

Figure S3. Timing of aerodynamic force production. The timing of aerodynamic force production used in simulations (A) is consistent with the timing of force production measured *in vivo* (i.e., peaks in mid-downstroke) (B). (A): aerodynamic force produced by the manual (“hand”) segment of the adult chukar wing, during the downstroke; (B) modified from (Lentink et al., 2015), shaded areas represent downstrokes.

