

**Table S1.** Local wing kinematics.

	Stroke amplitude (cm)	Stroke duration (ms)	Wing speed (m/s)	Wing extension (cm)	Stroke plane angle (deg)
Downstroke					
NO flights	23.9 ± 1.9	63 ± 10	3.9 ± 0.8	40.6 ± 0.2	60 ± 0.0
HO flights	24.6 ± 3.2	58 ± 2	4.3 ± 0.6	37.9 ± 0.3	47 ± 4.0
Upstroke					
NO flights	23.6 ± 2.3	57 ± 9	4.2 ± 0.9	32.0 ± 0.4	54.8 ± 1.5
HO flights	23.9 ± 3.3	52 ± 3	4.6 ± 0.6	24.4 ± 0.3	44.4 ± 4.1

Mean ± SD of individual wing kinematics.