

## **Interactive comment on “Significant recent warming over the northern Tibetan Plateau from ice core $\delta^{18}\text{O}$ records” by W. An et al.**

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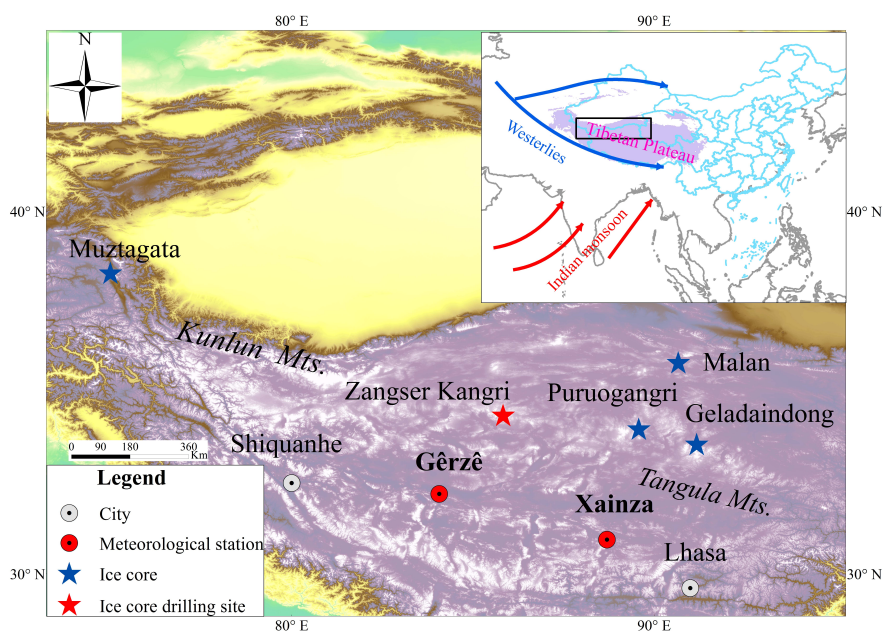
The revised manuscript and supplementary materials for the paper “Significant recent warming over the northern Tibetan Plateau from ice core  $\delta^{18}\text{O}$  records” (CP-2015-69) by W. An et al. are in the attached zip file.

Please also note the supplement to this comment:

<http://www.clim-past-discuss.net/11/C2255/2015/cpd-11-C2255-2015-supplement.zip>

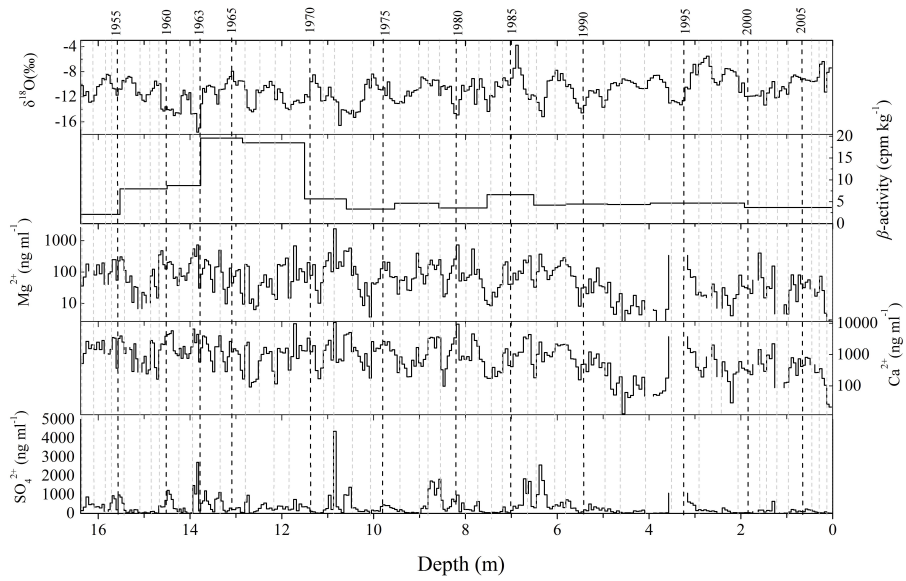
Interactive comment on Clim. Past Discuss., 11, 2701, 2015.

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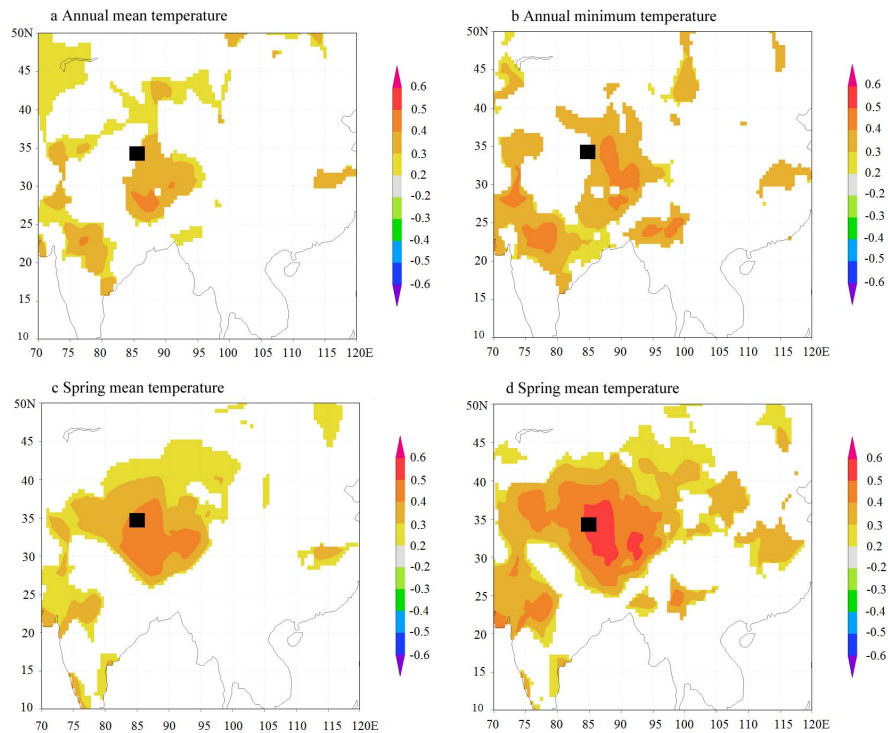
**Fig. 1.** Location of the ice core drilling site of ZK, two nearby meteorological station sites, and the location of other ice cores described in the text: Muztagata (Tian et al., 2006), Puruogangri (Yao et al

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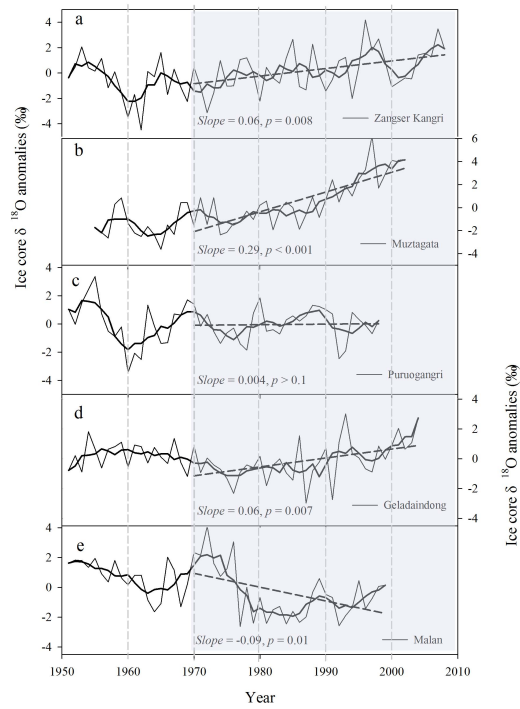
**Fig. 2.** Variations of  $\delta^{18}\text{O}$  in the ZK ice core and other data used for dating, including beta activity and major ion concentrations. We calculated the logarithm to the base 10 for the concentrations of the  $\text{Ca}^{2+}$

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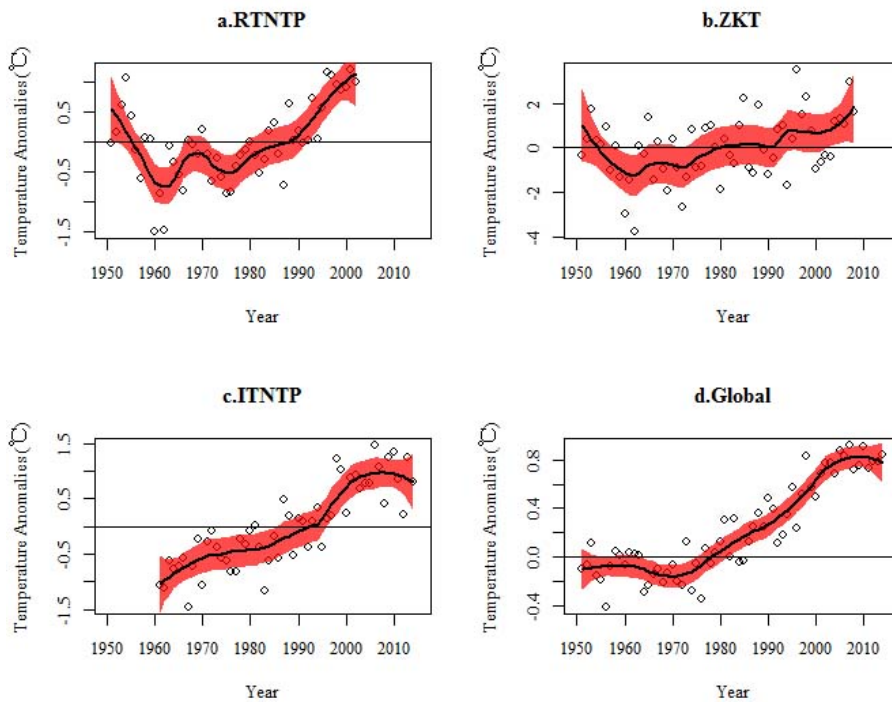
**Fig. 3.** Spatial correlations of ZK ice core  $\delta^{18}\text{O}$  record with CRU-gridded (Mitchell and Jones, 2005) annual mean temperature (a), annual minimum temperature (b), spring mean temperature (c), and spring minimum (d)

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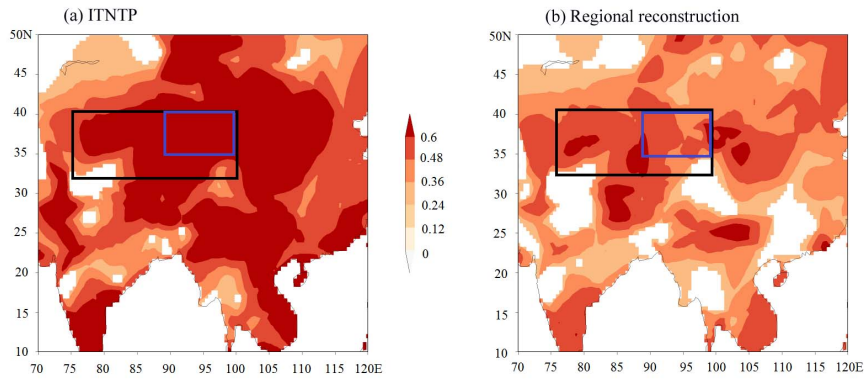
**Fig. 4.** Comparison of the anomalies of  $\delta^{18}\text{O}$  records in the ZK ice core (a) with  $\delta^{18}\text{O}$  records from Muztagata (b), Puruogangri (c), Geladaindong (d) and Malan ice cores (e). Thin lines represent annual values,

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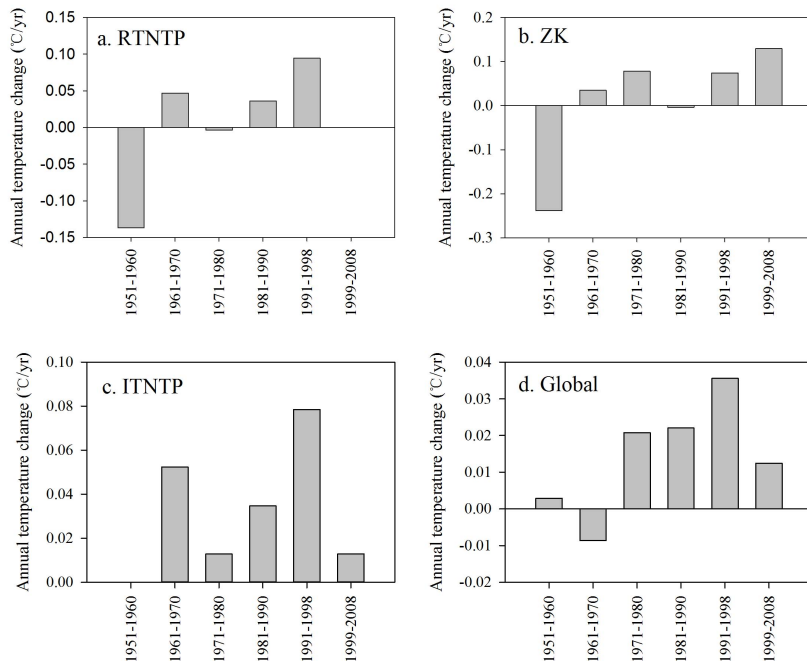
**Fig. 5.** The reconstructed regional temperature series for northern Tibetan Plateau (RTNTP) from ZK, Muztagata, Puruogangri and Geladaindong ice core  $\delta^{18}\text{O}$  records (a), the reconstructed temperature series from

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**Fig. 6.** Spatial correlations ( $r$  values in color,  $p < 0.01$ ) between the gridded annual mean temperature data (the CRU 4 temperature time series,  $0.5^\circ \times 0.5^\circ$  resolution, Mitchell and Jones, 2005) and the instru

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**Fig. 7.** Decadal mean annual change rates for the regional temperature reconstruction series for northern TP (RTNTP) (a), the temperature reconstruction from ZK ice core  $\delta^{18}O$  record (ZK) (b), the instrumental

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