

National Weather Service (NWS)
Arrival of Tropical Storm Force Winds Product Social Science Research Project
Interview Guide
January 8, 2015

Introduction for Interviews:

My name is XX. I am with Eastern Research Group (ERG), and I am calling to schedule an interview with you on behalf of NOAA's National Weather Service. I am hoping to ask you some questions about a new product that the National Weather Service is looking to create that would provide information on the arrival of tropical storm force winds. The interview would be 40 to 60 minutes long. Do you have any availability over the next couple of weeks to schedule this interview? We will not release your name or information that could identify you as part of this interview process or in our subsequent reports to the National Weather Service.

- **What will be done with this information:** The NWS will use the information from these interviews to develop a product tailored to the needs of its users and to ensure the proper coordination and training systems are in place for customers to use the product effectively.
- **Why we asked you to participate:** The NWS wants to know about your needs and preferences for using this product, so that the NHC can develop a product best tailored to its customers' needs, as well as to ensure smooth implementation of the product along with other tools that customers currently use during a hurricane.

Interview Questions for Emergency Managers:

1. What are your current clearance times?
2. What tools/data do you currently use to determine when your preparations must be complete?
3. How do you currently determine the arrival of tropical storm force winds? What tools do you use?
4. How have you used the information for recent storms?
5. Given your clearance times, how do you balance the data you have with when "to pull the trigger"?
6. Are you aware of/have you used the NHC wind speed probability products in your decision-making?
7. Do you perceive that the tropical storm force winds arrive earlier/later than what NHC forecasts (i.e., how good are NHC forecasts)?
8. How do you incorporate the uncertainty into your decision-making? How do you communicate uncertainty to decision-makers? What about the public?
9. Do you use the "what if scenarios" in HURREVAC to address the uncertainty?
10. Do you use any visual depictions to communicate this information to decision-makers? What about the public?

11. How important would it be for you to be able to incorporate information about the arrival of tropical storm force winds into HURREVAC?

Review of Prototype

12. How would you interpret this map? How would you use it?
13. Do you have any suggestions for how to improve the map? [Probe for title, labeling, lines, colors]
14. Is there any other information you'd want to see on this map?
15. How much confidence do you want NHC to build into this product? For instance:
 - a. NHC could provide a graphic based on a 10% exceedance threshold. This would correspond to a reasonable estimate of how early tropical storm force winds could arrive at a location.
 - b. NHC could provide a graphic based on a 50% exceedance threshold. This would mean that there is a 50% chance that tropical storm force winds would arrive earlier than the indicated time, and a 50% chance that they would arrive later than the indicated time.
 - c. Would you prefer a 10 percent exceedance threshold? 50 percent? Would you like both pieces of information or something in between?
16. What do you think this map should be titled?

Discussion of Related Products

17. This map provides timing information on the arrival of tropical storm force winds but assumes that tropical storm force winds will happen at all. How would you use this map together with other information available on the probability of winds occurring?
18. How would you use this map with other information available to you on storm surge?

Interview Questions for Broadcast Meteorologists:

1. How do you currently determine the arrival of tropical storm force winds?
2. What do you need/use the information for?
3. How have you used the information for recent storms?
4. Are you aware of and/or have you used the NHC wind speed probability products?
5. Do you perceive that the arrival of tropical storm force winds arrive earlier/later than what NHC forecasts (i.e., how good are NHC forecasts)?
6. What do you show on the air? Do you generate any graphics to display the winds?
7. How do you communicate this information to the public?
8. How do you communicate uncertainty in timing information?

Review of Prototype

9. How would you interpret this map? How would you use it?
10. Do you have any suggestions for how to improve the map? [Probe for title, labeling, lines, colors]
11. Is there any other information you'd want to see on this map?
12. How much confidence do you want NHC to build into this product? For instance:
 - a. NHC could provide a graphic based on a 10% exceedance threshold. This would correspond to a reasonable estimate of how early tropical storm force winds could arrive at a location.
 - b. NHC could provide a graphic based on a 50% exceedance threshold. This would mean that there is a 50% chance that tropical storm force winds would arrive earlier than the indicated time, and a 50% chance that they would arrive later than the indicated time.
 - c. Would you prefer a 10 percent exceedance threshold? 50 percent? Would you like both pieces of information or something in between?
13. Would you show this NHC graphic on air? In what format would you like to see this map? [Probe for preferences for a dynamic, GIS-based product/NHC graphic, TV-ready graphic, or data to create your own graphic?]
14. What do you think this map should be titled?

Discussion of Related Products

15. This map provides timing information on the arrival of tropical storm force winds but assumes that tropical storm force winds will happen at all. How would you use this map together with other information available on the probability of winds occurring?
16. How would you use this map with other information available to you on storm surge?