



NOAA Satellite Proving Ground/User Readiness Meeting

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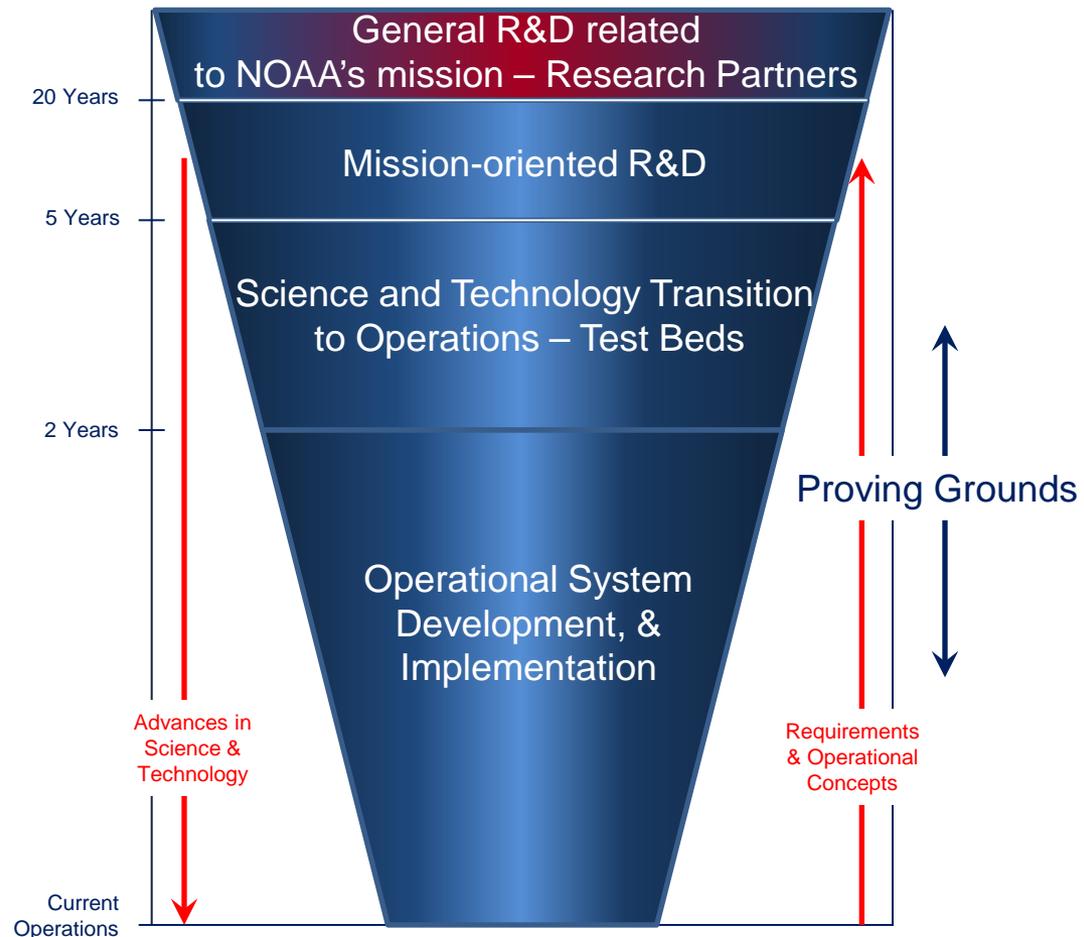
2 June 2014



NOAA Research & Development Funnel



- New satellite systems are almost here
- This group needs now to focus attention on bottom part of the funnel





Reality Check



- New era in satellite meteorology is upon us =>
 - **S-NPP** products are already flowing and being used operationally
 - **Himawari 8** will be launched this year
 - **GOES-R** launch is NLT 2QFY16
 - **JPSS** launch is 2QFY17
 - Other satellite programs are coming online - GPM, SMAP, OceanSat, GCOM, Sentinel
- **WILL WE BE READY?**
- User readiness: Focus is changing from demonstration to implementation



S-NPP



- Operational data availability is expanding as distribution system build out continues.
 - Selected imagery based on priorities for distribution
 - NUCAPs soundings available effective 15 Apr 2014 via SBN on AWIPS II
 - Near Constant Contrast available by early CY15

- Operational Direct Broadcast capability being built for Alaska.
 - Upgrades current capability for polar-orbiting satellite ingest
 - Decision to make operational expected by December 2015.



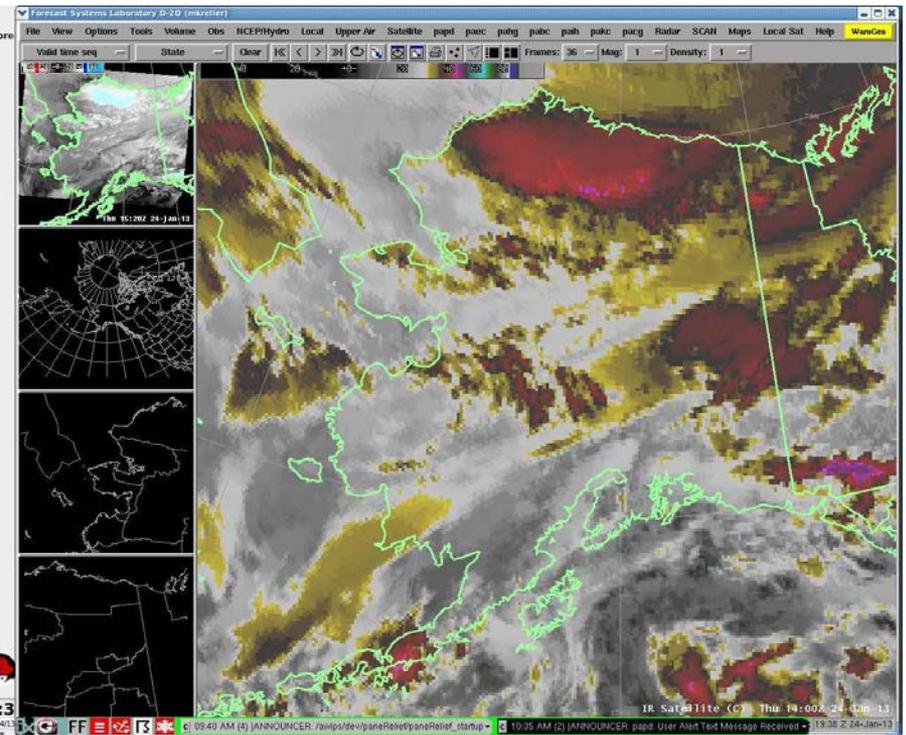
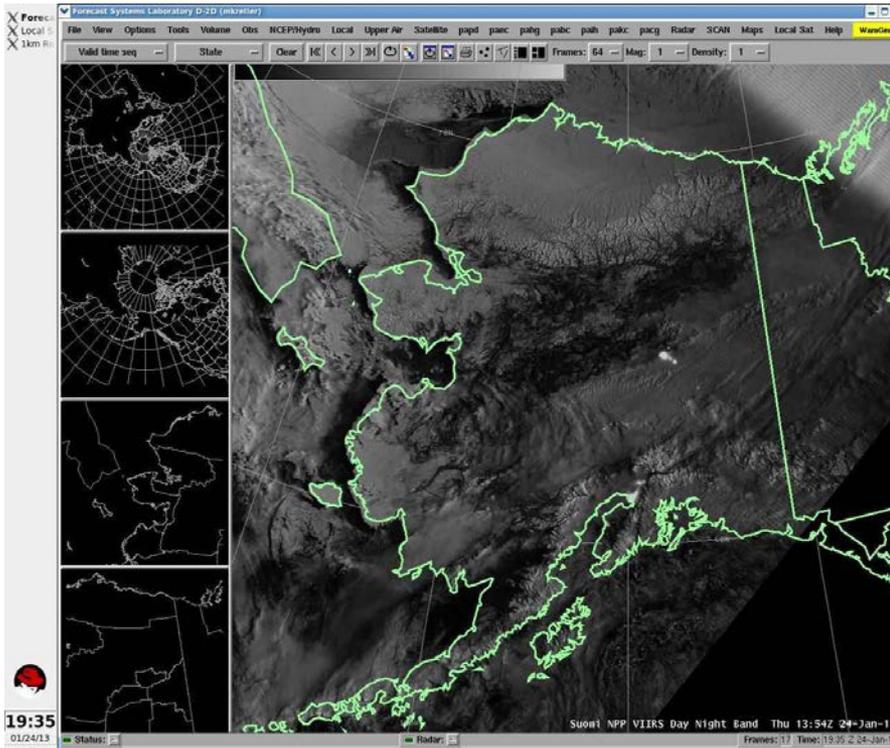
S-NPP DNB

unanticipated utility



SNPP DNB 24 Jan 2013 @
0454L

GOES IR 24 Jan 2013 @
0500L

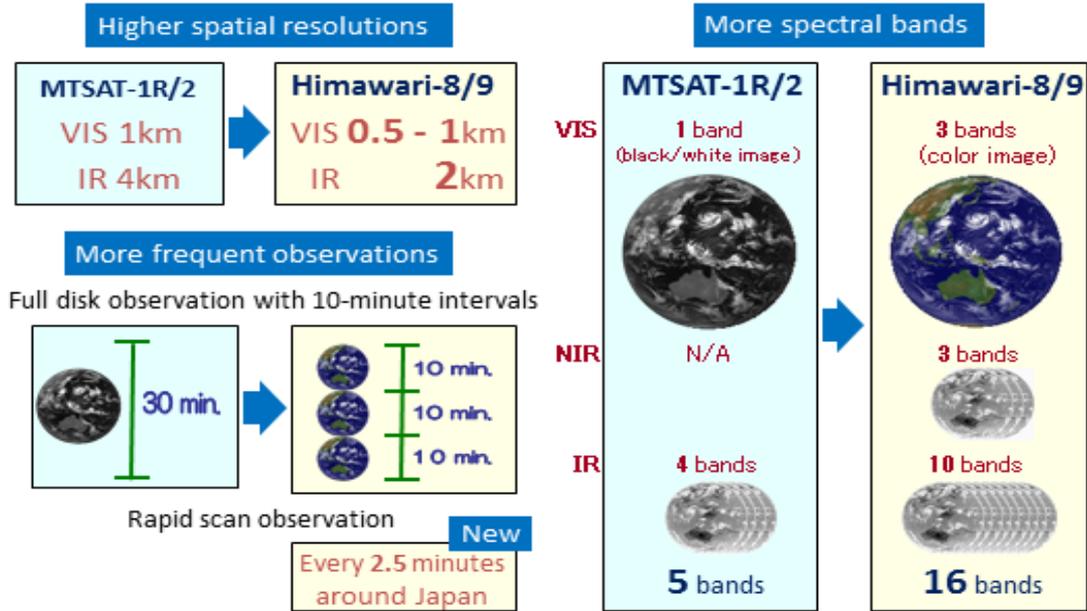




Himawari 8

- Data availability: Summer 2015
- Exploit use of H8 for GOES-R readiness

Enhancement of the observation function of Himawari-8/9 as compared to that of MTSAT-1R/2





GOES-R



- Data availability: As early as CY16
- Beginning tests of data delivery paths
 - Sectorized Cloud and Moisture Imagery
 - Dedicated GOES-R/AWIPS interface for GOES-R imagery (Spring/Summer 2014 testing)
 - Additional imagery and derived products
 - AWIPS Data Delivery interface with NESDIS Product Distribution and Access System (PDA) (Fall 2014 testing)
 - PDA subscriptions over SBN (Fall 2014 testing)
- AWIPS II development and testing: ongoing



GOES-R (cont'd)



- End-to-end test (TOWR-G) that will leverage GOES-R testing (summer 2015) to:
 - Validate delivery systems
 - Validate AWIPS II functionality to ingest, decode, store, and display GOES-R products
 - Explore use of GOES-R products in operations

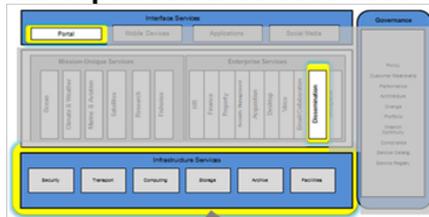


Integrated Dissemination Program Overview



- IDP plans to deliver NOAA Wide Dissemination Services in a phased approach
- In Phase 1, IDP's focus is on executing against its 3 Program, Project and Activities (PPAs) requirements: NWS Ground Readiness Project, NWS Telecommunication Gateway (Re-architecture), and NWS Next Generation IT Web Services.

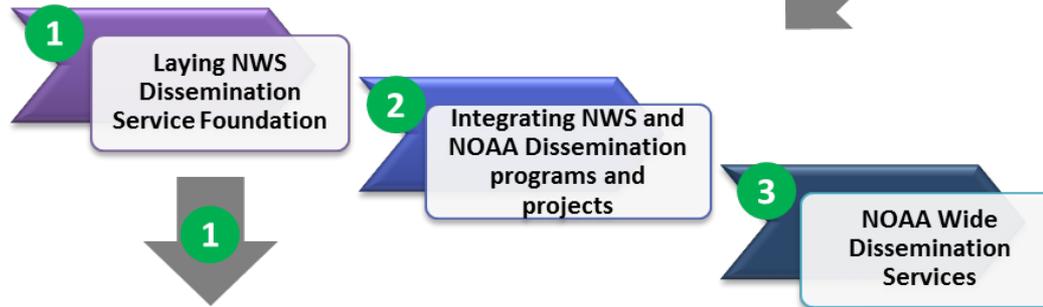
NOAA Enterprise Shared Services Model



National Weather Service Portfolios



IDP Long Term Approach (Phased Approach)



IDP Near Term Approach



IDP three PPAs:

- NWS Ground Readiness Project
- NWS Telecommunication Gateway Re-architecture
- Next Generation (NextGen) IT Web Services

IDP project description:

- **Ground Readiness** focuses on NWS network upgrades and optimization In support of NWS ground readiness to ensure networks can support increased Data volumes (e.g. Satellite data, model data and radar data)
- **Dissemination Infrastructure** focuses on provisioning and supporting Dissemination capabilities
- **Web Services Portal** focuses on access and discovery of data and information



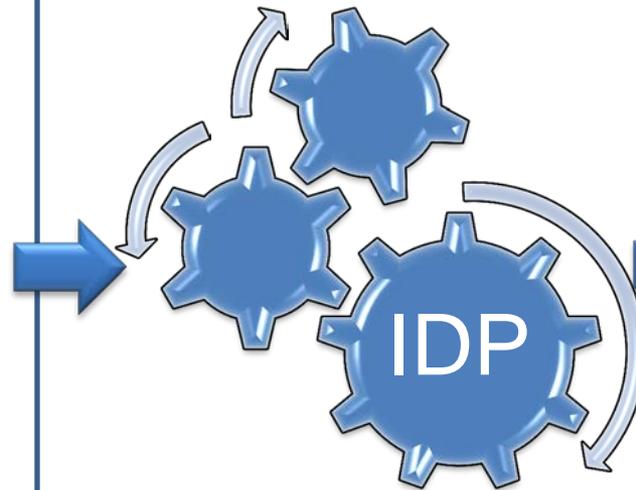
IDP Phase 1 Challenges/Benefits



Current State (Challenges)

- Aging Infrastructure
- Backup Telecommunication Gateway with 74% operational capability
- Disbursed dissemination applications
- Multiple source of weather data
- Inadequate Networks
- Next generation of satellite (volume increase) about to launch
- Super Computer Upgrade (volume increase)

Integrated Dissemination Program Phase 1 Initiatives



- Dissemination Infrastructure
- NWSTG Re-architecture Functionality
- NextGen IT
- Direct Readout (GRB Antennas)
- SBN Upgrade &
- Network Upgrade & Optimization

Target State (Benefits)

- Redundant Dissemination Infrastructure at diverse locations with 100% primary and backup operational capability
- NWSTG Re-architected functionality
- Disseminate a single source of weather data to NWSTG consumers, aviation decision makers, and others
- Fully exploit and benefit from new observations and products
- Improved and upgraded NWS Networks with increased bandwidth



AWIPS II Development



- AWIPS II being deployed
- AWIPS II development for GOES-R and JPSS (S-NPP NDE)
 - S-NPP NDE testing accomplished product-by-product
 - Testing started for GOES-R
- AWIPS Data Delivery
 - Subscription services to PDA for S-NPP, GOES-R and other legacy products



Training



- User readiness: Focus is changing from demonstration to implementation
- Timelines demand that a key component of readiness is training
- Funding requests to STI for FY15 funding are being prepared for GOES-R and Himawari
- STI plans on sending a JPSS training proposal to JPSS soon for FY15