

SPECIFIC, MINOR COMMENTS:

Thank you for your constructive critique and comments!

1. Introduction p. 2611, line 29: correct spelling: KÅS' szeg

*I corrected it in the new version to
Kőszeg*

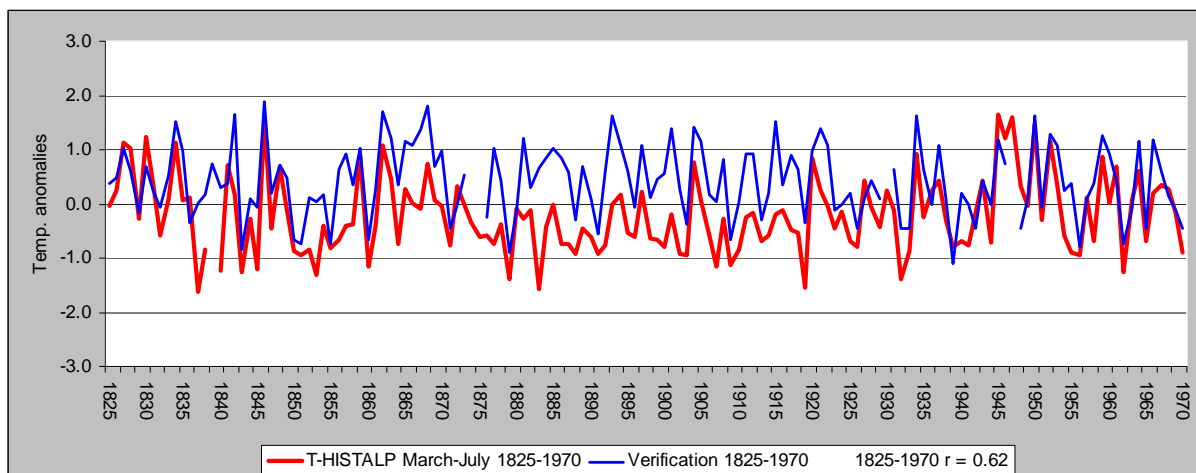
3.3 Homogenization of data type p. 2623, lines 9-14: Does this mean that no other, published information (e.g. any published analysis or observations of professional network, agricultural stations/research institute etc.) is available concerning this questions (differences in slope, grain variety etc.), only e-mail communication?

I added Diepenbrock et al. (2005) to the e-mail quote.
Diepenbrock, W., Elmer, F., Léon, J.: Ackerbau, Pflanzenbau und Pflanzenzüchtung, in: UTB, Verlag Eugen Ulmer, Stuttgart, 2005.

3.5 Calibration – verification p. 2624, line 17: I think it would be useful to replace the 'Wikipedia' entry with some controlled literature reference.

I added Diepenbrock et al. (1999) to the wikipedia quote.
Diepenbrock, W., Fischbeck, G., Heyland, K-U., Knauer, N.: Spezieller Pflanzenbau, in: UTB, Verlag Eugen Ulmer, Stuttgart, 1999.

General comment to 3.5 As for calibration period, the authors chose 1774-1824, and 1920-1970 as verification period. I find it as a very good and reasonable idea. However, if such a long overlapping period (with instrumental measurements) is available, it would be interesting to use the opportunity to test with the full period as well, i.e. calibration: 1774-1872; verification: 1873-1970 (also taking Fig 7a-b into consideration).



I don't see the advantage of a longer calibration period than 50 years. 50 year of calibration by the way seems to be something like an international standard and it reproduces the HISTALP temperatures from 1825-1970 quite adequately (see figure) I do not really want to add this figure as there are already many other.

5. Discussion p. 2628. lines 26-27; p. 2629. line 1: Do you mean 'even though' instead of 'even tough'?

Yes, I corrected it in the new version to “even though”

The astonishingly good congruities between the presented reconstruction and the Hungarian one might be caused by the fact that in both cases the composites react on July temperatures on the first place, and then June and May (and then on March in case of the Wetter-Pfister reconstruction). Despite the relatively short distance, congruities are relatively weak between the MožnĀĵ et al. (2011) cerealbased Czech and the 'mixed' KĀS' szeg (Hungarian) reconstruction, too. For this latter comparison and short reasoning, see: Kiss et al. 2011. It is, I think, due to the fact that the MožnĀĵ et al. (2011) temperature reconstruction refers to the month MAMJ and thus, no July is included.

Thank you for your explanation of the good congruities between our reconstructions. I will enclose it in the new version (see text).

“Kiss et al. (2010) furthermore explain the quite weak congruities between Hungarian and Czech reconstructions with the fact that Možny et al. (2010) only include MAMJ temperatures, whereas Kiss et al. (2010) – like our reconstruction - additionally includes July, which is according to the stepwise linear regressions in both cases the most influential month.”

Tables and Figures are informative, complementing well the textual part of the paper. Minor comment: I suggest to check through the references concerning publishing dates (e.g. MožnĀĵ et al. 2010 or 2011, Maurer et al. 2009 or 2010, DobrovolnĀĵ et al. 2010).

It is Možny 2010; Maurer 2009 and Dobrovolny et al. 2010. The Dobrovolny (2010) paper is now in the references and needs to be corrected in table 3 (Dobrovolny 2010 instead of 2009) (see yellow marked mutations).

Type of series	Origin	Correlation	Authors
Grape harvest (1480-2006)	Swiss Plateau	r = 0.67 p = 0.01	Meier et al., 2007
Grape harvest (1458-1705)	Basel; books of expenditures of Basel hospital, 1458-1705	r = -0.65 p = 0.01	Wetter et al., in preparation
Grape harvest (1370-2003)	France (Burgundy)	r = 0.64 p = 0.01	Chuine et al., 2004
Grape harvest (1523-1879)	Austria (Vienna)	r = 0.47 p = 0.01	Maurer et al., 2009
T-Index by Glaser (1500-1760)	Germany	r = 0.47 p = 0.01	Dobrovolny et al, 2010
GHD, WHGD (1618-2010)	Western Hungary (Kőszeg),	r = 0.47 p = 0.01	Kiss et al., 2010
Grain harvest (1501-2008)	Czech Republic (north western to whole territory)	r = 0.36 p = 0.01	Možny et al., submitted 2010