Stats. Blue

Polynomial Regression Calculator

Variable Names (optional):

Data goes here (enter numbers in columns):

Explanatory (x)

0.000002345 -0.000001234 0.000005678

-0.000008901

0.000006789 -0.000001234

0.000004567

-0.000009012 0.000003456

-0.000002345

Response (y)

-0.000004678

0.000007890 -0.000009012

0.000003456

-0.000003430

0.000008901

-0.000007890

0.000005678

-0.000006789

0.000001234

Include Regression Curve: <a>V

Polynomial Model:

 $y = \beta_0 + \beta_1 x + \beta_2 x^2$

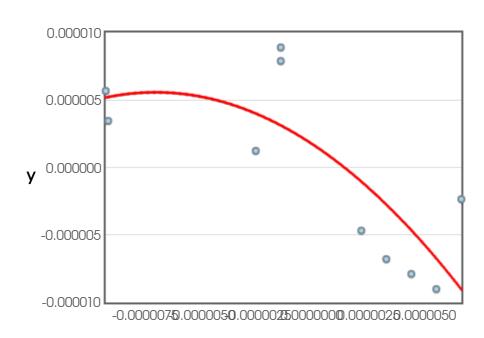
Degree:

2

Increase Degree Decrease Degree

Display output to 4 decimal places

Calculate



Download Scatter Plot JPEG

Regression Polynomial: $y=-79107.6484x^2-1.0758x+0$

R-squared: $r^2=0.61$

Adjusted R-squared: $r_{
m adj}^2 = 0.5613$

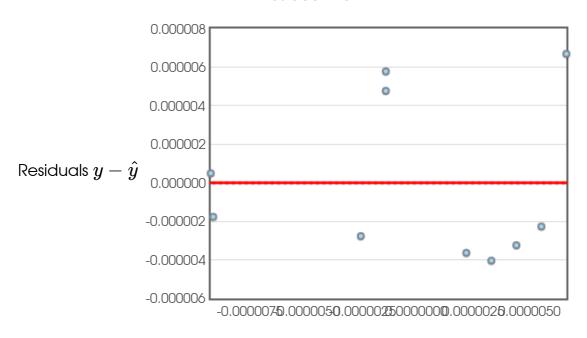
Residual Standard Error: $\boldsymbol{0}$ on $\boldsymbol{7}$ degrees of freedom

Coefficient	Estimate	Standard Error	t-statistic	p-value
eta_0	0	0	0.8404	0.4285
eta_1	-1.0758	0.3282	-3.2776	0.0135
eta_2	-79107.6484	60089.0363	-1.3165	0.2295

Analysis of Variance Table

Source	df	SS	MS	${\it F}$ -statistic	p-value
Regression	2	0	0	5.4746	0.037
Residual Error	7	0	0		
Total	9	0	0		

Residual Plot



Download Residual Plot JPEG