Explanation of Probabilistic Hazards Map

The probabilistic U.S. hazards outlook for temperature hazards across the CONUS and Alaska for the 8-14 day time range contains human drawn delineations of where temperatures are expected to be either much below normal or much above normal AND where those much below (above) normal temperatures pose a hazard to life or property. The typical hazard used is forecast temperatures below the 15th percentile for much below normal temperatures or above the 85th percentile for much above normal temperatures. Then additionally, forecasters assess if the forecast temperatures cross critical thresholds 32 deg F, 90 deg F, 100 deg F, night time lows above 80 deg F).

The forecasters do apply a subjective decision factor when delineating a hazard area. A cold snap in the winter or a heat wave in the summer are likely threats to life and property, while a cool period across the Great Plains in July is likely perceived as a break in the heat.

If any of the hazardous conditions are met, forecasters use the atmospheric model ensemble output to estimate the likelihood of that event occurring, and indicate a confidence/risk of occurrence. Forecast confidence risk is categorized as slight, moderate, or high, with the categories indicating a 20%, 40%, or 60% chance of occurrence, respectively.