

**Table 1: Parameter Values for Simulations with  $z=a/2$** 

| a    | $T_{er}$ | $\eta$ | $s_z$ | $v_1$ | $v_2$ | $v_3$ | $v_4$ |
|------|----------|--------|-------|-------|-------|-------|-------|
| 0.08 | 0.300    | 0.08   | 0.02  | 0.40  | 0.25  | 0.10  | 0.00  |
| 0.08 | 0.300    | 0.16   | 0.02  | 0.40  | 0.25  | 0.10  | 0.00  |
| 0.16 | 0.300    | 0.08   | 0.02  | 0.30  | 0.20  | 0.10  | 0.00  |
| 0.16 | 0.300    | 0.16   | 0.02  | 0.30  | 0.20  | 0.10  | 0.00  |
| 0.16 | 0.300    | 0.08   | 0.10  | 0.30  | 0.20  | 0.10  | 0.00  |
| 0.16 | 0.300    | 0.16   | 0.10  | 0.30  | 0.20  | 0.10  | 0.00  |

**Table 2: Parameter Values for Simulations with  $z \neq a/2$** 

| a    | z    | $T_{er}$ | $\eta$ | $s_z$ | $v_1$ | $v_2$ | $v_3$ | $v_4$ |
|------|------|----------|--------|-------|-------|-------|-------|-------|
| 0.08 | 0.03 | 0.300    | 0.08   | 0.02  | 0.30  | 0.10  | -0.10 | -0.30 |
| 0.08 | 0.03 | 0.300    | 0.16   | 0.02  | 0.30  | 0.10  | -0.10 | -0.30 |
| 0.16 | 0.06 | 0.300    | 0.08   | 0.02  | 0.30  | 0.10  | -0.10 | -0.30 |
| 0.16 | 0.06 | 0.300    | 0.16   | 0.02  | 0.30  | 0.10  | -0.10 | -0.30 |
| 0.16 | 0.06 | 0.300    | 0.08   | 0.10  | 0.30  | 0.10  | -0.10 | -0.30 |
| 0.16 | 0.06 | 0.300    | 0.16   | 0.10  | 0.30  | 0.10  | -0.10 | -0.30 |

**Table 3: Mean Parameter Values Recovered from the Maximum Likelihood Fitting Method (N=250,  $z=a/2$ )**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   |
|--------|----------|--------|--------|--------|--------|--------|---------|
| 0.0793 | 0.3010   | 0.0859 | 0.0206 | 0.4180 | 0.2612 | 0.1061 | -0.0021 |
| 0.0788 | 0.3009   | 0.1596 | 0.0178 | 0.4057 | 0.2543 | 0.0958 | 0.0032  |
| 0.1598 | 0.3039   | 0.0794 | 0.0220 | 0.3064 | 0.2024 | 0.1018 | -0.0007 |
| 0.1590 | 0.2998   | 0.0762 | 0.1095 | 0.2963 | 0.1985 | 0.1002 | -0.0019 |
| 0.1618 | 0.3055   | 0.1696 | 0.0319 | 0.3146 | 0.2092 | 0.1039 | -0.0007 |
| 0.1602 | 0.3000   | 0.1605 | 0.1068 | 0.3027 | 0.2008 | 0.0986 | 0.0025  |

**Table 4: Standard Deviations in the Mean Parameter Values Recovered from the Maximum Likelihood Fitting Method (N=250,  $z=a/2$ )**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  |
|--------|----------|--------|--------|--------|--------|--------|--------|
| 0.0023 | 0.0029   | 0.0519 | 0.0144 | 0.0402 | 0.0292 | 0.0220 | 0.0195 |
| 0.0029 | 0.0029   | 0.0496 | 0.0159 | 0.0442 | 0.0295 | 0.0218 | 0.0238 |
| 0.0058 | 0.0080   | 0.0225 | 0.0255 | 0.0269 | 0.0194 | 0.0143 | 0.0104 |
| 0.0076 | 0.0045   | 0.0291 | 0.0372 | 0.0294 | 0.0229 | 0.0176 | 0.0139 |
| 0.0078 | 0.0097   | 0.0297 | 0.0313 | 0.0375 | 0.0299 | 0.0204 | 0.0143 |
| 0.0077 | 0.0060   | 0.0295 | 0.0327 | 0.0325 | 0.0273 | 0.0227 | 0.0153 |

**Table 5: Correlations among parameter values for maximum likelihood fits (N=250, z=a/2)**

|          | a       | $T_{er}$ | $\eta$ | $s_z$  | $v_1$   | $v_2$   | $v_3$  | $v_4$   |
|----------|---------|----------|--------|--------|---------|---------|--------|---------|
| a        | 1.0000  | 0.3980   | 0.8263 | 0.6238 | 0.7842  | 0.6819  | 0.5000 | -0.0227 |
| $T_{er}$ | 0.3980  | 1.0000   | 0.4257 | 0.7904 | 0.5295  | 0.4751  | 0.2890 | 0.0355  |
| $\eta$   | 0.8263  | 0.4257   | 1.0000 | 0.5330 | 0.7837  | 0.7129  | 0.5270 | 0.0115  |
| $s_z$    | 0.6238  | 0.7904   | 0.5330 | 1.0000 | 0.6019  | 0.5233  | 0.3312 | 0.0165  |
| $v_1$    | 0.7842  | 0.5295   | 0.7837 | 0.6019 | 1.0000  | 0.6534  | 0.4620 | -0.0432 |
| $v_2$    | 0.6819  | 0.4751   | 0.7129 | 0.5233 | 0.6534  | 1.0000  | 0.4378 | -0.0300 |
| $v_3$    | 0.5000  | 0.2890   | 0.5270 | 0.3312 | 0.4620  | 0.4378  | 1.0000 | 0.0171  |
| $v_4$    | -0.0227 | 0.0355   | 0.0115 | 0.0165 | -0.0432 | -0.0300 | 0.0171 | 1.0000  |

**Table 6: Mean parameter values recovered from the chi square method (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   |
|--------|----------|--------|--------|--------|--------|--------|---------|
| 0.0810 | 0.3010   | 0.1135 | 0.0279 | 0.4346 | 0.2710 | 0.1114 | -0.0026 |
| 0.0808 | 0.3002   | 0.1883 | 0.0249 | 0.4156 | 0.2649 | 0.1009 | 0.0028  |
| 0.1653 | 0.3067   | 0.0995 | 0.0388 | 0.3296 | 0.2148 | 0.1092 | -0.0009 |
| 0.1588 | 0.2936   | 0.0748 | 0.0951 | 0.2915 | 0.1925 | 0.0977 | -0.0016 |
| 0.1657 | 0.3048   | 0.1786 | 0.0422 | 0.3328 | 0.2130 | 0.1067 | 0.0001  |
| 0.1603 | 0.2886   | 0.1550 | 0.0918 | 0.2981 | 0.1912 | 0.0944 | 0.0023  |

**Table 7: Standard deviations in parameter values recovered from the chi square method (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  |
|--------|----------|--------|--------|--------|--------|--------|--------|
| 0.0039 | 0.0039   | 0.0701 | 0.0155 | 0.0606 | 0.0379 | 0.0281 | 0.0215 |
| 0.0039 | 0.0042   | 0.0648 | 0.0174 | 0.0625 | 0.0370 | 0.0251 | 0.0258 |
| 0.0095 | 0.0136   | 0.0359 | 0.0374 | 0.0499 | 0.0382 | 0.0215 | 0.0116 |
| 0.0090 | 0.0162   | 0.0401 | 0.0280 | 0.0424 | 0.0309 | 0.0217 | 0.0133 |
| 0.0103 | 0.0121   | 0.0399 | 0.0340 | 0.0485 | 0.0369 | 0.0241 | 0.0164 |
| 0.0111 | 0.0175   | 0.0453 | 0.0375 | 0.0464 | 0.0412 | 0.0258 | 0.0160 |

**Table 8: Correlations among parameter values for chi square fits (N=250, z=a/2)**

|                 | a      | T <sub>er</sub> | $\eta$  | s <sub>z</sub> | v <sub>1</sub> | v <sub>2</sub> | v <sub>3</sub> | v <sub>4</sub> |
|-----------------|--------|-----------------|---------|----------------|----------------|----------------|----------------|----------------|
| a               | 1.0000 | 0.4548          | 0.88738 | 0.6845         | 0.8087         | 0.80081        | 0.6584         | 0.01246        |
| T <sub>er</sub> | 0.4548 | 1.0000          | 0.55904 | 0.8634         | 0.6523         | 0.62060        | 0.4681         | 0.04467        |
| $\eta$          | 0.8874 | 0.5590          | 1.00000 | 0.6820         | 0.8007         | 0.83487        | 0.6812         | 0.00875        |
| s <sub>z</sub>  | 0.6845 | 0.8634          | 0.68200 | 1.0000         | 0.7231         | 0.70458        | 0.5460         | 0.03549        |
| v <sub>1</sub>  | 0.8087 | 0.6523          | 0.80067 | 0.7231         | 1.0000         | 0.76057        | 0.5956         | -0.01422       |
| v <sub>2</sub>  | 0.8008 | 0.6206          | 0.83487 | 0.7046         | 0.7606         | 1.00000        | 0.6268         | -0.00266       |
| v <sub>3</sub>  | 0.6584 | 0.4681          | 0.68125 | 0.5460         | 0.5956         | 0.62683        | 1.0000         | 0.01982        |
| v <sub>4</sub>  | 0.0125 | 0.0447          | 0.00875 | 0.0355         | -0.0142        | -0.00266       | 0.0198         | 1.00000        |

**Table 9: Mean parameter values recovered from the weighted least squares method (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   |
|--------|----------|--------|--------|--------|--------|--------|---------|
| 0.0795 | 0.2955   | 0.0916 | 0.0213 | 0.4251 | 0.2637 | 0.1079 | -0.0026 |
| 0.0789 | 0.2953   | 0.1592 | 0.0191 | 0.4099 | 0.2571 | 0.0957 | 0.0041  |
| 0.1643 | 0.3086   | 0.0951 | 0.0422 | 0.3353 | 0.2228 | 0.1122 | 0.0001  |
| 0.1605 | 0.2966   | 0.0813 | 0.1011 | 0.3061 | 0.2069 | 0.1047 | -0.0010 |
| 0.1666 | 0.3082   | 0.1879 | 0.0460 | 0.3422 | 0.2282 | 0.1139 | -0.0012 |
| 0.1632 | 0.2940   | 0.1717 | 0.0998 | 0.3189 | 0.2116 | 0.1055 | 0.0027  |

**Table 10: Standard deviations in parameter values recovered from the weighted least squares method (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  |
|--------|----------|--------|--------|--------|--------|--------|--------|
| 0.0031 | 0.0038   | 0.0579 | 0.0144 | 0.0464 | 0.0325 | 0.0232 | 0.0205 |
| 0.0036 | 0.0037   | 0.0641 | 0.0144 | 0.0566 | 0.0365 | 0.0233 | 0.0265 |
| 0.0123 | 0.0193   | 0.0462 | 0.0443 | 0.0668 | 0.0501 | 0.0286 | 0.0118 |
| 0.0138 | 0.0213   | 0.0507 | 0.0364 | 0.0642 | 0.0500 | 0.0283 | 0.0148 |
| 0.0139 | 0.0201   | 0.0551 | 0.0504 | 0.0737 | 0.0520 | 0.0335 | 0.0175 |
| 0.0156 | 0.0269   | 0.0635 | 0.0473 | 0.0849 | 0.0640 | 0.0375 | 0.0186 |

**Table 11: Maximum likelihood and chi square fitting methods applied to samples where drift rates that do not span the range from low to high (N=250 per condition,  $z=a/2$ )**

|                       |               | a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   |
|-----------------------|---------------|--------|----------|--------|--------|--------|--------|--------|---------|
| high drift rates      | Target value  | 0.08   | 0.3      | 0.08   | 0.02   | 0.40   | 0.35   | 0.30   | 0.25    |
|                       | MLH mean      | 0.0790 | 0.3005   | 0.0743 | 0.0164 | 0.4117 | 0.3570 | 0.3052 | 0.2522  |
|                       | MLH SD        | 0.0026 | 0.0027   | 0.0467 | 0.0151 | 0.0381 | 0.0359 | 0.0300 | 0.0285  |
|                       | $\chi^2$ mean | 0.0803 | 0.3009   | 0.1103 | 0.0263 | 0.4283 | 0.3689 | 0.3167 | 0.2648  |
|                       | $\chi^2$ SD   | 0.0039 | 0.0038   | 0.0552 | 0.0161 | 0.0591 | 0.0506 | 0.0417 | 0.0378  |
| high drift rates      | Target value  | 0.16   | 0.3      | 0.16   | 0.02   | 0.30   | 0.25   | 0.20   | 0.15    |
|                       | MLH mean      | 0.1618 | 0.3047   | 0.1704 | 0.0243 | 0.3158 | 0.2585 | 0.2096 | 0.1570  |
|                       | MLH SD        | 0.0075 | 0.0089   | 0.0271 | 0.0314 | 0.0368 | 0.0338 | 0.0258 | 0.0244  |
|                       | $\chi^2$ mean | 0.1657 | 0.3047   | 0.1832 | 0.0414 | 0.3372 | 0.2678 | 0.2158 | 0.1594  |
|                       | $\chi^2$ SD   | 0.0105 | 0.0109   | 0.0380 | 0.0343 | 0.0535 | 0.0410 | 0.0368 | 0.0272  |
| low drift rates       | Target value  | 0.08   | 0.3      | 0.08   | 0.02   | 0.15   | 0.10   | 0.05   | 0.00    |
|                       | MLH mean      | 0.0792 | 0.3011   | 0.0730 | 0.0203 | 0.1558 | 0.1065 | 0.0519 | -0.0026 |
|                       | MLH SD        | 0.0024 | 0.0032   | 0.0671 | 0.0145 | 0.0246 | 0.0247 | 0.0214 | 0.0184  |
|                       | $\chi^2$ mean | 0.0816 | 0.3018   | 0.1177 | 0.0286 | 0.1651 | 0.1157 | 0.0536 | -0.0023 |
|                       | $\chi^2$ SD   | 0.0049 | 0.0067   | 0.0953 | 0.0205 | 0.0372 | 0.0337 | 0.0243 | 0.0211  |
| low drift rates       | Target value  | 0.16   | 0.3      | 0.16   | 0.02   | 0.15   | 0.10   | 0.05   | 0.00    |
|                       | MLH mean      | 0.1609 | 0.3061   | 0.1665 | 0.0259 | 0.1553 | 0.1011 | 0.0499 | 0.0004  |
|                       | MLH SD        | 0.0072 | 0.0118   | 0.0318 | 0.0315 | 0.0249 | 0.0188 | 0.0175 | 0.0161  |
|                       | $\chi^2$ mean | 0.1638 | 0.3066   | 0.1655 | 0.0414 | 0.1949 | 0.1048 | 0.0515 | -0.0008 |
|                       | $\chi^2$ SD   | 0.0090 | 0.0180   | 0.0397 | 0.0373 | 0.0716 | 0.0229 | 0.0194 | 0.0152  |
| very high drift rates | Target value  | 0.16   | 0.3      | 0.16   | 0.02   | 0.45   | 0.40   | 0.35   | 0.30    |
|                       | MLH mean      | 0.1606 | 0.3030   | 0.1672 | 0.0223 | 0.4692 | 0.4135 | 0.3576 | 0.3046  |
|                       | MLH SD        | 0.0076 | 0.0072   | 0.0228 | 0.0265 | 0.0450 | 0.0397 | 0.0324 | 0.0336  |
|                       | $\chi^2$ mean | 0.1669 | 0.3072   | 0.1987 | 0.0492 | 0.5073 | 0.4416 | 0.3829 | 0.3279  |
|                       | $\chi^2$ SD   | 0.0173 | 0.0107   | 0.0508 | 0.0366 | 0.0796 | 0.0752 | 0.0668 | 0.0655  |

**Table 12: Mean parameter values recovered from the chi square method applied to data with 5% contaminants (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   |
|--------|----------|--------|--------|--------|--------|--------|---------|
| 0.1024 | 0.3012   | 0.2874 | 0.0556 | 0.5530 | 0.3570 | 0.1570 | 0.0085  |
| 0.1047 | 0.3018   | 0.3817 | 0.0587 | 0.5653 | 0.3684 | 0.1631 | -0.0001 |
| 0.1866 | 0.2991   | 0.1378 | 0.0630 | 0.3449 | 0.2345 | 0.1217 | 0.0011  |
| 0.1791 | 0.2896   | 0.1133 | 0.1154 | 0.3073 | 0.2089 | 0.1088 | 0.0004  |
| 0.1838 | 0.2916   | 0.1992 | 0.0439 | 0.3314 | 0.2184 | 0.1186 | 0.0021  |
| 0.1770 | 0.2777   | 0.1733 | 0.0977 | 0.3082 | 0.1953 | 0.0982 | 0.0002  |

**Table 13: Standard deviations in parameter values recovered from the chi square method applied to data with 5% contaminants (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  |
|--------|----------|--------|--------|--------|--------|--------|--------|
| 0.0159 | 0.0073   | 0.1600 | 0.0317 | 0.1707 | 0.1099 | 0.0691 | 0.0313 |
| 0.0134 | 0.0065   | 0.1247 | 0.0295 | 0.1513 | 0.0921 | 0.0693 | 0.0455 |
| 0.0169 | 0.0163   | 0.0462 | 0.0442 | 0.0688 | 0.0457 | 0.0271 | 0.0147 |
| 0.0166 | 0.0217   | 0.0565 | 0.0384 | 0.0637 | 0.0439 | 0.0299 | 0.0123 |
| 0.0107 | 0.0123   | 0.0349 | 0.0315 | 0.0405 | 0.0295 | 0.0289 | 0.0173 |
| 0.0126 | 0.0236   | 0.0467 | 0.0409 | 0.0480 | 0.0381 | 0.0252 | 0.0164 |



**Table 14: Mean parameter values recovered from the weighted least squares method from data with 5% contaminants (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  |
|--------|----------|--------|--------|--------|--------|--------|--------|
| 0.0929 | 0.2863   | 0.1416 | 0.0405 | 0.4666 | 0.2942 | 0.1188 | 0.0007 |
| 0.0946 | 0.2846   | 0.2227 | 0.0374 | 0.4572 | 0.2876 | 0.1167 | 0.0028 |
| 0.1768 | 0.2794   | 0.0941 | 0.0416 | 0.3045 | 0.2095 | 0.1061 | 0.0008 |
| 0.1737 | 0.2714   | 0.0786 | 0.1048 | 0.2848 | 0.1950 | 0.0996 | 0.0009 |
| 0.1787 | 0.2805   | 0.1730 | 0.0475 | 0.3055 | 0.2088 | 0.1082 | 0.0009 |
| 0.1768 | 0.2679   | 0.1648 | 0.1025 | 0.2993 | 0.1984 | 0.0981 | 0.0003 |

**Table 15: Standard deviations in parameter values recovered from the weighted least squares method from data with 5% contaminants (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  |
|--------|----------|--------|--------|--------|--------|--------|--------|
| 0.0120 | 0.0103   | 0.1379 | 0.0324 | 0.1816 | 0.1263 | 0.0579 | 0.0208 |
| 0.0115 | 0.0104   | 0.1271 | 0.0334 | 0.1465 | 0.0950 | 0.0493 | 0.0259 |
| 0.0172 | 0.0258   | 0.0544 | 0.0513 | 0.0819 | 0.0588 | 0.0339 | 0.0124 |
| 0.0187 | 0.0324   | 0.0630 | 0.0497 | 0.0840 | 0.0596 | 0.0331 | 0.0122 |
| 0.0167 | 0.0261   | 0.0590 | 0.0559 | 0.0801 | 0.0521 | 0.0337 | 0.0167 |
| 0.0206 | 0.0352   | 0.0738 | 0.0594 | 0.1018 | 0.0641 | 0.0379 | 0.0170 |

**Table 16: Mean parameter values recovered from the maximum likelihood method with the mixture correction method applied to data with 5% contaminants (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   | $P_o$  |
|--------|----------|--------|--------|--------|--------|--------|---------|--------|
| 0.0809 | 0.3018   | 0.1086 | 0.0247 | 0.4358 | 0.2741 | 0.1121 | -0.0027 | 0.0489 |
| 0.0799 | 0.3014   | 0.1736 | 0.0196 | 0.4203 | 0.2630 | 0.0995 | 0.0027  | 0.0499 |
| 0.1663 | 0.3009   | 0.0926 | 0.0214 | 0.3096 | 0.2063 | 0.1055 | -0.0006 | 0.0295 |
| 0.1667 | 0.3027   | 0.0983 | 0.1066 | 0.3070 | 0.2077 | 0.1070 | -0.0014 | 0.0281 |
| 0.1701 | 0.3025   | 0.1839 | 0.0284 | 0.3217 | 0.2158 | 0.1075 | -0.0009 | 0.0274 |
| 0.1698 | 0.3029   | 0.1814 | 0.1101 | 0.3188 | 0.2141 | 0.1049 | 0.0030  | 0.0259 |

**Table 17: Standard deviations in parameter values recovered from the maximum likelihood method with the mixture correction method applied to data with 5% contaminants (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  | $P_o$  |
|--------|----------|--------|--------|--------|--------|--------|--------|--------|
| 0.0039 | 0.0033   | 0.0704 | 0.0160 | 0.0513 | 0.0381 | 0.0250 | 0.0204 | 0.0058 |
| 0.0041 | 0.0036   | 0.0635 | 0.0183 | 0.0551 | 0.0348 | 0.0261 | 0.0252 | 0.0058 |
| 0.0079 | 0.0104   | 0.0243 | 0.0296 | 0.0301 | 0.0237 | 0.0172 | 0.0110 | 0.0143 |
| 0.0105 | 0.0042   | 0.0327 | 0.0141 | 0.0324 | 0.0264 | 0.0194 | 0.0148 | 0.0163 |
| 0.0116 | 0.0120   | 0.0367 | 0.0368 | 0.0428 | 0.0329 | 0.0217 | 0.0156 | 0.0165 |
| 0.0109 | 0.0082   | 0.0331 | 0.0229 | 0.0375 | 0.0303 | 0.0228 | 0.0158 | 0.0171 |

**Table 18: Mean parameter values recovered from the chi square method with the mixture correction method applied to data with 5% contaminants (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   | $P_o$  |
|--------|----------|--------|--------|--------|--------|--------|---------|--------|
| 0.0816 | 0.2998   | 0.1042 | 0.0240 | 0.4323 | 0.2820 | 0.1115 | 0.0010  | 0.0420 |
| 0.0814 | 0.2991   | 0.1756 | 0.0205 | 0.4316 | 0.2746 | 0.1110 | -0.0002 | 0.0433 |
| 0.1718 | 0.2984   | 0.1011 | 0.0386 | 0.3162 | 0.2305 | 0.1144 | -0.0008 | 0.0296 |
| 0.1667 | 0.2839   | 0.0779 | 0.0920 | 0.2859 | 0.2072 | 0.1034 | 0.0008  | 0.0278 |
| 0.1708 | 0.3009   | 0.1774 | 0.0424 | 0.3351 | 0.2209 | 0.1149 | 0.0011  | 0.0304 |
| 0.1633 | 0.2863   | 0.1447 | 0.0894 | 0.2979 | 0.1949 | 0.0987 | -0.0010 | 0.0330 |

**Table 19: Standard deviations in parameter values recovered from the chi square method with the mixture correction method applied to data with 5% contaminants (N=250, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  | $P_o$  |
|--------|----------|--------|--------|--------|--------|--------|--------|--------|
| 0.0046 | 0.0042   | 0.0677 | 0.0151 | 0.0528 | 0.0493 | 0.0289 | 0.0210 | 0.0178 |
| 0.0063 | 0.0040   | 0.0747 | 0.0177 | 0.0661 | 0.0473 | 0.0308 | 0.0260 | 0.0162 |
| 0.0130 | 0.0127   | 0.0372 | 0.0318 | 0.0368 | 0.0309 | 0.0214 | 0.0134 | 0.0258 |
| 0.0150 | 0.0187   | 0.0440 | 0.0335 | 0.0508 | 0.0387 | 0.0230 | 0.0141 | 0.0262 |
| 0.0133 | 0.0127   | 0.0408 | 0.0347 | 0.0518 | 0.0363 | 0.0256 | 0.0161 | 0.0254 |
| 0.0152 | 0.0168   | 0.0534 | 0.0361 | 0.0486 | 0.0366 | 0.0240 | 0.0172 | 0.0254 |

**Table 20: Mean parameter values recovered from the maximum likelihood method with corrections applied to data with 5% contaminants and variability in starting point (N=250,  $z=a/2$ )**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   | $p_o$  | $s_t$  |
|--------|----------|--------|--------|--------|--------|--------|---------|--------|--------|
| 0.0806 | 0.3053   | 0.1135 | 0.0337 | 0.4603 | 0.2861 | 0.1136 | -0.0020 | 0.0554 | 0.2019 |
| 0.0794 | 0.3054   | 0.1832 | 0.0307 | 0.4413 | 0.2729 | 0.1083 | -0.0029 | 0.0554 | 0.2022 |
| 0.1708 | 0.2950   | 0.0985 | 0.0273 | 0.3102 | 0.2086 | 0.1051 | -0.0002 | 0.0244 | 0.1883 |
| 0.1707 | 0.2987   | 0.1011 | 0.1134 | 0.3095 | 0.2103 | 0.1101 | -0.0023 | 0.0226 | 0.1917 |
| 0.1709 | 0.2968   | 0.1753 | 0.0275 | 0.3103 | 0.2115 | 0.1035 | -0.0025 | 0.0247 | 0.1880 |
| 0.1702 | 0.2935   | 0.1756 | 0.1063 | 0.3091 | 0.2064 | 0.1029 | 0.0009  | 0.0258 | 0.1875 |

**Table 21: Standard deviations in parameter values recovered from the maximum likelihood method applied to data with 5% contaminants and variability in starting point (N=250,  $z=a/2$ )**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  | $p_o$  | $s_t$  |
|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.0046 | 0.0063   | 0.0814 | 0.0118 | 0.0805 | 0.0544 | 0.0292 | 0.0220 | 0.0088 | 0.0103 |
| 0.0050 | 0.0050   | 0.0802 | 0.0070 | 0.0716 | 0.0489 | 0.0338 | 0.0253 | 0.0101 | 0.0099 |
| 0.0090 | 0.0177   | 0.0271 | 0.0348 | 0.0378 | 0.0251 | 0.0179 | 0.0113 | 0.0145 | 0.0252 |
| 0.0112 | 0.0175   | 0.0344 | 0.0239 | 0.0436 | 0.0292 | 0.0193 | 0.0124 | 0.0157 | 0.0260 |
| 0.0106 | 0.0173   | 0.0369 | 0.0386 | 0.0444 | 0.0327 | 0.0214 | 0.0155 | 0.0180 | 0.0280 |
| 0.0147 | 0.0206   | 0.0488 | 0.0352 | 0.0568 | 0.0390 | 0.0242 | 0.0180 | 0.0195 | 0.0278 |

**Table 22: Mean parameter values recovered from the chi square method with corrections applied to data with 5% contaminants and variability in starting point (N=1000, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   | $P_o$  | $S_t$  |
|--------|----------|--------|--------|--------|--------|--------|---------|--------|--------|
| 0.0832 | 0.2955   | 0.0972 | 0.0255 | 0.4025 | 0.2543 | 0.1014 | -0.0007 | 0.0382 | 0.1962 |
| 0.0827 | 0.2965   | 0.1714 | 0.0235 | 0.4055 | 0.2538 | 0.1020 | -0.0023 | 0.0426 | 0.1979 |
| 0.1650 | 0.2964   | 0.0896 | 0.0277 | 0.3010 | 0.2036 | 0.1026 | 0.0007  | 0.0369 | 0.1954 |
| 0.1617 | 0.2888   | 0.0749 | 0.0939 | 0.2811 | 0.1908 | 0.0953 | -0.0004 | 0.0375 | 0.1927 |
| 0.1651 | 0.2970   | 0.1687 | 0.0251 | 0.3080 | 0.2025 | 0.1031 | -0.0000 | 0.0418 | 0.1954 |
| 0.1625 | 0.2849   | 0.1524 | 0.0858 | 0.2865 | 0.1873 | 0.0954 | -0.0009 | 0.0379 | 0.1928 |

**Table 23: Standard deviations in parameter values recovered from the chi square method applied to data with 5% contaminants and variability in starting point (N=1000, z=a/2)**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  | $P_o$  | $S_t$  |
|--------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.0048 | 0.0090   | 0.0461 | 0.0158 | 0.0543 | 0.0308 | 0.0166 | 0.0108 | 0.0207 | 0.0095 |
| 0.0061 | 0.0082   | 0.0671 | 0.0192 | 0.0741 | 0.0475 | 0.0244 | 0.0119 | 0.0209 | 0.0080 |
| 0.0072 | 0.0095   | 0.0176 | 0.0230 | 0.0201 | 0.0150 | 0.0093 | 0.0052 | 0.0184 | 0.0227 |
| 0.0087 | 0.0174   | 0.0302 | 0.0268 | 0.0336 | 0.0218 | 0.0121 | 0.0069 | 0.0195 | 0.0343 |
| 0.0077 | 0.0096   | 0.0215 | 0.0244 | 0.0234 | 0.0196 | 0.0123 | 0.0077 | 0.0171 | 0.0189 |
| 0.0132 | 0.0197   | 0.0436 | 0.0408 | 0.0450 | 0.0350 | 0.0194 | 0.0091 | 0.0193 | 0.0258 |

**Table 24: Mean parameter values recovered from the weighted least squares method (with no corrections) for data with outliers and variability in starting point (N=1000,  $z=a/2$ )**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   |
|--------|----------|--------|--------|--------|--------|--------|---------|
| 0.0940 | 0.2507   | 0.0454 | 0.0145 | 0.3175 | 0.2026 | 0.0801 | -0.0001 |
| 0.0933 | 0.2493   | 0.0870 | 0.0134 | 0.2980 | 0.1853 | 0.0736 | -0.0016 |
| 0.1710 | 0.2616   | 0.0730 | 0.0217 | 0.2635 | 0.1820 | 0.0933 | 0.0006  |
| 0.1688 | 0.2526   | 0.0636 | 0.0896 | 0.2499 | 0.1732 | 0.0872 | -0.0002 |
| 0.1731 | 0.2595   | 0.1428 | 0.0286 | 0.2643 | 0.1785 | 0.0912 | -0.0003 |
| 0.1716 | 0.2571   | 0.1415 | 0.0970 | 0.2613 | 0.1755 | 0.0896 | -0.0011 |

**Table 25: Standard deviations in parameter values recovered from the weighted least squares method (with no corrections) for data with outliers and variability in starting point (N=1000,  $z=a/2$ )**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  |
|--------|----------|--------|--------|--------|--------|--------|--------|
| 0.0026 | 0.0032   | 0.0351 | 0.0118 | 0.0243 | 0.0176 | 0.0114 | 0.0076 |
| 0.0018 | 0.0036   | 0.0283 | 0.0127 | 0.0183 | 0.0144 | 0.0091 | 0.0079 |
| 0.0052 | 0.0097   | 0.0190 | 0.0279 | 0.0219 | 0.0158 | 0.0095 | 0.0046 |
| 0.0077 | 0.0194   | 0.0313 | 0.0290 | 0.0342 | 0.0257 | 0.0129 | 0.0062 |
| 0.0078 | 0.0143   | 0.0286 | 0.0349 | 0.0349 | 0.0265 | 0.0172 | 0.0068 |
| 0.0105 | 0.0206   | 0.0381 | 0.0336 | 0.0455 | 0.0306 | 0.0184 | 0.0085 |

**Table 26: Mean parameter values recovered from the chi square method (with no corrections) for data with outliers and variability in starting point (N=1000,  $z=a/2$ )**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$   |
|--------|----------|--------|--------|--------|--------|--------|---------|
| 0.1007 | 0.2420   | 0.0205 | 0.0300 | 0.2748 | 0.1870 | 0.0764 | -0.0004 |
| 0.0986 | 0.2383   | 0.0454 | 0.0170 | 0.2506 | 0.1622 | 0.0661 | -0.0012 |
| 0.1752 | 0.2664   | 0.0827 | 0.0307 | 0.2694 | 0.1869 | 0.0963 | 0.0006  |
| 0.1710 | 0.2641   | 0.0753 | 0.0962 | 0.2550 | 0.1781 | 0.0906 | -0.0003 |
| 0.1798 | 0.2712   | 0.1600 | 0.0534 | 0.2825 | 0.1902 | 0.0981 | 0.0000  |
| 0.1734 | 0.2577   | 0.1403 | 0.0876 | 0.2704 | 0.1720 | 0.0882 | -0.0014 |

**Table 27: Standard deviations in parameter values recovered from the chi square method (with no corrections) for data with outliers and variability in starting point (N=1000,  $z=a/2$ )**

| a      | $T_{er}$ | $\eta$ | $s_z$  | $v_1$  | $v_2$  | $v_3$  | $v_4$  |
|--------|----------|--------|--------|--------|--------|--------|--------|
| 0.0040 | 0.0049   | 0.0327 | 0.0139 | 0.0248 | 0.0180 | 0.0120 | 0.0072 |
| 0.0015 | 0.0045   | 0.0242 | 0.0136 | 0.0127 | 0.0097 | 0.0083 | 0.0076 |
| 0.0048 | 0.0082   | 0.0148 | 0.0270 | 0.0176 | 0.0134 | 0.0084 | 0.0048 |
| 0.0066 | 0.0116   | 0.0242 | 0.0174 | 0.0246 | 0.0189 | 0.0091 | 0.0066 |
| 0.0065 | 0.0112   | 0.0208 | 0.0296 | 0.0264 | 0.0199 | 0.0128 | 0.0071 |
| 0.0089 | 0.0184   | 0.0340 | 0.0330 | 0.0321 | 0.0262 | 0.0152 | 0.0089 |