

General comments

The authors set out to describe the modern air, englacial and permafrost temperatures on Mt. Ortles, in the Eastern European Alps. The manuscript by Carturan et al. is well-written paper. The data and instruments used are presented and described with sufficient detail. The data description is well explained and accurate, including complete and exhaustive images and tables.

The study site was well chosen with a dataset covered six years with only a few gaps for specific months. The data set is easily accessible through the link written in the manuscript (section 5. Data Availability).

Good narrative, flow and pause throughout the document. Overall, this manuscript is a relevant that deserves publication once the minor corrections are addressed. The minor suggestions are reported in the Specific Comments.

Specific comments

L 189: What is the range of these variations? Please provide some number.

L 281: The adjective “very” is subjective. Please, provide a degree range also in this case.

L 303: Range of the accuracy?

Technical corrections

Title: Please consider to remove the comma after “Ortles” and put it after the brackets.

L 36: ...rock wall *temperatures*

L 37: ...regarding instrument *types*

L 39: In the observed period,

L 45-47: Please reformulate the sentence. It is unclear.

L 84: In this paper,englacial *temperatures*

L 87: make a unique sentence with the previous one “.....Ortles Project *which* is an international...”

L 95-96: remove from the brackets 3905 m a.s.l. and create a unique sentence “....Italian Alps (Carturan et al., 2013) *and* it is the highest peak (3905 m a.s.l.) of South Tyrol”.

L 107: consider replace “with” with “so”.

L 111: Insert the two ice bodies names

L 143:datasets *due to* the impossibility....

L 290-291: Please consider reformulating the sentence. Example: “.....but was repaired in late August 2012. It remained operational until August 2014 when it was removed due to another badly damage”.

L 294:battery failure *while* the other....

L 336: are

L 343: delete “as such”

L 380: decreased

Figure 1: Panel d) Please consider leaving only “Hintergrat ridge”. Insert the year of the DEM used in this Figure.

Figure 5: Consider splitting the y axis more.

Figure 7: Please consider inserting the legend also in the other panels (b, c, d, e and f) or put the present legend at the end of all panels.

Table 2: Consider to remove “for air temperature measurements”. Also the sentence “Differences are calculated in the common working period for pairs of sensors, i.e. they refer to different period” should be along the main text and not here.