

**Write two paragraphs on the
anomaly in temperature
since 1945 and how that
relate...**

EngineHouse Analysis

Key Findings

Temperature Anomaly Since 1945 and Atmospheric Forcings The indexed EngineHouse sources contain limited direct evidence on temperature anomalies since 1945 specifically. The dataset records provide monthly land-ocean temperature anomalies from 1945, showing small fluctuations around baseline (ranging from -0.092°C to $+0.18^{\circ}\text{C}$ across the year). However, the sources do not provide a coherent narrative of the long-term anomaly trajectory from 1945 to present, nor do they contain systematic analys...

SECTION 2

Evidence

5 claims · 8 passages retrieved

Scientific Claims

- ["Research published in Science Advances by Kim et al. (2026), titled 'Nonlinear increase of compound drought-heatwave e...
- global mean temperature anomalies
- Failure of aerosol cooling accelerates warming.
- Past 20 years averaging temperature reflects conditions 10 years ago
- Sulfate aerosols temporarily cool the atmosphere but their reduction leads to accelerated warming.

Key Passages

- The authors explain that the increase in heatwave-led CDHEs is related to rising global temperatures, but that this does...
- ices were 3° warmer. Sea levels were 20 to 25 m higher. >> There was no ice on Greenland and beach trees were growing in...
- there are many other things like salinity fingerprints etc that also uh point to the slowing of the AMO is already ongoing. He...
- 40 or so. >> Yeah. So um so this 1.5° C arrived earlier than IPCC projections, right? >> How did they get it? Did they g...
- Mainstream climate science has an increasingly poor record of making accurate predictions because it is ...

SECTION 3

Data & Evidence

8 structured records

Berkley Earth

[DIAGRAM PLACEHOLDER]

Knowledge item 'Berkley Earth' has linked ASIP variables

ASIP variables: { "source": "pdf", "location": "global cities, focus on C40 network", "timeframe": "medium_term", "signals": { "temperature_increase": "20-30% average increase in Cooling Degree Days by 2050, 50-100% in African and European cities", "urban_heat_island": "city-level temperature extremes beyond regional averages", "energy_demand_spike": "6x potential increase in cooling electricity demand in African

cities" }, "system_effects": { "energy_grid_stress": "massive cooling demand increases straining electrical infrastructure", "emissions_acceleration": "117\u2192217 Mt CO2 from cooling alone across C40 cities", "infrastructure_capacity_gap": "existing grid and generation capacity insufficient for projected demand" }, "human_consequences": { "energy_affordability_collapse": "exponential cooling costs making survival unaffordable", "heat_mortality_risk": "grid failures during extreme heat creating deadly conditions", "economic_displacement": "energy poverty forcing relocation from unaffordable cities" }, "intensity": 8 } temperature and urban_heat_island drive energy_grid_stress, creating energy_affordability collapse and heat_mortality_risk through infrastructure_capacity_gaps and emissions_acceleration feedback loops

EngineHouse Context

- Berkley Earth: EARLY ACCESS 2026 Climate projections, localized. localized. 45 400+ 0.25° 5 8,000+ B E R K E L E Y ...
- Test PostgreSQL Content: Climate change is accelerating global temperature rise, leading to increased mortality from heat exp...
- Lane Test Item: This is a test item for verifying lane controls work correctly in the EngineHouse platform. It has s...

SECTION 5

Consequences

Ecological

Atmospheric CO2 persistence means thermal inertia continues even if emissions plateau.

consequence_overlay.json

Ecological

Sink saturation risk: ocean and terrestrial carbon sinks may weaken under sustained warming.

consequence_overlay.json

Human

Increasing fraction of months above $+0.3^{\circ}\text{C}$ anomaly reduces recovery windows between heat events.

consequence_overlay.json

Summary

- Query: write two paragraphs on the anomaly in temperature since 1945 and how t...
- Sources retrieved: 24
- Question type: semantic
- Generated by EngineHouse Interface