

Anonymous Referee #2

1. The rationale and goal of this study are unclear. It should be required to mention what a kind of questions remain unclear, why and how the question is important, and how this study is designed to solve the question. For example, why was it necessary to examine the spatial variability of the elements of soil and plants? I suppose that the effects of wild fire on elemental composition could be the main topic for this study. It would be required to reorganize largely this manuscript to clarify these points.

*We thank the reviewer for this helpful comment. We specified problems and shortcomings in the literature that are addressed by the study (lines 48, 67, 100). We clarified in the title and introduction that one of the main objectives of the study is to determine the legacy of fires on the availability of nutrients in soils and vegetation (lines 72, 100, 109).*

2. The authors would need to explain about materials and methods more carefully. For example, it is unclear how many soil cores were collected from each study site, and how many plant individuals of the same species were examined at each study site.

*All data used in the study are listed in Tables 1, S1, and S2. We took one soil core from each sampling location (line 144).*

How were the samples dried (L131)?

*Soils were dried in an oven at 60° C for 24 hours. This was clarified in line 136.*

For what the authors made the comparison (L153)? In particular, it is not clear to me why the authors applied PCA for the element compositions of soil and plants. Was it important to demonstrate the difference in elemental compositions between soil and foliage? Please clarify.

*We compared elements in soils and vegetation to provide quantitative information regarding patterns in concentrations between the sampling sites, and to evaluate the legacy of past wildfire impact on the distribution of elements. We used principal component analysis to differentiate elemental signatures in foliage and soils (lines 208-210). We clarified the text by presenting the principal component loads in a new table (Table 2). We feel PCA was important to help characterize patterns in elemental distribution among soil and foliage.*

3. I would like to recommend that Results and Discussion section (L159) would be separated into Results section and Discussion section in order to present clearly the present findings and the interpretation.

*We find that our results and discussions are better presented in the same section. This avoids redundancy as our datasets are available in the supplemental information. By combining the sections, we can discuss the implications of the data without having to re-state the main patterns in the text.*