Table 1. Results of Shapiro-Wilks normality test for BEF parameters

|  |  |  |
| --- | --- | --- |
|  | W | *p* |
| All EFs Vmax | 0.112 | 0.000 |
| All EFs Km | 0.088 | 0.000 |
| Carbon data Vmax | 0.331 | 0.000 |
| Carbon data Km | 0.088 | 0.000 |

Table 2. Results of Kruskal-Wallis test of BEF parameters against continent

|  |  |  |  |
| --- | --- | --- | --- |
|  | H statistic | Degrees of freedom | P |
| All data Vmax | 43.801 | 5 | 0.000 |
| All data Km | 55.123 | 5 | 0.000 |
| Carbon Vmax | 9.406 | 3 | 0.024 |
| Carbon Km | 7.897 | 3 | 0.048 |

Table 3. Results of Dunn’s test with Benjamini Hochberg adjustment for parameters against continent

|  |  |  |  |
| --- | --- | --- | --- |
|  | Z | P unadjusted | P adjusted |
| All data Vmax | | | |
| Africa – Asia | -1.738 | 0.082 | 0.247 |
| Africa – Australia | 0.359 | 0.720 | 0.771 |
| Asia – Australia | -0.915 | 0.156 | 0.389 |
| Africa – Europe | -0.915 | 0.036 | 0.450 |
| **Asia – Europe** | **-0.946** | **0.344** | **0.000** |
| Australia – Europe | -0.946 | 0.344 | 0.470 |
| Africa – North America | -1.301 | 0.193 | 0.414 |
| Asia – North America | 1.225 | 0.221 | 0.414 |
| Australia – North America | -1.181 | 0.238 | 0.3564 |
| Europe – North America | -1.224 | 0.221 | 0.368 |
| Africa – South America | 0.061 | 0.951 | 0.951 |
| **Asia – South America** | **5.321** | **0.000** | **0.000** |
| Australia – South America | -0.370 | 0.711 | 0.820 |
| **Europe – South America** | **2.662** | **0.008** | **0.029** |
| **North America – South America** | **3.198** | **0.001** | **0.007** |
| All data Km | | | |
| Africa – Asia | 0.050 | 0.960 | 0.960 |
| Africa – Australia | 1.044 | 0.296 | 0.445 |
| Asia – Australia | 1.175 | 0.240 | 0.515 |
| Africa – Europe | 1.055 | 0.292 | 0.486 |
| **Asia – Europe** | **5.057** | **0.000** | **0.000** |
| Australia – Europe | -0.584 | 0.559 | 0.763 |
| Africa – North America | 1.107 | 0.269 | 0.503 |
| **Asia – North America** | **3.509** | **0.000** | **0.002** |
| Australia – North America | -0.530 | 0.596 | 0.745 |
| Europe – North America | 0.243 | 0.808 | 0.932 |
| Africa – South America | 1.750 | 0.080 | 0.240 |
| **Asia – South America** | **5.265** | **0.000** | **0.000** |
| Australia – South America | -0.140 | 0.889 | 0.952 |
| Europe – South America | 2.061 | 0.039 | 0.147 |
| North America – South America | 1.538 | 0.154 | 0.310 |
| Carbon data Vmax | | | |
| Asia – Europe | 2.104 | 0.035 | 0.071 |
| Asia – North America | -0.684 | 0.494 | 0.494 |
| Europe – North America | -2.549 | 0.011 | 0.065 |
| Asia – South America | 1.646 | 0.100 | 0.150 |
| Europe – South America | -1.000 | 0.317 | 0.381 |
| North America – South America | 2.230 | 0.026 | 0.078 |
| Carbon data Km | | | |
| Asia – Europe | 2.104 | 0.035 | 0.071 |
| Asia – North America | -0.684 | 0.494 | 0.494 |
| Europe – North America | -2.549 | 0.012 | 0.065 |
| Asia – South America | 1.646 | 0.100 | 0.150 |
| Europe – South America | -1.000 | 0.317 | 0.381 |
| North America – South America | 2.230 | 0.026 | 0.077 |

Table 4. Median BEF parameter values grouped by continent (should I reduce this to just the groups that are significantly different no right)

|  |  |  |
| --- | --- | --- |
|  | Vmax | Km |
| All | | |
| Africa | -0.080 | **-0.003** |
| Asia | **-0.076** | -0.004 |
| Australia | -0.088 | -0.035 |
| Europe | -0.081 | -0.017 |
| North America | -0.081 | -0.019 |
| South America | -0.087 | -0.062 |
| Carbon | | |
| Asia | -0.084 | **-0.016** |
| Europe | -0.119 | -0.106 |
| North America | **-0.081** | -0.020 |
| South America | -0.094 | -0.077 |

Table 5. Results of Kruskal Wallis test of BEF parameters against land use intensity

|  |  |  |  |
| --- | --- | --- | --- |
|  | H statistic | Degrees of freedom | P |
| **All data Vmax** | **7.753** | **2** | **0.021** |
| All data Km | 0.301 | 2 | 0.860 |
| **Carbon Vmax** | **9.481** | **2** | **0.009** |
| **Carbon Km** | **3.208** | **2** | **0.201** |

Table 6. Results of Dunn’s test with Benjamini Hochberg adjustment for BEF parameters against land use intensity

|  |  |  |  |
| --- | --- | --- | --- |
|  | Z | P unadjusted | P adjusted |
| All data Vmax | | | |
| **Intense – light** | **-2.47** | **0.013** | **0.040** |
| Intense – minimal | -0.611 | 0.541 | 0.5412 |
| Light – minimal | 2.030 | 0.042 | 0.0635 |
| All data Km | | | |
| Intense – light | 0.157 | 0.875 | 0.875 |
| Intense – minimal | 0.504 | 0.614 | 1.000 |
| Light - minimal | 0.444 | 0.657 | 0.986 |
| Carbon data Vmax | | | |
| **Intense – light** | **-2.806** | **0.005** | **0.015** |
| Intense – minimal | -1.305 | 0.192 | 0.192 |
| **Light - minimal** | **2.436** | **0.015** | **0.022** |
| Carbon data Km | | | |
| Intense – light | -1.64 | 0.101 | 0.304 |
| Intense – minimal | -0.772 | 0.440 | 0.440 |
| Light - minimal | 1.408 | 0.159 | 0.239 |

Table 7. Medians of Vmax for different land use intensities

|  |  |  |
| --- | --- | --- |
|  | Vmax | Km |
| All data | | |
| Minimal | -0.083 | -0.017 |
| Light | **-0.080** | -0.023 |
| Intense | -0.083 | **-0.015** |
| Carbon | | |
| Minimal | -0.087 | -0.050 |
| Light | **-0.079** | **-0.023** |
| Intense | -0.119 | -0.106 |

Table 8. Results of Kruskal Wallis test of parameter values in biodiversity hotspots

|  |  |  |  |
| --- | --- | --- | --- |
|  | H | Degrees of freedom | *p* |
| All data Vmax | 2.674 | 1 | 0.102 |
| All data Km | 0.486 | 1 | 0.485 |
| Carbon data Vmax | 0.907 | 1 | 0.341 |
| **Carbon data Km** | **4.513** | **1** | **0.034** |