

Interactive comment on “Dedradation of buried ice and permafrost in the Veleta Cirque (Sierra Nevada, Spain) from 2006–2013” by A. Gómez-Ortiz et al.

PhD Díaz del Olmo (Referee)

delolmo@us.es

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-I'm grateful to the author's comment but I recognize that my review is not intended to discuss about the origin of the glacier ice in the Veleta cirque. Nevertheless, because of in the paper the “buried ice” is linked to LIA in three times (in the abstract, introduction and conclusion), by their third reply I assume that authors acknowledge that they do not know if the buried ice is or is not from LIA. Accordingly, and as I suggested, I understand you will modify the texts and I hope to read them shortly.

-Regarding 14 May 2014 authors' comment on page 1053 (line 18-20) say: “In other ranges in the Mediterranean Alpine fringe, such as broad sections of the Alps, this

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positive thermal inertia recorded in recent decades has resulted in increased rates of movement of the rock glaciers, even leading to collapses and landslides in their detritus structure (Ikeda et al., 2003; Roer et al., 2005; Kääb et al., 2007; Delaloye et al., 2010)”. According this, I say: 1. Pluviometric data for the last years in the Alps Mountains talk about a later regimen (July-September). This may explain internal movements in the rock glaciers (collapses and landslides) for a higher humidity (falls, solifluction and geli-solifluction). 2. As Francou (1993) in the Alps Mountains the glacial inertia of the last half-century is irregular in the following sense: negative evolution since 1942 to 1950; stable, since 1950 to 1965; positive since 1965 to 1985, with a rise in this trend from 1977 (p. 111). Francou, B. 1993 “Hautes montagnes. Passion d'explorations”, Masson, Paris, 202 pages. Then, I would know your opinion about how could be integrated your explanation “positive thermal inertia recorded in recent decades (page 1053, line 20)” with my previous comments (points 1 and 2).

-Regarding my comment (14 May 2014) about “Dedradation” in the paper's title: I don't know yet whether the authors were wrong (it should be “Degradation”) or are introducing a new concept-term (“Dedradation”).

Interactive comment on Solid Earth Discuss., 6, 1037, 2014.