Interactive comment on “Brief Communication: “An inventory of permafrost evidence for the European Alps”” by E. Cremonese et al.

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We thank the referee #2 for the constructive comments that have helped to improve the manuscript. We carefully considered all comments of the reviewer which are listed below.

1) I support the points raised by Anonymous Referee #1. In particular, I agree with the suggestions regarding Figure 1, where it would be very useful to add the time period represented at each site – perhaps this could be using a colour scale for the dots with respect to mean date of observations and size of dots to represent length of time over which there are observations.
We thank the reviewer for this suggestion. Point evidence are now shown in 3 different colors representing 3 classes of the last observation dates confirming permafrost state (before 1990, between 1900 and 2000 and after 2000). The size of the dots indicates 3 classes (<2 years, 3-8 years, > 8 years) representing the length of observations/data associated with each evidence.

FIG 1 CAPTION: Map of the permafrost evidence acquired in the Alps. The colors of point evidence dots represent 3 classes of last observation dates confirming permafrost state (before 1990, between 1900 and 2000 and after 2000). The size of the dots indicates 3 classes (<2 years, 3-8 years, > 8 years) representing the length of observations/measured data associated with each evidence.

2) I agree with the comment about Figure 2 – it would be useful to show the type of measurements available for Germany.

Germany bar width has been slightly increased to show the evidence type. FIG 2 CAPTION (following also suggestion from reviewer #1) a) Relative amounts of point evidence types (borehole (BH), geophysical prospecting (GP), ground surface temperature (GST), other indirect evidence (OIE), rock fall scar (SC), surface movement (SM), trench or construction site (TR)) in the entire inventory and b) by country: bar width represents the relative abundance of evidence in each country (A: 24%, CH: 29%, D: 0.5%, F: 28%, I: 17%; for graphical reasons, Germany bar width has been increased (tripled)).

3) In addition, it would be useful to have a Figure like Figure 3 for the time period covered by the various types of observations.

Unfortunately TC “Brief Communication” have a limit of 3 figures.

4) p. 1207, line 1 – replace “the majority (>60%) is” with “the majority (>60%) are” done

5) p. 1207, line 7 – replace “(85%) of points has” with “(85%) of points have” C715
6) p. 1207, line 25 – inventory is not available (10th June 2011) website is under construction. Clicking on the present link, the user is redirected to a temporary server

Interactive comment on The Cryosphere Discuss., 5, 1201, 2011.
Fig. 1. complete caption is in the reply
Fig. 2. complete caption is in the reply