

We are grateful to the anonymous referee 3 for suggestions and critics on our paper. As asked by editor, and following yours and other two referees' suggestions, we will submit in a few days a revised version of the manuscript.

The main points arisen from your review of our manuscript are discussed below.

Referee's comments are light-blue shaded

You should not only show an all-in-one figure of tree-ring series but the RCS curve used and the sample-depth distribution for it.

In the revised version of the manuscript we will add a more detailed description of the standardisation technique. A figure representing the RCS curve and sample depth distribution will be included.

You use the HISTALP temperature data set for the calibration of the tree-ring data.

However, it becomes not clear from the paper if you are aware of the discussions concerning the early part of the HISTALP data set (e.g., Frank et al., 2007; Böhm et al., 2010) and which version of the HISTALP data set was used. Moreover, the usage of the High-Alps HISTALP data set is problematic, because it is based on the record of only a single station for the period 1818 to 1863.

We are aware of problems related to the homogeneity of the HISTALP dataset, we chosen to use the gridded HISTALP dataset because of the shortness and poor quality of high-elevation climate records available from meteorological stations located in our study area.

We have used the latest release of HISTALP dataset at now available on the HISTALP website. In order to avoid problems related to the High-elevation dataset, we have decided to further check the reconstruction using the Low-elevation temperature data. The results will be discussed in detail in the revised manuscript.

Your reconstruction shows much less variability than the instrumental data. That could be a problem of the transfer method applied: regression. You should test an alternative transfer method: scaling.

Following your suggestions, in order to avoid loss of amplitude due to regression error, we have performed a new reconstruction applying scaling instead that regression as transfer method. The resulting reconstruction shows a better performance in following short term fluctuations and the variability of the actual data. We will discuss the new results in detail in the revised manuscript.

Detailed comparison of the established reconstruction with other tree-ring based reconstruction is missed, e.g. Büntgen et al., 2006; Büntgen et al., 2011, Trachsel et al., 2012.

In the revised version of the manuscript detailed comparisons with other regional temperature reconstructions are included. The final reconstruction reveals good correlation values with recent reconstructions of summer temperature for the Alpine region and Central Europe (Büntgen et al., 2006; Büntgen et al., 2011, Trachsel et al., 2012).