Visually Comparing Weather Features in Forecasts
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We conducted a **design study** with meteorologists in various decision support roles (e.g., wildfire response).

Meteorologists, at a high level, identify and relate multiple weather features.

Only combined, for example, do the above criteria become red-flags for potential wildfire outbreaks.

As part of this work, we extended a set of techniques using interactivity to provide an intial-step in directly visualizing the interactions of multiple features over an **ensemble** forecast -- something existing techniques did not support.

This work also introduced a set of **informed default** encoding choices that integrate meteorological conventions with effective visualization practices.

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An overview of the interface for WeaVER, an open-source tool developed for supporting meteorological analysis, shown here visually relating multiple isocontour features across an ensemble using contour boxplots.

Examples of visualizations generated by WeaVER using our informed defaults.