CORRIGENDUM

Warming of the Antarctic ice-sheet surface since the 1957 International Geophysical Year

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In this Letter, we reported trends on reconstructed temperature histories for different areas of the Antarctic continent. The confidence levels on the trends, as given in the text, did not take into account the reduced degrees of freedom in the time series due to autocorrelation. We report in Table 1 the corrected values, based on a two-tailed *t*-test, with the number of degrees of freedom adjusted for autocorrelation, using $N_{\text{effective}} = N(1 - r)/(1 + r)$, in which N is the sample size and r is the lag-1 autocorrelation coefficient of the residuals of the detrended time series. The median of r is 0.27, resulting in a reduction in the degrees of freedom from $N = 600$ to $N_{\text{effective}} = 345$ for the monthly time series.

We also include results of a further calculation that takes into account both the variance and the uncertainty in the reconstructed temperatures. We performed Monte-Carlo simulations of the reconstructed temperatures using a Gaussian distribution with variance equal to the unresolved variance from the split calibration/verification tests described in the paper. Confidence bounds were obtained by detrending each simulation and obtaining the lag-1 autocorrelation coefficient and variance of the residuals; a random realization of Gaussian noise having the same lag-1 autocorrelation coefficient and variance was then added to the trend, and a new trend was calculated. The 2.5th and 97.5th percentiles of the 10,000 simulated trends give the 95% confidence bounds. For the case of zero unresolved variance, this calculation converges on the same value as the two-tailed *t*-test, above. The 95% confidence minimum trend value is given by the 5th percentile values of the simulated trends, last row of Table 1.

The corrected confidence levels do not change the assessed significance of trends, nor any of the primary conclusions of the paper. We also note that there is a typographical error in Supplementary Table 1: the correct location of Automatic Weather Station 'Harry' is 83.0° S, 238.6° E. The position of this station on the maps in the paper is correct.

Table 1 | Corrected confidence levels on mean decadal temperature trends

	West Antarctica	East Antarctica	Antarctic Peninsula	All Antarctica
Trend (°C per decade)	0.18	0.10	0.11	0.12
95% CI of trend in mean reconstruction	±0.09	±0.10	±0.05	±0.10
95% CI of trend, accounting for unresolved variance in mean reconstruction	±0.12	±0.13	±0.07	±0.12
Minimum trend (95% confidence, accounting for unresolved variance in mean reconstruction)	0.08	−0.01	0.05	0.02

The confidence levels are shown over the period 1957–2006 for the reported surface temperatures based on satellite data. CI, confidence interval.