

Revisiting East Asia temperature and its associated uncertainty over the last 2k from reconstructions and climate simulations

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A review of existing published temperature reconstructions covering totally or partly the last two millennia over East Asia is presented in this work. The latter provides a suitable frame to discuss some factors in the calibration process that to a large extent might be affected by subjectivity, and that produce a noticeable impact on the final temperature estimations. Examples of these aspects are the nature and number of proxies, their low-to-high-frequency variability ratios or their specific seasonal target. Additionally a new estimate of temperatures for the last two thousand years over East Asia is proposed and placed in the discussion context allowed by the revision of proxy-based temperature reconstructions over the region. A pool of state-of-the-art climate model simulations, some of them following the PMIP3 protocol, help evaluating the impact of the relevant factors mentioned above on the decision-making procedure to calibrate and produce final reconstructed temperature estimates.