**Climate
of the Past**

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Discussions

Interactive comment on "Temperature changes derived from phenological and natural evidences in South Central China from 1850 to 2008" *by* J. Zheng et al.

J. Zheng et al.

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Anonymous Referee #3

1) On page 4079, the authors mentioned ": : :Although these series have become important data to illustrate regional temperature changes in China in the last century(Tang et al. 2009), several flaws remain in the data: : :" What are the flaws? The authors should at least explain the flaws by one or two sentences.

We agree and added, please see line 39-46.

2) Since this work applied multi-types of proxies, and the authors also believe that the

new reconstructed temperature anomalies have lower uncertainties, it would be helpful if the authors make a detailed comparison between the new reconstructed time series and the time series reconstructed by (Wang et al., 1998).

We agree, and the text for comparison was added from Line 324-331 in the last paragraph of result and discussion section

3) On page 4086, "our annual temperature series has a higher explaining variance(more than 56%) on the temperature observation" How is the explaining variance 56%calculated? It will be helpful if the authors show a figure here, or explain by some sentences on the explaining variance.

We agree. The explain variance was calculated by the ratio between observed temperature and predicted temperature. And the figure has been added in Figure 3.

4) On page 4086 and 4087, the authors claim that the maximum error is only 0.35oC. How did the error bar calculated?

It is 95% confidence level, i.e. 2-times standard error of prediction. which has been added from line 189 to 191.

Interactive comment on Clim. Past Discuss., 11, 4077, 2015.