

# SPSS Regression

Winter 2014

# Regression

## EarthQuakeSmall.sav

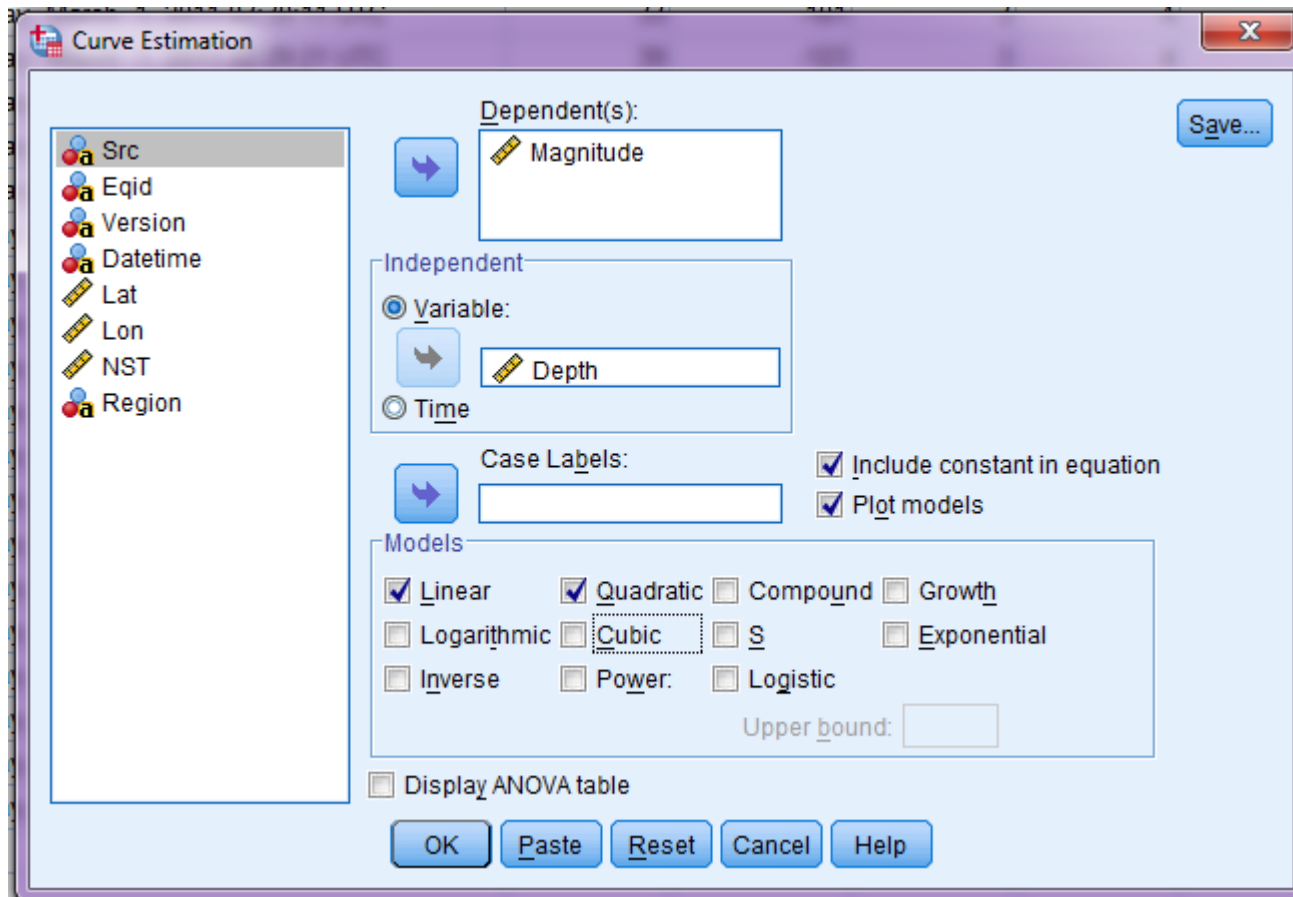
### in CS 130 Public

- Analyze |
- Regression |
- Curve Estimation

The screenshot shows the PASW Statistics Data Editor interface. The title bar reads "EarthQuake7DayM25\_orig.sav [DataSet 1] - PASW Statistics Data Editor". The menu bar includes File, Edit, View, Data, Transform, Analyze, Graphs, Utilities, Add-ons, Window, and Help. The Analyze menu is open, showing options like Reports, Descriptive Statistics, Compare Means, General Linear Model, Generalized Linear Models, Mixed Models, Correlate, Regression, Loglinear, Classify, Dimension Reduction, Scale, Nonparametric Tests, Forecasting, Survival, Multiple Response, and Quality Control. The Regression menu is further expanded to show Linear..., Curve Estimation..., Partial Least Squares..., Binary Logistic..., Multinomial Logistic..., Ordinal..., Probit..., Nonlinear..., Weight Estimation..., and 2-Stage Least Squares... The data table in the background has columns Src, Eqid, and V, with rows numbered 1 to 15.

	Src	Eqid	V
1	us	b0001mgd	4
2	us	b0001mg2	5
3	nc	71530295	1
4	nc	71530230	6
5	ak	10182565	1
6	us	b0001mfa	9
7	us	b0001mej	5
8	us	b0001m9j	6
9	us	b0001m4j	7
10	ak	10182353	2
11	us	b0001lvz	5
12	us	2011hxbb	3
13	ak	10182270	1
14	nm	022811f	A
15	nm	022811e	A

# Regressions continued



### Model Summary and Parameter Estimates

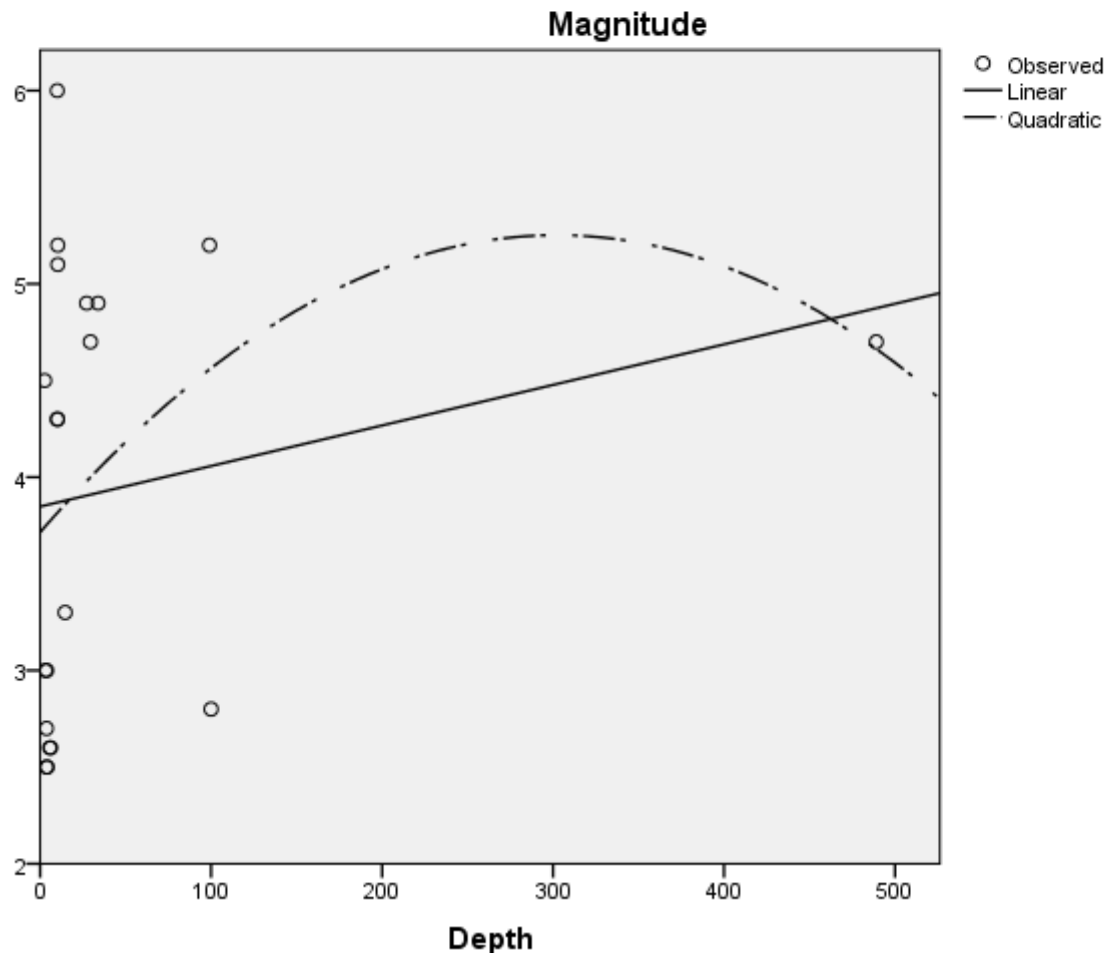
Dependent Variable: Magnitude

Equation	Model Summary					Parameter Estimates		
	R Square	F	df1	df2	Sig.	Constant	b1	b2
Linear	.039	.737	1	18	.402	3.848	.002	
Quadratic	.066	.603	2	17	.558	3.715	.010	-1.685E-005

The independent variable is Depth.

Equations?

R<sup>2</sup>?



**y =**  
**x =**

**Linear:**  
 $y = mx + b$

$m =$   
 $b =$

**Quadratic:**  
 $y = ax^2 + bx + c$

$a =$   
 $b =$   
 $c =$