**Article:**
Millar, RJ, Fuglestvedt, JS, Friedlingstein, P et al. (7 more authors) (2018) Author Correction: Emission budgets and pathways consistent with limiting warming to 1.5 °C. Nature Geoscience, 11. pp. 454-455. ISSN 1752-0894

https://doi.org/10.1038/s41561-018-0153-1

Corrigendum – Millar et al. (http://dx.doi.org/10.1038/ngeo3031)

Due to a coding error, a subset of RCP4.5 and RCP8.5 simulations were included in the sets used for RCP2.6 and RCP6, respectively, leading to an incorrect depiction of the data of the latter two sets in both Figure 1b and Table 2. This coding error has now been corrected.

Below, the graphic and quantitative changes in the corrected Figure 1b and Table 2 are contrasted with the originally published visual items (see Figure 1 and Table 1 below).

This error does not affect the core conclusions of the paper, but some values and statements require updating.

Table 2 below lists all statements and their corrections.

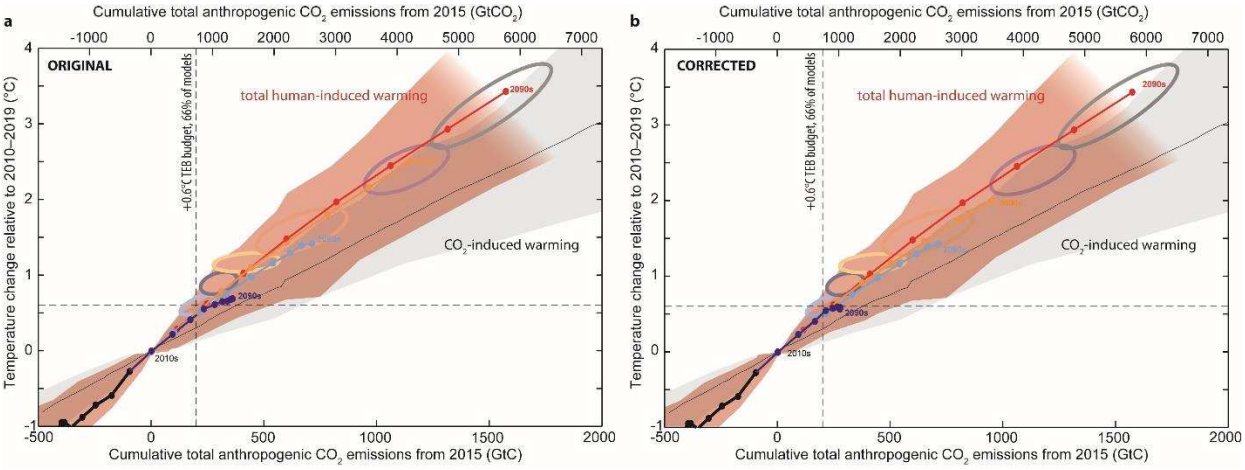


**Figure 1 | Visual comparison correction.** Original (panel a) and corrected (panel b) version of Figure 1b in the main manuscript.

**Table 1 | Comparison of original Table 2 and correct values.** Future cumulative budgets (GtC) from January 2015 for percentiles of the distribution of RCP2.6 simulations of CMIP5 models and various levels of future warming above the modelled 2010–2019 average.

**ORIGINAL**

| Warming above | Percentiles of CMIP5 models | | | | |
|---|---|---|---|---|---|
| **2010-2019 average (°C)** | **90%** | **66%** | **50%** | **33%** | **10%** |
| **0.3** | 89 | 106 | 118 | 133 | 245 |
| **0.4** | 106 | 152 | 173 | 193 | NA |
| **0.5** | 126 | 191 | 214 | 258 | NA |
| **0.6** | 143 | 242 | 303 | NA | NA |
| **0.7** | 170 | 291 | NA | NA | NA |
| **0.8** | 177 | 372 | NA | NA | NA |
| **0.9** | 277 | NA | NA | NA | NA |
| **1.0** | 468 | NA | NA | NA | NA |
| **1.1** | NA | NA | NA | NA | NA |

**CORRECTED**

| Warming above | Percentiles of CMIP5 models | | | | |
|---|---|---|---|---|---|
| **2010-2019 average (°C)** | **90%** | **66%** | **50%** | **33%** | **10%** |
| **0.3** | 88 | 104 | 123 | 127 | 273 |
| **0.4** | 106 | 152 | 162 | 206 | NA |
| **0.5** | 126 | 171 | 194 | 247 | NA |
| **0.6** | 143 | 196 | 352 | NA | NA |
| **0.7** | 160 | 224 | NA | NA | NA |
| **0.8** | 178 | 280 | NA | NA | NA |
| **0.9** | NA | NA | NA | NA | NA |
| **1.0** | NA | NA | NA | NA | NA |
| **1.1** | NA | NA | NA | NA | NA |

**DIFFERENCE**

| Warming above | Percentiles of CMIP5 models | | | | |
|---|---|---|---|---|---|
| **2010-2019 average (°C)** | **90%** | **66%** | **50%** | **33%** | **10%** |
| **0.3** | -1 | -1 | 5 | -6 | 28 |
| **0.4** | -0 | -0 | -11 | 14 | NA |
| **0.5** | -0 | -20 | -19 | -11 | NA |
| **0.6** | -1 | -46 | 49 | NA | NA |
| **0.7** | -10 | -68 | NA | NA | NA |
| **0.8** | 1 | NA | NA | NA | NA |
| **0.9** | NA | NA | NA | NA | NA |
| **1.0** | NA | NA | NA | NA | NA |
| **1.1** | NA | NA | NA | NA | NA |

**Table 2 | Corrected statements due to this corrigendum.** Sometimes more than only the corrected sentence is provided for context.

| | Original statement | Corrected statement due to corrigendum |
|---|---|---|
| 1 | We show that limiting cumulative post-2015 $CO_2$ emissions to about 200 GtC would limit post-2015 warming to less than 0.6°C in 66% of Earth system model members of the CMIP5 ensemble with no mitigation of other climate drivers, increasing to 240 GtC with ambitious non-$CO_2$ mitigation. | We show that limiting cumulative post-2015 $CO_2$ emissions to about 200 GtC would limit post-2015 warming to less than 0.6°C in 66% of Earth system model members of the CMIP5 ensemble with no mitigation of other climate drivers. |
| 2 | Table 2 shows budgets for thresholds of future warming in the CMIP5 ensemble under an RCP2.6 scenario, a stabilization scenario in which non-$CO_2$ forcing across the rest of the century remains closer to the 2010-2019 average than in the RCP8.5 scenario. This allows more $CO_2$-induced warming for the same total, increasing the median TEB of the CMIP5 distribution for an additional 0.6°C to 303GtC and the 66th percentile to 242GtC. | Table 2 shows budgets for thresholds of future warming in the CMIP5 ensemble under an RCP2.6 scenario, a stabilization scenario in which non-$CO_2$ forcing across the rest of the century remains closer to the 2010-2019 average than in the RCP8.5 scenario. This should allow more $CO_2$-induced warming for the same total. However, due to the smaller subset of available models in the RCP2.6 scenario, it is not possible to identify any robust shifts in the percentiles of the TEB distribution from the RCP8.5 scenario. Restricting the ensemble to those models that completed both RCP8.5 and RCP2.6 simulations, the ensemble mean TEB for 0.6°C warming above the 2010-2019 average is 16GtC larger for the RCP2.6 scenario relative to RCP8.5. |
| 3 | Assuming completely successful adaptive $CO_2$ mitigation to achieve a warming of 1.5°C in 2100 (allowing for mid-century temperature overshoots, assuming non-$CO_2$ forcing following RCP2.6-2017, and imposing no restrictions on the rate of net carbon dioxide removal), the cumulative carbon budget from 2015 to 2100 is unlikely (<33% probability) to be less than 250GtC ($920GtCO_2$), in good agreement with the 242GtC TEB for the 66th percentile of the CMIP5 distribution for 0.6°C warming above the 2010-2019 average in the RCP2.6 scenario (Table 2). | Assuming completely successful adaptive $CO_2$ mitigation to achieve a warming of 1.5°C in 2100 (allowing for mid-century temperature overshoots, assuming non-$CO_2$ forcing following RCP2.6-2017, and imposing no restrictions on the rate of net carbon dioxide removal), the cumulative carbon budget from 2015 to 2100 is unlikely (<33% probability) to be less than 250GtC ($920GtCO_2$), about 25% higher than the 204GtC TEB for the 66th percentile of the CMIP5 distribution for 0.6°C warming above the 2010-2019 average in the RCP8.5 scenario (Table 1). |