



# **NWS Partners Meeting**

## **Observations Status Update**

**January 11, 2018**

**Kevin J. Schrab**  
**Portfolio Manager, NWS Office of Observations**

# Agenda

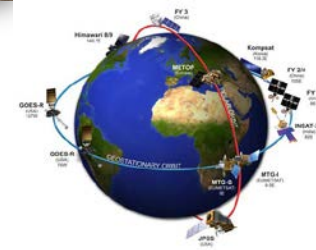
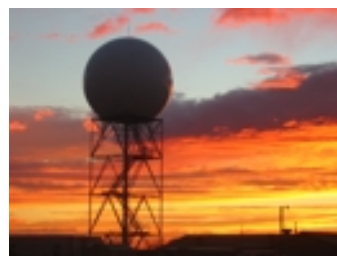
- Observations Overview
- Investing in Observational Infrastructure

- Satellites
- Radar
- Surface
- Upper Air

- Leveraging Smart Data Buys
- Observing Portfolio Management

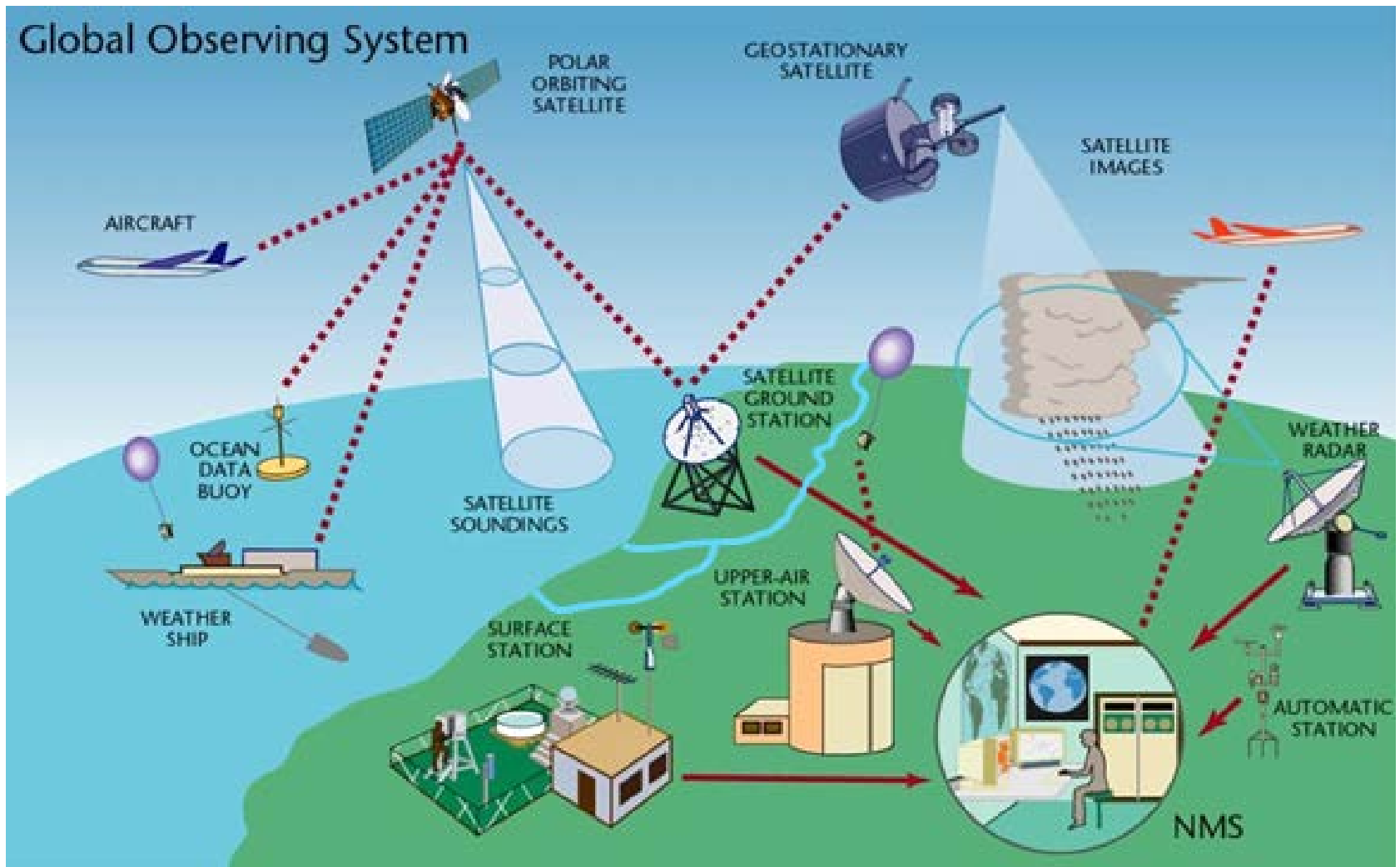
- Guiding Principles
- Emerging Technologies
- Coordination / Collaboration

- Discussion



# Observations Portfolio

Responsible for the collection of space, atmosphere, water, and climate observational data owned or leveraged by the NWS



# Investing in Observation Infrastructure - Satellites

## GOES-16

- Became operational as GOES-East on Dec 18, 2017

## JPSS-1 (now NOAA-20)

- Launched Nov 18, 2017
- ATMS and CrIS radiances in models within next few months



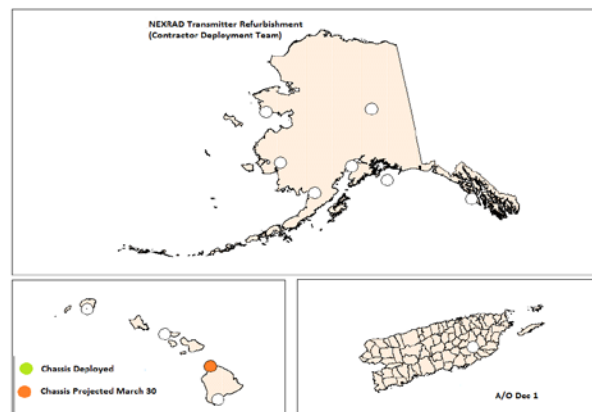
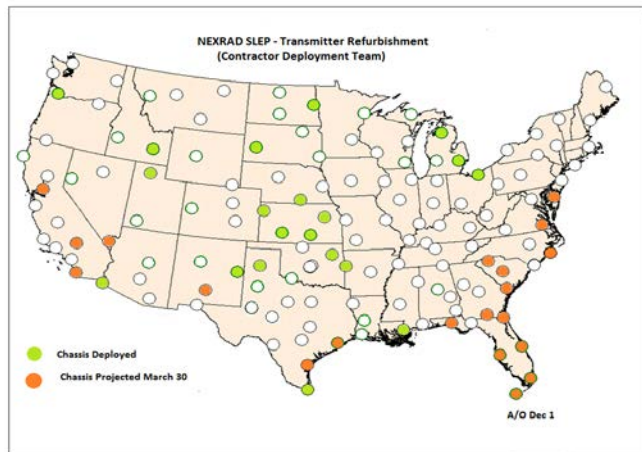
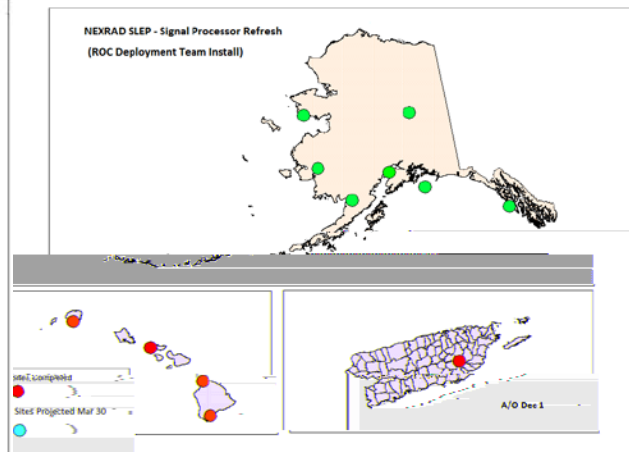
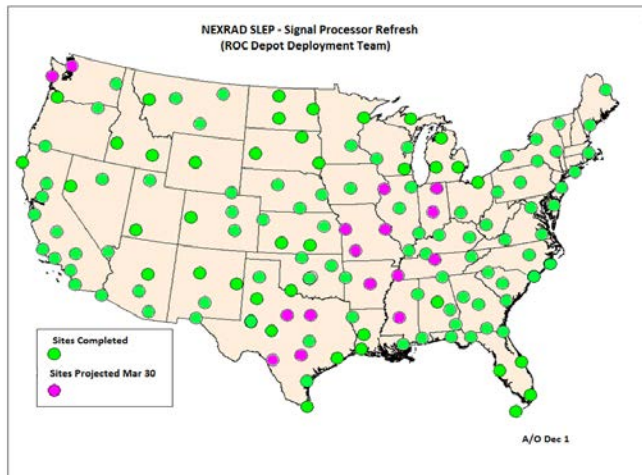
## GOES-S

- Revolutionary capability for Western U.S. and Pacific
- Launch in March 2018

## COSMIC-2A

- 1800 soundings a day in the tropics is eagerly anticipated

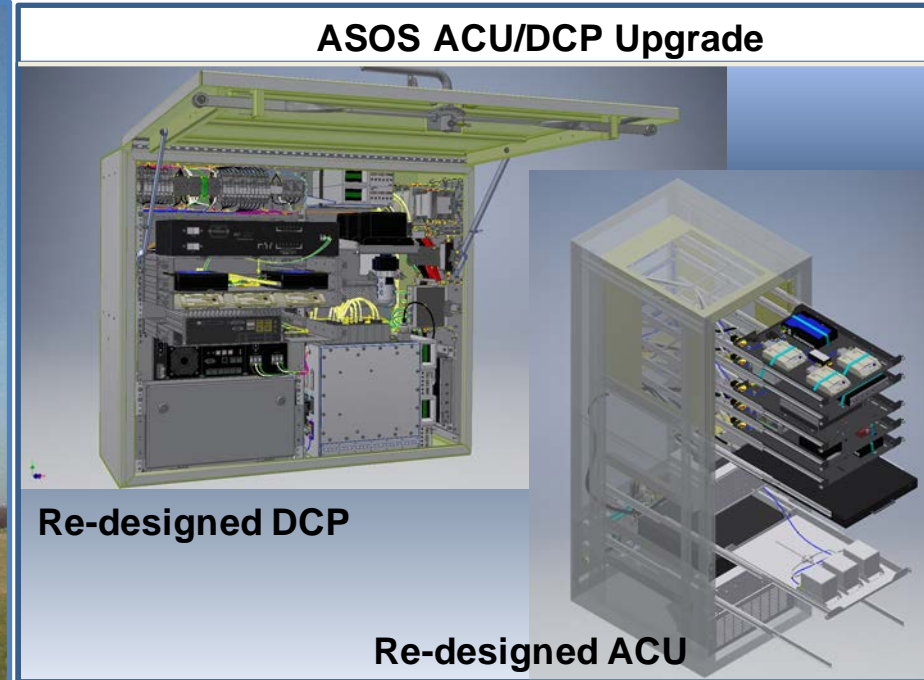
# Investing in Observation Infrastructure – NEXRAD SLEP



- **NEXRAD Service Life Extension Program (SLEP)** ensures viability thru at least 2030
- Signal Processor Suite Technology Refresh scheduled to be complete in February 2018
- Transmitter Refurbishment (second of 4 projects), 20 sites completed all phases of refurbishment as of Nov 2017
- Pedestal Refurbishment contract award expected in 2018
- Overall, the project is ahead of schedule and within budget



# Investing in Observation Infrastructure – ASOS SLEP



- **Automated Surface Observing System (ASOS) SLEP** aims to extend system viability thru 2040
- Most critical components:
  - Acquisition Control Unit / Data Collection Platform (ACU/DCP) replacement
  - Telecommunications upgrade
- Will facilitate cost-effective Commercial-off-the-Shelf meteorological sensor solutions, increased data flow, improved system security posture, and remote maintenance capabilities
- Funded in the FY 2017 Omnibus Appropriation and in FY18 Continuing Resolutions

# Investing in Observation Infrastructure – Radiosonde Network



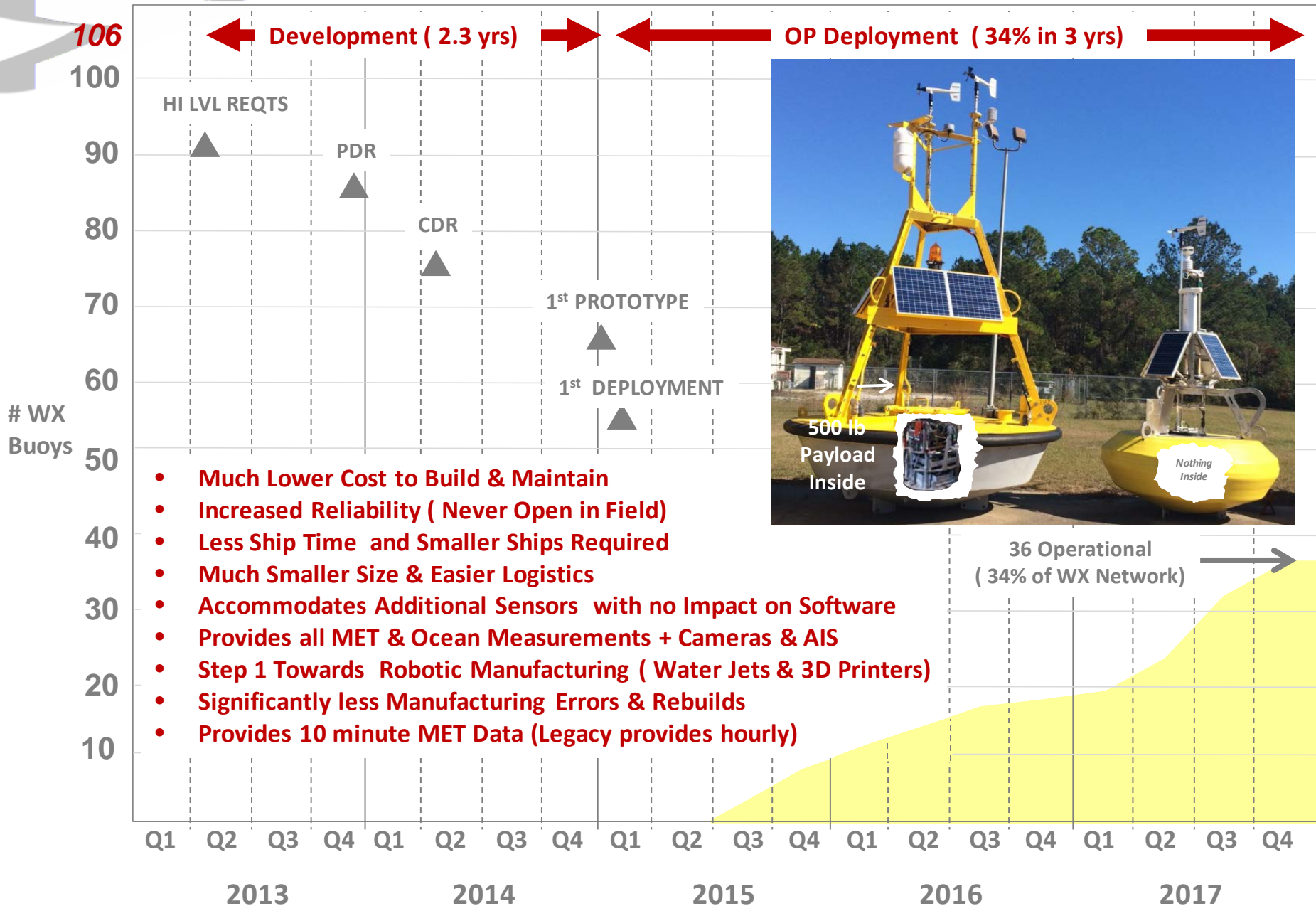
**Radiosonde Autolauncher**



**Radiosonde Manual Launching Operation**

- Due to sale of “spectrum,” the **Radiosonde Frequency Migration Project** will move radiosondes from the 1680 MHz band to the 403 MHz band. Funding from the spectrum sale is supporting this infrastructure investment.
- Developing knowledge and experience for autolaunching radiosondes under Demonstration Project in Alaska Region while recapitalizing the rest of the network with new manual launch systems
- Approximately 25% of the network will be autolauncher while the remaining ~75% of the network will continue manual launches with newly acquired systems

# Recapitalizing WX Buoy Network with SCOOP at NDBC







# Observing Portfolio Management – Guiding Principles

- **Vision:** NOAA’s vision is to achieve and sustain an observing system portfolio that is *mission-effective, integrated, adaptable,* and *affordable*.
- Superior Service and Reputation
- Adaptability
- Cost-Effectiveness, Affordability & Sustainability
- Integration
- Global Context and Commitments (*Data Sharing*)
- In-House Expertise
- *Well-governed, Understood & Trusted*

# NOAA's Emerging Technologies for Observations Workshop 2017

**Theme:** *“Technology toward a mission-effective, integrated, adaptable and affordable observation portfolio”*

**When:** August 22-23, 2017

**Where:** NOAA Center for Weather and Climate Prediction (NCWCP), College Park, MD

**Why:** The NOAA Observing Systems Council is seeking to identify emerging technologies for Earth and space observation, and develop recommendations to help NOAA infuse new technology into the observing systems portfolio.

**How:** 5 Internal Sessions – Space, Atmosphere, Terrestrial, Oceans, and Data Management/Analytics  
2 External Requests for Information that was open to all Inter-governmental / Partner Panel as the last session

**Report:** [https://nosc.noaa.gov/public\\_docs/ETW\\_Report\\_2017\\_FINAL-v10.pdf](https://nosc.noaa.gov/public_docs/ETW_Report_2017_FINAL-v10.pdf)





# Future Partner Discussion

- IDSS and Dissemination had focused day-long workshops in December 2017
- Planning for Observations focused day-long workshop to include NOAA's portfolio management processes





# Questions?

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