|  |  |  |  |
| --- | --- | --- | --- |
| Algorithm | mean\_absolute\_error % from mean | root\_mean\_squared\_error % from mean | r2\_score |
| Adaboost | Y 12.58210043755031  log\_y 1.0194394992623765 | 18.575120236619025 1.3561892862717322 | 0.8378402898800325 0.8494046201302399 |
| Gradient Boosting | Y 9.451134860679408  log\_y 0.6704464296878929 | 14.911817368749944 0.9250863024036519 | 0.895494091707424 0.9299294492713883 |
| Random Forest | Y 9.761050355233428  log\_y 0.753444520091138 | 15.436083148434099 1.0711098906620615 | 0.8880165325971235 0.9060624802630963 |
| Support Vector | Y 9.089936231792796  log\_y 0.6334280167764837 | 15.035750609127419 0.9340084133928446 | 0.8937497600753737 0.9285713229448201 |
| Decision Tree | Y 13.756127009762464  log\_y 1.126644644638039 | 22.270150569410674 1.4945325634051108 | 0.7669087350455193 0.8171134387850167 |
| KNN | Y 14.972127254133897  log\_y 1.2292877761336893 | 24.066727829638562 1.7617850057333735 | 0.7277839140500839 0.7458577626933486 |
| Linear Regression | Y 9.669261284709801  log\_y 0.6990706695973498 | 15.353004818072064 0.9645239229881359 | 0.8892186981415366 0.9238277055232978 |

### **Conclusion:**

* **Gradient Boosting** and **Support Vector Regression** appear to be the best models based on these results. You might want to focus on these models for further tuning and analysis.
* **Random Forest** and **Linear Regression** are also decent options if you prefer simpler or more interpretable models.
* **Adaboost**, **Decision Tree**, and **KNN** are performing worse, and may require further tuning or could be excluded.