

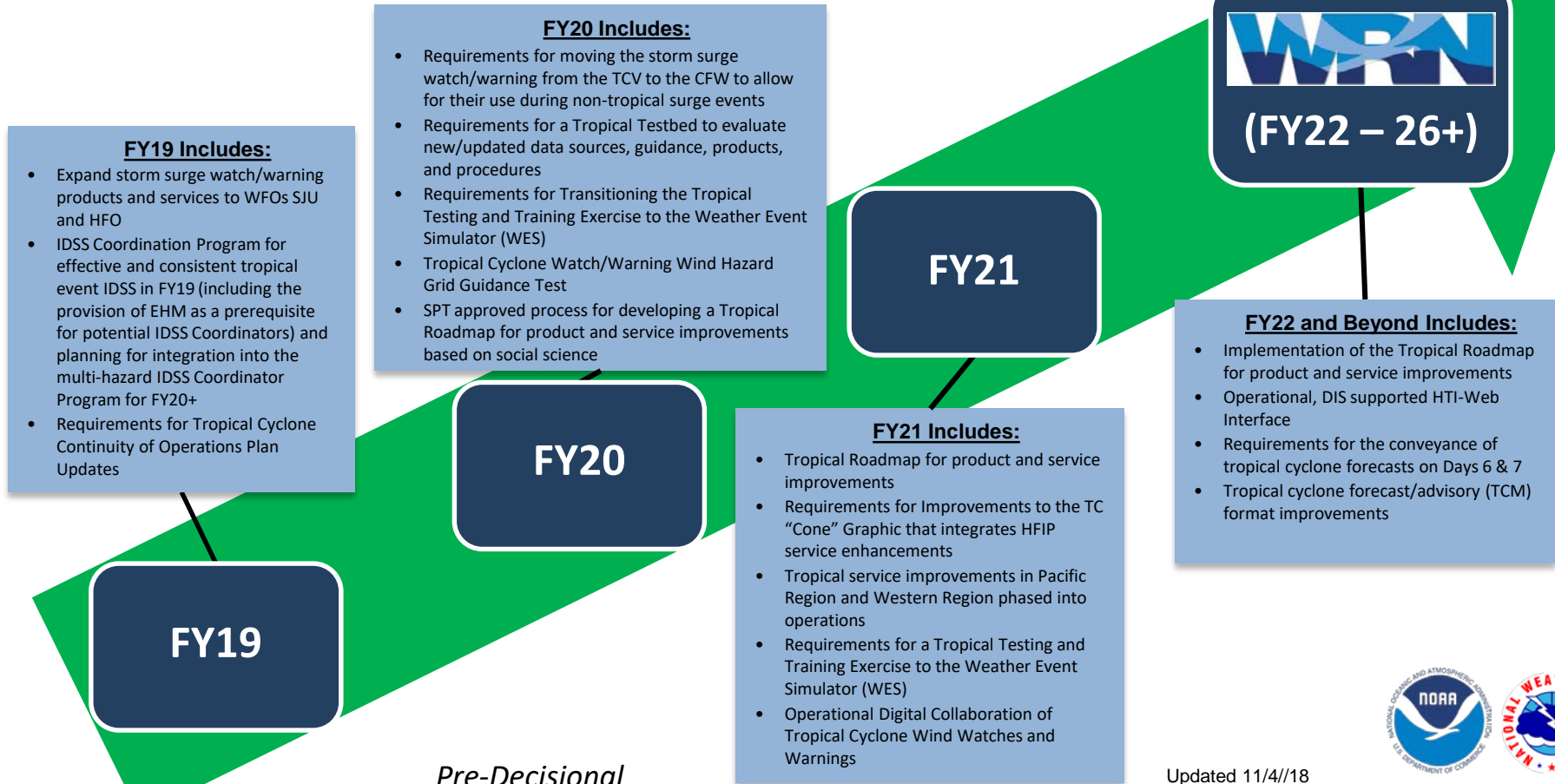
Status of NWS Tropical Program

Jessica Schauer

NWS Tropical Services Program Leader

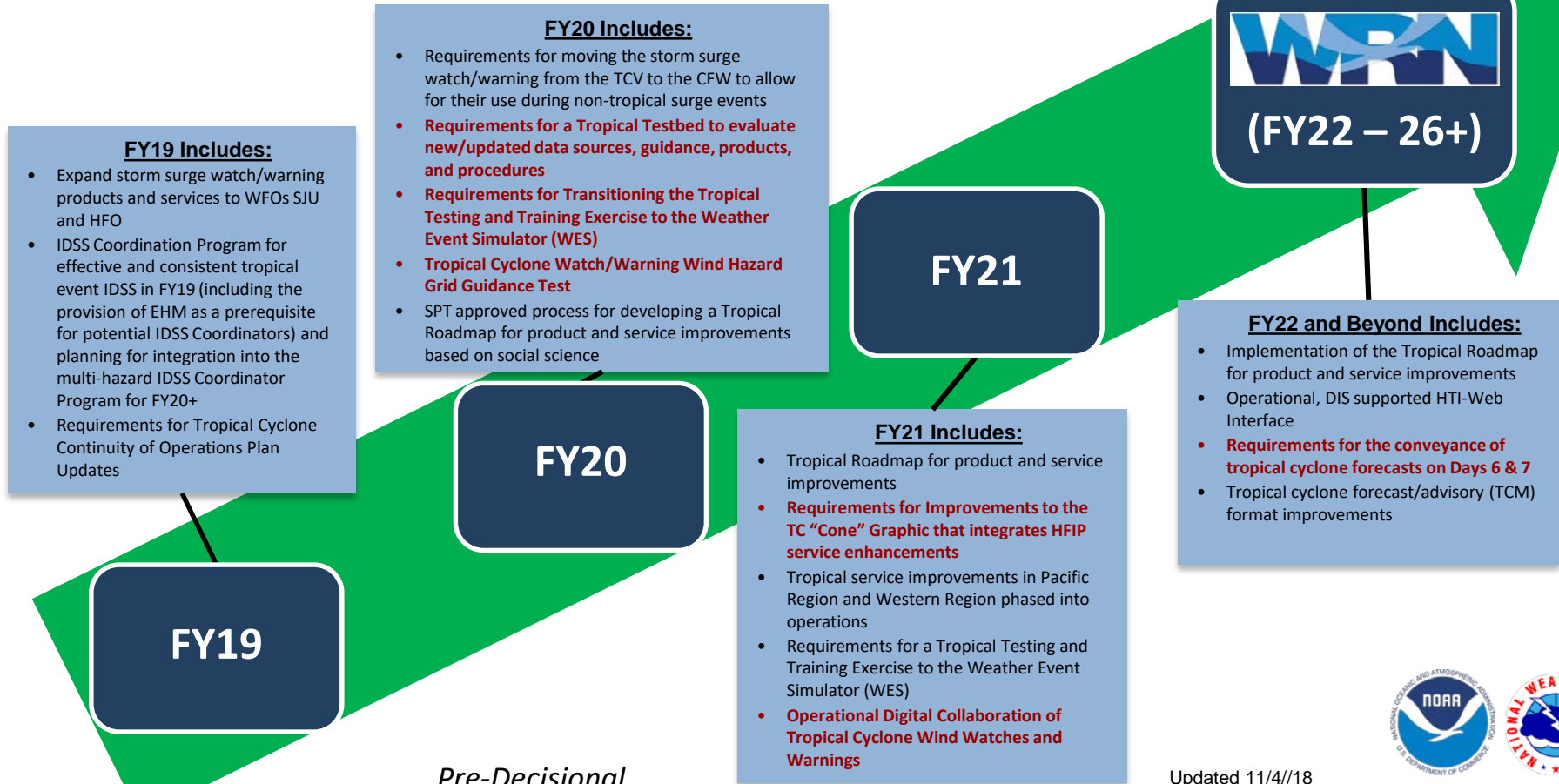
Tropical Program/Project Milestones

Building a Weather-Ready Nation and Evolving the NWS



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Building a Weather-Ready Nation and Evolving the NWS



Requirements for a Tropical Testbed to evaluate new/updated data sources, guidance, products, and procedures



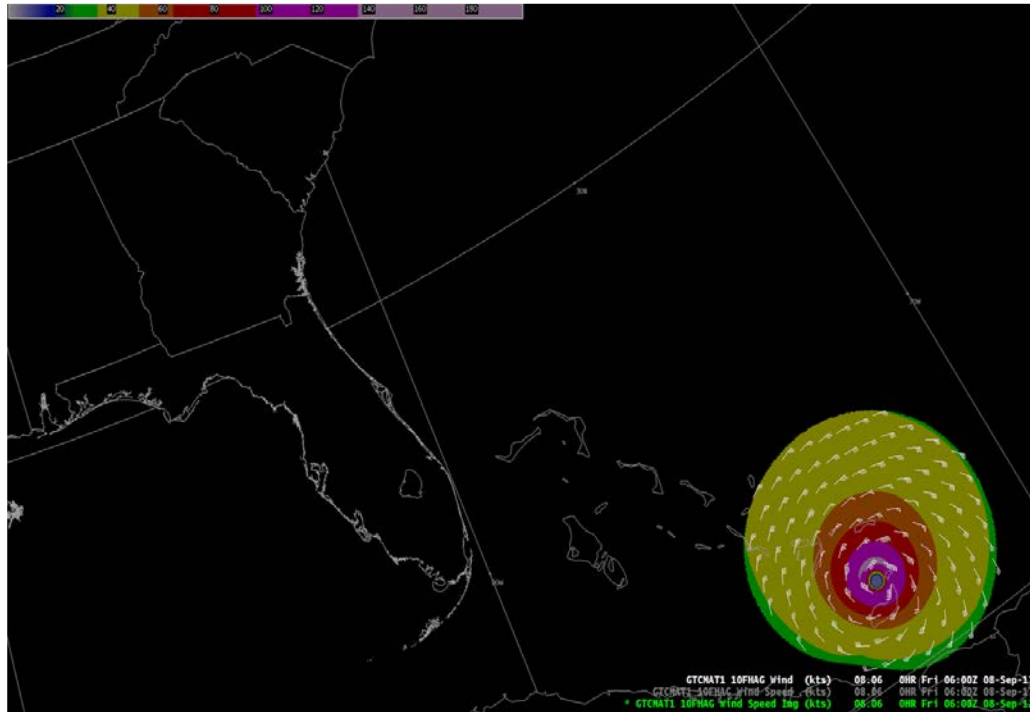
- **Description:** Identify a systematic way to test out new capabilities (i.e., the Gridded TCM, inland wind reduction in the TC Wind Speed Probabilities, collaboration software, etc.) prior to use in operations
- **Cross-Cut Office Dependency:** OAR
- **Wx Act Connection:** Yes
 - **Title 1, Section 104** Improve hurricane forecasting
 - **Title IV, Section 403** The OAR and the NWS may establish a program to detail their personnel to each other
 - **Title IV, Section 411** The NWS must review existing research, products, and services that meet the specific needs of the urban environment

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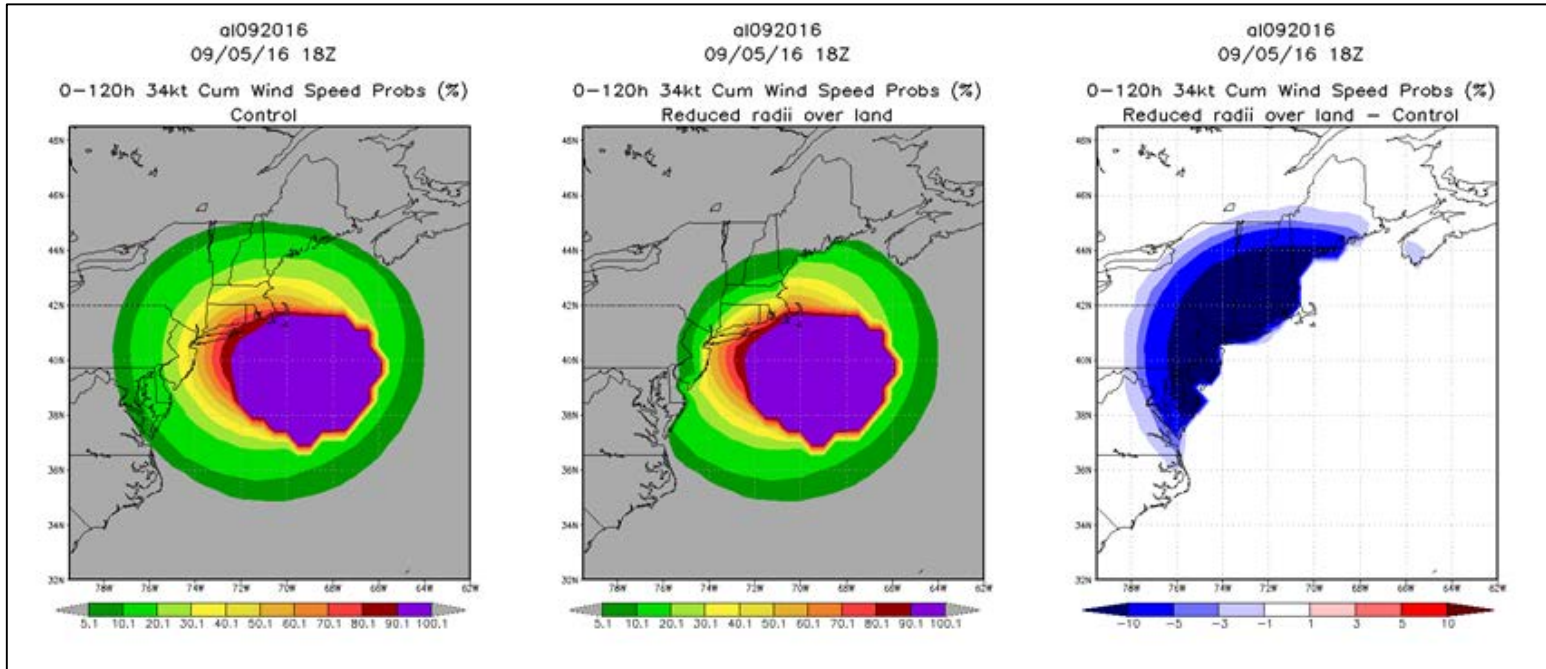
Opportunities for Collaboration



Gridded TCM (TC Forecast) with Inland Wind Reduction

- Validation process leading to improvements in the gridded wind depiction
 - Ensure consistency with the NHC, CPHC, or JTWC forecast

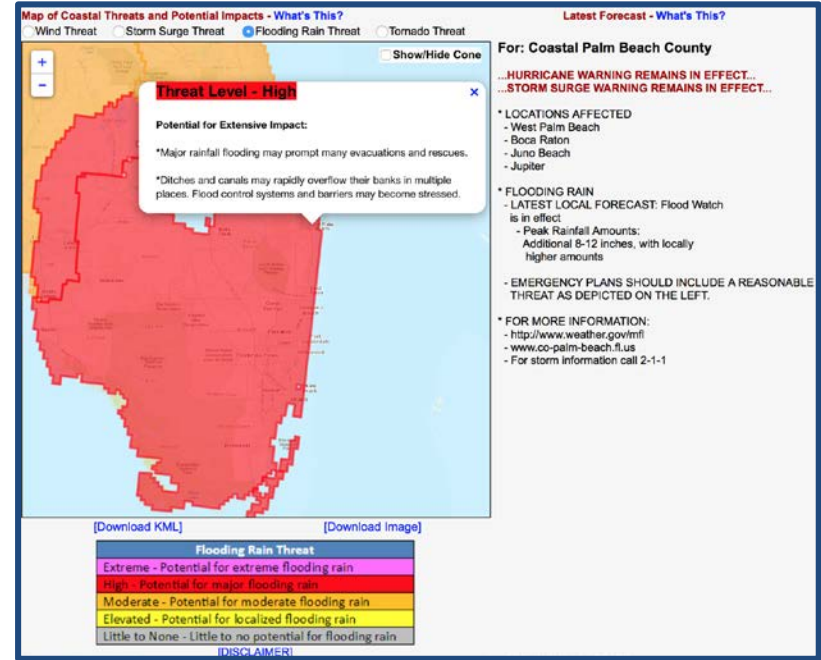
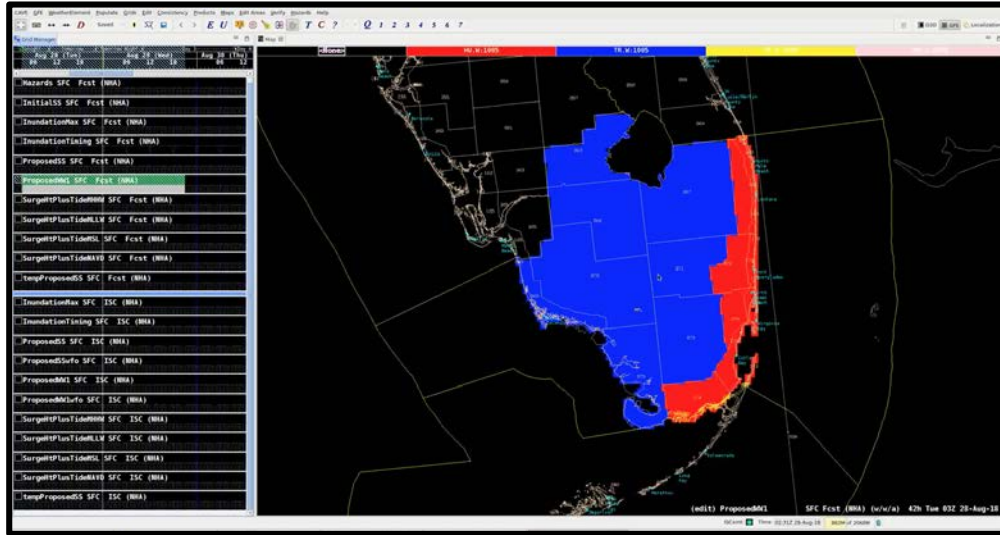
Opportunities for Collaboration



TC Wind Speed Probabilities Improvements and Operational Integration

- Evaluation and development of inland wind reduction techniques
- Wind Radii Bias Correction Over Land - Applies a 20% wind reduction factor to the cyclone's maximum winds before wind radii calculation for land points if the TC center is over water

Opportunities for Collaboration



Converting Forecasts to Actionable Information

- Developing, testing, and improving “recommenders” for placement of W/Ws
- Developing, testing, and improving algorithms that depict the threat a hazard could pose

Overarching Goal of Tropical Product Innovation

Ensuring quality guidance and scientifically validated techniques are incorporated into easily understood NWS tropical products and services that meet the needs of our users as identified by social science.

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+

Scientifically validated techniques

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Social science

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Quality guidance

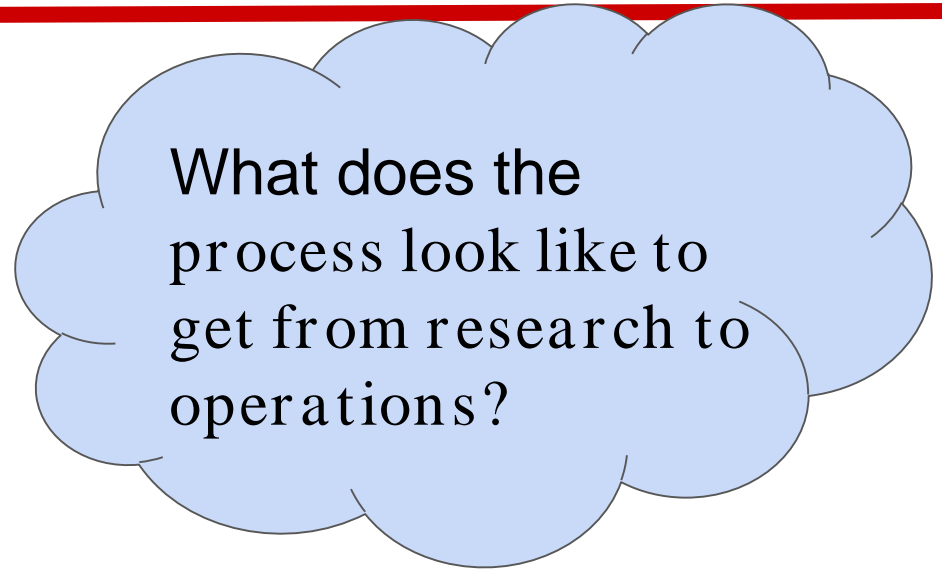
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Scientifically validated techniques

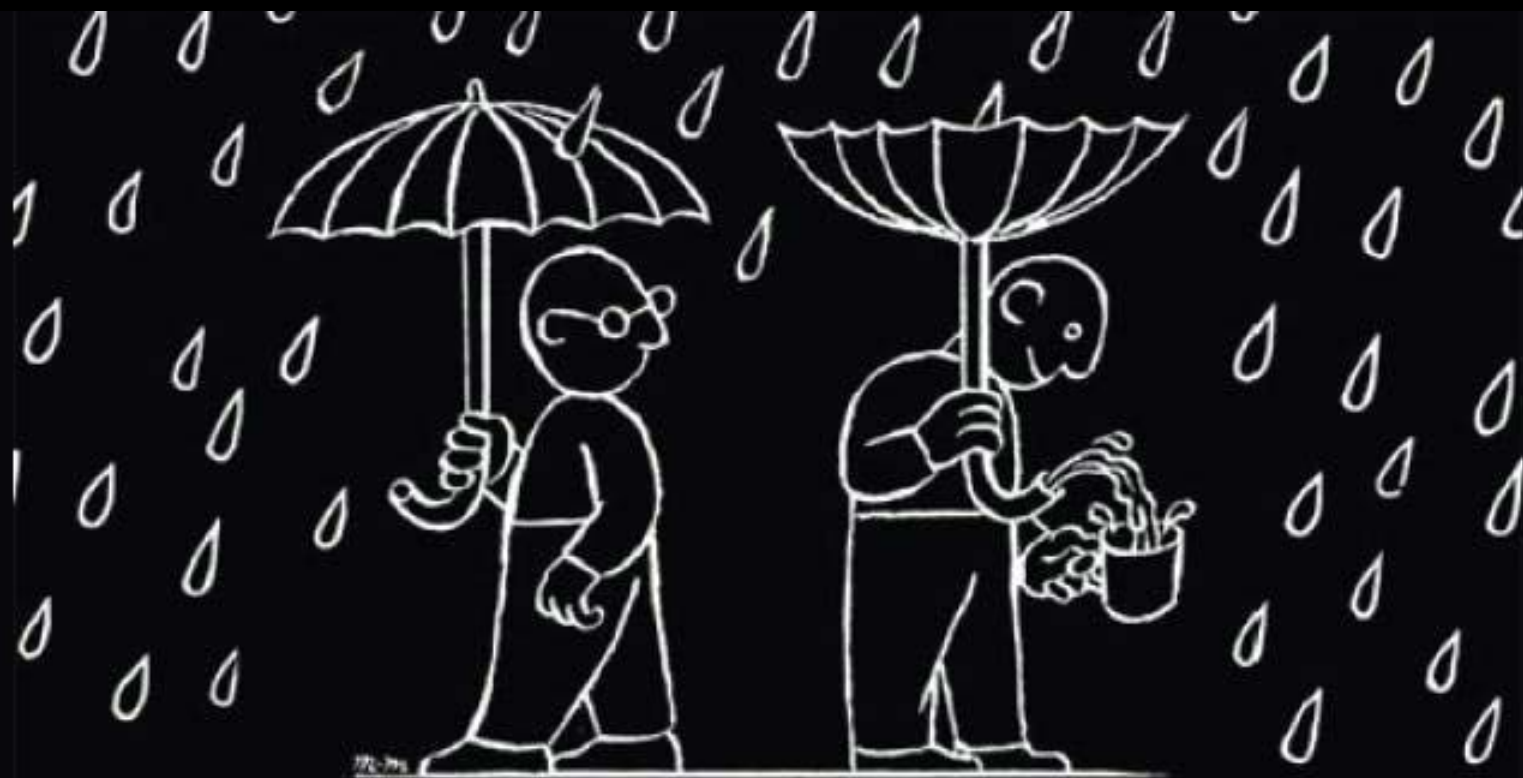
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Social science

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Easily understood NWS tropical products and services that meet the needs of our users



INNOVATION IS A STATE OF MIND

What Do We Need To Do In the Short-Term?

Agree on the steps needed to get to an improved user experience during a tropical event.

Steps in the proposed process:

1. Analyze Existing Product/Service Evaluations
2. Determine the Impacts of Science and Technology Advancements and Policy Changes on NWS Products and Services
1. Social Science to Identify Gaps and Potential Service Improvements
2. Look Holistically at the User Experience to Target Changes

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Step 2: Determine the Impacts of Internal Advancements and Policy

- Identify what can be improved because of upcoming scientific improvements (i.e., improved forecasts, etc.)
- Identify what can be improved because of upcoming technology innovations
- Identify what could be changed because of policy changes to allow for service improvements (i.e., removing SSWW from TCV)

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Step 3: Social Science to Identify Gaps and Potential Service Improvements

Evaluate the user experience during a tropical event

- Can people find what they're looking for?
- Is the information provided encouraging people to make good decisions for their safety?
- Is there a need to improve the web user experience? The social media user experience? The mobile user experience?

The ultimate goal...



Thank You

Jessica Schauer

NWS Tropical Services Program Leader

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