**Table S1:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **parameter** |  | **home** |  | **non-returned** |
|  | **CS** | **CGE** | **Nc** | ***F*** | ***d.d.f. (n.d.f.* = 2*)*** | ***p*** |  | **CS** | **CGE** | **Nc** | ***F*** | ***d.d.f. (n.d.f.* = 2*)*** | ***p*** |
| **track length [m]** |  | 224.8 | 239.7 | 248 | *0.30* | *77.7* | *0.74* |  | 53.9 | 375.2 | 158.7 | *3.29* | *10.0* | *0.08* |
|   | (188.3 / 268.5) | (198.5 / 289.5) | (203.3 / 302.6) |  | (17.1 / 170.3) | (146.7 / 959.8) | (89.3 / 282.1) |
| **total track duration [s]** |  | 196.0 | 226.5 | 184.6 | *0.28* | *76.4* | *0.75* |  | 40.1 | 802.3 | 372.3 | *2.53* | *10.0* | *0.13* |
|   | ( 131.7 / 291.5) | (149.4 / 343.5) | (118.2 / 288.3) |  | (5.04 / 320) | (147.4 / 4368) | ( 131.9 / 1051) |
| **actual total flight time [s]** |  | 86.9 | 87.1 | 104.0 | *0.85* | *71.5* | *0.43* |  | 9.64 | 178.4 | 49.2 | *3.99* | *10.0* | *0.053* |
|   | (64.9 / 116.4) | (64.5 / 117.4) | (75.6 / 143.2) |  | (2.00 / 46.4) | (49.4 / 643.5) | (22.4 / 107.8) |
| **total gap duration [s]** |  | 36.9 | 59.3 | 35.9 | *0.36* | *77.0* | *0.67* |  | 6.10 | 407.1 | 107.6 | *1.12* | *10.0* | *0.36* |
|   | (14.05 / 94.3) | (21.86 / 157.9) | (12.09 / 102.9) |  | (-0.89 / 443) | (12.89 / 11996) | (12.70 / 860) |
| **mean gap duration [s]** |  | 24.1 | 37.5 | 23.9 | *0.39* | *76.3* | *0.68* |  | 6.07 | 177.8 | 54.0 | *0.92* | *10.0* | *0.43* |
|   | (9.82 / 57.21) | (14.99 / 91.62) | (8.71 / 62.91) |  | ( -0.81 / 263) | ( 8.29 / 3438) | (8.00 / 335) |
| **number of gaps** |  | 1.12 | 1.34 | 1.24 | *0.23* | *80.0* | *0.79* |  | 0.43 | 2.93 | 1.44 | *1.63* | *7.60* | *0.26* |
|   | (0.74 / 1.58) | (0.89 / 1.89) | (0.80 / 1.80) |  | (-0.38 / 2.30) | (0.95 / 6.91) | (0.51 / 2.93) |
| **max. velocity [ms-1]** |  | 7.68 | 7.29 | 7.28 | *0.52* | *73.1* | *0.60* |  | 5.16 | 7.17 | 7.90 | *1.15* | *10.0* | *0.36* |
|   | (6.75 / 8.74) | (6.42 / 8.27) | (6.35 / 8.34) |  | (3.16/ 8.44) | (4.80 / 10.70) | (6.18 / 10.10) |
| **mean velocity [ms-1]** |  | 3.17 | 3.46 | 2.98 | *2.80* | *73.0* | *0.07* |  | 3.03 | 2.24 | 3.09 | *0.84* | *10.0* | *0.46* |
|   | (2.75 / 3.60) | (3.03 / 3.90) | (2.53 / 3.44) |  | (1.68 / 4.38) | ( 1.14 / 3.35) | (2.41 / 3.77) |
| **max. acceleration [ms-2]**  |  | 3.40 | 3.57 | 3.25 | *0.48* | *75.5* | *0.62* |  | 2.11 | 3.55 | 3.57 | *1.33* | *2.00* | *0.51\** |
|   | (2.94 / 3.93) | (3.07 / 4.15) | (2.76 / 3.82) |  | ( 0.93/ 4.79) | (1.82 / 6.94) | (2.37 / 5.38) |
| **mean acceleration [ms-2]**  |  | 1.05 | 1.17 | 0.97 | *2.94* | *73.8* | *0.06* |  | 1.05 | 0.76 | 1.05 | *0.74* | *10.0* | *0.50* |
|   | (0.91 / 1.19) | (1.02 / 1.32) | (0.82 / 1.13) |  | (0.54/ 1.56) | (0.34 / 1.17) | (0.80 / 1.31) |
| **approachiness** |  | 0.43 | 0.41 | 0.37 | *0.78* | *77.5* | *0.46* |  | 0.44 | 0.16 | -0.15 | *13.9* | *8.10* | ***0.002*** |
|   | (0.36 / 0.49) | (0.34 / 0.48) | (0.30 / 0.44) |  | (0.21 / 0.67) | (-0.04 / 0.35) | (-0.29 / -0.02) |
| **straightness** |  | 0.59 | 0.55 | 0.52 | *0.60* | *77.1* | *0.55* |  | - | - | - | - | - | - |
|   | (0.50 / 0.69) | (0.46 / 0.65) | (0.43/ 0.62) |  |