Supporting Information for:

Changes in Aerosol/Gas-Phase Distribution Ratio of Semi-Volatile Products

Affect Secondary Organic Aerosol Formation with NOx from α-Pinene

Photooxidation

Shijie Liu^{1,2}, Xinbei Xu¹, Si Zhang¹, Rongjie Li¹, Zheng Li¹, Can Wu¹, Rui Li¹, Guiqin Zhang², and Gehui Wang^{1,3*}

¹Key Laboratory of Geographic Information Science of the Ministry of Education, School of Geographic Sciences, East China Normal University, Shanghai 200241, China

²Resources and Environment Innovation Institute, Shandong Jianzhu University, Jinan 250101, China

³Institute of Eco-Chongming, Cuiniao Road, Chenjia Zhen, Chongming, Shanghai 202150, China

*Correspondence to: Prof. Gehui Wang (ghwang@geo.ecnu.edu.cn)

Content of the file Supplemental Figures S1-S5

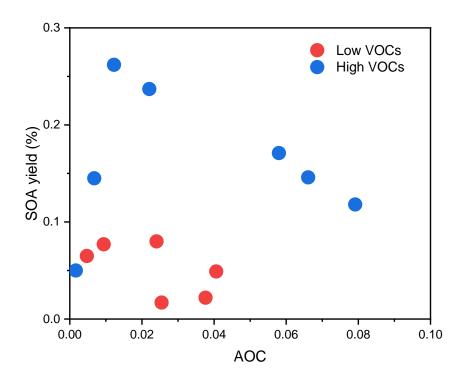


Figure S1 The relation of AOC with SOA yield under different experiment conditions

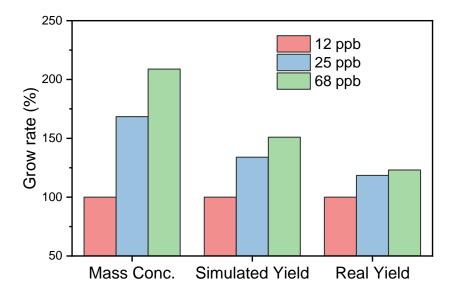


Figure S2 The grow rate of SOA mass concentration and SOA yield under low NOx conditions

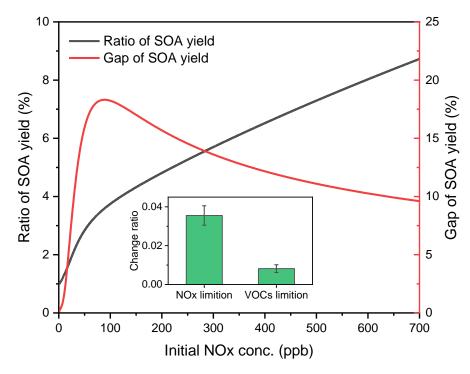


Figure S3 The evolution of the ratio and gap of SOA yield between lowand high-VOCs conditions with NOx.

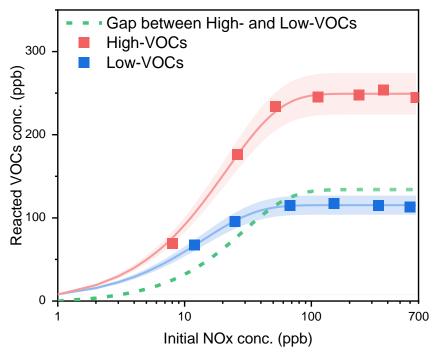


Figure S4 The consumption of VOCs under high- and low-VOCs conditions.

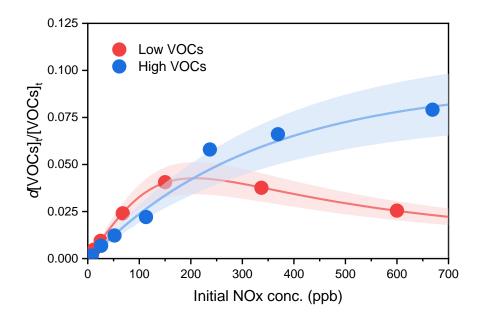


Figure S5 The variation of AOC with NOx under both low- and high-VOCs conditions.