General comment: The authors provide an interesting box-model study showing the impacts of extended Cl chemistry on two distinct urban environments. While the majority of the reviewers' comments have been addressed in the revised versions, I have a few remaining questions, and also some minor typographical errors (listed in the 'private note' to authors) that should be addressed. I noted a few points in going through the response to reviewers and the manuscript that could be improved.

Response: We are grateful for a careful evaluation of the revised manuscript and valuable comments. Our responses are given below in blue-color fonts and corresponding changes in the manuscript are highlighted in red-color.

Comment 1: Reviewer 2 noted the possibility of the formation of organohalogens. I see that Cl+isoprene (which is known to make organohalogens) is included in the model, but (presumably for simplicity?) the chemistry in the model mimics the OH reaction. Maybe a brief statement could be made along these lines?

Response: Yes, a simple mechanism mimicking the OH + isoprene has been included for Cl + isoprene reaction. Developing a kinetic model for the isoprene oxidation forming organohalogens could be another major project worth addressing in a future study. As suggested, we have clarified this aspect in the revised manuscript, as follows:

Lines 122-124: "The reaction of Cl atoms with isoprene proceeds mainly via addition, and it produces chlorine-containing organics (Ragains and Finlayson-Pitts, 1997; Fan and Zhang, 2004). However, here we have simplified the mechanism by not considering the fate of organohalogens."

2. Line 286, perhaps elsewhere. The fact that Cl-reactivity is high compared to OH reactivity does not necessarily mean that Cl contributes significantly to oxidizing capacity (there need of course to be Cl-atoms present). Please clarify.

Response: We agree. Apart from higher Cl reactivity compared to OH, abundance of Cl-atoms should be significant to influence the oxidation capacity. The discussion has been revised suitably, as follows:

Lines 297-298: Accordingly, the magnitude of AOC depends upon the concentration and reactivity of Cl.

Lines 301-303: Besides the abundance of Cl, higher reactivity enhances the contribution of Cl in AOC, which is further substantiated by the ratio of Cl reactivity to OH reactivity (Fig. 5b).

Lines 363-364: However, Cl to OH reactivity ratio (≈270) is pronounced in Leicester coinciding with higher contribution of Cl in AOC.

3. Please add anything further to the specific comment #6 of R2 regarding the ClNO2 uptake coefficient, if possible.

Response: We performed a sensitivity simulation with $ClNO_2$ uptake coefficient of 1E-5 and compared the loss rate of $ClNO_2$ with Cl^- in this simulation with NEW simulation over Delhi.

Accordingly, the following discussion has been added in the revised manuscript to mention the role of $ClNO_2$ uptake coefficient.

Lines 256-259: We are using $ClNO_2$ uptake coefficient, γ = 9E-3 from Fickert et al. (1998) in the simulation. Sensitivity simulation with γ = 1E-5 (Haskins et al., 2019) results in considerably slower (by a factor of ≈270 and ≈17, near sunrise and during mid-day, respectively) loss rate of $ClNO_2$ with Cl^- than in the NEW simulation over Delhi.

Minor 'typos': Please replace the current text with that shown below:
Response: All the typos pointed out by the editor, listed below, have been corrected in the revised manuscript.

Line 14 (and elsewhere): 'near sunrise'.

Line 17: the atmosphere and radical cycling...'

Line 32: 'associated mechanisms'

Line 33: delete 'however'

Line 45: "A few recent studies..."

Line 115: 'The heterogeneous chemistry just discussed is implemented..."

Line 182: "gets removed rapidly during..."

Line 228-9: "due to Cl chemistry, further measurements..."

Line 232: "left-upper panel (a)"

Line 236: "to the morning peak, which have ..."

Line 252: its (not it's)

Line 369: "to better quantification of the importance..."