

# Results

## Linear Regression

Model Fit Measures

| Model | R       | R <sup>2</sup> | Overall Model Test |     |      |          |
|-------|---------|----------------|--------------------|-----|------|----------|
|       |         |                | F                  | df1 | df2  | p        |
| 1     | 0.16915 | 0.02861        | 11.66383           | 3   | 1188 | < .00001 |

Model Coefficients - log\_VAR

| Predictor | Estimate | SE      | t         | p        |
|-----------|----------|---------|-----------|----------|
| Intercept | -1.10912 | 0.03950 | -28.07708 | < .00001 |
| EPS       | -0.00139 | 0.00060 | -2.32365  | 0.02031  |
| SPS       | -0.00195 | 0.00071 | -2.74732  | 0.00610  |
| GPS       | 0.00090  | 0.00055 | 1.64309   | 0.10063  |

### Assumption Checks

Durbin–Watson Test for Autocorrelation

| Autocorrelation | DW Statistic | p       |
|-----------------|--------------|---------|
| 0.04429         | 1.91114      | 0.12000 |

[3]

Collinearity Statistics

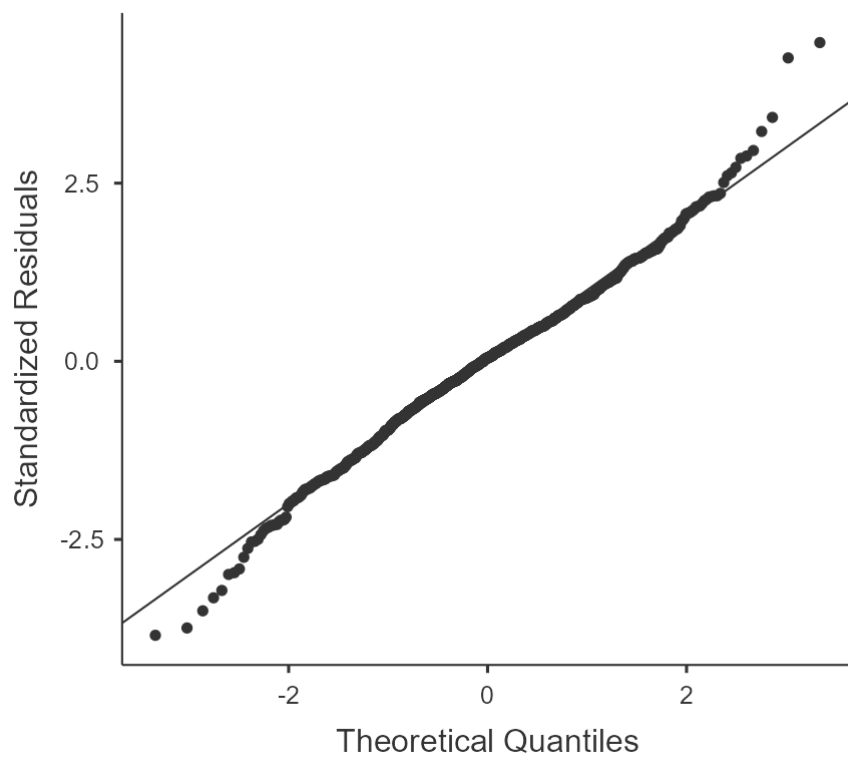
|     | VIF     | Tolerance |
|-----|---------|-----------|
| EPS | 1.88942 | 0.52926   |
| SPS | 1.92779 | 0.51873   |
| GPS | 1.20316 | 0.83115   |

[3]

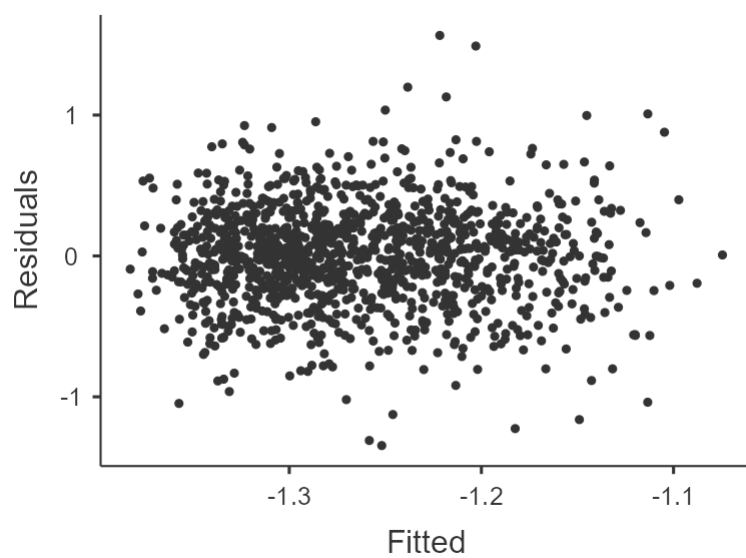
Normality Test (Shapiro-Wilk)

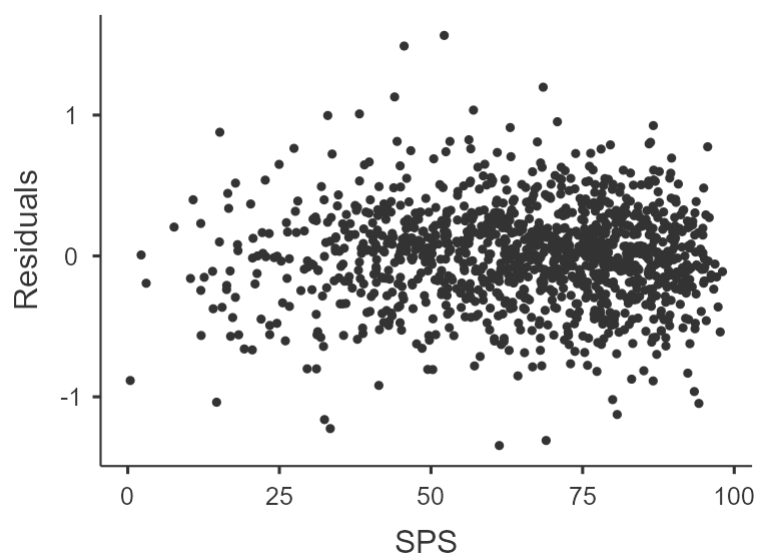
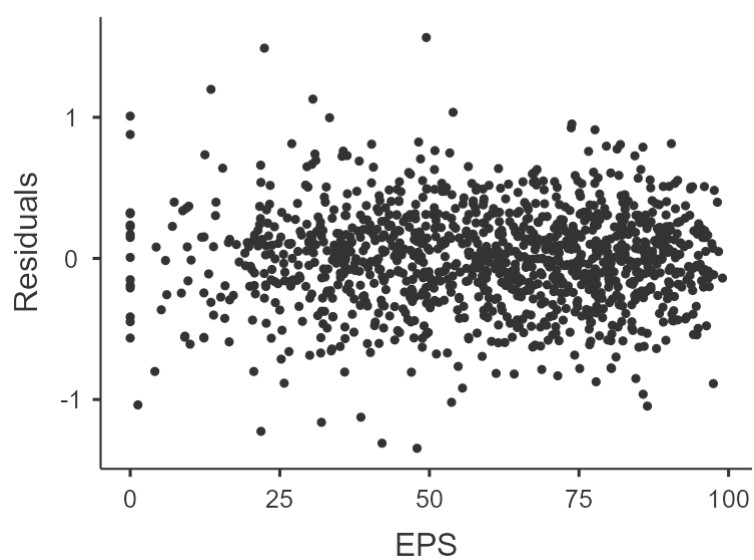
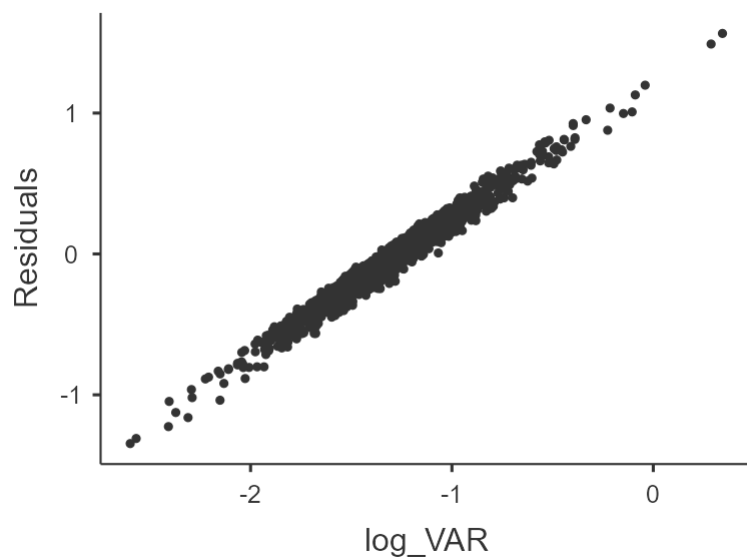
| Statistic | p        |
|-----------|----------|
| 0.99111   | < .00001 |

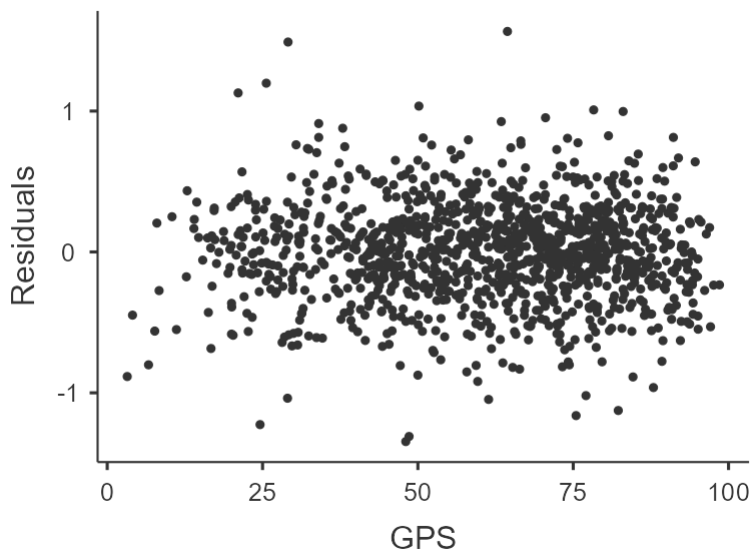
### Q-Q Plot



### Residuals Plots







## References

- [1] The jamovi project (2022). *jamovi*. (Version 2.3) [Computer Software]. Retrieved from <https://www.jamovi.org>.
- [2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.1) [Computer software]. Retrieved from <https://cran.r-project.org>. (R packages retrieved from MRAN snapshot 2022-01-01).
- [3] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from <https://cran.r-project.org/package=car>.