

## ***Interactive comment on “Tree-ring reconstruction of seasonal mean minimum temperature at Mt. Yaoshan, China, since 1873 and its relevance to 20th-century warming” by Y. Liu et al.***

**Anonymous Referee #2**

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The paper is interesting and worth to be published in CP. The authors reconstructed mean minimum temperature from the previous December to the current June from the beginning of 1873 AD, which was the first one for the region and also the general focus is more often the reconstruction of summer temperatures. However, I also agree with Paul Krusic that the Ed Cook Paper and the PAGES 2k Consortium paper is missing in the introduction, although these are summer reconstructions, but should be mentioned here. In general, the paper is easy to follow and statistics and analysis well described.

General: English in the abstract might be checked, but afterwards it seems to be fine. (the Central Planes). The current knowledge. . . it seems as the authors deleted several -the- and -are, is- to fit a certain number of words!

C430

Should be it in general” the central planes”

The authors start a sentence often with “to + verb”. E.g. To reconstruct; to determine I learned preferably another sentence order and would suggest changing the order from time to time.

The letters of the figures are often cut off at the lower part. Please change the spacing that all the letters become visible

Detailed comments:

Line 10 By using tree rings, series of temperature (Gou et al., 2008; Liang et al., 2008; Liu et al., 2009a, b, 2013; Cai et al., 2010, 2013; Bao et al., 2012; Li et al., 2013; Zhang et al., 2013) have been elucidated in China → rewrite Line22 page 862 recovered → maybe better extracted or taken Line 12 page 863” Departures” I would suggest to replace the word Combine Fig 6-7 if possible Fig 10 I do not see a dashed line here and again the letters are cut off First part of the discussion:

Page 869 Line 5 frost damage instead of cold damage?! Following part: “On the other hand, relatively higher minimum temperature in spring may result in increasing soil water and extending growing season, which would produce a wide ring. Why because soils are less frozen and can contain more water? Usually higher temperatures should result in less water due to higher evaporation? Or do I miss a point here. And also rephrase: an extended growing season due to earlier. . .

Page 869 Line 17-18: “The values of high and low Tmin\_DJ in the reconstruction were 17 and 21,” maybe rephrase “ e.g. 17 and 21 temperature values were below or above these threshold. . .

Page 869 line 28 increased 870 line 21 “the conclusions are supported by the significant correlation between the Tmin\_DJ in the Yaoshan region and “other times of the year??” Seasonal time periods? Fig 10 Maybe you can add some more information to the figure caption that it becomes clear that the numbers are the global cycles; a

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