

Comments to the Author:

The work is an excellent contribution to the special volume. I have very few comments. Mostly technical, but some to clarify the text.

We have made the suggested modifications to the text, see our responses below and the attached text with the changes highlighted.

Line 187: in the special issue Cartier et al. 2018 indicate a possible different climate reconstruction. Consider to revise this point.

We have modified the text considering the new record of Cartier et al. (2019). The text now reads:

"Apart from the SW Europe, the Balkans and the Carpathian Mts., high precipitation at 4.2 ka BP in Europe was also registered in a lake at the foothills of the Alps (Cartier et al., 2019) and in Gotland, the Baltic Sea (Muschitielo et al., 2013).

In the Alps, high flooding activity at 4.2 ka BP was linked to increased autumn precipitation (Cartier et al., 2019), while in the Baltic, high winter precipitation is consistent with strong easterly winds picking-up local moisture form the Baltic Sea (Muschitielo et al., 2013, as well as the discussion in 3.1 above)."

Lines 197-207: note that clear aridity indicated by pollen and speleothem records from central Mediterranean are not coherent with NAO-.

We have amended the text, it reads:

"Proxy-based reconstructions of the NAO index (Olsen et al., 2012) indicate a brief negative mode at 4.2 ka cal BP, but contradictory evidence from speleothem and pollen data from the Central Mediterranean region (e.g., Bini et al. (2018) and references therein) suggest that a combination of different mechanisms (including NAO- conditions) could have been responsible for the winter climatic conditions at 4.2 ka BP in Europe."

Some corrections are necessary for Table 1

8: in their manuscript Zanchetta et al. 2012 consider the indication of 4.2 event (even if slightly younger) as drier for a spike with higher delta¹⁸O-values. Consider this also in the text.

The text has been modified as suggested. It now reads:

"A Black Sea source for the moisture leading to high precipitation in the Carpathian Mountains is consistent with the information of prevailing northeasterly winds at 4.2 ka BP (see section 3.1. above), but it would not fully explain the possibly wet conditions on the Adriatic Coast at 4.3 ka cal BP (Fig. 1b, Zanchetta et al., 2012), where high winter precipitation is the result of moisture originating in the Adriatic Sea (Ulbrich et al., 2012). **We note however, that the Adriatic coast could also have been dry at 4.2 ka BP, as suggested by a spike in the carbonate δ¹⁸O record of Shkodra Lake (Zanchetta et al., 2012).**"

10 Buca della (not dela) Renella: high values drier conditions

Done.

12 Grotte de Piste: in the list you wrote high values = dry. It should be lower values = wetter, as correctly reported within the text.

Corrected.

After these small corrections the manuscript can be accepted.

My compliments to the authors!

Thank you.