Germany Results

|-> RESET

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| NLOGIT 5 (tm) Feb 28, 2017, 10:32:14PM |

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| Registered to Joanna Karavolias |

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| Registration Number 1206-0012703-LSL |

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-------Initializing NLOGIT Version 5 (May 1, 2012)--------

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|-> reset$

|-> import; file="E:\GM Project copy\Choice Experiment\Austria.Germany\AUS\_Monsanto.csv"$

Last observation read from data file was 11070

Error 535: Warning: Name LOCATION was in use. Replaced with X113

Error 535: Warning: Name LOCATION was in use. Replaced with X114

|-> create; CDProd = total\_CD \* producer$

|-> create; CDPrice = total\_CD \* price$

|-> create; TechPri= total\_te \* price$

|-> create; NepPri= total\_ne \* price$

|-> create; monsanto=producer=1$

|-> create; sfc=producer=2$

|-> create; public=producer=3$

|-> create; price1=-price$

|-> GMXLOGIT; Lhs = choice; Choices =A, B, C;

Model: U(A, B)=P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds/

U(C)=a+P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds;

pds=9; parameter;

Fcn =mon(n), fam(n), pub(n), seed(n), P(\*L) $;

+------------------------------------------------------+

|WARNING: Bad observations were found in the sample. |

|Found 83 bad observations among 3690 individuals. |

|You can use ;CheckData to get a list of these points. |

+------------------------------------------------------+

Normal exit: 5 iterations. Status=0, F= 3348.634

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Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -3348.63361

Estimation based on N = 3607, K = 6

Inf.Cr.AIC = 6709.3 AIC/N = 1.860

Model estimated: Feb 28, 2017, 22:32:39

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -3919.3465 .1456 .1443

Response data are given as ind. choices

Number of obs.= 3690, skipped 83 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

MON| -2.36198\*\*\* .09381 -25.18 .0000 -2.54584 -2.17812

FAM| -.60502\*\*\* .06439 -9.40 .0000 -.73121 -.47882

PUB| -1.49074\*\*\* .07366 -20.24 .0000 -1.63510 -1.34637

SEED| .41188\*\*\* .05307 7.76 .0000 .30786 .51589

P| 1.52998\*\*\* .09956 15.37 .0000 1.33484 1.72512

A| -3.63328\*\*\* .19213 -18.91 .0000 -4.00985 -3.25670

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Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

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NOTE: Convergence in initial iterations is rarely

at a true function optimum. This may not be a

solution (especially if initial iterations stopped).

Exit from iterative procedure. 5 iterations completed.

Check convergence values shown below.

Gradient value: Tolerance= .0000D+00, current value= .2514D-08

Function chg. : Tolerance= .0000D+00, current value= .6682D-06

Parameters chg: Tolerance= .1000D-05, current value= .7341D-08

Smallest abs. param. change from start value = .2372D+00

Normal exit: 5 iterations. Status=0, F= 3919.647

Error 1027: Models - estimated variance matrix of estimates is singular

Error 1027: Models - estimated variance matrix of estimates is singular

|-> histogram; rhs=logl\_obs ;

title=histogram AUS Monsanto $

|-> dstat; rhs=logl\_obs$

Descriptive Statistics for 1 variables

--------+---------------------------------------------------------------------

Variable| Mean Std.Dev. Minimum Maximum Cases Missing

--------+---------------------------------------------------------------------

LOGL\_OBS| -.639116 1.052124 -4.018340 0.0 10848 222

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DSTAT results are matrix LASTDSTA in current project.

|-> reset$

|-> import; file="E:\GM Project copy\Choice Experiment\Austria.Germany\AUS\_emotional.csv"$

Last observation read from data file was 11070

Error 535: Warning: Name LOCATION was in use. Replaced with X113

Error 535: Warning: Name LOCATION was in use. Replaced with X114

|-> create; CDProd = total\_CD \* producer$

|-> create; CDPrice = total\_CD \* price$

|-> create; TechPri= total\_te \* price$

|-> create; NepPri= total\_ne \* price$

|-> create; monsanto=producer=1$

|-> create; sfc=producer=2$

|-> create; public=producer=3$

|-> create; price1=-price$

|-> GMXLOGIT; Lhs = choice; Choices =A, B, C;

Model: U(A, B)=P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds/

U(C)=a+P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds;

pds=9; parameter;

Fcn =mon(n), fam(n), pub(n), seed(n), P(\*L) $;

+------------------------------------------------------+

|WARNING: Bad observations were found in the sample. |

|Found 11 bad observations among 3690 individuals. |

|You can use ;CheckData to get a list of these points. |

+------------------------------------------------------+

Normal exit: 6 iterations. Status=0, F= 3348.176

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Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -3348.17583

Estimation based on N = 3679, K = 6

Inf.Cr.AIC = 6708.4 AIC/N = 1.823

Model estimated: Feb 28, 2017, 22:33:56

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -4004.6815 .1639 .1627

Response data are given as ind. choices

Number of obs.= 3690, skipped 11 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

MON| -2.57186\*\*\* .09597 -26.80 .0000 -2.75996 -2.38375

FAM| -.75479\*\*\* .06482 -11.64 .0000 -.88184 -.62774

PUB| -1.69143\*\*\* .07487 -22.59 .0000 -1.83818 -1.54469

SEED| .41138\*\*\* .05378 7.65 .0000 .30596 .51679

P| 1.53571\*\*\* .10042 15.29 .0000 1.33888 1.73253

A| -3.72766\*\*\* .19463 -19.15 .0000 -4.10913 -3.34619

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Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

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Line search at iteration 5 does not improve fn. Exiting optimization.

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Generalized Mixed (RP) Logit Model

Dependent variable CHOICE

Log likelihood function -3724.15010

Restricted log likelihood -4041.79461

Chi squared [ 11 d.f.] 635.28902

Significance level .00000

McFadden Pseudo R-squared .0785900

Estimation based on N = 3679, K = 11

Inf.Cr.AIC = 7470.3 AIC/N = 2.031

Model estimated: Feb 28, 2017, 22:40:55

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

No coefficients -4041.7946 .0786 .0772

Constants only -4004.6815 .0701 .0687

At start values -4443.1970 .1618 .1606

Response data are given as ind. choices

Replications for simulated probs. = 100

Used pseudo random draws (Mersenne twister)

RPL model with panel has 410 groups

Fixed number of obsrvs./group= 9

BHHH estimator used for asymp. variance

Number of obs.= 3690, skipped 11 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

|Random parameters in utility functions

MON| .26906 .21502 1.25 .2108 -.15238 .69050

FAM| -.87527\*\*\* .14072 -6.22 .0000 -1.15107 -.59947

PUB| .68884\*\*\* .14800 4.65 .0000 .39877 .97892

SEED| -.58251\*\*\* .14064 -4.14 .0000 -.85817 -.30685

P| 1.0 .....(Fixed Parameter).....

|Nonrandom parameters in utility functions

A| .73378\*\*\* .04811 15.25 .0000 .63949 .82808

|Distns. of RPs. Std.Devs or limits of triangular

NsMON| 4.05489\*\*\* .66808 6.07 .0000 2.74547 5.36430

NsFAM| .45941\*\*\* .13104 3.51 .0005 .20258 .71623

NsPUB| .93802\*\*\* .18448 5.08 .0000 .57644 1.29960

NsSEED| 1.10732\*\*\* .11166 9.92 .0000 .88847 1.32618

CsP| 0.0 .....(Fixed Parameter).....

|Variance parameter tau in GMX scale parameter

TauScale| 5.74850\*\* 2.88513 1.99 .0463 .09374 11.40326

|Weighting parameter gamma in GMX model

GammaMXL| 0.0 .....(Fixed Parameter).....

|Coefficient on P in preference space form

Beta0WTP| -.31595 .20378 -1.55 .1210 -.71535 .08345

S\_b0\_WTP| 0.0 .....(Fixed Parameter).....

| Sample Mean Sample Std.Dev.

Sigma(i)| .45416\*\*\* .12147 3.74 .0002 .21608 .69225

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Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

Fixed parameter ... is constrained to equal the value or

had a nonpositive st.error because of an earlier problem.

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|-> histogram; rhs=logl\_obs ;

title=histogram AUS Emotional $

|-> dstat; rhs=logl\_obs$

Descriptive Statistics for 1 variables

--------+---------------------------------------------------------------------

Variable| Mean Std.Dev. Minimum Maximum Cases Missing

--------+---------------------------------------------------------------------

LOGL\_OBS| -.610750 1.001519 -3.933208 0.0 11040 30

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DSTAT results are matrix LASTDSTA in current project.

|-> reset$

|-> import; file="E:\GM Project copy\Choice Experiment\Austria.Germany\AUS\_simple.csv"$

Last observation read from data file was 11070

Error 535: Warning: Name LOCATION was in use. Replaced with X113

Error 535: Warning: Name LOCATION was in use. Replaced with X114

|-> create; CDProd = total\_CD \* producer$

|-> create; CDPrice = total\_CD \* price$

|-> create; TechPri= total\_te \* price$

|-> create; NepPri= total\_ne \* price$

|-> create; monsanto=producer=1$

|-> create; sfc=producer=2$

|-> create; public=producer=3$

|-> create; price1=-price$

|-> GMXLOGIT; Lhs = choice; Choices =A, B, C;

Model: U(A, B)=P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds/

U(C)=a+P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds;

pds=9; parameter;

Fcn =mon(n), fam(n), pub(n), seed(n), P(\*L) $;

+------------------------------------------------------+

|WARNING: Bad observations were found in the sample. |

|Found 81 bad observations among 3690 individuals. |

|You can use ;CheckData to get a list of these points. |

+------------------------------------------------------+

Normal exit: 5 iterations. Status=0, F= 3346.530

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Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -3346.52965

Estimation based on N = 3609, K = 6

Inf.Cr.AIC = 6705.1 AIC/N = 1.858

Model estimated: Feb 28, 2017, 22:41:14

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -3897.5626 .1414 .1401

Response data are given as ind. choices

Number of obs.= 3690, skipped 81 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

MON| -2.36988\*\*\* .09432 -25.12 .0000 -2.55475 -2.18501

FAM| -.50939\*\*\* .06384 -7.98 .0000 -.63452 -.38426

PUB| -1.34755\*\*\* .07212 -18.69 .0000 -1.48890 -1.20620

SEED| .46629\*\*\* .05275 8.84 .0000 .36291 .56968

P| 1.50026\*\*\* .09916 15.13 .0000 1.30591 1.69461

A| -3.52555\*\*\* .18904 -18.65 .0000 -3.89606 -3.15504

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Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

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Line search at iteration 3 does not improve fn. Exiting optimization.

With < 4 iterations, this may not be a good solution to the

optimization. (The log-likelihood is flat.) Try refitting

with ;Output=3 and examining the derivatives.

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Generalized Mixed (RP) Logit Model

Dependent variable CHOICE

Log likelihood function -3854.23984

Restricted log likelihood -3964.89175

Chi squared [ 11 d.f.] 221.30382

Significance level .00000

McFadden Pseudo R-squared .0279079

Estimation based on N = 3609, K = 11

Inf.Cr.AIC = 7730.5 AIC/N = 2.142

Model estimated: Feb 28, 2017, 22:45:44

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

No coefficients -3964.8917 .0279 .0264

Constants only -3897.5626 .0111 .0096

At start values -4293.8164 .1024 .1010

Response data are given as ind. choices

Replications for simulated probs. = 100

Used pseudo random draws (Mersenne twister)

RPL model with panel has 410 groups

Fixed number of obsrvs./group= 9

BHHH estimator used for asymp. variance

Number of obs.= 3690, skipped 81 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

|Random parameters in utility functions

MON| -.58896\*\*\* .06521 -9.03 .0000 -.71676 -.46116

FAM| -1.11248\*\*\* .14526 -7.66 .0000 -1.39719 -.82778

PUB| 1.92444\*\*\* .21058 9.14 .0000 1.51171 2.33717

SEED| -1.11523\*\*\* .10947 -10.19 .0000 -1.32979 -.90068

P| 1.0 .....(Fixed Parameter).....

|Nonrandom parameters in utility functions

A| .93652\*\*\* .04253 22.02 .0000 .85316 1.01989

|Distns. of RPs. Std.Devs or limits of triangular

NsMON| 3.76018\*\*\* .27155 13.85 .0000 3.22796 4.29240

NsFAM| .08209 .11740 .70 .4844 -.14800 .31219

NsPUB| 1.45118\*\*\* .16916 8.58 .0000 1.11963 1.78273

NsSEED| .38967\*\*\* .04634 8.41 .0000 .29884 .48049

CsP| 0.0 .....(Fixed Parameter).....

|Variance parameter tau in GMX scale parameter

TauScale| 7.34087\* 4.24452 1.73 .0837 -.97823 15.65998

|Weighting parameter gamma in GMX model

GammaMXL| 0.0 .....(Fixed Parameter).....

|Coefficient on P in preference space form

Beta0WTP| -.04496 .69204 -.06 .9482 -1.40133 1.31141

S\_b0\_WTP| 0.0 .....(Fixed Parameter).....

| Sample Mean Sample Std.Dev.

Sigma(i)| .08043 .16848 .48 .6331 -.24979 .41065

--------+--------------------------------------------------------------------

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

Fixed parameter ... is constrained to equal the value or

had a nonpositive st.error because of an earlier problem.

-----------------------------------------------------------------------------

|-> histogram; rhs=logl\_obs ;

title= AUS Simple $

|-> dstat; rhs=logl\_obs$

Descriptive Statistics for 1 variables

--------+---------------------------------------------------------------------

Variable| Mean Std.Dev. Minimum Maximum Cases Missing

--------+---------------------------------------------------------------------

LOGL\_OBS| -.631337 1.050472 -4.194955 0.0 10854 216

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DSTAT results are matrix LASTDSTA in current project.

|-> reset$

|-> import; file="E:\GM Project copy\Choice Experiment\Austria.Germany\AUS\_benefit.csv"$

Last observation read from data file was 11070

Error 535: Warning: Name LOCATION was in use. Replaced with X113

Error 535: Warning: Name LOCATION was in use. Replaced with X114

|-> create; CDProd = total\_CD \* producer$

|-> create; CDPrice = total\_CD \* price$

|-> create; TechPri= total\_te \* price$

|-> create; NepPri= total\_ne \* price$

|-> create; monsanto=producer=1$

|-> create; sfc=producer=2$

|-> create; public=producer=3$

|-> create; price1=-price$

|-> GMXLOGIT; Lhs = choice; Choices =A, B, C;

Model: U(A, B)=P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds/

U(C)=a+P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds;

pds=9; parameter;

Fcn =mon(n), fam(n), pub(n), seed(n), P(\*L) $;

+------------------------------------------------------+

|WARNING: Bad observations were found in the sample. |

|Found 117 bad observations among 3690 individuals. |

|You can use ;CheckData to get a list of these points. |

+------------------------------------------------------+

Normal exit: 5 iterations. Status=0, F= 3304.931

-----------------------------------------------------------------------------

Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -3304.93130

Estimation based on N = 3573, K = 6

Inf.Cr.AIC = 6621.9 AIC/N = 1.853

Model estimated: Feb 28, 2017, 22:46:03

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -3893.6252 .1512 .1499

Response data are given as ind. choices

Number of obs.= 3690, skipped 117 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

MON| -2.42759\*\*\* .09501 -25.55 .0000 -2.61380 -2.24139

FAM| -.71789\*\*\* .06523 -11.00 .0000 -.84574 -.59003

PUB| -1.59335\*\*\* .07494 -21.26 .0000 -1.74023 -1.44646

SEED| .35106\*\*\* .05361 6.55 .0000 .24598 .45614

P| 1.49650\*\*\* .10058 14.88 .0000 1.29937 1.69363

A| -3.66532\*\*\* .19592 -18.71 .0000 -4.04931 -3.28133

--------+--------------------------------------------------------------------

Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

-----------------------------------------------------------------------------

Initial iterations cannot improve function.Status=3

Error 805: Initial iterations cannot improve function.Status=3

Function= .43290284992D+04, at entry, .42004371532D+04 at exit

Error 1025: Failed to fit model. See earlier diagnostic.

|-> histogram; rhs=logl\_obs ;

title=AUS Benefit $

|-> dstat; rhs=logl\_obs$

Descriptive Statistics for 1 variables

--------+---------------------------------------------------------------------

Variable| Mean Std.Dev. Minimum Maximum Cases Missing

--------+---------------------------------------------------------------------

LOGL\_OBS| -.667037 1.133890 -4.322188 0.0 10758 312

--------+---------------------------------------------------------------------

DSTAT results are matrix LASTDSTA in current project.

|-> reset$

|-> import; file="E:\GM Project copy\Choice Experiment\Austria.Germany\AUS\_control.csv"$

Last observation read from data file was 11070

Error 535: Warning: Name LOCATION was in use. Replaced with X113

Error 535: Warning: Name LOCATION was in use. Replaced with X114

|-> create; CDProd = total\_CD \* producer$

|-> create; CDPrice = total\_CD \* price$

|-> create; TechPri= total\_te \* price$

|-> create; NepPri= total\_ne \* price$

|-> create; monsanto=producer=1$

|-> create; sfc=producer=2$

|-> create; public=producer=3$

|-> create; price1=-price$

|-> GMXLOGIT; Lhs = choice; Choices =A, B, C;

Model: U(A, B)=P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds/

U(C)=a+P\*Price1+Mon\*monsanto+Fam\*sfc+pub\*public+seed\*seeds;

pds=9;parameter;

Fcn =mon(n), fam(n), pub(n), seed(n), P(\*L) $;

+------------------------------------------------------+

|WARNING: Bad observations were found in the sample. |

|Found 83 bad observations among 3690 individuals. |

|You can use ;CheckData to get a list of these points. |

+------------------------------------------------------+

Normal exit: 6 iterations. Status=0, F= 3330.553

-----------------------------------------------------------------------------

Start values obtained using MNL model

Dependent variable Choice

Log likelihood function -3330.55323

Estimation based on N = 3607, K = 6

Inf.Cr.AIC = 6673.1 AIC/N = 1.850

Model estimated: Feb 28, 2017, 22:48:11

R2=1-LogL/LogL\* Log-L fncn R-sqrd R2Adj

Constants only -3837.3239 .1321 .1307

Response data are given as ind. choices

Number of obs.= 3690, skipped 83 obs

--------+--------------------------------------------------------------------

| Standard Prob. 95% Confidence

CHOICE| Coefficient Error z |z|>Z\* Interval

--------+--------------------------------------------------------------------

MON| -1.80325\*\*\* .08931 -20.19 .0000 -1.97830 -1.62820

FAM| .08264 .06255 1.32 .1865 -.03996 .20525

PUB| -1.13736\*\*\* .07168 -15.87 .0000 -1.27786 -.99686

SEED| .33908\*\*\* .05122 6.62 .0000 .23869 .43946

P| 1.72551\*\*\* .09958 17.33 .0000 1.53034 1.92068

A| -3.96917\*\*\* .18921 -20.98 .0000 -4.34001 -3.59834

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Note: \*\*\*, \*\*, \* ==> Significance at 1%, 5%, 10% level.

-----------------------------------------------------------------------------

Initial iterations cannot improve function.Status=3

Error 805: Initial iterations cannot improve function.Status=3

Function= .43398982824D+04, at entry, .38528145697D+04 at exit

Error 1025: Failed to fit model. See earlier diagnostic.

|-> histogram; rhs=logl\_obs ;

title=AUS control $

|-> dstat; rhs=logl\_obs$

Descriptive Statistics for 1 variables

--------+---------------------------------------------------------------------

Variable| Mean Std.Dev. Minimum Maximum Cases Missing

--------+---------------------------------------------------------------------

LOGL\_OBS| -.630018 1.049466 -3.959068 0.0 10848 222

--------+---------------------------------------------------------------------

DSTAT results are matrix LASTDSTA in current project.