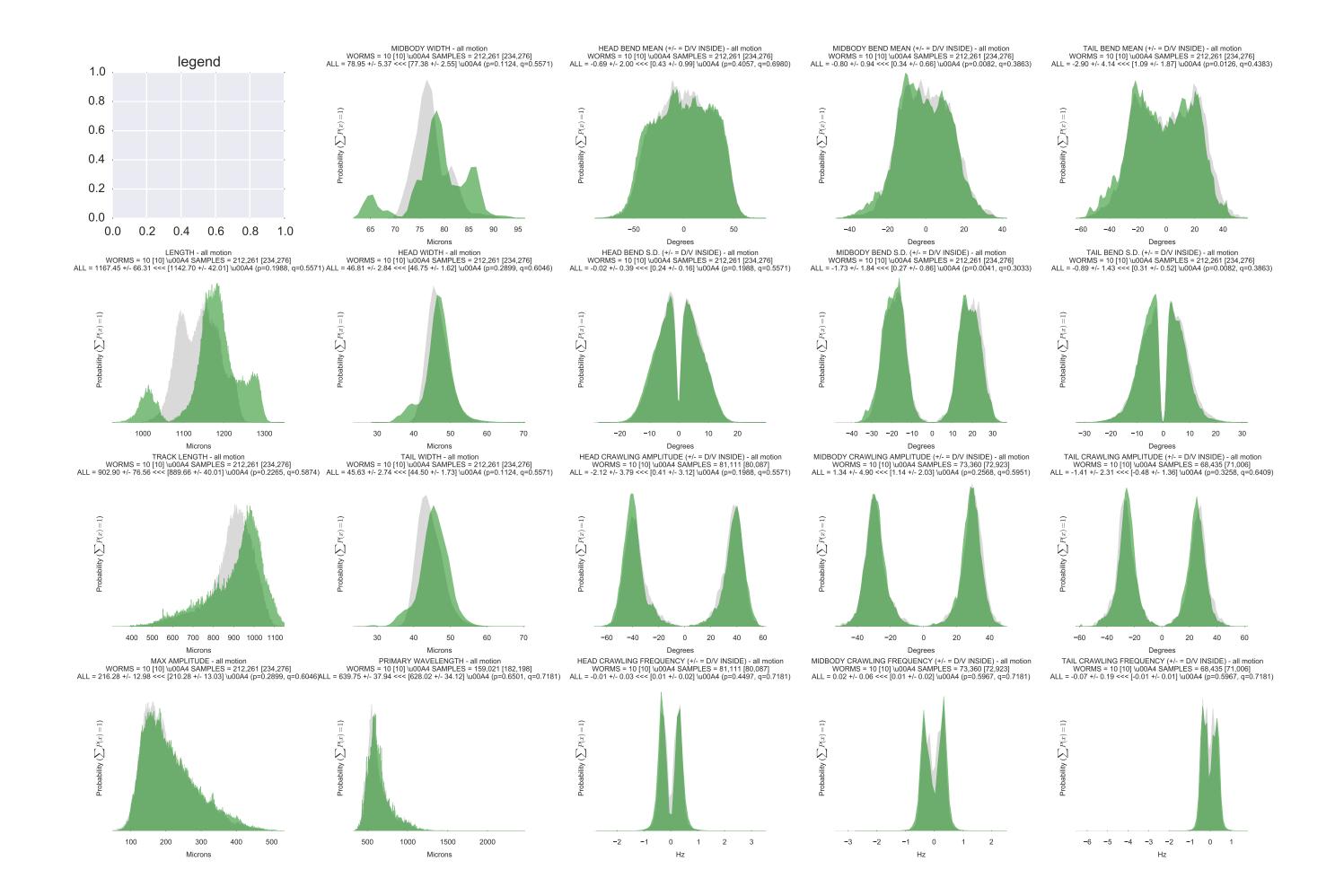
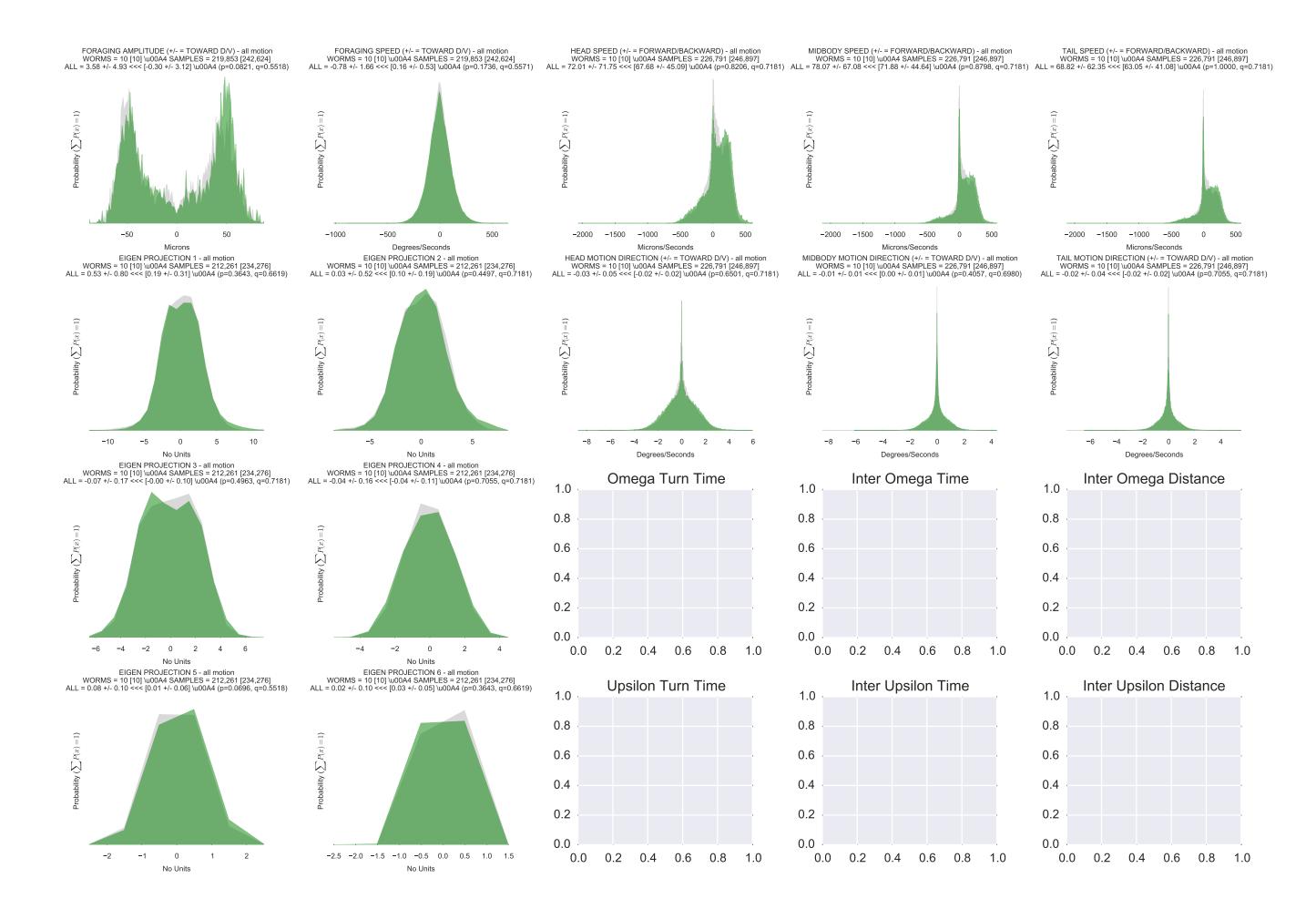
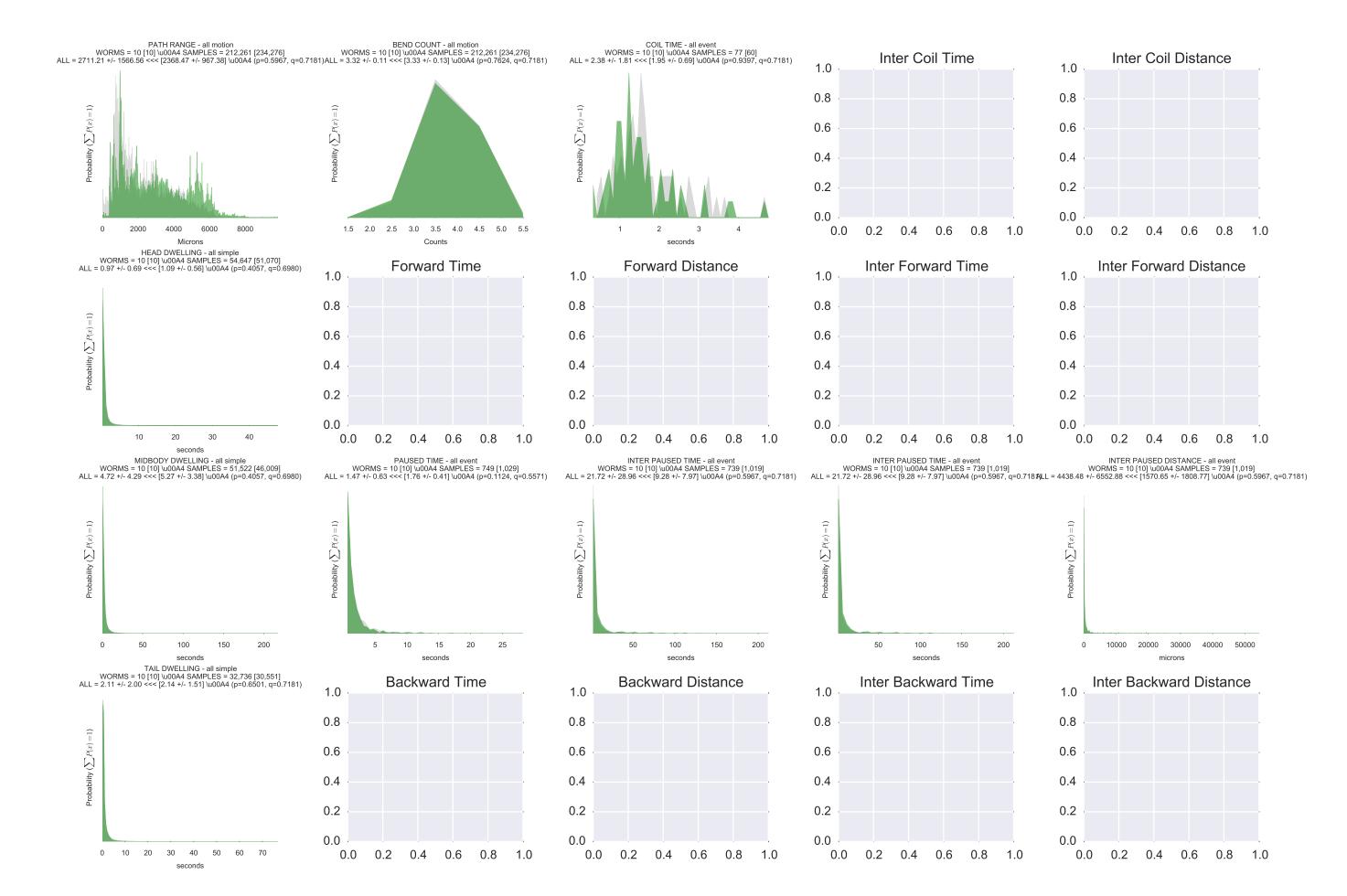
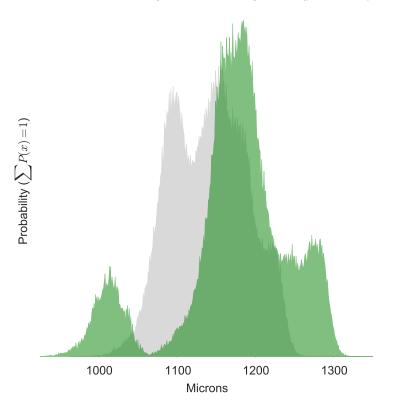
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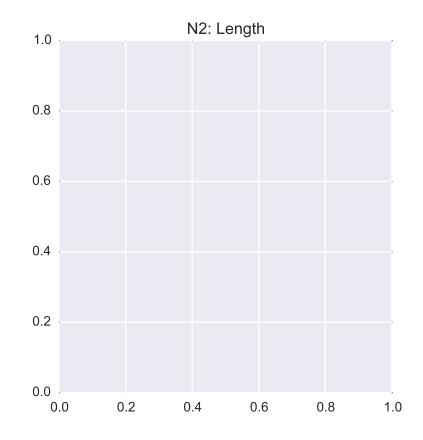


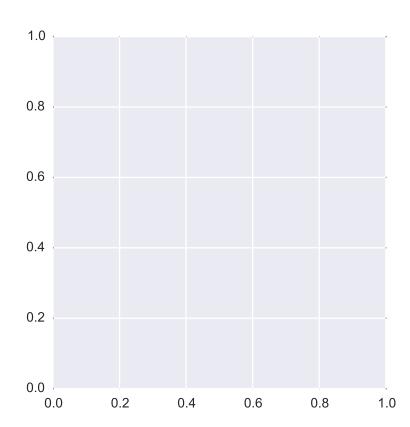




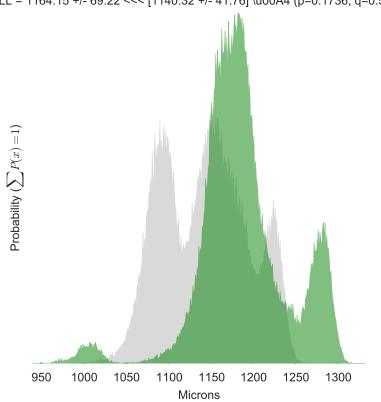
LENGTH - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 1167.45 +/- 66.31 <<< [1142.70 +/- 42.01] \u00A4 (p=0.1988, q=0.5571)



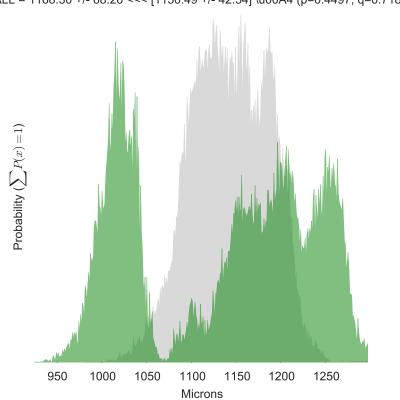




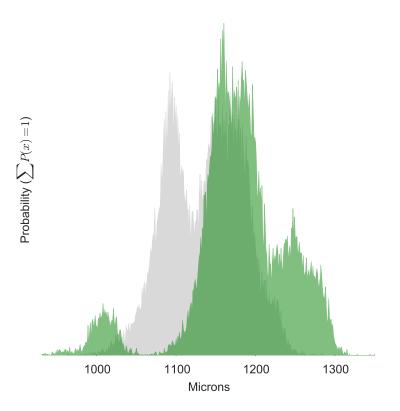
LENGTH - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 1164.15 +/- 69.22 <<< [1140.32 +/- 41.76] \u00aa4 (p=0.1736, q=0.5571)



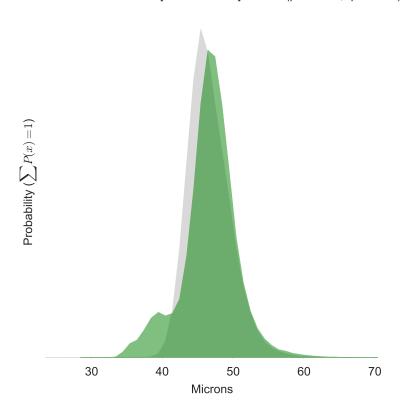
LENGTH - paused motion WORMS = 10 [10] \u000A4 SAMPLES = 40,894 [54,915] ALL = 1168.30 +/- 68.26 <<< [1150.49 +/- 42.54] \u000A4 (p=0.4497, q=0.7181)

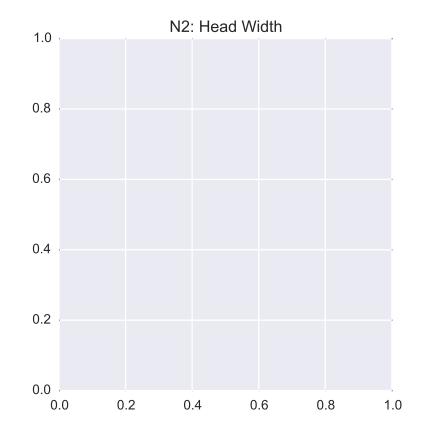


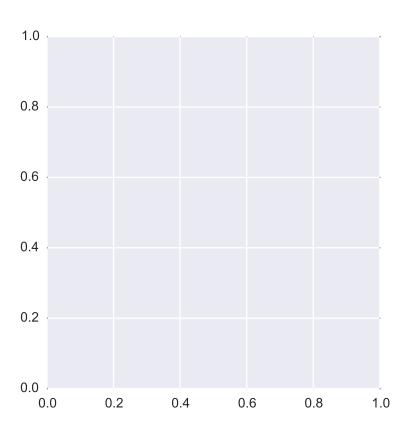
LENGTH - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 1165.67 +/- 67.67 <<< [1141.07 +/- 41.39] \u00a4 (p=0.2568, q=0.5951)



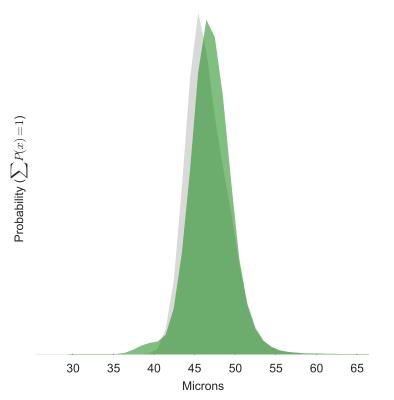
HEAD WIDTH - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 46.81 +/- 2.84 <<< [46.75 +/- 1.62] \u00A4 (p=0.2899, q=0.6046)



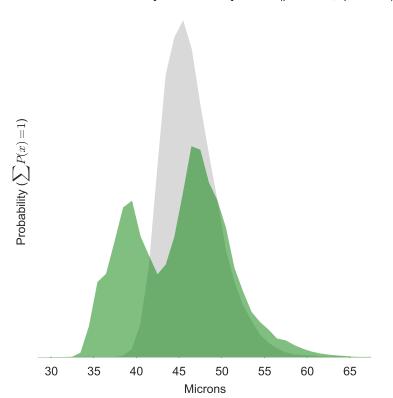




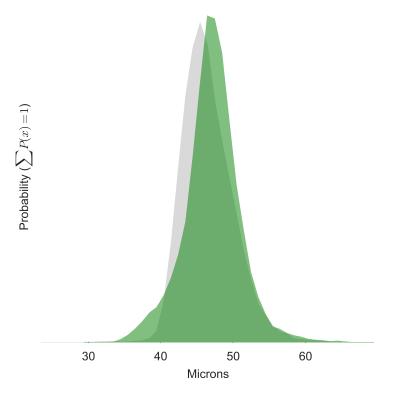
HEAD WIDTH - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 47.06 +/- 3.12 <<< [46.57 +/- 1.62] \u00A4 (p=0.2568, q=0.5951)



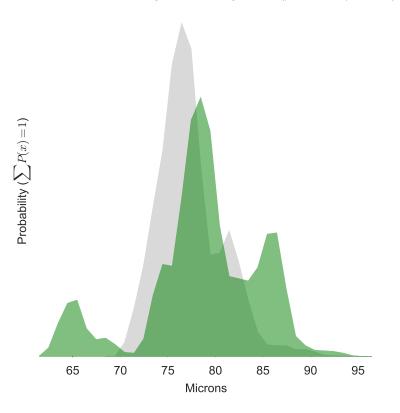
HEAD WIDTH - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 46.52 +/- 2.96 <<< [46.68 +/- 1.79] \u00A4 (p=0.5967, q=0.7181)

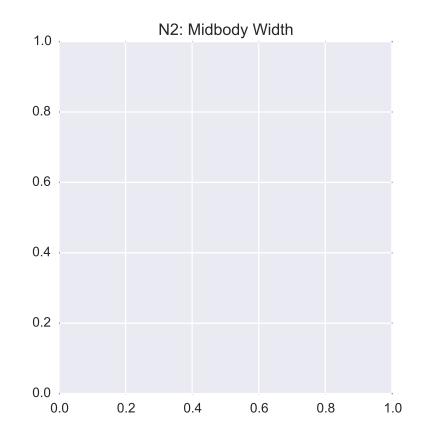


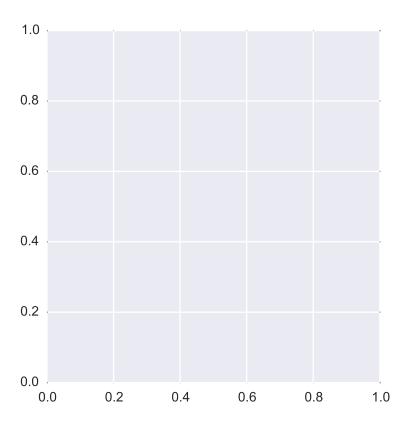
HEAD WIDTH - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 47.27 +/- 3.33 <<< [46.74 +/- 1.91] \u00A4 (p=0.2265, q=0.5874)



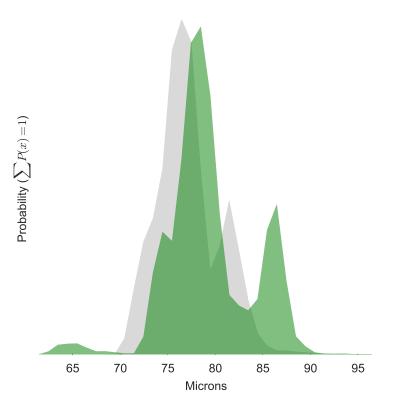
MIDBODY WIDTH - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 78.95 +/- 5.37 <<< [77.38 +/- 2.55] \u00A4 (p=0.1124, q=0.5571)



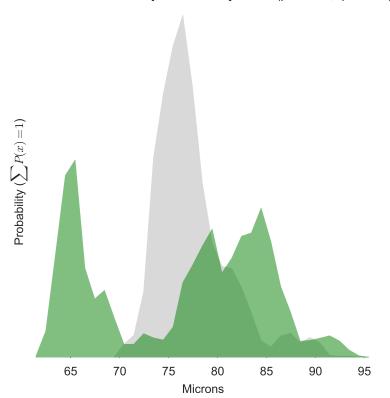




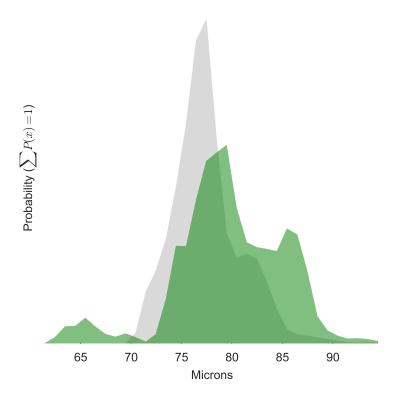
MIDBODY WIDTH - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 78.59 +/- 5.43 <<< [77.01 +/- 2.58] \u00A4 (p=0.1509, q=0.5571)



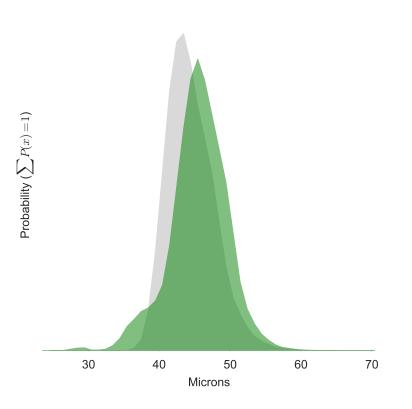
MIDBODY WIDTH - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 79.41 +/- 5.62 <<< [77.79 +/- 2.53] \u00A4 (p=0.0963, q=0.5518)

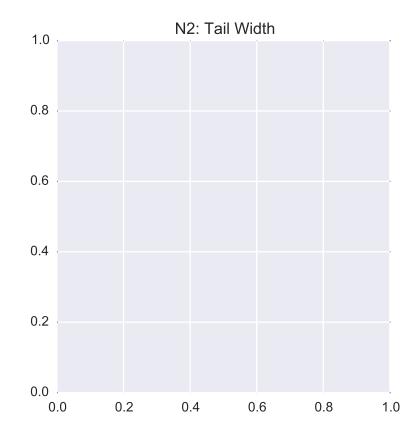


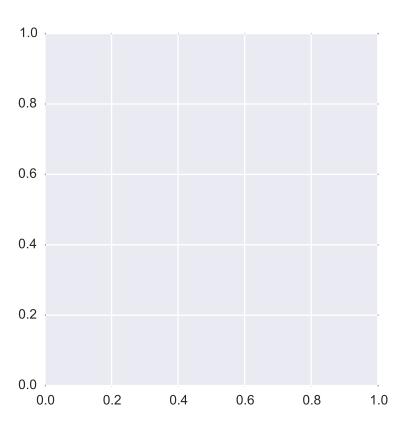
MIDBODY WIDTH - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 79.58 +/- 5.59 <<< [77.69 +/- 2.40] \u00A4 (p=0.0963, q=0.5518)



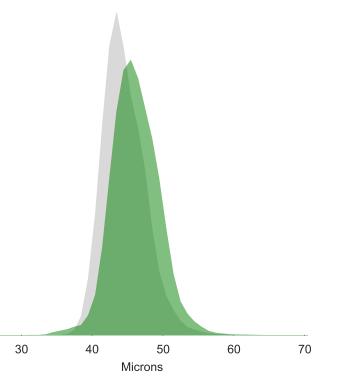
TAIL WIDTH - all motion
WORMS = 10 [10] \u000A4 SAMPLES = 212,261 [234,276]
ALL = 45.63 +/- 2.74 <<< [44.50 +/- 1.73] \u000A4 (p=0.1124, q=0.5571)



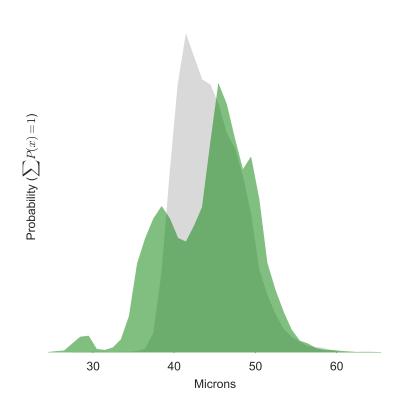




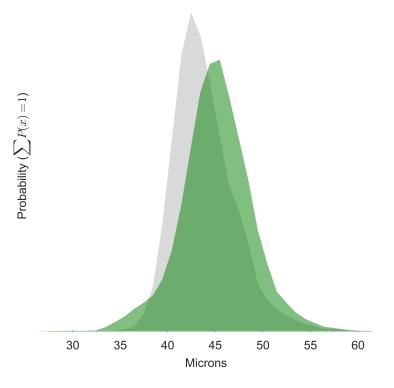
TAIL WIDTH - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 45.63 +/- 2.86 <<< [44.35 +/- 1.71] \u00A4 (p=0.0494, q=0.5518)



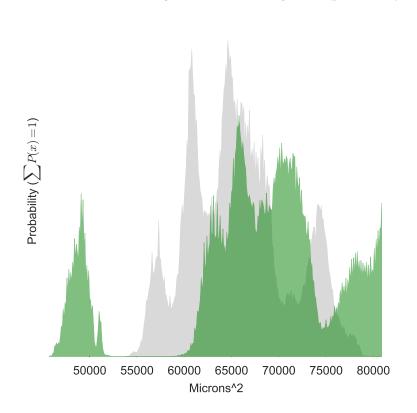
TAIL WIDTH - paused motion
WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915]
ALL = 46.44 +/- 2.82 <<< [44.95 +/- 1.89] \u00A4 (p=0.0963, q=0.5518)

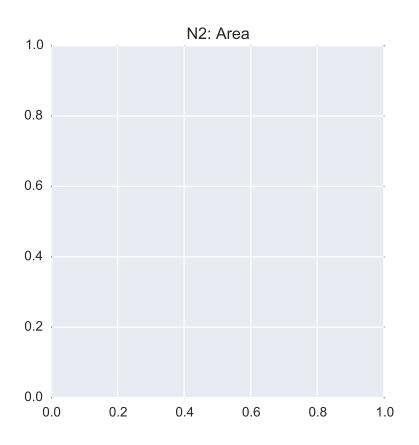


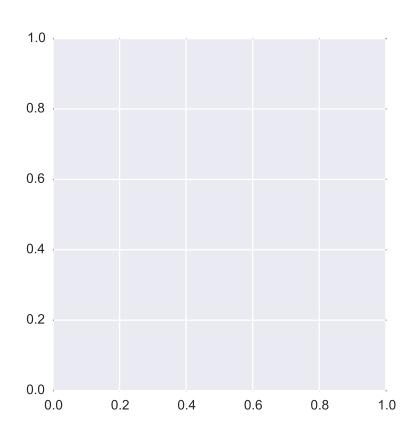
TAIL WIDTH - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 45.01 +/- 2.94 <<< [43.98 +/- 1.52] \u00A4 (p=0.1306, q=0.5571)

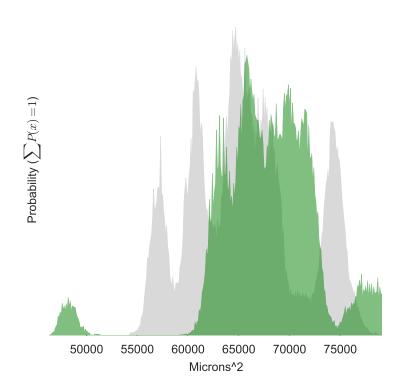


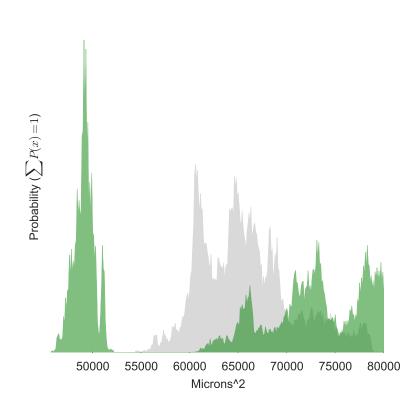
AREA - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 68493.77 +/- 8322.91 <<< [65815.82 +/- 4696.36] \u00A4 (p=0.1736, q=0.5571)

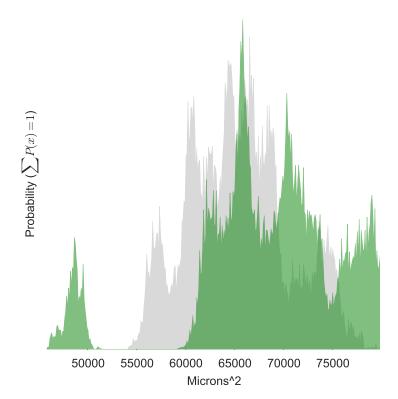




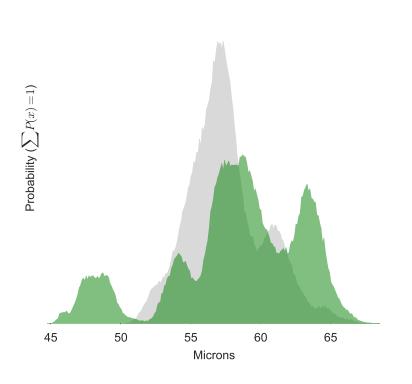


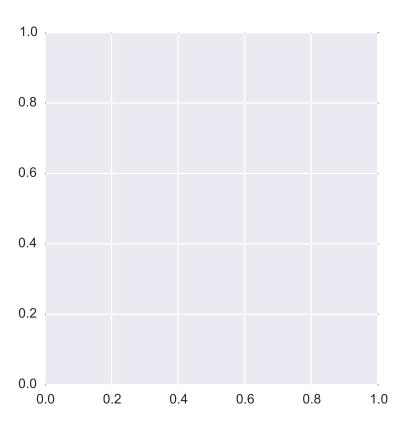




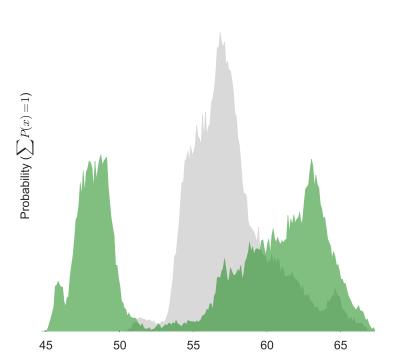


AREA/LENGTH - all motion WORMS = 10 [10] \u000A4 SAMPLES = 212,261 [234,276] ALL = 58.48 +/- 4.30 <<< [57.54 +/- 2.11] \u000A4 (p=0.1736, q=0.5571)





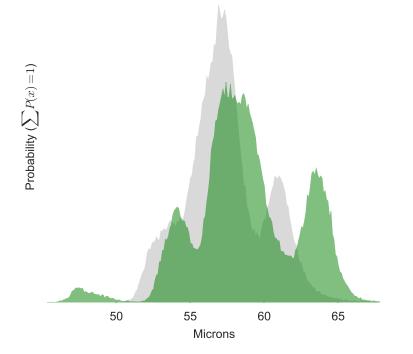
AREA/LENGTH - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 58.32 +/- 4.33 <<< [57.24 +/- 2.14] \u00A4 (p=0.1509, q=0.5571)

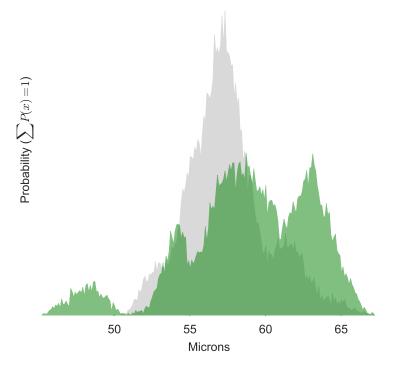


Microns

AREA/LENGTH - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 58.85 +/- 4.41 <<< [57.87 +/- 2.01] \u00A4 (p=0.1306, q=0.5571)

AREA/LENGTH - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 58.75 +/- 4.48 <<< [57.63 +/- 2.04] \u00A4 (p=0.1509, q=0.5571)





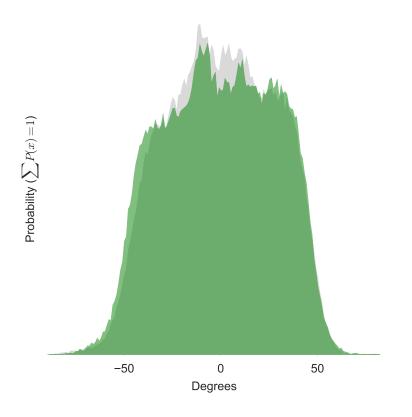
WIDTH/LENGTH - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 0.07 +/- 0.00 <<< [0.07 +/- 0.00] \u00A4 (p=0.8206, q=0.7181) N2: Width/Length 1.0 1.0 8.0 8.0 Probability  $(\sum P(x) = 1)$ 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0 0.2 0.060 0.065 0.070 0.075 0.0 0.4 0.0 0.2 0.080 0.085 0.090 0.6 8.0 1.0 0.4 0.6 8.0 1.0 No Units WIDTH/LENGTH - forward motion WORMS = 10 [10] \u000a4 SAMPLES = 119,609 [114,032] ALL =  $0.07 +/-0.00 <<< [0.07 +/-0.00] \setminus 0.004$  (p=0.7624, q=0.7181) WIDTH/LENGTH - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 0.07 +/- 0.00 <<< [0.07 +/- 0.00] \u00A4 (p=0.9397, q=0.7181)  $\label{eq:worm} WIDTH/LENGTH - backward motion \\ WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] \\ ALL = 0.07 +/- 0.00 <<< [0.07 +/- 0.00] \u00A4 (p=0.7624, q=0.7181) \\$ Probability  $(\sum P(x) = 1)$ Probability  $(\sum P(x) = 1)$ Probability  $(\sum P(x) = 1)$ 0.070 0.060 0.065 0.070 0.075 0.085 0.065 0.070 0.085 0.065 0.080 0.085 0.080 0.060 0.075 0.080 0.060 0.075

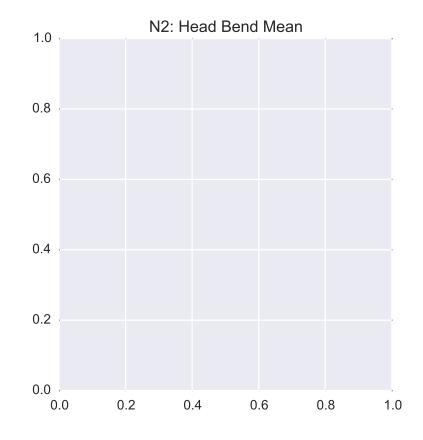
No Units

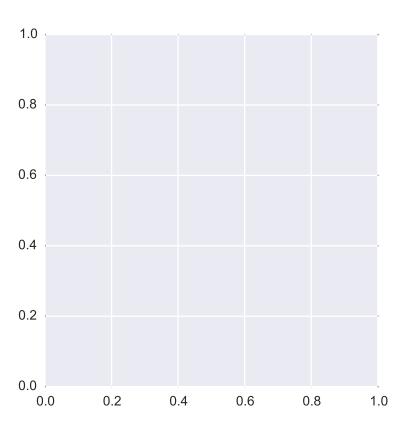
No Units

No Units

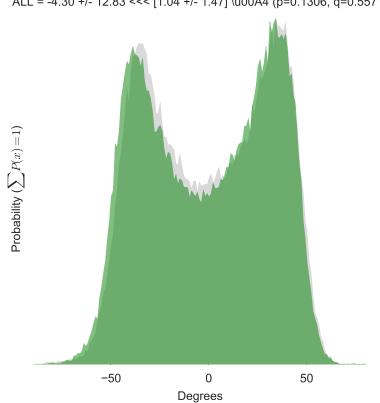
HEAD BEND MEAN (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -0.69 +/- 2.00 <<< [0.43 +/- 0.99] \u00A4 (p=0.4057, q=0.6980)



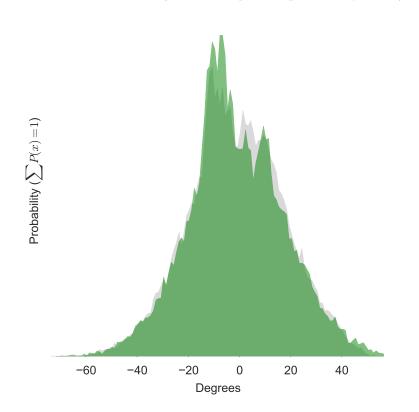




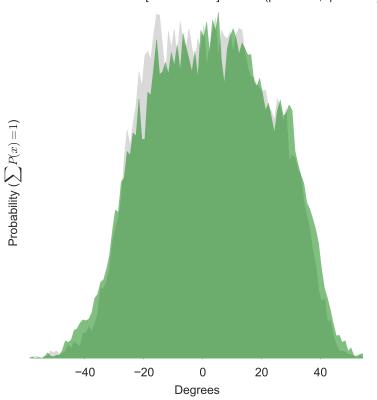
HEAD BEND MEAN (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u000a4 SAMPLES = 119,609 [114,032] ALL = -4.30 +/- 12.83 <<< [1.04 +/- 1.47] \u000a4 (p=0.1306, q=0.5571)



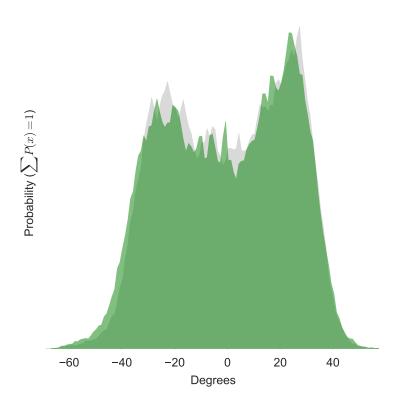
HEAD BEND MEAN (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 0.26 +/- 3.72 <<< [-1.72 +/- 1.95] \u00A4 (p=0.2899, q=0.6046)

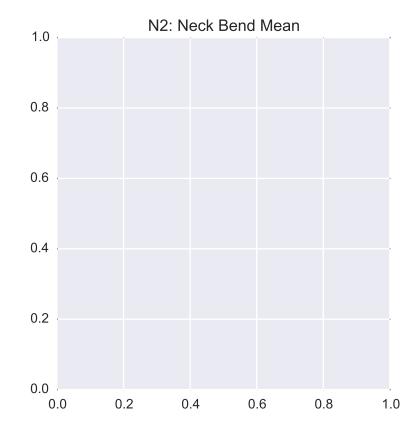


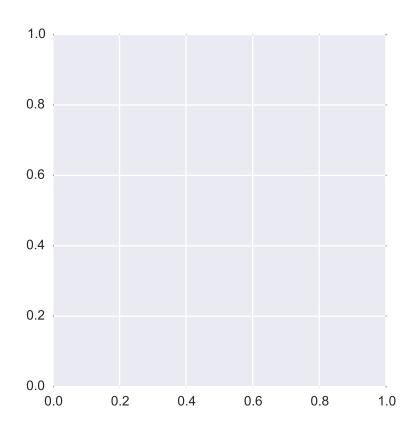
HEAD BEND MEAN (+/- = D/V INSIDE) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 4.11 +/- 3.76 <<< [1.97 +/- 1.78] \u00A4 (p=0.1306, q=0.5571)

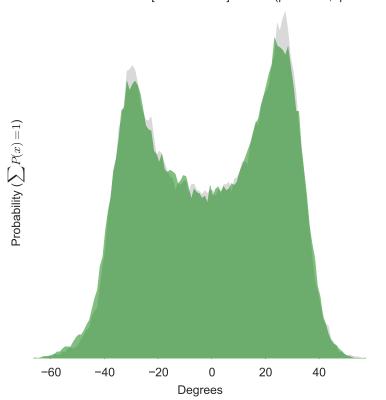


NECK BEND MEAN (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -2.18 +/- 6.27 <<< [0.48 +/- 1.06] \u00A4 (p=0.1988, q=0.5571)

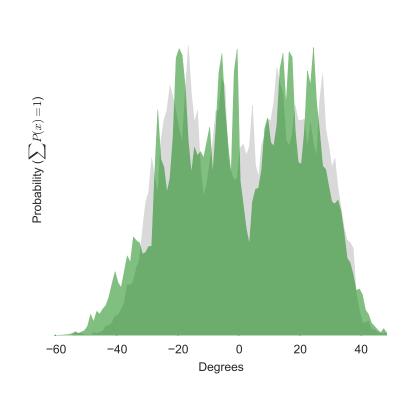




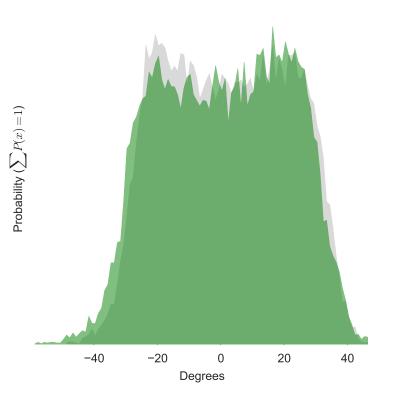




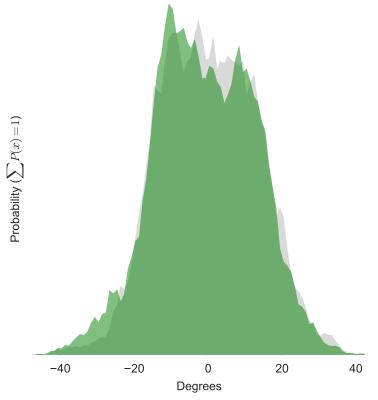
NECK BEND MEAN (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = -1.46 +/- 9.26 <<< [1.44 +/- 3.79] \u00A4 (p=0.5453, q=0.7181)

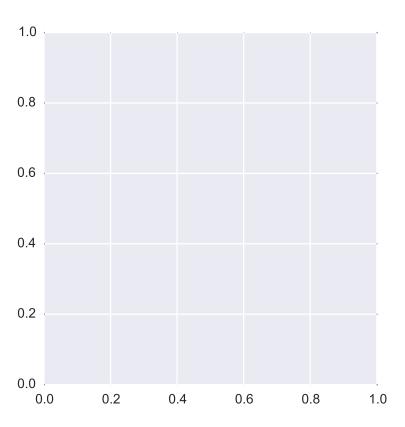


NECK BEND MEAN (+/- = D/V INSIDE) - backward motion WORMS = 10 [10] \u000A4 SAMPLES = 24,374 [27,704] ALL = 0.25 +/- 3.61 <<< [2.10 +/- 0.55] \u00ba00A4 (p=0.0233, q=0.5259)



MIDBODY BEND MEAN (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -0.80 +/- 0.94 <<< [0.34 +/- 0.66] \u00A4 (p=0.0082, q=0.3863)





MIDBODY BEND MEAN (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = -0.34 +/- 2.72 <<< [-0.18 +/- 0.53] \u00A4 (p=0.4057, q=0.6980)

-40

-20

20

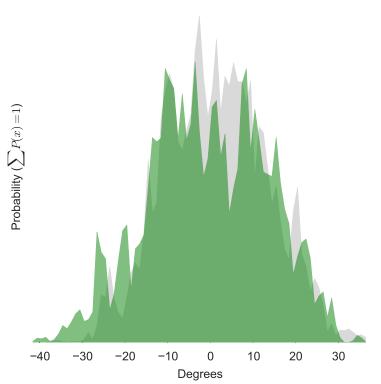
0

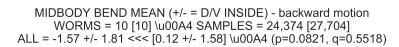
Degrees

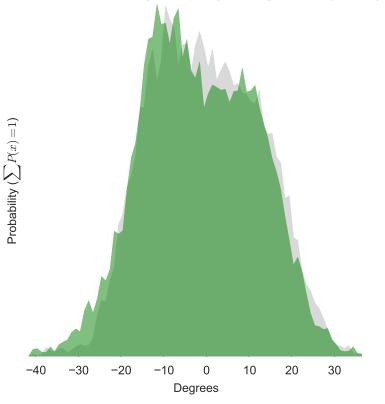
40



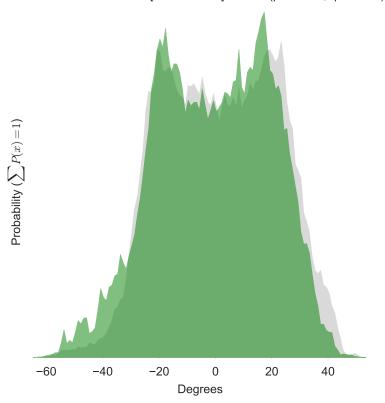
MIDBODY BEND MEAN (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = -1.87 +/- 4.18 <<< [1.71 +/- 1.58] \u00A4 (p=0.0233, q=0.5259)

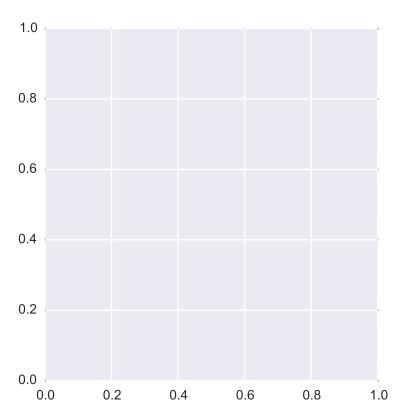




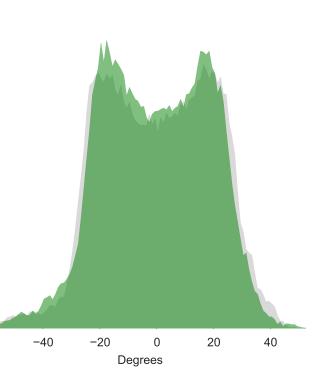


HIPS BEND MEAN (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -0.75 +/- 3.00 <<< [1.93 +/- 1.75] \u00A4 (p=0.0284, q=0.5259)



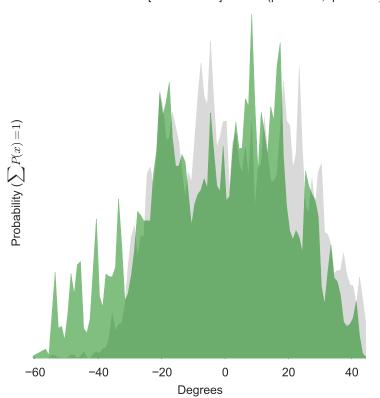


HIPS BEND MEAN (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = -0.83 +/- 1.88 <<<  $[0.68 +/- 0.80] \u00A4 (p=0.0413, q=0.5518)$ 

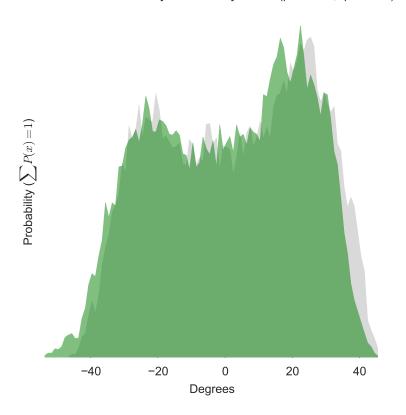


-60

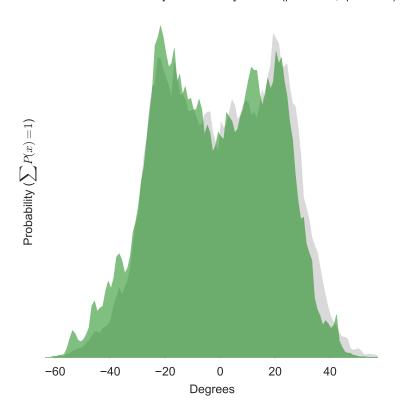
HIPS BEND MEAN (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 2.13 +/- 7.47 <<< [2.53 +/- 3.48] \u00A4 (p=0.5967, q=0.7181)



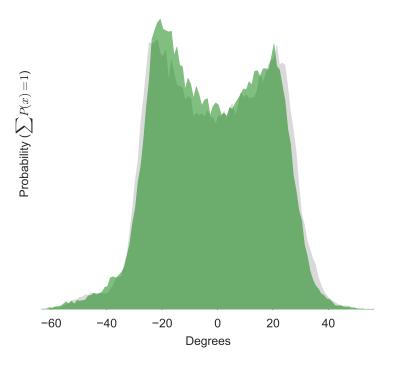
HIPS BEND MEAN (+/- = D/V INSIDE) - backward motion WORMS = 10 [10] \u000a4 SAMPLES = 24,374 [27,704] ALL = 0.17 +/- 3.21 <<< [3.19 +/- 2.23] \u000a4 (p=0.0191, q=0.4982)

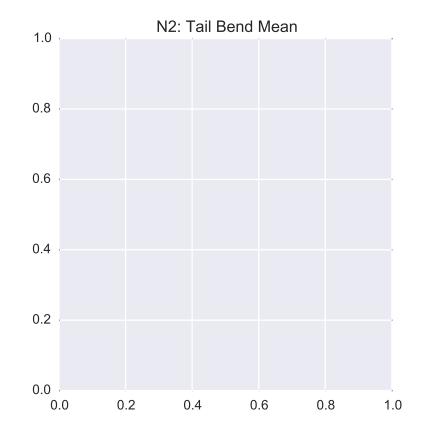


TAIL BEND MEAN (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -2.90 +/- 4.14 <<< [1.09 +/- 1.87] \u00A4 (p=0.0126, q=0.4383)

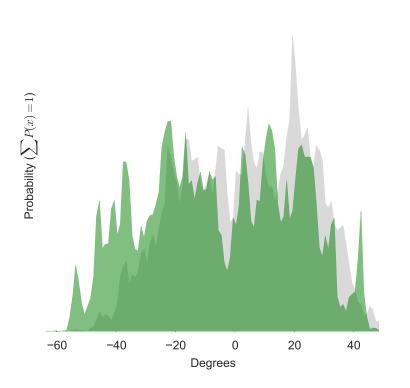


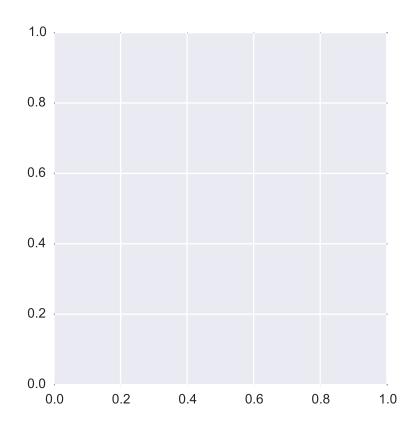
TAIL BEND MEAN (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u000a4 SAMPLES = 119,609 [114,032] ALL = -3.15 +/- 4.04 <<< [-0.55 +/- 0.88] \u000a0 (p=0.0494, q=0.5518)



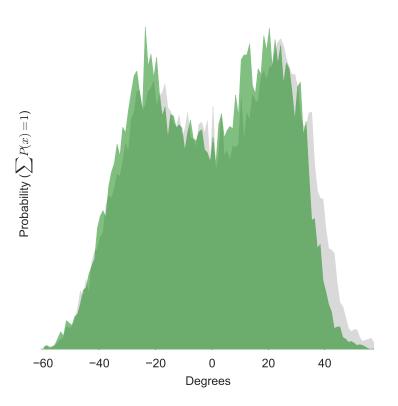


TAIL BEND MEAN (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = -0.49 +/- 7.28 <<< [2.92 +/- 3.25] \u00A4 (p=0.0343, q=0.5259)

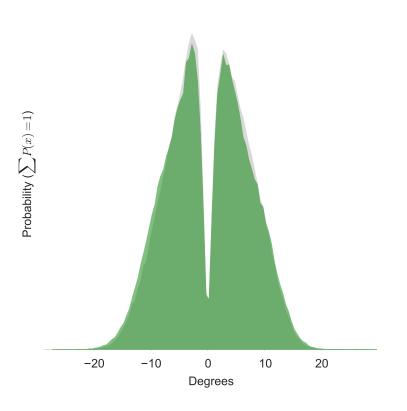


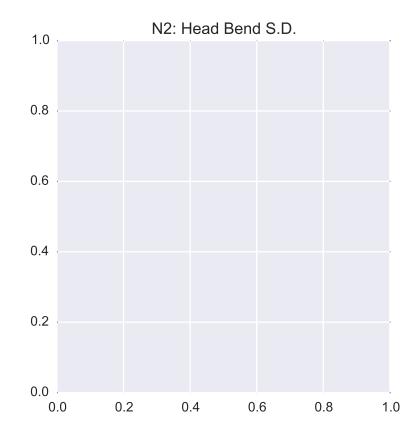


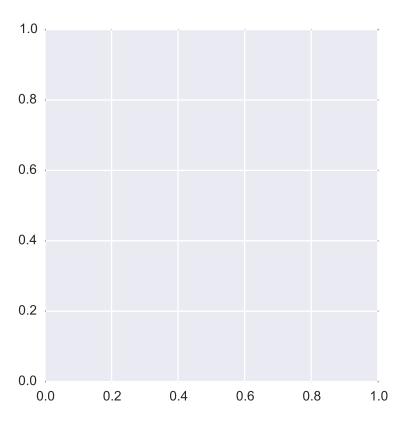
TAIL BEND MEAN (+/- = D/V INSIDE) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = -2.47 +/- 5.18 <<< [1.50 +/- 2.32] \u00A4 (p=0.0494, q=0.5518)



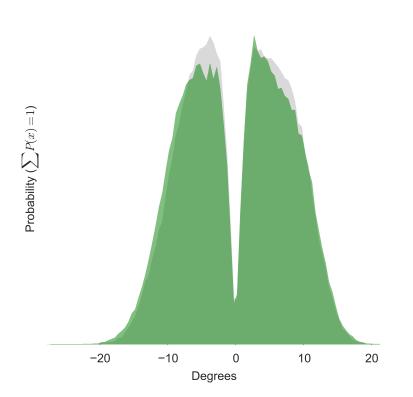
HEAD BEND S.D. (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -0.02 +/- 0.39 <<< [0.24 +/- 0.16] \u00A4 (p=0.1988, q=0.5571)



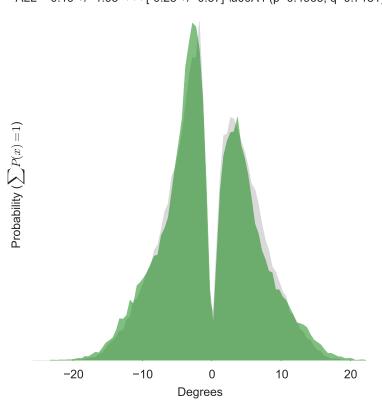




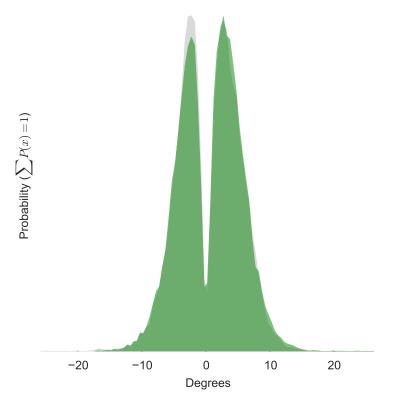
HEAD BEND S.D. (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u000A4 SAMPLES = 119,609 [114,032] ALL = -0.51 +/- 2.00 <<< [0.38 +/- 0.30] \u000A4 (p=0.1736, q=0.5571)



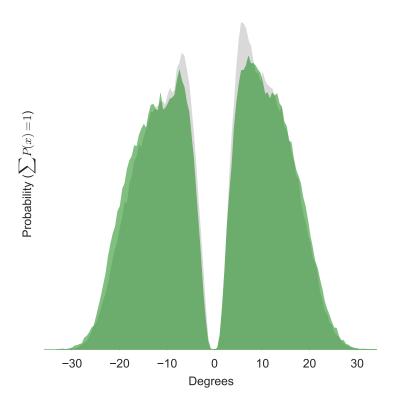
HEAD BEND S.D. (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u000A4 SAMPLES = 40,894 [54,915] ALL = 0.19 +/- 1.05 <<< [-0.28 +/- 0.57] \u00ba000A4 (p=0.4963, q=0.7181)

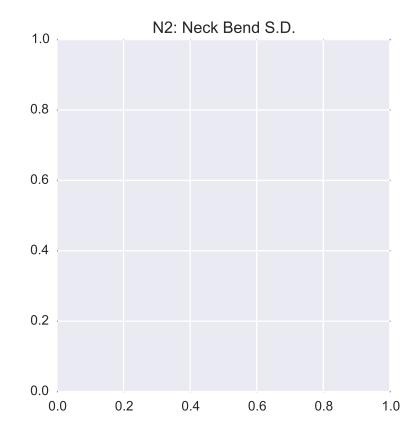


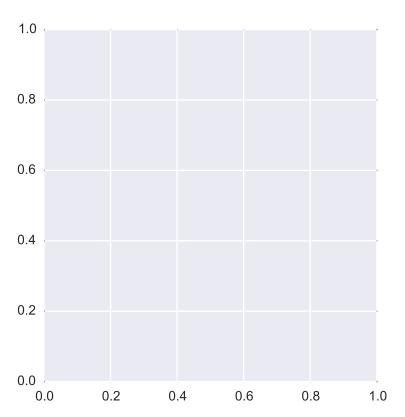
HEAD BEND S.D. (+/- = D/V INSIDE) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 0.83 +/- 0.65 <<< [0.51 +/- 0.30] \u00A4 (p=0.2265, q=0.5874)



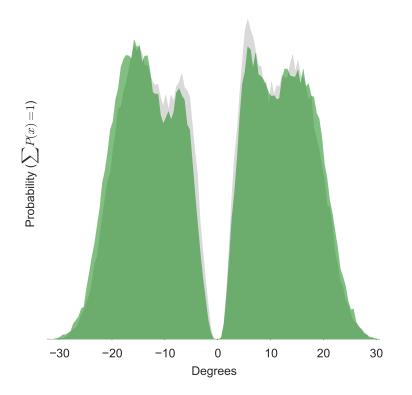
NECK BEND S.D. (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u000A4 SAMPLES = 212,261 [234,276] ALL = -0.94 +/- 2.59 <<< [0.19 +/- 0.47] \u000A4 (p=0.1124, q=0.5571)

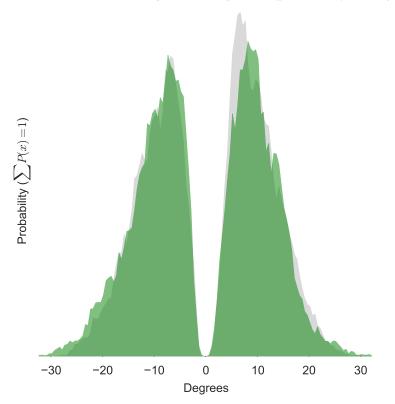


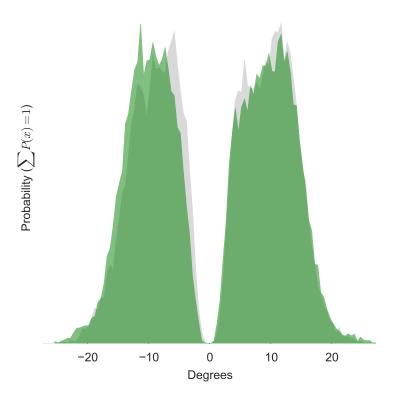




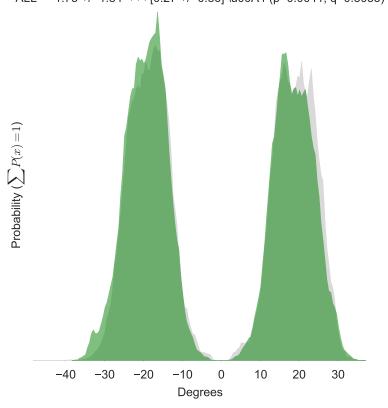
NECK BEND S.D. (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u00ba0000A4 SAMPLES = 119,609 [114,032] ALL = -1.12 +/- 2.11 <<<  $[-0.07 +/- 0.38] \u000A4 (p=0.0284, q=0.5259)$ 



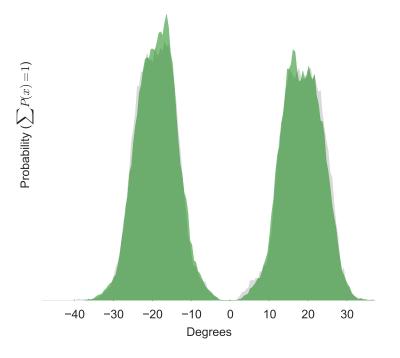


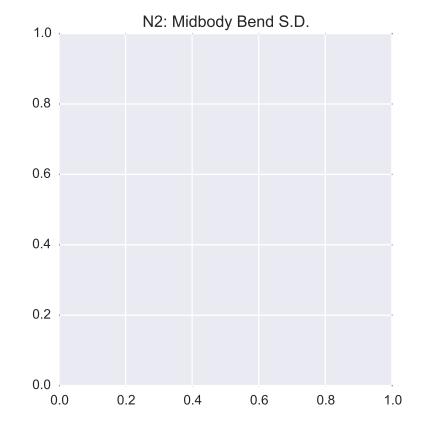


MIDBODY BEND S.D. (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -1.73 +/- 1.84 <<< [0.27 +/- 0.86] \u00A4 (p=0.0041, q=0.3033)

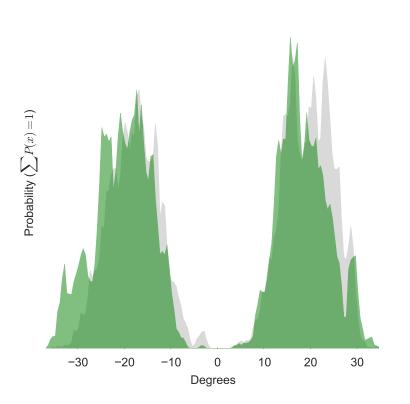


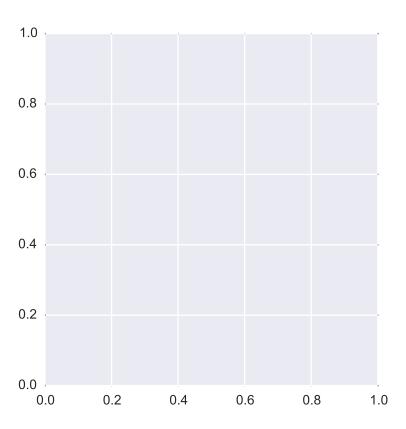
MIDBODY BEND S.D. (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 0.31 +/- 5.12 <<< [-0.60 +/- 0.44] \u00A4 (p=0.2265, q=0.5874)

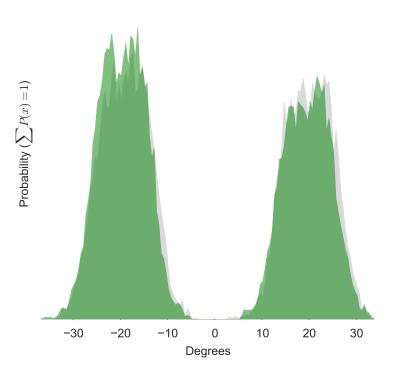




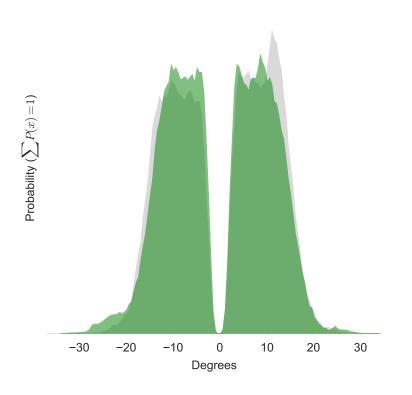
MIDBODY BEND S.D. (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u000A4 SAMPLES = 40,894 [54,915] ALL = -3.75 +/- 6.48 <<< [2.31 +/- 2.60] \u000A4 (p=0.0065, q=0.3766)







HIPS BEND S.D. (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 0.18 +/- 1.11 <<< [0.51 +/- 0.52] \u00A4 (p=0.2899, q=0.6046)



N2: Hips Bend S.D

0.8

0.6

0.4

0.2

0.0

0.0

0.0

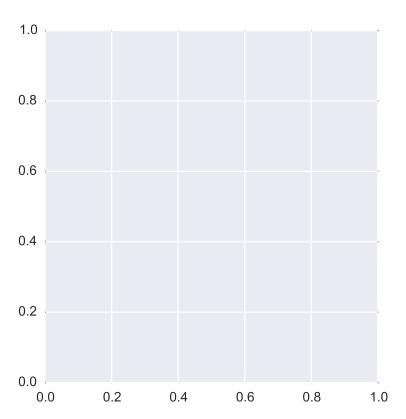
0.2

0.4

0.6

0.8

1.0



HIPS BEND S.D. (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = -0.44 +/- 1.47 <<< [0.26 +/- 0.33] \u00A4 (p=0.0696, q=0.5518)

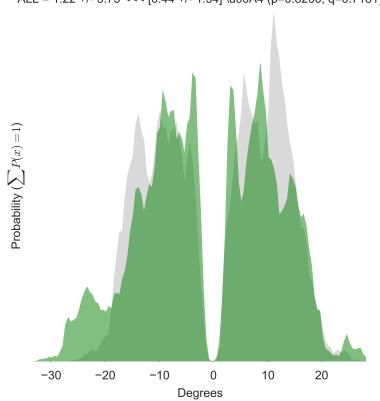
-20

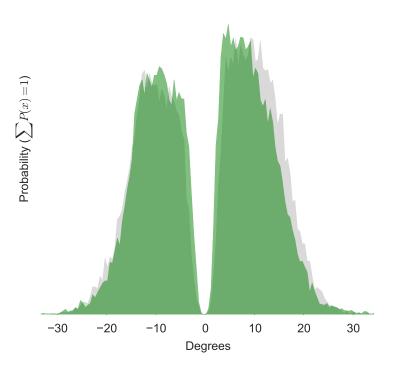
-10

Degrees

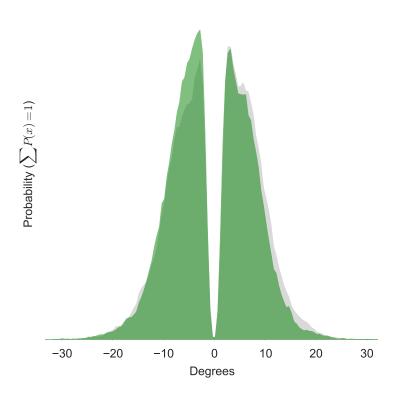


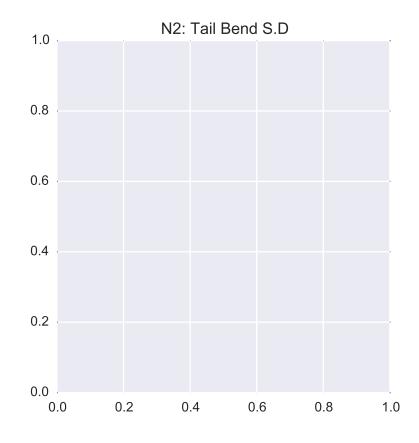
HIPS BEND S.D. (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 1.22 +/- 3.73 <<< [0.44 +/- 1.54] \u00A4 (p=0.8206, q=0.7181)

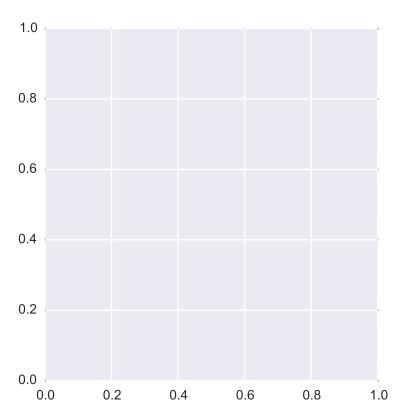




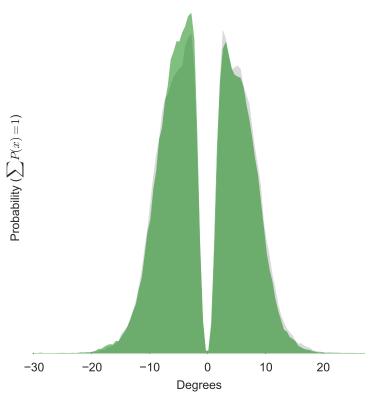
TAIL BEND S.D. (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u000A4 SAMPLES = 212,261 [234,276] ALL = -0.89 +/- 1.43 <<< [0.31 +/- 0.52] \u000a000A4 (p=0.0082, q=0.3863)



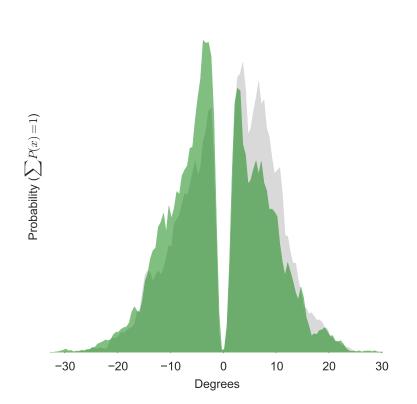


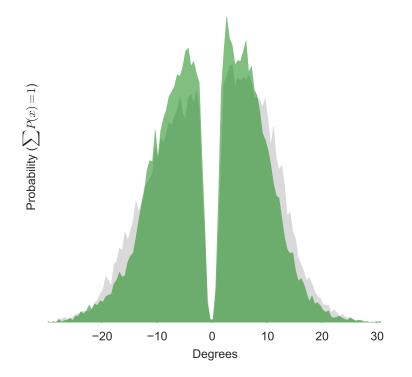


TAIL BEND S.D. (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u000A4 SAMPLES = 119,609 [114,032] ALL = -1.02 +/- 1.61 <<< [-0.10 +/- 0.22] \u000A4 (p=0.0284, q=0.5259)

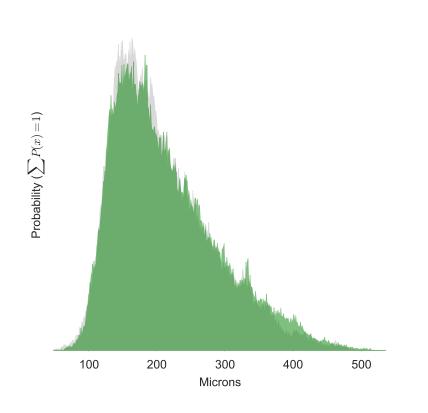


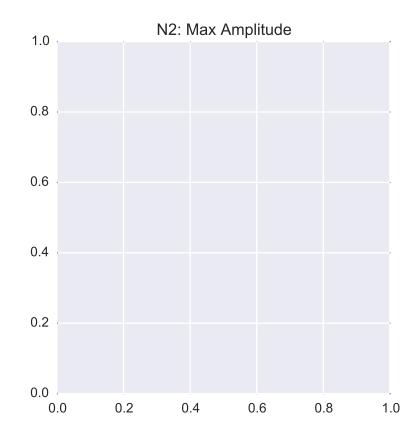
TAIL BEND S.D. (+/- = D/V INSIDE) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 0.05 +/- 1.77 <<< [1.00 +/- 1.00] \u00A4 (p=0.0821, q=0.5518)

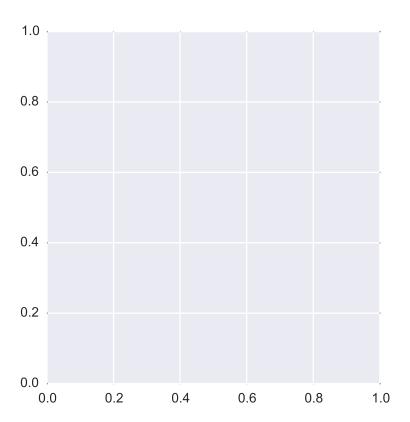




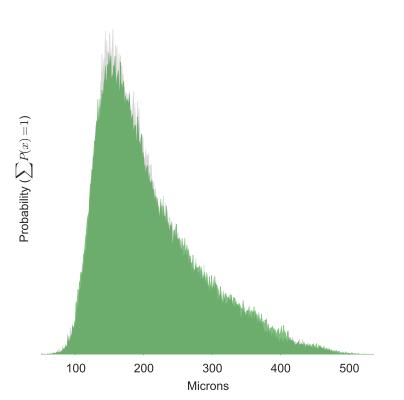
MAX AMPLITUDE - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 216.28 +/- 12.98 <<< [210.28 +/- 13.03] \u00A4 (p=0.2899, q=0.6046)



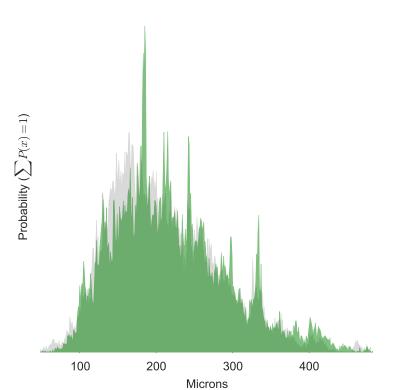




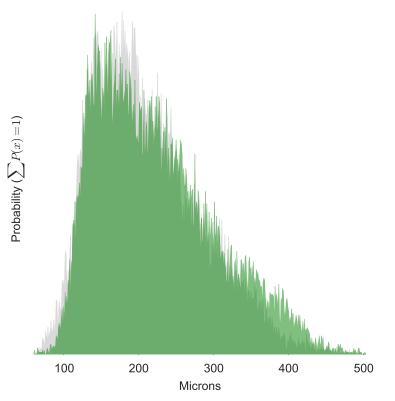
MAX AMPLITUDE - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 212.41 +/- 16.90 <<< [207.83 +/- 15.09] \u00a4 (p=0.5453, q=0.7181)



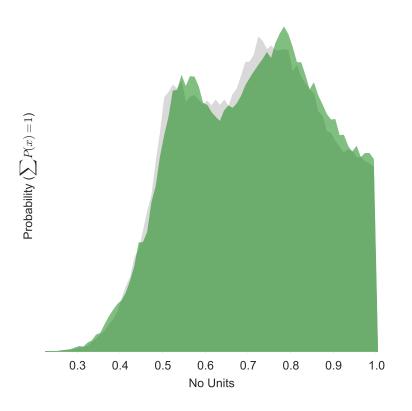
MAX AMPLITUDE - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 224.27 +/- 33.14 <<< [215.11 +/- 20.92] \u00A4 (p=0.7624, q=0.7181)

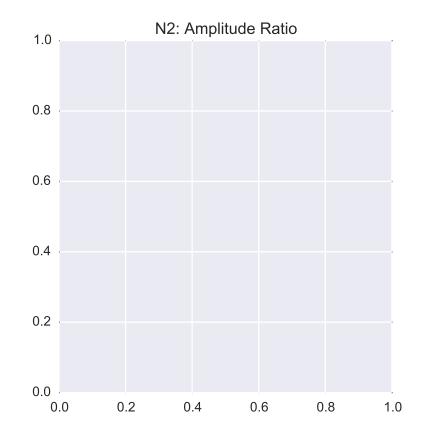


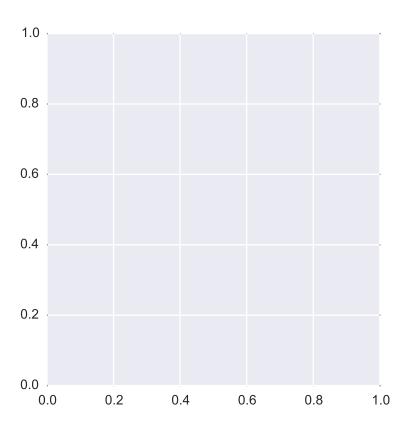
MAX AMPLITUDE - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 221.48 +/- 22.25 <<< [212.95 +/- 17.36] \u00A4 (p=0.2568, q=0.5951)

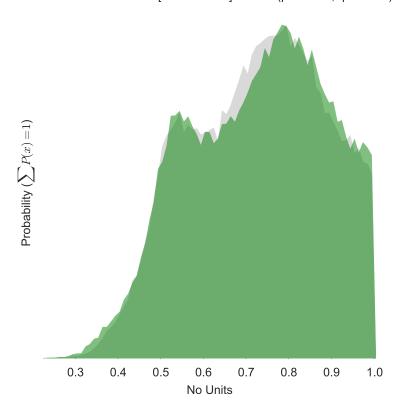


AMPLITUDE RATIO - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 0.71 +/- 0.03 <<< [0.71 +/- 0.01] \u00A4 (p=0.7624, q=0.7181)

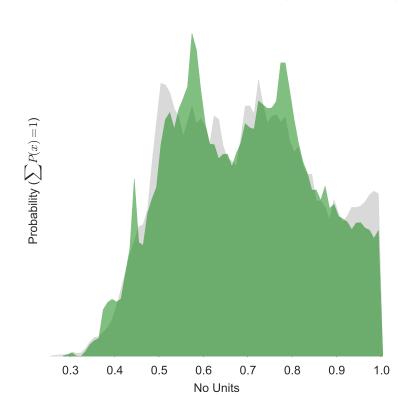




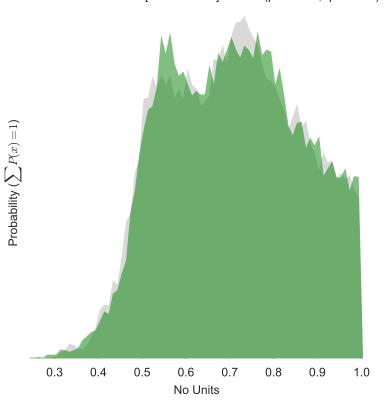




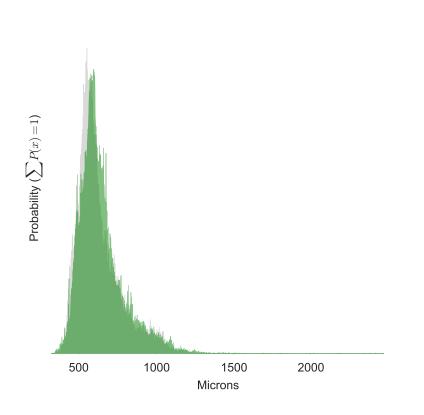
AMPLITUDE RATIO - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 0.68 +/- 0.05 <<< [0.69 +/- 0.03] \u00A4 (p=1.0000, q=0.7181)

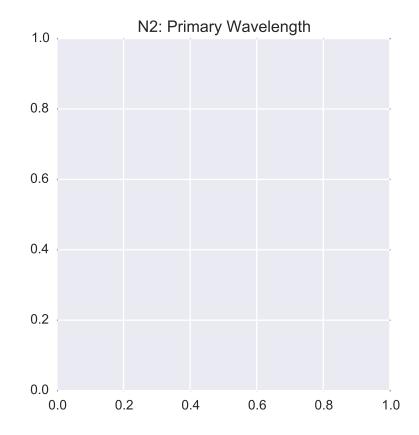


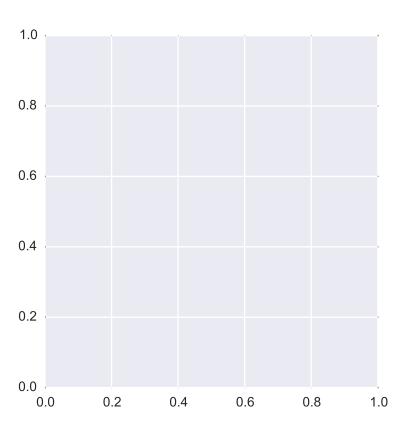
AMPLITUDE RATIO - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 0.71 +/- 0.04 <<< [0.71 +/- 0.02] \u00A4 (p=0.7055, q=0.7181)



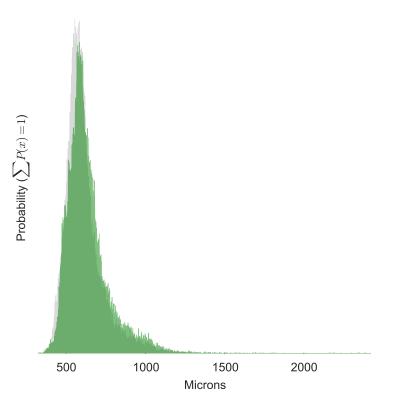
PRIMARY WAVELENGTH - all motion WORMS = 10 [10] \u00A4 SAMPLES = 159,021 [182,198] ALL = 639.75 +/- 37.94 <<< [628.02 +/- 34.12] \u00A4 (p=0.6501, q=0.7181)



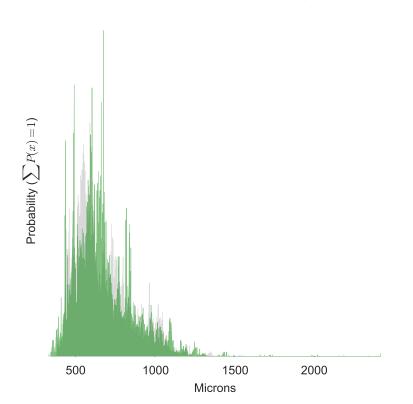




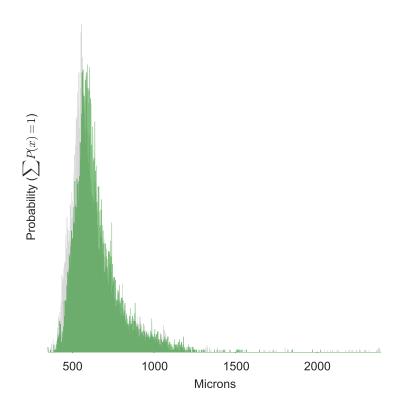
PRIMARY WAVELENGTH - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 91,995 [87,606] ALL = 629.00 +/- 33.18 <<< [610.02 +/- 31.74] \u00A4 (p=0.3258, q=0.6409)

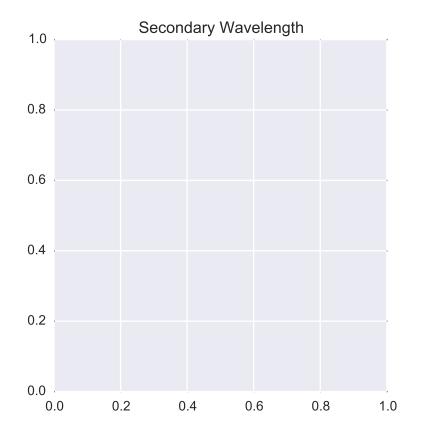


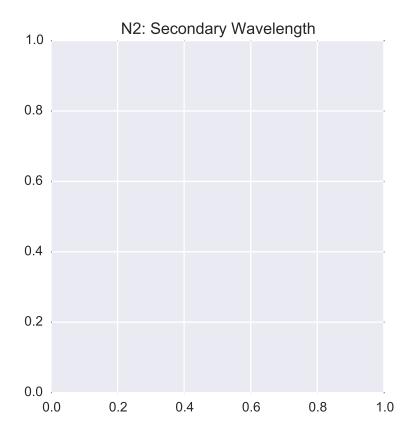
PRIMARY WAVELENGTH - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 29,981 [45,541] ALL = 669.56 +/- 77.24 <<< [661.26 +/- 51.95] \u00A4 (p=0.7624, q=0.7181)

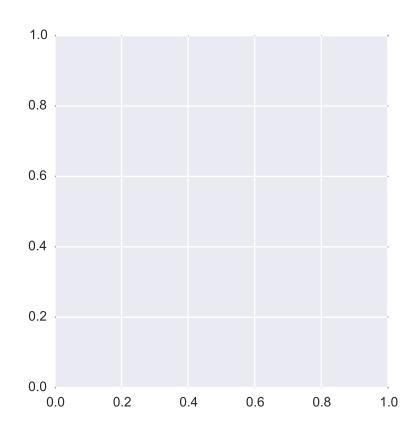


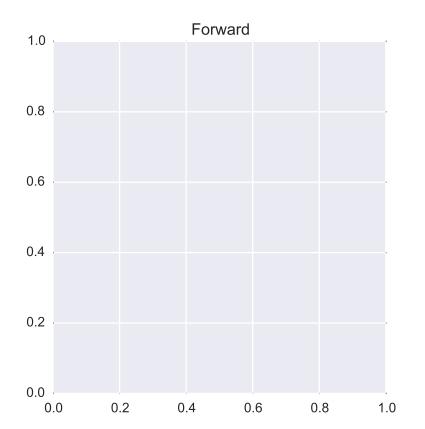
PRIMARY WAVELENGTH - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 19,405 [22,652] ALL = 639.48 +/- 42.66 <<< [624.43 +/- 28.68] \u00A4 (p=0.5453, q=0.7181)

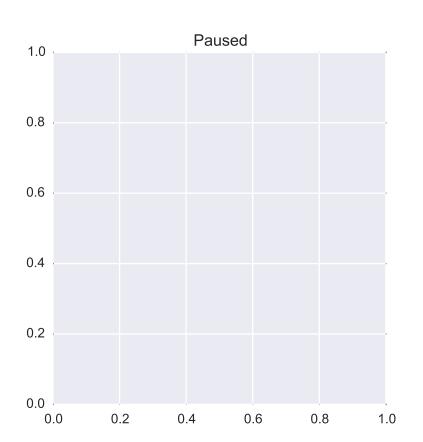


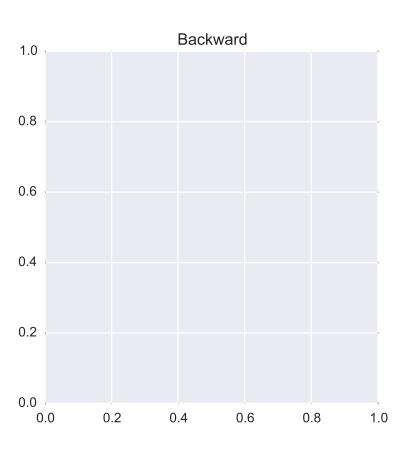




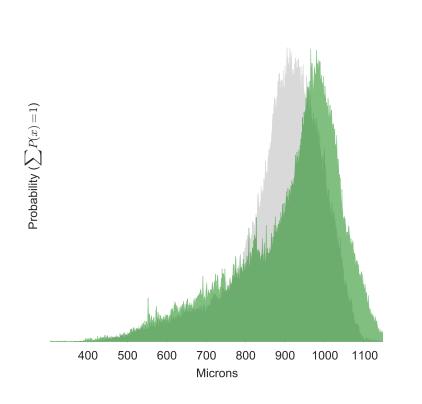


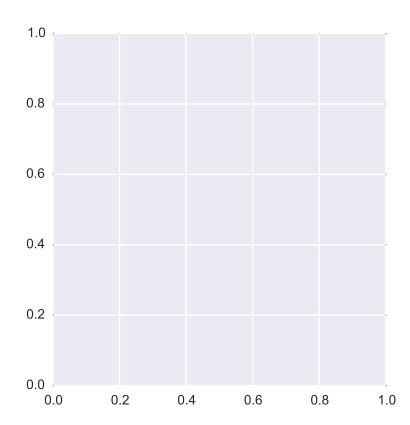




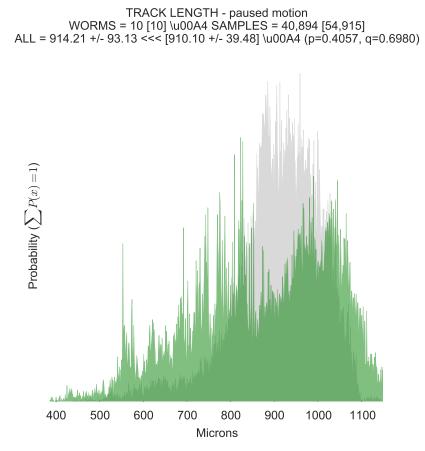


TRACK LENGTH - all motion
WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276]
ALL = 902.90 +/- 76.56 <<< [889.66 +/- 40.01] \u00A4 (p=0.2265, q=0.5874)

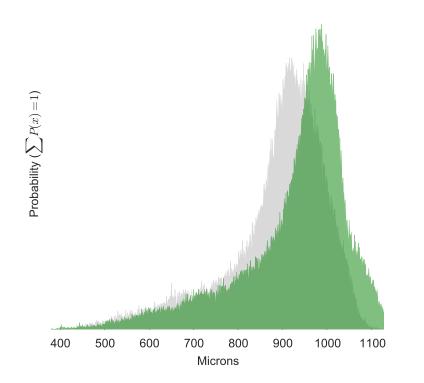


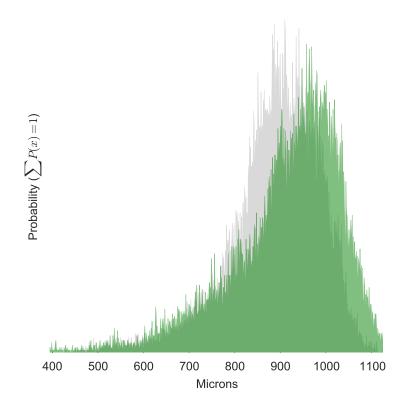


TRACK LENGTH - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 893.68 +/- 82.81 <<< [879.93 +/- 41.09] \u00A4 (p=0.1736, q=0.5571)



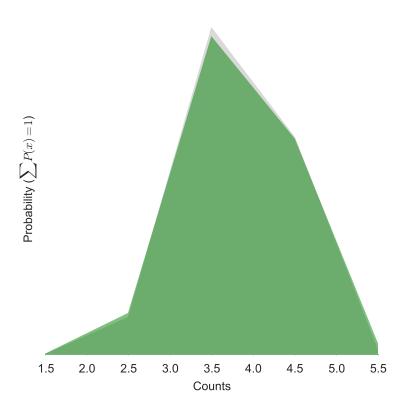
TRACK LENGTH - backward motion
WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704]
ALL = 901.98 +/- 76.29 <<< [891.08 +/- 42.64] \u00A4 (p=0.1988, q=0.5571)

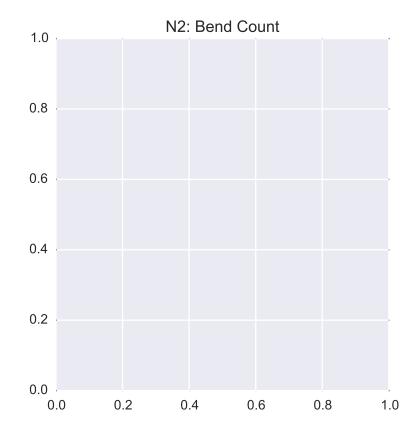


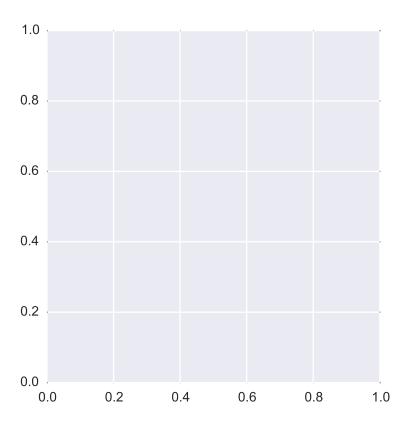


ECCENTRICITY - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 0.96 +/- 0.01 <<< [0.96 +/- 0.01] \u00A4 (p=0.9397, q=0.7181) N2: Eccentricity 1.0 1.0 0.8 8.0 Probability  $(\sum P(x) = 1)$ 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0 0.2 0.2 0.4 8.0 0.0 0.4 0.6 0.0 0.2 0.4 0.6 1.0 8.0 1.0 0.6 8.0 1.0 No Units ECCENTRICITY - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 0.96 +/- 0.01 <<< [0.96 +/- 0.01] \u00A4 (p=0.5453, q=0.7181) ECCENTRICITY - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 0.96 +/- 0.01 <<< [0.96 +/- 0.01] \u00A4 (p=0.4963, q=0.7181) Probability  $(\sum P(x) = 1)$ 8.0 0.2 0.4 0.2 0.3 0.4 0.5 0.6 0.7 0.9 1.0 0.6 0.8 1.0 0.5 0.6 0.7 0.8 0.9 1.0 0.4 No Units No Units No Units

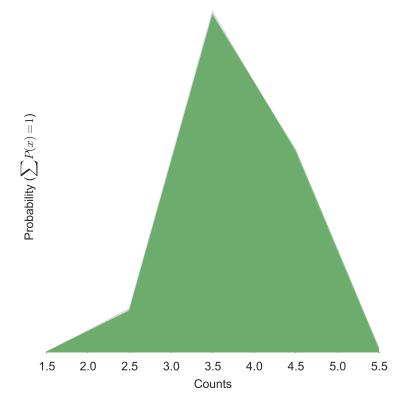
BEND COUNT - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 3.32 +/- 0.11 <<< [3.33 +/- 0.13] \u00A4 (p=0.7624, q=0.7181)



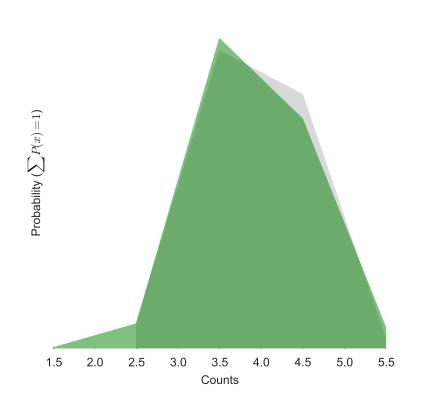




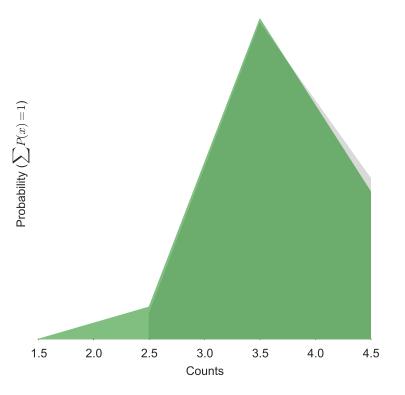
BEND COUNT - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 3.29 +/- 0.15 <<< [3.28 +/- 0.12] \u00A4 (p=0.7624, q=0.7181)



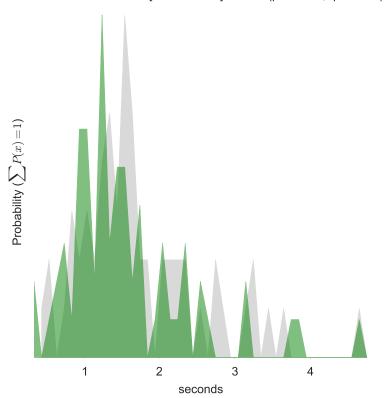
BEND COUNT - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 3.40 +/- 0.14 <<< [3.41 +/- 0.14] \u00A4 (p=1.0000, q=0.7181)

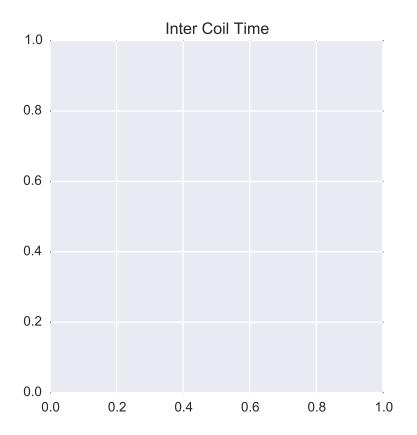


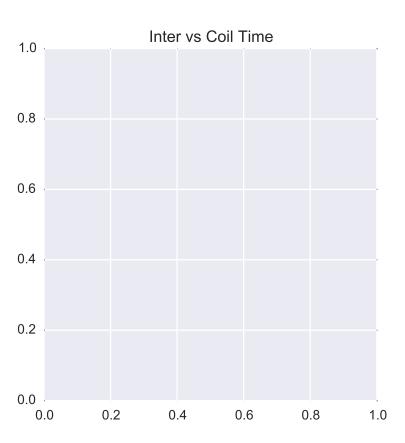
BEND COUNT - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 3.24 +/- 0.11 <<< [3.29 +/- 0.13] \u00A4 (p=0.4057, q=0.6980)

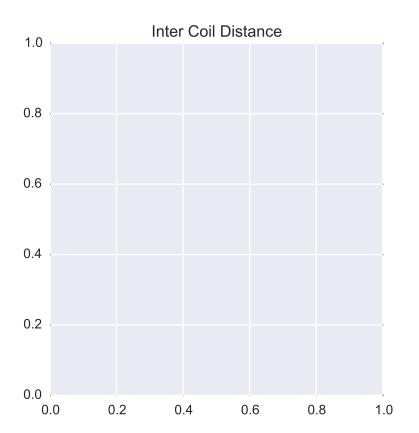


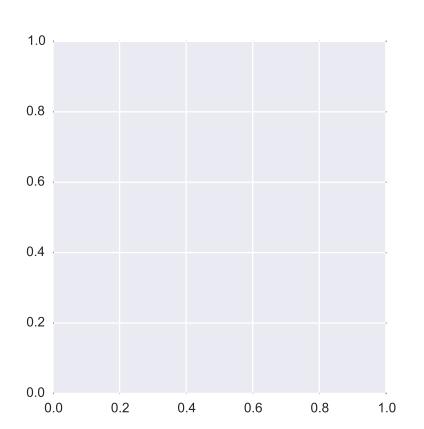
COIL TIME - all event WORMS = 10 [10] \u00A4 SAMPLES = 77 [60] ALL = 2.38 +/- 1.81 <<< [1.95 +/- 0.69] \u00A4 (p=0.9397, q=0.7181)

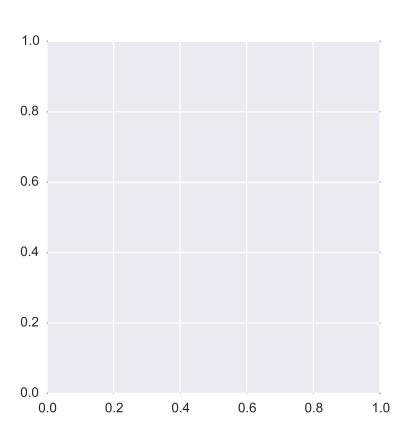




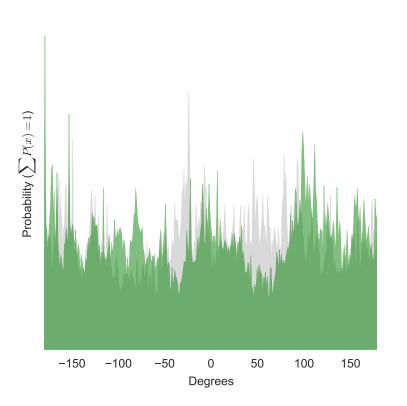


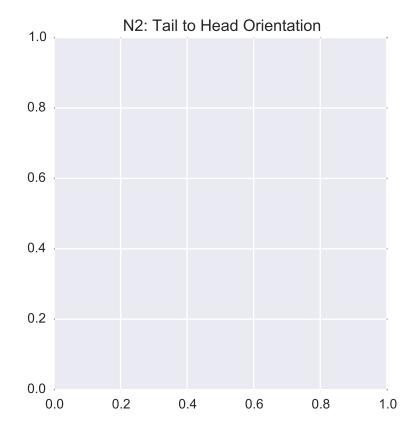


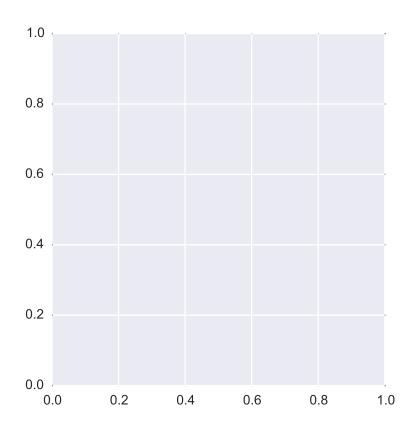




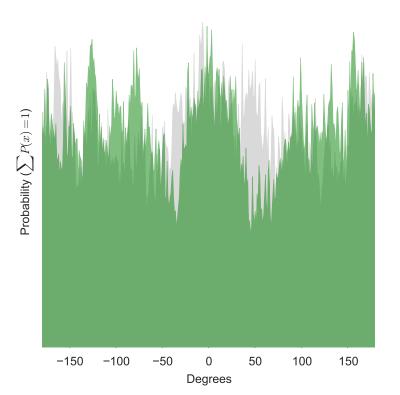
TAIL-TO-HEAD ORIENTATION - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 4.09 +/- 25.32 <<< [0.74 +/- 32.96] \u00A4 (p=0.9397, q=0.7181)



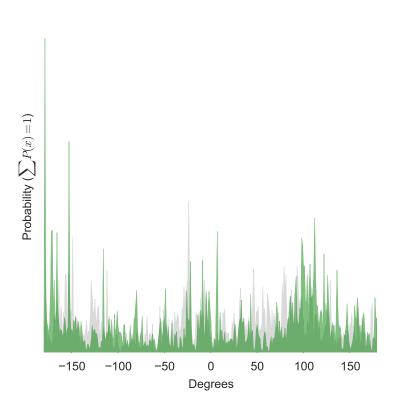




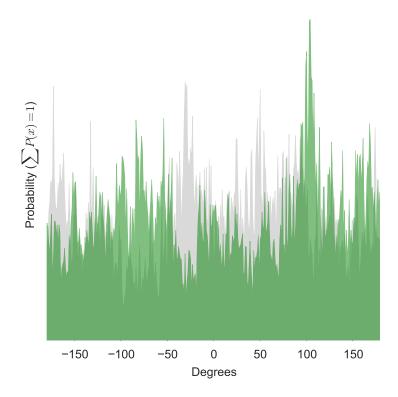
TAIL-TO-HEAD ORIENTATION - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 6.57 +/- 18.49 <<< [2.53 +/- 17.03] \u00A4 (p=0.8798, q=0.7181)



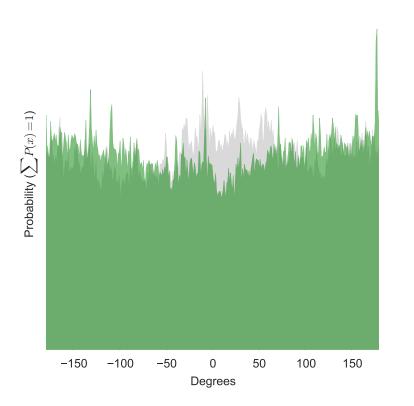
TAIL-TO-HEAD ORIENTATION - paused motion WORMS = 10 [10] \u000A4 SAMPLES = 40,894 [54,915] ALL = 6.94 +/- 47.98 <<< [0.81 +/- 52.50] \u00da4 (p=0.7624, q=0.7181)

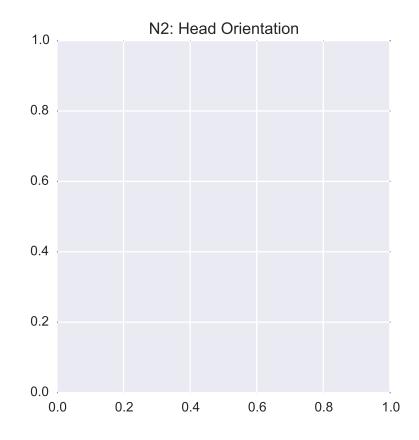


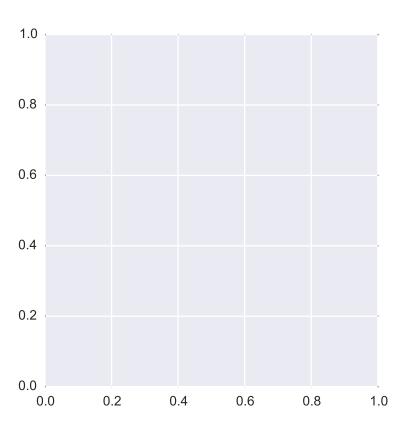
TAIL-TO-HEAD ORIENTATION - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 9.39 +/- 21.15 <<< [0.32 +/- 30.26] \u00A4 (p=0.7624, q=0.7181)



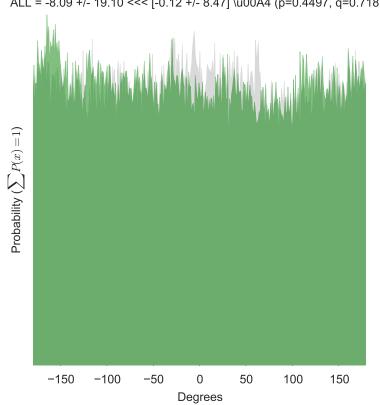
HEAD ORIENTATION - all motion WORMS = 10 [10] \u000A4 SAMPLES = 212,261 [234,276] ALL = -1.11 +/- 13.66 <<< [3.32 +/- 17.75] \u00da4 (p=0.3643, q=0.6619)



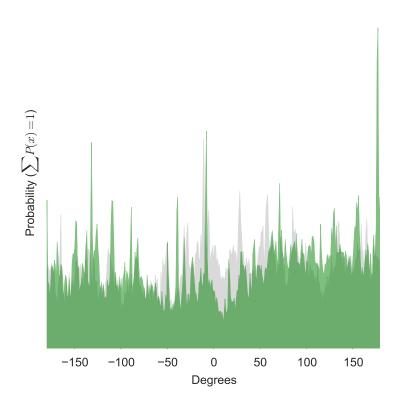




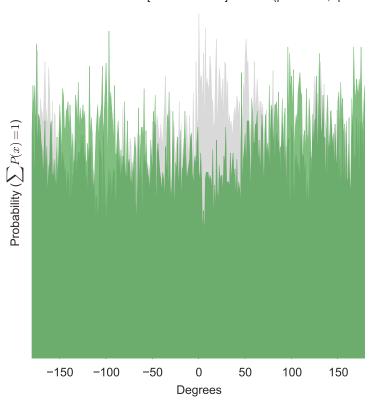
HEAD ORIENTATION - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = -8.09 +/- 19.10 <<< [-0.12 +/- 8.47] \u00A4 (p=0.4497, q=0.7181)



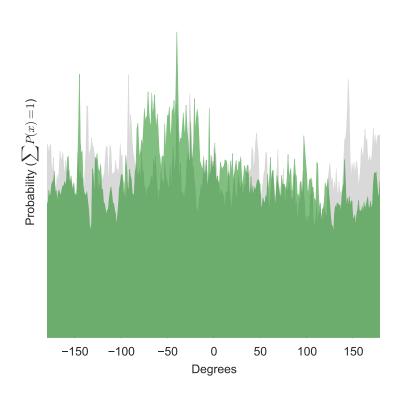
HEAD ORIENTATION - paused motion WORMS = 10 [10] \u000A4 SAMPLES = 40,894 [54,915] ALL = 1.27 +/- 38.56 <<< [8.59 +/- 27.51] \u000A4 (p=0.2899, q=0.6046)

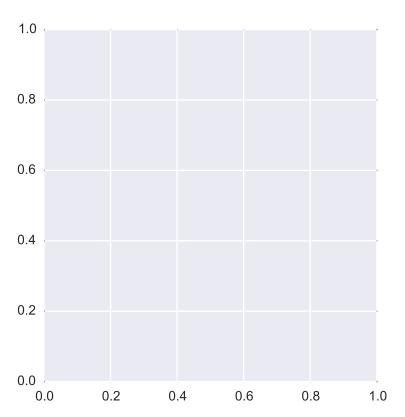


HEAD ORIENTATION - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 2.08 +/- 12.45 <<< [3.59 +/- 19.49] \u00A4 (p=0.6501, q=0.7181)

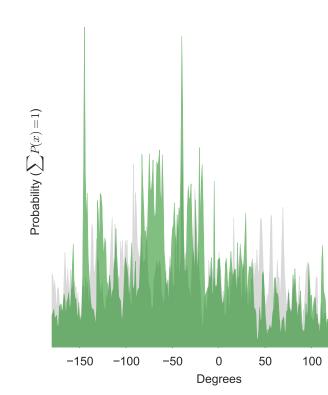


TAIL ORIENTATION - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -18.85 +/- 43.02 <<< [-2.95 +/- 18.98] \u00A4 (p=0.5967, q=0.7181)





TAIL ORIENTATION - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = -14.55 +/- 43.78 <<< [1.67 +/- 8.67] \u00A4 (p=0.4963, q=0.7181)



TAIL ORIENTATION - paused motion

WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915]

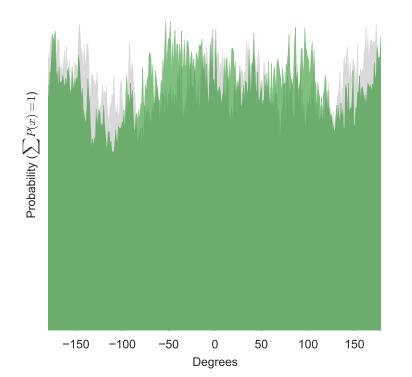
ALL = -22.78 +/- 53.24 <<< [-4.19 +/- 34.85] \u00A4 (p=0.4963, q=0.7181)

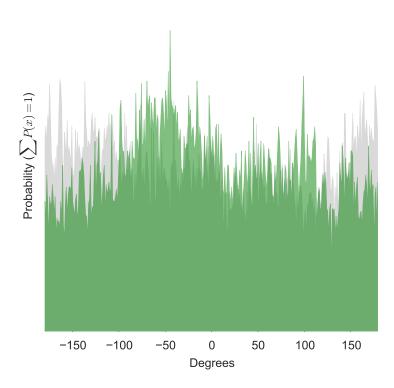
TAIL ORIENTATION - backward motion

WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704]

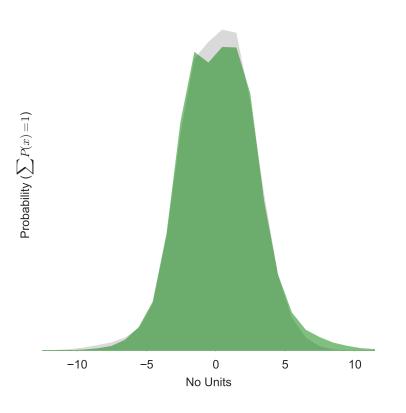
ALL = -16.18 +/- 40.76 <<< [-5.06 +/- 22.01] \u00A4 (p=0.7624, q=0.7181)

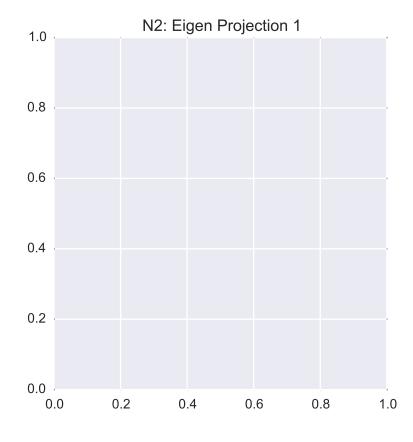
150

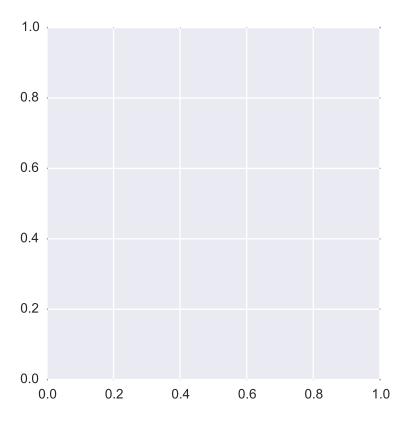




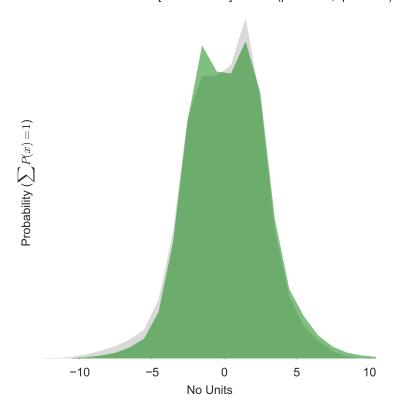
EIGEN PROJECTION 1 - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 0.53 +/- 0.80 <<< [0.19 +/- 0.31] \u00A4 (p=0.3643, q=0.6619)



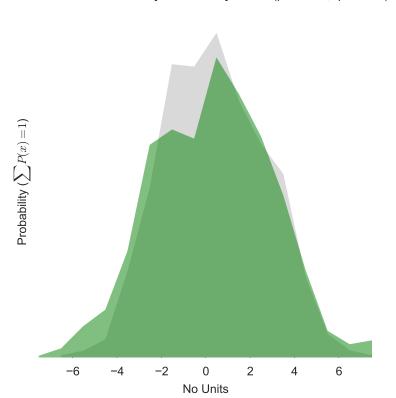




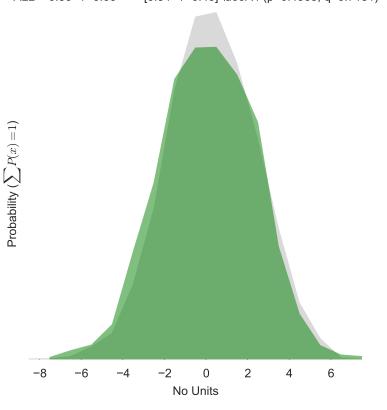
EIGEN PROJECTION 1 - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 0.79 +/- 1.19 <<< [0.03 +/- 0.15] \u00A4 (p=0.0102, q=0.4077)



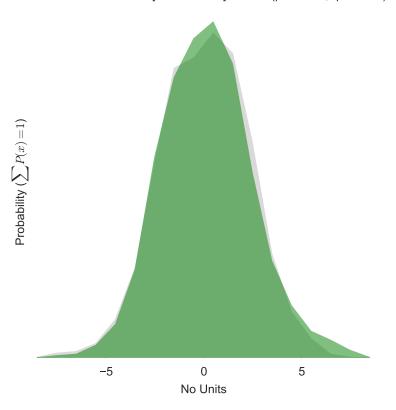
EIGEN PROJECTION 1 - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 0.79 +/- 1.35 <<< [0.52 +/- 0.58] \u00A4 (p=0.9397, q=0.7181)

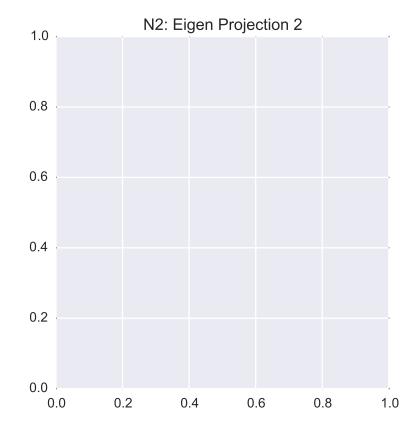


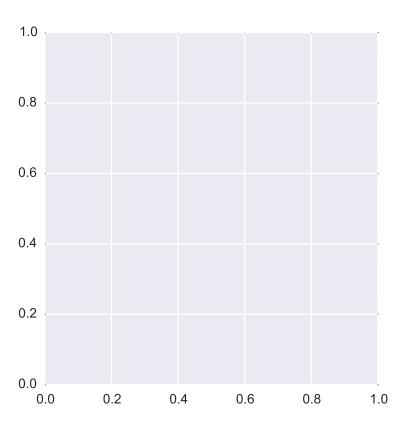
EIGEN PROJECTION 1 - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 0.30 +/- 0.66 <<< [0.34 +/- 0.45] \u00A4 (p=0.4963, q=0.7181)



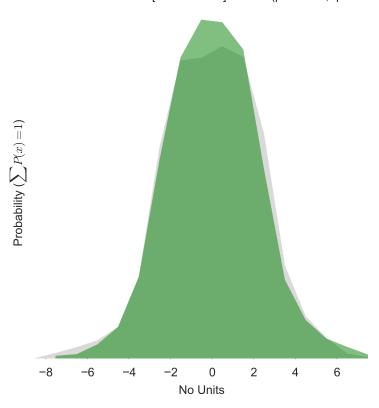
EIGEN PROJECTION 2 - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 0.03 +/- 0.52 <<< [0.10 +/- 0.19] \u00A4 (p=0.4497, q=0.7181)



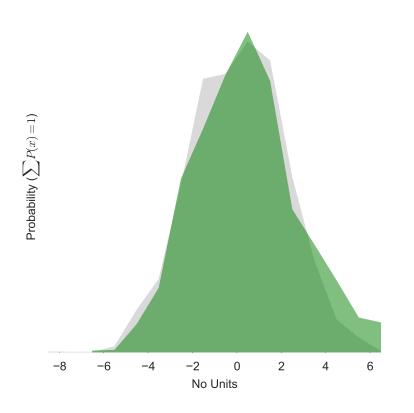




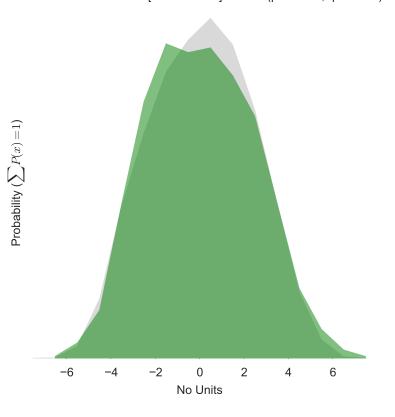
EIGEN PROJECTION 2 - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = -0.12 +/- 0.60 <<< [0.05 +/- 0.08] \u00A4 (p=0.9397, q=0.7181)



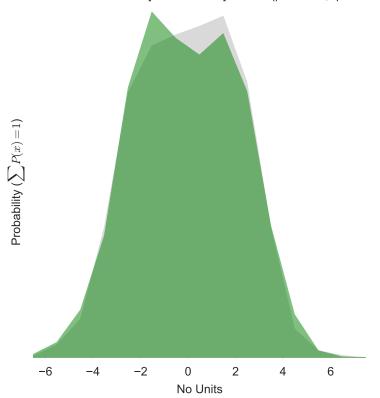
EIGEN PROJECTION 2 - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 0.02 +/- 0.72 <<< [0.13 +/- 0.41] \u00A4 (p=0.9397, q=0.7181)

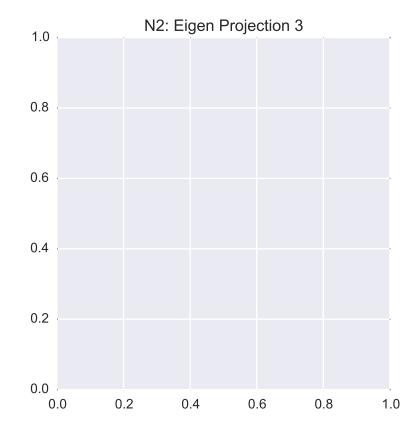


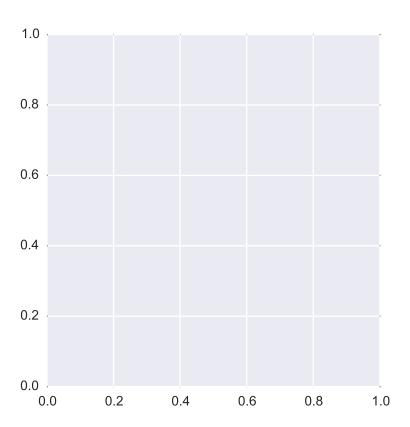
EIGEN PROJECTION 2 - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 0.03 +/- 0.43 <<< [0.12 +/- 0.31] \u00A4 (p=0.4963, q=0.7181)



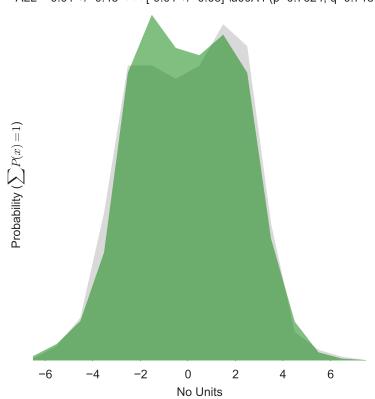
EIGEN PROJECTION 3 - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -0.07 +/- 0.17 <<< [-0.00 +/- 0.10] \u00A4 (p=0.4963, q=0.7181)



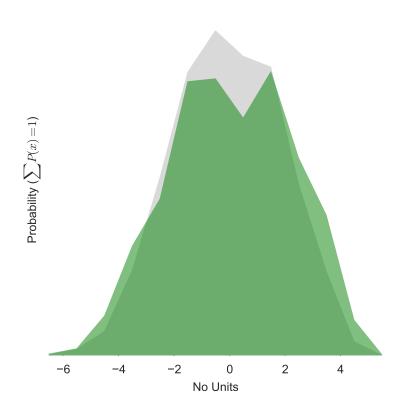




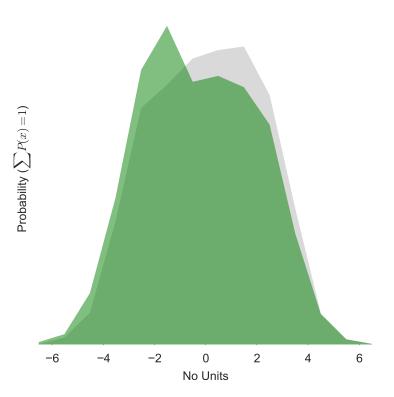
EIGEN PROJECTION 3 - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 0.01 +/- 0.43 <<< [-0.01 +/- 0.08] \u00A4 (p=0.7624, q=0.7181)



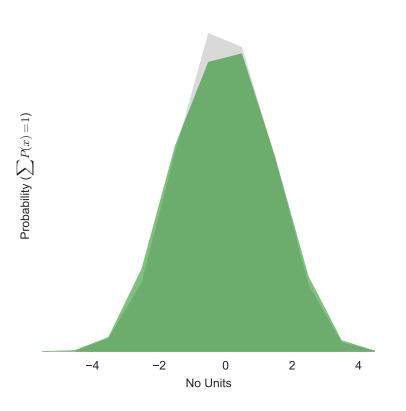
EIGEN PROJECTION 3 - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = -0.10 +/- 0.83 <<< [-0.18 +/- 0.29] \u00A4 (p=0.3643, q=0.6619)

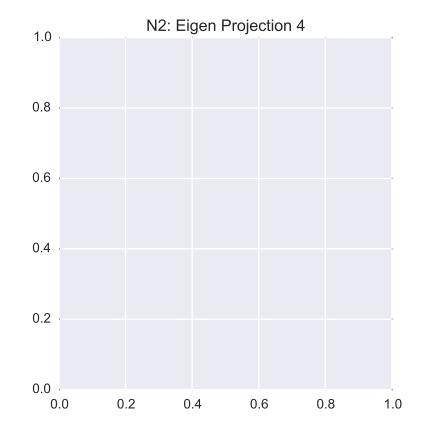


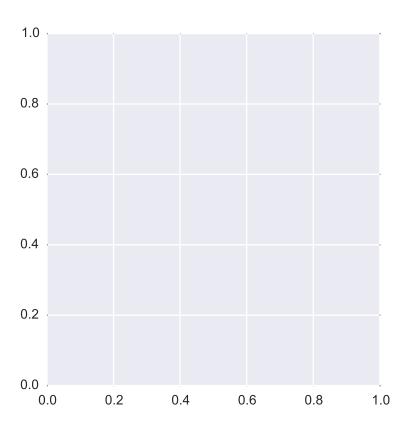
EIGEN PROJECTION 3 - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = -0.27 +/- 0.27 <<< [0.03 +/- 0.22] \u00A4 (p=0.0191, q=0.4982)



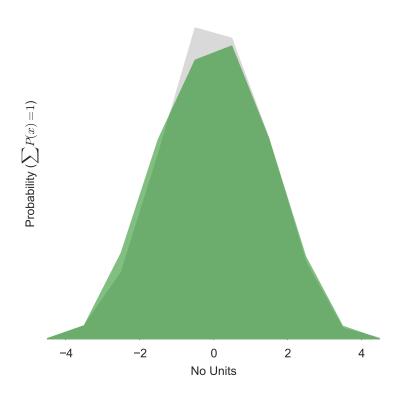
EIGEN PROJECTION 4 - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = -0.04 +/- 0.16 <<< [-0.04 +/- 0.11] \u00A4 (p=0.7055, q=0.7181)



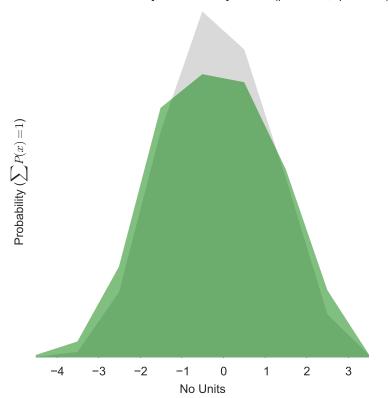




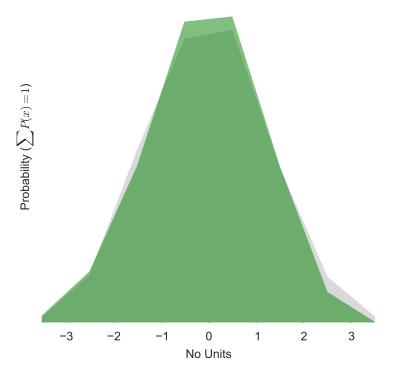
EIGEN PROJECTION 4 - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 0.08 +/- 0.35 <<< [0.03 +/- 0.08] \u00A4 (p=0.4497, q=0.7181)



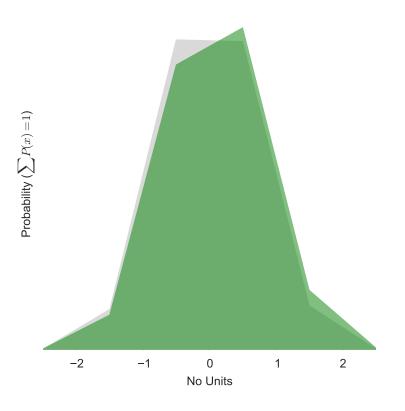
EIGEN PROJECTION 4 - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = -0.08 +/- 0.27 <<< [-0.17 +/- 0.20] \u00A4 (p=0.1988, q=0.5571)

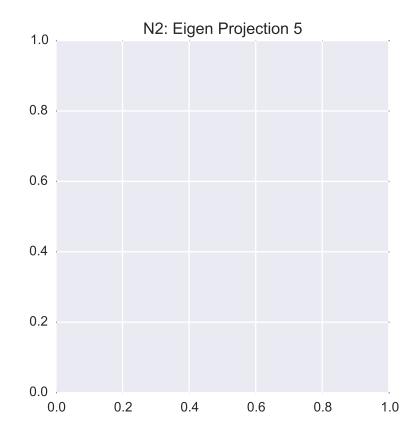


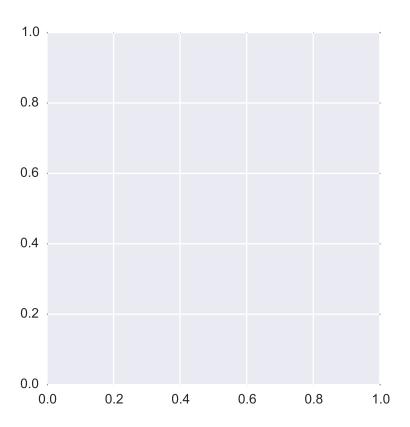
EIGEN PROJECTION 4 - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = -0.18 +/- 0.32 <<< [-0.03 +/- 0.13] \u00A4 (p=0.4963, q=0.7181)



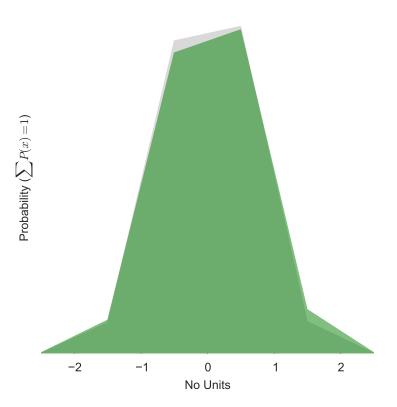
EIGEN PROJECTION 5 - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 0.08 +/- 0.10 <<< [0.01 +/- 0.06] \u00A4 (p=0.0696, q=0.5518)



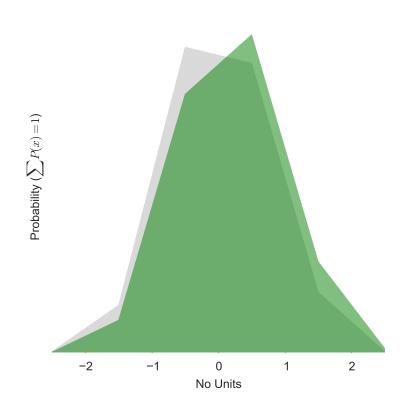




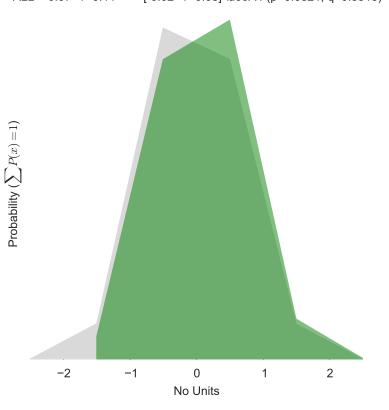
EIGEN PROJECTION 5 - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 0.09 +/- 0.13 <<< [0.00 +/- 0.04] \u00A4 (p=0.0963, q=0.5518)



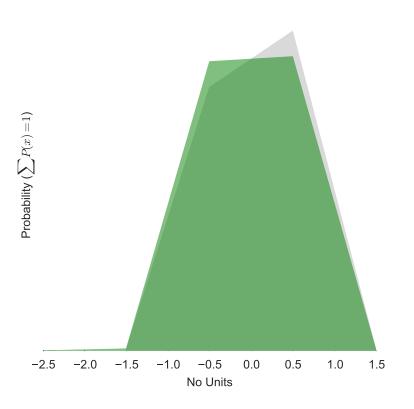
EIGEN PROJECTION 5 - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,894 [54,915] ALL = 0.10 +/- 0.13 <<< [0.02 +/- 0.10] \u00A4 (p=0.1988, q=0.5571)

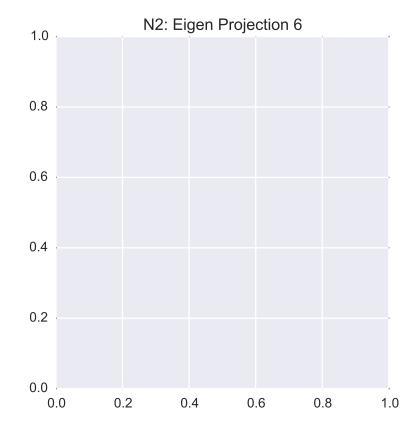


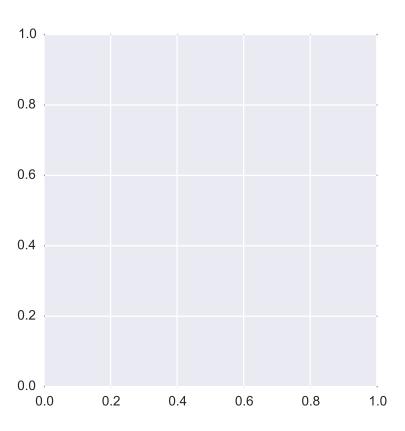
EIGEN PROJECTION 5 - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 0.07 +/- 0.11 <<< [-0.02 +/- 0.08] \u00A4 (p=0.0821, q=0.5518)



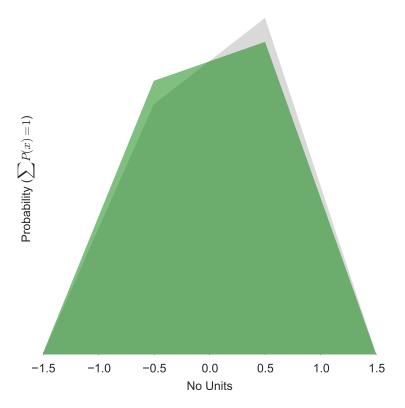
EIGEN PROJECTION 6 - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 0.02 +/- 0.10 <<< [0.03 +/- 0.05] \u00A4 (p=0.3643, q=0.6619)

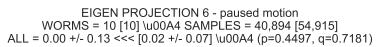


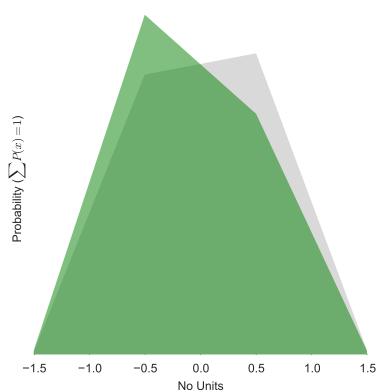




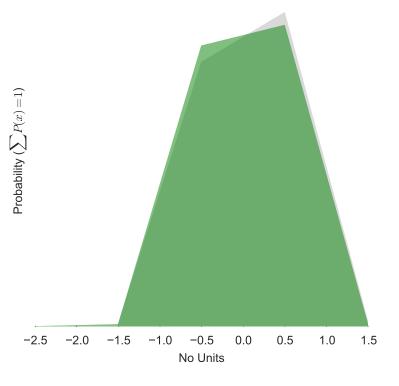
EIGEN PROJECTION 6 - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 0.05 +/- 0.15 <<< [0.04 +/- 0.05] \u00A4 (p=0.4963, q=0.7181)

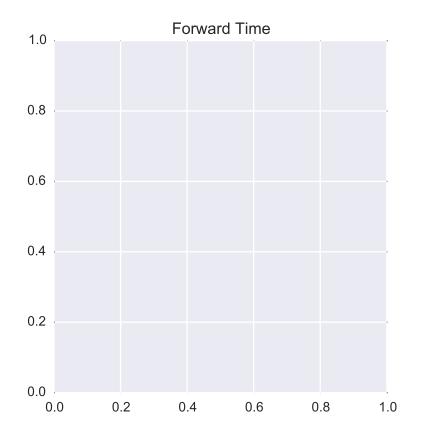


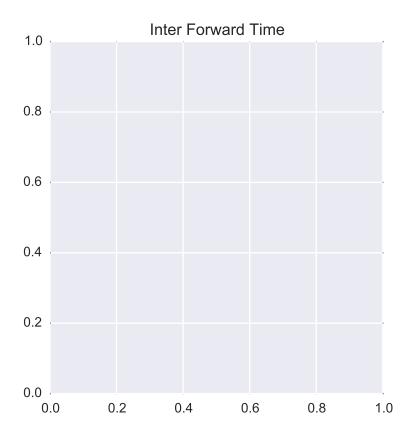


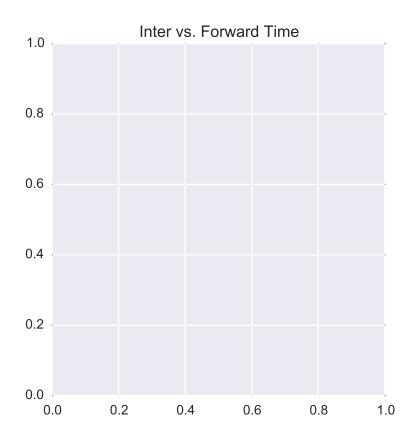


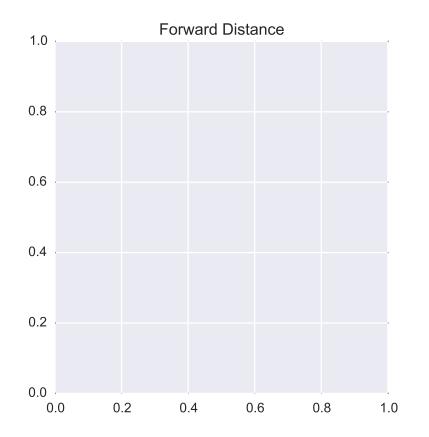
EIGEN PROJECTION 6 - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 24,374 [27,704] ALL = 0.03 +/- 0.08 <<< [0.03 +/- 0.07] \u00A4 (p=0.8798, q=0.7181)

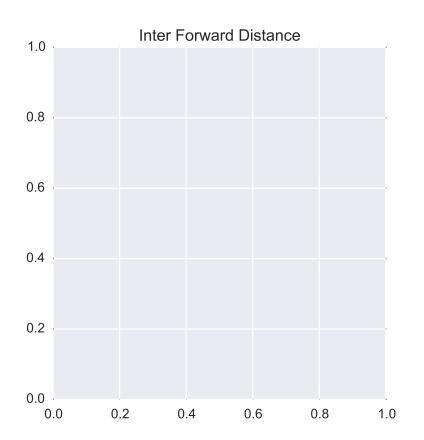


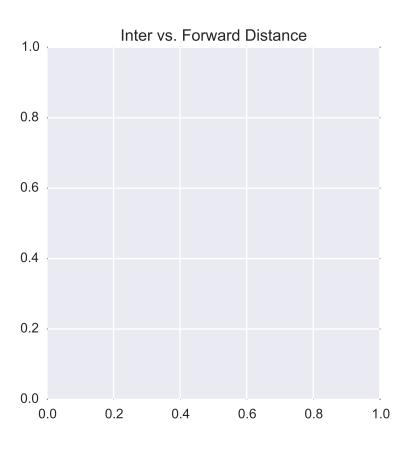


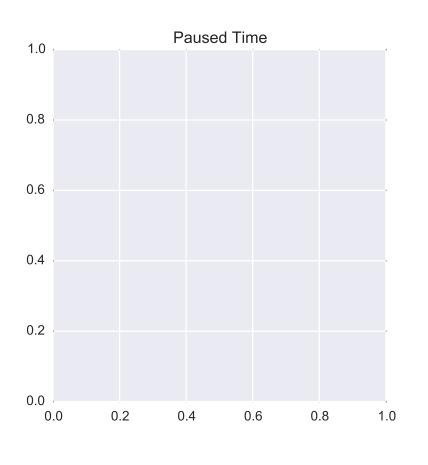


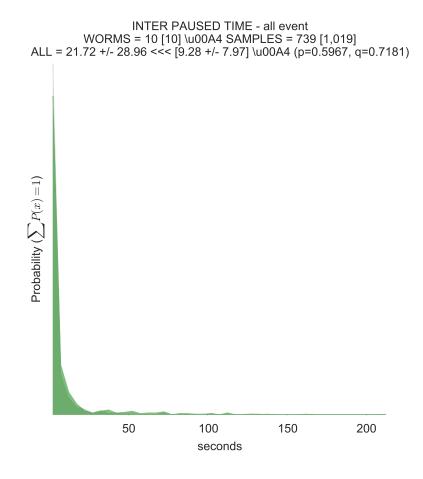


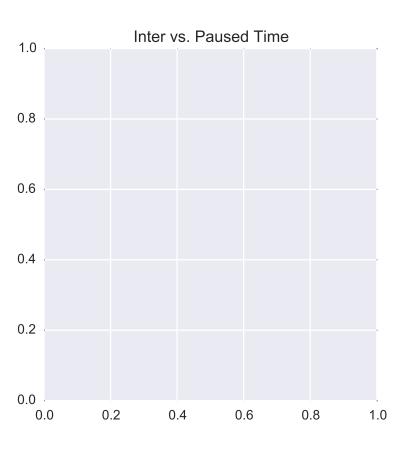


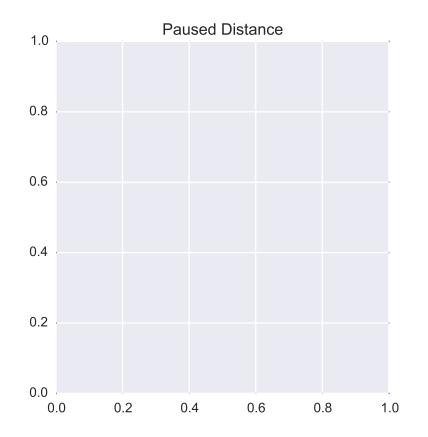


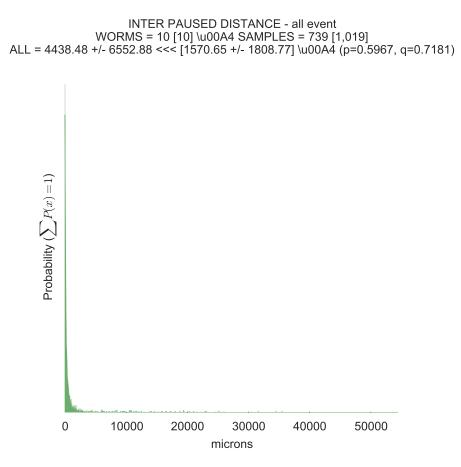


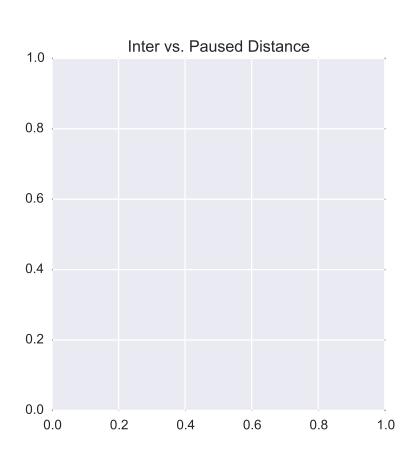


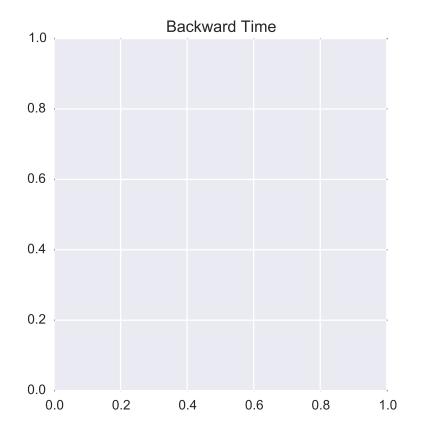


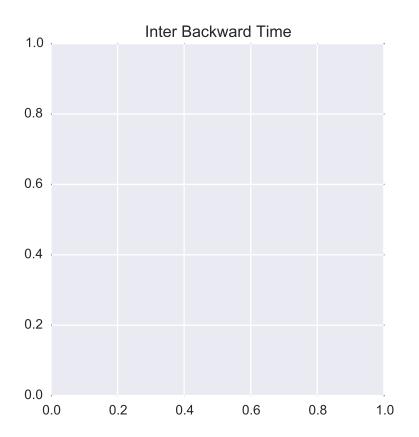


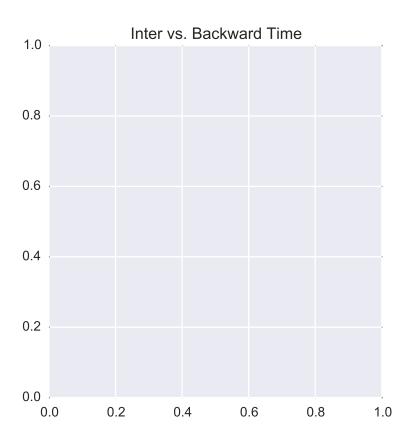


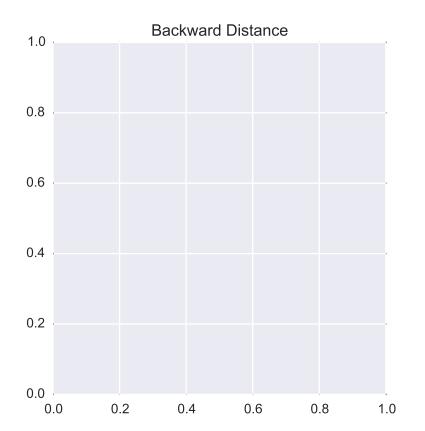


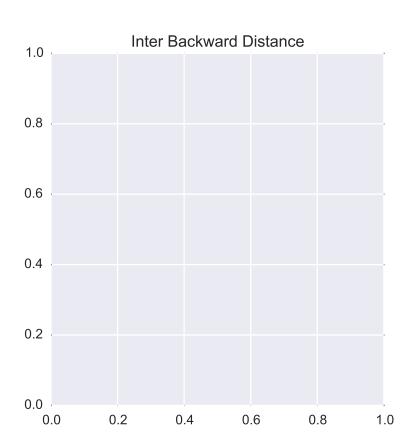


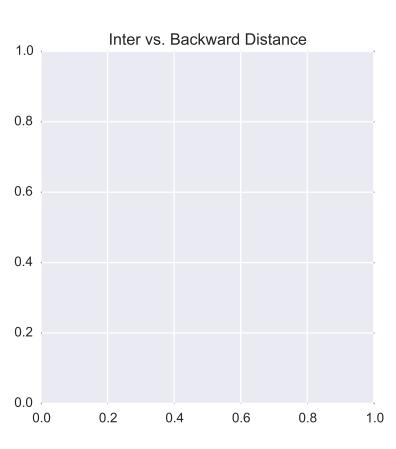






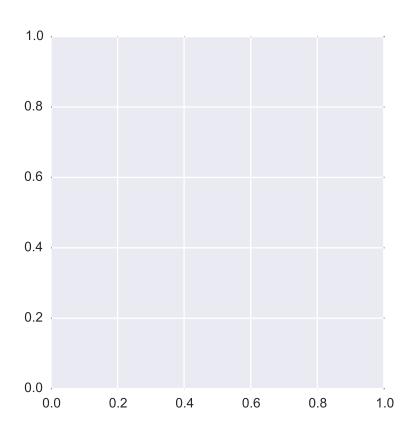


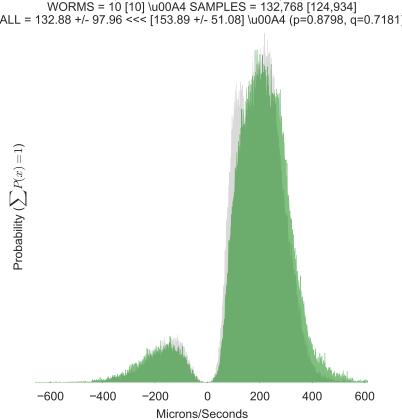


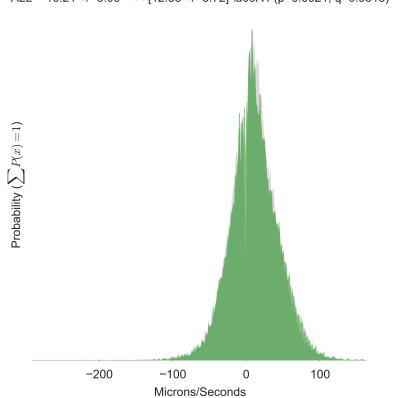


HEAD TIP SPEED (+/- = FORWARD/BACKWARD) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 219,831 [241,970] ALL = 68.11 +/- 76.24 <<< [66.45 +/- 46.47] \u00A4 (p=0.8206, q=0.7181) N2: Head Tip Speed 1.0 1.0 8.0 8.0 Probability  $(\sum P(x) = 1)$ 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0 -3000 -1000 0.2 -2000 0 0.0 0.4 0.6 8.0 1.0 0.0 0.2 0.4 0.6 8.0 1.0 Microns/Seconds HEAD TIP SPEED (+/- = FORWARD/BACKWARD) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 25,357 [28,768] ALL = -299.68 +/- 194.27 <<< [-212.03 +/- 61.00] \u00A4 (p=0.1736, q=0.5571) HEAD TIP SPEED (+/- = FORWARD/BACKWARD) - forward motion HEAD TIP SPEED (+/- = FORWARD/BACKWARD) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 126,323 [120,711] ALL = 130.06 +/- 105.46 <<< [154.44 +/- 55.25] \u00dau00A4 (p=0.8206, q=0.7181) WORMS = 10 [10] \u00A4 SAMPLES = 40,973 [54,998] ALL = 20.50 +/- 6.58 <<< [15.25 +/- 7.40] \u00A4 (p=0.0821, q=0.5518) -1000 -500 -400 -200 200 400 500 0 -3000-2000 -1000Microns/Seconds Microns/Seconds Microns/Seconds

HEAD SPEED (+/- = FORWARD/BACKWARD) - all motion WORMS = 10 [10] \u000A4 SAMPLES = 226,791 [246,897] ALL = 72.01 +/- 71.75 <<< [67.68 +/- 45.09] \u000a4 (p=0.8206, q=0.7181) N2: Head Speed 1.0 8.0 Probability  $(\sum P(x) = 1)$ 0.6 0.4 0.2 0.0 -1500 0.2 -2000 -1000-500 0 500 0.0 0.4 0.6 Microns/Seconds HEAD SPEED (+/- = FORWARD/BACKWARD) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 132,768 [124,934] ALL = 132.88 +/- 97.96 <<< [153.89 +/- 51.08] \u00A4 (p=0.8798, q=0.7181) HEAD SPEED (+/- = FORWARD/BACKWARD) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 41,048 [55,101] ALL = 16.21 +/- 5.00 <<< [12.38 +/- 5.72] \u00a4 (p=0.0821, q=0.5518)

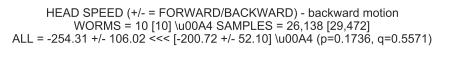


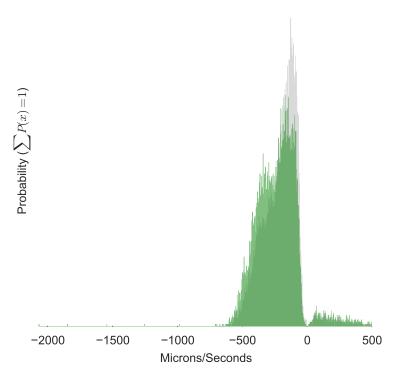




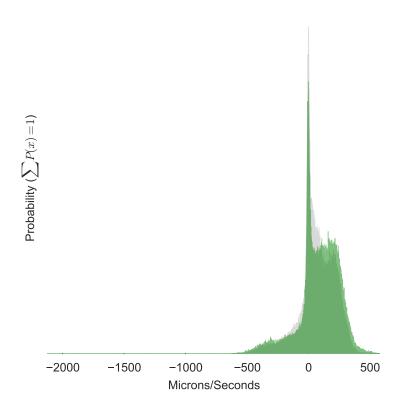
8.0

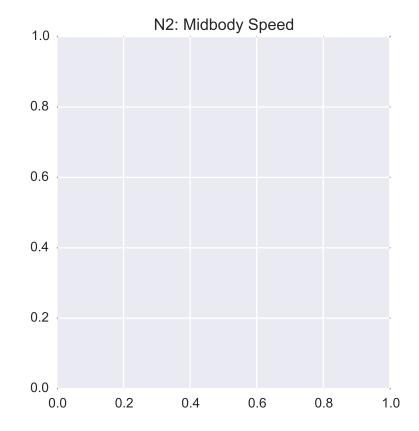
1.0

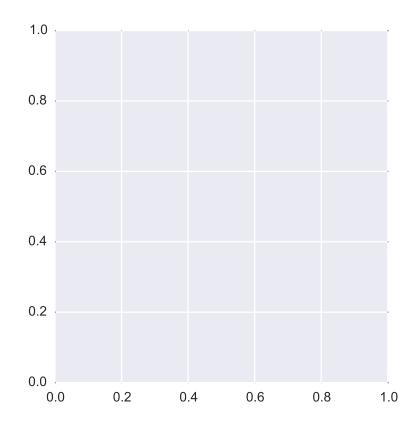




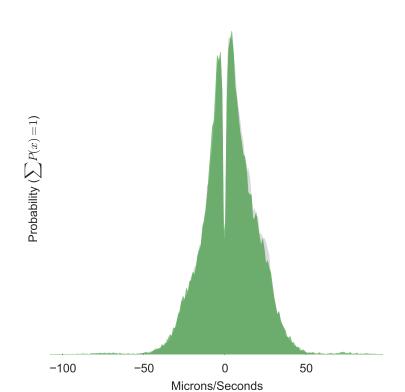
MIDBODY SPEED (+/- = FORWARD/BACKWARD) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 226,791 [246,897] ALL = 78.07 +/- 67.08 <<< [71.88 +/- 44.64] \u00A4 (p=0.8798, q=0.7181)







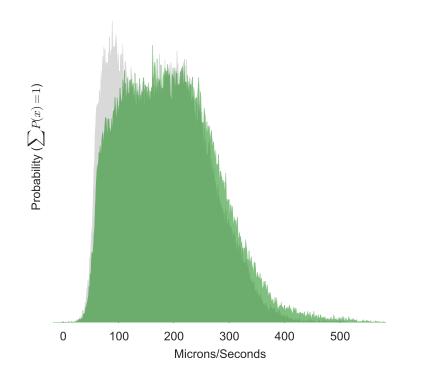
MIDBODY SPEED (+/- = FORWARD/BACKWARD) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 132,768 [124,934] ALL = 165.68 +/- 51.63 <<< [164.84 +/- 44.56] \u00A4 (p=0.9397, q=0.7181)

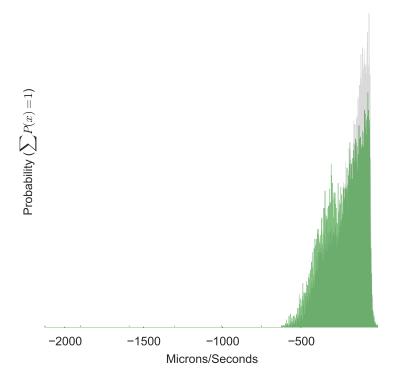


MIDBODY SPEED (+/- = FORWARD/BACKWARD) - paused motion

WORMS = 10 [10] \u00A4 SAMPLES = 41,048 [55,101] ALL = 3.60 +/- 2.75 <<< [3.56 +/- 1.98] \u00A4 (p=0.8798, q=0.7181)

MIDBODY SPEED (+/- = FORWARD/BACKWARD) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 26,138 [29,472] ALL = -248.33 +/- 85.90 <<< [-193.48 +/- 47.04] \u00A4 (p=0.1509, q=0.5571)





TAIL SPEED (+/- = FORWARD/BACKWARD) - all motion WORMS = 10 [10] \u000A4 SAMPLES = 226,791 [246,897] ALL = 68.82 +/- 62.35 <<< [63.05 +/- 41.08] \u000a4 (p=1.0000, q=0.7181) N2: Tail Speed 1.0 1.0 8.0 8.0 Probability  $(\sum P(x) = 1)$ 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0 -1500 0 0.2 0.2 -2000 -1000-500 500 0.0 0.4 0.6 8.0 1.0 0.0 0.4 0.6 8.0 1.0 Microns/Seconds TAIL SPEED (+/- = FORWARD/BACKWARD) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 132,768 [124,934] ALL = 147.11 +/- 50.40 <<< [146.32 +/- 43.10] \u00A4 (p=0.9397, q=0.7181) TAIL SPEED (+/- = FORWARD/BACKWARD) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 41,048 [55,101] ALL = 1.39 +/- 3.90 <<< [0.62 +/- 1.56] \u00A4 (p=0.9397, q=0.7181) TAIL SPEED (+/- = FORWARD/BACKWARD) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 26,138 [29,472] ALL = -220.74 +/- 80.86 <<< [-175.26 +/- 45.33] \u00A4 (p=0.1124, q=0.5571) Probability  $(\sum P(x) = 1)$ 200 50 500 400 -100 -50 -2000 -1500 -500

Microns/Seconds

100

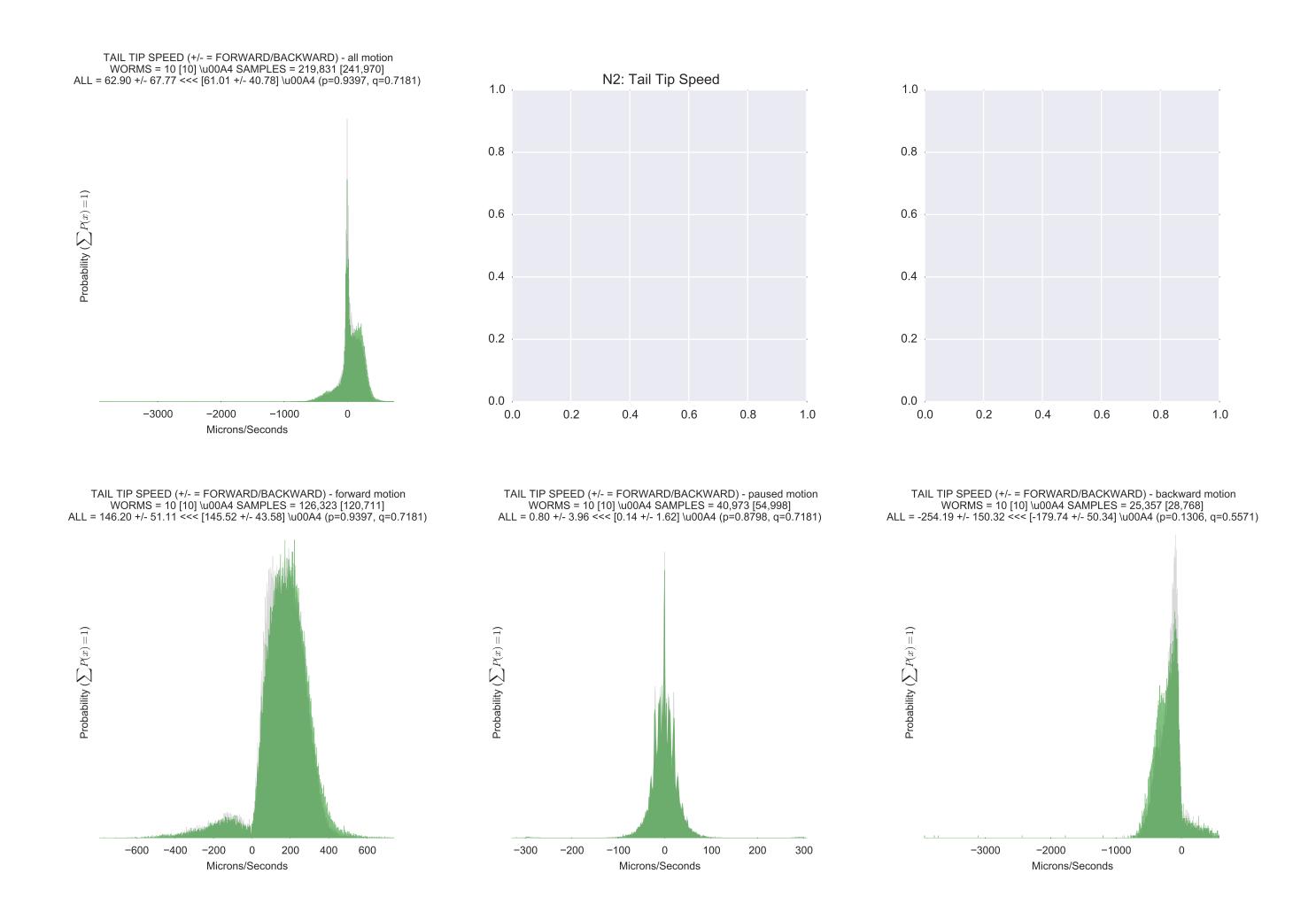
-1000

Microns/Seconds

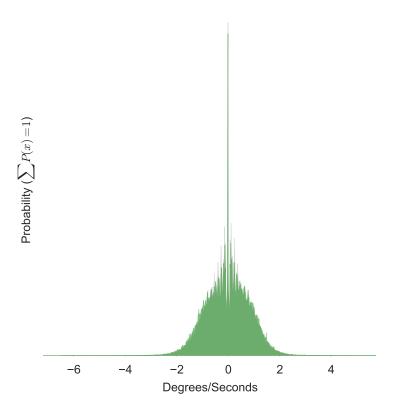
-400

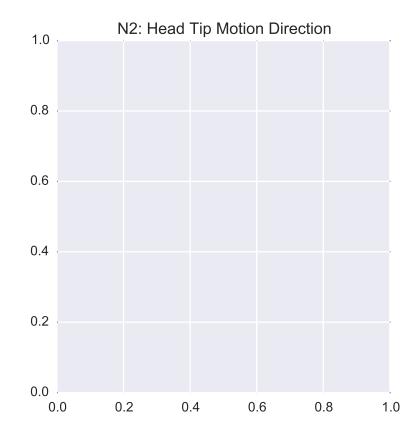
-200

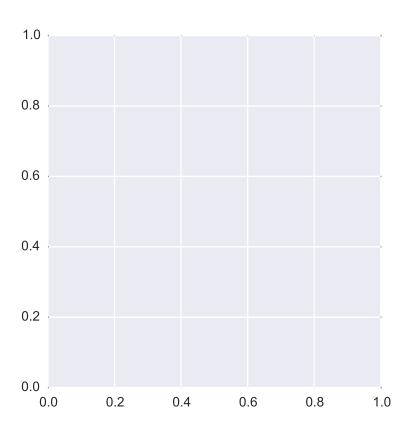
Microns/Seconds



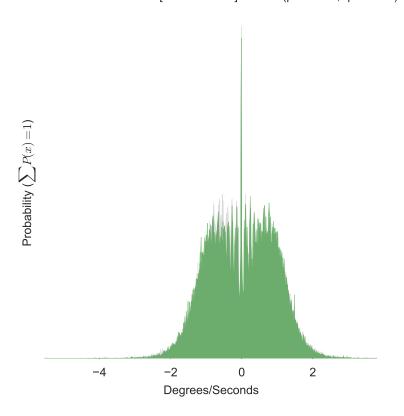
HEAD TIP MOTION DIRECTION (+/- = TOWARD D/V) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 219,831 [241,970] ALL = -0.01 +/- 0.02 <<< [-0.01 +/- 0.01] \u00A4 (p=0.9397, q=0.7181)



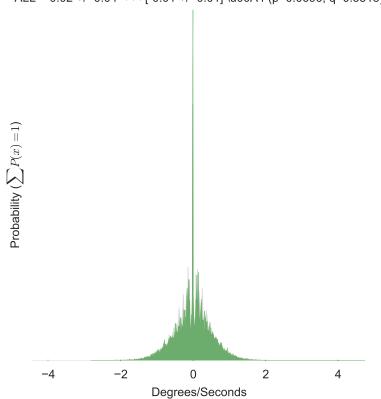




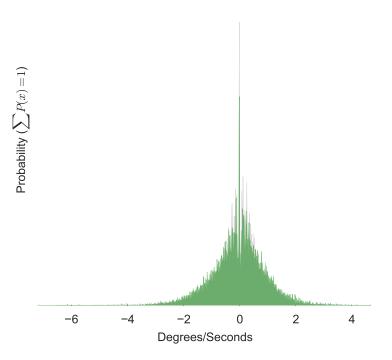
HEAD TIP MOTION DIRECTION (+/- = TOWARD D/V) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 126,323 [120,711] ALL = -0.04 +/- 0.11 <<< [-0.00 +/- 0.01] \u00A4 (p=0.5453, q=0.7181)



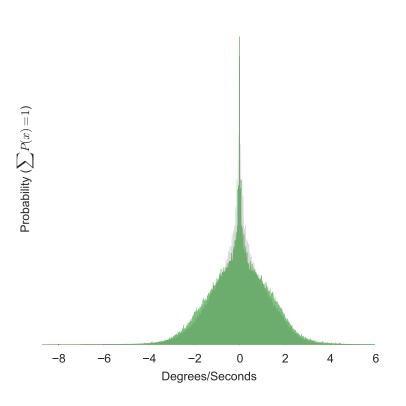
HEAD TIP MOTION DIRECTION (+/- = TOWARD D/V) - paused motion WORMS = 10 [10] \u000A4 SAMPLES = 40,973 [54,998] ALL = 0.02 +/- 0.04 <<< [-0.01 +/- 0.01] \u000A4 (p=0.0696, q=0.5518)

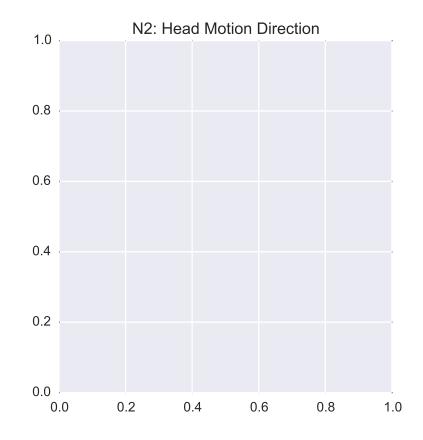


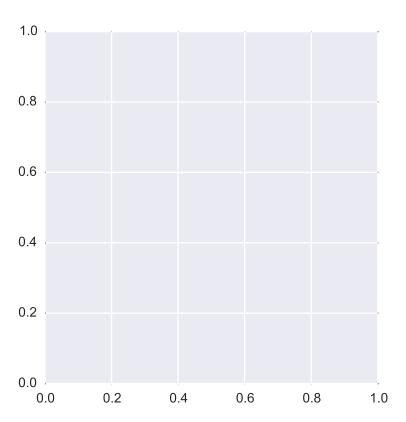
HEAD TIP MOTION DIRECTION (+/- = TOWARD D/V) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 25,357 [28,768] ALL = -0.09 +/- 0.23 <<< [-0.05 +/- 0.05] \u00A4 (p=0.8206, q=0.7181)



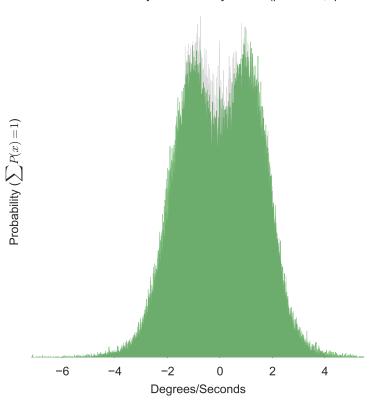
HEAD MOTION DIRECTION (+/- = TOWARD D/V) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 226,791 [246,897] ALL = -0.03 +/- 0.05 <<< [-0.02 +/- 0.02] \u00A4 (p=0.6501, q=0.7181)



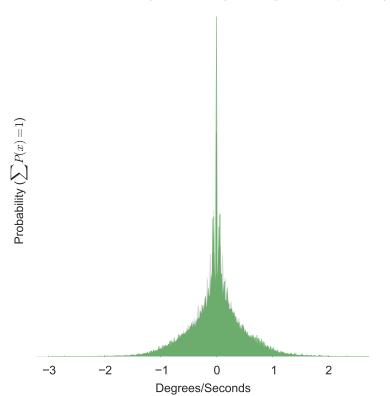




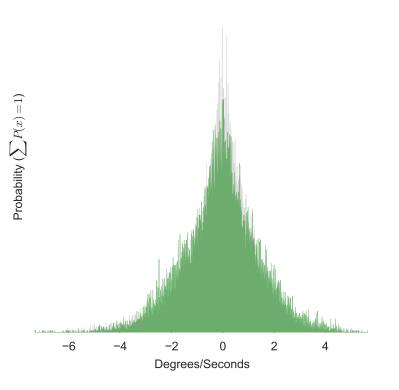
HEAD MOTION DIRECTION (+/- = TOWARD D/V) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 132,768 [124,934] ALL = -0.12 +/- 0.34 <<< [-0.01 +/- 0.03] \u00A4 (p=0.3258, q=0.6409)



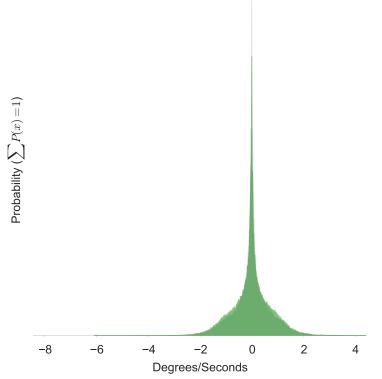
HEAD MOTION DIRECTION (+/- = TOWARD D/V) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 41,048 [55,101] ALL = 0.04 +/- 0.06 <<< [-0.02 +/- 0.02] \u00A4 (p=0.0102, q=0.4077)

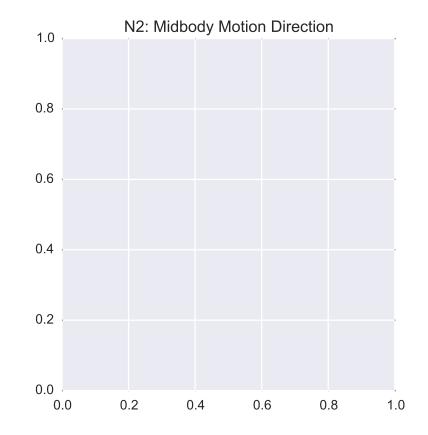


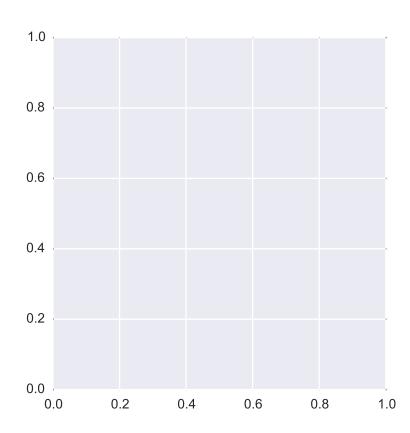
HEAD MOTION DIRECTION (+/- = TOWARD D/V) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 26,138 [29,472] ALL = -0.13 +/- 0.33 <<< [-0.09 +/- 0.08] \u00A4 (p=0.9397, q=0.7181)



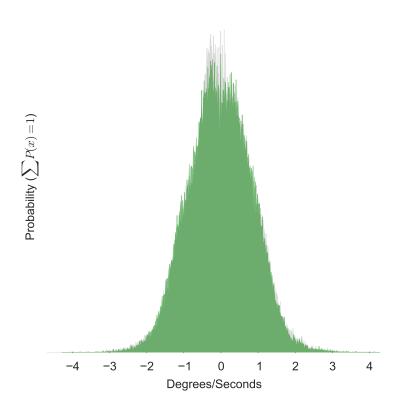
MIDBODY MOTION DIRECTION (+/- = TOWARD D/V) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 226,791 [246,897] ALL = -0.01 +/- 0.01 <<< [0.00 +/- 0.01] \u00A4 (p=0.4057, q=0.6980)



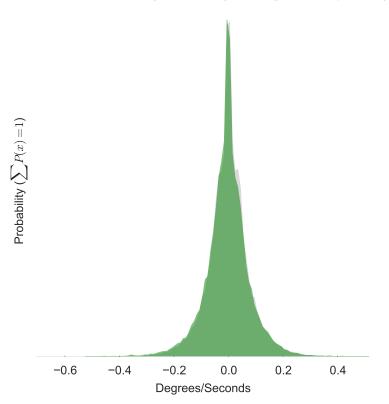




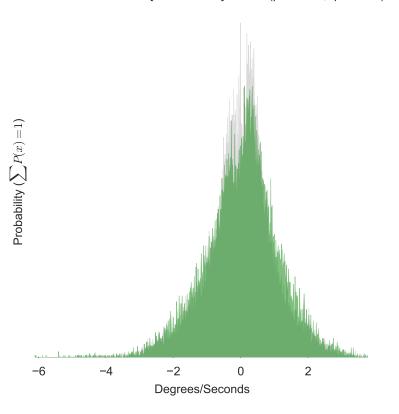
MIDBODY MOTION DIRECTION (+/- = TOWARD D/V) - forward motion WORMS = 10 [10] \u000A4 SAMPLES = 132,768 [124,934] ALL = 0.00 +/- 0.11 <<< [0.00 +/- 0.02] \u000A4 (p=0.4497, q=0.7181)



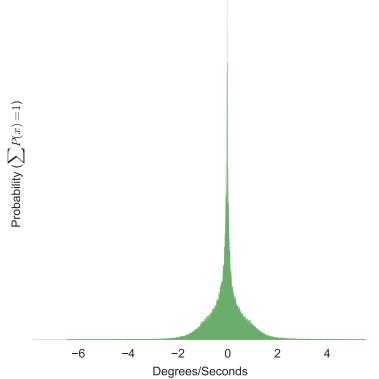
MIDBODY MOTION DIRECTION (+/- = TOWARD D/V) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 41,048 [55,101] ALL = -0.01 +/- 0.01 <<< [0.00 +/- 0.00] \u00A4 (p=0.0032, q=0.2778)

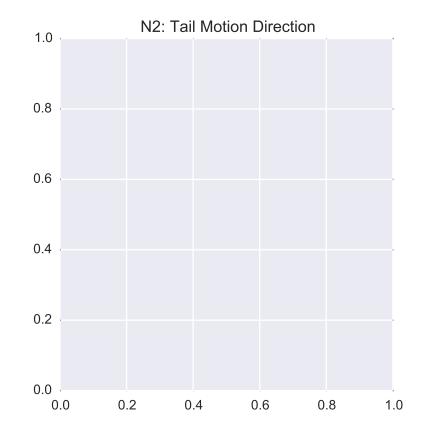


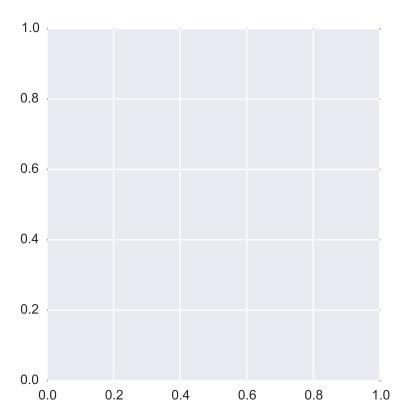
MIDBODY MOTION DIRECTION (+/- = TOWARD D/V) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 26,138 [29,472] ALL = 0.02 +/- 0.15 <<< [0.00 +/- 0.08] \u00A4 (p=0.5967, q=0.7181)



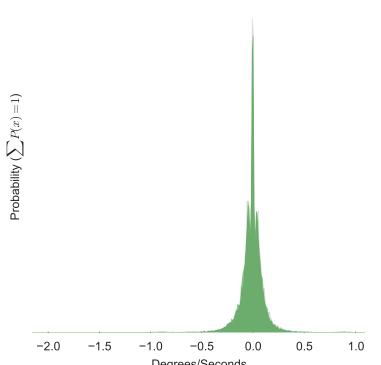
TAIL MOTION DIRECTION (+/- = TOWARD D/V) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 226,791 [246,897] ALL = -0.02 +/- 0.04 <<< [-0.02 +/- 0.02] \u00A4 (p=0.7055, q=0.7181)







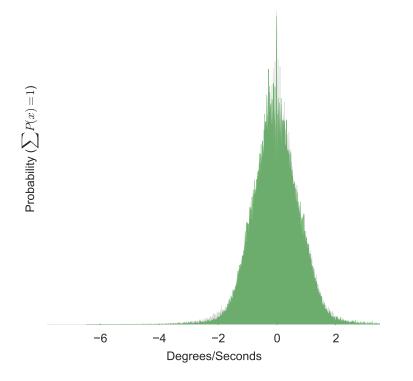
TAIL MOTION DIRECTION (+/- = TOWARD D/V) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 132,768 [124,934] ALL = -0.07 +/- 0.08 <<< [-0.04 +/- 0.03] \u00A4 (p=0.3643, q=0.6619)

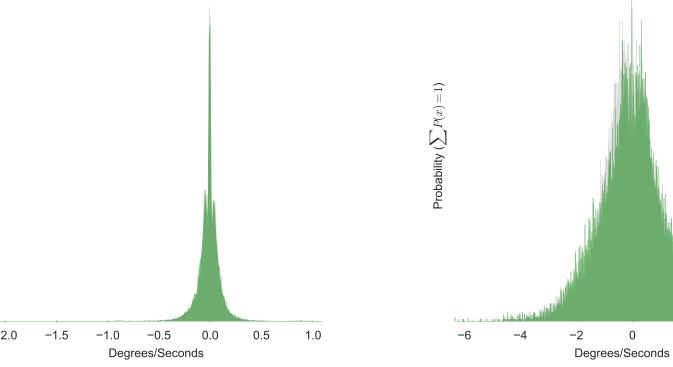


TAIL MOTION DIRECTION (+/- = TOWARD D/V) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 41,048 [55,101] ALL = -0.01 +/- 0.01 <<< [-0.01 +/- 0.01] \u00A4 (p=0.8798, q=0.7181)

TAIL MOTION DIRECTION (+/- = TOWARD D/V) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 26,138 [29,472] ALL = 0.07 +/- 0.13 <<< [-0.02 +/- 0.09] \u00A4 (p=0.1736, q=0.5571)

2





TAIL TIP MOTION DIRECTION (+/- = TOWARD D/V) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 219,831 [241,970] ALL = -0.01 +/- 0.02 <<< [-0.01 +/- 0.01] \u00A4 (p=0.9397, q=0.7181) N2: Tail Tip Motion Direction 1.0 1.0 8.0 8.0 Probability  $(\sum P(x) = 1)$ 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0 0.2 0.4 0.2 0.4 -4 2 0.0 0.6 8.0 1.0 0.0 0.6 Degrees/Seconds TAIL TIP MOTION DIRECTION (+/- = TOWARD D/V) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 126,323 [120,711] ALL = -0.03 +/- 0.03 <<< [-0.02 +/- 0.01] \u00A4 (p=0.5453, q=0.7181) TAIL TIP MOTION DIRECTION (+/- = TOWARD D/V) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,973 [54,998] ALL = -0.00 +/- 0.01 <<< [-0.00 +/- 0.00] \u00A4 (p=0.9397, q=0.7181) TAIL TIP MOTION DIRECTION (+/- = TOWARD D/V) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 25,357 [28,768] ALL = 0.03 +/- 0.05 <<< [-0.01 +/- 0.05] \u00ba00A4 (p=0.1509, q=0.5571) Probability  $(\sum P(x) = 1)$ 

-3

-2

Degrees/Seconds

-3

-2

-4

-1 0

Degrees/Seconds

3

2

2

8.0

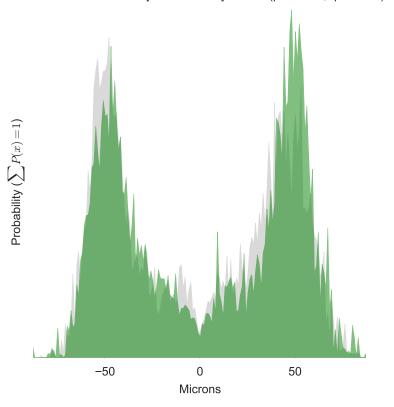
0

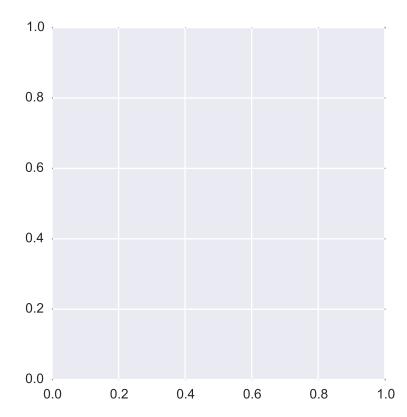
Degrees/Seconds

-3

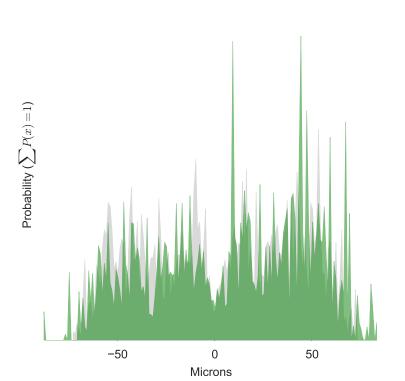
1.0

FORAGING AMPLITUDE (+/- = TOWARD D/V) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 219,853 [242,624] ALL = 3.58 +/- 4.93 <<< [-0.30 +/- 3.12] \u00A4 (p=0.0821, q=0.5518)



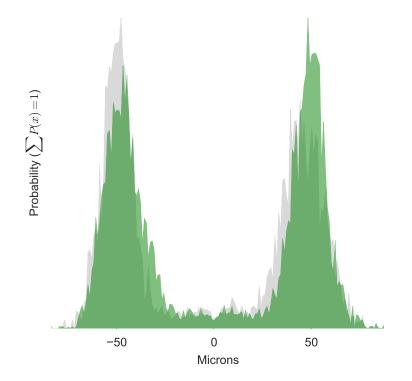


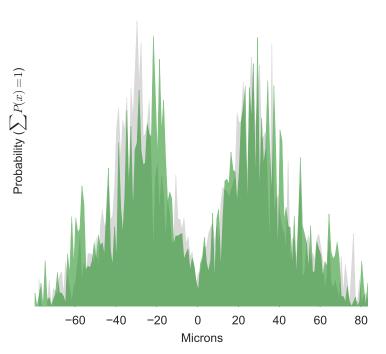
FORAGING AMPLITUDE (+/- = TOWARD D/V) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 126,416 [121,477] ALL = 5.96 +/- 13.90 <<< [-1.33 +/- 3.94] \u00A4 (p=0.1124, q=0.5571)



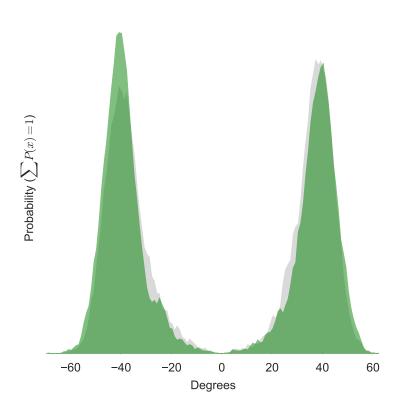
FORAGING AMPLITUDE (+/- = TOWARD D/V) - paused motion WORMS = 10 [10] \u00A4 SAMPLES = 40,962 [54,996] ALL = 3.28 +/- 6.62 <<< [4.05 +/- 4.52] \u00A4 (p=0.8206, q=0.7181)

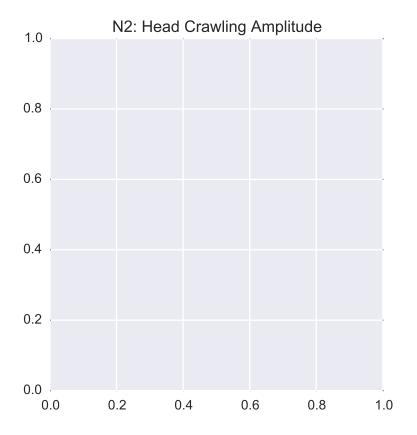
FORAGING AMPLITUDE (+/- = TOWARD D/V) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 25,462 [28,804] ALL = 2.54 +/- 5.31 <<< [2.48 +/- 6.18] \u00A4 (p=1.0000, q=0.7181)

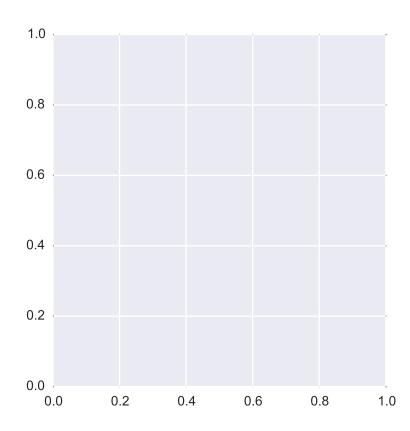


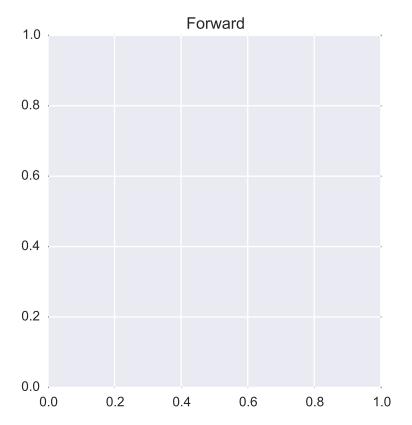


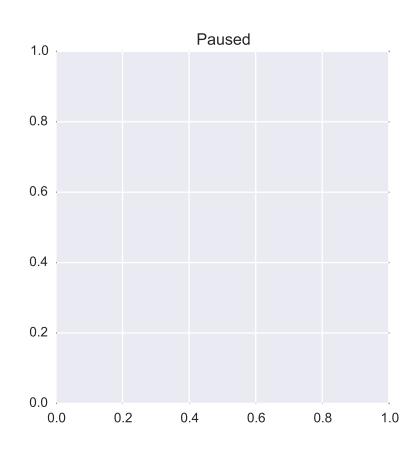
HEAD CRAWLING AMPLITUDE (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 81,111 [80,087] ALL = -2.12 +/- 3.79 <<< [0.41 +/- 3.12] \u00A4 (p=0.1988, q=0.5571)

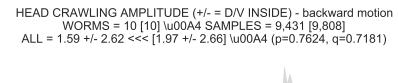


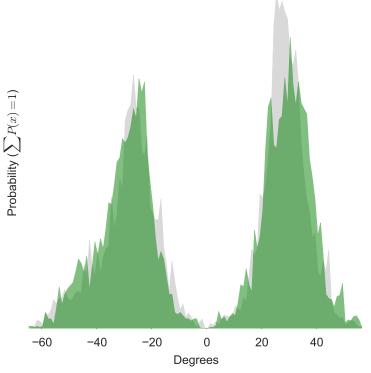




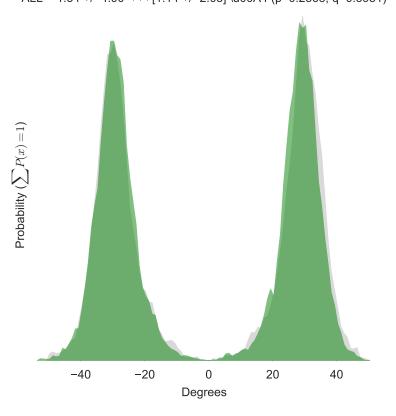


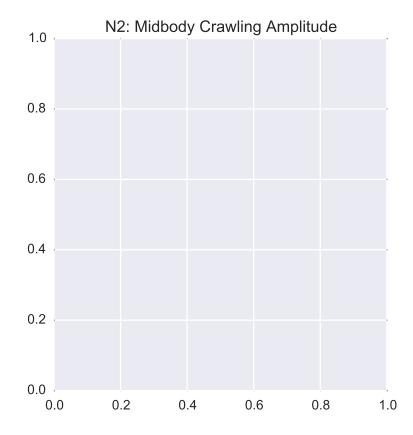


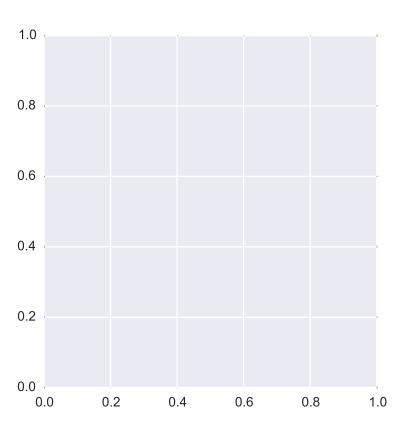




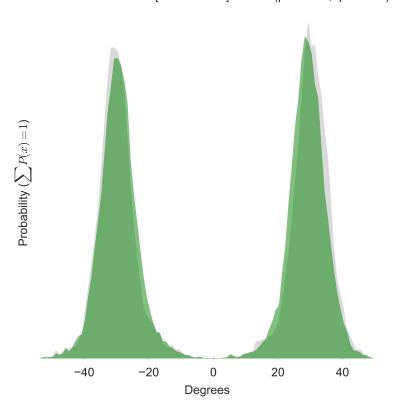
MIDBODY CRAWLING AMPLITUDE (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 73,360 [72,923] ALL = 1.34 +/- 4.90 <<< [1.14 +/- 2.03] \u00A4 (p=0.2568, q=0.5951)

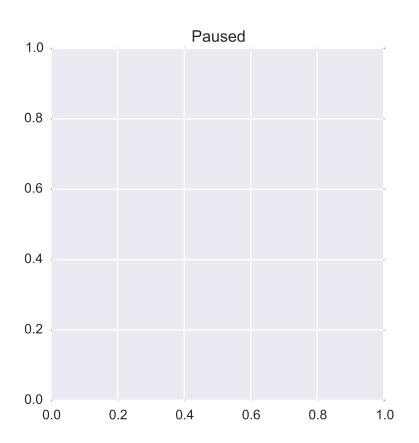


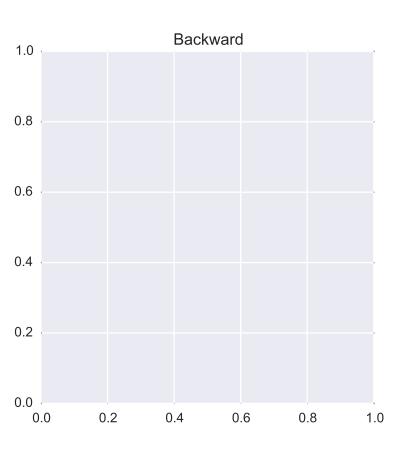




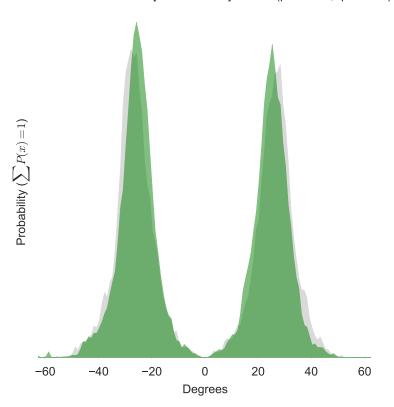
MIDBODY CRAWLING AMPLITUDE (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 58,495 [54,099] ALL = 2.86 +/- 8.80 <<< [1.09 +/- 2.37] \u00A4 (p=0.7055, q=0.7181)

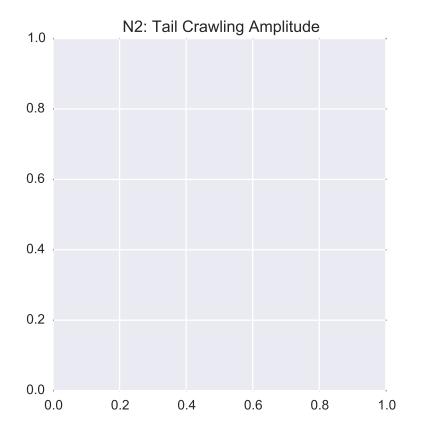


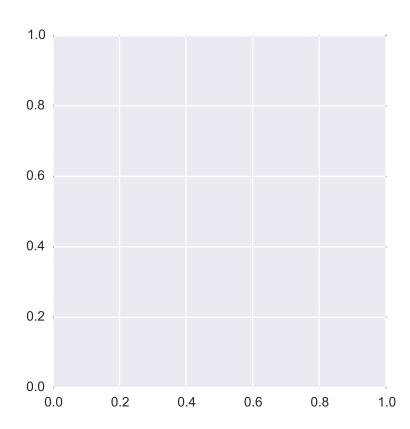


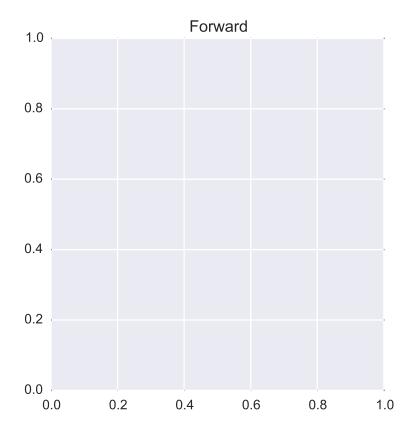


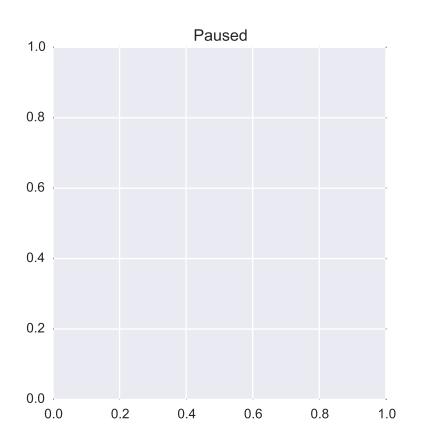
TAIL CRAWLING AMPLITUDE (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u000A4 SAMPLES = 68,435 [71,006] ALL = -1.41 +/- 2.31 <<< [-0.48 +/- 1.36] \u000a4 (p=0.3258, q=0.6409)

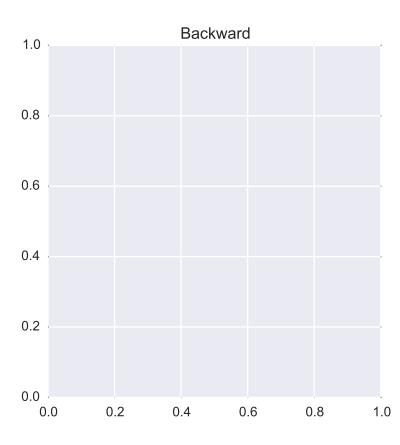




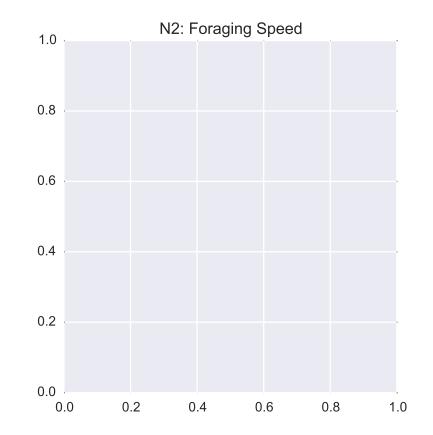


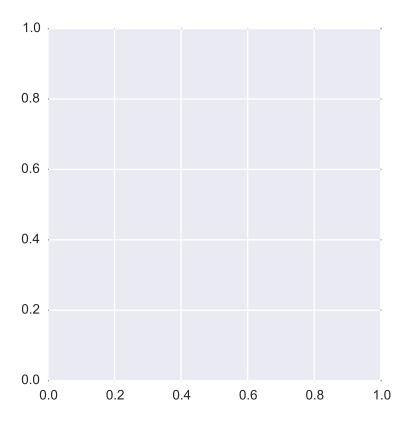




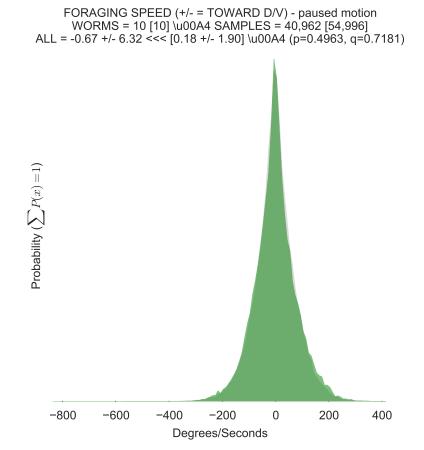


FORAGING SPEED (+/- = TOWARD D/V) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 219,853 [242,624] ALL = -0.78 +/- 1.66 <<< [0.16 +/- 0.53] \u00A4 (p=0.1736, q=0.5571) Probability  $(\sum P(x) = 1)$ -1000 -500 500 Degrees/Seconds FORAGING SPEED (+/- = TOWARD D/V) - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 126,416 [121,477] ALL = -2.17 +/- 4.87 <<< [0.19 +/- 1.11] \u00A4 (p=0.1736, q=0.5571)

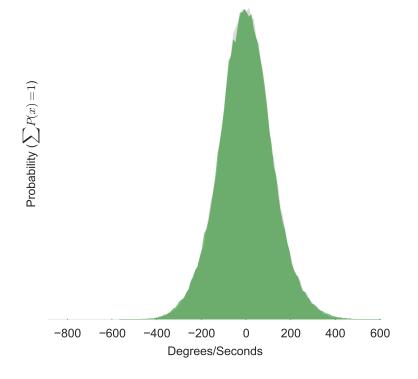


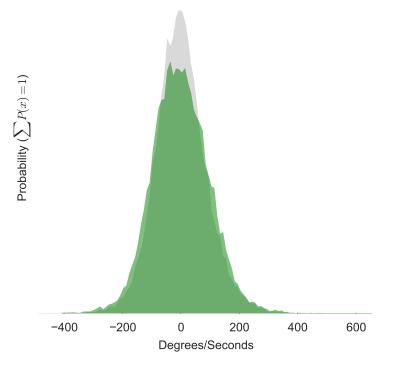




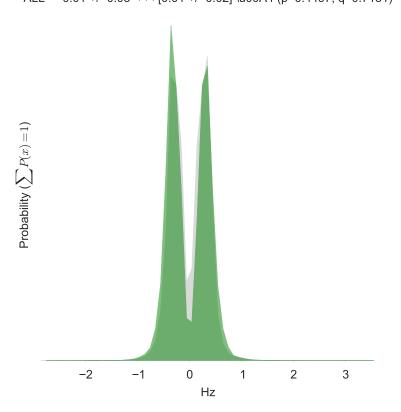


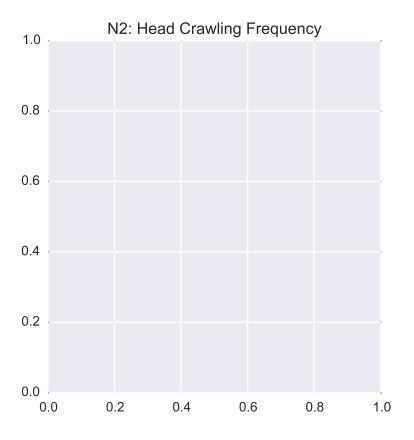
FORAGING SPEED (+/- = TOWARD D/V) - backward motion WORMS = 10 [10] \u00A4 SAMPLES = 25,462 [28,804] ALL = 5.23 +/- 16.95 <<< [2.28 +/- 3.33] \u00A4 (p=0.5453, q=0.7181)

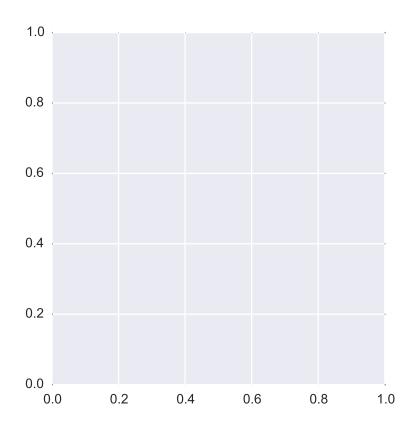


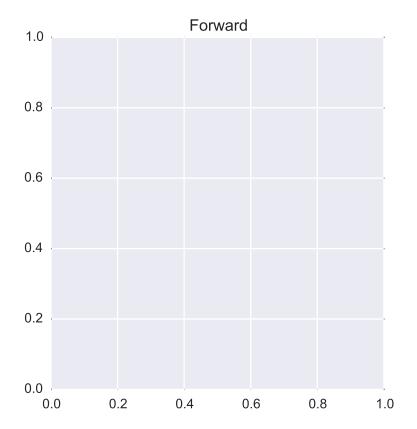


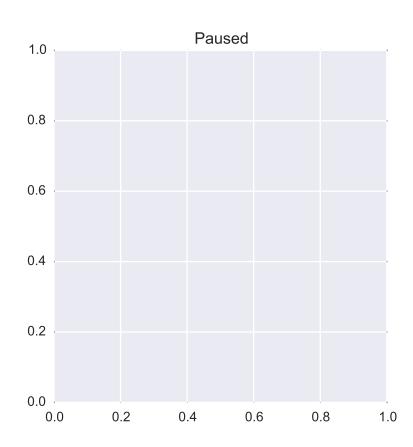
HEAD CRAWLING FREQUENCY (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 81,111 [80,087] ALL = -0.01 +/- 0.03 <<< [0.01 +/- 0.02] \u00A4 (p=0.4497, q=0.7181)

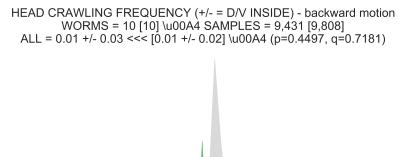


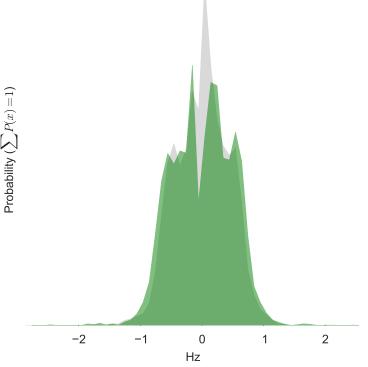




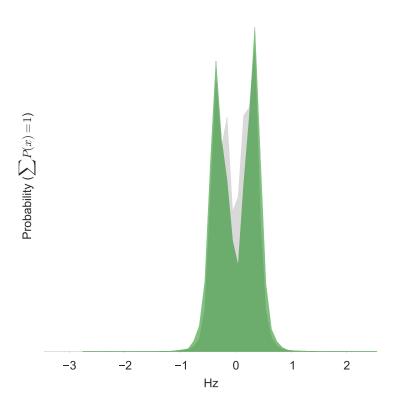


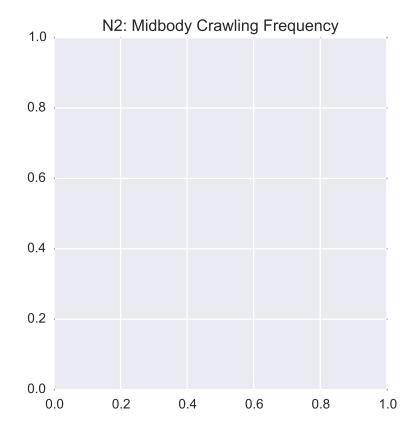


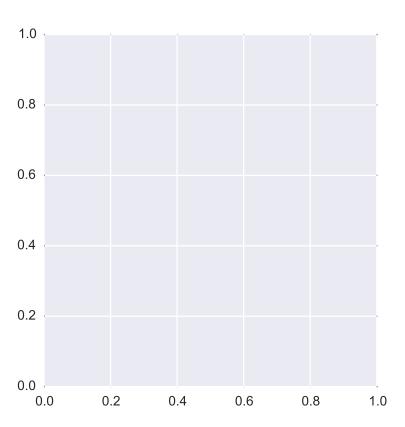




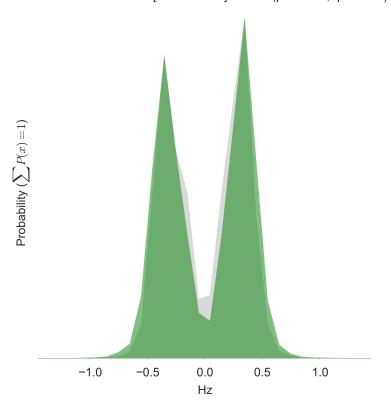
MIDBODY CRAWLING FREQUENCY (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 73,360 [72,923] ALL = 0.02 +/- 0.06 <<< [0.01 +/- 0.02] \u00A4 (p=0.5967, q=0.7181)

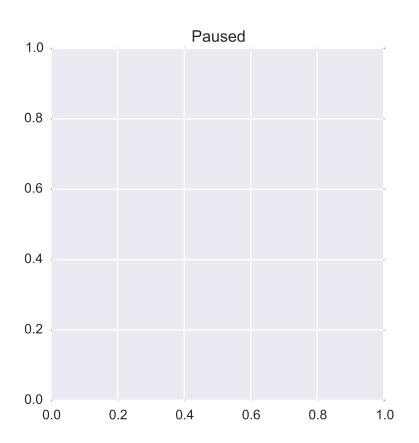


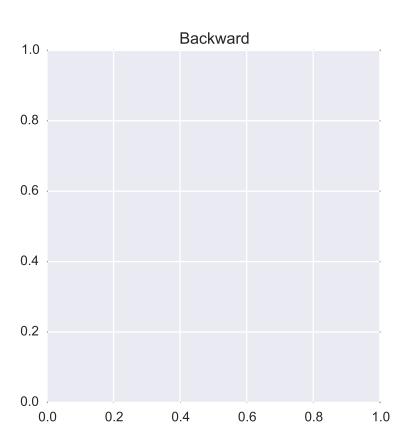




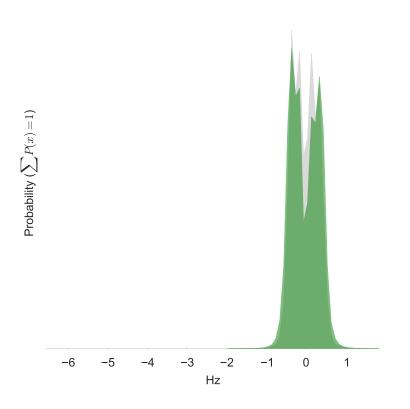
MIDBODY CRAWLING FREQUENCY (+/- = D/V INSIDE) - forward motion WORMS = 10 [10] \u000A4 SAMPLES = 58,495 [54,099] ALL = 0.01 +/- 0.03 <<< [0.01 +/- 0.02] \u000A4 (p=0.4963, q=0.7181)

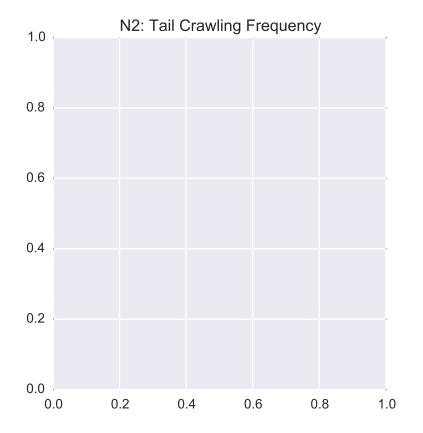


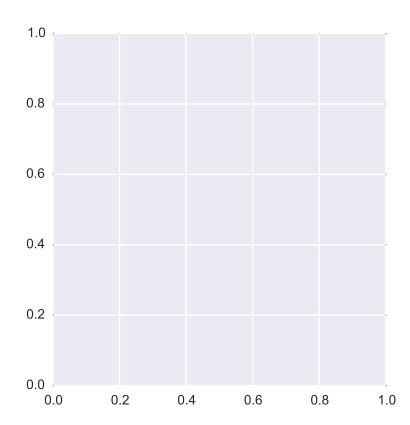


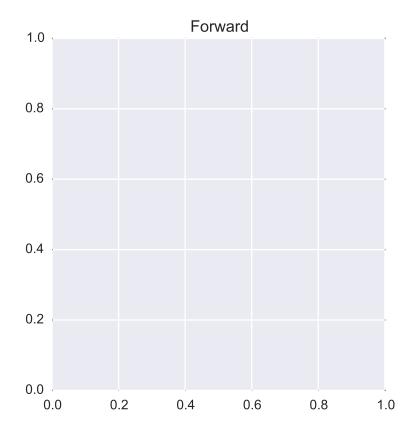


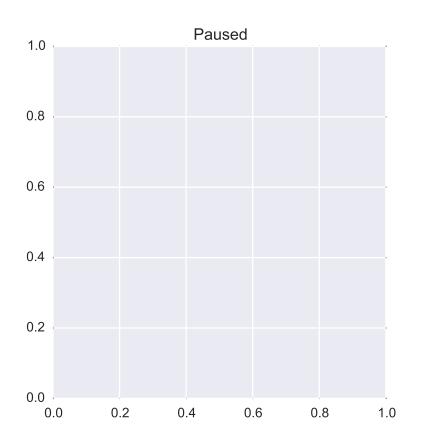
TAIL CRAWLING FREQUENCY (+/- = D/V INSIDE) - all motion WORMS = 10 [10] \u00A4 SAMPLES = 68,435 [71,006] ALL = -0.07 +/- 0.19 <<< [-0.01 +/- 0.01] \u00A4 (p=0.5967, q=0.7181)

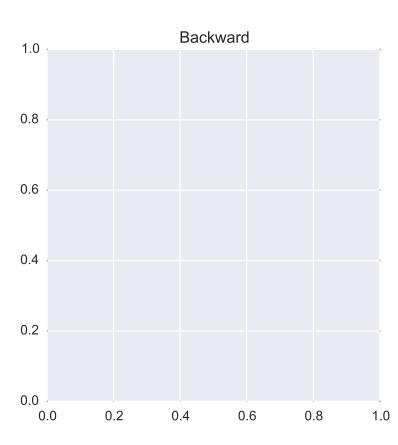


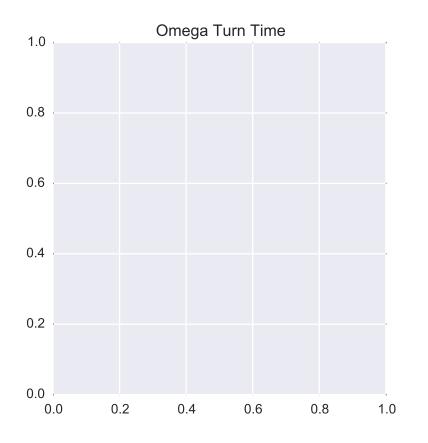


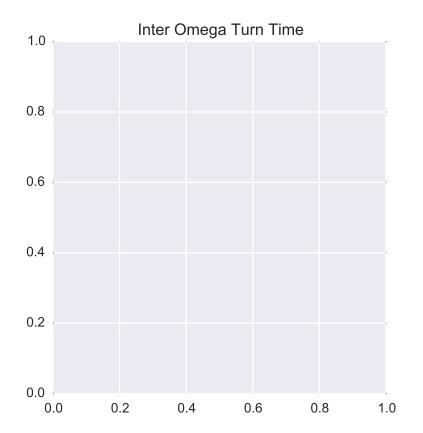


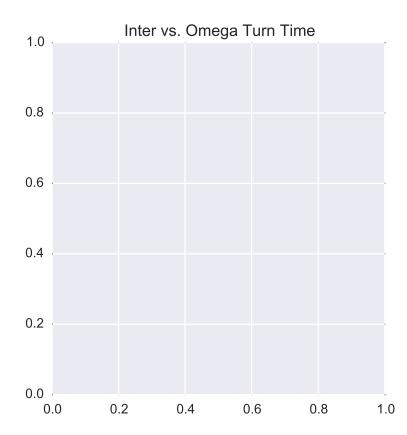


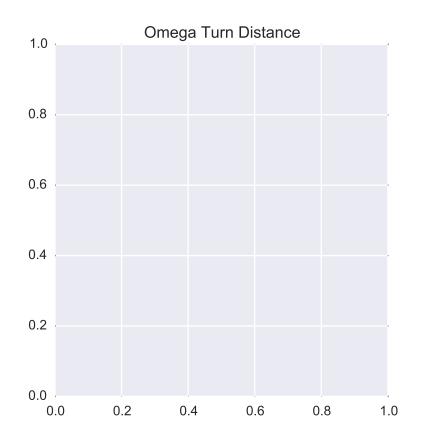


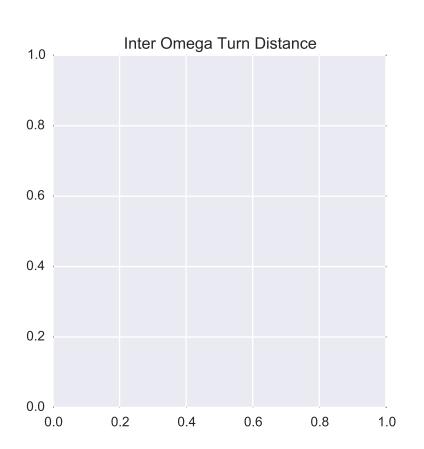


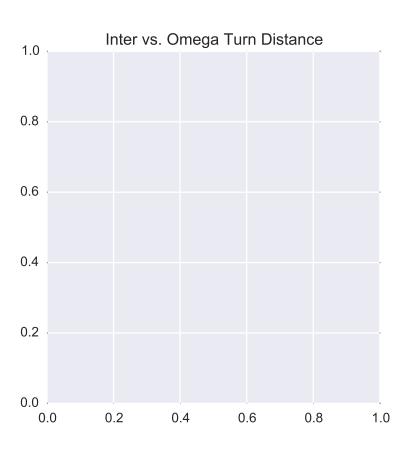


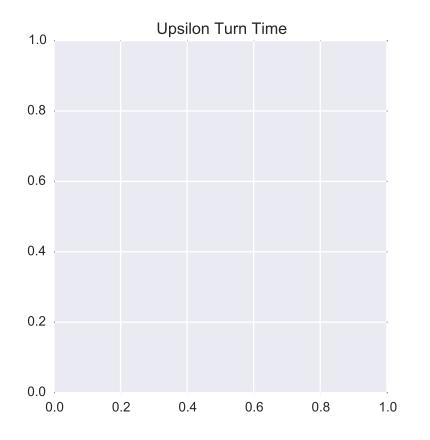


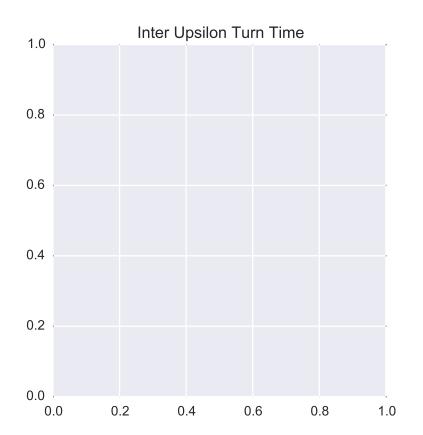


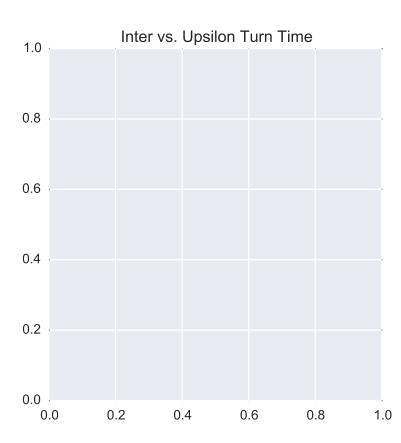


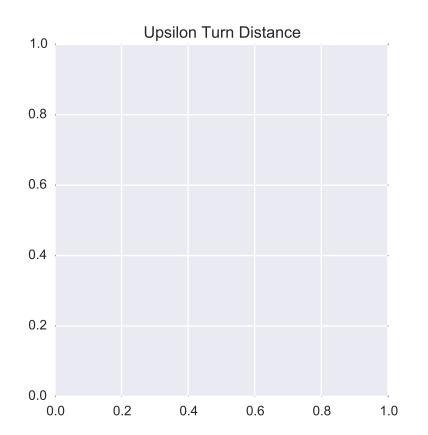


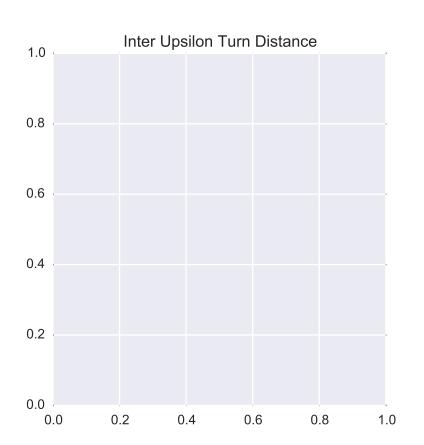


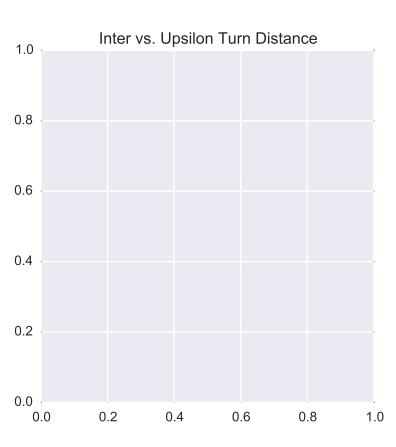




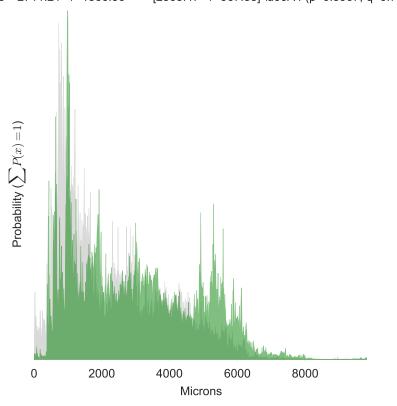


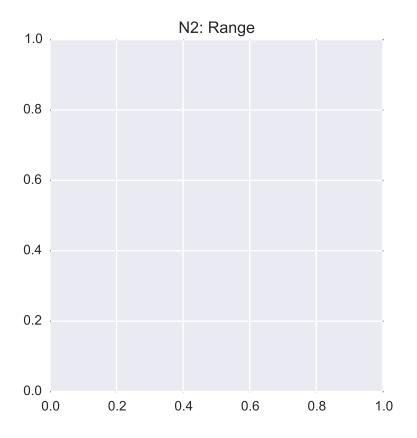


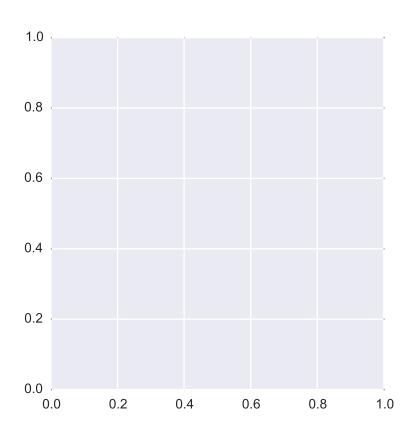




PATH RANGE - all motion WORMS = 10 [10] \u00A4 SAMPLES = 212,261 [234,276] ALL = 2711.21 +/- 1566.56 <<< [2368.47 +/- 967.38] \u00A4 (p=0.5967, q=0.7181)

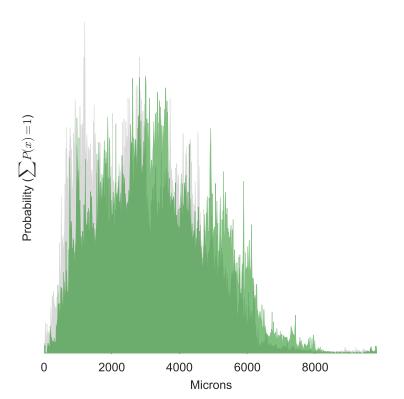


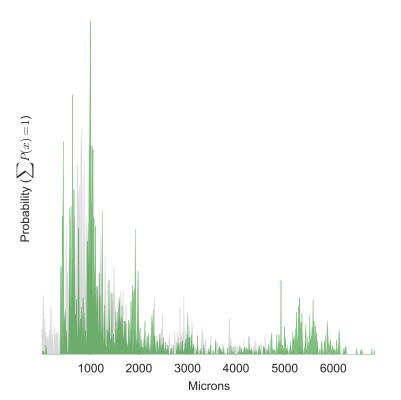


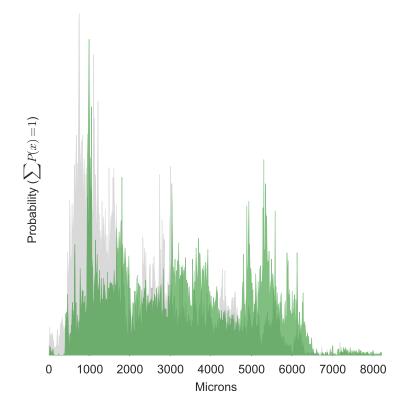


PATH RANGE - forward motion WORMS = 10 [10] \u00A4 SAMPLES = 119,609 [114,032] ALL = 2738.24 +/- 1516.67 <<< [2764.87 +/- 841.91] \u00A4 (p=1.0000, q=0.7181)

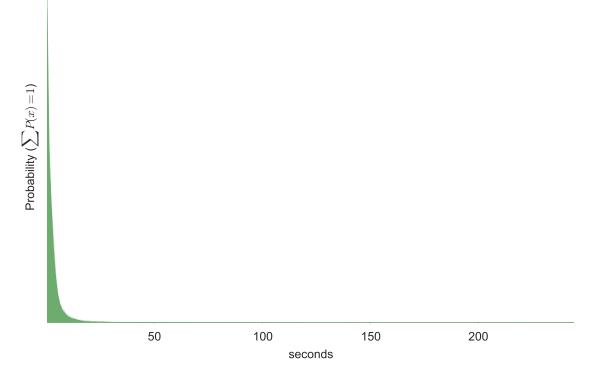




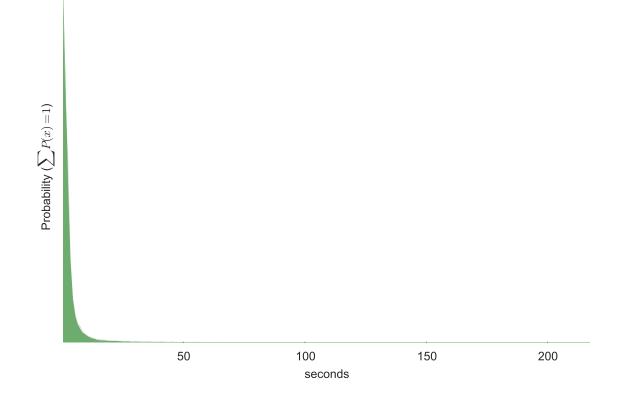




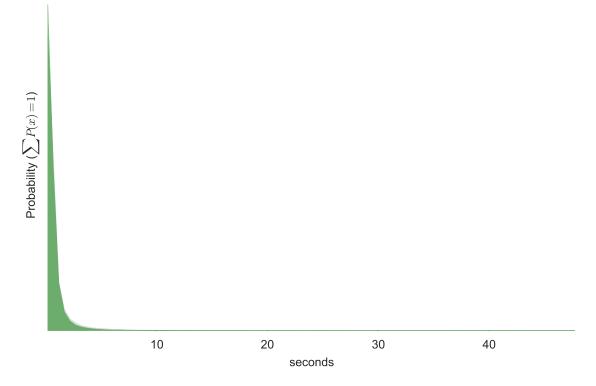




MIDBODY DWELLING - all simple WORMS = 10 [10] \u00A4 SAMPLES = 51,522 [46,009] ALL = 4.72 +/- 4.29 <<< [5.27 +/- 3.38] \u00A4 (p=0.4057, q=0.6980)



## HEAD DWELLING - all simple WORMS = 10 [10] \u00A4 SAMPLES = 54,647 [51,070] ALL = 0.97 +/- 0.69 <<< [1.09 +/- 0.56] \u00A4 (p=0.4057, q=0.6980)



TAIL DWELLING - all simple WORMS = 10 [10] \u00A4 SAMPLES = 32,736 [30,551] ALL = 2.11 +/- 2.00 <<< [2.14 +/- 1.51] \u00A4 (p=0.6501, q=0.7181)

