



Corrigendum to “Modelling present-day basal melt rates for Antarctic ice shelves using a parametrization of buoyant meltwater plumes” published in The Cryosphere, 12, 49–70, 2018

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In the Appendix of the paper describing the details of the basal melt parametrization, we show that the dimensionless melt rate $\hat{M}(\hat{X})$ is given by a polynomial function (Eq. A13):

$$\hat{M}(\hat{X}) = \sum_{k=0}^{11} p_k \hat{X}^k.$$

Unfortunately, the coefficients p_k given in Table A1 were accidentally rounded to four significant digits. This minor mistake has big consequences for the values of $\hat{M}(\hat{X})$, as the high degree of the polynomial makes it very sensitive to the values of p_k . The correct dimensionless melt-rate curve (shown in Fig. 2 in the paper) can only be obtained with the full values given in the corrected table below.

Table A1. Coefficients for the polynomial fit of the dimensionless melt curve $\hat{M}(\hat{X})$.

p_{11}	$6.387953795485420 \times 10^4$
p_{10}	$-3.520598035764990 \times 10^5$
p_9	$8.466870335320488 \times 10^5$
p_8	$-1.166290429178556 \times 10^6$
p_7	$1.015475347943186 \times 10^6$
p_6	$-5.820015295669482 \times 10^5$
p_5	$2.218596970948727 \times 10^5$
p_4	$-5.563863123811898 \times 10^4$
p_3	$8.927093637594877 \times 10^3$
p_2	$-8.951812433987858 \times 10^2$
p_1	$5.527656234709359 \times 10^1$
p_0	$1.371330075095435 \times 10^{-1}$

We strongly recommend all colleagues that would like to implement the model or reproduce the results to use the updated values and apologize for any inconvenience caused by this mistake.