

**Supplementary Table 5.1.** Calculated 95% confidence intervals of (a) movement towards the other individual over total number of towards/away movements and (b) four types of simultaneous movements over total movements between lion and spotted hyena individuals for each dyad. Males are underlined. An asterisk denotes significance between random and individual movements ( $a = 0.5$ ,  $b = 0.25$ ).

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| SU-33868 & TJ-33870 | SU-33868   | 0-50                  | 3     | 2       | 0.0943   | 0.9916   |              |
|                     | TJ-33870   |                       | 3     | 2       | 0.0943   | 0.9916   |              |
|                     | SU-33868   | 50-100                | 17    | 10      | 0.3292   | 0.8156   |              |
|                     | TJ-33870   |                       | 18    | 9       | 0.2602   | 0.7398   |              |
|                     | SU-33868   | 100-200               | 24    | 14      | 0.3664   | 0.7789   |              |
|                     | TJ-33870   |                       | 25    | 13      | 0.3131   | 0.722    |              |
|                     | SU-33868   | 200-500               | 48    | 22      | 0.3137   | 0.6083   |              |
|                     | TJ-33870   |                       | 43    | 22      | 0.3546   | 0.6669   |              |
|                     | SU-33868   | 500-1000              | 21    | 5       | 0.0822   | 0.4717   | *            |
|                     | TJ-33870   |                       | 18    | 10      | 0.3076   | 0.7847   |              |
|                     | SU-33868   | 1000-2000             | 84    | 42      | 0.3889   | 0.6111   |              |
|                     | TJ-33870   |                       | 70    | 35      | 0.378    | 0.622    |              |
|                     | SU-33868   | 2000-3000             | 89    | 55      | 0.5089   | 0.719    | *            |
|                     | TJ-33870   |                       | 81    | 34      | 0.3109   | 0.5346   |              |
|                     | SU-33868   | 3000-5000             | 291   | 138     | 0.4147   | 0.5333   |              |
|                     | TJ-33870   |                       | 264   | 135     | 0.4493   | 0.5731   |              |
|                     | SU-33868   | 5000-10 000           | 1054  | 551     | 0.4921   | 0.5533   |              |
|                     | TJ-33870   |                       | 1056  | 506     | 0.4487   | 0.5098   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| SU-33868 & TJ-33870 | 0-50                  | 2     | 0     | A → ← B | 0        | 0.8419   |              |
|                     |                       |       | 0     | ← A B → | 0        | 0.8419   |              |
|                     |                       |       | 1     | A → B → | 0.0126   | 0.9874   |              |
|                     |                       |       | 1     | ← A ← B | 0.0126   | 0.9874   |              |
|                     | 50-100                | 16    | 3     | A → ← B | 0.0405   | 0.4565   |              |
|                     |                       |       | 2     | ← A B → | 0.0155   | 0.3835   |              |
|                     |                       |       | 6     | A → B → | 0.1520   | 0.6457   |              |
|                     |                       |       | 5     | ← A ← B | 0.1102   | 0.5866   |              |
|                     | 100-200               | 18    | 4     | A → ← B | 0.0641   | 0.4764   |              |
|                     |                       |       | 3     | ← A B → | 0.0358   | 0.4142   |              |
|                     |                       |       | 6     | A → B → | 0.1334   | 0.5901   |              |
|                     |                       |       | 5     | ← A ← B | 0.0969   | 0.5348   |              |
|                     | 200-500               | 35    | 7     | A → ← B | 0.0844   | 0.3694   |              |
|                     |                       |       | 9     | ← A B → | 0.1249   | 0.4326   |              |
|                     |                       |       | 8     | A → B → | 0.1042   | 0.4014   |              |
|                     |                       |       | 11    | ← A ← B | 0.1685   | 0.4929   |              |
|                     | 500-1000              | 13    | 1     | A → ← B | 0.0019   | 0.3603   |              |
|                     |                       |       | 5     | ← A B → | 0.1386   | 0.6842   |              |
|                     |                       |       | 0     | A → B → | 0        | 0.2471   | *            |
|                     |                       |       | 7     | ← A ← B | 0.2513   | 0.8078   | *            |
|                     | 1000-2000             | 56    | 10    | A → ← B | 0.0891   | 0.3040   |              |
|                     |                       |       | 9     | ← A B → | 0.0762   | 0.2833   |              |
|                     |                       |       | 19    | A → B → | 0.2181   | 0.4781   |              |
|                     |                       |       | 18    | ← A ← B | 0.2029   | 0.4596   |              |
|                     | 2000-3000             | 71    | 20    | A → ← B | 0.1813   | 0.4010   |              |
|                     |                       |       | 16    | ← A B → | 0.1346   | 0.3400   |              |
|                     |                       |       | 24    | A → B → | 0.2300   | 0.4601   |              |
|                     |                       |       | 11    | ← A ← B | 0.0800   | 0.2603   |              |
|                     | 3000-5000             | 196   | 54    | A → ← B | 0.2142   | 0.3437   |              |
|                     |                       |       | 54    | ← A B → | 0.2142   | 0.3437   |              |
|                     |                       |       | 44    | A → B → | 0.1681   | 0.2894   |              |
|                     |                       |       | 44    | ← A ← B | 0.1681   | 0.2894   |              |
|                     | 5000-10 000           | 810   | 187   | A → ← B | 0.2023   | 0.2615   |              |
|                     |                       |       | 199   | ← A B → | 0.2164   | 0.2768   |              |
|                     |                       |       | 225   | A → B → | 0.2472   | 0.3100   |              |
|                     |                       |       | 199   | ← A ← B | 0.2164   | 0.2768   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| SU-33868 & SA-33872 | SU-33868   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | SU-33868   | 50-100                | 1     | 1       | 0.0250   | 1        |              |
|                     | SA-33872   |                       | 1     | 1       | 0.0250   | 1        |              |
|                     | SU-33868   | 100-200               | 6     | 3       | 0.1181   | 0.8819   |              |
|                     | SA-33872   |                       | 6     | 2       | 0.0433   | 0.7772   |              |
|                     | SU-33868   | 200-500               | 22    | 11      | 0.2822   | 0.7178   |              |
|                     | SA-33872   |                       | 17    | 6       | 0.1421   | 0.6167   |              |
|                     | SU-33868   | 500-1000              | 34    | 17      | 0.3243   | 0.6757   |              |
|                     | SA-33872   |                       | 39    | 19      | 0.3242   | 0.6522   |              |
|                     | SU-33868   | 1000-2000             | 54    | 28      | 0.3784   | 0.6566   |              |
|                     | SA-33872   |                       | 58    | 24      | 0.2860   | 0.5507   |              |
|                     | SU-33868   | 2000-3000             | 61    | 30      | 0.3614   | 0.6230   |              |
|                     | SA-33872   |                       | 68    | 31      | 0.3345   | 0.5812   |              |
|                     | SU-33868   | 3000-5000             | 245   | 128     | 0.4579   | 0.5864   |              |
|                     | SA-33872   |                       | 230   | 115     | 0.4336   | 0.5664   |              |
|                     | SU-33868   | 5000-10 000           | 1430  | 741     | 0.4919   | 0.5444   |              |
|                     | SA-33872   |                       | 1415  | 727     | 0.4874   | 0.5401   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| SU-33868 & SA-33872 | 0-50                  | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 50-100                | 1     | 1     | A → ← B | 0.0250   | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 0.9750   |              |
|                     |                       |       | 0     | A → B → | 0        | 0.9750   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.9750   |              |
|                     | 100-200               | 6     | 1     | A → ← B | 0.0042   | 0.6412   |              |
|                     |                       |       | 2     | ← A B → | 0.0433   | 0.7772   |              |
|                     |                       |       | 2     | A → B → | 0.0433   | 0.7772   |              |
|                     |                       |       | 1     | ← A ← B | 0.0042   | 0.6412   |              |
|                     | 200-500               | 14    | 2     | A → ← B | 0.0178   | 0.4281   |              |
|                     |                       |       | 1     | ← A B → | 0.0018   | 0.3387   |              |
|                     |                       |       | 7     | A → B → | 0.2304   | 0.7696   |              |
|                     |                       |       | 4     | ← A ← B | 0.0839   | 0.5810   |              |
|                     | 500-1000              | 29    | 10    | A → ← B | 0.1794   | 0.5433   |              |
|                     |                       |       | 8     | ← A B → | 0.1273   | 0.4724   |              |
|                     |                       |       | 5     | A → B → | 0.0585   | 0.3577   |              |
|                     |                       |       | 6     | ← A ← B | 0.0799   | 0.3972   |              |
|                     | 1000-2000             | 43    | 7     | A → ← B | 0.0681   | 0.3070   |              |
|                     |                       |       | 13    | ← A B → | 0.1718   | 0.4613   |              |
|                     |                       |       | 13    | A → B → | 0.1718   | 0.4613   |              |
|                     |                       |       | 10    | ← A ← B | 0.1176   | 0.3863   |              |
|                     | 2000-3000             | 50    | 14    | A → ← B | 0.1623   | 0.4249   |              |
|                     |                       |       | 18    | ← A B → | 0.2292   | 0.5081   |              |
|                     |                       |       | 12    | A → B → | 0.1306   | 0.3817   |              |
|                     |                       |       | 6     | ← A ← B | 0.0453   | 0.2431   | *            |
|                     | 3000-5000             | 168   | 41    | A → ← B | 0.1812   | 0.3162   |              |
|                     |                       |       | 41    | ← A B → | 0.1812   | 0.3162   |              |
|                     |                       |       | 47    | A → B → | 0.2134   | 0.3541   |              |
|                     |                       |       | 39    | ← A ← B | 0.1706   | 0.3034   |              |
|                     | 5000-10 000           | 1098  | 291   | A → ← B | 0.2391   | 0.2922   |              |
|                     |                       |       | 263   | ← A B → | 0.2146   | 0.2659   |              |
|                     |                       |       | 282   | A → B → | 0.2312   | 0.2838   |              |
|                     |                       |       | 262   | ← A ← B | 0.2137   | 0.2650   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| RE-33864 & TJ-33870 | RE-33864   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   | 1000-2000             | 12    | 4       | 0.0992   | 0.6511   |              |
|                     | TJ-33870   |                       | 19    | 9       | 0.2445   | 0.7114   |              |
|                     | RE-33864   | 2000-3000             | 30    | 20      | 0.4719   | 0.8271   |              |
|                     | TJ-33870   |                       | 25    | 10      | 0.2113   | 0.6133   |              |
|                     | RE-33864   | 3000-5000             | 128   | 54      | 0.3351   | 0.5123   |              |
|                     | TJ-33870   |                       | 131   | 58      | 0.3561   | 0.5321   |              |
|                     | RE-33864   | 5000-10 000           | 1324  | 664     | 0.4742   | 0.5288   |              |
|                     | TJ-33870   |                       | 1295  | 640     | 0.4666   | 0.5218   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| RE-33864 & TJ-33870 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 12    | 3     | $A \rightarrow \leftarrow B$  | 0.0549   | 0.5719   |              |
|                     |                       |       | 5     | $\leftarrow A B \rightarrow$  | 0.1517   | 0.7233   |              |
|                     |                       |       | 1     | $A \rightarrow B \rightarrow$ | 0.0021   | 0.3848   |              |
|                     |                       |       | 3     | $\leftarrow A \leftarrow B$   | 0.0549   | 0.5719   |              |
|                     | 2000-3000             | 21    | 6     | $A \rightarrow \leftarrow B$  | 0.1128   | 0.5218   |              |
|                     |                       |       | 3     | $\leftarrow A B \rightarrow$  | 0.0305   | 0.3634   |              |
|                     |                       |       | 10    | $A \rightarrow B \rightarrow$ | 0.2571   | 0.7022   | *            |
|                     |                       |       | 2     | $\leftarrow A \leftarrow B$   | 0.0117   | 0.3038   |              |
|                     | 3000-5000             | 99    | 21    | $A \rightarrow \leftarrow B$  | 0.1364   | 0.3058   |              |
|                     |                       |       | 30    | $\leftarrow A B \rightarrow$  | 0.2147   | 0.4035   |              |
|                     |                       |       | 23    | $A \rightarrow B \rightarrow$ | 0.1533   | 0.3279   |              |
|                     |                       |       | 25    | $\leftarrow A \leftarrow B$   | 0.1706   | 0.3498   |              |
|                     | 5000-10 000           | 1001  | 248   | $A \rightarrow \leftarrow B$  | 0.2213   | 0.2757   |              |
|                     |                       |       | 243   | $\leftarrow A B \rightarrow$  | 0.2165   | 0.2706   |              |
|                     |                       |       | 259   | $A \rightarrow B \rightarrow$ | 0.2319   | 0.2871   |              |
|                     |                       |       | 251   | $\leftarrow A \leftarrow B$   | 0.2242   | 0.2788   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| RE-33864 & SA-33872 | RE-33864   | 0-50                  | 1     | 0       | 0        | 0.9750   |              |
|                     | SA-33872   |                       | 1     | 0       | 0        | 0.9750   |              |
|                     | RE-33864   | 50-100                | 1     | 1       | 0.0250   | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   | 100-200               | 3     | 1       | 0.0084   | 0.9057   |              |
|                     | SA-33872   |                       | 4     | 2       | 0.0676   | 0.9324   |              |
|                     | RE-33864   | 200-500               | 14    | 8       | 0.2886   | 0.8234   |              |
|                     | SA-33872   |                       | 12    | 6       | 0.2109   | 0.7891   |              |
|                     | RE-33864   | 500-1000              | 7     | 3       | 0.0990   | 0.8159   |              |
|                     | SA-33872   |                       | 7     | 4       | 0.1841   | 0.9010   |              |
|                     | RE-33864   | 1000-2000             | 44    | 30      | 0.5242   | 0.8139   | *            |
|                     | SA-33872   |                       | 44    | 15      | 0.2049   | 0.4992   | *            |
|                     | RE-33864   | 2000-3000             | 54    | 28      | 0.3784   | 0.6566   |              |
|                     | SA-33872   |                       | 55    | 24      | 0.3030   | 0.5768   |              |
|                     | RE-33864   | 3000-5000             | 100   | 55      | 0.4473   | 0.6497   |              |
|                     | SA-33872   |                       | 115   | 51      | 0.3509   | 0.5391   |              |
|                     | RE-33864   | 5000-10 000           | 562   | 299     | 0.4898   | 0.5739   |              |
|                     | SA-33872   |                       | 552   | 252     | 0.4144   | 0.4991   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| RE-33864 & SA-33872 | 0-50                  | 1     | 0     | A → ← B | 0        | 0.975    |              |
|                     |                       |       | 1     | ← A B → | 0.0250   | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 0.9750   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.9750   |              |
|                     | 50-100                | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 100-200               | 3     | 1     | A → ← B | 0.0084   | 0.9057   |              |
|                     |                       |       | 1     | ← A B → | 0.0084   | 0.9057   |              |
|                     |                       |       | 0     | A → B → | 0        | 0.7076   |              |
|                     |                       |       | 1     | ← A ← B | 0.0084   | 0.9057   |              |
|                     | 200-500               | 10    | 4     | A → ← B | 0.1216   | 0.7376   |              |
|                     |                       |       | 2     | ← A B → | 0.0252   | 0.5561   |              |
|                     |                       |       | 2     | A → B → | 0.0252   | 0.5561   |              |
|                     |                       |       | 2     | ← A ← B | 0.0252   | 0.5561   |              |
|                     | 500-1000              | 6     | 0     | A → ← B | 0        | 0.4593   |              |
|                     |                       |       | 1     | ← A B → | 0.0042   | 0.6412   |              |
|                     |                       |       | 2     | A → B → | 0.0433   | 0.7772   |              |
|                     |                       |       | 3     | ← A ← B | 0.1181   | 0.8819   |              |
|                     | 1000-2000             | 35    | 10    | A → ← B | 0.1464   | 0.4630   |              |
|                     |                       |       | 5     | ← A B → | 0.0481   | 0.3026   |              |
|                     |                       |       | 16    | A → B → | 0.2883   | 0.6335   | *            |
|                     |                       |       | 4     | ← A ← B | 0.0320   | 0.2674   |              |
|                     | 2000-3000             | 33    | 8     | A → ← B | 0.1109   | 0.4226   |              |
|                     |                       |       | 10    | ← A B → | 0.1559   | 0.4871   |              |
|                     |                       |       | 10    | A → B → | 0.1559   | 0.4871   |              |
|                     |                       |       | 5     | ← A ← B | 0.0511   | 0.3190   |              |
|                     | 3000-5000             | 85    | 18    | A → ← B | 0.1306   | 0.3139   |              |
|                     |                       |       | 18    | ← A B → | 0.1306   | 0.3139   |              |
|                     |                       |       | 26    | A → B → | 0.2105   | 0.4153   |              |
|                     |                       |       | 23    | ← A ← B | 0.1799   | 0.3779   |              |
|                     | 5000-10 000           | 426   | 102   | A → ← B | 0.1997   | 0.2829   |              |
|                     |                       |       | 115   | ← A B → | 0.2283   | 0.3148   |              |
|                     |                       |       | 125   | A → B → | 0.2506   | 0.3392   | *            |
|                     |                       |       | 84    | ← A ← B | 0.1604   | 0.2382   | *            |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| OF-34309 & SA-33872 | OF-34309   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 200-500               | 5     | 4       | 0.2836   | 0.9949   |              |
|                     | SA-33872   |                       | 5     | 0       | 0        | 0.5218   |              |
|                     | OF-34309   | 500-1000              | 6     | 4       | 0.2228   | 0.9567   |              |
|                     | SA-33872   |                       | 6     | 0       | 0        | 0.4593   | *            |
|                     | OF-34309   | 1000-2000             | 11    | 7       | 0.3079   | 0.8907   |              |
|                     | SA-33872   |                       | 7     | 2       | 0.0367   | 0.7096   |              |
|                     | OF-34309   | 2000-3000             | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 3000-5000             | 13    | 8       | 0.3158   | 0.8614   |              |
|                     | SA-33872   |                       | 23    | 9       | 0.1971   | 0.6146   |              |
|                     | OF-34309   | 5000-10 000           | 112   | 78      | 0.6024   | 0.7798   | *            |
|                     | SA-33872   |                       | 116   | 36      | 0.2277   | 0.4029   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| OF-34309 & SA-33872 | 0-50                  | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 200-500               | 5     | 0     | A → ← B | 0        | 0.5218   |              |
|                     |                       |       | 1     | ← A B → | 0.0051   | 0.7164   |              |
|                     |                       |       | 4     | A → B → | 0.2836   | 0.9949   | *            |
|                     |                       |       | 0     | ← A ← B | 0        | 0.5218   |              |
|                     | 500-1000              | 6     | 0     | A → ← B | 0        | 0.4593   |              |
|                     |                       |       | 2     | ← A B → | 0.0433   | 0.7772   |              |
|                     |                       |       | 4     | A → B → | 0.2228   | 0.9567   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.4593   |              |
|                     | 1000-2000             | 7     | 1     | A → ← B | 0.0036   | 0.5787   |              |
|                     |                       |       | 0     | ← A B → | 0        | 0.4096   |              |
|                     |                       |       | 5     | A → B → | 0.2904   | 0.9633   | *            |
|                     |                       |       | 1     | ← A ← B | 0.0036   | 0.5787   |              |
|                     | 2000-3000             | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 3000-5000             | 10    | 3     | A → ← B | 0.0667   | 0.6525   |              |
|                     |                       |       | 2     | ← A B → | 0.0252   | 0.5561   |              |
|                     |                       |       | 3     | A → B → | 0.0667   | 0.6525   |              |
|                     |                       |       | 2     | ← A ← B | 0.0252   | 0.5561   |              |
|                     | 5000-10 000           | 86    | 18    | A → ← B | 0.1290   | 0.3105   |              |
|                     |                       |       | 16    | ← A B → | 0.1102   | 0.2845   |              |
|                     |                       |       | 41    | A → B → | 0.3679   | 0.5873   | *            |
|                     |                       |       | 11    | ← A ← B | 0.0656   | 0.2173   | *            |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| OK-33863 & SA-33872 | OK-33863   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OK-33863   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OK-33863   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OK-33863   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OK-33863   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OK-33863   | 1000-2000             | 10    | 6       | 0.2624   | 0.8784   |              |
|                     | SA-33872   |                       | 7     | 2       | 0.0367   | 0.7096   |              |
|                     | OK-33863   | 2000-3000             | 10    | 10      | 0.6915   | 1        | *            |
|                     | SA-33872   |                       | 8     | 2       | 0.0319   | 0.6509   |              |
|                     | OK-33863   | 3000-5000             | 15    | 2       | 0.0166   | 0.4046   | *            |
|                     | SA-33872   |                       | 11    | 4       | 0.1093   | 0.6921   |              |
|                     | OK-33863   | 5000-10 000           | 28    | 10      | 0.1864   | 0.5593   |              |
|                     | SA-33872   |                       | 32    | 20      | 0.4369   | 0.7890   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| OK-33863 & SA-33872 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 6     | 1     | $A \rightarrow \leftarrow B$  | 0.0042   | 0.6412   |              |
|                     |                       |       | 1     | $\leftarrow A B \rightarrow$  | 0.0042   | 0.6412   |              |
|                     |                       |       | 3     | $A \rightarrow B \rightarrow$ | 0.1181   | 0.8819   |              |
|                     |                       |       | 1     | $\leftarrow A \leftarrow B$   | 0.0042   | 0.6412   |              |
|                     | 2000-3000             | 8     | 2     | $A \rightarrow \leftarrow B$  | 0.0319   | 0.6509   |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 0.3694   |              |
|                     |                       |       | 6     | $A \rightarrow B \rightarrow$ | 0.3491   | 0.9681   | *            |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 0.3694   |              |
|                     | 3000-5000             | 11    | 0     | $A \rightarrow \leftarrow B$  | 0        | 0.2849   |              |
|                     |                       |       | 7     | $\leftarrow A B \rightarrow$  | 0.3079   | 0.8907   | *            |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 0.2849   |              |
|                     |                       |       | 4     | $\leftarrow A \leftarrow B$   | 0.1093   | 0.6921   |              |
|                     | 5000-10 000           | 26    | 8     | $A \rightarrow \leftarrow B$  | 0.1433   | 0.5179   |              |
|                     |                       |       | 5     | $\leftarrow A B \rightarrow$  | 0.0655   | 0.3935   |              |
|                     |                       |       | 2     | $A \rightarrow B \rightarrow$ | 0.0095   | 0.2513   |              |
|                     |                       |       | 11    | $\leftarrow A \leftarrow B$   | 0.2335   | 0.6308   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| OM-34308 & SA-33872 | OM-34308   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   | 1000-2000             | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   | 2000-3000             | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   | 3000-5000             | 35    | 17      | 0.3138   | 0.6601   |              |
|                     | SA-33872   |                       | 28    | 10      | 0.1864   | 0.5593   |              |
|                     | OM-34308   | 5000-10 000           | 168   | 77      | 0.3814   | 0.5368   |              |
|                     | SA-33872   |                       | 167   | 96      | 0.4961   | 0.6509   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| OM-34308 & SA-33872 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 2000-3000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 3000-5000             | 24    | 3     | $A \rightarrow \leftarrow B$  | 0.0266   | 0.3236   |              |
|                     |                       |       | 9     | $\leftarrow A B \rightarrow$  | 0.1880   | 0.5941   |              |
|                     |                       |       | 8     | $A \rightarrow B \rightarrow$ | 0.1563   | 0.5532   |              |
|                     |                       |       | 4     | $\leftarrow A \leftarrow B$   | 0.0474   | 0.3738   |              |
|                     | 5000-10 000           | 130   | 42    | $A \rightarrow \leftarrow B$  | 0.2437   | 0.4107   |              |
|                     |                       |       | 35    | $\leftarrow A B \rightarrow$  | 0.1952   | 0.3540   |              |
|                     |                       |       | 20    | $A \rightarrow B \rightarrow$ | 0.9066   | 0.2276   | *            |
|                     |                       |       | 33    | $\leftarrow A \leftarrow B$   | 0.1816   | 0.3376   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| NU-33865 & SA-33872 | NU-33865   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   | 1000-2000             | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   | 2000-3000             | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   | 3000-5000             | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   |                       | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   | 5000-10 000           | 86    | 37      | 0.3239   | 0.5415   |              |
|                     | SA-33872   |                       | 90    | 29      | 0.2275   | 0.4290   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| NU-33865 & SA-33872 | 0-50                  | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 1000-2000             | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 2000-3000             | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 3000-5000             | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 5000-10 000           | 72    | 10    | A → ← B | 0.0687   | 0.2406   | *            |
|                     |                       |       | 29    | ← A B → | 0.2888   | 0.5250   | *            |
|                     |                       |       | 20    | A → B → | 0.1786   | 0.3959   |              |
|                     |                       |       | 13    | ← A ← B | 0.0998   | 0.2889   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| KW-36716 & SR-34310 | KW-36716   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | SR-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | SR-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | SR-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 200-500               | 1     | 0       | 0        | 0.9750   |              |
|                     | SR-34310   |                       | 1     | 0       | 0        | 0.9750   |              |
|                     | KW-36716   | 500-1000              | 9     | 4       | 0.1370   | 0.7880   |              |
|                     | SR-34310   |                       | 10    | 6       | 0.2624   | 0.8784   |              |
|                     | KW-36716   | 1000-2000             | 10    | 6       | 0.2624   | 0.8784   |              |
|                     | SR-34310   |                       | 15    | 6       | 0.1634   | 0.6771   |              |
|                     | KW-36716   | 2000-3000             | 79    | 34      | 0.3194   | 0.5467   |              |
|                     | SR-34310   |                       | 83    | 42      | 0.3940   | 0.6176   |              |
|                     | KW-36716   | 3000-5000             | 187   | 97      | 0.4446   | 0.5922   |              |
|                     | SR-34310   |                       | 204   | 85      | 0.3482   | 0.4876   | *            |
|                     | KW-36716   | 5000-10 000           | 1544  | 766     | 0.4709   | 0.5214   |              |
|                     | SR-34310   |                       | 1473  | 691     | 0.4434   | 0.4950   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| KW-36716 & SR-34310 | 0-50                  | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 200-500               | 1     | 0     | A → ← B | 0        | 0.9750   |              |
|                     |                       |       | 1     | ← A B → | 0.0250   | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 0.9750   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.9750   |              |
|                     | 500-1000              | 6     | 1     | A → ← B | 0.0042   | 0.6412   |              |
|                     |                       |       | 2     | ← A B → | 0.0433   | 0.7772   |              |
|                     |                       |       | 1     | A → B → | 0.0042   | 0.6412   |              |
|                     |                       |       | 2     | ← A ← B | 0.0433   | 0.7772   |              |
|                     | 1000-2000             | 9     | 3     | A → ← B | 0.0749   | 0.7007   |              |
|                     |                       |       | 2     | ← A B → | 0.0281   | 0.6001   |              |
|                     |                       |       | 2     | A → B → | 0.0281   | 0.6001   |              |
|                     |                       |       | 2     | ← A ← B | 0.0281   | 0.6001   |              |
|                     | 2000-3000             | 64    | 14    | A → ← B | 0.1251   | 0.3397   |              |
|                     |                       |       | 20    | ← A B → | 0.2024   | 0.4406   |              |
|                     |                       |       | 14    | A → B → | 0.1251   | 0.3397   |              |
|                     |                       |       | 16    | ← A ← B | 0.1502   | 0.3740   |              |
|                     | 3000-5000             | 139   | 29    | A → ← B | 0.1444   | 0.2857   |              |
|                     |                       |       | 36    | ← A B → | 0.1885   | 0.3401   |              |
|                     |                       |       | 41    | A → B → | 0.2207   | 0.3782   |              |
|                     |                       |       | 33    | ← A ← B | 0.1694   | 0.3169   |              |
|                     | 5000-10 000           | 1116  | 241   | A → ← B | 0.1921   | 0.2413   | *            |
|                     |                       |       | 294   | ← A B → | 0.2378   | 0.2903   |              |
|                     |                       |       | 309   | A → B → | 0.2508   | 0.3041   | *            |
|                     |                       |       | 272   | ← A ← B | 0.2188   | 0.2700   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| SW-33950 & SR-34310 | SW-33950   | 0-50                  | 1     | 0       | 0        | 0.9750   |              |
|                     | SR-34310   |                       | 1     | 0       | 0        | 0.9750   |              |
|                     | SW-33950   | 50-100                | 4     | 2       | 0.0676   | 0.9324   |              |
|                     | SR-34310   |                       | 4     | 2       | 0.0676   | 0.9324   |              |
|                     | SW-33950   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | SR-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | SW-33950   | 200-500               | 2     | 2       | 0.1581   | 1        |              |
|                     | SR-34310   |                       | 2     | 0       | 0        | 0.8419   |              |
|                     | SW-33950   | 500-1000              | 23    | 12      | 0.3059   | 0.7318   |              |
|                     | SR-34310   |                       | 19    | 7       | 0.1629   | 0.6164   |              |
|                     | SW-33950   | 1000-2000             | 104   | 60      | 0.4761   | 0.6732   |              |
|                     | SR-34310   |                       | 99    | 46      | 0.3638   | 0.5677   |              |
|                     | SW-33950   | 2000-3000             | 141   | 71      | 0.4182   | 0.5888   |              |
|                     | SR-34310   |                       | 152   | 78      | 0.4308   | 0.5950   |              |
|                     | SW-33950   | 3000-5000             | 614   | 288     | 0.4290   | 0.5094   |              |
|                     | SR-34310   |                       | 633   | 306     | 0.4438   | 0.5231   |              |
|                     | SW-33950   | 5000-10 000           | 2010  | 1112    | 0.5312   | 0.5751   | *            |
|                     | SR-34310   |                       | 2066  | 1032    | 0.4777   | 0.5213   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| SW-33950 & SR-34310 | 0-50                  | 1     | 0     | A → ← B | 0        | 0.9750   |              |
|                     |                       |       | 1     | ← A B → | 0.0250   | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 0.9750   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.9750   |              |
|                     | 50-100                | 4     | 1     | A → ← B | 0.0063   | 0.8059   |              |
|                     |                       |       | 1     | ← A B → | 0.0063   | 0.8059   |              |
|                     |                       |       | 1     | A → B → | 0.0063   | 0.8059   |              |
|                     |                       |       | 1     | ← A ← B | 0.0063   | 0.8059   |              |
|                     | 100-200               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 200-500               | 2     | 0     | A → ← B | 0        | 0.8419   |              |
|                     |                       |       | 0     | ← A B → | 0        | 0.8419   |              |
|                     |                       |       | 2     | A → B → | 0.1581   | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.8419   |              |
|                     | 500-1000              | 16    | 1     | A → ← B | 0.0016   | 0.3023   |              |
|                     |                       |       | 4     | ← A B → | 0.0727   | 0.5238   |              |
|                     |                       |       | 7     | A → B → | 0.1975   | 0.7012   |              |
|                     |                       |       | 4     | ← A ← B | 0.0727   | 0.5238   |              |
|                     | 1000-2000             | 84    | 23    | A → ← B | 0.1821   | 0.3820   |              |
|                     |                       |       | 18    | ← A B → | 0.1322   | 0.3174   |              |
|                     |                       |       | 25    | A → B → | 0.2027   | 0.4073   |              |
|                     |                       |       | 18    | ← A ← B | 0.1322   | 0.3174   |              |
|                     | 2000-3000             | 108   | 27    | A → ← B | 0.1717   | 0.3425   |              |
|                     |                       |       | 26    | ← A B → | 0.1637   | 0.3325   |              |
|                     |                       |       | 29    | A → B → | 0.1878   | 0.3624   |              |
|                     |                       |       | 26    | ← A ← B | 0.1637   | 0.3325   |              |
|                     | 3000-5000             | 456   | 101   | A → ← B | 0.1842   | 0.2624   |              |
|                     |                       |       | 125   | ← A B → | 0.2337   | 0.3175   |              |
|                     |                       |       | 109   | A → B → | 0.2006   | 0.2809   |              |
|                     |                       |       | 121   | ← A ← B | 0.2254   | 0.3084   |              |
|                     | 5000-10 000           | 1528  | 413   | A → ← B | 0.2482   | 0.2933   |              |
|                     |                       |       | 351   | ← A B → | 0.2088   | 0.2516   |              |
|                     |                       |       | 432   | A → B → | 0.2603   | 0.3060   | *            |
|                     |                       |       | 332   | ← A ← B | 0.1968   | 0.2388   | *            |

**Supplementary Table 5.2.** Calculated 95% confidence intervals of (a) movement towards the other individual over total number of towards/away movements and (b) four types of simultaneous movements over their total sum between lion individuals for each dyad. Males are underlined. An asterisk denotes significance between random and individual movements ( $a = 0.5$ ,  $b = 0.25$ ).

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| MO-33866 & NU-33865 | MO-33866   | 0-50                  | 2172  | 1305    | 0.5799   | 0.6215   | *            |
|                     | NU-33865   |                       | 2201  | 1225    | 0.5355   | 0.5775   | *            |
|                     | MO-33866   | 50-100                | 154   | 95      | 0.5352   | 0.6940   | *            |
|                     | NU-33865   |                       | 169   | 85      | 0.4252   | 0.5807   |              |
|                     | MO-33866   | 100-200               | 52    | 38      | 0.5898   | 0.8443   | *            |
|                     | NU-33865   |                       | 50    | 29      | 0.4321   | 0.7181   |              |
|                     | MO-33866   | 200-500               | 54    | 34      | 0.4874   | 0.7571   |              |
|                     | NU-33865   |                       | 45    | 25      | 0.4000   | 0.7036   |              |
|                     | MO-33866   | 500-1000              | 49    | 25      | 0.3634   | 0.6558   |              |
|                     | NU-33865   |                       | 44    | 23      | 0.3669   | 0.6754   |              |
|                     | MO-33866   | 1000-2000             | 126   | 62      | 0.4019   | 0.5826   |              |
|                     | NU-33865   |                       | 135   | 82      | 0.5197   | 0.6903   | *            |
|                     | MO-33866   | 2000-3000             | 136   | 76      | 0.4712   | 0.6438   |              |
|                     | NU-33865   |                       | 135   | 85      | 0.5423   | 0.7111   | *            |
|                     | MO-33866   | 3000-5000             | 263   | 128     | 0.4248   | 0.5489   |              |
|                     | NU-33865   |                       | 276   | 161     | 0.5227   | 0.6421   | *            |
|                     | MO-33866   | 5000-10 000           | 718   | 367     | 0.4739   | 0.5483   |              |
|                     | NU-33865   |                       | 697   | 377     | 0.5031   | 0.5784   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| MO-33866 & NU-33865 | 0-50                  | 1741  | 460   | A → ← B | 0.2436   | 0.2856   |              |
|                     |                       |       | 221   | ← A B → | 0.1117   | 0.1435   | *            |
|                     |                       |       | 576   | A → B → | 0.3088   | 0.3535   | *            |
|                     |                       |       | 484   | ← A ← B | 0.2571   | 0.2997   | *            |
|                     | 50-100                | 134   | 36    | A → ← B | 0.1958   | 0.3520   |              |
|                     |                       |       | 21    | ← A B → | 0.0997   | 0.2295   | *            |
|                     |                       |       | 48    | A → B → | 0.2773   | 0.4456   | *            |
|                     |                       |       | 29    | ← A ← B | 0.1500   | 0.2958   |              |
|                     | 100-200               | 42    | 14    | A → ← B | 0.1957   | 0.4955   |              |
|                     |                       |       | 3     | ← A B → | 0.0150   | 0.1948   | *            |
|                     |                       |       | 15    | A → B → | 0.2155   | 0.5197   |              |
|                     |                       |       | 10    | ← A ← B | 0.1205   | 0.3945   |              |
|                     | 200-500               | 41    | 13    | A → ← B | 0.1808   | 0.4809   |              |
|                     |                       |       | 7     | ← A B → | 0.0715   | 0.3206   |              |
|                     |                       |       | 11    | A → B → | 0.1422   | 0.4294   |              |
|                     |                       |       | 10    | ← A ← B | 0.1236   | 0.4030   |              |
|                     | 500-1000              | 36    | 10    | A → ← B | 0.1420   | 0.4519   |              |
|                     |                       |       | 8     | ← A B → | 0.1012   | 0.3915   |              |
|                     |                       |       | 8     | A → B → | 0.1012   | 0.3915   |              |
|                     |                       |       | 10    | ← A ← B | 0.1420   | 0.4519   |              |
|                     | 1000-2000             | 106   | 38    | A → ← B | 0.2677   | 0.4574   | *            |
|                     |                       |       | 27    | ← A B → | 0.1751   | 0.3486   |              |
|                     |                       |       | 10    | A → B → | 0.0462   | 0.1667   | *            |
|                     |                       |       | 31    | ← A ← B | 0.2081   | 0.3887   |              |
|                     | 2000-3000             | 102   | 33    | A → ← B | 0.2342   | 0.4234   |              |
|                     |                       |       | 14    | ← A B → | 0.0771   | 0.2196   | *            |
|                     |                       |       | 24    | A → B → | 0.1569   | 0.3296   |              |
|                     |                       |       | 31    | ← A ← B | 0.2167   | 0.4029   |              |
|                     | 3000-5000             | 204   | 57    | A → ← B | 0.2190   | 0.3464   |              |
|                     |                       |       | 43    | ← A B → | 0.1569   | 0.2732   |              |
|                     |                       |       | 43    | A → B → | 0.1569   | 0.2732   |              |
|                     |                       |       | 61    | ← A ← B | 0.2371   | 0.3669   |              |
|                     | 5000-10 000           | 549   | 153   | A → ← B | 0.2416   | 0.3182   |              |
|                     |                       |       | 124   | ← A B → | 0.1915   | 0.2632   |              |
|                     |                       |       | 125   | A → B → | 0.1932   | 0.2651   |              |
|                     |                       |       | 147   | ← A ← B | 0.2311   | 0.3069   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| OJ-33867 & OK-33863 | OJ-33867   | 0-50                  | 116   | 73      | 0.5347   | 0.7171   | *            |
|                     | OK-33863   |                       | 118   | 67      | 0.4734   | 0.6587   |              |
|                     | OJ-33867   | 50-100                | 29    | 24      | 0.6423   | 0.9415   | *            |
|                     | OK-33863   |                       | 24    | 4       | 0.0474   | 0.3738   | *            |
|                     | OJ-33867   | 100-200               | 19    | 17      | 0.6686   | 0.9870   | *            |
|                     | OK-33863   |                       | 20    | 6       | 0.1189   | 0.5428   |              |
|                     | OJ-33867   | 200-500               | 51    | 33      | 0.5007   | 0.7757   | *            |
|                     | OK-33863   |                       | 56    | 27      | 0.3466   | 0.6197   |              |
|                     | OJ-33867   | 500-1000              | 35    | 22      | 0.4492   | 0.7853   |              |
|                     | OK-33863   |                       | 29    | 14      | 0.2945   | 0.6747   |              |
|                     | OJ-33867   | 1000-2000             | 87    | 51      | 0.4755   | 0.6908   |              |
|                     | OK-33863   |                       | 90    | 43      | 0.3713   | 0.5857   |              |
|                     | OJ-33867   | 2000-3000             | 145   | 76      | 0.4396   | 0.6076   |              |
|                     | OK-33863   |                       | 159   | 86      | 0.4601   | 0.6201   |              |
|                     | OJ-33867   | 3000-5000             | 108   | 59      | 0.4476   | 0.6424   |              |
|                     | OK-33863   |                       | 105   | 65      | 0.5191   | 0.7121   | *            |
|                     | OJ-33867   | 5000-10 000           | 331   | 170     | 0.4583   | 0.5686   |              |
|                     | OK-33863   |                       | 317   | 158     | 0.4420   | 0.5548   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| OJ-33867 & OK-33863 | 0-50                  | 102   | 25    | A → ← B | 0.1653   | 0.3402   |              |
|                     |                       |       | 5     | ← A B → | 0.0161   | 0.1107   | *            |
|                     |                       |       | 39    | A → B → | 0.2879   | 0.4839   | *            |
|                     |                       |       | 33    | ← A ← B | 0.2342   | 0.4234   |              |
|                     | 50-100                | 22    | 2     | A → ← B | 0.0112   | 0.2916   |              |
|                     |                       |       | 2     | ← A B → | 0.0112   | 0.2916   |              |
|                     |                       |       | 17    | A → B → | 0.5463   | 0.9218   | *            |
|                     |                       |       | 1     | ← A ← B | 0.0012   | 0.2284   | *            |
|                     | 100-200               | 17    | 3     | A → ← B | 0.0380   | 0.4343   |              |
|                     |                       |       | 0     | ← A B → | 0        | 0.1951   | *            |
|                     |                       |       | 13    | A → B → | 0.5010   | 0.9319   | *            |
|                     |                       |       | 1     | ← A ← B | 0.0015   | 0.2869   |              |
|                     | 200-500               | 42    | 10    | A → ← B | 0.1205   | 0.3945   |              |
|                     |                       |       | 5     | ← A B → | 0.0398   | 0.2563   |              |
|                     |                       |       | 18    | A → B → | 0.2772   | 0.5904   | *            |
|                     |                       |       | 9     | ← A ← B | 0.1030   | 0.3681   |              |
|                     | 500-1000              | 24    | 8     | A → ← B | 0.1563   | 0.5532   |              |
|                     |                       |       | 4     | ← A B → | 0.0474   | 0.3738   |              |
|                     |                       |       | 8     | A → B → | 0.1563   | 0.5532   |              |
|                     |                       |       | 4     | ← A ← B | 0.0474   | 0.3738   |              |
|                     | 1000-2000             | 76    | 24    | A → ← B | 0.2139   | 0.4325   |              |
|                     |                       |       | 18    | ← A B → | 0.1468   | 0.3482   |              |
|                     |                       |       | 22    | A → B → | 0.1911   | 0.4049   |              |
|                     |                       |       | 12    | ← A ← B | 0.0843   | 0.2596   |              |
|                     | 2000-3000             | 118   | 32    | A → ← B | 0.1935   | 0.3608   |              |
|                     |                       |       | 27    | ← A B → | 0.1565   | 0.3152   |              |
|                     |                       |       | 29    | A → B → | 0.1712   | 0.3335   |              |
|                     |                       |       | 30    | ← A ← B | 0.1786   | 0.3426   |              |
|                     | 3000-5000             | 91    | 28    | A → ← B | 0.2151   | 0.4132   |              |
|                     |                       |       | 17    | ← A B → | 0.1128   | 0.2822   |              |
|                     |                       |       | 21    | A → B → | 0.1489   | 0.3309   |              |
|                     |                       |       | 25    | ← A ← B | 0.1863   | 0.3783   |              |
|                     | 5000-10 000           | 251   | 66    | A → ← B | 0.2096   | 0.3220   |              |
|                     |                       |       | 59    | ← A B → | 0.1840   | 0.2925   |              |
|                     |                       |       | 65    | A → B → | 0.2059   | 0.3178   |              |
|                     |                       |       | 61    | ← A ← B | 0.1913   | 0.3009   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| SU-33868 & RE-33864 | SU-33868   | 0-50                  | 1020  | 678     | 0.6348   | 0.6937   | *            |
|                     | RE-33864   |                       | 1030  | 485     | 0.44     | 0.5019   |              |
|                     | SU-33868   | 50-100                | 206   | 173     | 0.7824   | 0.8871   | *            |
|                     | RE-33864   |                       | 203   | 36      | 0.1274   | 0.237    | *            |
|                     | SU-33868   | 100-200               | 163   | 151     | 0.8749   | 0.9614   | *            |
|                     | RE-33864   |                       | 164   | 23      | 0.091    | 0.203    | *            |
|                     | SU-33868   | 200-500               | 112   | 95      | 0.7681   | 0.909    | *            |
|                     | RE-33864   |                       | 100   | 20      | 0.1267   | 0.2918   | *            |
|                     | SU-33868   | 500-1000              | 109   | 68      | 0.526    | 0.7148   | *            |
|                     | RE-33864   |                       | 110   | 42      | 0.2908   | 0.4793   | *            |
|                     | SU-33868   | 1000-2000             | 180   | 106     | 0.5133   | 0.6615   | *            |
|                     | RE-33864   |                       | 200   | 71      | 0.2888   | 0.4256   | *            |
|                     | SU-33868   | 2000-3000             | 157   | 90      | 0.4919   | 0.6517   |              |
|                     | RE-33864   |                       | 181   | 68      | 0.3049   | 0.4506   | *            |
|                     | SU-33868   | 3000-5000             | 478   | 244     | 0.4647   | 0.5561   |              |
|                     | RE-33864   |                       | 478   | 235     | 0.4459   | 0.5374   |              |
|                     | SU-33868   | 5000-10 000           | 1268  | 642     | 0.4784   | 0.5342   |              |
|                     | RE-33864   |                       | 1250  | 641     | 0.4847   | 0.5409   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| SU-33868 & RE-33864 | 0-50                  | 841   | 211   | A → ← B | 0.2219   | 0.2816   |              |
|                     |                       |       | 106   | ← A B → | 0.1044   | 0.1504   | *            |
|                     |                       |       | 356   | A → B → | 0.3896   | 0.4575   | *            |
|                     |                       |       | 168   | ← A ← B | 0.1732   | 0.2284   | *            |
|                     | 50-100                | 188   | 13    | A → ← B | 0.0373   | 0.1153   | *            |
|                     |                       |       | 10    | ← A B → | 0.0258   | 0.0956   | *            |
|                     |                       |       | 147   | A → B → | 0.7160   | 0.8387   | *            |
|                     |                       |       | 18    | ← A ← B | 0.0577   | 0.1471   | *            |
|                     | 100-200               | 152   | 14    | A → ← B | 0.0513   | 0.1497   | *            |
|                     |                       |       | 7     | ← A B → | 0.0187   | 0.0926   | *            |
|                     |                       |       | 126   | A → B → | 0.7595   | 0.8851   | *            |
|                     |                       |       | 5     | ← A ← B | 0.0108   | 0.0751   | *            |
|                     | 200-500               | 93    | 14    | A → ← B | 0.0848   | 0.2397   | *            |
|                     |                       |       | 11    | ← A B → | 0.0605   | 0.2018   | *            |
|                     |                       |       | 64    | A → B → | 0.5837   | 0.7802   | *            |
|                     |                       |       | 4     | ← A ← B | 0.0118   | 0.1065   | *            |
|                     | 500-1000              | 89    | 20    | A → ← B | 0.1430   | 0.3255   |              |
|                     |                       |       | 18    | ← A B → | 0.1245   | 0.3007   |              |
|                     |                       |       | 38    | A → B → | 0.3226   | 0.5363   | *            |
|                     |                       |       | 13    | ← A ← B | 0.0801   | 0.2368   | *            |
|                     | 1000-2000             | 139   | 24    | A → ← B | 0.1139   | 0.2459   | *            |
|                     |                       |       | 31    | ← A B → | 0.1568   | 0.3014   |              |
|                     |                       |       | 62    | A → B → | 0.3618   | 0.5327   | *            |
|                     |                       |       | 22    | ← A ← B | 0.1019   | 0.2298   | *            |
|                     | 2000-3000             | 130   | 24    | A → ← B | 0.1220   | 0.2621   |              |
|                     |                       |       | 30    | ← A B → | 0.1614   | 0.3128   |              |
|                     |                       |       | 53    | A → B → | 0.3224   | 0.4973   | *            |
|                     |                       |       | 23    | ← A ← B | 0.1156   | 0.2535   |              |
|                     | 3000-5000             | 350   | 90    | A → ← B | 0.2122   | 0.3063   |              |
|                     |                       |       | 97    | ← A B → | 0.2309   | 0.3272   |              |
|                     |                       |       | 82    | A → B → | 0.1909   | 0.2822   |              |
|                     |                       |       | 81    | ← A ← B | 0.1883   | 0.2792   |              |
|                     | 5000-10 000           | 956   | 245   | A → ← B | 0.2289   | 0.2852   |              |
|                     |                       |       | 241   | ← A B → | 0.2248   | 0.2809   |              |
|                     |                       |       | 233   | A → B → | 0.2168   | 0.2722   |              |
|                     |                       |       | 237   | ← A ← B | 0.2208   | 0.2766   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| SU-33868 & MO-33866 | SU-33868   | 0-50                  | 24    | 12      | 0.2912   | 0.7088   |              |
|                     | MO-33866   |                       | 27    | 15      | 0.3533   | 0.7452   |              |
|                     | SU-33868   | 50-100                | 1     | 0       | 0        | 0.9750   |              |
|                     | MO-33866   |                       | 1     | 0       | 0        | 0.9750   |              |
|                     | SU-33868   | 100-200               | 1     | 0       | 0        | 0.9750   |              |
|                     | MO-33866   |                       | 1     | 0       | 0        | 0.9750   |              |
|                     | SU-33868   | 200-500               | 1     | 1       | 0.0250   | 1        |              |
|                     | MO-33866   |                       | 1     | 0       | 0        | 0.9750   |              |
|                     | SU-33868   | 500-1000              | 8     | 3       | 0.0852   | 0.7551   |              |
|                     | MO-33866   |                       | 8     | 1       | 0.0032   | 0.5265   |              |
|                     | SU-33868   | 1000-2000             | 21    | 9       | 0.2182   | 0.6598   |              |
|                     | MO-33866   |                       | 22    | 13      | 0.3635   | 0.7929   |              |
|                     | SU-33868   | 2000-3000             | 52    | 31      | 0.4510   | 0.7299   |              |
|                     | MO-33866   |                       | 51    | 23      | 0.3113   | 0.5966   |              |
|                     | SU-33868   | 3000-5000             | 56    | 39      | 0.5590   | 0.8122   | *            |
|                     | MO-33866   |                       | 56    | 31      | 0.4147   | 0.6866   |              |
|                     | SU-33868   | 5000-10 000           | 321   | 184     | 0.5171   | 0.6280   | *            |
|                     | MO-33866   |                       | 320   | 151     | 0.4161   | 0.5282   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| SU-33868 & MO-33866 | 0-50                  | 22    | 8     | A → ← B | 0.1720   | 0.5934   |              |
|                     |                       |       | 7     | ← A B → | 0.1386   | 0.5487   |              |
|                     |                       |       | 3     | A → B → | 0.0291   | 0.3491   |              |
|                     |                       |       | 4     | ← A ← B | 0.0519   | 0.4028   |              |
|                     | 50-100                | 1     | 0     | A → ← B | 0        | 0.9750   |              |
|                     |                       |       | 1     | ← A B → | 0.0250   | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 0.9750   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.9750   |              |
|                     | 100-200               | 1     | 0     | A → ← B | 0        | 0.9750   |              |
|                     |                       |       | 1     | ← A B → | 0.0250   | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 0.9750   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.9750   |              |
|                     | 200-500               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 500-1000              | 7     | 0     | A → ← B | 0        | 0.4096   |              |
|                     |                       |       | 4     | ← A B → | 0.1841   | 0.9010   |              |
|                     |                       |       | 2     | A → B → | 0.0367   | 0.7096   |              |
|                     |                       |       | 1     | ← A ← B | 0.0036   | 0.5787   |              |
|                     | 1000-2000             | 16    | 4     | A → ← B | 0.0727   | 0.5238   |              |
|                     |                       |       | 3     | ← A B → | 0.0405   | 0.4565   |              |
|                     |                       |       | 3     | A → B → | 0.0405   | 0.4565   |              |
|                     |                       |       | 6     | ← A ← B | 0.1520   | 0.6457   |              |
|                     | 2000-3000             | 43    | 15    | A → ← B | 0.2101   | 0.5093   |              |
|                     |                       |       | 12    | ← A B → | 0.1533   | 0.4367   |              |
|                     |                       |       | 11    | A → B → | 0.1352   | 0.4117   |              |
|                     |                       |       | 5     | ← A ← B | 0.0389   | 0.2508   |              |
|                     | 3000-5000             | 47    | 18    | A → ← B | 0.2451   | 0.5362   |              |
|                     |                       |       | 7     | ← A B → | 0.0620   | 0.2831   |              |
|                     |                       |       | 16    | A → B → | 0.2086   | 0.4931   |              |
|                     |                       |       | 6     | ← A ← B | 0.0483   | 0.2574   |              |
|                     | 5000-10 000           | 254   | 58    | A → ← B | 0.1782   | 0.2850   |              |
|                     |                       |       | 57    | ← A B → | 0.1746   | 0.2808   |              |
|                     |                       |       | 78    | A → B → | 0.2509   | 0.3678   | *            |
|                     |                       |       | 61    | ← A ← B | 0.1890   | 0.2975   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| G2-35678 & LU-34308 | G2-35678   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | LU-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | G2-35678   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | LU-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | G2-35678   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | LU-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | G2-35678   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | LU-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | G2-35678   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | LU-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | G2-35678   | 1000-2000             | 6     | 4       | 0.2228   | 0.9567   |              |
|                     | LU-34308   |                       | 6     | 2       | 0.0433   | 0.7772   |              |
|                     | G2-35678   | 2000-3000             | 71    | 36      | 0.3856   | 0.6278   |              |
|                     | LU-34308   |                       | 81    | 38      | 0.3573   | 0.5833   |              |
|                     | G2-35678   | 3000-5000             | 138   | 76      | 0.4638   | 0.6354   |              |
|                     | LU-34308   |                       | 163   | 71      | 0.3582   | 0.5154   |              |
|                     | G2-35678   | 5000-10 000           | 1533  | 818     | 0.5083   | 0.5588   | *            |
|                     | LU-34308   |                       | 1539  | 771     | 0.4757   | 0.5263   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| G2-35678 & LU-34308 | 0-50                  | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 1000-2000             | 5     | 1     | A → ← B | 0.0051   | 0.7164   |              |
|                     |                       |       | 2     | ← A B → | 0.0527   | 0.8534   |              |
|                     |                       |       | 2     | A → B → | 0.0527   | 0.8534   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.5218   |              |
|                     | 2000-3000             | 51    | 10    | A → ← B | 0.0982   | 0.3312   |              |
|                     |                       |       | 12    | ← A B → | 0.1279   | 0.3749   |              |
|                     |                       |       | 17    | A → B → | 0.2076   | 0.4792   |              |
|                     |                       |       | 12    | ← A ← B | 0.1279   | 0.3749   |              |
|                     | 3000-5000             | 113   | 26    | A → ← B | 0.1561   | 0.3187   |              |
|                     |                       |       | 28    | ← A B → | 0.1714   | 0.3378   |              |
|                     |                       |       | 38    | A → B → | 0.2501   | 0.4312   | *            |
|                     |                       |       | 21    | ← A ← B | 0.1189   | 0.2699   |              |
|                     | 5000-10 000           | 1178  | 330   | A → ← B | 0.2546   | 0.3067   | *            |
|                     |                       |       | 280   | ← A B → | 0.2136   | 0.2631   |              |
|                     |                       |       | 315   | A → B → | 0.2423   | 0.2937   |              |
|                     |                       |       | 253   | ← A ← B | 0.1916   | 0.2393   | *            |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| OF-34309 & OM-34308 | OF-34309   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 1000-2000             | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 2000-3000             | 0     | 0       | 0        | 1        |              |
|                     | OM-34308   |                       | 0     | 0       | 0        | 1        |              |
|                     | OF-34309   | 3000-5000             | 20    | 9       | 0.2306   | 0.6847   |              |
|                     | OM-34308   |                       | 27    | 13      | 0.2867   | 0.6805   |              |
|                     | OF-34309   | 5000-10 000           | 150   | 78      | 0.4370   | 0.6022   |              |
|                     | OM-34308   |                       | 134   | 50      | 0.2912   | 0.4608   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| OF-34309 & OM-34308 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 2000-3000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 3000-5000             | 18    | 5     | $A \rightarrow \leftarrow B$  | 0.0969   | 0.5348   |              |
|                     |                       |       | 6     | $\leftarrow A B \rightarrow$  | 0.1334   | 0.5901   |              |
|                     |                       |       | 3     | $A \rightarrow B \rightarrow$ | 0.0358   | 0.4142   |              |
|                     |                       |       | 4     | $\leftarrow A \leftarrow B$   | 0.0641   | 0.4764   |              |
|                     | 5000-10 000           | 103   | 23    | $A \rightarrow \leftarrow B$  | 0.1471   | 0.3160   |              |
|                     |                       |       | 37    | $\leftarrow A B \rightarrow$  | 0.2670   | 0.4597   | *            |
|                     |                       |       | 27    | $A \rightarrow B \rightarrow$ | 0.1804   | 0.3580   |              |
|                     |                       |       | 16    | $\leftarrow A \leftarrow B$   | 0.0915   | 0.2400   | *            |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| MO-33866 & RE-33864 | MO-33866   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   |                       | 0     | 0       | 0        | 1        |              |
|                     | MO-33866   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   |                       | 0     | 0       | 0        | 1        |              |
|                     | MO-33866   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   |                       | 0     | 0       | 0        | 1        |              |
|                     | MO-33866   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   |                       | 0     | 0       | 0        | 1        |              |
|                     | MO-33866   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   |                       | 0     | 0       | 0        | 1        |              |
|                     | MO-33866   | 1000-2000             | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   |                       | 0     | 0       | 0        | 1        |              |
|                     | MO-33866   | 2000-3000             | 0     | 0       | 0        | 1        |              |
|                     | RE-33864   |                       | 0     | 0       | 0        | 1        |              |
|                     | MO-33866   | 3000-5000             | 2     | 0       | 0        | 0.8419   |              |
|                     | RE-33864   |                       | 1     | 0       | 0        | 0.9750   |              |
|                     | MO-33866   | 5000-10 000           | 463   | 235     | 0.4610   | 0.5540   |              |
|                     | RE-33864   |                       | 461   | 223     | 0.4373   | 0.5304   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| MO-33866 & RE-33864 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 2000-3000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 3000-5000             | 1     | 0     | $A \rightarrow \leftarrow B$  | 0        | 0.9750   |              |
|                     |                       |       | 1     | $\leftarrow A B \rightarrow$  | 0.0250   | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 0.9750   |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 0.9750   |              |
|                     | 5000-10 000           | 353   | 87    | $A \rightarrow \leftarrow B$  | 0.2024   | 0.2948   |              |
|                     |                       |       | 90    | $\leftarrow A B \rightarrow$  | 0.2103   | 0.3038   |              |
|                     |                       |       | 95    | $A \rightarrow B \rightarrow$ | 0.2235   | 0.3186   |              |
|                     |                       |       | 81    | $\leftarrow A \leftarrow B$   | 0.1866   | 0.2769   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| SU-33868 & NU-33865 | SU-33868   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   |                       | 0     | 0       | 0        | 1        |              |
|                     | SU-33868   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   |                       | 0     | 0       | 0        | 1        |              |
|                     | SU-33868   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   |                       | 0     | 0       | 0        | 1        |              |
|                     | SU-33868   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   |                       | 0     | 0       | 0        | 1        |              |
|                     | SU-33868   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   |                       | 0     | 0       | 0        | 1        |              |
|                     | SU-33868   | 1000-2000             | 0     | 0       | 0        | 1        |              |
|                     | NU-33865   |                       | 0     | 0       | 0        | 1        |              |
|                     | SU-33868   | 2000-3000             | 15    | 8       | 0.2659   | 0.7873   |              |
|                     | NU-33865   |                       | 17    | 6       | 0.1421   | 0.6167   |              |
|                     | SU-33868   | 3000-5000             | 0     | 0       | 0        | 0        |              |
|                     | NU-33865   |                       | 0     | 0       | 0        | 0        |              |
|                     | SU-33868   | 5000-10 000           | 157   | 75      | 0.3975   | 0.5588   |              |
|                     | NU-33865   |                       | 155   | 85      | 0.4665   | 0.6283   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| SU-33868 & NU-33865 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 2000-3000             | 13    | 3     | $A \rightarrow \leftarrow B$  | 0.0504   | 0.5381   |              |
|                     |                       |       | 3     | $\leftarrow A B \rightarrow$  | 0.0504   | 0.5381   |              |
|                     |                       |       | 4     | $A \rightarrow B \rightarrow$ | 0.0909   | 0.6143   |              |
|                     |                       |       | 3     | $\leftarrow A \leftarrow B$   | 0.0504   | 0.5381   |              |
|                     | 3000-5000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 5000-10 000           | 119   | 31    | $A \rightarrow \leftarrow B$  | 0.1844   | 0.3489   |              |
|                     |                       |       | 27    | $\leftarrow A B \rightarrow$  | 0.1552   | 0.3127   |              |
|                     |                       |       | 26    | $A \rightarrow B \rightarrow$ | 0.1480   | 0.3035   |              |
|                     |                       |       | 35    | $\leftarrow A \leftarrow B$   | 0.2142   | 0.3846   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| KW-36716 & SW-33950 | KW-36716   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | SW-33950   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | SW-33950   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | SW-33950   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | SW-33950   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | SW-33950   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 1000-2000             | 0     | 0       | 0        | 1        |              |
|                     | SW-33950   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 2000-3000             | 0     | 0       | 0        | 1        |              |
|                     | SW-33950   |                       | 0     | 0       | 0        | 1        |              |
|                     | KW-36716   | 3000-5000             | 13    | 5       | 0.1386   | 0.6842   |              |
|                     | SW-33950   |                       | 18    | 4       | 0.0641   | 0.4764   | *            |
|                     | KW-36716   | 5000-10 000           | 828   | 382     | 0.4270   | 0.4960   | *            |
|                     | SW-33950   |                       | 877   | 430     | 0.4567   | 0.5239   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| KW-36716 & SW-33950 | 0-50                  | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 1000-2000             | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 2000-3000             | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 3000-5000             | 12    | 0     | A → ← B | 0        | 0.2646   |              |
|                     |                       |       | 4     | ← A B → | 0.0992   | 0.6511   |              |
|                     |                       |       | 5     | A → B → | 0.1517   | 0.7233   |              |
|                     |                       |       | 3     | ← A ← B | 0.0549   | 0.5719   |              |
|                     | 5000-10 000           | 631   | 147   | A → ← B | 0.2005   | 0.2679   |              |
|                     |                       |       | 174   | ← A B → | 0.2412   | 0.3124   |              |
|                     |                       |       | 144   | A → B → | 0.1960   | 0.2630   |              |
|                     |                       |       | 166   | ← A ← B | 0.2291   | 0.2993   |              |

**Supplementary Table 5.3.** Calculated 95% confidence intervals of (a) movement towards the other individual over total number of towards/away movements and (b) four types of simultaneous movements over their total sum between spotted hyena individuals for each dyad. Males are underlined. An asterisk denotes significance between random and individual movements ( $a = 0.5$ ,  $b = 0.25$ ).

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| SA-33872 & NE-33871 | SA-33872   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 1000-2000             | 6     | 0       | 0        | 0.4593   | *            |
|                     | NE-33871   |                       | 7     | 1       | 0.0036   | 0.5787   |              |
|                     | SA-33872   | 2000-3000             | 37    | 10      | 0.1379   | 0.4412   | *            |
|                     | NE-33871   |                       | 40    | 23      | 0.4089   | 0.7296   |              |
|                     | SA-33872   | 3000-5000             | 108   | 41      | 0.2880   | 0.4781   | *            |
|                     | NE-33871   |                       | 118   | 53      | 0.3575   | 0.5434   |              |
|                     | SA-33872   | 5000-10 000           | 810   | 350     | 0.3977   | 0.4670   | *            |
|                     | NE-33871   |                       | 767   | 445     | 0.5444   | 0.6154   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type    | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|---------|----------|----------|--------------|
| SA-33872 & NE-33871 | 0-50                  | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | A → ← B | 0        | 1        |              |
|                     |                       |       | 0     | ← A B → | 0        | 1        |              |
|                     |                       |       | 0     | A → B → | 0        | 1        |              |
|                     |                       |       | 0     | ← A ← B | 0        | 1        |              |
|                     | 1000-2000             | 4     | 0     | A → ← B | 0        | 0.6024   |              |
|                     |                       |       | 4     | ← A B → | 0.3976   | 1        | *            |
|                     |                       |       | 0     | A → B → | 0        | 0.6024   |              |
|                     |                       |       | 0     | ← A ← B | 0        | 0.6024   |              |
|                     | 2000-3000             | 28    | 1     | A → ← B | 0.0009   | 0.1835   | *            |
|                     |                       |       | 7     | ← A B → | 0.1069   | 0.4487   |              |
|                     |                       |       | 5     | A → B → | 0.0606   | 0.3689   |              |
|                     |                       |       | 15    | ← A ← B | 0.3387   | 0.7249   | *            |
|                     | 3000-5000             | 81    | 14    | A → ← B | 0.0978   | 0.2730   |              |
|                     |                       |       | 23    | ← A B → | 0.1893   | 0.3950   |              |
|                     |                       |       | 17    | A → B → | 0.1273   | 0.3146   |              |
|                     |                       |       | 27    | ← A ← B | 0.2324   | 0.4468   |              |
|                     | 5000-10 000           | 580   | 133   | A → ← B | 0.1957   | 0.2657   |              |
|                     |                       |       | 148   | ← A B → | 0.2202   | 0.2927   |              |
|                     |                       |       | 101   | A → B → | 0.1441   | 0.2075   | *            |
|                     |                       |       | 198   | ← A ← B | 0.3028   | 0.3816   | *            |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| GO-33869 & TJ-33870 | GO-33869   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | GO-33869   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | GO-33869   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | GO-33869   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | GO-33869   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | GO-33869   | 1000-2000             | 1     | 1       | 0.0250   | 1        |              |
|                     | TJ-33870   |                       | 1     | 1       | 0.0250   | 1        |              |
|                     | GO-33869   | 2000-3000             | 5     | 3       | 0.1466   | 0.9473   |              |
|                     | TJ-33870   |                       | 6     | 5       | 0.3588   | 0.9958   |              |
|                     | GO-33869   | 3000-5000             | 80    | 50      | 0.5096   | 0.7308   | *            |
|                     | TJ-33870   |                       | 80    | 33      | 0.3035   | 0.5282   |              |
|                     | GO-33869   | 5000-10 000           | 555   | 272     | 0.4477   | 0.5325   |              |
|                     | TJ-33870   |                       | 524   | 273     | 0.4773   | 0.5645   |              |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| GO-33869 & TJ-33870 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 1     | 1     | $A \rightarrow \leftarrow B$  | 0.0250   | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 0.9750   |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 0.9750   |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 0.9750   |              |
|                     | 2000-3000             | 4     | 1     | $A \rightarrow \leftarrow B$  | 0.0063   | 0.8059   |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 0.6024   |              |
|                     |                       |       | 1     | $A \rightarrow B \rightarrow$ | 0.0063   | 0.8059   |              |
|                     |                       |       | 2     | $\leftarrow A \leftarrow B$   | 0.0676   | 0.9324   |              |
|                     | 3000-5000             | 60    | 17    | $A \rightarrow \leftarrow B$  | 0.1745   | 0.4144   |              |
|                     |                       |       | 17    | $\leftarrow A B \rightarrow$  | 0.1745   | 0.4144   |              |
|                     |                       |       | 21    | $A \rightarrow B \rightarrow$ | 0.2313   | 0.4840   |              |
|                     |                       |       | 5     | $\leftarrow A \leftarrow B$   | 0.0276   | 0.1839   | *            |
|                     | 5000-10 000           | 401   | 94    | $A \rightarrow \leftarrow B$  | 0.1938   | 0.2790   |              |
|                     |                       |       | 96    | $\leftarrow A B \rightarrow$  | 0.1984   | 0.2843   |              |
|                     |                       |       | 102   | $A \rightarrow B \rightarrow$ | 0.2124   | 0.3000   |              |
|                     |                       |       | 109   | $\leftarrow A \leftarrow B$   | 0.2289   | 0.3182   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| SA-33872 & TJ-33870 | SA-33872   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 1000-2000             | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 2000-3000             | 0     | 0       | 0        | 1        |              |
|                     | TJ-33870   |                       | 0     | 0       | 0        | 1        |              |
|                     | SA-33872   | 3000-5000             | 4     | 3       | 0.1941   | 0.9937   |              |
|                     | TJ-33870   |                       | 7     | 5       | 0.2904   | 0.9633   |              |
|                     | SA-33872   | 5000-10 000           | 102   | 30      | 0.2080   | 0.3925   | *            |
|                     | TJ-33870   |                       | 94    | 36      | 0.2846   | 0.4890   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| SA-33872 & TJ-33870 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 2000-3000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 3000-5000             | 3     | 2     | $A \rightarrow \leftarrow B$  | 0.0943   | 0.9916   |              |
|                     |                       |       | 1     | $\leftarrow A B \rightarrow$  | 0.0084   | 0.9057   |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 0.7076   |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 0.7076   |              |
|                     | 5000-10 000           | 78    | 8     | $A \rightarrow \leftarrow B$  | 0.0453   | 0.1921   | *            |
|                     |                       |       | 34    | $\leftarrow A B \rightarrow$  | 0.3239   | 0.5530   | *            |
|                     |                       |       | 14    | $A \rightarrow B \rightarrow$ | 0.1017   | 0.2828   |              |
|                     |                       |       | 22    | $\leftarrow A \leftarrow B$   | 0.1859   | 0.3953   |              |

(a)

| Dyad                | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|---------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| NE-33871 & WO-34310 | NE-33871   | 0-50                  | 0     | 0       | 0        | 1        |              |
|                     | WO-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   | 50-100                | 0     | 0       | 0        | 1        |              |
|                     | WO-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   | 100-200               | 0     | 0       | 0        | 1        |              |
|                     | WO-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   | 200-500               | 0     | 0       | 0        | 1        |              |
|                     | WO-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   | 500-1000              | 0     | 0       | 0        | 1        |              |
|                     | WO-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   | 1000-2000             | 0     | 0       | 0        | 1        |              |
|                     | WO-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   | 2000-3000             | 0     | 0       | 0        | 1        |              |
|                     | WO-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   | 3000-5000             | 0     | 0       | 0        | 1        |              |
|                     | WO-34310   |                       | 0     | 0       | 0        | 1        |              |
|                     | NE-33871   | 5000-10 000           | 48    | 19      | 0.2577   | 0.5473   |              |
|                     | WO-34310   |                       | 39    | 28      | 0.5513   | 0.8500   | *            |

(b)

| Dyad                | Distance Interval (m) | Total | Count | Type                          | Lower CI | Upper CI | Significance |
|---------------------|-----------------------|-------|-------|-------------------------------|----------|----------|--------------|
| NE-33871 & WO-34310 | 0-50                  | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 50-100                | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 100-200               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 200-500               | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 500-1000              | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 1000-2000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 2000-3000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 3000-5000             | 0     | 0     | $A \rightarrow \leftarrow B$  | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A B \rightarrow$  | 0        | 1        |              |
|                     |                       |       | 0     | $A \rightarrow B \rightarrow$ | 0        | 1        |              |
|                     |                       |       | 0     | $\leftarrow A \leftarrow B$   | 0        | 1        |              |
|                     | 5000-10 000           | 33    | 13    | $A \rightarrow \leftarrow B$  | 0.2291   | 0.5786   |              |
|                     |                       |       | 7     | $\leftarrow A B \rightarrow$  | 0.0898   | 0.3891   |              |
|                     |                       |       | 2     | $A \rightarrow B \rightarrow$ | 0.0074   | 0.2023   | *            |
|                     |                       |       | 11    | $\leftarrow A \leftarrow B$   | 0.1796   | 0.5183   |              |

**Supplementary Table 5.4.** Calculated 95% confidence intervals of movement towards the other individual over total number of towards/away movements between lion individuals for each dyad with extended time together at very close distances. Males in the dyad are underlined. An asterisk denotes significance between random (0.5) and individual movements.

| Dyad                              | Individual | Distance Interval (m) | Total | Towards | Lower CI | Upper CI | Significance |
|-----------------------------------|------------|-----------------------|-------|---------|----------|----------|--------------|
| MO-33866 & NU-33865               | MO-33866   | 0 – 15                | 1345  | 794     | 0.5635   | 0.6168   | *            |
|                                   | NU-33865   |                       | 1369  | 769     | 0.535    | 0.5882   | *            |
|                                   | MO-33866   | 15 – 100              | 981   | 606     | 0.5865   | 0.6483   | *            |
|                                   | NU-33865   |                       | 1001  | 541     | 0.509    | 0.5717   | *            |
| OJ-33867 & OK-33863               | OJ-33867   | 0 – 15                | 95    | 54      | 0.4628   | 0.6697   |              |
|                                   | OK-33863   |                       | 94    | 60      | 0.5327   | 0.7349   | *            |
|                                   | OJ-33867   | 15 – 100              | 50    | 43      | 0.7326   | 0.9418   | *            |
|                                   | OK-33863   |                       | 48    | 11      | 0.1203   | 0.3731   | *            |
| <u>SU-33868</u> & <u>RE-33864</u> | SU-33868   | 0 – 15                | 604   | 371     | 0.5741   | 0.6532   | *            |
|                                   | RE-33864   |                       | 632   | 344     | 0.5046   | 0.5836   | *            |
|                                   | SU-33868   | 15 – 100              | 622   | 480     | 0.7367   | 0.8041   | *            |
|                                   | RE-33864   |                       | 601   | 177     | 0.2583   | 0.3327   | *            |