

Dear Dr. Etienne Berthier,

Thank you for correcting the manuscript. We appreciate your time working with the manuscript and us. We have addressed the comments you provided below.  
Thank you,

Naomi Ochwat, on behalf of all of the coauthors.

**L217. For clarity, maybe refer to it as the "IRRP A site" as you do in Figure 1.**

We have made this edit, thank you.

**L274. "We do not have"**

We have made this edit, thank you.

**L276. What about "and while working at the Copland" ?**

We have fixed this sentence, thank you.

**L288. Put the minus sign as exponent for conductivity**

We have fixed this, thank you. We also have realized this was a formatting problem throughout the text and have revised accordingly.

**L298. Maybe replace "normal" by "close to climatological values"**

We have replaced the word normal with "close to standard climatological values."

**L426. I find the formulation weird. A weather station is punctual/local not regional by definition. Or do you refer to a network of stations? Or did I misunderstand?**

Thank you for catching that, "local" is a much better word to use here to describe the weather station. We have changed it accordingly.

**L454. Can authors double check this sentence? It was not clear to me.**

We have fixed the sentence, now line 457.

**L505-506. I wonder whether this should not be moved to (or first mentioned in) the "results" section when liquid water is mentioned, i.e. L339 (section about core stratigraphy)**

We have added an additional sentence on line 340 to include the supplemental videos.