

Table S1. Individual number (ID; AV = *Aneides vagrans*, AL = *Aneides lugubris*, AF = *Aneides flavipunctatus*, EE = *Ensatina eschscholtzii*), body mass, snout-vent length (SVL), total body length, Reynolds Number, and relative forelimb (FL), hindlimb (HL), and tail length of plethodontid salamanders used in wind tunnel trials. Relative limb and tail lengths were calculated by dividing appendage length by SVL.

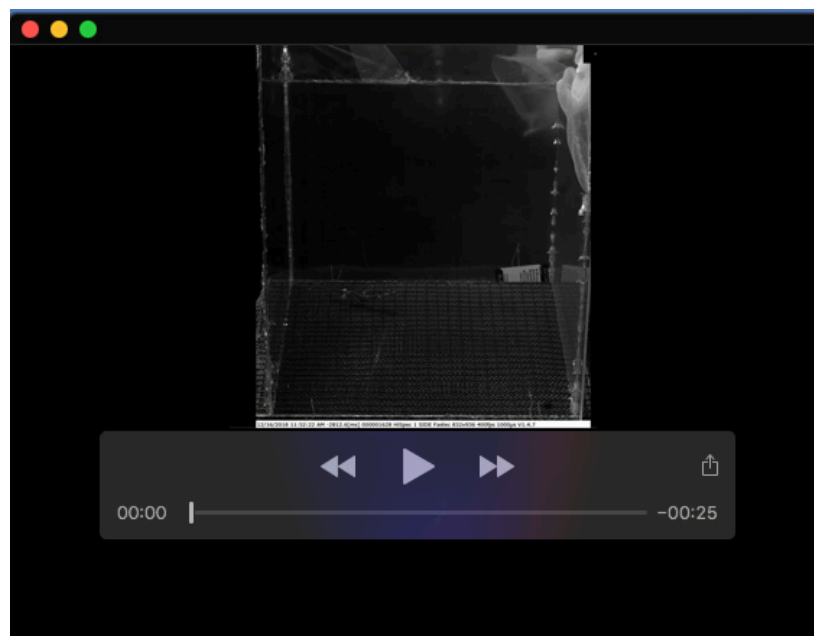
| ID | Mass (g) | SVL (mm) | Total length (mm) | Reynolds Number | Relative FL Length | Relative HL Length | Relative Tail Length |
|-------|----------|----------|-------------------|------------------------|--------------------|--------------------|----------------------|
| AV_23 | 4.54 | 73 | 120 | $\sim 7.4 \times 10^4$ | 0.30 | 0.35 | 0.81 |
| AV_24 | 3.34 | 63 | 104 | $\sim 6.2 \times 10^4$ | 0.29 | 0.40 | 0.84 |
| AV_25 | 2.08 | 47 | 86 | $\sim 4.7 \times 10^4$ | 0.30 | 0.39 | 0.89 |
| AL_20 | 3.55 | 66 | 101 | $\sim 6.3 \times 10^4$ | 0.25 | 0.29 | 0.85 |
| AL_21 | 1.87 | 60 | 100 | $\sim 6.0 \times 10^4$ | 0.26 | 0.30 | 0.85 |
| AL_22 | 10.81 | 85 | 152 | $\sim 11 \times 10^4$ | 0.24 | 0.30 | 0.89 |
| AF_01 | 3.60 | 55 | 96 | $\sim 6.6 \times 10^4$ | 0.24 | 0.28 | 0.90 |
| AF_02 | 3.50 | 58 | 109 | $\sim 7.5 \times 10^4$ | 0.22 | 0.25 | 0.92 |
| AF_04 | 3.30 | 51 | 102 | $\sim 7.1 \times 10^4$ | 0.20 | 0.23 | 0.83 |
| EE_90 | 2.08 | 47 | 85 | $\sim 5.1 \times 10^4$ | 0.25 | 0.29 | 0.85 |
| EE_92 | 3.05 | 49 | 90 | $\sim 5.6 \times 10^4$ | 0.24 | 0.29 | 0.82 |
| EE_94 | 2.73 | 52 | 92 | $\sim 5.6 \times 10^4$ | 0.22 | 0.27 | 0.79 |

Table S2. Average instantaneous vertical velocity and acceleration (± 1 SEM) and average and maximum instantaneous values of horizontal velocity and acceleration, glide angle (Avg/Min), body angle, crab angle, and the average magnitude of change in the latter two angles for individual plethodontid salamanders used in wind tunnel trials.

| ID | Vertical Velocity (m/s) | Vertical Acceleration (m/s ²) | Horizontal Velocity (m/s) | Horizontal Acceleration (m/s ²) | Glide Angle (deg.) | Body Angle (deg.) | Crab Angle (deg.) |
|-------|-------------------------|---|---------------------------|---|------------------------|----------------------------------|------------------------------------|
| AV_21 | 9.9 \pm 0.1 | 0.4 \pm 0.3 | Avg: 0.55 Max: 0.98 | Avg: 2.4 Max: 3.5 | Avg: 86.8 Min: 84.3 | Avg: 1.2 Avg Δ : 29.3 | Avg: 50.5 Avg Δ : 47.8 |
| AV_22 | 9.7 \pm 0.0 | -0.5 \pm 0.2 | Avg: 0.76 Max: 0.90 | Avg: 3.7 Max: 4.8 | Avg: 85.6 Min: 84.7 | Avg: 1.2 Avg Δ : 26.9 | Avg: 67.2 Avg Δ : 57.8 |
| AV_23 | 9.6 \pm 0.1 | 0.7 \pm 0.5 | Avg: 0.74 Max: 0.91 | Avg: 2.7 Max: 4.2 | Avg: 85.5 Min: 84.4 | Avg: 9.9 Avg Δ : 33.7 | Avg: 36.9 Avg Δ : 51.6 |
| AV_24 | 9.4 \pm 0.1 | -0.7 \pm 0.4 | Avg: 0.69 Max: 0.81 | Avg: 2.7 Max: 5.6 | Avg: 85.9 Min: 85.3 | Avg: -5.9 Avg Δ : 61.3 | Avg: 41.3 Avg Δ : 55.3 |
| AV_25 | 8.4 \pm 0.0 | -0.3 \pm 0.1 | Avg: 0.82 Max: 0.99 | Avg: 1.7 Max: 5.2 | Avg: 84.5 Min: 83.5 | Avg: -3.2 Avg Δ : 46.0 | Avg: 84.1 Avg Δ : 78.0 |
| AL_20 | 10 \pm 0.2 | 0.5 \pm 0.3 | Avg: 0.31 Max: 0.77 | Avg: 1.8 Max: 2.5 | Avg: 87.6 Min: 85.5 | Avg: 11.4 Avg Δ : 20.0 | Avg: 101.2 Avg Δ : 87.1 |
| AL_21 | 9.0 \pm 0.2 | 0.9 \pm 0.3 | Avg: 0.35 Max: 0.75 | Avg: 1.8 Max: 2.6 | Avg: 87.1 Min: 85.4 | Avg: 3.0 Avg Δ : 30.1 | Avg: 80.0 Avg Δ : 102.9 |
| AL_22 | 11.3 \pm 0.0 | 0.0 \pm 0.1 | Avg: 0.30 Max: 0.44 | Avg: 1.8 Max: 2.4 | Avg: 88.3 Min: 87.8 | Avg: 3.2 Avg Δ : 35.0 | Avg: 89.3 Avg Δ : 85.7 |
| AL_23 | 10.5 \pm 0.7 | 0.1 \pm 0.2 | Avg: 0.41 Max: 0.60 | Avg: 2.3 Max: 4.0 | Avg: 87.1 Min: 86.8 | Avg: -2.8 Avg Δ : 39.6 | Avg: 86.7 Avg Δ : 74.6 |
| AL_24 | 8.8 \pm 0.1 | -0.4 \pm 0.2 | Avg: 0.4 Max: 0.71 | Avg: 1.8 Max: 3.2 | Avg: 86.5 Min: 85.4 | Avg: 3.0 Avg Δ : 43.7 | Avg: 51.8 Avg Δ : 85.9 |
| AF_01 | 10.7 \pm 0.1 | -0.4 \pm 0.1 | Avg: 0.20 Max: 0.33 | Avg: 1.5 Max: 2.5 | Avg: 88.7 Min: 88.3 | Avg: 9.6 Avg Δ : 17.5 | Avg: 119.5 Avg Δ : 97.3 |
| AF_02 | 11.0 \pm 0.3 | -0.4 \pm 0.6 | Avg: 0.24 Max: 0.32 | Avg: 1.0 Max: 1.9 | Avg: 88.6 Min: 88.4 | Avg: 10.4 Avg Δ : 25.4 | Avg: 137.3 Avg Δ : 83.5 |
| EE_90 | 9.2 \pm 0.0 | -0.03 \pm 0.2 | Avg: 0.05 Max: 0.09 | Avg: 1.1 Max: 1.6 | Avg: 89.7 Min: 89.4 | Avg: 7.7 Avg Δ : 38.0 | Avg: 81.8 Avg Δ : 139.9 |
| EE_92 | 9.6 \pm 0.1 | 0.3 \pm 0.4 | Avg: 0.13 Max: 0.17 | Avg: 1.5 Max: 1.9 | Avg: 89.1 Min: 89.0 | Avg: 2.1 Avg Δ : 11.5 | Avg: 118.5 Avg Δ : 108.7 |
| EE_94 | 9.5 \pm 0.1 | 0.8 \pm 0.2 | Avg: 0.20 Max: 0.42 | Avg: 1.6 Max: 1.9 | Avg: 89.2 Min: 88.9 | Avg: 5.6 Avg Δ : 6.8 | Avg: 22.3 Avg Δ : 39.1 |



Movie 1. *Aneides lugubris* executing a banking turn in a vertical wind tunnel set to an airspeed at which vertical aerodynamic drag and lift forces balance the force of gravity such that suspension is achieved by salamanders.



Movie 2. *Aneides vagrans* pitching in a vertical wind tunnel set to an airspeed at which vertical aerodynamic drag and lift forces balance the force of gravity such that suspension is achieved by salamanders.



Movie 3. *Ensatina eschscholtzii* tumbling out of control and assuming inverted postures in a vertical wind tunnel set to an airspeed at which vertical aerodynamic drag and lift forces balance the force of gravity such that suspension is achieved by salamanders.