

Central Region DFP input

April 2005

Q2 responses:

If all offices approached the temporal resolution issue referenced in the previous question similarly that would help tremendously (though time zones could present a problem).

This would result in a more coherent/consistent set of grids to collaborate -- rather than

forcing forecasters to work out differences between grids that start/stop at an assortment of times (based on differing approaches to temporal resolution). Though not a popular approach, having HPC provide (at least) guidance grids to use as a starting point would also assist with the later forecast periods. I would argue that by spending less time on days 4-7 we could do much better on days 1-3.

Lastly, I've wondered about the feasibility of having a consistency check applied BEFORE grids could be physically published to official. If large differences existed within certain grids, then offices would be precluded from publishing them. Once they we appropriately collaborated, they could be published. I suspect this would be far too difficult to pull off.

I realize that this is really tied to question #1. There were several proposals given in the conference call, like changing the resolution as we go out in time (to be more general). This is a good idea, in my opinion.

In the forecast sense, it was thought that if we started out with the same baseline we might be better off. There are problems with this such as poor grids from HPC, which have to be tweaked due to the use of geostrophic wind, the fact that HPC starts out with new forecasts each day instead of adjusting previous forecasts, etc. If HPC produced high quality grids, we might be able to start with those, but changes would need to be made. Another option that was not discussed in the call is the ability to get more extended model data into AWIPS, maybe via the WAN. I would love to see the Ensemble data out to 8 days in AWIPS. That may be a better starting point if the grids were actually available. In any event, I would like to see only day 7 being populated each day with a uniform initialization (whatever it is). Adjustments can easily be made to previous forecasts.

What is the "climatology of consistency"? In other words, are the benchmarks we set as requirements even realistic based on what the weather really does.

For example, let's say we could import a national NDFD LAPS grid for every day of the year based on real observations. What would the consistency statistics be for such grids? I can't say I have any good idea, but it does seem to me that we need to know this before we willy-nilly set requirements for consistency that could possibly be unrealistic, especially for some elements.

Smooth the NDFD. It is the only way to produce a near-seamless gridded suite. The NDFD does not have to be a literal composite of the LDFDs. Complete consistency (which includes the "smile test") is not achievable. The composite of the LDFD into the RDFD and NDFD must be "sewn" together in a way that reduces the rough edges between CWA while still preserving the integrity of each WFO's gridded forecast suite. The RDFD and NDFD are just as much about presentation as they are precision. They must possess a level "out of the box" application as raw model grids possess.