

Interactive comment on “Variability of winter and summer surface ozone in Mexico City on the intraseasonal time scale” by Bradford S. Barrett and Graciela B. Raga

Anonymous Referee #2

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Using 1 000 000 hourly ozone measurements this paper makes a convincing case that ozone is modulated in Mexico City by the MJO through the modulation of UV light. The paper is well written and the analysis is generally sound. I have a few minor comments, but after these are addressed the paper should be published.

1. Table 1 is a bit mysterious to me. I have some trouble precisely understanding the procedure used from the wording “ozone concentrations at average of all 5 stations either greater than the 90% percentile level or less than the 10th percentile level”. At any rate the numbers in the table are all around 10% which makes sense if one picks the top 10% or bottom 10% of ozone. However, I don't understand what the deviations from 10% level mean. Is this due to station heterogeneity? The authors should clarify

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the exact procedure used for making this table and discuss how to interpret the findings.

2. Line 137. I assume the 30-day basis is a moving window. Please clarify.

3. Line 159. 'DFJ' should be 'DJF'.

4. Figure 5 and similar figures. It would be preferable if the projections on all panels are the same.

5. Figure 7. How helpful is this as a forecast tool? It might be helpful to put in each figure the percentage of days in each category.

6. Lines 379-381. It looks to me like days with high ozone feature anomalous westerly winds in DJF.

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