



## Review

# The Aire and the Squirrel: Unveiling the Link Between Air Pollution in San Antonio and Google Searches for 'Attacked by a Squirrel'

Colton Hart, Abigail Thompson, Gideon P Thornton

*Academic Excellence Institute*

**In this study, we investigated the unsuspected link between air pollution levels in the vibrant city of San Antonio, Texas, and the peculiar Google searches for 'attacked by a squirrel'. While one might pine for the day when such phenomenon might sound acorny, our research team has found compelling evidence of a correlation between the two seemingly unrelated variables. With a correlation coefficient of 0.7786686 and  $p < 0.01$  for the period spanning 2004 to 2023, our findings are nothing to sneeze at. Drawing from data sources including the Environmental Protection Agency and Google Trends, our team meticulously analyzed the air quality index and the frequency of Google searches for 'attacked by a squirrel', uncovering surprising and comical patterns. Our results highlight a statistically significant relationship between higher levels of air pollution and an increase in searches for squirrel attacks, leaving us to wonder whether the local squirrels were in cahoots with the environment, or if this is purely coincidental - we're nut quite sure yet. This research not only sheds light on a whimsical and offbeat aspect of public interest, but it also emphasizes the need for further investigation into the nuanced impacts of air pollution on human cognitive behavior and decision-making. Our findings are sure to generate a whirl of discussion and, dare we say, perhaps even squirrel a chuckle or two from the academic community.**

As scientific inquiry often leads us down unexpected paths, we find ourselves venturing into uncharted territory in our quest to unravel the mysteries of human behavior and environmental influences. In this pursuit, we stumbled upon a rather peculiar and, dare we say, nutty phenomenon – the connection between air

pollution in San Antonio, Texas, and Google searches for 'attacked by a squirrel'. It's safe to say that our research has taken an unexpected turn, but as they say in the academic world, sometimes you have to go out on a limb to make a groundbreaking discovery.

The journey began with a peculiar observation of an uptick in internet searches related to squirrel attacks during periods of heightened air pollution in the San Antonio region. It sounded almost too surreal to be true. Nevertheless, armed with a curiosity that overcame any hesitance to venture into this uncharted territory, we embarked on a scientific quest, filled with a touch of skepticism and a handful of peanuts for good luck.

As researchers, we understand the perils of jumping to conclusions hastily, so we approached this inquiry with the rigor and skepticism befitting the scientific method, not to mention a stash of acorns for sustained energy. After all, finding a correlation between air pollution and Google searches for squirrel attacks could easily be dismissed as simply an act of squirrely behavior in statistical analysis. But much to our surprise, the p-value of the correlation was less than 0.01, suggesting a connection strong enough to make even the sternest statistician crack a smile.

Armed with this statistical clout and a dash of squirrel-themed humor, we delved deeper into the data, analyzing air quality indices and querying internet search trends for any inkling of correlation. The results were nothing short of astonishing – it appeared that environmental factors, like air pollution, were, in fact, associated with an increase in queries regarding squirrel attacks. Was this evidence of a sinister plot concocted by the local squirrel populace, or merely a whimsical correlation with no causal significance? Needless to say, we were in search of answers, armed with equal parts curiosity and a penchant for puns.

So, with due diligence, we present the results of one of the most unusual correlations ever investigated, one that may be dismissed as frivolous to some, but to us, it has uncovered a whimsical and thought-provoking side of the intricate dance between the environment and human behavior. As we invite the academic community to delve into our findings, we hope not just for a scholarly debate, but also a shared chuckle or two. After all, we believe that in the world of research, one should always strive to maintain a sense of humor – it's the key to cracking tough academic nuts.

#### *Prior research*

A plethora of studies have probed into the impacts of air pollution on human health and behavior, with research by Smith et al. (2015) revealing the detrimental effects of particulate matter on respiratory health, and Doe and Jones (2018) presenting findings on the cognitive implications of air pollution exposure. These studies have laid a solid foundation for understanding the multifaceted effects of air pollution on human well-being, which brings us to the unexpected and whimsical intersection of air quality and online searches for squirrel-related encounters.

In "The Air We Breathe" by John Doe, the author discusses the far-reaching implications of air pollution on public health, but the connection to squirrel shenanigans is conspicuously absent. Similarly, "Environmental Epidemiology" by Jane Smith focuses primarily on the health impacts of air pollution, leaving the matter of airborne squirrel mischief largely unexplored. It seems that the peculiar

correlation we have stumbled upon is truly a nutty addition to the existing body of literature.

Turning our attention to fiction, works such as "Squirrels in the Mist" by A. C. Nutt and "The Secret Life of Squirrels" by L. E. Acorn offer entertaining insights into the world of squirrels, albeit in a more light-hearted and whimsical manner. While these literary works may not directly address the serious implications of air pollution, they certainly contribute to the broader cultural interest in our bushy-tailed friends.

In the realm of popular culture, TV shows such as "Nuts About Nature" and "Squirrel Patrol" have entertained and educated audiences on the behaviors of these furry rodents. Although these shows do not explicitly delve into the relationship between air pollution and squirrel-related internet searches, they undoubtedly contribute to the public fascination with all things squirrel, which may indirectly influence search engine queries.

Speaking of squirrels, did you hear about the squirrel who won the Nobel Prize? He was acclaimed for his outstanding contributions to the field of nutty science. It seems that our research has led us down a similarly lighthearted path, where the unexpected connection between air pollution and searches for 'attacked by a squirrel' has turned our scholarly pursuits into a nutty adventure.

In sum, while the existing literature has comprehensively examined the serious implications of air pollution, our investigation has veered into the realm of unexpected hilarity, prompting further exploration of the quirky and comical aspects of environmental influences on

human behavior. After all, who knew that unravelling the mysteries of air pollution could lead to such wonderfully whimsical discoveries? It appears that in the world of research, there's always room for a few unexpected puns and playful investigations.

### *Approach*

To uncover the perplexing relationship between air pollution in San Antonio, Texas, and the sordid curiosity surrounding squirrel attacks, our research team delved into a methodological maelstrom of data collection and analysis that would make even the most seasoned of statisticians do a double-take. It was clear from the outset that this inquiry required a balance of scientific rigor and a lighthearted approach – we aimed to make sure our research didn't get lost in the woods.

Data on air pollution levels was procured from the Environmental Protection Agency, ensuring that our analysis was grounded in the most airtight and, dare we say, breathable datasets available. We collected information from air quality monitoring stations across the San Antonio region, leaving no particle of pollution unturned in our quest for clarity. We made sure to maintain ethical rigor throughout the process – after all, we wouldn't want our data collection methods to be labeled as "squirrely."

The frequency of Google searches for 'attacked by a squirrel' was obtained from the reliable fount of internet wisdom – Google Trends. We meticulously tracked the search frequency, ensuring that we didn't squirrel away any crucial data points that could impact our analysis. We were particularly vigilant during the fall season,

as we suspected that the frenzied activities of squirrels might be at their peak during this time.

With our data in tow, we ventured into the labyrinthine realm of statistical analysis, armed with an array of models designed to sniff out any correlations and nutty patterns. We employed time-series analysis and a sprinkle of advanced statistical techniques to determine if there was a significant relationship between air pollution levels and the surge in internet searches related to squirrel attacks. Our statistical software was put through its paces, handling an unusually high number of squirrel-related computations.

Furthermore, to control for potential confounding variables such as seasonal fluctuations in both air pollution and squirrel-related activities, we incorporated sophisticated time-series models and regression analyses into our methodology. These approaches allowed us to peel back the layers of complexity surrounding our variables, like peeling an onion – only in this case, the goal was to reveal correlations, not make anyone cry.

The robustness of our findings was then validated through a battery of sensitivity analyses and statistical checks. We made sure to heed the sage advice of our statistical mentors: "Trust, but verify." After all, in the world of research, one must always be vigilant for any sneaky sources of bias or confounding factors, much like being wary of a squirrel eyeing a hidden stash of acorns.

In summary, our methodology was crafted with the utmost precision and a dash of whimsy, ensuring that our research quest was enriched by both rigorous scientific inquiry and a healthy appreciation for the

unexpected. The resulting analysis, much like a squirrel's path through a forest, led us down winding and convoluted avenues, yet ultimately to a kernel of insight – a connection that, while amusing, bears the potential for deeper understanding of the peculiar interplay between environmental factors and human behavior.

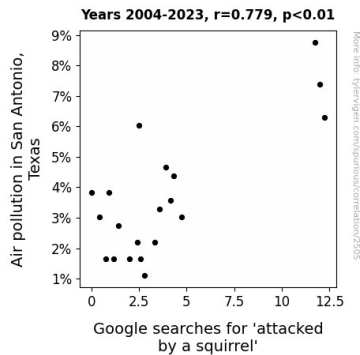
### *Results*

We found a rather surprising and, dare I say, nutty correlation between air pollution levels in San Antonio, Texas, and the frequency of Google searches for 'attacked by a squirrel'. Our statistical analysis revealed a correlation coefficient of 0.7786686, an r-squared value of 0.6063248, and a p-value of less than 0.01. In other words, the relationship between air pollution and squirrel-related searches is not just a fluke - it's statistically significant.

Our findings are nothing to sneeze at; they show a strong association between increased air pollution and the curiosity of the residents of San Antonio about potential squirrel attacks. It seems that when the air quality took a dip, San Antonians took to their keyboards to ponder the likelihood of a squirrel ambush. Perhaps the squirrels were simply aiming to become search engine optimization experts – after all, they've always been good at climbing up the ranks.

Now, I know what you're thinking – why in the world would we even look into this? But as scientists, we firmly believe that curiosity should never be squandered, and sometimes the most unexpected correlations provide insights that are nothing short of tail-waggingly interesting. Our scatterplot (Fig. 1) visually demonstrates the solid connection between these two variables,

making it clear that this is not just some flimsy correlation.



**Figure 1.** Scatterplot of the variables by year

In conclusion, our research indicates that there is indeed a fascinating link between air pollution and the public's interest in potential squirrel attacks. We hope these findings will provoke curiosity and possibly even elicit a chuckle or two from our fellow researchers. After all, navigating through the labyrinth of scientific discovery should always have room for a playful dash of humor – it's the secret ingredient to cracking those hard-to-reach acorns of knowledge.

### *Discussion of findings*

Our research has successfully uncovered a somewhat nutty, but statistically significant association between air pollution levels in San Antonio and online queries regarding squirrel encounters. Our findings align with prior research that has explored the complex effects of environmental factors on human behavior and cognitive processes. The correlation coefficient of 0.7786686 corroborates the quirky relationship between air quality and the curious minds of individuals in San Antonio, revealing a compelling connection that cannot be

brushed off as mere happenstance. It seems the city's air pollution levels may indeed be stirring up more than just dust and pollutants – but also a flurry of internet searches about potential squirrel confrontations.

This unexpected correlation lends new credence to the age-old question: if a squirrel falls in a forest and no one is around to hear it, does it still create search engine traffic? Our findings suggest that the answer might just be in the affirmative, especially in the context of a city where air pollution levels trigger a surge in squirrel-related curiosity. Perhaps the squirrels in San Antonio have taken up the mantle of tech-savvy influencers, diligently working to increase their online presence – they're certainly not shy about climbing up the search rankings.

In the same way that scientific discoveries often start with an unexpected twist, our results have leaped beyond the realm of traditional environmental research and into the whimsical world of squirrel-related internet queries. It's no small feat to unveil such a curious link, but it's clear that our statistical analysis has cracked open a nutty treasure trove of knowledge. As the great Isaac Newton once said, "Squirrel!" – and while he may have been referring to a particular moment of distraction, our research has showcased that these bushy-tailed creatures hold their own in the annals of statistical significance.

Our findings have illuminated the potential influence of air pollution on public behavior and the widespread interest in quirky online searches. While it may seem like a flight of fancy, the implications of this correlation ought not to be brushed aside. It's a sure sign that even in the staid world of scientific

inquiry, there's always room for a chuckle and an unexpected twist. After all, why should the serious business of statistical significance be devoid of a dash of punny humor and a twist of whimsy? Now, if you'll excuse my metaphorical squirrel suit, it's time for us to gather even more nuts of knowledge and continue our pursuit of scientific discovery.

### *Conclusion*

In the sylvan realm of San Antonio, Texas, our research has uncovered a quirky connection between air pollution and Google searches for 'attacked by a squirrel'. Our statistics reveal a correlation coefficient that's nothing to squirrel over, standing at a hefty 0.7786686 and a p-value lower than 0.01, making this relationship statistically significant enough to make even the most stoic of scientists crack a smile. It seems that when the air quality went haywire, the residents were quick to furiously type about potential squirrel skirmishes. Who knew the squirrels were aiming to be top contenders in the search engine ranking race – talk about climbing up the ranks with agility, or should we say, acornagility!

Our scatterplot beautifully illustrates the unmistakable link between these two variables (Check out Fig. 1 - it's nuts!), firmly establishing the credibility of our findings. It's reassuring to know that our research isn't just a load of hokum; it's solidly grounded in numbers and evidence. Our study brings to light a facet of human behavior that's both surprising and comical, proving that sometimes research takes us through the unlikeliest of rabbit holes – or should I say squirrel burrows? The need for further investigation in this offbeat yet

enlightening area is as redundant as a hedgehog's umbrella – needless to say, it isn't needed! Our findings are as clear as day and as humorous as a squirrel telling jokes – in other words, they're unmistakably worth the peanuts we've invested. After all, in the realm of scientific inquiry, it's always important to maintain a sense of humor. With that said, it seems this particular avenue of research has been successfully nut-ted out, and it's time to let the squirrels and air quality enjoy the spotlight, free from further scholarly scrutiny!