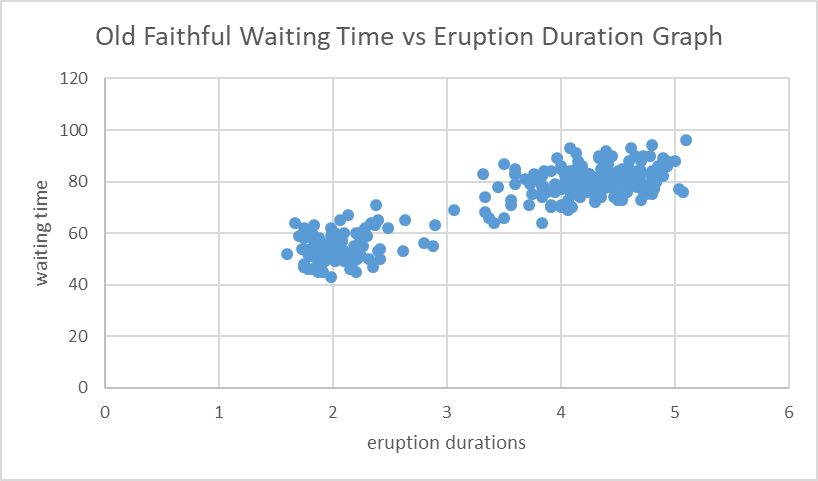
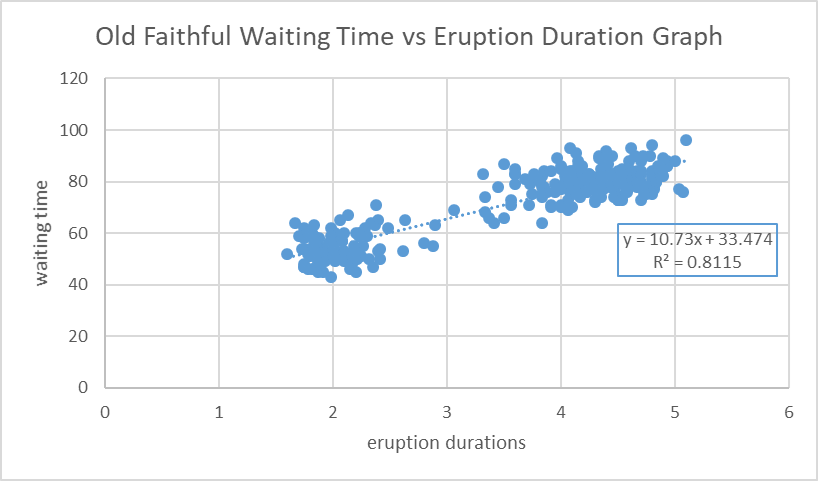
****

1. Correlation Coefficient (*r*) = 0.9
2. regression model 🡪 ŷ = β0 + β1x

🡪 y = 10.73x + 33.474

1. β0 = 33.474
2. β1 = 10.73
3. Coeﬃcient of determination *r2 =* 0.8115

****

1. The data is “Homoscedastic” which means that there is homogeneity in variance.
2. The waiting time until the next eruption after one 4.0 minutes in duration should be approximately 79.



ŷ = β0 + β1x1 **+** β2x2 + β3x3 + β4x4

y = -0.0376 – 0.066x1 - 3.9x2 + 0.185x3 + 9.6x4

1. Coeﬃcient t statistics and p-values:



1. Coeﬃcient of multiple determination R2:

* R2 for Tank Temp (x1) = 0.697
* R2 for Tank Pressure (x2) = 0.755
* R2 for Gasoline Temp (x3) = 0.7644
* R2 for Gasoline Pressure (x4) = 0.8373

1. Root mean square error (RMSE) of the training data set = 1602.586439
2. Root mean square error (RMSE) of the testing data set = 8.082570983