Dr. Purdum

ECO$OFT

P.O. BOX 68602
INDIANAPOLIS, IN 46268

INDIANAPOLIS, IN 462
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DAVID SCHAEFFER
1716 E. WALNUT ST.
CHATHAM, IL
62629

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                ----- REGRESSION ANALYSIS -----
HEADER DATA FOR: A:IEC32       LABEL: I&EC VOL 24 1932 P1207
NUMBER OF CASES:  13           NUMBER OF VARIABLES:  5
-------------------------------------------------------------------
          TEST OF STEPWISE MULTIPLE REGRESSION

INDEX         NAME              MEAN          STD.DEV.
 1           --X1-              7.462           5.882
 2           --X2-             48.154          15.561
 3           --X3-             11.769           6.405
 4             --X4            30.000          16.738
DEP. VAR.: --Y--               95.423          15.044

F TO ENTER = 3 , F TO REMOVE = 3 ,     TOLERANCE =.0010

-------------------------------------------------------------------
STEP 1 .  VARIABLE 4 :  --X4 ENTERED.

DEPENDENT VARIABLE: --Y--

VAR.   REGRESSION COEFFICIENT   STD. ERROR    F(1, 11)
 --X4             -0.7382         0.1546       22.799
CONSTANT:        117.5679

STD. ERROR OF EST. =          8.9639
         r SQUARED =           .6745
                 r =           .8213


                   ANALYSIS OF VARIANCE TABLE

  SOURCE      SUM OF SQUARES   D.F.        MEAN SQUARE     F RATIO
REGRESSION        1831.8961      1          1831.8961      22.7985
RESIDUAL           883.8670     11            80.3515
TOTAL             2715.7630     12


VARIABLES NOT IN EQUATION:

 NAME    PARTIAL r^2       TOLERANCE      F TO ENTER
--X1-        0.9154          0.9398        108.2230
--X2-        0.0170          0.0534          0.1725
--X3-        0.8012          0.9991         40.2947

-------------------------------------------------------------------
STEP 2 .  VARIABLE 1 : --X1- ENTERED.

DEPENDENT VARIABLE: --Y--

VAR.   REGRESSION COEFFICIENT   STD. ERROR    F(1, 10)  PARTIAL r^2
--X1-              1.4400         0.1384      108.224      0.9154
 --X4             -0.6140         0.0486      159.295      0.9409
CONSTANT:        103.0974

STD. ERROR OF EST. =          2.7343
        R SQUARED =            .9725
       MULTIPLE R =            .9861


                   ANALYSIS OF VARIANCE TABLE

  SOURCE      SUM OF SQUARES   D.F.        MEAN SQUARE     F RATIO
REGRESSION        2641.0009      2          1320.5005     176.6270
RESIDUAL            74.7621     10             7.4762
TOTAL             2715.7630     12


VARIABLES NOT IN EQUATION:

 NAME    PARTIAL r^2       TOLERANCE      F TO ENTER
--X2-        0.3583          0.0532          5.0259
--X3-        0.3200          0.2891          4.2358

-------------------------------------------------------------------
STEP 3 .  VARIABLE 2 : --X2- ENTERED.

DEPENDENT VARIABLE: --Y--

VAR.   REGRESSION COEFFICIENT   STD. ERROR    F(1,  9)  PARTIAL r^2
--X1-              1.4519         0.1170      154.008      0.9448
--X2-              0.4161         0.1856        5.026      0.3583
 --X4             -0.2365         0.1733        1.863      0.1715
CONSTANT:         71.6483

STD. ERROR OF EST. =          2.3087
        R SQUARED =            .9823
       MULTIPLE R =            .9911


                   ANALYSIS OF VARIANCE TABLE

  SOURCE      SUM OF SQUARES   D.F.        MEAN SQUARE     F RATIO
REGRESSION        2667.7903      3           889.2634     166.8317
RESIDUAL            47.9727      9             5.3303
TOTAL             2715.7630     12


VARIABLES NOT IN EQUATION:

 NAME    PARTIAL r^2       TOLERANCE      F TO ENTER
--X3-        0.0023          0.0213          0.0182

-------------------------------------------------------------------
STEP 4 .  VARIABLE 4 :  --X4 REMOVED.

DEPENDENT VARIABLE: --Y--

VAR.   REGRESSION COEFFICIENT   STD. ERROR    F(1, 10)  PARTIAL r^2
--X1-              1.4683         0.1213      146.523      0.9361
--X2-              0.6623         0.0459      208.582      0.9543
CONSTANT:         52.5774

STD. ERROR OF EST. =          2.4063
        R SQUARED =            .9787
       MULTIPLE R =            .9893


                   ANALYSIS OF VARIANCE TABLE

  SOURCE      SUM OF SQUARES   D.F.        MEAN SQUARE     F RATIO
REGRESSION        2657.8586      2          1328.9293     229.5037
RESIDUAL            57.9045     10             5.7904
TOTAL             2715.7630     12


VARIABLES NOT IN EQUATION:

 NAME    PARTIAL r^2       TOLERANCE      F TO ENTER
--X3-        0.1691          0.3183          1.8321
 --X4        0.1715          0.0528          1.8633

                                                STANDARDIZED RESIDUALS
       OBSERVED  CALCULATED   RESIDUAL    -2.0               0                 2.0
   1     78.500      80.074     -1.574     |            *    |                   |
   2     74.300      73.251      1.049     |                 |    *              |
   3    104.300     105.815     -1.515     |            *    |                   |
   4     87.600      89.258     -1.658     |           *     |                   |
   5     95.900      97.293     -1.393     |            *    |                   |
   6    109.200     105.152      4.048     |                 |                *  |
   7    102.700     104.002     -1.302     |             *   |                   |
   8     72.500      74.575     -2.075     |          *      |                   |
   9     93.100      91.275      1.825     |                 |       *           |
  10    115.900     114.538      1.362     |                 |      *            |
  11     83.800      80.536      3.264     |                 |             *     |
  12    113.300     112.437      0.863     |                 |   *               |
  13    109.400     112.293     -2.893     |      *          |                   |

DURBIN-WATSON TEST =    1.9216
```

Dear David,

Just wanted you to know we're not sitting on our hands. I read your license agreement & comments and thought you'd like to see the above. We will be releasing MICROSTAT 2.0 in about 3 weeks and it includes stepwise plus several other improvements, including: moments about the mean, skewness, kurtosis, each file can be declared single or double precision, files can be spread over all data drives, smaller code size, no more sort for scatterplot plus a few other changes.

The update will cost $45.00 plus return of original disk. Let us know if you're interested.