

Interactive comment on “Above- and below-ground response to soil moisture change on an alpine wetland ecosystem in the Qinghai-Tibetan Plateau, China” by G.-L. Wu et al.

Anonymous Referee #4

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General Comments:

The importance of the research done is not questionable. However, the methodology, the design and the way the result is presented is not sufficient enough to get published at this stage. I suggest the author to address the following issues and re-write the manuscript in a clear way.

Abstract

The abstract is well written. Only the last sentence of the abstract needs to be rewritten for more clarity.

C3718

Introduction

In line 24 (the first sentence of the paragraph), there is a term ‘climate warming’ and please change it to ‘global warming’ or use the appropriate term.

The unit of temperature is not correctly written in some places (see line 2 of page 7143).

Shorten some of the long sentences (one sentence has 6 lines from line 6-13 in page 7143).

It would be more appropriate to use the term ‘soil water’ than ‘soil moisture’.

Methodology

It would be good to use a consistent unit system, preferably SI units.

The sentence in line 13 on page 7146 seems to have a type about the number of quadrants.

Generally this section needs a revision to correct the sentences.

The gravimetric analysis of soil water is not described in detail. . . for example the size of the soil sample (length and diameter).

Detail description of the laboratory analysis is missed for most of the soil properties.

Result and Discussion

In section 3.2, it is reported that the water content ranges from 17.6 to 103.3%. A volumetric water content cannot be that much high, so it has to be checked or if the unit is different, it has to be clear. It would be better to present water content in $\text{m}^3 \text{m}^{-3}$ or kg kg^{-1} with the bulk density of the soil.

I suggest to add the bulk density of the soils.

This section is generally hard to follow and needs more work.

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