## Supplementary Materials

Table S1: Risk indicator values for 350m.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Data detection section numbers | Average speed (m/s) | Speed standard deviation (m/s) | Acceleration  range (m/s2) | Acceleration of average absolute value (m/s2) | |
| 1 | 23.8417 | 1.4513 | 2.03 | 0.2543 | |
| 2 | 23.0235 | 2.3755 | 3.65 | 0.3909 | |
| 3 | 21.8598 | 1.9640 | 8.49 | 0.6148 | |
| 4 | 17.5062 | 0.9795 | 0.87 | 0.1897 | |
| 5 | 17.4275 | 0.8162 | 1.85 | 0.2031 | |
| 6 | 23.8972 | 1.3040 | 3.93 | 0.2281 | |
| 7 | 23.7176 | 1.5035 | 2.89 | 0.2487 | |
| 8 | 18.1604 | 2.0628 | 1.91 | 0.2069 | |
| 9 | 17.4000 | 1.0567 | 2.09 | 0.1838 | |
| 10 | 23.6603 | 1.3933 | 3.18 | 0.2528 | |
| 11 | 23.5837 | 1.6136 | 4.16 | 0.2941 | |
| 12 | 19.4035 | 2.9669 | 7.38 | 0.3974 | |
| 13 | 16.9837 | 0.8708 | 8.03 | 0.2337 | |
| 14 | 23.7828 | 1.5446 | 3.82 | 0.2062 | |
| 15 | 23.2139 | 2.4402 | 4.66 | 0.2815 | |
| 16 | 18.8159 | 3.1835 | 7.15 | 1.0592 | |
| 17 | 16.5326 | 1.5600 | 4.46 | 0.3142 | |
| 18 | 23.8893 | 2.0034 | 1.96 | 0.2388 | |
| 19 | 23.4425 | 2.5381 | 2.13 | 0.2682 | |
| 20 | 20.3651 | 3.4302 | 2.70 | 0.3491 | |
| 21 | 16.3986 | 2.2763 | 3.52 | 0.4009 |

Table S2: Risk Indicator values for 450m.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Data detection section numbers | Average speed (m/s) | Speed standard deviation (m/s) | Acceleration  range (m/s2) | Acceleration of average absolute value (m/s2) | |
| 1 | 23.6873 | 1.7277 | 2.03 | 0.287 | |
| 2 | 22.9313 | 2.2911 | 3.59 | 0.3965 | |
| 3 | 21.9737 | 2.0949 | 4.57 | 0.5509 | |
| 4 | 17.4637 | 0.9631 | 0.85 | 0.1788 | |
| 5 | 17.5074 | 0.8177 | 1.81 | 0.1975 | |
| 6 | 23.6079 | 1.5265 | 1.97 | 0.2037 | |
| 7 | 23.8392 | 1.4882 | 3.4 | 0.2054 | |
| 8 | 17.934 | 2.0268 | 0.94 | 0.1801 | |
| 9 | 17.4125 | 1.0432 | 0.68 | 0.1786 | |
| 10 | 23.6278 | 1.3782 | 1.17 | 0.1613 | |
| 11 | 23.7504 | 1.4054 | 2.92 | 0.2186 | |
| 12 | 17.8185 | 1.8643 | 3.15 | 0.1933 | |
| 13 | 17.4879 | 0.8309 | 1.98 | 0.192 | |
| 14 | 23.6209 | 1.4043 | 3.41 | 0.2361 | |
| 15 | 23.5081 | 1.6943 | 4.35 | 0.3117 | |
| 16 | 19.3109 | 3.189 | 4.21 | 0.5051 | |
| 17 | 16.8551 | 1.148 | 3.23 | 0.2371 | |
| 18 | 23.623 | 1.8156 | 3.56 | 0.2798 | |
| 19 | 23.4547 | 2.5253 | 2.89 | 0.2701 | |
| 20 | 19.9482 | 4.2745 | 3.09 | 0.4751 | |
| 21 | 16.2183 | 2.4464 | 3.56 | 0.4024 |

Table S3: Risk Indicator values for 550m.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Data detection section numbers | Average speed (m/s) | Speed standard deviation (m/s) | Acceleration  range (m/s2) | Acceleration of average absolute value (m/s2) | |
| 1 | 23.8061 | 1.4217 | 2.06 | 0.2426 | |
| 2 | 22.8963 | 2.6597 | 5.66 | 0.4133 | |
| 3 | 22.0764 | 1.9703 | 8.1 | 0.6517 | |
| 4 | 17.4949 | 0.7423 | 7.96 | 0.2481 | |
| 5 | 17.5354 | 1.0037 | 0.92 | 0.1792 | |
| 6 | 23.7385 | 1.3771 | 1.64 | 0.1838 | |
| 7 | 23.7651 | 1.6863 | 2.33 | 0.2073 | |
| 8 | 17.953 | 2.0761 | 2.13 | 0.1926 | |
| 9 | 17.5413 | 1.2883 | 0.68 | 0.1692 | |
| 10 | 23.7845 | 1.2668 | 0.87 | 0.1646 | |
| 11 | 23.8425 | 1.4496 | 2.27 | 0.1982 | |
| 12 | 17.9749 | 1.9638 | 0.79 | 0.1752 | |
| 13 | 17.6143 | 1.1602 | 0.75 | 0.1691 | |
| 14 | 23.6798 | 1.5231 | 2.94 | 0.2099 | |
| 15 | 23.4925 | 1.7502 | 3.49 | 0.3109 | |
| 16 | 18.9567 | 2.7251 | 8.28 | 0.4354 | |
| 17 | 17.0351 | 1.1905 | 4.66 | 0.2388 | |
| 18 | 23.7853 | 1.4618 | 1.98 | 0.2348 | |
| 19 | 23.6923 | 1.9131 | 1.5 | 0.2488 | |
| 20 | 21.194 | 3.3931 | 1.92 | 0.4161 | |
| 21 | 16.3954 | 2.1439 | 3.67 | 0.3488 |