Corrigendum: Continental-scale temperature variability during the past two millennia

PAGES 2k Consortium

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Since the original publication of this Progress Article, errors have been identified in the data set used for the Arctic temperature reconstruction. Accordingly, the following corrections have been made to the data set (see updated Supplementary Databases): (1) three records¹⁻³ have been removed, as well as sections of five records⁴⁻⁸ that did not meet the authors' criteria for sensitivity to temperature; (2) the signs of the proxy temperature relation for two records^{9,10} have been corrected; and (3) a 50-year offset in the ages of one record¹¹ has been corrected. Following these corrections, the period from 1941–1970 emerges as the second warmest 30-year period in the Arctic record, and 1971–2000 the third warmest, rather than the first and second warmest as reported in the original version. The ranked order of the best estimate of temperature indicates that the warmest 30-year period is centred on AD 395. No major conclusions have been affected by the corrections made to the Arctic data set including the conclusion that, during the period AD 1971–2000, the area-weighted average reconstructed temperature among regions was higher than any other time in nearly 1,400 years.

Table 1 has been revised to reflect the updated values of the number of lake sediments (19, not 22) and the calibration r value (0.55, not 0.56). Figures 2 and 4b have been updated and replaced (also shown below) and the above corrections have been made in all online versions of the Progress Article. New versions of Supplementary Databases S1 and S2 have been uploaded online to reflect the updated version of the Arctic data set (v.1.1.1). A comparison of the original and revised Arctic data sets is available¹². The Arctic data set, the reconstruction and its revision history are available at http://ncdc.noaa.gov/paleo/study/16973. The PAGES 2k data sets and any future updates are available from http://ncdc.noaa.gov/paleo/study/12621.

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