



Weathering the Storm: How Graphical Visualizations Affect Tropical System Forecast Perceptions

The Cone of Uncertainty (COU) is a graphic designed by the National Hurricane Center that communicates the forecast track of the center of tropical systems. The COU graphic primarily distills a forecast and its uncertainty to a single image, making redistribution of the NHC's forecast highly available to the general public. However, previous research suggests the public is confused by the COU and desires to know a storm's hazards in addition to its track. To probe this question, this study conducted an extensive survey during the summer of 2021 to understand how the public perceives the current COU and what modifications they may desire to facilitate storm preparations. Specifically, the research team designed ten graphics -- the current COU with and without the track line plus eight modifications -- based on a literature review and original concepts. These illustrations were shown to 149 in-person respondents throughout the state of Florida and 4,181 online respondents throughout the United States. By recognizing how the general public understands the current COU and potential modifications to the graphic, this study investigated if a COU redesign was necessary and what modifications would need to be included in such a redesign. Our finding is that survey respondents preferred a COU that includes threat level at landfall.



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Location: EOA 1050 (in-person portion)

Zoom Link: <https://fsu.zoom.us/j/99658349923?pwd=Z1A4UG41S0NoSWhpdkNZNmsyQ1h3dz09>

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