

Interactive comment on “Enhancement of biogenic emissions of VOCs in the semi-arid region of India during winter to summer transition period: Role of meteorological conditions” by Nidhi Tripathi and Lokesh Kumar Sahu

Anonymous Referee #1

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General Comments

This manuscript uses PTR-TOF-MS to measure monoterpenes for western India. The authors found high mixing ratios of monoterpenes from evening until midnight. The strong temperature is responsible for increasing the monoterpenes/benzene about 2 times. Additionally, the increasing about 50% of local biogenic sources comes from regional transport from SE Asia.

While this manuscript provides information about biogenic VOCs emissions from local

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India, I suggest the authors point the major innovations besides the study region in the manuscript to emphasize its significance of this work.

Specific Comments

Section 3.2, fig3 shows time series of monoterpenes from biomass burning. But due to February and March are strongly biomass burning emission time period in SE Asia, so it has a value to clarify how much is responsible for monoterpenes in local India.

Section 4.1, analysis of the effect of wind parameters on monoterpene using exponential decay functions and wind rose. The result will be stronger if the author could show the wind map that indicates the impact of Asian monsoon that brings the monoterpene from SE Asia.

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