

Interactive comment on “Climate warming and vegetation response at the end of Heinrich event 1 (16 700–16 000 cal yr BP) in Europe south of the Alps” by S. Samartin et al.

S. Samartin et al.

stephanie.samartin@ips.unibe.ch

Received and published: 31 October 2012

Remark 1: In the section Introduction, you should made the text more precise by adding (1) the radiocarbon age of the onset of the Bølling warming (see the beginning of the first paragraph : ‘... about 1.5 millennia prior to the onset of the Bølling warming radiocarbon dated to XXXX yr BP (Vescovi et al. 2007)’), and (2) the age of the onset of the Lateglacial Interstadial in the Greenland ice core (see second paragraph : ‘... in icecore records from Greenland where the onset of the Interglacial Interstadial is dated to 14650 yr BP (Svensson et al. 2008)’). Thus, precise indications about the general context of your paper are presented to the reader as early as the beginning of

C2119

the paper.

Response 1: Many thanks Michel for your very valuable suggestions. In section 1 “Introduction” the age of the onset of the Bølling/Allerød in the Greenland ice core has been added as proposed.

Remark 2: In section 3.5 ‘Evolution of the inferred temperatures’: in the first paragraph, the Younger Dryas and the early Holocene correspond to zones ORE-4 and ORE-5 respectively (instead of ORE-2 and ORE-1 in your text). Please, correct the text accordingly

Response 2: In section 3.5 “Evaluation of the inferred temperatures” in line 8 the sentence has been changed accordingly.

Remark 3: Figure 2: please, add a sediment profile along the depth scale.

Response 3: We have added a lithological description to the depth scale in the age-depth model (see Figure 2).

Remark 4: Figure 4: in the chronological scale, the strokes to mark millennia should be longer. The same for Figures 5 and 7.

Response 4: The strokes in figure 4, 5 and 7 have been extended.

Remark 5: Figure 5: the indications of units in c) and d) are too small. Please, homogenize with units of a) and b)

Response 5: Figures 5 c and d have been amplified and homogenized with figures 5 a and b. Remark 6: Figure 6: you should add thin vertical lines to mark millennia and made the comparisons between records easier.

Response 6: Vertical lines have been added to figure 6 to simplify the comparison between different zones and different records.