

We want to thank referee #2 for the helpful suggestion and positive feedback on our manuscript. Dr. Adriana Grandis is correct that this work has previously been reviewed and revised elsewhere. Our responses are listed below along with the corresponding changes in the text.

Response to Comments from referee #2:

***Comment 1:** Line 65: Please correct – critical.*

Response 1: We apologize for the mistake. This word has been revised as “critical” on line 65.

***Comment 2:** Line 238: What is CV? Coefficient variation? Please describe if is the first time appear?*

Response 2: Yes. CV stands for the coefficient of variation. CV first appeared in part 2.5 Data analysis (line 202). We have also added this description on line 242.

***Comment 3:** Line 160 and 253, 254: MAP and MAT. Please describe for the people that is not familiarized with these terms?*

Response 3: Thanks for your suggestion. MAT and MAP have been described on lines 165–168: “In meteorology, MAT (°C) is the mean air temperature calculated by averaging the 12 months of the calendar year. MAP (mm) is the annual average value of the product of atmospheric water vapor that falls under gravity”.