| Variables           |                   | Slope difference |      |
|---------------------|-------------------|------------------|------|
| Explanatory         | Response          | t <sub>18</sub>  | Р    |
| Body mass           | Paero             | 0.80             | 0.43 |
|                     | P <sub>CoM</sub>  | 0.20             | 0.84 |
| Wing area           | P <sub>aero</sub> | 0.30             | 0.76 |
|                     | P <sub>CoM</sub>  | 0.17             | 0.87 |
| Wing span           | P <sub>aero</sub> | 0.95             | 0.35 |
|                     | P <sub>CoM</sub>  | 0.66             | 0.52 |
| Wing loading        | P <sub>aero</sub> | 0.11             | 0.92 |
|                     | P <sub>CoM</sub>  | -0.46            | 0.65 |
| Aspect ratio        | P <sub>aero</sub> | -0.49            | 0.63 |
|                     | P <sub>CoM</sub>  | 0.43             | 0.67 |
| Wing beat frequency | P <sub>aero</sub> | 1.00             | 0.33 |
|                     | P <sub>CoM</sub>  | 1.09             | 0.29 |
| Stroke plane angle  | P <sub>aero</sub> | 0.24             | 0.81 |
|                     | P <sub>CoM</sub>  | -0.13            | 0.89 |
| Wing beat amplitude | P <sub>aero</sub> | 0.62             | 0.54 |
|                     | P <sub>CoM</sub>  | 0.31             | 0.76 |
| Downstroke ratio    | P <sub>aero</sub> | -0.32            | 0.75 |
|                     | P <sub>CoM</sub>  | -0.01            | 0.99 |

Table S1. Analysis of the differences between male and female blue tits in take-off performance(aerodynamic,  $P_{aero}$  and take-off,  $P_{COM}$  power) relative to morphological and kinematic traits

Least-squares regression results for males and females including whether the slopes differed significantly from each other. If the least-squares regression slope for male and female blue tits for any of the relationships between the response and explanatory variables had a P-value of <0.05, the sexes were considered to be significantly different from each other. N = 29.