

Data Source: Data 1 in GH Density

Equation: Exponential Growth, Single, 2 Parameter

$f = a * \exp(b * x)$

R	Rsqr	Adj Rsqr	Standard Error of Estimate
0.9998	0.9997	0.9996	0.0123

	Coefficient	Std. Error	t	P
a	0.0827	0.0057	14.5323	0.0007
b	0.2347	0.0058	40.4847	<0.0001

Analysis of Variance:

	DF	SS	MS
Regression	2	1.9537	0.9769
Residual	3	0.0005	0.0002
Total	5	1.9542	0.3908

Corrected for the mean of the observations:

	DF	SS	MS
Regression	1	1.3517	1.3517
Residual	3	0.0005	0.0002
Total	4	1.3521	0.3380

Statistical Tests:

Normality Test (Shapiro-Wilk) Passed (P = 0.9767)
 W Statistic= 0.9892 Significance Level = 0.0500

Constant Variance Test (Spearman Rank Correlation) Passed (P = 0.0500)

Fit Equation Description:

[Variables]

x = col(2)

y = col(1)

reciprocal_y = 1/abs(y)

reciprocal_ysquare = 1/y^2

reciprocal_x = 1/abs(x)

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reciprocal_xsquare = 1/x^2
reciprocal_pred = 1/abs(f)
reciprocal_predsqr = 1/f^2
weight_Cauchy = 1/(1+4*(y-f)^2)
'Automatic Initial Parameter Estimate Functions
F(q) = ape(x,ln(y),1,0,1)
[Parameters]
a = exp(F(0)[1]) "Auto {{previous: 0.0827065}}
b = F(0)[2] "Auto {{previous: 0.234685}}
[Equation]
f = a*exp(b*x)
fit f to y
"fit f to y with weight reciprocal_y
"fit f to y with weight reciprocal_ysquare
"fit f to y with weight reciprocal_x
"fit f to y with weight reciprocal_xsquare
"fit f to y with weight reciprocal_pred
"fit f to y with weight reciprocal_predsqr
"fit f to y with weight weight_Cauchy
[Constraints]
b>0
[Options]
tolerance=1e-10
stepsize=1
iterations=200

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Number of Iterations Performed = 11