Interactive comment on “Measurements of volatile organic compounds in the middle of Central East China during Mount Tai Experiment 2006 (MTX2006): observation of regional background and impact of biomass burning” by J. Suthawaree et al.

Anonymous Referee #1

Received and published: 9 September 2009

General comments: Based on VOCs measurements on top of Mount Tai, the manuscript conducted interesting evaluation about the sources of VOCs in the middle of Central East China region. The methodologies are well accepted. The work could be helpful due to the lack of VOCs data in this area.

Specific comments:

(1) To enhance the introduction and discussion of the manuscript, the Authors are
suggested to use more recent researches in China on VOCs, e.g. Source profiles (Liu et al., AE, 2008, 42: 6247-6260), source apportionments for both urban and rural site in PRD (Liu et al., AE, 2008, 42: 6261-6274), VOCs tracers for biomass burning (Xie et al., AE, 2008, 42: 6000-6010), and the VOCs in Beijing city (Shao et al, JGR, 2009, DOI:10.1029/2008JD010863).

(2) The discussion in line 18-21, page 16719, the authors need to be more explicit about chemical regimes of ozone formation, I guess the model results indicate that VOCs-limited was true for urban areas, was it the same for remote site (as Mount Tai) and the whole region?

(3) It could be better if the analysis for the sources of VOCs have support of local (or regional information), the ERs comparison with national inventory was not that convincing. As a background site, the discussion reveal the impact of biomass burning, I wonder if there were any local fires during the measurements.

Interactive comment on Atmos. Chem. Phys. Discuss., 9, 16715, 2009.