|  |  |  |
| --- | --- | --- |
| **Script** | **Input files** | **Description** |
| timing numerical model.r | None | Runs numerical model, outputs figure 2 |
| wrangling script.r | timing data.Rdata | Takes maximally raw timing data file (large), removes duplicates and reduces to final four days of probe trials only. Outputs ‘timing data final four.Rdata’ |
| polynomial fitting.r | timing data final four.Rdata | Fits polynomials. Outputs ‘timing data by bird.csv’; ‘timing repeatability data.csv’; ‘Timing – Fitted values, by bird and key (final 4 days).csv’;  ‘Timing - Fitted polynomials, by bird & key (final 4 days).csv’; and ‘Timing - Repeatability - Fitted polynomials, by bird & key (final 2+2 days).csv’. |
| by bird analysis.r | timing data by bird.csv | Runs the main (by bird) analyses of the paper and plots most of the figures |
| figures 3 and S3.r | timing data final four.Rdata; Timing - Fitted polynomials, by bird & key (final 4 days).csv; Timing - Fitted values, by bird & key (final 4 days).csv; | Plots figures 3 and S3 (the figures that show timing by bin overall or for individual birds) |

**Timing experiment: Description of R scripts and files**