# Fueling the Vote: Investigating the Surprising Relationship Between Democrat Votes for Senators in New Hampshire and Jet Fuel Consumption in Mongolia

**Cameron Hart, Anthony Tanner, Gloria P Todd** 

#### Abstract

This study delves into the intriguing nexus between political preferences and energy consumption to unravel the unexpected ties between Democrat votes for Senators in New Hampshire and jet fuel usage in Mongolia. Leveraging renowned data repositories such as the MIT Election Data and Science Lab, Harvard Dataverse, and the Energy Information Administration, our research seeks to shed light on this peculiar correlation. Employing advanced statistical analyses, we have uncovered a striking correlation coefficient of 0.9441816, with a pvalue of less than 0.01, across the time span from 1998 to 2020. Our findings pave the way for a deeper examination of the interplay between transcontinental energy patterns and regional political dynamics, offering a fresh perspective on the intricate web of global interconnectedness.

#### 1. Introduction

The interplay between political behavior and energy consumption has long been an area of interest for researchers seeking to understand the complex and sometimes unexpected connections that exist in our globalized world. In this study, we explore the intriguing relationship between Democrat votes for Senators in New Hampshire and jet fuel usage in Mongolia. While these two seemingly disparate phenomena may appear unrelated at first glance, our analysis reveals a surprising correlation that demands further investigation.

On the surface, one might question the logical link between the voting patterns in a state renowned for its picturesque fall foliage and the jet fuel consumption in a landlocked Asian country famous for its nomadic culture. However, as with all statistical inquiries, the allure of uncovering hidden patterns and connections motivates us to delve deeper into the data, armed with a healthy dose of curiosity and skepticism.

Our study's foundation rests upon the utilization of robust and reputable sources of information, including the MIT Election Data and Science Lab and the Energy Information Administration. Through meticulously collected and rigorously analyzed data sets, we aim to untangle the enigma of this unexpected correlation, using advanced statistical methods to tease out meaningful insights from the numbers.

Outlining the scope of our investigation, we aim to track the patterns and dynamics from 1998 to 2020, a period that encompasses a diverse array of political and environmental shifts. This broad time span allows us to capture the nuances and fluctuations that may contribute to the observed relationship, providing a comprehensive view of the interplay between regional political choices and international energy dynamics.

As we embark on this academic adventure, we remain mindful of the potential implications of our findings. Beyond the intellectual satisfaction of unraveling a statistical mystery, our research offers the tantalizing prospect of shedding light on the intricate web of global interconnectedness, where unforeseen ties between seemingly unrelated variables may hold profound implications for our understanding of society and the world at large.

So, join us as we embark on a journey of statistical discovery, where the unexpected becomes the norm, and where the improbable might just hold the key to unlocking new perspectives on the intricate tapestry of human behavior and global affairs.

## 2. Literature Review

The literature examining the intersection of political preferences and energy consumption provides a robust foundation for our investigation into the peculiar connection between Democrat votes for Senators in New Hampshire and jet fuel usage in Mongolia. Smith et al. (2016) conducted a comprehensive analysis of regional voting patterns and their relationship to environmental variables, laying the groundwork for our exploration of seemingly incongruous correlations. Likewise, Doe and Jones (2018) delved into the global energy landscape, offering valuable insights into the complexities of fuel consumption and its potential reverberations in unexpected corners of the world.

Moving beyond strictly academic arenas, works such as "Energy and Democracy" by Green and Power (2014) and "The Politics of Fuel" by Red and Blue (2017) offer intriguing perspectives on the intricate dance between political decision-making and energy dynamics. These texts lay bare the complexities and interdependencies that underpin seemingly disparate phenomena, setting the stage for our ventures into uncharted statistical territory.

Transitioning from scholarly to fictional realms, the works of J.R.R. Tolkien, particularly "The Lord of the Rings," and George R.R. Martin's "A Song of Ice and Fire" series, spark fascinating parallels. While these narrative epics may seem far removed from our empirical inquiry, the subtle connections between the political machinations of Westeros and the energy-intensive journeys to Mount Doom offer unexpected avenues for contemplation.

Moreover, the viral internet sensation known as "Jet Fuel Can't Melt Steel Beams" serves as a curious parallel to our topic of inquiry. While originating from a different discourse, the meme's emphasis on questioning established narratives and uncovering hidden connections aligns with our own quest to unravel the enigmatic ties between seemingly unrelated variables.

In synthesizing these diverse strands of literature, we embark on a journey that combines rigorous statistical analysis with a dash of speculative intrigue, as we probe the curious correlation between political support in New Hampshire and jet fuel consumption in Mongolia.

## 3. Methodology

To uncover the underlying connection between Democrat votes for Senators in New Hampshire and jet fuel consumption in Mongolia, we employed an array of meticulous methodologies that allowed for a robust and comprehensive analysis. Our data collection process involved a wide net cast across the vast expanse of the internet, with a particular focus on esteemed repositories such as the MIT Election Data and Science Lab, Harvard Dataverse, and the Energy Information Administration. We diligently sifted through the digital haystack to procure the most salient and reliable datasets spanning the 22-year period from 1998 to 2020.

The initial step in our methodological odyssey involved the extraction and amalgamation of electoral data pertaining to the voting trends associated with Democrat candidates for the United States Senate representing the state of New Hampshire. These data were sourced from the MIT Election Data and Science Lab, a repository renowned for its veracity and scope in capturing the intricate dynamics of electoral behavior. Simultaneously, we harnessed the prodigious resources of the Harvard Dataverse to obtain granular insights into the jet fuel consumption patterns within the landlocked expanse of Mongolia.

With these datasets in hand, we proceeded to meticulously sanitize, harmonize, and align the information to ensure a seamless integration, cognizant of the potential pitfalls that can ensnare unwary researchers in the thorny thickets of disparate data sources. Our team, armed with a fount of caffeinated beverages and an abundance of determination, meticulously cross-referenced and calibrated the datasets, crafting a unified corpus of information capable of withstanding the exacting scrutiny of advanced statistical methodologies.

Having fortified our dataset, we embarked on the arduous task of statistical analysis, deploying an ensemble of sophisticated techniques to unravel the enigma enshrouding the perceived correlation between the disparate variables of Democrat senatorial votes in New Hampshire and jet fuel usage in Mongolia. The bedrock of our analysis lay in the calculation of correlation coefficients, a venerable statistical tool that gauges the strength and direction of the relationship between two variables. Through our assiduous calculations, we unearthed a striking correlation coefficient of 0.9441816, imbuing our findings with a robust statistical significance, as evidenced by a p-value of less than 0.01.

Furthermore, our statistical alchemy drew upon the art time series analysis, venerable of а methodological mainstay for unraveling the temporal ebbs and flows that underpin the tides of complex phenomena. This allowed us to trace the nuanced fluctuations in both political preferences and energy consumption across the expanse of time, offering a panoramic view of the interplay between regional electoral dynamics and international energy patterns.

In sum, our methodological repertoire was marked by a meticulous and thorough approach, blending the art of data collection, harmonization, and statistical analysis to unearth the unexpected nexus between Democrat votes for Senators in New Hampshire and jet fuel consumption in Mongolia. This methodological saga stands as a testament to the enduring spirit of academic inquiry, where the pursuit of knowledge is infused with equal parts rigor and a sense of adventure.

## 4. Results

Our analysis reveals a remarkably strong correlation between Democrat votes for Senators in New Hampshire and jet fuel consumption in Mongolia, with a correlation coefficient of 0.9441816. This substantial coefficient suggests a robust relationship between these two seemingly unrelated variables. The high R-squared value of 0.8914789 further underscores the predictive power of the relationship, indicating that over 89% of the variability in Democrat votes for Senators in New Hampshire can be explained by jet fuel usage in Mongolia. With a p-value of less than 0.01, we can confidently reject the null hypothesis of no correlation and assert the existence of a significant association.

The strong statistical connection between these disparate elements prompts us to consider potential underlying mechanisms. Are the fall colors of New Hampshire secretly influencing energy decisions in a nomadic Mongolian context? Or perhaps there's a clandestine migration of Mongolian yaks secretly swaying political sentiments in the Granite State? Alas, these whimsical suppositions call for further investigation and tongue-in-cheek reflections.

To visually represent this unexpected relationship, we have included a scatterplot (Fig. 1) that vividly depicts the tight alignment between Democrat votes for Senators in New Hampshire and jet fuel consumption in Mongolia. The scatterplot serves as a compelling visual testimonial to the striking statistical association we have uncovered.



Figure 1. Scatterplot of the variables by year

The magnitude of this correlation, while undeniably intriguing, prompts us to exercise caution in ascribing causality. It would be premature to assert that the voting behaviors in one region directly dictate energy choices in a distant land. Our findings present an intellectual enigma that beckons for continued exploration and scholarly discernment.

In sum, our investigation into the surprising interconnection between Democrat votes for Senators in New Hampshire and jet fuel in Mongolia has unearthed consumption а statistically significant correlation. These findings challenge us to rethink the boundaries of causality and to welcome the unconventional with open statistical arms.

As we ponder the implications of these unexpected results, we remain vigilant in our quest for knowledge and understanding. The convoluted web of statistical relationships continues to unravel, inviting us to embrace the unexpected and celebrate the serendipitous discoveries that await in the unlikeliest of places.

#### 5. Discussion

The culmination of our study sheds light on the intricate connection between Democrat votes for Senators in New Hampshire and jet fuel consumption in Mongolia. Our findings not only validate the existing body of literature on seemingly disparate correlations but also open new avenues for speculation and inquiry.

In line with the scholarly works of Smith et al. (2016) and Doe and Jones (2018), our research

reaffirms the transformative potential of exploring unexpected intersections. The robust correlation coefficient of 0.9441816, reinforced by a significant p-value, mirrors the implications put forth by these prior studies. Indeed, as illustrated by our results, statistical analyses provide a powerful lens for uncovering latent relationships and unearthing unsuspected ties.

Moreover, our findings resonate with the speculative parallels drawn from J.R.R. Tolkien and George R.R. Martin's literary sagas. The convoluted political maneuvers of Westeros and the energy-intensive quests in Middle-earth now find a peculiar echo in our empirical discovery. It seems that the threads of unexpected correlations can weave a tale as compelling as any fantastical narrative.

Amidst these revelations, we cannot overlook the lighthearted allegory of "Jet Fuel Can't Melt Steel Beams." While rooted in a different context, this meme's spirit of teasing out improbable connections serves as an intriguing mirror to our own exploration. Though unassuming at first glance, these seemingly farcical references speak to the serendipitous nature of our statistical odyssey.

Our results put forth a mosaic of statistical interdependence, challenging the notion of causality and beckoning us to embrace the whimsical twists that statistical inquiry can unveil. In doing so, we underscore the spirited tenacity of scholarly pursuit, reminding ourselves that statistical truths can often reside in the unlikeliest of places.

### 6. Conclusion

In conclusion, the findings of this study present a compelling case for the unexpected relationship between Democrat votes for Senators in New Hampshire and jet fuel usage in Mongolia. The remarkable correlation coefficient of 0.9441816 defies conventional expectations and beckons us to contemplate the intricate interplay between seemingly disparate variables. While we have harnessed the power of advanced statistical techniques to unravel this enigma, we must exercise caution in leaping to causal assertions, as correlation does not necessarily imply causation - unless, of course, Mongolian yaks have secretly become political influencers in the New Hampshire wilderness!

Our journey through the statistical landscape has revealed not just an academic curiosity but a testament to the boundless surprises that await in the world of data analysis. As we gaze upon the scatterplot (Fig. 1) with its tightly clustered data points, we are reminded of the whimsical unpredictability of statistical relationships, where hidden connections sprout like wildflowers in an otherwise barren field.

Yet, as we revel in the delight of this unforeseen correlation, we must recognize the limits of our current understanding. While our study sheds light on this peculiar association, it paves the way for future inquiries to probe deeper into the underlying mechanisms and potential causal pathways. Perhaps a more nuanced analysis of seasonal variations in New Hampshire's foliage colors and their impact on international energy negotiations will offer a colorful twist to our findings.

In closing, the tantalizing dance between Democrat votes for Senators in New Hampshire and jet fuel consumption in Mongolia highlights the importance of embracing the unexpected in statistical inquiry. As we bid adieu to this peculiar pairing, we assert with confidence that no further research in this area is required, unless, of course, a yak-led political revolution sweeps through the forests of New Hampshire. Cheers to statistical serendipity!