


## The Observing Portfolio Looking Forward


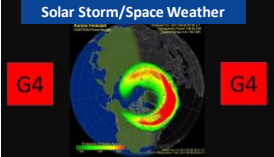


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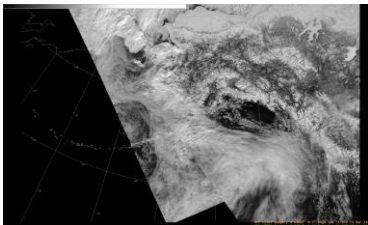
### Breadth & Importance of Observations

Friday, 9/8/2017

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### Investing in Observation Infrastructure – Satellites



- GOES-16 operating as GOES-East
- GOES-17 at its checkout location...to GOES-West later in 2018
- NOAA-20 in engineering checkout (image above is an AWIPS screen shot in Alaska of VIIRS imagery from NOAA-20 and SNPP during OT&E last month)
- COSMIC-2A – prepping for launch later in the year

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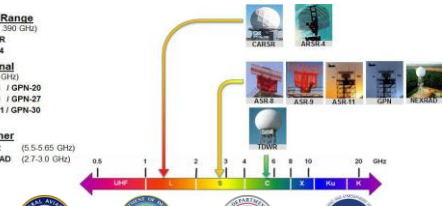
### Investing in Observation Infrastructure – NEXRAD SLEP

- NEXRAD Service Life Extension Program (SLEP) aims for viability thru at least 2030
- Signal Processor Technology Refresh completed in March
- Transmitter, Pedestal, and Shelter Refurbishment ongoing

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### Spectrum Efficient National Surveillance Radar (SENSR)



**Long Range** (1.215-1.350 GHz)

- CARSR
- ARSRA

**Terminal** (2.7-3.9 GHz)

- ASR-8 / GPN-20
- ASR-9 / GPN-27
- ASR-11 / GPN-30

**Weather**

- TDWR (5.5-5.65 GHz)
- NEXRAD (2.7-3.0 GHz)

- Objective is to vacate the 1300-1350 MHz spectrum by potentially consolidating long-range, short-range, and weather radar requirements (with no degradation of mission)
- Feasibility study is funded through the Spectrum Reallocation Fund (SRF), via the SENSR Pipeline Plan approved by the Technical Panel (FCC, OMB, NTIA)

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### 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

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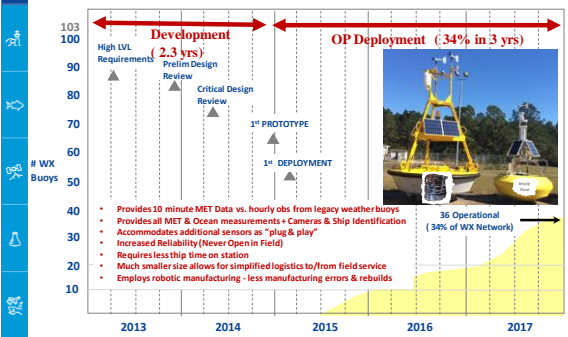
### Investing In Observation Infrastructure – Radiosonde Network



- Funded by the sale of "spectrum", the entire radiosonde network will move frequencies from the 1680 MHz band to the 403 MHz band.
- An updated and approved Transition Plan migrates ~25% of the network to automated launching technology, while the rest of the network is recapitalized with new manual systems.
- An Alaska Demonstration Project (all automated systems to be installed) is underway.

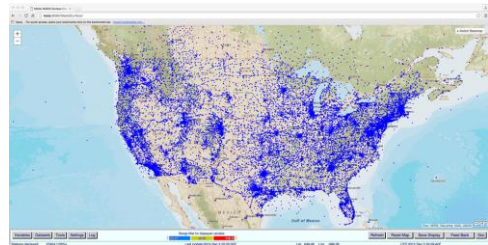
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### Investing In Observation Infrastructure – Weather Buoys



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### Leveraging Smart Data Buys



- National Mesonet Program
- Aircraft Based Observations (MDCRS, WVSS)
- Lightning Data
- GPS-Met
- Commercial Weather Data Pilot

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### Observing Portfolio Management – Guiding Principles

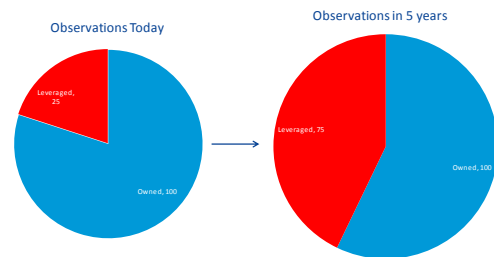


- Vision: NOAA's vision is to achieve and sustain an observing system portfolio that is *mission-effective, integrated, adaptable, and affordable.*
- Superior Service and Reputation
- Adaptability
- Cost-Effectiveness, Affordability & Sustainability
- Integration
- Global Context and Commitments (*Data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

Ref. NOAA Administrative Order 212-6, Effective 11/1/2016

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### Future Scenario: Growth in Leveraged Observations



Conceptual representation only, not based on actual numbers.

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Thank You!



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