Supplementary Table S15: maximum instantaneous loading rate-- Mann Whitney U Test outcomes comparing limb and speed effects. \* denotes significant differences between fore- and hind limbs, or between walk and slow run.

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| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  | **p value** | **Total N** | **Mann-Whitney U** | **Z** |
|  |  |  |  |  |  |
| Forelimb walk versus Hindlimb walk | Sheep | 0.355 | 25 |  61.0 | -0.925 |
| Pig |  0.020\* | 35 |  82.0 | -2.318 |
| Addax |  0.001\* | 17 |  0.0 | -3.464 |
| Alpaca | 0.188 | 27 |  40.5 | -1.316 |
| Deer | <0.001\* | 47 |  50.0 | -4.797 |
| Horse |  0.004\* | 56 | 215.0 | -2.902 |
| Bull | 0.254 | 44 | 193.0 | -1.140 |
| Dromedary | 0.478 | 32 | 105.0 | -0.710 |
| Giraffe | 0.127 |  8 |  0.0 | -1.528 |
| Elephant | 0.543 | 43 | 205.0 | -0.609 |
| Forelimb run versus Hindlimb run | Sheep | 0.439 |  9 |  6.0 | -0.775 |
| Pig | 0.178 | 17 |  22.0 | -1.347 |
| Alpaca | 0.317 |  8 |  3.0 | -1.000 |
| Deer |  0.009\* | 20 |  14.0 | -2.623 |
| Horse | 0.082 | 14 |  9.50 | -1.737 |
| Dromedary | 0.221 |  3 |  0.0 | -1.225 |
| Elephant | 0.513 |  6 |  3.0 | -0.655 |
| Forelimb run versus Forelimb walk | Antelope | 0.106 | 24 |  13.0 | -1.615 |
| Sheep |  0.009\* | 15 |  0.0 | -2.598 |
| Pig | <0.001\* | 24 |  4.0 | -3.674 |
| Alpaca |  0.008\* | 27 |  18.0 | -2.633 |
| Deer |  0.004\* | 33 |  31.0 | -2.899 |
| Horse |  0.001\* | 33 |  1.0 | -3.466 |
| Dromedary | 0.099 | 20 |  0.0 | -1.648 |
| Elephant | 0.049 | 26 |  10.0 | -1.967 |
| Hindlimb run versus Hindlimb walk | Sheep |  0.001\* | 19 |  0.0 | -3.421 |
| Pig | <0.001\* | 28 |  7.0 | -3.862 |
| Alpaca | 0.046 |  8 |  0.0 | -2.000 |
| Deer | <0.001\* | 34 |  15.0 | -4.216 |
| Horse | 0.229 | 37 |  92.0 | -1.204 |
| Dromedary | 0.027 | 15 |  0.0 | -2.208 |
| Elephant | 0.100 | 23 |  12.0 | -1.644 |