R2-*Whoa*

Challenges and solutions for executing best practices in transferring NOAA's research to NWS operations (825)

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Oversight and Strategic Direction

Challenge

- Centralizing priorities and developing a consistent vision for NOAA's agencies, cooperative institutes, and private partners to function effectively

Risks

- Lack of alignment between research portfolio and operational requirements
- Delayed R2O process resulting from funding cycle

Solutions

- Appoint a coordinator of proving ground activities
- Joint governance between the NWS Operational Advisory Team (NOAT) and research community

Operational Demonstrations

Challenges

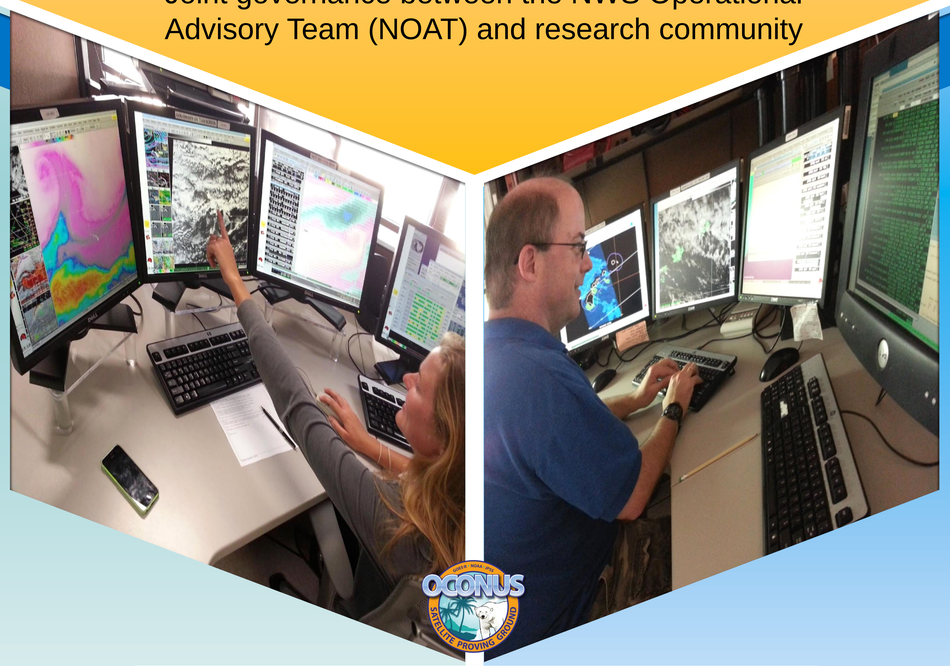
- Assuring operational meteorologists stay current with subject-matter expertise in satellite remote sensing
- Integrating new satellite products into the operational workflow
- Collecting relevant feedback
- Providing a pathway to operations following a successful demonstration

Risks

- Does not necessarily replicate operational setting
- Potential for inadequate training and misinformation
- Unclear responsibility for integrating demonstrated products into software systems

Solutions

- Employ satellite liaisons to facilitate training exercises and work with operations to prepare meteorologists for capabilities of the new generation weather satellites
- Hire technical liaisons and fund cooperative institutes to develop plug-ins for the Advanced Weather Interactive Processing System (AWIPS)



R2-*No* – Popular Excuses

Tight Budgets
Necessitate prioritization of products to transition
Rigid Policies
Impede R2O progress and agility
No Personnel on the Interface
No process owner to facilitate the "2" in R2O
Limited IT Infrastructure
Delays implementation of new products in the field
Cumbersome IT Security Regulations
Compromise the mission

Research Proposals

Challenges

- Building relationships with operations to discover worthy research topics
- Understanding types of information that would add value to the operational mission
- Developing an algorithm for a new instrument based on current capabilities
- Maintaining an algorithm and/or product following completion of the original proposal

Risks

- Funding research activities that do not return value to operations
- Operationally-relevant research proposals with scientific merit may go unfunded if importance to operations is unclear or understated

Solutions

- Hold technical interchange meetings and working groups with both operational and research participants
- Use proxy and simulated imagery from existing instruments and/or numerical models