Results

Linear Regression

Model Fit Measures

			Overall Model Test			
Model	**R**	**R^2**	**F**	**df1**	**df2**	**p**
1	0.22589	0.05103	21.32821	3	1190	< .00001

Model Coefficients - log_VOL

Predictor	**Estimate**	**SE**	**t**	**p**
Intercept	-1.83880	0.03574	-51.44447	< .00001
EPS	-0.00405	0.00063	-6.47342	< .00001
SPS	0.00107	0.00076	1.40274	0.16096
GPS	0.00019	0.00058	0.32455	0.74558

Assumption Checks

Durbin–Watson Test for Autocorrelation

Autocorrelation	**DW Statistic**	**p**
0.01503	1.96918	0.61400

[3]

Collinearity Statistics

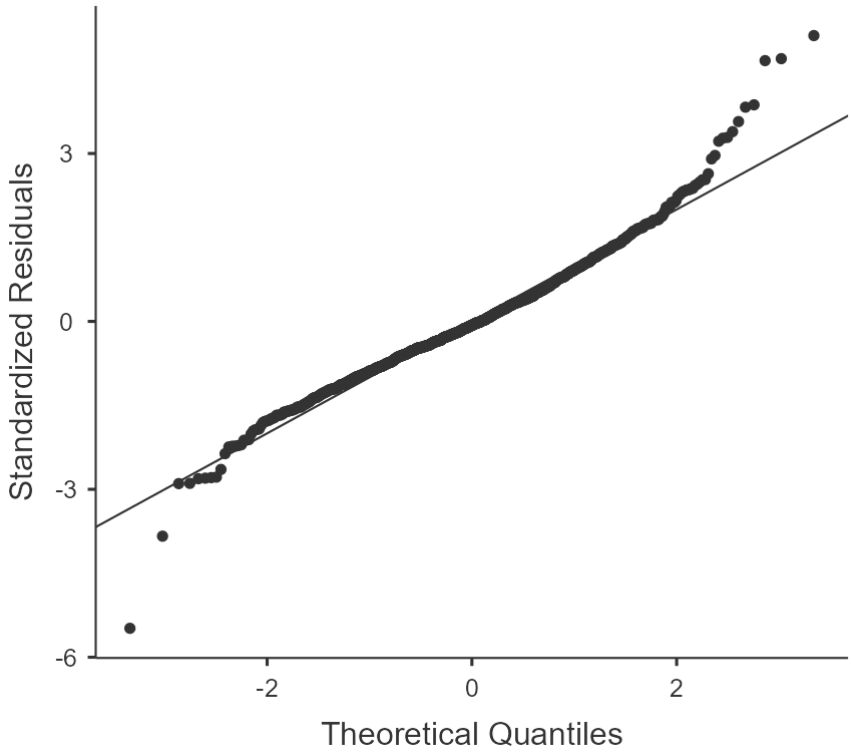
	VIF	**Tolerance**
EPS	2.15618	0.46378
SPS	2.17695	0.45936
GPS	1.31427	0.76088

[3]

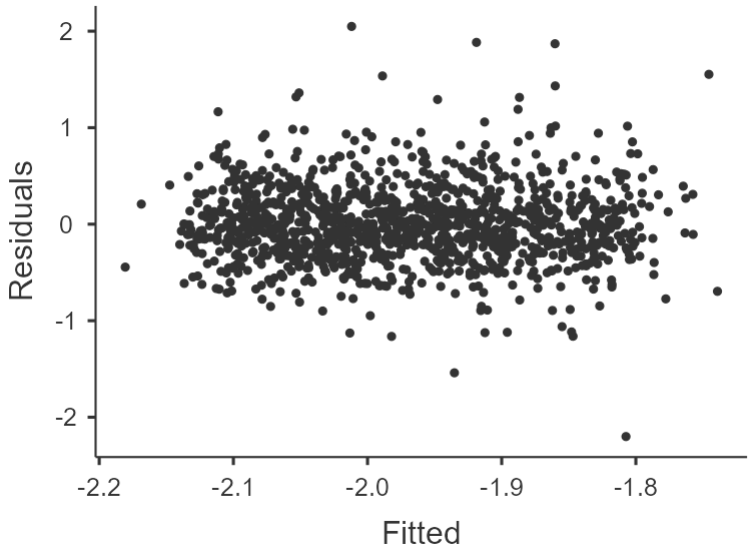
Normality Test (Shapiro-Wilk)

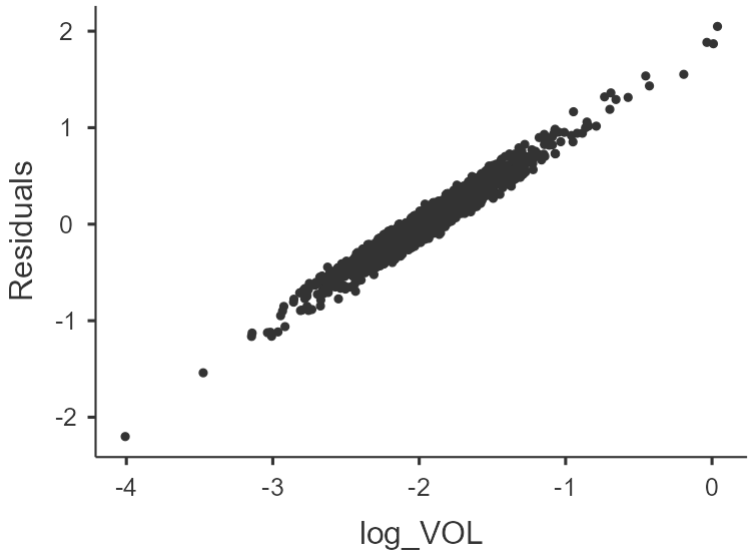
Statistic	**p**
0.97351	< .00001

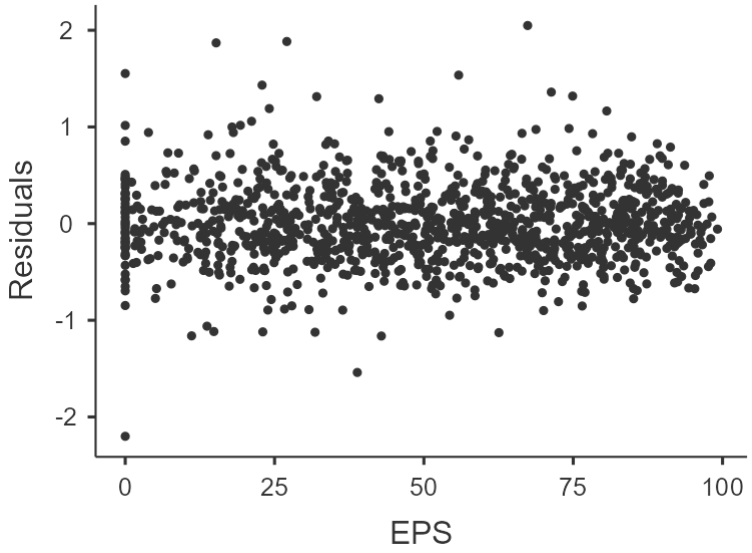
Q-Q Plot

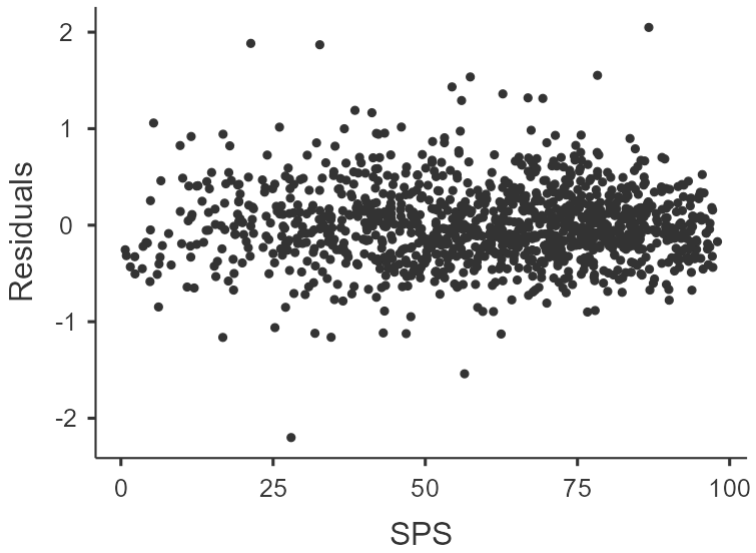


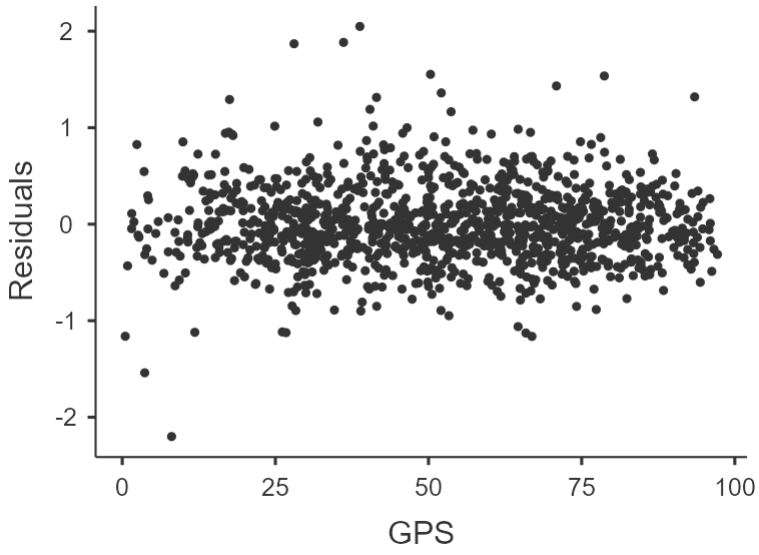
Residuals Plots




Residuals
2
1
0
-1
-2
-4
-3
-2
-1
0
log_VOL


Residuals
2
1
0
-1
-2
0
25
50
75
100
EPS


Residuals
2
1
0
-1
-2
0
25
50
75
100
SPS



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.