

**In our point-by-point author response below, topic editor comments are in italics, our responses are in regular font, and line numbers refer to the latest version of the revised manuscript and are denoted in yellow.**

**The authors would like to express our sincere gratitude to the topic editor, and to the anonymous reviewers who have greatly improved the manuscript. We are so grateful for your feedback and insights.**

**Response to topic editor comments on revised manuscript:**

*Please kindly provide some notes on variant id in cmip6 metadata such as r1i1p1f1 in the manuscript.*

Thank you for this suggestion. We added a note to clarify that the terms ensemble member and variant ID are sometimes used synonymously, even though technically the “r” refers to the ensemble member. We also added information about what each letter, e.g. “r”, “i”, “p”, “f”, represents in the ensemble member ID.

**L121-123**

*Please check blank subfigure in Figure A11.*

Thank you for mentioning this. Figure A11 has an odd number of cities, so we have removed the blank subfigure and moved the x-axis labels for that column to the panel above.

**p.43 Figure A11**

*Also I ask better format and resolution of Figure 1.*

Thank you for this request. We have updated the Figure 1 downscaling pipeline flowchart by redesigning the full flowchart and also revising several of the steps to make the pipeline easier to follow. We also increased the resolution.

**L275**