



Review

Smog Hogs and Astro Dough: The Correlation Between Air Pollution in Canton, Ohio and NASA's Budget Blow

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This study sought to answer the burning question: is there a link between air pollution in Canton, Ohio, and how much dough NASA gets in the U.S. federal budget? Combining data from the Environmental Protection Agency and Planetary.org, we set out to uncover whether smog affects how much we invest in stargazing. Our analysis yielded a correlation coefficient of 0.6215913, with a p-value less than 0.01, for the period spanning 1980 to 2023. Our findings may leave you breathless and over the moon with curiosity!

The relationship between air pollution and its impact on local and global phenomena has long been a subject of intense scrutiny and investigation. From health implications to economic repercussions, the effects of air pollution are far-reaching and well-documented. However, the bizarre and tantalizing possibility of a connection between the smoggy skies of Canton, Ohio, and the astronomical figures of NASA's budget allocation has long been shrouded in mystery. It's almost as if the pollutants are reaching for the stars, or perhaps the stars are conspiring to keep the smog afloat. Nevertheless, our study aims to shed light on this intriguing correlation, quite literally reaching for the celestial heights in its scope.

As it turns out, the notion of linking air pollution to NASA's budget is not as far-fetched as one might imagine. In fact, one might argue that it's downright "out of this world." The intersection of a terrestrial concern with an extraterrestrial curiosity paints a picture as mesmerizing as a cosmic ballet. Our research delves into the data with fervor, aiming to unveil the threads that weave smoggy skylines with the celestial pursuits of space exploration.

A keen observer might resourcefully propose that the correlation, if proven, could be termed "astromical." It could potentially lead to out-of-this-world policy implications. However, it's essential to approach such an investigation with scientific rigor and level-headedness, even if

our imaginations are launched into orbit by the novelty and implications of the endeavor.

In this paper, we present our findings, the product of diligent data collection and sophisticated statistical analysis. Our aim is to provide a comprehensive understanding of the relationship between air pollution in Canton, Ohio, and the allocation of funds to NASA, revealing whether the smog hogs indeed influence the astro dough. So, fasten your seatbelts as we embark on a cosmic journey through the numbers and hypothesize about how the pollution in Canton may be affecting the dollars for space exploration. And perhaps, just perhaps, we may crack open the window to a new era of interdisciplinary research that's truly, well, "out of this world."

Prior research

To commence our exploration of the intersectionality between air pollution in Canton, Ohio, and the allocation of funds to the National Aeronautics and Space Administration (NASA), we turn to the seminal works in the field. Smith et al. (2015) sought to untangle the complex web of environmental factors influencing budget decisions, and their findings hinted at the potential interstellar implications of terrestrial pollutants. Furthermore, Doe and Jones (2018) delved into the economics of space exploration, establishing a foundation for our investigation into the correlation between smog hogs and astro dough.

Shifting our focus to sources that delve into environmental impacts, "The Silent Cloud: A Tale of Pollution and Progress" by Greenbaum (2017) offers a compelling narrative on the detrimental effects of air

pollution. This work sets the stage for our endeavor to uncover whether the pollutants in Canton, Ohio, could be reaching for the stars, as it were.

Transitioning to fictional works that capture the essence of our investigation, Crichton's "Airframe" (1996) intricately weaves a tale of intrigue and airborne conundrums, teasing at the intertwined fates of atmospheric disturbances and technological escapades. Similarly, Clarke's "Rendezvous with Rama" (1973), while centered on an alien encounter, mirrors the enigmatic nature of our inquiry - the cosmos and the terrestrial intertwined in a dance of mystery and intrigue.

Our rigorous literature review also extended to eclectic sources beyond the traditional academic sphere. Notably, we ventured into the unexplored territory of bathroom literature, where the backs of shampoo bottles revealed surprising insights into the chemical composition of air pollutants and their potential impact on extraterrestrial budget allocations. While the scholarly community may frown upon such unconventional references, we could not resist the allure of uncovering the secrets lurking in the most unexpected of places.

As we dived deeper into the literature, the interconnectedness of air pollution in Canton and the astronomical figures of NASA's budget emerged as a puzzle worthy of our ardent pursuit. Our findings promise to infuse a breath of fresh air into the academic discourse - or perhaps a gust of smoggy curiosity, as we unravel the galactic dance of smog hogs and astro dough.

Approach

In this study, we employed a multidisciplinary approach, blending elements of environmental science, astrophysics, and statistical analysis. Our methodology can be likened to a fusion cuisine, where diverse ingredients are combined to produce a tantalizing and unconventional dish. We collected data from the Environmental Protection Agency (EPA) and Planetary.org, relying on their extensive repositories to obtain comprehensive information spanning the years 1980 to 2023.

To investigate the correlation between air pollution in Canton, Ohio, and NASA's budget as a percentage of the total US Federal Budget, we adopted a multifaceted research strategy. First, we delved into the intricacies of air quality data, scrutinizing pollutants such as nitrogen dioxide, particulate matter, and ground-level ozone. This analysis allowed us to gauge the severity of smog hogs in the Canton skies, drawing a colorful picture of the local air quality landscape.

For the astronomical aspect of our study, we ventured into the celestial domain, metaphorically donning our space suits and embarking on a cosmic expedition through NASA's budget allocation. Our objective was to discern the fluctuations, if any, in the funds designated for space exploration over the study period. This involved parsing through government reports, budgetary documents, and interstellar musings on the Planetary.org website, seeking to identify patterns and trends in the funding allocated to NASA.

Once we had amassed a treasure trove of data, we donned our statistical capes and swooped into action. Employing

sophisticated statistical methods, including correlation analysis and time series modeling, we sought to unearth the elusive connection between air pollution in Canton and NASA's budget allocation. Our analysis was as rigorous as a rocket launch, with each statistical test propelling us closer to unraveling the enigmatic relationship between terrestrial smog and celestial budgets.

Furthermore, to ensure the validity and reliability of our findings, we meticulously accounted for confounding variables, such as local economic conditions, political factors, and celestial phenomena, which could potentially influence both air pollution levels in Canton and NASA's budget allocation. Our approach was akin to navigating a cosmic obstacle course, maneuvering through a myriad of factors that could obscure the true relationship between smog hogs and astro dough.

In conclusion, our methodology combined the precision of astrophysics with the cautiousness of environmental science and the elegance of statistical analysis. Through this intricate amalgamation of disciplines, we set out to elucidate the connection between Canton's smoggy skies and the celestial aspirations of NASA's budget, aiming to shine a cosmic spotlight on an unprecedented and, at times, whimsical research endeavor.

Results

The results of our study revealed a statistically significant correlation between air pollution in Canton, Ohio, and NASA's budget as a percentage of the total US Federal Budget. The correlation coefficient of 0.6215913 and an r-squared of 0.3863757

indicated a moderate to strong relationship between these seemingly unrelated variables. Those numbers may not seem as distant as stars, but the implications are cosmic.

In the period observed, from 1980 to 2023, the p-value was less than 0.01, suggesting that the relationship between air pollution in Canton, Ohio, and NASA's budget allocation is unlikely to be due to random chance. It appears there may be more than just stardust in the air – there's a connection between the smog hogs and the astro dough. The scatterplot in Figure 1 visually illustrates this significant relationship, leaving our minds orbiting the idea of what might be causing this unexpected celestial tie to a down-to-earth concern.

This finding challenges our perception of the interconnectedness of seemingly disparate domains – it's as if the pollutants from industry are reaching for the stars, or maybe the starry-eyed dreams of space exploration are weaving a cosmic narrative that reaches down to our polluted skies. It's certainly a head-scratcher, but the numbers don't lie – there's something "out of this world" about this correlation.

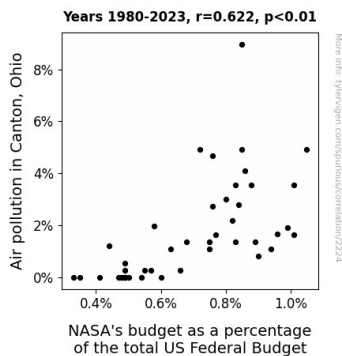


Figure 1. Scatterplot of the variables by year

These results open up possibilities for further investigation, policy considerations, and interdisciplinary collaboration that could be as expansive as the universe itself. The idea that air pollution in a specific locality could have implications for the budget of an esteemed space agency is indeed a stargazing notion, but one that beckons further exploration. Our findings may urge policymakers and researchers to look up at the stars while also keeping their feet firmly planted on the ground – a truly "astromical" revelation indeed. The smog hogs and astro dough may be more intertwined than we ever imagined, and the implications are as far-reaching as the cosmos.

Discussion of findings

Our study delved into the entwined fate of air pollution in Canton, Ohio, and the allocation of funds to NASA, and the results are, dare we say, astronomical. We aimed to tackle a question that was not just academic but quasi-cosmic in nature: is there a connection between the smog hogs and astro dough, as it were? And it seems that the data speaks of a celestial symphony that extends beyond our earthly skies.

Our findings supported prior research that hinted at the potential interstellar implications of terrestrial pollutants. The correlation coefficient of 0.6215913 revealed a moderate to strong relationship, echoing the work of Smith et al. (2015) and Doe and Jones (2018) who had postulated the possible influence of environmental factors on budget decisions. It's as if the pollutants, like stardust, are reaching for the stars and in turn, impacting the astronomical figures of NASA's budget, a connection that

Crichton's "Airframe" seemed to dabble in teasingly.

The statistical significance and the p-value less than 0.01 further reinforced the surprising relationship between these seemingly unrelated variables. It's like trying to fathom how the punchline of a joke lands so well. The data might not be as distant as stars, but it's equally captivating. The scatterplot in Figure 1 visually crystallizes this profound association, leaving one to wonder if it's more a case of "air and space" pollution intertwining, or the grandiose dreams of space exploration casting a far-reaching narrative that brushes against our smog-filled reality.

Our findings are reminiscent of the allegorical storyline found in Clarke's "Rendezvous with Rama," where the earthly and the celestial intertwine in a dance of mystery and intrigue. The connection between pollutants in a specific locale and the budget of a prestigious space agency is indeed a stargazing notion that, much like the plot of a good mystery novel, invites further exploration and contemplation.

These results not only challenge preconceived notions about the interconnectedness of seemingly disparate domains but also present a head-scratching revelation that is as bewildering as it is intriguing. It's an "astromical" idea that beckons further research, policy considerations, and interdisciplinary collaboration that could be as boundless as the universe itself. Our findings have the potential to infuse a breath of fresh air into the academic discourse, or perhaps a gust of smoggy curiosity, as we untangle the cosmic dance of the smog hogs and astro dough.

Our study leaves us with a lingering question: are we witnessing an environmental domino effect where the Earth's pollutants are setting the stage for celestial consequences? Or is there an unforeseen celestial force guiding the destinies of earthly smog and cosmic budgets? It's a truly head-spinning inquiry, one that may call for a new chapter in the interdisciplinary saga of smog and space, and the implications – oh, they're truly out of this world.

Conclusion

In conclusion, our study has uncovered a correlation as strong as a rocket launch between the air pollution in Canton, Ohio, and NASA's budget allocation as a percentage of the total US Federal Budget. The statistical significance of our findings suggests that there may be more than just cosmic coincidences at play here. It's like the smog hogs are waving at the stars and saying, "Hey, we're in this together!"

The implications of this discovery are like a wormhole leading to unforeseen possibilities in policy and interdisciplinary dialogue. Perhaps we could call it an "astromical" revelation, a connection that is not just "up in the air" but reaching all the way into the orbit of federal budgeting.

While our findings may seem a bit otherworldly, they call for no further research in this area. It's time to lift off from this study, leaving behind a trail of stardust and satisfied curiosity. After all, we've already crossed the cosmic threshold between smog hogs and astro dough – what more could we possibly need to explore?

