# Online resource 3

Electronic supplementary material to:

**Journal:** Theoretical Ecology

**Title:** Trophic niche-space imaging, using resource and consumer traits

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**Results obtained for the TTMs with D = 1, 2, or 3.**

The correlation coefficients (ρ) between predicted and observed trophic interaction strengths with increasing number of predictive dimensions.

**D=3**

| $D_c$ | dimensions fixed at best fitting values | dimensions permuted randomly | correlation coefficients (ρ) | | |
|---|---|---|---|---|---|
| | | | two-sided 95% confidence interval [a] | | actually found in 3D model [b] |
| 1 | - | 1, 2, 3 | -0.299 | - 0.283 | 0.655 |
| 2 | 1 | 2, 3 | 0.356 | - 0.614 | 0.655 |
| 3 | 1, 2 | 3 | 0.655 | - 0.655 | 0.655 |

**D=2**

| $D_c$ | dimensions fixed at best fitting values | dimensions permuted randomly | correlation coefficients (ρ) | | |
|---|---|---|---|---|---|
| | | | two-sided 95% confidence interval [a] | | actually found in 2D model [b] |
| 1 | - | 1, 2 | -0.290 | - 0.286 | 0.656 |
| 2 | 1 | 2 | -0.045 | - 0.493 | 0.656 |

**D=1**

| $D_c$ | dimensions fixed at best fitting values | dimensions permuted randomly | correlation coefficients (ρ) | |
|---|---|---|---|---|
| | | | two-sided 95% confidence interval [a] | actually found in 1D model [b] |
| 1 | - | 1 | -0.283 - 0.291 | 0.140 |