Expressing Forecast Uncertainty

Jeff Craven
Science and Operations Officer
NWS Jackson MS
WAS*I*IS
Background

• Forecasters can provide more information on the uncertainty of forecast products

• Users often ask us about the range of possibilities, which we provide verbally or briefly describe in forecast discussions
Problem Statement

- Not all forecasts carry the same level of confidence

- How do we describe this “level of confidence?”

- What medium do we use to communicate it?
Research Objectives

• Discover how this is best done for the majority of users

• How detailed can we provide this without becoming overly complex?
Methods

• Focus group with Customers (select group of about 8 (including local Emergency Managers, Media, and academia)

• Survey at annual NWS Jackson hosted Emergency Manager/Media Workshop
Identify Potential Major Obstacles

- Calibrating forecasters internally

- Defining different levels of uncertainty in easy to use/understand terms
Timeline

• Develop plan of implementation
• Train forecasters by Dec 1\textsuperscript{st}
• **Focus Group by Dec 10\textsuperscript{th}**
• Web brief/conference call to train power users by Dec 15\textsuperscript{th}
• **Implement by Jan 1\textsuperscript{st}**
• Obtain and analyze feedback January
• Forum and discussion at EM/Media workshop early in February
Deliverables

• Product (likely text product within current Area Forecast Discussion)
Deliverables (example)

<table>
<thead>
<tr>
<th>Period</th>
<th>Confidence Level</th>
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</thead>
<tbody>
<tr>
<td>Tonight</td>
<td>High</td>
</tr>
<tr>
<td>Tomorrow</td>
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