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Comment : Even though the experiments are done carefully and the results are illustrated detailly, I am sceptical about the suitability and subsequent implications of the comparison of limonene oxidation under aforementioned conditions.

Answer: We consider this comparison of great importance because it demonstrates strong and unexpected similitude in terms of reaction pathways to products of autoxidation and OH/O3 initiated oxidation. To our knowledge, this is the first time these results are reported, not only for limonene, but for any other organic compound.

Comment: It is significantly unclear about how relevant/representative of the applied/selected fuel lean condition to the real ambient conditions and whether the composition of the oxidation products in JCR largely dependent on the temperatures and limonene/O_2 concentration ratios.

Answer: The reviewer missed pour point: demonstrating the strong and unexpected similitude in terms of reaction pathways to products of autoxidation and OH/O3 initiated oxidation of limonene.

Comment: Finally, the manuscript is not written well, without presenting the novelty and atmospheric implications clearly. Therefore, I think the topic of this study fits better a combustion related journal (e.g., Combust. Flame.) rather than ACP.

Answer: The revision attempts to address this critic by emphasizing the novelty of this work: "To our knowledge, this is the first time this important finding is reported. It goes beyond expectations." Was added to the Conlusion section. However, this paper does not pretend to revolutionize the understanding of atmospheric processes but rather point out that both atmospheric chemists and combustion chemist can learn from their studies performed under different initial conditions. Regarding the choice of the journal to publish our work, we believe ACP is a better choice. One of the authors has been Editor in Chief of Combustion and Flame. He knows the present work would not be publishable in Combustion and Flame. In fact, in combustion the processes yielding highly oxygenated products are neglected and not included in the most recent chemical kinetic reaction mechanisms. Only very recently the so-called 'third O2 addition' has been considered.