mmore500/paperproject

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Abstract

TODO

1 Introduction

2 Methods

2.1 Software and Data Availability

Simulation code, configuration files, and batch scripts for this work are available via Zenodo at `TODO`. Postprocessing scripts and executable notebooks for this work are hosted separately at `TODO`. Data and supplemental materials are available via the Open Science Framework `TODO` (Foster & Deardorff, 2017).

This project benefited significantly from open-source scientific software (Harris et al., 2020; Hunter, 2007; Moreno, 2023; pandas developers, 2020; Virtanen et al., 2020; Waskom, 2021; Wes McKinney, 2010).

3 Results and Discussion

Example change.

4 Conclusion

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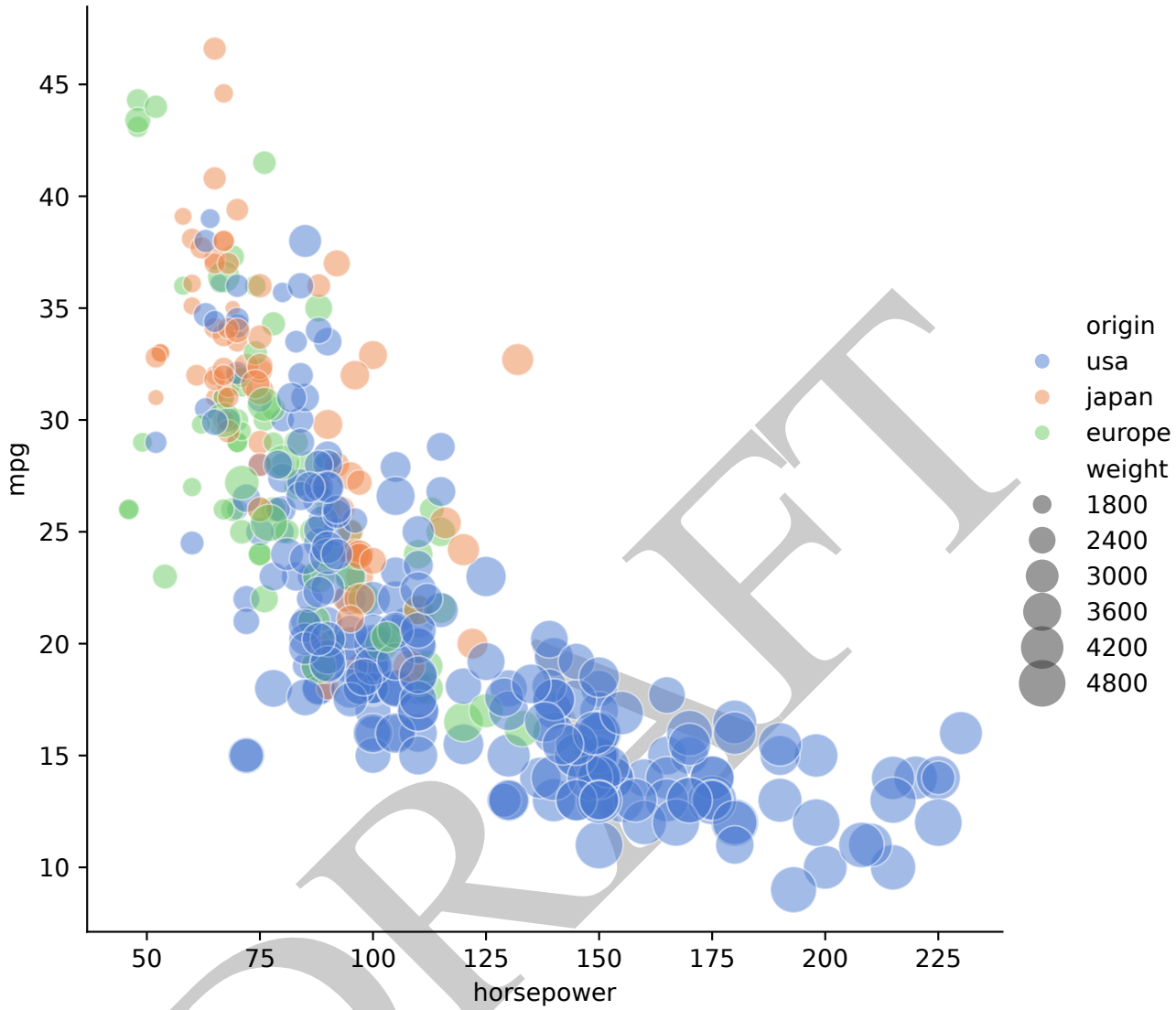


Figure 1: hello world

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References

Foster, E. D. & Deardorff, A. (2017). Open science framework (osf). *Journal of the Medical Library Association*, 105(2). https://doi.org/10.5195/jmla.2017.88

Harris, C. R., Millman, K. J., van der Walt, S. J., Gommers, R., Virtanen, P., Cournapeau, D., Wieser, E., Taylor, J., Berg, S., Smith, N. J., Kern, R., Picus, M., Hoyer, S., van Kerkwijk, M. H., Brett, M., Haldane, A., del Río, J. F., Wiebe, M.,

Peterson, P., Gérard-Marchant, P., Sheppard, K., Reddy, T., Weckesser, W., Abbasi, H., Gohlke, C., & Oliphant, T. E. (2020). Array programming with NumPy. *Nature*, 585(7825), 357–362. https://doi.org/10.1038/s41586-020-2649-2

Hunter, J. D. (2007). Matplotlib: A 2d graphics environment. *Computing in Science & Engineering*, 9(3), 90–95. https://doi.org/10.1109/mcse.2007.55

Moreno, M. A. (2023). *mmore500/teeplot*. https://doi.org/10.5281/zenodo.10440670

pandas developers (2020). pandas-dev/pandas: Pandas. *Zenodo*. https://doi.org/10.5281/zenodo.3509134

Virtanen, P., Gommers, R., Oliphant, T. E., Haberland, M., Reddy, T., Cournapeau, D., Burovski, E., Peterson, P., Weckesser, W., Bright, J., van der Walt, S. J., Brett, M., Wilson, J., Millman, K. J., Mayorov, N., Nelson, A. R. J., Jones, E., Kern, R., Larson, E., Carey, C. J., Polat, İ., Feng, Y., Moore, E. W., VanderPlas, J., Laxalde, D., Perktold, J., Cimrman, R., Henriksen, I., Quintero, E. A., Harris, C. R., Archibald, A. M., Ribeiro, A. H., Pedregosa, F., van Mulbregt, P., & SciPy 1.0 Contributors (2020). SciPy 1.0: Fundamental Algorithms for Scientific Computing in Python. *Nature Methods*, 17, 261–272. https://doi.org/10.1038/s41592-019-0686-2

Waskom, M. L. (2021). seaborn: statistical data visualization. *Journal of Open Source Software*, 6(60), 3021. https://doi.org/10.21105/joss.03021

Wes McKinney (2010). Data Structures for Statistical Computing in Python. *Proceedings of the 9th Python in Science Conference*, 56–61. https://doi.org/10.25080/Majora-92bf1922-00a

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Supplemental Material

References

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