

NOAA

**Satellite and
Information
Service**

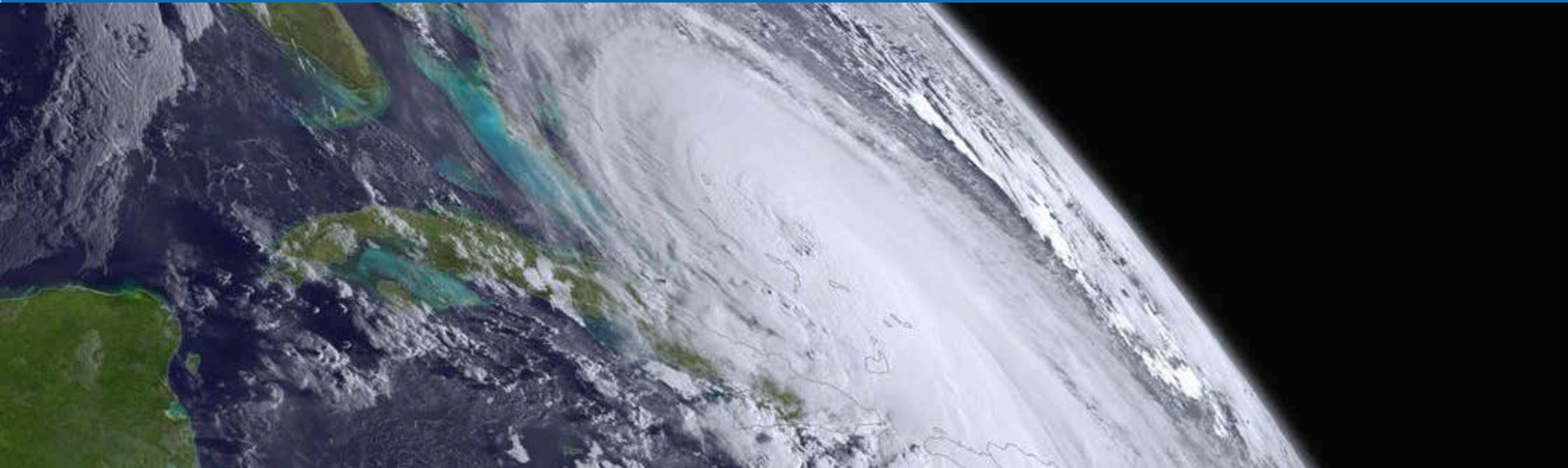
February 8, 2017



U.S. National Oceanic and Atmospheric Administration

Meteorological Satellite Update

Matthew Butler, Office of International and Interagency Affairs
NOAA Satellite and Information Service



Science, Service, Stewardship



PLANES FLY,

SHIPS SAIL,

UMBRELLAS OPEN,

CITIES PREPARE AND LIVES ARE SAVED

CROPS ARE PLANTED,

WITH FORECASTS MADE USING DATA & INFORMATION

FROM **NESDIS**
National Environmental Satellite, Data, & Information Service



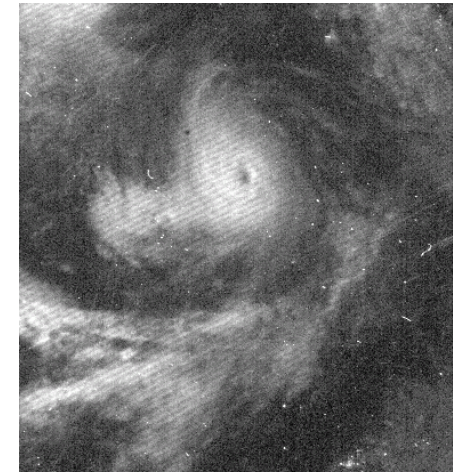
www.nesdis.noaa.gov



50 Years Ago: First Geostationary Weather Satellite Applications Technology Satellite (ATS) - 1



- ☑ Dimensions:
 - ☑ 142 cm in diameter
 - ☑ 135 cm long
- ☑ Weight: 340 kg
- ☑ Resolution: 3km



- ☑ Launched: December 7, 1966
- ☑ Deactivated: December 1, 1978
- ☑ Communications mission ended: January 1985

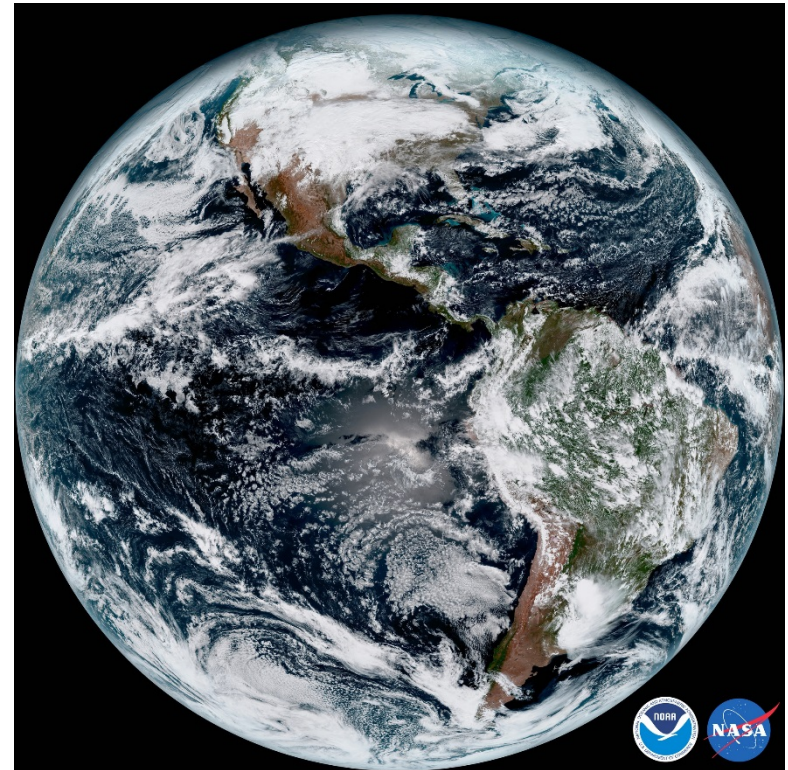
- ☑ Hurricane Monica: September 2, 1971

Geostationary Imagery: 50 Years of Improvements



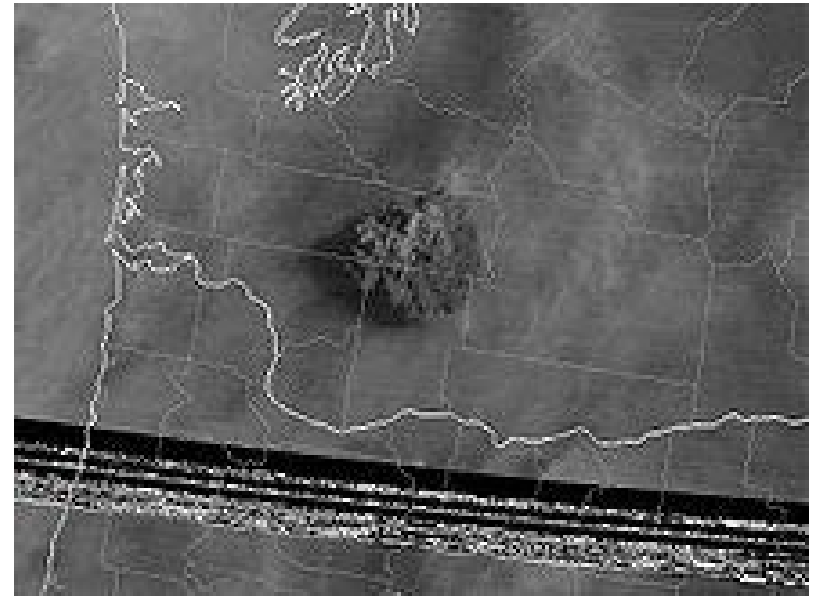
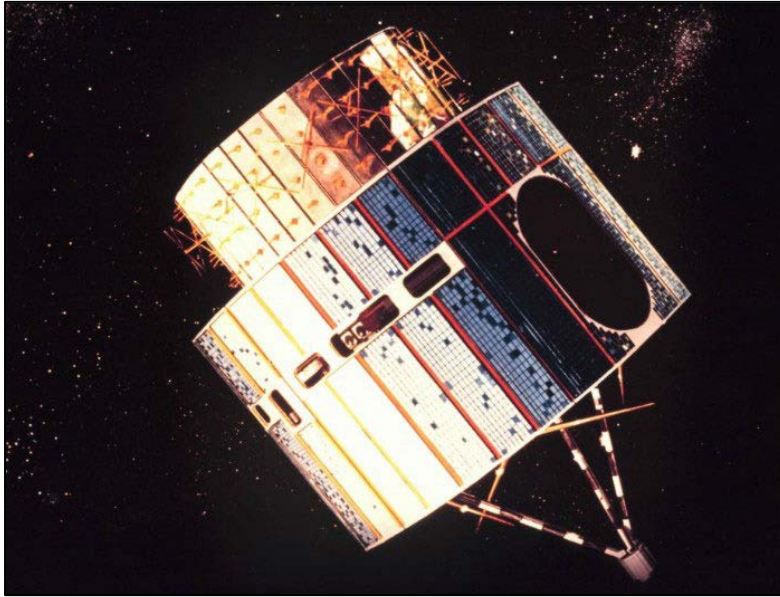
☑ Hurricane Camille: August 1969

☑ GOES-16: January 15, 2017





GOES-3: 38 Years in Service!

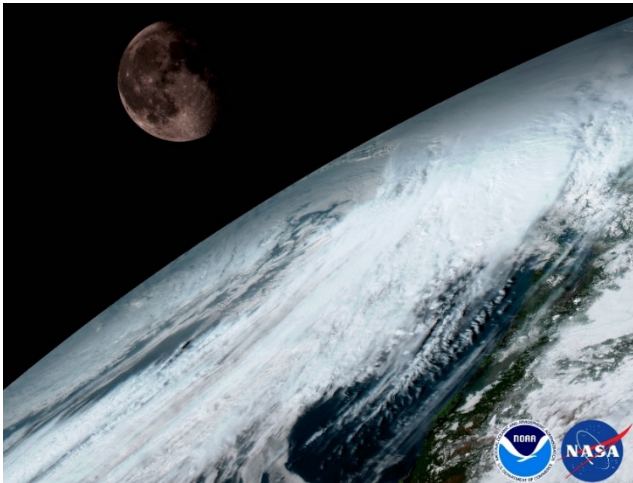


- 📍 Launched: June 16, 1978
- 📍 Decommissioned: June 29, 2016

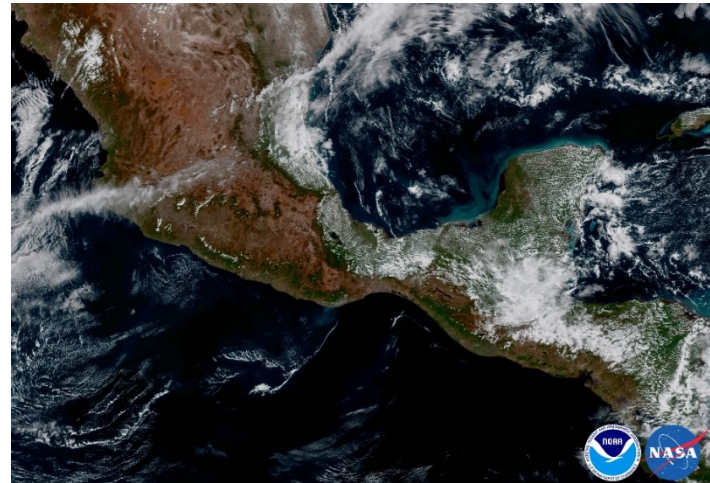
- 📍 Mount St. Helens Eruption
- 📍 May 18, 1980

- 📍 1978-1988: Weather satellite
- 📍 1988-1995: PEACESAT – Pacific Rim
- 📍 1995-2016: South Pole Communications

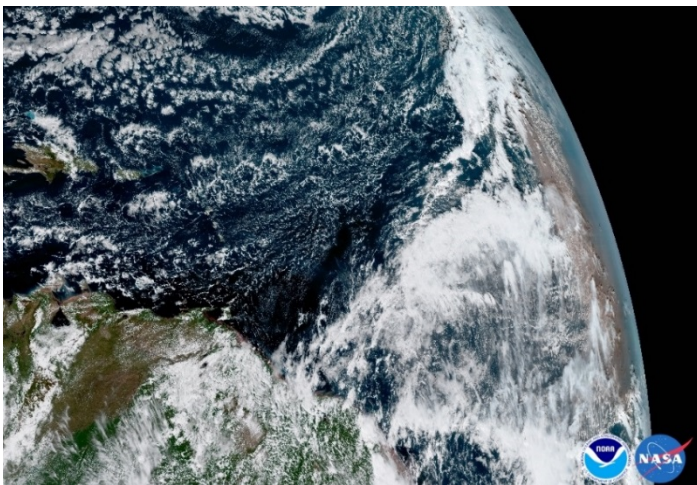
GOES-16: Earth in High Definition



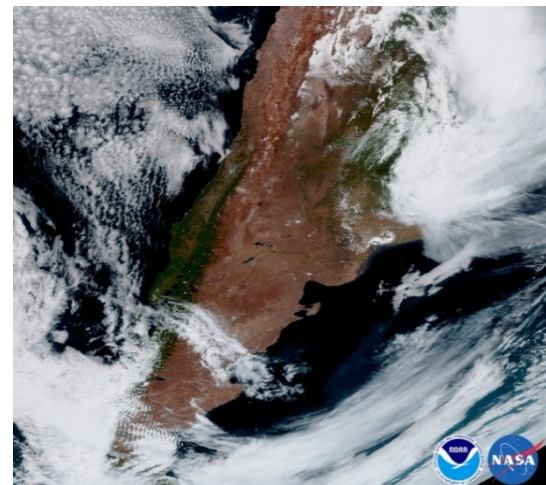
✔ Earth and Moon as seen from GOES-16



✔ Yucatan Peninsula: January 15, 2017



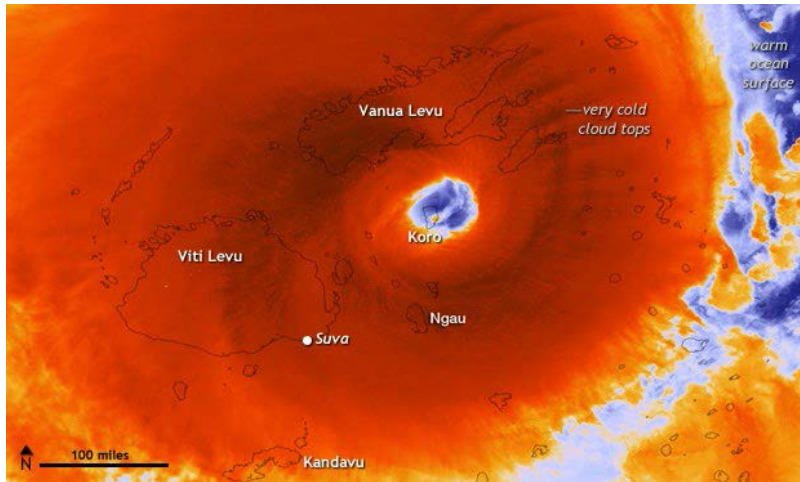
✔ Dust Off the Coast of Africa: January 15, 2017



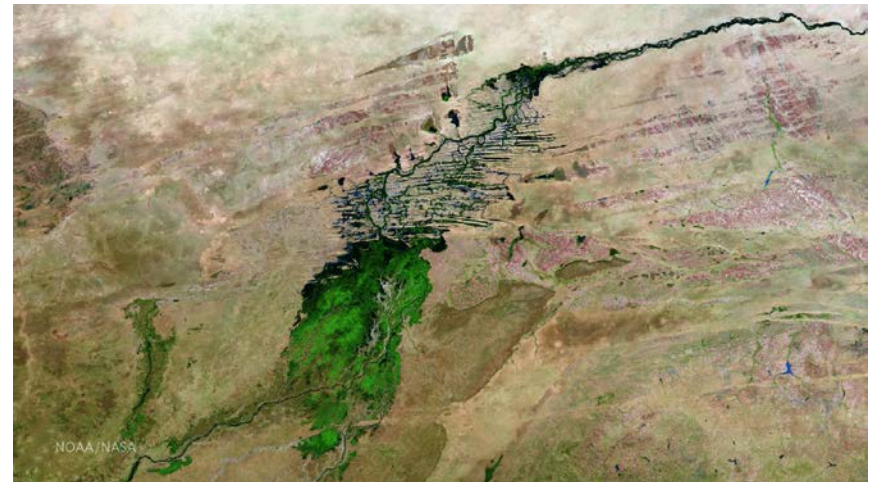
✔ South America: January 15, 2017



Advanced Polar Satellite Imagery



Tropical Cyclone Winston: February 2016



Desert Oasis - Inner Niger Delta: December 2016



Alberta Wildfires: May 2016



African Coastal Dust Cloud: December 2016



Recent and Upcoming Launches



JASON-3

OPERATIONAL JULY 1, 2016

DSCOVR

OPERATIONAL JULY 27, 2016

COSMIC-2

COSMIC-2A - 2017
COSMIC-2B - 2020

GOES-R SERIES

GOES-16 - LAUNCHED NOVEMBER 19, 2016
GOES-S - 2018
GOES-T - 2019
GOES-U - 2025

JPSS SERIES

JPSS-1 - 2017
JPSS-2 - 2021
JPSS-3 - 2026
JPSS-4 - 2031





Constellation of Earth Observing Satellites



- USA
- JAPAN
- SOUTH KOREA
- INDIA
- CHINA
- FRANCE
- RUSSIA
- NOAA
- EUMETSAT
- EUROPEAN COMMISSION
- NATIONAL SPACE ORGANIZATION (NSPO)
- EUROPEAN SPACE AGENCY

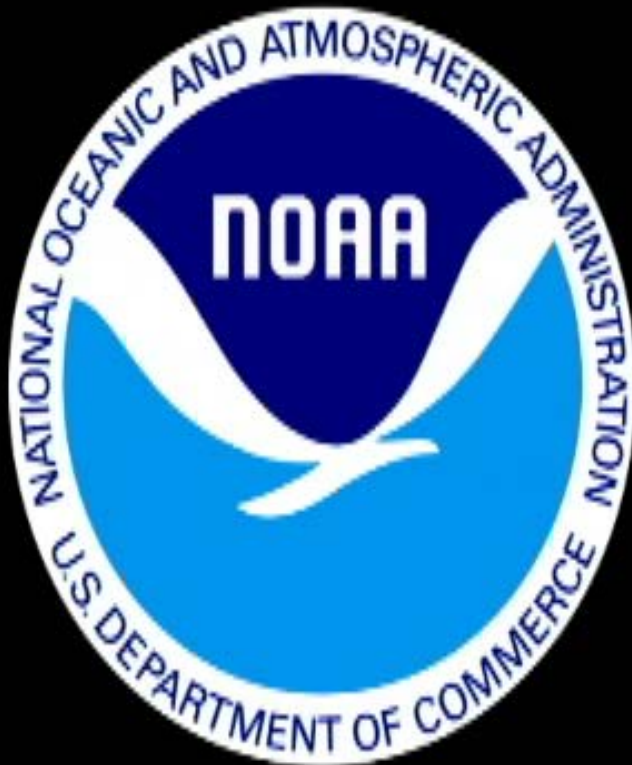


- GEOSTATIONARY ORBIT
- NEAR-POLAR ORBIT
- LAGRANGE POINT 1



Dr. Steven Volz

NOAA Assistant Administrator for Satellites and Information Service



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