**Evaluating the Performance of the WSAQS Photochemical Grid Model Platform**

**Statistical and Graphical Displays Checklist**

**Priorities for PGM 2011b Modeling Platform**

**03/28/2016**

**Purpose:** Outline and prioritize the graphical displays and statistical calculations to generate for the Intermountain West Data Warehouse (IWDW) before the end of Phase I of the Contract (April 2016).

**DISCUSSION NOTES:**

* Need other Workgroup Members to add/comment to list below.
* Need to determine whether static plots could be generated, zipped, and available through the Data Warehouse to download (e.g., gifs, jpeg, png, etc).
* Need to determine whether plots can/should be generated through a tool available through the Data Warehouse.
* Based on the analyses from the checklist that are not completed, the Workgroup would like to complete the analyses below given the remaining time and resources for the 2011b Modeling Platform. While not all the analyses outlined in the MPE Checklist have been completed, the analyses not completed may be useful for future model performance evaluations.

**Boundary Conditions:**

1. None at this time

**Emissions Inventory:**

1. Daily spatial plots of individual VOC emissions
2. Summary of individual VOC emissions by county and state

**Meteorological Model:**

1. Site-specific analyses of wind fields, precipitation, cloud cover, and photo-rates
   1. Hourly, Daily, etc? [Depend on resolution of data and resources available]
   2. Spatial plots
   3. Time-series plots

**Photochemical Grid Model:**

NOTE: Items should be completed for both CMAQ and CAMx.

1. Spatial plots of model and ambient monitoring data including:
2. Hourly ozone
3. Maximum daily 8-hour average ozone
4. 24-hour average of speciated PM2.5
5. Time-series plots for each pollutant at routine monitoring sites
6. Vertical profiles of ozone at sites with available data
7. Comparisons among models