

Simple Equation 13

Equation Family: Simple

$$z = a * \text{pow}(b, y) * \text{pow}(x, c)$$

Thu Apr 4 20:16:25 2019 local server time

Romans 12:1-2

I beseech you therefore, brethren, by the mercies of God, that ye present your bodies a living sacrifice, holy, acceptable unto God, which is your reasonable service. And be not conformed to this world: but be ye transformed by the renewing of your mind, that ye may prove what is that good, and acceptable, and perfect, will of God.

Read or search the King James Bible online at
<http://quod.lib.umich.edu/k/kjv/>

Coefficients

$z = a \cdot \text{pow}(b, y) \cdot \text{pow}(x, c)$

Fitting target of lowest sum of squared absolute error = 8.1908170660090292E+01

a = 1.1834672231963125E+02

b = 9.9667039815506886E-01

c = 4.0600537403361850E-02

Coefficient and Fit Statistics

Most statistics from `scipy.odr.odrpack` and <http://www.scipy.org/Cookbook/OLS>
LL, AIC and BIC from <http://stackoverflow.com/questions/7458391/python-multiple-linear-regression-using-ols-code-with-specific-data>

If you entered coefficient bounds. Parameter statistics may not be valid for parameter values at or near the bounds.

```
Degrees of freedom (error): 247
Degrees of freedom (regression): 2
Chi-squared: 81.9081706601
R-squared: 0.99795480695
R-squared adjusted: 0.997938246683
Model F-statistic: 60261.997598
Model F-statistic p-value: 1.11022302463e-16
Model log-likelihood: -215.251862286
AIC: 1.74601489829
BIC: 1.7882724293
Root Mean Squared Error (RMSE): 0.572392070735

a = 1.1834672231963125E+02
    std err: 1.00963E+00
    t-stat: 1.17781E+02
    p-stat: 0.00000E+00
    95% confidence intervals: [1.16368E+02, 1.20326E+02]
b = 9.9667039815506886E-01
    std err: 5.30019E-10
    t-stat: 4.32918E+04
    p-stat: 0.00000E+00
    95% confidence intervals: [9.96625E-01, 9.96716E-01]
c = 4.0600537403361850E-02
    std err: 7.04687E-07
    t-stat: 4.83653E+01
    p-stat: 0.00000E+00
    95% confidence intervals: [3.89471E-02, 4.22539E-02]

Coefficient Covariance Matrix
[ 2.92134564e+00 -5.23890960e-05 -1.50729861e-03]
[ -5.23890960e-05 1.53360258e-09 8.55154388e-16]
[ -1.50729861e-03 8.55154388e-16 2.03900062e-06]
```

Error Listing

Indep. Data 1	Indep. Data 2	Dependent Data	Predicted	Abs Error	Rel Error
0.00E+00	2.4815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	2.5815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	2.6815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	2.7815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	2.8815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	2.9815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	3.0815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	3.1815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	3.2815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
0.00E+00	3.3815E+02	0.0000000000E+00	0.0000000000E+00	0.000000E+00	n/a
5.00E+01	3.3815E+02	4.1728047461E+01	4.4910222197E+01	3.182175E+00	n/a
5.00E+01	3.2815E+02	4.3783325096E+01	4.6433306199E+01	2.649981E+00	n/a
1.00E+02	3.3815E+02	4.4357434031E+01	4.6192044336E+01	1.834610E+00	n/a
1.50E+02	3.3815E+02	4.5757651433E+01	4.6958755976E+01	1.201105E+00	n/a
5.00E+01	3.1815E+02	4.5857153348E+01	4.8008044028E+01	2.150891E+00	n/a
1.00E+02	3.2815E+02	4.6369508375E+01	4.7758600017E+01	1.389092E+00	n/a
2.00E+02	3.3815E+02	4.6696543578E+01	4.7510452087E+01	8.139085E-01	n/a
2.50E+02	3.3815E+02	4.7391687838E+01	4.7942840522E+01	5.511527E-01	n/a
1.50E+02	3.2815E+02	4.7738226578E+01	4.8551313894E+01	8.130873E-01	n/a
3.00E+02	3.3815E+02	4.7935800840E+01	4.8299047118E+01	3.632463E-01	n/a
5.00E+01	3.0815E+02	4.7949024663E+01	4.9636187471E+01	1.687163E+00	n/a
3.50E+02	3.3815E+02	4.8377077117E+01	4.8602279470E+01	2.252024E-01	n/a
1.00E+02	3.1815E+02	4.8398180929E+01	4.9378283823E+01	9.801029E-01	n/a
2.00E+02	3.2815E+02	4.8653174590E+01	4.9121720211E+01	4.685456E-01	n/a
4.00E+02	3.3815E+02	4.8743793818E+01	4.8866489672E+01	1.226959E-01	n/a
4.50E+02	3.3815E+02	4.9053968557E+01	4.9100731524E+01	4.676297E-02	n/a
5.00E+02	3.3815E+02	4.9319790751E+01	4.9311219287E+01	-8.571465E-03	n/a
2.50E+02	3.2815E+02	4.9329021401E+01	4.9568772656E+01	2.397513E-01	n/a
5.50E+02	3.3815E+02	4.9549893106E+01	4.9502405849E+01	-4.748726E-02	n/a
1.50E+02	3.1815E+02	4.9734475343E+01	5.0197881776E+01	4.634064E-01	n/a
6.00E+02	3.3815E+02	4.9750612639E+01	4.9677592687E+01	-7.301995E-02	n/a
3.00E+02	3.2815E+02	4.9856940546E+01	4.9937059631E+01	8.011909E-02	n/a
6.50E+02	3.3815E+02	4.9926740073E+01	4.9839296391E+01	-8.744368E-02	n/a
5.00E+01	2.9815E+02	5.0058495436E+01	5.1319547725E+01	1.261052E+00	n/a
7.00E+02	3.3815E+02	5.0081984025E+01	4.9989479862E+01	-9.250416E-02	n/a
7.50E+02	3.3815E+02	5.0219275886E+01	5.0129704079E+01	-8.957181E-02	n/a
3.50E+02	3.2815E+02	5.0284234442E+01	5.0250575798E+01	-3.365864E-02	n/a
8.00E+02	3.3815E+02	5.0340971638E+01	5.0261231119E+01	-7.974052E-02	n/a
1.00E+02	3.0815E+02	5.0443001118E+01	5.1052897540E+01	6.098964E-01	n/a
8.50E+02	3.3815E+02	5.0448994573E+01	5.0385096100E+01	-6.389847E-02	n/a
9.00E+02	3.3815E+02	5.0544933918E+01	5.0502158673E+01	-4.277524E-02	n/a
2.00E+02	3.1815E+02	5.0624924842E+01	5.0787632836E+01	1.627080E-01	n/a
9.50E+02	3.3815E+02	5.0630118827E+01	5.0613140670E+01	-1.697816E-02	n/a
4.00E+02	3.2815E+02	5.0638622205E+01	5.0523746417E+01	-1.148758E-01	n/a
1.00E+03	3.3815E+02	5.0705672063E+01	5.0718654152E+01	1.298209E-02	n/a
1.05E+03	3.3815E+02	5.0772550668E+01	5.0819222659E+01	4.667199E-02	n/a
1.10E+03	3.3815E+02	5.0831577087E+01	5.0915297539E+01	8.372045E-02	n/a
1.15E+03	3.3815E+02	5.0883463319E+01	5.1007270679E+01	1.238074E-01	n/a
1.20E+03	3.3815E+02	5.0928829839E+01	5.1095484538E+01	1.666547E-01	n/a
4.50E+02	3.2815E+02	5.0937751215E+01	5.0765932340E+01	-1.718189E-01	n/a
5.00E+02	3.2815E+02	5.1193550972E+01	5.0983558579E+01	-2.099924E-01	n/a
2.50E+02	3.1815E+02	5.1281096013E+01	5.1249846605E+01	-3.124941E-02	n/a
5.50E+02	3.2815E+02	5.1414465631E+01	5.1181229037E+01	-2.332366E-01	n/a
6.00E+02	3.2815E+02	5.1606691866E+01	5.1362357157E+01	-2.443347E-01	n/a
1.50E+02	3.0815E+02	5.1745984910E+01	5.1900291314E+01	1.543064E-01	n/a
6.50E+02	3.2815E+02	5.1774911675E+01	5.1529544875E+01	-2.453668E-01	n/a
3.00E+02	3.1815E+02	5.1792545998E+01	5.1630623655E+01	-1.619223E-01	n/a
7.00E+02	3.2815E+02	5.1922749541E+01	5.1684821663E+01	-2.379279E-01	n/a
7.50E+02	3.2815E+02	5.2053068406E+01	5.1829801441E+01	-2.232670E-01	n/a
8.00E+02	3.2815E+02	5.2168170496E+01	5.1965789085E+01	-2.023814E-01	n/a
5.00E+01	2.8815E+02	5.2185180047E+01	5.3059997411E+01	8.748174E-01	n/a
3.50E+02	3.1815E+02	5.2205647469E+01	5.1954772400E+01	-2.508751E-01	n/a
8.50E+02	3.2815E+02	5.2269931848E+01	5.2093854820E+01	-1.760770E-01	n/a
9.00E+02	3.2815E+02	5.2359905137E+01	5.2214887449E+01	-1.450177E-01	n/a
9.50E+02	3.2815E+02	5.2439387556E+01	5.2329633286E+01	-1.097543E-01	n/a
1.00E+02	2.9815E+02	5.2503565086E+01	5.2784304059E+01	2.807390E-01	n/a
1.00E+03	3.2815E+02	5.2509474879E+01	5.2438725150E+01	-7.074973E-02	n/a
4.00E+02	3.1815E+02	5.2547542752E+01	5.2237207319E+01	-3.103354E-01	n/a

1.05E+03	3.2815E+02	5.2571101009E+01	5.2542704335E+01	-2.839667E-02	n/a
2.00E+02	3.0815E+02	5.2611406257E+01	5.2510043176E+01	-1.013631E-01	n/a
1.10E+03	3.2815E+02	5.2625068416E+01	5.2642037495E+01	1.696908E-02	n/a
1.15E+03	3.2815E+02	5.2672071534E+01	5.2737129810E+01	6.505828E-02	n/a
1.20E+03	3.2815E+02	5.2712716034E+01	5.2828335352E+01	1.156193E-01	n/a
4.50E+02	3.1815E+02	5.2835494094E+01	5.2487606729E+01	-3.478874E-01	n/a
5.00E+02	3.1815E+02	5.3081164326E+01	5.2712613538E+01	-3.685508E-01	n/a
2.50E+02	3.0815E+02	5.3247545237E+01	5.2987932449E+01	-2.596128E-01	n/a
5.50E+02	3.1815E+02	5.3292804036E+01	5.2916987787E+01	-3.758162E-01	n/a
6.00E+02	3.1815E+02	5.3476464878E+01	5.3104258680E+01	-3.722062E-01	n/a
6.50E+02	3.1815E+02	5.3636718802E+01	5.3277116398E+01	-3.596024E-01	n/a
3.00E+02	3.0815E+02	5.3742265410E+01	5.3381623161E+01	-3.606422E-01	n/a
1.50E+02	2.9815E+02	5.3772386091E+01	5.3660436321E+01	-1.119498E-01	n/a
7.00E+02	3.1815E+02	5.3777101836E+01	5.3437659239E+01	-3.394426E-01	n/a
7.50E+02	3.1815E+02	5.3900408542E+01	5.3587555856E+01	-3.128527E-01	n/a
8.00E+02	3.1815E+02	5.4008883849E+01	5.3728155382E+01	-2.807285E-01	n/a
8.50E+02	3.1815E+02	5.4104358527E+01	5.3860564334E+01	-2.437942E-01	n/a
3.50E+02	3.0815E+02	5.4140977382E+01	5.3716765077E+01	-4.242123E-01	n/a
9.00E+02	3.1815E+02	5.4188346699E+01	5.3985701661E+01	-2.026450E-01	n/a
9.50E+02	3.1815E+02	5.4262112380E+01	5.4104338985E+01	-1.577734E-01	n/a
1.00E+03	3.1815E+02	5.4326724102E+01	5.4217130587E+01	-1.095935E-01	n/a
5.00E+01	2.7815E+02	5.4328748002E+01	5.4859472658E+01	5.307247E-01	n/a
1.05E+03	3.1815E+02	5.4383092164E+01	5.4324636119E+01	-5.845605E-02	n/a
1.10E+03	3.1815E+02	5.4431998648E+01	5.4427338062E+01	-4.660586E-03	n/a
4.00E+02	3.0815E+02	5.4470224913E+01	5.4008778487E+01	-4.614464E-01	n/a
1.15E+03	3.1815E+02	5.44741120446E+01	5.4525655334E+01	5.153489E-02	n/a
1.20E+03	3.1815E+02	5.4510047340E+01	5.4619954018E+01	1.099067E-01	n/a
1.00E+02	2.8815E+02	5.4579516988E+01	5.4574429449E+01	-5.087539E-03	n/a
2.00E+02	2.9815E+02	5.4612274511E+01	5.4290867290E+01	-3.214072E-01	n/a
4.50E+02	3.0815E+02	5.4746875019E+01	5.4267669934E+01	-4.792051E-01	n/a
5.00E+02	3.0815E+02	5.4982315636E+01	5.4500307618E+01	-4.820080E-01	n/a
5.50E+02	3.0815E+02	5.5184598103E+01	5.4711613009E+01	-4.729851E-01	n/a
2.50E+02	2.9815E+02	5.5228040301E+01	5.4784963687E+01	-4.430766E-01	n/a
6.00E+02	3.0815E+02	5.5359626705E+01	5.4905235002E+01	-4.543917E-01	n/a
6.50E+02	3.0815E+02	5.5511858531E+01	5.5083955012E+01	-4.279035E-01	n/a
7.00E+02	3.0815E+02	5.5644741997E+01	5.5249942499E+01	-3.947995E-01	n/a
3.00E+02	2.9815E+02	5.5705785181E+01	5.5192006014E+01	-5.137792E-01	n/a
7.50E+02	3.0815E+02	5.5760999798E+01	5.5404922706E+01	-3.560771E-01	n/a
1.50E+02	2.8815E+02	5.5813349638E+01	5.5480274837E+01	-3.330748E-01	n/a
8.00E+02	3.0815E+02	5.5862819315E+01	5.5550290520E+01	-3.125288E-01	n/a
8.50E+02	3.0815E+02	5.5951984536E+01	5.5687189985E+01	-2.647946E-01	n/a
9.00E+02	3.0815E+02	5.6029969047E+01	5.5816571216E+01	-2.133978E-01	n/a
3.50E+02	2.9815E+02	5.6089920112E+01	5.5538513924E+01	-5.514062E-01	n/a
9.50E+02	3.0815E+02	5.6098004926E+01	5.5939232003E+01	-1.587729E-01	n/a
1.00E+03	3.0815E+02	5.6157132296E+01	5.6055848816E+01	-1.012835E-01	n/a
1.05E+03	3.0815E+02	5.6208237404E+01	5.6167000287E+01	-4.123712E-02	n/a
1.10E+03	3.0815E+02	5.6252081574E+01	5.6273185261E+01	2.110369E-02	n/a
1.15E+03	3.0815E+02	5.6289323882E+01	5.6374836862E+01	8.551298E-02	n/a
1.20E+03	3.0815E+02	5.6320537323E+01	5.6472333589E+01	1.517963E-01	n/a
4.00E+02	2.9815E+02	5.6406373527E+01	5.5840430668E+01	-5.659429E-01	n/a
5.00E+01	2.6815E+02	5.6488921434E+01	5.6719975257E+01	2.310538E-01	n/a
2.00E+02	2.8815E+02	5.6627221671E+01	5.6132086224E+01	-4.951354E-01	n/a
1.00E+02	2.7815E+02	5.6670544899E+01	5.6425265101E+01	-2.452798E-01	n/a
4.50E+02	2.9815E+02	5.6671605365E+01	5.6108102153E+01	-5.635032E-01	n/a
5.00E+02	2.9815E+02	5.6896722396E+01	5.6348629504E+01	-5.480929E-01	n/a
5.50E+02	2.9815E+02	5.7089571341E+01	5.6567101101E+01	-5.224702E-01	n/a
2.50E+02	2.8815E+02	5.7222290085E+01	5.6642939391E+01	-5.793507E-01	n/a
6.00E+02	2.9815E+02	5.7255904320E+01	5.6767289585E+01	-4.886147E-01	n/a
6.50E+02	2.9815E+02	5.7400062657E+01	5.6952070700E+01	-4.479920E-01	n/a
7.00E+02	2.9815E+02	5.7525403851E+01	5.7123687481E+01	-4.017164E-01	n/a
7.50E+02	2.9815E+02	5.7634577784E+01	5.7283923682E+01	-3.506541E-01	n/a
3.00E+02	2.8815E+02	5.7682824378E+01	5.7063786141E+01	-6.190382E-01	n/a
8.00E+02	2.9815E+02	5.7729714257E+01	5.7434221496E+01	-2.954928E-01	n/a
8.50E+02	2.9815E+02	5.7812547756E+01	5.7575763767E+01	-2.367840E-01	n/a
1.50E+02	2.7815E+02	5.7868588735E+01	5.7361831303E+01	-5.067574E-01	n/a
9.00E+02	2.9815E+02	5.7884512506E+01	5.7709532829E+01	-1.749797E-01	n/a
9.50E+02	2.9815E+02	5.7946806698E+01	5.7836353530E+01	-1.104532E-01	n/a
1.00E+03	2.9815E+02	5.8000441580E+01	5.7956925283E+01	-4.351630E-02	n/a
1.05E+03	2.9815E+02	5.8046279824E+01	5.8071846341E+01	2.556652E-02	n/a
3.50E+02	2.8815E+02	5.8052205667E+01	5.7422045510E+01	-6.301602E-01	n/a
1.10E+03	2.9815E+02	5.8085060716E+01	5.8181632469E+01	9.657175E-02	n/a
1.15E+03	2.9815E+02	5.8117425120E+01	5.8286731480E+01	1.693064E-01	n/a

1.20E+03	2.9815E+02	5.8143930983E+01	5.8387534708E+01	2.436037E-01	n/a
4.00E+02	2.8815E+02	5.8355726449E+01	5.7734201450E+01	-6.215250E-01	n/a
4.50E+02	2.8815E+02	5.8609430333E+01	5.8010950738E+01	-5.984796E-01	n/a
2.00E+02	2.7815E+02	5.8655977600E+01	5.8035748203E+01	-6.202294E-01	n/a
5.00E+01	2.5815E+02	5.8665472014E+01	5.8643574889E+01	-2.189713E-02	n/a
1.00E+02	2.6815E+02	5.8776377514E+01	5.8338869941E+01	-4.375076E-01	n/a
5.00E+02	2.8815E+02	5.8824133591E+01	5.8259635327E+01	-5.644983E-01	n/a
5.50E+02	2.8815E+02	5.9007476075E+01	5.8485516163E+01	-5.219599E-01	n/a
6.00E+02	2.8815E+02	5.9165054076E+01	5.8692493833E+01	-4.725602E-01	n/a
2.50E+02	2.7815E+02	5.9230037741E+01	5.8563926431E+01	-6.661113E-01	n/a
6.50E+02	2.8815E+02	5.9301090296E+01	5.8883541610E+01	-4.175487E-01	n/a
7.00E+02	2.8815E+02	5.9418849788E+01	5.9060978598E+01	-3.578712E-01	n/a
7.50E+02	2.8815E+02	5.9520908563E+01	5.9226649045E+01	-2.942595E-01	n/a
8.00E+02	2.8815E+02	5.9609334706E+01	5.9382044055E+01	-2.272907E-01	n/a
3.00E+02	2.7815E+02	5.9673137803E+01	5.8999045765E+01	-6.740920E-01	n/a
8.50E+02	2.8815E+02	5.9685816563E+01	5.9528386586E+01	-1.574300E-01	n/a
9.00E+02	2.8815E+02	5.9751746300E+01	5.9666692288E+01	-8.505401E-02	n/a
9.50E+02	2.8815E+02	5.9808287845E+01	5.9797813983E+01	-1.047386E-02	n/a
1.00E+03	2.8815E+02	5.9856423680E+01	5.9922474803E+01	6.605112E-02	n/a
1.05E+03	2.8815E+02	5.9896990340E+01	6.0041293291E+01	1.443030E-01	n/a
1.10E+03	2.8815E+02	5.9930707742E+01	6.0154802702E+01	2.240950E-01	n/a
1.50E+02	2.6815E+02	5.9937851097E+01	5.9307198823E+01	-6.306523E-01	n/a
1.15E+03	2.8815E+02	5.9958196638E+01	6.0263466038E+01	3.052694E-01	n/a
1.20E+03	2.8815E+02	5.9979999101E+01	6.0367687904E+01	3.876888E-01	n/a
3.50E+02	2.7815E+02	6.0027595828E+01	5.9369455132E+01	-6.581407E-01	n/a
4.00E+02	2.7815E+02	6.0318052901E+01	5.9692197520E+01	-6.258554E-01	n/a
4.50E+02	2.7815E+02	6.0560124350E+01	5.9978332475E+01	-5.817919E-01	n/a
2.00E+02	2.6815E+02	6.0698307088E+01	6.0003970921E+01	-6.943362E-01	n/a
5.00E+02	2.7815E+02	6.0764329442E+01	6.0235450947E+01	-5.288785E-01	n/a
5.00E+01	2.4815E+02	6.0858219112E+01	6.0632411424E+01	-2.258077E-01	n/a
1.00E+02	2.5815E+02	6.0896786035E+01	6.0317372721E+01	-5.794133E-01	n/a
5.50E+02	2.7815E+02	6.0938096709E+01	6.0468992299E+01	-4.691044E-01	n/a
6.00E+02	2.7815E+02	6.1086863471E+01	6.0682989404E+01	-4.038741E-01	n/a
6.50E+02	2.7815E+02	6.1214731527E+01	6.0880516370E+01	-3.342152E-01	n/a
2.50E+02	2.6815E+02	6.1251060156E+01	6.0550061771E+01	-7.009984E-01	n/a
7.00E+02	2.7815E+02	6.1324871389E+01	6.1063970951E+01	-2.609004E-01	n/a
7.50E+02	2.7815E+02	6.1419783804E+01	6.1235259941E+01	-1.845239E-01	n/a
8.00E+02	2.7815E+02	6.1501477189E+01	6.1395925012E+01	-1.055522E-01	n/a
8.50E+02	2.7815E+02	6.1571588253E+01	6.1547230600E+01	-2.435765E-02	n/a
9.00E+02	2.7815E+02	6.1631468503E+01	6.1690226797E+01	5.875829E-02	n/a
3.00E+02	2.6815E+02	6.1676512113E+01	6.0999937729E+01	-6.765744E-01	n/a
9.50E+02	2.7815E+02	6.1682247017E+01	6.1825795350E+01	1.435483E-01	n/a
1.00E+03	2.7815E+02	6.1724877010E+01	6.1954683913E+01	2.298069E-01	n/a
1.05E+03	2.7815E+02	6.1760170103E+01	6.2077532008E+01	3.173619E-01	n/a
1.10E+03	2.7815E+02	6.1788822073E+01	6.2194890974E+01	4.060689E-01	n/a
1.15E+03	2.7815E+02	6.1811437830E+01	6.2307239516E+01	4.958017E-01	n/a
1.20E+03	2.7815E+02	6.1828541617E+01	6.2414995959E+01	5.864543E-01	n/a
3.50E+02	2.6815E+02	6.2015885340E+01	6.1382909149E+01	-6.329762E-01	n/a
1.50E+02	2.5815E+02	6.2020923210E+01	6.1318541481E+01	-7.023817E-01	n/a
4.00E+02	2.6815E+02	6.2293153277E+01	6.1716597013E+01	-5.765563E-01	n/a
4.50E+02	2.6815E+02	6.2523491615E+01	6.2012435941E+01	-5.110557E-01	n/a
5.00E+02	2.6815E+02	6.2717119497E+01	6.2278274321E+01	-4.388452E-01	n/a
2.00E+02	2.5815E+02	6.2754009100E+01	6.2038943889E+01	-7.150652E-01	n/a
5.50E+02	2.6815E+02	6.2881246472E+01	6.2519735988E+01	-3.615105E-01	n/a
6.00E+02	2.6815E+02	6.3021148270E+01	6.2740990585E+01	-2.801577E-01	n/a
1.00E+02	2.4815E+02	6.3031577515E+01	6.2362974389E+01	-6.686031E-01	n/a
6.50E+02	2.6815E+02	6.3140804785E+01	6.2945216475E+01	-1.955883E-01	n/a
7.00E+02	2.6815E+02	6.3243289619E+01	6.3134892729E+01	-1.083969E-01	n/a
2.50E+02	2.5815E+02	6.3285168399E+01	6.2603554848E+01	-6.816136E-01	n/a
7.50E+02	2.6815E+02	6.3331026587E+01	6.3311990809E+01	-1.903578E-02	n/a
8.00E+02	2.6815E+02	6.3405964471E+01	6.3478104672E+01	7.214020E-02	n/a
8.50E+02	2.6815E+02	6.3469686326E+01	6.3634541632E+01	1.648553E-01	n/a
9.00E+02	2.6815E+02	6.3523503786E+01	6.3782387399E+01	2.588836E-01	n/a
9.50E+02	2.6815E+02	6.3568510045E+01	6.3922553619E+01	3.540436E-01	n/a
1.00E+03	2.6815E+02	6.3605627625E+01	6.4055813306E+01	4.501857E-01	n/a
1.05E+03	2.6815E+02	6.3635643088E+01	6.4182827668E+01	5.471846E-01	n/a
1.10E+03	2.6815E+02	6.3659231135E+01	6.4304166743E+01	6.449356E-01	n/a
1.15E+03	2.6815E+02	6.3676975563E+01	6.4420325469E+01	7.433499E-01	n/a
1.20E+03	2.6815E+02	6.3689385963E+01	6.4531736362E+01	8.423504E-01	n/a
3.00E+02	2.5815E+02	6.3692765163E+01	6.3068687887E+01	-6.240773E-01	n/a
3.50E+02	2.5815E+02	6.4016900128E+01	6.3464647389E+01	-5.522527E-01	n/a
1.50E+02	2.4815E+02	6.4117626349E+01	6.3398096758E+01	-7.195296E-01	n/a

4.00E+02	2.5815E+02	6.4280858340E+01	6.3809651933E+01	-4.712064E-01	n/a
4.50E+02	2.5815E+02	6.4499369404E+01	6.4115523935E+01	-3.838455E-01	n/a
5.00E+02	2.5815E+02	6.4682342387E+01	6.4390377950E+01	-2.919644E-01	n/a
2.00E+02	2.4815E+02	6.4822917955E+01	6.4142930872E+01	-6.799871E-01	n/a
5.50E+02	2.5815E+02	6.4836766281E+01	6.4640028541E+01	-1.967377E-01	n/a
6.00E+02	2.5815E+02	6.4967753462E+01	6.4868786760E+01	-9.896670E-02	n/a
6.50E+02	2.5815E+02	6.5079155994E+01	6.5079938761E+01	7.827670E-04	n/a
7.00E+02	2.5815E+02	6.5173952291E+01	6.5276047690E+01	1.020954E-01	n/a
7.50E+02	2.5815E+02	6.5254487851E+01	6.5459151869E+01	2.046640E-01	n/a
8.00E+02	2.5815E+02	6.5322647552E+01	6.5630899313E+01	3.082518E-01	n/a
2.50E+02	2.4815E+02	6.5332202794E+01	6.4726690031E+01	-6.055128E-01	n/a
8.50E+02	2.5815E+02	6.5379964428E+01	6.5792641672E+01	4.126772E-01	n/a
9.00E+02	2.5815E+02	6.5427706250E+01	6.5945501476E+01	5.177952E-01	n/a
9.50E+02	2.5815E+02	6.5466930748E+01	6.6090421290E+01	6.234905E-01	n/a
1.00E+03	2.5815E+02	6.5498530586E+01	6.6228200341E+01	7.296698E-01	n/a
1.05E+03	2.5815E+02	6.5523265878E+01	6.635952264E+01	8.362564E-01	n/a
1.10E+03	2.5815E+02	6.5541789216E+01	6.6484976429E+01	9.431872E-01	n/a
1.15E+03	2.5815E+02	6.5554665048E+01	6.6605074559E+01	1.050410E+00	n/a
1.20E+03	2.5815E+02	6.5562384886E+01	6.6720263838E+01	1.157879E+00	n/a
3.00E+02	2.4815E+02	6.5721747871E+01	6.5207597579E+01	-5.141503E-01	n/a
3.50E+02	2.4815E+02	6.6030494844E+01	6.5616985640E+01	-4.135092E-01	n/a
4.00E+02	2.4815E+02	6.6281028497E+01	6.5973690659E+01	-3.073378E-01	n/a
4.50E+02	2.4815E+02	6.6487620405E+01	6.6289935995E+01	-1.976844E-01	n/a
5.00E+02	2.4815E+02	6.6659866331E+01	6.6574111401E+01	-8.575493E-02	n/a
5.50E+02	2.4815E+02	6.6804528016E+01	6.6832228635E+01	2.770062E-02	n/a
6.00E+02	2.4815E+02	6.6926551249E+01	6.7068744954E+01	1.421937E-01	n/a
6.50E+02	2.4815E+02	6.7029661822E+01	6.7287057957E+01	2.573961E-01	n/a
7.00E+02	2.4815E+02	6.7116736989E+01	6.7489817720E+01	3.730807E-01	n/a
7.50E+02	2.4815E+02	6.7190044976E+01	6.7679131689E+01	4.890867E-01	n/a
8.00E+02	2.4815E+02	6.7251405614E+01	6.7856703770E+01	6.052982E-01	n/a
8.50E+02	2.4815E+02	6.7302301273E+01	6.8023931455E+01	7.216302E-01	n/a
9.00E+02	2.4815E+02	6.7343955398E+01	6.8181975342E+01	8.380199E-01	n/a
9.50E+02	2.4815E+02	6.7377389614E+01	6.8331809962E+01	9.544203E-01	n/a
1.00E+03	2.4815E+02	6.7403466015E+01	6.8474261649E+01	1.070796E+00	n/a
1.05E+03	2.4815E+02	6.7422918978E+01	6.8610037220E+01	1.187118E+00	n/a
1.10E+03	2.4815E+02	6.7436377440E+01	6.8739746034E+01	1.303369E+00	n/a
1.15E+03	2.4815E+02	6.7444386755E+01	6.8863917169E+01	1.419530E+00	n/a
1.20E+03	2.4815E+02	6.7447421147E+01	6.8983012973E+01	1.535592E+00	n/a

Error Statistics

NOTE: Relative error statistics cannot be compiled, as at least one of the dependent variable data points contains a value of exactly zero.

Absolute Error

Minimum:	-7.195296E-01
Maximum:	3.182175E+00
Mean:	2.130100E-03
Std. Error of Mean:	3.627362E-02
Median:	-9.103799E-02
Variance:	3.276281E-01
Standard Deviation:	5.723881E-01
Skew:	1.920141E+00
Kurtosis:	5.715179E+00

Data Statistics

X	Y	Z	
Minimum:	0.000000E+00	2.481500E+02	0.000000E+00
Maximum:	1.200000E+03	3.381500E+02	6.744742E+01
Mean:	6.000000E+02	2.931500E+02	5.524001E+01
Std. Error of Mean:	2.284925E+01	1.820234E+00	8.020912E-01
Median:	6.000000E+02	2.931500E+02	5.723910E+01
Variance:	1.300000E+05	8.250000E+02	1.601942E+02
Standard Deviation:	3.605551E+02	2.872281E+01	1.265679E+01
Skew:	0.000000E+00	0.000000E+00	-3.218235E+00
Kurtosis:	-1.203846E+00	-1.224242E+00	1.164261E+01

Source Code in C++

```
// To the best of my knowledge this code is correct.
// If you find any errors or problems please contact
// me directly using zunzun@zunzun.com.
//
//      James

#include

// Fitting target: lowest sum of squared absolute error
// Fitting target value = 81.9081706601

double Simple_SimpleEquation_13_model(double x_in, double y_in)
{
    double temp;
    temp = 0.0;

    // coefficients
    double a = 1.1834672231963125E+02;
    double b = 9.9667039815506886E-01;
    double c = 4.0600537403361850E-02;

    temp = a*pow(b,y_in)*pow(x_in,c);
    return temp;
}
```

Source Code in Fortran90

```
! To the best of my knowledge this code is correct.
! If you find any errors or problems please contact
! me directly using zunzun@zunzun.com.
!
!      James
```

```
! fortran90 has no power function, only an operator, create
! a function for pyeq3 automated source code generation
real function pow(a, b)
real :: a ! input
real :: b ! input
real :: c ! output
c = a**b
end function pow
```

```
! Fitting target: lowest sum of squared absolute error
! Fitting target value = 81.9081706601
```

```
real function Simple_SimpleEquation_13_model(x_in, y_in)
real :: x_in ! input
real :: y_in ! input
real :: temp ! output
```

```
! coefficients
real :: a = 1.1834672231963125E+02
real :: b = 9.9667039815506886E-01
real :: c = 4.0600537403361850E-02
```

```
temp = 0.0
```

```
temp = a*pow(b,y_in)*pow(x_in,c)
```

```
end function Simple_SimpleEquation_13_model
```

Source Code in Java

```
// To the best of my knowledge this code is correct.
// If you find any errors or problems please contact
// me directly using zunzun@zunzun.com.
//
//      James

import java.lang.Math;

// Fitting target: lowest sum of squared absolute error
// Fitting target value = 81.9081706601

class Simple_SimpleEquation_13
{
    double Simple_SimpleEquation_13_model(double x_in, double y_in)
    {
        double temp;
        temp = 0.0;

        // coefficients
        double a = 1.1834672231963125E+02;
        double b = 9.9667039815506886E-01;
        double c = 4.0600537403361850E-02;

        temp = a*Math.pow(b,y_in)*Math.pow(x_in,c);
        return temp;
    }
}
```

Source Code in Julia

```
# To the best of my knowledge this code is correct.
# If you find any errors or problems please contact
# me directly using zunzun@zunzun.com.
#
#       James

# julia has no power function, only an operator, create
# a function for pyeq3 automated source code generation
pow(x,y) = x ^ y

# Fitting target: lowest sum of squared absolute error
# Fitting target value = 81.9081706601

function Simple_SimpleEquation_l3_model(x_in, y_in)
    temp = 0.0

    # coefficients
    a = 1.1834672231963125E+02
    b = 9.9667039815506886E-01
    c = 4.0600537403361850E-02

    temp = a*pow(b,y_in)*pow(x_in,c)
end
```

Source Code in JavaScript

```
// To the best of my knowledge this code is correct.
// If you find any errors or problems please contact
// me directly using zunzun@zunzun.com.
//
//      James

// Fitting target: lowest sum of squared absolute error
// Fitting target value = 81.9081706601

function Simple_SimpleEquation_13_model(x_in, y_in)
{
    var temp;
    temp = 0.0;

    // coefficients
    var a = 1.1834672231963125E+02;
    var b = 9.9667039815506886E-01;
    var c = 4.0600537403361850E-02;

    temp = a*Math.pow(b,y_in)*Math.pow(x_in,c);
    return temp;
}
```

Source Code in Python

```
# To the best of my knowledge this code is correct.
# If you find any errors or problems please contact
# me directly using zunzun@zunzun.com.
#
#     James

import math

# Fitting target: lowest sum of squared absolute error
# Fitting target value = 81.9081706601

def Simple_SimpleEquation_l3_model(x_in, y_in):
    temp = 0.0

    # coefficients
    a = 1.1834672231963125E+02
    b = 9.9667039815506886E-01
    c = 4.0600537403361850E-02

    temp = a*math.pow(b,y_in)*math.pow(x_in,c)
    return temp
```


Source Code in C#

```
// To the best of my knowledge this code is correct.
// If you find any errors or problems please contact
// me directly using zunzun@zunzun.com.
//
//      James

using System;

// Fitting target: lowest sum of squared absolute error
// Fitting target value = 81.9081706601

class Simple_SimpleEquation_13
{
    double Simple_SimpleEquation_13_model(double x_in, double y_in)
    {
        double temp;
        temp = 0.0;

        // coefficients
        double a = 1.1834672231963125E+02;
        double b = 9.9667039815506886E-01;
        double c = 4.0600537403361850E-02;

        temp = a*Math.Pow(b,y_in)*Math.Pow(x_in,c);
        return temp;
    }
}
```

Source Code in SCILAB

```
// To the best of my knowledge this code is correct.
// If you find any errors or problems please contact
// me directly using zunzun@zunzun.com.
//
//      James

// Fitting target: lowest sum of squared absolute error
// Fitting target value = 81.9081706601

function z = Simple_SimpleEquation_l3_model(x_in, y_in)
    temp = 0.0;

    // coefficients
    a = 1.1834672231963125E+02;
    b = 9.9667039815506886E-01;
    c = 4.0600537403361850E-02;

    temp = a*power(b,y_in)*power(x_in,c);

    z = temp;
endfunction
```

Source Code in MATLAB

```
% To the best of my knowledge this code is correct.
% If you find any errors or problems please contact
% me directly using zunzun@zunzun.com.
%
%      James

% Fitting target: lowest sum of squared absolute error
% Fitting target value = 81.9081706601

function z = Simple_SimpleEquation_l3_model(x_in, y_in)
    temp = 0.0;

    % coefficients
    a = 1.1834672231963125E+02;
    b = 9.9667039815506886E-01;
    c = 4.0600537403361850E-02;

    temp = a.*power(b,y_in).*power(x_in,c);

    z = temp;
```

Source Code in VBA

```
' To the best of my knowledge this code is correct.
' If you find any errors or problems please contact
' me directly using zunzun@zunzun.com.
'
'      James

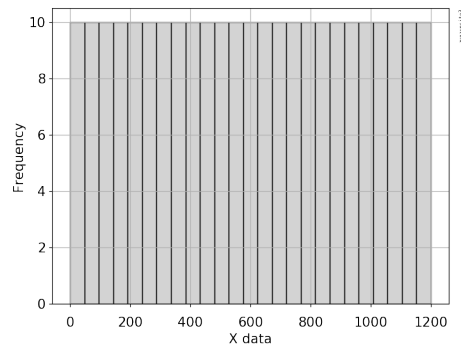
' Fitting target: lowest sum of squared absolute error
' Fitting target value = 81.9081706601

Public Function Simple_SimpleEquation_13_model(x_in, y_in)
    temp = 0.0

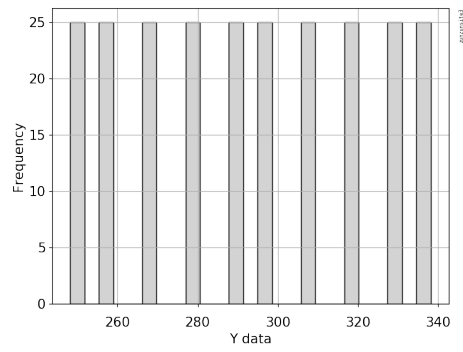
    ' coefficients
    Const a = 1.1834672231963125E+02
    Const b = 9.9667039815506886E-01
    Const c = 4.0600537403361850E-02

    temp = a*Application.WorksheetFunction.power(b,y_in)*Application.WorksheetFunction.power(x_in,c)
    Simple_SimpleEquation_13_model = temp
End Function
```

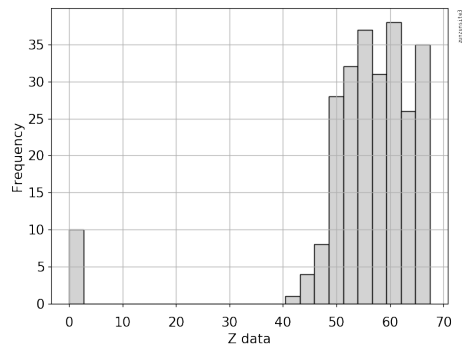
Histogram of X data



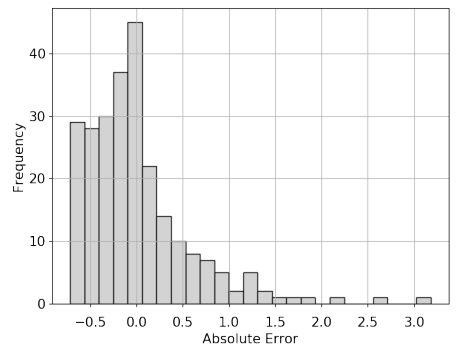
Histogram of Y data



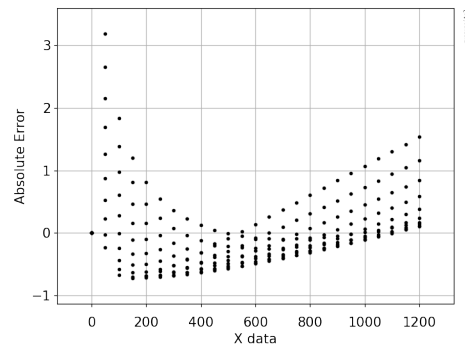
Histogram of Z data



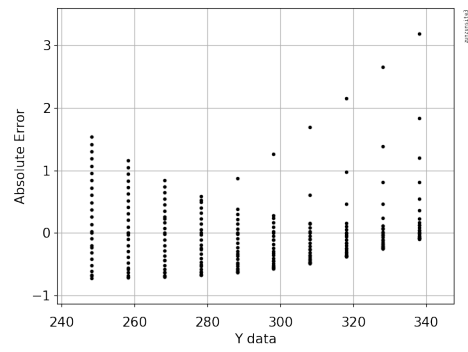
Histogram of Absolute Error



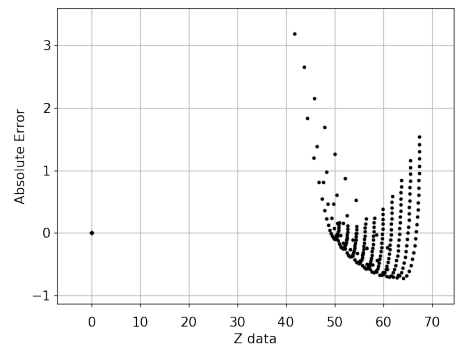
Absolute Error vs. X data



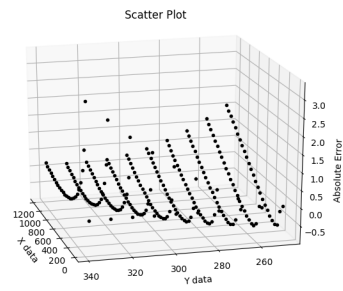
Absolute Error vs. Y data



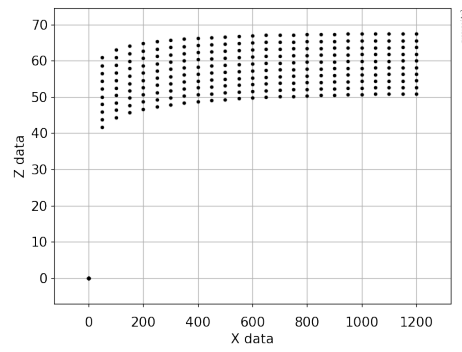
Absolute Error vs. Z data



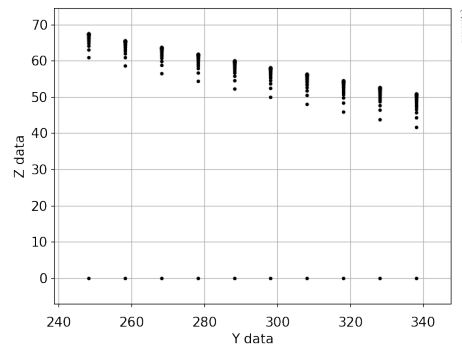
Absolute Error Scatter Plot



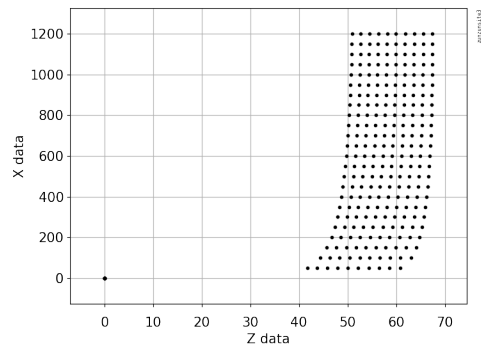
Z data vs. X data



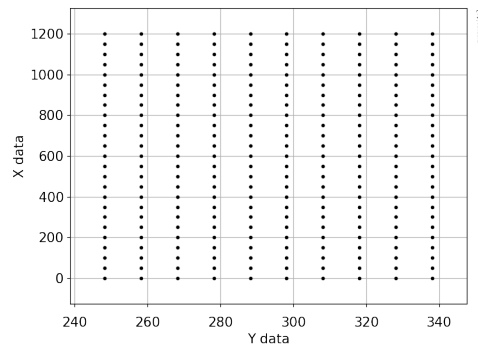
Z data vs. Y data



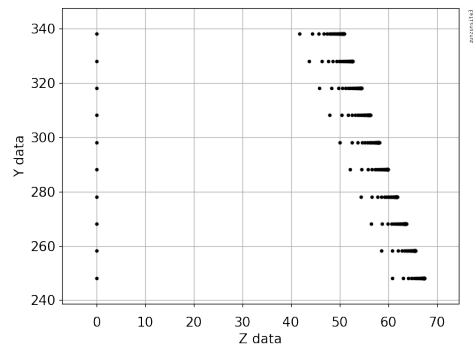
X data vs. Z data



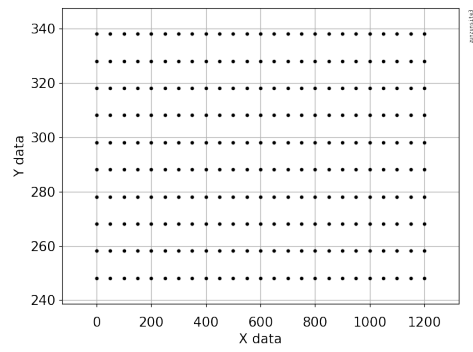
X data vs. Y data



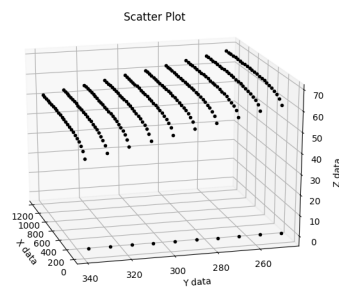
Y data vs. Z data



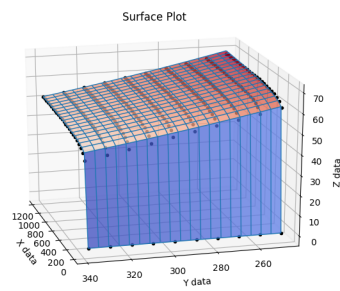
Y data vs. X data



Scatter Plot



Surface Plot



Contour Plot

