

EGUsphere-2025-4899 Response Document (April 2026)

Below is list of the corrections made to the paper in the April 2026 correction.

1) Addressing the lack of inclusion of other SSP Scenarios:

Added “While some models have explored additional scenarios (e.g., SSP1-1.9, SSP4-3.4), relatively few have simulated warming trends under these pathways.” to section 2.1.

Only 8 models in total simulated warming under SSP1-1.9, and only 7 in the SSP4-3.4. This is significantly less than the number required for a robust emergent constraint.

2) Correction of concluding paragraph:

The concluding paragraph now reads:

“It is likely that the 1.5°C warming level as set out by the 2015 Paris agreement will be exceeded within the next 10 years, given the recent warming trend (Cannon (2025)), and the failure to reduce global CO₂ emissions in line with the lower forcing scenarios SSP1-1.9 and SSP1-2.6 (Friedlingstein et al. (2025)). However, our results show that, for both TCR and future warming, the record global warming of 2023 and 2024 does not justify upward-revision of likely ranges. Therefore, the constraints presented here suggest that avoiding 2°C of global warming, although challenging, remains possible.”

This addresses both the ambiguity regarding what I meant by the next decade (as I’ve now put ‘next 10 years’ instead), and the language has been softened (e.g replacing “almost certain” with “likely”).