

The NOAA/CIMSS ProbSevere Model

ProbSevere Version 1 (v1; aka “Legacy Version”)

- Primary output:
 1. *The probability of any type of severe weather*

- Performance summary:
 - Most skillful for cellular convection and strong convective lines
 - Struggles with wind-only events

- AWIPS2 display: v.14.4.1 and later

- Available via the web:
https://cimss.ssec.wisc.edu/severe_conv/probsev_v1.html

- Display in GRLevelX (placefiles):
No longer supported

- Training material:
https://cimss.ssec.wisc.edu/severe_conv/training/recorded/ProbSvr/player.html

- R2O: Non-operational; available via LDM from NSSL. Will no longer be produced at NSSL or UW-CIMSS after MRMS v12 is operational at NCO (FY2020).

ProbSevere Version 2 (v2; aka “Hazards Version”)

- Primary output:
 1. *Probability of severe hail (ProbHail)*
 2. *Probability of severe wind (ProbWind)*
 3. *Probability of tornado (ProbTor)*
 4. *The probability of any type of severe weather (given by the maximum of ProbHail, ProbWind, and ProbTor)*

- Performance summary:
 - Improved overall performance compared to v1 ProbSevere
 - Like v1, v2 struggles with lightning poor storms
 - ProbTor tends to be underestimated in lead up to weak tornadoes

- AWIPS2 display: v.19.2.1 and later

- Available via the web:
https://cimss.ssec.wisc.edu/severe_conv/probsev.html
https://cimss.ssec.wisc.edu/severe_conv/probtor.html

- Display in GRLevelX (placefiles):
https://cimss.ssec.wisc.edu/severe_conv/NOAACIMSS_PROBSEVERE_LOOP (1-hour loop; v.2.60+)
https://cimss.ssec.wisc.edu/severe_conv/NOAACIMSS_PROBTOR_LOOP (1-hour loop; v.2.60+)
https://cimss.ssec.wisc.edu/severe_conv/NOAACIMSS_PROBSEVERE (latest image only)
https://cimss.ssec.wisc.edu/severe_conv/NOAACIMSS_PROBTOR (latest image only)

- Training material:
https://cimss.ssec.wisc.edu/severe_conv/training/recorded/ProbSevere2019/presentation.html

- R2O: Operational within MRMS in FY2020.