

MET-3020 Forecaster Check List

Past Weather:

- _____ Reviewed climate data for today to gage current weather:
 - [Average high, low:](#) _____, _____
 - [Record high, low:](#) _____, _____
 - [Today's observed high, low, precipitation:](#) _____, _____, _____
 - Noted natural temperature variance (1 SD) high, low: _____, _____
 - [NWS daily climate graphs](#)
- _____ If there was recent (yesterday or today) notable weather (records, streaks, big storms), have reviewed [storm totals](#), [wind gusts](#), extreme temperatures, etc.
- _____ Reviewed past [radar](#), [satellite](#), [surface](#), and [upper-air observations](#) to note the recent upstream and overhead weather patterns, connecting them to sensible surface weather on synoptic and mesoscales
- _____ Reviewed past [radar](#), [satellite](#), [surface](#), and [upper-air observations](#) to note the most important atmospheric structures (fronts, troughs, ridges, highs, lows) to monitor presently and for the future

Present Weather:

- _____ Reviewed current weather observations using the forecast funnel approach
 - [Satellite:](#) Note any organized cloud structures
 - [Upper-Air:](#) Note the pattern over North America and regionally
 - [Radar:](#) Note the mode and type of precipitation, its coverage and intensity
 - [Surface Data:](#) Conduct independent analysis of surface data
- _____ Identified the most relevant atmospheric structures (fronts, troughs, ridges, highs, lows), and mentally connect them to ongoing sensible weather (i.e., [cloud cover](#), [precipitation](#))
- _____ Recognize important evolving patterns, connecting them to other course content and background knowledge
- _____ Have thought about the ongoing societal impacts (e.g., travel conditions, recreation) of current weather

Future Weather:

- _____ Have developed a short-term (12 h) forecast based on continuity of current observations
- _____ Have examined the plan-view output (upper air and surface) from the [NAM and/or GFS model](#), and have identified most relevant atmospheric features in model data and examined how they are changing; identified main forecast problem
- _____ Have examined unique model forecast guidance (e.g., time-height sections, [soundings](#), ensembles ([SREF](#), [GEFS](#)), [HRRR](#)) to focus on the forecast problem
- _____ Have developed your own forecast through the next two to three days, identifying the most important weather threats or forecast problem
- _____ Have thought about the potential societal impacts, and clearly explain any potential impacts
- _____ Have thought through different forecast scenarios (use ensemble model data), and identified the most likely one
- _____ Have identified a [theme](#) for your weather forecast to highlight within the forecast discussion
- _____ [Clearly communicate](#) your forecast confidence and sources of uncertainty within the forecast discussion
- _____ Have checked to make sure forecast scenario is meteorologically consistent
- _____ Reviewed to see if any [NWS advisories, watches, or warnings exist](#), and read in detail
- _____ Reviewed to see if any [NWS zone forecast](#) and [forecast discussion](#) for consistency between your forecast and their's, and made suitable modifications to the forecast