Visualizations are widely used to help meteorologists understand the behaviors of and relationships among weather features, but what makes a visualization more (or less) effective? This talk will cover a couple of different aspects of our research related to this question. We will provide an overview of a study we conducted with meteorologists in decision support roles, along with our results: a proposed a set of informed default encoding choices, which integrate existing meteorological conventions with effective visualization practice, and a set of technique extensions that provide an initial step toward directly visualizing the interactions of multiple features over an ensemble forecast. Additionally, we will talk about the importance of and difficulties associated with designing evaluations of uncertainty visualizations in a real-world, meteorological setting. Specifically, we will discuss the design and results of a pilot user-study where we attempted to explicitly evaluate the effects of common uncertainty visualizations on forecasts. We will also cover our current progress expanding that pilot into a full study.

Sam Quinan
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Wednesday, January 20, 2016 at 3:15pm
Room 110 INSCC
Refreshments and Meet the Speaker at 3:00pm

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