NWSEO Talking Points Regarding the National Blend of Models (NBM)

1. The National Blend of Models (NBM) will often "over-forecast" a high Probability of Precipitation (POP) outside of the bullseye where the model guidance shows the most significant weather (It has a known "Wet Bias").

2. Since the NBM is a "Blend" of models (by definition, averaging the high and low end extremes to highlight a mean or median value), it will never be able to show the extreme upper-end (or record) events, that are responsible for the greatest threat to life and property. This is when customers need us the most, and this type of model guidance could severely downplay the life threatening impact of an event occurring of the next several hours, or days.

3. Forecasters at the 122 nationwide Weather Forecast and Warning Offices (WFOs) will be unable to modify the NBM's internal weighting of individual large scale, or high-resolution, mesoscale models to rapidly adapt to small scale, high impact features within a large storm (nor will they be able to capture the temporal or spatial transition of a storm from primarily synoptic to mesoscale). A prime example of this is a Nor'easter that brings widespread, heavy snow to the eastern half of Pennsylvania, while a quick transition to mesoscale lake effect snows/squalls occurs across the western mountains of the state. These latter, intense features are responsible for creating life-threatening, multi-vehicle accidents on area roads and interstates, and gridded data (NDFD) needs to be manually adjusted to reflect the best timing and location of these small scale features.

4. There are no plans for the NBM to include models, such as the European and its ensembles. The ECMWF has proven to be one of best (if not the most accurate) models over the past several years. The U.S., GFS Core-based models (and NBM) have fallen from 2nd to 4th place during this time. The NWS is trying to implement inferior model guidance and graphical data that looks "good enough" at a time when NWS Meteorologists and local WFO management staff are trying to build relations with Core and Deep Core partners, and ramp up IDSS for them. The NWS needs more people (and more adjustments to model guidance using local expertise) in order to provide the best possible IDSS in order to achieve a Weather Ready Nation.

5. Local expertise, which is so critical to recognizing various numerical model deficiencies and biases (that could reveal the fine difference between somewhat benign conditions, and extremely hazardous, life-threatening and high-impact weather) will be lost. Subsequently, there will likely be decrease in the confidence of our forecasts by Core and Deep Core partners. The public has always turned to the NWS (*and trusts us*) for high-quality, objective and unbiased data to meet their weather needs and safety.

6. NWS local and Senior National Management is (and has during the CR Superblend Demo Test) strongly discouraged any editing of the National Digital Forecast Database (NDFD) by NWS Meteorologists, who have developed a large amount of local expertise and may "blend" in other U.S. or European model data to enhance the accuracy of their forecast. The "Looks Good Enough" stance that is being taken by NWS Management at all levels will be a step in the wrong direction (with respect to forecast accuracy) for such a visible, highly trusted and respected organization.

7. Rather than focusing on a second rate, fourth place set of blended model "Guidance" to make a graphical image look "Good Enough", NWS Senior Management should be developing much improved and intuitive interactive software for the local WFO Meteorologists to use. Too much time is currently wasted trying to non-meteorologically smooth slightly differing data across CWA boundaries.

8. Large contradictions will arise between the NWS NBM approach, and other local and national outlets of weather forecasts (such as the weather channel, ACCU Weather, and local TV and Radio stations) that may be leaning more toward a ECMWF (and its ensembles) solution of a major storm track and its high impacts (related to severe convective weather, heavy rain and flooding, heavy snow, strong winds, and storm surge).

9. NWSEO proposes a GIS type of layering to the Digital and Graphical Data Set to offer customers at various levels (national, regional, state or county) a better product in the form of a "flexible" dataset to meet their specific weather needs with increasing detail. National Customers may need smooth-looking, generalized weather and temperatures, while regional and state agencies (core and deep core partners) would need general timing of weather features for planning purposes. County and sub-county level customers (such as school districts and transportation agencies) would need much more detail for critical decisions , such as dispatching staff for plowing roads or busing children to and from school safely.

10. NWSEO believes that the NWS's proposed "One Event, One Forecast" approach with the often inferior NBM simply "is not good enough" for the NWS mission of saving lives and property. NWSEO maintains, and weather experts agree, that the ownership of the forecast must be at the final point of delivery.