GENERATION OF *E*-SILYLKETENE ACETALS IN A RHODIUM-DUPHOS CATALYZED TWO-STEP REDUCTIVE ALDOL REACTION.

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Supplementary Material

General. ^{1}H NMR spectra were recorded on a Varian Gemini (300 MHz) spectrometer. Chemical shifts are reported in ppm from tetramethylsilane with the solvent resonance as the internal standard ($CDCl_3$: 7.24 ppm). Data are reported as follows: chemical shift, integration, multiplicity (s = singlet, d = doublet, t = triplet, q = quartet, br = broad, m = multiplet), coupling constants (Hz) and assignment. ^{13}C NMR were recorded on a Varian Gemini 300 (75 MHz) spectrometer with complete proton decoupling. Chemical shifts are reported in ppm from tetramethylsilane with the solvent as the internal standard ($CDCl_3$: 77.0 ppm).

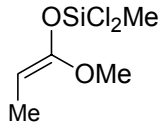
Liquid chromatography was performed using forced flow (flash chromatography) on Sigma silica gel 60 (SiO_2, 230-400 mesh). Thin layer chromatography was performed on EM science 0.25 mm silica gel 60 plates. Visualization was achieved with phosphomolybdic acid in ethanol, potassium permanganate in water, or vanillin in sulfuric acid, each followed by heating.

Analytical gas-liquid chromatography (GLC) was preformed on a Hewlett-Packard 6890 Series chromatograph equipped with a CTC Analytics Combi PAL autosampler by Leap Technologies (Carrboro, NC), a split mode capillary injection system, a flame ionization detector and the indicated column with helium as the carrier gas.

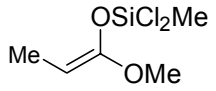
All reactions were conducted in oven and flame dried glassware under an inert atmosphere of dry nitrogen. ^{1}H NMR samples were prepared in a glovebox under an inert atmosphere of dry nitrogen. Deuterated solvents (CD_2Cl_2, C_6D_6) were distilled over CaH_2. Dichloroethane was sequentially washed with concentrated H_2SO_4, water, aqueous Na_2CO_3, and water, then dried with $MgSO_4$ and fractionally distilled from CaH_2. Benzene and toluene were distilled over CaH_2. Diethyl ether was passed through activated basic alumina. $[RhCl(cod)]_2$ and DuPhos were purchased from Strem Chemical Company. All other reagents were purchased from either Lancaster or Aldrich Chemical Companies and used directly.

Representative procedure for *in situ* ^{1}H NMR study. A 10 mL flame-dried round bottom flask was charged with 8.5 mg of Me-DuPhos (0.028 mmol), 6.0 mg of chloro(1,5-cyclooctadiene)rhodium (I) dimer (0.012 mmol; 1.2:1 ligand:metal) and 2 mL of benzene-d_6. The resulting solution was stirred at room temperature for 30 minutes. Methyl acrylate (45 μL, 0.50 mmol) and dichloromethylsilane (53 μL, 0.51 mmol) were added and the mixture stirred for 20 minutes. Then 400 μL of reaction mixture was transferred to an NMR tube and the solution was diluted with another 400 μL of benzene-d_6. ^{1}H NMR spectra were acquired at 20, 40 and 60 minute intervals. Once the ^{1}H NMR indicated no further reaction (generally the reaction was complete within 40 minutes), 71 μL of benzaldehyde (0.70 mmol) was added to the NMR tube. ^{1}H NMR of the resulting sample was taken at 20, 40 and 60 minute intervals (the

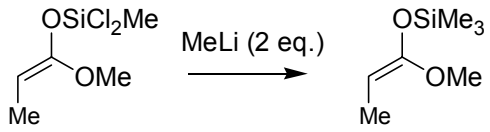
conversion of ketene acetal was generally completed within 20 minutes). ^{1}H NMR analysis indicates a single stereoisomer of aldol adduct was obtained.



(*E*)-1-Dichloromethylsiloxy-1-methoxypropene. ^{1}H NMR (300 MHz, C_6D_6) 4.19 (1H, q, J = 6.9 Hz, C=C**H**CH$_3$), 3.26 (3H, s, COC**H**$_3$), 1.52 (3H, d, J = 6.9Hz, C=CHC**H**$_3$), 0.38 (3H, s, COSiCl$_2$C**H**$_3$).



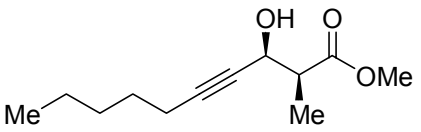
(*Z*)-1-Dichloromethylsiloxy-1-methoxypropene. When the reaction was conducted as above but at 2M substrate concentration a 1:1 mixture of silylketene acetals are produced. The ^{1}H NMR of the *Z*-isomer is as follows: (300 MHz, C_6D_6) 3.42 (1H, q, J = 6.6 Hz, C=C**H**CH$_3$), 3.25 (3H, s, COC**H**$_3$), 1.59 (3H, d, J = 6.6 Hz, C=CHC**H**$_3$), 0.38 (3H, s, COSiCl$_2$C**H**$_3$).



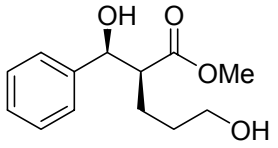
Proof of stereochemistry for (*E*)-1-Dichloromethylsiloxy-1-methoxypropene. A 50 mL flame-dried round bottom flask was charged with 42.0 mg of Me-DuPhos (0.14 mmol), 30.8 mg of chloro(1,5-cyclooctadiene)rhodium (I) dimer (0.063 mmol) and 20 mL of dry diethyl ether. The resulting solution was stirred at room temperature for 40 minutes. Then 900 µL of methyl acrylate (10.0 mmol) and 1.04 mL of dichloromethylsilane (10.0 mmol) were added to the mixture and the resulting mixture was stirred for 80 minutes. Then the reaction mixture was cooled to –90^{o}C, and 14.3 mL of 1.4 M solution of MeLi in ether (20 mmol) was slowly added to the mixture over 5 minutes. The resulting mixture was stirred for 40 minutes at –90^{o}C. The solution was then allowed to warm to room temperature and stir for 2 additional hours. The resulting hetereogeneous mixture was filtered, and the solution was concentrated under reduced pressure. The residue was diluted with pentane, filtered again to remove additional salts and concentrated. NMR analysis showed only the *E* isomer of trimethylsilyl ketene acetal to be present. ^{1}H NMR (300 MHz): δ 3.63 (1H, q, J = 6.9 Hz, CH$_3$C**H**=CH), 3.49 (3H, s, OC**H**$_3$), 1.46 (3H, d, J = 6.9 Hz, C**H**$_3$CH=CH), 0.19 (9H, s, Si(C**H**$_3$)$_3$). ^{13}C NMR (75MHz): δ 153.8, 78.7, 54.6, 9.4, 0.22. (Mikami, K.; Matsumoto, S.; Ishida, A.; Takamuku, S.; Suenobu, T.; Fukuzumi, S. *J. Am. Chem. Soc.* **1995,** *117*, 11134-11141).

Representative procedure for two-step catalytic reductive aldol reaction. A 20 mL flame-dried round bottom flask was charged with 8.5 mg of Me-DuPhos (0.028 mmol), 6.0 mg of chloro(1,5-cyclooctadiene)rhodium (I) dimer (0.012 mmol) and 4 mL of diethyl ether. The resulting solution was stirred at room temperature for 30 minutes. Then 180 µL of methyl acrylate (2.0 mmol) and 208 µL of dichloromethylsilane (2.0 mmol) were added to the mixture, and the resulting mixture was stirred for1.5 hours. The reaction mixture was cooled to -46 ^{o}C followed by addition of neat aldehyde (1.0 mmol). The reaction mixture was stirred for 4 hours at -46 ^{o}C. A solution of 2N HCl in aqueous methanol was then added to the reaction solution at same temperature. The mixture was stirred at room temperature for 20

minutes, diluted with saturated $NaHCO_3$ until pH > 7 and extracted with diethyl ether (3 x 15 mL). The combined organic layers were washed with saturated $NaHCO_3$, water and brine, and then dried over Na_2SO_4. After removal of solvent, the crude product was purified by flash chromatography.

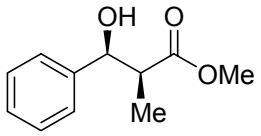


***syn*-Methyl 3-Hydroxy-2-methyl-4-decynoate.** ^{1}H NMR (300 MHz) δ 4.57 (1H, m, C**H**OH), 3.71 (3H, s, C(O)OC**H**$_3$), 2.87 (1H, d, J = 7.2 Hz, O**H**), 2.71 (1H, dq, J = 4.2, 7.2 Hz, CHC**H**$_3$), 2.17 (2H, dt, J = 2.1, 6.9 Hz, C≡CC**H**$_2$CH$_2$), 1.46 (2H, m, C≡CCH$_2$C**H**$_2$), 1.30 (4H, m, C**H**$_2$C**H**$_2$CH$_3$), 1.27 (3H, d, J = 7.2 Hz, CHC**H**$_3$), 0.87 (3H, t, CH$_2$C**H**$_3$). ^{13}C NMR: δ 174.5, 86.6, 78.3, 63.9, 51.9, 45.6, 31.0, 28.3, 22.2, 18.6, 14.0, 11.9.

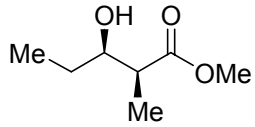


***syn*-Methyl 3-Hydroxy-2-(3-hydroxypropyl)-3-phenylpropionate**. ^{1}H NMR (300 MHz). δ 7.30 (5H, m, Ar), 4.92 (1H, d, J = 5.7Hz ArC**H**OH), 3.55 (3H, s, C(O)OC**H**$_3$), 3.54 (2H, t, J = 6.3Hz, C**H**$_2$OH), 3.00 (1H, br, ArCHO**H**), 2.72 (1H, dt, J= 8.7, 5.7Hz, C**H**CH$_2$), 1.55~1.90 (3H, m, CH$_2$C**H**$_2$CH$_2$O**H**), 1.37~1.60 (2H, m, CHC**H**$_2$CH$_2$). ^{13}C NMR: δ 175.2, 141.6, 128.4, 127.9, 126.2, 74.4, 62.5, 52.9, 51.9, 30.7, 23.7. The structure of this compound was also confirmed by single-crystal x-ray analysis.

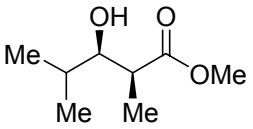
The following compounds were identical to those reported in the literature:



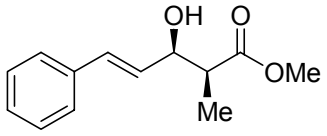
***syn*-Methyl 3-Hydroxy-2-methyl-3-phenylpropionate.** Spectral data were identical to that reported in the literature. (Gennari, C.; Colombo, L.; Bertolini, G.; Schimperna, G. *J. Org. Chem.* **1987,** *52,* 2757-2760). ^{1}H NMR: δ 7.20-7.40 (5H, m, C$_6$**H**$_5$), 5.08 (1H, broad t, J=3.8 Hz, ArC**H**OH), 3.65 (3H, s, OC**H**$_3$), 2.93 (1H, d, J=3.09 Hz, O**H**), 2.77 (1H, m, CH$_3$C**H**), 1.11 (3H, d, J=7.12 Hz, CHC**H**$_3$) ; ^{13}C NMR: δ 176.2, 141.4, 128.3, 127.4, 125.9, 73.6, 51.9, 46.3, 10.7.



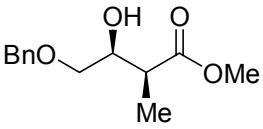
***syn*-Methyl 3-Hydroxy-2-methylpentanoate.** Spectral data were identical to that reported in the literature. (Hong, Y.; Norris, D. J.; Collins, S. *J. Org. Chem*. **1993**, *58*, 3591-3594). δ 3.80 (1H, br, C**H**OH), 3.67 (3H, s, C(O)OC**H**$_3$), 2.45-2.60 (2H, m, CHO**H**, C**H**CH$_3$), 1.32-1.55 (2H, m, CH$_3$C**H**$_2$CH), 1.14 (3H, d, J = 7.5Hz, CHC**H**$_3$), 0.92 (3H, t, J = 7.2 Hz, C**H**$_3$CH$_2$). ^{13}C NMR (75MHz): δ 176.3, 73.2, 51.7, 43.9, 26.8, 10.6, 10.4.



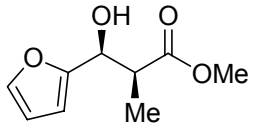
***syn*-Methyl 2,4-Dimethyl-3-hydroxypentanoate.** Spectral data were identical to that reported in the literature. (Yan, T.-H.; Tan, C.-W.; Lee, H.-C.; Lo, H.-C.; Huang, C.-Y. *J. Am. Chem. Soc.* **1983**, *115*, 2613-2621). ^{1}H NMR δ 4.12 (2H, q, J=7.14 Hz, O**C**$\mathbf{H_2}$CH$_3$), 3.60 (1H, t, J=4.4 Hz, C**H**OH), 2.66 (1H, m, CH$_3$C**H**), 2.17 (1H, d, J=4.7 Hz, O**H**), 1.24 (3H, t, J=7.13 Hz, CH$_2$C$\mathbf{H_3}$), 1.21 (3H, d, J=7.15 Hz, CHC$\mathbf{H_3}$), 0.92 (9H, s, (C$\mathbf{H_3}$)$_3$C); ^{13}C NMR: δ 177.2, 78.1, 60.5, 41.1, 35.5, 26.5, 14.1, 12.9.



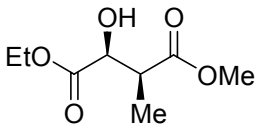
(*E*)-*syn*-Methyl 3-Hydroxy-2-methyl-5-phenyl-4-pentenoate. Spectral data were identical to that reported in the literature (Denmark, S. E.; Griedel, B. D.; Coe, G. M.; Schnute, M. E. *J. Am. Chem. Soc*. **1994**, *116*, 7026-7043). ^{1}H NMR δ 7.39-7.20 (5H, Ar**H**), 6.65 (1H, dd, J=16.1, 1.5 Hz, ArC**H**CH), 6.17 (1H, dd, J=16.0, 6.0 Hz, ArCHC**H**), 4.57 (1H, m, C**H**OH), 4.15 (2H, q, J=7.2 Hz, C$\mathbf{H_2}$CH$_3$), 2.77 (1H, d, J=4.8 Hz, O**H**), 2.70 (1H, dq, J=7.5, 4.5 Hz, C**H**CH$_3$), 1.25 (3H, t, J=7.2 Hz, C$\mathbf{H_3}$CH), 1.21 (3H, d, J=7.2 Hz, CHC$\mathbf{H_3}$); ^{13}C NMR: δ 175.4, 136.6, 131.5, 128.7, 128.6, 127.7, 126.5, 73.0, 60.8, 45.0, 14.2, 11.5.



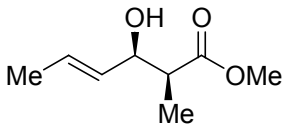
***syn*-Methyl 4-Benzyloxy-3-hydroxy-2-methylbutanoate**. Spectral data were identical to that reported in the literature (Zhao, C.-X.; Duffey, M. O.; Taylor, S. J.; Morken, J. P. *Organic Letters*; **2001**, *3*; 1829-1831) IR (Neat) 3462 (br, s), 3032 (m), 2950 (s), 1961 (w), 1869 (w), 1731 (s) 1203 (s), 1101 (s). ^{1}H NMR δ 7.34 (5H, m, Ar), 4.55 (2H, s, ArC$\mathbf{H_2}$O), 4.07 (1H, m, C**H**OH), 3.67 (3H, s, C(O)OC$\mathbf{H_3}$), 3.53 (1H, dd, J=1.9, 8Hz, BnOC**H**H), 3.48 (1H, dd, J= 3.4, 7.0Hz, BnOCH**H**), 2.72 (1H, d, J=4.8 Hz, O**H**), 2.70 (1H, m, C**H**CH$_3$), 1.22 (3H, d, J=7.2, CHC$\mathbf{H_3}$). ^{13}C NMR: δ 175.8, 138.0, 128.7, 128.04, 128.00, 73.7, 71.8, 71.1, 52.0, 42.2, 12.2.



***syn*-Methyl 2-Methyl-3-hydroxy-3-(2-furyl)propanoate.** Spectral data were identical to that reported in the literature (Akita, H.; Furuichi, A.; Koshiji, H.; Horikoshi, K.; Oishi, T. *Chem. Pharm. Bull.* **1984**, *32*, 1333-1341). ^{1}H NMR (300 MHz): δ 7.29 (1H, m, Ar**H**), 6.26 (1H, dd, J = 1.5 Hz, 3.3 Hz, Ar**H**), 6.21 (1H, m, Ar**H**), 4.95 (1H, d, J = 5.1 Hz, ArC**H**OH), 3.63 (3H, s, C(O)OC$\mathbf{H_3}$), 2.91 (1H, dq, J = 5.1, 7.2 Hz, C**H**CH$_3$), 1.15 (1H, d, J = 7.2 Hz, CHC$\mathbf{H_3}$). ^{13}C NMR (75MHz): δ 175.1, 154.0, 141.7, 110.1, 106.6, 68.8, 51.9, 44.1, 11.8.



***syn*-Methyl 2-Methyl-3-hydroxy-3-(carboethoxy)propanoate.** Spectral data were consistent with that reported in the literature (*syn*-Diethyl 3-methylmalate: Iseki, K.; Oishi, S.; Kobayashi, Y. *Tetrahedron,* **1996,** *52,* 71-84). ^{1}H NMR (300 MHz): δ 4.57 (1H, dd, J = 3.9, 5.1 Hz, C**H**OH), 4.25 (2H, q, J = 7.2 Hz, C(O)OC**H**$_2$CH$_3$), 3.71 (3H, s, C(O)C**H**$_3$), 3.03 (1H, d, J = 5.1 Hz, O**H**), 2.91 (1H, dq, J = 3.9, 7.2 Hz, CHC**H**$_3$), 1.28 (3H, t, J = 7.2 Hz, C(O)OCH$_2$C**H**$_3$), 1.14 (3H, d, J = 7.2 Hz, CHC**H**$_3$), 0.87(3H, t, C**H**$_2$C**H**$_3$). ^{13}C NMR (75MHz): δ 173.4, 172.9, 71.29, 61.94, 52.0, 43.0, 14.1, 10.6.



***E-syn*-Methyl 2-Methyl-3-hydroxy-hex-4-enoate.** Spectral data were identical to that reported in the literature (Yan, T.-H.; Tan, C.-W.; Lee, H.-C.; Lo, H.-C.; Huang, T.-Y. *J. Am. Chem. Soc*. **1993**, *115*, 2613-2621). ^{1}H NMR (300 MHz): δ 5.60-5.74 (1H, m, CH$_3$C**H**=CH), 5.35-5.47 (1H, m, CH$_3$CH=C**H**), 4.19-4.28 (1H, m, C**H**OH), 3.64 (3H, s, C(O)OC**H**$_3$), 2.67 (1H, br, CHO**H**), 2.56 (1H, m, C**H**CH$_3$), 1.65 (3H, dd, J = 6.6, 1.0 Hz, C**H**$_3$CH=CH), 1.12 (3H, d, J = 7.2 Hz, CHC**H**$_3$). ^{13}C NMR (75MHz): δ 175.5, 130.2, 128.1, 73.2, 51.7, 45.0, 17.7, 11.6.

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   Space Group and Cell Dimensions    Triclinic,    P -1
a   5.6293(3)   b  13.5851(6)   c  17.1663(8)
alpha  88.379(1)   beta  82.581(1)   gamma  85.373(1)
        Volume  1297.34(11)A**3

Empirical formula : C13 H18 O4

Cell dimensions were obtained from 4877 reflections with 2Theta angle
in the range   5.00 -  50.00 degrees.

Crystal dimensions :  0.25  X  0.25  X  0.20  mm

FW =    476.56     Z =    4     F(000) =     512.34

Dcalc  1.220Mg.m-3, mu   0.09mm-1, lambda 0.71073A, 2Theta(max)  50.0

The intensity data were collected on a Bruker SMART diffractometer,
using the omega scan mode.
The h,k,l ranges used during structure solution and refinement are :--
Hmin,max   -6   6;  Kmin,max    0  16;  Lmin,max -20  20
No. of reflections measured                         9936
No. of unique reflections                           4203
No. of reflections with Inet > 3.0sigma(Inet)     2883
Merging R-value on intensities  0.053
Correction was made for absorption using SADABS


         Details of the last least squares cycle
  70 atoms,  308 parameters  Full-matrix    on Fo     Counter wts (k 0.000200)
The residuals are as follows :--
Significant reflections:  2827  Rf 0.063, Rw 0.080
All reflections:          4203  Rf 0.096, Rw 0.103
Included reflections:     2827  Rf 0.063, Rw 0.080  GoF  2.4494
  where Rf = Sum(Fo-Fc)/Sum(Fo),
        Rw = Sqrt[Sum(w(Fo-Fc)**2)/Sum(wFo**2)] and
       GoF = Sqrt[Sum(w(Fo-Fc)**2)/(No. of reflns - No. of params.)]
The maximum shift/sigma ratio was  0.000.

Last D-map:  Minimum density -0.410e/A**3,  Maximum density   0.350e/A**3.

Secondary ext. coeff.    1.0170microns     sigma    0.2216
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The following references are relevant to the NRCVAX System.

1. Full System Reference :
Gabe, E.J., Le Page, Y., Charland,.J.-P., Lee, F.L. and White, P.S. (1989) J. Appl. Cryst., 22, 384-387.

2. Scattering Factors from Int. Tab. Vol. 4 :
International Tables for X-ray Crystallography, Vol. IV, (1974) Kynoch Press, Birmingham, England.

The following references may also be relevant.

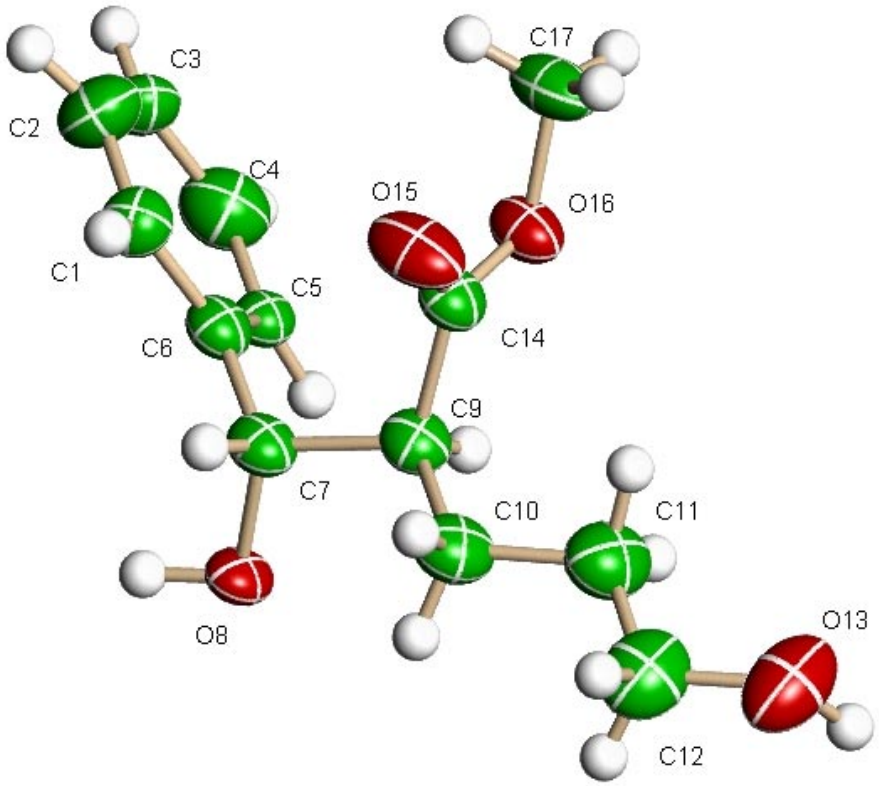
3. ORTEP Plotting :
Johnson, C.K., (1976) ORTEP - A Fortran Thermal Ellipsoid Plot Program, Technical Report ORNL-5138, Oak Ridge

4. Pluto Plotting :
S. Motherwell, University Chemical Laboratory, Cambridge, 1978

5. Missing Symmetry Treatment by MISSYM :
Le Page, Y., (1988) J. Appl. Cryst., 21, 983-984.

6. Grouping of Equivalent Reflections in DATRD2 :
Le Page, Y. and Gabe, E.J., (1979) J. Appl. Cryst., 12, 464-466.

7. Extinction Treatment :
Larson, A.C., (1970) p.293, Crystallographic Computing, Munksgaard, Copenhagen.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C2
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C7
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C10
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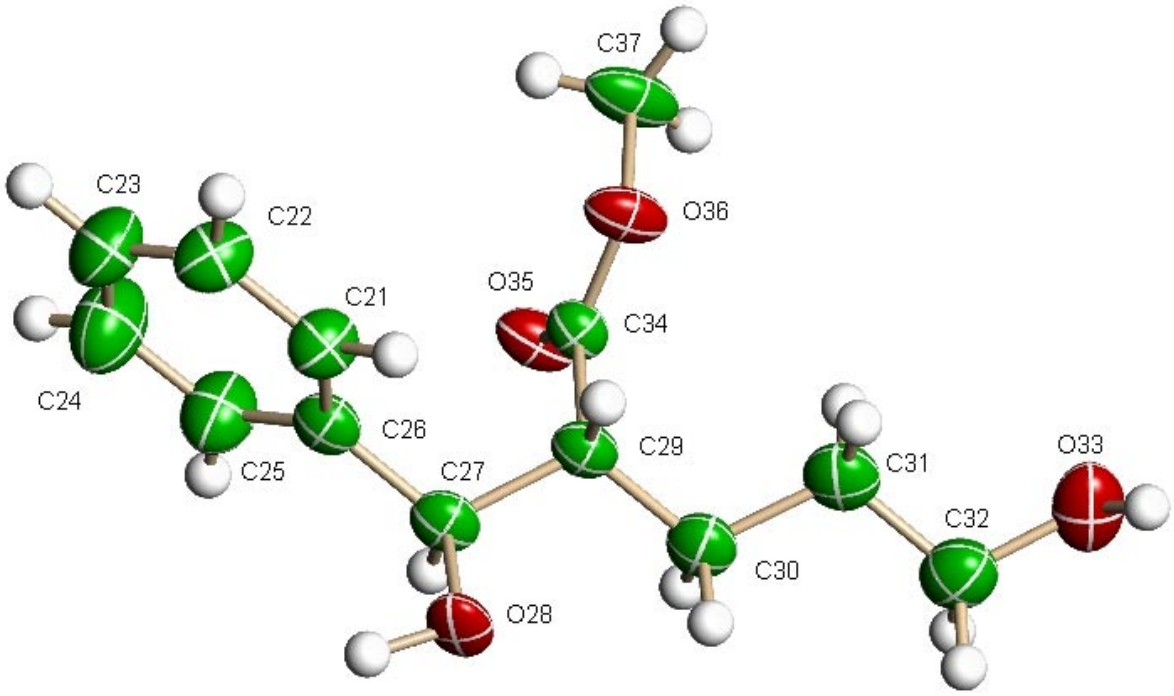
O13
C12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C22
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C24
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C29
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C32
C30
O28

30-Jul-2001

Table . Atomic Parameters x,y,z and Biso.
E.S.Ds. refer to the last digit printed.

	x	y	z	Biso
C1	0.3454(7)	0.1545 (3)	0.26760(23)	4.03(16)
C2	0.2631(8)	0.0984 (3)	0.2119 (3)	4.94(19)
C3	0.0654(8)	0.1330 (3)	0.1761 (3)	4.77(19)
C4	-0.0524(7)	0.2240 (3)	0.19676(24)	4.05(17)
C5	0.0283(6)	0.27965(22)	0.25381(22)	3.41(15)
C6	0.2298(6)	0.24611(22)	0.28904(20)	2.98(14)
C7	0.3166(6)	0.30507(21)	0.35150(20)	3.00(14)
O8	0.3431(4)	0.40618(14)	0.32729(14)	3.44(10)
C9	0.1455(6)	0.30903(21)	0.42904(20)	3.07(14)
C10	0.2503(6)	0.35678(23)	0.49449(21)	3.63(15)
C11	0.0725(7)	0.37385(24)	0.56866(22)	3.99(17)
C12	0.1695(7)	0.4288 (3)	0.62983(24)	4.51(18)
O13	0.0011(5)	0.44406(18)	0.69877(16)	4.97(13)
C14	0.0802(6)	0.20533(22)	0.45204(20)	3.06(14)
O15	0.2160(4)	0.14217(16)	0.47651(17)	4.49(12)
O16	-0.1440(4)	0.19090(15)	0.44181(14)	3.62(11)
C17	-0.2091(6)	0.09001(25)	0.4560 (3)	4.75(20)
C21	0.5021(6)	0.25087(23)	0.74645(22)	3.74(16)
C22	0.5728(7)	0.1875 (3)	0.68494(23)	4.35(18)
C23	0.4327(8)	0.1142 (3)	0.66947(24)	4.70(19)
C24	0.2205(8)	0.1031 (3)	0.7168 (3)	5.14(20)
C25	0.1487(7)	0.1659 (3)	0.77899(22)	4.08(16)
C26	0.2868(6)	0.24092(21)	0.79444(20)	2.85(13)
C27	0.2019(5)	0.30851(20)	0.86273(20)	2.94(14)
O28	0.1723(4)	0.41045(13)	0.83694(14)	3.34(10)
C29	0.3755(5)	0.30638(20)	0.92411(19)	2.64(13)
C30	0.2778(6)	0.36641(21)	0.99709(19)	2.93(14)
C31	0.4525(6)	0.36827(21)	1.05689(21)	3.20(14)
C32	0.3738(6)	0.43878(22)	1.12203(21)	3.30(15)
O33	0.5369(4)	0.43717(15)	1.17844(14)	3.88(11)
C34	0.4370(5)	0.20099(20)	0.95025(19)	2.63(13)
O35	0.2898(4)	0.14460(15)	0.97409(15)	3.84(11)
O36	0.6716(4)	0.18016(14)	0.94620(14)	3.31(11)
C37	0.7442(6)	0.08219(23)	0.9761 (3)	4.48(19)
H1	0.484	0.135	0.293	4.8
H2	0.361	0.042	0.191	5.8
H3	0.011	0.095	0.136	5.6
H4	-0.187	0.251	0.172	4.9
H5	-0.043	0.346	0.263	4.2
H7	0.476	0.280	0.360	3.8
H8	0.451	0.400	0.279	4.2
H9	-0.006	0.341	0.418	3.9
H10a	0.315	0.418	0.476	4.5
H10b	0.385	0.320	0.513	4.5
H11a	-0.078	0.399	0.553	4.8
H11b	0.030	0.308	0.582	4.8
H12a	0.227	0.488	0.605	5.3
H12b	0.321	0.402	0.645	5.3
H13	-0.127	0.495	0.701	5.7
H17a	-0.110	0.048	0.419	5.6
H17b	-0.378	0.091	0.452	5.6

H17c	-0.186	0.073	0.509	5.6
H21	0.595	0.305	0.755	4.5
H22	0.731	0.193	0.658	5.0
H23	0.479	0.068	0.628	5.4
H24	0.122	0.051	0.709	6.0
H25	-0.012	0.161	0.805	4.9
H27	0.048	0.293	0.889	3.7
H28	0.093	0.408	0.791	4.2
H29	0.529	0.325	0.899	3.4
H30a	0.129	0.344	1.022	3.7
H30b	0.237	0.434	0.983	3.7
H31a	0.483	0.304	1.079	4.0
H31b	0.611	0.381	1.033	4.0
H32a	0.218	0.431	1.151	4.1
H32b	0.283	0.501	1.118	4.1
H33	0.647	0.488	1.176	4.8
H37a	0.690	0.034	0.944	5.3
H37b	0.668	0.083	1.029	5.3
H37c	0.914	0.084	0.978	5.3

Biso is the Mean of the Principal Axes of the Thermal Ellipsoid

Table of u(i,j) or U values *100.
E.S.Ds. refer to the last digit printed

	u11(U)	u22	u33	u12	u13	u23
C1	5.50(22)	4.69(20)	5.1 (3)	-0.02(17)	-0.96(18)	0.59(18)
C2	7.3 (3)	5.12(22)	6.5 (3)	0.16(20)	-1.42(23)	-1.18(20)
C3	7.1 (3)	5.44(23)	5.9 (3)	-1.21(20)	-1.48(23)	-0.95(20)
C4	5.28(22)	5.13(21)	5.2 (3)	-0.90(17)	-1.34(19)	0.86(18)
C5	4.94(20)	3.62(18)	4.37(24)	-0.43(15)	-0.61(17)	0.73(15)
C6	4.02(18)	3.58(17)	3.70(21)	-0.57(14)	-0.45(15)	1.06(14)
C7	4.21(18)	3.16(16)	4.03(22)	-0.43(13)	-0.63(15)	1.12(14)
O8	5.81(14)	3.37(12)	3.87(15)	-0.98(10)	-0.39(11)	1.13(10)
C9	4.39(19)	3.44(17)	3.86(22)	-0.13(14)	-0.99(16)	1.01(14)
C10	5.76(22)	3.94(18)	4.23(24)	-0.93(16)	-1.06(18)	1.11(16)
C11	6.59(24)	4.32(19)	4.30(25)	-0.81(17)	-0.91(19)	0.94(17)
C12	7.1 (3)	5.60(22)	4.4 (3)	0.92(19)	-1.57(21)	0.87(19)
O13	8.82(20)	5.91(15)	3.84(17)	2.42(14)	-1.49(15)	0.35(12)
C14	4.33(19)	3.54(17)	3.72(22)	-0.49(15)	-0.43(16)	1.07(15)
O15	5.00(15)	4.38(13)	7.94(21)	-0.62(11)	-2.29(14)	2.92(13)
O16	4.02(13)	3.81(12)	5.95(18)	-0.38(10)	-1.00(11)	1.48(11)
C17	4.84(21)	4.05(20)	9.3 (3)	-1.07(16)	-1.31(21)	1.36(19)
C21	5.33(21)	3.74(18)	5.1 (3)	-1.03(16)	-0.17(18)	0.45(17)
C22	5.72(23)	5.13(22)	5.2 (3)	-0.66(18)	1.06(20)	0.40(19)
C23	7.4 (3)	5.28(22)	5.0 (3)	-0.76(20)	0.27(22)	-0.81(19)
C24	7.5 (3)	6.09(24)	6.1 (3)	-2.33(21)	0.06(23)	-1.42(21)
C25	5.24(21)	5.32(21)	4.9 (3)	-1.60(17)	0.31(18)	-0.36(18)
C26	3.92(18)	3.12(16)	3.78(21)	-0.07(13)	-0.88(15)	1.04(14)
C27	4.08(18)	2.83(16)	4.25(23)	-0.24(13)	-0.79(16)	1.15(14)
O28	5.67(14)	2.57(11)	4.68(16)	0.12(10)	-2.07(12)	1.11(10)
C29	3.36(16)	2.81(15)	3.84(22)	-0.17(12)	-0.64(14)	0.81(14)
C30	4.42(18)	3.12(16)	3.59(22)	-0.11(13)	-0.76(16)	0.86(14)
C31	4.86(19)	3.25(17)	4.06(23)	-0.07(14)	-0.97(16)	1.04(15)
C32	5.06(20)	3.46(17)	3.89(23)	-0.12(14)	-0.36(17)	0.55(15)
O33	7.10(16)	4.12(13)	3.87(16)	-2.01(11)	-1.28(13)	1.11(11)
C34	3.60(17)	2.96(15)	3.47(21)	-0.55(13)	-0.65(14)	0.94(13)
O35	3.71(12)	3.83(12)	7.11(19)	-0.89(10)	-1.00(12)	2.30(12)
O36	3.34(12)	2.66(11)	6.49(18)	-0.33(9)	-0.61(11)	1.84(10)
C37	4.15(20)	3.10(17)	9.8 (4)	-0.29(15)	-1.64(20)	2.45(18)
H1	6.1					
H2	7.3					
H3	7.2					
H4	6.2					
H5	5.3					
H7	4.8					
H8	5.3					
H9	4.9					
H10a	5.6					
H10b	5.6					
H11a	6.1					
H11b	6.1					
H12a	6.7					
H12b	6.7					
H13	7.2					
H17a	7.1					
H17b	7.1					
H17c	7.1					

H21	5.7
H22	6.4
H23	6.9
H24	7.6
H25	6.1
H27	4.7
H28	5.3
H29	4.3
H30a	4.7
H30b	4.7
H31a	5.1
H31b	5.1
H32a	5.1
H32b	5.1
H33	6.0
H37a	6.7
H37b	6.7
H37c	6.7

Anisotropic Temperature Factors are of the form
Temp=-2*Pi*Pi*(h*h*u11*astar*astar+---+2*h*k*u12*astar*bstar+---)

DISANG -- The NRCVAX Distance and Angle Program

The Space Group is P -1 Centrosymmetric
The Equivalent Positions are:
1) x y z

The Lattice is Primitive. There are no Centering Vectors

C(1)-C(2)	1.387(5)	C(21)-C(22)	1.379(5)
C(1)-C(6)	1.393(5)	C(21)-C(26)	1.389(5)
C(2)-C(3)	1.382(6)	C(22)-C(23)	1.372(5)
C(3)-C(4)	1.388(5)	C(23)-C(24)	1.372(6)
C(4)-C(5)	1.396(5)	C(24)-C(25)	1.383(5)
C(5)-C(6)	1.392(5)	C(25)-C(26)	1.382(4)
C(6)-C(7)	1.509(5)	C(26)-C(27)	1.514(4)
C(7)-O(8)	1.437(4)	C(27)-O(28)	1.445(3)
C(7)-C(9)	1.538(5)	C(27)-C(29)	1.525(5)
C(9)-C(10)	1.518(5)	C(29)-C(30)	1.531(4)
C(9)-C(14)	1.513(4)	C(29)-C(34)	1.515(4)
C(10)-C(11)	1.525(5)	C(30)-C(31)	1.513(5)
C(11)-C(12)	1.489(5)	C(31)-C(32)	1.493(5)
C(12)-O(13)	1.427(5)	C(32)-O(33)	1.417(4)
C(14)-O(15)	1.206(4)	C(34)-O(35)	1.199(4)
C(14)-O(16)	1.327(4)	C(34)-O(36)	1.322(4)
O(16)-C(17)	1.453(4)	O(36)-C(37)	1.459(4)

C(2)-C(1)-C(6)	120.8(3)	C(22)-C(21)-C(26)	120.2(3)
C(1)-C(2)-C(3)	120.4(3)	C(21)-C(22)-C(23)	121.1(3)
C(2)-C(3)-C(4)	119.7(3)	C(22)-C(23)-C(24)	119.2(3)
C(3)-C(4)-C(5)	119.9(3)	C(23)-C(24)-C(25)	120.1(3)
C(4)-C(5)-C(6)	120.8(3)	C(24)-C(25)-C(26)	121.1(3)
C(1)-C(6)-C(5)	118.5(3)	C(21)-C(26)-C(25)	118.2(3)
C(1)-C(6)-C(7)	120.3(3)	C(21)-C(26)-C(27)	122.1(3)
C(5)-C(6)-C(7)	121.2(3)	C(25)-C(26)-C(27)	119.7(3)
C(6)-C(7)-O(8)	112.1(3)	C(26)-C(27)-O(28)	111.5(3)
C(6)-C(7)-C(9)	113.4(3)	C(26)-C(27)-C(29)	113.62(25)
O(8)-C(7)-C(9)	105.75(23)	O(28)-C(27)-C(29)	105.72(22)
C(7)-C(9)-C(10)	112.7(3)	C(27)-C(29)-C(30)	113.50(25)
C(7)-C(9)-C(14)	108.73(25)	C(27)-C(29)-C(34)	110.25(23)
C(10)-C(9)-C(14)	111.3(3)	C(30)-C(29)-C(34)	108.2(3)
C(9)-C(10)-C(11)	113.7(3)	C(29)-C(30)-C(31)	114.0(3)
C(10)-C(11)-C(12)	113.4(3)	C(30)-C(31)-C(32)	114.1(3)
C(11)-C(12)-O(13)	112.6(3)	C(31)-C(32)-O(33)	113.1(3)
C(9)-C(14)-O(15)	124.2(3)	C(29)-C(34)-O(35)	123.9(3)
C(9)-C(14)-O(16)	112.5(3)	C(29)-C(34)-O(36)	111.79(23)
O(15)-C(14)-O(16)	123.3(3)	O(35)-C(34)-O(36)	124.3(3)
C(14)-O(16)-C(17)	114.79(24)	C(34)-O(36)-C(37)	114.90(22)

Torsion angles

C6	C1	C2	C3	0.5(4)	C2	C1	C6	C5	0.6(4)
C2	C1	C6	C7	178.2(8)	C1	C2	C3	C4	-0.6(4)
C2	C3	C4	C5	-0.5(4)	C3	C4	C5	C6	1.7(4)
C4	C5	C6	C1	-1.7(4)	C4	C5	C6	C7	-179.2(8)
C1	C6	C7	O8	131.6(7)	C1	C6	C7	C9	-108.7(6)
C5	C6	C7	O8	-50.9(4)	C5	C6	C7	C9	68.8(5)
C6	C7	C9	C10	172.4(7)	C6	C7	C9	C14	48.5(4)
O8	C7	C9	C10	-64.3(5)	O8	C7	C9	C14	171.8(7)
C7	C9	C10	C11	172.4(7)	C14	C9	C10	C11	-65.1(5)
C7	C9	C14	O15	72.4(5)	C7	C9	C14	O16	-107.2(6)
C10	C9	C14	O15	-52.4(5)	C10	C9	C14	O16	128.1(7)
C9	C10	C11	C12	-174.8(8)	C10	C11	C12	O13	-180.0(8)
C9	C14	O16	C17	174.5(7)	O15	C14	O16	C17	-5.0(4)
C26	C21	C22	C23	0.4(4)	C22	C21	C26	C25	0.5(4)
C22	C21	C26	C27	179.9(8)	C21	C22	C23	C24	-0.9(4)
C22	C23	C24	C25	0.5(4)	C23	C24	C25	C26	0.4(4)
C24	C25	C26	C21	-0.9(4)	C24	C25	C26	C27	179.7(8)
C21	C26	C27	O28	60.0(5)	C21	C26	C27	C29	-59.4(5)
C25	C26	C27	O28	-120.6(7)	C25	C26	C27	C29	120.0(7)
C26	C27	C29	C30	-174.0(7)	C26	C27	C29	C34	-52.4(4)
O28	C27	C29	C30	63.3(4)	O28	C27	C29	C34	-175.1(7)
C27	C29	C30	C31	-177.6(7)	C34	C29	C30	C31	59.7(4)
C27	C29	C34	O35	-53.3(4)	C27	C29	C34	O36	129.0(6)
C30	C29	C34	O35	71.4(5)	C30	C29	C34	O36	-106.4(6)
C29	C30	C31	C32	171.1(7)	C30	C31	C32	O33	178.3(7)
C29	C34	O36	C37	175.6(6)	O35	C34	O36	C37	-2.1(3)

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
-6, 0, l				0	15	4	92*	-4	141	151	28	-2	66	64	30	1	62	55	32	-7	16	20	90*
1	11	12	133*	1	58	54	34	-3	46	41	32	-1	13	2	90*	2	196	197	45	-6	21	16	66*
2	54	43	49	2	54	51	37	-2	140	139	34	0	39	36	38	3	103	95	31	-5	48	44	37
3	41	33	59	3	72	70	35	-1	98	94	29	1	107	107	31	4	48	45	38	-4	16	10	85*
4	47	46	56	4	67	64	36	0	30	29	45	2	121	111	33	5	14	11	100*	-3	20	5	69*
5	10	20	204*	5	37	30	67*	1	27	29	47*	3	131	127	34	6	66	55	35	-2	16	1	88*
6	24	25	92*	-6, 4, l				2	64	61	30	4	114	117	32	7	29	30	56*	-1	45	42	40
-6, 1, l				-8	57	47	33	3	34	33	43	5	35	37	47	8	23	23	75*	0	97	96	32
-10	31	34	44	-7	17	3	72*	4	38	40	42	6	27	28	60*	9	15	2	118*	1	26	16	60*
-9	47	44	34	-6	14	14	100*	5	112	105	31	7	54	45	36	-5, 6, l				2	71	67	34
-8	30	25	63*	-5	17	2	76*	6	55	51	35	8	44	39	42	-11	47	48	60	3	14	18	110*
-7	19	17	68*	-4	33	33	46	7	34	37	49	9	20	19	81*	-10	33	36	46	4	20	8	81*
-6	81	86	29	-3	47	45	37	8	61	60	35	10	66	61	36	-9	21	10	67*	5	20	20	82*
-5	113	118	31	-2	12	12	121*	9	49	47	39	-5, 4, l				-8	68	64	30	-5, 9, l			
-4	11	3	121*	-1	67	65	33	10	25	19	68*	-13	124	10	47	-7	68	68	30	-6	70	58	32
-3	58	56	32	0	10	2	148*	11	16	5	105*	-12	104	20	46	-6	16	17	75*	-5	22	23	67*
-2	35	34	43	1	44	44	40	-5, 2, l				-11	23	17	62*	-5	28	14	50*	-4	42	41	40
-1	33	34	46	2	17	12	91*	-12	103	69	48	-10	29	31	53*	-4	70	69	30	-3	59	59	34
0	35	33	44	3	8	20	211*	-11	44	44	27	-9	51	46	32	-3	40	35	39	-2	60	54	35
1	27	17	57*	-6, 5, l				-10	104	107	25	-8	70	73	29	-2	79	76	30	-1	104	101	33
2	45	47	41	-6	83	82	31	-9	80	77	23	-7	88	97	28	-1	40	39	40	0	100	100	33
3	37	32	47	-5	17	8	81*	-8	116	116	31	-6	97	103	29	0	39	39	40	1	57	65	37
4	15	9	103*	-4	6	13	237*	-7	35	26	37	-5	12	11	103*	1	31	31	49	2	16	0	97*
5	35	31	53	-3	32	26	49	-6	46	46	31	-4	100	105	29	2	58	57	33	3	42	44	46
6	44	30	45	-2	40	37	42	-5	47	49	30	-3	19	17	66*	3	27	28	56*	-4, 0, l			
-6, 2, l				-1	16	12	97*	-4	57	49	28	-2	103	104	30	4	39	40	44	1	206	202	38
-10	18	15	67*	0	35	30	51	-3	15	12	76*	-1	59	54	31	5	24	18	67*	2	26	24	37
-9	14	9	90*	1	118	110	34	-1	12	6	106*	0	13	15	94*	6	75	76	34	3	65	65	23
-8	24	28	51*	2	21	26	80*	0	120	123	32	1	66	54	31	7	19	5	91*	4	161	166	31
-7	21	22	62*	-6, 6, l				1	80	76	29	2	119	113	32	8	73	68	36	5	39	41	30
-6	25	25	53*	-3	44	32	57	2	13	9	91*	3	47	47	37	-5, 7, l				6	80	79	24
-5	13	10	100*	-2	43	35	59	3	53	41	33	4	65	66	33	-10	5	9	246*	7	63	60	26
-4	20	28	68*	-5, 0, l				4	69	72	31	5	11	1	141*	-9	17	6	75*	8	74	74	25
-3	32	31	45	1	50	43	26	5	13	16	104*	6	6	19	250*	-8	25	32	80*	9	14	10	79*
-2	16	8	83*	2	44	34	29	6	69	67	32	7	27	22	61*	-7	34	37	44	10	23	28	61*
-1	40	45	41	3	58	56	25	7	28	37	58*	8	60	57	36	-6	29	23	48*	11	63	67	28
0	8	20	161*	4	89	83	30	8	43	36	42	9	21	21	80*	-5	23	18	61*	12	17	11	72*
1	40	45	42	5	78	79	31	9	14	9	115*	10	72	66	43	-4	25	28	56*	13	15	17	84*
2	34	26	49	6	20	24	72*	10	30	26	61*	-5, 5, l				-3	10	17	132*	14	12	10	152*
3	56	53	36	7	13	16	109*	-5, 3, l				-12	105	9	47	-2	56	54	33	-4, 1, l			
4	14	3	116*	8	14	12	103*	-14	177	84	61	-11	14	11	103*	-1	40	41	41	-17	71	42	134*
5	53	48	41	9	22	29	74*	-13	122	19	46	-10	34	32	43	0	25	25	62*	-16	68	72	37
-6, 3, l				10	25	21	64*	-12	102	54	47	-9	34	31	42	1	44	49	40	-13	45	56	36
-9	43	44	36	11	26	16	66*	-11	22	27	64*	-8	11	12	111*	2	50	52	36	-12	64	67	36
-8	20	12	65*	-5, 1, l				-10	95	102	31	-7	45	47	35	3	54	53	35	-11	120	130	25
-7	13	14	98*	-11	36	32	32	-9	14	29	102*	-6	42	40	36	4	33	30	52	-10	134	147	27
-6	29	31	50*	-10	85	86	23	-8	93	102	29	-5	4	9	312*	5	7	6	235*	-9	195	204	37
-5	94	97	30	-9	50	46	26	-7	15	13	76*	-4	49	33	32	6	15	16	102*	-8	13	5	66*
-4	29	26	50*	-8	10	13	127*	-6	148	151	36	-3	14	14	85*	7	16	2	101*	-7	66	64	24
-3	28	22	51*	-7	47	40	26	-5	29	28	45	-2	41	33	37	-5, 8, l				-6	102	99	24
-2	43	33	39	-6	40	38	28	-4	112	117	31	-1	14	11	88*	-9	20	6	71*	-5	89	84	22
-1	31	22	49	-5	67	71	23	-3	82	77	29	0	110	111	31	-8	29	23	52*	-4	19	24	43*

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	-4, 1, l			-12	14	8	96*	11	14	11	103*	4	126	130	33	3	22	15	65*	-6	19	16	70*
-3	28	24	31	-11	149	164	30	12	15	16	105*	5	12	10	109*	4	57	49	34	-5	81	90	30
-2	68	76	22	-10	59	57	24	13	23	22	72*	6	132	136	34	5	80	83	31	-4	69	71	31
-1	68	65	22	-9	4	17	207*		-4, 5, l			7	16	26	93*	6	83	86	31	-3	14	19	101*
0	56	54	23	-8	31	30	20	-14	24	23	79*	8	18	3	81*	7	41	40	44	-2	41	38	40
1	88	90	22	-7	59	68	16	-13	14	1	107*	9	79	81	32	8	18	9	88*	-1	8	17	166*
2	78	74	22	-6	44	47	18	-12	120	124	34	10	11	3	138*	9	41	39	46	0	49	47	38
3	65	71	23	-5	157	162	25	-11	46	46	36	11	25	35	69*	10	15	14	110*	1	72	74	32
4	30	32	34	-4	163	163	26	-10	42	42	38	12	29	29	65*		-4, 9, l			2	24	31	65*
5	162	160	31	-3	72	74	21	-9	50	57	34		-4, 7, l			-11	36	27	45	3	45	42	42
6	13	14	77*	-2	53	55	23	-8	20	26	70*	-14	145	76	53	-10	74	73	31	4	30	31	59*
7	39	33	31	-1	57	53	29	-7	197	197	67	-13	123	87	51	-9	74	74	30	5	48	49	41
8	57	56	26	0	40	30	32	-6	53	56	30	-12	47	42	74	-8	25	33	53*		-4, 12, l		
9	139	132	29	1	30	26	40	-5	144	145	35	-11	114	120	34	-7	55	58	32	-3	124	123	34
10	78	74	25	2	4	13	273*	-4	32	24	40	-10	14	1	98*	-6	40	37	36	-2	11	12	125*
11	36	35	36	3	106	106	29	-3	151	155	36	-9	30	24	47	-5	94	102	30	-1	23	32	68*
12	93	84	26	4	216	223	48	-2	20	31	60*	-8	79	79	29	-4	15	2	79*	0	16	8	92*
13	47	42	38	5	103	105	30	-1	12	11	101*	-7	79	81	29	-3	9	1	135*	1	37	38	46
14	50	47	70	6	59	64	32	0	100	105	29	-6	83	87	29	-2	76	75	30		-3, 0, l		
	-4, 2, l			7	8	17	154*	1	12	11	97*	-5	62	65	30	-1	102	103	31	1	225	204	41
-14	56	35	80	8	44	40	38	2	62	57	30	-4	71	76	29	0	81	77	31	2	17	10	42*
-13	15	14	90*	9	45	35	38	3	15	30	81*	-3	53	51	31	1	94	89	31	3	273	253	49
-12	111	122	33	10	44	33	37	4	20	9	65*	-2	45	43	35	2	14	5	92*	4	89	76	21
-11	23	27	41*	11	56	54	34	5	37	35	40	-1	211	213	48	3	12	11	173*	5	96	96	22
-10	23	29	40*	12	13	19	116*	6	18	11	75*	0	66	68	31	4	33	40	48	6	54	50	24
-9	39	42	26	13	16	23	95*	7	59	60	32	1	17	24	76*	5	40	43	43	7	131	124	27
-8	177	184	34		-4, 4, l			8	49	53	36	2	66	75	30	6	48	48	38	8	64	65	24
-7	73	72	22	-14	14	5	105*	9	15	25	104*	3	14	8	86*	7	14	17	109*	9	90	92	24
-6	102	108	23	-13	37	38	45	10	24	23	67*	4	67	62	31	8	26	31	65*	10	98	94	24
-5	69	72	22	-12	8	12	178*	11	13	23	122*	5	119	122	33	9	32	40	60*	11	31	12	49
-4	30	21	30	-11	16	13	55*	12	20	22	86*	6	25	9	60*		-4, 10, l			12	20	20	52*
-3	38	32	26	-10	85	88	22	13	14	7	123*	7	38	43	45	-10	63	65	33	13	37	39	46
-2	81	80	22	-9	188	202	36		-4, 6, l			8	14	0	99*	-9	65	66	33	14	30	10	54*
-1	40	34	25	-8	61	70	22	-15	144	14	53	9	28	33	60*	-8	48	46	54	15	10	16	170*
0	12	9	70*	-7	115	113	25	-14	133	54	52	10	24	17	69*	-7	133	137	34	16	39	45	49
1	24	33	37	-6	159	162	30	-13	126	126	55	11	14	22	124*	-6	9	20	148*		-3, 1, l		
2	106	108	24	-5	49	46	29	-12	21	35	154*		-4, 8, l			-5	7	17	186*	-19	15	9	120*
3	98	99	23	-4	36	35	34	-11	14	11	98*	-13	185	152	66	-4	43	44	38	-18	16	12	109*
4	66	72	23	-3	79	71	27	-10	73	74	32	-11	15	1	94*	-3	41	39	39	-17	14	20	105*
5	29	33	37	-2	172	165	40	-9	127	137	35	-10	49	50	35	-2	27	27	53*	-16	59	62	36
6	2	2	403*	-1	151	163	36	-8	197	198	45	-9	93	92	30	-1	15	2	89*	-14	133	147	38
7	83	88	29	0	10	13	162*	-7	107	104	30	-8	13	16	94*	0	112	117	33	-10	162	180	32
8	23	29	60*	1	92	92	28	-6	51	48	31	-7	48	45	33	1	152	156	38	-9	13	3	55*
9	59	65	32	2	118	116	31	-5	143	145	35	-6	28	10	45	2	13	1	103*	-8	156	154	35
10	91	90	31	3	110	107	30	-4	77	77	28	-5	74	70	29	3	26	29	60*	-7	247	236	45
11	53	48	35	4	11	27	117*	-3	33	41	40	-4	50	49	32	4	7	2	224*	-6	142	141	28
12	23	24	69*	5	63	58	31	-2	63	57	30	-3	172	175	41	5	56	50	36	-5	22	35	37
13	93	84	32	6	12	3	99*	-1	124	121	32	-2	62	65	32	6	17	21	91*	-4	85	85	21
14	33	28	100*	7	88	93	30	0	128	124	33	-1	108	112	31	7	16	6	99*	-3	309	298	55
	-4, 3, l			8	71	71	32	1	144	142	36	0	138	136	35		-4, 11, l			-2	138	119	27
-14	12	14	114*	9	14	3	100*	2	112	116	31	1	40	47	39	-8	42	42	56	-1	430	406	76
-13	125	133	36	10	29	35	56*	3	45	43	36	2	49	42	34	-7	25	27	56*	0	102	102	22

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	-3, 1, l			-12	43	50	39	5	6	3	132*	-6	87	87	22		-3, 8, l			7	21	22	69*
1	89	90	20	-11	17	22	51*	6	39	39	26	-5	87	77	21	-15	150	15	54	8	34	33	47
2	112	108	23	-10	52	49	24	7	125	127	26	-4	42	33	30	-14	154	96	57	9	69	70	32
3	172	169	32	-9	91	92	35	8	224	236	41	-3	56	57	28	-13	30	24	119*	10	28	39	60*
4	211	211	39	-8	30	25	29	9	20	22	49*	-2	65	71	27	-12	22	32	138*	11	9	9	182*
5	338	332	60	-7	43	41	15	10	97	101	24	-1	49	47	28	-11	15	11	85*	12	28	25	64*
6	170	171	32	-6	7	17	299*	11	5	1	242*	0	67	67	26	-10	109	116	32		-3, 10, l		
7	110	99	24	-5	163	157	30	12	6	11	219*	1	140	142	34	-9	95	93	30	-13	140	33	52
9	259	267	47	-4	57	51	15	13	66	65	32	2	98	97	28	-8	15	12	87*	-12	155	95	57
10	240	245	44	-3	101	97	17	14	22	10	141*	3	14	8	73*	-7	25	1	75*	-11	25	26	59*
11	57	47	26	-2	154	153	29	15	18	6	179*	4	57	53	29	-6	210	210	47	-10	62	58	31
12	74	74	24	-1	151	149	35	16	17	34	185*	5	8	16	138*	-5	76	73	27	-9	49	43	32
13	47	52	39	0	9	34	94*		-3, 5, l			6	13	1	92*	-4	80	86	27	-8	56	61	30
14	14	15	110*	1	239	240	78	-14	24	73	183*	7	24	21	57*	-3	221	227	50	-7	85	87	28
15	14	5	113*	2	51	49	27	-13	25	17	71*	8	53	51	33	-2	236	239	52	-6	167	179	39
16	15	16	111*	3	67	72	25	-12	22	9	78*	9	108	102	31	-1	63	71	30	-5	78	83	29
	-3, 2, l			4	65	70	21	-11	191	195	36	10	83	91	31	0	12	1	97*	-4	38	40	37
-18	44	42	48	5	112	101	24	-10	66	59	24	11	55	51	36	1	129	141	33	-3	170	183	40
-17	42	45	47	6	87	73	22	-9	244	248	45	12	14	6	97*	2	11	8	110*	-2	74	80	30
-16	47	59	45	7	50	57	24	-8	230	239	42	13	35	30	50	3	56	58	31	-1	6	10	216*
-15	101	38	82	8	34	26	40	-7	52	43	24	14	29	20	111*	4	36	36	39	0	78	84	30
-10	24	28	34	9	184	183	35	-6	123	130	21	15	12	29	277*	5	193	208	44	1	52	51	34
-9	81	79	23	10	24	7	42*	-5	22	25	25		-3, 7, l			6	147	157	36	2	89	95	29
-7	91	84	17	11	12	5	78*	-4	52	47	20	-14	18	5	100*	7	42	40	38	3	44	46	36
-6	160	154	30	12	14	17	71*	-3	274	264	48	-13	72	75	38	8	32	35	45	4	75	73	31
-5	32	30	23	13	16	10	65*	-2	276	277	48	-12	105	120	35	9	12	12	118*	5	23	19	61*
-4	88	75	21	14	35	29	47	-1	64	63	19	-11	66	70	26	10	23	18	66*	6	90	88	31
-3	251	246	45	15	23	20	75*	0	6	2	102*	-10	54	57	27	11	40	37	45	7	110	112	32
-2	49	52	21	16	39	31	91*	1	13	14	73*	-9	37	26	43	12	21	27	84*	8	22	29	66*
-1	76	53	23		-3, 4, l			2	136	148	33	-8	190	192	36	13	20	21	87*	9	14	4	111*
0	16	27	41*	-18	42	49	56	3	50	52	28	-7	86	79	30		-3, 9, l			10	15	16	102*
1	50	51	20	-17	78	10	110	4	125	130	31	-6	166	170	39	-14	123	13	46	11	16	19	109*
2	14	9	49*	-16	80	54	112	5	216	226	48	-5	184	183	42	-13	118	46	48		-3, 11, l		
3	197	191	36	-15	56	65	45	6	38	38	36	-4	79	65	27	-12	29	17	112*	-11	29	26	46
4	86	76	21	-14	13	9	117*	7	105	102	30	-3	69	76	27	-11	96	112	32	-10	62	57	31
5	81	85	21	-13	12	9	119*	8	25	13	57*	-2	69	74	28	-10	15	6	85*	-9	89	97	29
6	70	69	22	-12	62	61	39	9	15	22	89*	-1	38	54	35	-9	66	58	32	-8	34	28	41
7	163	163	31	-11	90	96	25	10	52	53	34	0	68	70	28	-8	53	38	31	-7	123	131	32
8	44	36	27	-9	35	51	39	11	25	20	58*	1	149	156	36	-7	38	9	34	-6	44	46	34
9	158	160	31	-8	55	56	22	12	27	35	57*	2	11	3	100*	-6	19	9	60*	-5	62	69	30
10	24	23	53*	-7	35	32	18	13	9	2	159*	3	117	127	31	-5	123	131	32	-4	15	11	82*
11	52	39	35	-6	55	51	16	14	22	14	145*	4	125	127	32	-4	126	135	32	-3	57	57	32
12	15	18	62*	-5	91	93	17	15	69	62	64	5	13	25	94*	-3	130	125	33	-2	52	56	34
13	16	8	64*	-4	195	191	31		-3, 6, l			6	86	86	29	-2	159	169	38	-1	30	31	49
14	34	41	50	-3	155	152	28	-14	18	33	100*	7	17	25	77*	-1	44	53	35	0	80	82	30
15	14	11	108*	-2	78	81	18	-13	51	58	40	8	81	83	29	0	123	125	32	1	14	1	94*
16	15	7	106*	-1	24	16	25	-12	111	114	35	9	39	37	41	1	5	12	232*	2	10	6	126*
	-3, 3, l			0	84	77	19	-11	101	103	25	10	47	43	38	2	124	125	32	3	15	4	91*
-18	37	34	57	1	59	67	26	-10	251	252	46	11	22	31	74*	3	44	44	35	4	28	40	55*
-17	42	36	49	2	43	43	28	-9	287	296	52	12	31	27	55*	4	108	104	31	5	19	25	76*
-15	104	62	80	3	90	86	26	-8	94	92	23	13	21	13	81*	5	85	90	30	6	30	40	54*
-14	98	99	40	4	155	152	36	-7	62	44	24	14	31	17	114*	6	21	14	66*	7	29	35	57*

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
-3, 11, l				18	13	1	169*	11	137	127	28	-5	48	47	19	13	79	70	33	-4	154	156	29
8	39	41	45	-2, 1, l				12	115	115	25	-4	615	590	93	14	37	45	46	-3	50	45	26
9	40	33	46	-19	15	3	99*	13	54	60	36	-3	76	62	15	15	14	14	117*	-2	135	144	32
-3, 12, l				-17	13	12	112*	14	30	38	54*	-2	116	120	22	16	47	44	42	-1	69	66	25
-9	36	47	41	-14	19	32	66*	15	24	7	69*	-1	220	229	39	17	32	35	56*	0	46	51	27
-8	18	8	60*	-13	19	17	62*	16	13	11	121*	0	230	226	40	-2, 6, l				1	39	42	30
-7	78	93	30	-11	40	46	30	17	52	62	65	1	84	95	23	-18	53	50	53	2	130	136	31
-6	12	5	107*	-5	299	295	64	18	15	8	120*	2	179	194	40	-17	65	61	47	3	79	77	26
-5	21	30	63*	-4	472	454	83	-2, 3, l				3	40	40	25	-16	89	93	40	4	69	71	27
-4	16	3	75*	-3	322	329	73	-19	9	54	465*	4	83	83	24	-15	77	14	105	5	67	65	28
-3	18	4	73*	-2	341	327	77	-18	38	46	54	5	18	6	36*	-14	27	29	74*	6	104	104	29
-2	58	59	33	-1	190	177	44	-17	7	65	562*	6	126	126	25	-13	60	58	45	7	57	50	30
-1	6	1	217*	0	276	270	63	-15	14	74	299*	7	222	220	41	-12	110	113	45	8	14	17	88*
0	15	12	95*	1	31	34	20	-14	51	47	36	8	131	123	26	-11	66	62	26	9	46	48	34
1	58	57	33	2	450	460	80	-13	69	102	74	9	71	64	21	-10	9	9	116*	10	68	67	31
2	24	31	63*	3	64	77	18	-10	210	209	39	10	59	57	24	-9	8	2	123*	11	43	51	37
3	37	20	44	4	113	122	23	-8	290	277	52	11	85	82	23	-8	190	191	35	12	64	60	32
4	15	13	99*	5	127	135	25	-7	8	12	79*	12	58	65	25	-7	11	1	72*	13	44	41	39
5	42	45	43	6	151	144	29	-6	75	72	19	13	119	123	35	-6	21	12	39*	14	10	3	283*
6	20	8	82*	7	91	94	21	-5	11	15	36*	14	2	25	810*	-5	106	104	19	15	30	22	109*
7	16	25	103*	8	9	1	83*	-4	203	207	31	15	34	37	48	-4	49	39	16	16	11	0	303*
-3, 13, l				9	45	51	23	-3	144	137	23	16	33	32	54	-3	55	53	18	-2, 8, l			
-7	19	13	96*	11	92	83	23	-2	274	264	47	17	77	74	36	-2	114	120	28	-14	97	71	52
-6	51	52	34	12	25	25	41*	-1	10	33	43*	-2, 5, l				-1	64	49	24	-13	12	1	139*
-5	15	20	89*	13	105	103	33	0	45	55	21	-17	64	65	45	0	51	54	25	-12	12	1	140*
-4	39	40	40	14	31	21	53*	1	148	159	33	-16	75	2	104	1	24	32	39	-11	146	154	30
-3	17	4	76*	15	59	60	36	2	20	43	39*	-15	92	20	85	2	26	27	38	-10	226	243	42
-2	12	16	112*	16	28	28	62*	3	193	201	42	-13	132	92	68	3	162	171	37	-9	110	113	25
-1	26	27	59*	17	7	15	262*	4	31	31	22	-11	44	37	26	4	113	121	29	-8	92	101	24
0	6	8	245*	-2, 2, l				5	401	413	71	-10	92	85	25	5	179	185	41	-7	109	112	25
1	31	36	51	-19	36	47	56	6	279	284	50	-9	152	163	34	6	14	20	48*	-6	56	57	25
2	43	42	43	-18	17	17	97*	7	177	165	39	-8	190	190	35	7	36	25	24	-5	216	223	40
3	66	64	35	-16	33	40	49	8	254	255	46	-7	221	224	40	8	52	43	22	-4	143	146	28
4	16	6	93*	-13	46	56	34	9	278	281	50	-6	45	41	21	9	90	89	22	-3	124	134	31
5	43	34	46	-12	6	23	181*	10	62	64	23	-5	5	8	93*	10	14	9	66*	-2	90	90	26
-2, 0, l				-11	15	19	43*	11	120	125	26	-4	217	189	34	11	15	13	59*	-1	5	4	192*
1	399	410	72	-5	230	230	35	12	104	111	24	-3	266	258	47	12	27	22	38	0	24	18	44*
2	306	322	55	-4	194	190	30	13	76	74	32	-2	29	28	22	13	102	98	32	1	136	137	33
3	10	3	62*	-3	243	243	37	14	20	21	76*	-1	214	217	38	14	53	40	36	2	33	28	36
4	237	220	43	-2	100	100	20	15	47	46	40	0	96	107	25	15	10	9	286*	3	123	124	31
5	58	63	20	-1	44	24	23	16	33	27	54	1	200	209	44	16	77	69	58	4	90	85	28
6	147	153	28	0	22	31	33	17	39	35	50	2	85	75	24	-2, 7, l				5	14	14	84*
7	48	45	21	1	103	127	25	18	77	70	38	3	17	26	50*	-14	45	40	46	6	101	99	29
8	169	173	32	2	2	12	302*	-2, 4, l				4	289	299	62	-13	15	16	137*	7	49	46	32
9	83	77	21	3	40	39	19	-19	21	34	104*	5	43	43	29	-12	11	1	170*	8	21	23	64*
10	134	138	27	4	220	212	40	-18	14	6	139*	6	48	47	20	-11	69	76	24	9	20	25	69*
11	34	37	29	5	343	337	61	-17	11	11	161*	7	32	38	25	-10	177	181	34	10	101	101	30
12	101	100	24	6	201	200	37	-16	61	63	41	8	92	92	22	-9	198	217	37	11	13	16	102*
13	69	76	34	7	111	118	23	-13	104	52	73	9	33	27	28	-8	62	71	23	12	26	40	57*
14	108	114	34	8	168	163	32	-9	218	211	47	10	46	49	24	-7	105	113	23	13	33	27	49
15	17	8	91*	9	44	41	32	-7	211	214	38	11	158	156	31	-6	33	29	29	14	16	23	208*
16	89	93	33	10	90	80	22	-6	206	194	38	12	72	74	24	-5	94	92	26	15	11	7	278*

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	-2, 9, l			9	11	13	129*	9	38	42	49	12	134	134	26	0	476	537	82	-11	31	24	26
-15	13	9	187*	10	27	21	57*	10	76	67	34	13	117	109	33	1	358	409	76	-10	90	96	24
-13	32	31	60*	11	6	17	262*		-2, 13, l			16	71	67	36	2	34	49	15	-8	326	346	93
-12	57	65	40	12	24	25	68*	-10	11	14	152*	17	41	29	48	3	9	14	48*	-6	139	114	47
-11	89	92	25	13	11	6	273*	-9	45	53	35	18	25	33	78*	4	211	224	38	-4	223	201	40
-10	113	113	26		-2, 11, l			-8	13	17	93*	19	13	11	164*	5	58	67	16	-3	29	7	22
-9	20	16	58*	-13	180	93	62	-7	27	29	52*		-1, 1, l			6	65	70	17	-2	127	125	20
-8	176	182	34	-12	149	63	54	-6	40	40	37	-18	34	43	49	7	585	581	104	-1	287	281	44
-7	110	98	29	-10	72	70	33	-5	57	57	31	-17	39	34	43	8	101	90	21	0	15	19	30*
-6	177	172	34	-9	20	18	62*	-4	29	27	48*	-16	53	45	36	9	158	164	30	1	245	272	43
-5	135	133	27	-8	24	19	49*	-3	39	42	39	-15	14	18	94*	10	224	227	41	2	115	134	27
-4	12	2	80*	-7	93	90	28	-2	18	18	74*	-14	18	23	71*	11	58	59	21	3	482	484	85
-3	44	47	30	-6	155	159	37	-1	38	43	41	-13	45	47	32	12	120	128	25	4	84	86	18
-2	51	51	29	-5	109	126	30	0	51	44	35	-12	106	100	30	13	34	31	43	5	51	46	18
-1	140	140	34	-4	14	4	75*	1	94	105	31	-11	18	18	52*	14	46	45	37	6	94	104	20
0	32	38	38	-3	14	1	81*	2	20	18	77*	-10	242	251	56	15	89	86	32	7	10	9	58*
1	53	53	29	-2	85	95	28	3	11	16	136*	-9	6	3	136*	16	5	3	261*	8	51	48	19
2	40	32	34	-1	24	24	52*	4	36	34	48	-8	17	4	45*	19	13	6	160*	9	117	119	24
3	9	12	123*	0	30	36	44	5	25	29	63*	-7	70	69	29		-1, 3, l			10	66	64	21
4	41	40	36	1	39	40	37	6	15	18	106*	-4	213	264	69	-17	63	63	48	11	70	64	21
5	63	21	42	2	44	47	34	7	15	10	101*	-3	353	375	113	-13	41	52	36	12	71	71	23
6	32	22	43	3	67	64	31	8	15	2	102*	-2	348	375	73	-12	10	3	111*	13	125	124	35
7	5	10	239*	4	56	52	32		-2, 14, l			-1	365	362	66	-9	56	54	20	14	126	126	35
8	39	35	39	5	191	192	44	-7	17	6	75*	0	1062	1126	227	-8	25	8	26	15	72	68	33
9	40	43	40	6	73	80	31	-6	17	11	73*	1	2	2	174*	-7	76	78	19	16	26	31	58*
10	26	27	57*	7	122	125	33	-5	17	13	74*	2	128	150	24	-5	282	270	60	17	66	63	35
11	42	48	41	8	14	16	102*	-4	16	9	80*	3	353	431	75	-3	272	246	47	18	20	19	81*
12	22	7	68*	9	16	16	97*	-3	14	6	140*	4	22	24	26	-2	48	4	37		-1, 5, l		
13	22	21	74*	10	12	1	125*	-2	22	11	67*	5	363	363	64	-1	647	615	112	-19	10	58	430*
14	11	13	274*	11	35	27	51	-1	45	48	39	6	426	446	75	0	344	354	60	-17	23	32	86*
	-2, 10, l			12	15	1	110*	0	17	8	81*	7	205	198	37	1	599	654	129	-15	28	36	65*
-12	32	26	60*		-2, 12, l			1	16	15	91*	8	251	250	58	2	303	330	65	-13	33	24	52
-11	83	87	25	-11	38	48	39	2	73	80	33	9	28	19	25	3	37	45	16	-9	200	205	37
-10	31	38	40	-10	64	67	30	3	11	15	145*	10	85	87	20	4	186	193	34	-8	188	173	62
-9	60	64	32	-9	45	47	34	4	42	33	44	11	134	134	26	5	221	231	40	-7	236	245	68
-8	60	68	28	-8	62	66	30	5	34	41	50	12	20	8	40*	6	263	276	47	-6	127	120	25
-7	145	144	35	-7	76	81	29	6	73	70	35	13	88	87	31	7	299	291	54	-5	263	255	47
-6	24	21	47*	-6	21	19	58*		-2, 15, l			14	127	130	35	8	143	140	28	-4	886	799	156
-5	134	147	33	-5	21	20	59*	-1	14	19	159*	15	152	157	39	9	118	113	24	-3	271	239	42
-4	92	97	28	-4	28	32	46	0	41	36	56	17	21	24	98*	10	41	36	22	-2	338	319	52
-3	79	85	27	-3	113	116	31		-1, 0, l			18	9	49	469*	11	137	142	27	-1	241	230	37
-2	135	135	33	-2	57	54	31	1	575	656	121	19	14	11	136*	12	194	205	47	0	262	259	46
-1	12	15	96*	-1	45	47	35	2	253	273	45		-1, 2, l			13	100	104	31	1	121	133	23
0	39	46	36	0	99	109	30	3	589	643	104	-20	15	5	122*	14	20	19	68*	2	251	257	44
1	107	113	30	1	20	27	66*	4	493	484	104	-19	34	52	52	15	54	54	36	3	57	60	19
2	117	121	31	2	8	6	168*	5	332	320	59	-18	11	24	145*	16	9	8	166*	4	66	57	17
3	12	3	102*	3	55	59	34	6	277	274	49	-17	20	10	79*	17	14	11	107*	5	205	192	37
4	188	199	43	4	25	20	57*	7	412	383	73	-14	14	6	93*		-1, 4, l			6	392	379	69
5	144	155	36	5	40	43	42	8	166	148	31	-4	511	555	163	-19	14	0	128*	7	158	161	30
6	47	35	35	6	14	1	109*	9	126	134	25	-3	768	726	132	-18	10	45	299*	8	47	51	21
7	57	62	32	7	57	51	36	10	65	70	20	-2	996	937	150	-14	24	17	67*	9	16	12	46*
8	35	34	44	8	57	57	36	11	104	105	30	-1	753	723	155	-12	68	70	34	10	39	37	24

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
-1, 5, l				-6	110	104	20	10	112	115	25	2	13	7	67*	2	53	56	32	7	15	6	103*
11	158	155	31	-5	57	44	21	11	44	39	25	3	190	200	36	3	51	45	33	8	15	11	105*
12	196	189	47	-4	123	121	21	12	35	23	29	4	64	25	30	4	50	50	34	9	68	62	56
13	103	103	32	-3	321	302	49	13	47	43	33	5	30	16	38	5	23	22	62*	-1, 15, l			
14	49	46	34	-2	244	231	38	14	45	42	35	6	99	96	29	6	33	32	45	-5	14	7	148*
15	68	69	31	-1	27	19	21	15	9	8	148*	7	85	92	29	7	70	68	31	-4	14	18	94*
16	24	19	62*	0	195	191	31	16	16	9	84*	8	28	30	51*	8	100	105	31	-3	43	40	38
17	6	18	269*	1	176	163	28	-1, 9, l				9	12	9	117*	9	79	81	32	-2	46	53	38
18	49	46	40	2	14	9	38*	-13	125	115	36	10	9	8	159*	10	42	48	44	-1	19	6	69*
-1, 6, l				3	251	240	39	-12	118	115	36	11	60	67	33	11	15	14	101*	0	43	44	38
-17	26	20	86*	4	141	130	23	-11	58	58	27	12	21	18	73*	12	15	14	116*	1	44	43	39
-16	79	76	40	5	79	88	25	-10	42	47	30	13	10	4	280*	-1, 13, l				2	3	12	420*
-13	84	76	39	6	192	196	35	-9	17	31	62*	14	11	2	250*	-11	27	31	50*	3	45	48	40
-12	139	136	41	7	129	125	26	-8	45	50	28	15	20	17	161*	-10	92	94	29	4	18	24	88*
-11	190	191	56	8	72	66	21	-7	63	48	25	-1, 11, l				-9	59	51	47	5	5	7	327*
-8	53	52	25	9	49	48	23	-6	100	92	24	-10	98	88	26	-8	97	94	30	0, 0, l			
-7	64	62	20	10	63	68	22	-5	211	223	39	-9	47	41	30	-7	13	15	95*	1	18	48	9
-6	18	7	41*	11	36	38	40	-4	425	406	76	-8	126	118	33	-6	35	43	38	2	64	80	16
-5	97	94	18	12	37	50	27	-3	10	20	83*	-7	84	83	23	-5	21	28	55*	3	33	30	16
-4	204	178	32	13	57	69	31	-2	233	229	42	-6	209	220	39	-4	15	14	75*	4	470	595	106
-3	200	195	31	14	79	71	31	-1	77	76	17	-5	21	8	48*	-3	16	13	78*	5	15	14	41*
-2	62	54	15	15	47	50	36	0	132	132	22	-4	85	89	23	-2	104	105	30	6	313	347	71
-1	74	74	15	16	29	21	97*	1	118	121	21	-3	108	113	25	-1	14	4	85*	10	129	138	33
0	334	315	51	17	32	35	50	2	198	207	31	-2	172	176	33	0	32	38	45	11	38	38	35
1	152	136	24	-1, 8, l				3	272	283	42	-1	10	4	90*	1	26	26	52*	12	42	45	35
2	57	63	15	-17	47	58	58	4	215	221	34	0	40	38	34	2	247	249	55	13	76	77	31
3	88	95	17	-16	65	69	48	5	133	136	23	1	101	111	29	3	47	39	37	14	68	49	33
4	49	46	25	-15	2	5	1230*	6	11	9	102*	2	176	174	41	4	78	81	31	15	11	4	122*
5	164	156	31	-14	115	130	38	7	40	39	24	3	82	73	29	5	14	3	92*	16	117	111	35
6	121	109	24	-13	66	5	59	8	50	58	23	4	36	28	40	6	21	32	70*	17	13	5	124*
7	15	5	43*	-12	133	135	50	9	76	83	31	5	59	64	32	7	13	13	108*	18	44	49	45
8	18	28	43*	-11	53	54	27	10	160	164	31	6	65	67	30	8	62	58	34	19	13	20	132*
9	115	126	24	-10	59	61	25	11	11	14	81*	7	35	36	42	9	42	43	45	20	15	4	124*
10	99	101	23	-9	37	48	47	12	80	85	31	8	36	38	44	10	20	15	88*	0, 1, l			
11	149	153	29	-8	25	33	62*	13	53	55	65	9	95	91	32	11	80	79	34	-20	16	19	111*
12	92	95	23	-7	87	80	28	14	37	40	87*	10	17	32	88*	-1, 14, l				-19	14	3	124*
13	76	69	30	-6	315	304	56	15	6	6	514*	11	33	29	50	-9	18	5	68*	-18	38	40	51
14	74	75	31	-5	117	119	25	16	12	3	251*	12	14	7	112*	-8	64	57	30	-17	70	69	35
15	20	22	70*	-4	57	61	17	-1, 10, l				13	11	9	265*	-7	34	34	42	-16	128	128	36
16	15	5	93*	-3	77	73	17	-11	47	50	30	14	11	1	264*	-6	10	12	118*	-15	30	24	51*
17	16	12	93*	-2	40	47	18	-10	274	273	50	-1, 12, l				-5	62	60	31	-14	91	89	32
18	16	3	98*	-1	7	6	74*	-9	15	14	82*	-9	24	22	45*	-4	59	65	31	-13	22	10	62*
-1, 7, l				0	205	207	32	-8	7	13	149*	-8	26	25	43*	-3	16	12	74*	-12	39	28	36
-17	12	20	181*	1	216	218	34	-7	102	93	25	-7	91	90	24	-2	50	45	33	-11	39	44	34
-16	15	5	150*	2	31	24	21	-6	184	177	35	-6	15	4	70*	-1	70	75	31	-10	235	231	54
-15	13	20	164*	3	73	75	17	-5	151	152	30	-5	8	14	125*	0	90	93	30	-9	65	71	25
-14	131	138	41	4	210	219	33	-4	98	106	23	-4	113	116	30	1	37	34	42	-8	209	211	48
-11	134	141	32	5	17	19	41*	-3	70	78	22	-3	14	15	82*	2	44	39	39	-7	41	41	25
-10	7	8	131*	6	61	50	20	-2	143	143	28	-2	50	49	31	3	25	26	61*	-6	538	613	121
-9	82	78	25	7	13	12	54*	-1	4	11	199*	-1	70	78	28	4	19	10	78*	-5	170	174	31
-8	363	361	65	8	70	75	21	0	216	224	40	0	163	170	39	5	16	22	93*	-4	33	35	13
-7	89	90	22	9	41	40	24	1	16	15	57*	1	61	72	30	6	100	102	32	-3	4	19	54*

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l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	0, 1, l			16	57	53	38	0	879	750	134	-11	28	30	32	11	126	124	26	-5	57	50	19
-2	306	310	55	17	10	14	156*	1	110	104	18	-5	53	38	20	12	102	103	24	-4	148	131	25
-1	14	10	13	18	30	21	59*	2	259	237	40	-4	377	289	67	13	42	39	33	-3	106	96	20
0	200	210	35	19	36	31	52	3	33	28	16	-3	95	77	17	14	65	63	31	-2	147	149	24
1	54	65	9	20	75	71	38	4	432	426	65	-2	511	415	78	15	39	41	38	-1	8	1	73*
2	578	641	102		0, 3, l			5	116	114	20	-1	52	49	15	16	30	22	47	0	53	47	18
3	74	88	15	-19	14	17	119*	6	763	711	135	0	226	192	35	17	22	21	60*	1	74	69	17
4	1367	1225	290	-18	33	42	55	7	92	80	20	1	83	80	16	18	36	30	45	2	328	313	50
5	22	30	20	-17	19	3	84*	8	14	12	46*	2	653	594	99		0, 8, l			3	116	117	21
6	213	215	46	-16	81	83	32	9	26	18	26	3	10	2	50*	-17	13	2	191*	4	267	264	41
7	185	189	43	-15	84	82	31	10	36	34	22	4	151	146	24	-16	7	44	917*	5	49	33	19
8	133	130	33	-14	54	39	34	11	47	43	22	5	94	91	18	-15	42	46	59	6	61	66	21
9	67	74	24	-13	54	56	31	12	25	5	31	6	91	93	18	-14	77	85	42	7	16	10	49*
10	107	112	28	-12	73	78	29	13	78	68	29	7	107	95	20	-13	65	59	45	8	193	194	31
14	46	17	39	-11	38	30	19	14	81	65	30	8	42	37	21	-12	77	72	28	9	14	10	59*
15	96	94	33	-10	25	23	22	15	20	24	63*	9	51	46	21	-9	16	14	62*	10	254	254	46
16	85	89	33	-9	12	16	37*	18	29	21	64*	10	95	97	22	-8	144	132	29	11	15	10	58*
17	34	41	50	-8	10	7	47*	19	25	17	77*	11	145	143	29	-7	85	72	23	12	26	37	38
18	34	35	53	-7	13	5	33*		0, 5, l			12	89	83	22	-6	72	54	18	13	15	11	79*
19	17	16	103*	-6	26	38	19	-17	15	21	119*	13	29	36	43	-5	19	6	34*	14	33	20	42
20	23	27	81*	-5	20	5	25	-15	51	55	52	14	13	6	85*	-4	617	511	107	15	9	10	133*
	0, 2, l			-2	1113	820	237	-13	23	36	64*	15	21	24	60*	-3	145	131	24	16	57	51	33
-20	49	52	68	-1	45	43	13	-12	17	25	79*	16	61	60	32	-2	336	285	52		0, 10, l		
-19	42	45	46	0	537	531	94	-11	54	56	24	17	16	10	83*	-1	12	11	44*	-10	160	142	32
-18	18	18	92*	1	24	4	15	-6	249	208	81	18	79	13	65	0	251	227	39	-9	60	53	26
-17	83	86	33	2	315	315	48	-4	13	21	49*		0, 7, l			1	47	40	19	-8	222	176	41
-16	59	3	36	3	11	2	37*	-3	87	77	19	-18	98	97	50	2	116	116	20	-7	108	92	25
-15	34	21	47	4	158	157	28	-2	322	283	49	-17	31	37	82*	3	137	134	23	-6	12	7	93*
-14	63	65	34	5	31	37	25	-1	50	44	14	-16	27	42	92*	4	16	12	39*	-5	12	2	70*
-13	14	8	97*	6	250	241	45	0	204	179	37	-15	16	3	130*	5	82	84	18	-4	257	232	40
-12	62	52	30	7	7	17	79*	1	8	8	50*	-14	44	47	51	6	132	131	23	-3	69	66	18
-11	18	14	62*	8	525	498	93	2	144	141	23	-13	61	56	43	7	25	28	32	-2	90	82	19
-10	79	74	27	9	32	33	21	3	87	79	16	-11	53	53	26	8	73	71	19	-1	34	35	22
-9	87	92	19	10	69	25	26	4	20	20	25	-8	156	136	31	9	24	30	50*	0	84	86	18
-8	12	2	31*	11	13	8	49*	5	194	169	30	-7	75	76	24	10	105	95	24	1	79	82	18
-7	30	22	16	12	337	332	77	7	39	46	27	-6	86	69	24	11	51	57	24	2	41	39	21
-6	74	74	16	13	89	82	29	8	254	248	46	-5	168	135	27	12	49	40	25	3	28	19	28
-5	3	1	235*	14	302	303	70	9	30	26	25	-4	695	554	106	13	97	98	31	4	116	109	21
-4	1497	1330	262	17	13	2	114*	10	209	199	38	-3	48	33	17	14	60	61	31	5	25	15	31
0	835	779	128	18	26	23	73*	11	50	43	22	-2	590	489	90	15	56	61	32	6	61	46	42
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2	23	14	14		0, 4, l			13	31	32	40	0	269	237	42	17	26	25	57*	8	133	127	24
3	25	22	15	-17	13	8	121*	14	57	55	31	1	118	105	20		0, 9, l			9	148	142	26
4	569	564	100	-14	32	40	47	15	16	20	82*	2	216	203	34	-16	7	62	1023*	10	167	168	32
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6	846	832	149	-9	8	2	62*	17	17	22	98*	4	143	131	24	-14	45	41	58	12	16	19	62*
7	275	269	49	-7	6	14	86*	19	15	19	131*	5	49	48	17	-11	103	104	25	13	12	11	100*
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9	28	31	20	-4	69	49	20	-18	45	39	66	7	105	101	20	-9	43	42	29	15	32	28	44
10	412	398	94	-3	209	165	38	-17	13	4	148*	8	49	43	19	-8	119	100	26	16	18	3	72*
11	23	11	91*	-2	910	725	138	-15	23	21	80*	9	134	136	27	-7	44	35	26		0, 11, l		
12	29	23	40	-1	121	111	20	-12	35	29	50	10	27	32	31	-6	159	131	31	-9	57	48	27

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l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	0, 11, l			-10	150	120	38	1	89	90	43	4	28	35	12	18	14	5	102*	-9	22	16	27
-8	81	77	25	-9	15	7	94*	2	39	37	64	5	154	163	24	19	22	24	74*	-8	323	320	58
-7	44	36	25	-8	56	43	35	3	44	42	58	6	306	383	70	20	47	46	43	-7	146	150	28
-6	15	7	55*	-7	14	3	99*	4	22	26	99*	7	236	240	42		1, 3, l			-6	41	35	18
-5	53	51	23	-6	54	54	35	5	59	56	48	8	201	200	47	-19	15	4	125*	-5	221	226	40
-4	70	69	22	-5	23	21	62*	6	34	39	68*	9	43	44	27	-18	60	61	39	-4	208	226	68
-3	76	71	22	-4	115	110	26	7	14	21	148*	10	79	89	26	-17	62	61	37	-3	74	84	17
-2	20	25	45*	-3	5	6	180*		0, 16, l			11	146	164	36	-16	31	22	60*	-1	362	368	76
-1	26	32	29	-2	108	105	25	-1	50	54	56	12	71	18	48	-15	123	121	36	0	77	98	20
0	30	29	25	-1	34	41	33	0	75	83	48	13	57	68	30	-14	30	27	56*	1	180	211	40
1	15	5	46*	0	31	32	34	1	13	6	168*	14	210	210	50	-13	78	74	33	2	54	64	13
2	169	168	28	1	113	116	26	2	39	29	66*	15	91	95	31	-12	42	41	20	3	465	474	70
3	99	101	20	2	163	144	32		1, 0, l			16	12	13	111*	-11	15	15	34*	4	57	55	14
4	210	207	33	3	15	11	75*	0	34	34	13	17	15	2	96*	-10	117	116	24	5	68	78	15
5	74	75	20	4	48	54	36	1	585	632	105	18	62	57	35	-9	33	33	20	6	384	386	58
6	185	180	30	5	41	41	39	3	468	494	100	19	11	2	140*	-8	104	106	22	7	133	142	22
7	19	17	49*	6	14	6	106*	6	47	47	15	20	39	35	47	-7	52	59	17	8	138	138	23
8	68	69	21	7	14	4	107*	7	359	383	81		1, 2, l			-6	9	9	46*	9	73	73	18
9	7	12	127*	8	19	22	82*	8	114	113	29	-19	64	69	40	-5	191	180	35	10	41	42	19
10	34	28	46	9	56	57	35	9	90	93	26	-18	13	9	135*	-4	12	18	36*	13	27	14	49*
11	33	31	33	10	7	32	217*	10	75	85	25	-17	22	28	84*	-3	185	179	33	14	273	260	64
12	67	59	25	11	15	13	106*	11	90	89	27	-16	135	130	38	-2	191	202	34	15	12	12	107*
13	28	26	47	12	16	6	98*	12	25	20	42	-15	138	138	38	-1	574	604	121	16	17	23	85*
14	35	32	40		0, 14, l			13	18	13	61*	-14	68	54	36	0	305	367	65	17	40	41	44
15	11	7	244*	-9	10	12	165*	14	244	249	57	-13	68	61	35	1	657	751	139	18	28	30	54*
	0, 12, l			-8	123	114	35	15	99	105	31	-12	60	57	20	2	381	459	81	19	16	11	90*
-13	26	14	105*	-7	20	16	78*	16	56	48	34	-11	113	111	23	3	79	80	14		1, 5, l		
-12	8	16	329*	-6	111	107	33	17	25	30	57*	-7	400	390	71	4	96	107	16	-18	25	17	77*
-11	15	6	95*	-5	3	7	424*	18	48	52	38	-6	221	194	40	5	213	229	33	-17	45	58	45
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-7	52	47	25	-3	29	32	55*	20	30	30	59*	-4	404	379	71	7	285	272	50	-14	35	46	47
-6	31	34	33	-2	123	127	45		1, 1, l			-3	1001	940	177	10	230	227	41	-13	11	5	124*
-5	36	33	30	-1	12	31	153*	-19	74	76	40	-2	922	880	163	11	95	95	28	-12	23	21	31
-4	119	117	26	0	25	28	82*	-18	13	13	140*	-1	536	594	115	12	112	97	32	-11	63	67	20
-3	36	36	30	1	4	6	452*	-17	92	87	35	0	427	508	91	13	126	128	34	-10	33	38	23
-2	51	50	25	2	59	62	48	-16	80	79	36	1	321	380	68	14	79	56	31	-8	48	44	22
-1	3	7	282*	3	36	39	42	-15	38	40	49	2	96	115	19	15	104	106	32	-7	206	192	45
0	31	17	32	4	22	20	66*	-14	125	130	35	3	169	196	26	16	9	4	147*	-6	13	0	43*
1	36	36	31	5	61	63	33	-11	6	8	70*	4	175	188	27	17	51	50	36	-5	406	398	86
2	292	282	45	6	21	18	73*	-10	229	239	41	5	121	125	19	18	55	52	37	-3	299	277	64
3	58	61	21	7	15	12	101*	-9	49	50	17	6	55	65	13	19	13	20	121*	-2	357	344	63
4	170	165	28	8	37	33	50	-8	88	95	19	7	485	471	103	20	36	41	52	-1	317	313	68
5	16	5	49*	9	47	41	42	-7	27	7	26	8	68	63	24		1, 4, l			0	232	222	50
6	16	5	51*	10	26	26	65*	-6	82	89	19	9	29	32	35	-18	99	104	35	1	102	96	26
7	29	32	34		0, 15, l			-5	448	432	79	10	339	315	77	-17	14	1	116*	2	441	421	67
8	51	47	23	-6	14	11	140*	-4	430	427	75	11	132	131	34	-16	91	96	33	3	94	101	17
9	52	51	24	-5	24	28	94*	-3	275	269	50	12	144	153	36	-15	99	102	33	4	83	77	16
10	14	14	108*	-4	45	43	56	-2	481	494	86	13	113	124	32	-14	10	9	148*	5	134	134	22
11	12	12	126*	-3	27	27	80*	-1	495	521	88	14	127	132	34	-13	90	94	31	6	261	256	40
13	18	15	159*	-2	19	9	113*	0	1095	1101	194	15	70	69	32	-12	36	33	22	7	171	167	27
	0, 13, l			-1	16	18	129*	2	24	21	28	16	57	59	34	-11	53	41	20	8	141	128	23
-11	56	47	36	0	97	96	43	3	314	381	101	17	14	1	96*	-10	14	5	39*	9	42	51	18

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l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	1, 5, l			-1	48	39	17	-14	75	79	52	10	121	120	23	2	167	158	32	4	72	76	24
10	38	30	22	0	172	159	27	-12	49	41	29	11	66	64	21	3	41	40	27	5	15	8	66*
11	169	171	31	1	151	144	24	-11	55	45	29	12	15	1	81*	4	224	232	41	6	93	90	25
12	194	189	36	2	38	34	19	-7	112	114	25	13	15	13	89*	5	54	59	21	7	4	15	265*
15	13	2	95*	3	87	87	17	-6	16	8	50*	14	15	15	86*	6	71	74	20	8	15	19	73*
16	150	150	39	4	146	149	24	-5	296	296	53	15	12	10	114*	7	38	36	27	9	14	23	78*
17	19	25	73*	5	226	231	35	-4	486	467	86	16	17	0	76*	8	104	104	22	10	19	10	59*
18	9	12	180*	6	221	219	35	-3	63	67	17		1, 11, l			9	54	55	23		1, 15, l		
19	22	20	72*	7	89	88	18	-2	110	110	19	-13	12	21	212*	10	132	129	24	-6	38	44	45
	1, 6, l			8	56	55	18	-1	15	9	35*	-12	65	57	30	11	18	2	52*	-5	16	4	85*
-18	37	55	58	9	72	70	18	0	140	140	23	-11	57	50	30	12	17	18	59*	-4	89	90	33
-17	24	42	79*	10	12	15	56*	1	25	23	25	-10	57	52	31	13	11	4	122*	-3	59	57	36
-15	30	56	61*	11	17	11	67*	2	285	292	44	-9	56	53	30	14	40	36	40	-2	16	17	91*
-14	48	44	55	12	27	32	35	3	214	217	34	-8	177	178	41		1, 13, l			-1	33	33	50
-12	16	4	43*	13	91	97	29	4	94	89	21	-7	95	94	29	-11	86	86	32	0	32	15	51
-11	47	50	54	14	51	53	32	5	129	134	22	-6	82	78	28	-10	69	53	33	1	38	30	45
-8	12	6	52*	17	31	30	58*	6	33	32	24	-5	75	70	21	-9	17	6	166*	2	18	21	86*
-7	161	161	56	18	84	68	34	7	38	34	22	-4	142	142	28	-8	55	50	34	3	21	17	76*
-4	274	239	59		1, 8, l			8	43	40	22	-3	72	69	21	-7	25	13	54*	4	15	5	103*
-3	53	67	19	-16	12	12	220*	9	70	77	19	-2	174	174	32	-6	10	9	118*	5	22	10	77*
-2	72	73	17	-15	29	19	94*	10	84	75	20	-1	2	15	374*	-5	8	5	144*	6	15	5	109*
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1	313	294	48	-12	94	99	48	13	32	32	42	2	262	262	41	-2	108	114	31	-1	52	50	40
2	27	22	19	-11	61	11	90	14	15	6	87*	3	17	8	45*	-1	55	48	32	0	24	3	83*
3	142	145	26	-9	96	93	25	15	34	31	41	4	71	58	20	0	68	70	23	1	74	74	44
5	124	114	21	-6	214	178	39	16	8	0	183*	5	35	31	26	1	16	1	60*	2	20	9	103*
6	13	5	49*	-5	35	32	24	17	16	5	103*	6	168	164	28	2	262	257	47		2, 0, l		
7	114	109	20	-4	107	109	23		1, 10, l			7	48	49	22	3	19	1	54*	0	376	362	67
8	10	18	53*	-3	132	123	26	-15	34	35	90*	8	46	45	23	4	16	7	56*	1	438	409	77
9	127	129	22	-2	28	25	21	-14	12	1	226*	9	55	61	22	5	5	3	181*	2	541	530	96
10	138	122	24	-1	34	37	17	-13	7	27	369*	10	40	43	27	6	66	68	24	3	4	5	155*
11	80	75	21	0	240	216	37	-12	123	125	33	11	17	18	54*	7	18	23	57*	5	186	194	34
12	47	48	23	1	256	249	40	-11	106	106	30	12	8	19	172*	8	38	41	32	7	48	44	21
13	13	2	86*	2	64	60	16	-10	179	191	63	13	24	21	57*	9	8	21	125*	9	21	24	27
16	44	39	39	3	53	60	17	-7	165	154	32	14	20	13	68*	10	14	11	111*	10	25	35	39
17	14	1	102*	4	30	36	22	-6	167	149	32	15	17	11	76*	11	25	16	49*	11	36	47	32
18	15	16	99*	5	51	51	18	-5	143	144	28		1, 12, l			12	39	35	34	15	9	51	232*
19	15	12	109*	6	71	70	18	-4	90	86	18	-12	35	42	84*		1, 14, l			17	20	23	72*
	1, 7, l			7	7	4	297*	-3	169	174	27	-11	82	80	30	-9	33	25	49	19	15	27	105*
-17	14	7	152*	8	96	100	19	-2	104	110	19	-10	22	10	58*	-8	92	89	32	20	30	47	60*
-16	13	1	145*	9	105	114	20	-1	64	68	17	-9	19	8	65*	-7	72	73	32		2, 1, l		
-15	58	63	55	10	233	239	37	0	198	188	31	-8	47	39	34	-6	16	1	79*	-18	36	35	67*
-13	11	4	149*	11	15	4	51*	1	25	25	27	-7	33	39	40	-5	66	66	33	-17	37	34	67*
-12	19	28	46*	12	40	42	28	2	6	1	95*	-6	6	12	175*	-4	43	46	39	-14	7	1	199*
-10	47	48	24	13	64	59	30	3	168	166	28	-5	78	67	28	-3	22	19	63*	-13	16	23	92*
-8	220	221	74	14	12	14	98*	4	95	95	19	-4	144	143	35	-2	10	16	140*	-12	121	125	25
-6	149	138	34	15	4	2	261*	5	79	81	19	-3	39	37	26	-1	90	95	31	-11	29	32	50*
-5	128	133	48	17	16	8	95*	6	327	332	50	-2	16	2	51*	0	26	21	60*	-10	34	36	28
-4	53	63	19		1, 9, l			7	25	26	33	-1	59	58	23	1	18	17	80*	-9	199	216	37
-3	443	418	79	-16	27	28	108*	8	214	215	34	0	112	117	25	2	42	42	41	-8	200	205	37
-2	427	401	76	-15	70	85	54	9	93	90	21	1	81	78	23	3	40	35	42	-7	89	76	21

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	2, 1, l			16	10	0	118*	-4	585	551	104	11	204	199	32	-11	100	102	28	8	55	49	19
-6	382	372	68	17	22	30	64*	-2	8	6	68*	12	240	234	56	-10	69	81	50	9	44	49	20
-5	296	286	53	18	35	34	46	-1	192	194	42	13	56	59	33	-9	125	124	26	10	212	217	34
-4	283	285	51	19	6	4	223*	0	408	400	87	14	101	115	31	-8	82	89	22	11	21	24	35
-3	342	334	61	20	12	30	235*	1	45	69	20	15	8	8	167*	-6	61	61	20	12	77	85	19
-2	408	406	73		2, 3, l			2	232	250	51	16	14	20	89*	-4	32	39	27	13	28	48	80*
-1	140	144	26	-18	29	32	69*	3	104	107	42	17	29	33	52*	-3	50	47	23	14	51	48	38
0	266	261	48	-17	11	10	166*	4	16	12	32*	18	13	20	108*	-2	63	75	22	15	54	56	36
1	129	129	25	-16	66	74	39	5	143	130	23	19	32	31	50	-1	46	35	23	16	26	26	57*
2	385	389	68	-15	64	71	38	6	541	511	82		2, 6, l			0	85	80	24	17	29	25	51*
3	26	24	27	-14	39	7	48	7	149	145	24	-17	6	10	317*	1	24	37	30		2, 9, l		
4	275	277	59	-13	26	35	67*	8	24	28	20	-16	22	5	83*	2	76	75	23	-14	43	47	74*
5	229	255	75	-12	9	13	76*	9	99	89	18	-15	13	14	130*	3	183	185	33	-13	11	10	243*
8	33	33	18	-9	92	94	21	10	70	63	17	-14	23	27	71*	4	161	164	26	-12	17	12	59*
9	15	21	30*	-8	301	304	54	11	132	125	26	-13	34	38	50	5	154	159	25	-11	87	83	28
11	34	24	18	-7	84	78	20	12	194	198	46	-12	93	97	23	6	26	18	32	-10	113	115	30
14	24	30	51*	-6	188	187	34	13	205	214	49	-11	38	42	24	7	74	71	18	-9	170	170	39
16	24	28	57*	-5	17	27	35*	14	13	13	87*	-10	43	34	23	8	103	106	19	-8	107	104	30
17	43	55	38	-4	363	347	65	15	16	12	75*	-9	35	25	43	9	29	27	24	-7	210	206	47
18	15	24	92*	-3	274	262	49	16	43	44	37	-8	238	244	44	10	81	77	18	-6	268	269	59
19	15	9	95*	-2	325	299	58	17	13	10	104*	-7	131	135	31	11	213	208	34	-5	153	153	36
20	16	4	102*	-1	50	44	20	18	35	32	43	-6	18	18	35*	12	74	75	19	-4	45	45	27
	2, 2, l			0	35	42	21	19	12	21	115*	-5	21	22	31	13	53	45	34	-3	64	51	25
-18	14	8	133*	1	144	147	33		2, 5, l			-4	40	32	24	14	16	18	81*	-2	61	60	25
-17	13	12	171*	2	60	63	17	-17	14	1	125*	-3	25	26	29	15	42	42	39	-1	213	229	47
-16	50	54	44	4	8	1	61*	-16	14	2	122*	-2	172	159	38	16	15	3	95*	0	76	86	25
-15	33	40	58*	6	389	367	67	-15	22	23	82*	-1	70	67	22	17	16	1	83*	1	87	97	20
-12	23	29	29	7	163	164	26	-14	21	24	81*	0	10	4	61*	18	11	8	123*	2	14	18	45*
-11	93	95	21	8	177	180	28	-13	26	29	66*	1	14	30	44*		2, 8, l			3	53	59	20
-10	147	149	28	9	170	169	27	-12	90	92	22	2	24	31	29	-15	10	17	291*	4	42	42	19
-9	87	99	21	10	11	16	54*	-11	16	4	41*	3	195	187	43	-14	11	10	243*	5	53	44	18
-8	14	17	42*	11	51	46	19	-10	82	76	22	4	13	3	33*	-13	48	54	65	6	31	34	23
-7	272	275	49	12	150	146	38	-9	197	199	36	5	254	235	39	-12	28	25	37	7	88	86	18
-6	145	142	28	13	21	22	54*	-8	259	248	47	6	62	68	16	-11	12	17	82*	8	29	28	25
-5	186	186	34	14	116	122	32	-7	99	100	22	7	43	39	17	-10	93	96	27	9	43	41	21
-4	65	69	20	15	79	80	30	-6	12	11	43*	8	5	3	93*	-9	191	190	43	10	72	73	21
-3	280	254	50	16	28	29	49*	-5	117	113	23	9	15	10	35*	-8	66	61	26	11	49	53	23
-2	92	94	20	17	27	33	51*	-4	287	285	52	10	72	68	17	-7	48	48	27	12	22	20	38*
-1	167	184	31	18	15	14	85*	-3	286	279	62	11	14	14	44*	-6	87	88	26	13	24	27	116*
0	7	11	68*	19	47	46	39	-2	114	106	28	12	28	31	34	-5	128	112	32	15	21	11	71*
1	54	68	17		2, 4, l			-1	303	310	65	13	12	7	96*	-4	88	83	26	16	14	0	104*
2	83	75	20	-17	14	15	135*	0	178	198	40	14	13	18	96*	-3	161	177	37		2, 10, l		
4	273	273	59	-16	13	8	130*	1	223	237	49	15	41	41	39	-2	61	62	24	-13	79	78	55
5	188	187	41	-15	28	25	67*	2	42	46	22	16	38	40	41	-1	104	111	28	-12	13	6	81*
6	50	45	20	-14	52	49	42	3	130	137	30	17	16	5	78*	0	116	121	29	-11	88	90	28
9	15	8	32*	-13	56	59	37	4	346	340	53	18	9	29	142*	1	205	205	45	-10	56	53	29
10	101	83	21	-12	31	33	58*	5	169	156	27		2, 7, l			2	13	13	40*	-9	27	33	42
11	13	8	36*	-11	31	39	26	6	77	72	20	-16	15	25	180*	3	155	162	29	-8	14	13	70*
12	118	126	32	-10	31	41	26	7	67	74	16	-15	57	61	57	4	154	147	25	-7	194	194	44
13	43	48	31	-9	123	132	25	8	14	16	34*	-14	22	37	82*	5	23	21	25	-6	9	18	101*
14	81	78	29	-8	212	206	39	9	14	9	34*	-13	28	36	63*	6	133	129	23	-5	50	45	28
15	140	147	36	-7	300	301	54	10	158	159	26	-12	77	76	52	7	8	23	77*	-4	11	3	84*

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	2, 10, l			-10	49	53	34	-3	26	21	52*	-6	110	112	24		3, 3, l			13	22	17	59*
-3	105	116	28	-9	49	53	33	-2	29	31	47	-5	20	24	44*	-16	20	13	119*	15	14	8	89*
-2	144	152	35	-8	119	125	32	-1	95	100	24	-4	17	10	49*	-15	12	7	177*	16	29	34	48*
-1	6	16	141*	-7	24	18	47*	0	43	45	28	-3	442	424	78	-13	25	12	89*	17	16	1	83*
0	15	1	42*	-6	31	34	41	1	55	49	25	-2	116	99	24	-12	34	34	26	18	11	46	254*
1	55	56	20	-5	16	5	60*	2	140	144	29	-1	347	319	61	-11	56	60	21		3, 5, l		
2	27	34	28	-4	43	38	25	3	61	63	24	0	62	57	19	-10	12	17	62*	-15	32	15	86*
3	77	86	21	-3	109	122	24	4	69	67	24	1	54	39	24	-9	12	1	59*	-14	36	23	76*
4	217	226	39	-2	17	4	45*	5	30	27	37	2	87	86	20	-8	25	25	31	-13	7	21	279*
5	82	82	21	-1	118	124	25	6	65	63	25	3	192	175	35	-7	77	72	21	-12	68	71	23
6	10	12	71*	0	159	169	30	7	79	85	24	4	118	125	24	-6	38	29	26	-11	53	56	24
7	43	44	21	1	10	12	80*	8	69	64	25	5	495	485	88	-5	70	66	20	-10	78	80	22
8	30	29	33	2	119	121	25	9	63	64	25	6	254	252	46	-4	64	55	21	-9	90	88	23
9	105	111	20	3	90	85	23	10	19	18	77*	9	232	253	67	-3	26	5	32	-8	255	256	47
10	85	92	20	4	56	58	23		2, 15, l			10	182	184	40	-2	106	101	23	-5	44	35	25
11	99	95	23	5	8	2	106*	-4	71	76	32	11	133	134	27	-1	135	123	26	-4	84	77	20
12	51	53	25	6	8	11	110*	-3	38	41	41	12	26	79	157*	0	31	39	25	-3	184	180	41
13	6	10	176*	7	150	150	30	-2	1	16	860*	14	39	43	38	1	262	259	47	-2	203	200	45
14	52	8	63	8	83	87	23	-1	52	62	35	15	14	10	92*	2	39	37	17	-1	57	47	22
15	82	48	53	9	52	53	25	0	56	58	34	16	37	36	43	3	165	164	31	0	27	24	29
16	25	6	64*	10	51	44	25	1	53	49	35	17	14	11	100*	4	144	146	28	1	30	26	27
	2, 11, l			11	13	5	75*	2	20	3	43*	18	27	21	61*	5	151	144	35	2	163	170	37
-12	18	11	58*	12	18	15	56*	3	52	54	27	19	26	35	66*	6	34	26	26	3	135	139	32
-11	31	32	90*	13	17	10	82*	4	15	22	69*		3, 2, l			8	131	136	25	4	214	222	39
-10	130	134	34		2, 13, l			5	36	35	34	-15	13	15	133*	10	48	44	16	6	117	113	26
-9	12	9	87*	-9	28	20	49*	6	28	24	39	-14	13	1	115*	14	29	36	48*	7	17	12	30*
-8	36	36	35	-8	40	42	37	7	24	30	63*	-13	55	55	36	16	12	24	109*	8	95	89	49
-7	181	190	42	-7	12	0	101*		3, 0, l			-12	68	65	21	19	12	55	236*	9	104	106	50
-6	91	91	28	-6	20	20	61*	0	16	9	43*	-11	71	76	21		3, 4, l			10	12	9	44*
-5	131	151	33	-5	16	3	66*	1	237	226	43	-10	55	55	22	-16	12	24	172*	11	11	17	52*
-4	28	33	39	-4	15	20	80*	2	63	64	20	-9	40	41	30	-15	13	10	152*	12	16	2	48*
-3	104	112	29	-3	41	38	26	3	375	362	67	-8	37	31	31	-14	23	28	105*	13	10	98	209*
-2	78	88	21	-2	20	20	45*	4	38	39	25	-7	23	28	44*	-13	20	1	118*	14	13	10	96*
-1	4	8	163*	-1	178	190	42	5	62	25	47	-6	175	170	33	-10	16	2	44*	16	33	49	46
0	82	88	21	0	113	109	25	6	107	112	24	-5	82	62	35	-9	30	32	28	17	18	25	80*
1	16	2	41*	1	78	76	23	7	47	48	24	-4	113	97	24	-8	25	22	32	18	16	8	89*
2	21	33	39*	2	67	17	36	13	66	62	32	-3	95	100	22	-6	62	54	20		3, 6, l		
3	223	225	40	3	132	140	27	14	5	52	951*	-2	32	22	25	-5	11	0	62*	-15	12	7	228*
4	109	112	24	4	43	38	27	16	46	53	39	-1	193	177	35	-4	184	173	34	-14	60	55	57
5	69	69	21	5	14	15	64*	17	14	5	106*	0	11	4	65*	-3	174	173	32	-13	95	85	51
6	150	149	29	6	24	19	42*	18	9	55	473*	1	149	113	28	-2	139	139	26	-12	116	109	30
7	16	8	49*	7	16	11	59*	19	16	6	99*	2	10	2	67*	-1	45	44	23	-11	155	164	36
8	88	91	22	8	44	43	28		3, 1, l			3	178	178	33	0	93	90	25	-10	58	55	26
9	88	94	22	9	46	42	28	-16	15	3	116*	4	80	75	21	1	18	17	29	-9	205	214	46
10	18	5	47*	10	25	24	46*	-15	25	33	68*	5	285	275	51	2	16	15	31*	-8	159	162	37
11	46	42	26	11	22	21	52*	-14	30	37	55*	6	239	226	52	3	197	189	36	-7	129	135	31
12	42	41	29	12	58	55	38	-13	52	45	37	7	294	277	63	4	43	40	24	-6	97	82	27
13	17	11	68*		2, 14, l			-12	24	14	46*	10	121	124	50	5	119	120	29	-5	45	45	25
14	11	13	265*	-7	59	59	33	-11	14	3	71*	15	9	55	295*	7	149	141	28	-4	43	30	26
15	53	21	69	-6	29	28	48	-10	41	44	30	17	6	23	251*	9	68	72	17	-3	8	17	89*
	2, 12, l			-5	28	27	50*	-9	67	69	24	18	12	59	265*	10	80	80	25	-2	36	43	27
-11	29	23	45	-4	17	3	70*	-8	82	84	23	19	16	8	91*	11	63	68	24	-1	113	100	29

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	3, 6, l			-11	49	55	29	10	90	91	22	5	45	44	23	-4	63	60	30	5	189	190	36
1	80	82	24	-10	92	93	28	11	18	7	41*	6	15	8	52*	-3	21	7	39*	6	52	48	26
2	120	120	30	-9	85	95	28	12	96	103	23	7	19	22	45*	-2	87	95	24	7	45	46	29
3	78	81	24	-8	38	33	30	13	64	63	29	8	123	126	26	-1	21	8	40*	8	53	59	40
4	45	38	24	-7	134	144	33	14	17	15	66*	9	14	1	63*	0	33	38	32	9	31	27	40
5	65	66	54	-6	212	207	48	15	13	16	178*	10	64	57	22	1	23	36	40*	11	95	92	25
6	14	8	37*	-5	144	144	35	16	19	16	82*	11	65	60	22	2	66	65	31	12	69	6	113
8	25	25	24	-4	40	29	66		3, 10, l			12	23	15	42*	3	20	4	47*	13	58	53	41
9	19	22	30	-3	133	133	33	-12	16	18	73*	13	13	20	95*	4	29	30	37	14	102	60	83
10	17	0	31*	-2	238	247	52	-11	20	7	62*		3, 12, l			5	15	19	64*	15	62	9	115*
11	63	67	19	-1	76	82	25	-10	71	74	28	-9	37	31	39	6	19	25	52*	16	52	8	140*
13	82	65	54	0	24	29	37	-9	29	29	40	-8	101	109	31	7	110	103	26	17	38	36	51
15	12	20	111*	1	130	143	32	-8	19	7	58*	-7	75	72	28	8	55	57	39		4, 2, l		
16	26	35	57*	2	116	109	30	-7	89	83	28	-6	12	12	91*		4, 0, l			-14	23	22	79*
17	5	2	287*	3	15	10	58*	-6	151	155	36	-5	23	6	123*	0	71	80	22	-13	14	19	127*
18	17	7	79*	4	32	34	23	-5	35	31	33	-4	23	14	49*	1	126	105	26	-12	19	3	45*
	3, 7, l			5	170	170	31	-4	0	7	3864*	-3	47	41	31	2	72	65	22	-11	71	73	23
-14	104	103	53	6	63	54	19	-3	76	78	27	-2	17	1	53*	3	24	27	37	-10	63	70	27
-13	62	69	55	7	64	64	19	-2	122	128	32	-1	65	67	28	4	200	204	37	-9	49	49	29
-12	82	90	27	8	58	66	20	-1	36	40	32	0	51	48	22	5	85	91	23	-8	162	163	38
-11	54	57	28	9	72	63	18	0	43	36	30	1	23	26	38*	6	119	124	26	-7	41	43	31
-10	11	16	78*	10	11	7	58*	1	21	20	47*	2	47	54	23	7	54	55	31	-6	30	29	38
-9	134	135	33	11	95	100	20	2	23	21	33	3	13	10	59*	8	75	90	36	-5	104	112	24
-8	63	43	55	12	25	23	30	3	34	36	26	4	18	11	41*	9	174	175	41	-4	27	32	37
-7	57	48	58	13	11	20	87*	4	74	56	21	5	60	64	22	10	176	188	34	-3	12	12	77*
-6	71	58	27	14	60	59	25	5	63	59	21	6	19	3	42*	11	139	141	28	-2	70	64	22
-5	175	167	40	15	15	17	96*	6	105	111	23	7	46	48	25	12	27	29	57*	-1	16	15	54*
-4	45	37	26	16	17	5	80*	7	179	181	33	8	25	23	39	13	9	4	144*	0	16	20	55*
-3	109	121	28		3, 9, l			8	11	21	68*	9	8	8	109*	14	64	23	127*	1	114	107	25
-2	117	119	29	-13	30	21	102*	9	50	46	23	10	26	21	39	15	65	73	38	2	130	133	26
-1	89	99	26	-12	35	27	36	10	12	22	69*	11	30	25	36	16	85	4	103	3	199	194	37
0	34	20	29	-11	55	51	30	11	8	9	95*	12	27	24	40	17	84	92	36	4	79	86	22
1	30	22	31	-10	71	72	28	12	17	14	50*		3, 13, l				4, 1, l			5	121	119	26
2	7	4	110*	-9	19	2	54*	13	11	6	105*	-7	36	40	39	-14	15	5	118*	6	6	11	189*
3	224	228	49	-8	39	32	31	14	23	25	53*	-6	34	35	92*	-13	64	64	24	7	114	121	26
4	17	23	48*	-7	126	129	32		3, 11, l			-5	36	33	37	-12	122	118	28	8	15	24	117*
5	81	80	19	-6	72	72	27	-11	13	2	92*	-4	48	53	32	-11	87	88	25	9	177	181	34
6	79	79	26	-5	150	166	36	-10	63	55	30	-3	18	6	59*	-10	89	88	25	10	44	40	27
8	63	54	25	-4	42	15	63	-9	42	35	33	-2	52	52	23	-9	127	133	27	11	148	138	35
9	15	22	40*	-3	18	22	51*	-8	90	92	29	-1	40	40	26	-8	51	40	27	12	65	74	39
10	192	192	35	-2	107	112	29	-7	132	133	34	0	57	65	23	-7	68	70	26	13	100	23	80
11	141	140	24	-1	87	81	28	-6	37	34	34	1	21	26	41*	-6	16	14	69*	14	70	37	111
12	18	15	35*	0	67	58	25	-5	51	58	30	2	80	81	22	-5	70	68	24	15	68	18	112
13	30	19	33	1	82	87	26	-4	38	33	75*	3	45	46	26	-4	15	8	66*	16	15	7	104*
14	54	42	39	2	160	166	37	-3	67	62	28	4	19	15	48*	-3	12	15	73*	17	15	11	107*
15	20	24	71*	3	96	103	28	-2	27	26	42	5	26	26	37	-2	103	107	24		4, 3, l		
16	50	50	36	4	199	204	36	-1	69	65	28	6	44	44	27	-1	101	104	27	-14	34	17	76*
17	19	18	78*	5	170	175	32	0	94	104	28	7	38	37	29	0	38	31	31	-13	59	58	52
	3, 8, l			6	122	113	25	1	46	49	23	8	81	79	24	1	154	144	30	-12	9	13	100*
-14	33	29	92*	7	65	63	20	2	12	4	63*	9	35	34	33	2	11	16	71*	-11	17	11	53*
-13	43	44	74*	8	42	39	23	3	11	8	66*	10	44	39	29	3	12	9	71*	-10	48	46	25
-12	13	14	80*	9	84	83	21	4	104	108	23		3, 14, l			4	134	129	27	-9	64	67	23

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	4, 3, l			15	7	45	884*	7	34	31	31	1	14	3	63*	1	75	82	28	-3	19	4	57*
-8	10	10	87*	16	14	6	126*	8	37	24	21	2	117	122	31	2	49	47	30	-2	33	25	41
-7	19	23	46*	17	84	81	42	9	96	95	21	3	12	25	77*	3	91	93	29	-1	19	2	54*
-6	37	32	33		4, 5, l			10	72	73	18	4	41	38	31	4	54	59	21	0	51	55	25
-5	138	139	28	-13	12	4	203*	11	79	82	19	5	49	32	34	5	16	21	46*	1	75	79	23
-4	158	152	31	-12	87	86	28	12	17	29	151*	6	37	7	24	6	22	18	36	2	8	16	116*
-3	65	67	23	-11	22	20	49*	13	49	51	27	7	82	84	21	7	30	32	31	3	11	4	77*
-2	53	54	24	-10	30	29	38	14	8	3	113*	8	2	2	312*	8	76	71	22	4	21	9	38*
-1	108	107	24	-9	36	37	33	15	21	26	86*	9	72	72	20	9	7	1	117*	5	96	97	24
0	19	17	51*	-8	115	119	30	16	35	32	58*	10	19	5	35*	10	31	25	31	6	81	77	24
1	12	9	66*	-7	89	97	27		4, 7, l			11	12	18	65*	11	8	1	99*	7	118	109	42
2	28	26	32	-5	84	89	26	-12	52	51	30	12	18	12	55*	12	47	36	33		5, 0, l		
3	32	38	29	-4	54	46	26	-11	79	83	29	13	16	7	63*	13	16	14	75*	0	14	5	68*
4	205	203	38	-3	145	147	34	-10	74	83	28	14	25	23	46*		4, 11, l			1	45	45	27
5	84	88	22	-2	35	33	31	-9	40	42	31	15	15	14	71*	-8	6	7	212*	2	47	43	27
6	39	38	24	-1	13	3	67*	-8	55	57	29		4, 9, l			-7	33	28	38	3	53	49	25
7	14	4	56*	0	133	139	32	-7	15	23	66*	-10	50	51	32	-6	76	89	29	4	5	10	214*
8	214	217	40	1	105	109	28	-6	69	66	27	-9	43	44	33	-5	118	127	32	5	178	177	34
9	65	68	28	2	2	5	346*	-5	59	60	27	-8	64	66	28	-4	45	48	32	6	42	36	27
10	72	70	24	3	13	18	65*	-4	78	75	27	-7	23	15	48*	-3	15	19	69*	7	44	42	27
13	56	14	118*	4	31	25	24	-3	162	170	38	-6	77	82	27	-2	40	42	33	8	34	41	37
14	22	12	75*	5	9	12	76*	-2	123	128	31	-5	85	89	29	-1	70	70	28	9	97	95	25
15	56	46	42	6	1	12	616*	-1	138	140	34	-4	7	8	133*	0	58	59	29	10	62	65	25
16	12	20	141*	7	14	10	63*	0	31	31	34	-3	81	79	28	1	69	76	29	11	40	40	28
17	46	46	47	8	83	82	51	1	113	114	30	-2	175	181	41	2	63	67	29		5, 1, l		
	4, 4, l			9	53	43	60	2	13	25	69*	-1	161	172	38	3	29	29	30	-11	54	58	48
-14	30	29	88*	10	133	131	26	3	76	81	26	0	21	28	50*	4	19	3	40*	-10	79	87	41
-13	26	0	99*	11	116	123	52	4	22	22	43*	1	137	142	34	5	114	118	25	-9	57	56	35
-12	18	24	55*	13	22	20	39*	5	155	166	37	2	24	29	44*	6	19	23	45*	-8	9	2	143*
-11	14	26	68*	15	9	3	189*	6	175	174	40	3	90	96	27	7	28	30	34	-7	8	17	134*
-10	16	26	60*	16	31	37	65*	7	21	15	31	4	46	47	31	8	20	4	40*	-6	38	35	34
-9	107	115	29		4, 6, l			8	30	29	26	5	64	60	20	9	72	70	22	-5	64	66	26
-8	65	70	26	-13	128	141	55	9	56	56	20	6	123	127	25	10	18	7	53*	-4	97	103	25
-7	87	84	27	-12	13	9	70*	10	19	11	36*	7	126	129	25	11	59	50	24	-3	38	42	33
-6	95	97	27	-11	6	3	162*	11	21	19	35	8	99	97	23		4, 12, l			-2	83	83	24
-5	98	93	27	-10	17	7	58*	12	34	25	33	9	38	37	26	-6	20	15	59*	-1	65	56	25
-4	24	23	40	-9	99	104	29	13	44	54	29	10	19	1	41*	-5	19	2	57*	0	77	76	24
-3	129	135	26	-8	92	95	28	14	2	7	463*	11	11	0	75*	-4	18	5	60*	1	84	85	24
-2	240	247	43	-7	168	173	39	15	12	5	229*	12	39	40	35	-3	96	98	30	2	75	72	24
-1	128	135	25	-6	114	118	30		4, 8, l			13	40	37	34	-2	17	26	60*	3	30	27	36
0	15	14	45*	-5	41	28	29	-11	21	29	52*	14	13	6	89*	-1	51	54	31	4	25	19	41
1	22	24	32	-4	25	20	40	-10	8	8	140*		4, 10, l			0	13	19	84*	5	73	75	23
2	179	174	33	-3	20	9	49*	-9	12	0	83*	-9	94	97	30	1	16	5	69*	6	22	25	46*
3	129	129	26	-2	118	119	30	-8	19	18	56*	-8	89	92	29	2	19	18	46*	7	44	46	35
4	130	139	26	-1	122	125	31	-7	73	72	28	-7	157	166	38	3	95	92	23	8	32	31	38
5	195	195	36	0	103	104	28	-6	106	118	29	-6	8	13	121*	4	27	32	35	9	56	59	27
6	46	46	24	1	162	168	38	-5	54	59	28	-5	35	33	36	5	13	19	62*	10	40	43	47
7	181	183	34	2	7	6	131*	-4	34	41	34	-4	17	16	62*	6	80	82	23		5, 2, l		
8	34	11	31	3	37	40	30	-3	195	207	44	-3	42	47	32	7	55	50	24	-11	15	16	71*
12	48	47	24	4	150	150	36	-2	73	70	27	-2	60	64	29	8	32	31	32	-10	18	10	62*
13	69	7	99	5	14	3	61*	-1	129	134	32	-1	17	16	60*	9	25	21	39	-9	67	71	33
14	46	47	43	6	67	73	29	0	151	149	36	0	86	95	28		4, 13, l			-8	86	83	31

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	5, 2, l			2	344	329	74	7	55	59	29		5, 9, l			6	40	35	37	4	50	41	31
-7	43	38	38	3	176	172	41	8	118	120	31	-6	87	81	30	7	23	25	56*	5	21	16	81*
-6	80	88	30	4	2	12	445*	9	116	112	24	-5	10	6	112*	8	14	3	114*	6	21	15	80*
-5	49	44	47	5	14	13	72*	10	54	60	20	-4	38	34	37	9	43	42	35	7	72	61	33
-4	100	99	30	6	51	44	30	11	13	15	50*	-3	51	52	32	10	77	73	28	8	16	1	89*
-3	84	83	24	7	56	59	28	12	40	36	27	-2	12	12	91*		6, 1, l			9	45	41	38
-2	63	63	25	8	89	94	27	13	26	22	35	-1	49	50	31	-6	14	3	138*	10	74	54	30
-1	26	13	42	9	14	23	73*		5, 7, l			0	73	65	29	-5	75	74	44	11	22	16	69*
0	39	38	31	10	51	44	28	-8	34	35	38	1	28	26	45	-4	70	67	45		6, 4, l		
1	14	7	73*		5, 5, l			-7	18	7	56*	2	44	45	39	-3	45	44	53	-5	48	43	34
2	51	58	26	-10	20	20	56*	-6	22	25	53*	3	17	5	59*	-2	17	3	115*	-4	7	2	173*
3	63	60	24	-9	35	37	36	-5	43	41	32	4	37	37	36	-1	20	28	104*	-3	25	9	49*
4	73	70	23	-8	21	21	54*	-4	17	6	60*	5	39	40	36	0	46	46	52	-2	38	36	44
5	36	35	31	-7	85	86	28	-3	72	71	28	6	62	59	30	1	36	31	61*	-1	43	38	36
6	153	149	31	-6	11	0	98*	-2	21	20	50*	7	11	4	65*	2	92	88	42	0	27	30	51*
7	81	81	25	-5	17	10	57*	-1	77	78	27	8	22	1	34	3	22	26	94*	1	118	106	33
8	50	46	28	-4	104	106	29	0	77	71	28	9	12	19	71*	4	18	16	105*	2	47	36	37
9	30	29	36	-3	28	33	40	1	27	30	43	10	30	32	31	5	61	56	31	3	33	32	47
	5, 3, l			-2	27	19	41	2	109	112	30	11	18	13	66*	6	37	33	39	4	9	11	157*
-11	19	2	55*	-1	74	81	27	3	5	17	214*		5, 10, l			7	60	59	30	5	28	24	55*
-10	68	75	28	0	20	15	50*	4	23	13	48*	-5	19	23	72*	8	16	9	82*	6	15	7	93*
-9	16	19	68*	1	10	17	98*	5	16	4	63*	-4	36	35	38	9	18	20	60*	7	30	31	49
-8	10	6	102*	2	128	133	32	6	97	91	29	-3	24	32	49*	10	19	17	52*	8	19	7	72*
-7	48	48	30	3	50	47	30	7	32	32	38	-2	46	45	33		6, 2, l			9	44	40	35
-6	15	10	98*	4	20	27	54*	8	25	20	30	-1	35	39	38	-6	13	14	163*	10	25	14	52*
-5	55	53	34	5	95	90	28	9	40	42	23	0	114	103	32	-5	67	72	45		6, 5, l		
-4	86	91	30	6	231	226	51	10	96	91	22	1	104	104	31	-4	13	4	160*	-5	4	12	275*
-3	100	92	31	7	35	29	34	11	22	13	32	2	28	20	43	-3	13	0	145*	-4	20	19	61*
-2	89	87	30	8	15	15	68*	12	36	35	30	3	5	5	212*	-2	13	6	135*	-3	18	18	65*
-1	33	27	47	9	39	39	21	13	23	5	33	4	49	48	33	-1	24	21	86*	-2	23	19	55*
0	84	81	31	10	19	7	35*		5, 8, l			5	34	38	38	0	12	13	165*	-1	15	7	82*
1	155	156	38	11	36	31	21	-8	8	6	164*	6	16	13	51*	1	35	36	47	0	5	14	236*
2	95	91	31	12	22	5	32	-7	20	16	54*	7	33	38	28	2	63	58	35	1	38	37	39
3	135	135	35	13	13	9	59*	-6	32	38	41	8	10	11	86*	3	57	46	35	2	63	60	31
4	118	124	26	14	44	50	75*	-5	9	5	123*	9	26	27	35	4	69	68	34	3	120	115	33
5	38	38	24		5, 6, l			-4	43	40	71		5, 11, l			5	64	60	34	4	16	5	74*
6	53	52	23	-9	47	44	32	-3	14	25	80*	-2	68	69	31	6	61	57	34	5	17	24	76*
7	39	40	27	-8	35	38	37	-2	21	24	51*	-1	75	69	30	7	16	7	87*	6	17	2	70*
9	105	102	36	-7	29	32	41	-1	77	75	28	0	51	49	33	9	23	10	76*	7	69	68	30
	5, 4, l			-6	33	39	38	0	14	13	77*	1	15	12	79*	10	53	45	38	8	18	1	65*
-10	37	37	35	-5	78	78	28	1	103	99	30	2	19	21	65*	11	16	8	92*	9	21	16	61*
-9	24	26	48*	-4	30	28	40	2	64	61	28	3	65	63	31		6, 3, l			10	9	6	130*
-8	26	23	47*	-3	59	53	28	3	16	8	63*	4	18	18	70*	-6	17	22	77*		6, 6, l		
-7	51	53	30	-2	139	140	34	4	55	52	29	5	14	19	59*	-5	34	37	47	-4	19	0	54*
-6	140	146	34	-1	30	36	37	5	89	87	29	6	12	15	71*	-4	17	19	64*	-3	18	14	63*
-5	52	55	28	0	109	108	30	6	21	8	55*		6, 0, l			-3	30	31	55*	-2	19	11	58*
-4	43	35	30	1	60	64	28	7	53	56	21	0	15	15	93*	-2	29	22	58*	-1	56	48	32
-3	47	50	29	2	147	147	36	8	93	89	23	1	28	24	57*	-1	59	56	36	0	71	67	30
-2	64	63	27	3	26	23	42	9	37	36	26	2	53	46	34	0	14	4	106*	1	112	107	32
-1	83	78	27	4	30	33	39	10	1	3	596*	3	56	48	32	1	27	20	59*	2	18	14	66*
0	15	6	62*	5	88	89	28	11	9	14	87*	4	30	29	47	2	57	52	36	3	21	20	62*
1	86	76	27	6	54	48	29	12	17	11	60*	5	25	23	53*	3	120	120	34	4	59	56	30

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Columns are 10Fo 10Fc 100Sig, * for Insignificant

l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig	l	kFo	Fc	Sig
	6,	6, l		8	11	17	101*	-1	19	21	65*	3	87	79	30	7	11	2	101*	2	23	27	53*
5	30	29	45	9	37	40	23	0	59	55	32	4	75	69	29		6,	8, l		3	45	49	34
6	34	34	41		6,	7, l		1	75	67	30	5	22	14	59*	0	90	91	36	4	19	11	59*
7	49	47	33	-2	20	16	60*	2	24	21	51*	6	26	22	49*	1	18	1	66*	5	2	1	525*