Interactive comment on “Impact of primary formaldehyde on air pollution in the Mexico City Metropolitan Area” by W. Lei et al.

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Both reviewers have ratified the basic worth of the manuscript and have made suggestions for minor edits and clarifications that will improve the paper. The authors should carefully consider the reviewers’ suggestions and prepare a final version of the discussion manuscript for submission.

I believe that ozone formation in Mexico City has historically had two interesting characteristics. The first is the high frequency of days with significant ozone levels and the manuscript clearly addresses the role of primary HCHO in enhancing peak O3 levels. The second is that daily MCMA ozone concentrations tend to peak earlier in the day than in many other urban areas. The authors do discuss the time dependence of primary HCHO ozone production in section 3.4 of their manuscript. I would like to see
some additional discussion about whether or not the fact that since much of the primary HCHO is emitted during the morning rush hour has a significant impact on the timing of the daily ozone production peak and subsequent ozone concentration peak (which can’t occur until much of the early morning rush hour NO is converted to other nitrogen oxide species).

Interactive comment on Atmos. Chem. Phys. Discuss., 8, 19605, 2008.