| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8 | 0 | 31.552 | 30.642 | 30.639 | .367 | .910 | 3.2626 | 1.0000 | |
| 1 | 8 | 1 | 1.169 * | .811 | .810 | -.049 | .358 | .4287 | 1.0000 | * ** |
| 1 | 8 | 2 | 12.654 | 12.464 | -12.459 | -.355 | .190 | 1.2033 | 1.0000 | |
| 1 | 8 | 3 | 1.170 * | .129 | .120 | .046 | 1.042 | 1.2459 | 1.0000 | * ** |
| 1 | 8 | 4 | 21.502 | 22.337 | 22.334 | .322 | -.835 | -4.1512 | 1.0000 | |
| 1 | 8 | 5 | 1.653 * | .842 | .841 | -.040 | .811 | 1.1357 | 1.0000 | * ** |
| 1 | 8 | 6 | 7.402 | 7.484 | -7.479 | -.273 | -.082 | -.4284 | 1.0000 | |
| 1 | 9 | 0 | 29.668 | 29.690 | 29.687 | .394 | -.022 | -.0696 | 1.0000 | |
| 1 | 9 | 1 | 1.215 * | .376 | -.376 | -.014 | .839 | .9670 | 1.0000 | * ** |
| 1 | 9 | 2 | 10.004 | 10.025 | 10.025 | -.029 | -.021 | -.1403 | 1.0000 | |
| 1 | 9 | 3 | 1.261 * | .719 | .719 | .015 | .542 | .6019 | 1.0000 | * ** |
| 1 | 9 | 4 | 22.000 | 22.289 | 22.287 | .347 | -.289 | -1.3564 | 1.0000 | |
| 1 | 9 | 5 | 1.311 * | .215 | .215 | -.009 | 1.096 | 1.1701 | 1.0000 | * ** |
| 1 | 10 | 0 | 18.509 | 17.863 | -17.863 | -.131 | .646 | 3.3540 | 1.0000 | |
| 1 | 10 | 1 | 2.809 | 3.478 | 3.478 | -.031 | -.669 | -1.4795 | 1.0000 | |
| 1 | 10 | 2 | 5.356 | 5.572 | 5.571 | .127 | -.216 | -.8769 | 1.0000 | |
| 1 | 10 | 3 | 3.307 | 2.732 | -2.732 | .030 | .575 | 1.5228 | 1.0000 | |
| 1 | 10 | 4 | 13.466 | 13.428 | -13.428 | -.115 | .040 | .2847 | 1.0000 | |
| 1 | 11 | 0 | 5.507 | 4.966 | 4.963 | .183 | .540 | 2.0905 | 1.0000 | |
| 1 | 11 | 1 | 2.811 * | 2.676 | -2.676 | -.030 | .135 | .2800 | 1.0000 | * ** |
| 1 | 11 | 2 | 1.359 * | 1.880 | 1.877 | .109 | -.522 | -.5377 | 1.0000 | * ** |
| 2 | 0 | 0 | 33.948 | 32.254 | 32.254 | .101 | 1.694 | 11.9530 | 1.0000 | |
| 2 | 0 | 2 | 44.973 | 44.419 | 44.416 | .436 | .554 | 3.5093 | 1.0000 | |
| 2 | 0 | 4 | 15.671 | 15.444 | 15.444 | .089 | .227 | 1.1458 | 1.0000 | |
| 2 | 0 | 6 | 25.717 | 24.542 | 24.539 | .338 | 1.175 | 4.0084 | 1.0000 | |
| 2 | 0 | 8 | 4.882 | 4.188 | 4.188 | .063 | .694 | 2.5667 | 1.0000 | |
| 2 | 1 | 0 | 90.732 | 92.889 | -92.887 | -.500 | -2.157 | -17.0435 | 1.0000 | |
| 2 | 1 | 1 | 6.961 | 6.916 | -6.916 | -.028 | .045 | .1808 | 1.0000 | |
| 2 | 1 | 2 | 4.895 | 1.230 | -1.131 | .484 | 3.666 | 19.7035 | 1.0000 | |
| 2 | 1 | 3 | 5.808 | 5.713 | 5.713 | .027 | .095 | .5135 | 1.0000 | |
| 2 | 1 | 4 | 50.533 | 51.319 | -51.317 | -.439 | -.786 | -3.6316 | 1.0000 | |
| 2 | 1 | 5 | 1.652 * | 1.102 | -1.102 | -.024 | .549 | 1.0873 | 1.0000 | * ** |
| 2 | 1 | 6 | 10.988 | 10.464 | 10.457 | .372 | .525 | 3.4641 | 1.0000 | |
| 2 | 1 | 7 | 2.813 | 2.638 | 2.637 | .023 | .176 | .4515 | 1.0000 | |
| 2 | 1 | 8 | 19.302 | 18.687 | -18.684 | -.296 | .615 | 3.1062 | 1.0000 | |
| 2 | 2 | 0 | 61.460 | 60.285 | 60.284 | .340 | 1.175 | 8.2277 | 1.0000 | |
| 2 | 2 | 1 | 4.527 | 5.013 | 5.013 | .055 | -.486 | -2.0070 | 1.0000 | |
| 2 | 2 | 2 | 13.787 | 13.396 | 13.394 | .194 | .392 | 1.7087 | 1.0000 | |
| 2 | 2 | 3 | 4.074 | 3.871 | -3.871 | -.051 | .203 | .9210 | 1.0000 | |
| 2 | 2 | 4 | 34.536 | 34.574 | 34.572 | .299 | -.038 | -.1620 | 1.0000 | |
| 2 | 2 | 5 | 3.625 | 2.896 | 2.896 | .046 | .728 | 3.0610 | 1.0000 | |
| 2 | 2 | 6 | 10.154 | 9.965 | 9.964 | .151 | .189 | 1.2057 | 1.0000 | |
| 2 | 2 | 7 | 1.492 * | 1.981 | -1.981 | -.037 | -.490 | -.6619 | 1.0000 | * ** |
| 2 | 2 | 8 | 12.358 | 12.152 | 12.150 | .205 | .206 | 1.2930 | 1.0000 | |
| 2 | 3 | 0 | 62.353 | 58.608 | 58.608 | -.108 | 3.746 | 23.2407 | 1.0000 | |
| 2 | 3 | 1 | 14.253 | 13.251 | -13.251 | .067 | 1.002 | 6.2574 | 1.0000 | |
| 2 | 3 | 2 | 8.874 | 8.309 | 8.308 | .105 | .565 | 3.4572 | 1.0000 | |
| 2 | 3 | 3 | 4.153 | 4.323 | 4.323 | -.063 | -.170 | -.7595 | 1.0000 | |
| 2 | 3 | 4 | 23.556 | 25.991 | 25.990 | -.094 | -2.435 | -9.4588 | 1.0000 | |
| 2 | 3 | 5 | 5.776 | 6.165 | -6.165 | .059 | -.389 | -2.3208 | 1.0000 | |
| 2 | 3 | 6 | 4.436 | 4.059 | 4.058 | .080 | .377 | 1.6605 | 1.0000 | |
| 2 | 3 | 7 | 2.537 * | 1.526 | -1.525 | -.049 | 1.011 | 2.2156 | 1.0000 | * ** |
| 2 | 3 | 8 | 8.332 | 7.800 | 7.800 | -.064 | .532 | 2.9786 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 4 | 0 | 57.517 | 56.310 | 56.309 | .361 | 1.207 | 6.5649 | 1.0000 | |
| 2 | 4 | 1 | 4.933 | 4.892 | -4.892 | -.050 | .041 | .1972 | 1.0000 | |
| 2 | 4 | 2 | 4.933 | 5.147 | 5.146 | .141 | -.214 | -.9253 | 1.0000 | |
| 2 | 4 | 3 | 4.569 | 4.222 | 4.222 | .048 | .347 | 1.5788 | 1.0000 | |
| 2 | 4 | 4 | 34.683 | 35.356 | 35.355 | .318 | -.673 | -2.6922 | 1.0000 | |
| 2 | 4 | 5 | 3.274 | 2.845 | -2.844 | -.041 | .430 | 1.5273 | 1.0000 | |
| 2 | 4 | 6 | 5.167 | 5.120 | 5.119 | .110 | .047 | .2246 | 1.0000 | |
| 2 | 4 | 7 | 1.286 * | 2.174 | 2.173 | .036 | -.888 | -.9654 | 1.0000 | * ** |
| 2 | 4 | 8 | 13.562 | 13.035 | 13.033 | .217 | .528 | 3.1676 | 1.0000 | |
| 2 | 5 | 0 | 48.042 | 47.842 | 47.839 | .519 | .201 | .9573 | 1.0000 | |
| 2 | 5 | 1 | 11.419 | 10.984 | -10.984 | -.053 | .435 | 2.2345 | 1.0000 | |
| 2 | 5 | 2 | 71.745 | 73.360 | -73.358 | -.502 | -1.615 | -7.4279 | 1.0000 | |
| 2 | 5 | 3 | 12.695 | 13.211 | 13.211 | .050 | -.516 | -3.1396 | 1.0000 | |
| 2 | 5 | 4 | 33.231 | 34.641 | 34.638 | .455 | -1.410 | -5.2573 | 1.0000 | |
| 2 | 5 | 5 | 2.107 * | 2.480 | -2.480 | -.043 | -.373 | -.8210 | 1.0000 | * ** |
| 2 | 5 | 6 | 35.301 | 35.620 | -35.618 | -.386 | -.319 | -1.0177 | 1.0000 | |
| 2 | 5 | 7 | 7.784 | 7.415 | 7.415 | .037 | .369 | 2.0431 | 1.0000 | |
| 2 | 6 | 0 | 21.320 | 20.807 | 20.807 | .089 | .513 | 1.8586 | 1.0000 | |
| 2 | 6 | 1 | 1.731 * | 1.786 | -1.786 | -.004 | -.055 | -.0993 | 1.0000 | * ** |
| 2 | 6 | 2 | 21.725 | 21.272 | 21.269 | .356 | .454 | 2.3838 | 1.0000 | |
| 2 | 6 | 3 | 1.605 * | 1.510 | 1.510 | .005 | .095 | .1753 | 1.0000 | * ** |
| 2 | 6 | 4 | 12.991 | 13.013 | 13.012 | .079 | -.021 | -.1422 | 1.0000 | |
| 2 | 6 | 5 | 1.185 * | .949 | -.949 | -.002 | .236 | .2790 | 1.0000 | * ** |
| 2 | 6 | 6 | 12.248 | 13.015 | 13.012 | .275 | -.766 | -4.8196 | 1.0000 | |
| 2 | 6 | 7 | 1.313 * | .762 | .762 | .005 | .551 | .5881 | 1.0000 | * ** |
| 2 | 7 | 0 | 17.228 | 16.638 | -16.636 | -.268 | .590 | 3.3669 | 1.0000 | |
| 2 | 7 | 1 | 1.452 * | .103 | .102 | -.019 | 1.348 | 2.1307 | 1.0000 | * ** |
| 2 | 7 | 2 | 27.809 | 27.986 | 27.985 | .260 | -.177 | -.6405 | 1.0000 | |
| 2 | 7 | 3 | 4.037 | 3.993 | -3.993 | .019 | .043 | .1751 | 1.0000 | |
| 2 | 7 | 4 | 12.759 | 12.680 | -12.678 | -.235 | .079 | .5338 | 1.0000 | |
| 2 | 7 | 5 | 3.414 | 3.019 | -3.019 | -.017 | .394 | 1.1687 | 1.0000 | |
| 2 | 7 | 6 | 14.824 | 15.110 | 15.108 | .200 | -.286 | -1.6521 | 1.0000 | |
| 2 | 8 | 0 | 23.718 | 23.623 | 23.622 | .211 | .095 | .4451 | 1.0000 | |
| 2 | 8 | 1 | 1.185 * | 1.492 | 1.491 | .047 | -.307 | -.3622 | 1.0000 | * ** |
| 2 | 8 | 2 | 8.959 | 8.610 | 8.608 | .177 | .350 | 2.4669 | 1.0000 | |
| 2 | 8 | 3 | 1.196 * | 1.280 | -1.280 | -.043 | -.084 | -.0983 | 1.0000 | * ** |
| 2 | 8 | 4 | 16.661 | 16.625 | 16.624 | .186 | .037 | .1958 | 1.0000 | |
| 2 | 8 | 5 | 1.302 * | 1.214 | 1.213 | .041 | .088 | .0947 | 1.0000 | * ** |
| 2 | 8 | 6 | 5.699 | 5.360 | 5.359 | .138 | .339 | 1.4044 | 1.0000 | |
| 2 | 9 | 0 | 21.298 | 21.204 | -21.203 | -.212 | .094 | .3962 | 1.0000 | |
| 2 | 9 | 1 | 8.768 | 8.664 | 8.664 | .075 | .103 | .6867 | 1.0000 | |
| 2 | 9 | 2 | 16.880 | 16.837 | 16.836 | .206 | .042 | .2547 | 1.0000 | |
| 2 | 9 | 3 | 4.823 | 4.567 | -4.567 | -.071 | .256 | .9896 | 1.0000 | |
| 2 | 9 | 4 | 15.399 | 15.868 | -15.867 | -.186 | -.469 | -2.7439 | 1.0000 | |
| 2 | 9 | 5 | 8.725 | 8.518 | 8.518 | .064 | .207 | 1.1906 | 1.0000 | |
| 2 | 10 | 0 | 18.075 | 17.816 | 17.814 | .254 | .259 | 1.3142 | 1.0000 | |
| 2 | 10 | 1 | 3.185 | 1.995 | -1.995 | -.034 | 1.190 | 3.0317 | 1.0000 | |
| 2 | 10 | 2 | 1.328 * | 1.483 | 1.481 | .070 | -.154 | -.1627 | 1.0000 | * ** |
| 2 | 10 | 3 | 1.348 * | 1.907 | 1.907 | .034 | -.560 | -.5815 | 1.0000 | * ** |
| 2 | 10 | 4 | 13.060 | 13.176 | 13.174 | .224 | -.117 | -.7648 | 1.0000 | |
| 2 | 11 | 0 | 13.844 | 13.501 | 13.497 | .320 | .343 | 2.0310 | 1.0000 | |
| 2 | 11 | 1 | 1.714 * | .387 | -.384 | -.046 | 1.327 | 1.6694 | 1.0000 | * ** |
| 2 | 11 | 2 | 14.920 | 14.529 | -14.525 | -.310 | .391 | 2.3795 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 0 | 1 | 5.325 | 5.345 | 5.345 | -.030 | -.020 | -.0945 | 1.0000 | |
| 3 | 0 | 3 | 5.303 | 5.038 | 5.038 | .029 | .265 | 1.2315 | 1.0000 | |
| 3 | 0 | 5 | 4.279 | 4.500 | 4.500 | -.023 | -.221 | -1.0341 | 1.0000 | |
| 3 | 0 | 7 | 4.759 | 4.886 | 4.886 | .020 | -.127 | -.4962 | 1.0000 | |
| 3 | 1 | 0 | 12.886 | 15.847 | 15.836 | .584 | -2.961 | -13.0970 | 1.0000 | |
| 3 | 1 | 1 | 4.103 | 4.313 | -4.312 | -.085 | -.210 | -.9486 | 1.0000 | |
| 3 | 1 | 2 | 36.999 | 35.512 | 35.512 | -.045 | 1.488 | 8.1376 | 1.0000 | |
| 3 | 1 | 3 | 3.077 | 2.872 | -2.870 | .080 | .206 | .7174 | 1.0000 | |
| 3 | 1 | 4 | 23.668 | 22.415 | 22.409 | .513 | 1.253 | 4.8897 | 1.0000 | |
| 3 | 1 | 5 | 6.774 | 6.838 | -6.838 | -.072 | -.064 | -.4343 | 1.0000 | |
| 3 | 1 | 6 | 10.338 | 10.132 | 10.132 | -.032 | .206 | 1.2531 | 1.0000 | |
| 3 | 1 | 7 | 1.268 * | 1.733 | -1.732 | .061 | -.466 | -.5142 | 1.0000 | * ** |
| 3 | 1 | 8 | 11.533 | 11.551 | 11.546 | .349 | -.018 | -.1179 | 1.0000 | |
| 3 | 2 | 0 | 29.095 | 28.839 | 28.838 | .198 | .256 | 1.4502 | 1.0000 | |
| 3 | 2 | 1 | 4.573 | 4.462 | 4.462 | .007 | .111 | .5083 | 1.0000 | |
| 3 | 2 | 2 | 37.575 | 37.533 | -37.532 | -.192 | .042 | .2197 | 1.0000 | |
| 3 | 2 | 3 | 9.569 | 8.868 | -8.868 | -.005 | .701 | 3.9026 | 1.0000 | |
| 3 | 2 | 4 | 18.191 | 18.645 | 18.644 | .174 | -.454 | -2.2954 | 1.0000 | |
| 3 | 2 | 5 | 2.404 | 2.269 | -2.269 | .006 | .135 | .3600 | 1.0000 | |
| 3 | 2 | 6 | 16.326 | 16.256 | -16.255 | -.147 | .070 | .3995 | 1.0000 | |
| 3 | 2 | 7 | 4.597 | 4.600 | -4.600 | -.002 | -.003 | -.0099 | 1.0000 | |
| 3 | 2 | 8 | 8.041 | 7.514 | 7.513 | .117 | .527 | 2.8667 | 1.0000 | |
| 3 | 3 | 0 | 33.246 | 33.119 | -33.117 | -.282 | .127 | .6757 | 1.0000 | |
| 3 | 3 | 1 | 4.147 | 4.612 | 4.612 | .009 | -.465 | -1.9028 | 1.0000 | |
| 3 | 3 | 2 | 100.368 | 102.008 | 102.005 | .772 | -1.639 | -8.5154 | 1.0000 | |
| 3 | 3 | 3 | 2.130 * | 1.433 | 1.433 | -.007 | .697 | 1.6265 | 1.0000 | * ** |
| 3 | 3 | 4 | 20.269 | 21.065 | -21.063 | -.246 | -.796 | -4.0447 | 1.0000 | |
| 3 | 3 | 5 | 4.627 | 4.923 | 4.923 | .007 | -.296 | -1.4047 | 1.0000 | |
| 3 | 3 | 6 | 47.110 | 47.990 | 47.987 | .596 | -.880 | -3.0029 | 1.0000 | |
| 3 | 3 | 7 | 2.401 * | 2.554 | 2.554 | -.004 | -.153 | -.3025 | 1.0000 | * ** |
| 3 | 3 | 8 | 8.523 | 8.058 | -8.056 | -.164 | .465 | 2.5764 | 1.0000 | |
| 3 | 4 | 0 | 7.041 | 5.304 | 5.302 | -.137 | 1.737 | 7.4703 | 1.0000 | |
| 3 | 4 | 1 | 6.445 | 6.657 | 6.657 | .026 | -.211 | -.9258 | 1.0000 | |
| 3 | 4 | 2 | 14.291 | 14.039 | 14.038 | .133 | .253 | 1.1917 | 1.0000 | |
| 3 | 4 | 3 | 1.368 * | .666 | -.666 | -.023 | .702 | 1.0402 | 1.0000 | * ** |
| 3 | 4 | 4 | 2.137 * | .898 | .890 | -.120 | 1.240 | 3.0975 | 1.0000 | * ** |
| 3 | 4 | 5 | 5.934 | 5.625 | 5.625 | .022 | .308 | 1.7490 | 1.0000 | |
| 3 | 4 | 6 | 6.601 | 6.699 | 6.698 | .102 | -.098 | -.5327 | 1.0000 | |
| 3 | 4 | 7 | 2.581 * | 1.942 | 1.942 | -.015 | .639 | 1.3609 | 1.0000 | * ** |
| 3 | 5 | 0 | 28.539 | 26.969 | 26.967 | .348 | 1.569 | 6.5061 | 1.0000 | |
| 3 | 5 | 1 | 3.721 | 2.805 | -2.804 | .079 | .915 | 3.4406 | 1.0000 | |
| 3 | 5 | 2 | 2.224 * | .667 | -.656 | .122 | 1.557 | 3.6631 | 1.0000 | * ** |
| 3 | 5 | 3 | 1.096 * | .901 | -.898 | -.073 | .195 | .2492 | 1.0000 | * ** |
| 3 | 5 | 4 | 20.712 | 21.161 | 21.158 | .307 | -.449 | -2.0950 | 1.0000 | |
| 3 | 5 | 5 | 1.814 * | 2.043 | -2.042 | .068 | -.229 | -.4192 | 1.0000 | * ** |
| 3 | 5 | 6 | 1.600 * | .200 | -.176 | .095 | 1.400 | 1.9516 | 1.0000 | * ** |
| 3 | 5 | 7 | 2.774 | 2.245 | -2.245 | -.055 | .529 | 1.1590 | 1.0000 | |
| 3 | 6 | 0 | 16.935 | 17.272 | -17.272 | -.077 | -.337 | -1.5572 | 1.0000 | |
| 3 | 6 | 1 | 1.135 * | 1.031 | -1.031 | -.016 | .104 | .1280 | 1.0000 | * ** |
| 3 | 6 | 2 | 2.250 * | 1.306 | -1.304 | .075 | .944 | 2.4171 | 1.0000 | * ** |
| 3 | 6 | 3 | 1.150 * | 1.105 | -1.105 | .015 | .044 | .0539 | 1.0000 | * ** |
| 3 | 6 | 4 | 10.923 | 11.246 | -11.245 | -.067 | -.322 | -2.0552 | 1.0000 | |
| 3 | 6 | 5 | 2.944 | 2.347 | -2.347 | -.011 | .597 | 1.6143 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 6 | 6 | 1.289 * | .220 | -.212 | .057 | 1.070 | 1.1619 | 1.0000 | * ** |
| 3 | 6 | 7 | 1.446 * | 1.403 | -1.403 | .011 | .043 | .0475 | 1.0000 | * ** |
| 3 | 7 | 0 | 60.424 | 59.855 | 59.852 | .571 | .569 | 2.2005 | 1.0000 | |
| 3 | 7 | 1 | 10.584 | 10.379 | -10.379 | -.088 | .205 | 1.3522 | 1.0000 | |
| 3 | 7 | 2 | 6.173 | 5.987 | -5.985 | -.148 | .186 | 1.0766 | 1.0000 | |
| 3 | 7 | 3 | 9.808 | 9.974 | 9.974 | .084 | -.166 | -1.0519 | 1.0000 | |
| 3 | 7 | 4 | 42.621 | 43.520 | 43.517 | .502 | -.899 | -2.9562 | 1.0000 | |
| 3 | 7 | 5 | 6.213 | 5.933 | -5.932 | -.072 | .280 | 1.3559 | 1.0000 | |
| 3 | 7 | 6 | 4.511 | 4.534 | -4.532 | -.112 | -.022 | -.0752 | 1.0000 | |
| 3 | 8 | 0 | 14.440 | 14.438 | 14.438 | .157 | .001 | .0068 | 1.0000 | |
| 3 | 8 | 1 | 1.752 * | 3.020 | 3.020 | -.014 | -1.268 | -2.1013 | 1.0000 | * ** |
| 3 | 8 | 2 | 1.801 * | .364 | .332 | -.151 | 1.437 | 2.5059 | 1.0000 | * ** |
| 3 | 8 | 3 | 1.244 * | 1.475 | -1.475 | .014 | -.231 | -.2600 | 1.0000 | * ** |
| 3 | 8 | 4 | 10.472 | 10.530 | 10.529 | .137 | -.058 | -.4036 | 1.0000 | |
| 3 | 8 | 5 | 2.306 * | 2.401 | 2.401 | -.011 | -.095 | -.1729 | 1.0000 | * ** |
| 3 | 9 | 0 | 16.068 | 15.937 | -15.936 | -.149 | .131 | .6716 | 1.0000 | |
| 3 | 9 | 1 | 1.646 * | .202 | -.202 | .007 | 1.444 | 2.0640 | 1.0000 | * ** |
| 3 | 9 | 2 | 24.613 | 24.940 | 24.936 | .486 | -.327 | -1.3438 | 1.0000 | |
| 3 | 9 | 3 | 1.906 * | .363 | .363 | -.005 | 1.543 | 2.4221 | 1.0000 | * ** |
| 3 | 9 | 4 | 11.705 | 11.482 | -11.481 | -.130 | .223 | 1.4324 | 1.0000 | |
| 3 | 9 | 5 | 2.492 * | .250 | -.250 | .007 | 2.242 | 4.3099 | 1.0000 | * ** |
| 3 | 10 | 0 | 10.990 | 10.617 | -10.617 | -.040 | .373 | 2.1166 | 1.0000 | |
| 3 | 10 | 1 | 4.978 | 4.490 | 4.490 | .018 | .487 | 1.7807 | 1.0000 | |
| 3 | 10 | 2 | 2.559 * | .292 | -.289 | .040 | 2.267 | 4.4789 | 1.0000 | * ** |
| 3 | 10 | 3 | 4.518 | 3.869 | -3.869 | -.016 | .649 | 2.1663 | 1.0000 | |
| 3 | 11 | 0 | 6.399 | 6.343 | 6.342 | .102 | .056 | .2331 | 1.0000 | |
| 3 | 11 | 1 | 5.153 | 4.962 | 4.962 | .073 | .190 | .6695 | 1.0000 | |
| 4 | 0 | 0 | 76.512 | 74.970 | -74.970 | -.240 | 1.542 | 8.9642 | 1.0000 | |
| 4 | 0 | 2 | 67.193 | 66.558 | 66.554 | .741 | .634 | 3.3137 | 1.0000 | |
| 4 | 0 | 4 | 42.153 | 43.308 | -43.307 | -.209 | -1.155 | -4.7867 | 1.0000 | |
| 4 | 0 | 6 | 38.378 | 37.515 | 37.511 | .572 | .863 | 2.9113 | 1.0000 | |
| 4 | 0 | 8 | 17.356 | 16.590 | -16.590 | -.138 | .765 | 3.9313 | 1.0000 | |
| 4 | 1 | 0 | 21.736 | 21.948 | 21.946 | .266 | -.211 | -1.0237 | 1.0000 | |
| 4 | 1 | 1 | 2.308 | 2.314 | -2.314 | .057 | -.006 | -.0167 | 1.0000 | |
| 4 | 1 | 2 | 20.524 | 20.716 | -20.714 | -.257 | -.192 | -.8147 | 1.0000 | |
| 4 | 1 | 3 | 1.148 * | .638 | .636 | -.052 | .510 | .6217 | 1.0000 | * ** |
| 4 | 1 | 4 | 16.264 | 16.293 | 16.292 | .233 | -.029 | -.1375 | 1.0000 | |
| 4 | 1 | 5 | 1.154 * | .905 | .904 | .049 | .249 | .3017 | 1.0000 | * ** |
| 4 | 1 | 6 | 11.556 | 11.290 | -11.288 | -.198 | .266 | 1.6867 | 1.0000 | |
| 4 | 1 | 7 | 1.476 * | 1.047 | -1.047 | -.037 | .429 | .5197 | 1.0000 | * ** |
| 4 | 1 | 8 | 7.228 | 6.928 | 6.926 | .158 | .301 | 1.4413 | 1.0000 | |
| 4 | 2 | 0 | 75.863 | 73.806 | 73.805 | .445 | 2.057 | 11.2516 | 1.0000 | |
| 4 | 2 | 1 | 1.368 * | 1.810 | -1.810 | .016 | -.442 | -.7240 | 1.0000 | * ** |
| 4 | 2 | 2 | 35.621 | 35.979 | 35.979 | .067 | -.358 | -1.6469 | 1.0000 | |
| 4 | 2 | 3 | 1.167 * | .960 | -.960 | -.015 | .207 | .2506 | 1.0000 | * ** |
| 4 | 2 | 4 | 45.842 | 45.961 | 45.959 | .392 | -.118 | -.4814 | 1.0000 | |
| 4 | 2 | 5 | 2.203 * | 1.954 | -1.954 | .016 | .249 | .5652 | 1.0000 | * ** |
| 4 | 2 | 6 | 15.576 | 15.489 | 15.489 | .054 | .088 | .4746 | 1.0000 | |
| 4 | 2 | 7 | 1.867 * | 1.841 | -1.841 | -.014 | .026 | .0392 | 1.0000 | * ** |
| 4 | 2 | 8 | 17.958 | 16.738 | 16.736 | .267 | 1.220 | 7.0047 | 1.0000 | |
| 4 | 3 | 0 | 5.332 | 3.698 | -3.698 | .048 | 1.635 | 6.6571 | 1.0000 | |
| 4 | 3 | 1 | 11.099 | 11.133 | -11.133 | -.107 | -.035 | -.1782 | 1.0000 | |
| 4 | 3 | 2 | 5.352 | 4.101 | 4.100 | -.046 | 1.251 | 5.5887 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 3 | 3 | 9.207 | 9.088 | 9.087 | .102 | .119 | .6926 | 1.0000 | |
| 4 | 3 | 4 | 2.708 | 1.611 | -1.611 | .042 | 1.097 | 3.2613 | 1.0000 | |
| 4 | 3 | 5 | 5.615 | 5.909 | -5.909 | -.088 | -.295 | -1.5299 | 1.0000 | |
| 4 | 3 | 6 | 1.961 * | 1.274 | 1.273 | -.036 | .687 | 1.2100 | 1.0000 | * ** |
| 4 | 3 | 7 | 4.000 | 4.079 | 4.079 | .077 | -.079 | -.2458 | 1.0000 | |
| 4 | 4 | 0 | 54.257 | 54.466 | 54.463 | .569 | -.208 | -.9637 | 1.0000 | |
| 4 | 4 | 1 | 2.820 | 2.153 | -2.152 | -.035 | .667 | 1.6533 | 1.0000 | |
| 4 | 4 | 2 | 32.934 | 34.526 | -34.526 | -.083 | -1.592 | -6.5411 | 1.0000 | |
| 4 | 4 | 3 | 5.298 | 5.606 | 5.606 | .035 | -.308 | -1.7270 | 1.0000 | |
| 4 | 4 | 4 | 38.298 | 38.488 | 38.485 | .500 | -.190 | -.7043 | 1.0000 | |
| 4 | 4 | 5 | 1.180 * | .808 | .807 | -.030 | .373 | .4421 | 1.0000 | * ** |
| 4 | 4 | 6 | 14.764 | 14.618 | -14.618 | -.062 | .146 | .8822 | 1.0000 | |
| 4 | 4 | 7 | 4.669 | 4.506 | 4.506 | .028 | .163 | .5714 | 1.0000 | |
| 4 | 5 | 0 | 28.671 | 28.260 | -28.258 | -.271 | .411 | 1.6172 | 1.0000 | |
| 4 | 5 | 1 | 1.171 * | 1.108 | 1.107 | .046 | .064 | .0762 | 1.0000 | * ** |
| 4 | 5 | 2 | 24.311 | 24.068 | 24.066 | .263 | .243 | .8905 | 1.0000 | |
| 4 | 5 | 3 | 1.142 * | 1.392 | -1.392 | -.042 | -.250 | -.3062 | 1.0000 | * ** |
| 4 | 5 | 4 | 20.739 | 20.200 | -20.198 | -.238 | .539 | 2.4560 | 1.0000 | |
| 4 | 5 | 5 | 2.341 * | 1.497 | 1.497 | .039 | .843 | 1.8882 | 1.0000 | * ** |
| 4 | 5 | 6 | 13.242 | 13.259 | 13.258 | .203 | -.017 | -.1013 | 1.0000 | |
| 4 | 5 | 7 | 1.341 * | 1.257 | -1.257 | -.029 | .084 | .0876 | 1.0000 | * ** |
| 4 | 6 | 0 | 14.087 | 14.564 | 14.563 | -.169 | -.477 | -2.8465 | 1.0000 | |
| 4 | 6 | 1 | 4.112 | 4.853 | -4.852 | .024 | -.740 | -3.0966 | 1.0000 | |
| 4 | 6 | 2 | 39.822 | 38.885 | 38.880 | .584 | .937 | 3.5089 | 1.0000 | |
| 4 | 6 | 3 | 1.181 * | .343 | .343 | -.021 | .838 | .9929 | 1.0000 | * ** |
| 4 | 6 | 4 | 7.907 | 8.154 | 8.152 | -.147 | -.247 | -1.6088 | 1.0000 | |
| 4 | 6 | 5 | 5.807 | 5.322 | -5.322 | .020 | .486 | 2.2337 | 1.0000 | |
| 4 | 6 | 6 | 21.617 | 21.948 | 21.943 | .451 | -.330 | -1.4899 | 1.0000 | |
| 4 | 7 | 0 | 14.012 | 13.914 | 13.913 | .157 | .099 | .5468 | 1.0000 | |
| 4 | 7 | 1 | 1.193 * | .087 | .067 | .055 | 1.106 | 1.2974 | 1.0000 | * ** |
| 4 | 7 | 2 | 10.698 | 10.550 | -10.549 | -.151 | .148 | .9767 | 1.0000 | |
| 4 | 7 | 3 | 1.212 * | .306 | -.302 | -.051 | .907 | 1.0463 | 1.0000 | * ** |
| 4 | 7 | 4 | 9.646 | 10.011 | 10.010 | .138 | -.365 | -2.4970 | 1.0000 | |
| 4 | 7 | 5 | 1.312 * | .764 | .763 | .048 | .548 | .5843 | 1.0000 | * ** |
| 4 | 7 | 6 | 6.040 | 5.814 | -5.813 | -.116 | .225 | .9599 | 1.0000 | |
| 4 | 8 | 0 | 18.441 | 18.714 | 18.713 | .188 | -.273 | -1.3446 | 1.0000 | |
| 4 | 8 | 1 | 2.973 | 3.487 | -3.487 | .025 | -.513 | -1.3560 | 1.0000 | |
| 4 | 8 | 2 | 2.800 | 2.333 | 2.325 | .182 | .468 | 1.1689 | 1.0000 | |
| 4 | 8 | 3 | 5.398 | 5.907 | 5.907 | -.023 | -.509 | -2.1386 | 1.0000 | |
| 4 | 8 | 4 | 13.156 | 13.504 | 13.503 | .166 | -.348 | -2.1477 | 1.0000 | |
| 4 | 8 | 5 | 2.441 * | .632 | .631 | .024 | 1.810 | 3.3595 | 1.0000 | * ** |
| 4 | 9 | 0 | 8.631 | 7.954 | 7.953 | .097 | .678 | 4.0684 | 1.0000 | |
| 4 | 9 | 1 | 7.761 | 7.723 | -7.723 | -.083 | .038 | .2057 | 1.0000 | |
| 4 | 9 | 2 | 9.822 | 9.411 | -9.410 | -.093 | .412 | 2.6242 | 1.0000 | |
| 4 | 9 | 3 | 6.216 | 6.789 | 6.788 | .080 | -.573 | -2.5206 | 1.0000 | |
| 4 | 9 | 4 | 5.998 | 5.900 | 5.899 | .085 | .098 | .4084 | 1.0000 | |
| 4 | 10 | 0 | 25.928 | 25.579 | 25.576 | .433 | .348 | 1.3140 | 1.0000 | |
| 4 | 10 | 1 | 3.220 | 2.650 | -2.649 | -.049 | .570 | 1.3517 | 1.0000 | |
| 4 | 10 | 2 | 7.089 | 6.839 | -6.838 | -.118 | .250 | 1.1727 | 1.0000 | |
| 4 | 10 | 3 | 2.022 * | .121 | .111 | .048 | 1.901 | 2.8208 | 1.0000 | * ** |
| 5 | 0 | 1 | 2.838 | 3.304 | 3.303 | -.085 | -.466 | -1.1393 | 1.0000 | |
| 5 | 0 | 3 | 5.529 | 5.502 | -5.502 | .082 | .027 | .1230 | 1.0000 | |
| 5 | 0 | 5 | 3.658 | 3.238 | -3.237 | -.071 | .420 | 1.4437 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0 | 7 | 2.797 | 2.204 | -2.204 | .065 | .593 | 1.2801 | 1.0000 | |
| 5 | 1 | 0 | 14.780 | 13.593 | 13.590 | .280 | 1.188 | 5.7497 | 1.0000 | |
| 5 | 1 | 1 | 7.430 | 7.397 | 7.397 | .076 | .032 | .1522 | 1.0000 | |
| 5 | 1 | 2 | 31.639 | 32.039 | 32.039 | .217 | -.401 | -1.7076 | 1.0000 | |
| 5 | 1 | 3 | 10.856 | 10.895 | -10.895 | -.071 | -.039 | -.2055 | 1.0000 | |
| 5 | 1 | 4 | 13.754 | 12.667 | 12.665 | .247 | 1.087 | 6.3583 | 1.0000 | |
| 5 | 1 | 5 | 1.801 * | 1.366 | 1.365 | .062 | .435 | .7696 | 1.0000 | * ** |
| 5 | 1 | 6 | 15.055 | 14.880 | 14.880 | .169 | .175 | .9845 | 1.0000 | |
| 5 | 1 | 7 | 7.027 | 6.611 | -6.611 | -.050 | .416 | 2.0481 | 1.0000 | |
| 5 | 2 | 0 | 63.241 | 63.827 | -63.825 | -.514 | -.586 | -2.8064 | 1.0000 | |
| 5 | 2 | 1 | 13.223 | 13.524 | 13.524 | .049 | -.301 | -1.3008 | 1.0000 | |
| 5 | 2 | 2 | 65.612 | 67.025 | 67.024 | .498 | -1.413 | -6.3731 | 1.0000 | |
| 5 | 2 | 3 | 6.068 | 6.206 | -6.206 | -.044 | -.138 | -.7968 | 1.0000 | |
| 5 | 2 | 4 | 43.420 | 43.727 | -43.725 | -.451 | -.307 | -1.1642 | 1.0000 | |
| 5 | 2 | 5 | 9.171 | 9.257 | 9.257 | .043 | -.086 | -.6198 | 1.0000 | |
| 5 | 2 | 6 | 34.511 | 33.266 | 33.264 | .383 | 1.245 | 3.9020 | 1.0000 | |
| 5 | 2 | 7 | 1.327 * | .680 | -.680 | -.032 | .647 | .6826 | 1.0000 | * ** |
| 5 | 3 | 0 | 19.874 | 19.510 | 19.509 | .202 | .363 | 1.3177 | 1.0000 | |
| 5 | 3 | 1 | 4.462 | 4.321 | 4.321 | .015 | .140 | .5185 | 1.0000 | |
| 5 | 3 | 2 | 36.839 | 36.996 | 36.995 | .273 | -.157 | -.6470 | 1.0000 | |
| 5 | 3 | 3 | 1.125 * | .504 | .504 | -.013 | .620 | .7720 | 1.0000 | * ** |
| 5 | 3 | 4 | 14.871 | 14.574 | 14.573 | .179 | .297 | 1.7189 | 1.0000 | |
| 5 | 3 | 5 | 3.404 | 4.804 | 4.804 | .013 | -1.400 | -4.3290 | 1.0000 | |
| 5 | 3 | 6 | 17.656 | 17.569 | 17.568 | .211 | .087 | .4522 | 1.0000 | |
| 5 | 3 | 7 | 1.360 * | 2.043 | 2.043 | -.009 | -.683 | -.7032 | 1.0000 | * ** |
| 5 | 4 | 0 | 7.832 | 6.318 | 6.307 | .377 | 1.514 | 7.3663 | 1.0000 | |
| 5 | 4 | 1 | 9.161 | 9.413 | 9.413 | .035 | -.252 | -1.4201 | 1.0000 | |
| 5 | 4 | 2 | 22.191 | 21.174 | -21.171 | -.365 | 1.017 | 3.6861 | 1.0000 | |
| 5 | 4 | 3 | 9.186 | 9.684 | -9.684 | -.031 | -.497 | -3.0060 | 1.0000 | |
| 5 | 4 | 4 | 7.278 | 7.262 | 7.255 | .331 | .016 | .1017 | 1.0000 | |
| 5 | 4 | 5 | 3.695 | 3.371 | 3.371 | .032 | .324 | 1.0898 | 1.0000 | |
| 5 | 4 | 6 | 12.097 | 11.964 | -11.961 | -.281 | .133 | .7500 | 1.0000 | |
| 5 | 4 | 7 | 5.438 | 5.386 | -5.386 | -.024 | .052 | .2007 | 1.0000 | |
| 5 | 5 | 0 | 11.669 | 10.933 | 10.930 | .213 | .736 | 4.4770 | 1.0000 | |
| 5 | 5 | 1 | 7.535 | 7.381 | -7.381 | -.076 | .153 | 1.0269 | 1.0000 | |
| 5 | 5 | 2 | 13.908 | 13.690 | 13.688 | .225 | .217 | 1.2408 | 1.0000 | |
| 5 | 5 | 3 | 4.256 | 3.932 | 3.931 | .073 | .324 | 1.3087 | 1.0000 | |
| 5 | 5 | 4 | 9.991 | 9.102 | 9.100 | .187 | .889 | 6.2267 | 1.0000 | |
| 5 | 5 | 5 | 6.198 | 6.376 | -6.376 | -.061 | -.178 | -.8550 | 1.0000 | |
| 5 | 5 | 6 | 7.168 | 7.200 | 7.197 | .175 | -.032 | -.1567 | 1.0000 | |
| 5 | 6 | 0 | 16.887 | 16.691 | 16.690 | .171 | .197 | 1.0095 | 1.0000 | |
| 5 | 6 | 1 | 1.647 * | 1.154 | 1.150 | -.087 | .494 | .7992 | 1.0000 | * ** |
| 5 | 6 | 2 | 1.991 * | 1.078 | -1.065 | -.165 | .913 | 1.7446 | 1.0000 | * ** |
| 5 | 6 | 3 | 1.593 * | .984 | .980 | .084 | .610 | .9180 | 1.0000 | * ** |
| 5 | 6 | 4 | 12.382 | 12.079 | 12.079 | .150 | .303 | 1.8190 | 1.0000 | |
| 5 | 6 | 5 | 2.253 * | .487 | .481 | -.072 | 1.766 | 3.2272 | 1.0000 | * ** |
| 5 | 6 | 6 | 1.356 * | 1.120 | -1.113 | -.126 | .236 | .2439 | 1.0000 | * ** |
| 5 | 7 | 0 | 22.760 | 22.946 | 22.945 | .237 | -.187 | -.8190 | 1.0000 | |
| 5 | 7 | 1 | 2.225 * | 2.968 | 2.967 | .042 | -.743 | -1.5227 | 1.0000 | * ** |
| 5 | 7 | 2 | 17.951 | 17.855 | 17.854 | .150 | .096 | .4608 | 1.0000 | |
| 5 | 7 | 3 | 1.273 * | 1.080 | -1.079 | -.038 | .193 | .2126 | 1.0000 | * ** |
| 5 | 7 | 4 | 16.718 | 17.022 | 17.021 | .209 | -.305 | -1.7063 | 1.0000 | |
| 5 | 7 | 5 | 2.554 * | 2.845 | 2.845 | .036 | -.291 | -.5697 | 1.0000 | * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 8 | 0 | 29.776 | 29.044 | -29.042 | -.410 | .732 | 2.2102 | 1.0000 | |
| 5 | 8 | 1 | 2.517 * | 2.077 | 2.076 | .052 | .440 | .9184 | 1.0000 | * ** |
| 5 | 8 | 2 | 14.834 | 15.221 | 15.215 | .398 | -.386 | -2.2589 | 1.0000 | |
| 5 | 8 | 3 | 1.341 * | 1.742 | -1.742 | -.047 | -.401 | -.4186 | 1.0000 | * ** |
| 5 | 8 | 4 | 21.310 | 21.505 | -21.502 | -.360 | -.195 | -.8668 | 1.0000 | |
| 5 | 8 | 5 | 1.391 * | .871 | .870 | .044 | .520 | .5238 | 1.0000 | * ** |
| 5 | 9 | 0 | 2.237 * | 1.353 | 1.344 | .154 | .884 | 1.4973 | 1.0000 | * ** |
| 5 | 9 | 1 | 3.565 | 2.464 | 2.464 | .028 | 1.101 | 2.9247 | 1.0000 | |
| 5 | 9 | 2 | 7.965 | 7.885 | 7.883 | .171 | .080 | .4272 | 1.0000 | |
| 5 | 9 | 3 | 1.383 * | 2.462 | -2.462 | -.024 | -1.078 | -1.0921 | 1.0000 | * ** |
| 5 | 9 | 4 | 1.653 * | 1.375 | 1.368 | .136 | .278 | .3344 | 1.0000 | * ** |
| 5 | 10 | 0 | 15.120 | 15.175 | 15.174 | .145 | -.055 | -.2860 | 1.0000 | |
| 5 | 10 | 1 | 1.403 * | 1.726 | -1.726 | .037 | -.323 | -.3225 | 1.0000 | * ** |
| 5 | 10 | 2 | 5.205 | 5.701 | -5.699 | -.140 | -.496 | -1.7239 | 1.0000 | |
| 6 | 0 | 0 | 77.952 | 78.449 | 78.446 | .651 | -.498 | -2.2555 | 1.0000 | |
| 6 | 0 | 2 | 26.820 | 27.205 | -27.204 | -.160 | -.385 | -1.4767 | 1.0000 | |
| 6 | 0 | 4 | 54.827 | 54.143 | 54.140 | .572 | .685 | 2.5227 | 1.0000 | |
| 6 | 0 | 6 | 14.114 | 13.047 | -13.046 | -.121 | 1.067 | 5.9804 | 1.0000 | |
| 6 | 1 | 0 | 38.162 | 37.420 | 37.419 | .296 | .742 | 3.1165 | 1.0000 | |
| 6 | 1 | 1 | 9.653 | 9.691 | -9.691 | -.021 | -.037 | -.1977 | 1.0000 | |
| 6 | 1 | 2 | 2.072 * | 1.795 | -1.772 | -.286 | .277 | .5908 | 1.0000 | * ** |
| 6 | 1 | 3 | 6.726 | 6.533 | 6.533 | .022 | .193 | 1.1713 | 1.0000 | |
| 6 | 1 | 4 | 25.731 | 25.473 | 25.472 | .259 | .258 | .8668 | 1.0000 | |
| 6 | 1 | 5 | 5.248 | 4.717 | -4.717 | -.014 | .531 | 2.3839 | 1.0000 | |
| 6 | 1 | 6 | 3.440 | 2.920 | -2.912 | -.220 | .520 | 1.4089 | 1.0000 | |
| 6 | 1 | 7 | 1.524 * | 1.635 | 1.635 | .016 | -.111 | -.1242 | 1.0000 | * ** |
| 6 | 2 | 0 | 21.675 | 22.268 | 22.268 | .076 | -.593 | -2.1769 | 1.0000 | |
| 6 | 2 | 1 | 8.033 | 8.197 | -8.196 | -.114 | -.164 | -.8921 | 1.0000 | |
| 6 | 2 | 2 | 23.232 | 23.050 | 23.046 | .386 | .182 | .6641 | 1.0000 | |
| 6 | 2 | 3 | 7.011 | 7.244 | 7.243 | .108 | -.233 | -1.3527 | 1.0000 | |
| 6 | 2 | 4 | 14.273 | 14.073 | 14.073 | .068 | .200 | 1.1086 | 1.0000 | |
| 6 | 2 | 5 | 5.209 | 5.316 | -5.316 | -.095 | -.107 | -.4678 | 1.0000 | |
| 6 | 2 | 6 | 13.346 | 13.494 | 13.491 | .299 | -.148 | -.8624 | 1.0000 | |
| 6 | 2 | 7 | 4.617 | 3.858 | 3.857 | .080 | .759 | 2.5254 | 1.0000 | |
| 6 | 3 | 0 | 20.659 | 21.117 | -21.117 | .074 | -.458 | -2.2903 | 1.0000 | |
| 6 | 3 | 1 | 2.495 | 3.631 | 3.631 | .028 | -1.136 | -2.9249 | 1.0000 | |
| 6 | 3 | 2 | 7.562 | 6.725 | -6.724 | -.071 | .837 | 5.4105 | 1.0000 | |
| 6 | 3 | 3 | 1.184 * | .927 | -.927 | -.023 | .257 | .3038 | 1.0000 | * ** |
| 6 | 3 | 4 | 12.646 | 13.131 | -13.131 | .065 | -.485 | -2.9891 | 1.0000 | |
| 6 | 3 | 5 | 4.206 | 4.183 | 4.183 | .023 | .023 | .0820 | 1.0000 | |
| 6 | 3 | 6 | 3.526 | 3.020 | -3.020 | -.054 | .506 | 1.3556 | 1.0000 | |
| 6 | 3 | 7 | 2.178 * | .432 | .432 | -.013 | 1.747 | 2.7987 | 1.0000 | * ** |
| 6 | 4 | 0 | 1.431 * | .699 | .698 | -.031 | .732 | 1.0808 | 1.0000 | * ** |
| 6 | 4 | 1 | 6.899 | 6.624 | 6.623 | .106 | .275 | 1.6708 | 1.0000 | |
| 6 | 4 | 2 | 34.643 | 34.089 | 34.086 | .462 | .554 | 2.0242 | 1.0000 | |
| 6 | 4 | 3 | 5.752 | 5.997 | -5.996 | -.099 | -.245 | -1.2426 | 1.0000 | |
| 6 | 4 | 4 | 1.222 * | .129 | -.126 | -.026 | 1.093 | 1.2526 | 1.0000 | * ** |
| 6 | 4 | 5 | 4.848 | 4.695 | 4.694 | .089 | .153 | .5691 | 1.0000 | |
| 6 | 4 | 6 | 19.930 | 19.410 | 19.407 | .357 | .520 | 2.6134 | 1.0000 | |
| 6 | 5 | 0 | 20.210 | 19.764 | -19.761 | -.312 | .446 | 2.0529 | 1.0000 | |
| 6 | 5 | 1 | 1.907 * | 1.265 | -1.265 | .013 | .642 | 1.1801 | 1.0000 | * ** |
| 6 | 5 | 2 | 34.237 | 34.392 | 34.391 | .302 | -.155 | -.5436 | 1.0000 | |
| 6 | 5 | 3 | 1.227 * | 1.826 | -1.826 | -.011 | -.599 | -.6837 | 1.0000 | * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 5 | 4 | 14.988 | 14.970 | -14.967 | -.273 | .018 | .1026 | 1.0000 | |
| 6 | 5 | 5 | 2.797 | 2.094 | -2.094 | .013 | .703 | 1.5266 | 1.0000 | |
| 6 | 5 | 6 | 19.130 | 18.869 | 18.867 | .232 | .261 | 1.4099 | 1.0000 | |
| 6 | 6 | 0 | 36.001 | 36.132 | 36.128 | .523 | -.131 | -.4422 | 1.0000 | |
| 6 | 6 | 1 | 1.633 * | 1.812 | 1.812 | .010 | -.179 | -.2699 | 1.0000 | * ** |
| 6 | 6 | 2 | 1.242 * | 2.790 | -2.787 | -.118 | -1.548 | -1.7456 | 1.0000 | * ** |
| 6 | 6 | 3 | 1.286 * | 1.522 | -1.522 | -.008 | -.236 | -.2569 | 1.0000 | * ** |
| 6 | 6 | 4 | 25.917 | 26.367 | 26.363 | .460 | -.451 | -1.8275 | 1.0000 | |
| 6 | 6 | 5 | 3.198 | 1.590 | 1.590 | .010 | 1.608 | 3.8722 | 1.0000 | |
| 6 | 7 | 0 | 9.628 | 9.119 | 9.118 | .145 | .508 | 3.1757 | 1.0000 | |
| 6 | 7 | 1 | 6.503 | 6.101 | -6.101 | -.028 | .402 | 2.0180 | 1.0000 | |
| 6 | 7 | 2 | 15.963 | 16.072 | -16.072 | -.140 | -.110 | -.6150 | 1.0000 | |
| 6 | 7 | 3 | 7.450 | 7.699 | 7.699 | .028 | -.249 | -1.2871 | 1.0000 | |
| 6 | 7 | 4 | 6.624 | 6.716 | 6.715 | .127 | -.093 | -.4256 | 1.0000 | |
| 6 | 7 | 5 | 2.163 * | 1.289 | -1.289 | -.021 | .874 | 1.3962 | 1.0000 | * ** |
| 6 | 8 | 0 | 6.915 | 6.718 | 6.714 | .146 | .199 | .9542 | 1.0000 | |
| 6 | 8 | 1 | 3.747 | 3.551 | -3.550 | -.099 | .196 | .5531 | 1.0000 | |
| 6 | 8 | 2 | 11.989 | 11.866 | 11.865 | .194 | .122 | .7548 | 1.0000 | |
| 6 | 8 | 3 | 2.950 | 3.216 | 3.215 | .095 | -.267 | -.5856 | 1.0000 | |
| 6 | 8 | 4 | 4.571 | 4.762 | 4.760 | .129 | -.191 | -.6142 | 1.0000 | |
| 6 | 9 | 0 | 14.630 | 14.196 | 14.195 | .144 | .434 | 2.3333 | 1.0000 | |
| 6 | 9 | 1 | 4.997 | 5.440 | -5.440 | -.002 | -.443 | -1.4891 | 1.0000 | |
| 6 | 9 | 2 | 12.035 | 11.210 | -11.209 | -.138 | .825 | 5.2991 | 1.0000 | |
| 6 | 9 | 3 | 1.468 * | 2.629 | 2.629 | .004 | -1.161 | -1.2008 | 1.0000 | * ** |
| 7 | 0 | 1 | 13.452 | 13.626 | 13.626 | .137 | -.174 | -1.0197 | 1.0000 | |
| 7 | 0 | 3 | 14.219 | 14.160 | -14.159 | -.126 | .059 | .3261 | 1.0000 | |
| 7 | 0 | 5 | 5.760 | 5.702 | 5.701 | .115 | .058 | .2525 | 1.0000 | |
| 7 | 1 | 0 | 10.516 | 11.235 | 11.235 | -.048 | -.720 | -4.4647 | 1.0000 | |
| 7 | 1 | 1 | 1.537 * | .848 | .847 | .044 | .689 | 1.1072 | 1.0000 | * ** |
| 7 | 1 | 2 | 31.030 | 30.533 | 30.530 | .490 | .496 | 1.7779 | 1.0000 | |
| 7 | 1 | 3 | 1.847 * | 1.656 | 1.656 | -.042 | .191 | .3366 | 1.0000 | * ** |
| 7 | 1 | 4 | 7.092 | 7.626 | 7.626 | -.041 | -.534 | -3.0454 | 1.0000 | |
| 7 | 1 | 5 | 1.427 * | 3.018 | 3.017 | .039 | -1.591 | -1.8047 | 1.0000 | * ** |
| 7 | 1 | 6 | 16.884 | 16.365 | 16.360 | .379 | .520 | 2.7290 | 1.0000 | |
| 7 | 2 | 0 | 7.309 | 7.307 | 7.307 | .091 | .001 | .0079 | 1.0000 | |
| 7 | 2 | 1 | 1.180 * | 1.229 | 1.228 | -.057 | -.049 | -.0582 | 1.0000 | * ** |
| 7 | 2 | 2 | 2.461 * | 2.224 | -2.222 | -.088 | .237 | .5602 | 1.0000 | * ** |
| 7 | 2 | 3 | 2.069 * | 2.599 | 2.598 | .056 | -.529 | -1.0328 | 1.0000 | * ** |
| 7 | 2 | 4 | 5.216 | 5.408 | 5.408 | .080 | -.193 | -.8359 | 1.0000 | |
| 7 | 2 | 5 | 3.398 | 2.063 | 2.062 | -.045 | 1.336 | 3.5586 | 1.0000 | |
| 7 | 2 | 6 | 1.383 * | 1.672 | -1.670 | -.068 | -.288 | -.2918 | 1.0000 | * ** |
| 7 | 3 | 0 | 48.086 | 48.387 | 48.382 | .690 | -.302 | -1.1336 | 1.0000 | |
| 7 | 3 | 1 | 1.313 * | 1.270 | -1.270 | -.010 | .043 | .0543 | 1.0000 | * ** |
| 7 | 3 | 2 | 19.320 | 19.370 | -19.369 | -.242 | -.051 | -.2202 | 1.0000 | |
| 7 | 3 | 3 | 1.224 * | .919 | -.919 | .010 | .305 | .3489 | 1.0000 | * ** |
| 7 | 3 | 4 | 36.121 | 36.130 | 36.125 | .606 | -.009 | -.0303 | 1.0000 | |
| 7 | 3 | 5 | 2.549 * | 2.242 | -2.242 | -.007 | .307 | .6060 | 1.0000 | * ** |
| 7 | 3 | 6 | 11.141 | 11.125 | -11.124 | -.184 | .015 | .0948 | 1.0000 | |
| 7 | 4 | 0 | 10.309 | 10.551 | -10.551 | -.082 | -.242 | -1.4455 | 1.0000 | |
| 7 | 4 | 1 | 1.982 * | 1.865 | -1.863 | -.079 | .117 | .2153 | 1.0000 | * ** |
| 7 | 4 | 2 | 2.817 | 2.229 | 2.228 | .081 | .587 | 1.5382 | 1.0000 | |
| 7 | 4 | 3 | 1.245 * | .105 | -.073 | .076 | 1.139 | 1.2816 | 1.0000 | * ** |
| 7 | 4 | 4 | 7.558 | 7.480 | -7.480 | -.073 | .078 | .4318 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 7 | 4 | 5 | 2.573 * | 3.449 | -3.449 | -.063 | -.876 | -1.6769 | 1.0000 * ** |
| 7 | 4 | 6 | 2.244 * | 1.440 | 1.439 | .063 | .804 | 1.3095 | 1.0000 * ** |
| 7 | 5 | 0 | 5.026 | 4.169 | 4.167 | .113 | .857 | 3.7217 | 1.0000 |
| 7 | 5 | 1 | 4.211 | 4.342 | 4.342 | -.040 | -.132 | -.4807 | 1.0000 |
| 7 | 5 | 2 | 34.410 | 34.409 | 34.408 | .282 | .001 | .0026 | 1.0000 |
| 7 | 5 | 3 | 2.311 * | 2.143 | -2.142 | .039 | .169 | .3194 | 1.0000 * ** |
| 7 | 5 | 4 | 2.695 * | 3.241 | 3.239 | .100 | -.545 | -1.1131 | 1.0000 * ** |
| 7 | 5 | 5 | 3.702 | 3.172 | 3.172 | -.034 | .530 | 1.4128 | 1.0000 |
| 7 | 6 | 0 | 4.707 | 4.778 | 4.778 | -.007 | -.071 | -.2706 | 1.0000 |
| 7 | 6 | 1 | 9.772 | 10.078 | 10.077 | .111 | -.305 | -1.7652 | 1.0000 |
| 7 | 6 | 2 | 4.369 | 4.180 | 4.180 | .008 | .189 | .6435 | 1.0000 |
| 7 | 6 | 3 | 7.039 | 6.941 | -6.940 | -.102 | .099 | .4873 | 1.0000 |
| 7 | 6 | 4 | 2.430 * | 3.509 | 3.509 | -.007 | -1.078 | -1.9101 | 1.0000 * ** |
| 7 | 6 | 5 | 7.894 | 7.409 | 7.408 | .094 | .485 | 2.4485 | 1.0000 |
| 7 | 7 | 0 | 23.050 | 22.459 | -22.458 | -.145 | .592 | 2.3279 | 1.0000 |
| 7 | 7 | 1 | 8.489 | 8.098 | 8.098 | .057 | .391 | 2.2288 | 1.0000 |
| 7 | 7 | 2 | 31.463 | 32.161 | 32.158 | .485 | -.698 | -2.0292 | 1.0000 |
| 7 | 7 | 3 | 7.351 | 7.308 | -7.308 | -.052 | .043 | .2093 | 1.0000 |
| 7 | 7 | 4 | 17.136 | 16.774 | -16.773 | -.126 | .363 | 1.8626 | 1.0000 |
| 7 | 8 | 0 | 1.406 * | .167 | -.149 | .077 | 1.239 | 1.2330 | 1.0000 * ** |
| 7 | 8 | 1 | 1.620 * | .430 | .429 | -.020 | 1.190 | 1.4019 | 1.0000 * ** |
| 7 | 8 | 2 | 8.104 | 7.982 | -7.982 | -.073 | .121 | .6170 | 1.0000 |
| 7 | 8 | 3 | 1.581 * | .857 | -.857 | .020 | .724 | .8177 | 1.0000 * ** |
| 7 | 9 | 0 | 24.677 | 23.476 | 23.472 | .429 | 1.201 | 5.2387 | 1.0000 |
| 7 | 9 | 1 | 1.397 * | 1.391 | 1.391 | -.011 | .006 | .0060 | 1.0000 * ** |
| 8 | 0 | 0 | 53.698 | 55.214 | 55.213 | .419 | -1.516 | -5.5188 | 1.0000 |
| 8 | 0 | 2 | 2.020 * | 1.377 | 1.377 | .015 | .643 | 1.2038 | 1.0000 * ** |
| 8 | 0 | 4 | 39.290 | 39.417 | 39.416 | .368 | -.127 | -.3940 | 1.0000 |
| 8 | 0 | 6 | 3.379 | .711 | .711 | .014 | 2.668 | 6.3735 | 1.0000 |
| 8 | 1 | 0 | 21.272 | 20.891 | -20.888 | -.361 | .381 | 1.7015 | 1.0000 |
| 8 | 1 | 1 | 8.308 | 8.061 | -8.061 | -.062 | .247 | 1.6053 | 1.0000 |
| 8 | 1 | 2 | 19.409 | 19.847 | 19.844 | .350 | -.438 | -2.2638 | 1.0000 |
| 8 | 1 | 3 | 7.163 | 6.917 | 6.917 | .061 | .245 | 1.3745 | 1.0000 |
| 8 | 1 | 4 | 15.740 | 15.725 | -15.722 | -.317 | .015 | .0790 | 1.0000 |
| 8 | 1 | 5 | 3.949 | 4.608 | -4.608 | -.050 | -.659 | -1.8418 | 1.0000 |
| 8 | 1 | 6 | 10.991 | 11.123 | 11.120 | .269 | -.132 | -.8168 | 1.0000 |
| 8 | 2 | 0 | 9.592 | 7.728 | 7.726 | .145 | 1.864 | 12.7653 | 1.0000 |
| 8 | 2 | 1 | 5.269 | 5.172 | 5.172 | .081 | .096 | .4414 | 1.0000 |
| 8 | 2 | 2 | 4.971 | 5.118 | 5.110 | .271 | -.146 | -.6211 | 1.0000 |
| 8 | 2 | 3 | 3.727 | 3.371 | -3.370 | -.075 | .356 | 1.1051 | 1.0000 |
| 8 | 2 | 4 | 5.723 | 5.753 | 5.752 | .128 | -.031 | -.1297 | 1.0000 |
| 8 | 2 | 5 | 4.230 | 4.083 | 4.082 | .066 | .147 | .4481 | 1.0000 |
| 8 | 2 | 6 | 3.245 | 3.368 | 3.362 | .210 | -.123 | -.2760 | 1.0000 |
| 8 | 3 | 0 | 4.268 | 4.023 | 4.022 | -.070 | .245 | .9225 | 1.0000 |
| 8 | 3 | 1 | 1.674 * | .585 | .572 | .121 | 1.090 | 1.6733 | 1.0000 * ** |
| 8 | 3 | 2 | 4.448 | 4.561 | -4.560 | .068 | -.113 | -.4292 | 1.0000 |
| 8 | 3 | 3 | 1.300 * | .971 | -.965 | -.112 | .329 | .3543 | 1.0000 * ** |
| 8 | 3 | 4 | 3.436 | 2.890 | 2.889 | -.061 | .547 | 1.4313 | 1.0000 |
| 8 | 3 | 5 | 2.280 * | 1.356 | 1.352 | .104 | .924 | 1.5417 | 1.0000 * ** |
| 8 | 4 | 0 | 9.771 | 9.847 | 9.846 | .056 | -.075 | -.4018 | 1.0000 |
| 8 | 4 | 1 | 4.663 | 5.081 | -5.080 | -.054 | -.418 | -1.5894 | 1.0000 |
| 8 | 4 | 2 | 31.063 | 30.925 | 30.923 | .332 | .138 | .4292 | 1.0000 |
| 8 | 4 | 3 | 2.665 * | 2.552 | 2.551 | .051 | .113 | .2336 | 1.0000 * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 4 | 4 | 7.370 | 6.952 | 6.952 | .050 | .418 | 2.0573 | 1.0000 | |
| 8 | 4 | 5 | 4.485 | 4.272 | -4.272 | -.043 | .213 | .6590 | 1.0000 | |
| 8 | 5 | 0 | 29.920 | 30.207 | 30.205 | .372 | -.287 | -.8678 | 1.0000 | |
| 8 | 5 | 1 | 7.661 | 7.676 | -7.676 | -.052 | -.015 | -.0816 | 1.0000 | |
| 8 | 5 | 2 | 26.834 | 26.201 | -26.199 | -.359 | .633 | 2.6007 | 1.0000 | |
| 8 | 5 | 3 | 6.745 | 6.682 | 6.682 | .051 | .063 | .2904 | 1.0000 | |
| 8 | 5 | 4 | 22.625 | 22.594 | 22.591 | .327 | .032 | .1407 | 1.0000 | |
| 8 | 6 | 0 | 11.819 | 11.938 | 11.934 | .327 | -.119 | -.6266 | 1.0000 | |
| 8 | 6 | 1 | 2.747 * | .273 | -.271 | -.031 | 2.475 | 5.1412 | 1.0000 | * ** |
| 8 | 6 | 2 | 1.379 * | 1.990 | 1.989 | .032 | -.610 | -.6195 | 1.0000 | * ** |
| 8 | 6 | 3 | 1.810 * | 2.124 | 2.123 | .030 | -.314 | -.4023 | 1.0000 | * ** |
| 8 | 6 | 4 | 8.170 | 8.761 | 8.756 | .287 | -.591 | -2.9553 | 1.0000 | |
| 8 | 7 | 0 | 12.137 | 11.921 | -11.919 | -.205 | .216 | 1.1978 | 1.0000 | |
| 8 | 7 | 1 | 5.301 | 4.434 | -4.434 | -.062 | .867 | 3.1686 | 1.0000 | |
| 8 | 7 | 2 | 8.637 | 8.874 | 8.871 | .200 | -.237 | -1.2802 | 1.0000 | |
| 8 | 7 | 3 | 2.971 | 3.851 | 3.850 | .060 | -.879 | -1.7792 | 1.0000 | |
| 8 | 8 | 0 | 10.344 | 10.688 | 10.687 | .181 | -.345 | -1.9801 | 1.0000 | |
| 8 | 8 | 1 | 3.312 | 3.210 | 3.209 | .058 | .102 | .2282 | 1.0000 | |
| 9 | 0 | 0 | 1.268 * | .000 | .000 | .000 | 1.268 | 1.4002 | 1.0000 | * ** |
| 9 | 0 | 2 | 1.312 * | .000 | .000 | .000 | 1.312 | 1.4007 | 1.0000 | * ** |
| 9 | 0 | 4 | 1.377 * | .000 | .000 | .000 | 1.377 | 1.4004 | 1.0000 | * ** |
| 9 | 1 | 0 | 18.295 | 18.883 | 18.881 | .313 | -.589 | -2.7771 | 1.0000 | |
| 9 | 1 | 1 | 7.037 | 7.130 | -7.129 | -.132 | -.093 | -.4935 | 1.0000 | |
| 9 | 1 | 2 | 9.941 | 10.041 | 10.041 | .088 | -.100 | -.5950 | 1.0000 | |
| 9 | 1 | 3 | 7.880 | 8.285 | 8.284 | .124 | -.405 | -2.1412 | 1.0000 | |
| 9 | 1 | 4 | 13.732 | 14.206 | 14.204 | .276 | -.474 | -2.8087 | 1.0000 | |
| 9 | 1 | 5 | 3.244 | 3.251 | -3.249 | -.109 | -.007 | -.0164 | 1.0000 | |
| 9 | 2 | 0 | 28.667 | 29.536 | 29.534 | .355 | -.869 | -2.6417 | 1.0000 | |
| 9 | 2 | 1 | 1.434 * | 1.529 | 1.528 | -.007 | -.094 | -.1112 | 1.0000 | * ** |
| 9 | 2 | 2 | 30.650 | 31.332 | -31.331 | -.343 | -.682 | -2.0420 | 1.0000 | |
| 9 | 2 | 3 | 1.369 * | 2.346 | -2.346 | .009 | -.976 | -.9984 | 1.0000 | * ** |
| 9 | 2 | 4 | 22.224 | 22.175 | 22.173 | .311 | .049 | .2162 | 1.0000 | |
| 9 | 2 | 5 | 3.328 | .677 | -.677 | -.004 | 2.651 | 6.2677 | 1.0000 | |
| 9 | 3 | 0 | 4.301 | 3.396 | -3.396 | -.007 | .904 | 2.9964 | 1.0000 | |
| 9 | 3 | 1 | 1.334 * | .900 | -.900 | -.016 | .434 | .4555 | 1.0000 | * ** |
| 9 | 3 | 2 | 22.689 | 23.273 | 23.269 | .381 | -.583 | -2.7659 | 1.0000 | |
| 9 | 3 | 3 | 1.368 * | .856 | -.856 | .015 | .513 | .5248 | 1.0000 | * ** |
| 9 | 3 | 4 | 3.593 | 2.491 | -2.491 | -.005 | 1.102 | 2.8304 | 1.0000 | |
| 9 | 4 | 0 | 3.501 | 3.483 | -3.474 | -.250 | .018 | .0470 | 1.0000 | |
| 9 | 4 | 1 | 2.305 * | 2.011 | 2.011 | .011 | .294 | .5095 | 1.0000 | * ** |
| 9 | 4 | 2 | 9.595 | 9.850 | 9.847 | .243 | -.255 | -1.4396 | 1.0000 | |
| 9 | 4 | 3 | 1.382 * | .291 | -.290 | -.007 | 1.092 | 1.1055 | 1.0000 | * ** |
| 9 | 4 | 4 | 3.209 | 2.509 | -2.499 | -.219 | .700 | 1.5643 | 1.0000 | |
| 9 | 5 | 0 | 15.952 | 16.203 | 16.201 | .239 | -.251 | -1.2746 | 1.0000 | |
| 9 | 5 | 1 | 7.874 | 8.078 | 8.076 | .132 | -.203 | -1.0272 | 1.0000 | |
| 9 | 5 | 2 | 10.526 | 10.290 | 10.289 | .113 | .237 | 1.4783 | 1.0000 | |
| 9 | 5 | 3 | 5.669 | 5.626 | -5.625 | -.123 | .043 | .1605 | 1.0000 | |
| 9 | 6 | 0 | 11.074 | 10.278 | -10.277 | -.131 | .796 | 4.5432 | 1.0000 | |
| 9 | 6 | 1 | 2.523 * | 1.252 | 1.252 | .012 | 1.272 | 2.2742 | 1.0000 | * ** |
| 9 | 6 | 2 | 1.424 * | 2.251 | 2.247 | .128 | -.826 | -.8118 | 1.0000 | * ** |
| 9 | 7 | 0 | 11.998 | 11.618 | 11.615 | .275 | .381 | 2.1456 | 1.0000 | |
| 9 | 7 | 1 | 2.855 * | 3.746 | -3.745 | -.090 | -.890 | -1.7074 | 1.0000 | * ** |
| 10 | 0 | 0 | 19.589 | 19.534 | -19.533 | -.214 | .055 | .2423 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0 | 2 | 38.976 | 40.296 | 40.292 | .572 | -1.320 | -3.8262 | 1.0000 | |
| 10 | 0 | 4 | 15.859 | 15.064 | -15.063 | -.187 | .795 | 4.5364 | 1.0000 | |
| 10 | 1 | 0 | 7.205 | 7.071 | -7.071 | -.046 | .134 | .6476 | 1.0000 | |
| 10 | 1 | 1 | 2.333 * | 2.226 | 2.225 | .071 | .107 | .1834 | 1.0000 | * ** |
| 10 | 1 | 2 | 6.062 | 5.630 | -5.630 | .045 | .433 | 1.7616 | 1.0000 | |
| 10 | 1 | 3 | 2.307 * | 1.573 | -1.572 | -.064 | .734 | 1.1946 | 1.0000 | * ** |
| 10 | 1 | 4 | 5.348 | 5.193 | -5.193 | -.040 | .155 | .5356 | 1.0000 | |
| 10 | 2 | 0 | 14.734 | 15.243 | 15.239 | .339 | -.509 | -2.7357 | 1.0000 | |
| 10 | 2 | 1 | 3.587 | 3.144 | 3.143 | .079 | .442 | 1.1488 | 1.0000 | |
| 10 | 2 | 2 | 5.867 | 6.223 | 6.222 | .029 | -.356 | -1.3879 | 1.0000 | |
| 10 | 2 | 3 | 2.488 * | 2.914 | -2.913 | -.074 | -.426 | -.7502 | 1.0000 | * ** |
| 10 | 3 | 0 | 8.233 | 8.437 | 8.437 | -.027 | -.204 | -1.0721 | 1.0000 | |
| 10 | 3 | 1 | 9.912 | 10.466 | -10.465 | -.121 | -.554 | -3.2189 | 1.0000 | |
| 10 | 3 | 2 | 2.107 * | 2.438 | 2.438 | .027 | -.331 | -.4825 | 1.0000 | * ** |
| 10 | 3 | 3 | 8.221 | 8.157 | 8.156 | .116 | .064 | .3223 | 1.0000 | |
| 10 | 4 | 0 | 25.941 | 26.501 | 26.498 | .430 | -.561 | -2.0661 | 1.0000 | |
| 10 | 4 | 1 | 4.530 | 5.051 | -5.051 | -.075 | -.521 | -1.5805 | 1.0000 | |
| 10 | 4 | 2 | 4.802 | 5.228 | -5.227 | -.081 | -.425 | -1.3378 | 1.0000 | |
| 10 | 5 | 0 | 1.426 * | .929 | .927 | .057 | .497 | .4880 | 1.0000 | * ** |
| 10 | 5 | 1 | 1.416 * | 1.236 | -1.236 | .029 | .180 | .1778 | 1.0000 | * ** |
| 11 | 0 | 1 | 2.788 * | 4.070 | -4.067 | -.149 | -1.282 | -2.4582 | 1.0000 | * ** |
| 11 | 1 | 0 | 9.196 | 9.728 | 9.723 | .320 | -.532 | -2.8439 | 1.0000 | |
| 11 | 1 | 1 | 3.474 | 3.316 | 3.315 | .042 | .159 | .3741 | 1.0000 | |
| 11 | 1 | 2 | 6.158 | 7.236 | 7.236 | .024 | -1.078 | -4.2236 | 1.0000 | |
| 11 | 2 | 0 | 14.796 | 14.455 | -14.454 | -.232 | .340 | 1.8942 | 1.0000 | |
| 11 | 2 | 1 | 5.051 | 5.216 | 5.216 | .066 | -.165 | -.5460 | 1.0000 | |

SILLIMANITE (BRANDYWINE SPRINGS. AT 800 DEGREES C

RESULTS OF STRUCTURE FACTOR CALCULATIONS

| ALL REFLECTIONS | NUMERATOR | DENOMINATOR | NUMBER | R |
|---|---|---|---|---|
| WEIGHTED R | 9399.75 | 6989016.45 | 662 | .037 |
| UNWEIGHTED R | 370.42 | 8226.39 | 662 | .045 |
| RANGES OF F(OBS) | | | | |
| | 2971.21 | 838889.21 | 514 | .060 |
| | 1466.93 | 916331.21 | 87 | .040 |
| | 522.44 | 1043171.65 | 37 | .022 |
| | 871.08 | 1232318.28 | 12 | .027 |
| | 341.52 | 1227554.09 | 7 | .017 |
| | 338.98 | 1026299.50 | 3 | .018 |
| | 72.51 | 271768.92 | 1 | .016 |
| | 2815.08 | 432683.59 | 1 | .081 |
| RANGES OF (SIN(THETA)/LAMBDA)**2 | | | | |
| | 2938.56 | 2581761.44 | 39 | .034 |
| | 3557.10 | 1879239.83 | 55 | .044 |
| | 660.93 | 761431.51 | 69 | .029 |
| | 434.52 | 569081.52 | 85 | .028 |
| | 472.54 | 308042.66 | 89 | .039 |
| | 305.00 | 367286.99 | 104 | .029 |
| | 409.00 | 304726.59 | 112 | .037 |
| | 622.11 | 217445.90 | 109 | .053 |
| UNREJECTED REFLECTIONS | | | | |
| WEIGHTED R | 6266.47 | 6554755.04 | 498 | .031 |
| UNWEIGHTED R | 249.12 | 7818.24 | 498 | .032 |
| RANGES OF F(OBS) | | | | |
| | 2653.01 | 837311.39 | 351 | .056 |
| | 1466.93 | 916331.21 | 87 | .040 |
| | 522.44 | 1043171.65 | 37 | .022 |
| | 871.08 | 1232318.28 | 12 | .027 |
| | 341.52 | 1227554.09 | 7 | .017 |
| | 338.98 | 1026299.50 | 3 | .018 |
| | 72.51 | 271768.92 | 1 | .016 |
| | .00 | .00 | 0 | .000 |
| RANGES OF (SIN(THETA)/LAMBDA)**2 | | | | |
| | 2930.52 | 2581742.36 | 38 | .034 |
| | 737.20 | 1446522.57 | 50 | .023 |
| | 634.03 | 761309.21 | 54 | .029 |
| | 412.01 | 568903.84 | 64 | .027 |
| | 426.53 | 307812.91 | 61 | .037 |
| | 281.85 | 367124.54 | 84 | .028 |
| | 304.80 | 304238.40 | 74 | .032 |
| | 539.51 | 217101.20 | 73 | .050 |

SUM FCAL 8127.00

STANDARD DEV OF UNIT WEIGHT OBS 3.72

The thermal expansion and the high temperature crystal chemistry

of $Al_2SiO_5$ polymorphs

John K. Winter

and

Subrata Ghose

Department of Geological Sciences
University of Washington
Seattle, Washington 98195

Table 10. Sillimanite, andalusite and kyanite: observed and calculated structure factors at various temperatures.

Sillimanite 1000°C

FWA OF THE LOAD 111
LWA+1 OF THE LOAD 74743

TRANSFER ADDRESS -- REFINE 112

********* ERROR SUMMARY

NE4105/// CM BLANK COMMON TRUNCATED BY 20700B WORDS

PROGRAM AND BLOCK ASSIGNMENTS.

| BLOCK | ADDRESS | LENGTH | FILE | DATE | PROCSSR | VER | LEVEL | HARDWARE | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| REFINE | 111 | 10575 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| /A/ | 10706 | 1355 | | | | | | | |
| /C/ | 12263 | 457 | | | | | | | |
| /D/ | 12742 | 3244 | | | | | | | |
| /E/ | 16206 | 10 | | | | | | | |
| /F/ | 16216 | 174 | | | | | | | |
| /G/ | 16412 | 2307 | | | | | | | |
| /LS/ | 20721 | 334 | | | | | | | |
| /TAPE/ | 21255 | 6 | | | | | | | |
| /DEGEN/ | 21263 | 311 | | | | | | | |
| RFINE | 21574 | 5726 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| BODAN1 | 27522 | 1147 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| ELVIB1 | 30671 | 1312 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| INPUT | 32203 | 241 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| MATRIX | 32444 | 231 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| MODIFY | 32675 | 115 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| RCALC | 33012 | 152 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| RESET | 33164 | 73 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| SFAC | 33257 | 476 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| SYMINV | 33755 | 361 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| WEIGHT | 34336 | 12 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| ASINCOS | 34350 | 136 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| EXP | 34506 | 55 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| SINCOS | 34563 | 72 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| SQRT | 34655 | 44 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| ACGOER | 34721 | 12 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| ENDFIL | 34733 | 57 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| GETBA | 35012 | 17 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| INPUTB | 35031 | 256 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| KRAKER | 35307 | 1052 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| OUTPTB | 36361 | 244 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| SIO$ | 36625 | 1504 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| INPUTC | 40331 | 121 | SL-RUN2P3 | 03/17/75 | COMPASS | 3. | 74190 | | |
| KODER | 40452 | 1310 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| OUTPTC | 41762 | 71 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| REWINM | 42053 | 63 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| SYSTEM | 42136 | 1122 | SL-RUN2P3 | 03/04/75 | COMPASS | 3. | 74190 | | |
| // | 43260 | 31463 | | | | | | | |

SILLIMANITE (BRANDYWINE SPRINGS. AT 1000 DEGREES C

STRUCTURE FACTORS



| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 2 | 62.493 | 63.329 | -63.328 | -.347 | -.836 | -6.0096 | 1.0000 | |
| 0 | 0 | 4 | 126.155 | 138.349 | 138.347 | .795 | -12.194 | -61.0109 | 1.0000 | * |
| 0 | 0 | 6 | 23.271 | 22.867 | -22.865 | -.257 | .404 | 1.9492 | 1.0000 | |
| 0 | 0 | 8 | 44.486 | 43.783 | 43.780 | .514 | .703 | 2.0730 | 1.0000 | |
| 0 | 2 | 0 | 15.464 | 13.739 | 13.739 | .032 | 1.725 | 8.2721 | 1.0000 | |
| 0 | 2 | 1 | 4.593 | 4.799 | -4.799 | -.065 | -.207 | -.5241 | 1.0000 | |
| 0 | 2 | 2 | 23.047 | 18.906 | -18.899 | .496 | 4.141 | 23.1077 | 1.0000 | |
| 0 | 2 | 3 | 6.137 | 6.188 | 6.187 | .063 | -.050 | -.2582 | 1.0000 | |
| 0 | 2 | 4 | 6.745 | 6.164 | 6.164 | .028 | .581 | 3.1852 | 1.0000 | |
| 0 | 2 | 5 | 1.055 * | .180 | -.171 | -.056 | .875 | 1.1603 | 1.0000 | * ** |
| 0 | 2 | 6 | 8.104 | 7.674 | 7.665 | .371 | .430 | 3.1682 | 1.0000 | |
| 0 | 2 | 7 | 3.808 | 3.978 | 3.978 | .050 | -.170 | -.5936 | 1.0000 | |
| 0 | 2 | 8 | 1.307 * | 1.454 | 1.454 | .020 | -.147 | -.1579 | 1.0000 | * ** |
| 0 | 4 | 0 | 20.423 | 19.406 | 19.405 | -.153 | 1.017 | 5.0332 | 1.0000 | |
| 0 | 4 | 1 | 5.876 | 5.876 | 5.876 | .080 | .000 | .0000 | 1.0000 | |
| 0 | 4 | 2 | 86.453 | 87.010 | 87.008 | .637 | -.557 | -2.9646 | 1.0000 | |
| 0 | 4 | 3 | 9.434 | 9.618 | -9.618 | -.074 | -.185 | -1.1480 | 1.0000 | |
| 0 | 4 | 4 | 3.598 | 5.237 | 5.235 | -.132 | -1.640 | -6.9239 | 1.0000 | |
| 0 | 4 | 5 | 2.535 | 1.222 | 1.220 | .069 | 1.313 | 3.9240 | 1.0000 | |
| 0 | 4 | 6 | 39.336 | 41.263 | 41.260 | .476 | -1.927 | -6.4971 | 1.0000 | |
| 0 | 4 | 7 | 6.438 | 6.256 | -6.256 | -.054 | .182 | .9247 | 1.0000 | |
| 0 | 4 | 8 | 1.314 * | .433 | -.425 | -.083 | .881 | .9392 | 1.0000 | * ** |
| 0 | 6 | 0 | 46.361 | 46.065 | 46.060 | .700 | .296 | 1.3154 | 1.0000 | |
| 0 | 6 | 1 | 6.893 | 6.639 | 6.639 | -.017 | .255 | 1.5416 | 1.0000 | |
| 0 | 6 | 2 | 21.441 | 22.353 | -22.352 | -.243 | -.912 | -3.3996 | 1.0000 | |
| 0 | 6 | 3 | 1.792 * | .315 | -.315 | .017 | 1.477 | 3.2684 | 1.0000 | * ** |
| 0 | 6 | 4 | 32.698 | 33.803 | 33.797 | .605 | -1.105 | -4.0035 | 1.0000 | |
| 0 | 6 | 5 | 6.411 | 6.524 | 6.524 | -.010 | -.113 | -.6870 | 1.0000 | |
| 0 | 6 | 6 | 9.977 | 10.189 | -10.187 | -.180 | -.212 | -1.4993 | 1.0000 | |
| 0 | 6 | 7 | 1.290 * | 1.637 | 1.637 | .011 | -.346 | -.3753 | 1.0000 | * ** |
| 0 | 8 | 0 | 17.615 | 17.299 | 17.298 | .181 | .317 | 1.6941 | 1.0000 | |
| 0 | 8 | 1 | 2.156 * | 1.726 | 1.725 | -.065 | .430 | .9672 | 1.0000 | * ** |
| 0 | 8 | 2 | 19.570 | 19.638 | 19.637 | .189 | -.067 | -.3690 | 1.0000 | |
| 0 | 8 | 3 | 3.596 | 4.371 | -4.370 | .064 | -.774 | -2.7517 | 1.0000 | |
| 0 | 8 | 4 | 11.495 | 11.543 | 11.542 | .156 | -.047 | -.3626 | 1.0000 | |
| 0 | 8 | 5 | 1.715 * | 2.088 | -2.088 | -.053 | -.373 | -.5469 | 1.0000 | * ** |
| 0 | 8 | 6 | 10.623 | 11.251 | 11.250 | .142 | -.627 | -4.0964 | 1.0000 | |
| 0 | 10 | 0 | 6.224 | 6.171 | -6.169 | -.165 | .053 | .2439 | 1.0000 | |
| 0 | 10 | 1 | 4.293 | 4.546 | 4.545 | .073 | -.253 | -.8599 | 1.0000 | |
| 0 | 10 | 2 | 23.585 | 24.020 | 24.015 | .450 | -.435 | -2.0625 | 1.0000 | |
| 0 | 10 | 3 | 1.316 * | 1.352 | -1.351 | -.066 | -.036 | -.0382 | 1.0000 | * ** |
| 0 | 10 | 4 | 5.224 | 5.005 | -5.003 | -.142 | .219 | .8281 | 1.0000 | |
| 1 | 0 | 1 | 12.647 | 11.745 | 11.745 | .076 | .902 | 4.3012 | 1.0000 | |
| 1 | 0 | 3 | 2.479 | 1.969 | 1.968 | -.072 | .510 | 1.7188 | 1.0000 | |
| 1 | 0 | 5 | 8.331 | 8.341 | 8.341 | .065 | -.010 | -.0620 | 1.0000 | |
| 1 | 0 | 7 | 2.198 * | 1.944 | 1.943 | -.055 | .254 | .5309 | 1.0000 | * ** |
| 1 | 1 | 0 | 24.687 | 23.611 | 23.611 | .065 | 1.076 | 9.0079 | 1.0000 | |
| 1 | 1 | 1 | 4.817 | .971 | .970 | .029 | 3.847 | 6.7326 | 1.0000 | |
| 1 | 1 | 2 | 61.269 | 61.803 | 61.802 | .471 | -.534 | -3.6172 | 1.0000 | |
| 1 | 1 | 3 | 8.167 | 8.026 | 8.026 | -.027 | .141 | .8550 | 1.0000 | |
| 1 | 1 | 4 | 13.406 | 14.186 | 14.186 | .057 | -.780 | -3.7196 | 1.0000 | |
| 1 | 1 | 5 | 4.511 | 4.911 | 4.911 | .026 | -.400 | -2.0245 | 1.0000 | |
| 1 | 1 | 6 | 25.956 | 25.542 | 25.540 | .353 | .414 | 1.4227 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 7 | 4.648 | 3.912 | 3.912 | -.022 | .736 | 3.0786 | 1.0000 | |
| 1 | 1 | 8 | 5.507 | 5.758 | 5.757 | .039 | -.250 | -1.0384 | 1.0000 | |
| 1 | 2 | 0 | 76.061 | 80.908 | 80.907 | .457 | -4.847 | -38.1412 | 1.0000 | |
| 1 | 2 | 1 | 7.757 | 7.985 | -7.985 | -.043 | -.229 | -.9931 | 1.0000 | |
| 1 | 2 | 2 | 83.591 | 83.558 | -83.557 | -.441 | .033 | .2080 | 1.0000 | |
| 1 | 2 | 3 | 1.679 * | 1.439 | -1.438 | .041 | .241 | .5833 | 1.0000 | * ** |
| 1 | 2 | 4 | 44.449 | 45.251 | 45.250 | .395 | -.802 | -3.6749 | 1.0000 | |
| 1 | 2 | 5 | 6.926 | 7.659 | -7.658 | -.036 | -.733 | -5.1899 | 1.0000 | |
| 1 | 2 | 6 | 33.011 | 33.482 | -33.481 | -.329 | -.471 | -1.6558 | 1.0000 | |
| 1 | 2 | 7 | 1.575 * | 1.488 | -1.488 | .031 | .087 | .1250 | 1.0000 | * ** |
| 1 | 2 | 8 | 17.118 | 16.695 | 16.693 | .254 | .423 | 2.3037 | 1.0000 | |
| 1 | 3 | 0 | 46.549 | 47.076 | 47.072 | .619 | -.528 | -3.4219 | 1.0000 | |
| 1 | 3 | 1 | 5.065 | 5.380 | -5.380 | -.010 | -.315 | -1.6022 | 1.0000 | |
| 1 | 3 | 2 | 3.037 | 4.117 | -4.116 | -.088 | -1.080 | -4.2320 | 1.0000 | |
| 1 | 3 | 3 | 2.496 | 2.179 | -2.179 | .010 | .317 | 1.0107 | 1.0000 | |
| 1 | 3 | 4 | 37.192 | 38.020 | 38.017 | .535 | -.828 | -3.5806 | 1.0000 | |
| 1 | 3 | 5 | 4.795 | 5.368 | -5.368 | -.006 | -.573 | -3.0496 | 1.0000 | |
| 1 | 3 | 6 | 4.253 | 4.170 | -4.169 | -.065 | .083 | .3557 | 1.0000 | |
| 1 | 3 | 7 | 2.448 * | 2.694 | -2.694 | .007 | -.246 | -.5293 | 1.0000 | * ** |
| 1 | 3 | 8 | 16.886 | 16.484 | 16.481 | .346 | .402 | 2.3868 | 1.0000 | |
| 1 | 4 | 0 | 1.706 * | .819 | .750 | -.330 | .887 | 2.0888 | 1.0000 | * ** |
| 1 | 4 | 1 | 3.266 | 3.357 | -3.357 | -.030 | -.091 | -.3869 | 1.0000 | |
| 1 | 4 | 2 | 25.056 | 25.495 | 25.493 | .318 | -.439 | -2.0512 | 1.0000 | |
| 1 | 4 | 3 | 6.412 | 7.020 | 7.020 | .029 | -.608 | -3.4341 | 1.0000 | |
| 1 | 4 | 4 | 5.886 | 5.758 | -5.751 | -.285 | .128 | .7576 | 1.0000 | |
| 1 | 4 | 5 | 1.098 * | .530 | .529 | -.026 | .568 | .7248 | 1.0000 | * ** |
| 1 | 4 | 6 | 12.973 | 13.213 | 13.211 | .237 | -.240 | -1.5472 | 1.0000 | |
| 1 | 4 | 7 | 5.711 | 4.785 | 4.785 | .024 | .926 | 4.3489 | 1.0000 | |
| 1 | 4 | 8 | 3.292 | 3.268 | -3.263 | -.184 | .024 | .0624 | 1.0000 | |
| 1 | 5 | 0 | 11.325 | 10.719 | 10.718 | .175 | .606 | 3.2796 | 1.0000 | |
| 1 | 5 | 1 | 6.019 | 5.998 | 5.998 | -.024 | .020 | .1012 | 1.0000 | |
| 1 | 5 | 2 | 56.404 | 58.516 | 58.515 | .291 | -2.112 | -9.8702 | 1.0000 | |
| 1 | 5 | 3 | 1.478 * | .712 | -.712 | .025 | .766 | 1.2993 | 1.0000 | * ** |
| 1 | 5 | 4 | 9.793 | 9.582 | 9.581 | .152 | .211 | 1.6615 | 1.0000 | |
| 1 | 5 | 5 | 4.881 | 4.557 | 4.557 | -.020 | .325 | 1.6154 | 1.0000 | |
| 1 | 5 | 6 | 24.570 | 24.883 | 24.882 | .219 | -.313 | -1.3600 | 1.0000 | |
| 1 | 5 | 7 | 1.285 * | 1.600 | 1.599 | .022 | -.315 | -.3428 | 1.0000 | * ** |
| 1 | 6 | 0 | 23.168 | 22.918 | -22.918 | -.149 | .249 | .9648 | 1.0000 | |
| 1 | 6 | 1 | 2.453 | 2.240 | 2.239 | .077 | .213 | .5394 | 1.0000 | |
| 1 | 6 | 2 | 1.117 * | .174 | -.099 | .143 | .943 | 1.1823 | 1.0000 | * ** |
| 1 | 6 | 3 | 4.654 | 4.319 | -4.319 | -.073 | .335 | 1.7740 | 1.0000 | |
| 1 | 6 | 4 | 14.780 | 14.875 | -14.875 | -.128 | -.095 | -.6313 | 1.0000 | |
| 1 | 6 | 5 | 1.352 * | .764 | .761 | .065 | .588 | .8106 | 1.0000 | * ** |
| 1 | 6 | 6 | 1.259 * | .967 | .961 | .106 | .292 | .3243 | 1.0000 | * ** |
| 1 | 6 | 7 | 3.016 | 3.387 | -3.386 | -.054 | -.370 | -.8850 | 1.0000 | |
| 1 | 7 | 0 | 22.768 | 24.072 | -24.072 | -.030 | -1.304 | -4.6529 | 1.0000 | |
| 1 | 7 | 1 | 6.095 | 6.258 | 6.258 | .042 | -.164 | -1.0325 | 1.0000 | |
| 1 | 7 | 2 | 36.896 | 37.857 | 37.855 | .425 | -.961 | -3.6394 | 1.0000 | |
| 1 | 7 | 3 | 6.549 | 6.498 | -6.498 | -.037 | .051 | .3244 | 1.0000 | |
| 1 | 7 | 4 | 14.429 | 14.891 | -14.891 | -.025 | -.462 | -2.8160 | 1.0000 | |
| 1 | 7 | 5 | 3.074 | 2.967 | 2.967 | .036 | .107 | .2976 | 1.0000 | |
| 1 | 7 | 6 | 19.070 | 19.251 | 19.248 | .318 | -.181 | -1.0490 | 1.0000 | |
| 1 | 7 | 7 | 3.809 | 3.798 | -3.798 | -.026 | .011 | .0330 | 1.0000 | |

SILLIMANITE (BRANDYWINE SPRINGS. AT 1000 DEGREES C

STRUCTURE FACTORS



| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8 | 0 | 29.559 | 29.167 | 29.165 | .343 | .393 | 1.3586 | 1.0000 | |
| 1 | 8 | 1 | 1.588 * | .355 | .352 | -.044 | 1.233 | 1.9711 | 1.0000 | * ** |
| 1 | 8 | 2 | 11.775 | 11.613 | -11.609 | -.331 | .161 | 1.0600 | 1.0000 | |
| 1 | 8 | 3 | 1.188 * | .451 | .449 | .042 | .737 | .8676 | 1.0000 | * ** |
| 1 | 8 | 4 | 20.547 | 20.962 | 20.959 | .296 | -.415 | -2.0528 | 1.0000 | |
| 1 | 8 | 5 | 1.277 * | .565 | .564 | -.035 | .712 | .7808 | 1.0000 | * ** |
| 1 | 8 | 6 | 6.804 | 6.790 | -6.786 | -.247 | .014 | .0650 | 1.0000 | |
| 1 | 9 | 0 | 27.558 | 27.650 | 27.648 | .362 | -.092 | -.2881 | 1.0000 | |
| 1 | 9 | 1 | 1.224 * | .052 | .051 | -.010 | 1.172 | 1.3401 | 1.0000 | * ** |
| 1 | 9 | 2 | 8.991 | 9.448 | 9.448 | -.024 | -.458 | -3.0754 | 1.0000 | |
| 1 | 9 | 3 | 1.282 * | .406 | .405 | .011 | .876 | .9567 | 1.0000 | * ** |
| 1 | 9 | 4 | 19.659 | 20.481 | 20.479 | .313 | -.822 | -4.2731 | 1.0000 | |
| 1 | 9 | 5 | 2.187 * | .524 | .524 | -.005 | 1.663 | 2.9325 | 1.0000 | * ** |
| 1 | 10 | 0 | 16.785 | 15.987 | -15.987 | -.115 | .798 | 4.4800 | 1.0000 | |
| 1 | 10 | 1 | 2.311 * | 2.754 | 2.754 | -.032 | -.443 | -.8117 | 1.0000 | * ** |
| 1 | 10 | 2 | 4.753 | 4.407 | 4.405 | .110 | .346 | 1.2555 | 1.0000 | |
| 1 | 10 | 3 | 2.422 * | 2.121 | -2.121 | .030 | .301 | .5817 | 1.0000 | * ** |
| 1 | 10 | 4 | 11.732 | 11.832 | -11.832 | -.099 | -.100 | -.6769 | 1.0000 | |
| 1 | 11 | 0 | 4.607 | 4.407 | 4.404 | .166 | .199 | .6483 | 1.0000 | |
| 1 | 11 | 1 | 3.074 | 2.251 | -2.251 | -.030 | .823 | 1.8698 | 1.0000 | |
| 1 | 11 | 2 | 1.350 * | 1.347 | 1.344 | .093 | .003 | .0032 | 1.0000 | * ** |
| 2 | 0 | 0 | 33.886 | 32.130 | 32.129 | .102 | 1.756 | 12.2463 | 1.0000 | |
| 2 | 0 | 2 | 44.861 | 44.056 | 44.054 | .431 | .805 | 5.0750 | 1.0000 | |
| 2 | 0 | 4 | 15.007 | 14.757 | 14.757 | .089 | .250 | 1.2121 | 1.0000 | |
| 2 | 0 | 6 | 24.280 | 23.806 | 23.804 | .323 | .474 | 2.2272 | 1.0000 | |
| 2 | 0 | 8 | 2.646 * | 3.596 | 3.595 | .058 | -.950 | -1.8968 | 1.0000 | * ** |
| 2 | 1 | 0 | 80.915 | 92.555 | -92.554 | -.498 | -11.640 | -91.5922 | 1.0000 | * |
| 2 | 1 | 1 | 7.023 | 6.724 | -6.724 | -.028 | .300 | 1.2255 | 1.0000 | |
| 2 | 1 | 2 | 5.562 | 1.122 | -1.014 | .480 | 4.460 | 27.0155 | 1.0000 | |
| 2 | 1 | 3 | 5.360 | 5.525 | 5.524 | .028 | -.164 | -.8731 | 1.0000 | |
| 2 | 1 | 4 | 49.590 | 50.362 | -50.360 | -.430 | -.772 | -3.5353 | 1.0000 | |
| 2 | 1 | 5 | 1.074 * | 1.196 | -1.195 | -.024 | -.121 | -.1582 | 1.0000 | * ** |
| 2 | 1 | 6 | 10.474 | 10.036 | 10.029 | .358 | .439 | 2.7666 | 1.0000 | |
| 2 | 1 | 7 | 3.575 | 2.602 | 2.602 | .023 | .973 | 3.0677 | 1.0000 | |
| 2 | 1 | 8 | 18.411 | 17.519 | -17.517 | -.277 | .892 | 4.9784 | 1.0000 | |
| 2 | 2 | 0 | 60.878 | 59.481 | 59.480 | .336 | 1.397 | 9.6691 | 1.0000 | |
| 2 | 2 | 1 | 4.689 | 4.858 | 4.858 | .054 | -.169 | -.8026 | 1.0000 | |
| 2 | 2 | 2 | 14.007 | 13.762 | 13.761 | .192 | .245 | 1.5015 | 1.0000 | |
| 2 | 2 | 3 | 3.781 | 3.716 | -3.716 | -.050 | .065 | .2689 | 1.0000 | |
| 2 | 2 | 4 | 33.237 | 33.281 | 33.279 | .291 | -.044 | -.1887 | 1.0000 | |
| 2 | 2 | 5 | 3.556 | 2.796 | 2.795 | .045 | .761 | 3.1681 | 1.0000 | |
| 2 | 2 | 6 | 10.108 | 9.961 | 9.960 | .144 | .147 | .9881 | 1.0000 | |
| 2 | 2 | 7 | 3.220 | 1.851 | -1.851 | -.035 | 1.368 | 3.9617 | 1.0000 | |
| 2 | 2 | 8 | 11.064 | 11.028 | 11.026 | .189 | .036 | .2423 | 1.0000 | |
| 2 | 3 | 0 | 61.449 | 57.531 | 57.530 | -.110 | 3.919 | 24.0513 | 1.0000 | |
| 2 | 3 | 1 | 13.583 | 12.779 | -12.779 | .067 | .804 | 4.9354 | 1.0000 | |
| 2 | 3 | 2 | 9.145 | 8.514 | 8.513 | .106 | .631 | 3.9800 | 1.0000 | |
| 2 | 3 | 3 | 4.021 | 4.062 | 4.062 | -.064 | -.041 | -.1928 | 1.0000 | |
| 2 | 3 | 4 | 22.453 | 25.099 | 25.099 | -.095 | -2.646 | -9.9823 | 1.0000 | |
| 2 | 3 | 5 | 5.167 | 5.606 | -5.606 | .059 | -.439 | -2.4053 | 1.0000 | |
| 2 | 3 | 6 | 4.111 | 3.988 | 3.987 | .079 | .124 | .4993 | 1.0000 | |
| 2 | 3 | 7 | 1.270 * | 1.584 | -1.584 | -.049 | -.315 | -.3468 | 1.0000 | * ** |
| 2 | 3 | 8 | 7.791 | 7.246 | 7.246 | -.061 | .545 | 2.8859 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 4 | 0 | 56.749 | 54.777 | 54.776 | .353 | 1.972 | 10.6807 | 1.0000 | |
| 2 | 4 | 1 | 4.565 | 4.735 | -4.735 | -.049 | -.170 | -.8011 | 1.0000 | |
| 2 | 4 | 2 | 4.949 | 5.613 | 5.611 | .139 | -.664 | -3.0410 | 1.0000 | |
| 2 | 4 | 3 | 4.050 | 4.123 | 4.123 | .047 | -.072 | -.3192 | 1.0000 | |
| 2 | 4 | 4 | 33.778 | 33.624 | 33.623 | .306 | .154 | .6187 | 1.0000 | |
| 2 | 4 | 5 | 1.687 * | 2.696 | -2.696 | -.039 | -1.009 | -1.8148 | 1.0000 | * ** |
| 2 | 4 | 6 | 5.345 | 5.223 | 5.222 | .105 | .122 | .5989 | 1.0000 | |
| 2 | 4 | 7 | 3.119 | 2.102 | 2.102 | .035 | 1.016 | 2.6579 | 1.0000 | |
| 2 | 4 | 8 | 12.301 | 11.689 | 11.687 | .199 | .612 | 4.2379 | 1.0000 | |
| 2 | 5 | 0 | 47.086 | 46.818 | 46.815 | .506 | .269 | 1.2742 | 1.0000 | |
| 2 | 5 | 1 | 10.870 | 10.945 | -10.945 | -.051 | -.075 | -.4296 | 1.0000 | |
| 2 | 5 | 2 | 69.934 | 71.570 | -71.568 | -.488 | -1.636 | -7.4943 | 1.0000 | |
| 2 | 5 | 3 | 12.336 | 12.778 | 12.778 | .048 | -.442 | -2.6244 | 1.0000 | |
| 2 | 5 | 4 | 32.439 | 33.365 | 33.362 | .437 | -.926 | -3.4799 | 1.0000 | |
| 2 | 5 | 5 | 1.895 * | 2.495 | -2.495 | -.041 | -.600 | -1.1802 | 1.0000 | * ** |
| 2 | 5 | 6 | 33.458 | 33.699 | -33.697 | -.364 | -.242 | -.7649 | 1.0000 | |
| 2 | 5 | 7 | 6.438 | 6.788 | 6.788 | .035 | -.350 | -1.6370 | 1.0000 | |
| 2 | 6 | 0 | 20.788 | 19.850 | 19.850 | .087 | .938 | 3.4395 | 1.0000 | |
| 2 | 6 | 1 | 1.902 * | 1.665 | -1.665 | -.004 | .237 | .4670 | 1.0000 | * ** |
| 2 | 6 | 2 | 20.654 | 20.448 | 20.446 | .339 | .206 | 1.0536 | 1.0000 | |
| 2 | 6 | 3 | 1.111 * | 1.462 | 1.462 | .006 | -.351 | -.4421 | 1.0000 | * ** |
| 2 | 6 | 4 | 12.041 | 12.074 | 12.074 | .076 | -.033 | -.2314 | 1.0000 | |
| 2 | 6 | 5 | 1.185 * | .840 | -.840 | -.002 | .345 | .4077 | 1.0000 | * ** |
| 2 | 6 | 6 | 12.027 | 12.241 | 12.238 | .254 | -.214 | -1.4101 | 1.0000 | |
| 2 | 6 | 7 | 1.327 * | .748 | .748 | .006 | .579 | .6108 | 1.0000 | * ** |
| 2 | 7 | 0 | 15.256 | 14.865 | -14.863 | -.251 | .391 | 2.1276 | 1.0000 | |
| 2 | 7 | 1 | 1.124 * | .608 | -.607 | -.021 | .517 | .6435 | 1.0000 | * ** |
| 2 | 7 | 2 | 25.377 | 25.690 | 25.689 | .241 | -.313 | -1.0943 | 1.0000 | |
| 2 | 7 | 3 | 4.192 | 3.155 | -3.155 | .021 | 1.036 | 4.3765 | 1.0000 | |
| 2 | 7 | 4 | 11.428 | 11.280 | -11.278 | -.217 | .148 | 1.0039 | 1.0000 | |
| 2 | 7 | 5 | 3.151 | 3.161 | -3.161 | -.019 | -.010 | -.0268 | 1.0000 | |
| 2 | 7 | 6 | 13.435 | 13.474 | 13.473 | .180 | -.038 | -.2540 | 1.0000 | |
| 2 | 8 | 0 | 22.107 | 22.254 | 22.253 | .197 | -.148 | -.6667 | 1.0000 | |
| 2 | 8 | 1 | 1.190 * | 1.371 | 1.370 | .045 | -.180 | -.2118 | 1.0000 | * ** |
| 2 | 8 | 2 | 8.346 | 8.233 | 8.231 | .165 | .113 | .7401 | 1.0000 | |
| 2 | 8 | 3 | 1.210 * | 1.139 | -1.139 | -.040 | .071 | .0817 | 1.0000 | * ** |
| 2 | 8 | 4 | 14.888 | 15.319 | 15.318 | .171 | -.431 | -2.6109 | 1.0000 | |
| 2 | 8 | 5 | 1.311 * | 1.144 | 1.143 | .039 | .167 | .1787 | 1.0000 | * ** |
| 2 | 8 | 6 | 5.377 | 5.007 | 5.005 | .124 | .370 | 1.4316 | 1.0000 | |
| 2 | 9 | 0 | 20.370 | 19.310 | -19.309 | -.200 | 1.060 | 5.3608 | 1.0000 | |
| 2 | 9 | 1 | 8.265 | 7.859 | 7.859 | .072 | .406 | 2.5401 | 1.0000 | |
| 2 | 9 | 2 | 15.153 | 15.223 | 15.222 | .192 | -.070 | -.4359 | 1.0000 | |
| 2 | 9 | 3 | 4.619 | 4.112 | -4.111 | -.067 | .507 | 1.8805 | 1.0000 | |
| 2 | 9 | 4 | 14.396 | 14.258 | -14.257 | -.172 | .138 | .8229 | 1.0000 | |
| 2 | 9 | 5 | 7.072 | 7.667 | 7.667 | .060 | -.595 | -2.8378 | 1.0000 | |
| 2 | 10 | 0 | 16.382 | 15.996 | 15.995 | .229 | .386 | 2.0772 | 1.0000 | |
| 2 | 10 | 1 | 1.336 * | 1.956 | -1.955 | -.031 | -.620 | -.6496 | 1.0000 | * ** |
| 2 | 10 | 2 | 1.331 * | 1.296 | 1.294 | .064 | .035 | .0368 | 1.0000 | * ** |
| 2 | 10 | 3 | 2.316 * | 1.895 | 1.895 | .031 | .421 | .7522 | 1.0000 | * ** |
| 2 | 10 | 4 | 11.871 | 11.591 | 11.589 | .198 | .280 | 1.9116 | 1.0000 | |
| 2 | 11 | 0 | 12.727 | 12.101 | 12.097 | .281 | .627 | 3.9511 | 1.0000 | |
| 2 | 11 | 1 | 1.371 * | .189 | -.186 | -.038 | 1.181 | 1.2057 | 1.0000 | * ** |
| 2 | 11 | 2 | 12.973 | 13.160 | -13.157 | -.272 | -.187 | -1.1865 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 0 | 1 | 5.610 | 5.192 | 5.192 | -.029 | .418 | 2.0251 | 1.0000 |
| 3 | 0 | 3 | 5.211 | 4.935 | 4.935 | .027 | .275 | 1.2364 | 1.0000 |
| 3 | 0 | 5 | 4.691 | 4.150 | 4.150 | -.021 | .542 | 2.7249 | 1.0000 |
| 3 | 0 | 7 | 5.120 | 4.585 | 4.585 | .017 | .535 | 2.2698 | 1.0000 |
| 3 | 1 | 0 | 12.275 | 15.771 | 15.760 | .579 | -3.496 | -14.6951 | 1.0000 |
| 3 | 1 | 1 | 3.835 | 4.199 | -4.198 | -.084 | -.364 | -1.5217 | 1.0000 |
| 3 | 1 | 2 | 36.381 | 34.724 | 34.724 | -.045 | 1.657 | 8.9184 | 1.0000 |
| 3 | 1 | 3 | 2.701 | 2.530 | -2.528 | .080 | .172 | .4961 | 1.0000 |
| 3 | 1 | 4 | 23.147 | 22.031 | 22.025 | .501 | 1.117 | 4.2655 | 1.0000 |
| 3 | 1 | 5 | 6.496 | 6.597 | -6.596 | -.071 | -.101 | -.6609 | 1.0000 |
| 3 | 1 | 6 | 9.671 | 9.403 | 9.403 | -.032 | .267 | 2.0012 | 1.0000 |
| 3 | 1 | 7 | 1.270 * | 1.299 | -1.298 | .060 | -.029 | -.0323 | 1.0000 * ** |
| 3 | 1 | 8 | 10.771 | 10.786 | 10.781 | .324 | -.015 | -.0915 | 1.0000 |
| 3 | 2 | 0 | 28.842 | 28.568 | 28.567 | .199 | .275 | 1.5418 | 1.0000 |
| 3 | 2 | 1 | 4.326 | 4.157 | 4.157 | .007 | .169 | .8002 | 1.0000 |
| 3 | 2 | 2 | 36.864 | 36.950 | -36.950 | -.192 | -.086 | -.4479 | 1.0000 |
| 3 | 2 | 3 | 8.348 | 8.354 | -8.354 | -.005 | -.006 | -.0347 | 1.0000 |
| 3 | 2 | 4 | 17.687 | 18.295 | 18.294 | .171 | -.408 | -2.0326 | 1.0000 |
| 3 | 2 | 5 | 3.167 | 2.380 | -2.380 | .006 | .787 | 2.7449 | 1.0000 |
| 3 | 2 | 6 | 15.512 | 15.648 | -15.647 | -.143 | -.136 | -.7629 | 1.0000 |
| 3 | 2 | 7 | 4.253 | 4.089 | -4.089 | -.002 | .163 | .5689 | 1.0000 |
| 3 | 2 | 8 | 7.430 | 7.084 | 7.083 | .110 | .346 | 1.7307 | 1.0000 |
| 3 | 3 | 0 | 33.007 | 32.688 | -32.687 | -.276 | .319 | 1.6666 | 1.0000 |
| 3 | 3 | 1 | 4.943 | 4.692 | 4.692 | .008 | .251 | 1.2093 | 1.0000 |
| 3 | 3 | 2 | 98.765 | 100.211 | 100.208 | .755 | -1.446 | -7.4374 | 1.0000 |
| 3 | 3 | 3 | 1.578 * | 1.232 | 1.232 | -.006 | .346 | .5989 | 1.0000 * ** |
| 3 | 3 | 4 | 19.638 | 20.273 | -20.271 | -.238 | -.635 | -3.2133 | 1.0000 |
| 3 | 3 | 5 | 4.753 | 4.577 | 4.577 | .006 | .177 | .8560 | 1.0000 |
| 3 | 3 | 6 | 44.926 | 45.526 | 45.523 | .564 | -.600 | -2.0319 | 1.0000 |
| 3 | 3 | 7 | 1.318 * | 2.420 | 2.420 | -.002 | -1.103 | -1.1725 | 1.0000 * ** |
| 3 | 3 | 8 | 7.324 | 7.378 | -7.377 | -.152 | -.054 | -.2625 | 1.0000 |
| 3 | 4 | 0 | 7.316 | 4.551 | 4.549 | -.134 | 2.765 | 13.9084 | 1.0000 |
| 3 | 4 | 1 | 6.528 | 6.063 | 6.063 | .024 | .465 | 2.2425 | 1.0000 |
| 3 | 4 | 2 | 13.690 | 13.927 | 13.927 | .129 | -.238 | -1.3271 | 1.0000 |
| 3 | 4 | 3 | 2.394 | .288 | -.288 | -.021 | 2.106 | 5.4608 | 1.0000 |
| 3 | 4 | 4 | 1.091 * | .625 | .614 | -.116 | .466 | .5980 | 1.0000 * ** |
| 3 | 4 | 5 | 4.872 | 5.029 | 5.029 | .019 | -.158 | -.7410 | 1.0000 |
| 3 | 4 | 6 | 6.386 | 6.327 | 6.326 | .096 | .059 | .3158 | 1.0000 |
| 3 | 4 | 7 | 1.550 * | 1.993 | 1.993 | -.012 | -.443 | -.5500 | 1.0000 * ** |
| 3 | 5 | 0 | 26.768 | 25.015 | 25.013 | .334 | 1.752 | 7.0759 | 1.0000 |
| 3 | 5 | 1 | 3.188 | 2.087 | -2.085 | .078 | 1.101 | 3.5952 | 1.0000 |
| 3 | 5 | 2 | 1.164 * | .226 | -.191 | .120 | .939 | 1.1284 | 1.0000 * ** |
| 3 | 5 | 3 | 1.105 * | 1.222 | -1.220 | -.072 | -.117 | -.1484 | 1.0000 * ** |
| 3 | 5 | 4 | 19.420 | 19.628 | 19.626 | .289 | -.208 | -1.1531 | 1.0000 |
| 3 | 5 | 5 | 1.177 * | 1.516 | -1.514 | .068 | -.338 | -.4023 | 1.0000 * ** |
| 3 | 5 | 6 | 1.804 * | .212 | -.191 | .091 | 1.592 | 2.4557 | 1.0000 * ** |
| 3 | 5 | 7 | 1.964 * | 2.169 | -2.168 | -.054 | -.205 | -.3172 | 1.0000 * ** |
| 3 | 6 | 0 | 16.481 | 17.371 | -17.371 | -.078 | -.890 | -4.0952 | 1.0000 |
| 3 | 6 | 1 | 1.136 * | 1.167 | -1.167 | -.013 | -.031 | -.0380 | 1.0000 * ** |
| 3 | 6 | 2 | 1.114 * | .693 | -.689 | .075 | .421 | .5294 | 1.0000 * ** |
| 3 | 6 | 3 | 1.148 * | .968 | -.967 | .013 | .181 | .2202 | 1.0000 * ** |
| 3 | 6 | 4 | 10.559 | 11.083 | -11.083 | -.067 | -.524 | -3.6837 | 1.0000 |
| 3 | 6 | 5 | 3.077 | 2.313 | -2.313 | -.009 | .764 | 2.1503 | 1.0000 |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 6 | 6 | 1.296 * | .058 | -.017 | .055 | 1.238 | 1.3374 | 1.0000 | * ** |
| 3 | 6 | 7 | 3.014 | 1.288 | -1.288 | .008 | 1.726 | 3.9823 | 1.0000 | |
| 3 | 7 | 0 | 56.993 | 56.738 | 56.735 | .541 | .255 | .9768 | 1.0000 | |
| 3 | 7 | 1 | 10.066 | 9.775 | -9.775 | -.083 | .291 | 1.9527 | 1.0000 | |
| 3 | 7 | 2 | 5.835 | 5.320 | -5.319 | -.141 | .515 | 2.7709 | 1.0000 | |
| 3 | 7 | 3 | 8.954 | 9.384 | 9.384 | .080 | -.431 | -2.9585 | 1.0000 | |
| 3 | 7 | 4 | 39.880 | 40.763 | 40.760 | .468 | -.883 | -2.8811 | 1.0000 | |
| 3 | 7 | 5 | 5.866 | 5.523 | -5.523 | -.067 | .342 | 1.5380 | 1.0000 | |
| 3 | 7 | 6 | 3.926 | 4.141 | -4.140 | -.104 | -.216 | -.6385 | 1.0000 | |
| 3 | 8 | 0 | 13.824 | 13.448 | 13.447 | .147 | .376 | 2.2218 | 1.0000 | |
| 3 | 8 | 1 | 2.833 | 2.657 | 2.657 | -.013 | .176 | .4717 | 1.0000 | |
| 3 | 8 | 2 | 1.202 * | .437 | .413 | -.142 | .766 | .8913 | 1.0000 | * ** |
| 3 | 8 | 3 | 1.248 * | 1.170 | -1.170 | .012 | .078 | .0872 | 1.0000 | * ** |
| 3 | 8 | 4 | 9.354 | 9.710 | 9.709 | .127 | -.356 | -2.2901 | 1.0000 | |
| 3 | 8 | 5 | 1.344 * | 2.118 | 2.118 | -.009 | -.774 | -.8069 | 1.0000 | * ** |
| 3 | 9 | 0 | 14.818 | 14.582 | -14.581 | -.133 | .236 | 1.3028 | 1.0000 | |
| 3 | 9 | 1 | 1.414 * | .654 | -.654 | .004 | .760 | .9265 | 1.0000 | * ** |
| 3 | 9 | 2 | 22.321 | 22.362 | 22.358 | .441 | -.041 | -.2001 | 1.0000 | |
| 3 | 9 | 3 | 1.320 * | .799 | .799 | -.001 | .521 | .5528 | 1.0000 | * ** |
| 3 | 9 | 4 | 10.521 | 10.284 | -10.283 | -.115 | .237 | 1.5505 | 1.0000 | |
| 3 | 9 | 5 | 1.344 * | .519 | -.519 | .004 | .824 | .8585 | 1.0000 | * ** |
| 3 | 10 | 0 | 10.116 | 9.587 | -9.587 | -.034 | .529 | 3.1601 | 1.0000 | |
| 3 | 10 | 1 | 4.264 | 3.794 | 3.794 | .013 | .471 | 1.4992 | 1.0000 | |
| 3 | 10 | 2 | 1.346 * | .647 | -.646 | .032 | .699 | .7273 | 1.0000 | * ** |
| 3 | 10 | 3 | 3.475 | 3.287 | -3.287 | -.011 | .188 | .4808 | 1.0000 | |
| 3 | 11 | 0 | 5.838 | 5.758 | 5.757 | .087 | .081 | .3153 | 1.0000 | |
| 3 | 11 | 1 | 5.203 | 4.168 | 4.167 | .068 | 1.035 | 3.6795 | 1.0000 | |
| 4 | 0 | 0 | 75.403 | 74.119 | -74.118 | -.240 | 1.284 | 7.3886 | 1.0000 | |
| 4 | 0 | 2 | 66.840 | 65.913 | 65.909 | .730 | .928 | 4.8245 | 1.0000 | |
| 4 | 0 | 4 | 41.174 | 42.562 | -42.561 | -.206 | -1.388 | -5.6778 | 1.0000 | |
| 4 | 0 | 6 | 36.479 | 36.148 | 36.144 | .545 | .332 | 1.0946 | 1.0000 | |
| 4 | 0 | 8 | 16.884 | 15.806 | -15.806 | -.131 | 1.078 | 6.0131 | 1.0000 | |
| 4 | 1 | 0 | 21.275 | 21.810 | 21.808 | .259 | -.535 | -2.5518 | 1.0000 | |
| 4 | 1 | 1 | 1.109 * | 1.705 | -1.704 | .056 | -.596 | -.7515 | 1.0000 | * ** |
| 4 | 1 | 2 | 20.729 | 20.273 | -20.271 | -.250 | .457 | 1.9468 | 1.0000 | |
| 4 | 1 | 3 | 1.151 * | .101 | .088 | -.051 | 1.050 | 1.2768 | 1.0000 | * ** |
| 4 | 1 | 4 | 15.903 | 15.861 | 15.860 | .224 | .042 | .2405 | 1.0000 | |
| 4 | 1 | 5 | 2.895 | 1.260 | 1.259 | .047 | 1.635 | 4.8878 | 1.0000 | |
| 4 | 1 | 6 | 11.137 | 10.636 | -10.635 | -.187 | .501 | 3.3159 | 1.0000 | |
| 4 | 1 | 7 | 1.312 * | 1.316 | -1.316 | -.036 | -.004 | -.0045 | 1.0000 | * ** |
| 4 | 1 | 8 | 6.275 | 6.449 | 6.447 | .145 | -.174 | -.7279 | 1.0000 | |
| 4 | 2 | 0 | 74.394 | 71.932 | 71.931 | .436 | 2.462 | 13.4097 | 1.0000 | |
| 4 | 2 | 1 | 1.152 * | 1.502 | -1.501 | .018 | -.349 | -.4240 | 1.0000 | * ** |
| 4 | 2 | 2 | 35.109 | 35.426 | 35.426 | .066 | -.317 | -1.4681 | 1.0000 | |
| 4 | 2 | 3 | 1.483 * | 1.065 | -1.065 | -.017 | .418 | .6348 | 1.0000 | * ** |
| 4 | 2 | 4 | 43.958 | 43.886 | 43.884 | .377 | .072 | .2889 | 1.0000 | |
| 4 | 2 | 5 | 1.442 * | 1.605 | -1.605 | .019 | -.162 | -.2393 | 1.0000 | * ** |
| 4 | 2 | 6 | 14.726 | 14.989 | 14.989 | .051 | -.264 | -1.5451 | 1.0000 | |
| 4 | 2 | 7 | 2.598 * | 1.788 | -1.788 | -.016 | .811 | 1.6961 | 1.0000 | * ** |
| 4 | 2 | 8 | 16.057 | 15.112 | 15.110 | .244 | .945 | 5.5416 | 1.0000 | |
| 4 | 3 | 0 | 5.150 | 3.229 | -3.229 | .046 | 1.920 | 8.0729 | 1.0000 | |
| 4 | 3 | 1 | 10.654 | 10.612 | -10.611 | -.105 | .042 | .2058 | 1.0000 | |
| 4 | 3 | 2 | 4.520 | 3.596 | 3.596 | -.045 | .923 | 3.6963 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 3 | 3 | 8.946 | 8.555 | 8.555 | .099 | .391 | 2.2482 | 1.0000 | |
| 4 | 3 | 4 | 1.125 * | 1.466 | -1.466 | .040 | -.341 | -.4240 | 1.0000 | * ** |
| 4 | 3 | 5 | 5.664 | 5.484 | -5.484 | -.085 | .179 | .9485 | 1.0000 | |
| 4 | 3 | 6 | 1.920 * | 1.107 | 1.107 | -.034 | .813 | 1.4073 | 1.0000 | * ** |
| 4 | 3 | 7 | 4.080 | 3.688 | 3.687 | .072 | .392 | 1.2143 | 1.0000 | |
| 4 | 4 | 0 | 53.046 | 52.817 | 52.814 | .556 | .229 | 1.0504 | 1.0000 | |
| 4 | 4 | 1 | 2.402 * | 2.151 | -2.150 | -.035 | .251 | .6094 | 1.0000 | * ** |
| 4 | 4 | 2 | 32.402 | 33.333 | -33.333 | -.085 | -.931 | -3.8106 | 1.0000 | |
| 4 | 4 | 3 | 5.249 | 5.423 | 5.423 | .035 | -.174 | -.9505 | 1.0000 | |
| 4 | 4 | 4 | 36.912 | 36.624 | 36.621 | .481 | .288 | 1.0649 | 1.0000 | |
| 4 | 4 | 5 | 1.180 * | .579 | .579 | -.030 | .600 | .7121 | 1.0000 | * ** |
| 4 | 4 | 6 | 13.895 | 13.621 | -13.621 | -.062 | .274 | 1.5937 | 1.0000 | |
| 4 | 4 | 7 | 3.638 | 4.268 | 4.268 | .029 | -.630 | -1.7160 | 1.0000 | |
| 4 | 5 | 0 | 27.522 | 27.063 | -27.061 | -.259 | .460 | 1.7861 | 1.0000 | |
| 4 | 5 | 1 | 2.843 | 1.315 | 1.314 | .044 | 1.528 | 4.3519 | 1.0000 | |
| 4 | 5 | 2 | 22.668 | 22.663 | 22.662 | .249 | .005 | .0259 | 1.0000 | |
| 4 | 5 | 3 | 1.141 * | 1.577 | -1.577 | -.040 | -.437 | -.5361 | 1.0000 | * ** |
| 4 | 5 | 4 | 18.984 | 19.140 | -19.139 | -.224 | -.157 | -.8341 | 1.0000 | |
| 4 | 5 | 5 | 1.222 * | 1.591 | 1.590 | .036 | -.369 | -.4222 | 1.0000 | * ** |
| 4 | 5 | 6 | 12.441 | 12.271 | 12.270 | .186 | .170 | 1.1110 | 1.0000 | |
| 4 | 5 | 7 | 1.361 * | 1.315 | -1.315 | -.027 | .046 | .0469 | 1.0000 | * ** |
| 4 | 6 | 0 | 13.434 | 13.551 | 13.550 | -.160 | -.117 | -.6904 | 1.0000 | |
| 4 | 6 | 1 | 4.450 | 4.749 | -4.749 | .021 | -.299 | -1.3546 | 1.0000 | |
| 4 | 6 | 2 | 38.042 | 37.228 | 37.224 | .553 | .814 | 3.0100 | 1.0000 | |
| 4 | 6 | 3 | 1.182 * | .567 | .567 | -.017 | .615 | .7286 | 1.0000 | * ** |
| 4 | 6 | 4 | 6.991 | 7.322 | 7.321 | -.138 | -.331 | -1.9417 | 1.0000 | |
| 4 | 6 | 5 | 4.935 | 4.966 | -4.966 | .017 | -.032 | -.1250 | 1.0000 | |
| 4 | 6 | 6 | 19.928 | 20.395 | 20.391 | .413 | -.467 | -2.3905 | 1.0000 | |
| 4 | 7 | 0 | 13.247 | 13.058 | 13.058 | .145 | .189 | 1.1375 | 1.0000 | |
| 4 | 7 | 1 | 1.211 * | .536 | .533 | .053 | .675 | .7812 | 1.0000 | * ** |
| 4 | 7 | 2 | 9.535 | 9.622 | -9.621 | -.141 | -.087 | -.6244 | 1.0000 | |
| 4 | 7 | 3 | 1.213 * | .728 | -.726 | -.049 | .485 | .5601 | 1.0000 | * ** |
| 4 | 7 | 4 | 8.969 | 9.163 | 9.162 | .125 | -.194 | -1.2493 | 1.0000 | |
| 4 | 7 | 5 | 1.321 * | 1.022 | 1.021 | .045 | .299 | .3171 | 1.0000 | * ** |
| 4 | 7 | 6 | 5.153 | 5.074 | -5.073 | -.105 | .079 | .2869 | 1.0000 | |
| 4 | 8 | 0 | 16.241 | 16.752 | 16.751 | .168 | -.511 | -2.7496 | 1.0000 | |
| 4 | 8 | 1 | 1.703 * | 3.199 | -3.199 | .028 | -1.496 | -2.2995 | 1.0000 | * ** |
| 4 | 8 | 2 | 3.829 | 2.697 | 2.691 | .173 | 1.132 | 3.7631 | 1.0000 | |
| 4 | 8 | 3 | 4.805 | 5.375 | 5.374 | -.025 | -.569 | -2.1385 | 1.0000 | |
| 4 | 8 | 4 | 11.395 | 11.843 | 11.842 | .146 | -.448 | -3.1231 | 1.0000 | |
| 4 | 8 | 5 | 1.358 * | .686 | .685 | .027 | .672 | .6927 | 1.0000 | * ** |
| 4 | 9 | 0 | 7.129 | 6.971 | 6.970 | .087 | .158 | .7948 | 1.0000 | |
| 4 | 9 | 1 | 6.935 | 6.783 | -6.782 | -.077 | .153 | .7562 | 1.0000 | |
| 4 | 9 | 2 | 9.096 | 8.764 | -8.763 | -.084 | .332 | 1.9866 | 1.0000 | |
| 4 | 9 | 3 | 5.715 | 5.929 | 5.928 | .073 | -.214 | -.8576 | 1.0000 | |
| 4 | 9 | 4 | 5.428 | 5.039 | 5.038 | .075 | .389 | 1.4808 | 1.0000 | |
| 4 | 10 | 0 | 23.904 | 23.016 | 23.012 | .390 | .889 | 4.0100 | 1.0000 | |
| 4 | 10 | 1 | 2.621 * | 2.826 | -2.826 | -.044 | -.205 | -.3922 | 1.0000 | * ** |
| 4 | 10 | 2 | 6.468 | 6.255 | -6.254 | -.108 | .213 | .9215 | 1.0000 | |
| 4 | 10 | 3 | 1.377 * | .497 | .495 | .043 | .880 | .8946 | 1.0000 | * ** |
| 5 | 0 | 1 | 2.682 | 2.706 | 2.705 | -.085 | -.024 | -.0563 | 1.0000 | |
| 5 | 0 | 3 | 4.914 | 4.678 | -4.677 | .082 | .236 | 1.0671 | 1.0000 | |
| 5 | 0 | 5 | 3.765 | 3.331 | -3.331 | -.071 | .433 | 1.5584 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0 | 7 | 3.490 | 1.658 | -1.656 | .064 | 1.832 | 4.9765 | 1.0000 | |
| 5 | 1 | 0 | 15.190 | 13.888 | 13.886 | .276 | 1.301 | 6.3050 | 1.0000 | |
| 5 | 1 | 1 | 7.023 | 7.309 | 7.308 | .073 | -.285 | -1.3820 | 1.0000 | |
| 5 | 1 | 2 | 29.824 | 30.574 | 30.573 | .207 | -.750 | -3.1226 | 1.0000 | |
| 5 | 1 | 3 | 10.332 | 10.492 | -10.492 | -.067 | -.160 | -.8913 | 1.0000 | |
| 5 | 1 | 4 | 13.694 | 12.643 | 12.641 | .239 | 1.051 | 6.1232 | 1.0000 | |
| 5 | 1 | 5 | 1.558 * | 1.361 | 1.360 | .058 | .197 | .2990 | 1.0000 | * ** |
| 5 | 1 | 6 | 13.917 | 13.626 | 13.625 | .156 | .291 | 1.5734 | 1.0000 | |
| 5 | 1 | 7 | 6.792 | 6.044 | -6.043 | -.046 | .749 | 3.5892 | 1.0000 | |
| 5 | 2 | 0 | 62.292 | 62.108 | -62.106 | -.502 | .184 | .8795 | 1.0000 | |
| 5 | 2 | 1 | 12.581 | 12.745 | 12.745 | .048 | -.165 | -.8372 | 1.0000 | |
| 5 | 2 | 2 | 63.749 | 65.088 | 65.086 | .484 | -1.339 | -5.9842 | 1.0000 | |
| 5 | 2 | 3 | 5.568 | 5.903 | -5.903 | -.044 | -.335 | -1.8487 | 1.0000 | |
| 5 | 2 | 4 | 41.597 | 41.934 | -41.932 | -.434 | -.337 | -1.2676 | 1.0000 | |
| 5 | 2 | 5 | 8.172 | 8.485 | 8.485 | .041 | -.313 | -2.0598 | 1.0000 | |
| 5 | 2 | 6 | 31.722 | 31.387 | 31.384 | .361 | .335 | 1.0322 | 1.0000 | |
| 5 | 2 | 7 | 1.345 * | .755 | -.754 | -.031 | .590 | .6134 | 1.0000 | * ** |
| 5 | 3 | 0 | 19.121 | 18.707 | 18.706 | .191 | .414 | 1.4875 | 1.0000 | |
| 5 | 3 | 1 | 4.380 | 4.439 | 4.439 | .014 | -.059 | -.2027 | 1.0000 | |
| 5 | 3 | 2 | 34.545 | 35.444 | 35.443 | .266 | -.899 | -3.5972 | 1.0000 | |
| 5 | 3 | 3 | 1.124 * | .323 | .323 | -.012 | .801 | .9982 | 1.0000 | * ** |
| 5 | 3 | 4 | 14.145 | 13.858 | 13.857 | .166 | .286 | 1.8062 | 1.0000 | |
| 5 | 3 | 5 | 4.083 | 4.592 | 4.592 | .012 | -.509 | -1.8895 | 1.0000 | |
| 5 | 3 | 6 | 15.934 | 16.193 | 16.191 | .199 | -.259 | -1.2676 | 1.0000 | |
| 5 | 3 | 7 | 2.575 * | 1.866 | 1.866 | -.007 | .709 | 1.3770 | 1.0000 | * ** |
| 5 | 4 | 0 | 7.597 | 5.507 | 5.496 | .361 | 2.090 | 10.7467 | 1.0000 | |
| 5 | 4 | 1 | 8.525 | 9.098 | 9.098 | .036 | -.573 | -3.2566 | 1.0000 | |
| 5 | 4 | 2 | 20.699 | 20.226 | -20.223 | -.349 | .473 | 2.3402 | 1.0000 | |
| 5 | 4 | 3 | 8.983 | 9.170 | -9.170 | -.033 | -.187 | -1.2646 | 1.0000 | |
| 5 | 4 | 4 | 6.844 | 6.505 | 6.498 | .312 | .339 | 2.0535 | 1.0000 | |
| 5 | 4 | 5 | 1.883 * | 3.274 | 3.274 | .033 | -1.390 | -2.3021 | 1.0000 | * ** |
| 5 | 4 | 6 | 10.912 | 11.120 | -11.117 | -.260 | -.208 | -1.3490 | 1.0000 | |
| 5 | 4 | 7 | 5.561 | 4.896 | -4.895 | -.026 | .666 | 2.6086 | 1.0000 | |
| 5 | 5 | 0 | 11.440 | 10.477 | 10.475 | .200 | .963 | 5.7944 | 1.0000 | |
| 5 | 5 | 1 | 7.010 | 6.729 | -6.728 | -.071 | .282 | 1.7656 | 1.0000 | |
| 5 | 5 | 2 | 13.391 | 13.088 | 13.086 | .215 | .303 | 1.6991 | 1.0000 | |
| 5 | 5 | 3 | 3.678 | 3.509 | 3.508 | .067 | .169 | .5846 | 1.0000 | |
| 5 | 5 | 4 | 9.275 | 8.654 | 8.653 | .173 | .621 | 4.3970 | 1.0000 | |
| 5 | 5 | 5 | 5.548 | 5.792 | -5.792 | -.055 | -.243 | -1.0375 | 1.0000 | |
| 5 | 5 | 6 | 6.501 | 6.538 | 6.536 | .162 | -.037 | -.1664 | 1.0000 | |
| 5 | 6 | 0 | 16.153 | 15.617 | 15.616 | .164 | .536 | 2.7585 | 1.0000 | |
| 5 | 6 | 1 | 1.199 * | 1.008 | 1.005 | -.085 | .191 | .2227 | 1.0000 | * ** |
| 5 | 6 | 2 | 1.397 * | .702 | -.683 | -.159 | .695 | .9344 | 1.0000 | * ** |
| 5 | 6 | 3 | 1.220 * | .987 | .984 | .081 | .233 | .2672 | 1.0000 | * ** |
| 5 | 6 | 4 | 11.498 | 11.202 | 11.201 | .142 | .296 | 1.9443 | 1.0000 | |
| 5 | 6 | 5 | 1.672 * | .177 | .162 | -.070 | 1.495 | 1.9943 | 1.0000 | * ** |
| 5 | 6 | 6 | 3.082 | .869 | -.861 | -.119 | 2.212 | 5.1566 | 1.0000 | |
| 5 | 7 | 0 | 21.209 | 21.511 | 21.509 | .225 | -.301 | -1.2720 | 1.0000 | |
| 5 | 7 | 1 | 3.227 | 2.842 | 2.842 | .039 | .385 | 1.1317 | 1.0000 | |
| 5 | 7 | 2 | 16.077 | 16.378 | 16.377 | .135 | -.300 | -1.7962 | 1.0000 | |
| 5 | 7 | 3 | 2.341 * | .942 | -.942 | -.034 | 1.399 | 2.8051 | 1.0000 | * ** |
| 5 | 7 | 4 | 15.112 | 15.780 | 15.779 | .194 | -.667 | -3.8393 | 1.0000 | |
| 5 | 7 | 5 | 2.631 * | 2.658 | 2.658 | .033 | -.028 | -.0544 | 1.0000 | * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 8 | 0 | 27.604 | 27.546 | -27.543 | -.378 | .058 | .2468 | 1.0000 |
| 5 | 8 | 1 | 2.959 | 2.193 | 2.193 | .046 | .766 | 1.8751 | 1.0000 |
| 5 | 8 | 2 | 14.481 | 14.211 | 14.207 | .363 | .270 | 1.5837 | 1.0000 |
| 5 | 8 | 3 | 1.807 * | 1.764 | -1.764 | -.042 | .043 | .0611 | 1.0000 * ** |
| 5 | 8 | 4 | 19.958 | 20.050 | -20.047 | -.326 | -.092 | -.4611 | 1.0000 |
| 5 | 8 | 5 | 1.383 * | .903 | .903 | .038 | .479 | .4850 | 1.0000 * ** |
| 5 | 9 | 0 | 1.363 * | .962 | .952 | .140 | .401 | .4125 | 1.0000 * ** |
| 5 | 9 | 1 | 2.370 * | 2.235 | 2.235 | .023 | .135 | .2411 | 1.0000 * ** |
| 5 | 9 | 2 | 7.400 | 7.165 | 7.164 | .154 | .235 | 1.1565 | 1.0000 |
| 5 | 9 | 3 | 1.384 * | 2.222 | -2.222 | -.020 | -.839 | -.8484 | 1.0000 * ** |
| 5 | 9 | 4 | 1.388 * | 1.083 | 1.077 | .121 | .305 | .3073 | 1.0000 * ** |
| 5 | 10 | 0 | 13.536 | 12.913 | 12.912 | .124 | .623 | 3.7756 | 1.0000 |
| 5 | 10 | 1 | 1.398 * | 1.123 | -1.122 | .038 | .275 | .2754 | 1.0000 * ** |
| 5 | 10 | 2 | 3.766 | 4.366 | -4.364 | -.120 | -.600 | -1.5383 | 1.0000 |
| 6 | 0 | 0 | 75.499 | 75.523 | 75.520 | .627 | -.023 | -.1043 | 1.0000 |
| 6 | 0 | 2 | 25.765 | 25.822 | -25.822 | -.154 | -.057 | -.2118 | 1.0000 |
| 6 | 0 | 4 | 52.207 | 51.312 | 51.309 | .543 | .895 | 3.2822 | 1.0000 |
| 6 | 0 | 6 | 12.818 | 12.003 | -12.002 | -.114 | .816 | 5.0071 | 1.0000 |
| 6 | 1 | 0 | 37.038 | 36.370 | 36.369 | .289 | .667 | 2.7799 | 1.0000 |
| 6 | 1 | 1 | 8.847 | 8.810 | -8.810 | -.018 | .037 | .1968 | 1.0000 |
| 6 | 1 | 2 | 2.549 | 2.369 | -2.352 | -.279 | .181 | .4674 | 1.0000 |
| 6 | 1 | 3 | 5.602 | 5.742 | 5.742 | .018 | -.140 | -.7497 | 1.0000 |
| 6 | 1 | 4 | 24.309 | 24.377 | 24.376 | .250 | -.068 | -.3157 | 1.0000 |
| 6 | 1 | 5 | 3.940 | 3.984 | -3.984 | -.012 | -.045 | -.1502 | 1.0000 |
| 6 | 1 | 6 | 2.054 * | 2.965 | -2.958 | -.208 | -.911 | -1.4714 | 1.0000 * ** |
| 6 | 1 | 7 | 2.401 * | 1.144 | 1.144 | .012 | 1.256 | 2.2329 | 1.0000 * ** |
| 6 | 2 | 0 | 21.536 | 21.430 | 21.430 | .074 | .106 | .3814 | 1.0000 |
| 6 | 2 | 1 | 8.031 | 8.060 | -8.060 | -.111 | -.029 | -.1572 | 1.0000 |
| 6 | 2 | 2 | 22.215 | 21.899 | 21.896 | .369 | .317 | 1.6011 | 1.0000 |
| 6 | 2 | 3 | 6.826 | 7.070 | 7.069 | .105 | -.244 | -1.4505 | 1.0000 |
| 6 | 2 | 4 | 13.473 | 13.220 | 13.220 | .064 | .253 | 1.4944 | 1.0000 |
| 6 | 2 | 5 | 5.302 | 5.078 | -5.077 | -.091 | .223 | .9845 | 1.0000 |
| 6 | 2 | 6 | 12.369 | 12.430 | 12.427 | .277 | -.061 | -.3616 | 1.0000 |
| 6 | 2 | 7 | 4.042 | 3.625 | 3.624 | .077 | .417 | 1.2224 | 1.0000 |
| 6 | 3 | 0 | 18.888 | 19.435 | -19.435 | .074 | -.547 | -2.6496 | 1.0000 |
| 6 | 3 | 1 | 3.283 | 3.537 | 3.537 | .023 | -.255 | -.8551 | 1.0000 |
| 6 | 3 | 2 | 7.496 | 6.972 | -6.972 | -.072 | .524 | 3.6263 | 1.0000 |
| 6 | 3 | 3 | 1.194 * | 1.043 | -1.043 | -.019 | .150 | .1764 | 1.0000 * ** |
| 6 | 3 | 4 | 11.653 | 11.958 | -11.958 | .064 | -.305 | -1.9504 | 1.0000 |
| 6 | 3 | 5 | 4.724 | 3.876 | 3.876 | .018 | .848 | 3.3069 | 1.0000 |
| 6 | 3 | 6 | 1.974 * | 2.987 | -2.987 | -.054 | -1.013 | -1.4904 | 1.0000 * ** |
| 6 | 3 | 7 | 1.382 * | .281 | .281 | -.009 | 1.101 | 1.1147 | 1.0000 * ** |
| 6 | 4 | 0 | 1.293 * | .995 | .995 | -.030 | .298 | .4040 | 1.0000 * ** |
| 6 | 4 | 1 | 5.952 | 6.127 | 6.127 | .102 | -.175 | -.9708 | 1.0000 |
| 6 | 4 | 2 | 32.842 | 31.888 | 31.885 | .437 | .954 | 3.4290 | 1.0000 |
| 6 | 4 | 3 | 5.742 | 5.563 | -5.562 | -.094 | .179 | .9131 | 1.0000 |
| 6 | 4 | 4 | 1.233 * | .031 | .017 | -.025 | 1.202 | 1.3648 | 1.0000 * ** |
| 6 | 4 | 5 | 4.536 | 4.430 | 4.429 | .085 | .106 | .3797 | 1.0000 |
| 6 | 4 | 6 | 18.141 | 17.713 | 17.710 | .327 | .428 | 2.0718 | 1.0000 |
| 6 | 5 | 0 | 18.991 | 18.752 | -18.749 | -.300 | .240 | 1.0508 | 1.0000 |
| 6 | 5 | 1 | 1.200 * | .807 | -.807 | .012 | .393 | .4578 | 1.0000 * ** |
| 6 | 5 | 2 | 31.310 | 32.244 | 32.243 | .288 | -.934 | -3.1510 | 1.0000 |
| 6 | 5 | 3 | 1.245 * | 1.992 | -1.992 | -.010 | -.748 | -.8403 | 1.0000 * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 5 | 4 | 13.617 | 14.085 | -14.082 | -.259 | -.468 | -2.7089 | 1.0000 | |
| 6 | 5 | 5 | 1.583 * | 1.615 | -1.615 | .011 | -.032 | -.0396 | 1.0000 | * ** |
| 6 | 5 | 6 | 17.395 | 17.267 | 17.266 | .214 | .127 | .7329 | 1.0000 | |
| 6 | 6 | 0 | 33.446 | 34.062 | 34.059 | .487 | -.616 | -2.1021 | 1.0000 | |
| 6 | 6 | 1 | 2.489 * | 1.464 | 1.464 | .011 | 1.024 | 2.3285 | 1.0000 | * ** |
| 6 | 6 | 2 | 1.532 * | 2.629 | -2.627 | -.109 | -1.098 | -1.4969 | 1.0000 | * ** |
| 6 | 6 | 3 | 2.649 | 1.248 | -1.248 | -.008 | 1.401 | 3.1930 | 1.0000 | |
| 6 | 6 | 4 | 23.783 | 24.371 | 24.367 | .421 | -.588 | -2.8361 | 1.0000 | |
| 6 | 6 | 5 | 1.364 * | 1.437 | 1.437 | .011 | -.073 | -.0746 | 1.0000 | * ** |
| 6 | 7 | 0 | 8.232 | 8.324 | 8.323 | .130 | -.092 | -.5545 | 1.0000 | |
| 6 | 7 | 1 | 5.711 | 5.025 | -5.025 | -.022 | .686 | 3.1131 | 1.0000 | |
| 6 | 7 | 2 | 15.298 | 14.826 | -14.825 | -.127 | .472 | 2.8422 | 1.0000 | |
| 6 | 7 | 3 | 6.914 | 6.435 | 6.435 | .021 | .479 | 2.3328 | 1.0000 | |
| 6 | 7 | 4 | 5.929 | 5.975 | 5.974 | .112 | -.047 | -.1928 | 1.0000 | |
| 6 | 7 | 5 | 2.493 * | .771 | -.771 | -.014 | 1.722 | 3.1450 | 1.0000 | * ** |
| 6 | 8 | 0 | 6.082 | 5.931 | 5.930 | .134 | .150 | .6432 | 1.0000 | |
| 6 | 8 | 1 | 3.661 | 3.460 | -3.459 | -.092 | .201 | .5436 | 1.0000 | |
| 6 | 8 | 2 | 10.399 | 10.502 | 10.501 | .174 | -.103 | -.6570 | 1.0000 | |
| 6 | 8 | 3 | 2.009 * | 3.135 | 3.134 | .088 | -1.125 | -1.6473 | 1.0000 | * ** |
| 6 | 8 | 4 | 4.765 | 4.053 | 4.051 | .116 | .712 | 2.3680 | 1.0000 | |
| 6 | 9 | 0 | 13.403 | 12.947 | 12.946 | .133 | .456 | 2.6419 | 1.0000 | |
| 6 | 9 | 1 | 5.050 | 4.846 | -4.846 | -.005 | .204 | .6869 | 1.0000 | |
| 6 | 9 | 2 | 11.282 | 10.355 | -10.355 | -.130 | .927 | 6.0101 | 1.0000 | |
| 6 | 9 | 3 | 1.406 * | 2.304 | 2.304 | .006 | -.898 | -.8951 | 1.0000 | * ** |
| 7 | 0 | 1 | 11.992 | 12.348 | 12.347 | .130 | -.356 | -2.1274 | 1.0000 | |
| 7 | 0 | 3 | 12.160 | 12.816 | -12.815 | -.119 | -.655 | -3.9958 | 1.0000 | |
| 7 | 0 | 5 | 5.473 | 4.939 | 4.938 | .107 | .534 | 2.2464 | 1.0000 | |
| 7 | 1 | 0 | 9.484 | 10.444 | 10.444 | -.050 | -.960 | -5.9329 | 1.0000 | |
| 7 | 1 | 1 | 2.554 | 1.096 | 1.095 | .046 | 1.458 | 3.8558 | 1.0000 | |
| 7 | 1 | 2 | 28.963 | 29.125 | 29.121 | .468 | -.162 | -.5758 | 1.0000 | |
| 7 | 1 | 3 | 1.218 * | 1.126 | 1.125 | -.044 | .092 | .1059 | 1.0000 | * ** |
| 7 | 1 | 4 | 6.723 | 7.054 | 7.054 | -.042 | -.332 | -1.7959 | 1.0000 | |
| 7 | 1 | 5 | 3.827 | 2.951 | 2.950 | .040 | .876 | 2.6795 | 1.0000 | |
| 7 | 1 | 6 | 15.073 | 15.000 | 14.996 | .350 | .073 | .4276 | 1.0000 | |
| 7 | 2 | 0 | 6.288 | 6.256 | 6.255 | .082 | .032 | .1784 | 1.0000 | |
| 7 | 2 | 1 | 1.179 * | .677 | .675 | -.054 | .501 | .5957 | 1.0000 | * ** |
| 7 | 2 | 2 | 1.321 * | 1.802 | -1.801 | -.080 | -.482 | -.6040 | 1.0000 | * ** |
| 7 | 2 | 3 | 3.192 | 2.812 | 2.811 | .052 | .381 | 1.1348 | 1.0000 | |
| 7 | 2 | 4 | 4.402 | 4.622 | 4.621 | .071 | -.219 | -.8012 | 1.0000 | |
| 7 | 2 | 5 | 1.324 * | 1.513 | 1.512 | -.042 | -.189 | -.1998 | 1.0000 | * ** |
| 7 | 2 | 6 | 1.381 * | 1.418 | -1.417 | -.060 | -.038 | -.0381 | 1.0000 | * ** |
| 7 | 3 | 0 | 46.001 | 46.183 | 46.178 | .656 | -.182 | -.6770 | 1.0000 | |
| 7 | 3 | 1 | 1.460 * | .986 | -.986 | -.008 | .473 | .6573 | 1.0000 | * ** |
| 7 | 3 | 2 | 18.501 | 18.914 | -18.913 | -.233 | -.413 | -2.1728 | 1.0000 | |
| 7 | 3 | 3 | 1.230 * | .896 | -.896 | .008 | .333 | .3794 | 1.0000 | * ** |
| 7 | 3 | 4 | 33.260 | 33.995 | 33.990 | .567 | -.735 | -2.3093 | 1.0000 | |
| 7 | 3 | 5 | 1.357 * | 1.794 | -1.794 | -.005 | -.437 | -.4514 | 1.0000 | * ** |
| 7 | 3 | 6 | 10.845 | 10.655 | -10.653 | -.172 | .190 | 1.2072 | 1.0000 | |
| 7 | 4 | 0 | 9.366 | 9.805 | -9.805 | -.077 | -.439 | -2.7470 | 1.0000 | |
| 7 | 4 | 1 | 1.983 * | 1.979 | -1.978 | -.074 | .004 | .0082 | 1.0000 | * ** |
| 7 | 4 | 2 | 2.210 * | 2.148 | 2.147 | .074 | .062 | .1259 | 1.0000 | * ** |
| 7 | 4 | 3 | 1.321 * | .156 | .139 | .070 | 1.165 | 1.3627 | 1.0000 | * ** |
| 7 | 4 | 4 | 6.484 | 6.810 | -6.809 | -.067 | -.326 | -1.5480 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 7 | 4 | 5 | 3.303 | 3.376 | -3.375 | -.058 | -.073 | -.1738 | 1.0000 |
| 7 | 4 | 6 | 2.557 * | 1.303 | 1.302 | .056 | 1.254 | 2.3463 | 1.0000 * ** |
| 7 | 5 | 0 | 4.600 | 4.528 | 4.526 | .108 | .073 | .2844 | 1.0000 |
| 7 | 5 | 1 | 3.963 | 3.640 | 3.640 | -.042 | .322 | 1.1276 | 1.0000 |
| 7 | 5 | 2 | 30.480 | 31.480 | 31.479 | .256 | -1.000 | -3.1313 | 1.0000 |
| 7 | 5 | 3 | 1.303 * | 1.662 | -1.661 | .042 | -.359 | -.3852 | 1.0000 * ** |
| 7 | 5 | 4 | 3.803 | 3.474 | 3.473 | .094 | .329 | .9425 | 1.0000 |
| 7 | 5 | 5 | 2.208 * | 2.506 | 2.506 | -.036 | -.298 | -.4786 | 1.0000 * ** |
| 7 | 6 | 0 | 4.011 | 4.544 | 4.544 | -.004 | -.533 | -1.7329 | 1.0000 |
| 7 | 6 | 1 | 8.843 | 9.092 | 9.091 | .102 | -.249 | -1.4877 | 1.0000 |
| 7 | 6 | 2 | 2.800 | 3.322 | 3.322 | .003 | -.522 | -1.1387 | 1.0000 |
| 7 | 6 | 3 | 6.303 | 6.137 | -6.136 | -.093 | .166 | .7544 | 1.0000 |
| 7 | 6 | 4 | 2.426 * | 3.339 | 3.339 | -.004 | -.913 | -1.6164 | 1.0000 * ** |
| 7 | 6 | 5 | 6.141 | 6.504 | 6.503 | .084 | -.362 | -1.4498 | 1.0000 |
| 7 | 7 | 0 | 20.838 | 20.736 | -20.736 | -.137 | .102 | .4632 | 1.0000 |
| 7 | 7 | 1 | 7.985 | 7.644 | 7.644 | .054 | .341 | 1.8255 | 1.0000 |
| 7 | 7 | 2 | 28.985 | 29.121 | 29.118 | .444 | -.137 | -.5450 | 1.0000 |
| 7 | 7 | 3 | 6.876 | 6.730 | -6.730 | -.049 | .146 | .6555 | 1.0000 |
| 7 | 7 | 4 | 15.408 | 15.258 | -15.258 | -.118 | .150 | .8608 | 1.0000 |
| 7 | 8 | 0 | 1.395 * | .349 | -.343 | .065 | 1.046 | 1.0499 | 1.0000 * ** |
| 7 | 8 | 1 | 1.396 * | .170 | .169 | -.018 | 1.226 | 1.2295 | 1.0000 * ** |
| 7 | 8 | 2 | 6.887 | 7.080 | -7.079 | -.064 | -.193 | -.8419 | 1.0000 |
| 7 | 8 | 3 | 1.652 * | .612 | -.612 | .018 | 1.040 | 1.2165 | 1.0000 * ** |
| 7 | 9 | 0 | 21.731 | 20.736 | 20.732 | .377 | .995 | 4.8462 | 1.0000 |
| 7 | 9 | 1 | 1.426 * | 1.874 | 1.874 | -.005 | -.448 | -.4395 | 1.0000 * ** |
| 8 | 0 | 0 | 50.489 | 51.864 | 51.863 | .400 | -1.375 | -5.0026 | 1.0000 |
| 8 | 0 | 2 | 1.596 * | .767 | .767 | .006 | .829 | 1.2187 | 1.0000 * ** |
| 8 | 0 | 4 | 36.000 | 36.458 | 36.456 | .345 | -.457 | -1.3941 | 1.0000 |
| 8 | 0 | 6 | 2.780 * | .365 | .365 | .007 | 2.414 | 4.6990 | 1.0000 * ** |
| 8 | 1 | 0 | 19.747 | 19.948 | -19.945 | -.341 | -.201 | -.8606 | 1.0000 |
| 8 | 1 | 1 | 7.810 | 7.428 | -7.428 | -.061 | .381 | 2.4558 | 1.0000 |
| 8 | 1 | 2 | 18.278 | 18.676 | 18.673 | .328 | -.398 | -1.9910 | 1.0000 |
| 8 | 1 | 3 | 6.053 | 6.321 | 6.321 | .059 | -.268 | -1.2919 | 1.0000 |
| 8 | 1 | 4 | 14.765 | 14.811 | -14.808 | -.295 | -.046 | -.2611 | 1.0000 |
| 8 | 1 | 5 | 4.604 | 4.217 | -4.216 | -.049 | .388 | 1.2619 | 1.0000 |
| 8 | 1 | 6 | 10.065 | 10.121 | 10.118 | .246 | -.056 | -.3331 | 1.0000 |
| 8 | 2 | 0 | 6.902 | 7.169 | 7.168 | .134 | 1.732 | 10.9970 | 1.0000 |
| 8 | 2 | 1 | 4.697 | 4.477 | 4.476 | .072 | .220 | .9002 | 1.0000 |
| 8 | 2 | 2 | 5.216 | 5.086 | 5.080 | .253 | .130 | .5682 | 1.0000 |
| 8 | 2 | 3 | 2.581 * | 2.870 | -2.870 | -.066 | -.290 | -.6218 | 1.0000 * ** |
| 8 | 2 | 4 | 4.347 | 5.211 | 5.210 | .117 | -.864 | -2.7523 | 1.0000 |
| 8 | 2 | 5 | 3.884 | 3.508 | 3.507 | .057 | .376 | 1.0599 | 1.0000 |
| 8 | 2 | 6 | 2.758 * | 3.179 | 3.173 | .189 | -.421 | -.7940 | 1.0000 * ** |
| 8 | 3 | 0 | 3.991 | 3.562 | 3.561 | -.067 | .429 | 1.4958 | 1.0000 |
| 8 | 3 | 1 | 1.243 * | 1.191 | 1.185 | .117 | .051 | .0580 | 1.0000 * ** |
| 8 | 3 | 2 | 3.630 | 4.137 | -4.136 | .064 | -.507 | -1.5392 | 1.0000 |
| 8 | 3 | 3 | 1.318 * | 1.510 | -1.506 | -.108 | -.192 | -.2046 | 1.0000 * ** |
| 8 | 3 | 4 | 3.758 | 2.543 | 2.542 | -.058 | 1.215 | 3.4326 | 1.0000 |
| 8 | 3 | 5 | 1.391 * | 1.694 | 1.691 | .098 | -.303 | -.3047 | 1.0000 * ** |
| 8 | 4 | 0 | 8.137 | 8.477 | 8.477 | .044 | -.340 | -2.0455 | 1.0000 |
| 8 | 4 | 1 | 5.041 | 4.772 | -4.772 | -.047 | .269 | 1.1094 | 1.0000 |
| 8 | 4 | 2 | 28.475 | 28.832 | 28.830 | .312 | -.357 | -1.5352 | 1.0000 |
| 8 | 4 | 3 | 2.100 * | 2.440 | 2.440 | .045 | -.340 | -.5430 | 1.0000 * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 8 | 4 | 4 | 6.236 | 5.826 | 5.825 | .039 | .410 | 1.7494 | 1.0000 |
| 8 | 4 | 5 | 2.998 | 3.742 | -3.742 | -.036 | -.744 | -1.[illegible]601 | 1.0000 |
| 8 | 5 | 0 | 27.406 | 28.134 | 28.132 | .342 | -.727 | -3.0442 | 1.0000 |
| 8 | 5 | 1 | 6.546 | 6.903 | -6.903 | -.047 | -.358 | -1.6641 | 1.0000 |
| 8 | 5 | 2 | 24.534 | 24.324 | -24.321 | -.331 | .211 | .8222 | 1.0000 |
| 8 | 5 | 3 | 5.715 | 5.913 | 5.913 | .046 | -.198 | -.7868 | 1.0000 |
| 8 | 5 | 4 | 20.749 | 20.709 | 20.707 | .296 | .040 | .1954 | 1.0000 |
| 8 | 5 | 5 | 4.708 | 3.882 | -3.881 | -.037 | .826 | 2.6133 | 1.0000 |
| 8 | 6 | 0 | 10.886 | 11.130 | 11.126 | .298 | -.244 | -1.2974 | 1.0000 |
| 8 | 6 | 1 | 2.520 * | .299 | -.298 | -.025 | 2.221 | 4.1807 | 1.0000 * ** |
| 8 | 6 | 2 | 2.624 * | 1.549 | 1.549 | .026 | 1.076 | 2.0628 | 1.0000 * ** |
| 8 | 6 | 3 | 2.902 * | 1.885 | 1.885 | .025 | 1.017 | 2.0724 | 1.0000 * ** |
| 8 | 6 | 4 | 7.785 | 7.980 | 7.976 | .258 | -.195 | -.9511 | 1.0000 |
| 8 | 7 | 0 | 10.702 | 10.469 | -10.468 | -.185 | .233 | 1.4019 | 1.0000 |
| 8 | 7 | 1 | 3.966 | 4.430 | -4.430 | -.060 | -.464 | -1.2649 | 1.0000 |
| 8 | 7 | 2 | 6.718 | 7.271 | 7.269 | .177 | -.553 | -2.3667 | 1.0000 |
| 8 | 7 | 3 | 4.373 | 3.795 | 3.795 | .058 | .578 | 1.7058 | 1.0000 |
| 8 | 8 | 0 | 9.727 | 9.963 | 9.962 | .165 | -.236 | -1.3100 | 1.0000 |
| 8 | 8 | 1 | 3.381 | 2.567 | 2.567 | .048 | .814 | 1.8828 | 1.0000 |
| 9 | 0 | 1 | 1.294 * | 1.789 | 1.789 | .005 | -.496 | -.5363 | 1.0000 * ** |
| 9 | 0 | 3 | 1.360 * | .131 | .131 | -.004 | 1.229 | 1.2652 | 1.0000 * ** |
| 9 | 0 | 5 | 1.570 * | 2.130 | 2.130 | .009 | -.560 | -.6102 | 1.0000 * ** |
| 9 | 1 | 0 | 16.962 | 17.204 | 17.201 | .287 | -.241 | -1.2850 | 1.0000 |
| 9 | 1 | 1 | 6.413 | 6.757 | -6.756 | -.124 | -.344 | -1.6742 | 1.0000 |
| 9 | 1 | 2 | 9.149 | 9.222 | 9.222 | .081 | -.073 | -.4522 | 1.0000 |
| 9 | 1 | 3 | 7.801 | 7.713 | 7.712 | .116 | .088 | .4639 | 1.0000 |
| 9 | 1 | 4 | 12.640 | 12.750 | 12.747 | .248 | -.109 | -.6147 | 1.0000 |
| 9 | 1 | 5 | 3.592 | 3.117 | -3.116 | -.100 | .475 | 1.1814 | 1.0000 |
| 9 | 2 | 0 | 26.654 | 27.362 | 27.360 | .334 | -.708 | -2.9906 | 1.0000 |
| 9 | 2 | 1 | 1.324 * | .992 | .992 | -.008 | .333 | .3515 | 1.0000 * ** |
| 9 | 2 | 2 | 28.472 | 29.023 | -29.021 | -.322 | -.551 | -2.2860 | 1.0000 |
| 9 | 2 | 3 | 2.023 * | 1.653 | -1.653 | .010 | .370 | .5514 | 1.0000 * ** |
| 9 | 2 | 4 | 19.593 | 20.261 | 20.259 | .288 | -.668 | -3.2724 | 1.0000 |
| 9 | 2 | 5 | 1.416 * | .874 | -.874 | -.006 | .542 | .5360 | 1.0000 * ** |
| 9 | 3 | 0 | 4.206 | 3.192 | -3.192 | -.006 | 1.013 | 3.2624 | 1.0000 |
| 9 | 3 | 1 | 1.351 * | .842 | -.842 | -.015 | .509 | .5274 | 1.0000 * ** |
| 9 | 3 | 2 | 20.699 | 21.474 | 21.471 | .346 | -.775 | -3.5307 | 1.0000 |
| 9 | 3 | 3 | 1.385 * | .700 | -.700 | .014 | .685 | .6926 | 1.0000 * ** |
| 9 | 3 | 4 | 3.959 | 2.321 | -2.321 | -.005 | 1.639 | 4.5579 | 1.0000 |
| 9 | 4 | 0 | 4.258 | 3.504 | -3.497 | -.231 | .754 | 2.3598 | 1.0000 |
| 9 | 4 | 1 | 1.371 * | 1.253 | 1.253 | .005 | .118 | .1208 | 1.0000 * ** |
| 9 | 4 | 2 | 8.449 | 9.209 | 9.207 | .221 | -.761 | -4.0715 | 1.0000 |
| 9 | 4 | 3 | 1.397 * | .151 | .151 | -.002 | 1.246 | 1.2481 | 1.0000 * ** |
| 9 | 4 | 4 | 1.419 * | 2.435 | -2.426 | -.199 | -1.016 | -1.0025 | 1.0000 * ** |
| 9 | 5 | 0 | 14.088 | 14.283 | 14.282 | .217 | -.195 | -1.0329 | 1.0000 |
| 9 | 5 | 1 | 7.340 | 7.590 | 7.590 | .121 | -.251 | -1.1970 | 1.0000 |
| 9 | 5 | 2 | 8.917 | 9.209 | 9.209 | .099 | -.293 | -1.5853 | 1.0000 |
| 9 | 5 | 3 | 5.182 | 5.248 | -5.247 | -.111 | -.066 | -.2265 | 1.0000 |
| 9 | 6 | 0 | 10.531 | 9.706 | -9.705 | -.125 | .825 | 5.0607 | 1.0000 |
| 9 | 6 | 1 | 1.420 * | 1.[illegible]07 | 1.107 | .016 | .312 | .3079 | 1.0000 * ** |
| 9 | 6 | 2 | 1.999 * | 2.190 | 2.187 | .119 | -.191 | -.2621 | 1.0000 * ** |
| 9 | 7 | 0 | 11.150 | 10.165 | 10.162 | .240 | .985 | 6.0046 | 1.0000 |
| 9 | 7 | 1 | 2.995 | 3.159 | -3.158 | -.080 | -.164 | -.3320 | 1.0000 |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 0 | 0 | 18.059 | 18.026 | -18.025 | -.201 | .033 | .1653 | 1.0000 |
| 10 | 0 | 2 | 35.502 | 36.470 | 36.466 | .521 | -.968 | -2.7600 | 1.0000 |
| 10 | 0 | 4 | 13.675 | 13.771 | -13.769 | -.173 | .904 | 5.3362 | 1.0000 |
| 10 | 1 | 0 | 6.677 | 6.449 | -6.449 | -.046 | .228 | 1.0341 | 1.0000 |
| 10 | 1 | 1 | 1.952 * | 2.385 | 2.384 | .063 | -.433 | -.6118 | 1.0000 * ** |
| 10 | 1 | 2 | 5.320 | 4.696 | -4.696 | .044 | .624 | 2.2615 | 1.0000 |
| 10 | 1 | 3 | 1.403 * | 1.769 | -1.768 | -.057 | -.365 | -.3643 | 1.0000 * ** |
| 10 | 1 | 4 | 4.725 | 4.662 | -4.662 | -.039 | .063 | .1965 | 1.0000 |
| 10 | 2 | 0 | 13.180 | 13.807 | 13.803 | .307 | -.627 | -3.4746 | 1.0000 |
| 10 | 2 | 1 | 3.661 | 3.107 | 3.106 | .078 | .554 | 1.4526 | 1.0000 |
| 10 | 2 | 2 | 5.675 | 5.561 | 5.561 | .023 | .115 | .4325 | 1.0000 |
| 10 | 2 | 3 | 1.426 * | 2.850 | -2.849 | -.073 | -1.424 | -1.3972 | 1.0000 * ** |
| 10 | 3 | 0 | 7.134 | 7.143 | 7.142 | -.029 | -.008 | -.0380 | 1.0000 |
| 10 | 3 | 1 | 8.978 | 9.030 | -9.030 | -.107 | -.053 | -.2899 | 1.0000 |
| 10 | 3 | 2 | 1.425 * | 2.230 | 2.230 | .027 | -.805 | -.7910 | 1.0000 * ** |
| 10 | 3 | 3 | 6.436 | 6.958 | 6.957 | .102 | -.522 | -2.0994 | 1.0000 |
| 10 | 4 | 0 | 23.342 | 23.646 | 23.643 | .388 | -.305 | -1.3352 | 1.0000 |
| 10 | 4 | 1 | 5.419 | 4.708 | -4.707 | -.071 | .712 | 2.5997 | 1.0000 |
| 10 | 4 | 2 | 5.284 | 4.674 | -4.673 | -.078 | .611 | 2.0894 | 1.0000 |
| 10 | 5 | 0 | 1.438 * | .988 | .987 | .055 | .450 | .4377 | 1.0000 * ** |
| 10 | 5 | 1 | 1.624 * | .955 | -.955 | .026 | .669 | .7435 | 1.0000 * ** |
| 11 | 0 | 1 | 2.743 * | 4.075 | -4.073 | -.138 | -1.333 | -2.4345 | 1.0000 * ** |
| 11 | 1 | 0 | 8.912 | 8.932 | 8.928 | .288 | -.020 | -.1077 | 1.0000 |
| 11 | 1 | 1 | 3.340 | 2.754 | 2.753 | .033 | .586 | 1.3332 | 1.0000 |
| 11 | 1 | 2 | 5.610 | 6.017 | 6.017 | .015 | -.406 | -1.4447 | 1.0000 |
| 11 | 2 | 0 | 12.945 | 12.707 | -12.706 | -.208 | .238 | 1.4709 | 1.0000 |
| 11 | 2 | 1 | 4.308 | 4.467 | 4.466 | .060 | -.159 | -.4458 | 1.0000 |

SILLIMANITE (BRANDYWINE SPRINGS. AT 1000 DEGREES C

RESULTS OF STRUCTURE FACTOR CALCULATIONS

| ALL REFLECTIONS | NUMERATOR | DENOMINATOR | NUMBER | R |
|---|---|---|---|---|
| WEIGHTED R | 20261.28 | 6531773.17 | 663 | .056 |
| UNWEIGHTED R | 385.30 | 7782.24 | 663 | .050 |
| RANGES OF F(OBS) | | | | |
| | 3547.08 | 812326.36 | 522 | .066 |
| | 1232.50 | 861965.89 | 80 | .038 |
| | 517.89 | 992080.10 | 37 | .023 |
| | 983.78 | 1174920.30 | 12 | .029 |
| | 1804.42 | 1131392.13 | 7 | .040 |
| | 8397.96 | 902636.77 | 3 | .096 |
| | 55.32 | 258029.95 | 1 | .015 |
| | 3722.33 | 398421.67 | 1 | .097 |
| RANGES OF (SIN(THETA)/LAMBDA)**2 | | | | |
| | 12682.54 | 2368201.53 | 39 | .073 |
| | 4708.27 | 1780486.62 | 55 | .051 |
| | 741.74 | 721489.54 | 69 | .032 |
| | 428.82 | 536786.19 | 86 | .028 |
| | 408.36 | 284147.70 | 87 | .038 |
| | 379.10 | 358957.24 | 105 | .032 |
| | 365.43 | 287918.33 | 112 | .036 |
| | 547.01 | 193786.01 | 110 | .053 |
| UNREJECTED REFLECTIONS | | | | |
| WEIGHTED R | 7921.37 | 5726769.74 | 489 | .037 |
| UNWEIGHTED R | 257.56 | 7303.00 | 489 | .035 |
| RANGES OF F(OBS) | | | | |
| | 3318.63 | 811121.70 | 350 | .064 |
| | 1232.50 | 861965.89 | 80 | .038 |
| | 517.89 | 992080.10 | 37 | .023 |
| | 983.78 | 1174920.30 | 12 | .029 |
| | 1804.42 | 1131392.13 | 7 | .040 |
| | 8.83 | 497259.67 | 2 | .004 |
| | 55.32 | 258029.95 | 1 | .015 |
| | .00 | .00 | 0 | .000 |
| RANGES OF (SIN(THETA)/LAMBDA)**2 | | | | |
| | 4289.05 | 1962808.29 | 37 | .047 |
| | 982.50 | 1382001.03 | 48 | .027 |
| | 723.40 | 721432.71 | 57 | .032 |
| | 415.01 | 536701.56 | 64 | .028 |
| | 382.40 | 284010.62 | 62 | .037 |
| | 349.30 | 358754.33 | 81 | .031 |
| | 307.62 | 287544.60 | 68 | .033 |
| | 472.08 | 193516.59 | 72 | .049 |

SUM FCAL 7709.45

STANDARD DEV OF UNIT WEIGHT OBS 4.23

The thermal expansion and the high temperature crystal chemistry

of $Al_2SiO_5$ polymorphs

John K. Winter

and

Subrata Ghose

Department of Geological Sciences
University of Washington
Seattle, Washington 98195

Table 10. Sillimanite, andalusite and kyanite: observed and calculated structure factors at various temperatures.

Andalusite 25°C

FWA OF THE LOAD 111
LWA+1 OF THE LOAD 74743

TRANSFER ADDRESS -- REFINE 112

********* ERROR SUMMARY

NE4105// CM BLANK COMMON TRUNCATED BY 20700B WORDS

PROGRAM AND BLOCK ASSIGNMENTS.

| BLOCK | ADDRESS | LENGTH | FILE | DATE | PROCSSR | VER | LEVEL | HARDWARE | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| REFINE | 111 | 10575 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| /A/ | 10706 | 1355 | | | | | | | |
| /C/ | 12263 | 457 | | | | | | | |
| /D/ | 12742 | 3244 | | | | | | | |
| /E/ | 16206 | 10 | | | | | | | |
| /F/ | 16216 | 174 | | | | | | | |
| /G/ | 16412 | 2307 | | | | | | | |
| /LS/ | 20721 | 334 | | | | | | | |
| /TAPE/ | 21255 | 6 | | | | | | | |
| /DEGEN/ | 21263 | 311 | | | | | | | |
| RFINE | 21574 | 5726 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| BODAND | 27522 | 1147 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| ELVIBI | 30671 | 1312 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| INPUT | 32203 | 241 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| MATRIX | 32444 | 231 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| MODIFY | 32675 | 115 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| RCALC | 33012 | 152 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| RESET | 33164 | 73 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| SFAC | 33257 | 476 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| SYMINV | 33755 | 361 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| WEIGHT | 34336 | 12 | RFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| ASINCOS | 34350 | 136 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| EXP | 34506 | 55 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| SINCOS | 34563 | 72 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| SQRT | 34655 | 44 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| ACGOER | 34721 | 12 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| ENDFIL | 34733 | 57 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| GETBA | 35012 | 17 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| INPUTB | 35031 | 256 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| KRAKER | 35307 | 1052 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| OUTPTB | 36361 | 244 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| SIO$ | 36625 | 1504 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| INPUTC | 40331 | 121 | SL-RUN2P3 | 03/17/75 | COMPASS | | 3. 74190 | | |
| KODER | 40452 | 1310 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| OUTPTC | 41762 | 71 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| REWINM | 42053 | 63 | SL-RUN2P3 | 02/19/75 | COMPASS | | 3. 74190 | | |
| SYSTEM | 42136 | 1122 | SL-RUN2P3 | 03/04/75 | COMPASS | | 3. 74190 | | |
| // | 43260 | 31463 | | | | | | | |

ANDALUSITE (MINAS GERAIS) AT 25 DEGREES C FO-FC TABLE STRUCTURE FACTORS 

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 1 | 1.218 * | .000 | .000 | .000 | 1.218 | 1.3998 | 1.0000 * ** |
| 0 | 0 | 2 | 65.456 | 65.010 | 65.009 | .358 | .447 | 3.3931 | 1.0000 |
| 0 | 0 | 3 | 1.189 * | .000 | -.000 | -.000 | 1.189 | 2.4141 | 1.0000 * ** |
| 0 | 0 | 4 | 131.093 | 150.270 | 150.268 | .877 | -19.177 | -99.9953 | 1.0000 |
| 0 | 0 | 5 | 1.021 * | .000 | .000 | .000 | 1.021 | 1.4000 | 1.0000 * ** |
| 0 | 0 | 6 | 31.010 | 30.940 | 30.938 | .340 | .069 | .2584 | 1.0000 |
| 0 | 0 | 7 | 2.692 | .000 | -.000 | -.000 | 2.692 | 7.3102 | 1.0000 |
| 0 | 1 | 0 | .976 * | .000 | -.000 | -.000 | .976 | 2.2000 | 1.0000 * ** |
| 0 | 1 | 1 | 45.081 | 47.070 | -47.069 | -.169 | -1.988 | -18.2161 | 1.0000 |
| 0 | 1 | 2 | 1.036 * | .000 | .000 | .000 | 1.036 | 1.3994 | 1.0000 * ** |
| 0 | 1 | 3 | 45.390 | 44.692 | -44.691 | -.222 | .698 | 4.1247 | 1.0000 |
| 0 | 1 | 4 | 1.448 * | .000 | -.000 | -.000 | 1.448 | 2.8267 | 1.0000 * ** |
| 0 | 1 | 5 | 12.864 | 11.944 | -11.944 | -.105 | .919 | 6.2576 | 1.0000 |
| 0 | 1 | 6 | 1.066 * | .000 | .000 | .000 | 1.066 | 1.4008 | 1.0000 * ** |
| 0 | 1 | 7 | 25.060 | 24.344 | -24.342 | -.249 | .717 | 3.2831 | 1.0000 |
| 0 | 2 | 0 | 18.138 | 16.703 | -16.702 | -.128 | 1.435 | 8.6846 | 1.0000 |
| 0 | 2 | 1 | 1.317 * | .000 | .000 | .000 | 1.317 | 1.4002 | 1.0000 * ** |
| 0 | 2 | 2 | 67.051 | 74.355 | -74.352 | -.674 | -7.305 | -50.0760 | 1.0000 |
| 0 | 2 | 3 | .905 * | .000 | -.000 | -.000 | .905 | 1.4013 | 1.0000 * ** |
| 0 | 2 | 4 | 10.141 | 9.850 | -9.849 | -.129 | .291 | 1.8419 | 1.0000 |
| 0 | 2 | 5 | .986 * | .000 | .000 | .000 | .986 | 1.4014 | 1.0000 * ** |
| 0 | 2 | 6 | 41.799 | 42.090 | -42.086 | -.611 | -.291 | -1.1001 | 1.0000 |
| 0 | 2 | 7 | 1.165 * | .000 | -.000 | -.000 | 1.165 | 1.3995 | 1.0000 * ** |
| 0 | 3 | 0 | 1.043 * | .000 | -.000 | .000 | 1.043 | 1.4000 | 1.0000 * ** |
| 0 | 3 | 1 | 38.364 | 38.658 | 38.657 | .265 | -.294 | -2.0043 | 1.0000 |
| 0 | 3 | 2 | .950 * | .000 | -.000 | .000 | .950 | 1.4000 | 1.0000 * ** |
| 0 | 3 | 3 | 32.188 | 31.070 | 31.069 | .204 | 1.118 | 5.7983 | 1.0000 |
| 0 | 3 | 4 | 1.018 * | .000 | -.000 | -.000 | 1.018 | 1.3997 | 1.0000 * ** |
| 0 | 3 | 5 | 24.343 | 23.295 | 23.293 | .301 | 1.048 | 4.0919 | 1.0000 |
| 0 | 3 | 6 | 2.511 | .000 | .000 | .000 | 2.511 | 7.4350 | 1.0000 |
| 0 | 3 | 7 | 15.038 | 14.132 | 14.131 | .135 | .906 | 5.5508 | 1.0000 |
| 0 | 4 | 0 | 52.378 | 50.693 | -50.691 | .362 | 1.685 | 10.5912 | 1.0000 |
| 0 | 4 | 1 | 1.275 * | .000 | -.000 | .000 | 1.275 | 2.6316 | 1.0000 * ** |
| 0 | 4 | 2 | 39.888 | 38.608 | -38.608 | -.171 | 1.280 | 7.0090 | 1.0000 |
| 0 | 4 | 3 | .994 * | .000 | -.000 | -.000 | .994 | 1.3994 | 1.0000 * ** |
| 0 | 4 | 4 | 18.482 | 19.140 | -19.137 | .343 | -.658 | -3.6879 | 1.0000 |
| 0 | 4 | 5 | 1.024 * | .000 | .000 | .000 | 1.024 | 1.4003 | 1.0000 * ** |
| 0 | 4 | 6 | 19.477 | 18.792 | -18.792 | -.146 | .685 | 3.8591 | 1.0000 |
| 0 | 4 | 7 | 1.194 * | .000 | -.000 | -.000 | 1.194 | 1.3995 | 1.0000 * ** |
| 0 | 5 | 0 | 1.426 * | .000 | -.000 | -.000 | 1.426 | 3.0129 | 1.0000 * ** |
| 0 | 5 | 1 | 23.357 | 22.766 | 22.766 | .081 | .590 | 2.8792 | 1.0000 |
| 0 | 5 | 2 | 1.010 * | .000 | .000 | .000 | 1.010 | 1.4003 | 1.0000 * ** |
| 0 | 5 | 3 | 15.696 | 15.830 | 15.830 | .026 | -.134 | -.7348 | 1.0000 |
| 0 | 5 | 4 | .968 * | .000 | -.000 | -.000 | .968 | 1.3997 | 1.0000 * ** |
| 0 | 5 | 5 | 14.093 | 13.760 | 13.759 | .126 | .333 | 2.1220 | 1.0000 |
| 0 | 5 | 6 | 1.133 * | .000 | .000 | .000 | 1.133 | 1.3992 | 1.0000 * ** |
| 0 | 5 | 7 | 6.646 | 5.656 | 5.656 | -.023 | .990 | 5.6764 | 1.0000 |
| 0 | 6 | 0 | 20.634 | 19.946 | 19.946 | .053 | .688 | 2.9834 | 1.0000 |
| 0 | 6 | 1 | 1.577 * | .000 | .000 | .000 | 1.577 | 3.4509 | 1.0000 * ** |
| 0 | 6 | 2 | 44.231 | 44.145 | -44.142 | -.450 | .087 | .3993 | 1.0000 |
| 0 | 6 | 3 | .943 * | .000 | -.000 | -.000 | .943 | 1.4000 | 1.0000 * ** |
| 0 | 6 | 4 | 13.785 | 13.454 | 13.454 | .045 | .331 | 2.1931 | 1.0000 |
| 0 | 6 | 5 | 1.055 * | .000 | .000 | .000 | 1.055 | 1.4011 | 1.0000 * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6 | 6 | 26.426 | 25.906 | -25.903 | -.406 | .520 | 2.3387 | 1.0000 | |
| 0 | 7 | 0 | .969 * | .000 | .000 | .000 | .969 | 1.3991 | 1.0000 | * ** |
| 0 | 7 | 1 | 15.700 | 14.639 | -14.638 | -.204 | 1.061 | 5.6810 | 1.0000 | |
| 0 | 7 | 2 | 1.454 * | .000 | .000 | .000 | 1.454 | 3.3294 | 1.0000 | * ** |
| 0 | 7 | 3 | 20.604 | 20.915 | -20.913 | -.250 | -.311 | -1.6368 | 1.0000 | |
| 0 | 7 | 4 | 1.208 * | .000 | -.000 | -.000 | 1.208 | 1.9570 | 1.0000 | * ** |
| 0 | 7 | 5 | 5.033 | 4.338 | -4.336 | -.144 | .695 | 3.7031 | 1.0000 | |
| 0 | 7 | 6 | 1.176 * | .000 | .000 | .000 | 1.176 | 1.3993 | 1.0000 | * ** |
| 0 | 8 | 0 | 79.739 | 87.207 | 87.204 | .731 | -7.465 | -31.0195 | 1.0000 | |
| 0 | 8 | 1 | .978 * | .000 | .000 | .000 | .978 | 1.4000 | 1.0000 | * ** |
| 0 | 8 | 2 | 18.650 | 18.242 | 18.240 | .258 | .408 | 2.0400 | 1.0000 | |
| 0 | 8 | 3 | 1.008 * | .000 | -.000 | -.000 | 1.008 | 1.3994 | 1.0000 | * ** |
| 0 | 8 | 4 | 64.296 | 66.985 | 66.982 | .697 | -2.689 | -9.5859 | 1.0000 | |
| 0 | 8 | 5 | 1.823 * | .000 | .000 | .000 | 1.823 | 3.6469 | 1.0000 | * ** |
| 0 | 9 | 0 | 1.018 * | .000 | -.000 | -.000 | 1.018 | 1.3997 | 1.0000 | * ** |
| 0 | 9 | 1 | 6.674 | 6.303 | -6.303 | -.022 | .370 | 2.7501 | 1.0000 | |
| 0 | 9 | 2 | 1.040 * | .000 | .000 | .000 | 1.040 | 1.3997 | 1.0000 | * ** |
| 0 | 9 | 3 | 10.101 | 9.794 | -9.794 | -.067 | .307 | 2.5494 | 1.0000 | |
| 0 | 9 | 4 | 1.128 * | .000 | -.000 | -.000 | 1.128 | 1.4000 | 1.0000 | * ** |
| 0 | 10 | 0 | 22.402 | 21.973 | -21.971 | -.244 | .429 | 1.9392 | 1.0000 | |
| 0 | 10 | 1 | 1.088 * | .000 | .000 | .000 | 1.088 | 1.4003 | 1.0000 | * ** |
| 0 | 10 | 2 | 36.185 | 36.283 | -36.277 | -.664 | -.099 | -.3260 | 1.0000 | |
| 0 | 10 | 3 | 1.129 * | .000 | -.000 | -.000 | 1.129 | 1.3995 | 1.0000 | * ** |
| 0 | 11 | 0 | 1.962 * | .000 | -.000 | -.000 | 1.962 | 4.1090 | 1.0000 | * ** |
| 0 | 11 | 1 | 10.015 | 9.650 | 9.647 | .258 | .364 | 2.9036 | 1.0000 | |
| 1 | 0 | 0 | 1.110 * | .000 | -.000 | .000 | 1.110 | 2.6091 | 1.0000 | * ** |
| 1 | 0 | 1 | 56.323 | 56.834 | 56.834 | .215 | -.511 | -4.7739 | 1.0000 | |
| 1 | 0 | 2 | 1.049 * | .000 | .000 | .000 | 1.049 | 1.4005 | 1.0000 | * ** |
| 1 | 0 | 3 | 33.484 | 30.580 | 30.579 | .154 | 2.905 | 16.5553 | 1.0000 | |
| 1 | 0 | 4 | 1.060 * | .000 | -.000 | -.000 | 1.060 | 1.4003 | 1.0000 | * ** |
| 1 | 0 | 5 | 33.016 | 30.755 | 30.754 | .255 | 2.261 | 9.6370 | 1.0000 | |
| 1 | 0 | 6 | 2.798 | .000 | .000 | .000 | 2.798 | 8.7917 | 1.0000 | |
| 1 | 0 | 7 | 9.988 | 9.071 | 9.071 | .089 | .917 | 6.7082 | 1.0000 | |
| 1 | 1 | 0 | 46.817 | 45.639 | 45.638 | .156 | 1.179 | 12.4266 | 1.0000 | |
| 1 | 1 | 1 | 36.136 | 34.586 | -34.586 | -.203 | 1.550 | 12.1521 | 1.0000 | |
| 1 | 1 | 2 | 45.098 | 44.871 | -44.869 | -.396 | .227 | 1.5880 | 1.0000 | |
| 1 | 1 | 3 | 18.127 | 16.285 | -16.284 | -.199 | 1.841 | 9.1628 | 1.0000 | |
| 1 | 1 | 4 | 25.835 | 24.157 | 24.156 | .144 | 1.678 | 7.6154 | 1.0000 | |
| 1 | 1 | 5 | 21.670 | 20.194 | -20.193 | -.192 | 1.476 | 5.8121 | 1.0000 | |
| 1 | 1 | 6 | 25.972 | 23.867 | -23.865 | -.354 | 2.105 | 7.6702 | 1.0000 | |
| 1 | 1 | 7 | 7.692 | 6.845 | -6.842 | -.181 | .847 | 5.4279 | 1.0000 | |
| 1 | 2 | 0 | 42.773 | 41.321 | -41.321 | -.190 | 1.451 | 11.3814 | 1.0000 | |
| 1 | 2 | 1 | 4.114 | 2.439 | 2.439 | -.028 | 1.675 | 5.3482 | 1.0000 | |
| 1 | 2 | 2 | 50.155 | 46.086 | 46.085 | -.187 | 4.059 | 26.7734 | 1.0000 | |
| 1 | 2 | 3 | 5.942 | 5.382 | -5.381 | -.083 | .560 | 3.3911 | 1.0000 | |
| 1 | 2 | 4 | 24.680 | 24.048 | -24.048 | -.182 | .631 | 2.8011 | 1.0000 | |
| 1 | 2 | 5 | 4.678 | 4.517 | 4.516 | .027 | .162 | .9550 | 1.0000 | |
| 1 | 2 | 6 | 11.925 | 10.547 | 10.546 | -.171 | 1.378 | 8.6587 | 1.0000 | |
| 1 | 2 | 7 | 7.246 | 6.719 | -6.718 | -.124 | .527 | 3.2905 | 1.0000 | |
| 1 | 3 | 0 | 24.974 | 25.568 | 25.564 | .436 | -.595 | -3.7359 | 1.0000 | |
| 1 | 3 | 1 | 36.991 | 36.438 | 36.435 | .451 | .553 | 3.6119 | 1.0000 | |
| 1 | 3 | 2 | 33.569 | 32.128 | -32.128 | -.107 | 1.441 | 8.4079 | 1.0000 | |
| 1 | 3 | 3 | 38.148 | 37.078 | 37.075 | .442 | 1.071 | 5.5526 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 4 | 25.144 | 23.650 | 23.647 | .413 | 1.494 | 6.4785 | 1.0000 |
| 1 | 3 | 5 | 25.027 | 23.805 | 23.802 | .424 | 1.221 | 4.7504 | 1.0000 |
| 1 | 3 | 6 | 15.309 | 14.581 | -14.581 | -.089 | .728 | 4.5178 | 1.0000 |
| 1 | 3 | 7 | 23.661 | 23.625 | 23.622 | .400 | .035 | .1518 | 1.0000 |
| 1 | 4 | 0 | 17.515 | 16.158 | 16.158 | .049 | 1.357 | 6.7543 | 1.0000 |
| 1 | 4 | 1 | 31.315 | 29.518 | -29.518 | -.151 | 1.797 | 10.1810 | 1.0000 |
| 1 | 4 | 2 | .965 * | .748 | .746 | .050 | .217 | .3151 | 1.0000 * ** |
| 1 | 4 | 3 | 29.370 | 28.038 | -28.038 | -.202 | 1.332 | 6.2777 | 1.0000 |
| 1 | 4 | 4 | 8.901 | 9.586 | 9.586 | .047 | -.686 | -4.9438 | 1.0000 |
| 1 | 4 | 5 | 12.924 | 12.616 | -12.616 | -.090 | .307 | 1.9195 | 1.0000 |
| 1 | 4 | 6 | 1.099 * | .802 | .800 | .046 | .297 | .3786 | 1.0000 * ** |
| 1 | 4 | 7 | 16.483 | 16.180 | -16.179 | -.229 | .303 | 1.6593 | 1.0000 |
| 1 | 5 | 0 | 36.949 | 35.858 | 35.857 | .322 | 1.091 | 5.7793 | 1.0000 |
| 1 | 5 | 1 | 49.719 | 48.678 | -48.675 | -.519 | 1.041 | 5.5468 | 1.0000 |
| 1 | 5 | 2 | 19.076 | 17.899 | -17.898 | -.197 | 1.177 | 4.9724 | 1.0000 |
| 1 | 5 | 3 | 47.118 | 47.367 | -47.365 | -.509 | -.249 | -1.1514 | 1.0000 |
| 1 | 5 | 4 | 27.171 | 25.841 | 25.839 | .304 | 1.330 | 5.4316 | 1.0000 |
| 1 | 5 | 5 | 30.725 | 30.124 | -30.120 | -.489 | .601 | 2.2504 | 1.0000 |
| 1 | 5 | 6 | 11.374 | 11.070 | -11.068 | -.172 | .305 | 2.3158 | 1.0000 |
| 1 | 6 | 0 | 27.862 | 26.491 | 26.490 | .186 | 1.371 | 6.3081 | 1.0000 |
| 1 | 6 | 1 | 3.308 | 1.907 | 1.904 | .094 | 1.402 | 6.1069 | 1.0000 |
| 1 | 6 | 2 | 13.676 | 14.186 | -14.185 | .187 | -.510 | -3.1865 | 1.0000 |
| 1 | 6 | 3 | 2.374 | 2.233 | -2.233 | .041 | .141 | .5008 | 1.0000 |
| 1 | 6 | 4 | 19.463 | 18.965 | 18.964 | .178 | .498 | 2.5439 | 1.0000 |
| 1 | 6 | 5 | 6.257 | 6.078 | 6.076 | .137 | .180 | 1.2062 | 1.0000 |
| 1 | 6 | 6 | 7.953 | 5.592 | -5.589 | .172 | 2.361 | 16.1855 | 1.0000 |
| 1 | 7 | 0 | 28.488 | 28.653 | 28.653 | .076 | -.165 | -.7089 | 1.0000 |
| 1 | 7 | 1 | 28.537 | 27.700 | 27.699 | .290 | .837 | 3.5978 | 1.0000 |
| 1 | 7 | 2 | 21.130 | 19.961 | -19.957 | -.408 | 1.169 | 6.4723 | 1.0000 |
| 1 | 7 | 3 | 22.683 | 22.160 | 22.158 | .285 | .524 | 1.9828 | 1.0000 |
| 1 | 7 | 4 | 21.019 | 20.305 | 20.305 | .069 | .713 | 3.5309 | 1.0000 |
| 1 | 7 | 5 | 20.881 | 20.675 | 20.673 | .273 | .206 | 1.1140 | 1.0000 |
| 1 | 7 | 6 | 11.944 | 12.121 | -12.115 | -.366 | -.177 | -1.2693 | 1.0000 |
| 1 | 8 | 0 | 20.073 | 19.353 | -19.353 | -.148 | .720 | 3.7924 | 1.0000 |
| 1 | 8 | 1 | 14.512 | 13.820 | 13.820 | .146 | .692 | 4.0855 | 1.0000 |
| 1 | 8 | 2 | 5.166 | 5.127 | -5.125 | -.143 | .038 | .2478 | 1.0000 |
| 1 | 8 | 3 | 8.766 | 8.208 | 8.208 | .095 | .558 | 4.6735 | 1.0000 |
| 1 | 8 | 4 | 14.617 | 14.603 | -14.603 | -.142 | .014 | .0920 | 1.0000 |
| 1 | 8 | 5 | 12.641 | 12.560 | 12.559 | .182 | .081 | .5458 | 1.0000 |
| 1 | 9 | 0 | 14.705 | 13.759 | 13.757 | .225 | .946 | 6.0206 | 1.0000 |
| 1 | 9 | 1 | 5.370 | 4.700 | -4.698 | -.129 | .670 | 4.2392 | 1.0000 |
| 1 | 9 | 2 | 19.614 | 18.909 | -18.907 | -.221 | .705 | 4.0426 | 1.0000 |
| 1 | 9 | 3 | 2.676 | 1.558 | -1.553 | -.126 | 1.118 | 3.5227 | 1.0000 |
| 1 | 9 | 4 | 10.975 | 10.867 | 10.865 | .212 | .109 | .7903 | 1.0000 |
| 1 | 10 | 0 | 10.501 | 10.513 | -10.513 | -.068 | -.012 | -.0877 | 1.0000 |
| 1 | 10 | 1 | 2.559 | 2.655 | -2.653 | -.114 | -.096 | -.2770 | 1.0000 |
| 1 | 10 | 2 | 8.936 | 8.346 | 8.346 | -.063 | .590 | 4.5207 | 1.0000 |
| 1 | 10 | 3 | 5.204 | 4.924 | -4.922 | -.155 | .279 | 1.4420 | 1.0000 |
| 1 | 11 | 0 | 6.396 | 6.517 | 6.508 | .346 | -.121 | -.7098 | 1.0000 |
| 1 | 11 | 1 | 10.587 | 10.449 | 10.447 | .243 | .137 | .9899 | 1.0000 |
| 2 | 0 | 0 | 21.981 | 20.241 | -20.241 | -.097 | 1.739 | 11.0705 | 1.0000 |
| 2 | 0 | 1 | 1.336 * | .000 | -.000 | .000 | 1.336 | 1.3996 | 1.0000 * ** |
| 2 | 0 | 2 | .971 * | 4.730 | -4.686 | -.645 | -3.759 | -5.4186 | 1.0000 * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 0 | 3 | 1.437 * | .000 | .000 | -.000 | 1.437 | 3.1173 | 1.0000 | * ** |
| 2 | 0 | 4 | 10.225 | 9.584 | -9.583 | -.099 | .641 | 3.7622 | 1.0000 | |
| 2 | 0 | 5 | 1.041 * | .000 | .000 | .000 | 1.041 | 1.3992 | 1.0000 | * ** |
| 2 | 0 | 6 | 18.540 | 17.583 | -17.573 | -.585 | .957 | 4.4654 | 1.0000 | |
| 2 | 0 | 7 | 1.892 * | .000 | -.000 | -.000 | 1.892 | 3.4480 | 1.0000 | * ** |
| 2 | 1 | 0 | 39.742 | 37.684 | 37.684 | .195 | 2.058 | 16.0088 | 1.0000 | |
| 2 | 1 | 1 | 5.162 | 3.825 | -3.825 | .029 | 1.337 | 4.4428 | 1.0000 | |
| 2 | 1 | 2 | 49.143 | 46.6[illegible] | 46.680 | .194 | 2.463 | 16.2022 | 1.0000 | |
| 2 | 1 | 3 | 2.760 | 2.320 | -2.320 | -.027 | .441 | 1.7418 | 1.0000 | |
| 2 | 1 | 4 | 25.288 | 23.726 | 23.726 | .187 | 1.561 | 6.8637 | 1.0000 | |
| 2 | 1 | 5 | 1.408 * | .999 | .996 | .081 | .409 | .7570 | 1.0000 | * ** |
| 2 | 1 | 6 | 23.377 | 22.040 | 22.039 | .178 | 1.337 | 6.5872 | 1.0000 | |
| 2 | 1 | 7 | 1.983 * | 2.119 | -2.118 | -.074 | -.136 | -.2534 | 1.0000 | * ** |
| 2 | 2 | 0 | 75.861 | 82.244 | 82.242 | .634 | -6.383 | -48.5042 | 1.0000 | |
| 2 | 2 | 1 | 16.354 | 16.284 | -16.281 | -.271 | .070 | .3854 | 1.0000 | |
| 2 | 2 | 2 | 5.000 | 3.572 | -3.571 | .084 | 1.427 | 8.2312 | 1.0000 | |
| 2 | 2 | 3 | 15.975 | 14.834 | -14.832 | -.265 | 1.141 | 6.9896 | 1.0000 | |
| 2 | 2 | 4 | 55.701 | 55.035 | 55.032 | .603 | .666 | 3.1833 | 1.0000 | |
| 2 | 2 | 5 | 16.982 | 15.998 | -15.996 | -.254 | .984 | 5.0780 | 1.0000 | |
| 2 | 2 | 6 | 1.098 * | .990 | .986 | .089 | .108 | .1378 | 1.0000 | * ** |
| 2 | 2 | 7 | 9.762 | 9.573 | -9.570 | -.238 | .188 | 1.4308 | 1.0000 | |
| 2 | 3 | 0 | 13.524 | 12.333 | 12.332 | .152 | 1.191 | 5.8375 | 1.0000 | |
| 2 | 3 | 1 | 3.124 | 2.599 | 2.599 | -.013 | .525 | 1.9047 | 1.0000 | |
| 2 | 3 | 2 | 22.886 | 21.452 | 21.452 | .154 | 1.434 | 7.5182 | 1.0000 | |
| 2 | 3 | 3 | 10.697 | 9.972 | -9.972 | -.068 | .725 | 4.3084 | 1.0000 | |
| 2 | 3 | 4 | 11.140 | 11.041 | 11.040 | .146 | .098 | .6304 | 1.0000 | |
| 2 | 3 | 5 | 8.547 | 8.644 | 8.644 | .040 | -.098 | -.7556 | 1.0000 | |
| 2 | 3 | 6 | 13.456 | 12.558 | 12.557 | .141 | .899 | 5.8743 | 1.0000 | |
| 2 | 3 | 7 | 10.689 | 10.402 | -10.401 | -.109 | .287 | 1.9558 | 1.0000 | |
| 2 | 4 | 0 | 10.200 | 9.544 | 9.544 | -.065 | .656 | 4.2865 | 1.0000 | |
| 2 | 4 | 1 | 21.033 | 20.059 | 20.059 | .092 | .974 | 4.8949 | 1.0000 | |
| 2 | 4 | 2 | 93.249 | 103.036 | -103.035 | -.591 | -9.787 | -53.2999 | 1.0000 | |
| 2 | 4 | 3 | 15.996 | 15.462 | 15.462 | .090 | .534 | 2.9890 | 1.0000 | |
| 2 | 4 | 4 | 3.781 | 3.594 | 3.594 | -.068 | .186 | .9771 | 1.0000 | |
| 2 | 4 | 5 | 11.439 | 11.045 | 11.045 | .085 | .394 | 2.8163 | 1.0000 | |
| 2 | 4 | 6 | 54.354 | 53.957 | -53.954 | -.535 | .397 | 1.4264 | 1.0000 | |
| 2 | 4 | 7 | 6.684 | 7.122 | 7.122 | .081 | -.438 | -2.4012 | 1.0000 | |
| 2 | 5 | 0 | 44.565 | 43.899 | -43.898 | -.268 | .666 | 3.4742 | 1.0000 | |
| 2 | 5 | 1 | 8.041 | 7.444 | 7.444 | .030 | .597 | 3.7751 | 1.0000 | |
| 2 | 5 | 2 | 49.327 | 49.455 | -49.454 | -.260 | -.128 | -.6240 | 1.0000 | |
| 2 | 5 | 3 | .974 * | 2.094 | -2.094 | -.023 | -1.120 | -1.6098 | 1.0000 | * ** |
| 2 | 5 | 4 | 31.272 | 31.124 | -31.123 | -.256 | .148 | .5938 | 1.0000 | |
| 2 | 5 | 5 | 10.537 | 10.041 | 10.041 | .078 | .495 | 3.8549 | 1.0000 | |
| 2 | 5 | 6 | 28.178 | 27.328 | -27.327 | -.238 | .849 | 2.8132 | 1.0000 | |
| 2 | 6 | 0 | 48.450 | 47.746 | 47.743 | .576 | .704 | 2.3483 | 1.0000 | |
| 2 | 6 | 1 | 16.417 | 15.809 | 15.807 | .223 | .608 | 3.3313 | 1.0000 | |
| 2 | 6 | 2 | 11.499 | 11.108 | 11.108 | .071 | .391 | 2.6592 | 1.0000 | |
| 2 | 6 | 3 | 13.847 | 13.372 | 13.370 | .218 | .475 | 3.3512 | 1.0000 | |
| 2 | 6 | 4 | 37.512 | 37.420 | 37.416 | .548 | .092 | .3515 | 1.0000 | |
| 2 | 6 | 5 | 11.776 | 12.241 | 12.239 | .208 | -.465 | -3.0784 | 1.0000 | |
| 2 | 6 | 6 | 7.974 | 8.006 | 8.005 | .076 | -.031 | -.2092 | 1.0000 | |
| 2 | 7 | 0 | 2.898 | 3.354 | 3.354 | -.029 | -.456 | -1.9850 | 1.0000 | |
| 2 | 7 | 1 | .961 * | .201 | -.201 | -.002 | .760 | 1.1070 | 1.0000 | * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 7 | 2 | .966 * | .628 | .627 | -.022 | .338 | .4901 | 1.0000 | * ** |
| 2 | 7 | 3 | 1.656 * | .554 | -.552 | -.052 | 1.101 | 2.4877 | 1.0000 | * ** |
| 2 | 7 | 4 | 1.731 * | 1.754 | 1.753 | -.028 | -.022 | -.0488 | 1.0000 | * ** |
| 2 | 7 | 5 | 1.131 * | .077 | .063 | .044 | 1.054 | 1.3051 | 1.0000 | * ** |
| 2 | 8 | 0 | 8.811 | 8.837 | -8.836 | -.086 | -.026 | -.2068 | 1.0000 | |
| 2 | 8 | 1 | 20.047 | 19.895 | -19.894 | -.158 | .153 | .7828 | 1.0000 | |
| 2 | 8 | 2 | 19.917 | 19.199 | -19.192 | -.548 | .717 | 3.6063 | 1.0000 | |
| 2 | 8 | 3 | 16.984 | 16.843 | -16.843 | -.153 | .141 | .9247 | 1.0000 | |
| 2 | 8 | 4 | 7.447 | 7.250 | -7.249 | -.088 | .197 | 1.3910 | 1.0000 | |
| 2 | 8 | 5 | 13.206 | 13.601 | -13.600 | -.149 | -.395 | -2.5955 | 1.0000 | |
| 2 | 9 | 0 | 27.900 | 27.526 | 27.525 | .213 | .375 | 1.3357 | 1.0000 | |
| 2 | 9 | 1 | 1.775 * | 1.220 | 1.219 | .046 | .555 | 1.2779 | 1.0000 | * ** |
| 2 | 9 | 2 | 31.891 | 32.147 | 32.146 | .219 | -.256 | -.8891 | 1.0000 | |
| 2 | 9 | 3 | 1.093 * | .500 | -.500 | .000 | .592 | .7587 | 1.0000 | * ** |
| 2 | 9 | 4 | 21.831 | 21.805 | 21.804 | .204 | .026 | .1341 | 1.0000 | |
| 2 | 10 | 0 | 34.084 | 33.296 | 33.292 | .508 | .789 | 2.6294 | 1.0000 | |
| 2 | 10 | 1 | 8.778 | 9.271 | -9.270 | -.139 | -.493 | -3.7764 | 1.0000 | |
| 2 | 10 | 2 | 5.024 | 5.315 | -5.314 | .083 | -.291 | -1.4329 | 1.0000 | |
| 2 | 10 | 3 | 7.817 | 7.685 | -7.684 | -.136 | .132 | .8987 | 1.0000 | |
| 3 | 0 | 0 | 1.816 * | .000 | -.000 | -.000 | 1.816 | 3.7474 | 1.0000 | * ** |
| 3 | 0 | 1 | 40.455 | 38.516 | -36.515 | -.225 | 1.939 | 13.0174 | 1.0000 | |
| 3 | 0 | 2 | .996 * | .000 | .000 | .000 | .996 | 1.4003 | 1.0000 | * ** |
| 3 | 0 | 3 | 35.243 | 33.422 | -33.421 | -.276 | 1.821 | 9.2503 | 1.0000 | |
| 3 | 0 | 4 | 1.144 * | .000 | -.000 | -.000 | 1.144 | 1.5128 | 1.0000 | * ** |
| 3 | 0 | 5 | 19.559 | 18.397 | -18.396 | -.158 | 1.162 | 6.0267 | 1.0000 | |
| 3 | 0 | 6 | 1.280 * | .000 | .000 | .000 | 1.280 | 1.8294 | 1.0000 | * ** |
| 3 | 0 | 7 | 19.816 | 18.683 | -18.681 | -.297 | 1.133 | 5.6660 | 1.0000 | |
| 3 | 1 | 0 | 56.406 | 54.923 | 54.922 | .412 | 1.482 | 10.5293 | 1.0000 | |
| 3 | 1 | 1 | 46.444 | 46.028 | 46.025 | .493 | .416 | 2.7559 | 1.0000 | |
| 3 | 1 | 2 | .946 * | .685 | .671 | -.135 | .261 | .3865 | 1.0000 | * ** |
| 3 | 1 | 3 | 36.354 | 34.039 | 34.036 | .484 | 2.315 | 11.7586 | 1.0000 | |
| 3 | 1 | 4 | 39.859 | 37.819 | 37.817 | .390 | 2.040 | 9.3025 | 1.0000 | |
| 3 | 1 | 5 | 36.218 | 35.155 | 35.152 | .464 | 1.063 | 4.3067 | 1.0000 | |
| 3 | 1 | 6 | 2.833 | 2.289 | -2.286 | -.115 | .544 | 1.7200 | 1.0000 | |
| 3 | 1 | 7 | 19.452 | 18.840 | 18.835 | .437 | .611 | 3.0575 | 1.0000 | |
| 3 | 2 | 0 | 76.293 | 73.345 | 73.345 | -.186 | 2.948 | 19.7927 | 1.0000 | |
| 3 | 2 | 1 | 7.467 | 6.912 | 6.911 | .078 | .556 | 3.6552 | 1.0000 | |
| 3 | 2 | 2 | 4.885 | 4.072 | -4.068 | -.181 | .813 | 4.9502 | 1.0000 | |
| 3 | 2 | 3 | 2.018 * | .082 | .079 | .021 | 1.936 | 5.2273 | 1.0000 | * ** |
| 3 | 2 | 4 | 32.187 | 32.328 | 32.327 | -.178 | -.141 | -.6184 | 1.0000 | |
| 3 | 2 | 5 | 10.034 | 9.482 | 9.481 | .125 | .552 | 3.7558 | 1.0000 | |
| 3 | 2 | 6 | 5.122 | 4.773 | -4.770 | -.166 | .349 | 1.8780 | 1.0000 | |
| 3 | 2 | 7 | 2.432 * | 2.670 | -2.669 | -.030 | -.238 | -.5391 | 1.0000 | * ** |
| 3 | 3 | 0 | 16.405 | 14.862 | 14.862 | .087 | 1.542 | 7.5597 | 1.0000 | |
| 3 | 3 | 1 | 39.032 | 37.156 | -37.155 | -.263 | 1.875 | 10.7513 | 1.0000 | |
| 3 | 3 | 2 | 63.192 | 63.392 | -63.390 | -.446 | -.200 | -1.0927 | 1.0000 | |
| 3 | 3 | 3 | 34.441 | 33.624 | -33.623 | -.257 | .817 | 3.9075 | 1.0000 | |
| 3 | 3 | 4 | 10.454 | 9.574 | 9.573 | .079 | .881 | 6.0797 | 1.0000 | |
| 3 | 3 | 5 | 20.380 | 19.329 | -19.327 | -.249 | 1.051 | 5.3111 | 1.0000 | |
| 3 | 3 | 6 | 35.191 | 33.930 | -33.928 | -.400 | 1.261 | 4.4468 | 1.0000 | |
| 3 | 3 | 7 | 19.980 | 18.936 | -18.935 | -.233 | 1.044 | 5.2465 | 1.0000 | |
| 3 | 4 | 0 | 1.742 * | 1.312 | 1.309 | .074 | .431 | 1.1635 | 1.0000 | * ** |
| 3 | 4 | 1 | 26.443 | 25.637 | 25.636 | .180 | .806 | 4.0512 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 4 | 2 | 14.123 | 12.804 | 12.804 | .080 | 1.318 | 7.3011 | 1.0000 |
| 3 | 4 | 3 | 15.270 | 14.222 | 14.222 | .123 | 1.048 | 5.6454 | 1.0000 |
| 3 | 4 | 4 | 2.591 | 1.657 | 1.656 | .071 | .934 | 3.3283 | 1.0000 |
| 3 | 4 | 5 | 21.026 | 20.983 | 20.981 | .220 | .043 | .2127 | 1.0000 |
| 3 | 4 | 6 | 6.735 | 6.471 | 6.471 | .074 | .263 | 1.6450 | 1.0000 |
| 3 | 5 | 0 | 19.127 | 18.303 | 18.302 | .191 | .825 | 3.5455 | 1.0000 |
| 3 | 5 | 1 | 11.627 | 10.509 | 10.507 | .178 | 1.119 | 6.7286 | 1.0000 |
| 3 | 5 | 2 | 40.985 | 39.733 | -39.732 | -.320 | 1.252 | 5.8177 | 1.0000 |
| 3 | 5 | 3 | 14.449 | 13.990 | 13.989 | .175 | .459 | 2.9204 | 1.0000 |
| 3 | 5 | 4 | 14.825 | 13.784 | 13.783 | .179 | 1.041 | 7.0381 | 1.0000 |
| 3 | 5 | 5 | 6.099 | 5.283 | 5.280 | .168 | .816 | 5.3004 | 1.0000 |
| 3 | 5 | 6 | 22.674 | 22.225 | -22.223 | -.285 | .449 | 1.9392 | 1.0000 |
| 3 | 6 | 0 | 31.506 | 32.035 | -32.034 | .112 | -.528 | -2.3536 | 1.0000 |
| 3 | 6 | 1 | 4.768 | 3.224 | -3.223 | -.061 | 1.544 | 9.8931 | 1.0000 |
| 3 | 6 | 2 | 6.680 | 5.617 | 5.616 | .120 | 1.063 | 9.0603 | 1.0000 |
| 3 | 6 | 3 | 7.306 | 6.882 | -6.882 | -.110 | .424 | 3.5800 | 1.0000 |
| 3 | 6 | 4 | 20.837 | 20.622 | -20.622 | .108 | .215 | 1.0548 | 1.0000 |
| 3 | 6 | 5 | 1.115 * | .454 | .454 | -.009 | .661 | .8298 | 1.0000 * ** |
| 3 | 6 | 6 | 2.320 * | 3.092 | 3.090 | .110 | -.772 | -1.7200 | 1.0000 * ** |
| 3 | 7 | 0 | 33.727 | 32.545 | 32.543 | .428 | 1.182 | 4.8883 | 1.0000 |
| 3 | 7 | 1 | 19.096 | 18.256 | -18.253 | -.346 | .839 | 4.4958 | 1.0000 |
| 3 | 7 | 2 | 1.017 * | 2.064 | 2.063 | -.054 | -1.046 | -1.4408 | 1.0000 * ** |
| 3 | 7 | 3 | 15.346 | 14.953 | -14.950 | -.338 | .392 | 2.5469 | 1.0000 |
| 3 | 7 | 4 | 24.408 | 25.264 | 25.261 | .405 | -.856 | -4.0718 | 1.0000 |
| 3 | 7 | 5 | 15.631 | 15.666 | -15.663 | -.327 | -.035 | -.2165 | 1.0000 |
| 3 | 8 | 0 | 1.030 * | 1.271 | 1.268 | -.074 | -.240 | -.3263 | 1.0000 * ** |
| 3 | 8 | 1 | 13.246 | 12.576 | -12.576 | -.151 | .670 | 4.6565 | 1.0000 |
| 3 | 8 | 2 | 8.690 | 8.782 | -8.781 | -.062 | -.091 | -.7985 | 1.0000 |
| 3 | 8 | 3 | 13.191 | 13.310 | -13.309 | -.195 | -.119 | -.7484 | 1.0000 |
| 3 | 8 | 4 | 1.798 * | 1.404 | 1.403 | -.071 | .394 | .7621 | 1.0000 * ** |
| 3 | 8 | 5 | 7.033 | 7.121 | -7.121 | -.097 | -.089 | -.5397 | 1.0000 |
| 3 | 9 | 0 | 17.006 | 16.349 | 16.348 | .224 | .657 | 3.5789 | 1.0000 |
| 3 | 9 | 1 | 33.090 | 32.891 | 32.888 | .445 | .199 | .6928 | 1.0000 |
| 3 | 9 | 2 | 12.355 | 12.111 | -12.109 | -.217 | .243 | 1.7674 | 1.0000 |
| 3 | 9 | 3 | 27.309 | 26.817 | 26.814 | .437 | .492 | 2.2205 | 1.0000 |
| 3 | 9 | 4 | 12.825 | 12.735 | 12.734 | .210 | .090 | .6282 | 1.0000 |
| 3 | 10 | 0 | 8.912 | 8.361 | 8.360 | -.134 | .551 | 4.1217 | 1.0000 |
| 3 | 10 | 1 | 8.280 | 8.105 | 8.103 | .163 | .176 | 1.2475 | 1.0000 |
| 3 | 10 | 2 | 7.631 | 7.568 | -7.567 | -.120 | .062 | .4118 | 1.0000 |
| 4 | 0 | 0 | 42.140 | 39.713 | 39.711 | .354 | 2.427 | 14.7794 | 1.0000 |
| 4 | 0 | 1 | 1.013 * | .000 | .000 | .000 | 1.013 | 1.4006 | 1.0000 * ** |
| 4 | 0 | 2 | 80.091 | 80.240 | -80.240 | -.189 | -.149 | -.8410 | 1.0000 |
| 4 | 0 | 3 | 1.083 * | .000 | -.000 | -.000 | 1.083 | 1.3992 | 1.0000 * ** |
| 4 | 0 | 4 | 29.294 | 28.221 | 28.219 | .335 | 1.073 | 4.4752 | 1.0000 |
| 4 | 0 | 5 | 1.621 * | .000 | .000 | .000 | 1.621 | 3.0854 | 1.0000 * ** |
| 4 | 0 | 6 | 37.328 | 35.121 | -35.121 | -.162 | 2.207 | 7.7543 | 1.0000 |
| 4 | 0 | 7 | 3.166 | .000 | -.000 | -.000 | 3.166 | 8.9711 | 1.0000 |
| 4 | 1 | 0 | 37.544 | 34.552 | 34.552 | .010 | 2.991 | 17.8796 | 1.0000 |
| 4 | 1 | 1 | 38.122 | 35.671 | 35.671 | .186 | 2.451 | 14.0494 | 1.0000 |
| 4 | 1 | 2 | 8.167 | 7.390 | 7.390 | .012 | .777 | 4.5595 | 1.0000 |
| 4 | 1 | 3 | 19.952 | 18.170 | 18.169 | .127 | 1.782 | 7.4323 | 1.0000 |
| 4 | 1 | 4 | 20.040 | 19.257 | 19.257 | .010 | .783 | 4.2872 | 1.0000 |
| 4 | 1 | 5 | 27.894 | 26.863 | 26.862 | .227 | 1.032 | 3.8595 | 1.0000 |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 1 | 6 | 4.329 | 4.161 | 4.161 | .012 | .168 | .7227 | 1.0000 | |
| 4 | 1 | 7 | 3.712 | 3.713 | 3.712 | .060 | -.001 | -.0016 | 1.0000 | |
| 4 | 2 | 0 | 3.936 | 3.127 | -3.126 | -.035 | .809 | 3.7410 | 1.0000 | |
| 4 | 2 | 1 | 13.435 | 12.289 | 12.289 | .030 | 1.146 | 6.8072 | 1.0000 | |
| 4 | 2 | 2 | 55.486 | 54.829 | -54.826 | -.568 | .658 | 3.4854 | 1.0000 | |
| 4 | 2 | 3 | 6.503 | 6.409 | 6.409 | .030 | .094 | .5290 | 1.0000 | |
| 4 | 2 | 4 | 1.831 * | 2.177 | -2.177 | -.040 | -.346 | -.8454 | 1.0000 | * ** |
| 4 | 2 | 5 | 8.408 | 7.922 | 7.922 | .028 | .486 | 3.4500 | 1.0000 | |
| 4 | 2 | 6 | 33.255 | 32.488 | -32.484 | -.515 | .767 | 2.6190 | 1.0000 | |
| 4 | 2 | 7 | 1.239 * | 1.482 | 1.482 | .027 | -.242 | -.2737 | 1.0000 | * ** |
| 4 | 3 | 0 | 11.304 | 10.401 | 10.401 | -.054 | .903 | 5.7832 | 1.0000 | |
| 4 | 3 | 1 | 29.428 | 27.764 | -27.763 | -.207 | 1.665 | 8.3677 | 1.0000 | |
| 4 | 3 | 2 | 5.179 | 4.559 | -4.559 | -.047 | .620 | 3.3396 | 1.0000 | |
| 4 | 3 | 3 | 24.869 | 24.070 | -24.069 | -.256 | .798 | 3.4016 | 1.0000 | |
| 4 | 3 | 4 | 5.373 | 5.574 | 5.574 | -.052 | -.201 | -1.3245 | 1.0000 | |
| 4 | 3 | 5 | 16.752 | 16.294 | -16.294 | -.142 | .458 | 2.5961 | 1.0000 | |
| 4 | 3 | 6 | 1.660 * | 2.033 | -2.033 | -.043 | -.373 | -.6310 | 1.0000 | * ** |
| 4 | 4 | 0 | 77.100 | 78.611 | 78.606 | .855 | -1.511 | -7.8379 | 1.0000 | |
| 4 | 4 | 1 | 3.245 | 3.008 | 3.008 | -.009 | .237 | 1.0253 | 1.0000 | |
| 4 | 4 | 2 | 60.127 | 62.057 | 62.056 | .330 | -1.930 | -9.2741 | 1.0000 | |
| 4 | 4 | 3 | 2.950 | 2.634 | 2.634 | -.008 | .316 | 1.2980 | 1.0000 | |
| 4 | 4 | 4 | 60.293 | 60.617 | 60.611 | .816 | -.324 | -1.3277 | 1.0000 | |
| 4 | 4 | 5 | 1.535 * | .947 | .947 | -.009 | .588 | 1.0699 | 1.0000 | * ** |
| 4 | 4 | 6 | 34.866 | 34.874 | 34.873 | .314 | -.009 | -.0288 | 1.0000 | |
| 4 | 5 | 0 | 23.940 | 24.366 | -24.366 | .057 | -.426 | -1.8299 | 1.0000 | |
| 4 | 5 | 1 | 19.506 | 19.278 | -19.278 | -.097 | .228 | .9302 | 1.0000 | |
| 4 | 5 | 2 | 3.984 | 3.718 | -3.717 | .066 | .266 | 1.4383 | 1.0000 | |
| 4 | 5 | 3 | 18.643 | 17.816 | -17.816 | -.146 | .827 | 4.3560 | 1.0000 | |
| 4 | 5 | 4 | 16.333 | 15.830 | -15.830 | .054 | .503 | 2.8661 | 1.0000 | |
| 4 | 5 | 5 | 10.081 | 10.021 | -10.021 | -.042 | .060 | .4342 | 1.0000 | |
| 4 | 5 | 6 | 3.408 | 2.120 | -2.119 | .061 | 1.288 | 4.2524 | 1.0000 | |
| 4 | 6 | 0 | 5.063 | 4.060 | -4.055 | -.209 | 1.003 | 6.8255 | 1.0000 | |
| 4 | 6 | 1 | 6.316 | 5.821 | -5.821 | -.028 | .494 | 4.0028 | 1.0000 | |
| 4 | 6 | 2 | 56.384 | 56.100 | -56.096 | -.696 | .284 | 1.1948 | 1.0000 | |
| 4 | 6 | 3 | 3.053 | 3.000 | -3.000 | -.026 | .053 | .2077 | 1.0000 | |
| 4 | 6 | 4 | 5.488 | 5.175 | -5.171 | -.206 | .313 | 1.8824 | 1.0000 | |
| 4 | 6 | 5 | 5.482 | 5.110 | -5.109 | -.028 | .373 | 1.9741 | 1.0000 | |
| 4 | 7 | 0 | 4.784 | 4.570 | -4.570 | -.034 | .214 | 1.2806 | 1.0000 | |
| 4 | 7 | 1 | 21.858 | 20.994 | 20.992 | .284 | .864 | 4.4832 | 1.0000 | |
| 4 | 7 | 2 | 2.147 * | 1.569 | 1.569 | -.020 | .578 | 1.6059 | 1.0000 | * ** |
| 4 | 7 | 3 | 12.500 | 12.075 | 12.073 | .230 | .425 | 3.3039 | 1.0000 | |
| 4 | 7 | 4 | 3.936 | 3.735 | -3.734 | -.032 | .201 | .8389 | 1.0000 | |
| 4 | 7 | 5 | 19.477 | 20.065 | 20.063 | .312 | -.588 | -2.9255 | 1.0000 | |
| 4 | 8 | 0 | 30.046 | 28.733 | 28.731 | .356 | 1.312 | 4.7998 | 1.0000 | |
| 4 | 8 | 1 | 2.122 * | 2.018 | -2.018 | .020 | .104 | .2766 | 1.0000 | * ** |
| 4 | 8 | 2 | 26.037 | 25.872 | -25.872 | -.101 | .164 | .5746 | 1.0000 | |
| 4 | 8 | 3 | 1.950 * | 2.056 | -2.056 | .021 | -.106 | -.2267 | 1.0000 | * ** |
| 4 | 8 | 4 | 23.092 | 22.640 | 22.637 | .338 | .453 | 1.9647 | 1.0000 | |
| 4 | 9 | 0 | 19.409 | 18.555 | 18.555 | -.005 | .854 | 4.6500 | 1.0000 | |
| 4 | 9 | 1 | 3.787 | 3.225 | 3.225 | -.025 | .562 | 2.2749 | 1.0000 | |
| 4 | 9 | 2 | 8.528 | 8.192 | 8.192 | .011 | .336 | 2.4566 | 1.0000 | |
| 4 | 9 | 3 | 1.972 * | 1.077 | -1.075 | -.069 | .895 | 1.8384 | 1.0000 | * ** |
| 4 | 10 | 0 | 1.899 * | .175 | .147 | .095 | 1.724 | 3.3671 | 1.0000 | * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 10 | 1 | 1.161 * | 1.014 | 1.014 | .012 | .147 | .1775 | 1.0000 | * ** |
| 5 | 0 | 0 | 1.040 * | .000 | -.000 | .000 | 1.040 | 1.3997 | 1.0000 | * ** |
| 5 | 0 | 1 | 27.792 | 26.814 | -26.813 | -.107 | .979 | 4.7492 | 1.0000 | |
| 5 | 0 | 2 | 1.082 * | .000 | .000 | .000 | 1.082 | 1.3997 | 1.0000 | * ** |
| 5 | 0 | 3 | 31.228 | 29.555 | -29.555 | -.159 | 1.673 | 7.2232 | 1.0000 | |
| 5 | 0 | 4 | 1.067 * | .000 | -.000 | -.000 | 1.067 | 1.4003 | 1.0000 | * ** |
| 5 | 0 | 5 | 9.027 | 8.444 | -8.444 | -.048 | .583 | 4.1142 | 1.0000 | |
| 5 | 0 | 6 | 2.076 * | .000 | .000 | .000 | 2.076 | 4.1786 | 1.0000 | * ** |
| 5 | 1 | 0 | 52.693 | 50.776 | 50.775 | .374 | 1.917 | 10.3247 | 1.0000 | |
| 5 | 1 | 1 | 52.431 | 50.604 | -50.602 | -.522 | 1.827 | 9.5764 | 1.0000 | |
| 5 | 1 | 2 | 29.507 | 28.474 | -28.474 | -.160 | 1.033 | 4.7537 | 1.0000 | |
| 5 | 1 | 3 | 41.983 | 40.156 | -40.152 | -.511 | 1.827 | 8.2175 | 1.0000 | |
| 5 | 1 | 4 | 36.808 | 35.374 | 35.373 | .353 | 1.434 | 5.9047 | 1.0000 | |
| 5 | 1 | 5 | 38.265 | 37.133 | -37.130 | -.492 | 1.132 | 4.2662 | 1.0000 | |
| 5 | 1 | 6 | 16.815 | 15.596 | -15.596 | -.138 | 1.218 | 6.9032 | 1.0000 | |
| 5 | 2 | 0 | 19.922 | 18.376 | 18.375 | .223 | 1.546 | 6.8267 | 1.0000 | |
| 5 | 2 | 1 | 4.830 | 3.700 | -3.700 | -.001 | 1.130 | 5.5107 | 1.0000 | |
| 5 | 2 | 2 | 57.659 | 58.080 | 58.079 | .226 | -.421 | -2.0512 | 1.0000 | |
| 5 | 2 | 3 | 7.799 | 7.464 | -7.464 | -.055 | .335 | 2.4863 | 1.0000 | |
| 5 | 2 | 4 | 15.893 | 15.273 | 15.272 | .213 | .620 | 3.6630 | 1.0000 | |
| 5 | 2 | 5 | 1.107 * | 1.856 | 1.856 | .050 | -.749 | -.9479 | 1.0000 | * ** |
| 5 | 2 | 6 | 32.471 | 30.898 | 30.898 | .207 | 1.573 | 5.2097 | 1.0000 | |
| 5 | 3 | 0 | 13.285 | 12.558 | 12.557 | .123 | .727 | 3.5995 | 1.0000 | |
| 5 | 3 | 1 | 19.082 | 18.229 | 18.227 | .239 | .854 | 3.4867 | 1.0000 | |
| 5 | 3 | 2 | 18.727 | 17.153 | -17.149 | -.396 | 1.574 | 8.7683 | 1.0000 | |
| 5 | 3 | 3 | 19.673 | 19.244 | 19.243 | .235 | .429 | 2.3757 | 1.0000 | |
| 5 | 3 | 4 | 10.123 | 9.617 | 9.617 | .114 | .505 | 3.6166 | 1.0000 | |
| 5 | 3 | 5 | 12.679 | 11.158 | 11.156 | .225 | 1.521 | 9.4382 | 1.0000 | |
| 5 | 3 | 6 | 10.728 | 11.107 | -11.102 | -.355 | -.380 | -2.7368 | 1.0000 | |
| 5 | 4 | 0 | 10.452 | 11.123 | -11.123 | -.097 | -.671 | -4.0609 | 1.0000 | |
| 5 | 4 | 1 | 27.706 | 27.597 | 27.596 | .206 | .110 | .4762 | 1.0000 | |
| 5 | 4 | 2 | 15.755 | 16.405 | -16.405 | -.085 | -.651 | -3.4103 | 1.0000 | |
| 5 | 4 | 3 | 21.524 | 21.382 | 21.381 | .149 | .142 | .7692 | 1.0000 | |
| 5 | 4 | 4 | 8.756 | 8.373 | -8.372 | -.093 | .383 | 3.1274 | 1.0000 | |
| 5 | 4 | 5 | 19.248 | 19.106 | 19.104 | .243 | .142 | .7781 | 1.0000 | |
| 5 | 4 | 6 | 9.775 | 9.577 | -9.577 | -.078 | .197 | 1.4654 | 1.0000 | |
| 5 | 5 | 0 | 9.794 | 8.667 | 8.665 | .196 | 1.127 | 7.5162 | 1.0000 | |
| 5 | 5 | 1 | 6.984 | 6.143 | -6.142 | -.138 | .840 | 6.4365 | 1.0000 | |
| 5 | 5 | 2 | 25.650 | 24.910 | -24.908 | -.303 | .740 | 2.9603 | 1.0000 | |
| 5 | 5 | 3 | 9.544 | 8.967 | -8.966 | -.134 | .577 | 4.3870 | 1.0000 | |
| 5 | 5 | 4 | 7.532 | 7.611 | 7.609 | .183 | -.080 | -.5997 | 1.0000 | |
| 5 | 5 | 5 | 3.954 | 2.904 | -2.901 | -.132 | 1.050 | 4.1183 | 1.0000 | |
| 5 | 5 | 6 | 14.282 | 14.279 | -14.276 | -.269 | .003 | .0180 | 1.0000 | |
| 5 | 6 | 0 | 11.395 | 10.425 | -10.423 | -.159 | .970 | 6.6968 | 1.0000 | |
| 5 | 6 | 1 | 1.026 * | 1.112 | -1.107 | -.105 | -.085 | -.1164 | 1.0000 | * ** |
| 5 | 6 | 2 | 33.062 | 33.240 | -33.240 | -.142 | -.178 | -.6884 | 1.0000 | |
| 5 | 6 | 3 | 5.975 | 5.703 | -5.701 | -.152 | .272 | 1.7769 | 1.0000 | |
| 5 | 6 | 4 | 8.552 | 8.622 | -8.621 | -.152 | -.071 | -.5418 | 1.0000 | |
| 5 | 6 | 5 | 2.739 | 1.817 | 1.816 | -.052 | .922 | 2.5185 | 1.0000 | |
| 5 | 7 | 0 | 25.677 | 24.684 | 24.681 | .386 | .994 | 3.6615 | 1.0000 | |
| 5 | 7 | 1 | 23.624 | 23.117 | 23.115 | .349 | .507 | 2.5596 | 1.0000 | |
| 5 | 7 | 2 | 25.808 | 26.131 | -26.131 | -.084 | -.323 | -1.1362 | 1.0000 | |
| 5 | 7 | 3 | 19.793 | 19.374 | 19.371 | .344 | .420 | 2.3505 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 5 | 7 | 4 | 19.008 | 19.094 | 19.091 | .365 | -.086 | -.4421 | 1.0000 |
| 5 | 8 | 0 | 7.778 | 8.032 | 8.031 | .083 | -.253 | -1.8956 | 1.0000 |
| 5 | 8 | 1 | 6.582 | 5.988 | -5.988 | -.059 | .593 | 3.9839 | 1.0000 |
| 5 | 8 | 2 | 16.495 | 17.155 | 17.155 | .100 | -.660 | -3.8494 | 1.0000 |
| 5 | 8 | 3 | 9.773 | 9.730 | -9.730 | -.103 | .042 | .3178 | 1.0000 |
| 5 | 8 | 4 | 6.172 | 6.432 | 6.431 | .079 | -.260 | -1.3861 | 1.0000 |
| 5 | 9 | 0 | 18.872 | 18.558 | 18.557 | .211 | .314 | 1.6122 | 1.0000 |
| 5 | 9 | 1 | 28.932 | 29.333 | -29.329 | -.478 | -.401 | -1.2977 | 1.0000 |
| 5 | 9 | 2 | 11.467 | 11.477 | -11.475 | -.219 | -.010 | -.0739 | 1.0000 |
| 6 | 0 | 0 | 51.266 | 50.954 | -50.954 | -.041 | .312 | 1.5131 | 1.0000 |
| 6 | 0 | 1 | 2.282 * | .000 | .000 | .000 | 2.282 | 5.9653 | 1.0000 * ** |
| 6 | 0 | 2 | 62.679 | 61.532 | -61.530 | -.563 | 1.147 | 5.3030 | 1.0000 |
| 6 | 0 | 3 | 1.054 * | .000 | -.000 | -.000 | 1.054 | 1.3997 | 1.0000 * ** |
| 6 | 0 | 4 | 34.423 | 33.565 | -33.565 | -.045 | .858 | 3.2965 | 1.0000 |
| 6 | 0 | 5 | 1.146 * | .000 | .000 | .000 | 1.146 | 1.4002 | 1.0000 * ** |
| 6 | 0 | 6 | 38.331 | 37.162 | -37.158 | -.510 | 1.169 | 3.8077 | 1.0000 |
| 6 | 1 | 0 | 29.737 | 27.746 | -27.744 | -.262 | 1.991 | 8.9120 | 1.0000 |
| 6 | 1 | 1 | 5.123 | 5.136 | 5.136 | -.012 | -.013 | -.0664 | 1.0000 |
| 6 | 1 | 2 | 5.075 | 3.439 | -3.429 | -.256 | 1.636 | 8.4862 | 1.0000 |
| 6 | 1 | 3 | 1.984 * | 1.952 | 1.951 | -.065 | .033 | .0809 | 1.0000 * ** |
| 6 | 1 | 4 | 22.246 | 21.002 | -21.001 | -.251 | 1.244 | 6.2841 | 1.0000 |
| 6 | 1 | 5 | 4.828 | 3.934 | 3.934 | .040 | .895 | 4.2774 | 1.0000 |
| 6 | 1 | 6 | 4.743 | 4.029 | -4.022 | -.235 | .714 | 3.0031 | 1.0000 |
| 6 | 2 | 0 | 57.470 | 55.933 | 55.930 | .603 | 1.537 | 7.2775 | 1.0000 |
| 6 | 2 | 1 | 18.191 | 16.519 | 16.517 | .265 | 1.671 | 9.0522 | 1.0000 |
| 6 | 2 | 2 | 1.050 * | 1.169 | 1.167 | .081 | -.120 | -.1596 | 1.0000 * ** |
| 6 | 2 | 3 | 19.358 | 18.428 | 18.426 | .260 | .930 | 4.8248 | 1.0000 |
| 6 | 2 | 4 | 43.779 | 43.078 | 43.074 | .574 | .700 | 2.7141 | 1.0000 |
| 6 | 2 | 5 | 10.119 | 10.054 | 10.051 | .248 | .065 | .4573 | 1.0000 |
| 6 | 2 | 6 | 3.614 | 2.677 | 2.675 | .085 | .938 | 3.0436 | 1.0000 |
| 6 | 3 | 0 | 6.961 | 7.111 | -7.110 | -.085 | -.150 | -.9285 | 1.0000 |
| 6 | 3 | 1 | 3.091 | 2.394 | 2.394 | .040 | .697 | 2.7006 | 1.0000 |
| 6 | 3 | 2 | 8.969 | 8.942 | 8.942 | -.075 | .027 | .2078 | 1.0000 |
| 6 | 3 | 3 | 5.336 | 5.101 | -5.101 | -.013 | .235 | 1.4400 | 1.0000 |
| 6 | 3 | 4 | 6.214 | 5.635 | -5.634 | -.081 | .579 | 3.7565 | 1.0000 |
| 6 | 3 | 5 | 7.182 | 7.463 | 7.463 | .087 | -.282 | -1.7805 | 1.0000 |
| 6 | 3 | 6 | 5.224 | 4.323 | 4.322 | -.068 | .901 | 3.9804 | 1.0000 |
| 6 | 4 | 0 | 31.559 | 32.173 | 32.172 | -.129 | -.613 | -2.5794 | 1.0000 |
| 6 | 4 | 1 | 11.958 | 11.981 | -11.981 | -.093 | -.023 | -.1685 | 1.0000 |
| 6 | 4 | 2 | 40.194 | 39.977 | -39.972 | -.628 | .217 | .8948 | 1.0000 |
| 6 | 4 | 3 | 10.891 | 10.599 | -10.599 | -.090 | .292 | 2.0129 | 1.0000 |
| 6 | 4 | 4 | 21.888 | 21.044 | 21.043 | -.129 | .844 | 4.0751 | 1.0000 |
| 6 | 4 | 5 | 7.846 | 7.482 | -7.482 | -.088 | .364 | 2.4249 | 1.0000 |
| 6 | 5 | 0 | 22.420 | 22.241 | 22.240 | .183 | .179 | .6838 | 1.0000 |
| 6 | 5 | 1 | 3.439 | 2.140 | -2.140 | .050 | 1.299 | 5.5587 | 1.0000 |
| 6 | 5 | 2 | 2.605 | 2.649 | 2.642 | .196 | -.044 | -.1383 | 1.0000 |
| 6 | 5 | 3 | 7.695 | 7.063 | -7.063 | -.001 | .632 | 4.8786 | 1.0000 |
| 6 | 5 | 4 | 16.949 | 16.786 | 16.785 | .176 | .163 | .9829 | 1.0000 |
| 6 | 5 | 5 | 2.911 | 3.520 | 3.519 | .094 | -.609 | -1.6803 | 1.0000 |
| 6 | 6 | 0 | 38.307 | 37.142 | 37.138 | .586 | 1.164 | 4.4759 | 1.0000 |
| 6 | 6 | 1 | 12.618 | 12.501 | -12.500 | -.212 | .117 | .7717 | 1.0000 |
| 6 | 6 | 2 | 6.749 | 6.273 | 6.272 | .106 | .476 | 3.3338 | 1.0000 |
| 6 | 6 | 3 | 13.182 | 13.266 | -13.265 | -.206 | -.084 | -.5853 | 1.0000 |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 6 | 4 | 28.970 | 29.165 | 29.160 | .558 | -.195 | -.6286 | 1.0000 | |
| 6 | 6 | 5 | 7.049 | 7.321 | -7.319 | -.200 | -.272 | -1.5521 | 1.0000 | |
| 6 | 7 | 0 | 3.677 | 3.499 | 3.498 | .078 | .177 | .7460 | 1.0000 | |
| 6 | 7 | 1 | 6.559 | 6.192 | -6.192 | -.058 | .367 | 2.4306 | 1.0000 | |
| 6 | 7 | 2 | 2.863 | 1.300 | -1.296 | .097 | 1.563 | 4.9281 | 1.0000 | |
| 6 | 7 | 3 | 6.633 | 6.204 | -6.203 | -.103 | .429 | 2.6131 | 1.0000 | |
| 6 | 7 | 4 | 3.177 | 2.991 | 2.990 | .075 | .186 | .5655 | 1.0000 | |
| 6 | 8 | 0 | 21.539 | 20.654 | -20.653 | -.050 | .885 | 3.9268 | 1.0000 | |
| 6 | 8 | 1 | 13.253 | 13.354 | 13.353 | .146 | -.101 | -.7043 | 1.0000 | |
| 6 | 8 | 2 | 31.679 | 31.717 | -31.713 | -.490 | -.038 | -.1246 | 1.0000 | |
| 6 | 8 | 3 | 12.336 | 12.620 | 12.619 | .145 | -.284 | -2.1725 | 1.0000 | |
| 6 | 9 | 0 | 22.681 | 23.188 | -23.186 | -.282 | -.506 | -2.1127 | 1.0000 | |
| 6 | 9 | 1 | 6.149 | 5.596 | 5.596 | .045 | .553 | 3.0137 | 1.0000 | |
| 7 | 0 | 0 | 1.065 * | .000 | .000 | -.000 | 1.065 | 1.4013 | 1.0000 | * ** |
| 7 | 0 | 1 | 15.455 | 14.764 | 14.763 | .179 | .690 | 4.1523 | 1.0000 | |
| 7 | 0 | 2 | 1.300 * | .000 | .000 | .000 | 1.300 | 2.0715 | 1.0000 | * ** |
| 7 | 0 | 3 | 12.633 | 12.055 | 12.055 | .123 | .778 | 5.1180 | 1.0000 | |
| 7 | 0 | 4 | 1.135 * | .000 | -.000 | -.000 | 1.135 | 1.4000 | 1.0000 | * ** |
| 7 | 0 | 5 | 11.370 | 10.914 | 10.912 | .217 | .456 | 3.0191 | 1.0000 | |
| 7 | 0 | 6 | 1.274 * | .000 | .000 | .000 | 1.274 | 1.4002 | 1.0000 | * ** |
| 7 | 1 | 0 | 11.563 | 12.073 | -12.072 | .113 | -.510 | -3.1427 | 1.0000 | |
| 7 | 1 | 1 | 23.085 | 22.216 | 22.215 | .233 | .869 | 3.4485 | 1.0000 | |
| 7 | 1 | 2 | 36.881 | 35.738 | -35.736 | -.398 | 1.144 | 4.7107 | 1.0000 | |
| 7 | 1 | 3 | 17.560 | 16.998 | 16.996 | .229 | .562 | 3.2622 | 1.0000 | |
| 7 | 1 | 4 | 8.199 | 8.287 | -8.286 | .104 | -.088 | -.6198 | 1.0000 | |
| 7 | 1 | 5 | 17.404 | 17.304 | 17.302 | .220 | .101 | .5710 | 1.0000 | |
| 7 | 1 | 6 | 22.386 | 22.117 | -22.114 | -.357 | .269 | 1.3042 | 1.0000 | |
| 7 | 2 | 0 | 12.520 | 11.462 | 11.461 | .135 | 1.058 | 6.8216 | 1.0000 | |
| 7 | 2 | 1 | 2.410 | 1.774 | 1.774 | .035 | .636 | 1.9114 | 1.0000 | |
| 7 | 2 | 2 | 11.784 | 12.124 | -12.123 | .141 | -.340 | -2.2662 | 1.0000 | |
| 7 | 2 | 3 | 2.798 | 2.691 | -2.691 | -.017 | .107 | .3367 | 1.0000 | |
| 7 | 2 | 4 | 8.989 | 8.979 | 8.978 | .129 | .011 | .0842 | 1.0000 | |
| 7 | 2 | 5 | 4.945 | 4.830 | 4.829 | .082 | .115 | .5077 | 1.0000 | |
| 7 | 3 | 0 | 63.525 | 65.203 | 65.201 | .444 | -1.678 | -7.1193 | 1.0000 | |
| 7 | 3 | 1 | 22.334 | 21.625 | -21.621 | -.416 | .709 | 3.7550 | 1.0000 | |
| 7 | 3 | 2 | 2.705 | 1.527 | -1.526 | -.060 | 1.179 | 3.7631 | 1.0000 | |
| 7 | 3 | 3 | 22.957 | 21.820 | -21.816 | -.406 | 1.137 | 5.6004 | 1.0000 | |
| 7 | 3 | 4 | 47.765 | 49.177 | 49.175 | .421 | -1.412 | -5.0155 | 1.0000 | |
| 7 | 3 | 5 | 14.959 | 15.243 | -15.238 | -.392 | -.284 | -1.6555 | 1.0000 | |
| 7 | 4 | 0 | 10.638 | 10.573 | -10.573 | -.040 | .065 | .4372 | 1.0000 | |
| 7 | 4 | 1 | 17.974 | 17.997 | -17.995 | -.252 | -.023 | -.1121 | 1.0000 | |
| 7 | 4 | 2 | 3.749 | 4.445 | -4.445 | -.026 | -.696 | -2.9166 | 1.0000 | |
| 7 | 4 | 3 | 21.853 | 22.421 | -22.419 | -.297 | -.568 | -2.6645 | 1.0000 | |
| 7 | 4 | 4 | 7.700 | 7.729 | -7.729 | -.038 | -.029 | -.1942 | 1.0000 | |
| 7 | 4 | 5 | 7.818 | 7.690 | -7.688 | -.189 | .128 | .8013 | 1.0000 | |
| 7 | 5 | 0 | 34.160 | 34.789 | 34.788 | .319 | -.630 | -2.3378 | 1.0000 | |
| 7 | 5 | 1 | 31.418 | 31.870 | 31.867 | .463 | -.453 | -1.6374 | 1.0000 | |
| 7 | 5 | 2 | 12.813 | 12.707 | -12.706 | -.162 | .106 | .7366 | 1.0000 | |
| 7 | 5 | 3 | 30.543 | 30.844 | 30.841 | .456 | -.300 | -1.0262 | 1.0000 | |
| 7 | 5 | 4 | 26.362 | 27.000 | 26.998 | .301 | -.638 | -2.8050 | 1.0000 | |
| 7 | 6 | 0 | 13.085 | 12.720 | -12.719 | -.155 | .365 | 2.3562 | 1.0000 | |
| 7 | 6 | 1 | 12.509 | 12.761 | 12.760 | .174 | -.252 | -1.6702 | 1.0000 | |
| 7 | 6 | 2 | 6.506 | 5.942 | 5.940 | -.134 | .565 | 3.5032 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 6 | 3 | 9.088 | 8.911 | 8.910 | .123 | .177 | 1.2975 | 1.0000 | |
| 7 | 6 | 4 | 9.617 | 10.062 | -10.060 | -.149 | -.445 | -3.0498 | 1.0000 | |
| 7 | 7 | 0 | 19.846 | 20.168 | -20.168 | .021 | -.321 | -1.3747 | 1.0000 | |
| 7 | 7 | 1 | 22.642 | 23.174 | -23.172 | -.290 | -.532 | -2.3723 | 1.0000 | |
| 7 | 7 | 2 | 30.906 | 30.651 | -30.648 | -.428 | .255 | .8296 | 1.0000 | |
| 7 | 7 | 3 | 19.076 | 19.474 | -19.471 | -.282 | -.397 | -2.2510 | 1.0000 | |
| 7 | 8 | 0 | 13.669 | 14.144 | 14.144 | .104 | -.475 | -2.9499 | 1.0000 | |
| 7 | 8 | 1 | 5.970 | 6.077 | 6.076 | .108 | -.108 | -.5640 | 1.0000 | |
| 7 | 8 | 2 | 9.352 | 9.232 | 9.231 | .128 | .121 | .8581 | 1.0000 | |
| 8 | 0 | 0 | 66.631 | 67.419 | 67.414 | .865 | -.788 | -3.2060 | 1.0000 | |
| 8 | 0 | 1 | 1.406 * | .000 | .000 | .000 | 1.406 | 2.2154 | 1.0000 | * ** |
| 8 | 0 | 2 | 6.687 | 5.877 | 5.866 | .356 | .810 | 5.3310 | 1.0000 | |
| 8 | 0 | 3 | 1.144 * | .000 | -.000 | -.000 | 1.144 | 1.4012 | 1.0000 | * ** |
| 8 | 0 | 4 | 51.945 | 52.237 | 52.230 | .825 | -.292 | -1.0185 | 1.0000 | |
| 8 | 0 | 5 | 1.267 * | .000 | .000 | .000 | 1.267 | 1.4002 | 1.0000 | * ** |
| 8 | 1 | 0 | 16.209 | 15.899 | 15.899 | .115 | .310 | 1.7641 | 1.0000 | |
| 8 | 1 | 1 | 15.695 | 15.399 | -15.398 | -.160 | .496 | 2.7916 | 1.0000 | |
| 8 | 1 | 4 | 11.896 | 11.843 | 11.842 | .110 | .053 | .3572 | 1.0000 | |
| 8 | 1 | 5 | 6.286 | 6.153 | -6.152 | -.102 | .133 | .6604 | 1.0000 | |
| 8 | 2 | 0 | 4.854 | 4.510 | -4.508 | -.140 | .344 | 1.7647 | 1.0000 | |
| 8 | 2 | 1 | 11.700 | 11.564 | -11.564 | -.062 | .135 | .9212 | 1.0000 | |
| 8 | 2 | 2 | 40.377 | 40.415 | -40.410 | -.632 | -.038 | -.1430 | 1.0000 | |
| 8 | 2 | 3 | 12.889 | 12.940 | -12.940 | -.060 | -.051 | -.3678 | 1.0000 | |
| 8 | 2 | 4 | 3.819 | 4.519 | -4.517 | -.139 | -.699 | -2.3886 | 1.0000 | |
| 8 | 2 | 5 | 5.167 | 5.112 | -5.111 | -.059 | .055 | .2318 | 1.0000 | |
| 8 | 3 | 0 | 6.108 | 6.346 | 6.345 | -.045 | -.237 | -1.4523 | 1.0000 | |
| 8 | 3 | 1 | 19.045 | 19.059 | 19.057 | .250 | -.014 | -.0812 | 1.0000 | |
| 8 | 3 | 2 | 7.901 | 7.685 | -7.685 | -.032 | .216 | 1.6011 | 1.0000 | |
| 8 | 3 | 3 | 15.417 | 15.312 | 15.311 | .195 | .105 | .6705 | 1.0000 | |
| 8 | 3 | 4 | 4.494 | 4.183 | 4.182 | -.043 | .311 | 1.2442 | 1.0000 | |
| 8 | 4 | 0 | 22.212 | 21.715 | 21.712 | .337 | .497 | 2.3898 | 1.0000 | |
| 8 | 4 | 1 | 1.595 * | 2.419 | -2.419 | .023 | -.824 | -1.4576 | 1.0000 | * ** |
| 8 | 4 | 2 | 2.747 | 2.499 | 2.495 | -.144 | .248 | .7196 | 1.0000 | |
| 8 | 4 | 3 | 1.271 * | 1.393 | -1.393 | .024 | -.122 | -.1531 | 1.0000 | * ** |
| 8 | 4 | 4 | 17.773 | 17.938 | 17.935 | .320 | -.165 | -.9154 | 1.0000 | |
| 8 | 5 | 0 | 2.389 * | 2.647 | -2.647 | .002 | -.258 | -.6458 | 1.0000 | * ** |
| 8 | 5 | 1 | 8.040 | 8.298 | 8.297 | .075 | -.258 | -1.7823 | 1.0000 | |
| 8 | 5 | 2 | 17.948 | 18.300 | 18.300 | .021 | -.352 | -1.7864 | 1.0000 | |
| 8 | 5 | 3 | 5.629 | 5.529 | 5.529 | .026 | .100 | .4890 | 1.0000 | |
| 8 | 5 | 4 | 1.431 * | 1.791 | -1.791 | .002 | -.359 | -.4735 | 1.0000 | * ** |
| 8 | 6 | 0 | 1.187 * | .879 | -.878 | .033 | .308 | .3634 | 1.0000 | * ** |
| 8 | 6 | 1 | 5.554 | 5.793 | 5.793 | .043 | -.239 | -1.2021 | 1.0000 | |
| 8 | 6 | 2 | 32.245 | 33.221 | -33.218 | -.421 | -.976 | -3.1269 | 1.0000 | |
| 8 | 6 | 3 | 7.000 | 7.638 | 7.638 | .045 | -.638 | -3.5947 | 1.0000 | |
| 8 | 7 | 0 | 11.469 | 11.052 | -11.052 | -.085 | .417 | 2.6997 | 1.0000 | |
| 8 | 7 | 1 | 9.735 | 9.917 | -9.915 | -.193 | -.182 | -1.3025 | 1.0000 | |
| 8 | 7 | 2 | 2.686 | 2.329 | -2.328 | -.059 | .357 | .8959 | 1.0000 | |
| 9 | 0 | 0 | 2.478 | .000 | .000 | -.000 | 2.478 | 6.5121 | 1.0000 | |
| 9 | 0 | 1 | 24.557 | 24.459 | 24.458 | .226 | .098 | .4679 | 1.0000 | |
| 9 | 0 | 2 | 1.183 * | .000 | .000 | .000 | 1.183 | 1.3993 | 1.0000 | * ** |
| 9 | 0 | 3 | 15.418 | 15.086 | 15.085 | .172 | .332 | 2.1705 | 1.0000 | |
| 9 | 0 | 4 | 1.273 * | .000 | -.000 | -.000 | 1.273 | 1.3991 | 1.0000 | * ** |
| 9 | 1 | 0 | 10.754 | 10.851 | 10.850 | .157 | -.097 | -.6346 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 1 | 1 | 6.596 | 7.035 | -7.033 | -.165 | -.439 | -2.6542 | 1.0000 | |
| 9 | 1 | 2 | 39.737 | 40.506 | -40.505 | -.329 | -.769 | -2.6650 | 1.0000 | |
| 9 | 1 | 3 | 5.181 | 5.065 | -5.063 | -.161 | .116 | .5289 | 1.0000 | |
| 9 | 1 | 4 | 8.841 | 8.435 | 8.433 | .146 | .407 | 2.6227 | 1.0000 | |
| 9 | 2 | 0 | 39.125 | 39.866 | -39.865 | -.223 | -.741 | -2.6509 | 1.0000 | |
| 9 | 2 | 1 | 2.985 | 3.566 | -3.565 | -.089 | -.581 | -1.7213 | 1.0000 | |
| 9 | 2 | 2 | 23.726 | 24.152 | -24.152 | -.212 | -.427 | -1.9267 | 1.0000 | |
| 9 | 2 | 3 | 5.876 | 6.197 | -6.195 | -.136 | -.321 | -1.6054 | 1.0000 | |
| 9 | 2 | 4 | 31.30 | 31.566 | -31.565 | -.213 | -.206 | -.6296 | 1.0000 | |
| 9 | 3 | 0 | 21.351 | 21.493 | 21.490 | .359 | -.142 | -.6396 | 1.0000 | |
| 9 | 3 | 1 | 30.174 | 30.675 | 30.671 | .449 | -.501 | -1.6520 | 1.0000 | |
| 9 | 3 | 2 | 8.338 | 8.694 | 8.693 | -.119 | -.355 | -2.4025 | 1.0000 | |
| 9 | 3 | 3 | 27.919 | 28.802 | 28.799 | .441 | -.884 | -3.9199 | 1.0000 | |
| 9 | 4 | 0 | 6.102 | 6.446 | 6.446 | .051 | -.344 | -1.8301 | 1.0000 | |
| 9 | 4 | 1 | 9.175 | 9.277 | -9.277 | -.035 | -.102 | -.7383 | 1.0000 | |
| 9 | 4 | 2 | 5.215 | 5.232 | 5.231 | .068 | -.017 | -.0776 | 1.0000 | |
| 9 | 4 | 3 | 8.323 | 8.201 | -8.201 | -.082 | .122 | .7813 | 1.0000 | |
| 9 | 5 | 0 | 19.587 | 19.264 | 19.262 | .268 | .324 | 1.6361 | 1.0000 | |
| 9 | 5 | 1 | 28.641 | 30.575 | -30.571 | -.531 | -1.935 | -6.0203 | 1.0000 | |
| 9 | 5 | 2 | 2.180 * | .754 | .730 | -.189 | 1.426 | 2.8765 | 1.0000 | * ** |
| 9 | 6 | 0 | 28.041 | 28.608 | 28.607 | .198 | -.567 | -2.4365 | 1.0000 | |
| 9 | 6 | 1 | 3.450 | 3.548 | -3.548 | .003 | -.098 | -.3009 | 1.0000 | |
| 10 | 0 | 0 | 5.866 | 5.490 | -5.487 | -.177 | .376 | 1.8906 | 1.0000 | |
| 10 | 0 | 1 | 1.251 * | .000 | .000 | .000 | 1.251 | 1.3995 | 1.0000 | * ** |
| 10 | 0 | 2 | 25.422 | 25.921 | -25.913 | -.646 | -.498 | -2.1151 | 1.0000 | |
| 10 | 0 | 3 | 1.285 * | .000 | -.000 | -.000 | 1.285 | 1.4000 | 1.0000 | * ** |
| 10 | 1 | 0 | 12.948 | 13.388 | -13.388 | .107 | -.440 | -2.8347 | 1.0000 | |
| 10 | 1 | 1 | 1.929 * | 1.473 | -1.472 | .065 | .456 | .7851 | 1.0000 | * ** |
| 10 | 1 | 2 | 5.692 | 5.814 | 5.813 | .111 | -.122 | -.5595 | 1.0000 | |
| 10 | 1 | 3 | 3.221 | 2.946 | -2.946 | .015 | .274 | .7429 | 1.0000 | |
| 10 | 2 | 0 | 36.669 | 37.597 | 37.592 | .586 | -.927 | -3.0401 | 1.0000 | |
| 10 | 2 | 1 | 14.681 | 14.722 | -14.720 | -.247 | -.041 | -.2578 | 1.0000 | |
| 10 | 2 | 2 | 6.599 | 6.549 | 6.548 | .114 | .050 | .2626 | 1.0000 | |
| 10 | 3 | 0 | 2.749 | 3.315 | -3.309 | .203 | -.566 | -1.3503 | 1.0000 | |
| 10 | 3 | 1 | 1.876 * | 2.063 | -2.062 | -.065 | -.187 | -.3083 | 1.0000 | * ** |
| 10 | 3 | 2 | 11.044 | 10.924 | 10.921 | .215 | .120 | .8998 | 1.0000 | |
| 10 | 4 | 0 | 2.239 * | 1.663 | -1.662 | -.030 | .577 | 1.1350 | 1.0000 | * ** |
| 10 | 4 | 1 | 5.127 | 5.712 | 5.711 | .080 | -.585 | -2.4074 | 1.0000 | |
| 0 | 0 | 8 | 67.714 | 64.657 | 64.653 | .761 | 3.056 | 9.6644 | 1.0000 | |
| 0 | 1 | 8 | 1.653 * | .000 | -.000 | -.000 | 1.653 | 2.3824 | 1.0000 | * ** |
| 0 | 2 | 8 | 6.863 | 6.912 | -6.911 | -.130 | -.049 | -.2598 | 1.0000 | |
| 0 | 3 | 8 | 1.261 * | .000 | -.000 | -.000 | 1.261 | 1.3998 | 1.0000 | * ** |
| 0 | 6 | 7 | 1.232 * | .000 | -.000 | -.000 | 1.232 | 1.3998 | 1.0000 | * ** |
| 0 | 8 | 6 | 13.146 | 13.268 | 13.266 | .247 | -.122 | -.8274 | 1.0000 | |
| 0 | 9 | 5 | 2.682 | .707 | -.707 | .023 | 1.975 | 5.2465 | 1.0000 | |
| 0 | 10 | 4 | 18.471 | 18.732 | -18.730 | -.239 | -.261 | -1.4350 | 1.0000 | |
| 0 | 11 | 2 | 1.393 * | .000 | -.000 | .000 | 1.393 | 2.0327 | 1.0000 | * ** |
| 0 | 11 | 3 | 8.751 | 8.942 | 8.939 | .212 | -.191 | -1.3278 | 1.0000 | |
| 1 | 0 | 8 | 1.281 * | .000 | -.000 | -.000 | 1.281 | 1.4002 | 1.0000 | * ** |
| 1 | 1 | 8 | 12.023 | 10.788 | 10.787 | .114 | 1.235 | 8.2371 | 1.0000 | |
| 1 | 2 | 8 | 11.508 | 10.573 | -10.572 | -.160 | .935 | 6.3192 | 1.0000 | |
| 1 | 3 | 8 | 10.769 | 11.112 | 11.106 | .350 | -.343 | -2.3646 | 1.0000 | |
| 1 | 5 | 7 | 28.595 | 28.878 | -28.874 | -.459 | -.283 | -1.2006 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6 | 7 | 3.034 | 3.146 | -3.146 | -.009 | -.112 | -.3086 | 1.0000 | |
| 1 | 8 | 6 | 2.446 * | 2.878 | -2.875 | -.131 | -.432 | -.9841 | 1.0000 | * ** |
| 1 | 9 | 5 | 6.792 | 6.448 | -6.447 | -.123 | .344 | 2.0073 | 1.0000 | |
| 1 | 10 | 4 | 8.206 | 8.193 | -8.192 | -.065 | .013 | .0895 | 1.0000 | |
| 1 | 11 | 2 | 14.454 | 14.045 | -14.045 | -.056 | .409 | 2.5879 | 1.0000 | |
| 1 | 11 | 3 | 10.534 | 10.427 | 10.424 | .239 | .107 | .8038 | 1.0000 | |
| 2 | 0 | 8 | 6.296 | 5.430 | -5.429 | -.103 | .866 | 4.2247 | 1.0000 | |
| 2 | 1 | 8 | 12.698 | 11.856 | 11.855 | .164 | .842 | 5.3975 | 1.0000 | |
| 2 | 2 | 8 | 27.898 | 26.923 | 26.918 | .521 | .975 | 3.9993 | 1.0000 | |
| 2 | 3 | 8 | 6.964 | 6.633 | 6.632 | .128 | .331 | 1.7659 | 1.0000 | |
| 2 | 5 | 7 | 5.201 | 5.417 | -5.416 | -.067 | -.216 | -.9672 | 1.0000 | |
| 2 | 6 | 7 | 6.994 | 7.384 | 7.381 | .197 | -.390 | -2.1474 | 1.0000 | |
| 2 | 7 | 6 | 2.452 * | .246 | -.246 | -.020 | 2.206 | 5.3395 | 1.0000 | * ** |
| 2 | 8 | 6 | 11.818 | 12.626 | -12.616 | -.497 | -.808 | -5.7816 | 1.0000 | |
| 2 | 9 | 5 | 3.498 | 2.315 | 2.313 | .087 | 1.183 | 3.9590 | 1.0000 | |
| 2 | 10 | 4 | 26.619 | 26.768 | 26.763 | .483 | -.149 | -.6151 | 1.0000 | |
| 2 | 11 | 0 | 5.243 | 5.124 | -5.124 | -.030 | .120 | .5746 | 1.0000 | |
| 2 | 11 | 1 | 2.554 | 2.578 | -2.578 | -.040 | -.024 | -.0608 | 1.0000 | |
| 2 | 11 | 2 | 5.062 | 3.889 | -3.889 | -.020 | 1.173 | 5.6623 | 1.0000 | |
| 2 | 11 | 3 | 6.774 | 6.733 | -6.733 | -.080 | .041 | .2273 | 1.0000 | |
| 3 | 0 | 8 | 2.646 * | .000 | -.000 | -.000 | 2.646 | 5.8031 | 1.0000 | * ** |
| 3 | 1 | 8 | 18.610 | 17.564 | 17.561 | .330 | 1.046 | 5.3963 | 1.0000 | |
| 3 | 2 | 8 | 15.586 | 12.725 | 12.724 | -.157 | 2.862 | 16.8993 | 1.0000 | |
| 3 | 4 | 7 | 4.154 | 3.555 | 3.555 | .063 | .599 | 2.1740 | 1.0000 | |
| 3 | 5 | 7 | 11.301 | 10.848 | 10.847 | .161 | .453 | 3.1497 | 1.0000 | |
| 3 | 7 | 6 | 2.772 | 1.723 | 1.723 | -.042 | 1.048 | 2.8080 | 1.0000 | |
| 3 | 9 | 5 | 25.282 | 26.112 | 26.109 | .418 | -.831 | -3.3242 | 1.0000 | |
| 3 | 10 | 3 | 5.143 | 4.509 | 4.508 | .117 | .634 | 3.1410 | 1.0000 | |
| 3 | 10 | 4 | 7.937 | 7.017 | 7.015 | -.129 | .920 | 5.9718 | 1.0000 | |
| 3 | 11 | 0 | 6.495 | 5.825 | 5.825 | .037 | .670 | 3.8197 | 1.0000 | |
| 3 | 11 | 1 | 17.744 | 17.332 | -17.329 | -.296 | .412 | 2.2461 | 1.0000 | |
| 3 | 11 | 2 | 22.727 | 22.213 | -22.210 | -.357 | .514 | 2.5199 | 1.0000 | |
| 4 | 3 | 7 | 13.656 | 13.409 | -13.406 | -.277 | .248 | 1.5874 | 1.0000 | |
| 4 | 4 | 7 | 3.287 | 1.331 | 1.331 | -.006 | 1.956 | 5.8811 | 1.0000 | |
| 4 | 5 | 7 | 10.647 | 10.370 | -10.369 | -.177 | .277 | 1.9793 | 1.0000 | |
| 4 | 6 | 6 | 35.728 | 35.645 | -35.640 | -.632 | .082 | .2541 | 1.0000 | |
| 4 | 7 | 6 | 1.218 * | .417 | .417 | -.019 | .801 | .9201 | 1.0000 | * ** |
| 4 | 8 | 5 | 1.201 * | .861 | -.861 | .018 | .340 | .3961 | 1.0000 | * ** |
| 4 | 9 | 4 | 15.626 | 15.192 | 15.192 | -.004 | .434 | 2.5491 | 1.0000 | |
| 4 | 10 | 2 | 15.230 | 14.589 | -14.586 | -.318 | .641 | 4.1916 | 1.0000 | |
| 4 | 10 | 3 | 1.180 * | .019 | -.013 | .014 | 1.162 | 1.3786 | 1.0000 | * ** |
| 4 | 11 | 0 | 3.509 | 3.304 | -3.304 | -.032 | .205 | .6483 | 1.0000 | |
| 4 | 11 | 1 | 5.572 | 5.407 | -5.405 | -.157 | .165 | .8112 | 1.0000 | |
| 5 | 0 | 7 | 19.853 | 18.499 | -18.498 | -.190 | 1.354 | 6.3491 | 1.0000 | |
| 5 | 1 | 7 | 21.472 | 21.295 | -21.290 | -.462 | .177 | .8488 | 1.0000 | |
| 5 | 2 | 7 | 6.724 | 6.344 | -6.344 | -.097 | .379 | 1.9673 | 1.0000 | |
| 5 | 3 | 7 | 13.246 | 13.032 | 13.030 | .214 | .214 | 1.2820 | 1.0000 | |
| 5 | 4 | 7 | 10.684 | 10.324 | 10.323 | .089 | .360 | 2.4349 | 1.0000 | |
| 5 | 6 | 6 | 20.663 | 20.596 | -20.595 | -.130 | .067 | .3222 | 1.0000 | |
| 5 | 7 | 5 | 17.819 | 18.095 | 18.092 | .327 | -.275 | -1.4915 | 1.0000 | |
| 5 | 8 | 5 | 1.714 * | .510 | -.510 | -.011 | 1.203 | 1.9276 | 1.0000 | * ** |
| 5 | 9 | 3 | 23.512 | 24.110 | -24.105 | -.466 | -.598 | -2.4937 | 1.0000 | |
| 5 | 9 | 4 | 14.668 | 14.514 | 14.513 | .198 | .154 | .9994 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 10 | 0 | 5.933 | 5.636 | 5.634 | .139 | .297 | 1.5175 | 1.0000 | |
| 5 | 10 | 1 | 2.044 * | .787 | -.783 | .077 | 1.257 | 2.4846 | 1.0000 | * ** |
| 5 | 10 | 2 | 20.684 | 20.088 | 20.087 | .158 | .596 | 3.3593 | 1.0000 | |
| 6 | 0 | 7 | 1.295 * | .000 | -.000 | -.000 | 1.295 | 1.3991 | 1.0000 | * ** |
| 6 | 1 | 7 | 1.284 * | .618 | -.609 | -.105 | .666 | .7261 | 1.0000 | * ** |
| 6 | 2 | 7 | 12.690 | 12.595 | 12.592 | .234 | .096 | .5980 | 1.0000 | |
| 6 | 4 | 6 | 24.846 | 24.996 | -24.990 | -.570 | -.150 | -.6264 | 1.0000 | |
| 6 | 5 | 6 | 1.716 * | 1.630 | 1.621 | .180 | .085 | .1320 | 1.0000 | * ** |
| 6 | 7 | 5 | 4.391 | 3.903 | -3.903 | -.010 | .487 | 1.8811 | 1.0000 | |
| 6 | 8 | 4 | 17.676 | 17.330 | -17.330 | -.053 | .345 | 2.0642 | 1.0000 | |
| 6 | 9 | 2 | 8.070 | 7.137 | -7.133 | -.255 | .933 | 6.1375 | 1.0000 | |
| 6 | 9 | 3 | 4.223 | 3.587 | 3.587 | .001 | .636 | 2.4364 | 1.0000 | |
| 6 | 10 | 0 | 29.549 | 29.374 | 29.370 | .454 | .175 | .7263 | 1.0000 | |
| 6 | 10 | 1 | 7.232 | 7.396 | 7.395 | .142 | -.165 | -.9547 | 1.0000 | |
| 7 | 2 | 6 | 6.596 | 6.063 | -6.062 | .129 | .533 | 2.7223 | 1.0000 | |
| 7 | 3 | 6 | 1.864 * | .080 | .066 | -.046 | 1.783 | 2.9039 | 1.0000 | * ** |
| 7 | 4 | 6 | 3.001 | 2.416 | -2.416 | -.024 | .585 | 1.5013 | 1.0000 | |
| 7 | 5 | 5 | 20.198 | 21.242 | 21.238 | .434 | -1.044 | -4.9664 | 1.0000 | |
| 7 | 6 | 5 | 10.880 | 11.095 | 11.093 | .209 | -.215 | -1.5050 | 1.0000 | |
| 7 | 7 | 4 | 16.975 | 16.829 | -16.829 | .016 | .145 | .8530 | 1.0000 | |
| 7 | 8 | 3 | 4.906 | 4.878 | 4.877 | .062 | .028 | .1195 | 1.0000 | |
| 7 | 9 | 0 | 10.330 | 10.152 | 10.149 | .216 | .178 | 1.3125 | 1.0000 | |
| 7 | 9 | 1 | 3.693 | 4.188 | 4.185 | .164 | -.295 | -.9904 | 1.0000 | |
| 7 | 9 | 2 | 9.078 | 8.999 | -8.997 | -.198 | .079 | .5313 | 1.0000 | |
| 8 | 0 | 6 | 3.288 | 4.672 | 4.660 | .338 | -1.384 | -3.6278 | 1.0000 | |
| 8 | 1 | 6 | 3.542 | 3.583 | -3.581 | .109 | -.041 | -.1131 | 1.0000 | |
| 8 | 2 | 6 | 25.544 | 26.055 | -26.049 | -.574 | -.511 | -1.9957 | 1.0000 | |
| 8 | 3 | 5 | 14.331 | 14.581 | 14.578 | .282 | -.250 | -1.4770 | 1.0000 | |
| 8 | 4 | 5 | 1.766 * | 1.963 | -1.963 | .020 | -.197 | -.2975 | 1.0000 | * ** |
| 8 | 5 | 5 | 6.477 | 7.138 | 7.137 | .116 | -.661 | -3.3069 | 1.0000 | |
| 8 | 6 | 4 | 1.250 * | 1.311 | -1.310 | .027 | -.061 | -.0684 | 1.0000 | * ** |
| 8 | 7 | 3 | 12.608 | 13.026 | -13.024 | -.234 | -.419 | -2.7352 | 1.0000 | |
| 8 | 8 | 0 | 35.151 | 36.442 | 36.435 | .687 | -1.290 | -3.8568 | 1.0000 | |
| 8 | 8 | 1 | 3.703 | 3.209 | 3.209 | -.028 | .494 | 1.6460 | 1.0000 | |
| 8 | 8 | 2 | 1.703 * | 1.221 | 1.193 | .259 | .482 | .7369 | 1.0000 | * ** |
| 9 | 0 | 5 | 22.033 | 22.405 | 22.403 | .260 | -.372 | -1.7615 | 1.0000 | |
| 9 | 1 | 5 | 6.503 | 6.991 | -6.990 | -.156 | -.488 | -2.3918 | 1.0000 | |
| 9 | 2 | 5 | 1.287 * | .497 | -.495 | -.037 | .791 | .8593 | 1.0000 | * ** |
| 9 | 3 | 4 | 16.599 | 16.969 | 16.965 | .339 | -.369 | -2.1419 | 1.0000 | |
| 9 | 3 | 5 | 20.740 | 21.352 | 21.347 | .421 | -.612 | -3.2403 | 1.0000 | |
| 9 | 4 | 4 | 5.263 | 5.345 | 5.345 | .049 | -.082 | -.3518 | 1.0000 | |
| 9 | 5 | 3 | 27.917 | 28.889 | -28.885 | -.518 | -.973 | -4.1104 | 1.0000 | |
| 9 | 5 | 4 | 14.952 | 15.204 | 15.201 | .253 | -.252 | -1.6017 | 1.0000 | |
| 9 | 6 | 2 | 18.697 | 18.738 | 18.737 | .220 | -.041 | -.2257 | 1.0000 | |
| 9 | 6 | 3 | 5.598 | 6.241 | -6.241 | -.043 | -.643 | -2.8772 | 1.0000 | |
| 9 | 7 | 0 | 11.805 | 12.174 | 12.174 | .103 | -.369 | -2.2638 | 1.0000 | |
| 9 | 7 | 1 | 10.619 | 10.894 | 10.890 | .270 | -.274 | -2.0213 | 1.0000 | |
| 9 | 7 | 2 | 28.081 | 28.707 | -28.705 | -.325 | -.626 | -2.5347 | 1.0000 | |
| 10 | 0 | 4 | 5.058 | 5.115 | -5.112 | -.175 | -.057 | -.2258 | 1.0000 | |
| 10 | 1 | 4 | 11.082 | 11.235 | -11.234 | .102 | -.153 | -.9804 | 1.0000 | |
| 10 | 2 | 3 | 10.247 | 10.181 | -10.178 | -.241 | .067 | .4596 | 1.0000 | |
| 10 | 2 | 4 | 29.178 | 30.370 | 30.365 | .558 | -1.192 | -4.8497 | 1.0000 | |
| 10 | 3 | 3 | 5.114 | 5.692 | -5.691 | -.110 | -.578 | -2.3137 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 4 | 2 | 33.793 | 35.433 | -35.430 | -.482 | -1.641 | -4.9636 | 1.0000 | |
| 10 | 4 | 3 | 4.377 | 4.752 | 4.751 | .080 | -.374 | -1.3204 | 1.0000 | |
| 10 | 5 | 0 | 3.964 | 2.736 | 2.717 | -.321 | 1.228 | 4.1091 | 1.0000 | |
| 10 | 5 | 1 | 6.829 | 6.537 | 6.537 | .008 | .291 | 1.5199 | 1.0000 | |
| 10 | 5 | 2 | 13.940 | 14.578 | -14.575 | -.295 | -.638 | -4.5317 | 1.0000 | |
| 10 | 6 | 0 | 18.254 | 19.050 | 19.044 | .496 | -.796 | -4.1302 | 1.0000 | |
| 10 | 6 | 1 | 10.412 | 10.939 | 10.937 | .209 | -.526 | -3.6079 | 1.0000 | |
| 11 | 0 | 0 | 1.309 * | .000 | .000 | .000 | 1.309 | 1.3991 | 1.0000 | * ** |
| 11 | 0 | 1 | 13.039 | 13.875 | -13.872 | -.317 | -.836 | -5.3226 | 1.0000 | |
| 11 | 0 | 2 | 1.308 * | .000 | -.000 | .000 | 1.308 | 1.3996 | 1.0000 | * ** |
| 11 | 0 | 3 | 11.677 | 12.118 | -12.113 | -.357 | -.441 | -3.1089 | 1.0000 | |
| 11 | 1 | 0 | 14.277 | 14.869 | 14.864 | .383 | -.592 | -3.4358 | 1.0000 | |
| 11 | 1 | 1 | 19.068 | 20.119 | 20.115 | .426 | -1.051 | -5.5395 | 1.0000 | |
| 11 | 1 | 2 | 4.263 | 4.372 | 4.371 | -.076 | -.109 | -.3653 | 1.0000 | |
| 11 | 2 | 0 | 10.500 | 10.360 | -10.359 | -.131 | .140 | .9663 | 1.0000 | |
| 11 | 2 | 1 | 8.401 | 8.900 | 8.898 | .146 | -.499 | -2.9458 | 1.0000 | |
| 11 | 2 | 2 | 14.131 | 14.628 | -14.628 | -.119 | -.498 | -3.4594 | 1.0000 | |
| 11 | 3 | 0 | 6.945 | 6.907 | 6.907 | .022 | .038 | .1944 | 1.0000 | |
| 11 | 3 | 1 | 15.714 | 17.037 | -17.035 | -.271 | -1.323 | -7.9086 | 1.0000 | |
| 11 | 3 | 2 | 33.643 | 35.249 | -35.247 | -.424 | -1.607 | -6.6183 | 1.0000 | |
| 11 | 4 | 0 | 8.197 | 8.337 | 8.337 | .047 | -.140 | -.8119 | 1.0000 | |
| 11 | 4 | 1 | 5.047 | 4.836 | 4.834 | .133 | .211 | .8407 | 1.0000 | |

ANDALUSITE (MINAS GERAIS) AT 25 DEGREES C FO-FC TABLE

RESULTS OF STRUCTURE FACTOR CALCULATIONS

| ALL REFLECTIONS | NUMERATOR | DENOMINATOR | NUMBER | R |
|---|---|---|---|---|
| WEIGHTED R | 32569.85 | 10278053.82 | 764 | .056 |
| UNWEIGHTED R | 597.88 | 11828.22 | 764 | .051 |
| RANGES OF F(OBS) | | | | |
| | 5241.34 | 1366080.28 | 501 | .062 |
| | 2905.20 | 2036076.74 | 172 | .038 |
| | 3684.96 | 2721301.34 | 60 | .037 |
| | 1518.36 | 2030971.72 | 21 | .027 |
| | 6380.05 | 1398491.35 | 8 | .068 |
| | 2840.88 | 257894.69 | 1 | .105 |
| | .00 | .00 | 0 | .000 |
| | 9999.06 | 467237.69 | 1 | .146 |
| RANGES OF (SIN(THETA)/LAMBDA)**2 | | | | |
| | 8881.47 | 3150733.90 | 50 | .053 |
| | 15294.71 | 2312572.74 | 69 | .081 |
| | 1895.46 | 1227878.55 | 83 | .039 |
| | 1953.87 | 957666.05 | 92 | .045 |
| | 1192.44 | 668237.13 | 105 | .042 |
| | 827.23 | 759649.94 | 114 | .033 |
| | 993.01 | 590619.78 | 122 | .041 |
| | 1531.66 | 610695.73 | 129 | .050 |

| UNREJECTED REFLECTIONS | | | | |
|---|---|---|---|---|
| WEIGHTED R | 32040.55 | 10277050.70 | 625 | .056 |
| UNWEIGHTED R | 460.85 | 11635.58 | 625 | .040 |
| RANGES OF F(OBS) | | | | |
| | 4712.04 | 1365077.16 | 362 | .059 |
| | 2905.20 | 2036076.74 | 172 | .038 |
| | 3684.96 | 2721301.34 | 60 | .037 |
| | 1518.36 | 2030971.72 | 21 | .027 |
| | 6380.05 | 1398491.35 | 8 | .068 |
| | 2840.88 | 257894.69 | 1 | .105 |
| | .00 | .00 | 0 | .000 |
| | 9999.06 | 467237.69 | 1 | .146 |
| RANGES OF (SIN(THETA)/LAMBDA)**2 | | | | |
| | 8795.87 | 3150673.90 | 34 | .053 |
| | 15225.42 | 2312478.44 | 56 | .081 |
| | 1832.55 | 1227795.01 | 72 | .039 |
| | 1900.02 | 957569.53 | 74 | .045 |
| | 1160.84 | 668092.01 | 85 | .042 |
| | 782.84 | 759502.59 | 96 | .032 |
| | 917.24 | 590428.87 | 101 | .039 |
| | 1425.76 | 610510.35 | 107 | .048 |

SUM FCAL 11521.29

STANDARD DEV OF UNIT WEIGHT OBS 7.43

The thermal expansion and the high temperature crystal chemistry

of $Al_2SiO_5$ polymorphs

John K. Winter

and

Subrata Ghose

Department of Geological Sciences
University of Washington
Seattle, Washington 98195

Table 10. Sillimanite, andalusite and kyanite: observed and calculated structure factors at various temperatures.

Andalusite 400°C

FWA OF THE LOAD  111
LWA+1 OF THE LOAD  74743

TRANSFER ADDRESS -- REFINE  112

********* ERROR SUMMARY

NF4105/// CM BLANK COMMON TRUNCATED BY  20700B WORDS

PROGRAM AND BLOCK ASSIGNMENTS.

| BLOCK | ADDRESS | LENGTH | FILE | DATE | PROCSSR | VER | LEVEL | HARDWARE | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| REFINE | 111 | 10575 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| /A/ | 10706 | 1355 | | | | | | | |
| /C/ | 12263 | 457 | | | | | | | |
| /D/ | 12742 | 3244 | | | | | | | |
| /E/ | 16206 | 10 | | | | | | | |
| /F/ | 16216 | 174 | | | | | | | |
| /G/ | 16412 | 2307 | | | | | | | |
| /LS/ | 20721 | 334 | | | | | | | |
| /TAPE/ | 21255 | 6 | | | | | | | |
| /DEGEN/ | 21263 | 311 | | | | | | | |
| RFINE | 21574 | 5726 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| BODAN1 | 27522 | 1147 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| ELVIB1 | 30671 | 1312 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| INPUT | 32203 | 241 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| MATRIX | 32444 | 231 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| MODIFY | 32675 | 115 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| RCALC | 33012 | 152 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| RESET | 33164 | 73 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| SFAC | 33257 | 476 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| SYMINV | 33755 | 361 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| WEIGHT | 34336 | 12 | REFINE | 05/14/76 | RUN | F | EB 74 B | 646X I | |
| ASINCOS | 34350 | 136 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| EXP | 34506 | 55 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| SINCOS | 34563 | 72 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| SQRT | 34655 | 44 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| ACGOER | 34721 | 12 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| ENDFIL | 34733 | 57 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| GETBA | 35012 | 17 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| INPUTB | 35031 | 256 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| KRAKER | 35307 | 1052 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| OUTPTB | 36361 | 244 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| SIO$ | 36625 | 1504 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| INPUTC | 40331 | 121 | SL-RUN2P3 | 03/17/75 | COMPASS | 3. | 74190 | | |
| KODER | 40452 | 1310 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| OUTPTC | 41762 | 71 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| REWINM | 42053 | 63 | SL-RUN2P3 | 02/19/75 | COMPASS | 3. | 74190 | | |
| SYSTEM | 42136 | 1122 | SL-RUN2P3 | 03/04/75 | COMPASS | 3. | 74190 | | |
| // | 43260 | 31463 | | | | | | | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0 | 1 | 1.649 * | .000 | .000 | .000 | 1.649 | 2.5476 | 1.0000 | * ** |
| 0 | 0 | 2 | 64.394 | 63.918 | 63.917 | .354 | .476 | 3.5657 | 1.0000 | |
| 0 | 0 | 3 | .970 * | .000 | -.000 | -.000 | .970 | 1.4006 | 1.0000 | * ** |
| 0 | 0 | 4 | 127.049 | 143.598 | 143.595 | .848 | -16.549 | -86.1478 | 1.0000 | |
| 0 | 0 | 5 | 1.315 * | .000 | .000 | .000 | 1.315 | 2.2261 | 1.0000 | * ** |
| 0 | 0 | 6 | 28.187 | 27.227 | 27.225 | .308 | .960 | 3.5261 | 1.0000 | |
| 0 | 0 | 7 | 1.206 * | .000 | -.000 | -.000 | 1.206 | 1.3993 | 1.0000 | * ** |
| 0 | 0 | 8 | 58.056 | 54.526 | 54.522 | .663 | 3.530 | 11.0845 | 1.0000 | |
| 0 | 1 | 0 | 1.216 * | .000 | .000 | .000 | 1.216 | 3.2589 | 1.0000 | * ** |
| 0 | 1 | 1 | 46.893 | 47.164 | -47.163 | -.171 | -.271 | -2.4670 | 1.0000 | |
| 0 | 1 | 2 | 1.108 * | .000 | .000 | .000 | 1.108 | 1.4013 | 1.0000 | * ** |
| 0 | 1 | 3 | 45.713 | 43.554 | -43.553 | -.220 | 2.159 | 12.8621 | 1.0000 | |
| 0 | 1 | 4 | 1.044 * | .000 | -.000 | -.000 | 1.044 | 1.3994 | 1.0000 | * ** |
| 0 | 1 | 5 | 11.944 | 10.318 | -10.317 | -.098 | 1.626 | 10.5527 | 1.0000 | |
| 0 | 1 | 6 | 1.068 * | .000 | .000 | .000 | 1.068 | 1.4008 | 1.0000 | * ** |
| 0 | 1 | 7 | 22.327 | 21.075 | -21.074 | -.225 | 1.252 | 5.4636 | 1.0000 | |
| 0 | 1 | 8 | 1.279 * | .000 | -.000 | -.000 | 1.279 | 1.4004 | 1.0000 | * ** |
| 0 | 2 | 0 | 19.335 | 17.758 | -17.758 | -.130 | 1.577 | 9.5957 | 1.0000 | |
| 0 | 2 | 1 | 1.344 * | .000 | .000 | .000 | 1.344 | 1.4004 | 1.0000 | * ** |
| 0 | 2 | 2 | 68.115 | 72.690 | -72.687 | -.667 | -4.575 | -31.1432 | 1.0000 | |
| 0 | 2 | 3 | .931 * | .000 | -.000 | -.000 | .931 | 1.4003 | 1.0000 | * ** |
| 0 | 2 | 4 | 10.867 | 10.125 | -10.124 | -.125 | .742 | 4.7532 | 1.0000 | |
| 0 | 2 | 5 | 1.012 * | .000 | .000 | .000 | 1.012 | 1.4011 | 1.0000 | * ** |
| 0 | 2 | 6 | 40.548 | 39.067 | -39.063 | -.567 | 1.481 | 5.5451 | 1.0000 | |
| 0 | 2 | 7 | 1.197 * | .000 | -.000 | -.000 | 1.197 | 1.4002 | 1.0000 | * ** |
| 0 | 2 | 8 | 6.014 | 6.194 | -6.193 | -.109 | -.180 | -.8553 | 1.0000 | |
| 0 | 3 | 0 | 1.701 * | .000 | -.000 | -.000 | 1.701 | 3.3054 | 1.0000 | * ** |
| 0 | 3 | 1 | 39.348 | 38.995 | 38.994 | .272 | .353 | 2.3891 | 1.0000 | |
| 0 | 3 | 2 | .994 * | .000 | -.000 | .000 | .994 | 1.4009 | 1.0000 | * ** |
| 0 | 3 | 3 | 32.260 | 30.580 | 30.579 | .207 | 1.680 | 8.6085 | 1.0000 | |
| 0 | 3 | 4 | 1.017 * | .000 | -.000 | -.000 | 1.017 | 1.4003 | 1.0000 | * ** |
| 0 | 3 | 5 | 23.365 | 22.089 | 22.087 | .291 | 1.276 | 4.9100 | 1.0000 | |
| 0 | 3 | 6 | 1.087 * | .000 | .000 | .000 | 1.087 | 1.3995 | 1.0000 | * ** |
| 0 | 3 | 7 | 12.573 | 12.199 | 12.199 | .123 | .373 | 2.4564 | 1.0000 | |
| 0 | 3 | 8 | 2.095 * | .000 | -.000 | -.000 | 2.095 | 3.8184 | 1.0000 | * ** |
| 0 | 4 | 0 | 51.139 | 49.278 | -49.277 | .354 | 1.861 | 11.6124 | 1.0000 | |
| 0 | 4 | 1 | 1.772 * | .000 | -.000 | .000 | 1.772 | 5.1036 | 1.0000 | * ** |
| 0 | 4 | 2 | 38.180 | 37.776 | -37.776 | -.163 | .404 | 2.1870 | 1.0000 | |
| 0 | 4 | 3 | 1.165 * | .000 | -.000 | -.000 | 1.165 | 1.8963 | 1.0000 | * ** |
| 0 | 4 | 4 | 16.440 | 16.508 | -16.504 | .327 | -.067 | -.3639 | 1.0000 | |
| 0 | 4 | 5 | 1.038 * | .000 | .000 | .000 | 1.038 | 1.3989 | 1.0000 | * ** |
| 0 | 4 | 6 | 16.370 | 16.558 | -16.557 | -.129 | -.187 | -.9802 | 1.0000 | |
| 0 | 4 | 7 | 1.202 * | .000 | -.000 | -.000 | 1.202 | 1.3995 | 1.0000 | * ** |
| 0 | 5 | 0 | 1.513 * | .000 | .000 | -.000 | 1.513 | 3.3707 | 1.0000 | * ** |
| 0 | 5 | 1 | 21.346 | 20.696 | 20.696 | .060 | .649 | 3.0683 | 1.0000 | |
| 0 | 5 | 2 | 1.014 * | .000 | .000 | .000 | 1.014 | 1.4000 | 1.0000 | * ** |
| 0 | 5 | 3 | 13.239 | 13.514 | 13.514 | .007 | -.275 | -1.6938 | 1.0000 | |
| 0 | 5 | 4 | .976 * | .000 | -.000 | -.000 | .976 | 1.3991 | 1.0000 | * ** |
| 0 | 5 | 5 | 10.979 | 10.856 | 10.856 | .099 | .123 | .9211 | 1.0000 | |
| 0 | 5 | 6 | 1.132 * | .000 | .000 | .000 | 1.132 | 1.4003 | 1.0000 | * ** |
| 0 | 5 | 7 | 4.445 | 3.236 | 3.235 | -.038 | 1.209 | 4.7860 | 1.0000 | |
| 0 | 6 | 0 | 20.607 | 19.704 | 19.704 | .050 | .902 | 3.8363 | 1.0000 | |
| 0 | 6 | 1 | 1.010 * | .000 | .000 | .000 | 1.010 | 1.4003 | 1.0000 | * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 6 | 2 | 42.120 | 42.316 | -42.314 | -.419 | -.196 | -.8876 | 1.0000 | |
| 0 | 6 | 3 | .952 * | .000 | -.000 | -.000 | .952 | 1.4003 | 1.0000 | * ** |
| 0 | 6 | 4 | 13.609 | 13.293 | 13.293 | .041 | .316 | 2.0387 | 1.0000 | |
| 0 | 6 | 5 | 3.630 | .000 | .000 | .000 | 3.630 | 15.7768 | 1.0000 | |
| 0 | 6 | 6 | 23.438 | 22.876 | -22.873 | -.358 | .563 | 2.4555 | 1.0000 | |
| 0 | 6 | 7 | 1.370 * | .000 | -.000 | -.000 | 1.370 | 1.7930 | 1.0000 | * ** |
| 0 | 7 | 0 | .980 * | .000 | .000 | -.000 | .980 | 1.3988 | 1.0000 | * ** |
| 0 | 7 | 1 | 13.074 | 12.231 | -12.230 | -.175 | .843 | 5.0651 | 1.0000 | |
| 0 | 7 | 2 | 1.801 * | .000 | .000 | .000 | 1.801 | 4.8830 | 1.0000 | * ** |
| 0 | 7 | 3 | 17.909 | 17.947 | -17.946 | -.213 | -.038 | -.1905 | 1.0000 | |
| 0 | 7 | 4 | 1.332 * | .000 | -.000 | -.000 | 1.332 | 2.3369 | 1.0000 | * ** |
| 0 | 7 | 5 | 2.792 | 3.012 | -3.009 | -.112 | -.219 | -.6718 | 1.0000 | |
| 0 | 7 | 6 | 1.184 * | .000 | .000 | .000 | 1.184 | 1.3993 | 1.0000 | * ** |
| 0 | 8 | 0 | 74.117 | 79.101 | 79.098 | .668 | -4.984 | -20.5578 | 1.0000 | |
| 0 | 8 | 1 | .992 * | .000 | .000 | .000 | .992 | 1.4000 | 1.0000 | * ** |
| 0 | 8 | 2 | 19.245 | 18.431 | 18.429 | .242 | .814 | 4.1488 | 1.0000 | |
| 0 | 8 | 3 | 1.031 * | .000 | -.000 | -.000 | 1.031 | 1.4003 | 1.0000 | * ** |
| 0 | 8 | 4 | 56.266 | 58.358 | 58.355 | .615 | -2.092 | -7.3504 | 1.0000 | |
| 0 | 8 | 5 | 1.150 * | .000 | .000 | .000 | 1.150 | 1.4005 | 1.0000 | * ** |
| 0 | 8 | 6 | 11.982 | 12.099 | 12.097 | .212 | -.117 | -.8013 | 1.0000 | |
| 0 | 9 | 0 | 1.101 * | .000 | .000 | .000 | 1.101 | 1.6072 | 1.0000 | * ** |
| 0 | 9 | 1 | 7.172 | 7.097 | -7.097 | -.036 | .075 | .5750 | 1.0000 | |
| 0 | 9 | 2 | 1.051 * | .000 | .000 | .000 | 1.051 | 1.3995 | 1.0000 | * ** |
| 0 | 9 | 3 | 10.093 | 9.761 | -9.760 | -.074 | .332 | 2.6073 | 1.0000 | |
| 0 | 9 | 4 | 2.582 | .000 | -.000 | -.000 | 2.582 | 7.2213 | 1.0000 | |
| 0 | 9 | 5 | 1.183 * | 1.206 | -1.206 | .004 | -.023 | -.0267 | 1.0000 | * ** |
| 0 | 10 | 0 | 21.050 | 20.713 | -20.712 | -.234 | .337 | 1.5101 | 1.0000 | |
| 0 | 10 | 1 | 1.325 * | .000 | .000 | .000 | 1.325 | 1.9969 | 1.0000 | * ** |
| 0 | 10 | 2 | 31.194 | 31.360 | -31.354 | -.581 | -.166 | -.5362 | 1.0000 | |
| 0 | 10 | 3 | 1.418 * | .000 | -.000 | -.000 | 1.418 | 2.1562 | 1.0000 | * ** |
| 0 | 10 | 4 | 17.095 | 17.189 | -17.188 | -.219 | -.094 | -.5670 | 1.0000 | |
| 0 | 11 | 0 | 1.226 * | .000 | .000 | .000 | 1.226 | 1.5885 | 1.0000 | * ** |
| 0 | 11 | 1 | 9.244 | 9.474 | 9.471 | .247 | -.230 | -1.7072 | 1.0000 | |
| 0 | 11 | 2 | 2.345 * | .000 | -.000 | .000 | 2.345 | 5.7506 | 1.0000 | * ** |
| 0 | 11 | 3 | 8.244 | 8.704 | 8.701 | .204 | -.460 | -3.0241 | 1.0000 | |
| 0 | 12 | 0 | 6.432 | 6.225 | 6.218 | .288 | .207 | 1.1116 | 1.0000 | |
| 1 | 0 | 0 | 1.575 * | .000 | -.000 | -.000 | 1.575 | 5.2500 | 1.0000 | * ** |
| 1 | 0 | 1 | 56.006 | 56.681 | 56.681 | .215 | -.675 | -6.2548 | 1.0000 | |
| 1 | 0 | 2 | 1.540 * | .000 | .000 | .000 | 1.540 | 2.7404 | 1.0000 | * ** |
| 1 | 0 | 3 | 32.098 | 29.496 | 29.496 | .151 | 2.602 | 14.5562 | 1.0000 | |
| 1 | 0 | 4 | 3.572 | .000 | -.000 | -.000 | 3.572 | 15.3850 | 1.0000 | |
| 1 | 0 | 5 | 30.065 | 28.111 | 28.110 | .242 | 1.954 | 8.1650 | 1.0000 | |
| 1 | 0 | 6 | 2.809 | .000 | .000 | .000 | 2.809 | 8.6519 | 1.0000 | |
| 1 | 0 | 7 | 7.675 | 7.122 | 7.122 | .075 | .552 | 3.4255 | 1.0000 | |
| 1 | 0 | 8 | 1.681 * | .000 | -.000 | -.000 | 1.681 | 2.4059 | 1.0000 | * ** |
| 1 | 1 | 0 | 45.703 | 45.067 | 45.067 | .154 | .636 | 6.5879 | 1.0000 | |
| 1 | 1 | 1 | 36.018 | 34.680 | -34.679 | -.202 | 1.338 | 10.5052 | 1.0000 | |
| 1 | 1 | 2 | 43.563 | 43.659 | -43.657 | -.392 | -.096 | -.6661 | 1.0000 | |
| 1 | 1 | 3 | 17.138 | 15.774 | -15.773 | -.196 | 1.363 | 6.5378 | 1.0000 | |
| 1 | 1 | 4 | 24.955 | 23.862 | 23.861 | .140 | 1.094 | 4.8835 | 1.0000 | |
| 1 | 1 | 5 | 19.985 | 18.978 | -18.977 | -.184 | 1.007 | 5.4787 | 1.0000 | |
| 1 | 1 | 6 | 23.067 | 21.441 | -21.438 | -.328 | 1.626 | 8.0366 | 1.0000 | |
| 1 | 1 | 7 | 6.947 | 6.098 | -6.096 | -.166 | .849 | 5.0401 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 8 | 11.466 | 10.203 | 10.203 | .105 | 1.263 | 8.5396 | 1.0000 | |
| 1 | 2 | 0 | 41.427 | 40.011 | -40.010 | -.182 | 1.417 | 11.0330 | 1.0000 | |
| 1 | 2 | 1 | 3.459 | 1.847 | 1.846 | -.029 | 1.612 | 4.3713 | 1.0000 | |
| 1 | 2 | 2 | 49.096 | 45.775 | 45.774 | -.175 | 3.321 | 21.8461 | 1.0000 | |
| 1 | 2 | 3 | 6.368 | 5.876 | -5.876 | -.083 | .492 | 3.1706 | 1.0000 | |
| 1 | 2 | 4 | 23.388 | 22.616 | -22.616 | -.167 | .772 | 3.3529 | 1.0000 | |
| 1 | 2 | 5 | 4.214 | 3.899 | 3.899 | .026 | .314 | 1.6910 | 1.0000 | |
| 1 | 2 | 6 | 10.651 | 9.149 | 9.148 | -.145 | 1.502 | 11.2446 | 1.0000 | |
| 1 | 2 | 7 | 6.533 | 6.546 | -6.545 | -.113 | -.013 | -.0716 | 1.0000 | |
| 1 | 2 | 8 | 9.669 | 8.865 | -8.864 | -.129 | .803 | 5.2465 | 1.0000 | |
| 1 | 3 | 0 | 25.465 | 25.726 | 25.723 | .432 | -.261 | -1.6517 | 1.0000 | |
| 1 | 3 | 1 | 35.825 | 35.346 | 35.343 | .442 | .479 | 3.1089 | 1.0000 | |
| 1 | 3 | 2 | 32.887 | 31.218 | -31.218 | -.101 | 1.669 | 9.6714 | 1.0000 | |
| 1 | 3 | 3 | 36.909 | 36.038 | 36.036 | .426 | .870 | 4.5065 | 1.0000 | |
| 1 | 3 | 4 | 24.924 | 22.781 | 22.778 | .395 | 2.143 | 9.2316 | 1.0000 | |
| 1 | 3 | 5 | 22.631 | 22.440 | 22.437 | .394 | .190 | .7151 | 1.0000 | |
| 1 | 3 | 6 | 14.516 | 13.579 | -13.579 | -.083 | .937 | 5.6307 | 1.0000 | |
| 1 | 3 | 7 | 21.759 | 21.367 | 21.364 | .353 | .393 | 2.0334 | 1.0000 | |
| 1 | 3 | 8 | 9.506 | 9.721 | 9.717 | .303 | -.215 | -1.4243 | 1.0000 | |
| 1 | 4 | 0 | 18.225 | 16.261 | 16.260 | .036 | 1.964 | 10.0107 | 1.0000 | |
| 1 | 4 | 1 | 30.532 | 28.835 | -28.835 | -.148 | 1.697 | 9.5513 | 1.0000 | |
| 1 | 4 | 2 | .972 * | .797 | -.796 | .041 | .175 | .2522 | 1.0000 | * ** |
| 1 | 4 | 3 | 27.339 | 26.727 | -26.726 | -.194 | .612 | 2.8091 | 1.0000 | |
| 1 | 4 | 4 | 8.365 | 8.745 | 8.745 | .032 | -.380 | -2.9856 | 1.0000 | |
| 1 | 4 | 5 | 11.292 | 10.857 | -10.857 | -.082 | .434 | 3.1080 | 1.0000 | |
| 1 | 4 | 6 | 1.105 * | .343 | -.341 | .034 | .762 | .9663 | 1.0000 | * ** |
| 1 | 4 | 7 | 13.818 | 13.728 | -13.727 | -.201 | .090 | .5411 | 1.0000 | |
| 1 | 5 | 0 | 35.066 | 34.205 | 34.204 | .306 | .861 | 4.5280 | 1.0000 | |
| 1 | 5 | 1 | 47.941 | 47.320 | -47.317 | -.504 | .621 | 3.2694 | 1.0000 | |
| 1 | 5 | 2 | 18.471 | 17.940 | -17.939 | -.159 | .531 | 2.7090 | 1.0000 | |
| 1 | 5 | 3 | 44.393 | 45.107 | -45.105 | -.484 | -.714 | -3.2792 | 1.0000 | |
| 1 | 5 | 4 | 23.703 | 23.374 | 23.373 | .280 | .329 | 1.2903 | 1.0000 | |
| 1 | 5 | 5 | 28.271 | 27.799 | -27.795 | -.449 | .473 | 1.7303 | 1.0000 | |
| 1 | 5 | 6 | 11.509 | 11.031 | -11.030 | -.157 | .479 | 3.6692 | 1.0000 | |
| 1 | 5 | 7 | 24.700 | 24.942 | -24.939 | -.398 | -.242 | -.9992 | 1.0000 | |
| 1 | 6 | 0 | 26.048 | 25.137 | 25.136 | .190 | .911 | 4.1255 | 1.0000 | |
| 1 | 6 | 1 | 3.323 | 2.716 | 2.714 | .093 | .608 | 2.6287 | 1.0000 | |
| 1 | 6 | 2 | 10.917 | 11.062 | -11.060 | .195 | -.145 | -.9463 | 1.0000 | |
| 1 | 6 | 3 | 1.507 * | 1.084 | -1.083 | .042 | .423 | .9807 | 1.0000 | * ** |
| 1 | 6 | 4 | 17.565 | 17.500 | 17.499 | .175 | .065 | .3162 | 1.0000 | |
| 1 | 6 | 5 | 6.531 | 6.422 | 6.420 | .126 | .110 | .7521 | 1.0000 | |
| 1 | 6 | 6 | 4.090 | 3.108 | -3.104 | .165 | .982 | 3.8070 | 1.0000 | |
| 1 | 6 | 7 | 1.407 * | 1.889 | -1.889 | -.007 | -.482 | -.6279 | 1.0000 | * ** |
| 1 | 7 | 0 | 25.969 | 26.006 | 26.006 | .064 | -.037 | -.1554 | 1.0000 | |
| 1 | 7 | 1 | 27.360 | 26.781 | 26.779 | .277 | .580 | 2.4424 | 1.0000 | |
| 1 | 7 | 2 | 19.201 | 18.336 | -18.332 | -.377 | .865 | 4.6769 | 1.0000 | |
| 1 | 7 | 3 | 21.343 | 20.873 | 20.871 | .268 | .471 | 2.4506 | 1.0000 | |
| 1 | 7 | 4 | 17.955 | 17.701 | 17.701 | .057 | .253 | 1.4668 | 1.0000 | |
| 1 | 7 | 5 | 18.872 | 18.590 | 18.588 | .248 | .282 | 1.5015 | 1.0000 | |
| 1 | 7 | 6 | 1.054 * | 10.731 | -10.727 | -.316 | -9.677 | -12.8521 | 1.0000 | * ** |
| 1 | 8 | 0 | .765 * | 20.911 | -20.910 | -.165 | -20.145 | -42.9120 | 1.0000 | * ** |
| 1 | 8 | 1 | 1.152 * | 12.550 | 12.550 | .133 | -11.399 | -37.4870 | 1.0000 | * ** |
| 1 | 8 | 2 | .761 * | 5.685 | -5.683 | -.152 | -4.923 | -9.0600 | 1.0000 | * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 8 | 3 | .783 * | 7.323 | 7.322 | .086 | -6.540 | -11.7029 | 1.0000 * ** |
| 1 | 8 | 4 | 1.186 * | 15.017 | -15.016 | -.152 | -13.831 | -33.5749 | 1.0000 * ** |
| 1 | 8 | 5 | .868 * | 10.584 | 10.583 | .157 | -9.716 | -15.6596 | 1.0000 * ** |
| 1 | 8 | 6 | 1.346 * | 2.728 | -2.725 | -.129 | -1.382 | -2.7909 | 1.0000 * ** |
| 1 | 9 | 0 | .779 * | 12.120 | 12.118 | .199 | -11.341 | -20.4067 | 1.0000 * ** |
| 1 | 9 | 1 | .957 * | 4.231 | -4.229 | -.118 | -3.273 | -7.2580 | 1.0000 * ** |
| 1 | 9 | 2 | .793 * | 15.636 | -15.635 | -.186 | -14.843 | -26.2237 | 1.0000 * ** |
| 1 | 9 | 3 | .819 * | 1.545 | -1.541 | -.113 | -.726 | -1.2424 | 1.0000 * ** |
| 1 | 9 | 4 | .875 * | 9.574 | 9.572 | .182 | -8.699 | -13.9271 | 1.0000 * ** |
| 1 | 9 | 5 | .927 * | 5.745 | -5.744 | -.109 | -4.819 | -7.2725 | 1.0000 * ** |
| 1 | 10 | 0 | .825 * | 6.655 | -6.655 | -.037 | -5.830 | -9.9044 | 1.0000 * ** |
| 1 | 10 | 1 | .838 * | 3.094 | -3.092 | -.105 | -2.256 | -3.7670 | 1.0000 * ** |
| 1 | 10 | 2 | .867 * | 7.968 | 7.968 | -.025 | -7.101 | -11.4631 | 1.0000 * ** |
| 1 | 10 | 3 | 1.351 * | 5.029 | -5.027 | -.137 | -3.678 | -8.6491 | 1.0000 * ** |
| 1 | 10 | 4 | .949 * | 4.759 | -4.759 | -.033 | -3.810 | -5.6194 | 1.0000 * ** |
| 1 | 11 | 0 | .905 * | 5.333 | 5.325 | .290 | -4.428 | -6.8530 | 1.0000 * ** |
| 1 | 11 | 1 | .912 * | 8.618 | 8.616 | .206 | -7.706 | -11.8136 | 1.0000 * ** |
| 1 | 11 | 2 | .920 * | 11.386 | -11.386 | -.035 | -10.465 | -15.9178 | 1.0000 * ** |
| 1 | 11 | 3 | 2.329 | 8.647 | 8.645 | .200 | -6.318 | -21.8100 | 1.0000 |
| 2 | 0 | 0 | .490 * | 20.199 | -20.198 | -.096 | -19.709 | -129.6320 | 1.0000 * ** |
| 2 | 0 | 1 | .463 * | .000 | -.000 | .000 | .463 | 2.3862 | 1.0000 * ** |
| 2 | 0 | 2 | .434 * | 4.467 | -4.422 | -.632 | -4.034 | -13.0448 | 1.0000 * ** |
| 2 | 0 | 3 | 1.264 | .000 | .000 | -.000 | 1.264 | 8.4247 | 1.0000 |
| 2 | 0 | 4 | 1.040 * | 9.037 | -9.036 | -.093 | -7.997 | -32.1693 | 1.0000 * ** |
| 2 | 0 | 5 | .681 * | .000 | .000 | .000 | .681 | 1.4017 | 1.0000 * ** |
| 2 | 0 | 6 | 1.201 * | 17.065 | -17.056 | -.538 | -15.864 | -45.2872 | 1.0000 * ** |
| 2 | 0 | 7 | .855 * | .000 | -.000 | -.000 | .855 | 1.4007 | 1.0000 * ** |
| 2 | 0 | 8 | 1.898 * | 4.375 | -4.375 | -.084 | -2.477 | -7.1128 | 1.0000 * ** |
| 2 | 1 | 0 | .347 * | 37.874 | 37.873 | .194 | -37.526 | -151.5789 | 1.0000 * ** |
| 2 | 1 | 1 | .378 * | 3.502 | -3.502 | .030 | -3.124 | -11.5648 | 1.0000 * ** |
| 2 | 1 | 2 | .644 * | 45.795 | 45.794 | .193 | -45.151 | -210.2977 | 1.0000 * ** |
| 2 | 1 | 3 | 1.005 * | 1.764 | -1.764 | -.026 | -.759 | -4.0846 | 1.0000 * ** |
| 2 | 1 | 4 | .611 * | 23.243 | 23.242 | .178 | -22.632 | -51.8381 | 1.0000 * ** |
| 2 | 1 | 5 | .685 * | 1.311 | 1.309 | .078 | -.626 | -1.2804 | 1.0000 * ** |
| 2 | 1 | 6 | .782 * | 20.432 | 20.431 | .162 | -19.650 | -35.1632 | 1.0000 * ** |
| 2 | 1 | 7 | 2.343 | 1.729 | -1.727 | -.067 | .615 | 2.6011 | 1.0000 |
| 2 | 1 | 8 | 1.654 * | 10.475 | 10.474 | .137 | -8.821 | -23.2712 | 1.0000 * ** |
| 2 | 2 | 0 | 76.049 | 82.083 | 82.081 | .625 | -6.034 | -45.8862 | 1.0000 |
| 2 | 2 | 1 | .788 * | 16.328 | -16.326 | -.268 | -15.540 | -100.1845 | 1.0000 * ** |
| 2 | 2 | 2 | .460 * | 3.957 | -3.956 | .084 | -3.497 | -10.6383 | 1.0000 * ** |
| 2 | 2 | 3 | .597 * | 15.393 | -15.391 | -.256 | -14.797 | -42.2403 | 1.0000 * ** |
| 1 | 7 | 6 | 10.854 | 10.731 | -10.727 | -.316 | .123 | .9554 | 1.0000 |
| 1 | 8 | 0 | 21.432 | 20.911 | -20.910 | -.165 | .521 | 2.7417 | 1.0000 |
| 1 | 8 | 1 | 12.999 | 12.550 | 12.550 | .133 | .449 | 2.8930 | 1.0000 |
| 1 | 8 | 2 | 6.120 | 5.685 | -5.683 | -.152 | .436 | 3.1899 | 1.0000 |
| 1 | 8 | 3 | 7.907 | 7.323 | 7.322 | .086 | .584 | 4.7784 | 1.0000 |
| 1 | 8 | 4 | 15.257 | 15.017 | -15.016 | -.152 | .240 | 1.5668 | 1.0000 |
| 1 | 8 | 5 | 10.780 | 10.584 | 10.583 | .157 | .196 | 1.5883 | 1.0000 |
| 1 | 8 | 6 | 2.961 | 2.728 | -2.725 | -.129 | .233 | .6443 | 1.0000 |
| 1 | 9 | 0 | 13.361 | 12.120 | 12.118 | .199 | 1.241 | 8.5070 | 1.0000 |
| 1 | 9 | 1 | 4.602 | 4.231 | -4.229 | -.118 | .372 | 2.0437 | 1.0000 |
| 1 | 9 | 2 | 15.517 | 15.636 | -15.635 | -.186 | -.119 | -.7312 | 1.0000 |
| 1 | 9 | 3 | 3.209 | 1.545 | -1.541 | -.113 | 1.664 | 6.1134 | 1.0000 |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9 | 4 | 9.766 | 9.574 | 9.572 | .182 | .192 | 1.4984 | 1.0000 | |
| 1 | 9 | 5 | 5.472 | 5.745 | -5.744 | -.109 | -.273 | -1.3221 | 1.0000 | |
| 1 | 10 | 0 | 6.201 | 6.655 | -6.655 | -.037 | -.454 | -2.7130 | 1.0000 | |
| 1 | 10 | 1 | 3.276 | 3.094 | -3.092 | -.105 | .182 | .6574 | 1.0000 | |
| 1 | 10 | 2 | 8.429 | 7.968 | 7.968 | -.025 | .461 | 3.2740 | 1.0000 | |
| 1 | 10 | 3 | 4.894 | 5.029 | -5.027 | -.137 | -.135 | -.6457 | 1.0000 | |
| 1 | 10 | 4 | 4.958 | 4.759 | -4.759 | -.033 | .198 | .9028 | 1.0000 | |
| 1 | 11 | 0 | 5.641 | 5.333 | 5.325 | .290 | .308 | 1.5930 | 1.0000 | |
| 1 | 11 | 1 | 9.138 | 8.618 | 8.616 | .206 | .519 | 3.7995 | 1.0000 | |
| 1 | 11 | 2 | 12.159 | 11.386 | -11.386 | -.035 | .773 | 5.9259 | 1.0000 | |
| 1 | 11 | 3 | 8.088 | 8.647 | 8.645 | .200 | .441 | 3.1129 | 1.0000 | |
| 2 | 0 | 0 | 22.293 | 20.199 | -20.198 | -.096 | 2.094 | 13.4997 | 1.0000 | |
| 2 | 0 | 1 | 1.341 * | .000 | -.000 | .000 | 1.341 | 1.4002 | 1.0000 | * ** |
| 2 | 0 | 2 | .973 * | 4.467 | -4.422 | -.632 | -3.494 | -5.0244 | 1.0000 | * ** |
| 2 | 0 | 3 | 1.386 * | .000 | .000 | -.000 | 1.386 | 2.8825 | 1.0000 | * ** |
| 2 | 0 | 4 | 9.587 | 9.037 | -9.036 | -.093 | .551 | 3.0113 | 1.0000 | |
| 2 | 0 | 5 | 1.049 * | .000 | .000 | .000 | 1.049 | 1.4005 | 1.0000 | * ** |
| 2 | 0 | 6 | 17.658 | 17.065 | -17.056 | -.538 | .593 | 3.3356 | 1.0000 | |
| 2 | 0 | 7 | 1.223 * | .000 | -.000 | -.000 | 1.223 | 1.3995 | 1.0000 | * ** |
| 2 | 0 | 8 | 5.224 | 4.375 | -4.375 | -.094 | .848 | 3.4551 | 1.0000 | |
| 2 | 1 | 0 | 39.588 | 37.874 | 37.873 | .194 | 1.714 | 13.2420 | 1.0000 | |
| 2 | 1 | 1 | 4.355 | 3.502 | -3.502 | .030 | .852 | 2.9945 | 1.0000 | |
| 2 | 1 | 2 | 47.423 | 45.795 | 45.794 | .193 | 1.628 | 10.7079 | 1.0000 | |
| 2 | 1 | 3 | 1.987 * | 1.764 | -1.764 | -.026 | .223 | .6626 | 1.0000 | * ** |
| 2 | 1 | 4 | 24.791 | 23.243 | 23.242 | .178 | 1.538 | 6.7730 | 1.0000 | |
| 2 | 1 | 5 | 1.474 * | 1.311 | 1.309 | .078 | .163 | .3127 | 1.0000 | * ** |
| 2 | 1 | 6 | 21.774 | 20.432 | 20.431 | .162 | 1.342 | 6.4030 | 1.0000 | |
| 2 | 1 | 7 | 2.391 * | 1.729 | -1.727 | -.067 | .663 | 1.4902 | 1.0000 | * ** |
| 2 | 1 | 8 | 11.389 | 10.475 | 10.474 | .137 | .914 | 6.0954 | 1.0000 | |
| 2 | 2 | 1 | 16.243 | 16.328 | -16.326 | -.268 | -.085 | -.4629 | 1.0000 | |
| 2 | 2 | 2 | 5.154 | 3.957 | -3.956 | .084 | 1.197 | 6.4709 | 1.0000 | |
| 2 | 2 | 3 | 16.415 | 15.393 | -15.391 | -.256 | 1.021 | 4.4577 | 1.0000 | |
| 2 | 2 | 4 | 53.271 | 52.976 | 52.973 | .577 | .295 | 1.3928 | 1.0000 | |
| 2 | 2 | 5 | 15.859 | 15.559 | -15.557 | -.236 | .300 | 1.7810 | 1.0000 | |
| 2 | 2 | 6 | 1.098 * | .554 | .548 | .080 | .544 | .6939 | 1.0000 | * ** |
| 2 | 2 | 7 | 9.474 | 9.492 | -9.490 | -.206 | -.017 | -.1195 | 1.0000 | |
| 2 | 2 | 8 | 23.851 | 23.540 | 23.536 | .453 | .311 | 1.4760 | 1.0000 | |
| 2 | 3 | 0 | 13.969 | 12.562 | 12.561 | .144 | 1.407 | 7.0239 | 1.0000 | |
| 2 | 3 | 1 | 2.957 | 1.455 | 1.455 | -.020 | 1.502 | 6.1189 | 1.0000 | |
| 2 | 3 | 2 | 22.068 | 20.831 | 20.831 | .151 | 1.237 | 6.3689 | 1.0000 | |
| 2 | 3 | 3 | 10.992 | 10.615 | -10.615 | -.072 | .377 | 2.2363 | 1.0000 | |
| 2 | 3 | 4 | 11.464 | 11.204 | 11.203 | .133 | .260 | 1.7017 | 1.0000 | |
| 2 | 3 | 5 | 7.137 | 7.432 | 7.432 | .032 | -.295 | -2.2260 | 1.0000 | |
| 2 | 3 | 6 | 12.514 | 11.999 | 11.998 | .127 | .515 | 3.1959 | 1.0000 | |
| 2 | 3 | 7 | 11.163 | 9.717 | -9.716 | -.104 | 1.447 | 12.4635 | 1.0000 | |
| 2 | 3 | 8 | 2.007 * | 6.328 | 6.327 | .103 | -4.321 | -12.7075 | 1.0000 | * ** |
| 2 | 4 | 0 | 8.515 | 7.870 | 7.870 | -.071 | .645 | 3.7588 | 1.0000 | |
| 2 | 4 | 1 | 20.323 | 19.469 | 19.469 | .092 | .854 | 4.2197 | 1.0000 | |
| 2 | 4 | 2 | 88.935 | 98.986 | -98.984 | -.571 | -10.050 | -54.3540 | 1.0000 | |
| 2 | 4 | 3 | 14.890 | 14.620 | 14.619 | .089 | .270 | 1.4544 | 1.0000 | |
| 2 | 4 | 4 | 3.152 | 2.536 | 2.535 | -.070 | .616 | 2.6754 | 1.0000 | |
| 2 | 4 | 5 | 9.819 | 9.570 | 9.569 | .080 | .249 | 1.8629 | 1.0000 | |
| 2 | 4 | 6 | 48.339 | 48.022 | -48.020 | -.486 | .317 | 1.1178 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 4 | 7 | 5.448 | 5.776 | 5.776 | .073 | -.329 | -1.5173 | 1.0000 | |
| 2 | 5 | 0 | 44.285 | 43.300 | -43.299 | -.265 | .985 | 5.1014 | 1.0000 | |
| 2 | 5 | 1 | 9.281 | 8.757 | 8.756 | .045 | .525 | 3.2541 | 1.0000 | |
| 2 | 5 | 2 | 45.846 | 46.560 | -46.560 | -.245 | -.714 | -3.4599 | 1.0000 | |
| 2 | 5 | 3 | .975 * | .877 | -.877 | -.006 | .098 | .1404 | 1.0000 | * ** |
| 2 | 5 | 4 | 29.336 | 29.420 | -29.419 | -.244 | -.094 | -.3687 | 1.0000 | |
| 2 | 5 | 5 | 10.331 | 10.079 | 10.078 | .086 | .253 | 1.9521 | 1.0000 | |
| 2 | 5 | 6 | 24.244 | 23.681 | -23.680 | -.207 | .564 | 2.5170 | 1.0000 | |
| 2 | 5 | 7 | 4.254 | 4.287 | -4.287 | -.046 | -.034 | -.1247 | 1.0000 | |
| 2 | 6 | 0 | 44.726 | 44.111 | 44.107 | .544 | .615 | 2.8942 | 1.0000 | |
| 2 | 6 | 1 | 15.899 | 15.081 | 15.080 | .211 | .818 | 4.4471 | 1.0000 | |
| 2 | 6 | 2 | 11.953 | 11.959 | 11.959 | .075 | -.006 | -.0419 | 1.0000 | |
| 2 | 6 | 3 | 13.213 | 12.999 | 12.997 | .204 | .214 | 1.4574 | 1.0000 | |
| 2 | 6 | 4 | 33.569 | 33.766 | 33.763 | .502 | -.198 | -.7484 | 1.0000 | |
| 2 | 6 | 5 | 11.389 | 11.083 | 11.082 | .184 | .306 | 2.3075 | 1.0000 | |
| 2 | 6 | 6 | 7.669 | 7.802 | 7.802 | .071 | -.134 | -.8503 | 1.0000 | |
| 2 | 6 | 7 | 7.045 | 6.955 | 6.953 | .166 | .090 | .5051 | 1.0000 | |
| 2 | 7 | 0 | .964 * | 2.137 | 2.137 | -.029 | -1.174 | -1.6979 | 1.0000 | * ** |
| 2 | 7 | 1 | .960 * | 1.528 | -1.528 | -.024 | -.568 | -.8240 | 1.0000 | * ** |
| 2 | 7 | 2 | .981 * | 1.615 | 1.614 | -.010 | -.633 | -.9003 | 1.0000 | * ** |
| 2 | 7 | 3 | 2.151 | 1.705 | -1.703 | -.067 | .447 | 1.2786 | 1.0000 | |
| 2 | 7 | 4 | 1.061 * | .453 | .452 | -.026 | .608 | .7988 | 1.0000 | * ** |
| 2 | 7 | 5 | 1.134 * | .888 | -.887 | .020 | .246 | .3033 | 1.0000 | * ** |
| 2 | 7 | 6 | 1.229 * | .149 | -.149 | -.008 | 1.079 | 1.2955 | 1.0000 | * ** |
| 2 | 8 | 0 | 8.095 | 7.643 | -7.642 | -.087 | .452 | 3.8259 | 1.0000 | |
| 2 | 8 | 1 | 18.802 | 18.522 | -18.521 | -.152 | .280 | 1.4214 | 1.0000 | |
| 2 | 8 | 2 | 18.655 | 17.981 | -17.974 | -.491 | .674 | 3.2801 | 1.0000 | |
| 2 | 8 | 3 | 15.067 | 15.110 | -15.110 | -.144 | -.043 | -.2995 | 1.0000 | |
| 2 | 8 | 4 | 5.990 | 5.939 | -5.939 | -.084 | .051 | .2984 | 1.0000 | |
| 2 | 8 | 5 | 10.974 | 11.443 | -11.442 | -.136 | -.468 | -3.4279 | 1.0000 | |
| 2 | 8 | 6 | 10.484 | 11.523 | -11.515 | -.418 | -1.039 | -7.6018 | 1.0000 | |
| 2 | 9 | 0 | 24.462 | 24.796 | 24.795 | .188 | -.334 | -1.1403 | 1.0000 | |
| 2 | 9 | 1 | 2.408 | 2.186 | 2.185 | .063 | .222 | .6617 | 1.0000 | |
| 2 | 9 | 2 | 28.785 | 28.922 | 28.921 | .204 | -.137 | -.4731 | 1.0000 | |
| 2 | 9 | 3 | 1.861 * | .736 | .736 | .022 | 1.125 | 2.3759 | 1.0000 | * ** |
| 2 | 9 | 4 | 15.794 | 18.581 | 18.580 | .172 | .213 | 1.2182 | 1.0000 | |
| 2 | 9 | 5 | 2.417 * | 2.780 | 2.778 | .092 | -.363 | -.8429 | 1.0000 | * ** |
| 2 | 10 | 0 | 29.993 | 29.149 | 29.145 | .437 | .844 | 2.7124 | 1.0000 | |
| 2 | 10 | 1 | 8.042 | 8.022 | -8.021 | -.118 | .021 | .1482 | 1.0000 | |
| 2 | 10 | 2 | 4.356 | 4.235 | -4.234 | .083 | .121 | .5311 | 1.0000 | |
| 2 | 10 | 3 | 6.347 | 6.530 | -6.529 | -.111 | -.183 | -1.0655 | 1.0000 | |
| 2 | 10 | 4 | 22.768 | 22.643 | 22.639 | .404 | .126 | .6145 | 1.0000 | |
| 2 | 11 | 0 | 4.894 | 4.585 | -4.585 | -.039 | .309 | 1.4301 | 1.0000 | |
| 2 | 11 | 1 | 4.320 | 3.565 | -3.565 | -.057 | .755 | 3.1393 | 1.0000 | |
| 2 | 11 | 2 | 3.276 | 3.368 | -3.368 | -.018 | -.092 | -.2888 | 1.0000 | |
| 2 | 11 | 3 | 6.949 | 6.668 | -6.668 | -.088 | .281 | 1.6394 | 1.0000 | |
| 3 | 0 | 0 | 1.115 * | .000 | -.000 | -.000 | 1.115 | 1.3946 | 1.0000 | * ** |
| 3 | 0 | 1 | 38.526 | 36.855 | -36.854 | -.219 | 1.672 | 11.1453 | 1.0000 | |
| 3 | 0 | 2 | .970 * | .000 | .000 | .000 | .970 | 1.3944 | 1.0000 | * ** |
| 3 | 0 | 3 | 33.128 | 31.861 | -31.860 | -.264 | 1.267 | 6.3904 | 1.0000 | |
| 3 | 0 | 4 | 1.281 * | .000 | -.000 | -.000 | 1.281 | 1.8894 | 1.0000 | * ** |
| 3 | 0 | 5 | 16.912 | 15.785 | -15.784 | -.143 | 1.127 | 6.8142 | 1.0000 | |
| 3 | 0 | 6 | 1.126 * | .000 | .000 | .000 | 1.126 | 1.3944 | 1.0000 | * ** |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 0 | 7 | 16.924 | 16.220 | -16.217 | -.260 | .705 | 3.8108 | 1.0000 | |
| 3 | 0 | 8 | 1.296 * | .000 | -.000 | -.000 | 1.296 | 1.3945 | 1.0000 | * ** |
| 3 | 1 | 0 | 55.968 | 54.591 | 54.590 | .401 | 1.377 | 9.7144 | 1.0000 | |
| 3 | 1 | 1 | 46.332 | 45.923 | 45.920 | .489 | .409 | 2.7259 | 1.0000 | |
| 3 | 1 | 2 | 1.987 * | .131 | -.009 | -.131 | 1.856 | 5.1756 | 1.0000 | * ** |
| 3 | 1 | 3 | 35.440 | 33.495 | 33.492 | .471 | 1.944 | 9.8572 | 1.0000 | |
| 3 | 1 | 4 | 37.301 | 35.860 | 35.858 | .367 | 1.441 | 6.4932 | 1.0000 | |
| 3 | 1 | 5 | 34.513 | 33.631 | 33.628 | .435 | .882 | 3.5198 | 1.0000 | |
| 3 | 1 | 6 | 2.880 | 2.928 | -2.926 | -.108 | -.048 | -.1483 | 1.0000 | |
| 3 | 1 | 7 | 17.262 | 17.374 | 17.369 | .389 | .488 | 2.7323 | 1.0000 | |
| 3 | 1 | 8 | 15.512 | 14.873 | 14.871 | .281 | .638 | 3.7212 | 1.0000 | |
| 3 | 2 | 0 | 73.016 | 70.572 | 70.572 | -.195 | 2.444 | 16.2924 | 1.0000 | |
| 3 | 2 | 1 | 7.358 | 6.714 | 6.713 | .077 | .645 | 4.2120 | 1.0000 | |
| 3 | 2 | 2 | 5.130 | 4.845 | -4.842 | -.182 | .285 | 1.6909 | 1.0000 | |
| 3 | 2 | 3 | 2.215 | .174 | .172 | .021 | 2.041 | 6.0767 | 1.0000 | |
| 3 | 2 | 4 | 28.354 | 28.494 | 28.493 | -.180 | -.140 | -.6007 | 1.0000 | |
| 3 | 2 | 5 | 9.150 | 8.900 | 8.899 | .117 | .250 | 1.8407 | 1.0000 | |
| 3 | 2 | 6 | 5.238 | 5.223 | -5.220 | -.154 | .015 | .0816 | 1.0000 | |
| 3 | 2 | 7 | 2.475 * | 2.307 | -2.306 | -.027 | .168 | .3807 | 1.0000 | * ** |
| 3 | 2 | 8 | 11.238 | 8.980 | 8.979 | -.140 | 2.258 | 14.7548 | 1.0000 | |
| 3 | 3 | 0 | 14.908 | 13.175 | 13.175 | .080 | 1.733 | 8.3088 | 1.0000 | |
| 3 | 3 | 1 | 38.479 | 36.542 | -36.541 | -.257 | 1.937 | 11.0918 | 1.0000 | |
| 3 | 3 | 2 | 59.500 | 60.565 | -60.564 | -.427 | -1.065 | -5.7932 | 1.0000 | |
| 3 | 3 | 3 | 33.082 | 32.153 | -32.152 | -.246 | .929 | 4.3670 | 1.0000 | |
| 3 | 3 | 4 | 9.368 | 8.570 | 8.569 | .072 | .798 | 5.6295 | 1.0000 | |
| 3 | 3 | 5 | 17.772 | 17.366 | -17.364 | -.232 | .406 | 1.9744 | 1.0000 | |
| 3 | 3 | 6 | 30.641 | 30.197 | -30.195 | -.358 | .444 | 1.5211 | 1.0000 | |
| 3 | 3 | 7 | 16.682 | 15.995 | -15.994 | -.206 | .686 | 4.0984 | 1.0000 | |
| 3 | 4 | 0 | 1.909 * | 1.547 | 1.545 | .081 | .361 | 1.0967 | 1.0000 | * ** |
| 3 | 4 | 1 | 24.470 | 24.026 | 24.026 | .172 | .444 | 2.1720 | 1.0000 | |
| 3 | 4 | 2 | 16.352 | 15.251 | 15.251 | .097 | 1.101 | 6.4172 | 1.0000 | |
| 3 | 4 | 3 | 13.349 | 13.188 | 13.187 | .114 | .161 | .9885 | 1.0000 | |
| 3 | 4 | 4 | 1.011 * | 1.486 | 1.484 | .075 | -.475 | -.6548 | 1.0000 | * ** |
| 3 | 4 | 5 | 18.158 | 18.189 | 18.188 | .198 | -.031 | -.1809 | 1.0000 | |
| 3 | 4 | 6 | 7.082 | 6.918 | 6.918 | .083 | .164 | 1.0431 | 1.0000 | |
| 3 | 4 | 7 | 2.590 | 2.732 | 2.732 | .049 | -.142 | -.3354 | 1.0000 | |
| 3 | 5 | 0 | 17.678 | 16.411 | 16.410 | .182 | 1.267 | 5.3875 | 1.0000 | |
| 3 | 5 | 1 | 10.798 | 9.425 | 9.423 | .166 | 1.373 | 9.0923 | 1.0000 | |
| 3 | 5 | 2 | 36.504 | 35.706 | -35.705 | -.293 | .798 | 3.6303 | 1.0000 | |
| 3 | 5 | 3 | 12.956 | 12.904 | 12.903 | .163 | .052 | .3603 | 1.0000 | |
| 3 | 5 | 4 | 13.311 | 12.457 | 12.456 | .166 | .854 | 5.5087 | 1.0000 | |
| 3 | 5 | 5 | 5.915 | 4.495 | 4.493 | .149 | 1.420 | 8.9159 | 1.0000 | |
| 3 | 5 | 6 | 18.987 | 18.470 | -18.468 | -.245 | .517 | 2.6212 | 1.0000 | |
| 3 | 5 | 7 | 9.457 | 9.385 | 9.384 | .141 | .072 | .4927 | 1.0000 | |
| 3 | 6 | 0 | 31.329 | 31.574 | -31.574 | .083 | -.244 | -1.0759 | 1.0000 | |
| 3 | 6 | 1 | 3.700 | 3.095 | -3.094 | -.061 | .605 | 3.0525 | 1.0000 | |
| 3 | 6 | 2 | 4.889 | 4.165 | 4.164 | .106 | .723 | 4.7898 | 1.0000 | |
| 3 | 6 | 3 | 6.837 | 6.556 | -6.556 | -.104 | .281 | 2.2800 | 1.0000 | |
| 3 | 6 | 4 | 20.090 | 19.307 | -19.307 | .076 | .783 | 3.8119 | 1.0000 | |
| 3 | 6 | 5 | 1.120 * | .261 | .261 | -.010 | .859 | 1.0703 | 1.0000 | * ** |
| 3 | 6 | 6 | 2.031 * | 2.167 | 2.165 | .088 | -.136 | -.2635 | 1.0000 | * ** |
| 3 | 7 | 0 | 31.341 | 30.002 | 30.000 | .388 | 1.339 | 5.5215 | 1.0000 | |
| 3 | 7 | 1 | 17.537 | 16.571 | -16.568 | -.321 | .967 | 5.0319 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 7 | 2 | 1.013 * | 2.125 | 2.124 | -.044 | -1.112 | -1.5307 | 1.0000 | * ** |
| 3 | 7 | 3 | 13.739 | 13.340 | -13.336 | -.306 | .399 | 2.7951 | 1.0000 | |
| 3 | 7 | 4 | 22.142 | 22.549 | 22.546 | .355 | -.408 | -1.8986 | 1.0000 | |
| 3 | 7 | 5 | 14.150 | 14.265 | -14.262 | -.290 | -.116 | -.7447 | 1.0000 | |
| 3 | 7 | 6 | 1.212 * | 1.412 | 1.411 | -.035 | -.200 | -.2295 | 1.0000 | * ** |
| 3 | 8 | 0 | 2.033 * | 1.566 | 1.565 | -.062 | .467 | 1.2425 | 1.0000 | * ** |
| 3 | 8 | 1 | 11.499 | 11.051 | -11.050 | -.134 | .448 | 3.5471 | 1.0000 | |
| 3 | 8 | 2 | 7.026 | 7.060 | -7.060 | -.032 | -.034 | -.2556 | 1.0000 | |
| 3 | 8 | 3 | 11.660 | 11.652 | -11.651 | -.170 | .008 | .0595 | 1.0000 | |
| 3 | 8 | 4 | 2.096 * | 1.961 | 1.960 | -.056 | .135 | .2982 | 1.0000 | * ** |
| 3 | 8 | 5 | 5.456 | 5.621 | -5.621 | -.081 | -.166 | -.7938 | 1.0000 | |
| 3 | 9 | 0 | 14.825 | 14.226 | 14.225 | .186 | .599 | 3.6023 | 1.0000 | |
| 3 | 9 | 1 | 30.443 | 30.005 | 30.002 | .403 | .438 | 1.5114 | 1.0000 | |
| 3 | 9 | 2 | 11.086 | 11.116 | -11.114 | -.186 | -.030 | -.2138 | 1.0000 | |
| 3 | 9 | 3 | 24.084 | 24.096 | 24.093 | .391 | -.012 | -.0522 | 1.0000 | |
| 3 | 9 | 4 | 10.580 | 10.664 | 10.663 | .170 | -.085 | -.6332 | 1.0000 | |
| 3 | 9 | 5 | 21.683 | 22.073 | 22.070 | .356 | -.390 | -1.8502 | 1.0000 | |
| 3 | 10 | 0 | 5.145 | 4.530 | 4.527 | -.150 | .615 | 3.0388 | 1.0000 | |
| 3 | 10 | 1 | 7.410 | 7.074 | 7.073 | .145 | .336 | 2.2378 | 1.0000 | |
| 3 | 10 | 2 | 6.391 | 6.088 | -6.087 | -.117 | .303 | 1.7851 | 1.0000 | |
| 3 | 10 | 3 | 3.651 | 4.100 | 4.098 | .104 | -.449 | -1.5387 | 1.0000 | |
| 3 | 10 | 4 | 4.202 | 3.595 | 3.592 | -.139 | .607 | 2.3157 | 1.0000 | |
| 3 | 11 | 0 | 4.445 | 3.769 | 3.769 | .018 | .676 | 2.7648 | 1.0000 | |
| 3 | 11 | 1 | 16.075 | 15.551 | -15.548 | -.259 | .524 | 3.0545 | 1.0000 | |
| 3 | 11 | 2 | 18.079 | 17.832 | -17.830 | -.291 | .247 | 1.4727 | 1.0000 | |
| 4 | 0 | 0 | 40.436 | 38.241 | 38.239 | .338 | 2.198 | 13.2055 | 1.0000 | |
| 4 | 0 | 1 | 1.759 * | .000 | .000 | .000 | 1.759 | 4.2272 | 1.0000 | * ** |
| 4 | 0 | 2 | 76.552 | 76.931 | -76.931 | -.177 | -.379 | -2.1226 | 1.0000 | |
| 4 | 0 | 3 | 1.102 * | .000 | -.000 | -.000 | 1.102 | 1.3935 | 1.0000 | * ** |
| 4 | 0 | 4 | 28.335 | 26.940 | 26.939 | .313 | 1.395 | 5.8264 | 1.0000 | |
| 4 | 0 | 5 | 1.642 * | .000 | .000 | .000 | 1.642 | 3.0909 | 1.0000 | * ** |
| 4 | 0 | 6 | 32.821 | 30.070 | -30.070 | -.140 | 2.751 | 9.5639 | 1.0000 | |
| 4 | 0 | 7 | 2.271 * | .000 | -.000 | -.000 | 2.271 | 4.5776 | 1.0000 | * ** |
| 4 | 1 | 0 | 35.468 | 33.057 | 33.057 | .012 | 2.411 | 14.1394 | 1.0000 | |
| 4 | 1 | 1 | 37.683 | 35.176 | 35.176 | .178 | 2.507 | 14.3544 | 1.0000 | |
| 4 | 1 | 2 | 9.123 | 8.519 | 8.519 | .018 | .604 | 3.7477 | 1.0000 | |
| 4 | 1 | 3 | 18.314 | 16.998 | 16.998 | .119 | 1.316 | 5.2942 | 1.0000 | |
| 4 | 1 | 4 | 18.909 | 17.963 | 17.963 | .011 | .946 | 5.1154 | 1.0000 | |
| 4 | 1 | 5 | 25.281 | 24.324 | 24.323 | .205 | .957 | 3.5295 | 1.0000 | |
| 4 | 1 | 6 | 4.377 | 4.517 | 4.517 | .016 | -.140 | -.6107 | 1.0000 | |
| 4 | 1 | 7 | 3.243 | 2.371 | 2.370 | .052 | .873 | 2.4935 | 1.0000 | |
| 4 | 2 | 0 | 4.898 | 4.595 | -4.595 | -.041 | .303 | 1.6845 | 1.0000 | |
| 4 | 2 | 1 | 12.242 | 10.964 | 10.964 | .023 | 1.278 | 7.1886 | 1.0000 | |
| 4 | 2 | 2 | 52.734 | 51.801 | -51.798 | -.540 | .933 | 4.9072 | 1.0000 | |
| 4 | 2 | 3 | 5.639 | 5.775 | 5.775 | .023 | -.136 | -.7624 | 1.0000 | |
| 4 | 2 | 4 | 2.380 | 2.696 | -2.696 | -.042 | -.316 | -.9803 | 1.0000 | |
| 4 | 2 | 5 | 6.224 | 5.843 | 5.843 | .019 | .381 | 2.4755 | 1.0000 | |
| 4 | 2 | 6 | 29.305 | 28.751 | -28.747 | -.460 | .554 | 1.8655 | 1.0000 | |
| 4 | 2 | 7 | 1.252 * | 1.068 | 1.068 | .020 | .184 | .2046 | 1.0000 | * ** |
| 4 | 3 | 0 | 9.087 | 8.721 | 8.721 | -.054 | .366 | 2.0152 | 1.0000 | |
| 4 | 3 | 1 | 28.676 | 26.887 | -26.886 | -.193 | 1.789 | 8.9328 | 1.0000 | |
| 4 | 3 | 2 | 1.853 * | 2.110 | -2.110 | -.036 | -.257 | -.6307 | 1.0000 | * ** |
| 4 | 3 | 3 | 23.225 | 22.363 | -22.362 | -.235 | .862 | 3.5710 | 1.0000 | |

| H | K | L | F(OBS) | F(CALC) | A(CALC) | B(CALC) | DELTA F | DELTA/SIGMA | EXT. FACTOR | |
|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 3 | 4 | 4.309 | 4.678 | 4.678 | -.050 | -.369 | -1.9502 | 1.0000 | |
| 4 | 3 | 5 | 14.669 | 14.598 | -14.598 | -.123 | .270 | 1.6872 | 1.0000 | |
| 4 | 3 | 6 | 2.418 * | .424 | -.422 | -.031 | 1.995 | 4.8785 | 1.0000 | * ** |
| 4 | 3 | 7 | 11.282 | 11.112 | -11.109 | -.232 | .171 | 1.1633 | 1.0000 | |
| 4 | 4 | 0 | 72.875 | 75.139 | 75.135 | .813 | -2.264 | -11.6604 | 1.0000 | |
| 4 | 4 | 1 | 2.593 | 2.642 | 2.642 | -.007 | -.049 | -.1687 | 1.0000 | |
| 4 | 4 | 2 | 57.343 | 59.518 | 59.517 | .323 | -2.175 | -10.3281 | 1.0000 | |
| 4 | 4 | 3 | 1.942 * | 2.227 | 2.227 | -.004 | -.285 | -.7752 | 1.0000 | * ** |
| 4 | 4 | 4 | 54.739 | 55.710 | 55.705 | .749 | -.971 | -3.9393 | 1.0000 | |
| 4 | 4 | 5 | 2.089 * | .504 | .504 | -.008 | 1.585 | 3.8292 | 1.0000 | * ** |
| 4 | 4 | 6 | 30.729 | 30.005 | 30.003 | .281 | .724 | 2.3413 | 1.0000 | |
| 4 | 4 | 7 | 1.237 * | .865 | .865 | -.001 | .372 | .4193 | 1.0000 | * ** |
| 4 | 5 | 0 | 23.686 | 23.792 | -23.792 | .040 | -.107 | -.4537 | 1.0000 | |
| 4 | 5 | 1 | 19.447 | 19.554 | -19.553 | -.103 | -.106 | -.4297 | 1.0000 | |
| 4 | 5 | 2 | 3.095 | 3.417 | -3.416 | .067 | -.322 | -1.3747 | 1.0000 | |
| 4 | 5 | 3 | 17.082 | 17.060 | -17.059 | -.145 | .022 | .1149 | 1.0000 | |
| 4 | 5 | 4 | 15.118 | 14.941 | -14.940 | .037 | .176 | .9830 | 1.0000 | |
| 4 | 5 | 5 | 9.409 | 9.314 | -9.314 | -.048 | .094 | .7580 | 1.0000 | |
| 4 | 5 | 6 | 1.206 * | 1.668 | -1.667 | .057 | -.462 | -.5341 | 1.0000 | * ** |
| 4 | 5 | 7 | 8.486 | 8.551 | -8.550 | -.158 | -.065 | -.4052 | 1.0000 | |
| 4 | 6 | 0 | 5.047 | 4.196 | -4.191 | -.212 | .851 | 5.6726 | 1.0000 | |
| 4 | 6 | 1 | 5.342 | 5.009 | -5.009 | -.024 | .333 | 2.2819 | 1.0000 | |
| 4 | 6 | 2 | 52.251 | 52.225 | -52.221 | -.643 | .025 | .1053 | 1.0000 | |
| 4 | 6 | 3 | 2.707 | 2.503 | -2.503 | -.030 | .204 | .8825 | 1.0000 | |
| 4 | 6 | 4 | 5.214 | 5.274 | -5.270 | -.199 | -.059 | -.3385 | 1.0000 | |
| 4 | 6 | 5 | 3.700 | 3.899 | -3.899 | -.024 | -.198 | -.7316 | 1.0000 | |
| 4 | 6 | 6 | 30.810 | 31.478 | -31.473 | -.547 | -.668 | -2.0190 | 1.0000 | |
| 4 | 7 | 0 | 5.183 | 4.522 | -4.522 | -.044 | .661 | 4.1494 | 1.0000 | |
| 4 | 7 | 1 | 21.702 | 21.123 | 21.122 | .283 | .579 | 3.0442 | 1.0000 | |
| 4 | 7 | 2 | 1.044 * | .974 | .974 | -.009 | .069 | .0925 | 1.0000 | * ** |
| 4 | 7 | 3 | 12.802 | 12.583 | 12.581 | .229 | .219 | 1.4403 | 1.0000 | |
| 4 | 7 | 4 | 3.726 | 3.783 | -3.782 | -.041 | -.057 | -.2229 | 1.0000 | |
| 4 | 7 | 5 | 18.419 | 18.747 | 18.745 | .299 | -.329 | -1.6156 | 1.0000 | |
| 4 | 7 | 6 | 2.851 | .193 | -.193 | -.008 | 2.657 | 7.1069 | 1.0000 | |
| 4 | 8 | 0 | 25.328 | 24.519 | 24.517 | .314 | .809 | 2.8943 | 1.0000 | |
| 4 | 8 | 1 | 1.476 * | 1.439 | -1.439 | .018 | .037 | .0676 | 1.0000 | * ** |
| 4 | 8 | 2 | 21.765 | 21.560 | -21.560 | -.076 | .204 | .9694 | 1.0000 | |
| 4 | 8 | 3 | 1.111 * | 1.093 | -1.093 | .021 | .019 | .0233 | 1.0000 | * ** |
| 4 | 8 | 4 | 19.001 | 18.799 | 18.797 | .290 | .202 | 1.0254 | 1.0000 | |
| 4 | 8 | 5 | 1.200 * | .446 | -.446 | .012 | .754 | .8758 | 1.0000 | * ** |
| 4 | 9 | 0 | 15.857 | 15.212 | 15.212 | -.013 | .645 | 3.7797 | 1.0000 | |
| 4 | 9 | 1 | 2.461 | 1.323 | 1.322 | -.051 | 1.138 | 3.0600 | 1.0000 | |
| 4 | 9 | 2 | 8.968 | 8.634 | 8.633 | .026 | .334 | 2.5047 | 1.0000 | |
| 4 | 9 | 3 | 2.599 | 2.420 | -2.418 | -.035 | .179 | .4736 | 1.0000 | |
| 4 | 9 | 4 | 12.450 | 11.863 | 11.863 | -.012 | .588 | 4.1455 | 1.0000 | |
| 4 | 10 | 0 | 1.679 * | .944 | -.941 | .074 | .734 | 1.2201 | 1.0000 | * ** |
| 4 | 10 | 1 | 2.330 * | .330 | .330 | .004 | 1.999 | 4.6563 | 1.0000 | * ** |
| 4 | 10 | 2 | 11.959 | 11.647 | -11.644 | -.257 | .312 | 2.2360 | 1.0000 | |
| 4 | 10 | 3 | 1.837 * | .144 | -.144 | .008 | 1.693 | 3.0402 | 1.0000 | * ** |
| 4 | 11 | 0 | 4.642 | 3.889 | -3.889 | -.039 | .753 | 3.1721 | 1.0000 | |
| 4 | 11 | 1 | 3.005 | 3.639 | -3.637 | -.111 | -.634 | -1.7690 | 1.0000 | |
| 5 | 0 | 0 | 1.044 * | .000 | .000 | .000 | 1.044 | 1.3937 | 1.0000 | * ** |
| 5 | 0 | 1 | 27.687 | 26.136 | -26.136 | -.110 | 1.551 | 7.5847 | 1.0000 | |