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## Corrigendum

## Corrigendum to “Late Holocene climate anomaly concurrent with fire activity and ecosystem shifts in the eastern Australian Highlands” [Sci. Total Environ. 802 (2021)149542]



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The authors regret that the printed version of the above article contained a transcription error in the  $m/z$  1048 peak area column for the branched GDGTs (Table S2). This error affected the GDGT-inferred summer air temperature presented in Figs. 3, 4 and 5, and some of the calibrations presented Fig. S2. The GDGT-inferred temperatures have been recalculated and are presented below. The authors would like to apologise for any inconvenience caused.

The corrected GDGT-inferred summer air temperature (Fig. 3) is largely within the uncertainty of the temperature calibration (2.0 °C RMSE, Pearson et al., 2011). While the pattern of the temperature variations over the last 3500 years remains unchanged, the GDGT-inferred summer air temperature is between 0.4 and 3.3 degrees lower than was originally presented. The interpretations of Thomas et al. (2022) are unaffected, with reconstructed changes in temperature at Club Lake still associated with several other palaeoenvironmental proxies.

Section 4.1 “Our reconstruction of MSAT varies between about 13 and 16 °C, and appears to display a long-term increase in temperature averaging ~0.1 °C per century (Fig. 3).” should be “Our reconstruction of MSAT varies between about 10 and 15 °C, and appears to display a long-term increase in temperature averaging ~0.13 °C per century (Fig. 3).”

Section 4.2 “The reconstructed temperature of  $16.2 \pm 1$  °C (which is higher than the contemporary Thredbo AWS mean summer temperature) must therefore be treated with caution.” should be “The reconstructed temperature of  $15.7 \pm 1$  °C (which is higher than the contemporary Thredbo AWS mean summer temperature) must therefore be treated with caution.”

The updated figures and Supplementary information table and figure related to this corrigendum are presented below.

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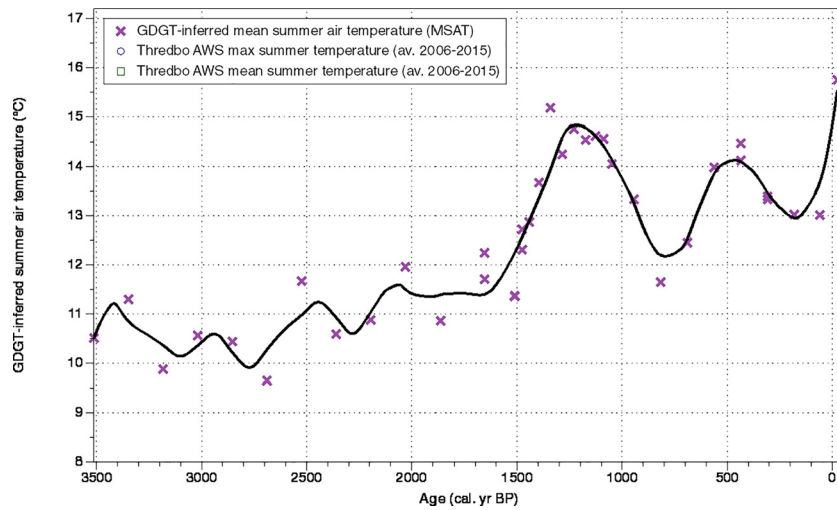


Fig. 3. GDGT-inferred mean summer air temperature calibration calculated from Pearson et al. (2011). Black line shows loess smoothed fit, purple envelope shows 1σ uncertainty. Also plotted is the Thredbo AWS mean (green) and maximum (blue) summer air temperature (averaged 2006–2015).

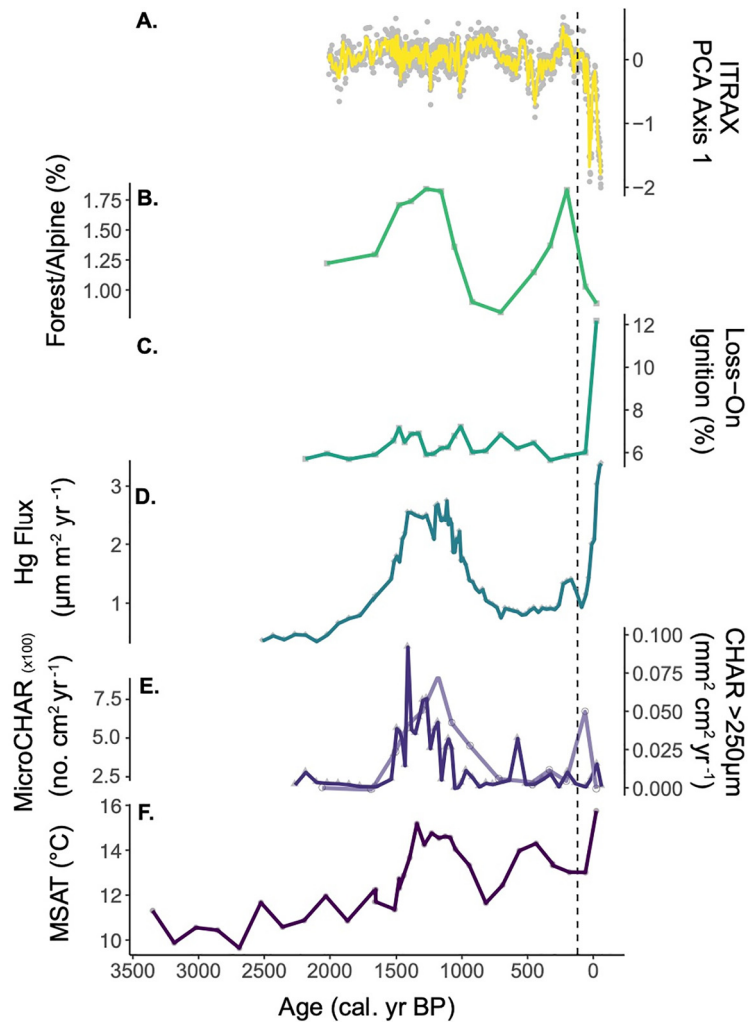
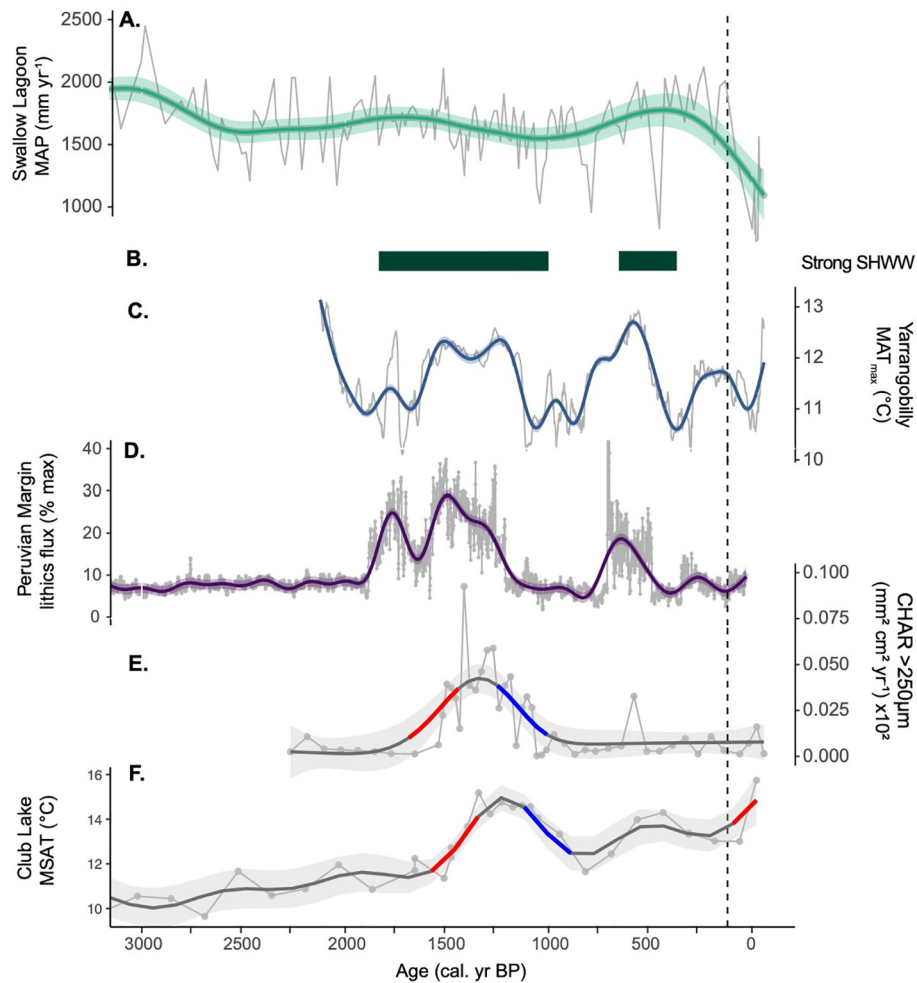


Fig. 4. Summary environmental proxies from Club Lake over the last 3500 years. A. Principal Component Axis 1 from ITRAX geochemical analysis; B. woodland:alpine vegetation ratio from pollen analysis; C. Loss-on-ignition (% of dry weight); D. mercury flux; E. total charcoal accumulation rate (dark purple CHAR>250, light purple dotted MicroCHAR<125); F. Mean Summer Air Temperature reconstruction. Dashed vertical line shows timing of the first European cattle grazing in the Australian Alps (1830s).



**Fig. 5.** Summary diagram of key sites across the Southern Hemisphere. A. Swallow Lagoon Mean Annual Precipitation (MAP; Barr et al., 2019); B. Reconstructed paleotemperature (T-max) from the Yarrangobilly Caves (McGowan et al., 2018; McGowan et al., 2019); C. Periods of stronger southern hemisphere westerly winds (SHWW) as reconstructed from the New Zealand sub-Antarctics (Turney et al., 2016); D. lithic flux rate (% maximum) from the Peruvian Margin (Rein et al., 2005); E. Charcoal accumulation rate (CHAR>250) from Club Lake (this study); F. Mean Summer Air temperature (°C) from Club Lake (this study). GAM (generalised additive model) splines are fitted to MSAT and CHAR data; significant positive trends are highlighted in red and significant negative trends in blue, determined from the first derivatives of the GAM splines. Dashed vertical line shows timing of the first European cattle grazing in the Australian Alps (1830s).

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.scitotenv.2021.152367>.

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