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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.

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We acknowledge the referee 1 for his valuable comments on the manuscript.

Regarding specific questions:

- Title. We have serious concerns about adding to the title the idea of "Little Ice Age", since it is not clear that the ice existing during the LIA did not accumulate above previous ice masses existing during the Medieval Warm Period. In this sense, the texts written during the Muslim occupation of southern Iberia during the XII and XIII centuires showed evidence of the presence of glacier spots in the highest northern cirques (Oliva et al., 2012). We prefer to leave it like that, with no chronological reference to

the origin of the ice, because it is not clear.

-Page 1042, line 7: Festuca pseudoeskia and is an endemic species of Sierra Nevada. So, should not be included with the examples of signiïĭňĄcant endemic species?. Ok, true.

-Page 1053: -Line 4-8: In relation to the collapse and subsidence phenomena described in the text, to discuss the rock glacier movement with the clasts dynamics in the debris accumulation of Veleta cirque (see Serrano et al., Rock glacier dynamics in marginal periglacial environments (page 1.312) [Earth surface processes and landforms, 35: 1.302-1.314, 2.010]). Ok, we have added this reference to the discussion.

-Line 19-20: Attention!. In the Alps Mountains the pluviometric regimen (rain and snow) is later (July-September) than in the Southern Mediterranean, therefore the clasts soliïĭňĆuxion is produced during a longer time We don't understand this comment about precipitation and solifluction when discussing about the rock glacier dynamics in Sierra Nevada. About solifluction processes in Sierra Nevada several papers can be examined (Oliva et al., 2008, 2009, 2014), but the purpose of this paper is to better understand the factors controlling the movement of the rock glacier in the Veleta cirque.

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