Evaluations of Ozone Production with the consideration of missing OH reactivity – A case study from a forest adjacent to Seoul an Asian Megacity.

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Photochemical ozone pollution recently has been highlighted in the East Asian megacities as primary pollutant emissions such as CO and SO\textsubscript{2} have been decreasing. The history of air pollution abatement in the Western World clearly instructs us that the ozone pollution may last quite a long time in the region due to the non-linear nature of photochemistry. In the presentation, we will discuss impacts of biogenic volatile organic compound photochemistry to ozone production at Taehwa Research Forest located in 30 km southwest of the Center of Seoul, South Korea in the late spring and the early summer of 2016 during the KORUS-AQ campaign. We will particularly highlight roles of BVOC in determining ozone production regime especially in the afternoon, when the NO\textsubscript{X} level is substantially suppressed. More importantly, the implication of missing OH reactivity, which was substantial at the site, towards assessing ozone production regime will be discussed.