ZunZunSite3

Simple Equation 13

Equation Family: Simple

z = a*pow(b,y)*pow(x,c)

Thu Apr 4 20:09:58 2019 local server time

Isaiah 44:24

Thus saith the LORD, thy redeemer, and he that formed thee from the womb, I am the LORD that maketh all things; that stretcheth forth the heavens alone; that spreadeth abroad the earth by myself

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

Coefficients

z = a*pow(b,y)*pow(x,c)

Fitting target of lowest sum of squared absolute error = 4.8727931869221584E+02

a = 6.5126737778450083E-01
b = 9.9680804877945284E-01
c = 1.0391858697506762E+00

Coefficient and Fit Statistics

Most statstics 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: 487.279318692
R-squared: 0.99987822071
R-squared adjusted: 0.999877234643
Model F-statistic: 1014006.24194
Model F-statistic p-value: 1.11022302463e-16
Model log-likelihood: -438.156707111
AIC: 3.52925365689
BIC: 3.5715111879
Root Mean Squared Error (RMSE): 1.39610790227

a = 6.5126737778450083E-01
       std err: 3.41744E-05
       t-stat: 1.11406E+02
       p-stat: 0.00000E+00
       95% confidence intervals: [6.39753E-01, 6.62782E-01]
b = 9.9680804877945284E-01
       std err: 1.83230E-10
       t-stat: 7.36399E+04
       p-stat: 0.00000E+00
       95% confidence intervals: [9.96781E-01, 9.96835E-01]
c = 1.0391858697506762E+00
       std err: 1.41469E-06
       t-stat: 8.73700E+02
       p-stat: 0.00000E+00
       95% confidence intervals: [1.03684E+00, 1.04153E+00]

Coefficient Covariance Matrix
[1.66215271e-05 -1.67638779e-08 -3.04069589e-06]
[-1.67638779e-08   8.91182719e-11 -1.61645171e-16]
[-3.04069589e-06 -1.61645171e-16   6.88069235e-07]

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	1.0671008857E+01	1.2876441708E+01	2.205433E+00	n/a
5.00E+01	3.2815E+02	1.1160941863E+01	1.3294760114E+01	2.133818E+00	n/a
5.00E+01	3.1815E+02	1.1645108400E+01	1.3726668478E+01	2.081560E+00	n/a
5.00E+01	3.0815E+02	1.2123059403E+01	1.4172608296E+01	2.049549E+00	n/a
5.00E+01	2.9815E+02	1.2594380193E+01	1.4633035412E+01	2.038655E+00	n/a
5.00E+01	2.8815E+02	1.3058686015E+01	1.5108420475E+01	2.049734E+00	n/a
5.00E+01	2.7815E+02	1.3515618395E+01	1.5599249426E+01	2.083631E+00	n/a
5.00E+01	2.6815E+02	1.3964842094E+01	1.6106023992E+01	2.141182E+00	n/a
5.00E+01	2.5815E+02	1.4406042512E+01	1.6629262201E+01	2.223220E+00	n/a
5.00E+01	2.4815E+02	1.4838923438E+01	1.7169498907E+01	2.330575E+00	n/a
1.00E+02	3.3815E+02	2.3900437536E+01	2.6461958499E+01	2.561521E+00	n/a
1.00E+02	3.2815E+02	2.4973919748E+01	2.7321631113E+01	2.347711E+00	n/a
1.00E+02	3.1815E+02	2.6043284691E+01	2.8209232008E+01	2.165947E+00	n/a
1.00E+02	3.0815E+02	2.7107887486E+01	2.9125668493E+01	2.017781E+00	n/a
1.00E+02	2.9815E+02	2.8167136378E+01	3.0071877353E+01	1.904741E+00	n/a
1.00E+02	2.8815E+02	2.9220486877E+01	3.1048825807E+01	1.828339E+00	n/a
1.00E+02	2.7815E+02	3.0267436935E+01	3.2057512494E+01	1.790076E+00	n/a
1.00E+02	2.6815E+02	3.1307522914E+01	3.3098968499E+01	1.791446E+00	n/a
1.00E+02	2.5815E+02	3.2340316176E+01	3.4174258402E+01	1.833942E+00	n/a
1.00E+02	2.4815E+02	3.3365420176E+01	3.5284481368E+01	1.919061E+00	n/a
1.50E+02	3.3815E+02	3.7675248416E+01	4.0328635878E+01	2.653387E+00	n/a
1.50E+02	3.2815E+02	3.9319202444E+01	4.1638796796E+01	2.319594E+00	n/a
1.50E+02	3.1815E+02	4.0960358466E+01	4.2991521059E+01	2.031163E+00	n/a
1.50E+02	3.0815E+02	4.2597892649E+01	4.4388191427E+01	1.790299E+00	n/a
1.50E+02	2.9815E+02	4.4231050396E+01	4.5830235582E+01	1.599185E+00	n/a
1.50E+02	2.8815E+02	4.5859139370E+01	4.7319127587E+01	1.459988E+00	n/a
1.50E+02	2.7815E+02	4.7481523729E+01	4.8856389393E+01	1.374866E+00	n/a
1.50E+02	2.6815E+02	4.9097619304E+01	5.0443592396E+01	1.345973E+00	n/a
1.50E+02	2.5815E+02	5.0706889529E+01	5.2082359042E+01	1.375470E+00	n/a
2.00E+02	3.3815E+02	5.1765032375E+01	5.4381114246E+01	2.616082E+00	n/a
1.50E+02	2.4815E+02	5.2308842024E+01	5.3774364483E+01	1.465522E+00	n/a
2.00E+02	3.2815E+02	5.3970074295E+01	5.6147799605E+01	2.177725E+00	n/a
2.00E+02	3.1815E+02	5.6173479990E+01	5.7971879470E+01	1.798399E+00	n/a
2.00E+02	3.0815E+02	5.8374257550E+01	5.9855218422E+01	1.480961E+00	n/a
2.00E+02	2.9815E+02	6.0571499084E+01	6.1799741618E+01	1.228243E+00	n/a
2.00E+02	2.8815E+02	6.2764372782E+01	6.3807436757E+01	1.043064E+00	n/a
2.00E+02	2.7815E+02	6.4952116336E+01	6.5880356114E+01	9.282398E-01	n/a
2.50E+02	3.3815E+02	6.6066789861E+01	6.8573389714E+01	2.506600E+00	n/a
2.00E+02	2.6815E+02	6.7134031437E+01	6.8020618634E+01	8.865872E-01	n/a
2.50E+02	3.2815E+02	6.8825664864E+01	7.0801141119E+01	1.975476E+00	n/a
2.00E+02	2.5815E+02	6.9309479148E+01	7.0230412102E+01	9.209330E-01	n/a
2.00E+02	2.4815E+02	7.1477876048E+01	7.2511995379E+01	1.034119E+00	n/a
2.50E+02	3.1815E+02	7.1583975255E+01	7.3101265733E+01	1.517290E+00	n/a
2.50E+02	3.0815E+02	7.4340568476E+01	7.5476114754E+01	1.135546E+00	n/a
2.50E+02	2.9815E+02	7.7094389927E+01	7.7928115762E+01	8.337258E-01	n/a
2.50E+02	2.8815E+02	7.9844474174E+01	8.0459775201E+01	6.153010E-01	n/a
3.00E+02	3.3815E+02	8.0521554064E+01	8.2878074015E+01	2.356520E+00	n/a
2.50E+02	2.7815E+02	8.2589937636E+01	8.3073680945E+01	4.837433E-01	n/a
3.00E+02	3.2815E+02	8.3828348448E+01	8.5570543304E+01	1.742195E+00	n/a
2.50E+02	2.6815E+02	8.5329972469E+01	8.5772504938E+01	4.425325E-01	n/a
3.00E+02	3.1815E+02	8.7135593752E+01	8.8350483144E+01	1.214889E+00	n/a
2.50E+02	2.5815E+02	8.8063841445E+01	8.8559005928E+01	4.951645E-01	n/a
3.00E+02	3.0815E+02	9.0441982094E+01	9.1220735202E+01	7.787531E-01	n/a
2.50E+02	2.4815E+02	9.0790873717E+01	9.1436032289E+01	6.451586E-01	n/a
3.00E+02	2.9815E+02	9.3746316917E+01	9.4184233460E+01	4.379165E-01	n/a
3.50E+02	3.3815E+02	9.5091019559E+01	9.7276919199E+01	2.185900E+00	n/a
3.00E+02	2.8815E+02	9.7047503398E+01	9.7244007219E+01	1.965038E-01	n/a
3.50E+02	3.2815E+02	9.8940737521E+01	1.0043716539E+02	1.496428E+00	n/a

3.00E+02	2.7815E+02	1.0034454047E+02	1.0040318419E+02	5.864372E-02	n/a
3.50E+02	3.1815E+02	1.0279188591E+02	1.0370007885E+02	9.081929E-01	n/a
3.00E+02	2.6815E+02	1.0363651412E+02	1.0366499370E+02	2.847958E-02	n/a
3.50E+02	3.0815E+02	1.0664300547E+02	1.0706899494E+02	4.259895E-01	n/a
3.00E+02	2.5815E+02	1.0692259186E+02	1.0703276998E+02	1.101781E-01	n/a
4.00E+02	3.3815E+02	1.0974827308E+02	1.1175686738E+02	2.008594E+00	n/a
3.00E+02	2.4815E+02	1.1020201810E+02	1.1050995559E+02	3.079375E-01	n/a
3.50E+02	2.9815E+02	1.1049276122E+02	1.1054735739E+02	5.459617E-02	n/a
4.00E+02	3.2815E+02	1.1413658560E+02	1.1538752527E+02	1.250940E+00	n/a
3.50E+02	2.8815E+02	1.1433993211E+02	1.1413872179E+02	-2.012103E-01	n/a
3.50E+02	2.7815E+02	1.1818340239E+02	1.1784675925E+02	-3.366431E-01	n/a
4.00E+02	3.1815E+02	1.1852728503E+02	1.1913613275E+02	6.088477E-01	n/a
3.50E+02	2.6815E+02	1.2202215443E+02	1.2167526014E+02	-3.468943E-01	n/a
4.00E+02	3.0815E+02	1.2291876373E+02	1.2300652166E+02	8.775792E-02	n/a
4.50E+02	3.3815E+02	1.2447336047E+02	1.2630809883E+02	1.834738E+00	n/a
3.50E+02	2.5815E+02	1.2585526272E+02	1.2562813797E+02	-2.271248E-01	n/a
4.00E+02	2.9815E+02	1.2730955097E+02	1.2700264833E+02	-3.069026E-01	n/a
4.50E+02	3.2815E+02	1.2939644449E+02	1.3041148420E+02	1.015040E+00	n/a
3.50E+02	2.4815E+02	1.2968188898E+02	1.2970943338E+02	2.754440E-02	n/a
4.00E+02	2.8815E+02	1.3169830185E+02	1.3112859761E+02	-5.697042E-01	n/a
4.50E+02	3.1815E+02	1.3432285791E+02	1.3464817672E+02	3.253188E-01	n/a
4.00E+02	2.7815E+02	1.3608378809E+02	1.3538858707E+02	-6.952010E-01	n/a
4.50E+02	3.0815E+02	1.3925084698E+02	1.3902250714E+02	-2.283398E-01	n/a
5.00E+02	3.3815E+02	1.3925089394E+02	1.4092295324E+02	1.672059E+00	n/a
4.00E+02	2.6815E+02	1.4046489037E+02	1.3978697129E+02	-6.779191E-01	n/a
4.50E+02	2.9815E+02	1.4417880726E+02	1.4353894693E+02	-6.398603E-01	n/a
5.00E+02	3.2815E+02	1.4470532331E+02	1.4550113304E+02	7.958097E-01	n/a
4.00E+02	2.5815E+02	1.4484059186E+02	1.4432824631E+02	-5.123456E-01	n/a
4.50E+02	2.8815E+02	1.4910527182E+02	1.4820211280E+02	-9.031590E-01	n/a
4.00E+02	2.4815E+02	1.4920997312E+02	1.4901705424E+02	-1.929189E-01	n/a
5.00E+02	3.1815E+02	1.5016401715E+02	1.5022804467E+02	6.402752E-02	n/a
4.50E+02	2.7815E+02	1.5402890149E+02	1.5301677147E+02	-1.012130E+00	n/a
5.50E+02	3.3815E+02	1.5406864529E+02	1.5559528391E+02	1.526639E+00	n/a
5.00E+02	3.0815E+02	1.5562507735E+02	1.5510852001E+02	-5.165573E-01	n/a
4.50E+02	2.6815E+02	1.5894847669E+02	1.5798784449E+02	-9.606322E-01	n/a
5.50E+02	3.2815E+02	1.6005131342E+02	1.6065012535E+02	5.988119E-01	n/a
5.00E+02	2.9815E+02	1.6108676728E+02	1.6014754790E+02	-9.392194E-01	n/a
4.50E+02	2.5815E+02	1.6386289062E+02	1.6312041332E+02	-7.424773E-01	n/a
5.50E+02	3.1815E+02	1.6603917862E+02	1.6586918400E+02	-1.699946E-01	n/a
5.00E+02	2.8815E+02	1.6654749940E+02	1.6535027925E+02	-1.197220E+00	n/a
4.50E+02	2.4815E+02	1.6877114384E+02	1.6841972449E+02	-3.514193E-01	n/a
6.00E+02	3.3815E+02	1.6891666403E+02	1.7032004686E+02	1.403383E+00	n/a
5.00E+02	2.7815E+02	1.7200582489E+02	1.7072203233E+02	-1.283793E+00	n/a
5.50E+02	3.0815E+02	1.7203019976E+02	1.7125779479E+02	-7.724050E-01	n/a
6.00E+02	3.2815E+02	1.7542472697E+02	1.7585325333E+02	4.285264E-01	n/a
5.00E+02	2.6815E+02	1.7746042500E+02	1.7626829814E+02	-1.192127E+00	n/a
5.50E+02	2.9815E+02	1.7802250924E+02	1.7682146598E+02	-1.201043E+00	n/a
6.00E+02	3.1815E+02	1.8193892103E+02	1.8156621770E+02	-3.727033E-01	n/a
5.00E+02	2.5815E+02	1.8291010396E+02	1.8199474612E+02	-9.153578E-01	n/a
6.50E+02	3.3815E+02	1.8378669610E+02	1.8509302684E+02	1.306331E+00	n/a
5.50E+02	2.8815E+02	1.8401439992E+02	1.8256588478E+02	-1.448515E+00	n/a
5.00E+02	2.4815E+02	1.8835378322E+02	1.8790722986E+02	-4.465534E-01	n/a
6.00E+02	3.0815E+02	1.8845706308E+02	1.8746477978E+02	-9.922833E-01	n/a
5.50E+02	2.7815E+02	1.9000431424E+02	1.8849692317E+02	-1.507391E+00	n/a
6.50E+02	3.2815E+02	1.9081752954E+02	1.9110616477E+02	2.886352E-01	n/a
6.00E+02	2.9815E+02	1.9497715536E+02	1.9355496911E+02	-1.422186E+00	n/a
5.50E+02	2.6815E+02	1.9599083515E+02	1.9462064386E+02	-1.370191E+00	n/a
6.50E+02	3.1815E+02	1.9785543276E+02	1.9731465219E+02	-5.407806E-01	n/a
7.00E+02	3.3815E+02	1.9867178523E+02	1.9991064745E+02	1.238862E+00	n/a
6.00E+02	2.8815E+02	2.0149737193E+02	1.9984301111E+02	-1.654361E+00	n/a
5.50E+02	2.5815E+02	2.0197267862E+02	2.0094330655E+02	-1.029372E+00	n/a
6.50E+02	3.0815E+02	2.0489808127E+02	2.0372483543E+02	-1.173246E+00	n/a
7.00E+02	3.2815E+02	2.0622295117E+02	2.0640516709E+02	1.822159E-01	n/a
5.50E+02	2.4815E+02	2.0794868766E+02	2.0747137429E+02	-4.773134E-01	n/a
6.00E+02	2.7815E+02	2.0801604719E+02	2.0633533343E+02	-1.680714E+00	n/a
6.50E+02	2.9815E+02	2.1194334784E+02	2.1034326701E+02	-1.600081E+00	n/a
7.50E+02	3.3815E+02	2.1356599019E+02	2.1476983529E+02	1.203845E+00	n/a
7.00E+02	3.1815E+02	2.1378213268E+02	2.1311067491E+02	-6.714578E-01	n/a
6.00E+02	2.6815E+02	2.1453166636E+02	2.1303857256E+02	-1.493094E+00	n/a
6.50E+02	2.8815E+02	2.1898928824E+02	2.1717671233E+02	-1.812576E+00	n/a
6.00E+02	2.5815E+02	2.2104285770E+02	2.1995958056E+02	-1.083277E+00	n/a
7.00E+02	3.0815E+02	2.2134686442E+02	2.2003402531E+02	-1.312839E+00	n/a

7.50E+02	3.2815E+02	2.2163521055E+02	2.2174708702E+02	1.118765E-01	n/a
6.50E+02	2.7815E+02	2.2603412928E+02	2.2423215654E+02	-1.801973E+00	n/a
6.00E+02	2.4815E+02	2.2754838621E+02	2.2710543214E+02	-4.429541E-01	n/a
8.00E+02	3.3815E+02	2.2846417879E+02	2.2966792020E+02	1.203741E+00	n/a
7.00E+02	2.9815E+02	2.2891489007E+02	2.2718229537E+02	-1.732595E+00	n/a
7.50E+02	3.1815E+02	2.2971340156E+02	2.2895100952E+02	-7.623920E-01	n/a
6.50E+02	2.6815E+02	2.3307625890E+02	2.3151681177E+02	-1.559447E+00	n/a
7.00E+02	2.8815E+02	2.3648414747E+02	2.3456279209E+02	-1.921355E+00	n/a
8.00E+02	3.2815E+02	2.3704931420E+02	2.3712916769E+02	7.985348E-02	n/a
7.50E+02	3.0815E+02	2.3779795732E+02	2.3638896665E+02	-1.408991E+00	n/a
6.50E+02	2.5815E+02	2.4011421798E+02	2.3903812441E+02	-1.076094E+00	n/a
8.50E+02	3.3815E+02	2.4336187412E+02	2.4460256036E+02	1.240686E+00	n/a
7.00E+02	2.7815E+02	2.4405275615E+02	2.4218305983E+02	-1.869696E+00	n/a
8.00E+02	3.1815E+02	2.4564438646E+02	2.4483280956E+02	-8.115769E-01	n/a
7.50E+02	2.9815E+02	2.4588649263E+02	2.4406856153E+02	-1.817931E+00	n/a
6.50E+02	2.4815E+02	2.4714669387E+02	2.4680378277E+02	-3.429111E-01	n/a
7.00E+02	2.6815E+02	2.5161900700E+02	2.5005088807E+02	-1.568119E+00	n/a
8.50E+02	3.2815E+02	2.5246090660E+02	2.5254899118E+02	8.808458E-02	n/a
7.50E+02	2.8815E+02	2.5397682759E+02	2.5199764427E+02	-1.979183E+00	n/a
8.00E+02	3.0815E+02	2.5424664919E+02	2.5278672051E+02	-1.459929E+00	n/a
9.00E+02	3.3815E+02	2.5825513746E+02	2.5957168487E+02	1.316547E+00	n/a
7.00E+02	2.5815E+02	2.5918135376E+02	2.5817431932E+02	-1.007034E+00	n/a
8.50E+02	3.1815E+02	2.6157085479E+02	2.6075357859E+02	-8.172762E-01	n/a
7.50E+02	2.7815E+02	2.6206697462E+02	2.6018432001E+02	-1.882655E+00	n/a
8.00E+02	2.9815E+02	2.6285358842E+02	2.6099903106E+02	-1.854557E+00	n/a
7.00E+02	2.4815E+02	2.6673840631E+02	2.6656165740E+02	-1.767489E-01	n/a
9.00E+02	3.2815E+02	2.6786615607E+02	2.6800441932E+02	1.382632E-01	n/a
7.50E+02	2.6815E+02	2.7015512766E+02	2.6863695720E+02	-1.518170E+00	n/a
8.50E+02	3.0815E+02	2.7068883182E+02	2.6922470935E+02	-1.464122E+00	n/a
8.00E+02	2.8815E+02	2.7146290654E+02	2.6947813586E+02	-1.984771E+00	n/a
9.50E+02	3.3815E+02	2.7314047766E+02	2.7457344904E+02	1.432971E+00	n/a
9.00E+02	3.1815E+02	2.7748908330E+02	2.7671110895E+02	-7.779744E-01	n/a
7.50E+02	2.5815E+02	2.7823965340E+02	2.7736419617E+02	-8.754572E-01	n/a
8.50E+02	2.9815E+02	2.7981219488E+02	2.7797104268E+02	-1.841152E+00	n/a
8.00E+02	2.7815E+02	2.8007250887E+02	2.7823270230E+02	-1.839807E+00	n/a
9.50E+02	3.2815E+02	2.8326166649E+02	2.8349354749E+02	2.318810E-01	n/a
7.50E+02	2.4815E+02	2.8631908432E+02	2.8637495793E+02	5.587361E-02	n/a
9.00E+02	3.0815E+02	2.8712089162E+02	2.8570065379E+02	-1.420238E+00	n/a
1.00E+03	3.3815E+02	2.8801477965E+02	2.8960619905E+02	1.591419E+00	n/a
8.00E+02	2.6815E+02	2.8868049243E+02	2.8727167931E+02	-1.408813E+00	n/a
8.50E+02	2.8815E+02	2.8893852859E+02	2.8700151913E+02	-1.937009E+00	n/a
9.50E+02	3.1815E+02	2.9339577212E+02	2.9270343417E+02	-6.923380E-01	n/a
9.00E+02	2.9815E+02	2.9675880920E+02	2.9498224299E+02	-1.776566E+00	n/a
8.00E+02	2.5815E+02	2.9728513684E+02	2.9660430658E+02	-6.808303E-01	n/a
8.50E+02	2.7815E+02	2.9806563106E+02	2.9632536968E+02	-1.740261E+00	n/a
1.00E+03	3.2815E+02	2.9864440772E+02	2.9901466812E+02	3.702604E-01	n/a
1.05E+03	3.3815E+02	3.0287524761E+02	3.0466844356E+02	1.793196E+00	n/a
9.50E+02	3.0815E+02	3.0353962606E+02	3.0221252347E+02	-1.327103E+00	n/a
8.00E+02	2.4815E+02	3.0588489715E+02	3.0624012397E+02	3.552268E-01	n/a
9.00E+02	2.8815E+02	3.0640030270E+02	3.0456536421E+02	-1.834938E+00	n/a
8.50E+02	2.6815E+02	3.0719150229E+02	3.0595212521E+02	-1.239377E+00	n/a
1.00E+03	3.1815E+02	3.0928797708E+02	3.0872879119E+02	-5.591859E-01	n/a
9.50E+02	2.9815E+02	3.1369032718E+02	3.1203053563E+02	-1.659792E+00	n/a
1.05E+03	3.2815E+02	3.1401166017E+02	3.1456624146E+02	5.545813E-01	n/a
9.00E+02	2.7815E+02	3.1604306284E+02	3.1445981336E+02	-1.583249E+00	n/a
8.50E+02	2.5815E+02	3.1631433474E+02	3.1589162623E+02	-4.227085E-01	n/a
1.10E+03	3.3815E+02	3.1771935893E+02	3.1975883081E+02	2.039472E+00	n/a
1.00E+03	3.0815E+02	3.1994217792E+02	3.1875849807E+02	-1.183680E+00	n/a
9.50E+02	2.8815E+02	3.2384522390E+02	3.2216750664E+02	-1.677717E+00	n/a
1.05E+03	3.1815E+02	3.2516305580E+02	3.2478559024E+02	-3.774656E-01	n/a
8.50E+02	2.4815E+02	3.2543250589E+02	3.2615403293E+02	7.215270E-01	n/a
9.00E+02	2.6815E+02	3.2568499243E+02	3.2467570460E+02	-1.009288E+00	n/a
1.10E+03	3.2815E+02	3.2936097001E+02	3.3014687182E+02	7.859018E-01	n/a
1.00E+03	2.9815E+02	3.3060397943E+02	3.2911404116E+02	-1.489938E+00	n/a
1.15E+03	3.3815E+02	3.3254482669E+02	3.3487612974E+02	2.331303E+00	n/a
9.50E+02	2.7815E+02	3.3400189929E+02	3.3263379858E+02	-1.368101E+00	n/a
9.00E+02	2.5815E+02	3.3532419655E+02	3.3522348064E+02	-1.007159E-01	n/a
1.05E+03	3.0815E+02	3.3632598291E+02	3.3533693615E+02	-9.890468E-01	n/a
1.10E+03	3.1815E+02	3.4101862414E+02	3.4087239028E+02	-1.462339E-01	n/a
1.00E+03	2.8815E+02	3.4127061143E+02	3.3980600593E+02	-1.464606E+00	n/a
9.50E+02	2.6815E+02	3.4415815867E+02	3.4344011011E+02	-7.180486E-01	n/a
1.15E+03	3.2815E+02	3.4469011267E+02	3.4575528813E+02	1.065175E+00	n/a

9.00E+02	2.4815E+02	3.4495897496E+02	3.4611392346E+02	1.154949E+00	n/a
1.20E+03	3.3815E+02	3.4734956873E+02	3.5001921445E+02	2.669646E+00	n/a
1.05E+03	2.9815E+02	3.4749728055E+02	3.4623106481E+02	-1.266216E+00	n/a
1.00E+03	2.7815E+02	3.5193954900E+02	3.5084532177E+02	-1.094227E+00	n/a
1.10E+03	3.0815E+02	3.5268872736E+02	3.5194634986E+02	-7.423775E-01	n/a
9.50E+02	2.5815E+02	3.5431201950E+02	3.5459748749E+02	2.854680E-01	n/a
1.15E+03	3.1815E+02	3.5685252067E+02	3.5698787897E+02	1.353583E-01	n/a
1.05E+03	2.8815E+02	3.5867405950E+02	3.5747911226E+02	-1.194947E+00	n/a
1.20E+03	3.2815E+02	3.5999706270E+02	3.6139032794E+02	1.393265E+00	n/a
1.00E+03	2.6815E+02	3.6260849960E+02	3.6224327310E+02	-3.652265E-01	n/a
1.10E+03	2.9815E+02	3.6436798807E+02	3.6338007042E+02	-9.879177E-01	n/a
9.50E+02	2.4815E+02	3.6446170356E+02	3.6611733585E+02	1.655632E+00	n/a
1.15E+03	3.0815E+02	3.6902831374E+02	3.6858538424E+02	-4.429295E-01	n/a
1.05E+03	2.7815E+02	3.6985368639E+02	3.6909257628E+02	-7.611101E-01	n/a
1.20E+03	3.1815E+02	3.7266277739E+02	3.7313085606E+02	4.680787E-01	n/a
1.00E+03	2.5815E+02	3.7327539275E+02	3.7401151095E+02	7.361182E-01	n/a
1.10E+03	2.8815E+02	3.7605339748E+02	3.7518523953E+02	-8.681580E-01	n/a
1.05E+03	2.6815E+02	3.8103377046E+02	3.8108332822E+02	4.955775E-02	n/a
1.15E+03	2.9815E+02	3.8121406898E+02	3.8055965897E+02	-6.544100E-01	n/a
1.00E+03	2.4815E+02	3.8393837193E+02	3.8616206487E+02	2.223693E+00	n/a
1.20E+03	3.0815E+02	3.8534283215E+02	3.8525280004E+02	-9.003211E-02	n/a
1.10E+03	2.7815E+02	3.8774221329E+02	3.8737392450E+02	-3.682888E-01	n/a
1.05E+03	2.5815E+02	3.9221215289E+02	3.9346362505E+02	1.251472E+00	n/a
1.15E+03	2.8815E+02	3.9340665749E+02	3.9292294331E+02	-4.837142E-01	n/a
1.20E+03	2.9815E+02	3.9803367215E+02	3.9776855098E+02	-2.651212E-01	n/a
1.10E+03	2.6815E+02	3.9943194603E+02	3.9995858464E+02	5.266386E-01	n/a
1.05E+03	2.4815E+02	4.0338689846E+02	4.0624612198E+02	2.859224E+00	n/a
1.15E+03	2.7815E+02	4.0560322747E+02	4.0568787505E+02	8.464758E-02	n/a
1.20E+03	2.8815E+02	4.1073204768E+02	4.1069090252E+02	-4.114516E-02	n/a
1.10E+03	2.5815E+02	4.1112034810E+02	4.1295208405E+02	1.831736E+00	n/a
1.15E+03	2.6815E+02	4.1780119025E+02	4.1886750256E+02	1.066312E+00	n/a
1.10E+03	2.4815E+02	4.2280540521E+02	4.2636770474E+02	3.562300E+00	n/a
1.20E+03	2.7815E+02	4.2343499688E+02	4.2403306395E+02	5.980671E-01	n/a
1.15E+03	2.5815E+02	4.2999820893E+02	4.3247529811E+02	2.477089E+00	n/a
1.20E+03	2.6815E+02	4.3613983128E+02	4.3780867367E+02	1.668842E+00	n/a
1.15E+03	2.4815E+02	4.4219218965E+02	4.4652517163E+02	4.332982E+00	n/a
1.20E+03	2.5815E+02	4.4884412415E+02	4.5203181316E+02	3.187689E+00	n/a
1.20E+03	2.4815E+02	4.6154570156E+02	4.6671702139E+02	5.171320E+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:	-1.984771E+00
Maximum:	5.171320E+00
Mean:	2.261510E-01
Std. Error of Mean:	8.730625E-02
Median:	5.207696E-02
Variance:	1.897973E+00
Standard Deviation:	1.377669E+00
Skew:	4.202004E-01
Kurtosis:	-3.469851E-01

Data Statistics

	X	Y	Z
Minimum:	0.000000E+00	2.481500E+02	0.000000E+00
Maximum:	1.200000E+03	3.381500E+02	4.615457E+02
Mean:	6.000000E+02	2.931500E+02	1.989847E+02
Std. Error of Mean:	2.284925E+01	1.820234E+00	7.911496E+00
Median:	6.000000E+02	2.931500E+02	1.969231E+02
Variance:	1.300000E+05	8.250000E+02	1.558535E+04
Standard Deviation:	3.605551E+02	2.872281E+01	1.248413E+02
Skew:	0.000000E+00	0.000000E+00	9.631061E-02
Kurtosis:	-1.203846E+00	-1.224242E+00	-1.116003E+00

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 = 487.279318692

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

    // coefficients
    double a = 6.5126737778450083E-01;
    double b = 9.9680804877945284E-01;
    double c = 1.0391858697506762E+00;

    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 = 487.279318692

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

! coefficients
real :: a = 6.5126737778450083E-01
real :: b = 9.9680804877945284E-01
real :: c = 1.0391858697506762E+00

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 = 487.279318692

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

        // coefficients
        double a = 6.5126737778450083E-01;
        double b = 9.9680804877945284E-01;
        double c = 1.0391858697506762E+00;

        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 = 487.279318692

function Simple_SimpleEquation_13_model(x_in, y_in)
    temp = 0.0

    # coefficients
    a = 6.5126737778450083E-01
    b = 9.9680804877945284E-01
    c = 1.0391858697506762E+00

    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 = 487.279318692

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

    // coefficients
    var a = 6.5126737778450083E-01;
    var b = 9.9680804877945284E-01;
    var c = 1.0391858697506762E+00;

    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 = 487.279318692

def Simple_SimpleEquation_13_model(x_in, y_in):
    temp = 0.0

    # coefficients
    a = 6.5126737778450083E-01
    b = 9.9680804877945284E-01
    c = 1.0391858697506762E+00

    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 = 487.279318692

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

        // coefficients
        double a = 6.5126737778450083E-01;
        double b = 9.9680804877945284E-01;
        double c = 1.0391858697506762E+00;

        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 = 487.279318692

function z = Simple_SimpleEquation_13_model(x_in, y_in)
    temp = 0.0;

    // coefficients
    a = 6.5126737778450083E-01;
    b = 9.9680804877945284E-01;
    c = 1.0391858697506762E+00;

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

    z = temp;
endfunction
```

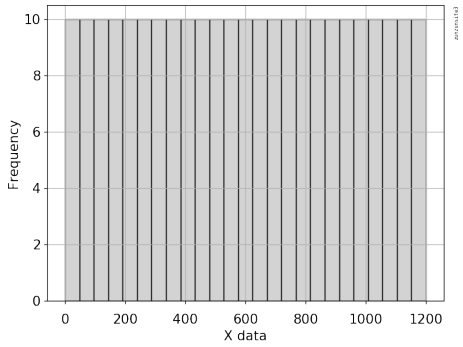
Source Code in MATLAB

```
% 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 = 487.279318692

function z = Simple_SimpleEquation_13_model(x_in, y_in)
    temp = 0.0;

    % coefficients
    a = 6.5126737778450083E-01;
    b = 9.9680804877945284E-01;
    c = 1.0391858697506762E+00;

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

    z = temp;
```

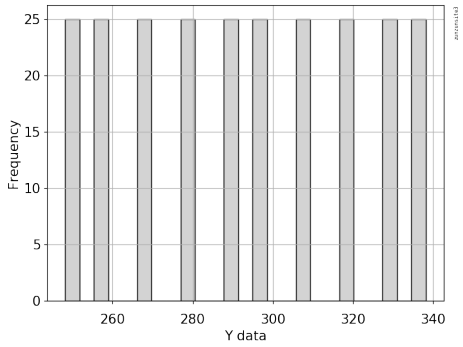
Source Code in VBA

```
' 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 = 487.279318692

Public Function Simple_SimpleEquation_13_model(x_in, y_in)
    temp = 0.0

    ' coefficients
    Const a = 6.5126737778450083E-01
    Const b = 9.9680804877945284E-01
    Const c = 1.0391858697506762E+00

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

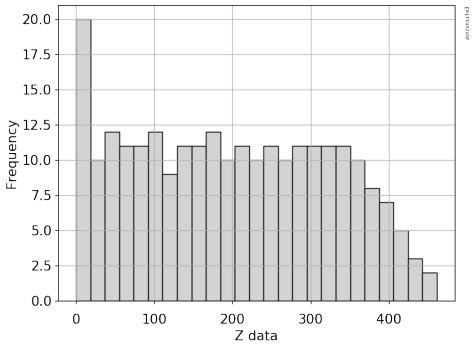
Histogram of X data



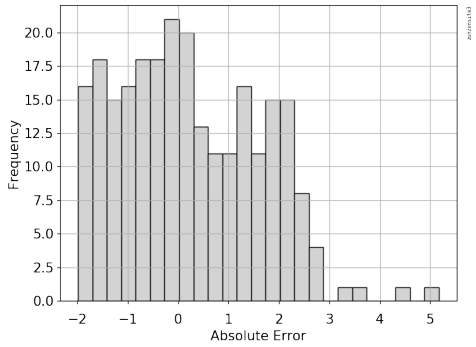
Histogram of Y data



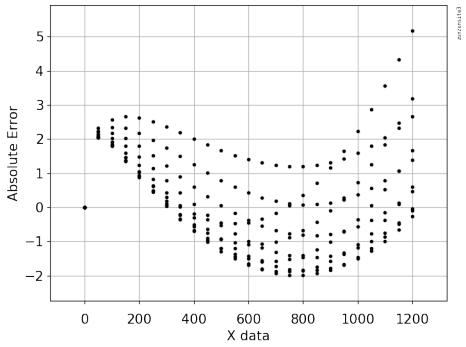
Histogram of Z data



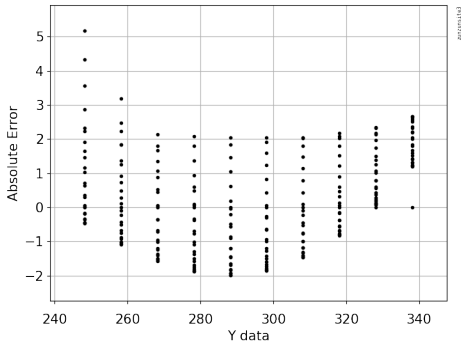
Histogram of Absolute Error



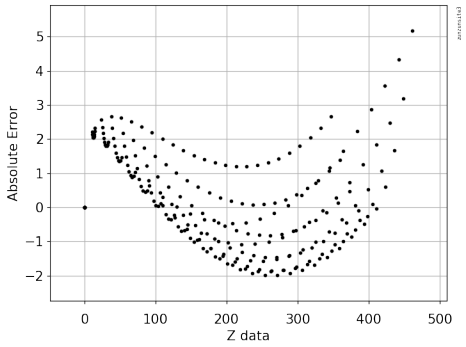
Absolute Error vs. X data



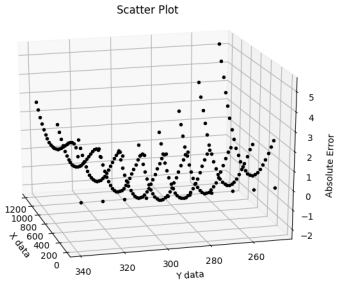
Absolute Error vs. Y data

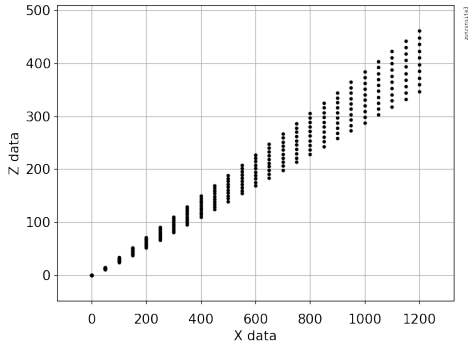


Absolute Error vs. Z data

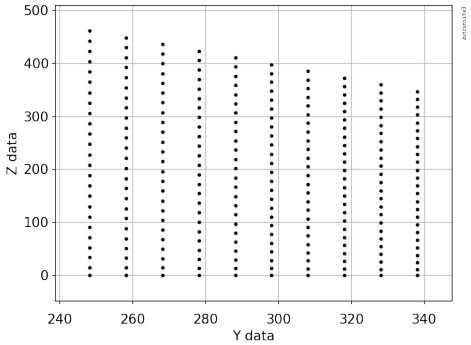


Absolute Error Scatter Plot

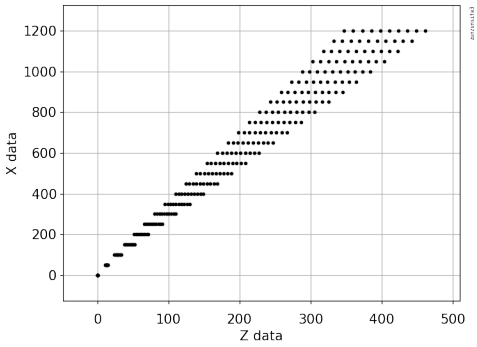



Z data vs. X data
Z data
X data
0
100
200
300
400
500
0
200
400
600
800
1000
1200

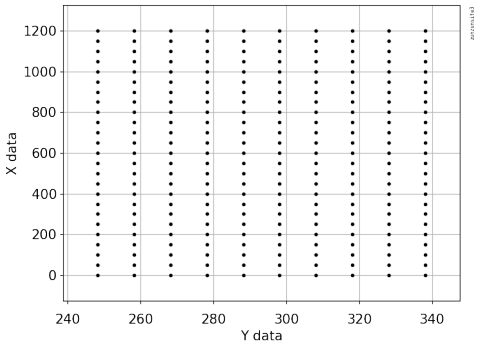
Z data vs. Y data



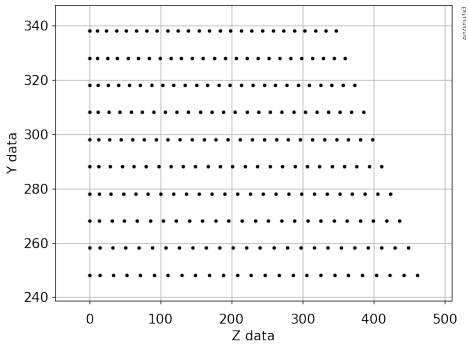
X data vs. Z data



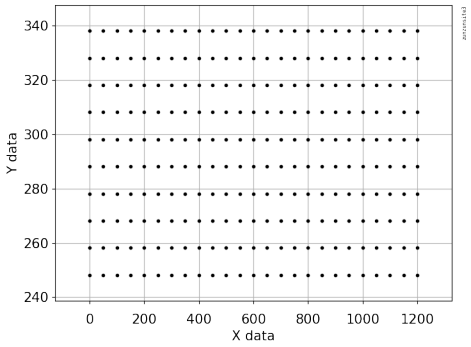
X data vs. Y data



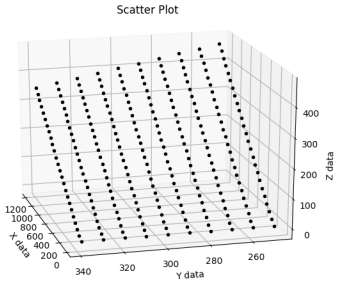
Y data vs. Z data



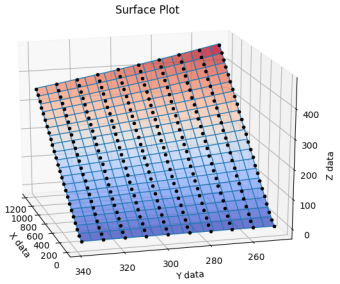
Y data vs. X data



Scatter Plot



Surface Plot



Contour Plot