Please find below our point-by-point response to the reviewer's comments. We quote all comments here in their entirety and all of our responses are in BLUE. All revisions are highlighted in blue color in the revised version of the manuscript.

My only few recommendations would be:

1. Remove reference to the excess charge densities of rocks when discussing this property interpreted for trees. Given the expertise of some authors this is not surprising, but I don't find this comparison relevant. It would be better to compare the data with similar.

[**Response**] We will adjust the reference and its citation accordingly in the revised manuscript.

2. Add a brief description of the color scheme used in Figs. 4b-c. This could be done as a legend to the colored bar or a brief description in the caption.

[**Response**] Thank the referee for this suggestion to enhance the figure's clarity. We have added a label indicating coherence to the color bar in Figs. 4b-c and provided a brief description in the caption to improve readability. Please refer to the updated figure below.



Figure 4: Wavelet coherence analysis between sap velocity and tree SP data at the Font-Blanche site in 2023. (a) Water surplus calculated as the difference between precipitation and actual evapotranspiration; (b-c) Wavelet

coherence maps for the Aleppo pine and Holm oak at the Font-Blanche site, respectively, with yellow highlighted boxes indicating periods of water surplus. Arrows denote the lag/lead phase between the two time series; White dashed lines (b-c) indicate the cone of influence where edge artifacts are negligible.

3. Sections 5.2 seems a bit too speculative, so I'd recommend to shorten the discussion and append it to Section 4. However, I will leave the decision on whether to do this or not to the authors.

**[Response]** We appreciate the referee's suggestion. We will revise Section 5.2 to focus solely on describing the observed pattern of how pH differences influence SP amplitudes. The current content of Section 5.2 discusses the potential underestimation of predicted SP by sap velocity, as compared to the SP component derived from measured data. However, since we did not measure sap's pH values, this part is speculative. As the referee pointed out, Section 5.2 reads more like a hypothesis, so we will shorten this section rather than moving it to Section 4, while ensuring that the Results section remains focused on the solid findings derived from the actual data.