Summary of disparity results

Updated on 11th June 2014

**Skulls dorsal**

Tenrecs seem to have higher disparity than golden moles. All disparity metrics and the rarefaction analyses agree. BUT the permutation tests (1000 reps) show that only the **range and ZelditchMD** (based on inter-landmark distances) disparity metrics are significantly different.

Both tenrecs and golden moles have significantly **lower disparity than expected** by chance.

Non-Microgale tenrecs seem to have higher disparity than golden moles. All disparity metrics and the rarefaction analyses agree. BUT the permutation tests (1000 reps) say that none of these differences are significant.

Non-Microgale tenrecs have significantly **lower disparity than expected** by chance.

**Skulls lateral**

Tenrecs seem to have higher disparity than golden moles. All disparity metrics and the rarefaction analyses agree. BUT the permutation tests (1000 reps) show that only the **range and ZelditchMD** disparity metrics are significantly different.

Both tenrecs and golden moles have significantly **lower disparity than expected** by chance.

Non-Microgale tenrecs have higher disparity than golden moles. All disparity metrics and the rarefaction analyses agree. Permutation tests agree in general: **significant difference in all metrics except for product of variance** (0.04 is insignificant in a two-tailed test?)

Non-Microgale tenrecs have significantly lower disparity than expected by chance.

**Skulls ventral**

Less clear results for comparing tenrecs and golden moles:

Tenrecs have higher disparity than golden moles for the PC disparity metrics but not the Zelditch MD. BUT the permutation tests (1000 reps) show that only the **range and ZelditchMD** disparity metrics are significantly different.

Rarefaction profiles show that these apparent differences are artefacts of variation in sample size; golden moles have higher disparity than tenrecs at equivalent sample sizes.

Both tenrecs and golden moles have **higher disparity than expected** by chance.

Non-Microgale tenrecs seem to have higher disparity than golden moles. All disparity metrics and the rarefaction analyses agree. BUT, permutation tests (1000 reps) say that none of these differences are significant.

Non-Microgale tenrecs have significantly **lower disparity than expected** by chance.

**Mandibles**

**Golden moles have higher** disparity than tenrecs for all metrics except for sum of ranges. Permutation tests (1000 reps): **significant difference in product of variance, sum of ranges and Zelditch MD.** No significant difference in sum of variance and product of ranges is 0.025.

Rarefaction profiles agree (golden moles have higher disparity than tenrecs at comparable sample sizes).

Tenrecs have significantly **lower disparity than expected** by chance.

Unclear results for non-Microgale tenrecs and golden moles.

Non-Microgale tenrecs have higher disparity for sum of variance and sum of ranges metrics. Golden moles have higher disparity for product of variance, product of ranges and ZelditchMD. BUT permutation tests (1000) reps show that none of the differences are significant. npMANOVAs are significant but that only shows the family occupy different areas of morphospace.

Rarefaction profiles; no significant difference between the two groups for the sum of variance, golden moles are higher than golden moles for the other three PC metrics (but not significantly higher for the product of variance).

Non-Microgale tenrecs have significantly **lower disparity than expected** by chance.