

RodentMetrics Research Report

test

Subject	test
Group	test
Researcher	Not specified
Laboratory	Not specified
Project	Not specified
Report date	2026-08-15
Report ID	RT-20260815-42E3AB

Deterministic report generated from the completed RodentMetrics analysis. No tracking or behavioral metric was recalculated during report generation.

Behavioral Summary

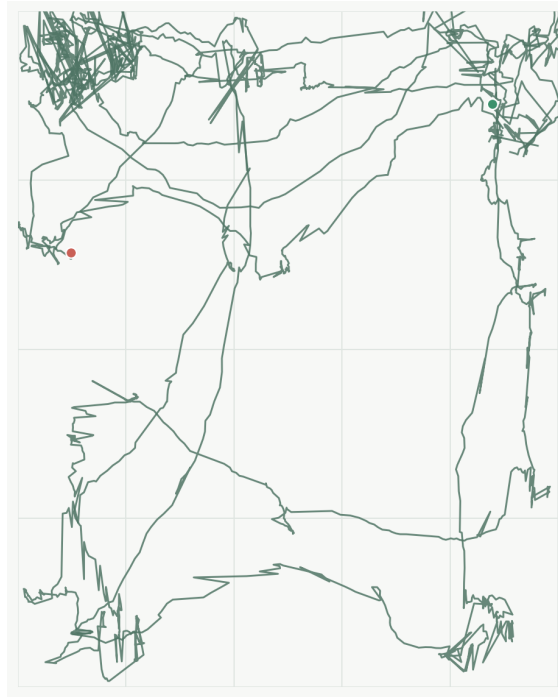
Tracking coverage	98.53%	Analyzed time	120.01 s
Detected positions	3546	Grid coverage	100%
Total distance	5.37 m	Average speed	4.48 cm/s
Maximum speed	25.85 cm/s	Center time	7.54 s
Center entries	5	Immobility time	70.12 s
Immobility episodes	19		

Experiment Information

Experiment	test
Source file	test.mp4
Subject	test
Group	test
Video	1920 x 1080 px at 29.99 fps
Source duration	344.39 s
Analysis start	00:55
Analysis end	02:55
Analyzed duration	02:00

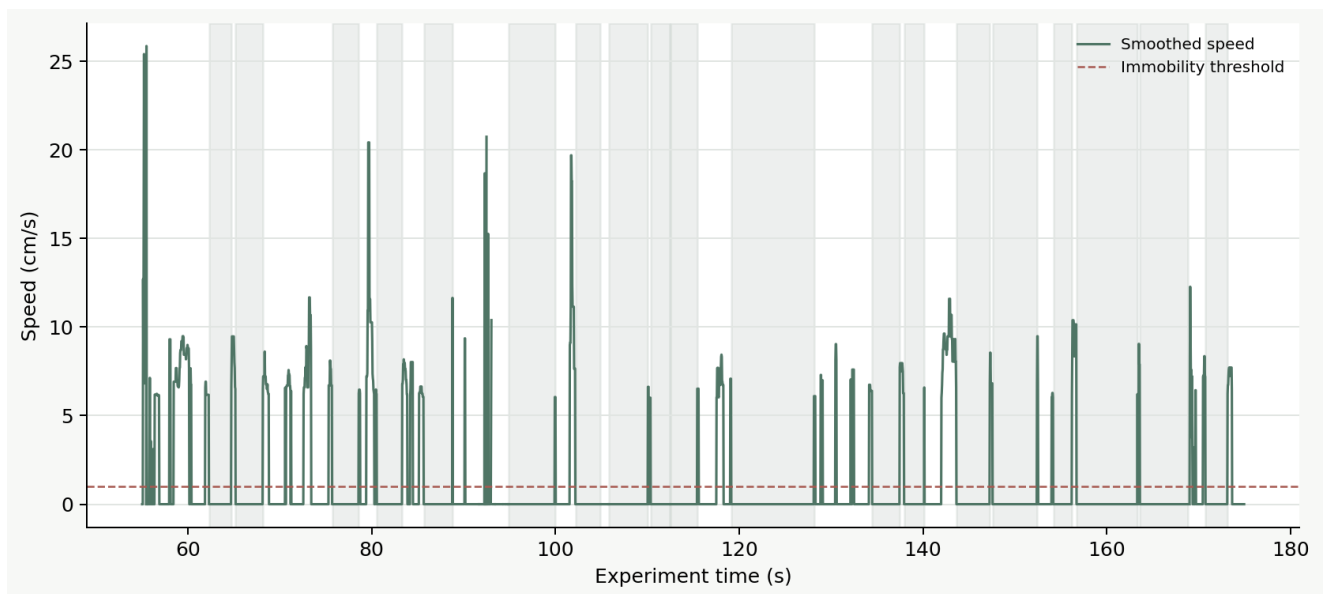
Locomotion Analysis

Movement trajectory



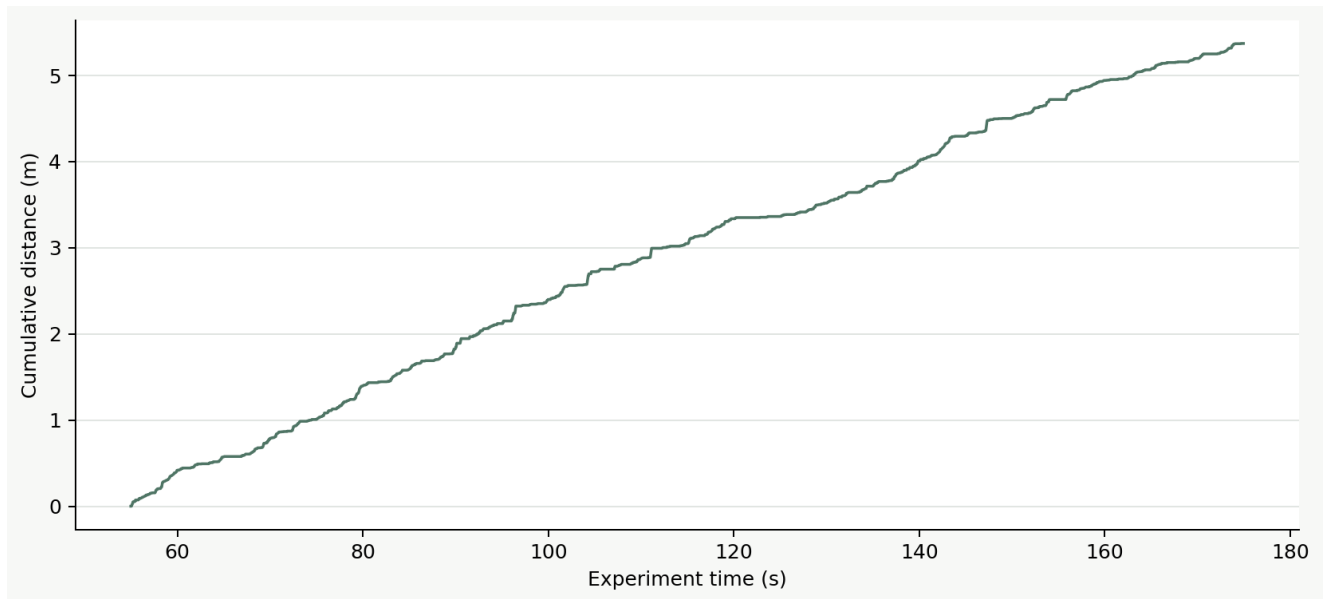
Visualization generated during the completed analysis.

Speed over time



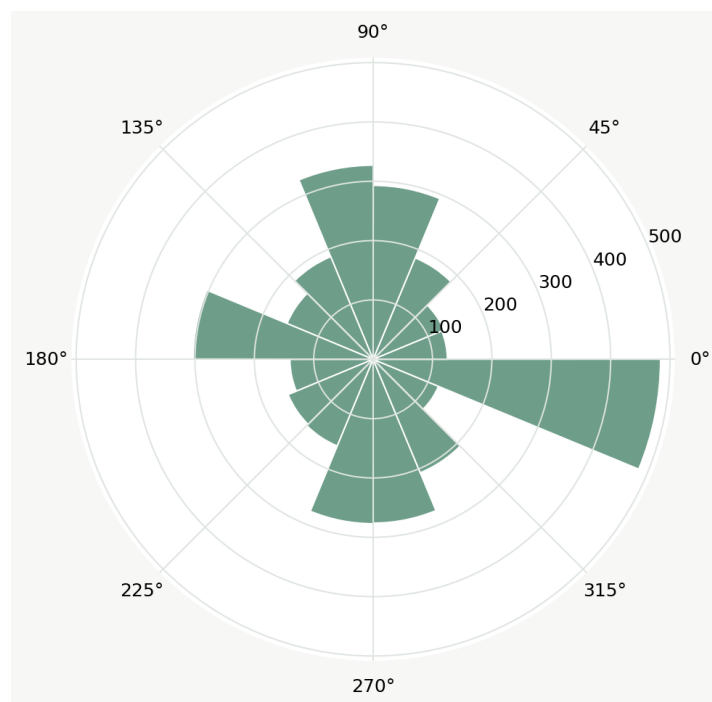
Visualization generated during the completed analysis.

Cumulative distance



Visualization generated during the completed analysis.

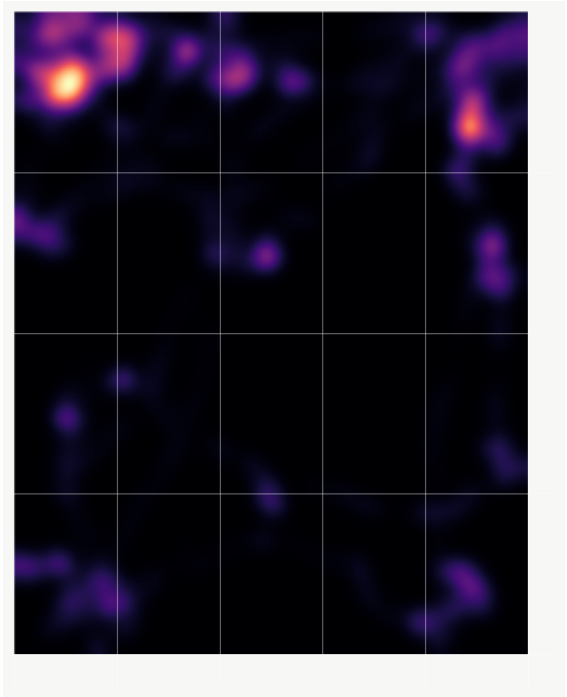
Movement direction



Visualization generated during the completed analysis.

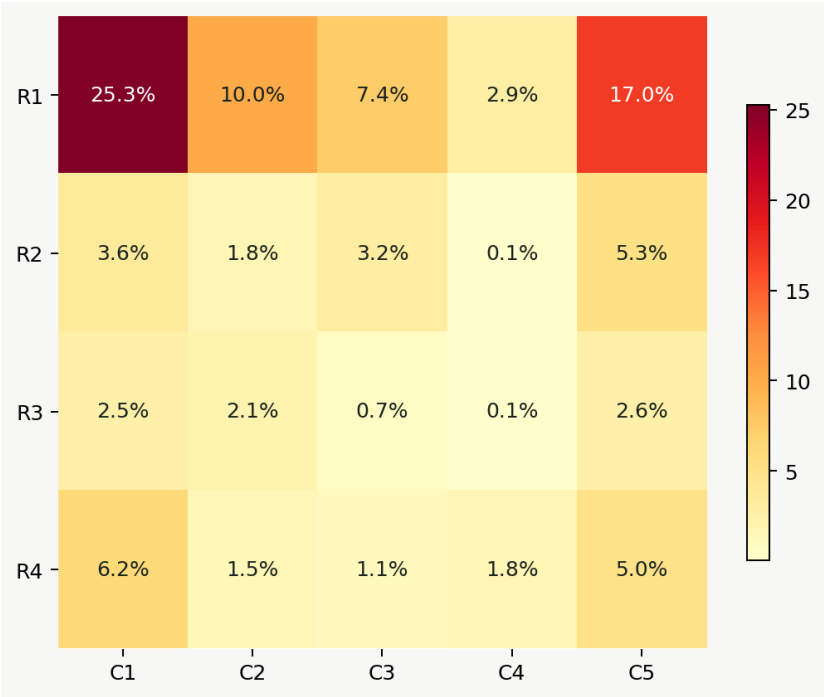
Spatial Analysis

Spatial occupancy heatmap



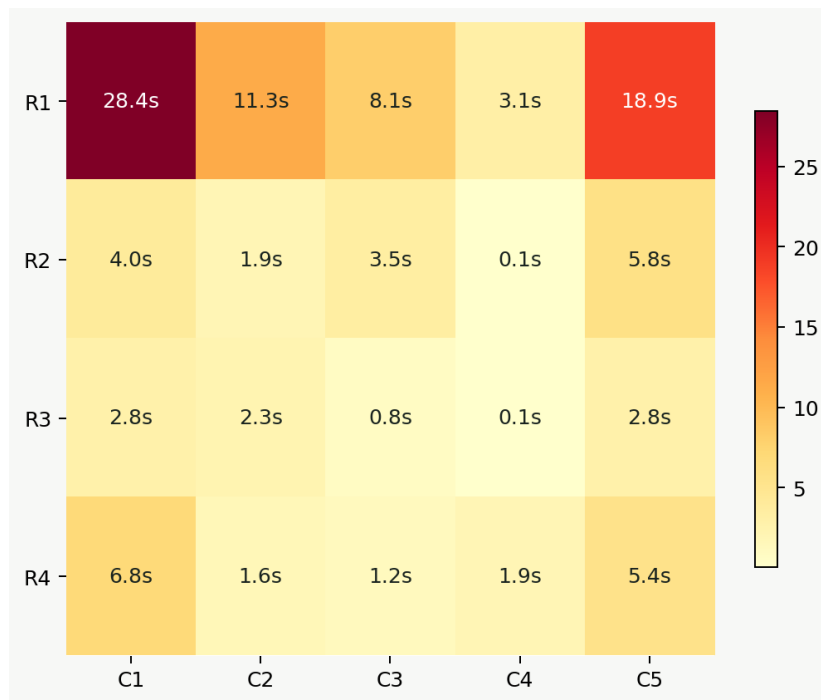
Visualization generated during the completed analysis.

Grid occupancy



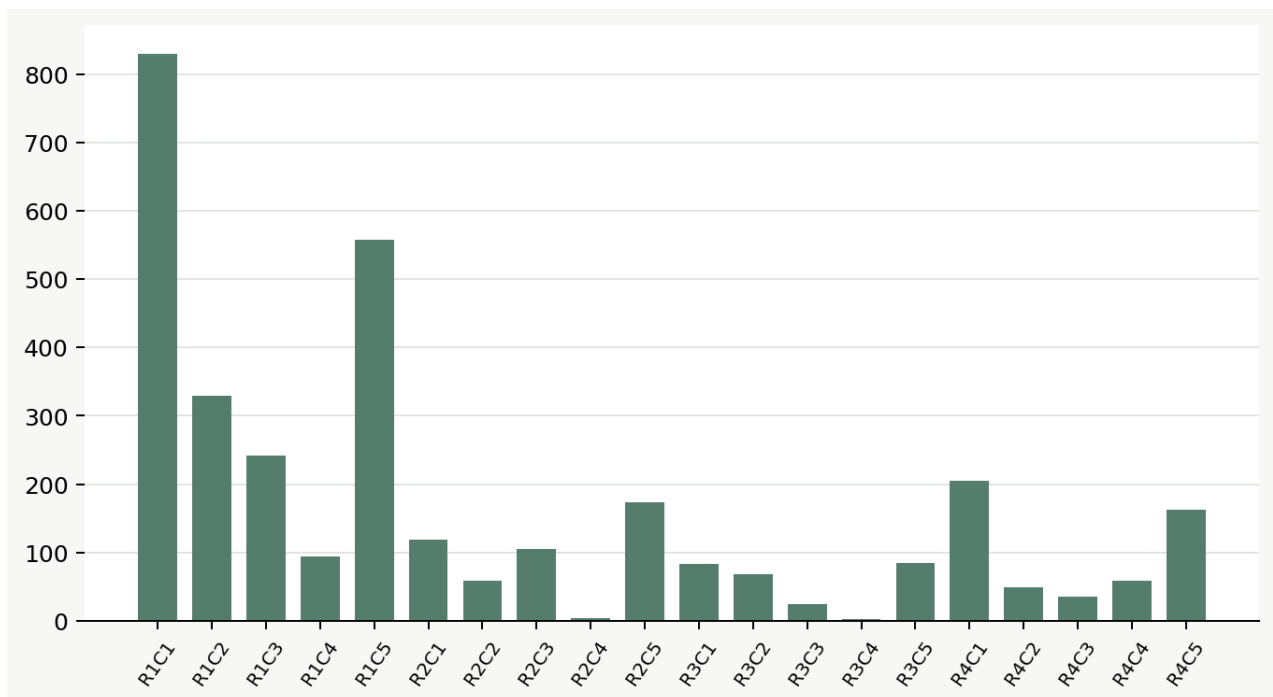
Visualization generated during the completed analysis.

Dwell time



Visualization generated during the completed analysis.

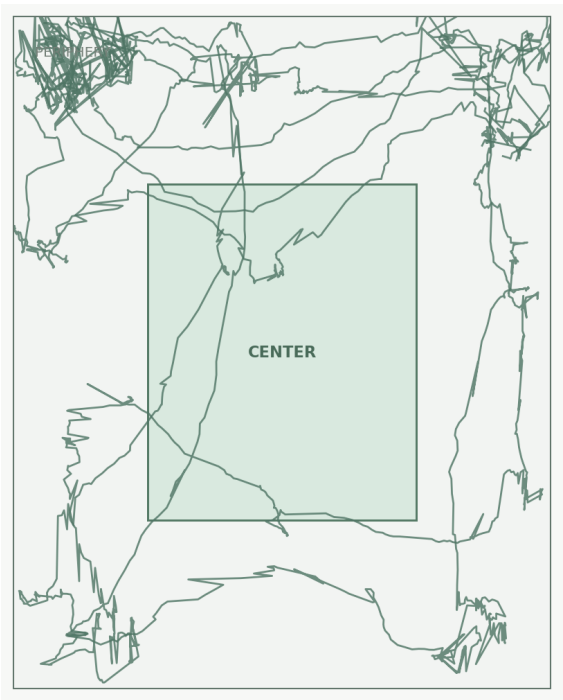
Grid activity



Visualization generated during the completed analysis.

Open Field Zones

Center / periphery trajectory



Visualization generated during the completed analysis.

Center time	7.54 s	Periphery time	110.7 s
Center occupancy	6.37%	Center entries	5
Mean visit	1.45 s		

Movement and Immobility

Moving time	48.12 s	Immobility time	70.12 s
Immobility percentage	59.31%	Episodes	19
Time to first immobility	7.3 s		

Tracking Validation

Detected frames	3546	Missing frames	53
Processed frames	3599	Coverage	98.53%
Tracking gaps	24		

Tracking coverage describes data completeness only and is not a statement of scientific validity.

Analysis Parameters

Parameter	Recorded value
Requested start	55 s
Requested duration	120 s
Min Contour Area	50
History	500
Variance Threshold	25
Normalized arena width	400 px
Normalized arena height	500 px
Grid rows	4
Grid columns	5
Arena width	20 cm
Arena height	20 cm
Minimum displacement	0.2 cm
Speed window	0.5 s
Path Color	#4f7565
Zones Enabled	True
Center Width Fraction	0.5
Center Height Fraction	0.5
Minimum center visit	0.5 s
Movement Analysis Enabled	True
Immobility speed threshold	1 cm/s
Minimum immobility duration	2 s
Speed smoothing window	0.5 s

Methodology

RodentMetrics processed the selected video interval with background-subtraction-based contour tracking. Detected centers were transformed into the calibrated arena coordinate system, assigned to virtual grid regions, and summarized from saved frame-level observations. Frame-to-frame displacement below the configured minimum displacement threshold (0.2 cm) was excluded from cumulative locomotor distance. Speed-based behavioral classification used a trailing rolling median with the configured 0.5 s window. Missing detections were treated as interruptions and were not bridged for distance or speed calculation. This report reads the completed result files and does not rerun the source video.

Detailed Tables

Grid occupancy

Region	C1	C2	C3	C4	C5
R1	830	329	242	94	557
R2	119	58	105	4	173
R3	83	68	24	2	84
R4	205	49	36	58	163

Center visits

Visit	Entry (s)	Exit (s)	Duration (s)
1	59.187405	59.68758	0.5
2	83.662647	85.196518	1.534
3	133.146652	134.113658	0.967
4	142.183152	143.216847	1.034
5	170.226311	173.427432	3.201

Immobility episodes

Episode	Start (s)	End (s)	Duration (s)	Mean speed
1	62.288491	64.722678	2.434	0.0
2	65.189508	68.157214	2.968	0.0
3	75.693188	78.594205	2.901	0.0
4	80.561561	83.329197	2.768	0.0
5	85.663348	88.79778	3.134	0.0
6	94.933263	99.935015	5.002	0.0
7	102.169131	104.903423	2.734	0.0
8	105.803738	110.0719	4.268	0.0
9	110.372006	112.439397	2.067	0.0
10	112.539432	115.440448	2.901	0.0
11	119.141745	128.144899	9.003	0.0
12	134.480453	137.481504	3.001	0.0
13	137.948334	140.149106	2.201	0.0
14	143.650332	147.284939	3.635	0.0
15	147.585044	152.420072	4.835	0.0
16	154.187358	156.221404	2.034	0.0
17	156.721579	163.357237	6.636	0.0
18	163.623997	168.82582	5.202	0.0
19	170.759831	173.160672	2.401	0.0