Thoughts on Ensemble Product Development  (Jirak, SPC)

**Primary Roles of EMC:** 1) Develop the best models and ensembles; 2) Output the most useful fields and diagnostics from models and ensemble members (control model integration and have access to full 3D grids); 3) Output basic ensemble fields (e.g., mean, spread, probs) for users without bandwidth to bring down all of the members - *no statistical post-processing*

**Primary Roles of MDL:** 1) Statistical post-processing (e.g., bias correction, calibration, etc.) of basic weather elements (both NDFD and point-based); 2) Specialized post-processing for elements not covered by National Centers (below)

**Primary Roles of National Centers:** 1) Statistical post-processing for specialized fields/products relevant to their mission (e.g., SPC - thunderstorms, severe weather; AWC - visibility, ceiling, icing; WPC - excessive rainfall and snowfall)

**Others (NOAA Labs/Academia):** 1) Collaborate with appropriate groups above