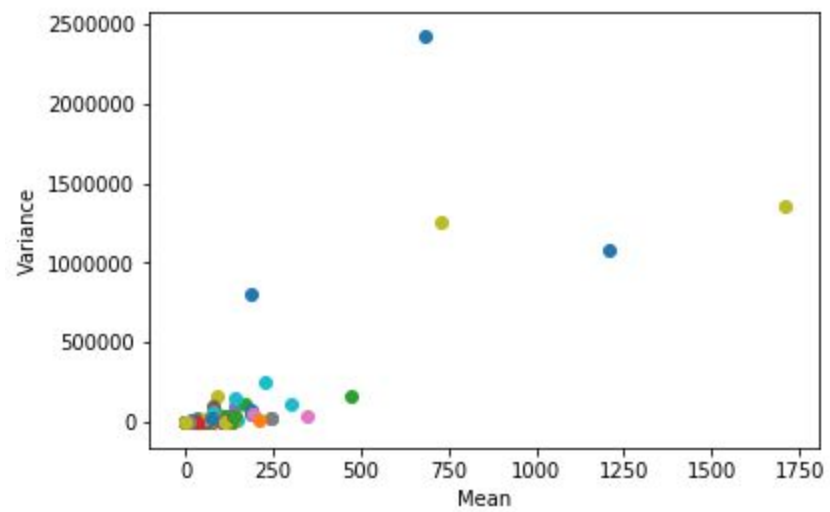
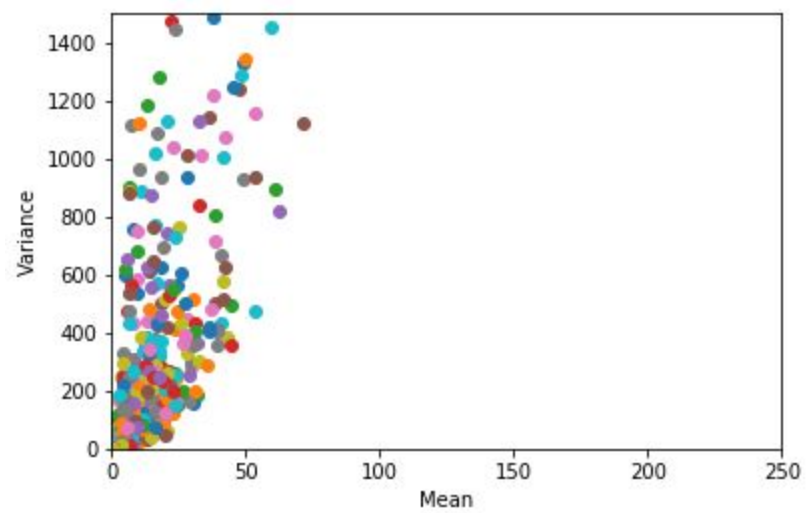


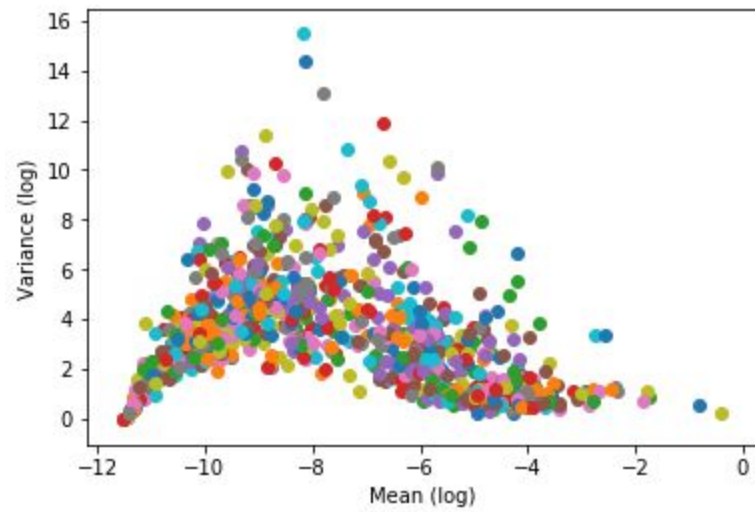
## 1. Non-log plot



Limited the scope for a closer look



Log result, treating 0 as 0.00001,  $\log(0.00001) = -11.5$  (natural log) using the arithmetic mean:



# OLS Regression Results

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Dep. Variable:          y  R-squared:          0.243
Model:                OLS  Adj. R-squared:      0.221
Method:              Least Squares  F-statistic:      11.20
Date:                Tue, 10 Dec 2019  Prob (F-statistic):  3.29e-38
Time:                14:35:47  Log-Likelihood:    1517.8
No. Observations:      899  AIC:                -2984.
Df Residuals:          873  BIC:                -2859.
Df Model:              25
Covariance Type:       nonrobust
=====
=====

```

	coef	std err	t	P> t	[0.025	0.975]
const	0.0437	0.002	25.261	0.000	0.040	0.047
x1	-0.0082	0.031	-0.262	0.793	-0.070	0.053
x2	-0.0109	0.043	-0.251	0.802	-0.096	0.074
x3	0.0664	0.029	2.270	0.023	0.009	0.124
x4	-0.0947	0.061	-1.555	0.120	-0.214	0.025
x5	-0.0156	0.049	-0.319	0.750	-0.111	0.080
x6	0.2262	0.043	5.202	0.000	0.141	0.312
x7	-0.0322	0.046	-0.706	0.481	-0.122	0.057
x8	0.6588	0.165	4.003	0.000	0.336	0.982
x9	0.1932	0.056	3.470	0.001	0.084	0.303
x10	-0.2210	0.136	-1.624	0.105	-0.488	0.046
x11	0.3420	0.044	7.821	0.000	0.256	0.428
x12	0.2030	0.113	1.793	0.073	-0.019	0.425
x13	0.0688	0.163	0.421	0.674	-0.252	0.389
x14	0.2348	0.098	2.393	0.017	0.042	0.427
x15	0.1478	0.102	1.451	0.147	-0.052	0.348
x16	0.0291	0.094	0.310	0.757	-0.156	0.214
x17	0.2740	0.116	2.371	0.018	0.047	0.501
x18	-0.1176	0.127	-0.926	0.354	-0.367	0.132
x19	-0.5839	0.228	-2.560	0.011	-1.032	-0.136
x20	-0.1589	0.224	-0.709	0.479	-0.599	0.281
x21	-0.0384	0.043	-0.887	0.375	-0.123	0.047
x22	-0.0190	0.073	-0.262	0.794	-0.161	0.123
x23	0.0310	0.034	0.903	0.367	-0.036	0.098

x24	0.0177	0.114	0.156	0.876	-0.206	0.241
x25	-0.6940	0.174	-3.999	0.000	-1.035	-0.353

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Omnibus:	1568.717	Durbin-Watson:	1.857
Prob(Omnibus):	0.000	Jarque-Bera (JB):	1658675.018
Skew:	11.233	Prob(JB):	0.00
Kurtosis:	212.227	Cond. No.	209.

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