

Figure 7—table supplement 1. Kinematic variables on different terrain types reported as mean \pm SD, except for meander values which are reported as median \pm interquartile range. For each variable, we show details of the ANOVAs performed on the linear model (from main text equation (10)), i.e. the F-value and p-value for the terrain factor. The denominator degrees of freedom for all ANOVAs was 16. Post-hoc comparisons when the ANOVAs reached the significance bound of $\alpha = 0.05$ are reported in the main text results section.

variable	flat	uneven I	uneven II	F-value	p-value
net metabolic rate (W/kg)	13.1 ± 0.5	13.7 ± 0.9	13.7 ± 0.8	2.97	0.08
median step width (%LL)	3.9 ± 1.9	4.1 ± 1.5	4.7 ± 2.0	4.53	0.03
IQR step width (% LL)	3.9 ± 1.4	4.3 ± 0.9	5.0 ± 1.2	3.65	0.05
mean step width (%LL)	4.2 ± 1.7	4.7 ± 1.6	5.2 ± 1.7	8.69	0.003
S.D. step width (% LL)	2.8 ± 0.8	3.4 ± 0.6	3.6 ± 0.6	5.54	0.01
mean step length (%LL)	128 ± 6	126 ± 9	125 ± 9	1.07	0.37
S.D. step length (%LL)	6 ± 1	7 ± 4	6 ± 1	0.64	0.54
mean meander ($\times 10^{-4}$)	3.21 ± 2.59	3.97 ± 1.65	4.88 ± 4.62	1.48	0.25
S.D. meander ($\times 10^{-4}$)	0.67 ± 0.53	1.33 ± 1.40	1.27 ± 2.78	1.58	0.23
mean fwd. foot speed (froude num.)	0.53 ± 0.17	0.36 ± 0.10	0.37 ± 0.12	13.08	0.0004
S.D. fwd. foot speed (froude num.)	0.17 ± 0.05	0.14 ± 0.05	0.18 ± 0.07	1.48	0.26
mean CoM speed (m/s)	3.24 ± 0.07	3.21 ± 0.07	3.18 ± 0.09	2.32	0.13
S.D. CoM speed (m/s)	0.11 ± 0.03	0.13 ± 0.04	0.12 ± 0.03	2.00	0.17
mean touchdown leg length (%LL)	120 ± 5	119 ± 4	119 ± 4	4.28	0.03
S.D. touchdown leg length (%LL)	1.1 ± 0.7	0.9 ± 0.3	1.3 ± 1.2	1.32	0.29
mean touchdown leg angle (rad)	0.20 ± 0.02	0.20 ± 0.02	0.21 ± 0.02	3.90	0.04
S.D. touchdown leg angle (rad)	0.03 ± 0.02	0.02 ± 0.003	0.03 ± 0.02	2.10	0.15