# All species cranium difference

Results of the area difference random test for the cranium of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.42 | 7.95 | 0.00 | 0.00 | **0.003** |
| Tip of snout | -0.52 | -8.60 | -0.00 | 0.00 | **0.003** |
| Remainder | 0.10 | 5.69 | -0.00 | 0.00 | **0.003** |

# All species cranium difference rarefied

Results of the area difference random test (rarefied - 47) for the cranium of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.07 | 3.90 | 0.00 | 0.00 | **0.003** |
| Tip of snout | -0.05 | -3.00 | 0.00 | 0.00 | **0.012** |
| Remainder | 0.10 | 6.11 | -0.00 | 0.00 | **0.003** |

# All species cranium overlaps

Results of the overlap probability random test for the cranium of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.95 | -6.00 | 0.98 | 0.00 | **0.003** |
| Tip of snout | 0.95 | -5.96 | 0.98 | 0.00 | **0.003** |
| Remainder | 0.78 | -4.95 | 0.90 | 0.00 | **0.003** |

# All species cranium overlaps rarefied

Results of the overlap probability random test (rarefied - 47) for the cranium of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.85 | -1.98 | 0.90 | 0.00 | 0.153 |
| Tip of snout | 0.86 | -1.65 | 0.90 | 0.00 | 0.297 |
| Remainder | 0.69 | -8.41 | 0.91 | 0.00 | **0.003** |

# All species mandible difference

Results of the area difference random test for the mandible of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | -0.02 | -1.38 | 0.00 | 0.00 | 0.51 |
| Symphyseal area | 0.05 | 0.96 | -0.00 | 0.00 | 1.00 |
| Remainder | -0.03 | -0.68 | -0.00 | 0.00 | 1.00 |

# All species mandible difference rarefied

Results of the area difference random test (rarefied - 45) for the mandible of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | -0.02 | -1.48 | 0.00 | 0.00 | 0.43 |
| Symphyseal area | 0.01 | 0.51 | 0.00 | 0.00 | 1.00 |
| Remainder | -0.01 | -0.27 | -0.00 | 0.00 | 1.00 |

# All species mandible overlaps

Results of the overlap probability random test for the mandible of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.83 | -3.31 | 0.92 | 0.00 | **0.024** |
| Symphyseal area | 0.99 | 2.37 | 0.98 | 0.00 | **0.045** |
| Remainder | 0.98 | 0.05 | 0.98 | 0.00 | 1 |

# All species mandible overlaps rarefied

Results of the overlap probability random test (rarefied - 45) for the mandible of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.87 | -1.98 | 0.92 | 0.00 | 0.14 |
| Symphyseal area | 0.91 | -0.58 | 0.92 | 0.00 | 1.00 |
| Remainder | 0.92 | -0.00 | 0.92 | 0.00 | 1.00 |

# *Lasiorhinus* cranium difference

Results of the area difference random test for the mandible of Lasiorhinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | -0.02 | -1.38 | 0.00 | 0.00 | 0.51 |
| Tip of snout | 0.05 | 0.96 | -0.00 | 0.00 | 1.00 |
| Remainder | -0.03 | -0.68 | -0.00 | 0.00 | 1.00 |

# *Lasiorhinus* cranium difference rarefied

Results of the area difference random test (rarefied - 47) for the mandible of Lasiorhinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | -0.02 | -1.48 | 0.00 | 0.00 | 0.43 |
| Tip of snout | 0.01 | 0.51 | 0.00 | 0.00 | 1.00 |
| Remainder | -0.01 | -0.27 | -0.00 | 0.00 | 1.00 |

# *Lasiorhinus* cranium overlaps

Results of the overlap probability random test for the mandible of Lasiorhinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.83 | -3.31 | 0.92 | 0.00 | **0.024** |
| Tip of snout | 0.99 | 2.37 | 0.98 | 0.00 | **0.045** |
| Remainder | 0.98 | 0.05 | 0.98 | 0.00 | 1 |

# *Lasiorhinus* cranium overlaps rarefied

Results of the overlap probability random test (rarefied - 47) for the mandible of Lasiorhinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.87 | -1.98 | 0.92 | 0.00 | 0.14 |
| Tip of snout | 0.91 | -0.58 | 0.92 | 0.00 | 1.00 |
| Remainder | 0.92 | -0.00 | 0.92 | 0.00 | 1.00 |

# Lasiorhinus mandible difference

Results of the area difference random test for the mandible of all species

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | -0.02 | -1.38 | 0.00 | 0.00 | 0.51 |
| Symphyseal area | 0.05 | 0.96 | -0.00 | 0.00 | 1.00 |
| Remainder | -0.03 | -0.68 | -0.00 | 0.00 | 1.00 |

# *Lasiorhinus* mandible difference rarefied

Results of the area difference random test (rarefied - 45) for the mandible of Lasiorhinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | -0.02 | -1.48 | 0.00 | 0.00 | 0.43 |
| Symphyseal area | 0.01 | 0.51 | 0.00 | 0.00 | 1.00 |
| Remainder | -0.01 | -0.27 | -0.00 | 0.00 | 1.00 |

# *Lasiorhinus* mandible overlaps

Results of the overlap probability random test for the mandible of Lasiorhinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.83 | -3.31 | 0.92 | 0.00 | **0.024** |
| Symphyseal area | 0.99 | 2.37 | 0.98 | 0.00 | **0.045** |
| Remainder | 0.98 | 0.05 | 0.98 | 0.00 | 1 |

# *Lasiorhinus* mandible overlaps rarefied

Results of the overlap probability random test (rarefied - 45) for the mandible of Lasiorhinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.87 | -1.98 | 0.92 | 0.00 | 0.14 |
| Symphyseal area | 0.91 | -0.58 | 0.92 | 0.00 | 1.00 |
| Remainder | 0.92 | -0.00 | 0.92 | 0.00 | 1.00 |

# *Lasiorhinus krefftii* cranium difference

Results of the area difference random test for the cranium of Lasiorhinus krefftii

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.09 | 3.45 | 0.00 | 0.00 | **0.006** |
| Tip of snout | -0.13 | -4.26 | -0.00 | 0.00 | **0.003** |
| Remainder | 0.04 | 4.96 | 0.00 | 0.00 | **0.003** |

# *Lasiorhinus krefftii* cranium difference rarefied

Results of the area difference random test (rarefied - 47) for the cranium of Lasiorhinus krefftii

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.01 | 1.78 | -0.00 | 0.00 | 0.225 |
| Tip of snout | -0.01 | -1.51 | 0.00 | 0.00 | 0.378 |
| Remainder | 0.05 | 5.11 | -0.00 | 0.00 | **0.003** |

# *Lasiorhinus krefftii* cranium overlaps

Results of the overlap probability random test for the cranium of Lasiorhinus krefftii

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.97 | -1.98 | 0.98 | 0.00 | 0.132 |
| Tip of snout | 0.98 | -1.00 | 0.98 | 0.00 | 0.95 |
| Remainder | 0.58 | -13.69 | 0.92 | 0.00 | **0.003** |

# *Lasiorhinus krefftii* cranium overlaps rarefied

Results of the overlap probability random test (rarefied - 47) for the cranium of Lasiorhinus krefftii

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.89 | -0.94 | 0.92 | 0.00 | 1 |
| Tip of snout | 0.90 | -0.66 | 0.92 | 0.00 | 1 |
| Remainder | 0.52 | -16.20 | 0.92 | 0.00 | **0.003** |

# *Lasiorhinus krefftii* mandible difference

Results of the area difference random test for the mandible of Lasiorhinus krefftii

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.03 | 2.37 | 0.00 | 0.00 | 0.057 |
| Symphyseal area | -0.11 | -2.60 | -0.00 | 0.00 | **0.045** |
| Remainder | 0.08 | 2.31 | -0.00 | 0.00 | **0.045** |

# *Lasiorhinus krefftii* mandible difference rarefied

Results of the area difference random test (rarefied - 45) for the mandible of Lasiorhinus krefftii

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.03 | 2.62 | -0.00 | 0.00 | **0.015** |
| Symphyseal area | -0.02 | -1.50 | 0.00 | 0.00 | 0.42 |
| Remainder | 0.02 | 1.43 | -0.00 | 0.00 | 0.438 |

# *Lasiorhinus krefftii* mandible overlaps

Results of the overlap probability random test for the mandible of Lasiorhinus krefftii

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.79 | -4.96 | 0.92 | 0.00 | **0.003** |
| Symphyseal area | 0.98 | 0.91 | 0.98 | 0.00 | 1 |
| Remainder | 0.99 | 1.40 | 0.98 | 0.00 | 0.438 |

# *Lasiorhinus krefftii* mandible overlaps rarefied

Results of the overlap probability random test (rarefied - 45) for the mandible of Lasiorhinus krefftii

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.75 | -6.46 | 0.92 | 0.00 | **0.003** |
| Symphyseal area | 0.91 | -0.33 | 0.92 | 0.00 | 1 |
| Remainder | 0.91 | -0.34 | 0.92 | 0.00 | 1 |

# *Lasiorhinus latifrons* cranium difference

Results of the area difference random test for the cranium of Lasiorhinus latifrons

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.00 | 0.17 | -0.00 | 0.00 | 1 |
| Tip of snout | -0.14 | -4.95 | 0.00 | 0.00 | **0.003** |
| Remainder | 0.14 | 16.32 | 0.00 | 0.00 | **0.003** |

# *Lasiorhinus latifrons* cranium difference rarefied

Results of the area difference random test (rarefied - 47) for the cranium of Lasiorhinus latifrons

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.00 | 0.17 | -0.00 | 0.00 | 1 |
| Tip of snout | -0.01 | -1.59 | -0.00 | 0.00 | 0.333 |
| Remainder | 0.15 | 16.41 | 0.00 | 0.00 | **0.003** |

# *Lasiorhinus latifrons* cranium overlaps

Results of the overlap probability random test for the cranium of Lasiorhinus latifrons

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.96 | -1.88 | 0.98 | 0.00 | 0.165 |
| Tip of snout | 0.98 | -0.34 | 0.98 | 0.00 | 1 |
| Remainder | 0.35 | -22.43 | 0.91 | 0.00 | **0.003** |

# *Lasiorhinus latifrons* cranium overlaps rarefied

Results of the overlap probability random test (rarefied - 47) for the cranium of Lasiorhinus latifrons

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.90 | -0.10 | 0.91 | 0.00 | 1 |
| Tip of snout | 0.91 | -0.14 | 0.91 | 0.00 | 1 |
| Remainder | 0.19 | -28.21 | 0.91 | 0.00 | **0.003** |

# *Lasiorhinus latifrons* mandible difference

Results of the area difference random test for the mandible of Lasiorhinus latifrons

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.10 | 10.43 | -0.00 | 0.00 | **0.003** |
| Symphyseal area | -0.22 | -6.75 | -0.00 | 0.00 | **0.003** |
| Remainder | 0.11 | 3.85 | 0.00 | 0.00 | **0.003** |

# *Lasiorhinus latifrons* mandible difference rarefied

Results of the area difference random test (rarefied - 45) for the mandible of Lasiorhinus latifrons

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.11 | 11.56 | 0.00 | 0.00 | **0.003** |
| Symphyseal area | -0.04 | -3.43 | -0.00 | 0.00 | **0.006** |
| Remainder | 0.02 | 2.31 | -0.00 | 0.00 | 0.069 |

# *Lasiorhinus latifrons* mandible overlaps

Results of the overlap probability random test for the mandible of Lasiorhinus latifrons

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.58 | -13.25 | 0.91 | 0.00 | **0.003** |
| Symphyseal area | 0.93 | -7.31 | 0.98 | 0.00 | **0.003** |
| Remainder | 0.95 | -3.44 | 0.98 | 0.00 | **0.015** |

# *Lasiorhinus latifrons* mandible overlaps rarefied

Results of the overlap probability random test (rarefied - 45) for the mandible of Lasiorhinus latifrons

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.46 | -17.59 | 0.91 | 0.00 | **0.003** |
| Symphyseal area | 0.85 | -2.78 | 0.92 | 0.00 | **0.018** |
| Remainder | 0.87 | -1.52 | 0.91 | 0.00 | 0.333 |

# *Vombatus ursinus* cranium difference

Results of the area difference random test for the cranium of Vombatus ursinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.40 | 11.90 | 0.00 | 0.00 | **0.003** |
| Tip of snout | -0.33 | -8.85 | -0.00 | 0.00 | **0.003** |
| Remainder | -0.06 | -5.51 | -0.00 | 0.00 | **0.003** |

# *Vombatus ursinus* cranium difference rarefied

Results of the area difference random test (rarefied - 47) for the cranium of Vombatus ursinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.07 | 5.88 | -0.00 | 0.00 | **0.003** |
| Tip of snout | -0.03 | -3.08 | -0.00 | 0.00 | **0.006** |
| Remainder | -0.06 | -5.92 | -0.00 | 0.00 | **0.003** |

# *Vombatus ursinus* cranium overlaps

Results of the overlap probability random test for the cranium of Vombatus ursinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.90 | -16.63 | 0.98 | 0.00 | **0.003** |
| Tip of snout | 0.92 | -15.51 | 0.99 | 0.00 | **0.003** |
| Remainder | 0.72 | -7.59 | 0.92 | 0.00 | **0.003** |

# *Vombatus ursinus* cranium overlaps rarefied

Results of the overlap probability random test (rarefied - 47) for the cranium of Vombatus ursinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Zygomatic Arch | 0.80 | -4.44 | 0.92 | 0.00 | **0.003** |
| Tip of snout | 0.85 | -2.35 | 0.91 | 0.00 | **0.048** |
| Remainder | 0.69 | -8.29 | 0.91 | 0.00 | **0.003** |

# *Vombatus ursinus* mandible difference

Results of the area difference random test for the mandible of Vombatus ursinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | -0.01 | -0.98 | -0.00 | 0.00 | 0.959 |
| Symphyseal area | -0.15 | -3.68 | 0.00 | 0.00 | **0.003** |
| Remainder | 0.17 | 4.63 | 0.00 | 0.00 | **0.003** |

# *Vombatus ursinus* mandible difference rarefied

Results of the area difference random test (rarefied - 45) for the mandible of Vombatus ursinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | -0.01 | -1.08 | -0.00 | 0.00 | 0.797 |
| Symphyseal area | -0.03 | -2.03 | 0.00 | 0.00 | 0.132 |
| Remainder | 0.03 | 2.86 | -0.00 | 0.00 | **0.012** |

# *Vombatus ursinus* mandible overlaps

Results of the overlap probability random test for the mandible of Vombatus ursinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.88 | -1.91 | 0.93 | 0.00 | 0.17 |
| Symphyseal area | 0.98 | -0.56 | 0.98 | 0.00 | 1.00 |
| Remainder | 0.97 | -1.87 | 0.98 | 0.00 | 0.18 |

# *Vombatus ursinus* mandible overlaps rarefied

Results of the overlap probability random test (rarefied - 45) for the mandible of Vombatus ursinus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Partition | Observed | Mean.Normal.residuals | Random.mean | Random.variance | p value (adjusted) |
| Masticatory insertions | 0.88 | -2.00 | 0.93 | 0.00 | 0.12 |
| Symphyseal area | 0.90 | -1.03 | 0.93 | 0.00 | 0.84 |
| Remainder | 0.91 | -0.62 | 0.93 | 0.00 | 1.00 |

# all differences

“diff” is the difference in landmark length between the ones from the partition and all the other. “overlap” is the probability of overlap between the distribution of the landmark lengths in the partitions and all the other. The p values are adjusted using a Bonferroni-Holm correction. Because of the number of bootstrap pseudo-replicates involved in the test (1000), we lowered our threshold for rejecting H0 to p <= 0.01. Signif. codes: 0 ’\*\*’ 0.001 ’\*’ 0.01 ’.’ 0.05 ’ ’ 1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | test | Zygomatic Arch | Tip of snout | Remainder(C) | Masticatory insertions | Symphyseal area | Remainder(M) |
| All specie1 | diff | 0.425 | -0.519 | 0.098 | -0.022 | 0.049 | -0.03 |
|  | p | 0.003\* | 0.003\* | 0.003\* | 0.509 | 1 | 1 |
|  | overlap | 0.95 | 0.95 | 0.78 | 0.83 | 0.99 | 0.98 |
|  | p | 0.003\* | 0.003\* | 0.003\* | 0.024. | 0.045. | 1 |
| *Lasiorhinus* | diff | 0.027 | -0.068 | 0.04 | 0.112 | -0.26 | 0.156 |
|  | p | 1 | 0.309 | 0.003\* | 0.003\* | 0.003\* | 0.003\* |
|  | overlap | 0.97 | 0.98 | 0.87 | 0.59 | 0.94 | 0.97 |
|  | p | 0.003\* | 0.051 | 0.126 | 0.003\* | 0.003\* | 1 |
| *Lasiorhinus krefftii* | diff | 0.092 | -0.133 | 0.043 | 0.029 | -0.112 | 0.081 |
|  | p | 0.006\* | 0.003\* | 0.003\* | 0.057 | 0.045. | 0.045. |
|  | overlap | 0.97 | 0.98 | 0.58 | 0.79 | 0.98 | 0.99 |
|  | p | 0.132 | 0.95 | 0.003\* | 0.003\* | 1 | 0.438 |
| *Lasiorhinus latifrons* | diff | 0.004 | -0.145 | 0.14 | 0.104 | -0.22 | 0.114 |
|  | p | 1 | 0.003\* | 0.003\* | 0.003\* | 0.003\* | 0.003\* |
|  | overlap | 0.97 | 0.98 | 0.35 | 0.58 | 0.93 | 0.95 |
|  | p | 0.165 | 1 | 0.003\* | 0.003\* | 0.003\* | 0.015. |
| *Vombatus usrinus* | diff | 0.395 | -0.333 | -0.06 | -0.012 | -0.148 | 0.165 |
|  | p | 0.003\* | 0.003\* | 0.003\* | 0.959 | 0.003\* | 0.003\* |
|  | overlap | 0.9 | 0.92 | 0.72 | 0.88 | 0.98 | 0.97 |
|  | p | 0.003\* | 0.003\* | 0.003\* | 0.174 | 1 | 0.18 |

# all differences rarefied

Rarefied results. “diff” is the difference in landmark length between the ones from the partition and all the other. “overlap” is the probability of overlap between the distribution of the landmark lengths in the partitions and all the other. The p values are adjusted using a Bonferroni-Holm correction. Because of the number of bootstrap pseudo-replicates involved in the test (1000), we lowered our threshold for rejecting H0 to p <= 0.01. Signif. codes: 0 ’\*\*’ 0.001 ’\*’ 0.01 ’.’ 0.05 ’ ’ 1

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | test | Zygomatic Arch | Tip of snout | Remainder(C) | Masticatory insertions | Symphyseal area | Remainder(M) |
| All species | diff | 0.071 | -0.052 | 0.105 | -0.023 | 0.008 | -0.005 |
|  | p | 0.003\* | 0.012. | 0.003\* | 0.426 | 1 | 1 |
|  | overlap | 0.85 | 0.86 | 0.69 | 0.87 | 0.91 | 0.92 |
|  | p | 0.153 | 0.297 | 0.003\* | 0.141 | 1 | 1 |
| *Lasiorhinus* | diff | 0.005 | -0.006 | 0.042 | 0.119 | -0.042 | 0.03 |
|  | p | 1 | 1 | 0.003\* | 0.003\* | 0.006\* | 0.06 |
|  | overlap | 0.9 | 0.9 | 0.87 | 0.52 | 0.88 | 0.88 |
|  | p | 0.812 | 1 | 0.078 | 0.003\* | 0.414 | 0.384 |
| *Lasiorhinus krefftii* | diff | 0.015 | -0.013 | 0.046 | 0.031 | -0.018 | 0.017 |
|  | p | 0.225 | 0.378 | 0.003\* | 0.015. | 0.42 | 0.438 |
|  | overlap | 0.89 | 0.9 | 0.52 | 0.75 | 0.91 | 0.91 |
|  | p | 1 | 1 | 0.003\* | 0.003\* | 1 | 1 |
| *Lasiorhinus latifrons* | diff | 0.001 | -0.014 | 0.147 | 0.113 | -0.035 | 0.023 |
|  | p | 1 | 0.333 | 0.003\* | 0.003\* | 0.006\* | 0.069 |
|  | overlap | 0.9 | 0.91 | 0.19 | 0.46 | 0.85 | 0.87 |
|  | p | 1 | 1 | 0.003\* | 0.003\* | 0.018. | 0.333 |
| *Vombatus usrinus* | diff | 0.067 | -0.033 | -0.062 | -0.013 | -0.025 | 0.033 |
|  | p | 0.003\* | 0.006\* | 0.003\* | 0.797 | 0.132 | 0.012. |
|  | overlap | 0.8 | 0.85 | 0.69 | 0.88 | 0.9 | 0.91 |
|  | p | 0.003\* | 0.048. | 0.003\* | 0.117 | 0.839 | 1 |