Interactive comment on “Volatile Organic Compound (VOC) measurements in the Pearl River Delta (PRD) region, China” by Y. Liu et al.

Anonymous Referee #2

Received and published: 7 January 2008

General comments:

This is a very nice summary of VOCs measured in the Pearl River Delta during Oct-Nov 2004. There are no obvious scientific flaws and the conclusions are well justified by the data, with some caveats as given by the authors. The manuscript is clear and concise, and the review of earlier literature is adequate. The paper is suitable for publication in ACP. Some very minor comments follow.

Specific comments:

Figs. 5 and 6: It is interesting that at GZ, O3 is not well correlated with NO, while at XK it is clearly correlated with NO. This would suggest that O3 production is NOx-limited at XK (the downwind site) but not in GZ.
Were SO2 measurements also made at GZ? Currently, they are only shown for XK (Fig. 9), and attributed to power plant emissions (14717/16). It would be interesting to see if such relatively high values were also observed in GZ.

Technical comments:

The site Tai O is defined twice: 14709/12: "a site on the north-south centerline of the Pearl Estuary" 14710/4: "a remote site between the PRD region and Hong Kong"

14711/6: change "are" to "area" 14713/10: change "Inte-" to "Inter-" 14713/16: Should be Figure 2, rather than Table 2 14715/7: insert "of" between "fractions" and "aromatic" 14720/9: Delete "The" Table 3: why such large uncertainties?

Table 1: replace "porpane" with "propane" replace "isobutnae" with "isobutane" replace "1,4-Dicrorobutane" with "1,4-Dichlorobutane" Freons are a brand name. Should use chemical names

Figure 10: The two panels are labeled as (a) alkenes in GZ, and (b) aromatics in XK. The figure caption only mentions alkenes.