Dataset: fluorescent\_lamp.csv

Source: F.G. Rosillo and N.M. Chivelet (2009). "Lifetime Prediction of Fluorescent Lamps Used in Photovoltaic Systems," Lighting Research and Technology, Vol. 41, #2, pp.183-197.

Description: Nonlinear regression, relating the ratio of observed to nominal lifetime for fluorescent

lamps (Y=LT/LT\_0) to integrated glow current (X1= I\_glow) and the

ratio of observed to nominal voltage (X2=V\_lamp/V\_lampnom).

Y = observed lifetime/advertised lifetime

X1 = a measure of gas discharge

X2 = observed voltage/advertised voltage (measure of performance of lamp and ballast)

Model: Y = exp(1+b0+b1\*X1+b2\*X2+b3\*(X2^2)) + error

Variables/Columns

Model 7-8

Type 9-16 /\* F=Tube/Wattage/Diameter C=Compact/watts

#Lamps (sample size) 24

LT/LT\_0 = Y 26-32

I\_glow = X1 33-40

V\_Lamp 42-48

V\_Lampnom 50-56