Routine Model Verification Checklist

Precipitation

☐ Change date on the upper right corner
☐ Add radar Image, observation and satellite figures
☐ Clear verification table
☐ Clear text – keep the following:

"Refer to the table that examines spatial accuracy (SA), temporal accuracy (TA), Hit/miss (H/M), Intensity (Int)."

☐ Ensure that the table legend is included

↑ 85%	85% - 70%	70% - 50%	50% - 40%	↓ 40%

☐ If the event is synoptic use 7 km resolution. Otherwise, use 2.8 km. Use the map on visual weather: visual weather > TEST > Verification: 7 precip or Verification: 2.8 precip
☐ Ensure that the map legend is included in all figures
☐ Change that you label each model runs in this format "Model run: 02 MAR 2022 18 UTC run "
☐ Change the time of model forecast in this format "Time: 23 UTC"
☐ Change the model runs in the table and evaluate the model output using the table bellow

Spatial accuracy: *keep in mind that the model uses the sum of precipitation over the entire hour not only at the top of the hour.*

Almost all areas are covered	**↑ 85%**
Some areas are not covered but the distance between areas covered, and the other area is small **OR** Area is shifted by a very small percentage (north, south, east, west of the event)	**85% - 70%**
Almost half of the areas are covered **OR** Area is shifted by a small percentage	**70% - 50%**
Almost a 1/3 of the area is covered **OR** Area is shifted which can make it hard to forecast but can be used to indicate activity	**50% - 40%**
Bad representation. Can't be used to identify the appropriate area or indicate the possibility of rainfall	**↓ 40%**

Temporal accuracy:

The same time as observed or ± 1 hour	↑ 85%
± 2-3 hours	85% - 70%
± 4 hours	70% - 50%
± 5 hours	50% - 40%
No precipitation shown or ± > 6 hours	↓ 40%

Intensity: *Keep in mind that the model uses the sum of precipitation over the entire hour not only at the top of the hour.*

The same	↑ 85%
Some areas are the same while a small amount lower than observed	85% - 70%
Half of the areas are the same while the other half is lower than observed	70% - 50%
Most of the areas are lower than observed or unrepresented	50% - 40%
Completely different in all aspects OR Significantly higher or lower	↓ 40%

☐ Include a general summery in text. If there are problems in the model, what are they? Try to answer at least 2-3 of these points. How can this help identify problems? What will the reader be taking away from this report?

- If the latest 4 runs are acceptable
- If the latest 8 runs are acceptable
- If the latest 12 runs are acceptable
- What are the main problems in the runs? Example: the model simulations indicated rainfall over the area but incorrectly forecasted the intensity.
- Overall, are the model runs acceptable? Can a forecaster use a simulation to confirm rainfall?
- What is the problem area? Example: precipitation is not well represented in the eastern area.

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