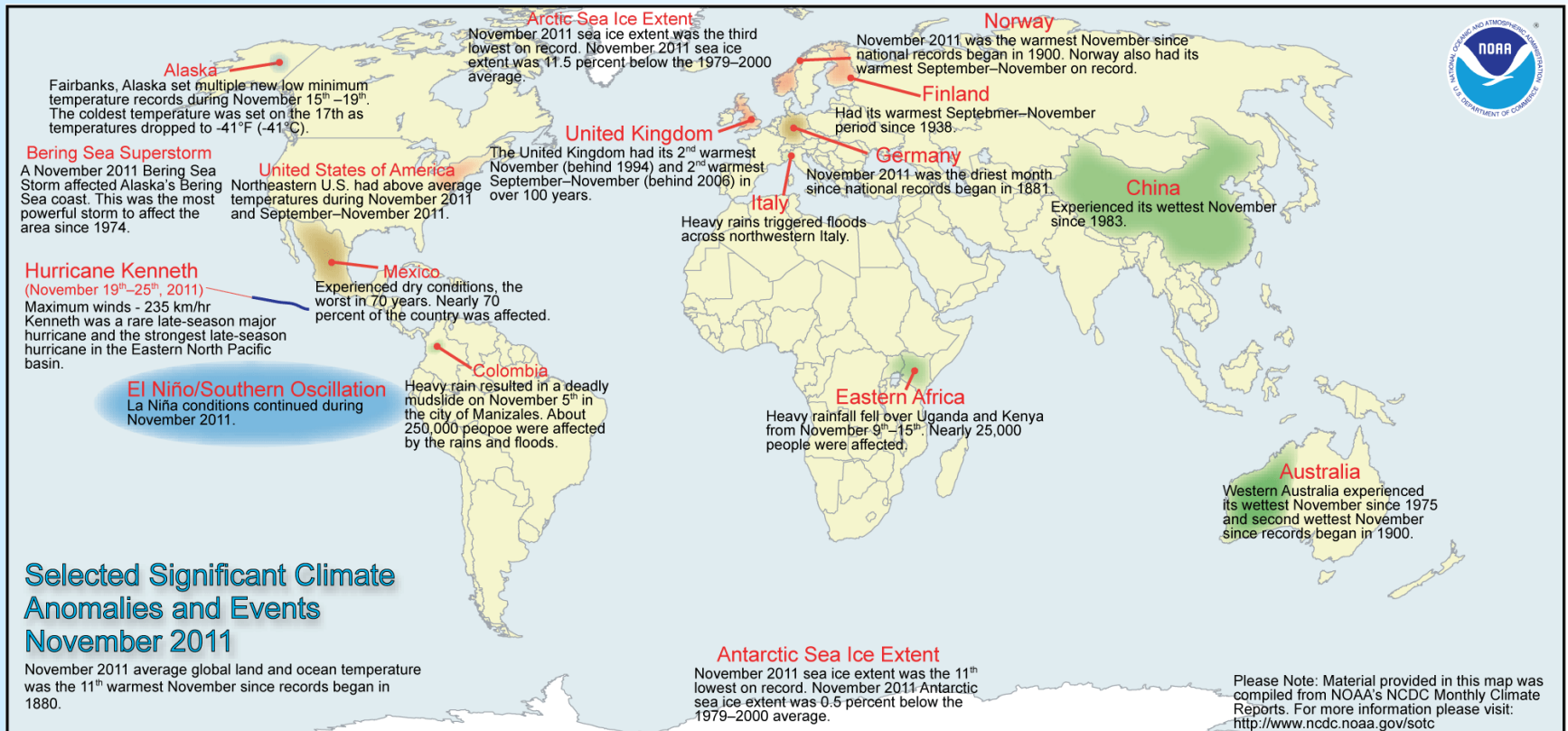


NOAA's Mission:

Science, Service, and Stewardship



- To understand and predict changes in climate, weather, oceans, and coasts;
- To share that knowledge and information with others; and,
- To conserve and manage coastal and marine ecosystems and resources





NOAA's Environmental Satellite Program

Requirements & Planning



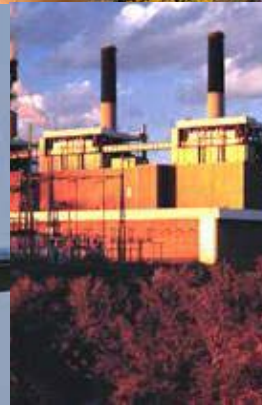
System Acquisition



Launch



Command & Control



Real-Time Product Development & Distribution

Data Archive & Access

Products & Services



24-hour Satellite Operations



**NOAA Satellite Operations Facility
(NSOF)
Suitland, Maryland**



NSOF Satellite Operations Control Center



**Fairbanks Command, Data,
and
Acquisition Station**

**Svalbard Satellite Station
Kongsberg Satellite Services**



**Wallops Command, Data,
and
Acquisition Station**



Current Satellite Programs

- Geostationary satellites (GOES) – 4 on orbit
- Polar-orbiting satellites (POES) – 5 on orbit
- Defense Meteorological Satellite Program (DMSP) – 6 on orbit
- Jason-2 altimetry satellite – international cooperative program





Additional Operations and Services



- Research satellites used operationally
 - Advanced Composition Explorer (ACE) – Solar Wind
- Rebroadcast services hosted on NOAA spacecraft
 - Emergency Manager's Weather Information Network (EMWIN)
 - ARGOS Data Collection System
 - GOES Data Collection System
 - Direct broadcast imagery transmissions
 - SARSAT – COSPAS
- GEONETCAST Americas



Future Satellite Programs

- Solar Wind Spacecraft (DSCOVR)
- Jason-3
- GOES-R
- Joint Polar Satellite System (JPSS)



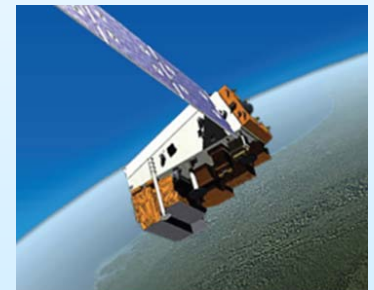
DSCOVR



Jason-3



GOES-R



JPSS



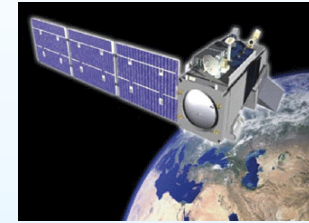
Significant Events: 2011

December 14: GOES-15 replaced GOES-11

- GOES-11 boosted to disposal orbit
- Procedures followed U.S. best practices



October 28: Next-generation polar environmental satellite launched



NPP





Contributions to Global Earth Observing Programs



- NOAA practices a full, open, and timely data policy
- Leaders and specialists participate in international forums and projects
 - Group on Earth Observations (GEO)
 - Committee on Earth Observation Satellites (CEOS)
 - Coordination Group for Meteorological Satellites (CGMS)
 - Numerous bi-lateral projects
- NOAA satellites integrated into the WMO Global Observing System
- GEONETCast Western Hemisphere regional infrastructure provider
 - Partnership with EUMETSAT and China Meteorological Administration
 - Very low equipment cost enables worldwide use



University of Ghana



October 28, 2011: A New Era Begins

