We thank the editor for noting that our report is a valuable community resource that fits ESSD well, and for the thorough review of our revised paper. Please see our responses below.

1. Changes to the attribution results

In the reply to RC1, the HadGEM3-A update and the dry-day bug fix are described as producing “minor quantitative changes”, mainly in Northwest Iberia. However, the original abstract quoted in your reply to RC2 stated that the observed burned area in the Midwestern Canadian Shield Forests was made “around 61 times more likely” and “46 times greater”. The revised manuscript reports a probability ratio (PR) of 10.64 (0.97 to >100) and an amplification factor (AF) of 8.68. That is roughly a sixfold reduction, and the lower bound of the PR is now below 1.

The central estimates of AF and PR are tail-based metrics and can be sensitive to changes in the evidence incorporated, particularly when attribution fractions are already very high. For this reason, we emphasise uncertainty ranges and likelihood statements throughout the manuscript, as these provide a more robust assessment of the strength of evidence. While the addition of ensemble members and the correction to the dry-day calculation affected the central estimates, they had little impact on the associated uncertainty ranges. This includes the lower bound of the PR confidence interval which was already below 1 for the Midwestern Canadian Shield Forests in the original version and is largely unchanged (0.96 originally, 0.97 in the revised version). Because AF and PR are based on differences in the tails of the factual and counterfactual distributions, relatively modest changes in the underlying distributions can produce comparatively large changes in the central values of these metrics.

Please provide:

- A before-and-after table for all focal regions. It should cover the present-day PR and AF, the dryness-only and fuel-only AFs, the sub-regional values, and the HadGEM3-A FWI PRs. For each, give the median, the 5–95% range and the likelihood.

Table R1: Midwestern Canadian Shield Forests

	Metric	Original	Revised
Burned Area - Mean			
AF Burned Area	5%	1	1.04
	50%	45.84	8.68

	95%	>100	>100
	Likelihood	97	97
AF for Fuel	5%	1.0	0.85
	50%	1.0	1.0
	95%	1.0	1.0
	Likelihood	45	45
AF for Dryness	5%	1.02	0.79
	50%	91.76	7.97
	95%	>100	>100
	Likelihood	98	93
PR	5%	0.96	0.97
	50%	61.41	10.64
	95%	>100	>100
	Likelihood	95	87
Burned Area - Sub-regional extremes			
AF Burned Area	5%	1.16	1.18
	50%	>100	10.55
	95%	>100	>100
	Likelihood	97	97
AF for Fuel	5%	1.00	1.00
	50%	1.00	1.00
	95%	1.00	1.00
	Likelihood	44	45
AF for Dryness	5%	1.00	0.64
	50%	4.67	1.94
	95%	>100	>100
	Likelihood	98	87
PR	5%	1.13	0.48
	50%	>100	36.96
	95%	>100	>100
	Likelihood	96	92

Table R2: Northwestern Iberia

	Metric	Original	Revised
Burned Area			
AF Burned Area	5%	0.98	0.73
	50%	1.25	2.93
	95%	15.08	>100
	Likelihood	88	94
AF for Fuel	5%	1	0.99
	50%	1	1
	95%	1	1
	Likelihood	48	48
AF for Dryness	5%	0.99	0.94
	50%	1.26	2.64
	95%	14.75	>100
	Likelihood	94	93
PR	5%	0.66	0.51
	50%	1.25	4.09
	95%	46.59	>100
	Likelihood	84	91
Burned Area - Sub-regional extremes			
AF Burned Area	5%	0.99	0.93
	50%	1.34	3.11
	95%	13.18	>100
	Likelihood	91	94
AF for Fuel	5%	1	0.94
	50%	1	1
	95%	1	1
	Likelihood	48	48
AF for Dryness	5%	1	0.87
	50%	1.09	1.68
	95%	5	45.83
	Likelihood	96	90
PR	5%	0.66	0.76
	50%	1.35	5.36
	95%	94.74	>100

	Likelihood	84	92

Table R3: Chilean Temperate Forests and Matorral

	Metric	Original	Revised
Burned Area			
AF Burned Area	5%	0.87	1.00
	50%	1.36	2.04
	95%	7.37	11.87
	Likelihood	92	95
% of BA from climate change	5%		
	50%		
	95%		
AF for Fuel	5%	1	0.89
	50%	1	1
	95%	1	1
	Likelihood	46	45
AF for Dryness	5%	1	1.07
	50%	1.35	1.94
	95%	12.93	10.42
	Likelihood	96	98
PR	5%	0.84	0.83
	50%	1.29	2.06
	95%	6.41	26.17
	Likelihood	93	93
Burned Area - Sub-regional extremes			
AF Burned Area	5%	0.96	1.01
	50%	1.2	2.02
	95%	44.13	96.5
	Likelihood	86	97
% of BA from climate change	5%		
	50%		
	95%		
AF for Fuel	5%	1	0.98

	50%	1	1
	95%	1	1
	Likelihood	45	44
AF for Dryness	5%	1	1.00
	50%	1.1	1.41
	95%	>100	44.2
	Likelihood	94	93
PR	5%	0.88	0.91
	50%	1.17	2.02
	95%	16.43	>100
	Likelihood	83	93

- A short description of the bug, including why its effect differs between regions.

Note that dry-day correction only changes the burned-area attribution results, it did not affect any other attributions nor any future projections.

To generate the counterfactuals in the original model/simulation, we used HadGEM3-A simulations with gaps in their time series. When a gap occurred, it artificially set the count of consecutive dry days to zero which was not initially apparent. Using the complete time series from the updated HadGEM ensemble, which became available during the review process, automatically corrected this issue.

This affected both the HadGEM ALL and NAT forcing simulations. Consequently, the delta used to construct the dry-day counterfactual generally had the correct direction – i.e indicating whether dry days increased or decreased - but underestimated the magnitude of change. This explains why regions with long cumulative dry periods, such as Northern Iberia, show a more pronounced effect from the dry day correction. It also accounts for why the overall likelihood remains largely unchanged, as the deltas produce counterfactuals with the correct signal even when the magnitude was muted.

- Confirmation that the projections are unaffected.

Yes, none of the projections used HadGEM3-A time series.

- Confirmation that the archived Zenodo datasets match the published numbers.

Zenodo datasets were updated during review and now match the revised numbers.

- A check of the HadGEM3-A uncertainty ranges. These now appear degenerate, for example 1.96 (1.95–1.96).

The uncertainty ranges for the HadGEM3-A results have decreased slightly due to the addition of extra ensemble members, although we note that the uncertainty ranges have always been small for this analysis due to the large number of ensemble members and the way the model is constrained using observed sea surface temperatures. The methodology and the narrow nature of the 5-95th certainty ranges has been consistent throughout. In the original submission, as probability ratios must be calculated from paired NAT and ALL simulation members, only 146 pairs of members were available for calculation. With the movement to the new FWI calculation scheme via the xclim library allowing for these additional members to be added, small changes to the event value for the FWI from ERA5 reanalysis were also introduced (highlighted below). Small changes in the event value and the addition of 3.5x more members to perform the probability ratio bootstrapping calculation on have contributed to the changes in PRs, but the relative level of uncertainty and likelihood remain unchanged. Likelihood remains calculated as the % of the 10,000 bootstrap replicates that show a probability ratio =>1. These changes have been uploaded to Zenodo.

Original (146 member method):

Region	ERA5 Event Value	Likelihood	Probability Ratio 5th-%ile	Probability Ratio 50th-%ile	Probability Ratio 95th-%ile
Canada	17.9	100	2.01	2.02	2.03
Iberia	43.9	100	1.63	1.63	1.64
Chile	35.2	100	1.76	1.76	1.77

Updated (525 member method):

Region	ERA5 Event Value	Likelihood	Probability Ratio 5th-%ile	Probability Ratio 50th-%ile	Probability Ratio 95th-%ile
Canada	17.0	100	1.95	1.96	1.96
Iberia	44.2	100	1.61	1.61	1.61
Chile	35.1	100	1.65	1.65	1.65

2. Confidence of headline claims

The FWI95 uncertainty ranges include 1 in all three regions:

Canada synthesis: 0.33–44.9
Chile synthesis: 0.63–11.7

Iberia models: 0.14–657

The “~3 times” figure for Iberia is a models-only estimate. The statement “at least 50%” for Chile is not supported. Please give ranges and calibrated likelihood language in the abstract, short summary and conclusions. Please also correct L2869–2870, where the Canada AF and PR are swapped.

We have modified the abstract according to the editor's suggestion, including the full 5-95th percentile uncertainty range, the median value, and the likelihood statement. The short summary does not include any numerical results. We have added the 5-95th percentile ranges and median values into the conclusions as well.

We have corrected the AF and PR for Canada.

3. Consistency between attribution and projections

The present-day AF for Canada is 8.68, while the projected AF reaches only about 1.37 by the 2090s under SSP5-8.5. Please explain this difference, for example in terms of training data, how the AF is defined, or how the counterfactual is constructed.

The attribution and projection analyses use different climate datasets and address related but distinct questions. The attribution analysis quantifies the influence of anthropogenic climate change on the observed 2025–26 event using near present day ERA5-constrained meteorological conditions and counterfactual climates derived from HadGEM3-A natural-forcing simulations. In contrast, the projections use bias-corrected CMIP6 historical and ScenarioMIP simulations provided through ISIMIP to assess how events of comparable rarity may change under future climate conditions. The stronger amplification seen in the attribution analysis likely reflects the direct constraint by observed variability and extremes, whereas future projections depend on bias-corrected model output that can smooth the tails of the distribution and therefore may not fully preserve the most extreme events. As already noted in the Discussion, reanalysis-constrained attribution analyses generally produce stronger amplification estimates than GCM-driven analyses, despite broad agreement on the direction of change:

> *However, our results this year also highlight both the strengths and remaining limitations of current climate models. Across multiple results, the reanalysis, numerical models and GCMs generally agree on the direction of large-scale influences of climate change, consistently indicating an increase in the likelihood and severity of extreme fire weather and BA. This agreement across independent models and methods provides greater confidence in the robustness of the overall signal, especially for future projections where there is still no alternative to using GCMs. However, differences do emerge primarily in the magnitude of the response. We see this in the FWI attribution for both Iberia and Chile, with the very different scale of results*

between the models and reanalysis, and in the ConFLAME BA where the future influence of climate change from modelled climate is much weaker than in the present-day climate constrained by observations. These differences reflect the continuing challenge of capturing the most extreme events and their tail risks, rather than disagreement over the underlying direction of change, and suggests a more blended approach of data and models could help improve our understanding of the influence of climate change on extremes.

We have added a short clarification to the Results section to make this distinction clearer:

Future projections indicate a relatively uncertain increase in BA for events such as 2025-26 (Figure 10). These projected amplification factors are substantially smaller than those estimated from the BA attribution analysis above. This may be because the attribution analysis is constrained by the observed near present-day climate conditions, whereas future projections are derived from GCM-simulated climates and quantify changes in events of comparable rarity in GCM output rather than the observed event itself.

The HadGEM3-A analysis uses 2020–2024 SSTs, so please describe it as attribution for recent climate rather than for these specific events. Please also make the period consistent: L846 gives 2020–2024, while L947 gives 2021–2024.

We have added '('Early 2020s')' to line 882 as follows:

We therefore run our analysis for the 2025-2026 events using 2020-2024 factual and counterfactual data to represent a near-present-day ('Early 2020s') climate state.

We have changed 'full present day attribution' to 'full near present day attribution' on line 887:

the full near present day attribution ensemble

We have added 'using recent climate' to line 916 and 986:

HadGEM3-A targets a specific event using recent climate while controlling internal variability

providing an event-focused attribution using recent climate

We have updated the period in the text to 2020-2024 at line 947 (now 988).

4. "Already mitigated" framing

The difference between SSP5-8.5 and SSP3-7.0 reflects which scenarios are now considered plausible. It is not an observed effect of policy, and the two scenarios also differ in their aerosol and land-use pathways. Please reframe this throughout.

We agree that the difference between SSP5-8.5 and SSP3-7.0 should not be interpreted solely as a direct consequence of climate policy. Rather, it reflects broader changes in

expectations of future emissions trajectories, including mitigation efforts, technological developments, socioeconomic trends, and updated understanding of plausible future pathways.

Indeed, the reasons why SSP5-8.5 is no longer considered plausible as stated by CMIP are as follows:

1. Emissions in recent years have largely followed the CMIP6 middle-of-the-road scenario and not the high emission scenario. This new starting point alone results in lower overall projection during the 21st century at the high end.
2. The cost of renewable energy has declined faster than expected. As a result, the high end of the range of plausible increases in fossil fuel use is lower than in previous scenarios.

https://wcrp-cmip.org/explainer-scenarios-for-cmip7/

There are in fact numerous cases of the framing of this change that directly refer to policy and mitigation action resulting in SSP5-8.5 no longer being considered plausible, e.g.:

"Although often slow and incomplete, our efforts to tackle climate change have made a tangible difference. We have averted the worst climate future once thought possible." https://theconversation.com/scientists-have-scrapped-the-worst-case-climate-scenario-because-action-is-making-a-difference-283675

"RCP8.5 has been retired because the world took action: climate policy and advances in renewable energy technologies have led to lower emissions than initially projected in this scenario." https://zerocarbon-analytics.org/science/rcp8-5-what-retiring-a-worst-case-scenario-means-for-climate-science-and-policy/

"...on the high-end of the range, the CMIP6 high emission levels (quantified by SSP5-8.5) have become implausible, based on trends in the costs of renewables, the emergence of climate policy and recent emission trends" (Van Vuuren et al., 2026)

However, we have revised the manuscript to clarify that the interpretation incorporates broader decisions around the plausibility of the scenarios.

Nevertheless, we believe the comparison between SSP5-8.5 and SSP3-7.0 remains scientifically informative. As outlined above,a key reason SSP5-8.5 is now regarded as less plausible than when it was first developed is that observed emissions trajectories since the late 2010s have diverged from those required to reach such a future. Our intention is therefore not to suggest that the world has moved from one SSP to another, nor that the difference between them represents a directly observed policy outcome. Rather, we use the comparison to illustrate how projected climate drivers of wildfire outcomes differ between a

very high-emissions future that was once considered plausible and a more plausible contemporary high-end emissions pathway. For example, SSP3-7.0 projects end-of-century extreme burned-area events in our focal regions that are 4–23% smaller than under SSP5-8.5.

On the specific point about land-use pathways, we would like to clarify that land-use changes do not contribute to the burned-area projections presented here. Following Haas et al. (2026), UNEP et al. (2022), we do not use SSP-specific land-use projections within ConFLAME, as these pathways are primarily designed to achieve specific radiative forcing trajectories and do not represent the management, fuel, and landscape changes most relevant to wildfire activity or extremes (Perkins et al. 2026). Consequently, differences in the projected burned-area response between SSP5-8.5 and SSP3-7.0 arise from differences in climate forcing rather than land-use assumptions.

To avoid potential misunderstanding, we have revised the relevant text throughout the manuscript. For example, in the Abstract:

> *"However, comparison of SSP3-7.0 with SSP5-8.5 suggests that projected end-of-century extreme BA events in our focal regions are 4-23% smaller than under the very high-emissions futures that were once considered plausible"*

We have changed the description in the Methods in reference to SSP585 from:

> *However, it is retained here to illustrate avoided impacts and the comparison between lower emissions pathways, and provides context for how mitigation has already shifted expected outcomes relative to earlier worst-case assumptions.*

To:

> *"However, it is retained here to provide context for how projected wildfire outcomes have changed as expectations of future emissions trajectories have evolved, and to compare contemporary high-end emissions pathways with the very high-emissions futures that were once considered plausible."*

And have updated the description of the difference between SSP585 and SSP370 accordingly in the results, e.g. :

Although SSP5-8.5 is now considered an unlikely future pathway and is not expected to be included in CMIP7, comparison with SSP3-7.0, which is considered a more plausible high-end emissions trajectory, suggests that ~~mitigation efforts have already reduced projected BA amplification.~~projected BA amplification is lower than under the very high-emissions futures that were once considered plausible, reflecting evolving expectations of future emissions pathways.

In the conclusion we have amended the text as follows:

Under a very high-emissions future (SSP5-8.5), events comparable to those of January–February 2026 could become more than three times larger by the 2090s. ~~Emissions reductions achieved to date have already lowered this projected increase,~~ Reflecting evolving

expectations of future emissions pathways over the past two decades, ~~with~~ fires under SSP3-7.0 are estimated to be around 9% smaller than under SSP5-8.5 by the end of the century.

We have also changed plot labels from "already mitigated" to "Past vs current high-end futures".

Haas, O., Prentice, I. C., and Harrison, S. P.: Wildfires on a changing planet, Nat Commun, 17, 1599, https://doi.org/10.1038/s41467-025-68176-4, 2026.

Perkins O, Haas O, Kasoar M, Voulgarakis A, Millington JD. Structural uncertainty in the direct human forcing of future global burned area. EGUsphere. 2025 Aug 18;2025:1-35.

United Nations Environment Programme (UNEP): Spreading like Wildfire: The Rising Threat of Extraordinary Landscape Fires, https://www.unep.org/resources/report/spreading-wildfire-rising-threat-extraordinary-landscape-fires (last access 6 August 2025), 2022.

Van Vuuren DP, O'Neill BC, Tebaldi C, Sanderson BM, Chini LP, Friedlingstein P, Hasegawa T, Riahi K, Govindasamy B, Bauer N, Eyring V. The scenario model intercomparison project for CMIP7 (ScenarioMIP-CMIP7). Geoscientific Model Development. 2026 Apr 7;19(7):2627-56.

Please also make the sign convention in the “Mitigation” rows of Tables 6–8 consistent with the stated formula.

We have presented the mitigation rows as the difference between the very high emissions pathway SSP5-8.5 and high emissions pathway SSP3-7.0 as discussed above, and between SSP3-7.0 and SSP1-2.6. This difference is a reduction and hence is presented as a negative number. We believe this is consistent with how it is described throughout the text.

5. Consistency, methods, data and editorial corrections

Baselines and numbers:

- Use a consistent number of seasons and consistent baseline periods.

The number of seasons is determined by the coverage of the product groups (emissions = beginning 2003; fire observations = 2002). This continues from the approach used in previous editions of this report.

- Correct the places where percentage anomalies are presented as ratios (Manitoba, Saskatchewan).

Our convention is to use percentage differences/anomalies up until the point that those become difficult to communicate, which happens when percentages become very large. Two examples:

- It is more natural to say “I would buy the organic carrots, but they’re 20% more expensive” than “I would buy the organic carrots but they’re 1.2 times more expensive”.
- It is more natural to say “I would buy the branded item but it’s 3 times more expensive” than “I would buy the branded item but it is 200% more expensive”.

As either way of expressing these anomalies is factually correct, we stick with our convention in the narrative text throughout section 3, except in Tables where values are compared directly.

- Reconcile the North America and Canada emission totals.

Sorry but we have checked the reported numbers for North America (417.4 TgC, 184% above average) and Canada (315 TgC, 195% above average) and these are compatible; it is not clear where the problem lies here and it is hard to trace without line numbers being provided.

- Correct the European burned-area statements in Section 3.3.3.

Sorry but this comment is too vague for us to understand the precise request. We have checked the phrasing in section 3.3.3 and we believe we have been clear on when the BA information is derived from analysis of EFFIS data (available from EFFIS and used by the regional panel) versus MODIS data (calculated in this work).

- Replace “northwest Argentina” with “northern Patagonia”.

Replaced “northwest Argentina” with “northern Patagonia” in sections 3.3.6 and 6.1.

Projections:

- Clarify how comparable the BuRNN, ConFLAME and Haas et al. projections are.

BuRNN, ConFLAME, and the projections of Haas et al. are independent fire modelling approaches that use similar climate forcing data but differ substantially in their representation of fire processes. BuRNN and ConFLAME are driven by ISIMIP3b climate data, while the Haas et al. projections use ISIMIP2b forcing, reflecting the datasets

available when the underlying methods were developed and published. Despite these methodological differences, all three approaches provide projections of future burned area, allowing comparison of the overall response of fire activity to climate change.

We intentionally include multiple fire models because wildfire behaviour is highly non-linear and projections can depend on model structure and assumptions. Agreement across independent methods therefore provides a stronger basis for inference than any individual model in isolation. While the models differ in the quantities reported and how uncertainty is represented, they nevertheless provide comparable evidence. ConFLAME produces probabilistic distributions of future burned area change, BuRNN reports ensemble-mean projections, and Haas et al. focus on model agreement in projected changes, alongside changes in fire size and intensity. Despite these differences, all three approaches indicate broadly consistent changes in burned area across the focal regions.

We therefore view BuRNN and Haas et al. as independent lines of evidence that can be used to evaluate the consistency of ConFLAME projections. This comparison is particularly valuable for interpreting ConFLAME projections of extreme burned-area events, where direct observational constraints are limited. The broad agreement across these independent fire representations increases confidence that the projected direction of change is robust, while differences between methods provide useful information on structural uncertainty.

- Explain the BuRNN result for Iberia under SSP1-2.6.

The primary differences between the BuRNN and ConFLAME projected burned area amplification factors under SSP1-2.6 occur during the early- to mid-century period, when the immediate consequences of stronger mitigation remain comparatively uncertain. For example, SSP1-2.6 can occasionally exhibit greater warming than higher-emissions scenarios over the near term because the scenarios share similar forcing trajectories during the first few decades, and internal climate variability can temporarily outweigh differences in emissions. The scenarios only diverge clearly later in the century as differences in radiative forcing become more pronounced.

We note, however, that the BuRNN response remains within the uncertainty range projected by ConFLAME, albeit towards its upper bound. This is one of the primary motivations for including multiple independent fire models in the analysis. Wildfire is a highly non-linear process, and differences between models are expected, particularly during periods when scenario differences are small relative to internal climate variability. Agreement between the independent modelling approaches on the overall direction of change, despite differences in the magnitude and timing of the response, increases confidence in the robustness of the projected signal. In this context, the SSP1-2.6 BuRNN response should be interpreted as representing a plausible outcome within the broader range of projected responses rather than a contradiction of the ConFLAME results.

- Verify that the HighResMIP models reach the +3 °C warming level.

We confirm that the HighResMIP models reach +3 °C warming. We have added this to the Supplement as follows:

SHAP analysis:

- Remove the causal wording.

Thank you for pointing this out we have been more explicit on the limitation of casual inference of the SHAP and we clarify this aspects on **line 782** where we first introduce the concept with this substantially revised paragraph:

For each grid cell and day, SHAP values are computed in the native log-link space, preserving the full spatiotemporal structure of the model attributions. Daily climatologies of both SHAP values and reconstructed model predictions are then calculated over a 2003–2024 baseline period using a trimmed mean (20th–80th percentile range) for each day, reducing sensitivity to extreme values. Daily SHAP anomalies are then defined relative to this climatology for each predictor.

Because the Tweedie-based model uses a logarithmic link function, SHAP anomalies are transformed into multiplicative perturbations in prediction space through exponentiation. For each predictor, its regional attribution is calculated by weighting these multiplicative anomalies by the climatological model prediction at each grid cell and aggregating them over the focal regions. This gives a daily regional attribution in km². Predictors are then grouped into physically interpretable categories. The grouping accounts for correlations among predictors and improves interpretability. These categories are assigned to three larger groups of ignition and suppression, fuel, and weather.

Period-attribution metrics are then obtained by averaging these regional attributions over each fire event. For every category, the daily attribution on each event day is compared with its climatological value for the same calendar day. These differences are averaged over the event period to give an event-mean anomaly. A positive anomaly means the category is associated with higher modelled BA than typical for the season, and a negative anomaly means it is associated with lower modelled BA.

[....]

These diagnostics describe sensitivities within the model representation and are not definitive causal attribution of observed BA. They provide a physically interpretable decomposition of the factors associated with anomalous modelled fire-season activity.

In addition we have made the following changes

line	Old text	Revised Text

1918 (Now 1996)	Figure 8: “causal analysis”	Replaced with “SHAP-based model attribution”.
1954–1955 (Now 2033)	“Our formal causality analysis further confirms…”	Replaced with “Our formal SHAP-based model attribution indicates…”.
2228 (now 2321)	Figure 12: “causal analysis”	Replaced with “SHAP-based model attribution”.
2538 (now 2651)	Figure 16: “causal analysis”	Replaced with “SHAP-based model attribution”.

Define how the percentage contributions are calculated.

We have expanded on our method section and added the following at previous line 746

The percentage attributed to each category is its share of the total positive anomaly. Each category with a positive event-mean anomaly is divided by the sum of all positive event-mean anomalies for that event and expressed as a percentage, so the percentages for all positively associated categories add up to 100 %. Group-level percentages for ignition and suppression, fuel, and weather are the sums of the percentages of their member categories. Categories with negative event-mean anomalies are left out of the percentage calculation. The percentages therefore show how the positive departure of modelled BA from climatology is split among categories within the model.

Either support the groundwater statements or remove them.

We removed unsupported statements about groundwater depletion. Here is a record of the changes

Lines 1936–1938 (now 2016)	persistent groundwater deficits	Changed to persistent soil-moisture deficits

Lines 2899–2900 (now 3024)	groundwater depletion	Changed to soil-moisture depletion
Lines 2953–2955 (now 3079)	“soil moisture and groundwater depletion…”	”Removed “and groundwater”.

GFED5 text:

- Remove the duplicated introduction of GFED5NRT.

Removed “For the period 2023-2026, our emissions record uses the GFED5 near-real-time extension (GFED5NRT; Chen et al., 2026a).”

- Use the GFED version names consistently.

All instances of “GFED4” are now “GFED4.1s”.

All instances of “GFED5” are now “GFED5.1”

- Correct the Chen et al. 2026a/2026b citation.

All instances checked.

- Give the GFED5 start year and the 2026 end month.

Done

- Leftover text: Remove the leftover phrase “driven primarily by…” from the citation at L1844–1845, and change “exists from” to “consists of” at L1024.

Phantom text “wildfire activity, driven primarily by extensive BA and emissions in Canada” deleted.

Data and code availability:

- Add a table of all 15 datasets with their DOI, version and licence.

Now added.

- Release the exceedance-day counts.

These are already available at the following repository, Column N:

Di Tomaso, E., Parrington, M., Di Giuseppe, F., Hamilton, D., Jones, M. W., Razinger, M., and Russo, E.: State of Wildfires 2025-26: Daily mean PM2.5 surface concentrations aggregated by Continent, Biome, Country, and Administrative Region, Zenodo [data set], available at: https://doi.org/10.5281/zenodo.21277053 (last access: 22 July 2026), https://doi.org/10.5281/zenodo.21277053, 2026.

- Provide access to the SPARKY code.

A free to use version of SPARKY-PoF is available through a public github repository. We have added this information

https://ecmwf.github.io/AI-Probability-of-Fire/

- Correct the access dates that are in the future.

Now removed

- Reconcile the author-contribution initials with the author list.

We have now revised the list and removed those not listed as a co-author.

Please submit a point-by-point response to this letter with a tracked-changes manuscript. Before resubmitting, please check that the numbers agree across the text, the tables and the archived datasets.

Please find the point by point response above. We have checked the numbers across the text, tables, and datasets.

In addition to the above points, we have also amended the references flagged in the auto check. However there were five that we believe are correct and therefore have not changed. These are as follows:

Reference 139 [No DOI/URL]

PIB Delhi: India’s Resolution on ‘Strengthening the Global Management of Wildfires’ adopted at UNEA-7, in Nairobi, available at: https://www.pib.gov.in/PressReleasePage.aspx?PRID=2203299&reg=3&lang=1 (last access 22 July 2026), 2025.

Needs review: The cited PIB webpage could not be read because the site blocked automated access, so the reference could not be compared with the page details.

Stable URL provided. The web link is live and works as expected, not changed

Reference 165 [No DOI/URL]
State of Wildfires Project: State of Wildfires Project, available at: https://stateofwildfires.com/ (last access: 22 July 2026), State of Wildfires Project, 2026.

Needs review: The cited HTML page at https://stateofwildfires.com/ was read and its title/publisher metadata ('State of Wildfires Project - We monitor, explain and predict wildfires.' / 'State of Wildfires Project') matches the cited State of Wildfires Project entry.

Stable URL provided. The web link is live and works as expected, not changed

Reference 175 [No DOI/URL]
The Insurer: CatIQ: Insurers facing C$300 million hit from early summer Canada wildfires, available at: https://www.theinsurer.com/ti/news/catiq-insurers-facing-c300-million-hit-from-early-summer-canada-wildfires-2025-09-08/ (last access: 22 July 2026), 2025.

Needs review: The cited web page could not be read because the publisher returned a bot-wall access control, so the document could not be compared with the reference.

Stable URL provided. The web link is live and works as expected, not changed

Reference 176 [Minor mismatch]
The Narwhal: Counting up receipts: one of Canada’s worst wildfire seasons cost at least $500M, available at: https://thenarwhal.ca/manitoba-wildfire-costs/ (last access: 22 July 2026), 2026.

Needs review: The cited URL was read and its page title is "The staggering price tag of one of Canada’s worst wildfire seasons | The Narwhal", which does not match the reference title "Counting up receipts: one of Canada’s worst wildfire seasons cost at least $500M".

The title of the article is "Counting up receipts...". For consistency this is how we have named it in the reference list, although we note that the page is named differently when hovering over the tab

Reference 193 [No DOI/URL]
World Bank: Wealth Accounting, World Bank [data set], available at: https://datacatalog.worldbank.org/search/dataset/0042066 (last access: 22 July 2026), https://datacatalog.worldbank.org/search/dataset/0042066, 2024.

Needs review: The cited address is an HTML web page rather than a DOI, and the page title 'Wealth Accounting - World Bank Data Catalog' matches the cited World Bank data set.

This dataset does not have a DOI. Stable URI provided, website is live and works as expected.

Finally we note that we have been requested to remove the colouring from the tables. We would like to check this, as we have included coloured tables uploaded as figures in previous years, and believe it is very helpful particularly from an accessibility perspective to include our likelihood results as colours.