Investigations into celestial escapades

John Little

Lillian Thurman

2024-02-14

Abstract

Based on [Quarto Manuscript](https://quarto.org/docs/manuscripts/) work by Posit.co, C.Wickham, Purves, and Cockett, et. al.: Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. …

## 1 Introduction

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| Figure 1: Timeline of Births in Star Wars |

Based on data up to and including 2019, births in the *Star Wars* multiverse can be said to happen every 7.3 years on average.

In an unrelated gambit to emulate a fashion of scholarly writing, this author references Lipset (1960). Lipset discussed the nature of democracy and the role of party representation. His paper highlights the difference in understanding of democracy between sociologists and laymen. While public opinion often emphasizes the freedom of citizens to elect representatives, sociologists focus on the social processes and elites that influence these democratic systems.

A sampling of eight births were recorded since star-date zero ([Figure 1](#fig-timeline)).

Data and methods are discussed in [Section 2](#sec-data-methods).

Let $x$ denote the number of births in a year. Then, $x$ can be modeled by a Poisson distribution

$$p\left(x\right)=\frac{e^{−λ}λ^{x}}{x!}  \left(1\right)$$

where $λ$ is the rate of births per year. Using [Equation 1](#eq-poisson), the probability of a birth in the next $t$ years can be calculated.

Below is a table generated from a data frame and presented via the {gt} package

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| Table 1: A table of *Star Wars* characters and their birth years

| name | birth\_year |
| --- | --- |
| Darth Vader | 41.9 |
| Lando Calrissian | 31.0 |
| Ackbar | 41.0 |
| Padmé Amidala | 46.0 |
| Mace Windu | 72.0 |
| Palpatine | 82.0 |
| Bail Prestor Organa | 67.0 |
| Darth Maul | 54.0 |

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However, as the situation demands, more basic tables can be presented with Markdown.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Table 2: Minor *Star Wars* characters and their hair color

| Name | Hair Color |
| --- | --- |
| Adi Gallia | none |
| Dormé | brown |
| Zam Wessell | blonde |
| Taun We | none |
| Jocasta Nu | white |
| Shaak Ti | none |

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[Table 1](#tbl-births) lists the birth years of a sample of *Star Wars* characters. Meanwhile, [Table 2](#tbl-hair-color) summarises Minor *Star Wars* characters and their hair color.

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| Figure 2: The Epsilon Eridani system |

Epsilon Eridani is visible from most of Earth’s surface. Located at a distance 10.5 light-years (3.2 parsecs) from the Sun ([Figure 2](#fig-map)).

Also notable is the ability to perform calculations in notebooks. This means multiple computation notebooks can be used in a project. Outputs and artifacts of those notebooks, then, can be embedded in the main manuscript page, or other notebooks. Below [Figure 3](#fig-spatial-plot) is an embedded figure derived from a separate notebook file.

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| Figure 3: Starwars characters: mass over height |

[Figure 3](#fig-spatial-plot) shows the relationship of mass over height for a sample of \_Star Wars\* characters.

## 2 Data & Methods

## 3 Conclusion

(A), Let’s not forget how cool [Figure 1](#fig-timeline) is. But, (B), don’t forget (A).

## 4 Slides

[my slides](slides/index-preview.html)

## References

Lipset, Seymour Martin. 1960. “Party Systems and the Representation of Social Groups.” *European Journal of Sociology* 1 (1): 50–85. <https://doi.org/10.1017/s0003975600000059>.