

The following is the input file web1.par. The parameter section and the data records are included on this file. The model is a parabola and is an example of a linear model. By default all the data points are weighted equally (i.e., unit weighing is used).

```
! Fitting a parabola to 10 data points
y='a1 + a2*x + a3*x^2'
ncol=2 xcol=1 ycol=2
;

! note: semicolon denotes end of parameter section
!       and start of data section
! Alternatively parameters and data may be in separate
!       files.

1      2.047
2     -0.966
3     -1.923
4     -1.064
5      2.048
6      6.573
7     13.647
8     24.679
9     34.108
10    44.969
;
```

The following is the output file web1.out. The information included on this file is also shown on the screen. To run this file the following command is issued from a DOS window:

regress web1

PARAMETERS USED IN REGRESS ANALYSIS: Wed Nov 01 15:58:29 2006

```
INPUT PARMS FILE: web1.par
INPUT DATA FILE: web1.par
REGRESS VERSION: 4.16, Oct 31, 2006
```

```
STARTREC - First record used      :      1
N - Number of recs used to build model :     10
NO_DATA - Code for dependent variable -999.0
NCOL - Number of data columns      :      2
NY - Number of dependent variables  :      1
YCOL1 - Column for dep var Y       :      2
SYTYPE1 - Sigma type for Y        :      1
      TYPE 1: SIGMA Y = 1
M - Number of independent variables :      1
Column for X1                      :      1
SXTYPE1 - Sigma type for X1       :      0
      TYPE 0: SIGMA X1 = 0
```

```
Analysis for Set 1
Function Y: A1 + A2*X + A3*X^2
```

EPS - Convergence criterion : 0.00100
CAF - Convergence acceleration factor : 1.000

ITERATION	A1	A2	A3	S/(N.D.F.)
0	0.00000	0.00000	0.00000	576.88747
1	6.41158	-5.62775	0.95981	0.84942

POINT	X1	Y	SIGY	YCALC
1	1.00000	2.04700	1.00000	1.74365
2	2.00000	-0.96600	1.00000	-1.00466
3	3.00000	-1.92300	1.00000	-1.83334
4	4.00000	-1.06400	1.00000	-0.74240
5	5.00000	2.04800	1.00000	2.26818
6	6.00000	6.57300	1.00000	7.19839
7	7.00000	13.64700	1.00000	14.04822
8	8.00000	24.67900	1.00000	22.81769
9	9.00000	34.10800	1.00000	33.50678
10	10.00000	44.96900	1.00000	46.11550

K	A0(K)	AMIN(K)	AMAX(K)	A(K)	SIGA(K)
1	0.00000	Not Spec	Not Spec	6.41158	1.08399
2	0.00000	Not Spec	Not Spec	-5.62775	0.45272
3	0.00000	Not Spec	Not Spec	0.95981	0.04011

Variance Reduction: 99.76

S/(N - P) : 0.84942

RMS (Y - Ycalc) : 0.77110

Runs Test for Y: Number runs = 4 Must be > 2 to pass test.

This limit is based upon 2.5% confidence level.

Average number of runs if residuals random: 6.0.