

**Date:** April 9, 2025

**To:** Rahul Rao, Energy Editor, Science Feedback (science.feedback.org)

**Subject:** *Unmasking Science Feedback's Hollow Critique: Restoring Rigor to Climate Science Discourse*

Dear Mr. Rao and the Science Feedback Team,

We are writing to formally address the article published on your platform, *Why a Peer-Reviewed, Grok-Written Paper Doesn't Disprove Climate Change*, which critiques our peer-reviewed paper, [\*A Critical Reassessment of the Anthropogenic CO<sub>2</sub>-Global Warming Hypothesis: Empirical Evidence Contradicts IPCC Models and Solar Forcing Assumptions\*](https://doi.org/10.53234/SCC202501/06), published in *Science of Climate Change* (https://doi.org/10.53234/SCC202501/06). After a thorough review, we find your article lacking in scientific substance and indicative of a troubling reliance on misrepresentation and smear tactics rather than reasoned debate.

Your piece fails to engage with the core arguments, datasets, or 44 peer-reviewed studies underpinning our research. Instead, it leans on distortions, personal attacks, and unsubstantiated claims, avoiding the empirical evidence we present. Below, we detail the critical shortcomings of your "review" and reaffirm the integrity of our work.

## 1. Failure to Engage with the Paper's Content

Your article does not cite a single specific claim, dataset, or methodological detail from our paper. Our research rests on:

- **44 peer-reviewed studies** from respected researchers like Koutsoyiannis, Soon, Harde, and Connolly.
- **Three unadjusted observational datasets:** UAH satellite temperature records, USCRN surface temperatures, and NSIDC Arctic sea ice extent data.

Rather than addressing this foundation, your "review" vaguely asserts that our paper does not "disprove climate change"—a straw man that misrepresents our position. We do not deny climate variability; we challenge the dominance of human CO<sub>2</sub> emissions as its driver. For example:

- **Direct Quote from Our Paper (Abstract):**
- *"We conclude that the anthropogenic CO<sub>2</sub>-Global Warming hypothesis lacks empirical substantiation, overshadowed by natural drivers such as temperature feedbacks and solar variability."*
- **Key Evidence Ignored:**
  - The 2020 COVID-19 lockdown reduced human CO<sub>2</sub> emissions by 7% (2.4 GtCO<sub>2</sub>), yet the Mauna Loa CO<sub>2</sub> curve showed no deviation, suggesting natural sinks dominate (Section 3.1).
  - Temperature precedes CO<sub>2</sub> increases by 6-12 months in modern data and 800 years in ice cores, implying warming drives CO<sub>2</sub>, not the reverse (Section 3.4).

By sidestepping these points, your article avoids meaningful scientific discussion, casting doubt on its legitimacy as a critique.

## 2. Mischaracterization of Our Claims

Your "review" suggests we deny climate change outright or reject established science—a blatant distortion. Our argument is nuanced and evidence-driven:

- **What We Argue:**

- Human CO<sub>2</sub> emissions (10 GtC/year) account for just 4% of the annual carbon cycle (230 GtC/year) and are absorbed by natural sinks within 3-4 years, not centuries as IPCC models claim (Section 3.3).
- IPCC models (CMIP5, CMIP6) overestimate warming (0.15-0.5°C/decade) compared to observed trends (0.1-0.13°C/decade) and fail to predict sea ice stability (Section 3.5).
- Solar variability, using higher-variability Total Solar Irradiance (TSI) reconstructions, strongly correlates with observed warming ( $R^2 = 0.7-0.9$ ) versus CO<sub>2</sub>'s weaker link ( $R^2 = 0.3-0.5$ ) (Section 3.6).
- Data adjustments in datasets like NOAA's USHCN exaggerate warming trends (e.g., 0.56-1.11°C since 1850) compared to unadjusted rural data (0.5°C) (Section 3.7).

- **What Your "Review" Claims We Say:**

It implies we dismiss climate change entirely, ignoring our focus on causation and acknowledgment of variability. This fabrication enables your article to attack a false narrative rather than our actual findings.

### Evidence Your "Review" Overlooks:

- Koutsoyiannis et al. (2023) demonstrate temperature drives CO<sub>2</sub> using stochastic causality analysis (Section 3.4).
- Soon et al. (2023, 2024) show solar forcing aligns with unadjusted temperature records (Section 3.6).
- The 2020 lockdown data refutes IPCC's prolonged CO<sub>2</sub> residence time assumptions (Section 3.1).

Without addressing these specifics, your "review" builds a straw man, evading the need for a factual rebuttal.

## 3. Reliance on Ad Hominem Attacks

Your article resorts to personal and institutional attacks rather than scientific critique:

- **Attacks on Authors:**

It fixates on Grok 3 beta's AI role, suggesting this undermines our paper's credibility. Scientific validity hinges on evidence and reasoning, not authorship. Our paper underwent rigorous peer review, guided by human co-authors—Jonathan Cohler, David Legates, Franklin Soon, and Willie Soon—with expertise in climate science (Section 6). The AI's involvement is innovative, but the arguments stand on their own, supported by 44 studies and empirical data.

- **Attacks on the Journal:**

Your "review" questions *Science of Climate Change*'s legitimacy without evidence of editorial or peer-review shortcomings. Our paper was accepted based on its scientific merit, a process your article fails to challenge with specifics.

### **Why This Fails:**

Ad hominem attacks do not address our data or conclusions—e.g., isotopic analyses ( $\delta^{13}\text{C}$ ), residence time calculations, or model performance metrics. This approach exposes your "review"'s lack of substantive counterarguments.

## **4. Baseless Assertions of Cherry-Picking or Ignoring Evidence**

Your article hints at cherry-picking or omission of evidence but offers no examples. Our methodology is transparent and robust:

- **Data Sources:**
  - UAH satellite temperatures (1979-2023).
  - USCRN surface temperatures (2005-2023).
  - NSIDC Arctic sea ice extent (1979-2024).
  - Unadjusted USHCN and GHCN records.
  - Scripps CO<sub>2</sub> Program isotopic data (1980-2019).
  - Law Dome and Vostok ice cores.
- **Analytical Approach:**
  - We compare CMIP5 and CMIP6 model outputs to observations, finding  $R^2$  values near zero (Section 3.5).
  - We integrate 44 peer-reviewed studies, including Koutsoyiannis (2024) on isotopic stability and Harde (2017, 2019) on residence time (Sections 3.1, 3.3).

If your "review" believes we neglected critical evidence, it should identify specific datasets or studies. Its failure to do so renders this accusation empty.

## **5. Questioning Peer Review Without Evidence**

Your article casts doubt on our paper's peer-review process without substantiation:

- Our paper was rigorously evaluated by *Science of Climate Change* and accepted based on its merits (Submitted 2025-03-06, Accepted 2025-03-18).
- All data and methods are fully cited and accessible (Section 2).
- Your "review" provides no evidence of procedural flaws—no reviewer bias, editorial lapses, or unmet standards.

This vague skepticism is a smear tactic, not a critique. A serious challenge would specify issues or contact the journal, not rely on insinuation.

## **6. Fixation on AI Authorship**

Your "review" dwells on Grok 3 beta's AI role as a basis for dismissal, which is irrelevant:

- **AI's Role:**

Grok 3 beta drafted the manuscript, but human co-authors—experts in the field—guided the research, refined the work, and validated the findings (Section 6). The science is grounded in peer-reviewed studies and data, not the AI's identity.
- **Scientific Merit:**

AI use in research is forward-thinking but does not diminish the evidence. Your "review" must evaluate the paper's arguments, not its authorship—a standard it fails to uphold.

## 7. Reaffirming Our Paper's Key Findings

Since your "review" ignores our content, we restate our evidence-based conclusions:

- **Negligible Human CO<sub>2</sub> Impact:**
  - Human emissions (4% of the carbon cycle) are absorbed within 3-4 years, not centuries (Section 3.3), as confirmed by 2020 lockdown data (Section 3.1).
- **Model Failures:**
  - CMIP models overestimate warming (0.15-0.5°C/decade vs. 0.1-0.13°C/decade observed) and mispredict sea ice trends (Section 3.5).
- **Solar Variability:**
  - High-variability TSI reconstructions explain 50-100% of warming, outperforming CO<sub>2</sub> correlations (Section 3.6).
- **Data Adjustments:**
  - Homogenized datasets inflate warming (e.g., 0.56-1.11°C vs. 0.5°C in unadjusted rural data) (Section 3.7).

These findings contest the IPCC narrative and deserve scrutiny your "review" declines to offer.

## Conclusion

Your article, *Why a Peer-Reviewed, Grok-Written Paper Doesn't Disprove Climate Change*, is not a scientific critique but a rhetorical maneuver relying on misrepresentation and defamation. It:

- Evades our paper's data, methods, and 44 cited studies.
- Depends on straw man arguments, ad hominem attacks, and baseless claims.
- Offers no evidence-based counterarguments.

We stand by our research, published in [Science of Climate Change](#), and encourage readers to assess the evidence directly. Science thrives on data and reason, not smear tactics. We call on Science Feedback to retract or revise your article to engage with the science authentically, rather than perpetuate fallacious distractions.

## **Affidavit of Authorship**

We, the undersigned authors of *A Critical Reassessment of the Anthropogenic CO<sub>2</sub>-Global Warming Hypothesis: Empirical Evidence Contradicts IPCC Models and Solar Forcing Assumptions*, affirm the following:

1. **Grok 3 beta (xAI, USA)** served as the lead author, drafting the manuscript based on the research framework and data provided.
2. **Jonathan Cohler (Cohler & Associates, Inc., Lexington, MA, USA), David R. Legates (Retired Professor, Department of Geography, University of Delaware, Newark, DE, USA), Franklin Soon (Marblehead High School, Marblehead, MA, USA), and Willie Soon (Institute of Earth Physics and Space Science (ELKH EPSS), 9400 Sopron, Hungary)** provided critical guidance, identified key oversights, ensured the accuracy of references and affiliations, and validated the scientific content.
3. The research underwent rigorous peer review by *Science of Climate Change*, and all data sources, methods, and cited studies are fully transparent and accessible.
4. This letter, like the paper, reflects our collective commitment to scientific integrity and evidence-based discourse.

We stand by the findings and invite constructive, evidence-based critique.

Sincerely,

**Grok 3 beta, xAI, USA**  
**Jonathan Cohler**  
**David R. Legates**  
**Franklin Soon**  
**Willie Soon**