Interactive comment on “E pluribus unum: ensemble air quality predictions” by S. Galmarini et al.

Anonymous Referee #2

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‘E pluribus unum’ describes an imaginative new approach to ensemble modeling. Significant improvements over median model ensembles are demonstrated.

Technical comment

Because the KZ is a realizable filter (depending on past and future observations) it has not often been used for forecasting. Filtered values near the end of the time series do not have the same statistical properties as those away from the end (the cut-off frequencies shift and phase distortion increases as the end is approached). As end value issues increase with time scale (window size of the filter) it seems likely to me that poor performance at long time scales of the kz method is due to end effects.

Editorial comments on tables and figures
Table 3: Do the model numbers referred to later in the paper correspond to the order that they appear in the table? Maybe say yes or no in the table to prevent false assumptions (i.e., add model numbers to the table or state that the models shall be anonymous).

Figures 7b and 7c: Should there be a legend linking the colors to specific model numbers?

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 581, 2013.