Example 1: US College and University Graduation Data

1. Allison1.out: Mplus 6 Output for Listwise Analysis (N = 455)
2. Allison2.out: Mplus 6 Output for Direct ML Analysis (N = 1302) with ML standard errors
3. Allison3.out: Mplus 6 Output for Direct ML Analysis (N = 1,302) with robust standard errors
4. Allison4.out: Mplus 6 Output for Direct ML Analysis (N = 1,302) with bootstrap-based standard errors and bias-corrected confidence intervals

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/10/2010   9:42 AM

INPUT INSTRUCTIONS

  TITLE: Demo of direct ML estimation ;

  DATA:
      FILE is usnews1.txt ;

  VARIABLE:
      NAMES ARE csat act stufac gradrat rmbrd private lenroll ;
      MISSING ARE ALL (-999) ;
      USEVARIABLES ARE csat stufac gradrat rmbrd private lenroll ;
      AUXILIARY ARE act ;

  ANALYSIS:
      TYPE = GENERAL ;

  MODEL:
      gradrat ON csat stufac rmbrd private lenroll ;

  OUTPUT:
      patterns sampstat standardized cinterval ;



*** WARNING
  Data set contains cases with missing on x-variables.
  These cases were not included in the analysis.
  Number of cases with missing on x-variables:  826
*** WARNING
  Data set contains cases with missing on all variables except
  x-variables.  These cases were not included in the analysis.
  Number of cases with missing on all variables except x-variables:  21
   2 WARNING(S) FOUND IN THE INPUT INSTRUCTIONS



Demo of direct ML estimation ;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                         455

Number of dependent variables                                    1
Number of independent variables                                  5
Number of continuous latent variables                            0

Observed dependent variables

  Continuous
   GRADRAT

Observed independent variables
   CSAT        STUFAC      RMBRD       PRIVATE     LENROLL

Observed auxiliary variables
   ACT
```

```
Estimator                                                       ML
Information matrix                                        OBSERVED
Maximum number of iterations                                  1000
Convergence criterion                                    0.500D-04
Maximum number of steepest descent iterations                   20
Maximum number of iterations for H1                           2000
Convergence criterion for H1                             0.100D-03

Input data file(s)
  usnews1.txt

Input data format  FREE


SUMMARY OF DATA

     Number of missing data patterns             1


SUMMARY OF MISSING DATA PATTERNS


     MISSING DATA PATTERNS (x = not missing)

           1
 GRADRAT   x
 CSAT      x
 STUFAC    x
 RMBRD     x
 PRIVATE   x
 LENROLL   x


     MISSING DATA PATTERN FREQUENCIES

    Pattern   Frequency
          1         455


COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value   0.100


     PROPORTION OF DATA PRESENT


           Covariance Coverage
              GRADRAT       CSAT          STUFAC        RMBRD         PRIVATE
              ________      ________      ________      ________      ________
 GRADRAT        1.000
 CSAT           1.000         1.000
 STUFAC         1.000         1.000         1.000
 RMBRD          1.000         1.000         1.000         1.000
 PRIVATE        1.000         1.000         1.000         1.000         1.000
 LENROLL        1.000         1.000         1.000         1.000         1.000


           Covariance Coverage
              LENROLL
              ________
 LENROLL        1.000
```

SAMPLE STATISTICS

ESTIMATED SAMPLE STATISTICS

Means

	GRADRAT	CSAT	STUFAC	RMBRD	PRIVATE
1	63.385	984.187	14.667	4.418	0.690

Means

	LENROLL
1	6.239

Covariances

	GRADRAT	CSAT	STUFAC	RMBRD	PRIVATE
GRADRAT	355.445				
CSAT	1415.108	15778.767			
STUFAC	-31.690	-236.764	30.288		
RMBRD	9.169	62.059	-1.512	1.167	
PRIVATE	3.460	9.902	-0.803	0.176	0.214
LENROLL	0.026	23.073	0.887	-0.041	-0.244

Covariances

	LENROLL
LENROLL	0.824

Correlations

	GRADRAT	CSAT	STUFAC	RMBRD	PRIVATE
GRADRAT	1.000				
CSAT	0.598	1.000			
STUFAC	-0.305	-0.342	1.000		
RMBRD	0.450	0.457	-0.254	1.000	
PRIVATE	0.397	0.170	-0.316	0.351	1.000
LENROLL	0.002	0.202	0.178	-0.042	-0.582

Correlations

	LENROLL
LENROLL	1.000

MAXIMUM LOG-LIKELIHOOD VALUE FOR THE UNRESTRICTED (H1) MODEL IS -7418.437

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 7

Loglikelihood

H0 Value	-1838.653
H1 Value	-1838.653

Information Criteria

Akaike (AIC)	3691.305
Bayesian (BIC)	3720.148
Sample-Size Adjusted BIC (n* = (n + 2) / 24)	3697.932

Chi-Square Test of Model Fit

Value	0.000
Degrees of Freedom	0
P-Value	0.0000

RMSEA (Root Mean Square Error Of Approximation)

Estimate	0.000	
90 Percent C.I.	0.000	0.000
Probability RMSEA <= .05	0.000	

CFI/TLI

CFI	1.000
TLI	1.000

Chi-Square Test of Model Fit for the Baseline Model

Value	286.313
Degrees of Freedom	5
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value	0.000

MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.067	0.006	10.539	0.000
STUFAC	-0.123	0.131	-0.939	0.347
RMBRD	2.161	0.709	3.049	0.002
PRIVATE	13.588	1.933	7.029	0.000
LENROLL	2.416	0.953	2.536	0.011
Intercepts				
GRADRAT	-35.024	7.634	-4.588	0.000
Residual Variances				
GRADRAT	189.445	12.560	15.083	0.000

STANDARDIZED MODEL RESULTS

STDYX Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.448	0.040	11.129	0.000
STUFAC	-0.036	0.038	-0.940	0.347
RMBRD	0.124	0.041	3.057	0.002
PRIVATE	0.333	0.047	7.116	0.000
LENROLL	0.116	0.046	2.538	0.011
Intercepts				
GRADRAT	-1.858	0.381	-4.878	0.000
Residual Variances				
GRADRAT	0.533	0.034	15.607	0.000

STDY Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.004	0.000	11.352	0.000
STUFAC	-0.007	0.007	-0.940	0.347
RMBRD	0.115	0.037	3.067	0.002
PRIVATE	0.721	0.099	7.255	0.000
LENROLL	0.128	0.050	2.547	0.011
Intercepts				
GRADRAT	-1.858	0.381	-4.878	0.000
Residual Variances				
GRADRAT	0.533	0.034	15.607	0.000

STD Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.067	0.006	10.539	0.000
STUFAC	-0.123	0.131	-0.939	0.347
RMBRD	2.161	0.709	3.049	0.002
PRIVATE	13.588	1.933	7.029	0.000
LENROLL	2.416	0.953	2.536	0.011
Intercepts				
GRADRAT	-35.024	7.634	-4.588	0.000
Residual Variances				
GRADRAT	189.445	12.560	15.083	0.000

R-SQUARE

Observed Variable	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value

GRADRAT	0.467	0.034	13.675	0.000

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix 0.579E-06
(ratio of smallest to largest eigenvalue)

CONFIDENCE INTERVALS OF MODEL RESULTS

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
GRADRAT ON							
CSAT	0.051	0.055	0.057	0.067	0.078	0.080	0.084
STUFAC	-0.461	-0.380	-0.339	-0.123	0.092	0.134	0.214
RMBRD	0.335	0.772	0.995	2.161	3.327	3.551	3.987
PRIVATE	8.608	9.799	10.408	13.588	16.768	17.377	18.568
LENROLL	-0.037	0.549	0.849	2.416	3.984	4.284	4.870
Intercepts							
GRADRAT	-54.687	-49.986	-47.581	-35.024	-22.466	-20.062	-15.361
Residual Variances							
GRADRAT	157.093	164.827	168.784	189.445	210.106	214.062	221.796

CONFIDENCE INTERVALS OF STANDARDIZED MODEL RESULTS

STDYX Standardization

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
GRADRAT ON							
CSAT	0.344	0.369	0.382	0.448	0.514	0.527	0.552
STUFAC	-0.134	-0.111	-0.099	-0.036	0.027	0.039	0.063
RMBRD	0.019	0.044	0.057	0.124	0.190	0.203	0.228
PRIVATE	0.213	0.241	0.256	0.333	0.410	0.425	0.454
LENROLL	-0.002	0.026	0.041	0.116	0.192	0.206	0.234
Intercepts							
GRADRAT	-2.839	-2.604	-2.484	-1.858	-1.231	-1.111	-0.877
Residual Variances							
GRADRAT	0.445	0.466	0.477	0.533	0.589	0.600	0.621

STDY Standardization

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
GRADRAT ON							
CSAT	0.003	0.003	0.003	0.004	0.004	0.004	0.004
STUFAC	-0.024	-0.020	-0.018	-0.007	0.005	0.007	0.011
RMBRD	0.018	0.041	0.053	0.115	0.176	0.188	0.211
PRIVATE	0.465	0.526	0.557	0.721	0.884	0.915	0.977
LENROLL	-0.001	0.030	0.045	0.128	0.211	0.227	0.258
Intercepts							
GRADRAT	-2.839	-2.604	-2.484	-1.858	-1.231	-1.111	-0.877
Residual Variances							
GRADRAT	0.445	0.466	0.477	0.533	0.589	0.600	0.621

STD Standardization

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
GRADRAT ON							
CSAT	0.051	0.055	0.057	0.067	0.078	0.080	0.084
STUFAC	-0.461	-0.380	-0.339	-0.123	0.092	0.134	0.214
RMBRD	0.335	0.772	0.995	2.161	3.327	3.551	3.987
PRIVATE	8.608	9.799	10.408	13.588	16.768	17.377	18.568
LENROLL	-0.037	0.549	0.849	2.416	3.984	4.284	4.870
Intercepts							
GRADRAT	-54.687	-49.986	-47.581	-35.024	-22.466	-20.062	-15.361
Residual Variances							
GRADRAT	157.093	164.827	168.784	189.445	210.106	214.062	221.796

```
    Beginning Time:  09:42:05
       Ending Time:  09:42:05
      Elapsed Time:  00:00:00
```

MUTHEN & MUTHEN
3463 Stoner Ave.
Los Angeles, CA 90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/10/2010   9:42 AM

INPUT INSTRUCTIONS

  TITLE: Demo of direct ML estimation ;

  DATA:
      FILE is usnews1.txt ;

  VARIABLE:
      NAMES ARE csat act stufac gradrat rmbrd private lenroll ;
      MISSING ARE ALL (-999) ;
      USEVARIABLES ARE csat stufac gradrat rmbrd private lenroll ;
      AUXILIARY ARE act ;

  ANALYSIS:
      TYPE = GENERAL ;

  MODEL:
      gradrat ON csat stufac rmbrd private lenroll ;

  ! Reffering to the variables' names below means
  ! Mplus will estimate their variances, which brings
  ! them into the model and invokes full-information
  ! maximum likelihood estimation for all 1,302 cases

      csat ;
      stufac ;
      rmbrd ;
      lenroll ;

  ! Note that the variable "private" is not listed above
  ! That is because private has no missing data, so we
  ! don't have to list it

  OUTPUT:
      patterns sampstat standardized cinterval ;



INPUT READING TERMINATED NORMALLY



Demo of direct ML estimation ;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                        1302

Number of dependent variables                                    1
Number of independent variables                                  5
Number of continuous latent variables                            0

Observed dependent variables

  Continuous
   GRADRAT

Observed independent variables
```

CSAT STUFAC RMBRD PRIVATE LENROLL

Observed auxiliary variables
ACT

Estimator	ML
Information matrix	OBSERVED
Maximum number of iterations	1000
Convergence criterion	0.500D-04
Maximum number of steepest descent iterations	20
Maximum number of iterations for H1	2000
Convergence criterion for H1	0.100D-03

Input data file(s)
usnews1.txt

Input data format FREE

SUMMARY OF DATA

Number of missing data patterns 14

SUMMARY OF MISSING DATA PATTERNS

MISSING DATA PATTERNS (x = not missing)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
GRADRAT	x	x	x	x	x	x								
CSAT	x	x					x	x	x	x				
STUFAC	x	x	x	x	x	x	x	x	x		x	x	x	
RMBRD	x		x	x			x				x			
LENROLL	x	x	x		x		x	x			x	x		x
PRIVATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x

MISSING DATA PATTERN FREQUENCIES

Pattern	Frequency	Pattern	Frequency	Pattern	Frequency
1	455	6	1	11	27
2	277	7	21	12	22
3	279	8	24	13	1
4	1	9	1	14	1
5	191	10	1		

COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value 0.100

PROPORTION OF DATA PRESENT

Covariance Coverage

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	0.925				
CSAT	0.562	0.598			
STUFAC	0.925	0.598	0.998		

RMBRD	0.565	0.366	0.601	0.601	
LENROLL	0.923	0.597	0.995	0.601	0.996
PRIVATE	0.925	0.598	0.998	0.601	0.996

Covariance Coverage

	PRIVATE
PRIVATE	1.000

SAMPLE STATISTICS

ESTIMATED SAMPLE STATISTICS

Means

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
1	59.917	958.964	14.863	4.078	6.169

Means

	PRIVATE
1	0.639

Covariances

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	355.429				
CSAT	1390.974	15505.577			
STUFAC	-31.057	-197.351	26.883		
RMBRD	10.424	68.900	-1.687	1.331	
LENROLL	-0.507	23.222	1.380	-0.023	0.993
PRIVATE	3.612	9.481	-0.915	0.191	-0.296

Covariances

	PRIVATE
PRIVATE	0.231

Correlations

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	1.000				
CSAT	0.593	1.000			
STUFAC	-0.318	-0.306	1.000		
RMBRD	0.479	0.480	-0.282	1.000	
LENROLL	-0.027	0.187	0.267	-0.020	1.000
PRIVATE	0.399	0.159	-0.367	0.344	-0.619

Correlations

	PRIVATE
PRIVATE	1.000

MAXIMUM LOG-LIKELIHOOD VALUE FOR THE UNRESTRICTED (H1) MODEL IS -17079.344

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 21

Loglikelihood

H0 Value	-16627.226
H1 Value	-16186.739

Information Criteria

Akaike (AIC)	33296.452
Bayesian (BIC)	33405.057
Sample-Size Adjusted BIC (n* = (n + 2) / 24)	33338.350

Chi-Square Test of Model Fit

Value	880.974
Degrees of Freedom	4
P-Value	0.0000

RMSEA (Root Mean Square Error Of Approximation)

Estimate	0.410	
90 Percent C.I.	0.388	0.433
Probability RMSEA <= .05	0.000	

CFI/TLI

CFI	0.000
TLI	-0.714

Chi-Square Test of Model Fit for the Baseline Model

Value	644.686
Degrees of Freedom	5
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value	0.168

MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.065	0.005	12.999	0.000
STUFAC	-0.187	0.102	-1.824	0.068
RMBRD	2.123	0.572	3.714	0.000
PRIVATE	15.275	1.239	12.327	0.000
LENROLL	2.813	0.589	4.772	0.000

STUFAC WITH				
CSAT	-192.754	21.108	-9.132	0.000
RMBRD WITH				
CSAT	69.965	6.008	11.645	0.000
STUFAC	-1.716	0.198	-8.657	0.000
LENROLL WITH				
CSAT	24.025	4.074	5.897	0.000
STUFAC	1.382	0.148	9.308	0.000
RMBRD	-0.029	0.043	-0.670	0.503
Means				
CSAT	959.616	4.109	233.516	0.000
STUFAC	14.860	0.144	103.357	0.000
RMBRD	4.111	0.039	104.105	0.000
LENROLL	6.167	0.028	222.912	0.000
Intercepts				
GRADRAT	-35.060	5.126	-6.839	0.000
Variances				
CSAT	15479.662	764.804	20.240	0.000
STUFAC	26.876	1.054	25.497	0.000
RMBRD	1.344	0.066	20.218	0.000
LENROLL	0.993	0.039	25.473	0.000
Residual Variances				
GRADRAT	187.726	8.618	21.783	0.000

STANDARDIZED MODEL RESULTS

STDYX Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.427	0.033	12.942	0.000
STUFAC	-0.052	0.028	-1.819	0.069
RMBRD	0.131	0.036	3.667	0.000
PRIVATE	0.390	0.029	13.642	0.000
LENROLL	0.149	0.030	4.953	0.000
STUFAC WITH				
CSAT	-0.299	0.029	-10.330	0.000
RMBRD WITH				
CSAT	0.485	0.032	15.297	0.000
STUFAC	-0.285	0.030	-9.638	0.000
LENROLL WITH				
CSAT	0.194	0.031	6.180	0.000
STUFAC	0.267	0.026	10.375	0.000
RMBRD	-0.025	0.037	-0.671	0.502
Means				
CSAT	7.713	0.196	39.405	0.000
STUFAC	2.866	0.063	45.737	0.000
RMBRD	3.546	0.095	37.293	0.000

LENROLL	6.188	0.125	49.662	0.000
Intercepts				
GRADRAT	-1.866	0.252	-7.419	0.000
Variances				
CSAT	1.000	0.000	999.000	999.000
STUFAC	1.000	0.000	999.000	999.000
RMBRD	1.000	0.000	999.000	999.000
LENROLL	1.000	0.000	999.000	999.000
Residual Variances				
GRADRAT	0.532	0.024	22.462	0.000

STDY Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.427	0.033	12.942	0.000
STUFAC	-0.052	0.028	-1.819	0.069
RMBRD	0.131	0.036	3.667	0.000
PRIVATE	0.813	0.058	13.994	0.000
LENROLL	0.149	0.030	4.953	0.000
STUFAC WITH				
CSAT	-0.299	0.029	-10.330	0.000
RMBRD WITH				
CSAT	0.485	0.032	15.297	0.000
STUFAC	-0.285	0.030	-9.638	0.000
LENROLL WITH				
CSAT	0.194	0.031	6.180	0.000
STUFAC	0.267	0.026	10.375	0.000
RMBRD	-0.025	0.037	-0.671	0.502
Means				
CSAT	7.713	0.196	39.405	0.000
STUFAC	2.866	0.063	45.737	0.000
RMBRD	3.546	0.095	37.293	0.000
LENROLL	6.188	0.125	49.662	0.000
Intercepts				
GRADRAT	-1.866	0.252	-7.419	0.000
Variances				
CSAT	1.000	0.000	999.000	999.000
STUFAC	1.000	0.000	999.000	999.000
RMBRD	1.000	0.000	999.000	999.000
LENROLL	1.000	0.000	999.000	999.000
Residual Variances				
GRADRAT	0.532	0.024	22.462	0.000

STD Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value

GRADRAT ON				
CSAT	0.065	0.005	12.999	0.000
STUFAC	-0.187	0.102	-1.824	0.068
RMBRD	2.123	0.572	3.714	0.000
PRIVATE	15.275	1.239	12.327	0.000
LENROLL	2.813	0.589	4.772	0.000
STUFAC WITH				
CSAT	-192.754	21.108	-9.132	0.000
RMBRD WITH				
CSAT	69.965	6.008	11.645	0.000
STUFAC	-1.716	0.198	-8.657	0.000
LENROLL WITH				
CSAT	24.025	4.074	5.897	0.000
STUFAC	1.382	0.148	9.308	0.000
RMBRD	-0.029	0.043	-0.670	0.503
Means				
CSAT	959.616	4.109	233.516	0.000
STUFAC	14.860	0.144	103.357	0.000
RMBRD	4.111	0.039	104.105	0.000
LENROLL	6.167	0.028	222.912	0.000
Intercepts				
GRADRAT	-35.060	5.126	-6.839	0.000
Variances				
CSAT	15479.662	764.804	20.240	0.000
STUFAC	26.876	1.054	25.497	0.000
RMBRD	1.344	0.066	20.218	0.000
LENROLL	0.993	0.039	25.473	0.000
Residual Variances				
GRADRAT	187.726	8.618	21.783	0.000

R-SQUARE

Observed Variable	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT	0.468	0.024	19.770	0.000

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix 0.618E-06
(ratio of smallest to largest eigenvalue)

CONFIDENCE INTERVALS OF MODEL RESULTS

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
GRADRAT ON							
CSAT	0.052	0.055	0.056	0.065	0.073	0.074	0.077
STUFAC	-0.451	-0.388	-0.356	-0.187	-0.018	0.014	0.077
RMBRD	0.650	1.002	1.183	2.123	3.063	3.243	

```
   3.595
    PRIVATE         12.083      12.846      13.236      15.275      17.313      17.703
  18.466
    LENROLL          1.295       1.657       1.843       2.813       3.782       3.968
   4.331

 STUFAC   WITH
    CSAT          -247.123    -234.125    -227.476    -192.754    -158.032    -151.383
-138.384

 RMBRD    WITH
    CSAT            54.489      58.189      60.081      69.965      79.849      81.741
  85.441
    STUFAC          -2.226      -2.104      -2.042      -1.716      -1.390      -1.327
  -1.205

 LENROLL  WITH
    CSAT            13.532      16.040      17.324      24.025      30.727      32.010
  34.519
    STUFAC           0.999       1.091       1.138       1.382       1.626       1.673
   1.764
    RMBRD           -0.138      -0.112      -0.098      -0.029       0.041       0.055
   0.081

 Means
    CSAT           949.031     951.561     952.856     959.616     966.376     967.670
970.201
    STUFAC          14.490      14.578      14.624      14.860      15.097      15.142
  15.230
    RMBRD            4.009       4.034       4.046       4.111       4.176       4.189
   4.213
    LENROLL          6.096       6.113       6.122       6.167       6.213       6.222
   6.239

 Intercepts
    GRADRAT        -48.264     -45.107     -43.492     -35.060     -26.627     -25.012
 -21.855

 Variances
    CSAT         13509.680   13980.646   14221.560   15479.662   16737.766   16978.678   1
7449.645
    STUFAC          24.161      24.810      25.142      26.876      28.610      28.942
  29.591
    RMBRD            1.173       1.214       1.235       1.344       1.453       1.474
   1.515
    LENROLL          0.893       0.917       0.929       0.993       1.057       1.070
   1.094

 Residual Variances
    GRADRAT        165.528     170.835     173.549     187.726     201.902     204.617
 209.924


CONFIDENCE INTERVALS OF STANDARDIZED MODEL RESULTS


STDYX Standardization

                 Lower .5%  Lower 2.5%    Lower 5%    Estimate    Upper 5%  Upper 2.5%
Upper .5%

 GRADRAT  ON
    CSAT             0.342       0.363       0.373       0.427       0.482       0.492
```

```
   0.512
    STUFAC          -0.125      -0.107      -0.098      -0.052      -0.005       0.004
   0.021
    RMBRD            0.039       0.061       0.072       0.131       0.190       0.201
   0.223
    PRIVATE          0.317       0.334       0.343       0.390       0.438       0.447
   0.464
    LENROLL          0.072       0.090       0.100       0.149       0.199       0.208
   0.227

 STUFAC   WITH
    CSAT            -0.373      -0.356      -0.346      -0.299      -0.251      -0.242
  -0.224

 RMBRD    WITH
    CSAT             0.403       0.423       0.433       0.485       0.537       0.547
   0.567
    STUFAC          -0.362      -0.344      -0.334      -0.285      -0.237      -0.227
  -0.209

 LENROLL  WITH
    CSAT             0.113       0.132       0.142       0.194       0.245       0.255
   0.275
    STUFAC           0.201       0.217       0.225       0.267       0.310       0.318
   0.334
    RMBRD           -0.119      -0.097      -0.085      -0.025       0.036       0.047
   0.070

 Means
    CSAT             7.209       7.329       7.391       7.713       8.035       8.097
   8.217
    STUFAC           2.705       2.744       2.763       2.866       2.970       2.989
   3.028
    RMBRD            3.301       3.360       3.390       3.546       3.703       3.733
   3.791
    LENROLL          5.867       5.944       5.983       6.188       6.393       6.432
   6.509

 Intercepts
    GRADRAT         -2.514      -2.359      -2.280      -1.866      -1.452      -1.373
  -1.218

 Variances
    CSAT             1.000       1.000       1.000       1.000       1.000       1.000
   1.000
    STUFAC           1.000       1.000       1.000       1.000       1.000       1.000
   1.000
    RMBRD            1.000       1.000       1.000       1.000       1.000       1.000
   1.000
    LENROLL          1.000       1.000       1.000       1.000       1.000       1.000
   1.000

 Residual Variances
    GRADRAT          0.471       0.485       0.493       0.532       0.571       0.578
   0.593


STDY Standardization

                  Lower .5%  Lower 2.5%    Lower 5%    Estimate    Upper 5%  Upper 2.5%
Upper .5%

 GRADRAT  ON
```

CSAT	0.342	0.363	0.373	0.427	0.482	0.492
0.512						
STUFAC	-0.125	-0.107	-0.098	-0.052	-0.005	0.004
0.021						
RMBRD	0.039	0.061	0.072	0.131	0.190	0.201
0.223						
PRIVATE	0.663	0.699	0.717	0.813	0.909	0.927
0.963						
LENROLL	0.072	0.090	0.100	0.149	0.199	0.208
0.227						
STUFAC WITH						
CSAT	-0.373	-0.356	-0.346	-0.299	-0.251	-0.242
-0.224						
RMBRD WITH						
CSAT	0.403	0.423	0.433	0.485	0.537	0.547
0.567						
STUFAC	-0.362	-0.344	-0.334	-0.285	-0.237	-0.227
-0.209						
LENROLL WITH						
CSAT	0.113	0.132	0.142	0.194	0.245	0.255
0.275						
STUFAC	0.201	0.217	0.225	0.267	0.310	0.318
0.334						
RMBRD	-0.119	-0.097	-0.085	-0.025	0.036	0.047
0.070						
Means						
CSAT	7.209	7.329	7.391	7.713	8.035	8.097
8.217						
STUFAC	2.705	2.744	2.763	2.866	2.970	2.989
3.028						
RMBRD	3.301	3.360	3.390	3.546	3.703	3.733
3.791						
LENROLL	5.867	5.944	5.983	6.188	6.393	6.432
6.509						
Intercepts						
GRADRAT	-2.514	-2.359	-2.280	-1.866	-1.452	-1.373
-1.218						
Variances						
CSAT	1.000	1.000	1.000	1.000	1.000	1.000
1.000						
STUFAC	1.000	1.000	1.000	1.000	1.000	1.000
1.000						
RMBRD	1.000	1.000	1.000	1.000	1.000	1.000
1.000						
LENROLL	1.000	1.000	1.000	1.000	1.000	1.000
1.000						
Residual Variances						
GRADRAT	0.471	0.485	0.493	0.532	0.571	0.578
0.593						

STD Standardization

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%

```
 GRADRAT  ON
    CSAT             0.052       0.055       0.056       0.065       0.073       0.074
   0.077
    STUFAC          -0.451      -0.388      -0.356      -0.187      -0.018       0.014
   0.077
    RMBRD            0.650       1.002       1.183       2.123       3.063       3.243
   3.595
    PRIVATE         12.083      12.846      13.236      15.275      17.313      17.703
  18.466
    LENROLL          1.295       1.657       1.843       2.813       3.782       3.968
   4.331

 STUFAC   WITH
    CSAT          -247.123    -234.125    -227.476    -192.754    -158.032    -151.383
-138.384

 RMBRD    WITH
    CSAT            54.489      58.189      60.081      69.965      79.849      81.741
  85.441
    STUFAC          -2.226      -2.104      -2.042      -1.716      -1.390      -1.327
  -1.205

 LENROLL  WITH
    CSAT            13.532      16.040      17.324      24.025      30.727      32.010
  34.519
    STUFAC           0.999       1.091       1.138       1.382       1.626       1.673
   1.764
    RMBRD           -0.138      -0.112      -0.098      -0.029       0.041       0.055
   0.081

 Means
    CSAT           949.031     951.561     952.856     959.616     966.376     967.670
970.201
    STUFAC          14.490      14.578      14.624      14.860      15.097      15.142
  15.230
    RMBRD            4.009       4.034       4.046       4.111       4.176       4.189
   4.213
    LENROLL          6.096       6.113       6.122       6.167       6.213       6.222
   6.239

 Intercepts
    GRADRAT        -48.264     -45.107     -43.492     -35.060     -26.627     -25.012
 -21.855

 Variances
    CSAT         13509.680   13980.646   14221.560   15479.662   16737.766   16978.678   1
7449.645
    STUFAC          24.161      24.810      25.142      26.876      28.610      28.942
  29.591
    RMBRD            1.173       1.214       1.235       1.344       1.453       1.474
   1.515
    LENROLL          0.893       0.917       0.929       0.993       1.057       1.070
   1.094

 Residual Variances
    GRADRAT        165.528     170.835     173.549     187.726     201.902     204.617
 209.924


     Beginning Time:  09:42:12
        Ending Time:  09:42:13
       Elapsed Time:  00:00:01
```

MUTHEN & MUTHEN
3463 Stoner Ave.
Los Angeles, CA 90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/10/2010   9:42 AM

INPUT INSTRUCTIONS

  TITLE: Demo of direct ML estimation with robust standard errors ;

  DATA:
      FILE is usnews1.txt ;

  VARIABLE:
      NAMES ARE csat act stufac gradrat rmbrd private lenroll ;
      MISSING ARE ALL (-999) ;
      USEVARIABLES ARE csat stufac gradrat rmbrd private lenroll ;
      AUXILIARY ARE act ;

  ANALYSIS:
      TYPE = GENERAL ;
      ESTIMATOR = MLR ; ! Invokes robust "sandiwch" standard errors

  MODEL:
      gradrat ON csat stufac rmbrd private lenroll ;

      csat ;
      stufac ;
      rmbrd ;
      lenroll ;

  OUTPUT:
      patterns sampstat standardized ;



INPUT READING TERMINATED NORMALLY



Demo of direct ML estimation with robust standard errors ;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                        1302

Number of dependent variables                                    1
Number of independent variables                                  5
Number of continuous latent variables                            0

Observed dependent variables

  Continuous
   GRADRAT

Observed independent variables
   CSAT        STUFAC      RMBRD       PRIVATE     LENROLL

Observed auxiliary variables
   ACT


Estimator                                                      MLR
Information matrix                                        OBSERVED
```

Maximum number of iterations 1000
Convergence criterion 0.500D-04
Maximum number of steepest descent iterations 20
Maximum number of iterations for H1 2000
Convergence criterion for H1 0.100D-03

Input data file(s)
usnews1.txt

Input data format FREE

SUMMARY OF DATA

Number of missing data patterns 14

SUMMARY OF MISSING DATA PATTERNS

MISSING DATA PATTERNS (x = not missing)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
GRADRAT	x	x	x	x	x	x								
CSAT	x	x					x	x	x	x				
STUFAC	x	x	x	x	x	x	x	x	x		x	x	x	
RMBRD	x		x	x			x				x			
LENROLL	x	x	x		x		x	x			x	x		x
PRIVATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x

MISSING DATA PATTERN FREQUENCIES

Pattern	Frequency	Pattern	Frequency	Pattern	Frequency
1	455	6	1	11	27
2	277	7	21	12	22
3	279	8	24	13	1
4	1	9	1	14	1
5	191	10	1		

COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value 0.100

PROPORTION OF DATA PRESENT

Covariance Coverage

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	0.925				
CSAT	0.562	0.598			
STUFAC	0.925	0.598	0.998		
RMBRD	0.565	0.366	0.601	0.601	
LENROLL	0.923	0.597	0.995	0.601	0.996
PRIVATE	0.925	0.598	0.998	0.601	0.996

Covariance Coverage

	PRIVATE

PRIVATE 1.000

SAMPLE STATISTICS

ESTIMATED SAMPLE STATISTICS

Means

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
1	59.917	958.964	14.863	4.078	6.169

Means

	PRIVATE
1	0.639

Covariances

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	355.429				
CSAT	1390.974	15505.577			
STUFAC	-31.057	-197.351	26.883		
RMBRD	10.424	68.900	-1.687	1.331	
LENROLL	-0.507	23.222	1.380	-0.023	0.993
PRIVATE	3.612	9.481	-0.915	0.191	-0.296

Covariances

	PRIVATE
PRIVATE	0.231

Correlations

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	1.000				
CSAT	0.593	1.000			
STUFAC	-0.318	-0.306	1.000		
RMBRD	0.479	0.480	-0.282	1.000	
LENROLL	-0.027	0.187	0.267	-0.020	1.000
PRIVATE	0.399	0.159	-0.367	0.344	-0.619

Correlations

	PRIVATE
PRIVATE	1.000

MAXIMUM LOG-LIKELIHOOD VALUE FOR THE UNRESTRICTED (H1) MODEL IS -17079.344

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 21

Loglikelihood

H0 Value	-16627.226
H0 Scaling Correction Factor for MLR	3.001
H1 Value	-16186.739
H1 Scaling Correction Factor for MLR	2.772

Information Criteria

Akaike (AIC)	33296.452
Bayesian (BIC)	33405.057
Sample-Size Adjusted BIC (n* = (n + 2) / 24)	33338.350

Chi-Square Test of Model Fit

Value	560.090*
Degrees of Freedom	4
P-Value	0.0000
Scaling Correction Factor for MLR	1.573

* The chi-square value for MLM, MLMV, MLR, ULSMV, WLSM and WLSMV cannot be used for chi-square difference testing in the regular way. MLM, MLR and WLSM chi-square difference testing is described on the Mplus website. MLMV, WLSMV, and ULSMV difference testing is done using the DIFFTEST option.

RMSEA (Root Mean Square Error Of Approximation)

Estimate	0.327	
90 Percent C.I.	0.304	0.350
Probability RMSEA <= .05	0.000	

CFI/TLI

CFI	0.000
TLI	-0.284

Chi-Square Test of Model Fit for the Baseline Model

Value	546.568
Degrees of Freedom	5
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value	0.168

MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.065	0.005	12.125	0.000
STUFAC	-0.187	0.111	-1.688	0.091

RMBRD	2.123	0.622	3.416	0.001
PRIVATE	15.275	1.322	11.555	0.000
LENROLL	2.813	0.674	4.175	0.000
STUFAC WITH				
CSAT	-192.754	19.909	-9.682	0.000
RMBRD WITH				
CSAT	69.965	6.645	10.529	0.000
STUFAC	-1.716	0.204	-8.393	0.000
LENROLL WITH				
CSAT	24.025	3.677	6.533	0.000
STUFAC	1.382	0.135	10.239	0.000
RMBRD	-0.029	0.043	-0.663	0.507
Means				
CSAT	959.616	3.987	240.707	0.000
STUFAC	14.860	0.144	103.354	0.000
RMBRD	4.111	0.039	104.757	0.000
LENROLL	6.167	0.028	222.903	0.000
Intercepts				
GRADRAT	-35.060	5.166	-6.787	0.000
Variances				
CSAT	15479.662	895.976	17.277	0.000
STUFAC	26.876	5.370	5.005	0.000
RMBRD	1.344	0.069	19.522	0.000
LENROLL	0.993	0.036	27.351	0.000
Residual Variances				
GRADRAT	187.726	10.072	18.638	0.000

STANDARDIZED MODEL RESULTS

STDYX Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.427	0.038	11.184	0.000
STUFAC	-0.052	0.033	-1.552	0.121
RMBRD	0.131	0.038	3.443	0.001
PRIVATE	0.390	0.030	12.847	0.000
LENROLL	0.149	0.034	4.328	0.000
STUFAC WITH				
CSAT	-0.299	0.037	-8.162	0.000
RMBRD WITH				
CSAT	0.485	0.033	14.756	0.000
STUFAC	-0.285	0.052	-5.533	0.000
LENROLL WITH				
CSAT	0.194	0.029	6.743	0.000
STUFAC	0.267	0.042	6.318	0.000
RMBRD	-0.025	0.037	-0.664	0.507
Means				

CSAT	7.713	0.220	35.079	0.000
STUFAC	2.866	0.271	10.570	0.000
RMBRD	3.546	0.085	41.649	0.000
LENROLL	6.188	0.115	53.685	0.000
Intercepts				
GRADRAT	-1.866	0.260	-7.184	0.000
Variances				
CSAT	1.000	0.000	999.000	999.000
STUFAC	1.000	0.000	999.000	999.000
RMBRD	1.000	0.000	999.000	999.000
LENROLL	1.000	0.000	999.000	999.000
Residual Variances				
GRADRAT	0.532	0.024	21.843	0.000

STDY Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.427	0.038	11.184	0.000
STUFAC	-0.052	0.033	-1.552	0.121
RMBRD	0.131	0.038	3.443	0.001
PRIVATE	0.813	0.063	12.895	0.000
LENROLL	0.149	0.034	4.328	0.000
STUFAC WITH				
CSAT	-0.299	0.037	-8.162	0.000
RMBRD WITH				
CSAT	0.485	0.033	14.756	0.000
STUFAC	-0.285	0.052	-5.533	0.000
LENROLL WITH				
CSAT	0.194	0.029	6.743	0.000
STUFAC	0.267	0.042	6.318	0.000
RMBRD	-0.025	0.037	-0.664	0.507
Means				
CSAT	7.713	0.220	35.079	0.000
STUFAC	2.866	0.271	10.570	0.000
RMBRD	3.546	0.085	41.649	0.000
LENROLL	6.188	0.115	53.685	0.000
Intercepts				
GRADRAT	-1.866	0.260	-7.184	0.000
Variances				
CSAT	1.000	0.000	999.000	999.000
STUFAC	1.000	0.000	999.000	999.000
RMBRD	1.000	0.000	999.000	999.000
LENROLL	1.000	0.000	999.000	999.000
Residual Variances				
GRADRAT	0.532	0.024	21.843	0.000

STD Standardization

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.065	0.005	12.125	0.000
STUFAC	-0.187	0.111	-1.688	0.091
RMBRD	2.123	0.622	3.416	0.001
PRIVATE	15.275	1.322	11.555	0.000
LENROLL	2.813	0.674	4.175	0.000
STUFAC WITH				
CSAT	-192.754	19.909	-9.682	0.000
RMBRD WITH				
CSAT	69.965	6.645	10.529	0.000
STUFAC	-1.716	0.204	-8.393	0.000
LENROLL WITH				
CSAT	24.025	3.677	6.533	0.000
STUFAC	1.382	0.135	10.239	0.000
RMBRD	-0.029	0.043	-0.663	0.507
Means				
CSAT	959.616	3.987	240.707	0.000
STUFAC	14.860	0.144	103.354	0.000
RMBRD	4.111	0.039	104.757	0.000
LENROLL	6.167	0.028	222.903	0.000
Intercepts				
GRADRAT	-35.060	5.166	-6.787	0.000
Variances				
CSAT	15479.662	895.976	17.277	0.000
STUFAC	26.876	5.370	5.005	0.000
RMBRD	1.344	0.069	19.522	0.000
LENROLL	0.993	0.036	27.351	0.000
Residual Variances				
GRADRAT	187.726	10.072	18.638	0.000

R-SQUARE

Observed Variable	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT	0.468	0.024	19.225	0.000

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix 0.618E-06
(ratio of smallest to largest eigenvalue)

Beginning Time: 09:42:20
Ending Time: 09:42:20
Elapsed Time: 00:00:00

MUTHEN & MUTHEN
3463 Stoner Ave.

Los Angeles, CA 90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/10/2010   9:42 AM

INPUT INSTRUCTIONS

  TITLE: Demo of direct ML estimation with bootstrap standard errors ;

  DATA:
      FILE is usnews1.txt ;

  VARIABLE:
      NAMES ARE csat act stufac gradrat rmbrd private lenroll ;
      MISSING ARE ALL (-999) ;
      USEVARIABLES ARE csat stufac gradrat rmbrd private lenroll ;
      AUXILIARY ARE act ;

  ANALYSIS:
      TYPE = GENERAL ;
      BOOTSTRAP = 5000 ;  ! Invoke the bootstrap and generate bootstrap
                          ! based standard errors

  MODEL:
      gradrat ON csat stufac rmbrd private lenroll ;

      csat ;
      stufac ;
      rmbrd ;
      lenroll ;

  ! Request bootstrap-based asymmetric bias-corrected confidence intervals

  OUTPUT:
      patterns sampstat standardized cinterval(bcbootstrap) ;



INPUT READING TERMINATED NORMALLY



Demo of direct ML estimation with bootstrap standard errors ;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                        1302

Number of dependent variables                                    1
Number of independent variables                                  5
Number of continuous latent variables                            0

Observed dependent variables

  Continuous
   GRADRAT

Observed independent variables
   CSAT        STUFAC      RMBRD       PRIVATE     LENROLL

Observed auxiliary variables
   ACT
```

Estimator	ML
Information matrix	OBSERVED
Maximum number of iterations	1000
Convergence criterion	0.500D-04
Maximum number of steepest descent iterations	20
Maximum number of iterations for H1	2000
Convergence criterion for H1	0.100D-03
Number of bootstrap draws	
Requested	5000
Completed	5000

Input data file(s)
usnews1.txt

Input data format FREE

SUMMARY OF DATA

Number of missing data patterns 14

SUMMARY OF MISSING DATA PATTERNS

MISSING DATA PATTERNS (x = not missing)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
GRADRAT	x	x	x	x	x	x								
CSAT	x	x					x	x	x	x				
STUFAC	x	x	x	x	x	x	x	x	x		x	x	x	
RMBRD	x		x	x			x				x			
LENROLL	x	x	x		x		x	x			x	x		x
PRIVATE	x	x	x	x	x	x	x	x	x	x	x	x	x	x

MISSING DATA PATTERN FREQUENCIES

Pattern	Frequency	Pattern	Frequency	Pattern	Frequency
1	455	6	1	11	27
2	277	7	21	12	22
3	279	8	24	13	1
4	1	9	1	14	1
5	191	10	1		

COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value 0.100

PROPORTION OF DATA PRESENT

Covariance Coverage

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	0.925				
CSAT	0.562	0.598			
STUFAC	0.925	0.598	0.998		
RMBRD	0.565	0.366	0.601	0.601	
LENROLL	0.923	0.597	0.995	0.601	0.996

PRIVATE	0.925	0.598	0.998	0.601	0.996

Covariance Coverage

	PRIVATE
PRIVATE	1.000

SAMPLE STATISTICS

ESTIMATED SAMPLE STATISTICS

Means

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
1	59.917	958.964	14.863	4.078	6.169

Means

	PRIVATE
1	0.639

Covariances

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	355.429				
CSAT	1390.974	15505.577			
STUFAC	-31.057	-197.351	26.883		
RMBRD	10.424	68.900	-1.687	1.331	
LENROLL	-0.507	23.222	1.380	-0.023	0.993
PRIVATE	3.612	9.481	-0.915	0.191	-0.296

Covariances

	PRIVATE
PRIVATE	0.231

Correlations

	GRADRAT	CSAT	STUFAC	RMBRD	LENROLL
GRADRAT	1.000				
CSAT	0.593	1.000			
STUFAC	-0.318	-0.306	1.000		
RMBRD	0.479	0.480	-0.282	1.000	
LENROLL	-0.027	0.187	0.267	-0.020	1.000
PRIVATE	0.399	0.159	-0.367	0.344	-0.619

Correlations

	PRIVATE
PRIVATE	1.000

MAXIMUM LOG-LIKELIHOOD VALUE FOR THE UNRESTRICTED (H1) MODEL IS -17079.344

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 21

Loglikelihood

H0 Value	-16627.226
H1 Value	-16186.739

Information Criteria

Akaike (AIC)	33296.452
Bayesian (BIC)	33405.057
Sample-Size Adjusted BIC (n* = (n + 2) / 24)	33338.350

Chi-Square Test of Model Fit

Value	880.974
Degrees of Freedom	4
P-Value	0.0000

RMSEA (Root Mean Square Error Of Approximation)

Estimate	0.410	
90 Percent C.I.	0.388	0.433
Probability RMSEA <= .05	0.000	

CFI/TLI

CFI	0.000
TLI	-0.714

Chi-Square Test of Model Fit for the Baseline Model

Value	644.686
Degrees of Freedom	5
P-Value	0.0000

SRMR (Standardized Root Mean Square Residual)

Value	0.168

MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
GRADRAT ON				
CSAT	0.065	0.005	12.073	0.000
STUFAC	-0.187	0.129	-1.452	0.147
RMBRD	2.123	0.630	3.369	0.001
PRIVATE	15.275	1.337	11.421	0.000
LENROLL	2.813	0.687	4.096	0.000
STUFAC WITH				

CSAT	-192.754	20.825	-9.256	0.000
RMBRD WITH				
CSAT	69.965	6.677	10.479	0.000
STUFAC	-1.716	0.208	-8.237	0.000
LENROLL WITH				
CSAT	24.025	3.757	6.394	0.000
STUFAC	1.382	0.134	10.329	0.000
RMBRD	-0.029	0.043	-0.670	0.503
Means				
CSAT	959.616	4.073	235.627	0.000
STUFAC	14.860	0.144	102.868	0.000
RMBRD	4.111	0.039	105.030	0.000
LENROLL	6.167	0.028	217.839	0.000
Intercepts				
GRADRAT	-35.060	5.307	-6.606	0.000
Variances				
CSAT	15479.662	897.982	17.238	0.000
STUFAC	26.876	5.414	4.964	0.000
RMBRD	1.344	0.069	19.460	0.000
LENROLL	0.993	0.036	27.511	0.000
Residual Variances				
GRADRAT	187.726	10.056	18.668	0.000

STANDARDIZED MODEL RESULTS

	StdYX Estimate	StdY Estimate	Std Estimate
GRADRAT ON			
CSAT	0.427	0.427	0.065
STUFAC	-0.052	-0.052	-0.187
RMBRD	0.131	0.131	2.123
PRIVATE	0.390	0.813	15.275
LENROLL	0.149	0.149	2.813
STUFAC WITH			
CSAT	-0.299	-0.299	-192.754
RMBRD WITH			
CSAT	0.485	0.485	69.965
STUFAC	-0.285	-0.285	-1.716
LENROLL WITH			
CSAT	0.194	0.194	24.025
STUFAC	0.267	0.267	1.382
RMBRD	-0.025	-0.025	-0.029
Means			
CSAT	7.713	7.713	959.616
STUFAC	2.866	2.866	14.860
RMBRD	3.546	3.546	4.111
LENROLL	6.188	6.188	6.167
Intercepts			
GRADRAT	-1.866	-1.866	-35.060

```
 Variances
    CSAT               1.000      1.000  15479.662
    STUFAC             1.000      1.000     26.876
    RMBRD              1.000      1.000      1.344
    LENROLL            1.000      1.000      0.993

 Residual Variances
    GRADRAT            0.532      0.532    187.726


R-SQUARE

    Observed
    Variable        Estimate

    GRADRAT            0.468


CONFIDENCE INTERVALS OF MODEL RESULTS

                  Lower .5%  Lower 2.5%    Lower 5%    Estimate    Upper 5%  Upper 2.5%
Upper .5%

 GRADRAT  ON
    CSAT              0.051       0.054       0.056       0.065       0.073       0.075
   0.078
    STUFAC           -0.478      -0.385      -0.356      -0.187       0.057       0.120
   0.227
    RMBRD             0.380       0.876       1.081       2.123       3.119       3.347
   3.720
    PRIVATE          11.724      12.641      13.035      15.275      17.480      17.945
  18.679
    LENROLL           0.987       1.467       1.697       2.813       3.939       4.170
   4.582

 STUFAC   WITH
    CSAT           -247.492    -233.400    -226.387    -192.754    -158.313    -152.690
-142.229

 RMBRD    WITH
    CSAT             53.076      57.425      59.438      69.965      81.379      83.445
  87.663
    STUFAC           -2.318      -2.150      -2.066      -1.716      -1.391      -1.335
  -1.220

 LENROLL  WITH
    CSAT             13.901      16.739      17.798      24.025      30.236      31.432
  33.477
    STUFAC            1.025       1.106       1.152       1.382       1.597       1.638
   1.713
    RMBRD            -0.138      -0.112      -0.097      -0.029       0.042       0.056
   0.084

 Means
    CSAT            948.524     951.533     952.960     959.616     966.320     967.758
970.405
    STUFAC           14.510      14.588      14.630      14.860      15.102      15.149
  15.252
    RMBRD             4.016       4.037       4.048       4.111       4.176       4.190
   4.212
    LENROLL           6.096       6.112       6.120       6.167       6.214       6.222
   6.238
```

```
 Intercepts
    GRADRAT        -48.875     -45.292     -43.603     -35.060     -25.959     -24.325
 -21.127

 Variances
    CSAT         13293.960   13770.181   14065.698   15479.662   16970.277   17277.734   1
7909.047
    STUFAC          17.645      18.894      19.822      26.876      38.468      40.670
  44.827
    RMBRD            1.181       1.219       1.238       1.344       1.467       1.489
   1.536
    LENROLL          0.902       0.922       0.935       0.993       1.053       1.065
   1.086

 Residual Variances
    GRADRAT        163.225     168.953     172.074     187.726     204.818     208.225
 215.100


     Beginning Time:  09:42:30
        Ending Time:  09:42:57
       Elapsed Time:  00:00:27


MUTHEN & MUTHEN
3463 Stoner Ave.
Los Angeles, CA  90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

Copyright (c) 1998-2010 Muthen & Muthen
```

Example 2: Clustered Logistic Regression of Gay Couples Study Data

1. HoffDemo1.out: Mplus 6 Output for Listwise Analysis (N = 955) with robust standard errors
2. HoffDemo2.out: Mplus 6 Output for Direct ML Analysis (N = 1166) with robust standard errors

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/10/2010   9:38 AM

INPUT INSTRUCTIONS

  TITLE: Clustered logistic regression ;

  DATA:
      FILE IS long_demo.txt ;

  VARIABLE:
      NAMES ARE coupid couphiv crela non_mono uaibin partner cesd age sais ;
      MISSING ARE ALL (-999) ;
      USEVARIABLES ARE crela non_mono uaibin cesd age sais hivdisc hivpos ;
      CLUSTER IS coupid ; ! Identifies the cluster ID variable ;
      CATEGORICAL ARE uaibin ; ! Identifies ordinal or binary mediators or outcomes ;

  ! Create dummy variables to indicate couple HIV status ;

  DEFINE:
      IF (couphiv EQ 1) THEN hivdisc = 0 ;
      IF (couphiv EQ 2) THEN hivdisc = 1 ;
      IF (couphiv EQ 3) THEN hivdisc = 0 ;
      IF (couphiv EQ 1) THEN hivpos = 0 ;
      IF (couphiv EQ 2) THEN hivpos = 0 ;
      IF (couphiv EQ 3) THEN hivpos = 1 ;

  ! Analysis type is COMPLEX ;
  ! MonteCarlo integration is required to estimate this model ;

  ANALYSIS:
      TYPE = COMPLEX ;
      ESTIMATOR = MLR ;
      ALGORITHM = integration ;
      INTEGRATION = montecarlo ;

  MODEL:
      uaibin ON hivdisc hivpos crela non_mono cesd age sais ;

  OUTPUT:
      cinterval ;



*** WARNING
  Data set contains cases with missing on x-variables.
  These cases were not included in the analysis.
  Number of cases with missing on x-variables:  177
   1 WARNING(S) FOUND IN THE INPUT INSTRUCTIONS



Clustered logistic regression ;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                         955

Number of dependent variables                                    1
Number of independent variables                                  7
Number of continuous latent variables                            0
```

```
Observed dependent variables

  Binary and ordered categorical (ordinal)
   UAIBIN

Observed independent variables
   CRELA       NON_MONO    CESD        AGE         SAIS        HIVDISC
   HIVPOS

Variables with special functions

  Cluster variable      COUPID

Estimator                                                MLR
Information matrix                                  OBSERVED
Optimization Specifications for the Quasi-Newton Algorithm for
Continuous Outcomes
  Maximum number of iterations                           100
  Convergence criterion                         0.100D-05
Optimization Specifications for the EM Algorithm
  Maximum number of iterations                           500
  Convergence criteria
    Loglikelihood change                        0.100D-02
    Relative loglikelihood change               0.100D-05
    Derivative                                  0.100D-02
Optimization Specifications for the M step of the EM Algorithm for
Categorical Latent variables
  Number of M step iterations                              1
  M step convergence criterion                  0.100D-02
  Basis for M step termination                  ITERATION
Optimization Specifications for the M step of the EM Algorithm for
Censored, Binary or Ordered Categorical (Ordinal), Unordered
Categorical (Nominal) and Count Outcomes
  Number of M step iterations                              1
  M step convergence criterion                  0.100D-02
  Basis for M step termination                  ITERATION
  Maximum value for logit thresholds                      15
  Minimum value for logit thresholds                     -15
  Minimum expected cell size for chi-square     0.100D-01
Maximum number of iterations for H1                    2000
Convergence criterion for H1                    0.100D-03
Optimization algorithm                                  EMA
Integration Specifications
  Type                                            MONTECARLO
  Number of integration points                             1
  Dimensions of numerical integration                      0
  Adaptive quadrature                                     ON
  Monte Carlo integration seed                             0
Link                                                   LOGIT
Cholesky                                                 OFF

Input data file(s)
  long_demo.txt
Input data format  FREE


SUMMARY OF DATA

     Number of missing data patterns             1
     Number of clusters         529
```

COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value 0.100

UNIVARIATE PROPORTIONS AND COUNTS FOR CATEGORICAL VARIABLES

UAIBIN

Category 1	0.867	828.000
Category 2	0.133	127.000

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 8

Loglikelihood

H0 Value	-318.291
H0 Scaling Correction Factor for MLR	1.072

Information Criteria

Akaike (AIC)	652.581
Bayesian (BIC)	691.475
Sample-Size Adjusted BIC (n* = (n + 2) / 24)	666.067

MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
UAIBIN ON				
HIVDISC	0.769	0.264	2.917	0.004
HIVPOS	0.596	0.281	2.123	0.034
CRELA	0.025	0.017	1.532	0.125
NON_MONO	2.270	0.389	5.832	0.000
CESD	0.000	0.010	0.036	0.971
AGE	-0.019	0.012	-1.662	0.097
SAIS	-0.027	0.012	-2.301	0.021
Thresholds				
UAIBIN$1	2.261	0.867	2.609	0.009

LOGISTIC REGRESSION ODDS RATIO RESULTS

UAIBIN ON	
HIVDISC	2.158
HIVPOS	1.815
CRELA	1.026
NON_MONO	9.681
CESD	1.000

AGE	0.981
SAIS	0.973

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix (ratio of smallest to largest eigenvalue) 0.367E-05

CONFIDENCE INTERVALS OF MODEL RESULTS

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
UAIBIN ON							
HIVDISC	0.090	0.252	0.335	0.769	1.203	1.286	1.448
HIVPOS	-0.127	0.046	0.134	0.596	1.058	1.146	1.319
CRELA	-0.017	-0.007	-0.002	0.025	0.053	0.058	0.068
NON_MONO	1.268	1.507	1.630	2.270	2.910	3.033	3.273
CESD	-0.025	-0.019	-0.016	0.000	0.016	0.019	0.025
AGE	-0.049	-0.042	-0.039	-0.019	0.000	0.003	0.011
SAIS	-0.058	-0.050	-0.047	-0.027	-0.008	-0.004	0.003
Thresholds							
UAIBIN$1	0.029	0.562	0.835	2.261	3.686	3.959	4.493

CONFIDENCE INTERVALS FOR THE LOGISTIC REGRESSION ODDS RATIO RESULTS

UAIBIN ON							
HIVDISC	1.094	1.287	1.398	2.158	3.329	3.617	4.255
HIVPOS	0.881	1.047	1.144	1.815	2.880	3.146	3.740
CRELA	0.983	0.993	0.998	1.026	1.054	1.060	1.071
NON_MONO	3.552	4.514	5.103	9.681	18.365	20.761	26.384
CESD	0.976	0.982	0.985	1.000	1.016	1.020	1.026
AGE	0.952	0.959	0.962	0.981	1.000	1.003	1.011
SAIS	0.944	0.951	0.954	0.973	0.992	0.996	1.003

Beginning Time: 09:38:00
Ending Time: 09:38:01
Elapsed Time: 00:00:01

MUTHEN & MUTHEN
3463 Stoner Ave.

Los Angeles, CA 90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/10/2010   9:40 AM

INPUT INSTRUCTIONS

  TITLE: Clustered logistic regression ;

  DATA:
      FILE IS long_demo.txt ;

  VARIABLE:
      NAMES ARE coupid couphiv crela non_mono uaibin partner cesd age sais ;
      MISSING ARE ALL (-999) ;
      USEVARIABLES ARE crela non_mono uaibin cesd age sais hivdisc hivpos ;
      CLUSTER IS coupid ; ! Identifies the cluster ID variable ;
      CATEGORICAL ARE uaibin ; ! Identifies ordinal or binary mediators or outcomes ;

  ! Create dummy variables to indicate couple HIV status ;

  DEFINE:
      IF (couphiv EQ 1) THEN hivdisc = 0 ;
      IF (couphiv EQ 2) THEN hivdisc = 1 ;
      IF (couphiv EQ 3) THEN hivdisc = 0 ;
      IF (couphiv EQ 1) THEN hivpos = 0 ;
      IF (couphiv EQ 2) THEN hivpos = 0 ;
      IF (couphiv EQ 3) THEN hivpos = 1 ;

  ! Analysis type is COMPLEX ;
  ! MonteCarlo integration is required to estimate this model ;

  ANALYSIS:
      TYPE = COMPLEX ;
      ESTIMATOR = MLR ;
      ALGORITHM = integration ;
      INTEGRATION = montecarlo ;

  MODEL:
      uaibin ON hivdisc hivpos crela non_mono cesd age sais ;

  ! Only SAIS and Age have missing data ;

      sais ;
      age ;

  OUTPUT:
      cinterval ;



INPUT READING TERMINATED NORMALLY



Clustered logistic regression ;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                        1132

Number of dependent variables                                    1
Number of independent variables                                  7
```

```
Number of continuous latent variables                          0

Observed dependent variables

  Binary and ordered categorical (ordinal)
   UAIBIN

Observed independent variables
   CRELA       NON_MONO    CESD        AGE         SAIS        HIVDISC
   HIVPOS

Variables with special functions

  Cluster variable      COUPID

Estimator                                                       MLR
Information matrix                                         OBSERVED
Optimization Specifications for the Quasi-Newton Algorithm for
Continuous Outcomes
  Maximum number of iterations                                  100
  Convergence criterion                                  0.100D-05
Optimization Specifications for the EM Algorithm
  Maximum number of iterations                                  500
  Convergence criteria
    Loglikelihood change                                 0.100D-02
    Relative loglikelihood change                        0.100D-05
    Derivative                                           0.100D-02
Optimization Specifications for the M step of the EM Algorithm for
Categorical Latent variables
  Number of M step iterations                                     1
  M step convergence criterion                           0.100D-02
  Basis for M step termination                           ITERATION
Optimization Specifications for the M step of the EM Algorithm for
Censored, Binary or Ordered Categorical (Ordinal), Unordered
Categorical (Nominal) and Count Outcomes
  Number of M step iterations                                     1
  M step convergence criterion                           0.100D-02
  Basis for M step termination                           ITERATION
  Maximum value for logit thresholds                             15
  Minimum value for logit thresholds                            -15
  Minimum expected cell size for chi-square              0.100D-01
Maximum number of iterations for H1                           2000
Convergence criterion for H1                             0.100D-03
Optimization algorithm                                         EMA
Integration Specifications
  Type                                                  MONTECARLO
  Number of integration points                                   50
  Dimensions of numerical integration                             2
  Adaptive quadrature                                            ON
  Monte Carlo integration seed                                    0
Link                                                          LOGIT
Cholesky                                                        OFF

Input data file(s)
  long_demo.txt
Input data format  FREE


SUMMARY OF DATA

     Number of missing data patterns             4
     Number of clusters         566
```

COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value 0.100

PROPORTION OF DATA PRESENT FOR Y

Covariance Coverage

	AGE	SAIS	CRELA	NON_MONO	CESD
AGE	0.951				
SAIS	0.844	0.884			
CRELA	0.951	0.884	1.000		
NON_MONO	0.951	0.884	1.000	1.000	
CESD	0.951	0.884	1.000	1.000	1.000
HIVDISC	0.951	0.884	1.000	1.000	1.000
HIVPOS	0.951	0.884	1.000	1.000	1.000

Covariance Coverage

	HIVDISC	HIVPOS
HIVDISC	1.000	
HIVPOS	1.000	1.000

UNIVARIATE PROPORTIONS AND COUNTS FOR CATEGORICAL VARIABLES

UAIBIN

Category 1	0.868	983.000
Category 2	0.132	149.000

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 13

Loglikelihood

H0 Value	-8166.921
H0 Scaling Correction Factor for MLR	1.207

Information Criteria

Akaike (AIC)	16359.841
Bayesian (BIC)	16425.254
Sample-Size Adjusted BIC (n* = (n + 2) / 24)	16383.962

MODEL RESULTS

Two-Tailed

	Estimate	S.E.	Est./S.E.	P-Value
UAIBIN ON				
HIVDISC	0.832	0.240	3.471	0.001
HIVPOS	0.356	0.258	1.379	0.168
CRELA	0.016	0.015	1.081	0.280
NON_MONO	1.897	0.299	6.337	0.000
CESD	0.006	0.009	0.647	0.517
AGE	-0.020	0.011	-1.831	0.067
SAIS	-0.027	0.011	-2.420	0.016
SAIS WITH				
AGE	-0.644	3.340	-0.193	0.847
Means				
AGE	41.282	0.452	91.424	0.000
SAIS	40.830	0.309	132.297	0.000
Thresholds				
UAIBIN$1	1.992	0.778	2.560	0.010
Variances				
AGE	132.383	7.302	18.130	0.000
SAIS	82.053	4.402	18.639	0.000

LOGISTIC REGRESSION ODDS RATIO RESULTS

UAIBIN ON	
HIVDISC	2.297
HIVPOS	1.428
CRELA	1.016
NON_MONO	6.666
CESD	1.006
AGE	0.981
SAIS	0.973

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix 0.213E-06
(ratio of smallest to largest eigenvalue)

CONFIDENCE INTERVALS OF MODEL RESULTS

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
UAIBIN ON							
HIVDISC	0.214	0.362	0.438	0.832	1.226	1.301	1.449
HIVPOS	-0.309	-0.150	-0.069	0.356	0.781	0.862	1.021
CRELA	-0.022	-0.013	-0.008	0.016	0.041	0.045	0.054
NON_MONO	1.126	1.310	1.405	1.897	2.389	2.484	2.668
CESD	-0.018	-0.012	-0.009	0.006	0.021	0.024	0.030
AGE	-0.047	-0.040	-0.037	-0.020	-0.002	0.001	0.008
SAIS	-0.056	-0.049	-0.046	-0.027	-0.009	-0.005	

```
   0.002

 SAIS     WITH
    AGE            -9.247      -7.190      -6.138      -0.644       4.849       5.901
   7.958

 Means
    AGE            40.119      40.397      40.539      41.282      42.025      42.167
  42.445
    SAIS           40.035      40.225      40.322      40.830      41.338      41.435
  41.625

 Thresholds
    UAIBIN$1       -0.012       0.467       0.712       1.992       3.271       3.516
   3.996

 Variances
    AGE           113.574     118.071     120.371     132.383     144.395     146.695
151.191
    SAIS           70.713      73.424      74.811      82.053      89.294      90.681
  93.392


CONFIDENCE INTERVALS FOR THE LOGISTIC REGRESSION ODDS RATIO RESULTS

 UAIBIN   ON
    HIVDISC         1.239       1.436       1.549       2.297       3.407       3.674
   4.259
    HIVPOS          0.734       0.861       0.934       1.428       2.183       2.368
   2.777
    CRELA           0.978       0.987       0.992       1.016       1.041       1.046
   1.056
    NON_MONO        3.083       3.707       4.074       6.666      10.908      11.987
  14.413
    CESD            0.982       0.988       0.991       1.006       1.022       1.025
   1.030
    AGE             0.954       0.960       0.964       0.981       0.998       1.001
   1.008
    SAIS            0.945       0.952       0.955       0.973       0.991       0.995
   1.002


     Beginning Time:  09:40:15
        Ending Time:  09:40:16
       Elapsed Time:  00:00:01


MUTHEN & MUTHEN
3463 Stoner Ave.
Los Angeles, CA  90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

Copyright (c) 1998-2010 Muthen & Muthen
```

Example 3: Multilevel Analysis of Longitudinal CD4 Data

1. Native_CD4_Model_B_Test2_MLR.out: Mplus 6 Output for Direct ML Multiple Groups Analysis with Robust Standard Errors

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/08/2010   8:02 AM

INPUT INSTRUCTIONS

  TITLE:     Square Root CD4 and ML estimation ;
  DATA:
     FILE IS H:\My Documents\Transfer\Elvin\2010_10\Stata Data\tor_0815_reduced2.txt;
  VARIABLE:  NAMES ARE cd4v csex cage sqrtcd4 ctime ls0 ls1 ls2 bcd4sp1 bcd4sp2
                       bcd4sp3 bcd4sp4 idno caztbl cefvbl cbvlm2 cbvlm3 cbvlm4
                       cbvlm5 sregion bcd4spx1 bcd4spx2 bcd4spx3 ;
             USEVARIABLES ARE sqrtcd4 ls0 ls1 ls2
                             csex cage bcd4spx1 bcd4spx2 bcd4spx3
                             cbvlm2 cbvlm3 cbvlm4 cbvlm5 caztbl cefvbl ;
             MISSING ARE ALL (-999) ;
             WITHIN =  ls0 ls1 ls2 ;
             BETWEEN =  csex cage bcd4spx1 bcd4spx2 bcd4spx3
                        cbvlm2 cbvlm3 cbvlm4 cbvlm5 caztbl cefvbl ;
             CLUSTER = idno ;
             GROUPING IS sregion (1 = NA 2 = WA 3 = EA 4 = SA 5 = ASIA) ;
             USEOBSERVATIONS ARE (IDNO < 50000) ;

  ANALYSIS:
      TYPE = TWOLEVEL RANDOM ;
      ESTIMATOR = ML ;
      PROCESSORS = 4 ;

  MODEL:
             %WITHIN%
              s0 | sqrtcd4 ON ls0 ;
              s1 | sqrtcd4 ON ls1 ;
              s2 | sqrtcd4 ON ls2 ;

              sqrtcd4 ;

             %BETWEEN%

             sqrtcd4 ON bcd4spx1 bcd4spx2 bcd4spx3
                     csex (050)
                     cage (060)
                     cbvlm2 (070)
                     cbvlm3 (080)
                     cbvlm4 (090)
                     cbvlm5 (0100)
                     caztbl (0110)
                     cefvbl (0120) ;

             sqrtcd4 WITH s0 ;
             sqrtcd4 WITH s1 ;
             sqrtcd4 WITH s2 ;
             s0 WITH s1 ;
             s1 WITH s2 ;
             s0 WITH s2 ;

            [sqrtcd4] ;
            [s0] ;
            [s1] ;
            [s2] ;

             [caztbl] (mcaztbl) ;
             [cefvbl] (mcefvbl) ;
             caztbl (vcaztbl) ;
```

```
             cefvbl (vcefvbl) ;

            [cbvlm2] (mbvl2) ;
            [cbvlm3] (mbvl3) ;
            [cbvlm4] (mbv14) ;
            [cbvlm5] (mbvl5) ;

            cbvlm2 (vbvl2) ;
            cbvlm3 (vbvl3) ;
            cbvlm4 (vbv14) ;
            cbvlm5 (vbvl5) ;

  MODEL NA:

             %WITHIN%

              sqrtcd4 (r1) ;

             %BETWEEN%

             sqrtcd4 ON bcd4spx1 (b110)
                        bcd4spx2 (b120)
                        bcd4spx3 (b130) ;

             sqrtcd4 WITH s0 (c101) ;
             sqrtcd4 WITH s1 (c102) ;
             sqrtcd4 WITH s2 (c103) ;
             s0 WITH s1 (c112) ;
             s0 WITH s2 (c113) ;
             s1 WITH s2 (c123) ;

             [sqrtcd4] (a10) ;
             [s0] (a11) ;
             [s1] (a12) ;
             [s2] (a13) ;

             sqrtcd4 (v10) ;
             s0 (v12) ;
             s1 (v13) ;
             s2 (v14) ;

  MODEL WA:

             %WITHIN%

             sqrtcd4 (r2) ;

             %BETWEEN%

             sqrtcd4 ON bcd4spx1 (b210)
                        bcd4spx2 (b220)
                        bcd4spx3 (b230) ;

             sqrtcd4 WITH s0 (c201) ;
             sqrtcd4 WITH s1 (c202) ;
             sqrtcd4 WITH s2 (c203) ;
             s0 WITH s1 (c212) ;
             s0 WITH s2 (c213) ;
             s1 WITH s2 (c223) ;

             [sqrtcd4] (a20) ;
             [s0] (a21) ;
             [s1] (a22) ;
```

```
            [s2] (a23) ;

            sqrtcd4 (v20) ;
            s0 (v22) ;
            s1 (v23) ;
            s2 (v24) ;

  MODEL EA:

            %WITHIN%

            sqrtcd4 (r3) ;

            %BETWEEN%

            sqrtcd4 ON bcd4spx1 (b310)
                       bcd4spx2 (b320)
                       bcd4spx3 (b330) ;

            sqrtcd4 WITH s0 (c301) ;
            sqrtcd4 WITH s1 (c302) ;
            sqrtcd4 WITH s2 (c303) ;
            s0 WITH s1 (c312) ;
            s0 WITH s2 (c313) ;
            s1 WITH s2 (c323) ;

            [sqrtcd4] (a30) ;
            [s0] (a31) ;
            [s1] (a32) ;
            [s2] (a33) ;

            sqrtcd4 (v30) ;
            s0 (v32) ;
            s1 (v33) ;
            s2 (v34) ;

  MODEL SA:

            %WITHIN%

            sqrtcd4 (r4) ;

            %BETWEEN%

            sqrtcd4 ON bcd4spx1 (b410)
                       bcd4spx2 (b420)
                       bcd4spx3 (b430) ;

            sqrtcd4 WITH s0 (c401) ;
            sqrtcd4 WITH s1 (c402) ;
            sqrtcd4 WITH s2 (c403) ;
            s0 WITH s1 (c412) ;
            s0 WITH s2 (c413) ;
            s1 WITH s2 (c423) ;

            [sqrtcd4] (a40) ;
            [s0] (a41) ;
            [s1] (a42) ;
            [s2] (a43) ;

            sqrtcd4 (v40) ;
            s0 (v42) ;
            s1 (v43) ;
```

```
            s2 (v44) ;

  MODEL ASIA:

            %WITHIN%

            sqrtcd4 (r5) ;

            %BETWEEN%

            sqrtcd4 ON bcd4spx1 (b510)
                       bcd4spx2 (b520)
                       bcd4spx3 (b530) ;

            sqrtcd4 WITH s0 (c501) ;
            sqrtcd4 WITH s1 (c502) ;
            sqrtcd4 WITH s2 (c503) ;
            s0 WITH s1 (c512) ;
            s0 WITH s2 (c513) ;
            s1 WITH s2 (c523) ;

            [sqrtcd4] (a50) ;
            [s0] (a51) ;
            [s1] (a52) ;
            [s2] (a53) ;

            sqrtcd4 (v50) ;
            s0 (v52) ;
            s1 (v53) ;
            s2 (v54) ;

  MODEL CONSTRAINT:
      NEW m111 m121 m141 m151 m161 m181
          m211 m221 m241 m251 m261 m281
          m311 m321 m341 m351 m361 m381
          m411 m421 m441 m451 m461 m481
          m511 m521 m541 m551 m561 m581

          m112 m122 m142 m152 m162 m182
          m212 m222 m242 m252 m262 m282
          m312 m322 m342 m352 m362 m382
          m412 m422 m442 m452 m462 m482
          m512 m522 m542 m552 m562 m582

          m113 m123 m143 m153 m163 m183
          m213 m223 m243 m253 m263 m283
          m313 m323 m343 m353 m363 m383
          m413 m423 m443 m453 m463 m483
          m513 m523 m543 m553 m563 m583 ;

      NEW m111x m121x m141x m151x m161x m181x
          m211x m221x m241x m251x m261x m281x
          m311x m321x m341x m351x m361x m381x
          m411x m421x m441x m451x m461x m481x
          m511x m521x m541x m551x m561x m581x

          m112x m122x m142x m152x m162x m182x
          m212x m222x m242x m252x m262x m282x
          m312x m322x m342x m352x m362x m382x
          m412x m422x m442x m452x m462x m482x
          m512x m522x m542x m552x m562x m582x

          m113x m123x m143x m153x m163x m183x
```

```
          m213x m223x m243x m253x m263x m283x
          m313x m323x m343x m353x m363x m383x
          m413x m423x m443x m453x m463x m483x
          m513x m523x m543x m553x m563x m583x ;

     NEW  NS_1_25 NS_1_50 NS_1_100 NS_1_150 NS_1_200 NS_1_300
          NS_2_25 NS_2_50 NS_2_100 NS_2_150 NS_2_200 NS_2_300
          NS_3_25 NS_3_50 NS_3_100 NS_3_150 NS_3_200 NS_3_300

          NE_1_25 NE_1_50 NE_1_100 NE_1_150 NE_1_200 NE_1_300
          NE_2_25 NE_2_50 NE_2_100 NE_2_150 NE_2_200 NE_2_300
          NE_3_25 NE_3_50 NE_3_100 NE_3_150 NE_3_200 NE_3_300

          NW_1_25 NW_1_50 NW_1_100 NW_1_150 NW_1_200 NW_1_300
          NW_2_25 NW_2_50 NW_2_100 NW_2_150 NW_2_200 NW_2_300
          NW_3_25 NW_3_50 NW_3_100 NW_3_150 NW_3_200 NW_3_300

          NA_1_25 NA_1_50 NA_1_100 NA_1_150 NA_1_200 NA_1_300
          NA_2_25 NA_2_50 NA_2_100 NA_2_150 NA_2_200 NA_2_300
          NA_3_25 NA_3_50 NA_3_100 NA_3_150 NA_3_200 NA_3_300

          SE_1_25 SE_1_50 SE_1_100 SE_1_150 SE_1_200 SE_1_300
          SE_2_25 SE_2_50 SE_2_100 SE_2_150 SE_2_200 SE_2_300
          SE_3_25 SE_3_50 SE_3_100 SE_3_150 SE_3_200 SE_3_300 ;

    NEW   SW_1_25 SW_1_50 SW_1_100 SW_1_150 SW_1_200 SW_1_300
          SW_2_25 SW_2_50 SW_2_100 SW_2_150 SW_2_200 SW_2_300
          SW_3_25 SW_3_50 SW_3_100 SW_3_150 SW_3_200 SW_3_300

          SA_1_25 SA_1_50 SA_1_100 SA_1_150 SA_1_200 SA_1_300
          SA_2_25 SA_2_50 SA_2_100 SA_2_150 SA_2_200 SA_2_300
          SA_3_25 SA_3_50 SA_3_100 SA_3_150 SA_3_200 SA_3_300

          EW_1_25 EW_1_50 EW_1_100 EW_1_150 EW_1_200 EW_1_300
          EW_2_25 EW_2_50 EW_2_100 EW_2_150 EW_2_200 EW_2_300
          EW_3_25 EW_3_50 EW_3_100 EW_3_150 EW_3_200 EW_3_300

          EA_1_25 EA_1_50 EA_1_100 EA_1_150 EA_1_200 EA_1_300
          EA_2_25 EA_2_50 EA_2_100 EA_2_150 EA_2_200 EA_2_300
          EA_3_25 EA_3_50 EA_3_100 EA_3_150 EA_3_200 EA_3_300

          WA_1_25 WA_1_50 WA_1_100 WA_1_150 WA_1_200 WA_1_300
          WA_2_25 WA_2_50 WA_2_100 WA_2_150 WA_2_200 WA_2_300
          WA_3_25 WA_3_50 WA_3_100 WA_3_150 WA_3_200 WA_3_300 ;

  NEW     u1 u2 u3 u4 u5 ;

      ! Time one knot values (4 months);
      ! Due to centering at 4 months, time is represented by the constant term ;

  m111=a10 + b110*25 + b120*.0765595 + b130*0 ;
  m121=a10 + b110*50 + b120*1.043728 + b130*0 ;
  m141=a10 + b110*100 + b120*10.55919 + b130*.2051171 ;
  m151=a10 + b110*150 + b120*38.38751 + b130*5.538162 ;
  m161=a10 + b110*200 + b120*92.08804 + b130*23.91666 ;
  m181=a10 + b110*300 + b120*246.1956 + b130*86.20248 ;

  m211=a20 + b210*25 + b220*.0765595 + b230*0 ;
  m221=a20 + b210*50 + b220*1.043728 + b230*0 ;
  m241=a20 + b210*100 + b220*10.55919 + b230*.2051171 ;
  m251=a20 + b210*150 + b220*38.38751 + b230*5.538162 ;
  m261=a20 + b210*200 + b220*92.08804 + b230*23.91666 ;
  m281=a20 + b210*300 + b220*246.1956 + b230*86.20248 ;
```

```
  m311=a30 + b310*25 + b320*.0765595 + b330*0 ;
  m321=a30 + b310*50 + b320*1.043728 + b330*0 ;
  m341=a30 + b310*100 + b320*10.55919 + b330*.2051171 ;
  m351=a30 + b310*150 + b320*38.38751 + b330*5.538162 ;
  m361=a30 + b310*200 + b320*92.08804 + b330*23.91666 ;
  m381=a30 + b310*300 + b320*246.1956 + b330*86.20248 ;

  m411=a40 + b410*25 + b420*.0765595 + b430*0 ;
  m421=a40 + b410*50 + b420*1.043728 + b430*0 ;
  m441=a40 + b410*100 + b420*10.55919 + b430*.2051171 ;
  m451=a40 + b410*150 + b420*38.38751 + b430*5.538162 ;
  m461=a40 + b410*200 + b420*92.08804 + b430*23.91666 ;
  m481=a40 + b410*300 + b420*246.1956 + b430*86.20248 ;

  m511=a50 + b510*25 + b520*.0765595 + b530*0 ;
  m521=a50 + b510*50 + b520*1.043728 + b530*0 ;
  m541=a50 + b510*100 + b520*10.55919 + b530*.2051171 ;
  m551=a50 + b510*150 + b520*38.38751 + b530*5.538162 ;
  m561=a50 + b510*200 + b520*92.08804 + b530*23.91666 ;
  m581=a50 + b510*300 + b520*246.1956 + b530*86.20248 ;

      ! Time two knot values;
      ! These represent the expected values of the spline knots at the end of time 2;
      ! (12 months), so the multiplier for time is constant + 8*time2 slope ;

  m112=a10 + b110*25 + b120*.0765595 + b130*0 + 8*a12 ;
  m122=a10 + b110*50 + b120*1.043728 + b130*0 + 8*a12 ;
  m142=a10 + b110*100 + b120*10.55919 + b130*.2051171 + 8*a12 ;
  m152=a10 + b110*150 + b120*38.38751 + b130*5.538162 + 8*a12 ;
  m162=a10 + b110*200 + b120*92.08804 + b130*23.91666 + 8*a12 ;
  m182=a10 + b110*300 + b120*246.1956 + b130*86.20248 + 8*a12 ;

  m212=a20 + b210*25 + b220*.0765595 + b230*0 + 8*a22 ;
  m222=a20 + b210*50 + b220*1.043728 + b230*0 + 8*a22 ;
  m242=a20 + b210*100 + b220*10.55919 + b230*.2051171 + 8*a22 ;
  m252=a20 + b210*150 + b220*38.38751 + b230*5.538162 + 8*a22 ;
  m262=a20 + b210*200 + b220*92.08804 + b230*23.91666 + 8*a22 ;
  m282=a20 + b210*300 + b220*246.1956 + b230*86.20248 + 8*a22 ;

  m312=a30 + b310*25 + b320*.0765595 + b330*0 + 8*a32 ;
  m322=a30 + b310*50 + b320*1.043728 + b330*0 + 8*a32 ;
  m342=a30 + b310*100 + b320*10.55919 + b330*.2051171 + 8*a32 ;
  m352=a30 + b310*150 + b320*38.38751 + b330*5.538162 + 8*a32 ;
  m362=a30 + b310*200 + b320*92.08804 + b330*23.91666 + 8*a32 ;
  m382=a30 + b310*300 + b320*246.1956 + b330*86.20248 + 8*a32 ;

  m412=a40 + b410*25 + b420*.0765595 + b430*0 + 8*a42 ;
  m422=a40 + b410*50 + b420*1.043728 + b430*0 + 8*a42 ;
  m442=a40 + b410*100 + b420*10.55919 + b430*.2051171 + 8*a42 ;
  m452=a40 + b410*150 + b420*38.38751 + b430*5.538162 + 8*a42 ;
  m462=a40 + b410*200 + b420*92.08804 + b430*23.91666 + 8*a42 ;
  m482=a40 + b410*300 + b420*246.1956 + b430*86.20248 + 8*a42 ;

  m512=a50 + b510*25 + b520*.0765595 + b530*0 + 8*a52 ;
  m522=a50 + b510*50 + b520*1.043728 + b530*0 + 8*a52 ;
  m542=a50 + b510*100 + b520*10.55919 + b530*.2051171 + 8*a52 ;
  m552=a50 + b510*150 + b520*38.38751 + b530*5.538162 + 8*a52 ;
  m562=a50 + b510*200 + b520*92.08804 + b530*23.91666 + 8*a52 ;
  m582=a50 + b510*300 + b520*246.1956 + b530*86.20248 + 8*a52 ;

      ! Time three knot values;
      ! These represent the expected values of the spline knots at the end of time 3;
```

```
     ! (36 months), so the multiplier for time is constant + 8*time2 slope +
     ! 24*time3 ;

  m113=a10 + b110*25 + b120*.0765595 + b130*0 + 8*a12 + 24*a13 ;
  m123=a10 + b110*50 + b120*1.043728 + b130*0 + 8*a12 + 24*a13 ;
  m143=a10 + b110*100 + b120*10.55919 + b130*.2051171 + 8*a12 + 24*a13 ;
  m153=a10 + b110*150 + b120*38.38751 + b130*5.538162 + 8*a12 + 24*a13 ;
  m163=a10 + b110*200 + b120*92.08804 + b130*23.91666 + 8*a12 + 24*a13 ;
  m183=a10 + b110*300 + b120*246.1956 + b130*86.20248 + 8*a12 + 24*a13 ;

  m213=a20 + b210*25 + b220*.0765595 + b230*0 + 8*a22 + 24*a23 ;
  m223=a20 + b210*50 + b220*1.043728 + b230*0 + 8*a22 + 24*a23 ;
  m243=a20 + b210*100 + b220*10.55919 + b230*.2051171 + 8*a22 + 24*a23 ;
  m253=a20 + b210*150 + b220*38.38751 + b230*5.538162 + 8*a22 + 24*a23 ;
  m263=a20 + b210*200 + b220*92.08804 + b230*23.91666 + 8*a22 + 24*a23 ;
  m283=a20 + b210*300 + b220*246.1956 + b230*86.20248 + 8*a22 + 24*a23 ;

  m313=a30 + b310*25 + b320*.0765595 + b330*0 + 8*a32 + 24*a33 ;
  m323=a30 + b310*50 + b320*1.043728 + b330*0 + 8*a32 + 24*a33 ;
  m343=a30 + b310*100 + b320*10.55919 + b330*.2051171 + 8*a32 + 24*a33 ;
  m353=a30 + b310*150 + b320*38.38751 + b330*5.538162 + 8*a32 + 24*a33 ;
  m363=a30 + b310*200 + b320*92.08804 + b330*23.91666 + 8*a32 + 24*a33 ;
  m383=a30 + b310*300 + b320*246.1956 + b330*86.20248 + 8*a32 + 24*a33 ;

  m413=a40 + b410*25 + b420*.0765595 + b430*0 + 8*a42 + 24*a43 ;
  m423=a40 + b410*50 + b420*1.043728 + b430*0 + 8*a42 + 24*a43 ;
  m443=a40 + b410*100 + b420*10.55919 + b430*.2051171 + 8*a42 + 24*a43 ;
  m453=a40 + b410*150 + b420*38.38751 + b430*5.538162 + 8*a42 + 24*a43 ;
  m463=a40 + b410*200 + b420*92.08804 + b430*23.91666 + 8*a42 + 24*a43 ;
  m483=a40 + b410*300 + b420*246.1956 + b430*86.20248 + 8*a42 + 24*a43 ;

  m513=a50 + b510*25 + b520*.0765595 + b530*0 + 8*a52 + 24*a53 ;
  m523=a50 + b510*50 + b520*1.043728 + b530*0 + 8*a52 + 24*a53 ;
  m543=a50 + b510*100 + b520*10.55919 + b530*.2051171 + 8*a52 + 24*a53 ;
  m553=a50 + b510*150 + b520*38.38751 + b530*5.538162 + 8*a52 + 24*a53 ;
  m563=a50 + b510*200 + b520*92.08804 + b530*23.91666 + 8*a52 + 24*a53 ;
  m583=a50 + b510*300 + b520*246.1956 + b530*86.20248 + 8*a52 + 24*a53 ;

     ! Variance components (total variance) for random effects ;
     ! See Eric Vittinghoff e-mail of Nov. 3, 2010 ;

  u1 = (1*v10 + (-2.5)*c101 + 8*c102 + 24*c103)*1 +
       (1*c101 + (-2.5)*v12 + 8*c112 + 24*c113)*(-2.5) +
       (1*c102 + (-2.5)*c112 + 8*v13 + 24*c123)*8 +
       (1*c103 + (-2.5)*c113 + 8*c123 + 24*v14)*24 ;

  u2 = (1*v20 + (-2.5)*c201 + 8*c202 + 24*c203)*1 +
       (1*c201 + (-2.5)*v22 + 8*c212 + 24*c213)*(-2.5) +
       (1*c202 + (-2.5)*c212 + 8*v23 + 24*c223)*8 +
       (1*c203 + (-2.5)*c213 + 8*c223 + 24*v24)*24 ;

  u3 = (1*v30 + (-2.5)*c301 + 8*c302 + 24*c303)*1 +
       (1*c301 + (-2.5)*v32 + 8*c312 + 24*c313)*(-2.5) +
       (1*c302 + (-2.5)*c312 + 8*v33 + 24*c323)*8 +
       (1*c303 + (-2.5)*c313 + 8*c323 + 24*v34)*24 ;

  u4 = (1*v40 + (-2.5)*c401 + 8*c402 + 24*c403)*1 +
       (1*c401 + (-2.5)*v42 + 8*c412 + 24*c413)*(-2.5) +
       (1*c402 + (-2.5)*c412 + 8*v43 + 24*c423)*8 +
       (1*c403 + (-2.5)*c413 + 8*c423 + 24*v44)*24 ;

  u5 = (1*v50 + (-2.5)*c501 + 8*c502 + 24*c503)*1 +
       (1*c501 + (-2.5)*v52 + 8*c512 + 24*c513)*(-2.5) +
```

```
      (1*c502 + (-2.5)*c512 + 8*v53 + 24*c523)*8 +
      (1*c503 + (-2.5)*c513 + 8*c523 + 24*v54)*24 ;

  ! Backtransformation to native scale of measurement ;

  m111x = m111**2 + u1 + r1 ;
  m121x = m121**2 + u1 + r1 ;
  m141x = m141**2 + u1 + r1 ;
  m151x = m151**2 + u1 + r1 ;
  m161x = m161**2 + u1 + r1 ;
  m181x = m181**2 + u1 + r1 ;

  m211x = m211**2 + u2 + r2 ;
  m221x = m221**2 + u2 + r2 ;
  m241x = m241**2 + u2 + r2 ;
  m251x = m251**2 + u2 + r2 ;
  m261x = m261**2 + u2 + r2 ;
  m281x = m281**2 + u2 + r2 ;

  m311x = m311**2 + u3 + r3 ;
  m321x = m321**2 + u3 + r3 ;
  m341x = m341**2 + u3 + r3 ;
  m351x = m351**2 + u3 + r3 ;
  m361x = m361**2 + u3 + r3 ;
  m381x = m381**2 + u3 + r3 ;

  m411x = m411**2 + u4 + r4 ;
  m421x = m421**2 + u4 + r4 ;
  m441x = m441**2 + u4 + r4 ;
  m451x = m451**2 + u4 + r4 ;
  m461x = m461**2 + u4 + r4 ;
  m481x = m481**2 + u4 + r4 ;

  m511x = m511**2 + u5 + r5 ;
  m521x = m521**2 + u5 + r5 ;
  m541x = m541**2 + u5 + r5 ;
  m551x = m551**2 + u5 + r5 ;
  m561x = m561**2 + u5 + r5 ;
  m581x = m581**2 + u5 + r5 ;


  m112x = m112**2 + u1 + r1 ;
  m122x = m122**2 + u1 + r1 ;
  m142x = m142**2 + u1 + r1 ;
  m152x = m152**2 + u1 + r1 ;
  m162x = m162**2 + u1 + r1 ;
  m182x = m182**2 + u1 + r1 ;

  m212x = m212**2 + u2 + r2 ;
  m222x = m222**2 + u2 + r2 ;
  m242x = m242**2 + u2 + r2 ;
  m252x = m252**2 + u2 + r2 ;
  m262x = m262**2 + u2 + r2 ;
  m282x = m282**2 + u2 + r2 ;

  m312x = m312**2 + u3 + r3 ;
  m322x = m322**2 + u3 + r3 ;
  m342x = m342**2 + u3 + r3 ;
  m352x = m352**2 + u3 + r3 ;
  m362x = m362**2 + u3 + r3 ;
  m382x = m382**2 + u3 + r3 ;

  m412x = m412**2 + u4 + r4 ;
```

```
  m422x = m422**2 + u4 + r4 ;
  m442x = m442**2 + u4 + r4 ;
  m452x = m452**2 + u4 + r4 ;
  m462x = m462**2 + u4 + r4 ;
  m482x = m482**2 + u4 + r4 ;

  m512x = m512**2 + u5 + r5 ;
  m522x = m522**2 + u5 + r5 ;
  m542x = m542**2 + u5 + r5 ;
  m552x = m552**2 + u5 + r5 ;
  m562x = m562**2 + u5 + r5 ;
  m582x = m582**2 + u5 + r5 ;


  m113x = m113**2 + u1 + r1 ;
  m123x = m123**2 + u1 + r1 ;
  m143x = m143**2 + u1 + r1 ;
  m153x = m153**2 + u1 + r1 ;
  m163x = m163**2 + u1 + r1 ;
  m183x = m183**2 + u1 + r1 ;

  m213x = m213**2 + u2 + r2 ;
  m223x = m223**2 + u2 + r2 ;
  m243x = m243**2 + u2 + r2 ;
  m253x = m253**2 + u2 + r2 ;
  m263x = m263**2 + u2 + r2 ;
  m283x = m283**2 + u2 + r2 ;

  m313x = m313**2 + u3 + r3 ;
  m323x = m323**2 + u3 + r3 ;
  m343x = m343**2 + u3 + r3 ;
  m353x = m353**2 + u3 + r3 ;
  m363x = m363**2 + u3 + r3 ;
  m383x = m383**2 + u3 + r3 ;

  m413x = m413**2 + u4 + r4 ;
  m423x = m423**2 + u4 + r4 ;
  m443x = m443**2 + u4 + r4 ;
  m453x = m453**2 + u4 + r4 ;
  m463x = m463**2 + u4 + r4 ;
  m483x = m483**2 + u4 + r4 ;

  m513x = m513**2 + u5 + r5 ;
  m523x = m523**2 + u5 + r5 ;
  m543x = m543**2 + u5 + r5 ;
  m553x = m553**2 + u5 + r5 ;
  m563x = m563**2 + u5 + r5 ;
  m583x = m583**2 + u5 + r5 ;


  ! Differences: NA - SA ;

  NS_1_25 = m111x - m411x ; ! Time 1, BLCD4 = 25 ;
  NS_1_50 = m121x - m421x ; ! Time 1, BLCD4 = 50 ;
  NS_1_100 = m141x - m441x ; ! Time 1, BLCD4 = 100 ;
  NS_1_150 = m151x - m451x ; ! Time 1, BLCD4 = 150 ;
  NS_1_200 = m161x - m461x ; ! Time 1, BLCD4 = 200 ;
  NS_1_300 = m181x - m481x ; ! Time 1, BLCD4 = 300 ;

  NS_2_25 = m112x - m412x ; ! Time 2, BLCD4 = 25 ;
  NS_2_50 = m122x - m422x ; ! Time 2, BLCD4 = 50 ;
  NS_2_100 = m142x - m442x ; ! Time 2, BLCD4 = 100 ;
  NS_2_150 = m152x - m452x ; ! Time 2, BLCD4 = 150 ;
```

```
  NS_2_200 = m162x - m462x ; ! Time 2, BLCD4 = 200 ;
  NS_2_300 = m182x - m482x ; ! Time 2, BLCD4 = 300 ;

  NS_3_25 = m113x - m413x ; ! Time 3, BLCD4 = 25 ;
  NS_3_50 = m123x - m423x ; ! Time 3, BLCD4 = 50 ;
  NS_3_100 = m143x - m443x ; ! Time 3, BLCD4 = 100 ;
  NS_3_150 = m153x - m453x ; ! Time 3, BLCD4 = 150 ;
  NS_3_200 = m163x - m463x ; ! Time 3, BLCD4 = 200 ;
  NS_3_300 = m183x - m483x ; ! Time 3, BLCD4 = 300 ;

  ! Differences: NA - EA ;

  NE_1_25 = m111x - m311x ; ! Time 1, BLCD4 = 25 ;
  NE_1_50 = m121x - m321x ; ! Time 1, BLCD4 = 50 ;
  NE_1_100 = m141x - m341x ; ! Time 1, BLCD4 = 100 ;
  NE_1_150 = m151x - m351x ; ! Time 1, BLCD4 = 150 ;
  NE_1_200 = m161x - m361x ; ! Time 1, BLCD4 = 200 ;
  NE_1_300 = m181x - m381x ; ! Time 1, BLCD4 = 300 ;

  NE_2_25 = m112x - m312x ; ! Time 2, BLCD4 = 25 ;
  NE_2_50 = m122x - m322x ; ! Time 2, BLCD4 = 50 ;
  NE_2_100 = m142x - m342x ; ! Time 2, BLCD4 = 100 ;
  NE_2_150 = m152x - m352x ; ! Time 2, BLCD4 = 150 ;
  NE_2_200 = m162x - m362x ; ! Time 2, BLCD4 = 200 ;
  NE_2_300 = m182x - m382x ; ! Time 2, BLCD4 = 300 ;

  NE_3_25 = m113x - m313x ; ! Time 3, BLCD4 = 25 ;
  NE_3_50 = m123x - m323x ; ! Time 3, BLCD4 = 50 ;
  NE_3_100 = m143x - m343x ; ! Time 3, BLCD4 = 100 ;
  NE_3_150 = m153x - m353x ; ! Time 3, BLCD4 = 150 ;
  NE_3_200 = m163x - m363x ; ! Time 3, BLCD4 = 200 ;
  NE_3_300 = m183x - m383x ; ! Time 3, BLCD4 = 300 ;

  ! Differences: NA - WA ;

  NW_1_25 = m111x - m211x ; ! Time 1, BLCD4 = 25 ;
  NW_1_50 = m121x - m221x ; ! Time 1, BLCD4 = 50 ;
  NW_1_100 = m141x - m241x ; ! Time 1, BLCD4 = 100 ;
  NW_1_150 = m151x - m251x ; ! Time 1, BLCD4 = 150 ;
  NW_1_200 = m161x - m261x ; ! Time 1, BLCD4 = 200 ;
  NW_1_300 = m181x - m281x ; ! Time 1, BLCD4 = 300 ;

  NW_2_25 = m112x - m212x ; ! Time 2, BLCD4 = 25 ;
  NW_2_50 = m122x - m222x ; ! Time 2, BLCD4 = 50 ;
  NW_2_100 = m142x - m242x ; ! Time 2, BLCD4 = 100 ;
  NW_2_150 = m152x - m252x ; ! Time 2, BLCD4 = 150 ;
  NW_2_200 = m162x - m262x ; ! Time 2, BLCD4 = 200 ;
  NW_2_300 = m182x - m282x ; ! Time 2, BLCD4 = 300 ;

  NW_3_25 = m113x - m213x ; ! Time 3, BLCD4 = 25 ;
  NW_3_50 = m123x - m223x ; ! Time 3, BLCD4 = 50 ;
  NW_3_100 = m143x - m243x ; ! Time 3, BLCD4 = 100 ;
  NW_3_150 = m153x - m253x ; ! Time 3, BLCD4 = 150 ;
  NW_3_200 = m163x - m263x ; ! Time 3, BLCD4 = 200 ;
  NW_3_300 = m183x - m283x ; ! Time 3, BLCD4 = 300 ;

  ! Differences: NA - ASIA ;

  NA_1_25 = m111x - m511x ; ! Time 1, BLCD4 = 25 ;
  NA_1_50 = m121x - m521x ; ! Time 1, BLCD4 = 50 ;
  NA_1_100 = m141x - m541x ; ! Time 1, BLCD4 = 100 ;
  NA_1_150 = m151x - m551x ; ! Time 1, BLCD4 = 150 ;
  NA_1_200 = m161x - m561x ; ! Time 1, BLCD4 = 200 ;
```

```
  NA_1_300 = m181x - m581x ; ! Time 1, BLCD4 = 300 ;

  NA_2_25 = m112x - m512x ; ! Time 2, BLCD4 = 25 ;
  NA_2_50 = m122x - m522x ; ! Time 2, BLCD4 = 50 ;
  NA_2_100 = m142x - m542x ; ! Time 2, BLCD4 = 100 ;
  NA_2_150 = m152x - m552x ; ! Time 2, BLCD4 = 150 ;
  NA_2_200 = m162x - m562x ; ! Time 2, BLCD4 = 200 ;
  NA_2_300 = m182x - m582x ; ! Time 2, BLCD4 = 300 ;

  NA_3_25 = m113x - m513x ; ! Time 3, BLCD4 = 25 ;
  NA_3_50 = m123x - m523x ; ! Time 3, BLCD4 = 50 ;
  NA_3_100 = m143x - m543x ; ! Time 3, BLCD4 = 100 ;
  NA_3_150 = m153x - m553x ; ! Time 3, BLCD4 = 150 ;
  NA_3_200 = m163x - m563x ; ! Time 3, BLCD4 = 200 ;
  NA_3_300 = m183x - m583x ; ! Time 3, BLCD4 = 300 ;

  ! Differences: SA - EA ;

  SE_1_25 = m411x - m311x ; ! Time 1, BLCD4 = 25 ;
  SE_1_50 = m421x - m321x ; ! Time 1, BLCD4 = 50 ;
  SE_1_100 = m441x - m341x ; ! Time 1, BLCD4 = 100 ;
  SE_1_150 = m451x - m351x ; ! Time 1, BLCD4 = 150 ;
  SE_1_200 = m461x - m361x ; ! Time 1, BLCD4 = 200 ;
  SE_1_300 = m481x - m381x ; ! Time 1, BLCD4 = 300 ;

  SE_2_25 = m412x - m312x ; ! Time 2, BLCD4 = 25 ;
  SE_2_50 = m422x - m322x ; ! Time 2, BLCD4 = 50 ;
  SE_2_100 = m442x - m342x ; ! Time 2, BLCD4 = 100 ;
  SE_2_150 = m452x - m352x ; ! Time 2, BLCD4 = 150 ;
  SE_2_200 = m462x - m362x ; ! Time 2, BLCD4 = 200 ;
  SE_2_300 = m482x - m382x ; ! Time 2, BLCD4 = 300 ;

  SE_3_25 = m413x - m313x ; ! Time 3, BLCD4 = 25 ;
  SE_3_50 = m423x - m323x ; ! Time 3, BLCD4 = 50 ;
  SE_3_100 = m443x - m343x ; ! Time 3, BLCD4 = 100 ;
  SE_3_150 = m453x - m353x ; ! Time 3, BLCD4 = 150 ;
  SE_3_200 = m463x - m363x ; ! Time 3, BLCD4 = 200 ;
  SE_3_300 = m483x - m383x ; ! Time 3, BLCD4 = 300 ;

  ! Differences: SA - WA ;

  SW_1_25 = m411x - m211x ; ! Time 1, BLCD4 = 25 ;
  SW_1_50 = m421x - m221x ; ! Time 1, BLCD4 = 50 ;
  SW_1_100 = m441x - m241x ; ! Time 1, BLCD4 = 100 ;
  SW_1_150 = m451x - m251x ; ! Time 1, BLCD4 = 150 ;
  SW_1_200 = m461x - m261x ; ! Time 1, BLCD4 = 200 ;
  SW_1_300 = m481x - m281x ; ! Time 1, BLCD4 = 300 ;

  SW_2_25 = m412x - m212x ; ! Time 2, BLCD4 = 25 ;
  SW_2_50 = m422x - m222x ; ! Time 2, BLCD4 = 50 ;
  SW_2_100 = m442x - m242x ; ! Time 2, BLCD4 = 100 ;
  SW_2_150 = m452x - m252x ; ! Time 2, BLCD4 = 150 ;
  SW_2_200 = m462x - m262x ; ! Time 2, BLCD4 = 200 ;
  SW_2_300 = m482x - m282x ; ! Time 2, BLCD4 = 300 ;

  SW_3_25 = m413x - m213x ; ! Time 3, BLCD4 = 25 ;
  SW_3_50 = m423x - m223x ; ! Time 3, BLCD4 = 50 ;
  SW_3_100 = m443x - m243x ; ! Time 3, BLCD4 = 100 ;
  SW_3_150 = m453x - m253x ; ! Time 3, BLCD4 = 150 ;
  SW_3_200 = m463x - m263x ; ! Time 3, BLCD4 = 200 ;
  SW_3_300 = m483x - m283x ; ! Time 3, BLCD4 = 300 ;

  ! Differences: SA - ASIA ;
```

```
  SA_1_25 = m411x - m511x ; ! Time 1, BLCD4 = 25 ;
  SA_1_50 = m421x - m521x ; ! Time 1, BLCD4 = 50 ;
  SA_1_100 = m441x - m541x ; ! Time 1, BLCD4 = 100 ;
  SA_1_150 = m451x - m551x ; ! Time 1, BLCD4 = 150 ;
  SA_1_200 = m461x - m561x ; ! Time 1, BLCD4 = 200 ;
  SA_1_300 = m481x - m581x ; ! Time 1, BLCD4 = 300 ;

  SA_2_25 = m412x - m512x ; ! Time 2, BLCD4 = 25 ;
  SA_2_50 = m422x - m522x ; ! Time 2, BLCD4 = 50 ;
  SA_2_100 = m442x - m542x ; ! Time 2, BLCD4 = 100 ;
  SA_2_150 = m452x - m552x ; ! Time 2, BLCD4 = 150 ;
  SA_2_200 = m462x - m562x ; ! Time 2, BLCD4 = 200 ;
  SA_2_300 = m482x - m582x ; ! Time 2, BLCD4 = 300 ;

  SA_3_25 = m413x - m513x ; ! Time 3, BLCD4 = 25 ;
  SA_3_50 = m423x - m523x ; ! Time 3, BLCD4 = 50 ;
  SA_3_100 = m443x - m543x ; ! Time 3, BLCD4 = 100 ;
  SA_3_150 = m453x - m553x ; ! Time 3, BLCD4 = 150 ;
  SA_3_200 = m463x - m563x ; ! Time 3, BLCD4 = 200 ;
  SA_3_300 = m483x - m583x ; ! Time 3, BLCD4 = 300 ;


  ! Differences: EA - WA ;

  EW_1_25 = m311x - m211x ; ! Time 1, BLCD4 = 25 ;
  EW_1_50 = m321x - m221x ; ! Time 1, BLCD4 = 50 ;
  EW_1_100 = m341x - m241x ; ! Time 1, BLCD4 = 100 ;
  EW_1_150 = m351x - m251x ; ! Time 1, BLCD4 = 150 ;
  EW_1_200 = m361x - m261x ; ! Time 1, BLCD4 = 200 ;
  EW_1_300 = m381x - m281x ; ! Time 1, BLCD4 = 300 ;

  EW_2_25 = m312x - m212x ; ! Time 2, BLCD4 = 25 ;
  EW_2_50 = m322x - m222x ; ! Time 2, BLCD4 = 50 ;
  EW_2_100 = m342x - m242x ; ! Time 2, BLCD4 = 100 ;
  EW_2_150 = m352x - m252x ; ! Time 2, BLCD4 = 150 ;
  EW_2_200 = m362x - m262x ; ! Time 2, BLCD4 = 200 ;
  EW_2_300 = m382x - m282x ; ! Time 2, BLCD4 = 300 ;

  EW_3_25 = m313x - m213x ; ! Time 3, BLCD4 = 25 ;
  EW_3_50 = m323x - m223x ; ! Time 3, BLCD4 = 50 ;
  EW_3_100 = m343x - m243x ; ! Time 3, BLCD4 = 100 ;
  EW_3_150 = m353x - m253x ; ! Time 3, BLCD4 = 150 ;
  EW_3_200 = m363x - m263x ; ! Time 3, BLCD4 = 200 ;
  EW_3_300 = m383x - m283x ; ! Time 3, BLCD4 = 300 ;


  ! Differences: EA - ASIA ;

  EA_1_25 = m311x - m511x ; ! Time 1, BLCD4 = 25 ;
  EA_1_50 = m321x - m521x ; ! Time 1, BLCD4 = 50 ;
  EA_1_100 = m341x - m541x ; ! Time 1, BLCD4 = 100 ;
  EA_1_150 = m351x - m551x ; ! Time 1, BLCD4 = 150 ;
  EA_1_200 = m361x - m561x ; ! Time 1, BLCD4 = 200 ;
  EA_1_300 = m381x - m581x ; ! Time 1, BLCD4 = 300 ;

  EA_2_25 = m312x - m512x ; ! Time 2, BLCD4 = 25 ;
  EA_2_50 = m322x - m522x ; ! Time 2, BLCD4 = 50 ;
  EA_2_100 = m342x - m542x ; ! Time 2, BLCD4 = 100 ;
  EA_2_150 = m352x - m552x ; ! Time 2, BLCD4 = 150 ;
  EA_2_200 = m362x - m562x ; ! Time 2, BLCD4 = 200 ;
  EA_2_300 = m382x - m582x ; ! Time 2, BLCD4 = 300 ;
```

```
  EA_3_25 = m313x - m513x ; ! Time 3, BLCD4 = 25 ;
  EA_3_50 = m323x - m523x ; ! Time 3, BLCD4 = 50 ;
  EA_3_100 = m343x - m543x ; ! Time 3, BLCD4 = 100 ;
  EA_3_150 = m353x - m553x ; ! Time 3, BLCD4 = 150 ;
  EA_3_200 = m363x - m563x ; ! Time 3, BLCD4 = 200 ;
  EA_3_300 = m383x - m583x ; ! Time 3, BLCD4 = 300 ;


  ! Differences: WA - ASIA ;

  WA_1_25 = m211x - m511x ; ! Time 1, BLCD4 = 25 ;
  WA_1_50 = m221x - m521x ; ! Time 1, BLCD4 = 50 ;
  WA_1_100 = m241x - m541x ; ! Time 1, BLCD4 = 100 ;
  WA_1_150 = m251x - m551x ; ! Time 1, BLCD4 = 150 ;
  WA_1_200 = m261x - m561x ; ! Time 1, BLCD4 = 200 ;
  WA_1_300 = m281x - m581x ; ! Time 1, BLCD4 = 300 ;

  WA_2_25 = m212x - m512x ; ! Time 2, BLCD4 = 25 ;
  WA_2_50 = m222x - m522x ; ! Time 2, BLCD4 = 50 ;
  WA_2_100 = m242x - m542x ; ! Time 2, BLCD4 = 100 ;
  WA_2_150 = m252x - m552x ; ! Time 2, BLCD4 = 150 ;
  WA_2_200 = m262x - m562x ; ! Time 2, BLCD4 = 200 ;
  WA_2_300 = m282x - m582x ; ! Time 2, BLCD4 = 300 ;

  WA_3_25 = m213x - m513x ; ! Time 3, BLCD4 = 25 ;
  WA_3_50 = m223x - m523x ; ! Time 3, BLCD4 = 50 ;
  WA_3_100 = m243x - m543x ; ! Time 3, BLCD4 = 100 ;
  WA_3_150 = m253x - m553x ; ! Time 3, BLCD4 = 150 ;
  WA_3_200 = m263x - m563x ; ! Time 3, BLCD4 = 200 ;
  WA_3_300 = m283x - m583x ; ! Time 3, BLCD4 = 300 ;

  OUTPUT:
      CINTERVAL TECH1 ;



INPUT READING TERMINATED NORMALLY



Square Root CD4 and ML estimation ;

SUMMARY OF ANALYSIS

Number of groups                                                 5
Number of observations
   Group NA                                                  25013
   Group WA                                                   1359
   Group EA                                                   5194
   Group SA                                                  65377
   Group ASIA                                                 3023

Number of dependent variables                                    1
Number of independent variables                                 14
Number of continuous latent variables                            3

Observed dependent variables

  Continuous
   SQRTCD4
```

Observed independent variables
LS0 LS1 LS2 CSEX CAGE BCD4SPX1
BCD4SPX2 BCD4SPX3 CBVLM2 CBVLM3 CBVLM4 CBVLM5
CAZTBL CEFVBL

Continuous latent variables
S0 S1 S2

Variables with special functions

Grouping variable SREGION
Cluster variable IDNO
Within variables
LS0 LS1 LS2

Between variables
CSEX CAGE BCD4SPX1 BCD4SPX2 BCD4SPX3 CBVLM2
CBVLM3 CBVLM4 CBVLM5 CAZTBL CEFVBL

Estimator	ML
Information matrix	OBSERVED
Maximum number of iterations	100
Convergence criterion	0.100D-05
Maximum number of EM iterations	500
Convergence criteria for the EM algorithm	
Loglikelihood change	0.100D-02
Relative loglikelihood change	0.100D-05
Derivative	0.100D-03
Minimum variance	0.100D-03
Maximum number of steepest descent iterations	20
Maximum number of iterations for H1	2000
Convergence criterion for H1	0.100D-03
Optimization algorithm	EMA

Input data file(s)
H:\My Documents\Transfer\Elvin\2010_10\Stata Data\tor_0815_reduced2.txt
Input data format FREE

SUMMARY OF DATA

Group NA
Number of missing data patterns 2
Number of clusters 4450

Group WA
Number of missing data patterns 2
Number of clusters 649

Group EA
Number of missing data patterns 2
Number of clusters 803

Group SA
Number of missing data patterns 6
Number of clusters 20323

Group ASIA

Number of missing data patterns 2
Number of clusters 593

COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value 0.100

PROPORTION OF DATA PRESENT FOR NA

Covariance Coverage

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.936				
CBVLM3	0.936	0.936			
CBVLM4	0.936	0.936	0.936		
CBVLM5	0.936	0.936	0.936	0.936	
CAZTBL	0.936	0.936	0.936	0.936	1.000
CEFVBL	0.936	0.936	0.936	0.936	1.000
SQRTCD4	0.936	0.936	0.936	0.936	1.000
LS0	0.936	0.936	0.936	0.936	1.000
LS1	0.936	0.936	0.936	0.936	1.000
LS2	0.936	0.936	0.936	0.936	1.000
CSEX	0.936	0.936	0.936	0.936	1.000
CAGE	0.936	0.936	0.936	0.936	1.000
BCD4SPX1	0.936	0.936	0.936	0.936	1.000
BCD4SPX2	0.936	0.936	0.936	0.936	1.000
BCD4SPX3	0.936	0.936	0.936	0.936	1.000

Covariance Coverage

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	1.000				
SQRTCD4	1.000	1.000			
LS0	1.000	1.000	1.000		
LS1	1.000	1.000	1.000	1.000	
LS2	1.000	1.000	1.000	1.000	1.000
CSEX	1.000	1.000	1.000	1.000	1.000
CAGE	1.000	1.000	1.000	1.000	1.000
BCD4SPX1	1.000	1.000	1.000	1.000	1.000
BCD4SPX2	1.000	1.000	1.000	1.000	1.000
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	1.000				
CAGE	1.000	1.000			
BCD4SPX1	1.000	1.000	1.000		
BCD4SPX2	1.000	1.000	1.000	1.000	
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

PROPORTION OF DATA PRESENT FOR WA

Covariance Coverage

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL

CBVLM2	0.383				
CBVLM3	0.383	0.383			
CBVLM4	0.383	0.383	0.383		
CBVLM5	0.383	0.383	0.383	0.383	
CAZTBL	0.383	0.383	0.383	0.383	1.000
CEFVBL	0.383	0.383	0.383	0.383	1.000
SQRTCD4	0.383	0.383	0.383	0.383	1.000
LS0	0.383	0.383	0.383	0.383	1.000
LS1	0.383	0.383	0.383	0.383	1.000
LS2	0.383	0.383	0.383	0.383	1.000
CSEX	0.383	0.383	0.383	0.383	1.000
CAGE	0.383	0.383	0.383	0.383	1.000
BCD4SPX1	0.383	0.383	0.383	0.383	1.000
BCD4SPX2	0.383	0.383	0.383	0.383	1.000
BCD4SPX3	0.383	0.383	0.383	0.383	1.000

Covariance Coverage

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	1.000				
SQRTCD4	1.000	1.000			
LS0	1.000	1.000	1.000		
LS1	1.000	1.000	1.000	1.000	
LS2	1.000	1.000	1.000	1.000	1.000
CSEX	1.000	1.000	1.000	1.000	1.000
CAGE	1.000	1.000	1.000	1.000	1.000
BCD4SPX1	1.000	1.000	1.000	1.000	1.000
BCD4SPX2	1.000	1.000	1.000	1.000	1.000
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	1.000				
CAGE	1.000	1.000			
BCD4SPX1	1.000	1.000	1.000		
BCD4SPX2	1.000	1.000	1.000	1.000	
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

PROPORTION OF DATA PRESENT FOR EA

Covariance Coverage

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.984				
CBVLM3	0.984	0.984			
CBVLM4	0.984	0.984	0.984		
CBVLM5	0.984	0.984	0.984	0.984	
CAZTBL	0.984	0.984	0.984	0.984	1.000
CEFVBL	0.984	0.984	0.984	0.984	1.000
SQRTCD4	0.984	0.984	0.984	0.984	1.000
LS0	0.984	0.984	0.984	0.984	1.000
LS1	0.984	0.984	0.984	0.984	1.000
LS2	0.984	0.984	0.984	0.984	1.000
CSEX	0.984	0.984	0.984	0.984	1.000
CAGE	0.984	0.984	0.984	0.984	1.000
BCD4SPX1	0.984	0.984	0.984	0.984	1.000
BCD4SPX2	0.984	0.984	0.984	0.984	1.000

BCD4SPX3	0.984	0.984	0.984	0.984	1.000

Covariance Coverage

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	1.000				
SQRTCD4	1.000	1.000			
LS0	1.000	1.000	1.000		
LS1	1.000	1.000	1.000	1.000	
LS2	1.000	1.000	1.000	1.000	1.000
CSEX	1.000	1.000	1.000	1.000	1.000
CAGE	1.000	1.000	1.000	1.000	1.000
BCD4SPX1	1.000	1.000	1.000	1.000	1.000
BCD4SPX2	1.000	1.000	1.000	1.000	1.000
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	1.000				
CAGE	1.000	1.000			
BCD4SPX1	1.000	1.000	1.000		
BCD4SPX2	1.000	1.000	1.000	1.000	
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

PROPORTION OF DATA PRESENT FOR SA

Covariance Coverage

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.672				
CBVLM3	0.672	0.672			
CBVLM4	0.672	0.672	0.672		
CBVLM5	0.672	0.672	0.672	0.672	
CAZTBL	0.633	0.633	0.633	0.633	0.956
CEFVBL	0.630	0.630	0.630	0.630	0.953
SQRTCD4	0.672	0.672	0.672	0.672	0.956
LS0	0.672	0.672	0.672	0.672	0.956
LS1	0.672	0.672	0.672	0.672	0.956
LS2	0.672	0.672	0.672	0.672	0.956
CSEX	0.672	0.672	0.672	0.672	0.956
CAGE	0.672	0.672	0.672	0.672	0.956
BCD4SPX1	0.672	0.672	0.672	0.672	0.956
BCD4SPX2	0.672	0.672	0.672	0.672	0.956
BCD4SPX3	0.672	0.672	0.672	0.672	0.956

Covariance Coverage

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.953				
SQRTCD4	0.953	1.000			
LS0	0.953	1.000	1.000		
LS1	0.953	1.000	1.000	1.000	
LS2	0.953	1.000	1.000	1.000	1.000
CSEX	0.953	1.000	1.000	1.000	1.000
CAGE	0.953	1.000	1.000	1.000	1.000
BCD4SPX1	0.953	1.000	1.000	1.000	1.000
BCD4SPX2	0.953	1.000	1.000	1.000	1.000

BCD4SPX3	0.953	1.000	1.000	1.000	1.000

Covariance Coverage

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	1.000				
CAGE	1.000	1.000			
BCD4SPX1	1.000	1.000	1.000		
BCD4SPX2	1.000	1.000	1.000	1.000	
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

PROPORTION OF DATA PRESENT FOR ASIA

Covariance Coverage

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.825				
CBVLM3	0.825	0.825			
CBVLM4	0.825	0.825	0.825		
CBVLM5	0.825	0.825	0.825	0.825	
CAZTBL	0.825	0.825	0.825	0.825	1.000
CEFVBL	0.825	0.825	0.825	0.825	1.000
SQRTCD4	0.825	0.825	0.825	0.825	1.000
LS0	0.825	0.825	0.825	0.825	1.000
LS1	0.825	0.825	0.825	0.825	1.000
LS2	0.825	0.825	0.825	0.825	1.000
CSEX	0.825	0.825	0.825	0.825	1.000
CAGE	0.825	0.825	0.825	0.825	1.000
BCD4SPX1	0.825	0.825	0.825	0.825	1.000
BCD4SPX2	0.825	0.825	0.825	0.825	1.000
BCD4SPX3	0.825	0.825	0.825	0.825	1.000

Covariance Coverage

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	1.000				
SQRTCD4	1.000	1.000			
LS0	1.000	1.000	1.000		
LS1	1.000	1.000	1.000	1.000	
LS2	1.000	1.000	1.000	1.000	1.000
CSEX	1.000	1.000	1.000	1.000	1.000
CAGE	1.000	1.000	1.000	1.000	1.000
BCD4SPX1	1.000	1.000	1.000	1.000	1.000
BCD4SPX2	1.000	1.000	1.000	1.000	1.000
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	1.000				
CAGE	1.000	1.000			
BCD4SPX1	1.000	1.000	1.000		
BCD4SPX2	1.000	1.000	1.000	1.000	
BCD4SPX3	1.000	1.000	1.000	1.000	1.000

THE STANDARD ERRORS OF THE MODEL PARAMETER ESTIMATES MAY NOT BE
TRUSTWORTHY FOR SOME PARAMETERS DUE TO A NON-POSITIVE DEFINITE

FIRST-ORDER DERIVATIVE PRODUCT MATRIX. THIS MAY BE DUE TO THE STARTING VALUES BUT MAY ALSO BE AN INDICATION OF MODEL NONIDENTIFICATION. THE CONDITION NUMBER IS 0.265D-16. PROBLEM INVOLVING PARAMETER 31.

THE MODEL ESTIMATION TERMINATED NORMALLY

MODEL FIT INFORMATION

Number of Free Parameters 110

Loglikelihood

H0 Value -308286.726

Information Criteria

Akaike (AIC)	616793.451
Bayesian (BIC)	617839.836
Sample-Size Adjusted BIC (n* = (n + 2) / 24)	617490.252

MODEL RESULTS

	Estimate	S.E.	Est./S.E.	Two-Tailed P-Value
Group NA				
Within Level				
Residual Variances				
SQRTCD4	3.205	0.038	84.777	0.000
Between Level				
SQRTCD4 ON				
BCD4SPX1	0.066	0.003	19.641	0.000
BCD4SPX2	-0.102	0.015	-7.010	0.000
BCD4SPX3	0.190	0.032	6.006	0.000
CSEX	-0.729	0.042	-17.186	0.000
CAGE	-0.044	0.002	-20.092	0.000
CBVLM2	-0.087	0.082	-1.060	0.289
CBVLM3	0.191	0.075	2.542	0.011
CBVLM4	0.627	0.077	8.146	0.000
CBVLM5	1.456	0.079	18.344	0.000
CAZTBL	-0.069	0.049	-1.414	0.157
CEFVBL	-0.252	0.044	-5.725	0.000
SQRTCD4 WITH				
S0	0.203	0.107	1.899	0.058
S1	-0.004	0.026	-0.149	0.881
S2	-0.039	0.011	-3.556	0.000
S0 WITH				
S1	0.064	0.017	3.873	0.000
S2	-0.003	0.008	-0.383	0.702
S1 WITH				

S2	0.010	0.001	7.570	0.000
Means				
CBVLM2	0.002	0.003	0.742	0.458
CBVLM3	-0.008	0.003	-2.423	0.015
CBVLM4	-0.027	0.003	-8.549	0.000
CBVLM5	-0.013	0.003	-4.524	0.000
CAZTBL	-0.045	0.003	-17.373	0.000
CEFVBL	-0.007	0.003	-2.538	0.011
S0	0.278	0.031	8.975	0.000
S1	0.295	0.007	39.556	0.000
S2	0.132	0.003	40.182	0.000
Intercepts				
SQRTCD4	9.920	0.148	67.239	0.000
Variances				
CBVLM2	0.138	0.001	94.289	0.000
CBVLM3	0.190	0.002	94.289	0.000
CBVLM4	0.173	0.002	94.286	0.000
CBVLM5	0.157	0.002	94.287	0.000
CAZTBL	0.178	0.002	114.645	0.000
CEFVBL	0.219	0.002	114.313	0.000
S0	0.127	0.069	1.845	0.065
S1	0.068	0.005	14.898	0.000
S2	0.010	0.001	14.135	0.000
Residual Variances				
SQRTCD4	6.675	0.234	28.535	0.000

Group WA

Within Level

Residual Variances				
SQRTCD4	5.577	0.393	14.202	0.000

Between Level

SQRTCD4 ON				
BCD4SPX1	0.052	0.009	5.757	0.000
BCD4SPX2	-0.061	0.039	-1.540	0.123
BCD4SPX3	0.108	0.087	1.243	0.214
CSEX	-0.729	0.042	-17.186	0.000
CAGE	-0.044	0.002	-20.092	0.000
CBVLM2	-0.087	0.082	-1.060	0.289
CBVLM3	0.191	0.075	2.542	0.011
CBVLM4	0.627	0.077	8.146	0.000
CBVLM5	1.456	0.079	18.344	0.000
CAZTBL	-0.069	0.049	-1.414	0.157
CEFVBL	-0.252	0.044	-5.725	0.000
SQRTCD4 WITH				
S0	-0.616	1.041	-0.591	0.554
S1	-0.008	0.143	-0.055	0.956
S2	0.030	0.138	0.219	0.827
S0 WITH				
S1	0.024	0.184	0.128	0.899
S2	-0.046	0.312	-0.148	0.882
S1 WITH				
S2	0.006	0.014	0.394	0.694

```
 Means
    CBVLM2             0.002      0.003      0.742      0.458
    CBVLM3            -0.008      0.003     -2.423      0.015
    CBVLM4            -0.027      0.003     -8.549      0.000
    CBVLM5            -0.013      0.003     -4.524      0.000
    CAZTBL            -0.045      0.003    -17.373      0.000
    CEFVBL            -0.007      0.003     -2.538      0.011
    S0                -0.080      0.276     -0.291      0.771
    S1                 0.216      0.029      7.521      0.000
    S2                 0.158      0.030      5.235      0.000

 Intercepts
    SQRTCD4           10.383      0.424     24.496      0.000

 Variances
    CBVLM2             0.138      0.001     94.289      0.000
    CBVLM3             0.190      0.002     94.289      0.000
    CBVLM4             0.173      0.002     94.286      0.000
    CBVLM5             0.157      0.002     94.287      0.000
    CAZTBL             0.178      0.002    114.645      0.000
    CEFVBL             0.219      0.002    114.313      0.000
    S0                 1.233      1.234      1.000      0.317
    S1                 0.023      0.026      0.873      0.383
    S2                 0.006      0.010      0.657      0.511

 Residual Variances
    SQRTCD4            5.513      1.008      5.470      0.000

Group EA

Within Level

 Residual Variances
    SQRTCD4            4.623      0.122     37.806      0.000

Between Level

 SQRTCD4    ON
    BCD4SPX1           0.032      0.006      5.170      0.000
    BCD4SPX2           0.017      0.028      0.616      0.538
    BCD4SPX3          -0.066      0.063     -1.037      0.300
    CSEX              -0.729      0.042    -17.186      0.000
    CAGE              -0.044      0.002    -20.092      0.000
    CBVLM2            -0.087      0.082     -1.060      0.289
    CBVLM3             0.191      0.075      2.542      0.011
    CBVLM4             0.627      0.077      8.146      0.000
    CBVLM5             1.456      0.079     18.344      0.000
    CAZTBL            -0.069      0.049     -1.414      0.157
    CEFVBL            -0.252      0.044     -5.725      0.000

 SQRTCD4  WITH
    S0                -0.363      0.521     -0.697      0.486
    S1                 0.012      0.085      0.136      0.892
    S2                -0.060      0.025     -2.372      0.018

 S0       WITH
    S1                 0.055      0.081      0.679      0.497
    S2                -0.017      0.027     -0.644      0.520

 S1       WITH
    S2                 0.003      0.004      0.711      0.477
```

```
 Means
    CBVLM2             0.002      0.003      0.742      0.458
    CBVLM3            -0.008      0.003     -2.423      0.015
    CBVLM4            -0.027      0.003     -8.549      0.000
    CBVLM5            -0.013      0.003     -4.524      0.000
    CAZTBL            -0.045      0.003    -17.373      0.000
    CEFVBL            -0.007      0.003     -2.538      0.011
    S0                 0.245      0.124      1.968      0.049
    S1                 0.154      0.019      7.954      0.000
    S2                 0.153      0.007     20.867      0.000

 Intercepts
    SQRTCD4           10.389      0.287     36.189      0.000

 Variances
    CBVLM2             0.138      0.001     94.289      0.000
    CBVLM3             0.190      0.002     94.289      0.000
    CBVLM4             0.173      0.002     94.286      0.000
    CBVLM5             0.157      0.002     94.287      0.000
    CAZTBL             0.178      0.002    114.645      0.000
    CEFVBL             0.219      0.002    114.313      0.000
    S0                 0.255      0.610      0.419      0.675
    S1                 0.060      0.015      3.897      0.000
    S2                 0.011      0.002      6.287      0.000

 Residual Variances
    SQRTCD4            4.644      0.647      7.179      0.000

Group SA

Within Level

 Residual Variances
    SQRTCD4            3.444      0.030    114.104      0.000

Between Level

 SQRTCD4    ON
    BCD4SPX1           0.040      0.001     27.016      0.000
    BCD4SPX2          -0.031      0.007     -4.532      0.000
    BCD4SPX3           0.052      0.015      3.375      0.001
    CSEX              -0.729      0.042    -17.186      0.000
    CAGE              -0.044      0.002    -20.092      0.000
    CBVLM2            -0.087      0.082     -1.060      0.289
    CBVLM3             0.191      0.075      2.542      0.011
    CBVLM4             0.627      0.077      8.146      0.000
    CBVLM5             1.456      0.079     18.344      0.000
    CAZTBL            -0.069      0.049     -1.414      0.157
    CEFVBL            -0.252      0.044     -5.725      0.000

 SQRTCD4  WITH
    S0                 0.899      0.140      6.410      0.000
    S1                -0.136      0.017     -7.835      0.000
    S2                -0.081      0.010     -8.242      0.000

 S0       WITH
    S1                 0.055      0.019      2.825      0.005
    S2                -0.004      0.013     -0.318      0.751

 S1       WITH
    S2                 0.011      0.001      9.198      0.000

 Means
```

CBVLM2	0.002	0.003	0.742	0.458
CBVLM3	-0.008	0.003	-2.423	0.015
CBVLM4	-0.027	0.003	-8.549	0.000
CBVLM5	-0.013	0.003	-4.524	0.000
CAZTBL	-0.045	0.003	-17.373	0.000
CEFVBL	-0.007	0.003	-2.538	0.011
S0	0.568	0.039	14.501	0.000
S1	0.312	0.004	74.068	0.000
S2	0.195	0.003	77.380	0.000
Intercepts				
SQRTCD4	11.109	0.069	161.197	0.000
Variances				
CBVLM2	0.138	0.001	94.289	0.000
CBVLM3	0.190	0.002	94.289	0.000
CBVLM4	0.173	0.002	94.286	0.000
CBVLM5	0.157	0.002	94.287	0.000
CAZTBL	0.178	0.002	114.645	0.000
CEFVBL	0.219	0.002	114.313	0.000
S0	1.543	0.134	11.558	0.000
S1	0.076	0.003	25.130	0.000
S2	0.015	0.001	20.152	0.000
Residual Variances				
SQRTCD4	7.932	0.144	54.963	0.000

Group ASIA

Within Level

Residual Variances				
SQRTCD4	2.707	0.095	28.350	0.000

Between Level

SQRTCD4 ON				
BCD4SPX1	0.057	0.008	6.817	0.000
BCD4SPX2	-0.064	0.037	-1.723	0.085
BCD4SPX3	0.108	0.083	1.301	0.193
CSEX	-0.729	0.042	-17.186	0.000
CAGE	-0.044	0.002	-20.092	0.000
CBVLM2	-0.087	0.082	-1.060	0.289
CBVLM3	0.191	0.075	2.542	0.011
CBVLM4	0.627	0.077	8.146	0.000
CBVLM5	1.456	0.079	18.344	0.000
CAZTBL	-0.069	0.049	-1.414	0.157
CEFVBL	-0.252	0.044	-5.725	0.000
SQRTCD4 WITH				
S0	0.403	0.331	1.215	0.224
S1	-0.049	0.067	-0.737	0.461
S2	-0.084	0.032	-2.610	0.009
S0 WITH				
S1	0.034	0.040	0.853	0.394
S2	-0.011	0.018	-0.613	0.540
S1 WITH				
S2	0.013	0.004	3.492	0.000
Means				
CBVLM2	0.002	0.003	0.742	0.458

CBVLM3	-0.008	0.003	-2.423	0.015
CBVLM4	-0.027	0.003	-8.549	0.000
CBVLM5	-0.013	0.003	-4.524	0.000
CAZTBL	-0.045	0.003	-17.373	0.000
CEFVBL	-0.007	0.003	-2.538	0.011
S0	0.249	0.089	2.807	0.005
S1	0.304	0.018	17.253	0.000
S2	0.151	0.010	15.637	0.000
Intercepts				
SQRTCD4	9.512	0.339	28.050	0.000
Variances				
CBVLM2	0.138	0.001	94.289	0.000
CBVLM3	0.190	0.002	94.289	0.000
CBVLM4	0.173	0.002	94.286	0.000
CBVLM5	0.157	0.002	94.287	0.000
CAZTBL	0.178	0.002	114.645	0.000
CEFVBL	0.219	0.002	114.313	0.000
S0	0.176	0.219	0.804	0.421
S1	0.041	0.010	4.050	0.000
S2	0.009	0.002	4.200	0.000
Residual Variances				
SQRTCD4	6.662	0.644	10.351	0.000
New/Additional Parameters				
M111	11.563	0.094	123.311	0.000
M121	13.116	0.091	144.916	0.000
M141	15.489	0.102	151.678	0.000
M151	16.975	0.079	214.172	0.000
M161	18.313	0.084	218.035	0.000
M181	21.095	0.092	228.139	0.000
M211	11.687	0.272	42.998	0.000
M221	12.937	0.244	52.937	0.000
M241	14.998	0.261	57.433	0.000
M251	16.503	0.215	76.861	0.000
M261	17.846	0.234	76.181	0.000
M281	20.454	0.314	65.193	0.000
M311	11.194	0.189	59.375	0.000
M321	12.014	0.176	68.349	0.000
M341	13.771	0.186	74.097	0.000
M351	15.508	0.170	91.090	0.000
M361	16.834	0.188	89.481	0.000
M381	18.612	0.359	51.787	0.000
M411	12.112	0.043	279.491	0.000
M421	13.087	0.038	342.344	0.000
M441	14.817	0.041	364.195	0.000
M451	16.254	0.040	410.888	0.000
M461	17.583	0.046	386.364	0.000
M481	20.147	0.118	170.665	0.000
M511	10.927	0.207	52.863	0.000
M521	12.285	0.213	57.664	0.000
M541	14.535	0.249	58.486	0.000
M551	16.160	0.201	80.541	0.000
M561	17.533	0.215	81.693	0.000
M581	20.038	0.361	55.442	0.000
M112	13.921	0.100	138.864	0.000
M122	15.473	0.097	159.801	0.000
M142	17.846	0.107	166.247	0.000
M152	19.333	0.086	225.348	0.000
M162	20.670	0.090	229.145	0.000
M182	23.452	0.098	238.646	0.000

M212	13.416	0.283	47.406	0.000
M222	14.666	0.258	56.909	0.000
M242	16.728	0.275	60.746	0.000
M252	18.232	0.233	78.297	0.000
M262	19.575	0.250	78.416	0.000
M282	22.184	0.320	69.385	0.000
M312	12.426	0.191	65.110	0.000
M322	13.246	0.178	74.410	0.000
M342	15.004	0.188	79.956	0.000
M352	16.740	0.172	97.261	0.000
M362	18.066	0.190	95.083	0.000
M382	19.845	0.361	55.000	0.000
M412	14.610	0.045	321.374	0.000
M422	15.585	0.041	384.262	0.000
M442	17.315	0.043	403.511	0.000
M452	18.753	0.042	447.024	0.000
M462	20.081	0.047	423.108	0.000
M482	22.645	0.118	191.111	0.000
M512	13.357	0.212	63.100	0.000
M522	14.715	0.216	68.039	0.000
M542	16.965	0.250	67.732	0.000
M552	18.591	0.204	90.921	0.000
M562	19.964	0.219	91.265	0.000
M582	22.468	0.363	61.915	0.000
M113	17.091	0.123	138.968	0.000
M123	18.644	0.120	155.251	0.000
M143	21.017	0.129	163.478	0.000
M153	22.503	0.111	202.486	0.000
M163	23.840	0.115	208.080	0.000
M183	26.623	0.121	219.885	0.000
M213	17.197	0.724	23.740	0.000
M223	18.447	0.716	25.773	0.000
M243	20.509	0.722	28.411	0.000
M253	22.013	0.705	31.242	0.000
M263	23.356	0.710	32.888	0.000
M283	25.965	0.742	34.978	0.000
M313	16.109	0.228	70.598	0.000
M323	16.929	0.219	77.410	0.000
M343	18.687	0.228	82.045	0.000
M353	20.424	0.215	94.964	0.000
M363	21.749	0.229	94.830	0.000
M383	23.528	0.383	61.470	0.000
M413	19.299	0.070	275.042	0.000
M423	20.274	0.067	302.172	0.000
M443	22.004	0.069	320.885	0.000
M453	23.442	0.068	344.442	0.000
M463	24.770	0.072	345.455	0.000
M483	27.334	0.130	209.816	0.000
M513	16.987	0.296	57.354	0.000
M523	18.345	0.299	61.272	0.000
M543	20.595	0.324	63.592	0.000
M553	22.220	0.288	77.257	0.000
M563	23.593	0.297	79.503	0.000
M583	26.098	0.415	62.943	0.000
M111X	153.505	2.404	63.849	0.000
M121X	191.822	2.624	73.094	0.000
M141X	259.701	3.396	76.470	0.000
M151X	307.948	2.974	103.544	0.000
M161X	355.140	3.340	106.329	0.000
M181X	464.795	4.159	111.767	0.000
M211X	171.651	28.826	5.955	0.000
M221X	202.421	28.740	7.043	0.000
M241X	260.014	29.054	8.949	0.000

M251X	307.410	28.954	10.617	0.000
M261X	353.545	29.350	12.046	0.000
M281X	453.436	30.850	14.698	0.000
M311X	146.724	6.506	22.553	0.000
M321X	165.757	6.576	25.206	0.000
M341X	211.079	7.257	29.086	0.000
M351X	261.930	7.348	35.645	0.000
M361X	304.800	8.074	37.750	0.000
M381X	367.846	14.185	25.933	0.000
M411X	173.050	2.027	85.383	0.000
M421X	197.626	2.006	98.502	0.000
M441X	245.886	2.124	115.787	0.000
M451X	290.560	2.174	133.632	0.000
M461X	335.523	2.376	141.224	0.000
M481X	432.268	5.071	85.236	0.000
M511X	135.783	5.217	26.026	0.000
M521X	167.304	5.922	28.250	0.000
M541X	227.638	7.804	29.170	0.000
M551X	277.536	7.124	38.959	0.000
M561X	323.799	8.141	39.776	0.000
M581X	417.900	14.995	27.870	0.000
M112X	213.580	2.953	72.334	0.000
M122X	259.216	3.181	81.501	0.000
M142X	338.283	4.016	84.223	0.000
M152X	393.537	3.541	111.148	0.000
M162X	447.034	3.941	113.427	0.000
M182X	569.808	4.825	118.088	0.000
M212X	215.066	29.201	7.365	0.000
M222X	250.157	29.110	8.593	0.000
M242X	314.882	29.533	10.662	0.000
M252X	367.482	29.426	12.488	0.000
M262X	418.262	29.891	13.993	0.000
M282X	527.174	31.545	16.712	0.000
M312X	175.831	6.844	25.691	0.000
M322X	196.885	6.897	28.545	0.000
M342X	246.539	7.627	32.325	0.000
M352X	301.670	7.699	39.185	0.000
M362X	347.808	8.489	40.972	0.000
M382X	415.238	15.065	27.563	0.000
M412X	239.804	2.190	109.506	0.000
M422X	269.253	2.158	124.795	0.000
M442X	326.155	2.304	141.558	0.000
M452X	378.013	2.367	159.733	0.000
M462X	429.614	2.603	165.076	0.000
M482X	539.171	5.653	95.376	0.000
M512X	194.799	6.187	31.485	0.000
M522X	232.920	6.919	33.663	0.000
M542X	304.188	8.989	33.840	0.000
M552X	361.987	8.145	44.445	0.000
M562X	414.923	9.266	44.778	0.000
M582X	521.198	16.779	31.063	0.000
M113X	311.907	4.288	72.742	0.000
M123X	367.389	4.585	80.135	0.000
M143X	461.503	5.526	83.512	0.000
M153X	526.181	5.142	102.326	0.000
M163X	588.159	5.601	105.011	0.000
M183X	728.577	6.598	110.420	0.000
M213X	330.816	33.252	9.949	0.000
M223X	375.356	33.963	11.052	0.000
M243X	455.671	35.942	12.678	0.000
M253X	519.649	36.852	14.101	0.000
M263X	580.586	38.430	15.108	0.000
M283X	709.220	42.544	16.670	0.000

M313X	280.931	8.932	31.454	0.000
M323X	308.026	9.051	34.034	0.000
M343X	370.628	10.056	36.856	0.000
M353X	438.553	10.271	42.699	0.000
M363X	494.455	11.252	43.945	0.000
M383X	574.987	18.655	30.822	0.000
M413X	398.800	3.181	125.381	0.000
M423X	437.395	3.195	136.911	0.000
M443X	510.517	3.456	147.703	0.000
M453X	575.858	3.610	159.508	0.000
M463X	639.921	3.934	162.684	0.000
M483X	773.523	7.319	105.688	0.000
M513X	304.945	10.451	29.178	0.000
M523X	352.924	11.411	30.929	0.000
M543X	440.523	13.758	32.018	0.000
M553X	510.124	13.225	38.573	0.000
M563X	573.027	14.458	39.634	0.000
M583X	697.484	22.105	31.553	0.000
NS_1_25	-19.544	3.164	-6.178	0.000
NS_1_50	-5.804	3.331	-1.742	0.081
NS_1_100	13.815	4.046	3.414	0.001
NS_1_150	17.387	3.735	4.656	0.000
NS_1_200	19.617	4.136	4.743	0.000
NS_1_300	32.526	6.559	4.959	0.000
NS_2_25	-26.224	3.699	-7.090	0.000
NS_2_50	-10.036	3.875	-2.590	0.010
NS_2_100	12.128	4.676	2.594	0.009
NS_2_150	15.524	4.314	3.599	0.000
NS_2_200	17.420	4.761	3.659	0.000
NS_2_300	30.637	7.431	4.123	0.000
NS_3_25	-86.893	5.365	-16.195	0.000
NS_3_50	-70.007	5.623	-12.450	0.000
NS_3_100	-49.014	6.567	-7.463	0.000
NS_3_150	-49.677	6.339	-7.837	0.000
NS_3_200	-51.762	6.884	-7.520	0.000
NS_3_300	-44.946	9.854	-4.561	0.000
NE_1_25	6.781	6.925	0.979	0.327
NE_1_50	26.065	7.066	3.689	0.000
NE_1_100	48.622	8.003	6.076	0.000
NE_1_150	46.018	7.925	5.807	0.000
NE_1_200	50.340	8.740	5.760	0.000
NE_1_300	96.948	14.786	6.557	0.000
NE_2_25	37.749	7.438	5.075	0.000
NE_2_50	62.332	7.576	8.227	0.000
NE_2_100	91.745	8.606	10.661	0.000
NE_2_150	91.867	8.468	10.849	0.000
NE_2_200	99.226	9.357	10.604	0.000
NE_2_300	154.570	15.821	9.770	0.000
NE_3_25	30.976	9.890	3.132	0.002
NE_3_50	59.363	10.125	5.863	0.000
NE_3_100	90.875	11.460	7.930	0.000
NE_3_150	87.628	11.481	7.632	0.000
NE_3_200	93.703	12.568	7.455	0.000
NE_3_300	153.590	19.792	7.760	0.000
NW_1_25	-18.146	28.925	-0.627	0.530
NW_1_50	-10.599	28.858	-0.367	0.713
NW_1_100	-0.313	29.249	-0.011	0.991
NW_1_150	0.538	29.106	0.018	0.985
NW_1_200	1.595	29.540	0.054	0.957
NW_1_300	11.359	31.127	0.365	0.715
NW_2_25	-1.486	29.349	-0.051	0.960
NW_2_50	9.059	29.281	0.309	0.757
NW_2_100	23.401	29.801	0.785	0.432

NW_2_150	26.055	29.637	0.879	0.379
NW_2_200	28.772	30.150	0.954	0.340
NW_2_300	42.634	31.909	1.336	0.182
NW_3_25	-18.909	33.524	-0.564	0.573
NW_3_50	-7.968	34.266	-0.233	0.816
NW_3_100	5.832	36.360	0.160	0.873
NW_3_150	6.532	37.208	0.176	0.861
NW_3_200	7.573	38.837	0.195	0.845
NW_3_300	19.357	43.051	0.450	0.653
NA_1_25	17.722	5.736	3.090	0.002
NA_1_50	24.518	6.470	3.789	0.000
NA_1_100	32.063	8.506	3.769	0.000
NA_1_150	30.411	7.709	3.945	0.000
NA_1_200	31.341	8.783	3.568	0.000
NA_1_300	46.894	15.544	3.017	0.003
NA_2_25	18.781	6.844	2.744	0.006
NA_2_50	26.297	7.605	3.458	0.001
NA_2_100	34.096	9.838	3.466	0.001
NA_2_150	31.550	8.866	3.558	0.000
NA_2_200	32.111	10.049	3.195	0.001
NA_2_300	48.610	17.439	2.788	0.005
NA_3_25	6.962	11.282	0.617	0.537
NA_3_50	14.465	12.285	1.177	0.239
NA_3_100	20.980	14.817	1.416	0.157
NA_3_150	16.057	14.174	1.133	0.257
NA_3_200	15.131	15.484	0.977	0.328
NA_3_300	31.092	23.047	1.349	0.177
SE_1_25	26.325	6.823	3.858	0.000
SE_1_50	31.869	6.884	4.629	0.000
SE_1_100	34.808	7.570	4.598	0.000
SE_1_150	28.631	7.671	3.732	0.000
SE_1_200	30.723	8.419	3.649	0.000
SE_1_300	64.422	15.043	4.282	0.000
SE_2_25	63.973	7.196	8.890	0.000
SE_2_50	72.368	7.236	10.001	0.000
SE_2_100	79.616	7.976	9.982	0.000
SE_2_150	76.342	8.062	9.469	0.000
SE_2_200	81.806	8.880	9.213	0.000
SE_2_300	123.933	16.064	7.715	0.000
SE_3_25	117.869	9.493	12.417	0.000
SE_3_50	129.369	9.608	13.465	0.000
SE_3_100	139.889	10.642	13.145	0.000
SE_3_150	137.305	10.894	12.603	0.000
SE_3_200	145.466	11.920	12.204	0.000
SE_3_300	198.536	20.010	9.922	0.000
SW_1_25	1.398	28.900	0.048	0.961
SW_1_50	-4.795	28.813	-0.166	0.868
SW_1_100	-14.128	29.132	-0.485	0.628
SW_1_150	-16.850	29.035	-0.580	0.562
SW_1_200	-18.022	29.443	-0.612	0.540
SW_1_300	-21.167	31.254	-0.677	0.498
SW_2_25	24.738	29.287	0.845	0.398
SW_2_50	19.095	29.193	0.654	0.513
SW_2_100	11.273	29.624	0.381	0.704
SW_2_150	10.530	29.520	0.357	0.721
SW_2_200	11.352	30.001	0.378	0.705
SW_2_300	11.996	32.036	0.374	0.708
SW_3_25	67.985	33.407	2.035	0.042
SW_3_50	62.039	34.115	1.819	0.069
SW_3_100	54.846	36.109	1.519	0.129
SW_3_150	56.209	37.028	1.518	0.129
SW_3_200	59.335	38.629	1.536	0.125
SW_3_300	64.304	43.161	1.490	0.136

SA_1_25	37.267	5.603	6.651	0.000
SA_1_50	30.322	6.257	4.846	0.000
SA_1_100	18.248	8.090	2.256	0.024
SA_1_150	13.024	7.451	1.748	0.080
SA_1_200	11.724	8.481	1.382	0.167
SA_1_300	14.368	15.817	0.908	0.364
SA_2_25	45.005	6.570	6.850	0.000
SA_2_50	36.333	7.252	5.010	0.000
SA_2_100	21.967	9.281	2.367	0.018
SA_2_150	16.026	8.484	1.889	0.059
SA_2_200	14.691	9.624	1.527	0.127
SA_2_300	17.973	17.690	1.016	0.310
SA_3_25	93.856	10.931	8.586	0.000
SA_3_50	84.471	11.854	7.126	0.000
SA_3_100	69.994	14.188	4.933	0.000
SA_3_150	65.734	13.712	4.794	0.000
SA_3_200	66.893	14.984	4.464	0.000
SA_3_300	76.039	23.271	3.267	0.001
EW_1_25	-24.927	29.544	-0.844	0.399
EW_1_50	-36.664	29.473	-1.244	0.214
EW_1_100	-48.935	29.931	-1.635	0.102
EW_1_150	-45.480	29.854	-1.523	0.128
EW_1_200	-48.744	30.420	-1.602	0.109
EW_1_300	-85.589	33.932	-2.522	0.012
EW_2_25	-39.235	29.983	-1.309	0.191
EW_2_50	-53.273	29.903	-1.781	0.075
EW_2_100	-68.343	30.484	-2.242	0.025
EW_2_150	-65.812	30.395	-2.165	0.030
EW_2_200	-70.455	31.050	-2.269	0.023
EW_2_300	-111.937	34.932	-3.204	0.001
EW_3_25	-49.885	34.420	-1.449	0.147
EW_3_50	-67.331	35.134	-1.916	0.055
EW_3_100	-85.043	37.306	-2.280	0.023
EW_3_150	-81.096	38.240	-2.121	0.034
EW_3_200	-86.131	40.027	-2.152	0.031
EW_3_300	-134.233	46.437	-2.891	0.004
EA_1_25	10.941	8.309	1.317	0.188
EA_1_50	-1.547	8.820	-0.175	0.861
EA_1_100	-16.559	10.633	-1.557	0.119
EA_1_150	-15.607	10.208	-1.529	0.126
EA_1_200	-18.999	11.439	-1.661	0.097
EA_1_300	-50.054	20.619	-2.428	0.015
EA_2_25	-18.968	9.189	-2.064	0.039
EA_2_50	-36.035	9.735	-3.701	0.000
EA_2_100	-57.649	11.762	-4.901	0.000
EA_2_150	-60.317	11.177	-5.396	0.000
EA_2_200	-67.115	12.536	-5.354	0.000
EA_2_300	-105.960	22.526	-4.704	0.000
EA_3_25	-24.014	13.708	-1.752	0.080
EA_3_50	-44.898	14.528	-3.090	0.002
EA_3_100	-69.895	17.015	-4.108	0.000
EA_3_150	-71.571	16.717	-4.281	0.000
EA_3_200	-78.572	18.293	-4.295	0.000
EA_3_300	-122.498	28.902	-4.238	0.000
WA_1_25	35.869	29.288	1.225	0.221
WA_1_50	35.117	29.336	1.197	0.231
WA_1_100	32.376	30.073	1.077	0.282
WA_1_150	29.874	29.808	1.002	0.316
WA_1_200	29.746	30.449	0.977	0.329
WA_1_300	35.535	34.290	1.036	0.300
WA_2_25	20.267	29.840	0.679	0.497
WA_2_50	17.238	29.909	0.576	0.564
WA_2_100	10.694	30.856	0.347	0.729

WA_2_150	5.495	30.520	0.180	0.857
WA_2_200	3.340	31.284	0.107	0.915
WA_2_300	5.977	35.716	0.167	0.867
WA_3_25	25.871	34.847	0.742	0.458
WA_3_50	22.432	35.816	0.626	0.531
WA_3_100	15.148	38.473	0.394	0.694
WA_3_150	9.525	39.145	0.243	0.808
WA_3_200	7.558	41.054	0.184	0.854
WA_3_300	11.735	47.936	0.245	0.807
U1	16.586	1.231	13.470	0.000
U2	29.487	28.111	1.049	0.294
U3	16.805	5.048	3.329	0.001
U4	22.910	1.758	13.029	0.000
U5	13.671	2.938	4.653	0.000

QUALITY OF NUMERICAL RESULTS

Condition Number for the Information Matrix 0.265E-16
(ratio of smallest to largest eigenvalue)

CONFIDENCE INTERVALS OF MODEL RESULTS

	Lower .5%	Lower 2.5%	Lower 5%	Estimate	Upper 5%	Upper 2.5%	Upper .5%
Group NA							
Within Level							
Residual Variances							
SQRTCD4	3.108	3.131	3.143	3.205	3.267	3.279	3.303
Between Level							
SQRTCD4 ON							
BCD4SPX1	0.057	0.059	0.061	0.066	0.072	0.073	0.075
BCD4SPX2	-0.139	-0.130	-0.126	-0.102	-0.078	-0.073	-0.064
BCD4SPX3	0.109	0.128	0.138	0.190	0.242	0.252	0.272
CSEX	-0.838	-0.812	-0.799	-0.729	-0.659	-0.646	-0.620
CAGE	-0.049	-0.048	-0.047	-0.044	-0.040	-0.040	-0.038
CBVLM2	-0.298	-0.247	-0.222	-0.087	0.048	0.074	0.124
CBVLM3	-0.003	0.044	0.067	0.191	0.315	0.338	0.385
CBVLM4	0.429	0.476	0.501	0.627	0.754	0.778	0.826
CBVLM5	1.252	1.300	1.325	1.456	1.587	1.612	1.660
CAZTBL	-0.196	-0.165	-0.150	-0.069	0.011	0.027	0.057
CEFVBL	-0.366	-0.339	-0.325	-0.252	-0.180	-0.166	-0.139
SQRTCD4 WITH							
S0	-0.072	-0.007	0.027	0.203	0.378	0.412	

```
  0.478
   S1               -0.071      -0.055      -0.047      -0.004       0.039       0.047
  0.063
   S2               -0.067      -0.061      -0.057      -0.039      -0.021      -0.018
 -0.011

S0       WITH
   S1                0.022       0.032       0.037       0.064       0.092       0.097
  0.107
   S2               -0.023      -0.018      -0.015      -0.003       0.010       0.012
  0.017

S1       WITH
   S2                0.007       0.008       0.008       0.010       0.013       0.013
  0.014

Means
   CBVLM2           -0.005      -0.003      -0.003       0.002       0.007       0.008
  0.009
   CBVLM3           -0.016      -0.014      -0.013      -0.008      -0.003      -0.002
  0.000
   CBVLM4           -0.035      -0.033      -0.032      -0.027      -0.022      -0.021
 -0.019
   CBVLM5           -0.021      -0.019      -0.018      -0.013      -0.009      -0.008
 -0.006
   CAZTBL           -0.052      -0.050      -0.049      -0.045      -0.041      -0.040
 -0.038
   CEFVBL           -0.015      -0.013      -0.012      -0.007      -0.003      -0.002
  0.000
   S0                0.198       0.217       0.227       0.278       0.328       0.338
  0.357
   S1                0.275       0.280       0.282       0.295       0.307       0.309
  0.314
   S2                0.124       0.126       0.127       0.132       0.138       0.139
  0.141

Intercepts
   SQRTCD4           9.540       9.631       9.678       9.920      10.163      10.209
 10.300

Variances
   CBVLM2            0.135       0.135       0.136       0.138       0.141       0.141
  0.142
   CBVLM3            0.185       0.186       0.186       0.190       0.193       0.194
  0.195
   CBVLM4            0.168       0.169       0.170       0.173       0.176       0.177
  0.178
   CBVLM5            0.153       0.154       0.155       0.157       0.160       0.161
  0.162
   CAZTBL            0.174       0.175       0.175       0.178       0.180       0.181
  0.182
   CEFVBL            0.214       0.215       0.216       0.219       0.222       0.223
  0.224
   S0               -0.050      -0.008       0.014       0.127       0.241       0.263
  0.305
   S1                0.057       0.059       0.061       0.068       0.076       0.077
  0.080
   S2                0.008       0.009       0.009       0.010       0.011       0.012
  0.012

Residual Variances
   SQRTCD4           6.073       6.217       6.290       6.675       7.060       7.134
  7.278
```

```
Group WA

Within Level

 Residual Variances
    SQRTCD4          4.565       4.807       4.931       5.577       6.223       6.346
   6.588

Between Level

 SQRTCD4  ON
    BCD4SPX1         0.029       0.035       0.037       0.052       0.067       0.070
   0.076
    BCD4SPX2        -0.162      -0.138      -0.125      -0.061       0.004       0.017
   0.041
    BCD4SPX3        -0.116      -0.062      -0.035       0.108       0.251       0.278
   0.331
    CSEX            -0.838      -0.812      -0.799      -0.729      -0.659      -0.646
  -0.620
    CAGE            -0.049      -0.048      -0.047      -0.044      -0.040      -0.040
  -0.038
    CBVLM2          -0.298      -0.247      -0.222      -0.087       0.048       0.074
   0.124
    CBVLM3          -0.003       0.044       0.067       0.191       0.315       0.338
   0.385
    CBVLM4           0.429       0.476       0.501       0.627       0.754       0.778
   0.826
    CBVLM5           1.252       1.300       1.325       1.456       1.587       1.612
   1.660
    CAZTBL          -0.196      -0.165      -0.150      -0.069       0.011       0.027
   0.057
    CEFVBL          -0.366      -0.339      -0.325      -0.252      -0.180      -0.166
  -0.139

 SQRTCD4  WITH
    S0              -3.297      -2.656      -2.328      -0.616       1.097       1.425
   2.066
    S1              -0.375      -0.287      -0.242      -0.008       0.227       0.272
   0.360
    S2              -0.325      -0.240      -0.196       0.030       0.257       0.300
   0.385

 S0       WITH
    S1              -0.451      -0.338      -0.280       0.024       0.327       0.385
   0.498
    S2              -0.849      -0.657      -0.559      -0.046       0.467       0.565
   0.757

 S1       WITH
    S2              -0.031      -0.022      -0.018       0.006       0.029       0.033
   0.042

 Means
    CBVLM2          -0.005      -0.003      -0.003       0.002       0.007       0.008
   0.009
    CBVLM3          -0.016      -0.014      -0.013      -0.008      -0.003      -0.002
   0.000
    CBVLM4          -0.035      -0.033      -0.032      -0.027      -0.022      -0.021
  -0.019
    CBVLM5          -0.021      -0.019      -0.018      -0.013      -0.009      -0.008
  -0.006
    CAZTBL          -0.052      -0.050      -0.049      -0.045      -0.041      -0.040
```

```
  -0.038
    CEFVBL           -0.015      -0.013      -0.012      -0.007      -0.003      -0.002
   0.000
    S0               -0.792      -0.622      -0.535      -0.080       0.374       0.461
   0.631
    S1                0.142       0.160       0.169       0.216       0.263       0.273
   0.290
    S2                0.080       0.099       0.108       0.158       0.207       0.217
   0.235

 Intercepts
    SQRTCD4           9.292       9.553       9.686      10.383      11.081      11.214
  11.475

 Variances
    CBVLM2            0.135       0.135       0.136       0.138       0.141       0.141
   0.142
    CBVLM3            0.185       0.186       0.186       0.190       0.193       0.194
   0.195
    CBVLM4            0.168       0.169       0.170       0.173       0.176       0.177
   0.178
    CBVLM5            0.153       0.154       0.155       0.157       0.160       0.161
   0.162
    CAZTBL            0.174       0.175       0.175       0.178       0.180       0.181
   0.182
    CEFVBL            0.214       0.215       0.216       0.219       0.222       0.223
   0.224
    S0               -1.944      -1.184      -0.796       1.233       3.263       3.651
   4.411
    S1               -0.044      -0.028      -0.020       0.023       0.066       0.074
   0.090
    S2               -0.019      -0.013      -0.010       0.006       0.022       0.025
   0.031

 Residual Variances
    SQRTCD4           2.917       3.538       3.855       5.513       7.170       7.488
   8.108

Group EA

Within Level

 Residual Variances
    SQRTCD4           4.308       4.384       4.422       4.623       4.825       4.863
   4.938

Between Level

 SQRTCD4  ON
    BCD4SPX1          0.016       0.020       0.022       0.032       0.042       0.044
   0.048
    BCD4SPX2         -0.055      -0.038      -0.029       0.017       0.063       0.072
   0.090
    BCD4SPX3         -0.229      -0.190      -0.170      -0.066       0.039       0.059
   0.098
    CSEX             -0.838      -0.812      -0.799      -0.729      -0.659      -0.646
  -0.620
    CAGE             -0.049      -0.048      -0.047      -0.044      -0.040      -0.040
  -0.038
    CBVLM2           -0.298      -0.247      -0.222      -0.087       0.048       0.074
   0.124
    CBVLM3           -0.003       0.044       0.067       0.191       0.315       0.338
   0.385
```

CBVLM4	0.429	0.476	0.501	0.627	0.754	0.778
0.826						
CBVLM5	1.252	1.300	1.325	1.456	1.587	1.612
1.660						
CAZTBL	-0.196	-0.165	-0.150	-0.069	0.011	0.027
0.057						
CEFVBL	-0.366	-0.339	-0.325	-0.252	-0.180	-0.166
-0.139						

SQRTCD4 WITH

S0	-1.704	-1.384	-1.220	-0.363	0.493	0.657
0.978						
S1	-0.206	-0.154	-0.128	0.012	0.151	0.177
0.229						
S2	-0.125	-0.109	-0.101	-0.060	-0.018	-0.010
0.005						

S0 WITH

S1	-0.154	-0.104	-0.078	0.055	0.188	0.214
0.263						
S2	-0.087	-0.071	-0.062	-0.017	0.027	0.036
0.052						

S1 WITH

S2	-0.008	-0.005	-0.004	0.003	0.010	0.011
0.013						

Means

CBVLM2	-0.005	-0.003	-0.003	0.002	0.007	0.008
0.009						
CBVLM3	-0.016	-0.014	-0.013	-0.008	-0.003	-0.002
0.000						
CBVLM4	-0.035	-0.033	-0.032	-0.027	-0.022	-0.021
-0.019						
CBVLM5	-0.021	-0.019	-0.018	-0.013	-0.009	-0.008
-0.006						
CAZTBL	-0.052	-0.050	-0.049	-0.045	-0.041	-0.040
-0.038						
CEFVBL	-0.015	-0.013	-0.012	-0.007	-0.003	-0.002
0.000						
S0	-0.076	0.001	0.040	0.245	0.449	0.489
0.565						
S1	0.104	0.116	0.122	0.154	0.186	0.192
0.204						
S2	0.135	0.139	0.141	0.153	0.166	0.168
0.172						

Intercepts

SQRTCD4	9.649	9.826	9.917	10.389	10.861	10.952
11.128						

Variances

CBVLM2	0.135	0.135	0.136	0.138	0.141	0.141
0.142						
CBVLM3	0.185	0.186	0.186	0.190	0.193	0.194
0.195						
CBVLM4	0.168	0.169	0.170	0.173	0.176	0.177
0.178						
CBVLM5	0.153	0.154	0.155	0.157	0.160	0.161
0.162						
CAZTBL	0.174	0.175	0.175	0.178	0.180	0.181
0.182						
CEFVBL	0.214	0.215	0.216	0.219	0.222	0.223

```
    0.224
     S0               -1.315      -0.939      -0.747       0.255       1.258       1.450
    1.825
     S1                0.020       0.030       0.035       0.060       0.086       0.090
    0.100
     S2                0.007       0.008       0.008       0.011       0.014       0.015
    0.016

 Residual Variances
    SQRTCD4           2.978       3.376       3.580       4.644       5.708       5.912
    6.310

Group SA

Within Level

 Residual Variances
    SQRTCD4           3.366       3.385       3.394       3.444       3.494       3.503
    3.522

Between Level

 SQRTCD4  ON
    BCD4SPX1          0.036       0.037       0.038       0.040       0.043       0.043
    0.044
    BCD4SPX2         -0.048      -0.044      -0.042      -0.031      -0.019      -0.017
   -0.013
    BCD4SPX3          0.012       0.022       0.027       0.052       0.078       0.083
    0.092
    CSEX             -0.838      -0.812      -0.799      -0.729      -0.659      -0.646
   -0.620
    CAGE             -0.049      -0.048      -0.047      -0.044      -0.040      -0.040
   -0.038
    CBVLM2           -0.298      -0.247      -0.222      -0.087       0.048       0.074
    0.124
    CBVLM3           -0.003       0.044       0.067       0.191       0.315       0.338
    0.385
    CBVLM4            0.429       0.476       0.501       0.627       0.754       0.778
    0.826
    CBVLM5            1.252       1.300       1.325       1.456       1.587       1.612
    1.660
    CAZTBL           -0.196      -0.165      -0.150      -0.069       0.011       0.027
    0.057
    CEFVBL           -0.366      -0.339      -0.325      -0.252      -0.180      -0.166
   -0.139

 SQRTCD4  WITH
    S0                0.538       0.624       0.669       0.899       1.130       1.174
    1.261
    S1               -0.180      -0.170      -0.164      -0.136      -0.107      -0.102
   -0.091
    S2               -0.106      -0.100      -0.097      -0.081      -0.065      -0.062
   -0.055

 S0       WITH
    S1                0.005       0.017       0.023       0.055       0.086       0.092
    0.104
    S2               -0.039      -0.030      -0.026      -0.004       0.018       0.022
    0.030

 S1       WITH
    S2                0.008       0.009       0.009       0.011       0.013       0.014
    0.014
```

```
 Means
    CBVLM2          -0.005      -0.003      -0.003       0.002       0.007       0.008
   0.009
    CBVLM3          -0.016      -0.014      -0.013      -0.008      -0.003      -0.002
   0.000
    CBVLM4          -0.035      -0.033      -0.032      -0.027      -0.022      -0.021
  -0.019
    CBVLM5          -0.021      -0.019      -0.018      -0.013      -0.009      -0.008
  -0.006
    CAZTBL          -0.052      -0.050      -0.049      -0.045      -0.041      -0.040
  -0.038
    CEFVBL          -0.015      -0.013      -0.012      -0.007      -0.003      -0.002
   0.000
    S0               0.467       0.492       0.504       0.568       0.633       0.645
   0.669
    S1               0.301       0.304       0.305       0.312       0.319       0.321
   0.323
    S2               0.189       0.190       0.191       0.195       0.200       0.200
   0.202

 Intercepts
    SQRTCD4         10.932      10.974      10.996      11.109      11.223      11.244
  11.287

 Variances
    CBVLM2           0.135       0.135       0.136       0.138       0.141       0.141
   0.142
    CBVLM3           0.185       0.186       0.186       0.190       0.193       0.194
   0.195
    CBVLM4           0.168       0.169       0.170       0.173       0.176       0.177
   0.178
    CBVLM5           0.153       0.154       0.155       0.157       0.160       0.161
   0.162
    CAZTBL           0.174       0.175       0.175       0.178       0.180       0.181
   0.182
    CEFVBL           0.214       0.215       0.216       0.219       0.222       0.223
   0.224
    S0               1.199       1.282       1.324       1.543       1.763       1.805
   1.887
    S1               0.069       0.070       0.071       0.076       0.081       0.082
   0.084
    S2               0.013       0.013       0.013       0.015       0.016       0.016
   0.016

 Residual Variances
    SQRTCD4          7.560       7.649       7.694       7.932       8.169       8.215
   8.303

Group ASIA

Within Level

 Residual Variances
    SQRTCD4          2.461       2.519       2.550       2.707       2.864       2.894
   2.953

Between Level

 SQRTCD4  ON
    BCD4SPX1         0.035       0.040       0.043       0.057       0.071       0.073
   0.078
    BCD4SPX2        -0.161      -0.138      -0.126      -0.064      -0.003       0.009
```

```
   0.032
    BCD4SPX3       -0.106      -0.055      -0.029       0.108       0.245       0.272
   0.323
    CSEX           -0.838      -0.812      -0.799      -0.729      -0.659      -0.646
  -0.620
    CAGE           -0.049      -0.048      -0.047      -0.044      -0.040      -0.040
  -0.038
    CBVLM2         -0.298      -0.247      -0.222      -0.087       0.048       0.074
   0.124
    CBVLM3         -0.003       0.044       0.067       0.191       0.315       0.338
   0.385
    CBVLM4          0.429       0.476       0.501       0.627       0.754       0.778
   0.826
    CBVLM5          1.252       1.300       1.325       1.456       1.587       1.612
   1.660
    CAZTBL         -0.196      -0.165      -0.150      -0.069       0.011       0.027
   0.057
    CEFVBL         -0.366      -0.339      -0.325      -0.252      -0.180      -0.166
  -0.139

 SQRTCD4  WITH
    S0             -0.451      -0.247      -0.143       0.403       0.948       1.052
   1.256
    S1             -0.221      -0.180      -0.159      -0.049       0.061       0.082
   0.123
    S2             -0.166      -0.146      -0.136      -0.084      -0.031      -0.021
  -0.001

 S0       WITH
    S1             -0.068      -0.044      -0.031       0.034       0.099       0.112
   0.136
    S2             -0.057      -0.046      -0.040      -0.011       0.018       0.024
   0.035

 S1       WITH
    S2              0.003       0.006       0.007       0.013       0.019       0.020
   0.022

 Means
    CBVLM2         -0.005      -0.003      -0.003       0.002       0.007       0.008
   0.009
    CBVLM3         -0.016      -0.014      -0.013      -0.008      -0.003      -0.002
   0.000
    CBVLM4         -0.035      -0.033      -0.032      -0.027      -0.022      -0.021
  -0.019
    CBVLM5         -0.021      -0.019      -0.018      -0.013      -0.009      -0.008
  -0.006
    CAZTBL         -0.052      -0.050      -0.049      -0.045      -0.041      -0.040
  -0.038
    CEFVBL         -0.015      -0.013      -0.012      -0.007      -0.003      -0.002
   0.000
    S0              0.021       0.075       0.103       0.249       0.395       0.423
   0.477
    S1              0.258       0.269       0.275       0.304       0.333       0.338
   0.349
    S2              0.126       0.132       0.135       0.151       0.167       0.170
   0.176

 Intercepts
    SQRTCD4         8.639       8.847       8.954       9.512      10.070      10.177
  10.385

 Variances
```

CBVLM2	0.135	0.135	0.136	0.138	0.141	0.141
0.142						
CBVLM3	0.185	0.186	0.186	0.190	0.193	0.194
0.195						
CBVLM4	0.168	0.169	0.170	0.173	0.176	0.177
0.178						
CBVLM5	0.153	0.154	0.155	0.157	0.160	0.161
0.162						
CAZTBL	0.174	0.175	0.175	0.178	0.180	0.181
0.182						
CEFVBL	0.214	0.215	0.216	0.219	0.222	0.223
0.224						
S0	-0.388	-0.253	-0.184	0.176	0.537	0.606
0.741						
S1	0.015	0.021	0.024	0.041	0.058	0.061
0.067						
S2	0.004	0.005	0.006	0.009	0.013	0.014
0.015						
Residual Variances						
SQRTCD4	5.004	5.401	5.604	6.662	7.721	7.924
8.320						
New/Additional Parameters						
M111	11.322	11.380	11.409	11.563	11.718	11.747
11.805						
M121	12.883	12.939	12.967	13.116	13.265	13.293
13.349						
M141	15.226	15.289	15.321	15.489	15.657	15.689
15.752						
M151	16.771	16.820	16.845	16.975	17.106	17.131
17.179						
M161	18.096	18.148	18.174	18.313	18.451	18.477
18.529						
M181	20.857	20.914	20.943	21.095	21.247	21.276
21.333						
M211	10.987	11.154	11.240	11.687	12.134	12.220
12.387						
M221	12.307	12.458	12.535	12.937	13.339	13.416
13.566						
M241	14.326	14.486	14.569	14.998	15.428	15.510
15.671						
M251	15.950	16.082	16.150	16.503	16.856	16.924
17.056						
M261	17.243	17.387	17.461	17.846	18.231	18.305
18.449						
M281	19.646	19.839	19.938	20.454	20.970	21.069
21.262						
M311	10.708	10.824	10.883	11.194	11.504	11.563
11.679						
M321	11.561	11.669	11.725	12.014	12.303	12.358
12.466						
M341	13.293	13.407	13.466	13.771	14.077	14.136
14.250						
M351	15.070	15.174	15.228	15.508	15.788	15.842
15.947						
M361	16.349	16.465	16.524	16.834	17.143	17.202
17.318						
M381	17.687	17.908	18.021	18.612	19.204	19.317
19.538						
M411	12.000	12.027	12.041	12.112	12.183	12.197
12.223						
M421	12.989	13.012	13.024	13.087	13.150	13.162

```
 13.186
   M441            14.712      14.737      14.750      14.817      14.884      14.896
 14.921
   M451            16.153      16.177      16.189      16.254      16.320      16.332
 16.356
   M461            17.466      17.494      17.508      17.583      17.658      17.672
 17.700
   M481            19.843      19.916      19.953      20.147      20.342      20.379
 20.451
   M511            10.395      10.522      10.587      10.927      11.267      11.332
 11.460
   M521            11.736      11.868      11.935      12.285      12.636      12.703
 12.834
   M541            13.895      14.048      14.126      14.535      14.944      15.022
 15.175
   M551            15.644      15.767      15.830      16.160      16.490      16.554
 16.677
   M561            16.981      17.113      17.180      17.533      17.887      17.954
 18.086
   M581            19.107      19.330      19.444      20.038      20.633      20.746
 20.969
   M112            13.663      13.724      13.756      13.921      14.086      14.117
 14.179
   M122            15.224      15.284      15.314      15.473      15.633      15.663
 15.723
   M142            17.570      17.636      17.670      17.846      18.023      18.057
 18.123
   M152            19.112      19.164      19.191      19.333      19.474      19.501
 19.553
   M162            20.438      20.493      20.521      20.670      20.818      20.847
 20.902
   M182            23.199      23.260      23.291      23.452      23.614      23.645
 23.706
   M212            12.687      12.862      12.951      13.416      13.882      13.971
 14.145
   M222            14.002      14.161      14.242      14.666      15.090      15.171
 15.330
   M242            16.018      16.188      16.275      16.728      17.181      17.267
 17.437
   M252            17.633      17.776      17.849      18.232      18.615      18.689
 18.832
   M262            18.932      19.086      19.165      19.575      19.986      20.065
 20.218
   M282            21.360      21.557      21.658      22.184      22.709      22.810
 23.007
   M312            11.934      12.052      12.112      12.426      12.740      12.800
 12.917
   M322            12.787      12.897      12.953      13.246      13.539      13.595
 13.705
   M342            14.520      14.636      14.695      15.004      15.312      15.371
 15.487
   M352            16.297      16.403      16.457      16.740      17.024      17.078
 17.184
   M362            17.577      17.694      17.753      18.066      18.379      18.438
 18.555
   M382            18.915      19.137      19.251      19.845      20.438      20.552
 20.774
   M412            14.493      14.521      14.535      14.610      14.685      14.699
 14.727
   M422            15.481      15.506      15.518      15.585      15.652      15.665
 15.690
   M442            17.204      17.231      17.244      17.315      17.385      17.399
 17.425
```

M452	18.645	18.670	18.684	18.753	18.822	18.835
18.861						
M462	19.959	19.988	20.003	20.081	20.159	20.174
20.204						
M482	22.340	22.413	22.451	22.645	22.840	22.878
22.951						
M512	12.812	12.943	13.009	13.357	13.706	13.772
13.903						
M522	14.158	14.291	14.360	14.715	15.071	15.139
15.272						
M542	16.320	16.474	16.553	16.965	17.377	17.456
17.610						
M552	18.064	18.190	18.254	18.591	18.927	18.991
19.117						
M562	19.400	19.535	19.604	19.964	20.323	20.392
20.527						
M582	21.533	21.757	21.871	22.468	23.065	23.179
23.403						
M113	16.775	16.850	16.889	17.091	17.294	17.332
17.408						
M123	18.335	18.409	18.446	18.644	18.842	18.879
18.953						
M143	20.686	20.765	20.805	21.017	21.228	21.269
21.348						
M153	22.217	22.285	22.320	22.503	22.686	22.721
22.789						
M163	23.545	23.616	23.652	23.840	24.029	24.065
24.136						
M183	26.311	26.386	26.424	26.623	26.822	26.860
26.935						
M213	15.332	15.778	16.006	17.197	18.389	18.617
19.063						
M223	16.603	17.044	17.270	18.447	19.624	19.850
20.291						
M243	18.649	19.094	19.321	20.509	21.696	21.924
22.368						
M253	20.198	20.632	20.854	22.013	23.172	23.394
23.828						
M263	21.527	21.964	22.188	23.356	24.525	24.748
25.186						
M283	24.052	24.510	24.743	25.965	27.186	27.419
27.877						
M313	15.521	15.662	15.734	16.109	16.484	16.556
16.697						
M323	16.366	16.501	16.569	16.929	17.289	17.358
17.493						
M343	18.100	18.240	18.312	18.687	19.062	19.133
19.274						
M353	19.870	20.002	20.070	20.424	20.777	20.845
20.978						
M363	21.158	21.300	21.372	21.749	22.126	22.199
22.340						
M383	22.542	22.778	22.898	23.528	24.157	24.278
24.514						
M413	19.118	19.161	19.183	19.299	19.414	19.436
19.480						
M423	20.101	20.143	20.164	20.274	20.385	20.406
20.447						
M443	21.827	21.869	21.891	22.004	22.117	22.138
22.180						
M453	23.266	23.308	23.330	23.442	23.553	23.575
23.617						
M463	24.586	24.630	24.652	24.770	24.888	24.911

24.955						
M483	26.999	27.079	27.120	27.334	27.549	27.590
27.670						
M513	16.224	16.407	16.500	16.987	17.475	17.568
17.750						
M523	17.574	17.758	17.853	18.345	18.838	18.932
19.116						
M543	19.761	19.960	20.062	20.595	21.128	21.230
21.429						
M553	21.480	21.657	21.747	22.220	22.694	22.784
22.961						
M563	22.829	23.012	23.105	23.593	24.082	24.175
24.358						
M583	25.030	25.285	25.416	26.098	26.780	26.911
27.166						
M111X	147.313	148.793	149.550	153.505	157.460	158.218
159.698						
M121X	185.062	186.678	187.505	191.822	196.139	196.965
198.581						
M141X	250.953	253.045	254.114	259.701	265.288	266.357
268.449						
M151X	300.287	302.119	303.056	307.948	312.840	313.777
315.609						
M161X	346.537	348.593	349.646	355.140	360.634	361.686
363.743						
M181X	454.083	456.644	457.954	464.795	471.636	472.946
475.506						
M211X	97.402	115.153	124.233	171.651	219.070	228.150
245.901						
M221X	128.391	146.090	155.143	202.421	249.699	258.752
276.450						
M241X	185.178	203.069	212.221	260.014	307.807	316.959
334.851						
M251X	232.831	250.661	259.781	307.410	355.039	364.160
381.990						
M261X	277.946	296.020	305.265	353.545	401.825	411.070
429.144						
M281X	373.972	392.970	402.687	453.436	504.184	513.901
532.899						
M311X	129.967	133.973	136.022	146.724	157.427	159.476
163.482						
M321X	148.818	152.868	154.939	165.757	176.574	178.646
182.696						
M341X	192.386	196.855	199.141	211.079	223.017	225.303
229.772						
M351X	243.002	247.527	249.842	261.930	274.018	276.332
280.857						
M361X	284.003	288.975	291.518	304.800	318.082	320.626
325.598						
M381X	331.309	340.044	344.513	367.846	391.180	395.648
404.383						
M411X	167.829	169.077	169.716	173.050	176.384	177.022
178.270						
M421X	192.458	193.693	194.325	197.626	200.926	201.558
202.793						
M441X	240.416	241.724	242.393	245.886	249.380	250.049
251.356						
M451X	284.960	286.299	286.984	290.560	294.137	294.822
296.161						
M461X	329.403	330.866	331.615	335.523	339.431	340.180
341.643						
M481X	419.205	422.328	423.926	432.268	440.611	442.209
445.332						

M511X	122.344	125.557	127.201	135.783	144.365	146.009
149.221						
M521X	152.049	155.696	157.562	167.304	177.046	178.912
182.558						
M541X	207.537	212.343	214.801	227.638	240.476	242.934
247.739						
M551X	259.187	263.574	265.818	277.536	289.255	291.499
295.886						
M561X	302.830	307.843	310.408	323.799	337.190	339.755
344.768						
M581X	379.277	388.511	393.234	417.900	442.567	447.290
456.524						
M112X	205.975	207.793	208.723	213.580	218.437	219.367
221.186						
M122X	251.024	252.982	253.984	259.216	264.448	265.450
267.409						
M142X	327.938	330.411	331.676	338.283	344.891	346.156
348.629						
M152X	384.417	386.597	387.713	393.537	399.361	400.477
402.657						
M162X	436.883	439.310	440.551	447.034	453.517	454.759
457.186						
M182X	557.379	560.350	561.870	569.808	577.745	579.265
582.237						
M212X	139.850	157.832	167.031	215.066	263.102	272.300
290.282						
M222X	175.175	193.101	202.271	250.157	298.044	307.214
325.140						
M242X	238.810	256.997	266.300	314.882	363.464	372.767
390.953						
M252X	291.686	309.807	319.076	367.482	415.888	425.157
443.278						
M262X	341.269	359.676	369.092	418.262	467.433	476.849
495.256						
M282X	445.921	465.346	475.283	527.174	579.066	589.002
608.428						
M312X	158.202	162.417	164.573	175.831	187.090	189.246
193.460						
M322X	179.118	183.366	185.539	196.885	208.231	210.403
214.651						
M342X	226.893	231.590	233.993	246.539	259.085	261.488
266.184						
M352X	281.840	286.581	289.006	301.670	314.335	316.760
321.500						
M362X	325.942	331.169	333.843	347.808	361.772	364.446
369.674						
M382X	376.434	385.711	390.456	415.238	440.019	444.765
454.041						
M412X	234.163	235.512	236.202	239.804	243.406	244.096
245.445						
M422X	263.695	265.024	265.704	269.253	272.802	273.482
274.810						
M442X	320.220	321.639	322.365	326.155	329.945	330.671
332.090						
M452X	371.917	373.374	374.120	378.013	381.906	382.651
384.108						
M462X	422.911	424.513	425.333	429.614	433.895	434.715
436.318						
M482X	524.609	528.090	529.871	539.171	548.470	550.251
553.732						
M512X	178.862	182.672	184.621	194.799	204.976	206.925
210.735						
M522X	215.098	219.358	221.538	232.920	244.302	246.481

250.742						
M542X	281.034	286.570	289.401	304.188	318.975	321.806
327.341						
M552X	341.008	346.023	348.589	361.987	375.385	377.950
382.966						
M562X	391.055	396.761	399.680	414.923	430.166	433.085
438.791						
M582X	477.978	488.311	493.596	521.198	548.799	554.084
564.417						
M113X	300.863	303.503	304.854	311.907	318.961	320.311
322.952						
M123X	355.580	358.403	359.847	367.389	374.930	376.374
379.198						
M143X	447.269	450.672	452.413	461.503	470.594	472.335
475.738						
M153X	512.936	516.102	517.722	526.181	534.640	536.260
539.426						
M163X	573.732	577.181	578.945	588.159	597.372	599.136
602.585						
M183X	711.581	715.644	717.723	728.577	739.431	741.509
745.573						
M213X	245.165	265.641	276.116	330.816	385.516	395.990
416.467						
M223X	287.875	308.790	319.488	375.356	431.225	441.923
462.838						
M243X	363.091	385.224	396.546	455.671	514.797	526.119
548.252						
M253X	424.726	447.419	459.028	519.649	580.270	591.879
614.572						
M263X	481.599	505.264	517.369	580.586	643.803	655.908
679.573						
M283X	599.635	625.833	639.235	709.220	779.205	792.606
818.805						
M313X	257.925	263.425	266.239	280.931	295.623	298.437
303.937						
M323X	284.713	290.287	293.138	308.026	322.914	325.765
331.339						
M343X	344.725	350.918	354.086	370.628	387.170	390.338
396.530						
M353X	412.097	418.422	421.657	438.553	455.448	458.684
465.008						
M363X	465.473	472.401	475.946	494.455	512.964	516.508
523.437						
M383X	526.935	538.423	544.299	574.987	605.675	611.551
623.039						
M413X	390.608	392.566	393.568	398.800	404.033	405.035
406.993						
M423X	429.166	431.134	432.140	437.395	442.651	443.657
445.624						
M443X	501.614	503.743	504.831	510.517	516.203	517.292
519.420						
M453X	566.559	568.782	569.919	575.858	581.797	582.934
585.157						
M463X	629.789	632.211	633.450	639.921	646.392	647.631
650.053						
M483X	754.671	759.178	761.484	773.523	785.563	787.868
792.375						
M513X	278.025	284.461	287.753	304.945	322.137	325.429
331.865						
M523X	323.532	330.559	334.153	352.924	371.695	375.289
382.316						
M543X	405.084	413.557	417.891	440.523	463.156	467.490
475.962						

M553X	476.059	484.203	488.369	510.124	531.879	536.045
544.188						
M563X	535.786	544.690	549.244	573.027	596.811	601.365
610.268						
M583X	640.546	654.158	661.121	697.484	733.848	740.811
754.423						
NS_1_25	-27.693	-25.745	-24.749	-19.544	-14.340	-13.343
-11.395						
NS_1_50	-14.384	-12.332	-11.283	-5.804	-0.324	0.725
2.776						
NS_1_100	3.392	5.884	7.158	13.815	20.471	21.745
24.237						
NS_1_150	7.767	10.067	11.244	17.387	23.531	24.708
27.008						
NS_1_200	8.964	11.511	12.814	19.617	26.420	27.723
30.269						
NS_1_300	15.631	19.670	21.736	32.526	43.316	45.382
49.421						
NS_2_25	-35.752	-33.474	-32.309	-26.224	-20.139	-18.974
-16.696						
NS_2_50	-20.017	-17.631	-16.410	-10.036	-3.662	-2.442
-0.056						
NS_2_100	0.085	2.964	4.437	12.128	19.820	21.293
24.172						
NS_2_150	4.414	7.070	8.429	15.524	22.620	23.979
26.635						
NS_2_200	5.156	8.088	9.588	17.420	25.252	26.752
29.684						
NS_2_300	11.497	16.073	18.413	30.637	42.861	45.202
49.778						
NS_3_25	-100.714	-97.409	-95.719	-86.893	-78.067	-76.377
-73.073						
NS_3_50	-84.491	-81.028	-79.257	-70.007	-60.757	-58.985
-55.523						
NS_3_100	-65.930	-61.886	-59.817	-49.014	-38.211	-36.142
-32.098						
NS_3_150	-66.004	-62.101	-60.104	-49.677	-39.250	-37.254
-33.351						
NS_3_200	-69.493	-65.254	-63.086	-51.762	-40.439	-38.271
-34.032						
NS_3_300	-70.328	-64.260	-61.156	-44.946	-28.736	-25.632
-19.564						
NE_1_25	-11.056	-6.792	-4.610	6.781	18.172	20.353
24.618						
NE_1_50	7.864	12.215	14.441	26.065	37.689	39.915
44.266						
NE_1_100	28.009	32.937	35.458	48.622	61.786	64.307
69.235						
NE_1_150	25.604	30.485	32.981	46.018	59.055	61.552
66.432						
NE_1_200	27.828	33.210	35.963	50.340	64.716	67.469
72.851						
NE_1_300	58.861	67.967	72.625	96.948	121.272	125.930
135.035						
NE_2_25	18.589	23.170	25.513	37.749	49.985	52.328
56.909						
NE_2_50	42.816	47.482	49.869	62.332	74.795	77.181
81.847						
NE_2_100	69.577	74.877	77.588	91.745	105.901	108.612
113.912						
NE_2_150	70.055	75.270	77.937	91.867	105.797	108.464
113.678						
NE_2_200	75.124	80.886	83.833	99.226	114.619	117.567

```
 123.329
   NE_2_300       113.818     123.561     128.544     154.570     180.596     185.580
 195.323
   NE_3_25          5.501      11.592      14.707      30.976      47.245      50.361
  56.451
   NE_3_50         33.283      39.518      42.707      59.363      76.018      79.207
  85.442
   NE_3_100        61.356      68.413      72.023      90.875     109.727     113.337
 120.395
   NE_3_150        58.054      65.124      68.741      87.628     106.515     110.132
 117.202
   NE_3_200        61.330      69.069      73.028      93.703     114.379     118.338
 126.077
   NE_3_300       102.610     114.798     121.033     153.590     186.148     192.382
 204.570
   NW_1_25        -92.652     -74.840     -65.728     -18.146      29.436      38.547
  56.360
   NW_1_50        -84.932     -67.161     -58.071     -10.599      36.873      45.963
  63.734
   NW_1_100       -75.653     -57.642     -48.428      -0.313      47.802      57.015
  75.027
   NW_1_150       -74.433     -56.510     -47.341       0.538      48.417      57.585
  75.508
   NW_1_200       -74.493     -56.302     -46.997       1.595      50.188      59.493
  77.683
   NW_1_300       -68.817     -49.649     -39.844      11.359      62.563      72.367
  91.535
   NW_2_25        -77.082     -59.009     -49.764      -1.486      46.793      56.037
  74.110
   NW_2_50        -66.362     -48.331     -39.108       9.059      57.226      66.449
  84.480
   NW_2_100       -53.361     -35.009     -25.622      23.401      72.425      81.812
 100.164
   NW_2_150       -50.285     -32.035     -22.699      26.055      74.809      84.144
 102.395
   NW_2_200       -48.889     -30.322     -20.825      28.772      78.369      87.866
 106.432
   NW_2_300       -39.557     -19.908      -9.856      42.634      95.124     105.175
 124.824
   NW_3_25       -105.260     -84.616     -74.056     -18.909      36.239      46.799
  67.443
   NW_3_50        -96.229     -75.128     -64.335      -7.968      48.399      59.193
  80.293
   NW_3_100       -87.824     -65.433     -53.980       5.832      65.644      77.097
  99.488
   NW_3_150       -89.310     -66.397     -54.676       6.532      67.740      79.461
 102.373
   NW_3_200       -92.464     -68.548     -56.315       7.573      71.460      83.694
 107.610
   NW_3_300       -91.532     -65.022     -51.461      19.357      90.175     103.736
 130.247
   NA_1_25          2.948       6.480       8.287      17.722      27.158      28.965
  32.497
   NA_1_50          7.852      11.836      13.874      24.518      35.161      37.199
  41.184
   NA_1_100        10.153      15.391      18.070      32.063      46.055      48.734
  53.972
   NA_1_150        10.555      15.302      17.730      30.411      43.093      45.521
  50.268
   NA_1_200         8.718      14.126      16.893      31.341      45.789      48.555
  53.964
   NA_1_300         6.856      16.428      21.324      46.894      72.464      77.361
  86.933
```

NA_2_25	1.153	5.367	7.523	18.781	30.039	32.195
36.410						
NA_2_50	6.707	11.391	13.786	26.297	38.807	41.202
45.886						
NA_2_100	8.754	14.812	17.911	34.096	50.280	53.379
59.437						
NA_2_150	8.712	14.172	16.965	31.550	46.135	48.928
54.388						
NA_2_200	6.227	12.415	15.581	32.111	48.642	51.807
57.995						
NA_2_300	3.692	14.431	19.924	48.610	77.297	82.790
93.529						
NA_3_25	-22.098	-15.151	-11.597	6.962	25.522	29.076
36.023						
NA_3_50	-17.178	-9.613	-5.744	14.465	34.673	38.543
46.107						
NA_3_100	-17.186	-8.061	-3.394	20.980	45.354	50.021
59.145						
NA_3_150	-20.451	-11.723	-7.258	16.057	39.373	43.837
52.565						
NA_3_200	-24.752	-15.217	-10.340	15.131	40.602	45.479
55.014						
NA_3_300	-28.271	-14.079	-6.819	31.092	69.004	76.264
90.456						
SE_1_25	8.750	12.952	15.101	26.325	37.549	39.698
43.900						
SE_1_50	14.137	18.376	20.545	31.869	43.193	45.361
49.600						
SE_1_100	15.310	19.971	22.356	34.808	47.260	49.644
54.306						
SE_1_150	8.871	13.595	16.011	28.631	41.250	43.667
48.391						
SE_1_200	9.037	14.221	16.873	30.723	44.572	47.224
52.408						
SE_1_300	25.674	34.937	39.676	64.422	89.168	93.907
103.170						
SE_2_25	45.437	49.868	52.135	63.973	75.811	78.078
82.509						
SE_2_50	53.729	58.185	60.464	72.368	84.272	86.551
91.007						
SE_2_100	59.072	63.984	66.496	79.616	92.736	95.249
100.160						
SE_2_150	55.576	60.541	63.080	76.342	89.605	92.144
97.109						
SE_2_200	58.934	64.402	67.199	81.806	96.414	99.211
104.679						
SE_2_300	82.554	92.447	97.507	123.933	150.359	155.419
165.312						
SE_3_25	93.418	99.264	102.254	117.869	133.485	136.475
142.321						
SE_3_50	104.621	110.538	113.564	129.369	145.174	148.201
154.117						
SE_3_100	112.478	119.031	122.383	139.889	157.395	160.747
167.300						
SE_3_150	109.244	115.952	119.384	137.305	155.227	158.658
165.367						
SE_3_200	114.763	122.103	125.858	145.466	165.074	168.829
176.169						
SE_3_300	146.994	159.316	165.620	198.536	231.453	237.757
250.079						
SW_1_25	-73.043	-55.247	-46.143	1.398	48.939	58.043
75.839						
SW_1_50	-79.012	-61.269	-52.193	-4.795	42.602	51.679

69.422							
	SW_1_100	-89.167	-71.227	-62.051	-14.128	33.795	42.972
60.912							
	SW_1_150	-91.638	-73.758	-64.612	-16.850	30.913	40.059
57.939							
	SW_1_200	-93.862	-75.731	-66.456	-18.022	30.412	39.687
57.818							
	SW_1_300	-101.671	-82.425	-72.580	-21.167	30.245	40.090
59.336							
	SW_2_25	-50.699	-32.664	-23.439	24.738	72.915	82.140
100.175							
	SW_2_50	-56.101	-38.123	-28.928	19.095	67.118	76.314
94.291							
	SW_2_100	-65.032	-46.790	-37.458	11.273	60.004	69.336
87.578							
	SW_2_150	-65.508	-47.329	-38.031	10.530	59.092	68.390
86.569							
	SW_2_200	-65.925	-47.451	-38.000	11.352	60.704	70.154
88.629							
	SW_2_300	-70.522	-50.794	-40.703	11.996	64.696	74.787
94.515							
	SW_3_25	-18.066	2.506	13.029	67.985	122.940	133.463
154.035							
	SW_3_50	-25.835	-4.827	5.920	62.039	118.158	128.904
149.912							
	SW_3_100	-38.163	-15.928	-4.553	54.846	114.245	125.619
147.855							
	SW_3_150	-39.168	-16.366	-4.702	56.209	117.121	128.785
151.587							
	SW_3_200	-40.166	-16.378	-4.210	59.335	122.880	135.049
158.837							
	SW_3_300	-46.871	-20.292	-6.696	64.304	135.303	148.899
175.478							
	SA_1_25	22.834	26.284	28.049	37.267	46.484	48.249
51.700							
	SA_1_50	14.205	18.058	20.029	30.322	40.614	42.585
46.438							
	SA_1_100	-2.590	2.392	4.940	18.248	31.556	34.104
39.086							
	SA_1_150	-6.169	-1.581	0.767	13.024	25.282	27.629
32.217							
	SA_1_200	-10.121	-4.899	-2.227	11.724	25.675	28.347
33.569							
	SA_1_300	-26.374	-16.634	-11.651	14.368	40.387	45.370
55.110							
	SA_2_25	28.082	32.128	34.197	45.005	55.813	57.883
61.929							
	SA_2_50	17.653	22.119	24.403	36.333	48.263	50.547
55.013							
	SA_2_100	-1.940	3.775	6.699	21.967	37.235	40.159
45.874							
	SA_2_150	-5.827	-0.603	2.070	16.026	29.982	32.654
37.878							
	SA_2_200	-10.098	-4.172	-1.140	14.691	30.523	33.554
39.481							
	SA_2_300	-27.594	-16.700	-11.128	17.973	47.074	52.646
63.540							
	SA_3_25	65.700	72.431	75.874	93.856	111.837	115.280
122.012							
	SA_3_50	53.938	61.238	64.972	84.471	103.971	107.705
115.004							
	SA_3_100	33.448	42.185	46.654	69.994	93.333	97.803
106.540							

SA_3_150	30.415	38.859	43.178	65.734	88.290	92.610	101.053
SA_3_200	28.297	37.524	42.244	66.893	91.543	96.263	105.490
SA_3_300	16.097	30.427	37.757	76.039	114.320	121.651	135.981
EW_1_25	-101.026	-82.833	-73.526	-24.927	23.672	32.978	51.171
EW_1_50	-112.580	-94.431	-85.147	-36.664	11.819	21.103	39.252
EW_1_100	-126.032	-107.600	-98.172	-48.935	0.301	9.730	28.161
EW_1_150	-122.377	-103.993	-94.589	-45.480	3.629	13.032	31.416
EW_1_200	-127.100	-108.367	-98.785	-48.744	1.296	10.878	29.611
EW_1_300	-172.991	-152.096	-141.407	-85.589	-29.771	-19.083	1.812
EW_2_25	-116.465	-98.002	-88.557	-39.235	10.087	19.532	37.995
EW_2_50	-130.298	-111.884	-102.464	-53.273	-4.082	5.338	23.753
EW_2_100	-146.864	-128.092	-118.489	-68.343	-18.197	-8.594	10.178
EW_2_150	-144.104	-125.387	-115.812	-65.812	-15.811	-6.237	12.481
EW_2_200	-150.433	-131.313	-121.532	-70.455	-19.377	-9.597	9.524
EW_2_300	-201.914	-180.403	-169.400	-111.937	-54.474	-43.470	-21.959
EW_3_25	-138.544	-117.348	-106.506	-49.885	6.736	17.579	38.775
EW_3_50	-157.829	-136.194	-125.126	-67.331	-9.535	1.533	23.168
EW_3_100	-181.136	-158.163	-146.411	-85.043	-23.675	-11.924	11.049
EW_3_150	-179.594	-156.046	-144.001	-81.096	-18.192	-6.146	17.402
EW_3_200	-189.232	-164.584	-151.975	-86.131	-20.286	-7.678	16.971
EW_3_300	-253.846	-225.250	-210.622	-134.233	-57.844	-43.216	-14.620
EA_1_25	-10.460	-5.344	-2.727	10.941	24.610	27.227	32.343
EA_1_50	-24.267	-18.835	-16.057	-1.547	12.962	15.741	21.172
EA_1_100	-43.949	-37.401	-34.051	-16.559	0.932	4.282	10.830
EA_1_150	-41.901	-35.615	-32.399	-15.607	1.186	4.401	10.688
EA_1_200	-48.462	-41.418	-37.815	-18.999	-0.182	3.421	10.465
EA_1_300	-103.165	-90.468	-83.973	-50.054	-16.135	-9.640	3.057
EA_2_25	-42.638	-36.979	-34.084	-18.968	-3.851	-0.956	4.702
EA_2_50	-61.112	-55.116	-52.050	-36.035	-20.020	-16.954	-10.959
EA_2_100	-87.945	-80.702	-76.997	-57.649	-38.301	-34.596	-27.353
EA_2_150	-89.107	-82.224	-78.703	-60.317	-41.930	-38.409	-31.526
EA_2_200	-99.406	-91.686	-87.737	-67.115	-46.493	-42.544	

```
-34.824
   EA_2_300      -163.981    -150.110    -143.015    -105.960     -68.905     -61.810
-47.938
   EA_3_25        -59.322     -50.881     -46.563     -24.014      -1.465       2.853
 11.294
   EA_3_50        -82.320     -73.374     -68.797     -44.898     -20.999     -16.423
 -7.476
   EA_3_100      -113.722    -103.244     -97.885     -69.895     -41.906     -36.546
-26.069
   EA_3_150      -114.631    -104.336     -99.070     -71.571     -44.071     -38.805
-28.511
   EA_3_200      -125.691    -114.426    -108.664     -78.572     -48.481     -42.719
-31.454
   EA_3_300      -196.942    -179.145    -170.041    -122.498     -74.954     -65.851
-48.053
   WA_1_25        -39.572     -21.536     -12.310      35.869      84.047      93.273
111.309
   WA_1_50        -40.446     -22.381     -13.140      35.117      83.374      92.615
110.679
   WA_1_100       -45.086     -26.567     -17.094      32.376      81.846      91.319
109.837
   WA_1_150       -46.906     -28.550     -19.161      29.874      78.908      88.298
106.654
   WA_1_200       -48.686     -29.935     -20.343      29.746      79.835      89.427
108.177
   WA_1_300       -52.788     -31.673     -20.871      35.535      91.942     102.743
123.858
   WA_2_25        -56.595     -38.219     -28.820      20.267      69.354      78.754
 97.130
   WA_2_50        -59.802     -41.384     -31.963      17.238      66.438      75.859
 94.277
   WA_2_100       -68.786     -49.785     -40.065      10.694      61.453      71.173
 90.174
   WA_2_150       -73.119     -54.325     -44.711       5.495      55.701      65.315
 84.110
   WA_2_200       -77.241     -57.976     -48.122       3.340      54.801      64.655
 83.920
   WA_2_300       -86.020     -64.026     -52.775       5.977      64.729      75.979
 97.973
   WA_3_25        -63.887     -42.429     -31.452      25.871      83.194      94.171
115.629
   WA_3_50        -69.823     -47.768     -36.485      22.432      81.350      92.632
114.688
   WA_3_100       -83.952     -60.260     -48.141      15.148      78.437      90.556
114.248
   WA_3_150       -91.305     -67.199     -54.869       9.525      73.919      86.250
110.355
   WA_3_200       -98.189     -72.908     -59.976       7.558      75.092      88.024
113.305
   WA_3_300      -111.739     -82.219     -67.120      11.735      90.590     105.690
135.209
   U1              13.414      14.173      14.561      16.586      18.612      19.000
 19.758
   U2             -42.921     -25.610     -16.755      29.487      75.730      84.585
101.896
   U3               3.803       6.912       8.502      16.805      25.108      26.698
 29.806
   U4              18.381      19.463      20.017      22.910      25.802      26.356
 27.439
   U5               6.103       7.913       8.838      13.671      18.503      19.428
 21.238
```

TECHNICAL 1 OUTPUT

PARAMETER SPECIFICATION FOR NA WITHIN

NU	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

NU	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				
CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2

CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0	0	0	0	0

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0	0	0	0	0

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0

CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0

CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0				
S1	0	0			
S2	0	0	0		
CBVLM2	0	0	0	0	
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0				
CBVLM5	0	0			
CAZTBL	0	0	0		
CEFVBL	0	0	0	0	
SQRTCD4	0	0	0	0	1
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0

BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR NA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0

LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				
CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0

CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	2	3	4	5	6

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	7	8	9	10	11

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0

CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	12	13
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	14	15	16	17	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	18	19
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	20	21	22
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

	PSI S0	S1	S2	CBVLM2	CBVLM3
S0	23				
S1	24	25			
S2	26	27	28		
CBVLM2	0	0	0	29	
CBVLM3	0	0	0	0	30
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	35	36	37	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

	PSI CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	31				
CBVLM5	0	32			
CAZTBL	0	0	33		
CEFVBL	0	0	0	34	
SQRTCD4	0	0	0	0	38
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR WA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				

CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0	0	0	0	0

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0	0	0	0	0

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0

LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0				
S1	0	0			
S2	0	0	0		
CBVLM2	0	0	0	0	
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0				
CBVLM5	0	0			
CAZTBL	0	0	0		
CEFVBL	0	0	0	0	
SQRTCD4	0	0	0	0	39
LS0	0	0	0	0	0

LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR WA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0

LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0

BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				
CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	40	41	42	5	6

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	7	8	9	10	43

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	12	13
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	14	15	16	17	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0

CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	18	19
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	44	45	46
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	47				
S1	48	49			
S2	50	51	52		
CBVLM2	0	0	0	29	
CBVLM3	0	0	0	0	30
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	53	54	55	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	31				
CBVLM5	0	32			
CAZTBL	0	0	33		
CEFVBL	0	0	0	34	
SQRTCD4	0	0	0	0	56
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR EA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3

CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0

CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				
CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0	0	0	0	0

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0	0	0	0	0

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0

BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0				
S1	0	0			
S2	0	0	0		
CBVLM2	0	0	0	0	
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0

LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0				
CBVLM5	0	0			
CAZTBL	0	0	0		
CEFVBL	0	0	0	0	
SQRTCD4	0	0	0	0	57
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR EA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0

BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				
CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			

BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	58	59	60	5	6

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	7	8	9	10	61

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	12	13
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0

CEFVBL	0	0	0	0	0
SQRTCD4	14	15	16	17	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	18	19
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	62	63	64
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	65				
S1	66	67			

S2	68	69	70		
CBVLM2	0	0	0	29	
CBVLM3	0	0	0	0	30
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	71	72	73	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	31				
CBVLM5	0	32			
CAZTBL	0	0	33		
CEFVBL	0	0	0	34	
SQRTCD4	0	0	0	0	74
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR SA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL

1	0	0	0	0	0

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0

CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				
CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0

BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0	0	0	0	0

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0	0	0	0	0

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4

S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0

BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0				
S1	0	0			
S2	0	0	0		
CBVLM2	0	0	0	0	
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0				
CBVLM5	0	0			
CAZTBL	0	0	0		
CEFVBL	0	0	0	0	
SQRTCD4	0	0	0	0	75
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	

BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR SA BETWEEN

	NU				
	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

	NU				
	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

	NU				
	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

	LAMBDA				
	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

	LAMBDA				
	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				
CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2

CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	76	77	78	5	6

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	7	8	9	10	79

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	12	13
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0

CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	14	15	16	17	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	18	19
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0

CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	80	81	82
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	83				
S1	84	85			
S2	86	87	88		
CBVLM2	0	0	0	29	
CBVLM3	0	0	0	0	30
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	89	90	91	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	31				
CBVLM5	0	32			
CAZTBL	0	0	33		
CEFVBL	0	0	0	34	
SQRTCD4	0	0	0	0	92
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0

BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR ASIA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0

LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				
CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0

CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0	0	0	0	0

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0	0	0	0	0

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0

CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0				
S1	0	0			
S2	0	0	0		
CBVLM2	0	0	0	0	
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0				
CBVLM5	0	0			
CAZTBL	0	0	0		
CEFVBL	0	0	0	0	
SQRTCD4	0	0	0	0	93
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR ASIA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0	0	0	0	0

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0	0	0	0	0

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0	0	0

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	0	0	0
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0				

CBVLM3	0	0			
CBVLM4	0	0	0		
CBVLM5	0	0	0	0	
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0				
SQRTCD4	0	0			
LS0	0	0	0		
LS1	0	0	0	0	
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0				
CAGE	0	0			
BCD4SPX1	0	0	0		
BCD4SPX2	0	0	0	0	
BCD4SPX3	0	0	0	0	0

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	94	95	96	5	6

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	7	8	9	10	97

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0	0	0	0	0

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0	0	0

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	12	13
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	14	15	16	17	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0	0	0	0	0
S1	0	0	0	0	0
S2	0	0	0	0	0
CBVLM2	0	0	0	0	0
CBVLM3	0	0	0	0	0
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	0	0	0	18	19
LS0	0	0	0	0	0
LS1	0	0	0	0	0

LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0	0	0
S1	0	0	0
S2	0	0	0
CBVLM2	0	0	0
CBVLM3	0	0	0
CBVLM4	0	0	0
CBVLM5	0	0	0
CAZTBL	0	0	0
CEFVBL	0	0	0
SQRTCD4	98	99	100
LS0	0	0	0
LS1	0	0	0
LS2	0	0	0
CSEX	0	0	0
CAGE	0	0	0
BCD4SPX1	0	0	0
BCD4SPX2	0	0	0
BCD4SPX3	0	0	0

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	101				
S1	102	103			
S2	104	105	106		
CBVLM2	0	0	0	29	
CBVLM3	0	0	0	0	30
CBVLM4	0	0	0	0	0
CBVLM5	0	0	0	0	0
CAZTBL	0	0	0	0	0
CEFVBL	0	0	0	0	0
SQRTCD4	107	108	109	0	0
LS0	0	0	0	0	0
LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	31				
CBVLM5	0	32			
CAZTBL	0	0	33		
CEFVBL	0	0	0	34	
SQRTCD4	0	0	0	0	110
LS0	0	0	0	0	0

LS1	0	0	0	0	0
LS2	0	0	0	0	0
CSEX	0	0	0	0	0
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0				
LS1	0	0			
LS2	0	0	0		
CSEX	0	0	0	0	
CAGE	0	0	0	0	0
BCD4SPX1	0	0	0	0	0
BCD4SPX2	0	0	0	0	0
BCD4SPX3	0	0	0	0	0

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0		
BCD4SPX2	0	0	
BCD4SPX3	0	0	0

PARAMETER SPECIFICATION FOR THE ADDITIONAL PARAMETERS

NEW/ADDITIONAL PARAMETERS

	M111	M121	M141	M151	M161
1	111	112	113	114	115

NEW/ADDITIONAL PARAMETERS

	M181	M211	M221	M241	M251
1	116	117	118	119	120

NEW/ADDITIONAL PARAMETERS

	M261	M281	M311	M321	M341
1	121	122	123	124	125

NEW/ADDITIONAL PARAMETERS

	M351	M361	M381	M411	M421
1	126	127	128	129	130

NEW/ADDITIONAL PARAMETERS

	M441	M451	M461	M481	M511
1	131	132	133	134	135

	NEW/ADDITIONAL PARAMETERS				
	M521	M541	M551	M561	M581
1	136	137	138	139	140

	NEW/ADDITIONAL PARAMETERS				
	M112	M122	M142	M152	M162
1	141	142	143	144	145

	NEW/ADDITIONAL PARAMETERS				
	M182	M212	M222	M242	M252
1	146	147	148	149	150

	NEW/ADDITIONAL PARAMETERS				
	M262	M282	M312	M322	M342
1	151	152	153	154	155

	NEW/ADDITIONAL PARAMETERS				
	M352	M362	M382	M412	M422
1	156	157	158	159	160

	NEW/ADDITIONAL PARAMETERS				
	M442	M452	M462	M482	M512
1	161	162	163	164	165

	NEW/ADDITIONAL PARAMETERS				
	M522	M542	M552	M562	M582
1	166	167	168	169	170

	NEW/ADDITIONAL PARAMETERS				
	M113	M123	M143	M153	M163
1	171	172	173	174	175

	NEW/ADDITIONAL PARAMETERS				
	M183	M213	M223	M243	M253
1	176	177	178	179	180

	NEW/ADDITIONAL PARAMETERS				
	M263	M283	M313	M323	M343
1	181	182	183	184	185

	NEW/ADDITIONAL PARAMETERS				
	M353	M363	M383	M413	M423

1	186	187	188	189	190

	NEW/ADDITIONAL PARAMETERS				
	M443	M453	M463	M483	M513
1	191	192	193	194	195

	NEW/ADDITIONAL PARAMETERS				
	M523	M543	M553	M563	M583
1	196	197	198	199	200

	NEW/ADDITIONAL PARAMETERS				
	M111X	M121X	M141X	M151X	M161X
1	201	202	203	204	205

	NEW/ADDITIONAL PARAMETERS				
	M181X	M211X	M221X	M241X	M251X
1	206	207	208	209	210

	NEW/ADDITIONAL PARAMETERS				
	M261X	M281X	M311X	M321X	M341X
1	211	212	213	214	215

	NEW/ADDITIONAL PARAMETERS				
	M351X	M361X	M381X	M411X	M421X
1	216	217	218	219	220

	NEW/ADDITIONAL PARAMETERS				
	M441X	M451X	M461X	M481X	M511X
1	221	222	223	224	225

	NEW/ADDITIONAL PARAMETERS				
	M521X	M541X	M551X	M561X	M581X
1	226	227	228	229	230

	NEW/ADDITIONAL PARAMETERS				
	M112X	M122X	M142X	M152X	M162X
1	231	232	233	234	235

	NEW/ADDITIONAL PARAMETERS				
	M182X	M212X	M222X	M242X	M252X
1	236	237	238	239	240

	NEW/ADDITIONAL PARAMETERS				
	M262X	M282X	M312X	M322X	M342X
1	241	242	243	244	245

	NEW/ADDITIONAL PARAMETERS				
	M352X	M362X	M382X	M412X	M422X
1	246	247	248	249	250

	NEW/ADDITIONAL PARAMETERS				
	M442X	M452X	M462X	M482X	M512X
1	251	252	253	254	255

	NEW/ADDITIONAL PARAMETERS				
	M522X	M542X	M552X	M562X	M582X
1	256	257	258	259	260

	NEW/ADDITIONAL PARAMETERS				
	M113X	M123X	M143X	M153X	M163X
1	261	262	263	264	265

	NEW/ADDITIONAL PARAMETERS				
	M183X	M213X	M223X	M243X	M253X
1	266	267	268	269	270

	NEW/ADDITIONAL PARAMETERS				
	M263X	M283X	M313X	M323X	M343X
1	271	272	273	274	275

	NEW/ADDITIONAL PARAMETERS				
	M353X	M363X	M383X	M413X	M423X
1	276	277	278	279	280

	NEW/ADDITIONAL PARAMETERS				
	M443X	M453X	M463X	M483X	M513X
1	281	282	283	284	285

	NEW/ADDITIONAL PARAMETERS				
	M523X	M543X	M553X	M563X	M583X
1	286	287	288	289	290

	NEW/ADDITIONAL PARAMETERS				
	NS_1_25	NS_1_50	NS_1_100	NS_1_150	NS_1_200

1	291	292	293	294	295

	NEW/ADDITIONAL PARAMETERS				
	NS_1_300	NS_2_25	NS_2_50	NS_2_100	NS_2_150
1	296	297	298	299	300

	NEW/ADDITIONAL PARAMETERS				
	NS_2_200	NS_2_300	NS_3_25	NS_3_50	NS_3_100
1	301	302	303	304	305

	NEW/ADDITIONAL PARAMETERS				
	NS_3_150	NS_3_200	NS_3_300	NE_1_25	NE_1_50
1	306	307	308	309	310

	NEW/ADDITIONAL PARAMETERS				
	NE_1_100	NE_1_150	NE_1_200	NE_1_300	NE_2_25
1	311	312	313	314	315

	NEW/ADDITIONAL PARAMETERS				
	NE_2_50	NE_2_100	NE_2_150	NE_2_200	NE_2_300
1	316	317	318	319	320

	NEW/ADDITIONAL PARAMETERS				
	NE_3_25	NE_3_50	NE_3_100	NE_3_150	NE_3_200
1	321	322	323	324	325

	NEW/ADDITIONAL PARAMETERS				
	NE_3_300	NW_1_25	NW_1_50	NW_1_100	NW_1_150
1	326	327	328	329	330

	NEW/ADDITIONAL PARAMETERS				
	NW_1_200	NW_1_300	NW_2_25	NW_2_50	NW_2_100
1	331	332	333	334	335

	NEW/ADDITIONAL PARAMETERS				
	NW_2_150	NW_2_200	NW_2_300	NW_3_25	NW_3_50
1	336	337	338	339	340

	NEW/ADDITIONAL PARAMETERS				
	NW_3_100	NW_3_150	NW_3_200	NW_3_300	NA_1_25
1	341	342	343	344	345

	NEW/ADDITIONAL PARAMETERS				
	NA_1_50	NA_1_100	NA_1_150	NA_1_200	NA_1_300
1	346	347	348	349	350

	NEW/ADDITIONAL PARAMETERS				
	NA_2_25	NA_2_50	NA_2_100	NA_2_150	NA_2_200
1	351	352	353	354	355

	NEW/ADDITIONAL PARAMETERS				
	NA_2_300	NA_3_25	NA_3_50	NA_3_100	NA_3_150
1	356	357	358	359	360

	NEW/ADDITIONAL PARAMETERS				
	NA_3_200	NA_3_300	SE_1_25	SE_1_50	SE_1_100
1	361	362	363	364	365

	NEW/ADDITIONAL PARAMETERS				
	SE_1_150	SE_1_200	SE_1_300	SE_2_25	SE_2_50
1	366	367	368	369	370

	NEW/ADDITIONAL PARAMETERS				
	SE_2_100	SE_2_150	SE_2_200	SE_2_300	SE_3_25
1	371	372	373	374	375

	NEW/ADDITIONAL PARAMETERS				
	SE_3_50	SE_3_100	SE_3_150	SE_3_200	SE_3_300
1	376	377	378	379	380

	NEW/ADDITIONAL PARAMETERS				
	SW_1_25	SW_1_50	SW_1_100	SW_1_150	SW_1_200
1	381	382	383	384	385

	NEW/ADDITIONAL PARAMETERS				
	SW_1_300	SW_2_25	SW_2_50	SW_2_100	SW_2_150
1	386	387	388	389	390

	NEW/ADDITIONAL PARAMETERS				
	SW_2_200	SW_2_300	SW_3_25	SW_3_50	SW_3_100
1	391	392	393	394	395

	NEW/ADDITIONAL PARAMETERS				
	SW_3_150	SW_3_200	SW_3_300	SA_1_25	SA_1_50

1	396	397	398	399	400

	NEW/ADDITIONAL PARAMETERS				
	SA_1_100	SA_1_150	SA_1_200	SA_1_300	SA_2_25
1	401	402	403	404	405

	NEW/ADDITIONAL PARAMETERS				
	SA_2_50	SA_2_100	SA_2_150	SA_2_200	SA_2_300
1	406	407	408	409	410

	NEW/ADDITIONAL PARAMETERS				
	SA_3_25	SA_3_50	SA_3_100	SA_3_150	SA_3_200
1	411	412	413	414	415

	NEW/ADDITIONAL PARAMETERS				
	SA_3_300	EW_1_25	EW_1_50	EW_1_100	EW_1_150
1	416	417	418	419	420

	NEW/ADDITIONAL PARAMETERS				
	EW_1_200	EW_1_300	EW_2_25	EW_2_50	EW_2_100
1	421	422	423	424	425

	NEW/ADDITIONAL PARAMETERS				
	EW_2_150	EW_2_200	EW_2_300	EW_3_25	EW_3_50
1	426	427	428	429	430

	NEW/ADDITIONAL PARAMETERS				
	EW_3_100	EW_3_150	EW_3_200	EW_3_300	EA_1_25
1	431	432	433	434	435

	NEW/ADDITIONAL PARAMETERS				
	EA_1_50	EA_1_100	EA_1_150	EA_1_200	EA_1_300
1	436	437	438	439	440

	NEW/ADDITIONAL PARAMETERS				
	EA_2_25	EA_2_50	EA_2_100	EA_2_150	EA_2_200
1	441	442	443	444	445

	NEW/ADDITIONAL PARAMETERS				
	EA_2_300	EA_3_25	EA_3_50	EA_3_100	EA_3_150
1	446	447	448	449	450

NEW/ADDITIONAL PARAMETERS

	EA_3_200	EA_3_300	WA_1_25	WA_1_50	WA_1_100
1	451	452	453	454	455

NEW/ADDITIONAL PARAMETERS

	WA_1_150	WA_1_200	WA_1_300	WA_2_25	WA_2_50
1	456	457	458	459	460

NEW/ADDITIONAL PARAMETERS

	WA_2_100	WA_2_150	WA_2_200	WA_2_300	WA_3_25
1	461	462	463	464	465

NEW/ADDITIONAL PARAMETERS

	WA_3_50	WA_3_100	WA_3_150	WA_3_200	WA_3_300
1	466	467	468	469	470

NEW/ADDITIONAL PARAMETERS

	U1	U2	U3	U4	U5
1	471	472	473	474	475

STARTING VALUES FOR NA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000

LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000

BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000

CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000				
S1	0.000	0.000			
S2	0.000	0.000	0.000		
CBVLM2	0.000	0.000	0.000	0.000	
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.000				
CBVLM5	0.000	0.000			
CAZTBL	0.000	0.000	0.000		
CEFVBL	0.000	0.000	0.000	0.000	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.148				
LS1	0.000	5.418			
LS2	0.000	0.000	25.065		
CSEX	0.000	0.000	0.000	0.000	
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0.000		
BCD4SPX2	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000

STARTING VALUES FOR NA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3

CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000

CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000

BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	1.000				
S1	0.000	1.000			
S2	0.000	0.000	1.000		
CBVLM2	0.000	0.000	0.000	0.069	
CBVLM3	0.000	0.000	0.000	0.000	0.105
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000

LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.096				
CBVLM5	0.000	0.078			
CAZTBL	0.000	0.000	0.121		
CEFVBL	0.000	0.000	0.000	0.066	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.000				
LS1	0.000	0.000			
LS2	0.000	0.000	0.000		
CSEX	0.000	0.000	0.000	0.075	
CAGE	0.000	0.000	0.000	0.000	47.314
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	5308.340		
BCD4SPX2	0.000	4598.894	
BCD4SPX3	0.000	0.000	592.398

STARTING VALUES FOR WA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000

BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			

BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000

CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000				
S1	0.000	0.000			

S2	0.000	0.000	0.000		
CBVLM2	0.000	0.000	0.000	0.000	
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.000				
CBVLM5	0.000	0.000			
CAZTBL	0.000	0.000	0.000		
CEFVBL	0.000	0.000	0.000	0.000	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.148				
LS1	0.000	5.418			
LS2	0.000	0.000	25.065		
CSEX	0.000	0.000	0.000	0.000	
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0.000		
BCD4SPX2	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000

STARTING VALUES FOR WA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL

1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000

CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000

BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4

S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000

BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	1.000				
S1	0.000	1.000			
S2	0.000	0.000	1.000		
CBVLM2	0.000	0.000	0.000	0.069	
CBVLM3	0.000	0.000	0.000	0.000	0.105
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.096				
CBVLM5	0.000	0.078			
CAZTBL	0.000	0.000	0.121		
CEFVBL	0.000	0.000	0.000	0.066	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.000				
LS1	0.000	0.000			
LS2	0.000	0.000	0.000		
CSEX	0.000	0.000	0.000	0.075	
CAGE	0.000	0.000	0.000	0.000	47.314
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	5308.340		
BCD4SPX2	0.000	4598.894	

BCD4SPX3	0.000	0.000	592.398

STARTING VALUES FOR EA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2

CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000

CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000

CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000				
S1	0.000	0.000			
S2	0.000	0.000	0.000		
CBVLM2	0.000	0.000	0.000	0.000	
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.000				
CBVLM5	0.000	0.000			
CAZTBL	0.000	0.000	0.000		
CEFVBL	0.000	0.000	0.000	0.000	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.148				
LS1	0.000	5.418			
LS2	0.000	0.000	25.065		
CSEX	0.000	0.000	0.000	0.000	
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000

BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0.000		
BCD4SPX2	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000

STARTING VALUES FOR EA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000

LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000

CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000

CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	1.000				
S1	0.000	1.000			
S2	0.000	0.000	1.000		
CBVLM2	0.000	0.000	0.000	0.069	
CBVLM3	0.000	0.000	0.000	0.000	0.105
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.096				
CBVLM5	0.000	0.078			
CAZTBL	0.000	0.000	0.121		
CEFVBL	0.000	0.000	0.000	0.066	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.000				
LS1	0.000	0.000			
LS2	0.000	0.000	0.000		
CSEX	0.000	0.000	0.000	0.075	
CAGE	0.000	0.000	0.000	0.000	47.314
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	5308.340		
BCD4SPX2	0.000	4598.894	
BCD4SPX3	0.000	0.000	592.398

STARTING VALUES FOR SA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				

CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000

LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000				
S1	0.000	0.000			
S2	0.000	0.000	0.000		
CBVLM2	0.000	0.000	0.000	0.000	
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.000				
CBVLM5	0.000	0.000			
CAZTBL	0.000	0.000	0.000		
CEFVBL	0.000	0.000	0.000	0.000	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000

LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.148				
LS1	0.000	5.418			
LS2	0.000	0.000	25.065		
CSEX	0.000	0.000	0.000	0.000	
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0.000		
BCD4SPX2	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000

STARTING VALUES FOR SA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000

LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000

BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000

CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	1.000				
S1	0.000	1.000			
S2	0.000	0.000	1.000		
CBVLM2	0.000	0.000	0.000	0.069	
CBVLM3	0.000	0.000	0.000	0.000	0.105
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.096				
CBVLM5	0.000	0.078			
CAZTBL	0.000	0.000	0.121		
CEFVBL	0.000	0.000	0.000	0.066	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.000				
LS1	0.000	0.000			
LS2	0.000	0.000	0.000		
CSEX	0.000	0.000	0.000	0.075	
CAGE	0.000	0.000	0.000	0.000	47.314
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	5308.340		
BCD4SPX2	0.000	4598.894	
BCD4SPX3	0.000	0.000	592.398

STARTING VALUES FOR ASIA WITHIN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3

CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000

CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000

BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000				
S1	0.000	0.000			
S2	0.000	0.000	0.000		
CBVLM2	0.000	0.000	0.000	0.000	
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000

LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.000				
CBVLM5	0.000	0.000			
CAZTBL	0.000	0.000	0.000		
CEFVBL	0.000	0.000	0.000	0.000	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.148				
LS1	0.000	5.418			
LS2	0.000	0.000	25.065		
CSEX	0.000	0.000	0.000	0.000	
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	0.000		
BCD4SPX2	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000

STARTING VALUES FOR ASIA BETWEEN

NU

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
1	0.000	0.000	0.000	0.000	0.000

NU

	CEFVBL	SQRTCD4	LS0	LS1	LS2
1	0.000	0.000	0.000	0.000	0.000

NU

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000	0.000	0.000

LAMBDA

	S0	S1	S2	CBVLM2	CBVLM3
CBVLM2	0.000	0.000	0.000	1.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	1.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	1.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	1.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	1.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	1.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	1.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	LS0	LS1	LS2	CSEX	CAGE
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	1.000	0.000	0.000	0.000	0.000
LS1	0.000	1.000	0.000	0.000	0.000
LS2	0.000	0.000	1.000	0.000	0.000
CSEX	0.000	0.000	0.000	1.000	0.000
CAGE	0.000	0.000	0.000	0.000	1.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000

BCD4SPX3	0.000	0.000	0.000	0.000	0.000

LAMBDA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	1.000	0.000	0.000
BCD4SPX2	0.000	1.000	0.000
BCD4SPX3	0.000	0.000	1.000

THETA

	CBVLM2	CBVLM3	CBVLM4	CBVLM5	CAZTBL
CBVLM2	0.000				
CBVLM3	0.000	0.000			
CBVLM4	0.000	0.000	0.000		
CBVLM5	0.000	0.000	0.000	0.000	
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CEFVBL	SQRTCD4	LS0	LS1	LS2
CEFVBL	0.000				
SQRTCD4	0.000	0.000			
LS0	0.000	0.000	0.000		
LS1	0.000	0.000	0.000	0.000	
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

THETA

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			

BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

ALPHA

	S0	S1	S2	CBVLM2	CBVLM3
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	LS0	LS1	LS2	CSEX	CAGE
1	0.000	0.000	0.000	0.000	0.000

ALPHA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	0.000	0.000	0.000

BETA

	S0	S1	S2	CBVLM2	CBVLM3
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000

CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	LS0	LS1	LS2	CSEX	CAGE
S0	0.000	0.000	0.000	0.000	0.000
S1	0.000	0.000	0.000	0.000	0.000
S2	0.000	0.000	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

BETA

	BCD4SPX1	BCD4SPX2	BCD4SPX3
S0	0.000	0.000	0.000
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
CBVLM2	0.000	0.000	0.000
CBVLM3	0.000	0.000	0.000
CBVLM4	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000
LS0	0.000	0.000	0.000
LS1	0.000	0.000	0.000
LS2	0.000	0.000	0.000
CSEX	0.000	0.000	0.000
CAGE	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000

PSI

	S0	S1	S2	CBVLM2	CBVLM3
S0	1.000				
S1	0.000	1.000			

S2	0.000	0.000	1.000		
CBVLM2	0.000	0.000	0.000	0.069	
CBVLM3	0.000	0.000	0.000	0.000	0.105
CBVLM4	0.000	0.000	0.000	0.000	0.000
CBVLM5	0.000	0.000	0.000	0.000	0.000
CAZTBL	0.000	0.000	0.000	0.000	0.000
CEFVBL	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	CBVLM4	CBVLM5	CAZTBL	CEFVBL	SQRTCD4
CBVLM4	0.096				
CBVLM5	0.000	0.078			
CAZTBL	0.000	0.000	0.121		
CEFVBL	0.000	0.000	0.000	0.066	
SQRTCD4	0.000	0.000	0.000	0.000	12.769
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000
CSEX	0.000	0.000	0.000	0.000	0.000
CAGE	0.000	0.000	0.000	0.000	0.000
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	LS0	LS1	LS2	CSEX	CAGE
LS0	0.000				
LS1	0.000	0.000			
LS2	0.000	0.000	0.000		
CSEX	0.000	0.000	0.000	0.075	
CAGE	0.000	0.000	0.000	0.000	47.314
BCD4SPX1	0.000	0.000	0.000	0.000	0.000
BCD4SPX2	0.000	0.000	0.000	0.000	0.000
BCD4SPX3	0.000	0.000	0.000	0.000	0.000

PSI

	BCD4SPX1	BCD4SPX2	BCD4SPX3
BCD4SPX1	5308.340		
BCD4SPX2	0.000	4598.894	
BCD4SPX3	0.000	0.000	592.398

STARTING VALUES FOR THE ADDITIONAL PARAMETERS

NEW/ADDITIONAL PARAMETERS

M111	M121	M141	M151	M161

1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M181	M211	M221	M241	M251
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M261	M281	M311	M321	M341
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M351	M361	M381	M411	M421
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M441	M451	M461	M481	M511
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M521	M541	M551	M561	M581
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M112	M122	M142	M152	M162
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M182	M212	M222	M242	M252
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M262	M282	M312	M322	M342
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M352	M362	M382	M412	M422
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M442	M452	M462	M482	M512
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M522	M542	M552	M562	M582
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M113	M123	M143	M153	M163
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M183	M213	M223	M243	M253
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M263	M283	M313	M323	M343
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M353	M363	M383	M413	M423
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M443	M453	M463	M483	M513
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M523	M543	M553	M563	M583
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M111X	M121X	M141X	M151X	M161X
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M181X	M211X	M221X	M241X	M251X
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M261X	M281X	M311X	M321X	M341X
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M351X	M361X	M381X	M411X	M421X

1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M441X	M451X	M461X	M481X	M511X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M521X	M541X	M551X	M561X	M581X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M112X	M122X	M142X	M152X	M162X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M182X	M212X	M222X	M242X	M252X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M262X	M282X	M312X	M322X	M342X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M352X	M362X	M382X	M412X	M422X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M442X	M452X	M462X	M482X	M512X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M522X	M542X	M552X	M562X	M582X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M113X	M123X	M143X	M153X	M163X
1	0.500	0.500	0.500	0.500	0.500

NEW/ADDITIONAL PARAMETERS

	M183X	M213X	M223X	M243X	M253X
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M263X	M283X	M313X	M323X	M343X
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M353X	M363X	M383X	M413X	M423X
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M443X	M453X	M463X	M483X	M513X
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	M523X	M543X	M553X	M563X	M583X
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NS_1_25	NS_1_50	NS_1_100	NS_1_150	NS_1_200
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NS_1_300	NS_2_25	NS_2_50	NS_2_100	NS_2_150
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NS_2_200	NS_2_300	NS_3_25	NS_3_50	NS_3_100
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NS_3_150	NS_3_200	NS_3_300	NE_1_25	NE_1_50
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NE_1_100	NE_1_150	NE_1_200	NE_1_300	NE_2_25
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NE_2_50	NE_2_100	NE_2_150	NE_2_200	NE_2_300
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NE_3_25	NE_3_50	NE_3_100	NE_3_150	NE_3_200

1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NE_3_300	NW_1_25	NW_1_50	NW_1_100	NW_1_150
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NW_1_200	NW_1_300	NW_2_25	NW_2_50	NW_2_100
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NW_2_150	NW_2_200	NW_2_300	NW_3_25	NW_3_50
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NW_3_100	NW_3_150	NW_3_200	NW_3_300	NA_1_25
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NA_1_50	NA_1_100	NA_1_150	NA_1_200	NA_1_300
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NA_2_25	NA_2_50	NA_2_100	NA_2_150	NA_2_200
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NA_2_300	NA_3_25	NA_3_50	NA_3_100	NA_3_150
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	NA_3_200	NA_3_300	SE_1_25	SE_1_50	SE_1_100
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SE_1_150	SE_1_200	SE_1_300	SE_2_25	SE_2_50
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SE_2_100	SE_2_150	SE_2_200	SE_2_300	SE_3_25
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SE_3_50	SE_3_100	SE_3_150	SE_3_200	SE_3_300
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SW_1_25	SW_1_50	SW_1_100	SW_1_150	SW_1_200
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SW_1_300	SW_2_25	SW_2_50	SW_2_100	SW_2_150
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SW_2_200	SW_2_300	SW_3_25	SW_3_50	SW_3_100
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SW_3_150	SW_3_200	SW_3_300	SA_1_25	SA_1_50
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SA_1_100	SA_1_150	SA_1_200	SA_1_300	SA_2_25
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SA_2_50	SA_2_100	SA_2_150	SA_2_200	SA_2_300
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SA_3_25	SA_3_50	SA_3_100	SA_3_150	SA_3_200
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	SA_3_300	EW_1_25	EW_1_50	EW_1_100	EW_1_150
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	EW_1_200	EW_1_300	EW_2_25	EW_2_50	EW_2_100
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	EW_2_150	EW_2_200	EW_2_300	EW_3_25	EW_3_50

1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	EW_3_100	EW_3_150	EW_3_200	EW_3_300	EA_1_25
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	EA_1_50	EA_1_100	EA_1_150	EA_1_200	EA_1_300
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	EA_2_25	EA_2_50	EA_2_100	EA_2_150	EA_2_200
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	EA_2_300	EA_3_25	EA_3_50	EA_3_100	EA_3_150
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	EA_3_200	EA_3_300	WA_1_25	WA_1_50	WA_1_100
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	WA_1_150	WA_1_200	WA_1_300	WA_2_25	WA_2_50
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	WA_2_100	WA_2_150	WA_2_200	WA_2_300	WA_3_25
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	WA_3_50	WA_3_100	WA_3_150	WA_3_200	WA_3_300
1	0.500	0.500	0.500	0.500	0.500

	NEW/ADDITIONAL PARAMETERS				
	U1	U2	U3	U4	U5
1	0.500	0.500	0.500	0.500	0.500

```
    Beginning Time:  08:02:45
       Ending Time:  08:52:17
      Elapsed Time:  00:49:32
```

MUTHEN & MUTHEN
3463 Stoner Ave.
Los Angeles, CA 90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

Example 4: Multiple Imputation of Clustered Ordered Categorical Data

1. Patterns.out: Basic descriptive analysis of South African NA-Accord subgroup with missing data patterns
2. Sqrt_Group4_Imputations_Basic.out: Mplus 6 Output for Direct ML Multiple Groups Analysis with Robust Standard Errors

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/09/2010  12:59 PM

INPUT INSTRUCTIONS

  TITLE:     Square root-transformed CD4 - Imputation of Group 4 data;

  DATA:
  FILE=H:\My Documents\Transfer\X-side Missingness talk\Imputation Example\sr4_only.txt ;

  VARIABLE:
      NAMES ARE aztbl bvlvc efvbl csex cage sqrtcd4 ls0 ls1 ls2 idno
                bcd4spx1 bcd4spx2 bcd4spx3;
      USEVARIABLES ARE aztbl bvlvc efvbl csex cage sqrtcd4 ls0 ls1 ls2
                bcd4spx1 bcd4spx2 bcd4spx3;
            MISSING ARE ALL (-999) ;
            WITHIN =  ls0 ls1 ls2 ;
            BETWEEN =  csex cage bcd4spx1 bcd4spx2 bcd4spx3
                       bvlvc aztbl efvbl ;
            CLUSTER = idno ;
            AUXILIARY ARE sqrtcd4 ;
            CATEGORICAL ARE bvlvc aztbl efvbl ;

  ANALYSIS:
      TYPE = TWOLEVEL BASIC ;
      PROCESSORS = 4 ;

  OUTPUT:
      TECH8 PATTERNS ;



INPUT READING TERMINATED NORMALLY



Square root-transformed CD4 - Imputation of Group 4 data;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Number of observations                                       65401

Number of dependent variables                                   12
Number of independent variables                                  0
Number of continuous latent variables                            0

Observed dependent variables

  Continuous
   CSEX        CAGE        BCD4SPX1    BCD4SPX2    BCD4SPX3    SQRTCD4
   LS0         LS1         LS2

  Binary and ordered categorical (ordinal)
   AZTBL       BVLVC       EFVBL

Variables with special functions

  Cluster variable      IDNO
  Within variables
   LS0         LS1         LS2
```

```
  Between variables
   CSEX        CAGE        BCD4SPX1    BCD4SPX2    BCD4SPX3    BVLVC
   AZTBL       EFVBL


Estimator                                                    MLR
Information matrix                                      OBSERVED
Optimization Specifications for the Quasi-Newton Algorithm for
Continuous Outcomes
  Maximum number of iterations                               100
  Convergence criterion                                0.100D-05
Optimization Specifications for the EM Algorithm
  Maximum number of iterations                               500
  Convergence criteria
    Loglikelihood change                               0.100D-02
    Relative loglikelihood change                      0.100D-05
    Derivative                                         0.100D-02
Optimization Specifications for the M step of the EM Algorithm for
Categorical Latent variables
  Number of M step iterations                                  1
  M step convergence criterion                         0.100D-02
  Basis for M step termination                         ITERATION
Optimization Specifications for the M step of the EM Algorithm for
Censored, Binary or Ordered Categorical (Ordinal), Unordered
Categorical (Nominal) and Count Outcomes
  Number of M step iterations                                  1
  M step convergence criterion                         0.100D-02
  Basis for M step termination                         ITERATION
  Maximum value for logit thresholds                          15
  Minimum value for logit thresholds                         -15
  Minimum expected cell size for chi-square            0.100D-01
Maximum number of iterations for H1                         2000
Convergence criterion for H1                           0.100D-03
Optimization algorithm                                       EMA
Integration Specifications
  Type                                                  STANDARD
  Number of integration points                                15
  Dimensions of numerical integration                          0
  Adaptive quadrature                                         ON
Link                                                       LOGIT
Cholesky                                                     OFF

Input data file(s)
  H:\My Documents\Transfer\X-side Missingness talk\Imputation Example\sr4_only.t
Input data format  FREE


SUMMARY OF DATA

     Number of missing data patterns             7
     Number of clusters                      20347

       Size (s)    Cluster ID with Size s

          1        19 35 64 116 154 183 185 730 742 849 865 978 979 999
                   1039 1053 1063 1068 1088 1099 1131 1154 1203 1206 1219
                   1226 1229 1240 1285 1303 1304 1316 1321 1326 1372 1405
                   1410 1411 1420 1458 1498 1506 1517 1530 1556 1583 1588
                   1591 1597 1603 1616 1625 1632 1634 1645 1646 1660 1665
                   1688 1698 1704 1730 1738 1739 1751 1752 1757 1761 1768
                   1770 1778 1797 1800 1820 1824 1827 1847 1865 1871 1872
                   1874 1887 1891 1904 1907 1911 1918 1922 1928 1954 1956
                   1962 1975 1977 1983 1989 1994 1996 2000 2024 2030 2043
```

2056 2078 2087 2109 2110 2155 2164 2173 2177 2180 2184
2187 2241 2248 2253 2262 2269 2286 2290 2291 2314 2315
2317 2322 2345 2760 3241 3251 3287 3291 3297 3306 3308
3317 3322 3326 3576 3580 3584 3585 3587 3596 3630 3633
3636 3642 3647 3650 3651 4377 4390 4394 4398 4403 4410
4412 4413 4414 4415 4461 4585 4790 4791 4797 4811 4818
4833 4840 4859 4867 4874 4888 4901 4903 5130 5132 5150
5154 5155 5170 5315 5501 5508 5510 5514 5517 5529 5537
5540 5671 5673 5675 5690 5691 5703 5709 5717 5718 5719
5726 5728 5821 5825 5957 5958 5965 5973 5980 5987 5996
5998 6000 6006 6521 6539 6542 6543 6547 6555 6562 6572
6573 6579 6582 6637 6934 6938 6942 6955 6970 6971 6979
6986 6992 6994 6997 6998 7002 7007 7031 7048 7049 7070
7081 7088 7099 7138 7142 7187 7194 7195 7198 7206 7211
7216 7217 7233 7246 7253 7255 7260 7264 7270 7272 7295
7305 7308 7310 7320 7321 7327 7337 7394 7395 7397 7408
7410 7415 7417 7421 7423 7430 7438 7446 7448 7452 7453
7459 7463 7478 7479 7482 7486 7490 7491 7493 7497 7501
7510 7514 7517 7520 7527 7529 7536 7537 7538 7539 7542
7550 7554 7556 7557 7558 7563 7564 7567 7568 7570 7573
7575 7577 7578 7579 7580 7581 7582 7583 7586 7587 7588
7589 7590 7592 7594 7595 7599 7600 7601 7602 7603 7604
7607 7608 7609 7610 7612 7613 7614 7617 7618 7620 7623
7624 7625 7626 7627 7628 7631 7632 7633 7635 7637 7638
7639 7642 7643 7644 7645 7646 7649 7650 7651 7652 7653
7654 7655 7656 7659 7661 7662 7664 7665 7666 7667 7670
7671 7672 7675 7677 7678 7679 7680 7681 7682 7684 7686
7687 7689 7690 7691 7692 7693 7694 7697 7698 7700 7706
7707 7708 7709 7710 7712 7715 7726 7732 7739 7743 7749
7759 7767 7769 7795 7807 7823 7825 7856 7859 7876 7906
7912 7925 7931 7944 7949 7955 7963 7968 7976 7982 7985
7987 7999 8004 8005 8010 8012 8017 8027 8037 8039 8042
8050 8053 8054 8056 8057 8061 8063 8064 8065 8066 8067
8070 8071 8073 8074 8075 8076 8077 8078 8081 8083 8084
8089 8090 8092 8094 8095 8097 8101 8106 8108 8110 8111
8112 8116 8119 8123 8124 8127 8129 8132 8133 8134 8136
8138 8139 8141 8142 8143 8150 8151 8152 8153 8157 8158
8160 8162 8163 8165 8168 8170 8171 8172 8173 8174 8175
8177 8178 8180 8181 8182 8183 8185 8188 8190 8191 8192
8193 8195 8197 8199 8201 8202 8205 8206 8208 8209 8210
8211 8214 8215 8217 8223 8224 8226 8227 8230 8232 8234
8236 8237 8240 8245 8249 8250 8252 8253 8259 8261 8264
8268 8270 8272 8273 8274 8275 8278 8280 8283 8284 8285
8288 8289 8294 8296 8298 8299 8300 8302 8304 8306 8307
8316 8323 8324 8326 8327 8331 8332 8334 8336 8337 8338
8341 8342 8343 8344 8345 8346 8347 8350 8351 8361 8362
8363 8365 8366 8369 8370 8374 8375 8376 8377 8378 8381
8383 8384 8385 8386 8387 8389 8390 8391 8394 8395 8402
8403 8408 8409 8410 8414 8415 8416 8417 8422 8423 8424
8425 8428 8431 8433 8435 8441 8442 8443 8444 8445 8447
8448 8449 8450 8454 8456 8458 8459 8460 8462 8465 8466
8468 8471 8474 8476 8479 8483 8484 8486 8487 8488 8489
8490 8491 8494 8497 8498 8499 8500 8502 8509 8510 8514
8515 8516 8518 8519 8520 8521 8522 8523 8525 8529 8530
8531 8533 8537 8538 8539 8541 8544 8546 8547 8549 8553
8558 8559 8562 8564 8565 8567 8568 8570 8571 8572 8573
8576 8577 8578 8581 8583 8584 8586 8588 8589 8590 8593
8594 8596 8597 8599 8600 8602 8605 8607 8610 8611 8612
8614 8616 8618 8622 8626 8627 8628 8629 8631 8633 8634
8635 8636 8637 8638 8639 8640 8646 8647 8649 8651 8652
8653 8655 8656 8658 8659 8660 8662 8666 8667 8668 8670
8671 8672 8673 8674 8676 8677 8678 8679 8680 8681 8682
8683 8684 8685 8688 8694 8696 8697 8699 8700 8702 8703

8705 8706 8707 8708 8709 8710 8711 8713 8715 8716 8722
8723 8726 8727 8728 8729 8733 8740 8741 8743 8744 8745
8747 8754 8757 8760 8761 8763 8764 8766 8767 8768 8772
8773 8775 8776 8777 8779 8780 8782 8783 8784 8786 8787
8788 8789 8796 8797 8798 8799 8800 8805 8807 8808 8809
8810 8811 8817 8820 8821 8823 8825 8827 8829 8831 8835
8837 8838 8839 8840 8841 8842 8843 8844 8845 8846 8849
8851 8852 8853 8854 8856 8857 8858 8860 8861 8863 8865
8869 8870 8874 8876 8880 8884 8888 8889 8890 8891 8894
8895 8896 8897 8898 8903 8904 8905 8906 8907 8913 8914
8916 8918 8925 8926 8927 8929 8930 8931 8933 8934 8935
8936 8937 8939 8941 8942 8943 8945 8949 8950 8951 8952
8957 8958 8959 8960 8961 8963 8966 8969 8970 8971 8973
8974 8975 8976 8977 8980 8982 8983 8984 8986 8987 8989
8991 8993 8994 8997 8998 8999 9000 9003 9004 9006 9007
9008 9009 9010 9012 9013 9014 9015 9016 9018 9019 9020
9022 9024 9025 9026 9027 9030 9031 9032 9034 9035 9038
9040 9042 9043 9046 9049 9050 9054 9056 9062 9065 9066
9069 9070 9071 9072 9074 9075 9076 9078 9081 9082 9083
9085 9086 9087 9090 9093 9094 9097 9098 9099 9100 9101
9102 9104 9105 9108 9109 9111 9112 9114 9115 9116 9119
9120 9121 9123 9125 9128 9129 9130 9131 9132 9135 9137
9138 9139 9141 9142 9143 9144 9146 9149 9150 9151 9152
9154 9155 9156 9157 9160 9161 9162 9163 9164 9165 9167
9170 9173 9174 9175 9176 9178 9179 9180 9181 9183 9185
9186 9188 9189 9190 9191 9192 9193 9195 9197 9199 9201
9202 9203 9206 9207 9208 9209 9210 9211 9216 9217 9218
9219 9221 9223 9224 9225 9226 9228 9229 9232 9234 9235
9241 9242 9244 9246 9247 9248 9250 9251 9253 9254 9256
9259 9260 9262 9264 9265 9268 9269 9271 9276 9278 9280
9282 9283 9284 9286 9287 9288 9291 9293 9294 9297 9298
9299 9300 9305 9306 9309 9314 9316 9318 9319 9320 9321
9323 9324 9325 9328 9330 9332 9334 9336 9337 9338 9343
9344 9346 9348 9349 9350 9351 9353 9354 9356 9358 9360
9361 9363 9364 9366 9367 9369 9370 9372 9374 9375 9379
9384 9385 9388 9390 9393 9396 9398 9401 9402 9404 9405
9406 9407 9408 9410 9411 9418 9421 9424 9425 9427 9428
9429 9431 9433 9436 9439 9442 9445 9446 9447 9448 9450
9454 9463 9479 9498 9500 9504 9506 9513 9515 9520 9521
9523 9525 9532 9534 9538 9540 9546 9559 9561 9568 9575
9598 9621 9636 9644 9671 9772 9773 9774 9776 9779 10307
10308 10309 10310 10312 10313 10315 10316 10317 10318
10319 10320 10323 10324 10327 10329 10337 10339 10340
10342 10343 10344 10345 10346 10347 10348 10350 10352
10357 10362 10364 10366 10369 10373 10375 10376 10377
10378 10379 10380 10384 10385 10386 10387 10388 10389
10391 10392 10393 10394 10395 10396 10397 10398 10399
10400 10401 10406 10407 10408 10409 10410 10412 10414
10416 10428 10429 10431 10432 10443 10449 10452 10454
10455 10456 10457 10459 10461 10465 10466 10467 10470
10471 10473 10475 10479 10481 10482 10485 10488 10489
10495 10498 10506 10508 10519 10526 10530 10532 10533
10535 10537 10541 10542 10550 10571 10577 10581 10595
10605 10615 10619 10630 10631 10633 10638 10640 10642
10643 10644 10645 10647 10648 10649 10651 10652 10653
10655 10657 10658 10659 10664 10665 10666 10667 10668
10672 10674 10675 10680 10681 10682 10684 10685 10687
10688 10691 10692 10693 10694 10697 10698 10699 10700
10701 10704 10706 10708 10711 10712 10714 10715 10717
10719 10721 10722 10723 10724 10726 10727 10728 10729
10732 10733 10735 10736 10738 10740 10742 10746 10748
10749 10750 10754 10755 10756 10758 10759 10762 10765
10768 10769 10770 10771 10772 10773 10774 10775 10776

10777 10780 10781 10782 10784 10785 10786 10787 10788
10789 10791 10792 10793 10796 10797 10805 10806 10807
10810 10811 10814 10817 10818 10819 10821 10822 10827
10828 10829 10830 10831 10833 10835 10836 10837 10838
10840 10844 10849 10854 10861 10862 10864 10866 10867
10868 10870 10876 10879 10880 10881 10882 10883 10888
10891 10892 10893 10894 10896 10897 10898 10899 10900
10901 10902 10903 10907 10908 10909 10912 10913 10915
10918 10919 10921 10922 10923 10924 10925 10930 10932
10933 10934 10938 10940 10941 10943 10945 10946 10948
10949 10952 10955 10956 10957 10958 10960 10964 10966
10969 10970 10972 10973 10976 10977 10979 10980 10981
10984 10985 10988 10989 10991 10993 10995 10997 10999
11000 11001 11003 11004 11010 11013 11017 11020 11021
11022 11023 11025 11031 11040 11047 11053 11055 11060
11066 11068 11069 11082 11085 11086 11087 11092 11095
11101 11105 11109 11110 11115 11117 11118 11122 11124
11125 11129 11131 11141 11142 11144 11146 11147 11149
11153 11154 11155 11156 11157 11161 11162 11166 11168
11172 11173 11174 11176 11185 11187 11195 11201 11202
11206 11209 11211 11212 11221 11222 11224 11226 11227
11229 11237 11241 11245 11246 11249 11251 11252 11255
11257 11264 11265 11267 11270 11282 11285 11288 11305
11307 11313 11322 11330 11336 11338 11342 11348 11360
11366 11368 11378 11388 11390 11392 11400 11407 11408
11409 11412 11414 11416 11419 11420 11421 11422 11427
11428 11432 11439 11440 11441 11444 11446 11451 11457
11466 11475 11480 11488 11491 11492 11497 11498 11499
11500 11514 11523 11532 11537 11538 11540 11543 11545
11547 11548 11549 11551 11554 11555 11560 11566 11568
11569 11570 11576 11579 11585 11589 11603 11608 11613
11636 11637 11641 11642 11648 11656 11658 11667 11668
11669 11678 11689 11691 11693 11696 11697 11701 11702
11705 11707 11711 11712 11722 11724 11728 11729 11730
11732 11736 11737 11741 11743 11748 11751 11752 11756
11758 11760 11764 11765 11769 11771 11772 11773 11776
11777 11779 11780 11783 11787 11789 11790 11793 11795
11798 11801 11802 11804 11807 11809 11812 11813 11816
11825 11828 11832 11836 11839 11841 11842 11846 11847
11850 11853 11855 11857 11866 11869 11870 11871 11874
11875 11876 11878 11880 11881 11883 11886 11887 11888
11889 11891 11892 11902 11906 11910 11916 11919 11926
11927 11928 11934 11936 11939 11940 11941 11942 11948
11950 11951 11956 11959 11960 11962 11963 11968 11970
11972 11973 11974 11979 11982 11988 11993 11997 11998
11999 12000 12001 12002 12004 12007 12010 12011 12015
12020 12021 12024 12031 12032 12035 12036 12039 12040
12046 12057 12058 12060 12063 12064 12066 12069 12071
12072 12077 12078 12079 12080 12081 12085 12094 12097
12098 12111 12113 12120 12123 12125 12126 12129 12132
12133 12134 12135 12142 12143 12149 12151 12154 12155
12163 12165 12166 12167 12170 12177 12180 12182 12188
12189 12190 12191 12202 12203 12205 12212 12217 12218
12221 12224 12226 12229 12231 12240 12241 12242 12256
12259 12260 12271 12273 12276 12277 12281 12282 12288
12289 12291 12297 12298 12302 12307 12308 12315 12316
12324 12327 12332 12333 12334 12336 12339 12349 12353
12356 12357 12358 12361 12363 12364 12365 12366 12371
12374 12375 12376 12380 12381 12385 12386 12387 12393
12394 12396 12397 12401 12402 12404 12407 12411 12415
12418 12419 12420 12421 12424 12426 12427 12429 12430
12433 12435 12436 12439 12440 12441 12443 12444 12446
12447 12454 12455 12456 12459 12462 12465 12467 12468

12469 12473 12474 12475 12479 12483 12487 12489 12490
12495 12496 12497 12498 12503 12504 12506 12507 12508
12511 12513 12516 12518 12520 12521 12524 12527 12528
12529 12530 12534 12537 12538 12539 12540 12547 12548
12552 12553 12554 12556 12563 12565 12566 12568 12572
12575 12576 12578 12579 12581 12584 12585 12586 12588
12589 12592 12595 12603 12604 12605 12607 12608 12613
12618 12620 12625 12627 12628 12630 12632 12633 12634
12635 12636 12637 12639 12640 12642 12648 12654 12655
12658 12660 12662 12671 12672 12682 12685 12686 12688
12689 12690 12691 12695 12697 12703 12704 12705 12706
12707 12711 12712 12713 12714 12716 12718 12725 12728
12731 12732 12735 12737 12738 12739 12740 12742 12748
12749 12752 12754 12756 12759 12760 12761 12766 12767
12773 12775 12777 12779 12781 12786 12787 12796 12798
12800 12805 12823 12824 12834 12837 12838 12841 12847
12848 12849 12855 12857 12858 12859 12860 12862 12865
12866 12867 12868 12869 12872 12873 12877 12880 12884
12890 12894 12899 12900 12903 12908 12909 12911 12912
12914 12915 12916 12918 12919 12920 12923 12932 12933
12948 12949 12951 12957 12959 12961 12964 12966 12969
12971 12976 12978 12983 12986 13001 13011 13013 13018
13021 13026 13031 13038 13039 13048 13052 13057 13058
13061 13070 13074 13075 13079 13084 13089 13092 13094
13095 13098 13108 13109 13111 13115 13119 13122 13126
13128 13135 13140 13141 13145 13146 13147 13156 13157
13164 13166 13167 13168 13169 13170 13172 13173 13174
13177 13178 13183 13187 13188 13190 13191 13192 13194
13200 13202 13219 13222 13223 13224 13226 13227 13228
13229 13238 13239 13242 13243 13253 13254 13255 13259
13261 13264 13265 13267 13280 13281 13282 13287 13294
13297 13300 13302 13307 13309 13310 13314 13319 13322
13328 13330 13334 13338 13348 13350 13358 13361 13363
13371 13372 13382 13383 13385 13388 13390 13397 13401
13403 13405 13407 13410 13412 13415 13421 13424 13430
13436 13448 13450 13451 13456 13459 13464 13467 13468
13471 13472 13473 13474 13477 13479 13480 13481 13483
13485 13486 13488 13489 13494 13495 13496 13497 13498
13499 13500 13501 13503 13505 13506 13509 13510 13511
13513 13514 13515 13516 13518 13519 13521 13527 13528
13529 13530 13531 13532 13533 13535 13538 13539 13545
13549 13553 13554 13557 13558 13559 13562 13565 13580
13581 13582 13583 13584 13585 13587 13588 13590 13592
13596 13600 13601 13602 13609 13611 13612 13613 13614
13615 13616 13618 13619 13620 13622 13624 13625 13626
13627 13628 13630 13631 13632 13635 13636 13637 13642
13643 13644 13645 13646 13647 13649 13650 13651 13652
13658 13659 13660 13661 13663 13665 13666 13667 13669
13670 13673 13678 13679 13681 13682 13683 13686 13687
13688 13691 13692 13694 13697 13698 13711 13713 13715
13716 13717 13722 13724 13725 13740 13744 13746 13748
13753 13760 13769 13772 13777 13781 13787 13792 13793
13802 13803 13807 13810 13820 13821 13824 13826 13828
13829 13830 13833 13839 13840 13842 13844 13847 13848
13849 13853 13860 13867 13874 13889 13892 13895 13896
13897 13899 13901 13910 13911 13914 13915 13918 13919
13920 13930 13935 13937 13939 13943 13944 13945 13951
13953 13954 13955 13961 13969 13971 13972 13975 13979
13984 13987 13989 14008 14011 14012 14015 14016 14017
14020 14022 14028 14033 14034 14036 14043 14046 14048
14053 14059 14065 14068 14070 14072 14075 14078 14082
14088 14091 14095 14097 14100 14101 14102 14108 14116
14119 14122 14131 14134 14136 14138 14146 14148 14156

14166 14167 14183 14187 14191 14193 14196 14197 14198
14207 14212 14214 14215 14218 14226 14229 14230 14231
14233 14234 14239 14244 14253 14256 14257 14259 14268
14270 14271 14272 14275 14278 14281 14288 14291 14293
14294 14295 14297 14298 14302 14307 14308 14311 14312
14313 14314 14319 14320 14326 14329 14331 14334 14338
14339 14340 14343 14348 14362 14365 14366 14371 14378
14379 14383 14388 14392 14394 14398 14399 14401 14403
14405 14409 14421 14423 14425 14426 14427 14428 14429
14432 14438 14439 14440 14441 14445 14446 14448 14450
14454 14455 14456 14458 14460 14465 14468 14471 14475
14479 14486 14488 14489 14490 14491 14492 14496 14497
14500 14506 14507 14508 14514 14515 14521 14525 14532
14536 14537 14538 14539 14541 14542 14543 14544 14545
14546 14547 14549 14550 14551 14552 14554 14555 14557
14558 14560 14561 14562 14563 14564 14565 14566 14567
14568 14570 14571 14572 14573 14574 14575 14576 14578
14579 14580 14581 14582 14583 14584 14586 14587 14588
14589 14590 14591 14593 14595 14597 14598 14599 14600
14602 14603 14606 14607 14608 14609 14612 14613 14614
14616 14617 14623 14624 14625 14628 14630 14631 14636
14637 14638 14639 14640 14641 14642 14643 14644 14646
14649 14650 14651 14656 14659 14660 14661 14662 14666
14667 14669 14670 14671 14676 14677 14682 14683 14685
14688 14691 14694 14695 14697 14699 14701 14703 14706
14707 14708 14709 14712 14715 14716 14717 14719 14721
14724 14725 14728 14733 14734 14739 14741 14743 14746
14747 14748 14756 14757 14759 14762 14764 14766 14769
14772 14776 14778 14779 14783 14784 14785 14791 14796
14798 14800 14802 14804 14810 14817 14818 14820 14822
14824 14826 14827 14828 14832 14833 14834 14835 14838
14839 14840 14841 14844 14846 14847 14849 14850 14852
14853 14854 14857 14858 14865 14870 14871 14874 14878
14890 14895 14896 14903 14905 14909 14913 14914 14920
14922 14924 14925 14928 14929 14930 14933 14934 14935
14937 14939 14940 14941 14942 14944 14946 14950 14953
14960 14967 14968 14971 14972 14977 14982 14984 14985
14988 14989 14993 14994 14999 15000 15002 15003 15004
15008 15014 15019 15020 15027 15035 15038 15042 15046
15047 15050 15054 15077 15102 15104 15126 15128 15148
15156 15182 15184 15185 15186 15188 15190 15197 15199
15203 15204 15205 15208 15213 15215 15217 15218 15229
15230 15243 15244 15245 15247 15250 15258 15260 15266
15269 15276 15281 15282 15287 15288 15293 15294 15300
15302 15306 15307 15309 15310 15311 15312 15325 15330
15337 15342 15343 15345 15351 15352 15360 15366 15373
15375 15377 15382 15393 15394 15404 15409 15413 15419
15421 15424 15425 15427 15430 15433 15434 15436 15444
15446 15447 15454 15456 15457 15464 15467 15469 15472
15478 15481 15486 15497 15502 15505 15508 15510 15513
15517 15522 15529 15531 15536 15540 15545 15546 15548
15549 15557 15558 15563 15567 15570 15580 15592 15594
15608 15610 15613 15614 15618 15619 15622 15624 15627
15629 15639 15640 15652 15658 15660 15668 15680 15683
15692 15703 15710 15716 15717 15718 15722 15731 15732
15734 15745 15756 15768 15769 15770 15781 15785 15786
15788 15790 15801 15815 15822 15835 15837 15839 15840
15845 15865 15869 15873 15878 15879 15881 15886 15887
15892 15895 15901 15903 15905 15908 15910 15913 15922
15924 15928 15940 15953 15963 15967 15972 15982 15983
15985 15999 16001 16003 16013 16014 16015 16021 16027
16029 16032 16033 16036 16046 16052 16053 16058 16060
16061 16066 16068 16070 16072 16073 16078 16082 16085

16088 16094 16095 16105 16106 16119 16120 16125 16127
16132 16138 16140 16152 16159 16165 16168 16174 16178
16182 16190 16195 16196 16198 16203 16206 16219 16224
16225 16227 16228 16234 16235 16245 16248 16252 16255
16263 16264 16267 16268 16270 16271 16272 16276 16279
16280 16297 16298 16300 16301 16304 16312 16319 16320
16327 16331 16333 16335 16346 16349 16358 16385 16386
16389 16392 16393 16403 16407 16412 16415 16426 16430
16431 16436 16439 16444 16447 16460 16476 16486 16487
16495 16497 16503 16504 16507 16508 16513 16522 16527
16536 16542 16543 16561 16564 16573 16579 16580 16588
16595 16596 16603 16608 16614 16615 16620 16633 16637
16640 16643 16644 16664 16665 16673 16676 16681 16683
16685 16687 16688 16696 16698 16713 16714 16717 16720
16725 16727 16741 16742 16752 16754 16758 16762 16768
16775 16798 16800 16807 16808 16817 16819 16820 16821
16832 16833 16839 16841 16845 16849 16853 16858 16859
16863 16868 16873 16876 16878 16884 16885 16889 16893
16896 16899 16906 16913 16916 16931 16932 16935 16943
16947 16948 16951 16954 16957 16962 16965 16968 16971
16974 16977 16980 16981 16982 16983 16988 16990 16991
16993 16997 17001 17002 17003 17009 17011 17017 17020
17022 17024 17028 17035 17038 17041 17042 17045 17048
17050 17058 17059 17060 17061 17062 17064 17065 17066
17068 17070 17071 17072 17073 17074 17077 17079 17080
17081 17082 17083 17085 17086 17087 17089 17090 17091
17093 17095 17096 17097 17098 17099 17101 17102 17103
17105 17106 17107 17109 17110 17111 17113 17114 17115
17116 17117 17118 17119 17120 17121 17122 17123 17124
17125 17127 17128 17129 17130 17131 17132 17133 17134
17135 17136 17138 17140 17141 17142 17143 17145 17148
17149 17150 17151 17152 17153 17154 17155 17156 17157
17158 17159 17160 17161 17162 17163 17164 17165 17166
17168 17169 17171 17172 17173 17174 17175 17178 17179
17180 17181 17182 17183 17184 17185 17186 17187 17188
17190 17191 17192 17193 17195 17196 17197 17198 17199
17200 17201 17202 17203 17205 17206 17209 17210 17211
17212 17213 17214 17215 17216 17217 17218 17219 17220
17221 17222 17223 17224 17225 17226 17227 17228 17229
17231 17232 17233 17234 17235 17236 17238 17239 17240
17241 17243 17244 17245 17246 17247 17249 17250 17252
17253 17254 17255 17257 17258 17259 17260 17261 17262
17263 17265 17266 17267 17268 17270 17271 17272 17273
17274 17275 17276 17277 17279 17281 17282 17283 17284
17285 17302 17304 17322 17324 17327 17333 17334 17342
17345 17348 17349 17355 17360 17364 17373 17377 17387
17389 17390 17392 17395 17399 17407 17409 17414 17424
17427 17429 17430 17432 17438 17440 17450 17458 17459
17460 17471 17472 17480 17482 17484 17491 17492 17503
17505 17506 17512 17522 17544 17551 17554 17558 17559
17563 17565 17584 17596 17601 17613 17616 17623 17629
17631 17632 17638 17643 17648 17653 17667 17672 17680
17683 17685 17686 17691 17694 17699 17707 17708 17712
17717 17720 17730 17731 17736 17745 17749 17756 17757
17761 17762 17766 17773 17779 17780 17792 17797 17825
17833 17841 17843 17846 17861 17863 17867 17874 17883
17885 17894 17897 17904 17910 17913 17915 17917 17918
17920 17924 17933 17938 17942 17947 17953 17956 17962
17965 17970 17978 17983 17985 17997 17998 18001 18013
18016 18017 18022 18030 18031 18049 18052 18057 18063
18064 18070 18078 18093 18099 18101 18105 18114 18116
18118 18121 18123 18126 18127 18128 18130 18134 18135
18138 18139 18146 18147 18150 18151 18152 18154 18155

18164 18167 18170 18174 18178 18181 18183 18191 18199
18202 18203 18206 18207 18208 18209 18212 18213 18215
18216 18220 18222 18223 18224 18225 18229 18232 18233
18236 18237 18238 18239 18241 18244 18245 18246 18247
18248 18249 18251 18253 18256 18258 18260 18261 18262
18263 18265 18266 18267 18268 18269 18270 18271 18272
18273 18274 18276 18277 18278 18279 18280 18281 18282
18283 18284 18285 18286 18287 18288 18289 18290 18291
18292 18293 18294 18295 18296 18298 18300 18301 18302
18303 18304 18305 18306 18311 18313 18318 18323 18334
18336 18345 18346 18352 18364 18377 18387 18400 18402
18408 18414 18429 18436 18439 18442 18444 18450 18457
18482 18483 18501 18507 18518 18523 18530 18534 18539
18549 18554 18574 18596 18602 18605 18632 18636 18642
18648 18649 18652 18661 18674 18675 18689 18693 18700
18701 18705 18709 18715 18718 18721 18731 18751 18758
18765 18780 18794 18800 18812 18817 18819 18821 18824
18830 18834 18836 18842 18845 18847 18865 18867 18874
18879 18891 18894 18902 18903 18916 18917 18920 18928
18948 18960 18966 18974 18978 18986 18994 18998 19002
19005 19006 19009 19020 19022 19045 19051 19055 19061
19082 19085 19094 19098 19100 19102 19118 19128 19133
19137 19144 19145 19158 19171 19173 19175 19204 19205
19206 19208 19209 19211 19216 19221 19224 19228 19229
19233 19234 19236 19243 19245 19247 19256 19276 19277
19282 19283 19286 19293 19298 19302 19308 19309 19311
19316 19336 19339 19342 19347 19348 19353 19355 19375
19376 19377 19379 19412 19419 19421 19427 19428 19434
19446 19455 19456 19459 19462 19471 19474 19475 19480
19482 19483 19487 19494 19512 19514 19519 19530 19531
19532 19537 19549 19559 19561 19568 19577 19590 19592
19595 19597 19601 19606 19608 19613 19617 19628 19636
19643 19649 19654 19659 19666 19669 19679 19680 19681
19682 19686 19689 19694 19697 19705 19706 19707 19708
19712 19717 19720 19721 19723 19732 19734 19739 19740
19745 19750 19753 19759 19760 19762 19763 19764 19765
19767 19769 19770 19771 19775 19777 19781 19785 19787
19790 19791 19794 19795 19797 19803 19808 19818 19819
19821 19824 19826 19831 19832 19835 19841 19842 19843
19844 19849 19856 19858 19859 19861 19862 19864 19866
19867 19868 19869 19872 19878 19880 19882 19883 19885
19886 19888 19892 19898 19901 19902 19907 19908 19911
19913 19914 19915 19916 19918 19920 19923 19924 19925
19930 19931 19932 19937 19939 19940 19944 19945 19947
19948 19950 19951 19952 19954 19955 19956 19958 19959
19960 19961 19963 19964 19969 19970 19972 19975 19976
19977 19978 19981 19983 19985 19986 19989 19990 19991
19992 19993 19994 19996 19997 19999 20002 20003 20004
20006 20007 20010 20011 20012 20014 20015 20016 20017
20018 20019 20021 20022 20026 20027 20028 20029 20030
20031 20032 20035 20036 20038 20040 20042 20043 20044
20046 20047 20048 20049 20050 20051 20054 20055 20056
20057 20058 20062 20063 20064 20065 20066 20067 20069
20070 20077 20079 20459 20466 20467 20468 20478 20481
20482 20484 20487 20489 20490 20492 20493 20494 20496
20497 20499 20502 20503 20507 20510 20511 20517 20519
20522 20523 20527 20529 20532 20535 20539 20542 20543
20546 20551 20552 20555 20557 20562 20568 20572 20574
20575 20578 20579 20588 20592 20593 20596 20597 20599
20601 20603 20604 20606 20607 20611 20612 20613 20619
20620 20622 20624 20626 20628 20631 20632 20633 20635
20637 20638 20639 20645 20649 20652 20656 20667 20673
20675 20678 20681 20683 21306 21311 21312 21318 21319

21321 21327 21331 21338 21341 21347 21348 21356 21358
21360 21364 21368 21378 21380 21385 21392 21402 21418
21424 21431 21432 21436 21443 21452 21453 21457 21458
21459 21460 21463 21464 21469 21472 21476 21481 21482
21483 21495 21499 21506 21507 21513 21514 21516 21525
21532 21537 21541 21544 21554 21555 21559 21561 21563
21569 21577 21585 21592 21602 21603 21614 21616 21619
21622 21624 21630 21632 21638 21650 21653 21654 21659
21661 21662 21667 21671 21677 21689 21690 21692 21693
21698 21699 21710 21718 21722 21723 21726 21730 21731
21736 21738 21744 21746 21751 21758 21764 21765 21767
21768 21771 21777 21778 21779 21780 21782 21784 21804
21805 21808 21810 21814 21819 21820 21833 21841 21844
21874 21875 21887 21889 21890 21891 21895 21906 21907
21910 21920 21923 21926 21927 21932 21933 21937 21940
21942 21945 21961 21967 21968 21969 21981 21990 21991
21995 21998 22005 22006 22013 22015 22017 22032 22034
22035 22039 22043 22052 22059 22063 22068 22069 22071
22075 22076 22081 22083 22086 22088 22094 22095 22101
22107 22108 22110 22111 22120 22124 22131 22132 22134
22140 22144 22145 22155 22157 22165 22167 22171 22173
22174 22184 22187 22188 22189 22191 22196 22201 22203
22210 22213 22215 22216 22221 22222 22224 22227 22229
22235 22237 22239 22251 22254 22257 22258 22259 22261
22262 22267 22275 22276 22278 22280 22281 22282 22284
22285 22287 22289 22299 22304 22305 22307 22318 22321
22326 22336 22337 22341 22344 22352 22354 22355 22358
22367 22368 22369 22378 22381 22386 22393 22394 22396
22398 22399 22408 22410 22413 22415 22419 22420 22423
22428 22429 22431 22432 22437 22439 22440 22443 22445
22446 22453 22458 22459 22460 22465 22467 22474 22475
22478 22486 22489 22490 22492 22493 22495 22496 22499
22506 22507 22515 22517 22523 22531 22540 22546 22551
22552 22556 22557 22558 22569 22573 22575 22580 22582
22585 22587 22593 22596 22597 22609 22610 22618 22620
22623 22625 22627 22631 22632 22648 22650 22653 22657
22664 22670 22672 22674 22681 22684 22686 22690 22693
22697 22701 22711 22717 22722 22724 22726 22730 22731
22733 22736 22739 22748 22756 22761 22765 22766 22776
22785 22786 22794 22795 22802 22803 22805 22806 22809
22812 22815 22816 22819 22820 22822 22829 22840 22842
22847 22849 22850 22858 22860 22862 22863 22867 22870
22873 22875 22879 22891 22892 22894 22896 22905 22906
22909 22911 22918 22921 22923 22927 22932 22936 22939
22940 22941 22942 22944 22945 22948 22959 22967 22972
22976 22977 22979 22986 22994 22998 23007 23012 23015
23016 23017 23023 23026 23027 23032 23033 23037 23041
23043 23045 23046 23056 23059 23062 23064 23066 23074
23076 23079 23080 23089 23091 23100 23105 23107 23108
23112 23116 23118 23130 23133 23137 23138 23142 23143
23160 23162 23165 23166 23171 23173 23175 23177 23185
23187 23190 23196 23203 23206 23207 23210 23214 23218
23220 23222 23223 23224 23226 23228 23233 23241 23255
23261 23262 23264 23265 23281 23285 23288 23289 23292
23294 23308 23311 23317 23320 23323 23324 23326 23327
23328 23338 23339 23340 23343 23345 23346 23347 23348
23349 23350 23353 23358 23359 23363 23365 23368 23375
23378 23383 23388 23395 23400 23402 23405 23406 23409
23410 23420 23422 23433 23434 23437 23439 23441 23450
23451 23454 23455 23456 23458 23463 23478 23480 23485
23486 23488 23489 23492 23495 23499 23503 23504 23514
23516 23517 23518 23520 23521 23523 23525 23527 23534
23536 23539 23547 23549 23553 23554 23555 23556 23557

23558 23559 23560 23564 23570 23575 23580 23583 23585
23587 23590 23591 23594 23598 23607 23614 23623 23627
23630 23636 23643 23645 23646 23651 23653 23654 23655
23657 23658 23660 23661 23663 23673 23675 23677 23681
23687 23690 23696 23703 23704 23707 23710 23714 23715
23716 23717 23722 23731 23739 23740 23742 23751 23752
23754 23768 23774 23780 23786 23796 23801 23812 23814
23822 23824 23838 23843 23847 23849 23850 23853 23855
23857 23861 23865 23869 23871 23883 23890 23897 23900
23906 23914 23915 23926 23929 23931 23934 23935 23945
23947 23948 23953 23955 23956 23958 23966 23969 23972
23978 23979 23987 23993 23999 24000 24003 24004 24006
24007 24011 24014 24027 24028 24029 24035 24044 24046
24054 24055 24058 24059 24069 24070 24071 24073 24074
24075 24083 24087 24093 24098 24100 24101 24107 24111
24112 24115 24118 24124 24125 24128 24129 24153 24159
24161 24164 24166 24167 24169 24170 24173 24201 24203
24204 24205 24210 24211 24215 24226 24228 24229 24230
24234 24238 24239 24241 24245 24247 24251 24254 24256
24258 24259 24268 24270 24276 24278 24281 24285 24287
24296 24300 24302 24304 24307 24311 24312 24321 24323
24324 24325 24333 24339 24340 24344 24347 24351 24356
24366 24372 24381 24383 24387 24391 24396 24398 24401
24412 24414 24416 24418 24423 24428 24429 24432 24438
24439 24457 24458 24461 24469 24472 24473 24476 24478
24479 24482 24485 24486 24488 24494 24495 24497 24502
24504 24513 24517 24523 24524 24525 24536 24537 24541
24544 24545 24550 24558 24565 24566 24574 24575 24577
24579 24581 24588 24595 24601 24602 24606 24607 24612
24615 24616 24622 24623 24624 24630 24631 24634 24636
24637 24639 24640 24645 24656 24669 24677 24679 24682
24683 24689 24694 24697 24700 24704 24710 24712 24714
24719 24721 24722 24726 24733 24734 24736 24741 24743
24762 24767 24768 24770 24778 24780 24784 24787 24792
24796 24797 24800 24805 24812 24813 24814 24817 24821
24823 24824 24825 24828 24831 24840 24843 24847 24850
24861 24863 24864 24867 24869 24875 24876 24881 24886
24893 24894 24895 24898 24903 24914 24921 24929 24936
24940 24941 24949 24951 24953 24954 24962 24971 24973
24977 24981 24985 24987 24988 24989 24996 24998 25003
25008 25009 25012 25013 25016 25020 25022 25028 25031
25033 25034 25040 25042 25044 25047 25051 25052 25056
25062 25066 25067 25068 25073 25077 25081 25082 25084
25089 25091 25092 25095 25097 25102 25103 25105 25106
25107 25110 25112 25117 25118 25122 25140 25149 25150
25151 25153 25159 25166 25167 25173 25175 25178 25179
25183 25184 25186 25187 25193 25194 25195 25197 25202
25203 25204 25210 25220 25222 25223 25225 25226 25231
25232 25233 25241 25242 25248 25249 25255 25256 25257
25258 25261 25263 25269 25275 25278 25288 25290 25293
25295 25296 25298 25304 25306 25308 25316 25318 25321
25330 25332 25336 25337 25340 25341 25346 25348 25349
25351 25352 25356 25361 25377 25379 25380 25381 25382
25384 25387 25391 25392 25395 25403 25405 25414 25418
25425 25426 25427 25430 25432 25437 25439 25443 25445
25447 25450 25460 25465 25471 25472 25477 25482 25484
25486 25487 25490 25496 25498 25499 25500 25505 25508
25510 25514 25528 25536 25540 25547 25551 25554 25558
25560 25561 25562 25564 25569 25571 25576 25582 25584
25587 25588 25590 25597 25600 25607 25608 25613 25622
25623 25640 25641 25654 25656 25659 25676 25686 25690
25693 25699 25703 25705 25713 25714 25726 25734 25740
25743 25745 25746 25748 25753 25755 25758 25764 25780

25781 25787 25792 25793 25794 25796 25798 25799 25803
25808 25809 25810 25815 25816 25823 25829 25835 25836
25839 25847 25849 25850 25861 25862 25864 25865 25869
25871 25877 25879 25880 25884 25900 25901 25907 25908
25912 25917 25918 25923 25931 25933 25941 25950 25953
25954 25957 25966 25972 25979 25980 25982 25983 25986
25990 25994 26003 26030 26031 26034 26041 26043 26045
26048 26049 26059 26066 26073 26079 26084 26095 26100
26101 26106 26118 26122 26124 26126 26127 26140 26145
26149 26151 26161 26165 26166 26174 26177 26180 26181
26182 26184 26187 26196 26206 26209 26213 26214 26215
26216 26220 26225 26228 26229 26230 26233 26235 26246
26253 26254 26256 26257 26262 26263 26265 26266 26268
26276 26279 26280 26282 26288 26292 26293 26300 26301
26305 26308 26315 26321 26326 26329 26330 26332 26337
26348 26350 26353 26356 26364 26370 26371 26373 26374
26375 26376 26378 26383 26385 26388 26396 26400 26401
26414 26415 26416 26426 26428 26429 26434 26441 26444
26445 26446 26459 26468 26469 26475 26478 26481 26483
26486 26496 26498 26499 26501 26509 26512 26515 26516
26517 26533 26536 26539 26542 26543 26548 26550 26554
26556 26561 26571 26576 26579 26580 26581 26591 26597
26598 26602 26606 26608 26611 26624 26628 26634 26635
26636 26637 26638 26643 26650 26653 26659 26661 26663
26671 26674 26678 26680 26686 26689 26692 26698 26703
26710 26711 26712 26718 26720 26728 26733 26736 26750
26751 26752 26753 26757 26761 26762 26766 26767 26776
26781 26785 26787 26788 26801 26802 26806 26807 26811
26813 26814 26815 26817 26818 50073 50074 50075 50076
50077 50078 50079 50080 50081 50082 50083 50084 50085
50086 50087 50088 50089 50090 50091 50092 50093 50094
50095 50096

2 16838 12354 16840 5157 16842 16843 16844 9542 16846
16847 16848 5168 16850 16852 12359 16854 16855 16856
16857 9550 1980 16861 16862 1982 8548 16869 16870 16871
16872 9570 16874 16875 12369 5399 16879 16880 16881
16882 16883 12373 9589 16886 16887 16888 8550 16890
16892 9609 16894 16895 12379 16897 16898 9612 16900
16901 16902 16903 16905 8551 16907 16909 16910 16911
12383 16914 16915 12384 16917 16918 16919 16920 16921
16922 16924 16925 16927 16928 16929 16930 5495 8554
16933 16934 9645 16936 16937 16938 16939 16940 16942
12388 16944 16945 16946 12390 12392 16949 16950 9649
16952 16953 9663 16955 16956 8556 16959 16960 16961
7621 16964 12398 16966 16967 12399 16970 12400 16972
16973 5498 16975 16976 8560 16978 16979 8561 12406 9777
12409 16984 16985 16986 16987 9778 16989 12413 118 16992
5503 16994 16995 16996 1984 16998 16999 17000 1986 1565
12422 17004 17005 17006 17007 17008 10311 17010 12425
17012 17013 17014 17015 17016 8569 17018 17019 7630
17021 12428 17023 10314 17025 17026 17027 1990 17029
17030 17031 17032 17033 17034 12431 17036 17037 12432
17039 17040 5523 5526 17043 17044 8574 17046 12438 17049
8575 17051 17052 17053 17054 17055 17056 17057 1568
10322 5532 5533 10326 17063 8580 12448 12449 17067 12450
17069 1576 10332 10333 12457 10335 17075 17076 12460
17078 10336 12463 12464 8582 10338 17084 7640 5538 1582
17088 5544 2003 12477 17092 5672 12481 12482 8592 2005
2007 17100 10349 12491 12492 17104 12493 12494 751 17108
762 5696 10358 17112 12499 12500 12502 10359 10361 12505
5698 2040 10365 12509 12510 5704 1108 17126 12514 8609
12517 1595 12519 2063 2070 1114 12525 12526 8615 2086
8617 1599 12531 12532 17146 17147 8619 12535 12536 2099

8624 1122 769 12541 12542 12544 12546 5960 2128 8630
2132 8632 12555 2136 12557 17167 12559 12560 17170 5985
12564 5986 2143 12567 17176 17177 1621 12569 12570 12571
2158 12573 1142 7688 8641 8642 12580 17189 1631 1146
8648 10422 17194 10423 10425 10426 12594 1149 12596
12598 12601 12602 17204 1638 2185 17207 17208 6546 12606
10433 10437 12609 12611 12612 7696 12616 12617 10446
12619 1639 12622 12624 10450 8657 6552 2200 12631 7705
17230 8661 2218 10460 8664 10463 6565 17237 2223 12641
2231 12643 17242 12646 12647 2233 12653 787 17248 10472
6583 17251 12659 10474 12661 6635 17256 12665 12667
12668 1175 8675 12674 12676 17264 12678 12679 12680
7735 17269 12683 12684 10483 7738 10486 6640 1650 10490
17278 12692 17280 10491 12696 6937 12698 12699 17290
17294 17301 12701 17303 10496 17314 17318 7754 10500
17325 17326 10501 10503 10504 17338 17340 2254 17343
10507 7760 10511 17351 17352 12717 17359 10513 17361
12719 17365 17372 12720 17375 12722 17379 12724 10517
12727 17391 6940 17394 12729 12730 17404 10524 7768
12734 17418 17422 10527 12736 17428 10528 10529 8686
10531 17439 8687 12743 17452 17456 12744 12745 12747
17462 17468 17469 6941 10534 12750 8690 12753 8693 12755
17494 17501 10539 12757 12758 1652 17521 7799 17530
17533 17534 17536 17537 17541 10544 17546 12765 10548
10549 12768 12771 6954 17566 17574 17579 17582 12774
17588 17593 10551 17600 10554 17603 10559 17614 10560
17620 17621 17622 12784 17624 12785 10561 10563 17633
17635 17636 17637 12788 17640 17641 12790 17647 12792
17649 12793 17655 17656 17659 17662 12794 17671 12795
17673 17675 10565 12797 10568 8698 12803 10572 17697
12806 17700 12808 12809 17709 12813 17713 12815 12817
17721 17723 17725 17726 12818 12819 17732 12821 17738
7815 17746 7816 17750 12826 12832 12833 10582 17763
12836 17769 17772 10583 17776 17777 10584 12839 17786
17789 17790 10585 17793 17795 17796 12842 17799 17802
17808 17812 17815 17816 12843 17827 17829 10586 17835
17836 17837 10587 10588 17845 12852 17849 17850 17859
17860 10591 12856 17866 10592 17870 10593 17877 10594
8701 17887 17888 10597 12864 17899 10599 10601 17911
17912 10602 7818 10606 12871 10607 17922 17923 10608
17925 17927 10610 12878 17940 10614 12881 17949 17952
12883 17954 17955 2266 17957 17961 12888 12889 17967
17968 10616 17971 17977 12891 17981 17982 12892 10618
17992 17996 12895 12897 17999 18000 6968 18002 18003
18007 18008 18011 18012 10622 10624 12905 18020 12906
18026 12907 10625 18033 18034 18037 18038 18044 10627
18051 12910 18054 18055 10628 18060 7828 7835 18066
10632 18073 18076 18077 7837 18081 18082 18084 18085
18086 18088 18089 12917 18094 18097 10637 7845 18102
18103 7846 18106 18107 18109 18112 10641 18115 12926
12929 18119 12930 18122 12931 18124 7850 6969 12935
12936 18132 18133 12944 8714 18136 18137 7857 12950
18140 18141 18142 18144 18145 10646 12953 18148 18149
12955 12956 2267 12958 8717 18156 18157 18158 18161
18163 8720 18165 18166 12963 18168 18169 10650 18172
18173 8721 18175 18177 12968 18179 18180 7862 18182
12970 18187 18188 18189 7864 18192 18194 18195 18196
18197 18198 12973 18200 18201 8725 10656 18205 7865
7868 12993 13000 18210 18211 7869 13002 18214 13003
13004 18217 18218 13009 18221 10660 13012 10661 13016
18226 18227 18228 10662 18231 13019 10663 18234 13022
1658 13027 13028 18240 8730 18242 18243 13032 13034
7879 8735 13042 13044 18250 13047 18252 8738 18254 18255

10669 18257 13053 18259 13056 10670 10671 13059 18264
7881 13065 13068 10673 13071 7889 7892 13078 10676 13082
18275 10677 13085 13086 13087 10678 7899 7901 7904 13096
13097 10683 13106 8749 8750 10686 8751 13116 13117 6974
10689 13124 10690 8755 13130 13131 13132 13134 7908
13136 18307 18308 18310 13138 13139 8758 6977 18326
2284 8762 18342 7929 13149 18348 18351 1179 18355 18356
18359 7933 18368 18376 10702 18378 18383 13165 18391
18398 10703 1193 18404 7946 10707 18418 8770 18430 18431
18432 18433 18434 10709 10710 18441 8771 1666 7952 18451
13179 18463 18472 18479 18481 13180 8774 18489 18491
18492 13186 6996 18515 7960 18521 13189 18524 10720
18533 791 18536 18538 1692 18544 7969 18552 13196 18560
18566 18569 18571 18573 13197 18578 18582 18588 18591
18593 13199 8781 10725 18606 18607 18610 18615 18620
18623 18631 13206 13208 18639 13209 18646 13213 13214
13215 18658 801 18662 18667 18670 18673 13220 13221
18677 18687 18688 7977 2318 18696 18697 18699 8785 10731
7010 7026 7993 13234 13235 18724 18727 18728 18729 18730
803 18734 18735 18737 18739 18745 18747 10737 18757
8792 18759 10739 18769 18778 18779 13251 18781 18783
18785 18790 18792 18793 13252 18796 18799 8793 18803
18809 10741 18813 8795 10743 13260 18823 10744 18829
13262 18833 10745 7035 10747 18844 13268 13270 18848
18854 13272 13274 7038 18878 8007 18880 2324 18892 13285
10751 10752 18905 18907 13296 2325 13298 18924 18925
8803 18932 18937 18942 18943 18945 18947 7060 18955
18956 8806 18961 2330 18972 10760 18977 13313 18983
18984 10761 18991 8030 13320 18999 19001 10763 13323
13326 13327 19011 19016 19017 10764 13329 19024 19030
19036 8036 19047 19048 19049 19050 13331 19053 13332
19058 13333 19065 19072 19077 19080 19081 10766 13337
19090 2337 13340 13341 13343 19106 19108 19110 19112
19117 2344 19122 8812 19129 19132 13351 13352 13354
8813 19148 19149 19150 8815 19159 19165 8816 19172 13368
13369 19176 19180 19191 19197 19198 19199 19201 7089
8818 13373 13376 13377 13379 19212 19215 13380 8819
19223 8044 19227 10778 13386 8048 13389 19235 7091 19237
19238 19239 13391 8824 10783 19250 19254 13402 19259
19264 19270 19272 822 8826 19279 19280 13406 7104 8055
19288 19290 19291 7108 8832 13417 19303 19304 19305
10790 8833 13426 13429 19319 19320 19321 19327 19328
19329 8834 19337 13434 7130 19344 13440 13441 19349
13443 13446 19356 19358 19359 19368 19374 13447 10794
7136 2346 19388 19391 19397 19401 19404 19406 13453
19414 10799 13457 13458 10800 19429 13460 13461 19451
19453 13462 13463 10802 13466 19468 19469 10803 10804
13469 19476 2347 7154 7164 19484 19486 10808 19492 19493
13476 19495 19500 19501 19503 19506 19511 7165 19513
8068 19516 19517 10812 19522 10813 7170 10815 19533
19536 7185 19541 19546 19548 13487 19551 19554 19556
2352 8848 19566 19567 13492 19570 19572 19575 10820
19579 19582 19583 19584 19585 19586 19588 2736 2752
19593 19594 10824 10826 19598 2759 19603 19605 7203
1737 19610 19612 7207 19616 13504 19620 19621 19627
825 19630 10832 19640 19641 13508 19645 19647 7215 19650
19651 19652 19653 10834 19656 19657 8859 19660 19664
8085 19667 19668 8086 19671 19674 19675 19678 8088 1231
10841 8866 19683 19685 10845 13523 19690 19693 10847
19696 10848 19698 19699 19700 19701 19703 8867 10851
10853 8868 19709 19710 10855 19713 19715 19716 10856
13536 13537 10857 19726 19727 19728 19729 19731 10859
13540 19735 19737 13541 13542 19741 19742 19743 13543

19746 19747 19749 13544 19752 10860 19754 19755 19758
13548 3252 19761 13550 13551 8091 10863 7220 10865 8093
8877 19773 19774 13564 19776 7231 19778 19779 19780
13577 19783 8883 19786 10871 19789 10872 10873 19792
10874 10875 19796 13586 19798 19799 19800 19801 3255
19804 19805 19806 10877 19810 19811 19813 19814 19815
19816 10878 8885 19820 13595 19822 8886 19825 13597
19827 19828 19829 19830 7237 8098 19834 8099 19836 19837
19839 19840 13604 13608 10884 13610 19845 19846 19847
19848 10885 19850 19851 19854 19855 10886 19857 10887
8100 19860 10889 10890 19863 8892 19865 7239 8102 13621
8104 19870 19871 13623 19874 19876 19877 10895 19879
7241 19881 8107 8900 8901 3257 7248 19889 19890 19891
3261 19893 19894 19896 19897 13634 19899 19900 3262
10905 19903 19904 19905 19906 10906 13639 19909 8114
8910 8911 10910 10911 19917 8115 13648 19921 3264 10914
8915 19926 19928 19929 10916 13653 13656 19933 19934
13657 19938 8117 3266 19941 19942 10920 8920 19946 13662
8921 19949 13664 8922 8923 8121 13668 10926 19957 10927
13671 13672 10928 19962 13675 13676 19965 19966 19967
19968 13677 10929 19971 8122 19973 19974 13680 10931
7266 7267 19980 13684 19982 8126 19984 10935 10936 19987
19988 13689 13690 10937 3280 13693 8128 19995 3285 10942
19998 13706 20000 20001 13710 8130 13712 20005 8131
13714 20009 7273 10947 7276 20013 13719 13721 8940 10950
7278 13732 20020 13733 13735 20023 20025 13736 13738
13739 10953 10954 13745 8135 20033 20034 7290 13751
8137 13755 13756 8947 13766 13767 13768 10959 61 10961
13778 20052 20053 13780 7302 13783 10965 13790 20060
20061 8140 10967 13795 13797 13798 13800 1265 8954 20072
20073 20074 20076 13806 20078 10971 20080 20455 20458
8955 20460 20462 20463 20464 20465 13812 13815 3294
20473 20474 10974 20480 10975 13825 20483 856 20485
13827 8144 10978 8146 13831 13832 20495 8147 13834 20498
13835 20500 20501 13836 8148 20504 20505 20506 10982
20509 10983 7316 20512 20513 20514 20515 13846 8967
20521 8968 857 20524 20525 13850 13852 20530 20531 3307
20533 20534 13859 20536 20538 10992 20540 20541 13861
13862 20544 13864 20547 20548 13865 13866 20554 7324
20556 13869 20558 20559 13871 20563 20564 20565 20567
13872 20569 20570 20571 13873 20573 10994 13879 20577
13880 13881 20582 20585 20587 13882 20589 20591 13885
13886 20595 13887 1763 20598 13890 20600 13891 20602
170 13894 10998 7340 20608 20610 7342 7344 13900 20615
11002 13902 13906 20623 13907 20625 13908 20627 13909
20630 8978 8979 11005 20634 8164 20636 11012 7347 11014
20640 13922 13923 20651 13926 20654 20655 13927 20660
20661 20662 20663 20664 20665 20666 13928 20671 11015
20674 13932 20676 8166 20679 20680 8167 8985 20685 13941
21307 13942 7348 21314 21317 7349 7350 13948 21323 21324
11030 21328 13952 21337 8990 21339 11034 21346 11035
7352 21352 21355 13962 21357 13964 21359 13966 13968
21365 11041 21369 21372 21373 21374 21377 11043 21379
7353 21382 21383 13974 21386 11050 21394 21396 21401
11052 21407 21409 21411 21414 7354 21419 21422 21423
13986 21425 8995 7356 21433 13991 21442 13992 21444
21450 13994 13995 21454 21455 13999 14004 14005 14007
21461 21462 11064 11065 7357 11067 21473 7358 21478
21479 7359 14019 11072 21488 21489 21492 21494 11073
21497 21498 14027 21501 21502 21505 11075 14029 21512
14032 11078 11081 21517 21519 9001 21526 21527 21529
21531 14038 21533 21534 21535 14039 21538 21540 11083
21543 14045 21548 21551 9002 14047 7360 14049 14052

21566 7361 21571 21572 21573 21574 14055 21578 21584
11090 21586 21591 14060 21593 21595 21596 14061 14062
21604 21605 21609 21612 21613 14063 11091 21617 14066
7363 7369 21625 21627 11096 14074 21633 21635 21637
11097 21639 21645 21647 21649 14076 14077 11098 21657
14079 14080 11100 21664 21665 14086 21668 21669 21670
8186 21676 11102 21679 21680 21681 21682 21684 21688
14094 11104 7372 14098 21695 21696 14099 11107 21700
21701 11108 21711 21712 7373 21720 9011 14109 14114
21729 14115 11111 21733 21734 14118 7374 21740 14120
7375 21747 21749 14123 21752 21755 14124 21760 14128
7376 11119 14135 11120 21776 7379 14145 11123 7380 14149
14151 21787 21788 21789 21792 21794 21796 21799 21801
21803 14152 14153 9017 21809 14158 14159 21815 21817
14160 14162 21826 21827 21828 21829 14165 21838 11126
21843 11127 21846 21858 21859 21860 21861 21863 21864
21865 21871 21873 14169 14170 21879 21884 14171 14173
14175 14177 21893 21894 14178 21896 21897 21899 21900
21901 21904 14181 14182 21908 11128 21914 21916 21919
8198 21922 14190 11130 14192 21931 7381 11133 11134
21938 11138 21941 14201 21943 14204 21947 21948 21949
21953 21955 21956 21960 14206 21963 21966 7382 14209
7383 21972 21975 21976 14213 21982 21983 21987 11143
9023 21994 11145 21996 14221 21999 22001 22003 22004
14222 14224 22007 22010 22012 14225 8203 22016 14227
22018 22019 22020 22022 22023 22024 8204 22033 11148
7384 22036 22037 22038 14232 11151 22045 22047 22049
22050 7385 22057 14235 22060 22061 14236 14237 9028
14241 22073 22074 14243 8207 22078 22079 22080 14246
22082 14247 22085 7386 14254 22090 22092 14255 7387
22096 22099 11158 22103 22105 22106 11160 14263 22109
14265 7391 22114 22117 22118 14269 22121 22122 7392
22125 22128 22129 11163 11164 14273 22135 22136 22139
7393 22141 22142 11167 14279 22146 22147 22149 22151
14280 3321 22158 22160 22164 14284 14286 11169 14289
14290 11170 14292 11171 9041 22190 8216 924 22197 22198
22200 8220 22202 14301 22204 22205 11179 14306 11180
11181 22217 11182 11183 11184 9047 14315 22234 11186
9048 14325 22240 22243 22245 22246 22249 22250 11188
14327 14328 11190 14330 11191 11192 14335 22268 22270
22271 14336 11193 22277 8222 22279 11197 11198 11199
14350 14359 14361 22288 7396 22293 22296 14363 22302
14364 9051 11203 22308 22309 22310 22311 14367 22319
22320 14368 22324 22325 14370 22328 22329 11204 14372
14373 14376 22345 22347 926 22353 11207 14380 22356
14381 22360 8225 14384 14385 22374 14386 11210 22382
14391 22388 9057 9058 22395 14397 22397 11213 11214
22400 22407 11215 14402 11216 11217 14407 14408 11219
22424 22426 22427 14410 14416 22430 14417 14418 22433
14420 7398 14422 22441 22442 7399 8229 7402 22449 22450
8231 22454 11228 7405 14431 22461 22462 11232 14433
22471 22472 22473 14434 14437 11233 22479 22482 22485
11234 11235 8233 14442 11239 9073 14447 11242 22503
14449 11243 22509 22511 22512 22513 11244 22516 7406
22521 8235 22524 22525 11248 22533 22534 22536 14459
22542 22543 1782 22549 14462 14464 22553 11250 14466
9077 22560 22568 1786 22571 22572 14474 22574 11253
22576 22577 22579 11254 14481 22584 9079 14487 22591
11256 7412 11261 22598 22600 22603 22608 11263 8242
22615 14493 22619 14494 22621 8243 9084 11268 22630
14505 11269 22633 22635 22636 22646 8244 11273 14509
22654 22656 14510 22660 22662 22663 14512 22666 22668
11275 11277 14516 22676 22678 22679 22680 14517 14518

22685 14519 22688 11278 22692 11279 22694 22695 14526
22698 22700 14528 22702 14529 22712 22714 22715 14530
22718 14531 22723 11281 14533 22728 14534 14535 7413
22734 11283 22737 8247 22740 22745 11286 22752 22754
14540 22757 9088 11296 11297 22768 22770 22773 11298
22781 11299 11301 22787 22788 11302 14548 22797 22798
11304 8248 9092 11311 22808 14553 3583 11318 14556 22817
7416 11325 22821 14559 22826 22827 22828 11327 22831
22834 22837 9095 11331 11334 1789 7418 22851 22853 11339
1791 11345 14569 11346 22868 22869 11347 7422 11350
11351 22880 22881 22884 22886 22887 22888 11352 11358
22893 1795 22895 11365 22898 22901 8265 8266 11373 11374
22913 22915 11375 14585 11376 22925 22926 11377 22928
22930 7424 22933 22934 22935 11382 22938 11383 11384
11386 14594 11387 14596 7427 22951 22954 22955 22957
8271 22960 22962 22964 11391 22971 7429 22973 22974
14601 11397 22978 11398 22981 14604 22987 22988 14605
22996 11399 23005 3595 23008 23009 23010 11404 23014
11405 14610 9113 23020 23021 7431 7433 14615 23028 8277
9117 23035 14619 14620 14621 14622 9118 23049 23050
23051 23055 11417 7435 23061 14627 7437 8282 23068 23069
1796 14633 14635 11424 23083 23085 11425 7441 23094
23098 9126 23101 11430 7442 11433 11434 23114 23115
11436 14645 23119 23121 23125 23127 11437 23131 23132
8286 23136 7443 7444 23139 8290 14658 23146 23147 23149
23155 23158 8293 11448 23164 11449 9136 23167 14665
23172 11452 23174 957 23176 11463 23179 23181 23184
11464 8295 23188 23189 14672 14673 23198 23201 14674
11472 11473 8 23211 23213 11478 9140 14687 11483 14690
11485 23225 14693 23227 11487 23229 7449 23236 23237
7451 23243 23244 23250 23252 1817 11495 14702 23263
11496 14705 23266 23267 23268 23273 23276 23278 23279
8301 1387 23287 9148 7455 14711 11504 23299 23304 23307
14714 11505 23316 11506 23318 11508 11510 11511 14722
14723 11512 23329 23330 23331 23333 11513 8305 14730
23341 14731 14732 11515 11517 14738 11518 14740 11521
23354 23355 11522 14745 23360 7456 23364 11524 11530
23372 14752 23376 23377 14753 23380 23381 14754 23384
23385 23386 11531 23391 23394 7457 23397 14758 11533
11534 11535 23407 23408 14765 11536 23411 23412 23418
9153 23421 8308 23423 23424 14775 11539 8310 23438 11541
14780 23444 23445 23447 14781 14782 23452 23453 11542
8311 11544 14786 23461 14788 23464 23465 23467 23468
23470 23471 23472 23477 14789 14790 23482 8312 14793
14795 9159 23490 14797 23494 8314 14799 23500 23501
7458 8318 23506 23510 23511 8319 23515 14805 14807 8320
14813 14814 11558 11559 1388 23528 23530 11563 11565
23538 7460 23541 23546 11567 7461 23552 14830 9172 7462
11571 11572 14836 14837 11574 23563 8328 23565 23568
11577 23573 23574 11578 23577 23579 14842 14843 23584
8330 14845 23589 11581 11583 14848 1396 23602 23603
23605 11588 23608 14851 23616 23618 23620 23622 9177
23626 11594 23628 11602 23632 14856 7464 8333 14859
23650 14860 14861 14862 14863 14864 11611 14866 14867
14868 14869 11612 7465 23678 23680 14872 23683 11617
23688 11621 23692 23695 14879 14880 14882 14884 14885
14886 14887 14888 14889 23718 23721 11626 23724 23726
23727 23728 14892 14893 14894 11631 23744 23748 23750
11632 14901 23753 14902 23759 23760 23763 23764 23767
11633 23771 14904 23779 7466 23783 7469 23787 23788
23789 23790 23791 23793 23794 7470 23800 7471 23803
23807 14916 23813 14917 23818 9187 23823 11652 23825
23826 23830 23831 23832 23833 23837 14923 23839 11653

7472 23848 7474 11659 11660 11663 23856 11665 7475 23863
14936 7476 14938 23873 23874 23875 23877 23878 23881
23882 1831 23886 11670 11672 1833 14943 23908 23913
11687 9194 23918 23921 23923 14948 11690 14951 14952
8349 14958 14959 11692 14962 23954 14965 14966 9196
23960 23962 23963 23965 11694 14970 11695 23973 7480
14973 23982 23983 23986 14974 23988 14975 23995 23996
23998 14976 7481 14981 11698 24005 14983 11699 24008
24010 11700 14987 24016 24021 24024 9200 8352 14990
24033 24034 11703 24037 24041 24042 24043 8353 14996
24051 11706 8356 11709 11710 24060 24064 9205 15005
15006 8357 15009 15012 24077 24081 11713 15015 24088
24090 24091 11714 24096 11716 24099 15023 15024 24103
24105 15025 24109 11718 15028 24114 15030 24117 15031
24122 15032 15033 24126 24127 11719 15037 24134 24137
24139 24141 24143 24144 24146 24149 8359 24154 24158
15039 15040 24162 11723 24165 15043 15045 24168 4382
11725 24171 11726 24175 24182 24183 24184 24187 24188
24190 24193 24195 24197 15051 24202 15052 15053 7483
24207 24209 15061 7485 15092 24217 24219 24221 24224
15093 15097 8364 9213 24232 15105 24236 15109 15119
24240 11733 24242 9214 15130 24248 15133 24253 15134
15140 15141 15143 24262 15145 9215 24272 24273 24275
15149 15150 15155 11739 24286 15159 24288 24289 24293
15161 15164 15170 15171 24306 15180 15181 1841 24314
24318 24319 24320 15183 7487 11744 11747 24326 24329
15187 24336 8367 15189 24341 11749 24346 15192 24348
24349 24350 15193 24353 24355 15195 24357 24360 24361
24362 24363 24364 11750 24367 24369 24370 8368 24374
24377 24380 7488 24382 11753 24386 11754 24390 15207
99 15210 24399 24400 15212 24402 24403 24406 24408 8371
1850 24415 15216 11761 24419 24420 24421 24422 11762
24424 24426 24427 15220 15222 15223 24433 24434 24437
15227 15228 24442 24443 24444 24447 24449 24450 24452
24453 7492 1856 24459 24460 15231 24462 24464 24466
24467 15234 24471 15235 11767 11768 7494 11770 9230
24484 15253 9231 1860 24490 24492 24493 15265 11774
11775 15270 24503 15271 24510 24512 15272 15273 24519
24520 24521 15274 15275 9233 24526 24532 24535 15278
8379 8380 24542 9236 11781 24547 15292 24555 7498 24561
24562 24563 24564 11784 15296 24570 15299 7499 11788
24578 15303 7500 24582 24583 9245 24589 24591 24593
24594 11791 24600 11792 4411 24605 11794 15314 15315
15316 15317 24617 24618 24621 15319 15320 15322 24629
15324 7502 24632 24633 15327 11796 15335 11797 15341
24641 24642 24643 24644 7503 24646 24647 24649 24652
24654 24655 11799 24657 24660 24661 24662 24664 24668
15344 24671 24673 9249 7505 24680 24681 7506 15353 24685
24687 15356 24691 24693 15358 24696 15359 24699 7508
24701 15364 24707 8392 24711 15371 11810 24715 7509
24720 15376 9257 24723 15378 24728 24729 24732 11814
15383 15387 24737 24740 15389 15390 24745 24750 24752
24753 15392 24765 11815 9258 15396 24773 24775 24776
24777 15397 15399 24781 24783 11817 15408 24788 24789
24791 11818 24793 11819 15414 15416 24804 15417 24806
24807 24809 24811 11820 15420 11823 11824 24818 24819
990 15426 8397 11829 11830 9261 24833 24836 24837 24839
15435 11833 15438 24848 15443 24853 24858 24859 11834
15445 11835 24865 24866 8400 15448 24870 15450 15451
24877 24879 15452 24885 7511 24887 24889 24890 24891
15455 11840 7512 24896 24897 15458 24899 24900 24901
15459 24906 24907 24909 24912 9266 24920 15465 24925
11843 24934 15468 24938 24939 11845 15471 24945 8404

15474 15476 8405 24956 24958 24959 15479 24963 24964
24969 15480 24972 11849 24976 15482 15483 24982 24983
9270 15488 15495 11851 24990 24993 15500 11852 24999
8406 25004 25005 15506 9272 25011 11856 9275 25014 15515
25017 11861 15520 25027 11862 25030 15526 25032 15528
8407 25036 25039 9277 197 15539 9279 25049 15541 15542
25053 15544 25058 25059 25061 1013 7519 15547 8411 25072
11877 25076 15551 25078 15553 15555 8412 25088 11879
25090 9285 15564 15565 8413 25101 711 15572 15578 7521
15581 25109 15584 15586 15587 15590 25119 25120 9289
25126 25128 25129 25132 15593 25142 25145 25147 25148
7522 15598 15601 15602 25156 15603 25162 25163 25164
25165 9292 7525 25172 8418 11894 25177 15616 15617 25181
11895 9295 11905 7526 25189 25190 15625 1876 11911 25196
15630 15633 15634 11913 25205 25207 25208 7528 25211
25213 25216 25218 25219 15645 4578 15654 25224 9304
8426 25227 25228 25230 15663 8427 15677 25234 25236
25237 11929 11930 25245 11931 15695 11932 11933 15715
9307 25259 9308 11938 7530 25274 15729 9311 25281 25283
9313 7531 25292 15737 15741 11943 11945 25300 25301
15757 25305 15766 25307 11947 25309 25311 25313 9315
11949 25319 25320 15776 25323 25328 25329 7532 25331
15783 8434 11954 25338 25339 7534 11957 25343 25344
25345 15793 11958 15805 15806 8436 25355 8438 25359
25360 15834 25367 25371 11961 15836 9322 15838 8439
25383 11964 25385 25386 11967 25388 25389 25390 15849
15851 25393 15858 25397 25401 15864 8440 25406 25407
25409 25410 15866 25415 25416 25417 4579 25420 25423
9326 15877 9327 25428 4580 15880 25433 11975 15884 15885
25444 11978 9329 11980 25452 25454 25457 25458 4582
25461 25462 11983 25467 11984 1877 25473 15906 25479
25480 25481 15907 25483 11990 25485 11992 9333 25488
25489 15918 25491 15920 15921 11996 4597 25503 8446
15929 25509 15937 7543 25515 25519 25524 25526 15951
25530 25534 7544 25538 25539 9339 25543 25545 9341 25550
12003 25552 7548 25556 12005 25559 7549 15991 15992
9345 25568 4606 12012 25573 16007 25581 16009 12014
25586 8455 12017 16017 25594 25595 25596 4619 16022
25606 16024 16025 25610 25611 1879 25614 25619 25620
25621 12022 16030 25624 25625 25626 25628 25629 25631
25632 25638 25639 16031 1478 25642 25643 25644 25652
25653 12027 25655 16035 12030 25662 25665 25667 25668
25670 25671 25672 16040 25677 25678 25682 25684 9352
25688 16048 25691 16049 1481 8461 16054 25709 16057
9355 25716 25717 25720 25721 25724 25725 12038 25728
25732 7559 25736 8463 12044 9359 12047 12049 25749 25751
12050 16079 25756 12052 25761 16083 25775 25776 25777
25778 25779 16084 12054 12056 7560 7562 16097 16100
16102 12059 25800 25801 9362 25806 16108 16112 16114
25812 25813 12061 8467 25817 25818 25821 25822 16122
25824 25827 25828 4798 25831 25832 9365 12067 16135
25840 25841 25843 25846 1485 16139 7566 25853 25854
16143 1497 25863 16153 16155 25867 16156 12073 25872
25873 25876 8477 25878 16166 8478 25882 16173 25887
25888 25891 25894 25896 25898 25899 9373 16177 25902
25903 25904 25905 4828 8480 25910 25911 16183 25914
16184 16187 25920 25921 16189 25924 25926 25929 12082
25932 16191 25934 25936 25937 25938 25940 9376 25942
25944 25945 25946 25948 12086 25951 12091 16202 25955
25956 12093 25961 16204 25968 9377 25973 25974 25975
25978 16216 12095 25981 16221 8481 9381 25987 12100
25991 25992 12110 25995 16232 26006 26014 26020 26021
26022 26023 26026 7569 12112 16239 26035 26036 26040

16241 4831 12116 26046 26047 12117 12118 26052 16257
26060 26061 12119 26067 26071 7571 26074 12122 26083
9389 26086 26088 26090 26093 26094 7572 26096 26097
9391 12127 26104 26105 1051 26109 26115 9394 9395 26123
16290 7574 9397 26129 26133 26135 26136 26139 12141
26142 26144 1499 26146 26148 16302 9399 26154 16305
26164 16309 12144 26169 26170 16314 26175 16315 4850
8492 16321 26183 16323 16324 26189 26192 26193 12152
26200 26202 16330 26208 12153 26212 8493 4854 16340
16342 16343 12156 26227 12158 12160 16359 26232 16360
26234 16363 26238 26239 26240 26242 26243 16366 26252
16378 16380 26255 16382 12162 26259 26261 8496 4856
16391 715 9409 12168 26278 16404 4861 12175 26286 16414
26290 12176 16416 26295 26297 26299 4865 16428 12178
26307 9414 26309 26310 26311 26312 26314 16432 26318
26319 12181 26322 9416 16440 12183 26331 16445 26333
26334 26336 12185 26338 26339 26340 26341 26342 26343
26344 26347 16448 8501 26351 16465 16467 26358 26361
26362 16469 26367 26369 9419 9420 1923 16492 12196 12197
26377 12198 26379 26381 9422 26384 16505 9423 26391
26392 26393 26394 26395 8504 26399 12206 16514 26402
26404 26411 26412 26413 8505 16525 8506 26419 26423
26425 16529 8507 8508 26430 26431 9430 26436 26438 16544
16551 16552 4872 26448 26451 26452 26455 26457 12228
26464 26467 16565 9432 16578 26476 1927 12233 26482
16585 16587 26487 26489 26491 26492 12239 16592 16593
1056 26502 26503 26504 26507 9437 26510 9438 26514 12243
12248 12249 26518 26522 26523 26527 26528 4897 26534
16624 16631 26540 1521 16634 26544 9444 12269 26551
26553 16642 1528 7593 26563 26567 16647 26572 26573
16648 26577 16657 16660 16663 26582 26584 26587 26590
12275 26593 26594 26595 26596 5118 16667 16669 26604
26605 5119 16674 9449 26612 26613 26619 26620 26621
26623 5127 26625 26627 12287 26629 16684 5128 16686
9459 12290 26639 26642 16695 26644 26648 36 26651 12294
26656 26657 16700 16701 16704 16706 16711 9473 26679
8526 26682 26684 12299 26687 16719 26691 8527 26696
26697 16721 16724 26704 26708 12305 8528 16728 16731
26719 16732 26722 26726 16733 26730 26731 16734 1965
26739 26743 26745 26748 26749 12309 16744 16750 12311
26755 26756 12312 26759 5135 16759 26763 9509 16763
26768 26769 26771 26772 26775 12322 26777 26778 26779
26780 16771 26782 26783 26784 16772 26786 16774 5139
26793 26795 26796 26798 26800 16778 16779 26804 16780
16783 26809 26810 16786 26812 16787 16788 16793 16794
16795 16797 8532 5140 16803 8535 8536 16810 16811 16815
1970 1533 12341 12342 16823 16825 16826 16827 16828
16829 16830 1545 8540 16835 16837

3 17984 22313 22316 22317 13561 17986 17988 17989 22322
7044 17993 17994 17995 12186 22330 22331 4860 13574
22339 22340 13576 22343 8524 13578 22346 13579 785 18004
18005 18006 15279 8103 22359 18010 22362 22364 12195
15285 15286 22372 18014 22377 18015 7052 11150 22384
22385 15290 18021 22392 7057 18023 18024 18025 11152
18028 4864 7062 22404 18032 13589 8109 22411 22412 18035
22414 18036 22416 22417 15301 13591 22421 22422 18039
18040 22425 18041 18042 18043 12208 18045 18046 18047
18048 22434 22435 15304 18050 13593 13594 18053 12210
22444 7066 18056 9029 18059 22452 13599 18061 22455
18062 1938 12220 7072 18067 18068 18069 22470 12223
18071 18072 15318 18074 22476 18075 10419 10421 22483
15321 18079 18080 8113 15323 18083 22494 9033 11165
12232 22500 22502 18087 15329 7074 18090 22510 18091

18092 15332 12236 15336 18098 22518 7075 22522 18100
15338 15339 22527 15340 18104 13617 22535 9036 22539
9037 18108 7079 18110 22548 18111 9039 18113 12245 22554
22555 1941 10436 18117 22559 12253 22562 22564 22565
15357 18120 22570 8118 11175 10441 15362 18125 13629
12261 12266 18129 22581 15372 22583 12268 15374 13633
22589 11177 22592 12270 22595 11178 15379 10442 8542
15385 22607 15386 18143 10444 22613 15388 8543 10448
9044 12283 9045 15395 2320 22628 18153 8545 15398 8120
22634 1943 15407 18159 18160 22649 12293 7090 13654
22655 13655 12296 4882 7095 11194 9055 18171 12303 12304
11196 22673 12306 18176 22677 15428 8125 10464 8552
22683 11200 1494 7100 22687 18184 22689 18185 22691
18186 15439 15442 10468 18190 12321 9063 18193 9064
22703 22706 22707 22710 12326 8555 15449 12329 12330
12331 786 9067 9068 22725 18204 10477 13685 12338 22732
15462 15463 8557 12340 7518 7106 22742 12347 15470 22750
22751 2326 12350 22755 10484 18219 13696 22762 11218
12355 13699 13704 7110 11220 22777 22778 7112 22782
22783 22784 8563 15489 18230 15490 22790 22791 22793
15491 15493 15494 18235 22799 22801 12360 11223 22804
12362 7524 15504 11225 22810 7125 22813 2328 12367 15511
22818 13723 10493 10494 11230 22824 22825 11231 15524
15525 13734 7132 22832 9080 13737 15535 22841 12377
22843 15538 22848 12378 7133 13741 7134 22855 15543
11236 22861 5037 13747 22864 22866 11238 1957 11240
15550 22872 1961 7143 22877 15554 12389 13761 13765
15560 7145 8145 9089 15566 7149 15568 11247 15571 13773
22900 15573 15574 15577 22908 13775 10514 9091 22914
15583 22917 7153 22919 22920 10522 18297 10523 13785
15591 13786 5126 13788 15595 12403 15599 10525 18309
12405 8149 13796 15609 22943 18320 7540 15611 22949
18330 22952 22953 18331 18332 18333 22958 15612 12408
18339 18340 9096 22968 22970 18343 12410 11258 13805
18350 11259 15621 11260 22980 7155 22984 22985 13811
15626 18365 22990 22991 22993 18366 22995 18367 22997
11262 23000 23001 18370 18372 13814 7156 15631 18382
23013 15632 18386 13817 18389 23019 7162 18392 18397
23024 15635 18399 15637 23029 23031 18401 8155 13823
18405 23040 18406 15641 18412 15643 23048 18417 12423
18419 18422 18426 18427 15650 8156 2338 9103 8591 15661
23070 23071 15662 11271 23078 15664 11272 23082 15669
23084 18447 23086 18448 18449 23092 23093 15672 2342
11274 18459 23102 9106 23106 18464 15688 18474 15691
11276 12434 23117 15697 18486 9107 23122 23123 23124
15708 1201 23128 23129 15714 18502 12437 18514 10545
10546 13845 7551 15723 15727 23144 23145 9110 15730
23148 12442 23150 18537 23156 11284 8595 13851 18547
15739 18550 12445 23169 15744 18557 18559 7171 18563
15749 18568 23178 15753 13854 23182 7175 15760 23186
15763 18579 11289 11291 23191 23192 23194 11292 23197
13863 23200 18595 12452 23204 18598 18601 12453 11293
11295 13868 23215 23217 18608 10557 23221 18612 18613
13870 18617 7176 18621 15796 18625 23232 12458 15804
7179 8601 23242 13875 13876 23247 23249 18647 15830
23254 12461 23259 23260 18651 11300 7183 8603 13883
10567 8604 18672 23269 23270 23271 10569 23275 13888
15850 11309 23280 18679 18682 12471 15861 15863 12472
23293 18695 23297 23298 7184 23303 8606 23305 23306
18698 11315 23309 23310 12476 23312 23313 11317 18704
10573 23319 18706 23321 18708 12480 18711 9122 11324
15883 13904 8169 23332 12484 23336 12485 15888 15890
12486 15893 23344 11326 15897 18743 15898 18746 9124

23352 11329 18752 18755 23357 18756 1719 1000 23362
11333 18760 18761 23367 9127 23369 23371 18766 23374
13921 11335 7190 15919 7192 18782 5136 11341 10589 15927
11343 23390 11344 23393 15935 13936 23396 10590 23398
15941 23401 18806 23404 15944 15946 15949 18816 15950
1971 15952 13940 23413 23414 23415 23416 15956 23419
18827 8176 9133 18831 11349 23429 23431 15975 15981
23435 23436 9134 7196 13946 23440 18846 15990 13947
18849 23448 18852 7197 18856 18859 15994 13950 12512
23457 18875 11354 23462 11356 12515 18887 11357 13956
13958 18899 13959 23473 23475 16018 1500 10600 18909
11361 11362 11364 12522 12523 23491 7199 23493 18931
7201 23498 18933 7202 13978 23502 11369 13983 16043
23509 16044 18949 8184 5143 7576 7205 18963 23519 10613
18968 23522 12533 18973 16056 18975 9145 23531 23533
11380 18981 18982 13996 23540 8189 23542 23543 16065
14001 23548 18992 23550 18993 16067 9147 10617 14006
11385 19004 5145 14009 23561 16081 14010 19014 1205
10620 23571 19019 12543 16086 16087 23578 7210 12545
23581 19042 19044 10623 177 23588 14021 11394 14023
23592 14024 23595 23597 12549 23599 23600 23601 16109
19056 12550 7212 19063 23609 23611 19064 14031 23617
19066 19067 19068 8196 23625 19074 19076 2756 23629
7585 14035 23635 16131 23639 23641 11403 19088 19089
16133 2757 19097 16137 8200 14040 19104 23659 9158 12561
23662 16147 23672 10636 1740 11410 8643 19123 19126
23682 14050 23684 16160 19130 19131 11413 10639 14054
23698 19138 16172 23706 7218 23708 19147 23713 14056
14058 5169 19154 16181 23720 7221 19160 23723 19161
19164 7591 19166 19167 23732 23733 23735 23737 7225
16186 9166 19174 7226 12577 19178 9169 19187 14069 23755
23757 7228 8654 16199 14073 23765 1745 12583 7596 23773
16208 23776 23777 23778 7232 19210 23781 16217 23784
8212 16220 12587 19219 19220 10654 23792 14081 8213
23795 14083 23797 23798 23799 14085 12590 14087 23805
16236 12591 14089 16244 23817 3228 23819 14092 12593
16254 7234 14096 23829 16258 16259 3231 19262 11442
19268 19269 23841 12597 23844 23845 23846 11443 19273
12600 8663 14103 11445 5489 14110 23858 23859 14111
19287 16293 9184 23870 1027 11450 19297 14117 23876
19300 19301 23879 23880 8221 7242 11453 23885 16307
23887 19307 16308 23898 12610 23901 23902 23904 19310
16310 23909 23910 19315 7245 19317 23916 11459 1523
14130 23924 23925 19325 12614 14132 23932 14133 19331
23938 23939 23941 23943 19334 19335 12615 7247 1221
19341 14137 11467 19346 23961 16334 14139 23964 16338
19351 23968 19352 23970 16339 14140 23975 23976 14143
19357 23981 11471 7249 14147 19370 19371 23989 19372
8228 11474 7250 16361 19378 11477 19382 19384 19386
7616 19389 24009 19390 16372 24012 24013 19394 24015
14155 24020 19398 19400 24025 24026 12629 19402 16381
19405 14157 19407 19409 19410 11479 19413 7252 19415
24047 24048 24049 24050 19416 11481 19420 11482 19422
19423 24063 19424 19426 90 9198 16394 19432 16397 19436
24078 24079 19438 19440 24084 19441 19442 19443 19444
16402 24094 24095 1531 19452 14168 19454 7256 24102
16409 24104 12638 24106 19461 7257 19463 19467 14172
10679 24116 19470 16418 24119 11494 14176 16429 19477
19479 7259 1532 24133 14179 24135 16435 14180 12645
19489 19490 19491 24147 9204 24152 8238 14184 24155
24156 14185 19496 24160 19497 19499 14186 16449 19502
16450 19504 19505 16451 19508 19509 16454 24177 24178
24179 24181 16456 16458 8239 24185 16461 14189 19518

12650 19520 24196 16468 19529 12651 16474 7262 11501
19534 14194 16491 19538 19539 19540 14195 19543 19544
16493 24227 11502 12657 16499 19553 24233 8241 19555
14199 19557 19558 8689 7263 24243 19563 19564 14205
24250 16511 8691 19569 11509 19571 16515 24260 19574
24264 24265 16520 24269 19576 24271 12663 19578 14210
19581 24277 16526 24280 14211 24282 8692 12666 16539
19587 797 24290 19589 7265 24297 14216 16546 16547 24305
16548 19596 16550 12669 19599 24316 24317 19600 14220
16553 19604 16554 16555 19607 16557 16558 24331 19611
24334 16560 24337 12670 19614 19615 24343 1535 8246
19618 19619 16571 16572 19624 19625 19626 12673 16574
24359 19629 16576 19631 19632 19633 19634 16577 24368
19637 19639 24371 10696 24373 5519 19642 12677 19644
7268 19646 24384 24385 16586 19648 11519 7269 24392
24393 24395 16589 24397 16591 9222 1540 19655 16594
1784 19658 24407 11526 16597 19662 16598 19665 16600
11528 16605 16606 19670 14238 19672 24425 19673 16611
12687 19676 19677 11529 16616 24436 16617 16618 14242
16621 19684 16622 24445 24446 16623 19687 19688 2020
16625 24454 24455 19691 19692 16629 8704 19695 10705
8254 16635 16636 14252 12694 19702 16641 19704 8257
7274 8260 16645 16646 1543 19711 8263 16649 19714 16650
16653 16654 24499 24500 24501 19718 19719 16656 24505
24507 24509 12700 19722 16658 24514 19724 24518 19725
16659 7277 16661 16662 19730 14267 24527 12702 19733
10713 8712 24538 19736 16668 24543 19738 25 16670 24548
16672 24551 24553 10716 9237 24559 19744 16675 12708
16677 19748 16679 16680 24572 19751 14277 24576 10718
9238 9239 19756 19757 9240 24584 24585 24586 14282 14283
16689 24592 16690 16691 16692 24596 24597 24598 16693
19766 16694 12715 7280 16697 24609 19772 24613 24614
14287 16699 11553 7282 16702 16703 9243 16705 7283 19782
16707 19784 16708 16709 16710 19788 12721 16712 7284
7285 19793 16715 16716 7286 16718 12726 24651 11564
14300 16722 19802 16723 24658 7287 10730 16726 24663
19807 24667 7288 19809 8724 24672 16729 24674 24676
19812 16730 8276 12733 10734 19817 9252 24686 16737
24688 16738 24690 16739 24692 16740 19823 7289 11573
24698 16743 14316 16745 24703 16746 16747 24709 16748
16749 14318 24713 16751 2034 24717 24718 16753 19838
11575 16755 16757 14323 24727 14324 16760 24730 16761
9255 7291 24735 16764 16765 24739 16766 16767 19852
19853 8281 16769 16770 24756 24759 24761 7292 11580
16773 12746 7294 16776 24774 16777 14332 8734 42 16781
16782 11586 16784 16785 11587 19873 8736 19875 9263
24794 16789 16790 24798 16791 24801 24803 16792 14341
14342 11592 24808 19884 16796 14344 19887 14347 24816
16799 8737 16801 24820 16802 24822 14349 16805 19895
16806 24829 24830 11595 24832 14351 16809 14352 14354
16812 24841 24842 16814 24844 24846 14355 16816 14357
24852 11598 11599 7296 24860 16822 19912 7297 16824
12764 11606 11607 9267 24871 24872 24874 19919 8287
12770 19922 16831 24884 8742 7299 16834 24888 19927
11614 16836 24892 7668 14377 12776 11619 12778 19935
19936 7669 14382 12780 24904 10757 11627 11628 19943
14387 24915 24917 24918 9273 9274 24924 16851 24928
8746 24931 24932 8292 24935 14396 8748 11640 7300 7301
24942 24944 11644 24946 24947 24948 16860 11645 24952
14404 1793 24955 16864 16867 12799 11650 12802 11651
24968 14412 12804 9281 10767 24974 24975 14419 16877
24980 12807 11655 8752 8753 7673 12816 8297 11662 8756
14430 7304 2051 25000 25001 25002 8759 16891 9290 25006

14436 12827 25010 12828 12830 7307 11671 25015 2053
14443 25019 14444 12835 25025 11673 16904 25029 11675
11676 7309 16908 11680 14453 25038 11684 20008 8303
25043 12845 25045 25046 11688 2054 9296 14461 12851
25054 7312 25057 12853 12854 16923 7313 25065 7314 16926
7315 25069 25071 9303 3320 25074 14480 7317 14483 25080
7318 12863 8313 25086 7319 8315 10795 9310 20037 11704
20039 25098 25100 16941 20041 1251 25104 10798 9312
20045 14498 12875 14501 25115 14502 14504 12876 8317
5682 25123 12879 25127 7323 1253 25130 9317 25134 25135
25139 8321 16958 25143 25144 12885 25146 11715 8322
11717 16963 7326 10809 14522 25157 12893 25161 20071
11720 16969 11721 12896 1062 25169 25171 8325 7328 7702
20081 8791 20456 20457 7331 10816 8329 20461 11731 7332
25192 7333 11734 7334 9331 7335 20470 20471 20472 10823
25206 7336 20475 25209 20476 20477 10825 25215 20479
11746 12921 8335 9335 12928 8801 20486 8802 20488 3327
25229 8804 20491 7713 7339 8339 12939 12940 25238 25239
12941 7724 12946 25247 12947 11759 25250 3533 9347 7729
10839 12954 25260 2076 20508 11766 25270 25271 7343
10842 10843 14577 25282 3578 25285 25286 8814 10846
20518 12965 20520 7346 8348 1269 10850 25303 7747 20526
11778 20528 7748 5714 12981 5716 14592 12984 12985 11782
20537 8822 25324 12998 8355 11785 10858 7755 25333 25334
2085 20545 13005 1807 17047 810 5720 20553 9368 7355
13017 7784 14611 9371 25353 20560 7790 25358 2090 13023
13024 25365 20566 25369 5727 25373 25374 11800 25378
8836 1818 5730 13033 11806 13037 9378 20576 11808 14629
5819 20580 20581 13043 20583 20584 25396 1585 20586
25402 14634 13046 9382 20590 25408 9383 8372 5822 20594
13054 13055 9386 9387 25421 7366 7367 7368 14647 14648
25429 13063 25431 20605 11821 13066 25438 14654 25440
25441 20609 11822 3610 25446 9392 8847 11826 25453 20616
20617 20618 13076 14663 20621 25464 13077 7838 25468
25469 7840 13081 8850 25474 25475 25476 13083 11831
20629 7371 8382 14675 5921 9400 14679 14680 14681 3625
13093 11837 25493 14686 25497 1289 9403 3632 25502 60
13102 25506 13103 20658 8388 11844 14698 25518 7377
25520 25522 7863 13112 8862 25529 14704 25531 20669
11848 5968 5969 17137 25541 9412 25544 20677 17139 9413
13125 8393 25553 11854 17144 21304 13129 9415 3635 1828
14720 11858 1079 8398 13137 11863 25577 25579 14727
21325 25583 21326 25585 11864 11865 10917 25589 21332
25593 21335 13142 13143 13144 25598 14736 25601 25603
25604 21343 14737 8871 8872 21349 25612 2140 13148 25616
25617 11873 8875 8401 13161 9426 21361 21362 21363 128
8878 21366 1836 25636 14755 21370 8881 8882 831 21375
13171 25645 25648 25650 25651 14760 7388 14763 9434
721 25657 25658 21384 13175 14768 21389 21390 25669
13176 6005 8887 25674 21397 4389 11893 25680 25681 21403
9440 25685 9441 21410 25689 11901 21412 6493 25697 25698
21416 25700 25702 9443 25704 1612 25707 25708 21420
7917 2174 25715 14787 11912 25718 21428 21429 25722
21430 10944 8893 25727 13198 11918 21438 25735 14794
25738 7926 25741 25742 11921 21445 21448 25747 11924
21451 25750 13207 6541 25754 1854 7932 21456 25760 14803
25762 25763 2178 25767 25768 25770 25773 10951 14806
13216 14808 13217 14811 21467 25782 25784 8899 25789
21470 7938 14816 8419 25797 9480 9497 21480 14821 8902
25804 1112 21485 21487 9502 7404 21491 7948 13232 13233
10962 25820 11944 13236 10963 11946 25826 21503 1380
6550 13245 21508 25833 21511 13246 13248 13249 8908
25842 8909 6551 21520 21521 21523 25852 7958 8912 25860

13257 8429 21530 8430 145 29 8917 14855 9545 6558 25874
25875 8919 13269 11966 9551 21545 21546 13273 21550
2192 21553 25893 13275 1393 21556 2213 4493 21562 8924
10986 13288 13289 25906 13291 10987 14875 14876 7420
21579 21582 6576 25919 11981 10990 21589 9607 25925
13303 25928 13305 21594 17292 17293 4574 17295 17299
13308 25939 21606 11987 21610 25943 1123 14891 17309
13312 25949 8002 21618 17321 9623 10996 2221 14898 14899
25962 25965 21631 14900 25971 13321 21634 9643 7425
8006 6590 21641 21642 21643 21644 25984 750 1408 25989
8938 14915 21651 8451 11006 21655 26004 21656 26011
26012 14919 26015 26019 12006 14921 8452 13335 26024
17367 26028 26029 21666 17371 26032 12009 11011 14927
26037 26039 9775 21674 21675 26044 4584 17385 12013
14932 13344 8026 26054 26057 26058 7432 21685 21686
26064 8944 12018 26069 26070 12019 26072 13356 11019
26075 26077 13360 26081 17413 8457 26085 6933 17421
26089 13367 26091 21702 21703 21704 21706 21708 26098
26099 8032 14947 12025 21713 21714 14949 26111 12026
26117 17431 162 21724 21725 26125 12028 21727 26128
11024 14954 26134 17447 21732 17449 7436 21735 11027
21737 12034 17457 21741 21742 26152 14961 26156 26159
11028 26162 14964 4594 17465 26168 752 21753 21754 11032
13387 26178 14969 21761 17473 8464 21766 12041 17483
21769 12043 26195 17486 26197 26199 17487 26201 17488
26204 26205 758 11037 4607 26210 12048 21785 17502 4618
14979 26217 26218 26219 21790 26221 26224 21791 13404
21793 11042 8052 12053 17526 17529 11044 12055 21807
13413 8470 8962 26244 26245 21812 26247 26249 26251
17539 17540 21816 14991 13420 17545 26258 21822 21823
21825 2249 26264 17549 8964 14998 26269 26270 26273
21831 17557 21834 21835 11054 26285 21839 13427 17560
15001 13428 21848 21850 26298 21852 21854 8473 26302
26303 17572 1896 17577 21862 11061 12065 17583 26313
21870 15007 26317 21872 17585 11062 17592 11063 21882
15010 17599 15011 8475 13444 26335 17605 17606 17607
17612 7447 21898 15016 17615 15017 21902 17617 26349
10331 6959 26352 12075 26354 12076 26357 21911 26359
21913 13452 26363 1900 17630 13454 10334 8972 2259 11074
15034 8062 15036 21934 21936 12084 11076 1901 12088
26386 26387 15041 17650 21944 13465 21946 11080 8482
26397 17658 21951 4805 6973 26403 17665 26405 26409
15048 15049 21962 13470 12096 11084 26417 17679 26420
4810 17682 21974 12099 17684 21977 21978 26433 21979
26435 13475 15066 17689 26442 21984 15069 15072 26447
17696 15074 6976 15082 17702 17705 26460 26461 26463
15089 26465 15090 12104 17711 26471 12107 15094 26477
22009 26479 8981 17718 15098 26485 22014 11088 26488
17722 11089 17724 4 26497 15108 22021 26500 12114 15112
15114 22025 22027 22029 22030 26511 15117 15118 17739
17741 12115 15120 17747 17748 26524 26526 15123 15125
26531 22046 17752 1466 26537 6982 22051 13491 22053
22056 26545 26546 6983 26549 13493 17765 15139 17768
26555 1909 26559 26560 6987 26562 15142 26565 12121
10355 17778 15146 26574 11099 17782 17785 12124 2270
15153 22084 26585 8495 26588 13502 4832 26592 22089
12128 22091 15162 17798 11103 26599 26600 17801 26603
22098 15165 17803 26607 17807 26609 26610 15168 17810
17811 15169 12131 8992 26622 17821 15175 22115 26626
17826 2280 8079 26630 26633 4836 17834 22123 13512 12137
12139 17838 17839 17840 26646 12140 8082 10368 4839
26654 26655 13520 15191 17851 22143 17853 26665 26667
26668 26669 26670 17854 26672 26673 17855 26676 26677

17857 22148 6999 26681 12146 22154 13524 17862 15196
26690 17864 22163 17865 13525 15198 26699 26700 26701
22170 17869 26705 22172 13526 17873 22176 26716 22178
22179 22180 22181 15200 26727 12148 17878 17880 26732
17881 11116 12150 26741 26742 15206 26744 8503 26746
26747 17889 17891 1173 15209 4845 17901 22206 22208
15211 26758 22212 17909 8087 13534 26765 11121 4848
12157 9005 26770 10382 22228 26773 26774 17919 22231
22233 15221 10383 7019 22238 15226 7025 1479 8511 17935
17937 174 26789 26791 26792 7034 26794 22253 17941 26797
22255 26799 15232 17945 15233 11132 26805 17950 10390
26808 15237 22269 15239 15240 15241 15242 17958 26816
1676 13552 17963 7037 17966 22283 11140 13556 22286
15251 1686 17972 22291 17973 22294 17975 17976 22301
15255 7041 17979 22306 17980 7042 15261 13560

4 12769 7113 19560 11071 19562 17804 17805 17806 7116
16556 17809 24409 13517 7118 22242 7122 24417 22244
19573 17813 17814 7898 16562 22252 17817 17819 17820
16563 17824 24431 15202 12171 16567 22265 22266 17828
16568 17830 16570 19591 22272 22273 7124 24448 1753
11079 7126 16575 14333 12782 24456 12783 17842 8644
19602 8645 16581 17847 17848 22290 16582 16583 19609
16584 8309 24477 15214 7128 24481 17856 4375 17858 7450
16590 11601 24491 8650 7131 22312 19623 5692 12192 15224
15225 17868 12193 16599 17871 24506 17872 5695 22327
16601 19635 17876 16602 19638 7927 17879 16604 14353
11609 17884 16607 17886 24528 11610 22348 22350 22351
16609 24539 16610 17890 12201 17893 16612 24546 17896
16613 24549 17898 14358 22365 22366 24556 17900 2246
17902 22370 17903 19663 22376 4381 24567 17905 17906
17907 22383 17908 7137 1555 16619 22391 12207 11615
17914 12811 17916 12812 7937 14369 16627 22401 17921
16628 9021 16630 11620 24599 17926 16632 17928 24603
24604 17930 17931 7139 24608 17934 12219 17936 14374
7140 17939 7141 16638 24619 16639 17944 12822 17946
15263 15264 13567 17951 13570 22436 24635 13571 22438
24638 4386 13575 4387 12825 7144 17959 17960 16651 22447
24648 16652 24650 12227 17964 24653 1313 16655 14390
7146 17969 12831 8669 15284 22463 7147 24665 17974 22469
7148 11112 5715 7150 16666 7152 1959 4392 4393 22480
22481 15297 24684 1558 7157 17987 22487 12251 8340 17990
17991 7998 16678 14414 22498 13598 7158 15308 7159 7161
2255 24705 24706 12267 13605 13607 14424 7163 1118 794
7166 7167 12274 9052 9053 8021 15326 22526 24725 7169
22528 22530 1571 22532 18019 9435 15331 12286 22537
22538 24738 15333 8354 22541 11681 11682 24747 24749
22545 18027 8695 24755 18029 22550 24760 11686 968 24763
7496 12295 7174 1371 24772 8360 746 14451 7177 22561
15355 2278 7180 22566 7182 5824 13638 1788 15363 13640
13641 15367 24795 15368 15370 4492 24799 16735 16736
11159 2281 18058 14467 7188 14469 9461 24810 14472 12898
18065 1981 14476 15384 22599 14477 12320 22605 22606
12902 2285 8373 24826 24827 14485 22611 22612 15391
7193 16756 19833 12325 24838 11708 7515 22624 12328
5962 5964 24845 8718 15401 15403 8719 24851 15406 1379
24855 24856 2288 22641 4581 15410 15412 8069 18096 1141
5979 8072 12924 12925 22661 24873 1385 15422 15423 22665
12346 22667 24882 2294 13674 22671 14511 7204 14513
87 8731 8732 11727 9543 802 15440 15441 5992 7209 14524
11189 24902 12945 14527 8080 9553 16804 11735 5993 188
24916 18131 22699 8739 11740 12368 5997 24926 22704
13695 24930 11742 15461 12372 120 22713 24937 16818
9580 22716 13703 12960 22720 13705 11745 4611 4612 4613

7219 1164 9617 6494 11205 19910 13718 7547 24960 24961
22738 12974 15485 24965 24966 7223 15487 22747 12977
18162 11757 12979 13730 15492 24979 12980 6495 22758
22760 1999 15496 22764 4789 8096 24991 22767 15501 9659
22771 22772 12989 22775 11763 7229 12999 22779 7230
1009 2001 15514 1618 811 15518 15519 22789 13749 15521
22792 16865 25024 16866 25026 7236 15523 13007 1021
22800 8105 13757 19953 8420 8421 13762 13763 15537 13015
10779 8765 4807 2332 2016 25050 8769 7244 12416 12417
13779 6554 4816 13782 15552 13029 13030 199 15556 22833
6559 19979 22839 11786 15559 4827 13791 22846 13035
13036 1196 8432 8778 25087 15569 22854 6568 6569 6571
25093 2028 25096 8437 1459 13049 6574 10801 1635 13813
1031 2350 15588 15589 1034 22878 25114 13818 25116 8790
11805 6584 13062 25121 6588 104 10341 8794 6618 15605
6628 13072 22897 13073 6632 768 25141 22902 22903 6636
2755 8453 9168 22910 13841 13080 11266 7275 25154 22916
10354 25158 1853 9171 7597 172 13088 22924 2058 13090
25168 13091 13856 22929 13857 25174 15636 13858 15638
6936 25180 10363 25182 2059 15642 1855 2067 25188 15646
7606 25191 12470 11280 22946 15655 3232 22950 25198
25201 13105 18299 10370 10371 10372 13110 3235 9182
15670 22961 6944 25214 22963 20068 25217 22965 22966
15676 6946 22969 14692 13877 13878 18314 20075 22975
15690 6947 13118 18324 8469 13120 22983 13121 13884
25240 6953 15712 18335 11294 18338 4870 8472 25252 25253
13127 3237 15721 12488 2069 20469 23003 8154 25264 25265
25266 25267 15728 6960 18354 25272 25273 13133 6964
13898 25280 18361 18362 6965 25284 10852 23018 7298
11860 25291 13903 23022 25294 11306 15747 25297 18373
8828 11308 25302 6967 23030 12501 8830 15761 23034 11312
23036 18388 25314 15765 18390 13912 23044 1487 18393
18394 25325 25326 854 13916 3254 23053 15778 4899 23057
25335 15782 13150 15784 23063 13151 13152 25342 18409
18410 15787 13155 25347 18416 20516 23077 13925 15792
11319 18421 25357 15794 11320 15798 13159 25363 23087
23088 15802 13160 25372 11321 13163 25375 25376 15809
23095 18435 15814 18437 18438 23104 8485 15817 15819
11323 23110 23111 15826 15827 13938 15831 6972 18453
18454 25398 25399 18456 7306 18458 781 20550 18460 134
11328 18465 18467 5036 1066 23135 18477 25419 18478
15841 20561 25424 23140 6978 10869 14771 9212 18488
15853 14774 10411 25434 18494 23151 23152 23154 1671
11337 11896 18510 23161 18512 25448 25449 2088 25451
13182 18516 15871 25456 15872 5123 15875 18527 11904
25463 6985 13960 18535 1674 2094 23180 13963 8179 23183
18542 13965 6989 7648 10427 11917 6990 3282 7322 23193
15896 13976 11923 8855 13981 13982 18572 25494 25495
13204 11925 18577 23208 23209 9227 6993 15911 20614
18584 23216 18585 25513 15912 14809 25517 15915 11355
13211 18597 25523 723 25525 8187 25527 7325 18603 1678
23231 25533 15925 12551 13218 14003 23238 23239 23240
15934 1883 25546 18614 25548 1886 18616 11363 8512 8513
25555 23253 7330 20641 20642 20643 20644 25563 12558
25565 25566 20648 18630 25570 20650 11367 25575 1685
8194 13230 25580 18640 20657 23272 11371 20659 14018
8517 15968 15969 15970 23284 3301 18653 18656 18657
23291 25599 20670 7006 20672 23295 25605 2133 8873 18665
10904 14025 15987 15988 7008 1244 20682 13244 14030
20686 20687 23314 21303 15996 18683 7011 21309 7013
16002 25634 21313 23325 12574 21315 21316 7014 8879
7017 10469 7018 25649 5146 7020 18702 16020 12582 7022
16023 21334 11395 21336 11396 16026 7024 21340 18720

21342 1078 1897 25673 18726 25675 10478 11401 23361
21350 11976 21353 25683 21354 23366 16034 13271 11977
23370 8534 25692 14873 25694 25695 7027 18740 7683 13277
25701 14877 23379 13279 18750 14064 11406 7028 25712
14067 873 12599 13286 16062 16063 25719 14071 7032 21381
25723 11986 18770 18771 877 23403 13290 25733 21387
1902 11989 16074 25739 21393 16075 13295 8218 14897
11991 8219 21404 21405 11415 18798 7036 2171 18802 1702
23425 23426 21415 23430 18804 13306 25766 18808 16091
16092 25771 7039 7040 14912 21426 16098 23442 23443
18820 14090 25783 10497 25786 16103 25788 7365 25790
25791 10499 10939 21440 1906 13315 1267 11431 21446
23460 7043 7701 25805 5400 25807 14926 16128 13324 25811
14107 7704 18853 7046 16136 7047 23476 3577 18866 14113
18868 21465 18872 18873 878 7051 1729 21475 25834 7055
1270 25838 18884 23497 18886 7059 18888 25844 13336
14121 7717 7719 18900 18901 1104 25856 25858 7061 23512
23513 16171 21496 140 25866 12029 18910 25870 13345
13346 7063 16179 16180 13349 11454 14956 14957 18935
23532 25883 7065 25885 25886 21515 1926 13353 21518
11461 11462 14963 21522 23544 13357 18952 7067 13359
18958 12652 8928 13362 25909 11465 16207 18970 18971
25915 25916 13364 16209 16213 23562 21542 25922 13365
18976 23566 23567 7741 17296 21547 18980 17297 16218
23576 17300 12042 9302 18987 18990 23582 13370 11468
17305 21564 17307 18995 12045 17313 25952 14980 17317
21575 14164 16231 10538 21581 25963 19007 21583 13374
19010 10968 21587 21588 19012 25976 25977 21590 23615
8251 19015 16238 17328 17329 13378 21599 7068 17335
17336 19035 17337 23631 25997 26000 21608 19040 26005
16242 26007 26008 26009 23637 19043 26013 8932 13381
26016 26017 26018 19046 11476 23647 23649 16251 14992
21620 2198 21623 13384 19052 16256 21628 17353 14995
8579 26038 23664 23668 23669 23670 7071 19062 16262
21636 8255 8256 46 17368 8258 10552 13393 19075 13396
26063 16273 26065 23693 19078 16274 23697 21652 23700
17380 943 17386 16278 13398 23709 13399 23711 23712
16289 13400 16292 8587 16294 26092 17403 23719 11489
17406 3615 7076 21672 21673 19113 26103 19114 19115
8262 26107 26108 10562 23734 26113 17416 23736 16303
26120 19124 19125 12070 15018 23747 13409 7077 15022
26130 26131 8946 14202 19135 19136 26137 26138 23756
7078 23758 13414 19139 23761 26147 23762 19142 26150
19143 17434 26153 23766 16317 26158 19146 26160 23770
21707 26163 23772 12074 8948 26167 17441 17442 17443
26172 19155 21715 21717 23782 19156 19157 23785 21721
3622 26185 16322 10570 17451 12693 26194 7400 16329
11503 26198 19168 19169 19170 8267 2215 10575 14217
17467 16336 16337 23808 23810 23811 19179 13433 14219
23816 19189 21748 11507 26223 23821 21750 19194 17474
17476 17477 26231 23827 19200 8953 19202 19203 21762
23834 23835 21763 17481 15044 16344 23842 26248 13437
26250 13439 16353 16355 21773 17489 19214 8269 23852
8598 23854 19218 17493 8956 17495 19222 7786 16362 23864
26271 19225 26274 23866 23867 19226 13445 7082 26284
16371 19230 19231 26289 17507 17508 17510 7794 26296
21806 17515 17516 17518 17520 19244 16373 23888 16376
23893 7083 19252 17527 19255 21821 23903 16379 23905
19258 23907 15058 13449 26323 26324 26325 19263 23912
15064 19266 21830 7084 23917 21832 12710 16388 19271
7085 16390 23927 23928 21840 23930 26345 26346 19275
21842 23933 17542 7086 19278 15076 21849 23942 11008
19281 23946 26360 17548 21855 23951 21856 21857 13455

19284 23957 26372 19285 23959 16396 17553 15086 17555
16400 26380 21866 26382 21867 21868 21869 19292 15087
19294 23974 19295 19296 11009 21876 23980 21877 12106
21880 23984 23985 19299 21883 17562 21886 23990 23991
16406 21888 7411 16408 17570 21892 17571 26421 8965
16410 7087 17578 14248 17581 14251 11527 19318 21903
16417 9340 17586 19322 21909 24023 19323 19324 16419
26450 19326 21915 26454 17590 24030 21918 16420 16422
24036 21921 24038 26466 24040 19330 16424 26470 21924
26474 19332 24045 16425 21930 8608 16427 15106 19338
24052 17604 19340 24057 9342 21939 12723 26493 24061
24062 15110 19345 24066 17608 17609 10598 16433 16434
11018 15115 21950 19354 24080 16438 17619 8279 21957
26521 21959 14264 16441 19361 19362 21965 26529 19364
24097 19367 26535 16443 19369 26538 21970 21971 26541
5531 17626 2217 15122 1930 26547 24108 8613 1932 17634
7092 19381 16452 21986 26557 1310 21988 21989 19385
16455 17639 10609 16457 21997 24130 17642 19393 7096
19395 24138 19396 16459 15135 19399 24145 7097 16462
24148 22011 16463 17654 16464 7098 16466 8620 17660
19411 26601 8621 13484 16470 16471 16472 19418 22026
2226 16475 17676 9357 24174 26618 16477 16479 19425
16480 24180 16482 16483 16484 17687 19433 24186 17688
26632 19435 22048 24192 16485 19437 15147 19439 24198
24199 24200 17693 11550 26649 16488 16489 17698 14285
19447 19448 19449 24212 26660 24214 19450 26664 8623
17701 15151 17703 22077 17704 16494 19457 19458 2228
19460 16496 13490 24237 16498 19466 10621 16500 17714
26688 16501 16502 24246 19472 26695 19473 24249 8625
8291 24252 22100 11049 16506 22104 26706 26707 19478
26709 7102 12751 19481 16509 26717 16510 15167 22112
19485 26723 26725 16512 22116 24274 17734 19488 22119
3643 26735 14296 26738 8988 17740 24283 16516 16517
22126 22127 16518 16519 24291 22130 3644 19498 22133
26754 16521 10629 17751 16523 17754 26760 24308 24309
17755 26764 16524 15177 19507 15179 11059 19510 16528
7107 24322 22150 16530 17767 19515 24327 24328 16531
24330 16532 24332 22159 16533 16534 17775 24338 19521
26790 16535 22168 24342 19523 19524 24345 19525 19526
19527 22175 19528 1311 16537 16538 7109 22183 17781
22185 16540 19535 17783 17784 24365 16541 22192 3648
17787 17788 14310 10634 19545 17791 24376 19547 24379
16545 10635 19550 17794 22211 19552 7111 12159 24388
24389 16549 1553 22219 22220 24394 8996

5 13225 19101 7172 25199 19103 15103 23701 23702 22323
19105 5493 19107 15666 19109 6935 25212 19111 10574
22332 22333 22335 1075 15671 22338 10576 19116 15673
2105 19120 10580 16478 15679 12062 22349 16481 1933
15684 25235 15685 15686 15687 23738 18009 22357 15116
25243 25244 23743 25246 15689 23746 14141 22361 16490
14142 25254 19140 19141 13237 6939 15121 15700 22371
25262 15702 9622 22375 15706 7181 25268 15709 22379
22380 19151 19152 23769 19153 25276 25277 9634 15711
12820 22387 23775 15713 22390 1320 25287 2126 25289
15131 20549 12466 19162 19163 1940 13250 15136 6943
22403 15726 22405 22406 11402 5512 14626 1522 12829
5516 25310 6948 6949 19177 15738 23804 14632 6951 19181
19183 19184 19185 19186 15743 23815 19188 1644 15152
19192 19193 1950 19195 19196 15748 12478 15750 15752
713 15754 15157 15158 6956 6958 23836 19207 12840 5524
11135 12089 22451 12844 19213 10604 15773 15774 19217
25364 12092 25366 15777 25368 1804 15779 6961 6962 15178
6963 13284 23860 14653 23862 11423 5528 16559 14657

19232 9061 1805 12103 23872 15795 1958 22484 16566 15797
19240 19241 19242 1199 16569 15799 19246 18095 25404
19248 15800 19251 23891 22501 23895 25411 23896 1337
19253 23899 12108 57 1085 3230 25422 15807 19260 20646
20647 19261 15808 11435 23911 22520 15813 19265 20653
25436 5543 19267 2176 23920 6975 25442 15818 1659 15201
15823 19274 4589 774 15828 15829 7224 20668 10330 25455
15832 23936 23937 25459 1663 6980 23940 22544 11447
5676 25466 5679 5680 8399 25470 19289 23949 23950 1092
23952 15844 12887 15846 7762 20684 13325 13752 3247
15857 15219 22563 11456 1978 21308 22567 25492 826 21310
23971 12136 11460 15867 19306 17286 25501 17289 15868
7775 7781 25507 21320 19313 6991 25512 5694 2190 1541
25516 6995 22588 16626 21329 25521 23992 21330 23994
13339 22594 23997 14240 21333 7796 24001 25532 24002
5697 25535 13776 25537 15238 22601 17308 13342 17311
17312 14245 14718 21345 19333 25549 17316 7800 24019
15891 17319 2195 5701 15894 22622 10356 1838 19343 15248
24031 24032 15249 25567 15900 17330 17331 17332 25572
19350 25574 24039 7000 15902 22638 22639 22640 7001
22642 22644 22645 1673 22647 15254 21371 24053 25591
25592 7003 22651 24056 17339 7005 2208 21376 14260 22658
17344 19363 24065 12161 24068 19365 25609 19366 5710
15914 14735 15916 25615 24076 15917 25618 5713 19373
21391 17356 17357 17358 15267 12164 25627 24089 3265
25630 19380 24092 25633 22682 17362 11811 19383 21406
15923 21408 17366 70 19387 25646 7012 17369 17370 15926
22696 19392 12927 24110 16671 21421 12169 17376 25660
14274 25664 17378 25666 15930 21427 24120 11490 24123
17381 17383 19403 17384 4799 21435 15936 24131 21437
14751 22721 24136 19408 17388 12173 4801 24142 7015
22727 16682 7016 15947 17398 19417 4804 17400 17401
3277 13375 24157 17405 25706 22741 1225 22743 25711
5722 24163 17408 15955 22749 17410 12942 19431 22753
15957 24172 21468 15959 17417 21471 15960 17419 25729
17420 15962 15295 17423 15964 17425 17426 15966 12943
7021 22774 25744 15298 24194 12184 15971 5723 17436
22780 15973 15974 7878 15977 15978 25759 11208 17444
24208 17446 14770 25765 11827 15305 24213 19464 21510
24216 25774 19465 24218 15986 24220 22796 24222 24223
5724 24225 17455 25785 7880 12952 3281 14299 15993 17461
1988 17463 15995 21524 4815 15998 15313 17470 16000
1550 13394 13837 17475 16004 16005 22823 16006 13838
16008 7029 24257 16011 17485 22830 24261 16012 2220
77 24266 25825 1992 22835 21549 17490 13843 21552 11838
16019 5823 7909 17496 18327 17498 11516 22852 1394 1227
25845 21567 22857 7922 21570 12213 24292 11520 24294
24295 12972 17509 24298 13411 24301 18341 13855 17513
21580 18344 17514 5920 24310 18347 1399 24313 18349
17517 12975 17519 25881 22885 18353 5924 13416 22889
10404 17523 25890 18360 25892 17525 21597 21598 25897
16041 21600 22899 21601 18363 13418 17528 13419 14812
22907 21607 19542 17531 18369 22912 16047 15349 15350
18374 18375 10695 17538 5956 18381 14815 24358 15354
18384 25927 13422 17543 25930 1400 13425 4837 22931
25935 2237 1870 17550 19565 16064 22937 18395 18396
24375 21640 15361 24378 14823 5963 17556 3319 16069
22947 13432 10413 17561 25958 25960 18407 11859 19580
25964 13435 12994 25967 18411 12995 21660 18413 17568
17569 12996 16080 2245 18420 17573 24405 7553 18423
18424 18425 17575 25988 24413 17576 18428 13442 5967
153 25996 17580 25999 7054 84 12247 16089 21687 16090
155 17587 26010 21691 22989 18440 5976 21694 13008 24435

5977 16096 17595 2013 17597 17598 18452 26025 23004
11872 23006 1577 18455 16101 17602 23011 14375 13014
16813 16104 11546 21716 26042 5981 16107 21719 24463
17611 12621 18475 26050 26051 12262 16111 26055 26056
12623 16113 24475 12263 21728 17618 18484 24480 18485
16115 26068 16116 16117 16118 12264 24489 12626 18495
21739 18498 18500 23047 24496 17625 7978 18505 18506
23052 17628 18509 16123 19661 23058 7980 18513 5983
5984 21756 24515 16129 21759 16130 18520 11552 18522
10438 26110 10439 26112 18526 16134 26116 18529 24531
23081 11885 2018 21772 11557 21774 24540 21775 858 12280
17644 26132 17645 1419 18540 21783 18541 16142 18543
24552 5989 26143 18546 16144 24557 18548 17651 24560
17652 18551 21795 16145 13478 26155 21800 18555 24568
16148 24571 11561 13040 23120 5990 18564 7073 16157
24580 16158 26171 18570 21813 5991 26176 17668 17669
26179 17670 14881 24590 16161 16162 18581 16163 18583
26190 26191 2264 17677 18587 15429 18589 11900 18592
17681 16170 14413 21836 21837 792 10453 26207 24610
24611 1586 26211 23157 16175 16176 15437 17690 4873
21847 17692 18609 23168 2031 24625 24627 23170 11908
21853 8019 5999 12300 12301 160 18618 18619 6001 6002
26241 18622 4884 18624 8034 18628 18629 16194 2272 6491
18635 6492 18637 18638 4893 16200 21878 18641 11584
23202 18643 18645 14908 19768 13507 12313 17719 18650
23212 26272 796 15460 26275 8047 24675 18655 16211 26281
12318 26283 23219 12319 18659 26287 2041 17727 18664
26291 17728 17729 6497 21905 18671 23230 3611 12323
17733 12681 16222 21912 17737 18680 13970 24702 11590
18684 18685 16226 23248 26316 6537 17743 18690 26320
18692 21925 1593 16229 24716 21928 26328 21929 16230
10753 15477 16233 13522 21935 11935 17753 11597 16237
14931 11287 23274 17758 17759 18712 18713 17760 16240
23282 23283 24742 6540 4904 23286 16243 3616 24751 7101
16246 1041 17771 24757 21958 16249 26368 23296 18732
16250 13988 24766 23300 23301 24769 6544 18738 16253
7105 6545 13993 13100 10487 24779 44 21973 24782 26389
26390 16261 3626 24785 18754 14000 6548 16265 26398
16266 5120 15503 16269 21985 18762 11952 26406 11953
26410 705 15507 1284 18772 18773 23335 18774 26418 23337
14955 16277 13113 15512 11618 26427 16281 24815 18784
16282 18787 18789 16285 16286 23351 26439 16287 16288
6553 2289 16291 15516 18801 26449 11026 14014 16295
11625 17818 37 18810 7119 7120 26462 22028 18814 17823
13555 18818 13123 11629 7121 18822 26472 16306 6557
22040 22042 18825 24857 22044 11033 23387 26484 17831
24862 17832 15530 23392 26490 18832 14503 24868 16311
11635 18839 18840 18841 11316 13563 10502 22062 24878
26508 16318 24880 22064 22065 26513 22066 11639 1766
22070 3639 22072 18850 18851 17844 26525 23417 6560
1162 7129 26530 18858 16325 16326 11646 10510 17852
18869 18870 24905 22087 23432 18871 24911 11649 2298
14042 12382 22093 18876 24919 11046 6566 24922 22097
14523 26558 18881 18882 23446 6567 11654 26564 23449
24933 26569 26570 2301 14997 18889 2309 14051 6570 18895
18896 18897 22113 26583 16347 15561 26586 16350 16351
16352 1617 16354 23469 12391 17875 18912 1910 11056
1301 18923 9486 23479 3652 23481 13158 23484 18930 24970
17882 23487 16364 16365 18934 26614 26617 6575 22137
18936 16367 18938 18941 16368 16369 16370 18946 5151
6577 17892 26631 24992 23505 24995 18950 24997 23507
6578 22152 26640 22153 18953 16374 26645 17895 26647
1780 16377 6580 18962 26652 11674 18965 6581 15582 18969

1919 16383 16384 26662 25018 23529 11677 26666 10536
16387 11679 9517 712 23537 18979 12762 15026 12763 22186
12412 25035 16395 25037 23545 18985 5159 25041 11683
16398 22194 23551 26693 22195 16399 20024 10540 22199
16401 6585 13181 18997 11353 1622 19000 22207 15604
1165 15607 17929 26714 26715 23569 763 25070 22214 16411
26721 17932 960 25075 22218 16413 6630 26729 19013 11359
22223 25083 26734 5398 22226 26737 6634 2329 963 12033
16421 19023 17943 25094 22236 19025 19027 23596 25099
19028 19029 9548 19032 19034 16423 9549 23604 22248
23606 25111 19037 25113 19038 10558 19041 17948 5487
15623 13203 6638 23619 6639 25124 25125 23621 11370
12789 23624 11093 25131 15062 25133 13210 12791 25136
16437 11372 19057 5488 19060 22274 6641 23638 10564
23640 16442 7168 15078 6916 16446 26803 25155 15083
19069 19071 15084 25160 19073 6932 2095 12051 15649
16453 19079 12801 22295 25170 15651 23665 23667 22297
15091 22300 19084 15653 23674 19086 19087 11381 14126
15657 19091 19093 9583 23686 19095 15659 22315 14129
19099

6 16028 24746 22031 24748 12414 4601 18877 22876 1292
25769 24754 12105 25772 5539 11310 11562 22883 18883
22041 6950 24764 18885 16037 16038 16039 974 18890 24771
23806 1790 16042 23809 18893 975 7173 25795 22055 16045
17627 22058 18898 13355 25802 12709 23820 15562 1186
24790 16050 18904 16051 22067 18906 14393 18908 1307
1187 18911 16055 24802 18913 18914 22922 5674 4788 23840
18918 18919 25830 3260 18921 18922 16059 15163 5678
25837 18926 18927 23851 717 18929 9 5681 6966 4795 2189
25848 15173 110 25851 15176 16071 18939 18940 25857
22102 24834 24835 998 12130 23868 17657 18944 11332
25868 5693 16076 22956 17661 16077 17663 18951 24849
10374 17666 3273 3274 24854 18957 23884 1648 21344 18959
4806 23889 25889 11591 1814 15597 23894 18964 25895
21351 17674 5700 18967 845 11596 17678 1204 22982 12145
4812 15194 22138 16093 12741 11106 24883 25913 11600
13392 22992 5707 16099 14801 130 23919 14435 13395 23922
22999 6984 11604 23002 18989 11868 739 3289 4819 16110
4824 18996 22162 24908 4825 24910 7214 1212 22166 17706
21388 15628 1377 23944 19003 14084 17710 24923 4830
21395 22177 1664 19008 21399 21400 186 16121 17715 17716
133 4834 16124 25969 23038 23039 1117 16126 24943 2227
23967 22193 14825 19021 21413 24950 11623 4838 3309
21417 5731 19026 24957 23054 14831 25993 15644 1549
5820 19031 25998 15647 22209 26002 19033 24967 15648
23065 748 17735 795 16141 19039 23072 23073 7711 23075
21434 13754 192 15236 17742 21439 16146 22225 21441
17744 14470 26027 18312 24994 22230 15656 23090 22232
16149 18315 21449 18316 23096 24022 23097 16150 23099
19054 18319 16151 23103 18321 11897 11898 16154 13758
26053 23109 22247 18329 25021 11899 11136 4851 11638
26062 1230 21466 15665 22256 19070 7716 18337 22260
15667 23126 16164 22263 22264 26076 5826 26078 17764
26080 14484 26082 21477 23134 16167 11907 26087 16169
25048 3323 17770 19083 23141 24067 21484 25055 15252
11379 15674 24072 17774 21490 25063 25064 15675 10424
21493 4858 15678 23153 19092 5922 26114 18357 24085
18358 21500 26119 19096 26121 11914 25079 15681 23163
21504 15682 14125 25085 22298 7243 12204 21509 16185
5923 161 16188 10430 14499 18371 26141 1687 16192 16193
12209 22314 1559 24113 15694 16197 18379 18380 12211
19121 21528 24121 17800 11389 15698 16201 23195 1864
19127 15701 23199 21536 24132 1562 16205 15277 22334

23205 15704 1867 24140 15707 16210 4869 16212 1869 25138
16214 16215 26186 10440 26188 7753 24151 18403 1693
12225 17822 12810 21557 21558 1564 21560 15289 16223
13804 26203 1398 15719 4875 18415 22363 5970 14154 15724
15725 5971 7033 21576 24176 5972 12234 23245 22373 12235
4876 25176 7778 26226 23251 15733 14163 15735 7779 23256
23258 5974 5975 26236 4877 1703 16247 1875 4885 15746
22389 4887 11685 19182 1234 14174 18443 15751 18445
18446 14907 19190 12254 4889 15755 16260 12257 3600
21611 15759 13162 4894 26267 23290 21615 2033 15764
1705 7050 22418 24231 18461 26277 21621 18462 24235
15767 4900 11426 2038 18468 21629 15771 18473 24244
16275 15772 18476 7833 14188 15775 23315 18480 11429
1708 24255 17306 25251 9457 26306 16283 23322 16284
18487 17310 24263 21648 15334 15780 24267 12272 18493
12562 17315 1881 5994 4906 22456 22457 21658 26327 1137
24279 18503 17320 2044 21663 24284 22464 12278 22466
17323 22468 15789 18511 16296 14200 15791 23356 16299
19249 12279 24299 5061 14203 3627 25299 24303 26355
9495 21678 7064 2045 19257 18525 21683 22488 14208 26366
1885 23373 25312 24315 22491 7535 25317 6003 15803 17341
5122 25322 16313 1722 12870 17347 25327 16316 6066 22504
17350 23389 5124 1724 15810 15811 24335 15812 12874
22514 1572 1894 23399 15816 5129 22519 16328 17363 18558
25350 26407 26408 31 14223 18561 18562 24352 15820 24354
16332 22529 15821 25362 1407 11994 26422 5133 26424
2065 13212 1898 5137 25370 18576 16341 26432 12886 15381
18580 15833 16345 17382 26440 2068 22547 26443 10509
16348 1899 19312 5142 19314 21743 10512 21745 26453
168 2071 26456 18594 26458 11469 15842 17393 16356 18599
16357 17396 17397 15843 135 14978 5147 17402 15847 15848
10521 13893 25412 25413 11738 26480 15852 5149 23466
21770 24410 15854 17411 15855 1258 22586 17415 12901
15859 26494 26495 22590 14986 18627 16375 15862 14250
23483 1418 12016 26505 26506 21786 18634 15405 5152
22602 1147 22604 805 15870 117 24440 24441 26519 26520
23496 19360 5158 15411 21797 21798 15874 22614 20059
17433 21802 26532 13905 23508 17435 15876 17437 1594
14262 22626 13241 9595 22629 24465 21811 15418 24468
18018 24470 25478 5164 26552 6561 5165 23524 2091 23526
22637 17448 13913 2336 18666 24483 15889 22643 26566
18668 26568 24487 23535 18669 16912 17453 17454 26575
173 1914 16405 18676 5397 18678 9625 12345 18681 22659
25511 2096 26589 15432 2343 17464 24508 18686 15013
24511 21845 15899 13256 22669 24516 13924 12348 10543
21851 18694 24522 22675 15904 7584 12352 1462 7114 15909
17478 24533 13933 18703 13934 11007 10547 18707 12934
7115 1276 1920 1277 5490 23586 18716 19430 15453 25557
18719 5491 1282 23593 18722 18723 13276 5494 22705 1771
5496 22708 22709 17497 14668 17500 13949 19445 5497
4460 25578 26658 23610 17504 23612 15931 22719 15932
15933 18741 18742 12649 18744 5499 5500 24587 6586 15938
15939 6587 18753 1772 22735 15942 15943 26683 25602
26685 8025 12656 13293 15948 5502 11029 22744 18763
23644 22746 15057 1777 11525 5504 5507 26702 14689 17532
15958 18776 18777 13301 17535 22759 24620 15071 26713
16473 15961 22763 1064 12664 24628 5509 18786 25637
23671 4573 18788 5511 10579 23676 18791 13977 818 17547
18795 5513 13980 13311 1288 17552 26740 21952 23691
5515 21954 15976 2154 25661 18805 25663 14346 18807
15979 15980 10328 24659 18811 23705 21964 15095 15096
15984 18815 13318 17564 7622 15101 17567 1488 14713
22807 12395 25687 11290 5518 22811 18826 21980 22814

```
                15107 18828 25696 23729 23730 1939 5522 15997 14356
                2159 13998 24695 18835 8060 18837 21993 25710 12987
                2163 14002 23745 12992 18843 12090 14729 24708 22002
                5525 22836 1785 17589 15532 17591 22008 15533 22844
                25730 25731 22845 15534 17594 15124 18855 24724 4586
                18857 2165 15127 18862 18863 24731 18864 5530 22859
                67 3240 15132 25752 4598 14013 22865 11556 5535 15137
      7         15473 19018 22477 124 1762 147 12344 2117 2123 22054
                17524 125 4588 14228 10611 97 25814 18626 12351 15824
                15825 25819 4590 4591 2130 25315 18633 21646 5153 4595
                13099 3300 22505 15166 13101 22508 5156 15499 178 11643
                18644 12102 13107 15174 13957 1209 7222 26365 4602 5160
                11867 19059 18654 10626 13114 5163 7961 12370 4603 14258
                18663 25859 10420 23892 867 5166 25354 7975 23427 23428
                15860 5167 11438 14266 7629 15527 1213 4609 11664 4610
                12861 13408 11666 7983 14276 14883 21697 872 3310 3311
                4615 10434 9482 15882 21705 18691 4616 4617 11039 1889
                1997 4655 2303 11458 2308 2156 25394 181 11048 12882
                3325 24411 25400 21305 22578 13154 1781 14906 11909
                18710 18317 1223 111 18714 14911 17610 18717 24913 12644
                14304 18325 3534 24430 4802 1492 14309 14918 1324 764
                22169 19134 24927 9535 15575 5506 13726 3579 4808 4809
                25947 6563 58 14321 1044 26473 22182 24451 2327 23977
                22616 4813 23060 1048 15256 11484 1792 18749 4817 23067
                15262 1682 103 25970 17287 12172 11077 17291 14041 17646
                15268 24474 12913 13184 15606 13185 17298 21781 25985
                18767 18768 14945 21367 11937 4822 15945 5520 24978
                11493 18775 4823 22652 2333 24017 26001 24986 24018
                10480 13193 24498 3603 17664 15283 15954 15620 13195
                12922 3606 18385 3607 5527 25504 12187 4829 15291 23113
                3608 25007 15965 2334 18797 1507 3613 23572 14360 17
                26033 21818 12194 9624 12451 11955 12937 24529 24530
                21824 12938 4835 9627 12200 812 777 1600 17695 2193
                1696 11303 9647 19622 11965 26578 25542 4841 17346 15989
                4842 4843 3628 7507 24554 4847 2197 17354 778 1815 11314
                4852 11113 12962 23159 13816 4853 25060 24086 18838
                24569 14395 3634 4855 10515 14106 14700 16010 2351 22292
                21447 11985 26615 26616 22729 11755 10518 17374 2202
                23633 23634 16016 14406 26102 2203 2207 1605 15347 4862
                23642 14411 18860 18861 2048 7736 21885 3645 13258 26641
                23652 4866 12246 5699 2050 15693 4868 1607 21474 18466
                25108 15696 3649 18469 23666 18471 5706 15699 12990
                4871 1610 13547 24626 21486 11340 15705 11139 2935 23679
                5711 5712 3227 22342 732 23685 1706 21917 17412 23689
                4378 4878 18490 13283 23694 4880 13006 1254 4883 23699
                23234 23235 26694 18496 18497 15720 18499 26173 14150
                1717 13010 4384 18504 189 23246 24666 15055 15056 1067
                24670 18915 105 15060 10553 24191 7797 15063 10556 23257
                25679 4890 23725 18517 15736 18519 15400 14161 15070
                15740 25185 17094 24206 4891 15742 13020 18528 17445
                15073 18531 23741 1069 15075 12285 23277 25200 3243
                26222 4895 15080 4896 1624 15415 10353 12037 12292 18545
                15088 15758 12772 18954 22409 11803 4898 15762 14473
                11582 25221 1736 21565 18556 7830 23302 21568 7832 22856
                1073 976 15100 25737 10360 13041 4407 18565 4409 18567
                743 17479 13603 24744 847 11593 22871 3259 2250 18575
                5062 1744 1861 14495 5961 12314 4416 24758 18988 5121
                23802 982 22448 1747 4490 22890 11605 5125 18590 1637
                17499 26294 11393 13917 3267 4494 4572 1197 5131 142
                22904 26304 25279 4575 4577 18604 5978 17511 1756 23828
                1642 10603 11622 18611 15144
      8         25152 7311 11 22303 3295 3296 925 3299 11624 1208 10445
                98 13546 10447 3303 11630 15328 171 1074 11036 26437
```

```
                1216 21539 2199 952 2201 3312 3313 8864 14261 3314 3315
                3316 954 1974 11051 1455 15348 200 18660 1628 7619 1629
                4857 13929 3324 13931 799 962 1633 3532 4863 24786 13247
                7080 1090 1476 1091 11971 15369 74 1095 967 1643 3582
                2235 25635 2236 1995 3586 10492 15380 13263 40 12310
                22769 13266 3588 14303 3590 18322 14305 4879 13606 24404
                3591 3592 18328 3593 3594 2242 21992 14664 4886 13967
                970 3597 14317 13278 22000 3598 11995 13973 3599 1998
                7663 3602 1110 3604 753 18725 755 756 10516 3609 21626
                1829 9460 7389 18733 14337 7390 13990 9466 19119 9470
                1654 12967 2009 11114 3614 15431 2010 1832 18748 9488
                11411 9489 15065 12023 15068 9494 3619 3620 3621 22838
                23648 13316 2265 3623 2014 7403 18764 1656 1835 15081
                9514 1262 12991 15085 17288 9516 3629 2022 2277 26157
                1837 2279 9528 757 1502 3638 2282 10555 3640 15099 1845
                2032 1119 78 1851 2039 1508 22874 5144 1513 10566 14044
                25757 14749 15113 14750 22882 15856 2295 2297 5148 1667
                4376 1515 9582 14400 21322 760 21709 9587 2307 22497
                2046 10578 4383 9604 1125 2310 1127 4388 24534 1279
                6592 15509 11470 14415 5162 7750 12083 1866 7454 9632
                4391 6631 820 1134 148 13050 13051 4395 15154 4396 9652
                4397 5172 80 24150 15160 23334 7780 4399 13060 4400
                18470 4401 4402 23342 24984 716 4404 24573 4405 2064
                21757 12109 15172 1690 1144 1536 7811 1695 26260 1145
                22156 14452 767 7822 2072 22161 6945 7827 180 129 2079
                4462 2341 7213 4491 24189 14829 2082 25855 7495 25435
                13423 1150 13774 21398 1152 25023 7855 4571 62 23382
                18508 1156 1319 2349 1160 2092 26724 14482 1721 726
                7871 15585 13438 2751 728 2753 1727 2101 7885 4587 779
                1169 1731 7900 2112 18532 1905 7905 2122 13808 4596
                1733 1348 4599 4600 1569 1570 3236 5541 4605 22617 15615
                1349 1352 131 3242 863 18553 23025 3246 7947 9059 2141
                12814 4614 3250 10381 2142 1045 2145 2150 3256 22241
                7964 7967 1749 24678 1378 13153 7970 17466 1924 1183
                1047 4796 7979 12199 11882 1383 783 1759 41 14910 18586
                5702 7990 11890 15280 10405 3268 7997 4803 23474 3269
                3270 12215 3271 21881 869 18600 734 3275 736 8011 11903
                3278 3279 1598 1942 26 25137 3283 2182 8028 3286 163
                3288 12237 1952 887 4826 8041 3292 11616 3293
      9         7831 2017 71 7834 2019 7836 1322 72 7839 2023 12174
                7842 14744 15402 7843 7844 3589 12179 1669 7847 7261
                7853 7854 5725 14105 2025 2027 1670 5729 2029 1076 1672
                7867 848 1338 14767 747 7872 7875 2035 3601 14773 1081
                1679 1680 7883 7279 14127 3605 7891 7281 7896 1681 2042
                1351 1683 7902 12216 1684 1084 2047 1354 1355 7910 1357
                7916 3617 7918 7919 1689 1365 1691 1369 10403 1370 2060
                2062 15466 1694 7936 852 73 7940 7942 2066 7945 15475
                3631 18736 10418 12250 1374 12252 1699 1700 12255 15484
                7951 1701 12258 1089 7956 3637 23656 43 20 2077 5988
                3641 176 861 15498 11038 2080 11647 7972 2081 3646 1384
                2084 1709 1710 1711 1712 7984 7329 8566 2089 1713 6004
                1714 32 4379 8001 4380 1718 7338 1101 1103 10462 2097
                4385 2098 8016 7345 1390 23042 6538 2100 1723 2103 7351
                2104 127 2106 2107 1725 1107 2111 866 22402 2114 8045
                51 2120 7364 54 56 6556 2124 2125 4406 8059 1734 2127
                1404 14249 2129 6564 12337 88 2131 1406 874 2134 2135
                875 1741 1742 1120 1121 2144 1413 2147 2148 1417 2151
                2153 4576 761 21 883 1755 91 2162 6591 4583 1457 889
                7409 1133 2166 12988 2168 6633 7414 2169 2170 921 4592
                7419 2172 1465 1135 2175 1767 922 1769 7428 2179 8665
                1477 2181 4604 9220 93 7434 2183 766 4608 1773 7440
                1774 1775 1776 2191 7445 1480 190 1484 2196 930 6952
                931 1783 941 1489 1491 191 4792 2204 1493 949 2209 2210
```

2212 1495 13045 1496 2216 137 1794 770 771 2222 1157
10596 7477 2224 8159 1501 8161 1802 4814 1803 6981 13064
13702 7484 2229 2230 13069 196 2232 4820 1503 6988 1504
1812 1813 2238 2239 1505 776 2243 2244 1816 138 13727
2247 139 1509 1821 1822 1512 1825 2256 7513 7009 2257
1826 9301 2260 2261 1166 4849 2263 7523 1514 1167 15059
1830 1516 2268 1168 1518 1519 2273 2275 2276 1520 7030
94 1170 780 7541 1524 1846 2283 15079 7546 1525 1848
1526 2287 971 1529 1178 7555 972 7045 2292 973 1857
7561 2296 1858 2 7565 2299 709 1862 2304 2306 1863 1188
1537 1189 2312 2313 1191 15111 1868 2316 14457 1542
784 1544 2321 977 14463 4905 2323 1547 144 18 980 1554
11920 15129 38 1882 2331 101 992 994 14478 7598 15138
1560 1561 1890 2340 995 7093 7605 7094 1892 1893 996
1895 7611 1211 150 2348 151 1215 5141 720 1001 1220
13201 1903 1005 1578 2754 1581 1007 1008 2758 1584 152
1912 3226 1913 7636 7123 1011 3229 1916 5161 1917 39
3233 1589 7647 1014 1592 1016 1019 13231 1239 5171 1596
3244 3245 7657 1020 1929 13240 3248 3249 725 1931 1250
3253 5492 1026 1935 1937 1602 3258 9455 800 7676 1604
1030 1255 9464 3263 26675 12008 1608 9471 1945 9478
1948 27 1611 9485 1953 1261 8358 9490 9493 1955 3272
1033 1263 9499 727 11418 1619 9503 7695 1960 1266 9512
1036 1963 5521 1964 7703 1623 3284 1966 1968 9527 13299
24082 1969 9529 9531 7191 13304 1038 65 3290 1972 804
729 9544 5534 1976 9547 7723 7200 7725 808 9552 7728
9555 108 1979 9567 7734 3298 9573 13985 3 9579 7737
5542 1050 9584 23459 7740 7208 9592 1286 3302 13997
9599 9600 1636 12087 3304 30 9611 7751 9615 816 14652
9620 1987 5677 7757 1291 1640 9626 1055 9628 9629 7763
9633 7764 7765 9641 13366 7766 1991 14026 1299 1993
7772 9650 7774 14678 9658 735 9660 9662 112 14037 9664
9666 9670 738 3318 1647 7783 1305 7785 165 1309 741
2002 114 7235 2004 12138 1657 7801 7802 15365 7805 7806
3328 7808 7809 12147 7240 7812 7814 834 2008 10325 1314
7820 843 2012 7824 1662 14726 7826 1070 2015 844
10 7789 1023 1111 1024 2052 1113 1392 7023 7271 2055 2271
143 2057 2274 1115 1873 1566 2061 9539 798 1707 12904
1397 1878 184 1880 82 1233 1401 959 3612 5966 1236 2074
9556 23613 2075 1715 2293 3618 1888 9571 1579 1580 7303
7841 50 7056 26237 1720 9586 1035 2300 9590 961 7848
2302 853 95 9603 4892 2305 12343 1412 7858 1726 7861
1587 1252 1414 2311 1590 1732 1416 1128 1735 7874 1129
9630 1908 2319 169 1043 9638 2102 132 107 7888 1046
1140 1743 9651 7895 9656 2108 7897 12675 34 1601 6496
1746 12982 1464 9669 2113 13292 809 2335 2115 1143 2119
1049 7103 1606 1754 11486 1274 12997 193 7924 1609 6549
1758 121 7930 1760 1934 1052 7615 1936 13317 1281 10321
1613 15246 7941 1764 1614 2137 7370 2138 9060 15579
2139 1615 123 15257 4408 7953 13025 7954 1054 1944 813
1946 1947 7962 814 1059 15596 7135 1951 1060 24 13347
817 7641 1293 10351 3234 2157 1626 1627 14322 2161 1779
1297 5401 759 1630 7992 7151 7995 1300 2167 876 986
6 1787 991 821 1308 1072 1172 13067 880 8015 1641 1312
9380 8018 156 8020 886 5505 1798 4593 1799 13708 1510
1315 2186 997 2188 8038 1318 1985 1649 1806 13720 1182
2194 10402 1808 1809 3276 1811 7439 14696 708 1653 1185
1655 15021 888 15346 13104 1323 33 2206 10417 1819 15029
6957 1082 14710 1336 1083 2211 1823 827 1192 2006 1003
1527 2219 13431 1350 1668 7721 2011 1086 828 2225 1353
3305 7730 793 832 710 11922 1675 837 1840 2021 1368
1843 14742 10451 7742 15067 1844 7745 7746 9451 11634
841 1096 2240 11045 932 935 1849 1373 1102 1852 7758

```
                  1546 937 2036 2037 11057 11058 2251 2252 1548 113 10476
                  182 13482 1551 7770 14777 9491 7251 1552 11070 2258
                  7776 3581 1022 1381 1217 4844 1109 4846 1557
         11       15259 1037 9565 11969 2160 96 1839 14389 109 7468 7731
                  2049 1302 1842 14057 969 14655 14144 838 1651 1126 12214
                  1563 1004 929 13822 85 10458 2234 59 7911 126 2118 28
                  936 2121 1661 846 10612 1574 1575 1015 68 942 157 14684
                  13750 1716 2073 1915 1097 1098 69 14093 1973 1100 1057
                  983 985 10415 9640 1061 951 10 14 1065 1028 14618 12101
                  5982 8051 13205 106 164 7787 4821 1032 11657 7793 2152
                  749 11661 11884 829 10505 16 1834 1295 167
         12       1949 1012 1921 12230 938 55 1325 14520 1194 993 1765
                  868 1017 66 819 2083 13789 2116 12284 1490 83 13572
                  47 1116 859 1967 22 862 14761 1884 2093 12335 13709
                  835 10435 12068 11455 9453 864 881 815 965 1677 884
                  79
         13       15 13743 14819 1386 12317 12244 10367 958 850 1077 11915
                  870 2149 950 149 63 953 14104 13568 12238 12222 923
                  955 15600 15576
         14       13784 12 13573 13819 13759 10520 7803 13701 23749 14345
         15       13799 13566 7 13794 1025 25647 1620 11094 14112 12850
         16       14792 13764 13569 11016 25959 12846
         17       11137 13707 13771 13728
         18       12265
         19       13801 13700 13809
         21       13731 13729
         22       13770
         23       13742


SUMMARY OF MISSING DATA PATTERNS


     MISSING DATA PATTERNS (x = not missing) FOR WITHIN

           1  2  3  4  5  6  7
 AZTBL     x     x     x  x
 BVLVC        x  x     x
 EFVBL     x     x
 CSEX      x  x  x  x  x  x  x
 CAGE      x  x  x  x  x  x  x
 BCD4SPX1  x  x  x  x  x  x  x
 BCD4SPX2  x  x  x  x  x  x  x
 BCD4SPX3  x  x  x  x  x  x  x
 SQRTCD4   x  x  x  x  x  x
 LS0       x  x  x  x  x  x  x
 LS1       x  x  x  x  x  x  x
 LS2       x  x  x  x  x  x  x


     MISSING DATA PATTERN FREQUENCIES FOR WITHIN

    Pattern   Frequency     Pattern   Frequency     Pattern   Frequency
          1       21137           4         305           7          24
          2        2547           5         202
          3       41185           6           1


     MISSING DATA PATTERNS FOR U (x = not missing) FOR WITHIN

           1  2  3  4  5  6
 AZTBL     x     x     x  x
```

```
 BVLVC        x  x     x
 EFVBL     x     x
```

MISSING DATA PATTERN FREQUENCIES FOR U FOR WITHIN

Pattern	Frequency	Pattern	Frequency	Pattern	Frequency
1	21137	3	41185	5	202
2	2547	4	329	6	1

MISSING DATA PATTERNS FOR Y (x = not missing) FOR WITHIN

```
           1  2
 CSEX      x  x
 CAGE      x  x
 BCD4SPX1  x  x
 BCD4SPX2  x  x
 BCD4SPX3  x  x
 SQRTCD4   x
 LS0       x  x
 LS1       x  x
 LS2       x  x
```

MISSING DATA PATTERN FREQUENCIES FOR Y FOR WITHIN

Pattern	Frequency	Pattern	Frequency
1	65377	2	24

COVARIANCE COVERAGE OF DATA

Minimum covariance coverage value 0.100

PROPORTION OF DATA PRESENT

Covariance Coverage

	AZTBL	BVLVC	EFVBL	CSEX	CAGE
AZTBL	0.956				
BVLVC	0.633	0.672			
EFVBL	0.953	0.630	0.953		
CSEX	0.956	0.672	0.953	1.000	
CAGE	0.956	0.672	0.953	1.000	1.000
BCD4SPX1	0.956	0.672	0.953	1.000	1.000
BCD4SPX2	0.956	0.672	0.953	1.000	1.000
BCD4SPX3	0.956	0.672	0.953	1.000	1.000
SQRTCD4	0.956	0.672	0.953	1.000	1.000
LS0	0.956	0.672	0.953	1.000	1.000
LS1	0.956	0.672	0.953	1.000	1.000
LS2	0.956	0.672	0.953	1.000	1.000

Covariance Coverage

	BCD4SPX1	BCD4SPX2	BCD4SPX3	SQRTCD4	LS0
BCD4SPX1	1.000				
BCD4SPX2	1.000	1.000			
BCD4SPX3	1.000	1.000	1.000		
SQRTCD4	1.000	1.000	1.000	1.000	

LS0	1.000	1.000	1.000	1.000	1.000
LS1	1.000	1.000	1.000	1.000	1.000
LS2	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	LS1	LS2
LS1	1.000	
LS2	1.000	1.000

PROPORTION OF DATA PRESENT FOR U

Covariance Coverage

	AZTBL	BVLVC	EFVBL
AZTBL	0.956		
BVLVC	0.633	0.672	
EFVBL	0.953	0.630	0.953

PROPORTION OF DATA PRESENT FOR Y

Covariance Coverage

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	1.000				
CAGE	1.000	1.000			
BCD4SPX1	1.000	1.000	1.000		
BCD4SPX2	1.000	1.000	1.000	1.000	
BCD4SPX3	1.000	1.000	1.000	1.000	1.000
SQRTCD4	1.000	1.000	1.000	1.000	1.000
LS0	1.000	1.000	1.000	1.000	1.000
LS1	1.000	1.000	1.000	1.000	1.000
LS2	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	SQRTCD4	LS0	LS1	LS2
SQRTCD4	1.000			
LS0	1.000	1.000		
LS1	1.000	1.000	1.000	
LS2	1.000	1.000	1.000	1.000

UNIVARIATE PROPORTIONS AND COUNTS FOR CATEGORICAL VARIABLES

AZTBL		
Category 1	0.850	16820.000
Category 2	0.150	2972.000
BVLVC		
Category 1	0.195	2384.000
Category 2	0.174	2130.000
Category 3	0.245	2988.000
Category 4	0.205	2506.000
Category 5	0.180	2202.000
EFVBL		
Category 1	0.314	6158.000
Category 2	0.686	13482.000

RESULTS FOR BASIC ANALYSIS

ESTIMATED SAMPLE STATISTICS

Means

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	-0.081	-0.046	108.839	34.023	8.038

Means

	SQRTCD4	LS0	LS1	LS2
1	17.004	-0.106	4.952	3.607

Covariances

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.221				
CAGE	0.893	72.745			
BCD4SPX1	-3.003	-4.306	5208.984		
BCD4SPX2	-1.654	-11.087	3208.946	2516.936	
BCD4SPX3	-0.467	-4.178	937.051	808.478	269.536
SQRTCD4	-0.345	-5.850	135.998	82.147	23.806
LS0	0.001	0.007	-0.242	-0.368	-0.136
LS1	0.002	-0.782	-0.201	-0.630	-0.188
LS2	-0.004	-1.745	-7.154	-5.454	-1.625

Covariances

	SQRTCD4	LS0	LS1	LS2
SQRTCD4	21.853			
LS0	0.331	0.127		
LS1	6.035	0.523	10.664	
LS2	10.828	0.381	10.993	35.612

Correlations

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	1.000				
CAGE	0.222	1.000			
BCD4SPX1	-0.088	-0.007	1.000		
BCD4SPX2	-0.070	-0.026	0.886	1.000	
BCD4SPX3	-0.060	-0.030	0.791	0.982	1.000
SQRTCD4	-0.157	-0.147	0.403	0.350	0.310
LS0	0.003	0.002	-0.009	-0.021	-0.023
LS1	0.001	-0.028	-0.001	-0.004	-0.004
LS2	-0.002	-0.034	-0.017	-0.018	-0.017

Correlations

	SQRTCD4	LS0	LS1	LS2

SQRTCD4	1.000			
LS0	0.198	1.000		
LS1	0.395	0.450	1.000	
LS2	0.388	0.179	0.564	1.000

MAXIMUM LOG-LIKELIHOOD VALUE FOR THE UNRESTRICTED (H1) MODEL IS -1623036.633

TECHNICAL 8 OUTPUT

Beginning Time: 12:59:43
Ending Time: 13:00:14
Elapsed Time: 00:00:31

MUTHEN & MUTHEN
3463 Stoner Ave.
Los Angeles, CA 90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

```
Mplus VERSION 6.1
MUTHEN & MUTHEN
11/09/2010  12:17 PM

INPUT INSTRUCTIONS

  TITLE:     Square root-transformed CD4 - Imputation of Group 4 data;

  DATA:
  FILE=H:\My Documents\Transfer\X-side Missingness talk\Imputation Example\sr4_only.txt ;

  VARIABLE:
      NAMES ARE aztbl bvlvc efvbl csex cage sqrtcd4 ls0 ls1 ls2 idno
                bcd4spx1 bcd4spx2 bcd4spx3;
      USEVARIABLES ARE aztbl bvlvc efvbl csex cage sqrtcd4 ls0 ls1 ls2
                bcd4spx1 bcd4spx2 bcd4spx3;
            MISSING ARE ALL (-999) ;
            WITHIN =  ls0 ls1 ls2 ;
            BETWEEN =  csex cage bcd4spx1 bcd4spx2 bcd4spx3
                       bvlvc aztbl efvbl ;
            CLUSTER = idno ;
            AUXILIARY ARE sqrtcd4 ;
            CATEGORICAL ARE bvlvc aztbl efvbl ;

  ANALYSIS:
      TYPE = TWOLEVEL BASIC ;
      PROCESSORS = 4 ;

  DATA IMPUTATION:
      IMPUTE = bvlvc (c) efvbl (c) aztbl (c) ;
      NDATASETS = 11 ;
      SAVE = Basic_Group_SA_*.txt ;

  OUTPUT:
      TECH8 ;



INPUT READING TERMINATED NORMALLY



Square root-transformed CD4 - Imputation of Group 4 data;

SUMMARY OF ANALYSIS

Number of groups                                                 1
Average number of observations                               65401

Number of replications
    Requested                                                   11
    Completed                                                   11

Number of dependent variables                                   12
Number of independent variables                                  0
Number of continuous latent variables                            0

Observed dependent variables

  Continuous
   CSEX        CAGE        BCD4SPX1    BCD4SPX2    BCD4SPX3    SQRTCD4
   LS0         LS1         LS2
```

```
  Binary and ordered categorical (ordinal)
   AZTBL       BVLVC       EFVBL

Variables with special functions

  Cluster variable      IDNO
  Within variables
   LS0         LS1         LS2

  Between variables
   CSEX        CAGE        BCD4SPX1    BCD4SPX2    BCD4SPX3    BVLVC
   AZTBL       EFVBL


Variables used for imputation

  Variables imputed as categorical
   BVLVC       EFVBL       AZTBL


Estimator                                                MLR
Information matrix                                  OBSERVED
Optimization Specifications for the Quasi-Newton Algorithm for
Continuous Outcomes
  Maximum number of iterations                           100
  Convergence criterion                            0.100D-05
Optimization Specifications for the EM Algorithm
  Maximum number of iterations                           500
  Convergence criteria
    Loglikelihood change                           0.100D-02
    Relative loglikelihood change                  0.100D-05
    Derivative                                     0.100D-02
Optimization Specifications for the M step of the EM Algorithm for
Categorical Latent variables
  Number of M step iterations                              1
  M step convergence criterion                     0.100D-02
  Basis for M step termination                     ITERATION
Optimization Specifications for the M step of the EM Algorithm for
Censored, Binary or Ordered Categorical (Ordinal), Unordered
Categorical (Nominal) and Count Outcomes
  Number of M step iterations                              1
  M step convergence criterion                     0.100D-02
  Basis for M step termination                     ITERATION
  Maximum value for logit thresholds                      15
  Minimum value for logit thresholds                     -15
  Minimum expected cell size for chi-square        0.100D-01
Maximum number of iterations for H1                     2000
Convergence criterion for H1                       0.100D-03
Optimization algorithm                                   EMA
Integration Specifications
  Type                                              STANDARD
  Number of integration points                            15
  Dimensions of numerical integration                      0
  Adaptive quadrature                                     ON
Link                                                   LOGIT
Specifications for Bayesian Estimation
  Point estimate                                      MEDIAN
  Number of Markov chain Monte Carlo (MCMC) chains         2
  Random seed for the first chain                          0
  Starting value information                       UNPERTURBED
  Treatment of categorical mediator                     LATENT
  Algorithm used for Markov chain Monte Carlo      GIBBS(PX1)
  Convergence criterion                             0.500D-01
```

```
  Maximum number of iterations                          50000
  K-th iteration used for thinning                          1
Specifications for Data Imputation
  Number of imputed data sets                              11
  H1 imputation model type                         COVARIANCE
  Iteration intervals for thinning                        100
Cholesky                                                  OFF

Input data file(s)
  H:\My Documents\Transfer\X-side Missingness talk\Imputation Example\sr4_only.t
Input data format  FREE


SUMMARY OF DATA FOR THE FIRST DATA SET

     Number of missing data patterns            2
     Number of clusters                     20347

       Size (s)    Cluster ID with Size s

          1        19 35 64 116 154 183 185 730 742 849 865 978 979 999
                   1039 1053 1063 1068 1088 1099 1131 1154 1203 1206 1219
                   1226 1229 1240 1285 1303 1304 1316 1321 1326 1372 1405
                   1410 1411 1420 1458 1498 1506 1517 1530 1556 1583 1588
                   1591 1597 1603 1616 1625 1632 1634 1645 1646 1660 1665
                   1688 1698 1704 1730 1738 1739 1751 1752 1757 1761 1768
                   1770 1778 1797 1800 1820 1824 1827 1847 1865 1871 1872
                   1874 1887 1891 1904 1907 1911 1918 1922 1928 1954 1956
                   1962 1975 1977 1983 1989 1994 1996 2000 2024 2030 2043
                   2056 2078 2087 2109 2110 2155 2164 2173 2177 2180 2184
                   2187 2241 2248 2253 2262 2269 2286 2290 2291 2314 2315
                   2317 2322 2345 2760 3241 3251 3287 3291 3297 3306 3308
                   3317 3322 3326 3576 3580 3584 3585 3587 3596 3630 3633
                   3636 3642 3647 3650 3651 4377 4390 4394 4398 4403 4410
                   4412 4413 4414 4415 4461 4585 4790 4791 4797 4811 4818
                   4833 4840 4859 4867 4874 4888 4901 4903 5130 5132 5150
                   5154 5155 5170 5315 5501 5508 5510 5514 5517 5529 5537
                   5540 5671 5673 5675 5690 5691 5703 5709 5717 5718 5719
                   5726 5728 5821 5825 5957 5958 5965 5973 5980 5987 5996
                   5998 6000 6006 6521 6539 6542 6543 6547 6555 6562 6572
                   6573 6579 6582 6637 6934 6938 6942 6955 6970 6971 6979
                   6986 6992 6994 6997 6998 7002 7007 7031 7048 7049 7070
                   7081 7088 7099 7138 7142 7187 7194 7195 7198 7206 7211
                   7216 7217 7233 7246 7253 7255 7260 7264 7270 7272 7295
                   7305 7308 7310 7320 7321 7327 7337 7394 7395 7397 7408
                   7410 7415 7417 7421 7423 7430 7438 7446 7448 7452 7453
                   7459 7463 7478 7479 7482 7486 7490 7491 7493 7497 7501
                   7510 7514 7517 7520 7527 7529 7536 7537 7538 7539 7542
                   7550 7554 7556 7557 7558 7563 7564 7567 7568 7570 7573
                   7575 7577 7578 7579 7580 7581 7582 7583 7586 7587 7588
                   7589 7590 7592 7594 7595 7599 7600 7601 7602 7603 7604
                   7607 7608 7609 7610 7612 7613 7614 7617 7618 7620 7623
                   7624 7625 7626 7627 7628 7631 7632 7633 7635 7637 7638
                   7639 7642 7643 7644 7645 7646 7649 7650 7651 7652 7653
                   7654 7655 7656 7659 7661 7662 7664 7665 7666 7667 7670
                   7671 7672 7675 7677 7678 7679 7680 7681 7682 7684 7686
                   7687 7689 7690 7691 7692 7693 7694 7697 7698 7700 7706
                   7707 7708 7709 7710 7712 7715 7726 7732 7739 7743 7749
                   7759 7767 7769 7795 7807 7823 7825 7856 7859 7876 7906
                   7912 7925 7931 7944 7949 7955 7963 7968 7976 7982 7985
                   7987 7999 8004 8005 8010 8012 8017 8027 8037 8039 8042
                   8050 8053 8054 8056 8057 8061 8063 8064 8065 8066 8067
                   8070 8071 8073 8074 8075 8076 8077 8078 8081 8083 8084
```

8089 8090 8092 8094 8095 8097 8101 8106 8108 8110 8111
8112 8116 8119 8123 8124 8127 8129 8132 8133 8134 8136
8138 8139 8141 8142 8143 8150 8151 8152 8153 8157 8158
8160 8162 8163 8165 8168 8170 8171 8172 8173 8174 8175
8177 8178 8180 8181 8182 8183 8185 8188 8190 8191 8192
8193 8195 8197 8199 8201 8202 8205 8206 8208 8209 8210
8211 8214 8215 8217 8223 8224 8226 8227 8230 8232 8234
8236 8237 8240 8245 8249 8250 8252 8253 8259 8261 8264
8268 8270 8272 8273 8274 8275 8278 8280 8283 8284 8285
8288 8289 8294 8296 8298 8299 8300 8302 8304 8306 8307
8316 8323 8324 8326 8327 8331 8332 8334 8336 8337 8338
8341 8342 8343 8344 8345 8346 8347 8350 8351 8361 8362
8363 8365 8366 8369 8370 8374 8375 8376 8377 8378 8381
8383 8384 8385 8386 8387 8389 8390 8391 8394 8395 8402
8403 8408 8409 8410 8414 8415 8416 8417 8422 8423 8424
8425 8428 8431 8433 8435 8441 8442 8443 8444 8445 8447
8448 8449 8450 8454 8456 8458 8459 8460 8462 8465 8466
8468 8471 8474 8476 8479 8483 8484 8486 8487 8488 8489
8490 8491 8494 8497 8498 8499 8500 8502 8509 8510 8514
8515 8516 8518 8519 8520 8521 8522 8523 8525 8529 8530
8531 8533 8537 8538 8539 8541 8544 8546 8547 8549 8553
8558 8559 8562 8564 8565 8567 8568 8570 8571 8572 8573
8576 8577 8578 8581 8583 8584 8586 8588 8589 8590 8593
8594 8596 8597 8599 8600 8602 8605 8607 8610 8611 8612
8614 8616 8618 8622 8626 8627 8628 8629 8631 8633 8634
8635 8636 8637 8638 8639 8640 8646 8647 8649 8651 8652
8653 8655 8656 8658 8659 8660 8662 8666 8667 8668 8670
8671 8672 8673 8674 8676 8677 8678 8679 8680 8681 8682
8683 8684 8685 8688 8694 8696 8697 8699 8700 8702 8703
8705 8706 8707 8708 8709 8710 8711 8713 8715 8716 8722
8723 8726 8727 8728 8729 8733 8740 8741 8743 8744 8745
8747 8754 8757 8760 8761 8763 8764 8766 8767 8768 8772
8773 8775 8776 8777 8779 8780 8782 8783 8784 8786 8787
8788 8789 8796 8797 8798 8799 8800 8805 8807 8808 8809
8810 8811 8817 8820 8821 8823 8825 8827 8829 8831 8835
8837 8838 8839 8840 8841 8842 8843 8844 8845 8846 8849
8851 8852 8853 8854 8856 8857 8858 8860 8861 8863 8865
8869 8870 8874 8876 8880 8884 8888 8889 8890 8891 8894
8895 8896 8897 8898 8903 8904 8905 8906 8907 8913 8914
8916 8918 8925 8926 8927 8929 8930 8931 8933 8934 8935
8936 8937 8939 8941 8942 8943 8945 8949 8950 8951 8952
8957 8958 8959 8960 8961 8963 8966 8969 8970 8971 8973
8974 8975 8976 8977 8980 8982 8983 8984 8986 8987 8989
8991 8993 8994 8997 8998 8999 9000 9003 9004 9006 9007
9008 9009 9010 9012 9013 9014 9015 9016 9018 9019 9020
9022 9024 9025 9026 9027 9030 9031 9032 9034 9035 9038
9040 9042 9043 9046 9049 9050 9054 9056 9062 9065 9066
9069 9070 9071 9072 9074 9075 9076 9078 9081 9082 9083
9085 9086 9087 9090 9093 9094 9097 9098 9099 9100 9101
9102 9104 9105 9108 9109 9111 9112 9114 9115 9116 9119
9120 9121 9123 9125 9128 9129 9130 9131 9132 9135 9137
9138 9139 9141 9142 9143 9144 9146 9149 9150 9151 9152
9154 9155 9156 9157 9160 9161 9162 9163 9164 9165 9167
9170 9173 9174 9175 9176 9178 9179 9180 9181 9183 9185
9186 9188 9189 9190 9191 9192 9193 9195 9197 9199 9201
9202 9203 9206 9207 9208 9209 9210 9211 9216 9217 9218
9219 9221 9223 9224 9225 9226 9228 9229 9232 9234 9235
9241 9242 9244 9246 9247 9248 9250 9251 9253 9254 9256
9259 9260 9262 9264 9265 9268 9269 9271 9276 9278 9280
9282 9283 9284 9286 9287 9288 9291 9293 9294 9297 9298
9299 9300 9305 9306 9309 9314 9316 9318 9319 9320 9321
9323 9324 9325 9328 9330 9332 9334 9336 9337 9338 9343
9344 9346 9348 9349 9350 9351 9353 9354 9356 9358 9360

9361 9363 9364 9366 9367 9369 9370 9372 9374 9375 9379
9384 9385 9388 9390 9393 9396 9398 9401 9402 9404 9405
9406 9407 9408 9410 9411 9418 9421 9424 9425 9427 9428
9429 9431 9433 9436 9439 9442 9445 9446 9447 9448 9450
9454 9463 9479 9498 9500 9504 9506 9513 9515 9520 9521
9523 9525 9532 9534 9538 9540 9546 9559 9561 9568 9575
9598 9621 9636 9644 9671 9772 9773 9774 9776 9779 10307
10308 10309 10310 10312 10313 10315 10316 10317 10318
10319 10320 10323 10324 10327 10329 10337 10339 10340
10342 10343 10344 10345 10346 10347 10348 10350 10352
10357 10362 10364 10366 10369 10373 10375 10376 10377
10378 10379 10380 10384 10385 10386 10387 10388 10389
10391 10392 10393 10394 10395 10396 10397 10398 10399
10400 10401 10406 10407 10408 10409 10410 10412 10414
10416 10428 10429 10431 10432 10443 10449 10452 10454
10455 10456 10457 10459 10461 10465 10466 10467 10470
10471 10473 10475 10479 10481 10482 10485 10488 10489
10495 10498 10506 10508 10519 10526 10530 10532 10533
10535 10537 10541 10542 10550 10571 10577 10581 10595
10605 10615 10619 10630 10631 10633 10638 10640 10642
10643 10644 10645 10647 10648 10649 10651 10652 10653
10655 10657 10658 10659 10664 10665 10666 10667 10668
10672 10674 10675 10680 10681 10682 10684 10685 10687
10688 10691 10692 10693 10694 10697 10698 10699 10700
10701 10704 10706 10708 10711 10712 10714 10715 10717
10719 10721 10722 10723 10724 10726 10727 10728 10729
10732 10733 10735 10736 10738 10740 10742 10746 10748
10749 10750 10754 10755 10756 10758 10759 10762 10765
10768 10769 10770 10771 10772 10773 10774 10775 10776
10777 10780 10781 10782 10784 10785 10786 10787 10788
10789 10791 10792 10793 10796 10797 10805 10806 10807
10810 10811 10814 10817 10818 10819 10821 10822 10827
10828 10829 10830 10831 10833 10835 10836 10837 10838
10840 10844 10849 10854 10861 10862 10864 10866 10867
10868 10870 10876 10879 10880 10881 10882 10883 10888
10891 10892 10893 10894 10896 10897 10898 10899 10900
10901 10902 10903 10907 10908 10909 10912 10913 10915
10918 10919 10921 10922 10923 10924 10925 10930 10932
10933 10934 10938 10940 10941 10943 10945 10946 10948
10949 10952 10955 10956 10957 10958 10960 10964 10966
10969 10970 10972 10973 10976 10977 10979 10980 10981
10984 10985 10988 10989 10991 10993 10995 10997 10999
11000 11001 11003 11004 11010 11013 11017 11020 11021
11022 11023 11025 11031 11040 11047 11053 11055 11060
11066 11068 11069 11082 11085 11086 11087 11092 11095
11101 11105 11109 11110 11115 11117 11118 11122 11124
11125 11129 11131 11141 11142 11144 11146 11147 11149
11153 11154 11155 11156 11157 11161 11162 11166 11168
11172 11173 11174 11176 11185 11187 11195 11201 11202
11206 11209 11211 11212 11221 11222 11224 11226 11227
11229 11237 11241 11245 11246 11249 11251 11252 11255
11257 11264 11265 11267 11270 11282 11285 11288 11305
11307 11313 11322 11330 11336 11338 11342 11348 11360
11366 11368 11378 11388 11390 11392 11400 11407 11408
11409 11412 11414 11416 11419 11420 11421 11422 11427
11428 11432 11439 11440 11441 11444 11446 11451 11457
11466 11475 11480 11488 11491 11492 11497 11498 11499
11500 11514 11523 11532 11537 11538 11540 11543 11545
11547 11548 11549 11551 11554 11555 11560 11566 11568
11569 11570 11576 11579 11585 11589 11603 11608 11613
11636 11637 11641 11642 11648 11656 11658 11667 11668
11669 11678 11689 11691 11693 11696 11697 11701 11702
11705 11707 11711 11712 11722 11724 11728 11729 11730

11732 11736 11737 11741 11743 11748 11751 11752 11756
11758 11760 11764 11765 11769 11771 11772 11773 11776
11777 11779 11780 11783 11787 11789 11790 11793 11795
11798 11801 11802 11804 11807 11809 11812 11813 11816
11825 11828 11832 11836 11839 11841 11842 11846 11847
11850 11853 11855 11857 11866 11869 11870 11871 11874
11875 11876 11878 11880 11881 11883 11886 11887 11888
11889 11891 11892 11902 11906 11910 11916 11919 11926
11927 11928 11934 11936 11939 11940 11941 11942 11948
11950 11951 11956 11959 11960 11962 11963 11968 11970
11972 11973 11974 11979 11982 11988 11993 11997 11998
11999 12000 12001 12002 12004 12007 12010 12011 12015
12020 12021 12024 12031 12032 12035 12036 12039 12040
12046 12057 12058 12060 12063 12064 12066 12069 12071
12072 12077 12078 12079 12080 12081 12085 12094 12097
12098 12111 12113 12120 12123 12125 12126 12129 12132
12133 12134 12135 12142 12143 12149 12151 12154 12155
12163 12165 12166 12167 12170 12177 12180 12182 12188
12189 12190 12191 12202 12203 12205 12212 12217 12218
12221 12224 12226 12229 12231 12240 12241 12242 12256
12259 12260 12271 12273 12276 12277 12281 12282 12288
12289 12291 12297 12298 12302 12307 12308 12315 12316
12324 12327 12332 12333 12334 12336 12339 12349 12353
12356 12357 12358 12361 12363 12364 12365 12366 12371
12374 12375 12376 12380 12381 12385 12386 12387 12393
12394 12396 12397 12401 12402 12404 12407 12411 12415
12418 12419 12420 12421 12424 12426 12427 12429 12430
12433 12435 12436 12439 12440 12441 12443 12444 12446
12447 12454 12455 12456 12459 12462 12465 12467 12468
12469 12473 12474 12475 12479 12483 12487 12489 12490
12495 12496 12497 12498 12503 12504 12506 12507 12508
12511 12513 12516 12518 12520 12521 12524 12527 12528
12529 12530 12534 12537 12538 12539 12540 12547 12548
12552 12553 12554 12556 12563 12565 12566 12568 12572
12575 12576 12578 12579 12581 12584 12585 12586 12588
12589 12592 12595 12603 12604 12605 12607 12608 12613
12618 12620 12625 12627 12628 12630 12632 12633 12634
12635 12636 12637 12639 12640 12642 12648 12654 12655
12658 12660 12662 12671 12672 12682 12685 12686 12688
12689 12690 12691 12695 12697 12703 12704 12705 12706
12707 12711 12712 12713 12714 12716 12718 12725 12728
12731 12732 12735 12737 12738 12739 12740 12742 12748
12749 12752 12754 12756 12759 12760 12761 12766 12767
12773 12775 12777 12779 12781 12786 12787 12796 12798
12800 12805 12823 12824 12834 12837 12838 12841 12847
12848 12849 12855 12857 12858 12859 12860 12862 12865
12866 12867 12868 12869 12872 12873 12877 12880 12884
12890 12894 12899 12900 12903 12908 12909 12911 12912
12914 12915 12916 12918 12919 12920 12923 12932 12933
12948 12949 12951 12957 12959 12961 12964 12966 12969
12971 12976 12978 12983 12986 13001 13011 13013 13018
13021 13026 13031 13038 13039 13048 13052 13057 13058
13061 13070 13074 13075 13079 13084 13089 13092 13094
13095 13098 13108 13109 13111 13115 13119 13122 13126
13128 13135 13140 13141 13145 13146 13147 13156 13157
13164 13166 13167 13168 13169 13170 13172 13173 13174
13177 13178 13183 13187 13188 13190 13191 13192 13194
13200 13202 13219 13222 13223 13224 13226 13227 13228
13229 13238 13239 13242 13243 13253 13254 13255 13259
13261 13264 13265 13267 13280 13281 13282 13287 13294
13297 13300 13302 13307 13309 13310 13314 13319 13322
13328 13330 13334 13338 13348 13350 13358 13361 13363
13371 13372 13382 13383 13385 13388 13390 13397 13401

13403 13405 13407 13410 13412 13415 13421 13424 13430
13436 13448 13450 13451 13456 13459 13464 13467 13468
13471 13472 13473 13474 13477 13479 13480 13481 13483
13485 13486 13488 13489 13494 13495 13496 13497 13498
13499 13500 13501 13503 13505 13506 13509 13510 13511
13513 13514 13515 13516 13518 13519 13521 13527 13528
13529 13530 13531 13532 13533 13535 13538 13539 13545
13549 13553 13554 13557 13558 13559 13562 13565 13580
13581 13582 13583 13584 13585 13587 13588 13590 13592
13596 13600 13601 13602 13609 13611 13612 13613 13614
13615 13616 13618 13619 13620 13622 13624 13625 13626
13627 13628 13630 13631 13632 13635 13636 13637 13642
13643 13644 13645 13646 13647 13649 13650 13651 13652
13658 13659 13660 13661 13663 13665 13666 13667 13669
13670 13673 13678 13679 13681 13682 13683 13686 13687
13688 13691 13692 13694 13697 13698 13711 13713 13715
13716 13717 13722 13724 13725 13740 13744 13746 13748
13753 13760 13769 13772 13777 13781 13787 13792 13793
13802 13803 13807 13810 13820 13821 13824 13826 13828
13829 13830 13833 13839 13840 13842 13844 13847 13848
13849 13853 13860 13867 13874 13889 13892 13895 13896
13897 13899 13901 13910 13911 13914 13915 13918 13919
13920 13930 13935 13937 13939 13943 13944 13945 13951
13953 13954 13955 13961 13969 13971 13972 13975 13979
13984 13987 13989 14008 14011 14012 14015 14016 14017
14020 14022 14028 14033 14034 14036 14043 14046 14048
14053 14059 14065 14068 14070 14072 14075 14078 14082
14088 14091 14095 14097 14100 14101 14102 14108 14116
14119 14122 14131 14134 14136 14138 14146 14148 14156
14166 14167 14183 14187 14191 14193 14196 14197 14198
14207 14212 14214 14215 14218 14226 14229 14230 14231
14233 14234 14239 14244 14253 14256 14257 14259 14268
14270 14271 14272 14275 14278 14281 14288 14291 14293
14294 14295 14297 14298 14302 14307 14308 14311 14312
14313 14314 14319 14320 14326 14329 14331 14334 14338
14339 14340 14343 14348 14362 14365 14366 14371 14378
14379 14383 14388 14392 14394 14398 14399 14401 14403
14405 14409 14421 14423 14425 14426 14427 14428 14429
14432 14438 14439 14440 14441 14445 14446 14448 14450
14454 14455 14456 14458 14460 14465 14468 14471 14475
14479 14486 14488 14489 14490 14491 14492 14496 14497
14500 14506 14507 14508 14514 14515 14521 14525 14532
14536 14537 14538 14539 14541 14542 14543 14544 14545
14546 14547 14549 14550 14551 14552 14554 14555 14557
14558 14560 14561 14562 14563 14564 14565 14566 14567
14568 14570 14571 14572 14573 14574 14575 14576 14578
14579 14580 14581 14582 14583 14584 14586 14587 14588
14589 14590 14591 14593 14595 14597 14598 14599 14600
14602 14603 14606 14607 14608 14609 14612 14613 14614
14616 14617 14623 14624 14625 14628 14630 14631 14636
14637 14638 14639 14640 14641 14642 14643 14644 14646
14649 14650 14651 14656 14659 14660 14661 14662 14666
14667 14669 14670 14671 14676 14677 14682 14683 14685
14688 14691 14694 14695 14697 14699 14701 14703 14706
14707 14708 14709 14712 14715 14716 14717 14719 14721
14724 14725 14728 14733 14734 14739 14741 14743 14746
14747 14748 14756 14757 14759 14762 14764 14766 14769
14772 14776 14778 14779 14783 14784 14785 14791 14796
14798 14800 14802 14804 14810 14817 14818 14820 14822
14824 14826 14827 14828 14832 14833 14834 14835 14838
14839 14840 14841 14844 14846 14847 14849 14850 14852
14853 14854 14857 14858 14865 14870 14871 14874 14878
14890 14895 14896 14903 14905 14909 14913 14914 14920

14922 14924 14925 14928 14929 14930 14933 14934 14935
14937 14939 14940 14941 14942 14944 14946 14950 14953
14960 14967 14968 14971 14972 14977 14982 14984 14985
14988 14989 14993 14994 14999 15000 15002 15003 15004
15008 15014 15019 15020 15027 15035 15038 15042 15046
15047 15050 15054 15077 15102 15104 15126 15128 15148
15156 15182 15184 15185 15186 15188 15190 15197 15199
15203 15204 15205 15208 15213 15215 15217 15218 15229
15230 15243 15244 15245 15247 15250 15258 15260 15266
15269 15276 15281 15282 15287 15288 15293 15294 15300
15302 15306 15307 15309 15310 15311 15312 15325 15330
15337 15342 15343 15345 15351 15352 15360 15366 15373
15375 15377 15382 15393 15394 15404 15409 15413 15419
15421 15424 15425 15427 15430 15433 15434 15436 15444
15446 15447 15454 15456 15457 15464 15467 15469 15472
15478 15481 15486 15497 15502 15505 15508 15510 15513
15517 15522 15529 15531 15536 15540 15545 15546 15548
15549 15557 15558 15563 15567 15570 15580 15592 15594
15608 15610 15613 15614 15618 15619 15622 15624 15627
15629 15639 15640 15652 15658 15660 15668 15680 15683
15692 15703 15710 15716 15717 15718 15722 15731 15732
15734 15745 15756 15768 15769 15770 15781 15785 15786
15788 15790 15801 15815 15822 15835 15837 15839 15840
15845 15865 15869 15873 15878 15879 15881 15886 15887
15892 15895 15901 15903 15905 15908 15910 15913 15922
15924 15928 15940 15953 15963 15967 15972 15982 15983
15985 15999 16001 16003 16013 16014 16015 16021 16027
16029 16032 16033 16036 16046 16052 16053 16058 16060
16061 16066 16068 16070 16072 16073 16078 16082 16085
16088 16094 16095 16105 16106 16119 16120 16125 16127
16132 16138 16140 16152 16159 16165 16168 16174 16178
16182 16190 16195 16196 16198 16203 16206 16219 16224
16225 16227 16228 16234 16235 16245 16248 16252 16255
16263 16264 16267 16268 16270 16271 16272 16276 16279
16280 16297 16298 16300 16301 16304 16312 16319 16320
16327 16331 16333 16335 16346 16349 16358 16385 16386
16389 16392 16393 16403 16407 16412 16415 16426 16430
16431 16436 16439 16444 16447 16460 16476 16486 16487
16495 16497 16503 16504 16507 16508 16513 16522 16527
16536 16542 16543 16561 16564 16573 16579 16580 16588
16595 16596 16603 16608 16614 16615 16620 16633 16637
16640 16643 16644 16664 16665 16673 16676 16681 16683
16685 16687 16688 16696 16698 16713 16714 16717 16720
16725 16727 16741 16742 16752 16754 16758 16762 16768
16775 16798 16800 16807 16808 16817 16819 16820 16821
16832 16833 16839 16841 16845 16849 16853 16858 16859
16863 16868 16873 16876 16878 16884 16885 16889 16893
16896 16899 16906 16913 16916 16931 16932 16935 16943
16947 16948 16951 16954 16957 16962 16965 16968 16971
16974 16977 16980 16981 16982 16983 16988 16990 16991
16993 16997 17001 17002 17003 17009 17011 17017 17020
17022 17024 17028 17035 17038 17041 17042 17045 17048
17050 17058 17059 17060 17061 17062 17064 17065 17066
17068 17070 17071 17072 17073 17074 17077 17079 17080
17081 17082 17083 17085 17086 17087 17089 17090 17091
17093 17095 17096 17097 17098 17099 17101 17102 17103
17105 17106 17107 17109 17110 17111 17113 17114 17115
17116 17117 17118 17119 17120 17121 17122 17123 17124
17125 17127 17128 17129 17130 17131 17132 17133 17134
17135 17136 17138 17140 17141 17142 17143 17145 17148
17149 17150 17151 17152 17153 17154 17155 17156 17157
17158 17159 17160 17161 17162 17163 17164 17165 17166
17168 17169 17171 17172 17173 17174 17175 17178 17179

17180 17181 17182 17183 17184 17185 17186 17187 17188
17190 17191 17192 17193 17195 17196 17197 17198 17199
17200 17201 17202 17203 17205 17206 17209 17210 17211
17212 17213 17214 17215 17216 17217 17218 17219 17220
17221 17222 17223 17224 17225 17226 17227 17228 17229
17231 17232 17233 17234 17235 17236 17238 17239 17240
17241 17243 17244 17245 17246 17247 17249 17250 17252
17253 17254 17255 17257 17258 17259 17260 17261 17262
17263 17265 17266 17267 17268 17270 17271 17272 17273
17274 17275 17276 17277 17279 17281 17282 17283 17284
17285 17302 17304 17322 17324 17327 17333 17334 17342
17345 17348 17349 17355 17360 17364 17373 17377 17387
17389 17390 17392 17395 17399 17407 17409 17414 17424
17427 17429 17430 17432 17438 17440 17450 17458 17459
17460 17471 17472 17480 17482 17484 17491 17492 17503
17505 17506 17512 17522 17544 17551 17554 17558 17559
17563 17565 17584 17596 17601 17613 17616 17623 17629
17631 17632 17638 17643 17648 17653 17667 17672 17680
17683 17685 17686 17691 17694 17699 17707 17708 17712
17717 17720 17730 17731 17736 17745 17749 17756 17757
17761 17762 17766 17773 17779 17780 17792 17797 17825
17833 17841 17843 17846 17861 17863 17867 17874 17883
17885 17894 17897 17904 17910 17913 17915 17917 17918
17920 17924 17933 17938 17942 17947 17953 17956 17962
17965 17970 17978 17983 17985 17997 17998 18001 18013
18016 18017 18022 18030 18031 18049 18052 18057 18063
18064 18070 18078 18093 18099 18101 18105 18114 18116
18118 18121 18123 18126 18127 18128 18130 18134 18135
18138 18139 18146 18147 18150 18151 18152 18154 18155
18164 18167 18170 18174 18178 18181 18183 18191 18199
18202 18203 18206 18207 18208 18209 18212 18213 18215
18216 18220 18222 18223 18224 18225 18229 18232 18233
18236 18237 18238 18239 18241 18244 18245 18246 18247
18248 18249 18251 18253 18256 18258 18260 18261 18262
18263 18265 18266 18267 18268 18269 18270 18271 18272
18273 18274 18276 18277 18278 18279 18280 18281 18282
18283 18284 18285 18286 18287 18288 18289 18290 18291
18292 18293 18294 18295 18296 18298 18300 18301 18302
18303 18304 18305 18306 18311 18313 18318 18323 18334
18336 18345 18346 18352 18364 18377 18387 18400 18402
18408 18414 18429 18436 18439 18442 18444 18450 18457
18482 18483 18501 18507 18518 18523 18530 18534 18539
18549 18554 18574 18596 18602 18605 18632 18636 18642
18648 18649 18652 18661 18674 18675 18689 18693 18700
18701 18705 18709 18715 18718 18721 18731 18751 18758
18765 18780 18794 18800 18812 18817 18819 18821 18824
18830 18834 18836 18842 18845 18847 18865 18867 18874
18879 18891 18894 18902 18903 18916 18917 18920 18928
18948 18960 18966 18974 18978 18986 18994 18998 19002
19005 19006 19009 19020 19022 19045 19051 19055 19061
19082 19085 19094 19098 19100 19102 19118 19128 19133
19137 19144 19145 19158 19171 19173 19175 19204 19205
19206 19208 19209 19211 19216 19221 19224 19228 19229
19233 19234 19236 19243 19245 19247 19256 19276 19277
19282 19283 19286 19293 19298 19302 19308 19309 19311
19316 19336 19339 19342 19347 19348 19353 19355 19375
19376 19377 19379 19412 19419 19421 19427 19428 19434
19446 19455 19456 19459 19462 19471 19474 19475 19480
19482 19483 19487 19494 19512 19514 19519 19530 19531
19532 19537 19549 19559 19561 19568 19577 19590 19592
19595 19597 19601 19606 19608 19613 19617 19628 19636
19643 19649 19654 19659 19666 19669 19679 19680 19681
19682 19686 19689 19694 19697 19705 19706 19707 19708

19712 19717 19720 19721 19723 19732 19734 19739 19740
19745 19750 19753 19759 19760 19762 19763 19764 19765
19767 19769 19770 19771 19775 19777 19781 19785 19787
19790 19791 19794 19795 19797 19803 19808 19818 19819
19821 19824 19826 19831 19832 19835 19841 19842 19843
19844 19849 19856 19858 19859 19861 19862 19864 19866
19867 19868 19869 19872 19878 19880 19882 19883 19885
19886 19888 19892 19898 19901 19902 19907 19908 19911
19913 19914 19915 19916 19918 19920 19923 19924 19925
19930 19931 19932 19937 19939 19940 19944 19945 19947
19948 19950 19951 19952 19954 19955 19956 19958 19959
19960 19961 19963 19964 19969 19970 19972 19975 19976
19977 19978 19981 19983 19985 19986 19989 19990 19991
19992 19993 19994 19996 19997 19999 20002 20003 20004
20006 20007 20010 20011 20012 20014 20015 20016 20017
20018 20019 20021 20022 20026 20027 20028 20029 20030
20031 20032 20035 20036 20038 20040 20042 20043 20044
20046 20047 20048 20049 20050 20051 20054 20055 20056
20057 20058 20062 20063 20064 20065 20066 20067 20069
20070 20077 20079 20459 20466 20467 20468 20478 20481
20482 20484 20487 20489 20490 20492 20493 20494 20496
20497 20499 20502 20503 20507 20510 20511 20517 20519
20522 20523 20527 20529 20532 20535 20539 20542 20543
20546 20551 20552 20555 20557 20562 20568 20572 20574
20575 20578 20579 20588 20592 20593 20596 20597 20599
20601 20603 20604 20606 20607 20611 20612 20613 20619
20620 20622 20624 20626 20628 20631 20632 20633 20635
20637 20638 20639 20645 20649 20652 20656 20667 20673
20675 20678 20681 20683 21306 21311 21312 21318 21319
21321 21327 21331 21338 21341 21347 21348 21356 21358
21360 21364 21368 21378 21380 21385 21392 21402 21418
21424 21431 21432 21436 21443 21452 21453 21457 21458
21459 21460 21463 21464 21469 21472 21476 21481 21482
21483 21495 21499 21506 21507 21513 21514 21516 21525
21532 21537 21541 21544 21554 21555 21559 21561 21563
21569 21577 21585 21592 21602 21603 21614 21616 21619
21622 21624 21630 21632 21638 21650 21653 21654 21659
21661 21662 21667 21671 21677 21689 21690 21692 21693
21698 21699 21710 21718 21722 21723 21726 21730 21731
21736 21738 21744 21746 21751 21758 21764 21765 21767
21768 21771 21777 21778 21779 21780 21782 21784 21804
21805 21808 21810 21814 21819 21820 21833 21841 21844
21874 21875 21887 21889 21890 21891 21895 21906 21907
21910 21920 21923 21926 21927 21932 21933 21937 21940
21942 21945 21961 21967 21968 21969 21981 21990 21991
21995 21998 22005 22006 22013 22015 22017 22032 22034
22035 22039 22043 22052 22059 22063 22068 22069 22071
22075 22076 22081 22083 22086 22088 22094 22095 22101
22107 22108 22110 22111 22120 22124 22131 22132 22134
22140 22144 22145 22155 22157 22165 22167 22171 22173
22174 22184 22187 22188 22189 22191 22196 22201 22203
22210 22213 22215 22216 22221 22222 22224 22227 22229
22235 22237 22239 22251 22254 22257 22258 22259 22261
22262 22267 22275 22276 22278 22280 22281 22282 22284
22285 22287 22289 22299 22304 22305 22307 22318 22321
22326 22336 22337 22341 22344 22352 22354 22355 22358
22367 22368 22369 22378 22381 22386 22393 22394 22396
22398 22399 22408 22410 22413 22415 22419 22420 22423
22428 22429 22431 22432 22437 22439 22440 22443 22445
22446 22453 22458 22459 22460 22465 22467 22474 22475
22478 22486 22489 22490 22492 22493 22495 22496 22499
22506 22507 22515 22517 22523 22531 22540 22546 22551
22552 22556 22557 22558 22569 22573 22575 22580 22582

22585 22587 22593 22596 22597 22609 22610 22618 22620
22623 22625 22627 22631 22632 22648 22650 22653 22657
22664 22670 22672 22674 22681 22684 22686 22690 22693
22697 22701 22711 22717 22722 22724 22726 22730 22731
22733 22736 22739 22748 22756 22761 22765 22766 22776
22785 22786 22794 22795 22802 22803 22805 22806 22809
22812 22815 22816 22819 22820 22822 22829 22840 22842
22847 22849 22850 22858 22860 22862 22863 22867 22870
22873 22875 22879 22891 22892 22894 22896 22905 22906
22909 22911 22918 22921 22923 22927 22932 22936 22939
22940 22941 22942 22944 22945 22948 22959 22967 22972
22976 22977 22979 22986 22994 22998 23007 23012 23015
23016 23017 23023 23026 23027 23032 23033 23037 23041
23043 23045 23046 23056 23059 23062 23064 23066 23074
23076 23079 23080 23089 23091 23100 23105 23107 23108
23112 23116 23118 23130 23133 23137 23138 23142 23143
23160 23162 23165 23166 23171 23173 23175 23177 23185
23187 23190 23196 23203 23206 23207 23210 23214 23218
23220 23222 23223 23224 23226 23228 23233 23241 23255
23261 23262 23264 23265 23281 23285 23288 23289 23292
23294 23308 23311 23317 23320 23323 23324 23326 23327
23328 23338 23339 23340 23343 23345 23346 23347 23348
23349 23350 23353 23358 23359 23363 23365 23368 23375
23378 23383 23388 23395 23400 23402 23405 23406 23409
23410 23420 23422 23433 23434 23437 23439 23441 23450
23451 23454 23455 23456 23458 23463 23478 23480 23485
23486 23488 23489 23492 23495 23499 23503 23504 23514
23516 23517 23518 23520 23521 23523 23525 23527 23534
23536 23539 23547 23549 23553 23554 23555 23556 23557
23558 23559 23560 23564 23570 23575 23580 23583 23585
23587 23590 23591 23594 23598 23607 23614 23623 23627
23630 23636 23643 23645 23646 23651 23653 23654 23655
23657 23658 23660 23661 23663 23673 23675 23677 23681
23687 23690 23696 23703 23704 23707 23710 23714 23715
23716 23717 23722 23731 23739 23740 23742 23751 23752
23754 23768 23774 23780 23786 23796 23801 23812 23814
23822 23824 23838 23843 23847 23849 23850 23853 23855
23857 23861 23865 23869 23871 23883 23890 23897 23900
23906 23914 23915 23926 23929 23931 23934 23935 23945
23947 23948 23953 23955 23956 23958 23966 23969 23972
23978 23979 23987 23993 23999 24000 24003 24004 24006
24007 24011 24014 24027 24028 24029 24035 24044 24046
24054 24055 24058 24059 24069 24070 24071 24073 24074
24075 24083 24087 24093 24098 24100 24101 24107 24111
24112 24115 24118 24124 24125 24128 24129 24153 24159
24161 24164 24166 24167 24169 24170 24173 24201 24203
24204 24205 24210 24211 24215 24226 24228 24229 24230
24234 24238 24239 24241 24245 24247 24251 24254 24256
24258 24259 24268 24270 24276 24278 24281 24285 24287
24296 24300 24302 24304 24307 24311 24312 24321 24323
24324 24325 24333 24339 24340 24344 24347 24351 24356
24366 24372 24381 24383 24387 24391 24396 24398 24401
24412 24414 24416 24418 24423 24428 24429 24432 24438
24439 24457 24458 24461 24469 24472 24473 24476 24478
24479 24482 24485 24486 24488 24494 24495 24497 24502
24504 24513 24517 24523 24524 24525 24536 24537 24541
24544 24545 24550 24558 24565 24566 24574 24575 24577
24579 24581 24588 24595 24601 24602 24606 24607 24612
24615 24616 24622 24623 24624 24630 24631 24634 24636
24637 24639 24640 24645 24656 24669 24677 24679 24682
24683 24689 24694 24697 24700 24704 24710 24712 24714
24719 24721 24722 24726 24733 24734 24736 24741 24743
24762 24767 24768 24770 24778 24780 24784 24787 24792

24796 24797 24800 24805 24812 24813 24814 24817 24821
24823 24824 24825 24828 24831 24840 24843 24847 24850
24861 24863 24864 24867 24869 24875 24876 24881 24886
24893 24894 24895 24898 24903 24914 24921 24929 24936
24940 24941 24949 24951 24953 24954 24962 24971 24973
24977 24981 24985 24987 24988 24989 24996 24998 25003
25008 25009 25012 25013 25016 25020 25022 25028 25031
25033 25034 25040 25042 25044 25047 25051 25052 25056
25062 25066 25067 25068 25073 25077 25081 25082 25084
25089 25091 25092 25095 25097 25102 25103 25105 25106
25107 25110 25112 25117 25118 25122 25140 25149 25150
25151 25153 25159 25166 25167 25173 25175 25178 25179
25183 25184 25186 25187 25193 25194 25195 25197 25202
25203 25204 25210 25220 25222 25223 25225 25226 25231
25232 25233 25241 25242 25248 25249 25255 25256 25257
25258 25261 25263 25269 25275 25278 25288 25290 25293
25295 25296 25298 25304 25306 25308 25316 25318 25321
25330 25332 25336 25337 25340 25341 25346 25348 25349
25351 25352 25356 25361 25377 25379 25380 25381 25382
25384 25387 25391 25392 25395 25403 25405 25414 25418
25425 25426 25427 25430 25432 25437 25439 25443 25445
25447 25450 25460 25465 25471 25472 25477 25482 25484
25486 25487 25490 25496 25498 25499 25500 25505 25508
25510 25514 25528 25536 25540 25547 25551 25554 25558
25560 25561 25562 25564 25569 25571 25576 25582 25584
25587 25588 25590 25597 25600 25607 25608 25613 25622
25623 25640 25641 25654 25656 25659 25676 25686 25690
25693 25699 25703 25705 25713 25714 25726 25734 25740
25743 25745 25746 25748 25753 25755 25758 25764 25780
25781 25787 25792 25793 25794 25796 25798 25799 25803
25808 25809 25810 25815 25816 25823 25829 25835 25836
25839 25847 25849 25850 25861 25862 25864 25865 25869
25871 25877 25879 25880 25884 25900 25901 25907 25908
25912 25917 25918 25923 25931 25933 25941 25950 25953
25954 25957 25966 25972 25979 25980 25982 25983 25986
25990 25994 26003 26030 26031 26034 26041 26043 26045
26048 26049 26059 26066 26073 26079 26084 26095 26100
26101 26106 26118 26122 26124 26126 26127 26140 26145
26149 26151 26161 26165 26166 26174 26177 26180 26181
26182 26184 26187 26196 26206 26209 26213 26214 26215
26216 26220 26225 26228 26229 26230 26233 26235 26246
26253 26254 26256 26257 26262 26263 26265 26266 26268
26276 26279 26280 26282 26288 26292 26293 26300 26301
26305 26308 26315 26321 26326 26329 26330 26332 26337
26348 26350 26353 26356 26364 26370 26371 26373 26374
26375 26376 26378 26383 26385 26388 26396 26400 26401
26414 26415 26416 26426 26428 26429 26434 26441 26444
26445 26446 26459 26468 26469 26475 26478 26481 26483
26486 26496 26498 26499 26501 26509 26512 26515 26516
26517 26533 26536 26539 26542 26543 26548 26550 26554
26556 26561 26571 26576 26579 26580 26581 26591 26597
26598 26602 26606 26608 26611 26624 26628 26634 26635
26636 26637 26638 26643 26650 26653 26659 26661 26663
26671 26674 26678 26680 26686 26689 26692 26698 26703
26710 26711 26712 26718 26720 26728 26733 26736 26750
26751 26752 26753 26757 26761 26762 26766 26767 26776
26781 26785 26787 26788 26801 26802 26806 26807 26811
26813 26814 26815 26817 26818 50073 50074 50075 50076
50077 50078 50079 50080 50081 50082 50083 50084 50085
50086 50087 50088 50089 50090 50091 50092 50093 50094
50095 50096

2 16838 12354 16840 5157 16842 16843 16844 9542 16846
16847 16848 5168 16850 16852 12359 16854 16855 16856

16857 9550 1980 16861 16862 1982 8548 16869 16870 16871
16872 9570 16874 16875 12369 5399 16879 16880 16881
16882 16883 12373 9589 16886 16887 16888 8550 16890
16892 9609 16894 16895 12379 16897 16898 9612 16900
16901 16902 16903 16905 8551 16907 16909 16910 16911
12383 16914 16915 12384 16917 16918 16919 16920 16921
16922 16924 16925 16927 16928 16929 16930 5495 8554
16933 16934 9645 16936 16937 16938 16939 16940 16942
12388 16944 16945 16946 12390 12392 16949 16950 9649
16952 16953 9663 16955 16956 8556 16959 16960 16961
7621 16964 12398 16966 16967 12399 16970 12400 16972
16973 5498 16975 16976 8560 16978 16979 8561 12406 9777
12409 16984 16985 16986 16987 9778 16989 12413 118 16992
5503 16994 16995 16996 1984 16998 16999 17000 1986 1565
12422 17004 17005 17006 17007 17008 10311 17010 12425
17012 17013 17014 17015 17016 8569 17018 17019 7630
17021 12428 17023 10314 17025 17026 17027 1990 17029
17030 17031 17032 17033 17034 12431 17036 17037 12432
17039 17040 5523 5526 17043 17044 8574 17046 12438 17049
8575 17051 17052 17053 17054 17055 17056 17057 1568
10322 5532 5533 10326 17063 8580 12448 12449 17067 12450
17069 1576 10332 10333 12457 10335 17075 17076 12460
17078 10336 12463 12464 8582 10338 17084 7640 5538 1582
17088 5544 2003 12477 17092 5672 12481 12482 8592 2005
2007 17100 10349 12491 12492 17104 12493 12494 751 17108
762 5696 10358 17112 12499 12500 12502 10359 10361 12505
5698 2040 10365 12509 12510 5704 1108 17126 12514 8609
12517 1595 12519 2063 2070 1114 12525 12526 8615 2086
8617 1599 12531 12532 17146 17147 8619 12535 12536 2099
8624 1122 769 12541 12542 12544 12546 5960 2128 8630
2132 8632 12555 2136 12557 17167 12559 12560 17170 5985
12564 5986 2143 12567 17176 17177 1621 12569 12570 12571
2158 12573 1142 7688 8641 8642 12580 17189 1631 1146
8648 10422 17194 10423 10425 10426 12594 1149 12596
12598 12601 12602 17204 1638 2185 17207 17208 6546 12606
10433 10437 12609 12611 12612 7696 12616 12617 10446
12619 1639 12622 12624 10450 8657 6552 2200 12631 7705
17230 8661 2218 10460 8664 10463 6565 17237 2223 12641
2231 12643 17242 12646 12647 2233 12653 787 17248 10472
6583 17251 12659 10474 12661 6635 17256 12665 12667
12668 1175 8675 12674 12676 17264 12678 12679 12680
7735 17269 12683 12684 10483 7738 10486 6640 1650 10490
17278 12692 17280 10491 12696 6937 12698 12699 17290
17294 17301 12701 17303 10496 17314 17318 7754 10500
17325 17326 10501 10503 10504 17338 17340 2254 17343
10507 7760 10511 17351 17352 12717 17359 10513 17361
12719 17365 17372 12720 17375 12722 17379 12724 10517
12727 17391 6940 17394 12729 12730 17404 10524 7768
12734 17418 17422 10527 12736 17428 10528 10529 8686
10531 17439 8687 12743 17452 17456 12744 12745 12747
17462 17468 17469 6941 10534 12750 8690 12753 8693 12755
17494 17501 10539 12757 12758 1652 17521 7799 17530
17533 17534 17536 17537 17541 10544 17546 12765 10548
10549 12768 12771 6954 17566 17574 17579 17582 12774
17588 17593 10551 17600 10554 17603 10559 17614 10560
17620 17621 17622 12784 17624 12785 10561 10563 17633
17635 17636 17637 12788 17640 17641 12790 17647 12792
17649 12793 17655 17656 17659 17662 12794 17671 12795
17673 17675 10565 12797 10568 8698 12803 10572 17697
12806 17700 12808 12809 17709 12813 17713 12815 12817
17721 17723 17725 17726 12818 12819 17732 12821 17738
7815 17746 7816 17750 12826 12832 12833 10582 17763
12836 17769 17772 10583 17776 17777 10584 12839 17786

17789 17790 10585 17793 17795 17796 12842 17799 17802
17808 17812 17815 17816 12843 17827 17829 10586 17835
17836 17837 10587 10588 17845 12852 17849 17850 17859
17860 10591 12856 17866 10592 17870 10593 17877 10594
8701 17887 17888 10597 12864 17899 10599 10601 17911
17912 10602 7818 10606 12871 10607 17922 17923 10608
17925 17927 10610 12878 17940 10614 12881 17949 17952
12883 17954 17955 2266 17957 17961 12888 12889 17967
17968 10616 17971 17977 12891 17981 17982 12892 10618
17992 17996 12895 12897 17999 18000 6968 18002 18003
18007 18008 18011 18012 10622 10624 12905 18020 12906
18026 12907 10625 18033 18034 18037 18038 18044 10627
18051 12910 18054 18055 10628 18060 7828 7835 18066
10632 18073 18076 18077 7837 18081 18082 18084 18085
18086 18088 18089 12917 18094 18097 10637 7845 18102
18103 7846 18106 18107 18109 18112 10641 18115 12926
12929 18119 12930 18122 12931 18124 7850 6969 12935
12936 18132 18133 12944 8714 18136 18137 7857 12950
18140 18141 18142 18144 18145 10646 12953 18148 18149
12955 12956 2267 12958 8717 18156 18157 18158 18161
18163 8720 18165 18166 12963 18168 18169 10650 18172
18173 8721 18175 18177 12968 18179 18180 7862 18182
12970 18187 18188 18189 7864 18192 18194 18195 18196
18197 18198 12973 18200 18201 8725 10656 18205 7865
7868 12993 13000 18210 18211 7869 13002 18214 13003
13004 18217 18218 13009 18221 10660 13012 10661 13016
18226 18227 18228 10662 18231 13019 10663 18234 13022
1658 13027 13028 18240 8730 18242 18243 13032 13034
7879 8735 13042 13044 18250 13047 18252 8738 18254 18255
10669 18257 13053 18259 13056 10670 10671 13059 18264
7881 13065 13068 10673 13071 7889 7892 13078 10676 13082
18275 10677 13085 13086 13087 10678 7899 7901 7904 13096
13097 10683 13106 8749 8750 10686 8751 13116 13117 6974
10689 13124 10690 8755 13130 13131 13132 13134 7908
13136 18307 18308 18310 13138 13139 8758 6977 18326
2284 8762 18342 7929 13149 18348 18351 1179 18355 18356
18359 7933 18368 18376 10702 18378 18383 13165 18391
18398 10703 1193 18404 7946 10707 18418 8770 18430 18431
18432 18433 18434 10709 10710 18441 8771 1666 7952 18451
13179 18463 18472 18479 18481 13180 8774 18489 18491
18492 13186 6996 18515 7960 18521 13189 18524 10720
18533 791 18536 18538 1692 18544 7969 18552 13196 18560
18566 18569 18571 18573 13197 18578 18582 18588 18591
18593 13199 8781 10725 18606 18607 18610 18615 18620
18623 18631 13206 13208 18639 13209 18646 13213 13214
13215 18658 801 18662 18667 18670 18673 13220 13221
18677 18687 18688 7977 2318 18696 18697 18699 8785 10731
7010 7026 7993 13234 13235 18724 18727 18728 18729 18730
803 18734 18735 18737 18739 18745 18747 10737 18757
8792 18759 10739 18769 18778 18779 13251 18781 18783
18785 18790 18792 18793 13252 18796 18799 8793 18803
18809 10741 18813 8795 10743 13260 18823 10744 18829
13262 18833 10745 7035 10747 18844 13268 13270 18848
18854 13272 13274 7038 18878 8007 18880 2324 18892 13285
10751 10752 18905 18907 13296 2325 13298 18924 18925
8803 18932 18937 18942 18943 18945 18947 7060 18955
18956 8806 18961 2330 18972 10760 18977 13313 18983
18984 10761 18991 8030 13320 18999 19001 10763 13323
13326 13327 19011 19016 19017 10764 13329 19024 19030
19036 8036 19047 19048 19049 19050 13331 19053 13332
19058 13333 19065 19072 19077 19080 19081 10766 13337
19090 2337 13340 13341 13343 19106 19108 19110 19112
19117 2344 19122 8812 19129 19132 13351 13352 13354

8813 19148 19149 19150 8815 19159 19165 8816 19172 13368
13369 19176 19180 19191 19197 19198 19199 19201 7089
8818 13373 13376 13377 13379 19212 19215 13380 8819
19223 8044 19227 10778 13386 8048 13389 19235 7091 19237
19238 19239 13391 8824 10783 19250 19254 13402 19259
19264 19270 19272 822 8826 19279 19280 13406 7104 8055
19288 19290 19291 7108 8832 13417 19303 19304 19305
10790 8833 13426 13429 19319 19320 19321 19327 19328
19329 8834 19337 13434 7130 19344 13440 13441 19349
13443 13446 19356 19358 19359 19368 19374 13447 10794
7136 2346 19388 19391 19397 19401 19404 19406 13453
19414 10799 13457 13458 10800 19429 13460 13461 19451
19453 13462 13463 10802 13466 19468 19469 10803 10804
13469 19476 2347 7154 7164 19484 19486 10808 19492 19493
13476 19495 19500 19501 19503 19506 19511 7165 19513
8068 19516 19517 10812 19522 10813 7170 10815 19533
19536 7185 19541 19546 19548 13487 19551 19554 19556
2352 8848 19566 19567 13492 19570 19572 19575 10820
19579 19582 19583 19584 19585 19586 19588 2736 2752
19593 19594 10824 10826 19598 2759 19603 19605 7203
1737 19610 19612 7207 19616 13504 19620 19621 19627
825 19630 10832 19640 19641 13508 19645 19647 7215 19650
19651 19652 19653 10834 19656 19657 8859 19660 19664
8085 19667 19668 8086 19671 19674 19675 19678 8088 1231
10841 8866 19683 19685 10845 13523 19690 19693 10847
19696 10848 19698 19699 19700 19701 19703 8867 10851
10853 8868 19709 19710 10855 19713 19715 19716 10856
13536 13537 10857 19726 19727 19728 19729 19731 10859
13540 19735 19737 13541 13542 19741 19742 19743 13543
19746 19747 19749 13544 19752 10860 19754 19755 19758
13548 3252 19761 13550 13551 8091 10863 7220 10865 8093
8877 19773 19774 13564 19776 7231 19778 19779 19780
13577 19783 8883 19786 10871 19789 10872 10873 19792
10874 10875 19796 13586 19798 19799 19800 19801 3255
19804 19805 19806 10877 19810 19811 19813 19814 19815
19816 10878 8885 19820 13595 19822 8886 19825 13597
19827 19828 19829 19830 7237 8098 19834 8099 19836 19837
19839 19840 13604 13608 10884 13610 19845 19846 19847
19848 10885 19850 19851 19854 19855 10886 19857 10887
8100 19860 10889 10890 19863 8892 19865 7239 8102 13621
8104 19870 19871 13623 19874 19876 19877 10895 19879
7241 19881 8107 8900 8901 3257 7248 19889 19890 19891
3261 19893 19894 19896 19897 13634 19899 19900 3262
10905 19903 19904 19905 19906 10906 13639 19909 8114
8910 8911 10910 10911 19917 8115 13648 19921 3264 10914
8915 19926 19928 19929 10916 13653 13656 19933 19934
13657 19938 8117 3266 19941 19942 10920 8920 19946 13662
8921 19949 13664 8922 8923 8121 13668 10926 19957 10927
13671 13672 10928 19962 13675 13676 19965 19966 19967
19968 13677 10929 19971 8122 19973 19974 13680 10931
7266 7267 19980 13684 19982 8126 19984 10935 10936 19987
19988 13689 13690 10937 3280 13693 8128 19995 3285 10942
19998 13706 20000 20001 13710 8130 13712 20005 8131
13714 20009 7273 10947 7276 20013 13719 13721 8940 10950
7278 13732 20020 13733 13735 20023 20025 13736 13738
13739 10953 10954 13745 8135 20033 20034 7290 13751
8137 13755 13756 8947 13766 13767 13768 10959 61 10961
13778 20052 20053 13780 7302 13783 10965 13790 20060
20061 8140 10967 13795 13797 13798 13800 1265 8954 20072
20073 20074 20076 13806 20078 10971 20080 20455 20458
8955 20460 20462 20463 20464 20465 13812 13815 3294
20473 20474 10974 20480 10975 13825 20483 856 20485
13827 8144 10978 8146 13831 13832 20495 8147 13834 20498

13835 20500 20501 13836 8148 20504 20505 20506 10982
20509 10983 7316 20512 20513 20514 20515 13846 8967
20521 8968 857 20524 20525 13850 13852 20530 20531 3307
20533 20534 13859 20536 20538 10992 20540 20541 13861
13862 20544 13864 20547 20548 13865 13866 20554 7324
20556 13869 20558 20559 13871 20563 20564 20565 20567
13872 20569 20570 20571 13873 20573 10994 13879 20577
13880 13881 20582 20585 20587 13882 20589 20591 13885
13886 20595 13887 1763 20598 13890 20600 13891 20602
170 13894 10998 7340 20608 20610 7342 7344 13900 20615
11002 13902 13906 20623 13907 20625 13908 20627 13909
20630 8978 8979 11005 20634 8164 20636 11012 7347 11014
20640 13922 13923 20651 13926 20654 20655 13927 20660
20661 20662 20663 20664 20665 20666 13928 20671 11015
20674 13932 20676 8166 20679 20680 8167 8985 20685 13941
21307 13942 7348 21314 21317 7349 7350 13948 21323 21324
11030 21328 13952 21337 8990 21339 11034 21346 11035
7352 21352 21355 13962 21357 13964 21359 13966 13968
21365 11041 21369 21372 21373 21374 21377 11043 21379
7353 21382 21383 13974 21386 11050 21394 21396 21401
11052 21407 21409 21411 21414 7354 21419 21422 21423
13986 21425 8995 7356 21433 13991 21442 13992 21444
21450 13994 13995 21454 21455 13999 14004 14005 14007
21461 21462 11064 11065 7357 11067 21473 7358 21478
21479 7359 14019 11072 21488 21489 21492 21494 11073
21497 21498 14027 21501 21502 21505 11075 14029 21512
14032 11078 11081 21517 21519 9001 21526 21527 21529
21531 14038 21533 21534 21535 14039 21538 21540 11083
21543 14045 21548 21551 9002 14047 7360 14049 14052
21566 7361 21571 21572 21573 21574 14055 21578 21584
11090 21586 21591 14060 21593 21595 21596 14061 14062
21604 21605 21609 21612 21613 14063 11091 21617 14066
7363 7369 21625 21627 11096 14074 21633 21635 21637
11097 21639 21645 21647 21649 14076 14077 11098 21657
14079 14080 11100 21664 21665 14086 21668 21669 21670
8186 21676 11102 21679 21680 21681 21682 21684 21688
14094 11104 7372 14098 21695 21696 14099 11107 21700
21701 11108 21711 21712 7373 21720 9011 14109 14114
21729 14115 11111 21733 21734 14118 7374 21740 14120
7375 21747 21749 14123 21752 21755 14124 21760 14128
7376 11119 14135 11120 21776 7379 14145 11123 7380 14149
14151 21787 21788 21789 21792 21794 21796 21799 21801
21803 14152 14153 9017 21809 14158 14159 21815 21817
14160 14162 21826 21827 21828 21829 14165 21838 11126
21843 11127 21846 21858 21859 21860 21861 21863 21864
21865 21871 21873 14169 14170 21879 21884 14171 14173
14175 14177 21893 21894 14178 21896 21897 21899 21900
21901 21904 14181 14182 21908 11128 21914 21916 21919
8198 21922 14190 11130 14192 21931 7381 11133 11134
21938 11138 21941 14201 21943 14204 21947 21948 21949
21953 21955 21956 21960 14206 21963 21966 7382 14209
7383 21972 21975 21976 14213 21982 21983 21987 11143
9023 21994 11145 21996 14221 21999 22001 22003 22004
14222 14224 22007 22010 22012 14225 8203 22016 14227
22018 22019 22020 22022 22023 22024 8204 22033 11148
7384 22036 22037 22038 14232 11151 22045 22047 22049
22050 7385 22057 14235 22060 22061 14236 14237 9028
14241 22073 22074 14243 8207 22078 22079 22080 14246
22082 14247 22085 7386 14254 22090 22092 14255 7387
22096 22099 11158 22103 22105 22106 11160 14263 22109
14265 7391 22114 22117 22118 14269 22121 22122 7392
22125 22128 22129 11163 11164 14273 22135 22136 22139
7393 22141 22142 11167 14279 22146 22147 22149 22151

14280 3321 22158 22160 22164 14284 14286 11169 14289
14290 11170 14292 11171 9041 22190 8216 924 22197 22198
22200 8220 22202 14301 22204 22205 11179 14306 11180
11181 22217 11182 11183 11184 9047 14315 22234 11186
9048 14325 22240 22243 22245 22246 22249 22250 11188
14327 14328 11190 14330 11191 11192 14335 22268 22270
22271 14336 11193 22277 8222 22279 11197 11198 11199
14350 14359 14361 22288 7396 22293 22296 14363 22302
14364 9051 11203 22308 22309 22310 22311 14367 22319
22320 14368 22324 22325 14370 22328 22329 11204 14372
14373 14376 22345 22347 926 22353 11207 14380 22356
14381 22360 8225 14384 14385 22374 14386 11210 22382
14391 22388 9057 9058 22395 14397 22397 11213 11214
22400 22407 11215 14402 11216 11217 14407 14408 11219
22424 22426 22427 14410 14416 22430 14417 14418 22433
14420 7398 14422 22441 22442 7399 8229 7402 22449 22450
8231 22454 11228 7405 14431 22461 22462 11232 14433
22471 22472 22473 14434 14437 11233 22479 22482 22485
11234 11235 8233 14442 11239 9073 14447 11242 22503
14449 11243 22509 22511 22512 22513 11244 22516 7406
22521 8235 22524 22525 11248 22533 22534 22536 14459
22542 22543 1782 22549 14462 14464 22553 11250 14466
9077 22560 22568 1786 22571 22572 14474 22574 11253
22576 22577 22579 11254 14481 22584 9079 14487 22591
11256 7412 11261 22598 22600 22603 22608 11263 8242
22615 14493 22619 14494 22621 8243 9084 11268 22630
14505 11269 22633 22635 22636 22646 8244 11273 14509
22654 22656 14510 22660 22662 22663 14512 22666 22668
11275 11277 14516 22676 22678 22679 22680 14517 14518
22685 14519 22688 11278 22692 11279 22694 22695 14526
22698 22700 14528 22702 14529 22712 22714 22715 14530
22718 14531 22723 11281 14533 22728 14534 14535 7413
22734 11283 22737 8247 22740 22745 11286 22752 22754
14540 22757 9088 11296 11297 22768 22770 22773 11298
22781 11299 11301 22787 22788 11302 14548 22797 22798
11304 8248 9092 11311 22808 14553 3583 11318 14556 22817
7416 11325 22821 14559 22826 22827 22828 11327 22831
22834 22837 9095 11331 11334 1789 7418 22851 22853 11339
1791 11345 14569 11346 22868 22869 11347 7422 11350
11351 22880 22881 22884 22886 22887 22888 11352 11358
22893 1795 22895 11365 22898 22901 8265 8266 11373 11374
22913 22915 11375 14585 11376 22925 22926 11377 22928
22930 7424 22933 22934 22935 11382 22938 11383 11384
11386 14594 11387 14596 7427 22951 22954 22955 22957
8271 22960 22962 22964 11391 22971 7429 22973 22974
14601 11397 22978 11398 22981 14604 22987 22988 14605
22996 11399 23005 3595 23008 23009 23010 11404 23014
11405 14610 9113 23020 23021 7431 7433 14615 23028 8277
9117 23035 14619 14620 14621 14622 9118 23049 23050
23051 23055 11417 7435 23061 14627 7437 8282 23068 23069
1796 14633 14635 11424 23083 23085 11425 7441 23094
23098 9126 23101 11430 7442 11433 11434 23114 23115
11436 14645 23119 23121 23125 23127 11437 23131 23132
8286 23136 7443 7444 23139 8290 14658 23146 23147 23149
23155 23158 8293 11448 23164 11449 9136 23167 14665
23172 11452 23174 957 23176 11463 23179 23181 23184
11464 8295 23188 23189 14672 14673 23198 23201 14674
11472 11473 8 23211 23213 11478 9140 14687 11483 14690
11485 23225 14693 23227 11487 23229 7449 23236 23237
7451 23243 23244 23250 23252 1817 11495 14702 23263
11496 14705 23266 23267 23268 23273 23276 23278 23279
8301 1387 23287 9148 7455 14711 11504 23299 23304 23307
14714 11505 23316 11506 23318 11508 11510 11511 14722

14723 11512 23329 23330 23331 23333 11513 8305 14730
23341 14731 14732 11515 11517 14738 11518 14740 11521
23354 23355 11522 14745 23360 7456 23364 11524 11530
23372 14752 23376 23377 14753 23380 23381 14754 23384
23385 23386 11531 23391 23394 7457 23397 14758 11533
11534 11535 23407 23408 14765 11536 23411 23412 23418
9153 23421 8308 23423 23424 14775 11539 8310 23438 11541
14780 23444 23445 23447 14781 14782 23452 23453 11542
8311 11544 14786 23461 14788 23464 23465 23467 23468
23470 23471 23472 23477 14789 14790 23482 8312 14793
14795 9159 23490 14797 23494 8314 14799 23500 23501
7458 8318 23506 23510 23511 8319 23515 14805 14807 8320
14813 14814 11558 11559 1388 23528 23530 11563 11565
23538 7460 23541 23546 11567 7461 23552 14830 9172 7462
11571 11572 14836 14837 11574 23563 8328 23565 23568
11577 23573 23574 11578 23577 23579 14842 14843 23584
8330 14845 23589 11581 11583 14848 1396 23602 23603
23605 11588 23608 14851 23616 23618 23620 23622 9177
23626 11594 23628 11602 23632 14856 7464 8333 14859
23650 14860 14861 14862 14863 14864 11611 14866 14867
14868 14869 11612 7465 23678 23680 14872 23683 11617
23688 11621 23692 23695 14879 14880 14882 14884 14885
14886 14887 14888 14889 23718 23721 11626 23724 23726
23727 23728 14892 14893 14894 11631 23744 23748 23750
11632 14901 23753 14902 23759 23760 23763 23764 23767
11633 23771 14904 23779 7466 23783 7469 23787 23788
23789 23790 23791 23793 23794 7470 23800 7471 23803
23807 14916 23813 14917 23818 9187 23823 11652 23825
23826 23830 23831 23832 23833 23837 14923 23839 11653
7472 23848 7474 11659 11660 11663 23856 11665 7475 23863
14936 7476 14938 23873 23874 23875 23877 23878 23881
23882 1831 23886 11670 11672 1833 14943 23908 23913
11687 9194 23918 23921 23923 14948 11690 14951 14952
8349 14958 14959 11692 14962 23954 14965 14966 9196
23960 23962 23963 23965 11694 14970 11695 23973 7480
14973 23982 23983 23986 14974 23988 14975 23995 23996
23998 14976 7481 14981 11698 24005 14983 11699 24008
24010 11700 14987 24016 24021 24024 9200 8352 14990
24033 24034 11703 24037 24041 24042 24043 8353 14996
24051 11706 8356 11709 11710 24060 24064 9205 15005
15006 8357 15009 15012 24077 24081 11713 15015 24088
24090 24091 11714 24096 11716 24099 15023 15024 24103
24105 15025 24109 11718 15028 24114 15030 24117 15031
24122 15032 15033 24126 24127 11719 15037 24134 24137
24139 24141 24143 24144 24146 24149 8359 24154 24158
15039 15040 24162 11723 24165 15043 15045 24168 4382
11725 24171 11726 24175 24182 24183 24184 24187 24188
24190 24193 24195 24197 15051 24202 15052 15053 7483
24207 24209 15061 7485 15092 24217 24219 24221 24224
15093 15097 8364 9213 24232 15105 24236 15109 15119
24240 11733 24242 9214 15130 24248 15133 24253 15134
15140 15141 15143 24262 15145 9215 24272 24273 24275
15149 15150 15155 11739 24286 15159 24288 24289 24293
15161 15164 15170 15171 24306 15180 15181 1841 24314
24318 24319 24320 15183 7487 11744 11747 24326 24329
15187 24336 8367 15189 24341 11749 24346 15192 24348
24349 24350 15193 24353 24355 15195 24357 24360 24361
24362 24363 24364 11750 24367 24369 24370 8368 24374
24377 24380 7488 24382 11753 24386 11754 24390 15207
99 15210 24399 24400 15212 24402 24403 24406 24408 8371
1850 24415 15216 11761 24419 24420 24421 24422 11762
24424 24426 24427 15220 15222 15223 24433 24434 24437
15227 15228 24442 24443 24444 24447 24449 24450 24452

24453 7492 1856 24459 24460 15231 24462 24464 24466
24467 15234 24471 15235 11767 11768 7494 11770 9230
24484 15253 9231 1860 24490 24492 24493 15265 11774
11775 15270 24503 15271 24510 24512 15272 15273 24519
24520 24521 15274 15275 9233 24526 24532 24535 15278
8379 8380 24542 9236 11781 24547 15292 24555 7498 24561
24562 24563 24564 11784 15296 24570 15299 7499 11788
24578 15303 7500 24582 24583 9245 24589 24591 24593
24594 11791 24600 11792 4411 24605 11794 15314 15315
15316 15317 24617 24618 24621 15319 15320 15322 24629
15324 7502 24632 24633 15327 11796 15335 11797 15341
24641 24642 24643 24644 7503 24646 24647 24649 24652
24654 24655 11799 24657 24660 24661 24662 24664 24668
15344 24671 24673 9249 7505 24680 24681 7506 15353 24685
24687 15356 24691 24693 15358 24696 15359 24699 7508
24701 15364 24707 8392 24711 15371 11810 24715 7509
24720 15376 9257 24723 15378 24728 24729 24732 11814
15383 15387 24737 24740 15389 15390 24745 24750 24752
24753 15392 24765 11815 9258 15396 24773 24775 24776
24777 15397 15399 24781 24783 11817 15408 24788 24789
24791 11818 24793 11819 15414 15416 24804 15417 24806
24807 24809 24811 11820 15420 11823 11824 24818 24819
990 15426 8397 11829 11830 9261 24833 24836 24837 24839
15435 11833 15438 24848 15443 24853 24858 24859 11834
15445 11835 24865 24866 8400 15448 24870 15450 15451
24877 24879 15452 24885 7511 24887 24889 24890 24891
15455 11840 7512 24896 24897 15458 24899 24900 24901
15459 24906 24907 24909 24912 9266 24920 15465 24925
11843 24934 15468 24938 24939 11845 15471 24945 8404
15474 15476 8405 24956 24958 24959 15479 24963 24964
24969 15480 24972 11849 24976 15482 15483 24982 24983
9270 15488 15495 11851 24990 24993 15500 11852 24999
8406 25004 25005 15506 9272 25011 11856 9275 25014 15515
25017 11861 15520 25027 11862 25030 15526 25032 15528
8407 25036 25039 9277 197 15539 9279 25049 15541 15542
25053 15544 25058 25059 25061 1013 7519 15547 8411 25072
11877 25076 15551 25078 15553 15555 8412 25088 11879
25090 9285 15564 15565 8413 25101 711 15572 15578 7521
15581 25109 15584 15586 15587 15590 25119 25120 9289
25126 25128 25129 25132 15593 25142 25145 25147 25148
7522 15598 15601 15602 25156 15603 25162 25163 25164
25165 9292 7525 25172 8418 11894 25177 15616 15617 25181
11895 9295 11905 7526 25189 25190 15625 1876 11911 25196
15630 15633 15634 11913 25205 25207 25208 7528 25211
25213 25216 25218 25219 15645 4578 15654 25224 9304
8426 25227 25228 25230 15663 8427 15677 25234 25236
25237 11929 11930 25245 11931 15695 11932 11933 15715
9307 25259 9308 11938 7530 25274 15729 9311 25281 25283
9313 7531 25292 15737 15741 11943 11945 25300 25301
15757 25305 15766 25307 11947 25309 25311 25313 9315
11949 25319 25320 15776 25323 25328 25329 7532 25331
15783 8434 11954 25338 25339 7534 11957 25343 25344
25345 15793 11958 15805 15806 8436 25355 8438 25359
25360 15834 25367 25371 11961 15836 9322 15838 8439
25383 11964 25385 25386 11967 25388 25389 25390 15849
15851 25393 15858 25397 25401 15864 8440 25406 25407
25409 25410 15866 25415 25416 25417 4579 25420 25423
9326 15877 9327 25428 4580 15880 25433 11975 15884 15885
25444 11978 9329 11980 25452 25454 25457 25458 4582
25461 25462 11983 25467 11984 1877 25473 15906 25479
25480 25481 15907 25483 11990 25485 11992 9333 25488
25489 15918 25491 15920 15921 11996 4597 25503 8446
15929 25509 15937 7543 25515 25519 25524 25526 15951

25530 25534 7544 25538 25539 9339 25543 25545 9341 25550
12003 25552 7548 25556 12005 25559 7549 15991 15992
9345 25568 4606 12012 25573 16007 25581 16009 12014
25586 8455 12017 16017 25594 25595 25596 4619 16022
25606 16024 16025 25610 25611 1879 25614 25619 25620
25621 12022 16030 25624 25625 25626 25628 25629 25631
25632 25638 25639 16031 1478 25642 25643 25644 25652
25653 12027 25655 16035 12030 25662 25665 25667 25668
25670 25671 25672 16040 25677 25678 25682 25684 9352
25688 16048 25691 16049 1481 8461 16054 25709 16057
9355 25716 25717 25720 25721 25724 25725 12038 25728
25732 7559 25736 8463 12044 9359 12047 12049 25749 25751
12050 16079 25756 12052 25761 16083 25775 25776 25777
25778 25779 16084 12054 12056 7560 7562 16097 16100
16102 12059 25800 25801 9362 25806 16108 16112 16114
25812 25813 12061 8467 25817 25818 25821 25822 16122
25824 25827 25828 4798 25831 25832 9365 12067 16135
25840 25841 25843 25846 1485 16139 7566 25853 25854
16143 1497 25863 16153 16155 25867 16156 12073 25872
25873 25876 8477 25878 16166 8478 25882 16173 25887
25888 25891 25894 25896 25898 25899 9373 16177 25902
25903 25904 25905 4828 8480 25910 25911 16183 25914
16184 16187 25920 25921 16189 25924 25926 25929 12082
25932 16191 25934 25936 25937 25938 25940 9376 25942
25944 25945 25946 25948 12086 25951 12091 16202 25955
25956 12093 25961 16204 25968 9377 25973 25974 25975
25978 16216 12095 25981 16221 8481 9381 25987 12100
25991 25992 12110 25995 16232 26006 26014 26020 26021
26022 26023 26026 7569 12112 16239 26035 26036 26040
16241 4831 12116 26046 26047 12117 12118 26052 16257
26060 26061 12119 26067 26071 7571 26074 12122 26083
9389 26086 26088 26090 26093 26094 7572 26096 26097
9391 12127 26104 26105 1051 26109 26115 9394 9395 26123
16290 7574 9397 26129 26133 26135 26136 26139 12141
26142 26144 1499 26146 26148 16302 9399 26154 16305
26164 16309 12144 26169 26170 16314 26175 16315 4850
8492 16321 26183 16323 16324 26189 26192 26193 12152
26200 26202 16330 26208 12153 26212 8493 4854 16340
16342 16343 12156 26227 12158 12160 16359 26232 16360
26234 16363 26238 26239 26240 26242 26243 16366 26252
16378 16380 26255 16382 12162 26259 26261 8496 4856
16391 715 9409 12168 26278 16404 4861 12175 26286 16414
26290 12176 16416 26295 26297 26299 4865 16428 12178
26307 9414 26309 26310 26311 26312 26314 16432 26318
26319 12181 26322 9416 16440 12183 26331 16445 26333
26334 26336 12185 26338 26339 26340 26341 26342 26343
26344 26347 16448 8501 26351 16465 16467 26358 26361
26362 16469 26367 26369 9419 9420 1923 16492 12196 12197
26377 12198 26379 26381 9422 26384 16505 9423 26391
26392 26393 26394 26395 8504 26399 12206 16514 26402
26404 26411 26412 26413 8505 16525 8506 26419 26423
26425 16529 8507 8508 26430 26431 9430 26436 26438 16544
16551 16552 4872 26448 26451 26452 26455 26457 12228
26464 26467 16565 9432 16578 26476 1927 12233 26482
16585 16587 26487 26489 26491 26492 12239 16592 16593
1056 26502 26503 26504 26507 9437 26510 9438 26514 12243
12248 12249 26518 26522 26523 26527 26528 4897 26534
16624 16631 26540 1521 16634 26544 9444 12269 26551
26553 16642 1528 7593 26563 26567 16647 26572 26573
16648 26577 16657 16660 16663 26582 26584 26587 26590
12275 26593 26594 26595 26596 5118 16667 16669 26604
26605 5119 16674 9449 26612 26613 26619 26620 26621
26623 5127 26625 26627 12287 26629 16684 5128 16686

9459 12290 26639 26642 16695 26644 26648 36 26651 12294
26656 26657 16700 16701 16704 16706 16711 9473 26679
8526 26682 26684 12299 26687 16719 26691 8527 26696
26697 16721 16724 26704 26708 12305 8528 16728 16731
26719 16732 26722 26726 16733 26730 26731 16734 1965
26739 26743 26745 26748 26749 12309 16744 16750 12311
26755 26756 12312 26759 5135 16759 26763 9509 16763
26768 26769 26771 26772 26775 12322 26777 26778 26779
26780 16771 26782 26783 26784 16772 26786 16774 5139
26793 26795 26796 26798 26800 16778 16779 26804 16780
16783 26809 26810 16786 26812 16787 16788 16793 16794
16795 16797 8532 5140 16803 8535 8536 16810 16811 16815
1970 1533 12341 12342 16823 16825 16826 16827 16828
16829 16830 1545 8540 16835 16837

3 17984 22313 22316 22317 13561 17986 17988 17989 22322
7044 17993 17994 17995 12186 22330 22331 4860 13574
22339 22340 13576 22343 8524 13578 22346 13579 785 18004
18005 18006 15279 8103 22359 18010 22362 22364 12195
15285 15286 22372 18014 22377 18015 7052 11150 22384
22385 15290 18021 22392 7057 18023 18024 18025 11152
18028 4864 7062 22404 18032 13589 8109 22411 22412 18035
22414 18036 22416 22417 15301 13591 22421 22422 18039
18040 22425 18041 18042 18043 12208 18045 18046 18047
18048 22434 22435 15304 18050 13593 13594 18053 12210
22444 7066 18056 9029 18059 22452 13599 18061 22455
18062 1938 12220 7072 18067 18068 18069 22470 12223
18071 18072 15318 18074 22476 18075 10419 10421 22483
15321 18079 18080 8113 15323 18083 22494 9033 11165
12232 22500 22502 18087 15329 7074 18090 22510 18091
18092 15332 12236 15336 18098 22518 7075 22522 18100
15338 15339 22527 15340 18104 13617 22535 9036 22539
9037 18108 7079 18110 22548 18111 9039 18113 12245 22554
22555 1941 10436 18117 22559 12253 22562 22564 22565
15357 18120 22570 8118 11175 10441 15362 18125 13629
12261 12266 18129 22581 15372 22583 12268 15374 13633
22589 11177 22592 12270 22595 11178 15379 10442 8542
15385 22607 15386 18143 10444 22613 15388 8543 10448
9044 12283 9045 15395 2320 22628 18153 8545 15398 8120
22634 1943 15407 18159 18160 22649 12293 7090 13654
22655 13655 12296 4882 7095 11194 9055 18171 12303 12304
11196 22673 12306 18176 22677 15428 8125 10464 8552
22683 11200 1494 7100 22687 18184 22689 18185 22691
18186 15439 15442 10468 18190 12321 9063 18193 9064
22703 22706 22707 22710 12326 8555 15449 12329 12330
12331 786 9067 9068 22725 18204 10477 13685 12338 22732
15462 15463 8557 12340 7518 7106 22742 12347 15470 22750
22751 2326 12350 22755 10484 18219 13696 22762 11218
12355 13699 13704 7110 11220 22777 22778 7112 22782
22783 22784 8563 15489 18230 15490 22790 22791 22793
15491 15493 15494 18235 22799 22801 12360 11223 22804
12362 7524 15504 11225 22810 7125 22813 2328 12367 15511
22818 13723 10493 10494 11230 22824 22825 11231 15524
15525 13734 7132 22832 9080 13737 15535 22841 12377
22843 15538 22848 12378 7133 13741 7134 22855 15543
11236 22861 5037 13747 22864 22866 11238 1957 11240
15550 22872 1961 7143 22877 15554 12389 13761 13765
15560 7145 8145 9089 15566 7149 15568 11247 15571 13773
22900 15573 15574 15577 22908 13775 10514 9091 22914
15583 22917 7153 22919 22920 10522 18297 10523 13785
15591 13786 5126 13788 15595 12403 15599 10525 18309
12405 8149 13796 15609 22943 18320 7540 15611 22949
18330 22952 22953 18331 18332 18333 22958 15612 12408
18339 18340 9096 22968 22970 18343 12410 11258 13805

18350 11259 15621 11260 22980 7155 22984 22985 13811
15626 18365 22990 22991 22993 18366 22995 18367 22997
11262 23000 23001 18370 18372 13814 7156 15631 18382
23013 15632 18386 13817 18389 23019 7162 18392 18397
23024 15635 18399 15637 23029 23031 18401 8155 13823
18405 23040 18406 15641 18412 15643 23048 18417 12423
18419 18422 18426 18427 15650 8156 2338 9103 8591 15661
23070 23071 15662 11271 23078 15664 11272 23082 15669
23084 18447 23086 18448 18449 23092 23093 15672 2342
11274 18459 23102 9106 23106 18464 15688 18474 15691
11276 12434 23117 15697 18486 9107 23122 23123 23124
15708 1201 23128 23129 15714 18502 12437 18514 10545
10546 13845 7551 15723 15727 23144 23145 9110 15730
23148 12442 23150 18537 23156 11284 8595 13851 18547
15739 18550 12445 23169 15744 18557 18559 7171 18563
15749 18568 23178 15753 13854 23182 7175 15760 23186
15763 18579 11289 11291 23191 23192 23194 11292 23197
13863 23200 18595 12452 23204 18598 18601 12453 11293
11295 13868 23215 23217 18608 10557 23221 18612 18613
13870 18617 7176 18621 15796 18625 23232 12458 15804
7179 8601 23242 13875 13876 23247 23249 18647 15830
23254 12461 23259 23260 18651 11300 7183 8603 13883
10567 8604 18672 23269 23270 23271 10569 23275 13888
15850 11309 23280 18679 18682 12471 15861 15863 12472
23293 18695 23297 23298 7184 23303 8606 23305 23306
18698 11315 23309 23310 12476 23312 23313 11317 18704
10573 23319 18706 23321 18708 12480 18711 9122 11324
15883 13904 8169 23332 12484 23336 12485 15888 15890
12486 15893 23344 11326 15897 18743 15898 18746 9124
23352 11329 18752 18755 23357 18756 1719 1000 23362
11333 18760 18761 23367 9127 23369 23371 18766 23374
13921 11335 7190 15919 7192 18782 5136 11341 10589 15927
11343 23390 11344 23393 15935 13936 23396 10590 23398
15941 23401 18806 23404 15944 15946 15949 18816 15950
1971 15952 13940 23413 23414 23415 23416 15956 23419
18827 8176 9133 18831 11349 23429 23431 15975 15981
23435 23436 9134 7196 13946 23440 18846 15990 13947
18849 23448 18852 7197 18856 18859 15994 13950 12512
23457 18875 11354 23462 11356 12515 18887 11357 13956
13958 18899 13959 23473 23475 16018 1500 10600 18909
11361 11362 11364 12522 12523 23491 7199 23493 18931
7201 23498 18933 7202 13978 23502 11369 13983 16043
23509 16044 18949 8184 5143 7576 7205 18963 23519 10613
18968 23522 12533 18973 16056 18975 9145 23531 23533
11380 18981 18982 13996 23540 8189 23542 23543 16065
14001 23548 18992 23550 18993 16067 9147 10617 14006
11385 19004 5145 14009 23561 16081 14010 19014 1205
10620 23571 19019 12543 16086 16087 23578 7210 12545
23581 19042 19044 10623 177 23588 14021 11394 14023
23592 14024 23595 23597 12549 23599 23600 23601 16109
19056 12550 7212 19063 23609 23611 19064 14031 23617
19066 19067 19068 8196 23625 19074 19076 2756 23629
7585 14035 23635 16131 23639 23641 11403 19088 19089
16133 2757 19097 16137 8200 14040 19104 23659 9158 12561
23662 16147 23672 10636 1740 11410 8643 19123 19126
23682 14050 23684 16160 19130 19131 11413 10639 14054
23698 19138 16172 23706 7218 23708 19147 23713 14056
14058 5169 19154 16181 23720 7221 19160 23723 19161
19164 7591 19166 19167 23732 23733 23735 23737 7225
16186 9166 19174 7226 12577 19178 9169 19187 14069 23755
23757 7228 8654 16199 14073 23765 1745 12583 7596 23773
16208 23776 23777 23778 7232 19210 23781 16217 23784
8212 16220 12587 19219 19220 10654 23792 14081 8213

23795 14083 23797 23798 23799 14085 12590 14087 23805
16236 12591 14089 16244 23817 3228 23819 14092 12593
16254 7234 14096 23829 16258 16259 3231 19262 11442
19268 19269 23841 12597 23844 23845 23846 11443 19273
12600 8663 14103 11445 5489 14110 23858 23859 14111
19287 16293 9184 23870 1027 11450 19297 14117 23876
19300 19301 23879 23880 8221 7242 11453 23885 16307
23887 19307 16308 23898 12610 23901 23902 23904 19310
16310 23909 23910 19315 7245 19317 23916 11459 1523
14130 23924 23925 19325 12614 14132 23932 14133 19331
23938 23939 23941 23943 19334 19335 12615 7247 1221
19341 14137 11467 19346 23961 16334 14139 23964 16338
19351 23968 19352 23970 16339 14140 23975 23976 14143
19357 23981 11471 7249 14147 19370 19371 23989 19372
8228 11474 7250 16361 19378 11477 19382 19384 19386
7616 19389 24009 19390 16372 24012 24013 19394 24015
14155 24020 19398 19400 24025 24026 12629 19402 16381
19405 14157 19407 19409 19410 11479 19413 7252 19415
24047 24048 24049 24050 19416 11481 19420 11482 19422
19423 24063 19424 19426 90 9198 16394 19432 16397 19436
24078 24079 19438 19440 24084 19441 19442 19443 19444
16402 24094 24095 1531 19452 14168 19454 7256 24102
16409 24104 12638 24106 19461 7257 19463 19467 14172
10679 24116 19470 16418 24119 11494 14176 16429 19477
19479 7259 1532 24133 14179 24135 16435 14180 12645
19489 19490 19491 24147 9204 24152 8238 14184 24155
24156 14185 19496 24160 19497 19499 14186 16449 19502
16450 19504 19505 16451 19508 19509 16454 24177 24178
24179 24181 16456 16458 8239 24185 16461 14189 19518
12650 19520 24196 16468 19529 12651 16474 7262 11501
19534 14194 16491 19538 19539 19540 14195 19543 19544
16493 24227 11502 12657 16499 19553 24233 8241 19555
14199 19557 19558 8689 7263 24243 19563 19564 14205
24250 16511 8691 19569 11509 19571 16515 24260 19574
24264 24265 16520 24269 19576 24271 12663 19578 14210
19581 24277 16526 24280 14211 24282 8692 12666 16539
19587 797 24290 19589 7265 24297 14216 16546 16547 24305
16548 19596 16550 12669 19599 24316 24317 19600 14220
16553 19604 16554 16555 19607 16557 16558 24331 19611
24334 16560 24337 12670 19614 19615 24343 1535 8246
19618 19619 16571 16572 19624 19625 19626 12673 16574
24359 19629 16576 19631 19632 19633 19634 16577 24368
19637 19639 24371 10696 24373 5519 19642 12677 19644
7268 19646 24384 24385 16586 19648 11519 7269 24392
24393 24395 16589 24397 16591 9222 1540 19655 16594
1784 19658 24407 11526 16597 19662 16598 19665 16600
11528 16605 16606 19670 14238 19672 24425 19673 16611
12687 19676 19677 11529 16616 24436 16617 16618 14242
16621 19684 16622 24445 24446 16623 19687 19688 2020
16625 24454 24455 19691 19692 16629 8704 19695 10705
8254 16635 16636 14252 12694 19702 16641 19704 8257
7274 8260 16645 16646 1543 19711 8263 16649 19714 16650
16653 16654 24499 24500 24501 19718 19719 16656 24505
24507 24509 12700 19722 16658 24514 19724 24518 19725
16659 7277 16661 16662 19730 14267 24527 12702 19733
10713 8712 24538 19736 16668 24543 19738 25 16670 24548
16672 24551 24553 10716 9237 24559 19744 16675 12708
16677 19748 16679 16680 24572 19751 14277 24576 10718
9238 9239 19756 19757 9240 24584 24585 24586 14282 14283
16689 24592 16690 16691 16692 24596 24597 24598 16693
19766 16694 12715 7280 16697 24609 19772 24613 24614
14287 16699 11553 7282 16702 16703 9243 16705 7283 19782
16707 19784 16708 16709 16710 19788 12721 16712 7284

7285 19793 16715 16716 7286 16718 12726 24651 11564
14300 16722 19802 16723 24658 7287 10730 16726 24663
19807 24667 7288 19809 8724 24672 16729 24674 24676
19812 16730 8276 12733 10734 19817 9252 24686 16737
24688 16738 24690 16739 24692 16740 19823 7289 11573
24698 16743 14316 16745 24703 16746 16747 24709 16748
16749 14318 24713 16751 2034 24717 24718 16753 19838
11575 16755 16757 14323 24727 14324 16760 24730 16761
9255 7291 24735 16764 16765 24739 16766 16767 19852
19853 8281 16769 16770 24756 24759 24761 7292 11580
16773 12746 7294 16776 24774 16777 14332 8734 42 16781
16782 11586 16784 16785 11587 19873 8736 19875 9263
24794 16789 16790 24798 16791 24801 24803 16792 14341
14342 11592 24808 19884 16796 14344 19887 14347 24816
16799 8737 16801 24820 16802 24822 14349 16805 19895
16806 24829 24830 11595 24832 14351 16809 14352 14354
16812 24841 24842 16814 24844 24846 14355 16816 14357
24852 11598 11599 7296 24860 16822 19912 7297 16824
12764 11606 11607 9267 24871 24872 24874 19919 8287
12770 19922 16831 24884 8742 7299 16834 24888 19927
11614 16836 24892 7668 14377 12776 11619 12778 19935
19936 7669 14382 12780 24904 10757 11627 11628 19943
14387 24915 24917 24918 9273 9274 24924 16851 24928
8746 24931 24932 8292 24935 14396 8748 11640 7300 7301
24942 24944 11644 24946 24947 24948 16860 11645 24952
14404 1793 24955 16864 16867 12799 11650 12802 11651
24968 14412 12804 9281 10767 24974 24975 14419 16877
24980 12807 11655 8752 8753 7673 12816 8297 11662 8756
14430 7304 2051 25000 25001 25002 8759 16891 9290 25006
14436 12827 25010 12828 12830 7307 11671 25015 2053
14443 25019 14444 12835 25025 11673 16904 25029 11675
11676 7309 16908 11680 14453 25038 11684 20008 8303
25043 12845 25045 25046 11688 2054 9296 14461 12851
25054 7312 25057 12853 12854 16923 7313 25065 7314 16926
7315 25069 25071 9303 3320 25074 14480 7317 14483 25080
7318 12863 8313 25086 7319 8315 10795 9310 20037 11704
20039 25098 25100 16941 20041 1251 25104 10798 9312
20045 14498 12875 14501 25115 14502 14504 12876 8317
5682 25123 12879 25127 7323 1253 25130 9317 25134 25135
25139 8321 16958 25143 25144 12885 25146 11715 8322
11717 16963 7326 10809 14522 25157 12893 25161 20071
11720 16969 11721 12896 1062 25169 25171 8325 7328 7702
20081 8791 20456 20457 7331 10816 8329 20461 11731 7332
25192 7333 11734 7334 9331 7335 20470 20471 20472 10823
25206 7336 20475 25209 20476 20477 10825 25215 20479
11746 12921 8335 9335 12928 8801 20486 8802 20488 3327
25229 8804 20491 7713 7339 8339 12939 12940 25238 25239
12941 7724 12946 25247 12947 11759 25250 3533 9347 7729
10839 12954 25260 2076 20508 11766 25270 25271 7343
10842 10843 14577 25282 3578 25285 25286 8814 10846
20518 12965 20520 7346 8348 1269 10850 25303 7747 20526
11778 20528 7748 5714 12981 5716 14592 12984 12985 11782
20537 8822 25324 12998 8355 11785 10858 7755 25333 25334
2085 20545 13005 1807 17047 810 5720 20553 9368 7355
13017 7784 14611 9371 25353 20560 7790 25358 2090 13023
13024 25365 20566 25369 5727 25373 25374 11800 25378
8836 1818 5730 13033 11806 13037 9378 20576 11808 14629
5819 20580 20581 13043 20583 20584 25396 1585 20586
25402 14634 13046 9382 20590 25408 9383 8372 5822 20594
13054 13055 9386 9387 25421 7366 7367 7368 14647 14648
25429 13063 25431 20605 11821 13066 25438 14654 25440
25441 20609 11822 3610 25446 9392 8847 11826 25453 20616
20617 20618 13076 14663 20621 25464 13077 7838 25468

25469 7840 13081 8850 25474 25475 25476 13083 11831
20629 7371 8382 14675 5921 9400 14679 14680 14681 3625
13093 11837 25493 14686 25497 1289 9403 3632 25502 60
13102 25506 13103 20658 8388 11844 14698 25518 7377
25520 25522 7863 13112 8862 25529 14704 25531 20669
11848 5968 5969 17137 25541 9412 25544 20677 17139 9413
13125 8393 25553 11854 17144 21304 13129 9415 3635 1828
14720 11858 1079 8398 13137 11863 25577 25579 14727
21325 25583 21326 25585 11864 11865 10917 25589 21332
25593 21335 13142 13143 13144 25598 14736 25601 25603
25604 21343 14737 8871 8872 21349 25612 2140 13148 25616
25617 11873 8875 8401 13161 9426 21361 21362 21363 128
8878 21366 1836 25636 14755 21370 8881 8882 831 21375
13171 25645 25648 25650 25651 14760 7388 14763 9434
721 25657 25658 21384 13175 14768 21389 21390 25669
13176 6005 8887 25674 21397 4389 11893 25680 25681 21403
9440 25685 9441 21410 25689 11901 21412 6493 25697 25698
21416 25700 25702 9443 25704 1612 25707 25708 21420
7917 2174 25715 14787 11912 25718 21428 21429 25722
21430 10944 8893 25727 13198 11918 21438 25735 14794
25738 7926 25741 25742 11921 21445 21448 25747 11924
21451 25750 13207 6541 25754 1854 7932 21456 25760 14803
25762 25763 2178 25767 25768 25770 25773 10951 14806
13216 14808 13217 14811 21467 25782 25784 8899 25789
21470 7938 14816 8419 25797 9480 9497 21480 14821 8902
25804 1112 21485 21487 9502 7404 21491 7948 13232 13233
10962 25820 11944 13236 10963 11946 25826 21503 1380
6550 13245 21508 25833 21511 13246 13248 13249 8908
25842 8909 6551 21520 21521 21523 25852 7958 8912 25860
13257 8429 21530 8430 145 29 8917 14855 9545 6558 25874
25875 8919 13269 11966 9551 21545 21546 13273 21550
2192 21553 25893 13275 1393 21556 2213 4493 21562 8924
10986 13288 13289 25906 13291 10987 14875 14876 7420
21579 21582 6576 25919 11981 10990 21589 9607 25925
13303 25928 13305 21594 17292 17293 4574 17295 17299
13308 25939 21606 11987 21610 25943 1123 14891 17309
13312 25949 8002 21618 17321 9623 10996 2221 14898 14899
25962 25965 21631 14900 25971 13321 21634 9643 7425
8006 6590 21641 21642 21643 21644 25984 750 1408 25989
8938 14915 21651 8451 11006 21655 26004 21656 26011
26012 14919 26015 26019 12006 14921 8452 13335 26024
17367 26028 26029 21666 17371 26032 12009 11011 14927
26037 26039 9775 21674 21675 26044 4584 17385 12013
14932 13344 8026 26054 26057 26058 7432 21685 21686
26064 8944 12018 26069 26070 12019 26072 13356 11019
26075 26077 13360 26081 17413 8457 26085 6933 17421
26089 13367 26091 21702 21703 21704 21706 21708 26098
26099 8032 14947 12025 21713 21714 14949 26111 12026
26117 17431 162 21724 21725 26125 12028 21727 26128
11024 14954 26134 17447 21732 17449 7436 21735 11027
21737 12034 17457 21741 21742 26152 14961 26156 26159
11028 26162 14964 4594 17465 26168 752 21753 21754 11032
13387 26178 14969 21761 17473 8464 21766 12041 17483
21769 12043 26195 17486 26197 26199 17487 26201 17488
26204 26205 758 11037 4607 26210 12048 21785 17502 4618
14979 26217 26218 26219 21790 26221 26224 21791 13404
21793 11042 8052 12053 17526 17529 11044 12055 21807
13413 8470 8962 26244 26245 21812 26247 26249 26251
17539 17540 21816 14991 13420 17545 26258 21822 21823
21825 2249 26264 17549 8964 14998 26269 26270 26273
21831 17557 21834 21835 11054 26285 21839 13427 17560
15001 13428 21848 21850 26298 21852 21854 8473 26302
26303 17572 1896 17577 21862 11061 12065 17583 26313

21870 15007 26317 21872 17585 11062 17592 11063 21882
15010 17599 15011 8475 13444 26335 17605 17606 17607
17612 7447 21898 15016 17615 15017 21902 17617 26349
10331 6959 26352 12075 26354 12076 26357 21911 26359
21913 13452 26363 1900 17630 13454 10334 8972 2259 11074
15034 8062 15036 21934 21936 12084 11076 1901 12088
26386 26387 15041 17650 21944 13465 21946 11080 8482
26397 17658 21951 4805 6973 26403 17665 26405 26409
15048 15049 21962 13470 12096 11084 26417 17679 26420
4810 17682 21974 12099 17684 21977 21978 26433 21979
26435 13475 15066 17689 26442 21984 15069 15072 26447
17696 15074 6976 15082 17702 17705 26460 26461 26463
15089 26465 15090 12104 17711 26471 12107 15094 26477
22009 26479 8981 17718 15098 26485 22014 11088 26488
17722 11089 17724 4 26497 15108 22021 26500 12114 15112
15114 22025 22027 22029 22030 26511 15117 15118 17739
17741 12115 15120 17747 17748 26524 26526 15123 15125
26531 22046 17752 1466 26537 6982 22051 13491 22053
22056 26545 26546 6983 26549 13493 17765 15139 17768
26555 1909 26559 26560 6987 26562 15142 26565 12121
10355 17778 15146 26574 11099 17782 17785 12124 2270
15153 22084 26585 8495 26588 13502 4832 26592 22089
12128 22091 15162 17798 11103 26599 26600 17801 26603
22098 15165 17803 26607 17807 26609 26610 15168 17810
17811 15169 12131 8992 26622 17821 15175 22115 26626
17826 2280 8079 26630 26633 4836 17834 22123 13512 12137
12139 17838 17839 17840 26646 12140 8082 10368 4839
26654 26655 13520 15191 17851 22143 17853 26665 26667
26668 26669 26670 17854 26672 26673 17855 26676 26677
17857 22148 6999 26681 12146 22154 13524 17862 15196
26690 17864 22163 17865 13525 15198 26699 26700 26701
22170 17869 26705 22172 13526 17873 22176 26716 22178
22179 22180 22181 15200 26727 12148 17878 17880 26732
17881 11116 12150 26741 26742 15206 26744 8503 26746
26747 17889 17891 1173 15209 4845 17901 22206 22208
15211 26758 22212 17909 8087 13534 26765 11121 4848
12157 9005 26770 10382 22228 26773 26774 17919 22231
22233 15221 10383 7019 22238 15226 7025 1479 8511 17935
17937 174 26789 26791 26792 7034 26794 22253 17941 26797
22255 26799 15232 17945 15233 11132 26805 17950 10390
26808 15237 22269 15239 15240 15241 15242 17958 26816
1676 13552 17963 7037 17966 22283 11140 13556 22286
15251 1686 17972 22291 17973 22294 17975 17976 22301
15255 7041 17979 22306 17980 7042 15261 13560

4 12769 7113 19560 11071 19562 17804 17805 17806 7116
16556 17809 24409 13517 7118 22242 7122 24417 22244
19573 17813 17814 7898 16562 22252 17817 17819 17820
16563 17824 24431 15202 12171 16567 22265 22266 17828
16568 17830 16570 19591 22272 22273 7124 24448 1753
11079 7126 16575 14333 12782 24456 12783 17842 8644
19602 8645 16581 17847 17848 22290 16582 16583 19609
16584 8309 24477 15214 7128 24481 17856 4375 17858 7450
16590 11601 24491 8650 7131 22312 19623 5692 12192 15224
15225 17868 12193 16599 17871 24506 17872 5695 22327
16601 19635 17876 16602 19638 7927 17879 16604 14353
11609 17884 16607 17886 24528 11610 22348 22350 22351
16609 24539 16610 17890 12201 17893 16612 24546 17896
16613 24549 17898 14358 22365 22366 24556 17900 2246
17902 22370 17903 19663 22376 4381 24567 17905 17906
17907 22383 17908 7137 1555 16619 22391 12207 11615
17914 12811 17916 12812 7937 14369 16627 22401 17921
16628 9021 16630 11620 24599 17926 16632 17928 24603
24604 17930 17931 7139 24608 17934 12219 17936 14374

7140 17939 7141 16638 24619 16639 17944 12822 17946
15263 15264 13567 17951 13570 22436 24635 13571 22438
24638 4386 13575 4387 12825 7144 17959 17960 16651 22447
24648 16652 24650 12227 17964 24653 1313 16655 14390
7146 17969 12831 8669 15284 22463 7147 24665 17974 22469
7148 11112 5715 7150 16666 7152 1959 4392 4393 22480
22481 15297 24684 1558 7157 17987 22487 12251 8340 17990
17991 7998 16678 14414 22498 13598 7158 15308 7159 7161
2255 24705 24706 12267 13605 13607 14424 7163 1118 794
7166 7167 12274 9052 9053 8021 15326 22526 24725 7169
22528 22530 1571 22532 18019 9435 15331 12286 22537
22538 24738 15333 8354 22541 11681 11682 24747 24749
22545 18027 8695 24755 18029 22550 24760 11686 968 24763
7496 12295 7174 1371 24772 8360 746 14451 7177 22561
15355 2278 7180 22566 7182 5824 13638 1788 15363 13640
13641 15367 24795 15368 15370 4492 24799 16735 16736
11159 2281 18058 14467 7188 14469 9461 24810 14472 12898
18065 1981 14476 15384 22599 14477 12320 22605 22606
12902 2285 8373 24826 24827 14485 22611 22612 15391
7193 16756 19833 12325 24838 11708 7515 22624 12328
5962 5964 24845 8718 15401 15403 8719 24851 15406 1379
24855 24856 2288 22641 4581 15410 15412 8069 18096 1141
5979 8072 12924 12925 22661 24873 1385 15422 15423 22665
12346 22667 24882 2294 13674 22671 14511 7204 14513
87 8731 8732 11727 9543 802 15440 15441 5992 7209 14524
11189 24902 12945 14527 8080 9553 16804 11735 5993 188
24916 18131 22699 8739 11740 12368 5997 24926 22704
13695 24930 11742 15461 12372 120 22713 24937 16818
9580 22716 13703 12960 22720 13705 11745 4611 4612 4613
7219 1164 9617 6494 11205 19910 13718 7547 24960 24961
22738 12974 15485 24965 24966 7223 15487 22747 12977
18162 11757 12979 13730 15492 24979 12980 6495 22758
22760 1999 15496 22764 4789 8096 24991 22767 15501 9659
22771 22772 12989 22775 11763 7229 12999 22779 7230
1009 2001 15514 1618 811 15518 15519 22789 13749 15521
22792 16865 25024 16866 25026 7236 15523 13007 1021
22800 8105 13757 19953 8420 8421 13762 13763 15537 13015
10779 8765 4807 2332 2016 25050 8769 7244 12416 12417
13779 6554 4816 13782 15552 13029 13030 199 15556 22833
6559 19979 22839 11786 15559 4827 13791 22846 13035
13036 1196 8432 8778 25087 15569 22854 6568 6569 6571
25093 2028 25096 8437 1459 13049 6574 10801 1635 13813
1031 2350 15588 15589 1034 22878 25114 13818 25116 8790
11805 6584 13062 25121 6588 104 10341 8794 6618 15605
6628 13072 22897 13073 6632 768 25141 22902 22903 6636
2755 8453 9168 22910 13841 13080 11266 7275 25154 22916
10354 25158 1853 9171 7597 172 13088 22924 2058 13090
25168 13091 13856 22929 13857 25174 15636 13858 15638
6936 25180 10363 25182 2059 15642 1855 2067 25188 15646
7606 25191 12470 11280 22946 15655 3232 22950 25198
25201 13105 18299 10370 10371 10372 13110 3235 9182
15670 22961 6944 25214 22963 20068 25217 22965 22966
15676 6946 22969 14692 13877 13878 18314 20075 22975
15690 6947 13118 18324 8469 13120 22983 13121 13884
25240 6953 15712 18335 11294 18338 4870 8472 25252 25253
13127 3237 15721 12488 2069 20469 23003 8154 25264 25265
25266 25267 15728 6960 18354 25272 25273 13133 6964
13898 25280 18361 18362 6965 25284 10852 23018 7298
11860 25291 13903 23022 25294 11306 15747 25297 18373
8828 11308 25302 6967 23030 12501 8830 15761 23034 11312
23036 18388 25314 15765 18390 13912 23044 1487 18393
18394 25325 25326 854 13916 3254 23053 15778 4899 23057
25335 15782 13150 15784 23063 13151 13152 25342 18409

18410 15787 13155 25347 18416 20516 23077 13925 15792
11319 18421 25357 15794 11320 15798 13159 25363 23087
23088 15802 13160 25372 11321 13163 25375 25376 15809
23095 18435 15814 18437 18438 23104 8485 15817 15819
11323 23110 23111 15826 15827 13938 15831 6972 18453
18454 25398 25399 18456 7306 18458 781 20550 18460 134
11328 18465 18467 5036 1066 23135 18477 25419 18478
15841 20561 25424 23140 6978 10869 14771 9212 18488
15853 14774 10411 25434 18494 23151 23152 23154 1671
11337 11896 18510 23161 18512 25448 25449 2088 25451
13182 18516 15871 25456 15872 5123 15875 18527 11904
25463 6985 13960 18535 1674 2094 23180 13963 8179 23183
18542 13965 6989 7648 10427 11917 6990 3282 7322 23193
15896 13976 11923 8855 13981 13982 18572 25494 25495
13204 11925 18577 23208 23209 9227 6993 15911 20614
18584 23216 18585 25513 15912 14809 25517 15915 11355
13211 18597 25523 723 25525 8187 25527 7325 18603 1678
23231 25533 15925 12551 13218 14003 23238 23239 23240
15934 1883 25546 18614 25548 1886 18616 11363 8512 8513
25555 23253 7330 20641 20642 20643 20644 25563 12558
25565 25566 20648 18630 25570 20650 11367 25575 1685
8194 13230 25580 18640 20657 23272 11371 20659 14018
8517 15968 15969 15970 23284 3301 18653 18656 18657
23291 25599 20670 7006 20672 23295 25605 2133 8873 18665
10904 14025 15987 15988 7008 1244 20682 13244 14030
20686 20687 23314 21303 15996 18683 7011 21309 7013
16002 25634 21313 23325 12574 21315 21316 7014 8879
7017 10469 7018 25649 5146 7020 18702 16020 12582 7022
16023 21334 11395 21336 11396 16026 7024 21340 18720
21342 1078 1897 25673 18726 25675 10478 11401 23361
21350 11976 21353 25683 21354 23366 16034 13271 11977
23370 8534 25692 14873 25694 25695 7027 18740 7683 13277
25701 14877 23379 13279 18750 14064 11406 7028 25712
14067 873 12599 13286 16062 16063 25719 14071 7032 21381
25723 11986 18770 18771 877 23403 13290 25733 21387
1902 11989 16074 25739 21393 16075 13295 8218 14897
11991 8219 21404 21405 11415 18798 7036 2171 18802 1702
23425 23426 21415 23430 18804 13306 25766 18808 16091
16092 25771 7039 7040 14912 21426 16098 23442 23443
18820 14090 25783 10497 25786 16103 25788 7365 25790
25791 10499 10939 21440 1906 13315 1267 11431 21446
23460 7043 7701 25805 5400 25807 14926 16128 13324 25811
14107 7704 18853 7046 16136 7047 23476 3577 18866 14113
18868 21465 18872 18873 878 7051 1729 21475 25834 7055
1270 25838 18884 23497 18886 7059 18888 25844 13336
14121 7717 7719 18900 18901 1104 25856 25858 7061 23512
23513 16171 21496 140 25866 12029 18910 25870 13345
13346 7063 16179 16180 13349 11454 14956 14957 18935
23532 25883 7065 25885 25886 21515 1926 13353 21518
11461 11462 14963 21522 23544 13357 18952 7067 13359
18958 12652 8928 13362 25909 11465 16207 18970 18971
25915 25916 13364 16209 16213 23562 21542 25922 13365
18976 23566 23567 7741 17296 21547 18980 17297 16218
23576 17300 12042 9302 18987 18990 23582 13370 11468
17305 21564 17307 18995 12045 17313 25952 14980 17317
21575 14164 16231 10538 21581 25963 19007 21583 13374
19010 10968 21587 21588 19012 25976 25977 21590 23615
8251 19015 16238 17328 17329 13378 21599 7068 17335
17336 19035 17337 23631 25997 26000 21608 19040 26005
16242 26007 26008 26009 23637 19043 26013 8932 13381
26016 26017 26018 19046 11476 23647 23649 16251 14992
21620 2198 21623 13384 19052 16256 21628 17353 14995
8579 26038 23664 23668 23669 23670 7071 19062 16262

21636 8255 8256 46 17368 8258 10552 13393 19075 13396
26063 16273 26065 23693 19078 16274 23697 21652 23700
17380 943 17386 16278 13398 23709 13399 23711 23712
16289 13400 16292 8587 16294 26092 17403 23719 11489
17406 3615 7076 21672 21673 19113 26103 19114 19115
8262 26107 26108 10562 23734 26113 17416 23736 16303
26120 19124 19125 12070 15018 23747 13409 7077 15022
26130 26131 8946 14202 19135 19136 26137 26138 23756
7078 23758 13414 19139 23761 26147 23762 19142 26150
19143 17434 26153 23766 16317 26158 19146 26160 23770
21707 26163 23772 12074 8948 26167 17441 17442 17443
26172 19155 21715 21717 23782 19156 19157 23785 21721
3622 26185 16322 10570 17451 12693 26194 7400 16329
11503 26198 19168 19169 19170 8267 2215 10575 14217
17467 16336 16337 23808 23810 23811 19179 13433 14219
23816 19189 21748 11507 26223 23821 21750 19194 17474
17476 17477 26231 23827 19200 8953 19202 19203 21762
23834 23835 21763 17481 15044 16344 23842 26248 13437
26250 13439 16353 16355 21773 17489 19214 8269 23852
8598 23854 19218 17493 8956 17495 19222 7786 16362 23864
26271 19225 26274 23866 23867 19226 13445 7082 26284
16371 19230 19231 26289 17507 17508 17510 7794 26296
21806 17515 17516 17518 17520 19244 16373 23888 16376
23893 7083 19252 17527 19255 21821 23903 16379 23905
19258 23907 15058 13449 26323 26324 26325 19263 23912
15064 19266 21830 7084 23917 21832 12710 16388 19271
7085 16390 23927 23928 21840 23930 26345 26346 19275
21842 23933 17542 7086 19278 15076 21849 23942 11008
19281 23946 26360 17548 21855 23951 21856 21857 13455
19284 23957 26372 19285 23959 16396 17553 15086 17555
16400 26380 21866 26382 21867 21868 21869 19292 15087
19294 23974 19295 19296 11009 21876 23980 21877 12106
21880 23984 23985 19299 21883 17562 21886 23990 23991
16406 21888 7411 16408 17570 21892 17571 26421 8965
16410 7087 17578 14248 17581 14251 11527 19318 21903
16417 9340 17586 19322 21909 24023 19323 19324 16419
26450 19326 21915 26454 17590 24030 21918 16420 16422
24036 21921 24038 26466 24040 19330 16424 26470 21924
26474 19332 24045 16425 21930 8608 16427 15106 19338
24052 17604 19340 24057 9342 21939 12723 26493 24061
24062 15110 19345 24066 17608 17609 10598 16433 16434
11018 15115 21950 19354 24080 16438 17619 8279 21957
26521 21959 14264 16441 19361 19362 21965 26529 19364
24097 19367 26535 16443 19369 26538 21970 21971 26541
5531 17626 2217 15122 1930 26547 24108 8613 1932 17634
7092 19381 16452 21986 26557 1310 21988 21989 19385
16455 17639 10609 16457 21997 24130 17642 19393 7096
19395 24138 19396 16459 15135 19399 24145 7097 16462
24148 22011 16463 17654 16464 7098 16466 8620 17660
19411 26601 8621 13484 16470 16471 16472 19418 22026
2226 16475 17676 9357 24174 26618 16477 16479 19425
16480 24180 16482 16483 16484 17687 19433 24186 17688
26632 19435 22048 24192 16485 19437 15147 19439 24198
24199 24200 17693 11550 26649 16488 16489 17698 14285
19447 19448 19449 24212 26660 24214 19450 26664 8623
17701 15151 17703 22077 17704 16494 19457 19458 2228
19460 16496 13490 24237 16498 19466 10621 16500 17714
26688 16501 16502 24246 19472 26695 19473 24249 8625
8291 24252 22100 11049 16506 22104 26706 26707 19478
26709 7102 12751 19481 16509 26717 16510 15167 22112
19485 26723 26725 16512 22116 24274 17734 19488 22119
3643 26735 14296 26738 8988 17740 24283 16516 16517
22126 22127 16518 16519 24291 22130 3644 19498 22133

26754 16521 10629 17751 16523 17754 26760 24308 24309
17755 26764 16524 15177 19507 15179 11059 19510 16528
7107 24322 22150 16530 17767 19515 24327 24328 16531
24330 16532 24332 22159 16533 16534 17775 24338 19521
26790 16535 22168 24342 19523 19524 24345 19525 19526
19527 22175 19528 1311 16537 16538 7109 22183 17781
22185 16540 19535 17783 17784 24365 16541 22192 3648
17787 17788 14310 10634 19545 17791 24376 19547 24379
16545 10635 19550 17794 22211 19552 7111 12159 24388
24389 16549 1553 22219 22220 24394 8996
5 13225 19101 7172 25199 19103 15103 23701 23702 22323
19105 5493 19107 15666 19109 6935 25212 19111 10574
22332 22333 22335 1075 15671 22338 10576 19116 15673
2105 19120 10580 16478 15679 12062 22349 16481 1933
15684 25235 15685 15686 15687 23738 18009 22357 15116
25243 25244 23743 25246 15689 23746 14141 22361 16490
14142 25254 19140 19141 13237 6939 15121 15700 22371
25262 15702 9622 22375 15706 7181 25268 15709 22379
22380 19151 19152 23769 19153 25276 25277 9634 15711
12820 22387 23775 15713 22390 1320 25287 2126 25289
15131 20549 12466 19162 19163 1940 13250 15136 6943
22403 15726 22405 22406 11402 5512 14626 1522 12829
5516 25310 6948 6949 19177 15738 23804 14632 6951 19181
19183 19184 19185 19186 15743 23815 19188 1644 15152
19192 19193 1950 19195 19196 15748 12478 15750 15752
713 15754 15157 15158 6956 6958 23836 19207 12840 5524
11135 12089 22451 12844 19213 10604 15773 15774 19217
25364 12092 25366 15777 25368 1804 15779 6961 6962 15178
6963 13284 23860 14653 23862 11423 5528 16559 14657
19232 9061 1805 12103 23872 15795 1958 22484 16566 15797
19240 19241 19242 1199 16569 15799 19246 18095 25404
19248 15800 19251 23891 22501 23895 25411 23896 1337
19253 23899 12108 57 1085 3230 25422 15807 19260 20646
20647 19261 15808 11435 23911 22520 15813 19265 20653
25436 5543 19267 2176 23920 6975 25442 15818 1659 15201
15823 19274 4589 774 15828 15829 7224 20668 10330 25455
15832 23936 23937 25459 1663 6980 23940 22544 11447
5676 25466 5679 5680 8399 25470 19289 23949 23950 1092
23952 15844 12887 15846 7762 20684 13325 13752 3247
15857 15219 22563 11456 1978 21308 22567 25492 826 21310
23971 12136 11460 15867 19306 17286 25501 17289 15868
7775 7781 25507 21320 19313 6991 25512 5694 2190 1541
25516 6995 22588 16626 21329 25521 23992 21330 23994
13339 22594 23997 14240 21333 7796 24001 25532 24002
5697 25535 13776 25537 15238 22601 17308 13342 17311
17312 14245 14718 21345 19333 25549 17316 7800 24019
15891 17319 2195 5701 15894 22622 10356 1838 19343 15248
24031 24032 15249 25567 15900 17330 17331 17332 25572
19350 25574 24039 7000 15902 22638 22639 22640 7001
22642 22644 22645 1673 22647 15254 21371 24053 25591
25592 7003 22651 24056 17339 7005 2208 21376 14260 22658
17344 19363 24065 12161 24068 19365 25609 19366 5710
15914 14735 15916 25615 24076 15917 25618 5713 19373
21391 17356 17357 17358 15267 12164 25627 24089 3265
25630 19380 24092 25633 22682 17362 11811 19383 21406
15923 21408 17366 70 19387 25646 7012 17369 17370 15926
22696 19392 12927 24110 16671 21421 12169 17376 25660
14274 25664 17378 25666 15930 21427 24120 11490 24123
17381 17383 19403 17384 4799 21435 15936 24131 21437
14751 22721 24136 19408 17388 12173 4801 24142 7015
22727 16682 7016 15947 17398 19417 4804 17400 17401
3277 13375 24157 17405 25706 22741 1225 22743 25711
5722 24163 17408 15955 22749 17410 12942 19431 22753

15957 24172 21468 15959 17417 21471 15960 17419 25729
17420 15962 15295 17423 15964 17425 17426 15966 12943
7021 22774 25744 15298 24194 12184 15971 5723 17436
22780 15973 15974 7878 15977 15978 25759 11208 17444
24208 17446 14770 25765 11827 15305 24213 19464 21510
24216 25774 19465 24218 15986 24220 22796 24222 24223
5724 24225 17455 25785 7880 12952 3281 14299 15993 17461
1988 17463 15995 21524 4815 15998 15313 17470 16000
1550 13394 13837 17475 16004 16005 22823 16006 13838
16008 7029 24257 16011 17485 22830 24261 16012 2220
77 24266 25825 1992 22835 21549 17490 13843 21552 11838
16019 5823 7909 17496 18327 17498 11516 22852 1394 1227
25845 21567 22857 7922 21570 12213 24292 11520 24294
24295 12972 17509 24298 13411 24301 18341 13855 17513
21580 18344 17514 5920 24310 18347 1399 24313 18349
17517 12975 17519 25881 22885 18353 5924 13416 22889
10404 17523 25890 18360 25892 17525 21597 21598 25897
16041 21600 22899 21601 18363 13418 17528 13419 14812
22907 21607 19542 17531 18369 22912 16047 15349 15350
18374 18375 10695 17538 5956 18381 14815 24358 15354
18384 25927 13422 17543 25930 1400 13425 4837 22931
25935 2237 1870 17550 19565 16064 22937 18395 18396
24375 21640 15361 24378 14823 5963 17556 3319 16069
22947 13432 10413 17561 25958 25960 18407 11859 19580
25964 13435 12994 25967 18411 12995 21660 18413 17568
17569 12996 16080 2245 18420 17573 24405 7553 18423
18424 18425 17575 25988 24413 17576 18428 13442 5967
153 25996 17580 25999 7054 84 12247 16089 21687 16090
155 17587 26010 21691 22989 18440 5976 21694 13008 24435
5977 16096 17595 2013 17597 17598 18452 26025 23004
11872 23006 1577 18455 16101 17602 23011 14375 13014
16813 16104 11546 21716 26042 5981 16107 21719 24463
17611 12621 18475 26050 26051 12262 16111 26055 26056
12623 16113 24475 12263 21728 17618 18484 24480 18485
16115 26068 16116 16117 16118 12264 24489 12626 18495
21739 18498 18500 23047 24496 17625 7978 18505 18506
23052 17628 18509 16123 19661 23058 7980 18513 5983
5984 21756 24515 16129 21759 16130 18520 11552 18522
10438 26110 10439 26112 18526 16134 26116 18529 24531
23081 11885 2018 21772 11557 21774 24540 21775 858 12280
17644 26132 17645 1419 18540 21783 18541 16142 18543
24552 5989 26143 18546 16144 24557 18548 17651 24560
17652 18551 21795 16145 13478 26155 21800 18555 24568
16148 24571 11561 13040 23120 5990 18564 7073 16157
24580 16158 26171 18570 21813 5991 26176 17668 17669
26179 17670 14881 24590 16161 16162 18581 16163 18583
26190 26191 2264 17677 18587 15429 18589 11900 18592
17681 16170 14413 21836 21837 792 10453 26207 24610
24611 1586 26211 23157 16175 16176 15437 17690 4873
21847 17692 18609 23168 2031 24625 24627 23170 11908
21853 8019 5999 12300 12301 160 18618 18619 6001 6002
26241 18622 4884 18624 8034 18628 18629 16194 2272 6491
18635 6492 18637 18638 4893 16200 21878 18641 11584
23202 18643 18645 14908 19768 13507 12313 17719 18650
23212 26272 796 15460 26275 8047 24675 18655 16211 26281
12318 26283 23219 12319 18659 26287 2041 17727 18664
26291 17728 17729 6497 21905 18671 23230 3611 12323
17733 12681 16222 21912 17737 18680 13970 24702 11590
18684 18685 16226 23248 26316 6537 17743 18690 26320
18692 21925 1593 16229 24716 21928 26328 21929 16230
10753 15477 16233 13522 21935 11935 17753 11597 16237
14931 11287 23274 17758 17759 18712 18713 17760 16240
23282 23283 24742 6540 4904 23286 16243 3616 24751 7101

16246 1041 17771 24757 21958 16249 26368 23296 18732
16250 13988 24766 23300 23301 24769 6544 18738 16253
7105 6545 13993 13100 10487 24779 44 21973 24782 26389
26390 16261 3626 24785 18754 14000 6548 16265 26398
16266 5120 15503 16269 21985 18762 11952 26406 11953
26410 705 15507 1284 18772 18773 23335 18774 26418 23337
14955 16277 13113 15512 11618 26427 16281 24815 18784
16282 18787 18789 16285 16286 23351 26439 16287 16288
6553 2289 16291 15516 18801 26449 11026 14014 16295
11625 17818 37 18810 7119 7120 26462 22028 18814 17823
13555 18818 13123 11629 7121 18822 26472 16306 6557
22040 22042 18825 24857 22044 11033 23387 26484 17831
24862 17832 15530 23392 26490 18832 14503 24868 16311
11635 18839 18840 18841 11316 13563 10502 22062 24878
26508 16318 24880 22064 22065 26513 22066 11639 1766
22070 3639 22072 18850 18851 17844 26525 23417 6560
1162 7129 26530 18858 16325 16326 11646 10510 17852
18869 18870 24905 22087 23432 18871 24911 11649 2298
14042 12382 22093 18876 24919 11046 6566 24922 22097
14523 26558 18881 18882 23446 6567 11654 26564 23449
24933 26569 26570 2301 14997 18889 2309 14051 6570 18895
18896 18897 22113 26583 16347 15561 26586 16350 16351
16352 1617 16354 23469 12391 17875 18912 1910 11056
1301 18923 9486 23479 3652 23481 13158 23484 18930 24970
17882 23487 16364 16365 18934 26614 26617 6575 22137
18936 16367 18938 18941 16368 16369 16370 18946 5151
6577 17892 26631 24992 23505 24995 18950 24997 23507
6578 22152 26640 22153 18953 16374 26645 17895 26647
1780 16377 6580 18962 26652 11674 18965 6581 15582 18969
1919 16383 16384 26662 25018 23529 11677 26666 10536
16387 11679 9517 712 23537 18979 12762 15026 12763 22186
12412 25035 16395 25037 23545 18985 5159 25041 11683
16398 22194 23551 26693 22195 16399 20024 10540 22199
16401 6585 13181 18997 11353 1622 19000 22207 15604
1165 15607 17929 26714 26715 23569 763 25070 22214 16411
26721 17932 960 25075 22218 16413 6630 26729 19013 11359
22223 25083 26734 5398 22226 26737 6634 2329 963 12033
16421 19023 17943 25094 22236 19025 19027 23596 25099
19028 19029 9548 19032 19034 16423 9549 23604 22248
23606 25111 19037 25113 19038 10558 19041 17948 5487
15623 13203 6638 23619 6639 25124 25125 23621 11370
12789 23624 11093 25131 15062 25133 13210 12791 25136
16437 11372 19057 5488 19060 22274 6641 23638 10564
23640 16442 7168 15078 6916 16446 26803 25155 15083
19069 19071 15084 25160 19073 6932 2095 12051 15649
16453 19079 12801 22295 25170 15651 23665 23667 22297
15091 22300 19084 15653 23674 19086 19087 11381 14126
15657 19091 19093 9583 23686 19095 15659 22315 14129
19099

6 16028 24746 22031 24748 12414 4601 18877 22876 1292
25769 24754 12105 25772 5539 11310 11562 22883 18883
22041 6950 24764 18885 16037 16038 16039 974 18890 24771
23806 1790 16042 23809 18893 975 7173 25795 22055 16045
17627 22058 18898 13355 25802 12709 23820 15562 1186
24790 16050 18904 16051 22067 18906 14393 18908 1307
1187 18911 16055 24802 18913 18914 22922 5674 4788 23840
18918 18919 25830 3260 18921 18922 16059 15163 5678
25837 18926 18927 23851 717 18929 9 5681 6966 4795 2189
25848 15173 110 25851 15176 16071 18939 18940 25857
22102 24834 24835 998 12130 23868 17657 18944 11332
25868 5693 16076 22956 17661 16077 17663 18951 24849
10374 17666 3273 3274 24854 18957 23884 1648 21344 18959
4806 23889 25889 11591 1814 15597 23894 18964 25895

21351 17674 5700 18967 845 11596 17678 1204 22982 12145
4812 15194 22138 16093 12741 11106 24883 25913 11600
13392 22992 5707 16099 14801 130 23919 14435 13395 23922
22999 6984 11604 23002 18989 11868 739 3289 4819 16110
4824 18996 22162 24908 4825 24910 7214 1212 22166 17706
21388 15628 1377 23944 19003 14084 17710 24923 4830
21395 22177 1664 19008 21399 21400 186 16121 17715 17716
133 4834 16124 25969 23038 23039 1117 16126 24943 2227
23967 22193 14825 19021 21413 24950 11623 4838 3309
21417 5731 19026 24957 23054 14831 25993 15644 1549
5820 19031 25998 15647 22209 26002 19033 24967 15648
23065 748 17735 795 16141 19039 23072 23073 7711 23075
21434 13754 192 15236 17742 21439 16146 22225 21441
17744 14470 26027 18312 24994 22230 15656 23090 22232
16149 18315 21449 18316 23096 24022 23097 16150 23099
19054 18319 16151 23103 18321 11897 11898 16154 13758
26053 23109 22247 18329 25021 11899 11136 4851 11638
26062 1230 21466 15665 22256 19070 7716 18337 22260
15667 23126 16164 22263 22264 26076 5826 26078 17764
26080 14484 26082 21477 23134 16167 11907 26087 16169
25048 3323 17770 19083 23141 24067 21484 25055 15252
11379 15674 24072 17774 21490 25063 25064 15675 10424
21493 4858 15678 23153 19092 5922 26114 18357 24085
18358 21500 26119 19096 26121 11914 25079 15681 23163
21504 15682 14125 25085 22298 7243 12204 21509 16185
5923 161 16188 10430 14499 18371 26141 1687 16192 16193
12209 22314 1559 24113 15694 16197 18379 18380 12211
19121 21528 24121 17800 11389 15698 16201 23195 1864
19127 15701 23199 21536 24132 1562 16205 15277 22334
23205 15704 1867 24140 15707 16210 4869 16212 1869 25138
16214 16215 26186 10440 26188 7753 24151 18403 1693
12225 17822 12810 21557 21558 1564 21560 15289 16223
13804 26203 1398 15719 4875 18415 22363 5970 14154 15724
15725 5971 7033 21576 24176 5972 12234 23245 22373 12235
4876 25176 7778 26226 23251 15733 14163 15735 7779 23256
23258 5974 5975 26236 4877 1703 16247 1875 4885 15746
22389 4887 11685 19182 1234 14174 18443 15751 18445
18446 14907 19190 12254 4889 15755 16260 12257 3600
21611 15759 13162 4894 26267 23290 21615 2033 15764
1705 7050 22418 24231 18461 26277 21621 18462 24235
15767 4900 11426 2038 18468 21629 15771 18473 24244
16275 15772 18476 7833 14188 15775 23315 18480 11429
1708 24255 17306 25251 9457 26306 16283 23322 16284
18487 17310 24263 21648 15334 15780 24267 12272 18493
12562 17315 1881 5994 4906 22456 22457 21658 26327 1137
24279 18503 17320 2044 21663 24284 22464 12278 22466
17323 22468 15789 18511 16296 14200 15791 23356 16299
19249 12279 24299 5061 14203 3627 25299 24303 26355
9495 21678 7064 2045 19257 18525 21683 22488 14208 26366
1885 23373 25312 24315 22491 7535 25317 6003 15803 17341
5122 25322 16313 1722 12870 17347 25327 16316 6066 22504
17350 23389 5124 1724 15810 15811 24335 15812 12874
22514 1572 1894 23399 15816 5129 22519 16328 17363 18558
25350 26407 26408 31 14223 18561 18562 24352 15820 24354
16332 22529 15821 25362 1407 11994 26422 5133 26424
2065 13212 1898 5137 25370 18576 16341 26432 12886 15381
18580 15833 16345 17382 26440 2068 22547 26443 10509
16348 1899 19312 5142 19314 21743 10512 21745 26453
168 2071 26456 18594 26458 11469 15842 17393 16356 18599
16357 17396 17397 15843 135 14978 5147 17402 15847 15848
10521 13893 25412 25413 11738 26480 15852 5149 23466
21770 24410 15854 17411 15855 1258 22586 17415 12901
15859 26494 26495 22590 14986 18627 16375 15862 14250

23483 1418 12016 26505 26506 21786 18634 15405 5152
22602 1147 22604 805 15870 117 24440 24441 26519 26520
23496 19360 5158 15411 21797 21798 15874 22614 20059
17433 21802 26532 13905 23508 17435 15876 17437 1594
14262 22626 13241 9595 22629 24465 21811 15418 24468
18018 24470 25478 5164 26552 6561 5165 23524 2091 23526
22637 17448 13913 2336 18666 24483 15889 22643 26566
18668 26568 24487 23535 18669 16912 17453 17454 26575
173 1914 16405 18676 5397 18678 9625 12345 18681 22659
25511 2096 26589 15432 2343 17464 24508 18686 15013
24511 21845 15899 13256 22669 24516 13924 12348 10543
21851 18694 24522 22675 15904 7584 12352 1462 7114 15909
17478 24533 13933 18703 13934 11007 10547 18707 12934
7115 1276 1920 1277 5490 23586 18716 19430 15453 25557
18719 5491 1282 23593 18722 18723 13276 5494 22705 1771
5496 22708 22709 17497 14668 17500 13949 19445 5497
4460 25578 26658 23610 17504 23612 15931 22719 15932
15933 18741 18742 12649 18744 5499 5500 24587 6586 15938
15939 6587 18753 1772 22735 15942 15943 26683 25602
26685 8025 12656 13293 15948 5502 11029 22744 18763
23644 22746 15057 1777 11525 5504 5507 26702 14689 17532
15958 18776 18777 13301 17535 22759 24620 15071 26713
16473 15961 22763 1064 12664 24628 5509 18786 25637
23671 4573 18788 5511 10579 23676 18791 13977 818 17547
18795 5513 13980 13311 1288 17552 26740 21952 23691
5515 21954 15976 2154 25661 18805 25663 14346 18807
15979 15980 10328 24659 18811 23705 21964 15095 15096
15984 18815 13318 17564 7622 15101 17567 1488 14713
22807 12395 25687 11290 5518 22811 18826 21980 22814
15107 18828 25696 23729 23730 1939 5522 15997 14356
2159 13998 24695 18835 8060 18837 21993 25710 12987
2163 14002 23745 12992 18843 12090 14729 24708 22002
5525 22836 1785 17589 15532 17591 22008 15533 22844
25730 25731 22845 15534 17594 15124 18855 24724 4586
18857 2165 15127 18862 18863 24731 18864 5530 22859
67 3240 15132 25752 4598 14013 22865 11556 5535 15137
7 15473 19018 22477 124 1762 147 12344 2117 2123 22054
17524 125 4588 14228 10611 97 25814 18626 12351 15824
15825 25819 4590 4591 2130 25315 18633 21646 5153 4595
13099 3300 22505 15166 13101 22508 5156 15499 178 11643
18644 12102 13107 15174 13957 1209 7222 26365 4602 5160
11867 19059 18654 10626 13114 5163 7961 12370 4603 14258
18663 25859 10420 23892 867 5166 25354 7975 23427 23428
15860 5167 11438 14266 7629 15527 1213 4609 11664 4610
12861 13408 11666 7983 14276 14883 21697 872 3310 3311
4615 10434 9482 15882 21705 18691 4616 4617 11039 1889
1997 4655 2303 11458 2308 2156 25394 181 11048 12882
3325 24411 25400 21305 22578 13154 1781 14906 11909
18710 18317 1223 111 18714 14911 17610 18717 24913 12644
14304 18325 3534 24430 4802 1492 14309 14918 1324 764
22169 19134 24927 9535 15575 5506 13726 3579 4808 4809
25947 6563 58 14321 1044 26473 22182 24451 2327 23977
22616 4813 23060 1048 15256 11484 1792 18749 4817 23067
15262 1682 103 25970 17287 12172 11077 17291 14041 17646
15268 24474 12913 13184 15606 13185 17298 21781 25985
18767 18768 14945 21367 11937 4822 15945 5520 24978
11493 18775 4823 22652 2333 24017 26001 24986 24018
10480 13193 24498 3603 17664 15283 15954 15620 13195
12922 3606 18385 3607 5527 25504 12187 4829 15291 23113
3608 25007 15965 2334 18797 1507 3613 23572 14360 17
26033 21818 12194 9624 12451 11955 12937 24529 24530
21824 12938 4835 9627 12200 812 777 1600 17695 2193
1696 11303 9647 19622 11965 26578 25542 4841 17346 15989

4842 4843 3628 7507 24554 4847 2197 17354 778 1815 11314
4852 11113 12962 23159 13816 4853 25060 24086 18838
24569 14395 3634 4855 10515 14106 14700 16010 2351 22292
21447 11985 26615 26616 22729 11755 10518 17374 2202
23633 23634 16016 14406 26102 2203 2207 1605 15347 4862
23642 14411 18860 18861 2048 7736 21885 3645 13258 26641
23652 4866 12246 5699 2050 15693 4868 1607 21474 18466
25108 15696 3649 18469 23666 18471 5706 15699 12990
4871 1610 13547 24626 21486 11340 15705 11139 2935 23679
5711 5712 3227 22342 732 23685 1706 21917 17412 23689
4378 4878 18490 13283 23694 4880 13006 1254 4883 23699
23234 23235 26694 18496 18497 15720 18499 26173 14150
1717 13010 4384 18504 189 23246 24666 15055 15056 1067
24670 18915 105 15060 10553 24191 7797 15063 10556 23257
25679 4890 23725 18517 15736 18519 15400 14161 15070
15740 25185 17094 24206 4891 15742 13020 18528 17445
15073 18531 23741 1069 15075 12285 23277 25200 3243
26222 4895 15080 4896 1624 15415 10353 12037 12292 18545
15088 15758 12772 18954 22409 11803 4898 15762 14473
11582 25221 1736 21565 18556 7830 23302 21568 7832 22856
1073 976 15100 25737 10360 13041 4407 18565 4409 18567
743 17479 13603 24744 847 11593 22871 3259 2250 18575
5062 1744 1861 14495 5961 12314 4416 24758 18988 5121
23802 982 22448 1747 4490 22890 11605 5125 18590 1637
17499 26294 11393 13917 3267 4494 4572 1197 5131 142
22904 26304 25279 4575 4577 18604 5978 17511 1756 23828
1642 10603 11622 18611 15144

8 25152 7311 11 22303 3295 3296 925 3299 11624 1208 10445
98 13546 10447 3303 11630 15328 171 1074 11036 26437
1216 21539 2199 952 2201 3312 3313 8864 14261 3314 3315
3316 954 1974 11051 1455 15348 200 18660 1628 7619 1629
4857 13929 3324 13931 799 962 1633 3532 4863 24786 13247
7080 1090 1476 1091 11971 15369 74 1095 967 1643 3582
2235 25635 2236 1995 3586 10492 15380 13263 40 12310
22769 13266 3588 14303 3590 18322 14305 4879 13606 24404
3591 3592 18328 3593 3594 2242 21992 14664 4886 13967
970 3597 14317 13278 22000 3598 11995 13973 3599 1998
7663 3602 1110 3604 753 18725 755 756 10516 3609 21626
1829 9460 7389 18733 14337 7390 13990 9466 19119 9470
1654 12967 2009 11114 3614 15431 2010 1832 18748 9488
11411 9489 15065 12023 15068 9494 3619 3620 3621 22838
23648 13316 2265 3623 2014 7403 18764 1656 1835 15081
9514 1262 12991 15085 17288 9516 3629 2022 2277 26157
1837 2279 9528 757 1502 3638 2282 10555 3640 15099 1845
2032 1119 78 1851 2039 1508 22874 5144 1513 10566 14044
25757 14749 15113 14750 22882 15856 2295 2297 5148 1667
4376 1515 9582 14400 21322 760 21709 9587 2307 22497
2046 10578 4383 9604 1125 2310 1127 4388 24534 1279
6592 15509 11470 14415 5162 7750 12083 1866 7454 9632
4391 6631 820 1134 148 13050 13051 4395 15154 4396 9652
4397 5172 80 24150 15160 23334 7780 4399 13060 4400
18470 4401 4402 23342 24984 716 4404 24573 4405 2064
21757 12109 15172 1690 1144 1536 7811 1695 26260 1145
22156 14452 767 7822 2072 22161 6945 7827 180 129 2079
4462 2341 7213 4491 24189 14829 2082 25855 7495 25435
13423 1150 13774 21398 1152 25023 7855 4571 62 23382
18508 1156 1319 2349 1160 2092 26724 14482 1721 726
7871 15585 13438 2751 728 2753 1727 2101 7885 4587 779
1169 1731 7900 2112 18532 1905 7905 2122 13808 4596
1733 1348 4599 4600 1569 1570 3236 5541 4605 22617 15615
1349 1352 131 3242 863 18553 23025 3246 7947 9059 2141
12814 4614 3250 10381 2142 1045 2145 2150 3256 22241
7964 7967 1749 24678 1378 13153 7970 17466 1924 1183

1047 4796 7979 12199 11882 1383 783 1759 41 14910 18586
5702 7990 11890 15280 10405 3268 7997 4803 23474 3269
3270 12215 3271 21881 869 18600 734 3275 736 8011 11903
3278 3279 1598 1942 26 25137 3283 2182 8028 3286 163
3288 12237 1952 887 4826 8041 3292 11616 3293
9 7831 2017 71 7834 2019 7836 1322 72 7839 2023 12174
7842 14744 15402 7843 7844 3589 12179 1669 7847 7261
7853 7854 5725 14105 2025 2027 1670 5729 2029 1076 1672
7867 848 1338 14767 747 7872 7875 2035 3601 14773 1081
1679 1680 7883 7279 14127 3605 7891 7281 7896 1681 2042
1351 1683 7902 12216 1684 1084 2047 1354 1355 7910 1357
7916 3617 7918 7919 1689 1365 1691 1369 10403 1370 2060
2062 15466 1694 7936 852 73 7940 7942 2066 7945 15475
3631 18736 10418 12250 1374 12252 1699 1700 12255 15484
7951 1701 12258 1089 7956 3637 23656 43 20 2077 5988
3641 176 861 15498 11038 2080 11647 7972 2081 3646 1384
2084 1709 1710 1711 1712 7984 7329 8566 2089 1713 6004
1714 32 4379 8001 4380 1718 7338 1101 1103 10462 2097
4385 2098 8016 7345 1390 23042 6538 2100 1723 2103 7351
2104 127 2106 2107 1725 1107 2111 866 22402 2114 8045
51 2120 7364 54 56 6556 2124 2125 4406 8059 1734 2127
1404 14249 2129 6564 12337 88 2131 1406 874 2134 2135
875 1741 1742 1120 1121 2144 1413 2147 2148 1417 2151
2153 4576 761 21 883 1755 91 2162 6591 4583 1457 889
7409 1133 2166 12988 2168 6633 7414 2169 2170 921 4592
7419 2172 1465 1135 2175 1767 922 1769 7428 2179 8665
1477 2181 4604 9220 93 7434 2183 766 4608 1773 7440
1774 1775 1776 2191 7445 1480 190 1484 2196 930 6952
931 1783 941 1489 1491 191 4792 2204 1493 949 2209 2210
2212 1495 13045 1496 2216 137 1794 770 771 2222 1157
10596 7477 2224 8159 1501 8161 1802 4814 1803 6981 13064
13702 7484 2229 2230 13069 196 2232 4820 1503 6988 1504
1812 1813 2238 2239 1505 776 2243 2244 1816 138 13727
2247 139 1509 1821 1822 1512 1825 2256 7513 7009 2257
1826 9301 2260 2261 1166 4849 2263 7523 1514 1167 15059
1830 1516 2268 1168 1518 1519 2273 2275 2276 1520 7030
94 1170 780 7541 1524 1846 2283 15079 7546 1525 1848
1526 2287 971 1529 1178 7555 972 7045 2292 973 1857
7561 2296 1858 2 7565 2299 709 1862 2304 2306 1863 1188
1537 1189 2312 2313 1191 15111 1868 2316 14457 1542
784 1544 2321 977 14463 4905 2323 1547 144 18 980 1554
11920 15129 38 1882 2331 101 992 994 14478 7598 15138
1560 1561 1890 2340 995 7093 7605 7094 1892 1893 996
1895 7611 1211 150 2348 151 1215 5141 720 1001 1220
13201 1903 1005 1578 2754 1581 1007 1008 2758 1584 152
1912 3226 1913 7636 7123 1011 3229 1916 5161 1917 39
3233 1589 7647 1014 1592 1016 1019 13231 1239 5171 1596
3244 3245 7657 1020 1929 13240 3248 3249 725 1931 1250
3253 5492 1026 1935 1937 1602 3258 9455 800 7676 1604
1030 1255 9464 3263 26675 12008 1608 9471 1945 9478
1948 27 1611 9485 1953 1261 8358 9490 9493 1955 3272
1033 1263 9499 727 11418 1619 9503 7695 1960 1266 9512
1036 1963 5521 1964 7703 1623 3284 1966 1968 9527 13299
24082 1969 9529 9531 7191 13304 1038 65 3290 1972 804
729 9544 5534 1976 9547 7723 7200 7725 808 9552 7728
9555 108 1979 9567 7734 3298 9573 13985 3 9579 7737
5542 1050 9584 23459 7740 7208 9592 1286 3302 13997
9599 9600 1636 12087 3304 30 9611 7751 9615 816 14652
9620 1987 5677 7757 1291 1640 9626 1055 9628 9629 7763
9633 7764 7765 9641 13366 7766 1991 14026 1299 1993
7772 9650 7774 14678 9658 735 9660 9662 112 14037 9664
9666 9670 738 3318 1647 7783 1305 7785 165 1309 741
2002 114 7235 2004 12138 1657 7801 7802 15365 7805 7806

```
                3328 7808 7809 12147 7240 7812 7814 834 2008 10325 1314
                7820 843 2012 7824 1662 14726 7826 1070 2015 844
          10    7789 1023 1111 1024 2052 1113 1392 7023 7271 2055 2271
                143 2057 2274 1115 1873 1566 2061 9539 798 1707 12904
                1397 1878 184 1880 82 1233 1401 959 3612 5966 1236 2074
                9556 23613 2075 1715 2293 3618 1888 9571 1579 1580 7303
                7841 50 7056 26237 1720 9586 1035 2300 9590 961 7848
                2302 853 95 9603 4892 2305 12343 1412 7858 1726 7861
                1587 1252 1414 2311 1590 1732 1416 1128 1735 7874 1129
                9630 1908 2319 169 1043 9638 2102 132 107 7888 1046
                1140 1743 9651 7895 9656 2108 7897 12675 34 1601 6496
                1746 12982 1464 9669 2113 13292 809 2335 2115 1143 2119
                1049 7103 1606 1754 11486 1274 12997 193 7924 1609 6549
                1758 121 7930 1760 1934 1052 7615 1936 13317 1281 10321
                1613 15246 7941 1764 1614 2137 7370 2138 9060 15579
                2139 1615 123 15257 4408 7953 13025 7954 1054 1944 813
                1946 1947 7962 814 1059 15596 7135 1951 1060 24 13347
                817 7641 1293 10351 3234 2157 1626 1627 14322 2161 1779
                1297 5401 759 1630 7992 7151 7995 1300 2167 876 986
                6 1787 991 821 1308 1072 1172 13067 880 8015 1641 1312
                9380 8018 156 8020 886 5505 1798 4593 1799 13708 1510
                1315 2186 997 2188 8038 1318 1985 1649 1806 13720 1182
                2194 10402 1808 1809 3276 1811 7439 14696 708 1653 1185
                1655 15021 888 15346 13104 1323 33 2206 10417 1819 15029
                6957 1082 14710 1336 1083 2211 1823 827 1192 2006 1003
                1527 2219 13431 1350 1668 7721 2011 1086 828 2225 1353
                3305 7730 793 832 710 11922 1675 837 1840 2021 1368
                1843 14742 10451 7742 15067 1844 7745 7746 9451 11634
                841 1096 2240 11045 932 935 1849 1373 1102 1852 7758
                1546 937 2036 2037 11057 11058 2251 2252 1548 113 10476
                182 13482 1551 7770 14777 9491 7251 1552 11070 2258
                7776 3581 1022 1381 1217 4844 1109 4846 1557
          11    15259 1037 9565 11969 2160 96 1839 14389 109 7468 7731
                2049 1302 1842 14057 969 14655 14144 838 1651 1126 12214
                1563 1004 929 13822 85 10458 2234 59 7911 126 2118 28
                936 2121 1661 846 10612 1574 1575 1015 68 942 157 14684
                13750 1716 2073 1915 1097 1098 69 14093 1973 1100 1057
                983 985 10415 9640 1061 951 10 14 1065 1028 14618 12101
                5982 8051 13205 106 164 7787 4821 1032 11657 7793 2152
                749 11661 11884 829 10505 16 1834 1295 167
          12    1949 1012 1921 12230 938 55 1325 14520 1194 993 1765
                868 1017 66 819 2083 13789 2116 12284 1490 83 13572
                47 1116 859 1967 22 862 14761 1884 2093 12335 13709
                835 10435 12068 11455 9453 864 881 815 965 1677 884
                79
          13    15 13743 14819 1386 12317 12244 10367 958 850 1077 11915
                870 2149 950 149 63 953 14104 13568 12238 12222 923
                955 15600 15576
          14    13784 12 13573 13819 13759 10520 7803 13701 23749 14345
          15    13799 13566 7 13794 1025 25647 1620 11094 14112 12850
          16    14792 13764 13569 11016 25959 12846
          17    11137 13707 13771 13728
          18    12265
          19    13801 13700 13809
          21    13731 13729
          22    13770
          23    13742


SUMMARY OF MISSING DATA PATTERNS FOR THE FIRST DATA SET
```

MISSING DATA PATTERNS (x = not missing) FOR WITHIN

	1	2
AZTBL	x	x
BVLVC	x	x
EFVBL	x	x
CSEX	x	x
CAGE	x	x
BCD4SPX1	x	x
BCD4SPX2	x	x
BCD4SPX3	x	x
SQRTCD4	x	
LS0	x	x
LS1	x	x
LS2	x	x

MISSING DATA PATTERN FREQUENCIES FOR WITHIN

Pattern	Frequency	Pattern	Frequency
1	65377	2	24

MISSING DATA PATTERNS FOR U (x = not missing) FOR WITHIN

	1
AZTBL	x
BVLVC	x
EFVBL	x

MISSING DATA PATTERN FREQUENCIES FOR U FOR WITHIN

Pattern	Frequency
1	65401

MISSING DATA PATTERNS FOR Y (x = not missing) FOR WITHIN

	1	2
CSEX	x	x
CAGE	x	x
BCD4SPX1	x	x
BCD4SPX2	x	x
BCD4SPX3	x	x
SQRTCD4	x	
LS0	x	x
LS1	x	x
LS2	x	x

MISSING DATA PATTERN FREQUENCIES FOR Y FOR WITHIN

Pattern	Frequency	Pattern	Frequency
1	65377	2	24

COVARIANCE COVERAGE OF DATA FOR THE FIRST DATA SET

Minimum covariance coverage value 0.100

PROPORTION OF DATA PRESENT

Covariance Coverage

	AZTBL	BVLVC	EFVBL	CSEX	CAGE
AZTBL	1.000				
BVLVC	1.000	1.000			
EFVBL	1.000	1.000	1.000		
CSEX	1.000	1.000	1.000	1.000	
CAGE	1.000	1.000	1.000	1.000	1.000
BCD4SPX1	1.000	1.000	1.000	1.000	1.000
BCD4SPX2	1.000	1.000	1.000	1.000	1.000
BCD4SPX3	1.000	1.000	1.000	1.000	1.000
SQRTCD4	1.000	1.000	1.000	1.000	1.000
LS0	1.000	1.000	1.000	1.000	1.000
LS1	1.000	1.000	1.000	1.000	1.000
LS2	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	BCD4SPX1	BCD4SPX2	BCD4SPX3	SQRTCD4	LS0
BCD4SPX1	1.000				
BCD4SPX2	1.000	1.000			
BCD4SPX3	1.000	1.000	1.000		
SQRTCD4	1.000	1.000	1.000	1.000	
LS0	1.000	1.000	1.000	1.000	1.000
LS1	1.000	1.000	1.000	1.000	1.000
LS2	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	LS1	LS2
LS1	1.000	
LS2	1.000	1.000

PROPORTION OF DATA PRESENT FOR U

Covariance Coverage

	AZTBL	BVLVC	EFVBL
AZTBL	1.000		
BVLVC	1.000	1.000	
EFVBL	1.000	1.000	1.000

PROPORTION OF DATA PRESENT FOR Y

Covariance Coverage

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	1.000				
CAGE	1.000	1.000			
BCD4SPX1	1.000	1.000	1.000		
BCD4SPX2	1.000	1.000	1.000	1.000	
BCD4SPX3	1.000	1.000	1.000	1.000	1.000
SQRTCD4	1.000	1.000	1.000	1.000	1.000
LS0	1.000	1.000	1.000	1.000	1.000
LS1	1.000	1.000	1.000	1.000	1.000

LS2	1.000	1.000	1.000	1.000	1.000

Covariance Coverage

	SQRTCD4	LS0	LS1	LS2
SQRTCD4	1.000			
LS0	1.000	1.000		
LS1	1.000	1.000	1.000	
LS2	1.000	1.000	1.000	1.000

UNIVARIATE PROPORTIONS AND COUNTS FOR CATEGORICAL VARIABLES

AZTBL		
Category 1	0.850	16820.000
Category 2	0.150	2972.000
BVLVC		
Category 1	0.195	2384.000
Category 2	0.174	2130.000
Category 3	0.245	2988.000
Category 4	0.205	2506.000
Category 5	0.180	2202.000
EFVBL		
Category 1	0.314	6158.000
Category 2	0.686	13482.000

RESULTS FOR BASIC ANALYSIS

NOTE: These are average results over 11 data sets.

SAMPLE STATISTICS

Means

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
1	-0.081	-0.046	108.839	34.023	8.038

Means

	SQRTCD4	LS0	LS1	LS2
1	17.004	-0.106	4.952	3.607

Covariances

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.221				
CAGE	0.893	72.745			
BCD4SPX1	-3.003	-4.306	5208.984		
BCD4SPX2	-1.654	-11.087	3208.946	2516.936	
BCD4SPX3	-0.467	-4.178	937.051	808.478	269.536
SQRTCD4	-0.345	-5.850	135.998	82.147	23.806
LS0	0.001	0.007	-0.242	-0.368	-0.136
LS1	0.002	-0.782	-0.201	-0.630	-0.188
LS2	-0.004	-1.745	-7.154	-5.454	-1.625

Covariances

	SQRTCD4	LS0	LS1	LS2
SQRTCD4	21.853			
LS0	0.331	0.127		
LS1	6.035	0.523	10.664	
LS2	10.828	0.381	10.993	35.612

Correlations

	CSEX	CAGE	BCD4SPX1	BCD4SPX2	BCD4SPX3
CSEX	0.000				
CAGE	0.000	0.000			
BCD4SPX1	0.000	0.000	0.000		
BCD4SPX2	0.000	0.000	0.000	0.000	
BCD4SPX3	0.000	0.000	0.000	0.000	0.000
SQRTCD4	0.000	0.000	0.000	0.000	0.000
LS0	0.000	0.000	0.000	0.000	0.000
LS1	0.000	0.000	0.000	0.000	0.000
LS2	0.000	0.000	0.000	0.000	0.000

Correlations

	SQRTCD4	LS0	LS1	LS2
SQRTCD4	1.000			
LS0	0.198	1.000		
LS1	0.395	0.450	1.000	
LS2	0.388	0.179	0.564	1.000

TECHNICAL 8 OUTPUT

TECHNICAL 8 OUTPUT FOR BAYES ESTIMATION

CHAIN	BSEED
1	0
2	285380

ITERATION	POTENTIAL SCALE REDUCTION	PARAMETER WITH HIGHEST PSR
100	1.693	65
200	1.052	9

SAVEDATA INFORMATION

Order of variables

AZTBL
BVLVC
EFVBL
CSEX
CAGE
BCD4SPX1
BCD4SPX2
BCD4SPX3
SQRTCD4
LS0
LS1
LS2

```
    IDNO

  Save file
    Basic_Group_SA_*.txt

  Save file format           Free

  Save file record length    5000


     Beginning Time:  12:17:43
        Ending Time:  12:33:15
       Elapsed Time:  00:15:32



MUTHEN & MUTHEN
3463 Stoner Ave.
Los Angeles, CA  90066

Tel: (310) 391-9971
Fax: (310) 391-8971
Web: www.StatModel.com
Support: Support@StatModel.com

Copyright (c) 1998-2010 Muthen & Muthen
```