**Correlation between years of number of species caught**

Is there correlation between the multiple years trapping data?

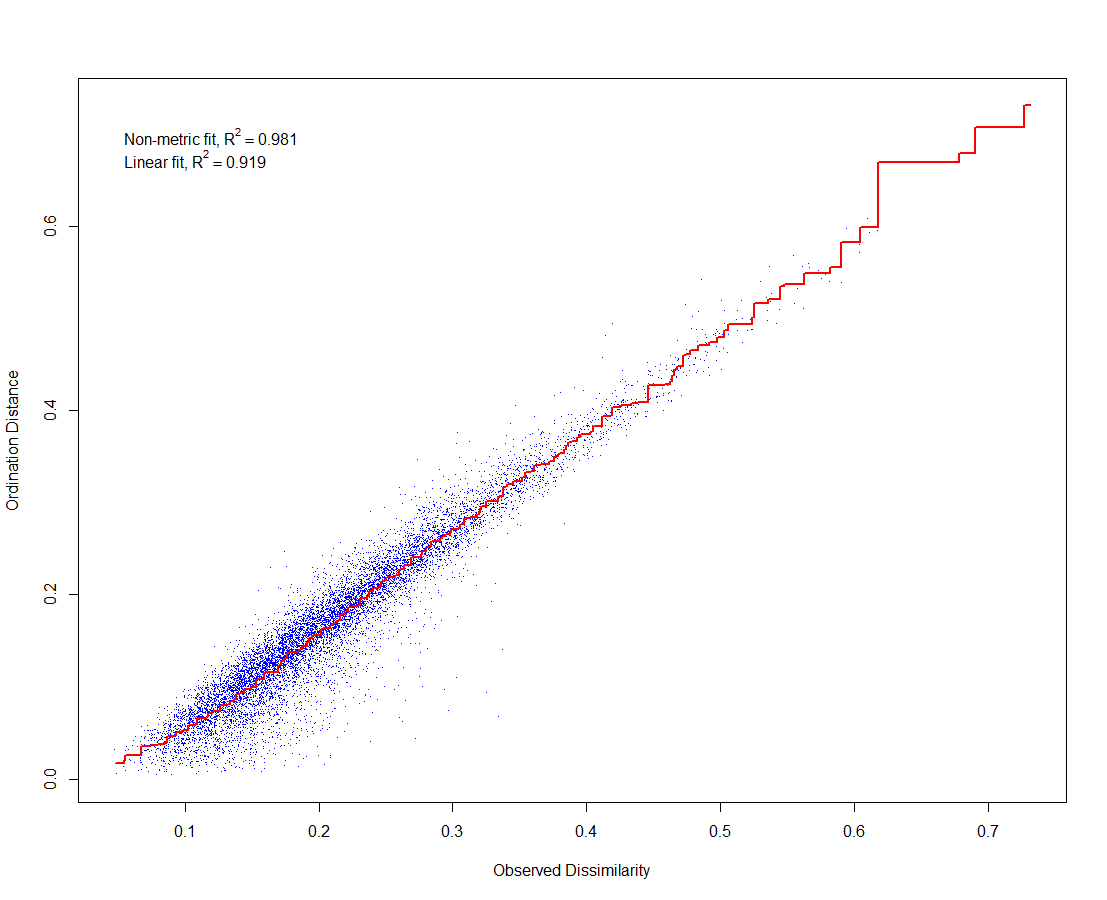
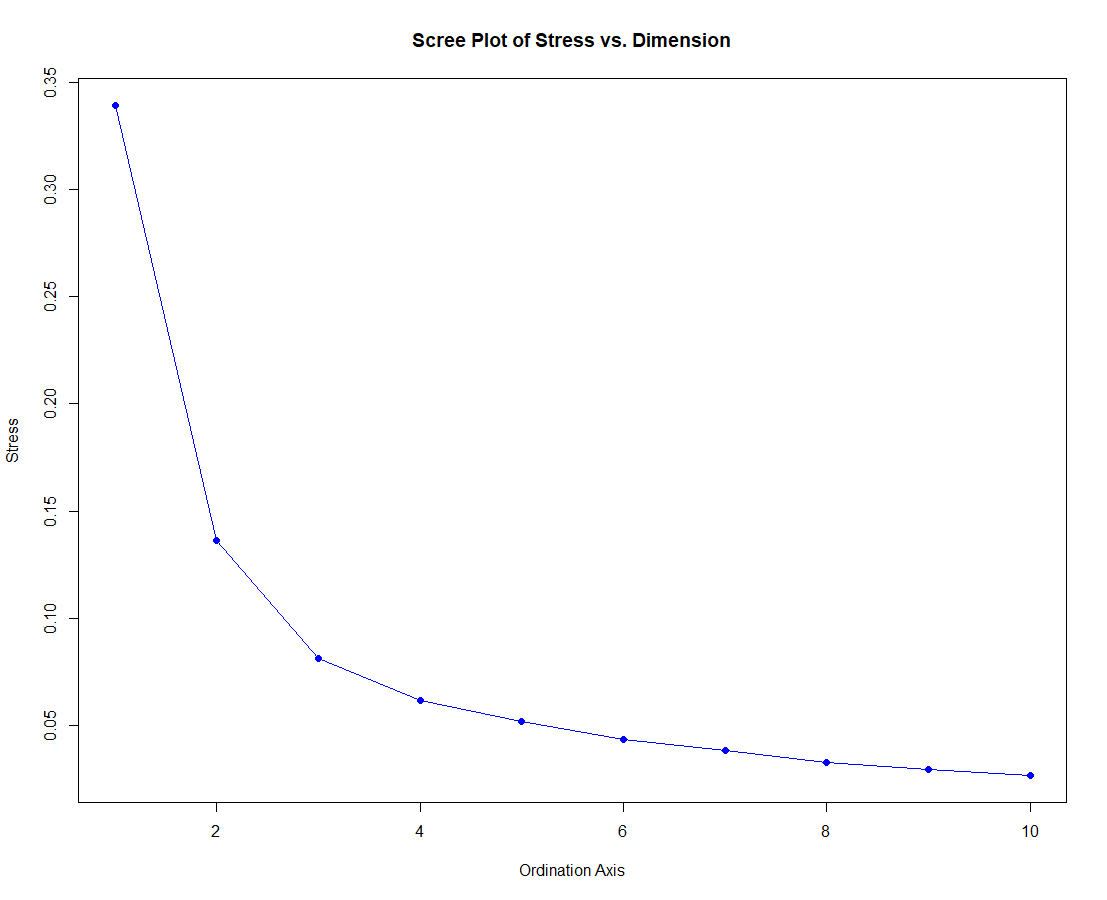
Spearman's rank correlation test was run on the GLSA data from 2014 to 2016. There was a statistically insignificant correlation between the years 2014 and 2015 (rho=0.535, p=0.059), as well as a statistically significant correlation between the years 2015 and 2016 (rho=0.589, p=0.027).

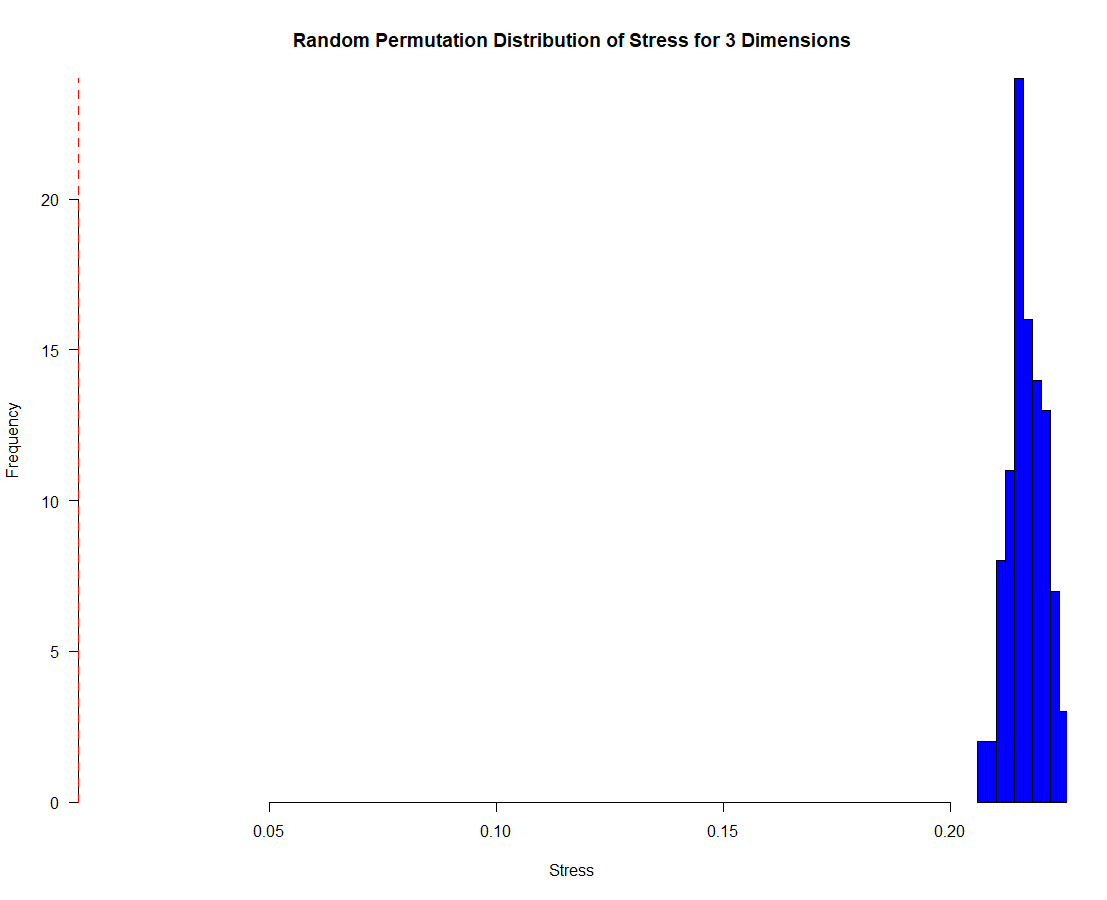
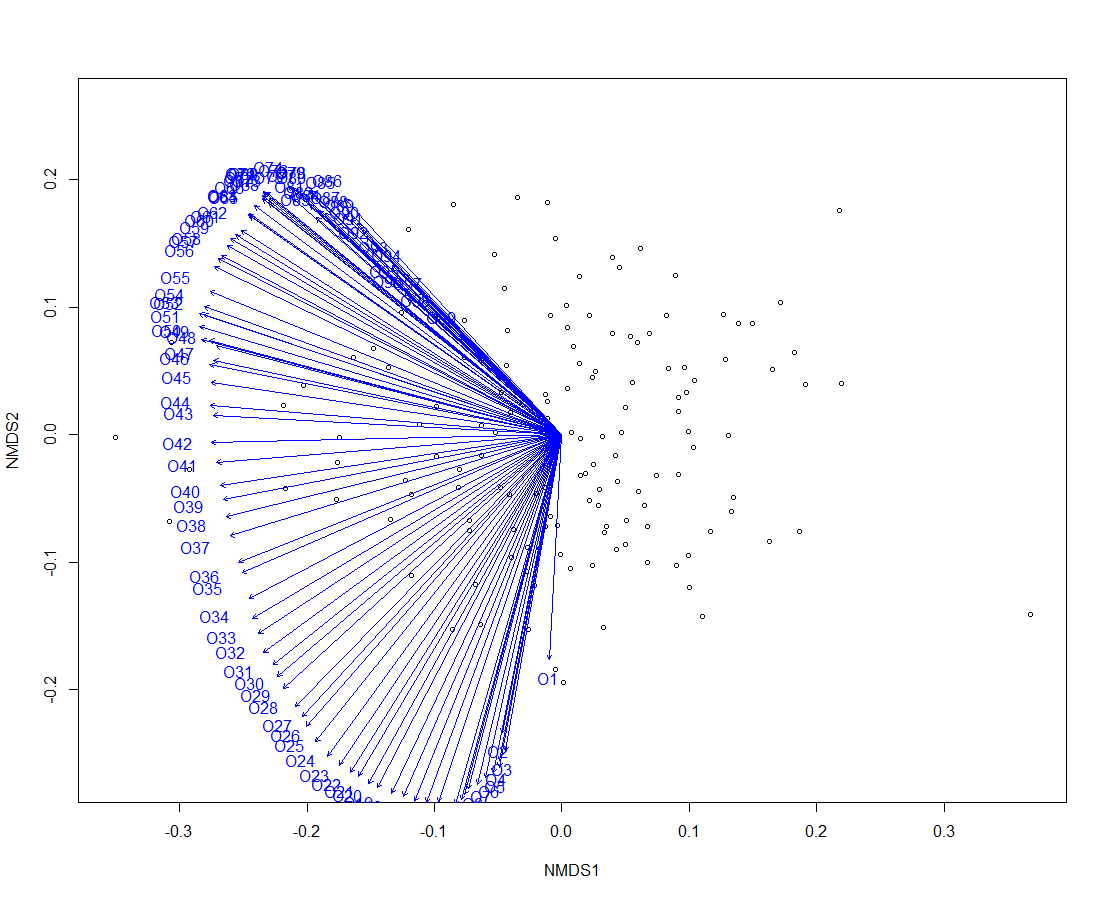
NEFU had a very high correlation but also a very large number of 0 making the data largely unusable for this analysis.

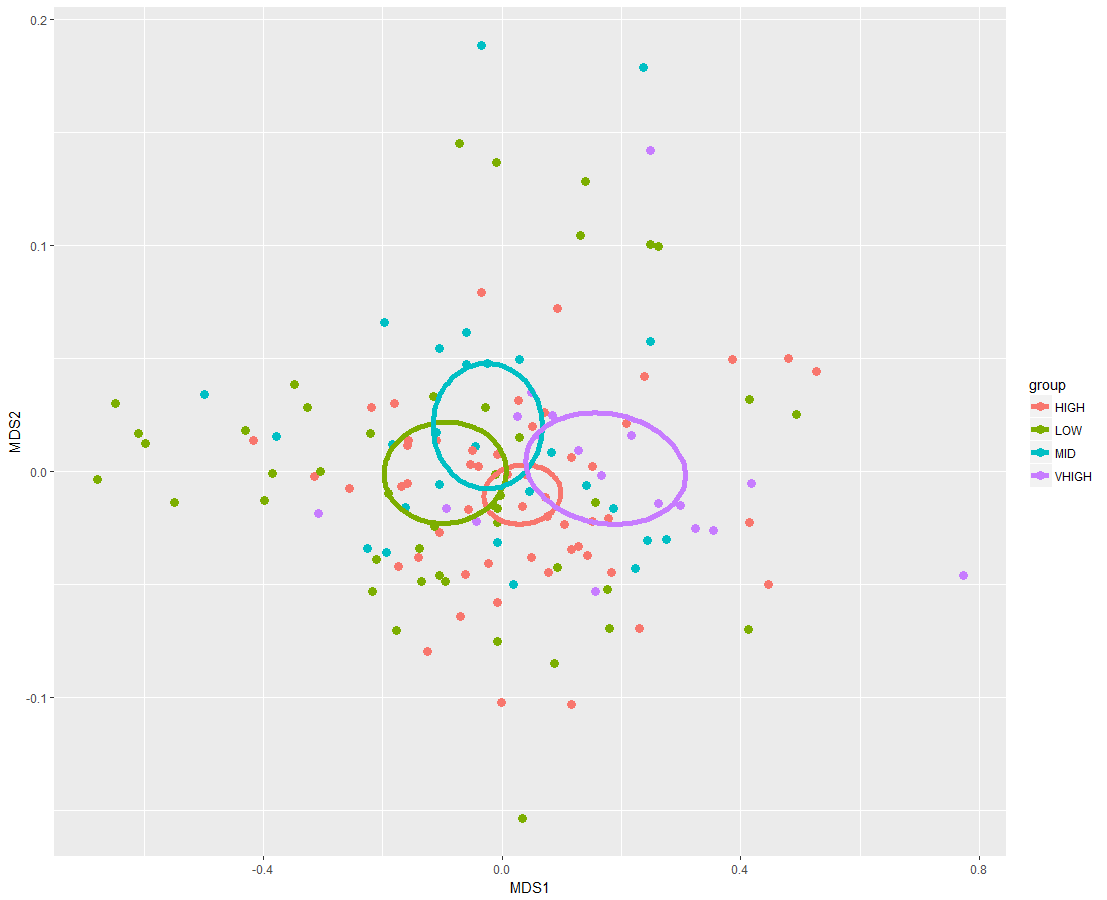
NECI had no correlation between years.

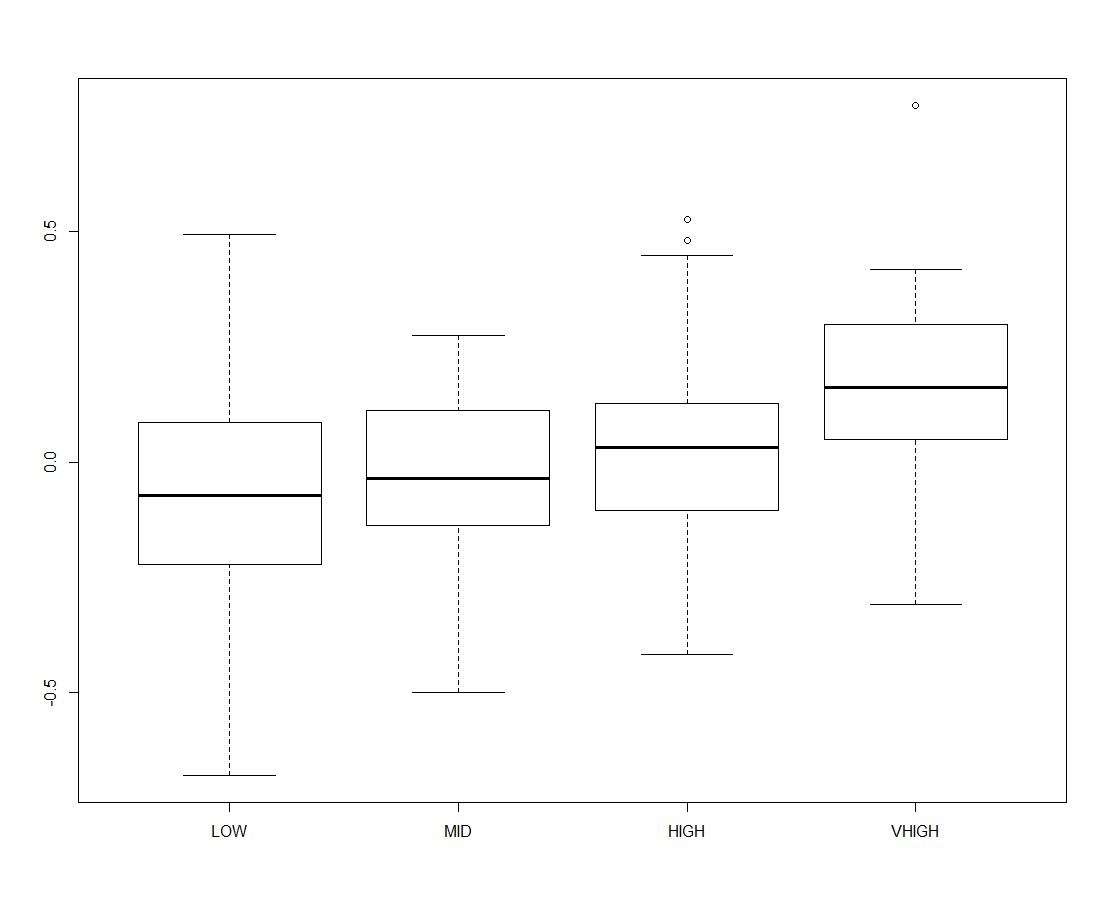
**Conduct a NMDS to identify the Loadings that most impact PC1**

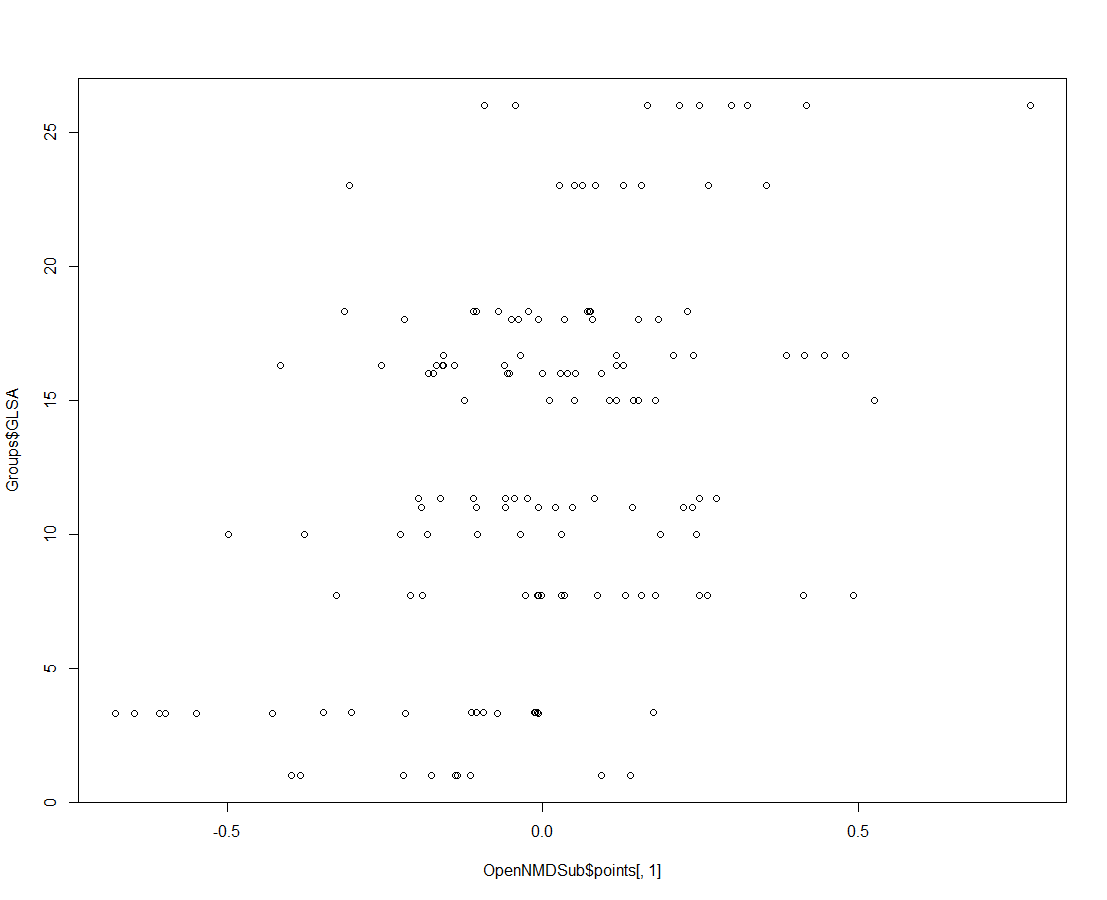
**OPENNESS**



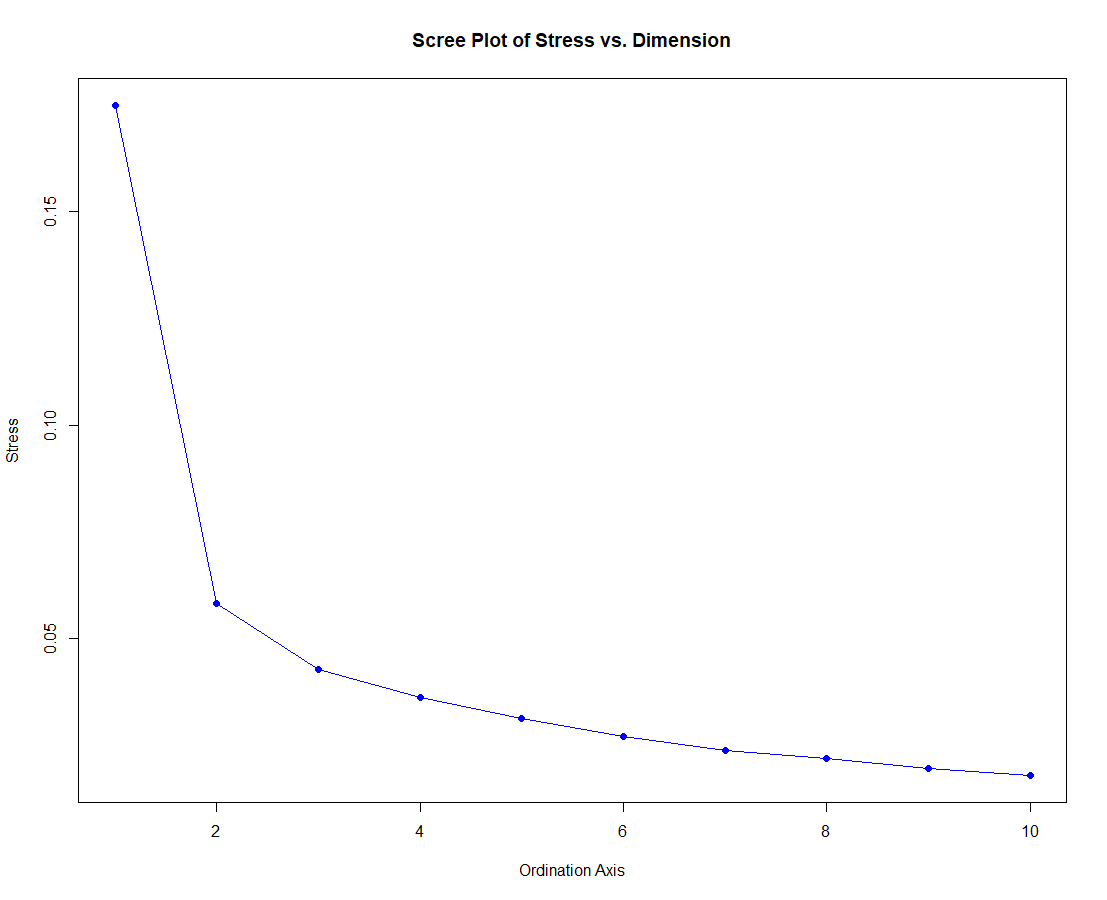


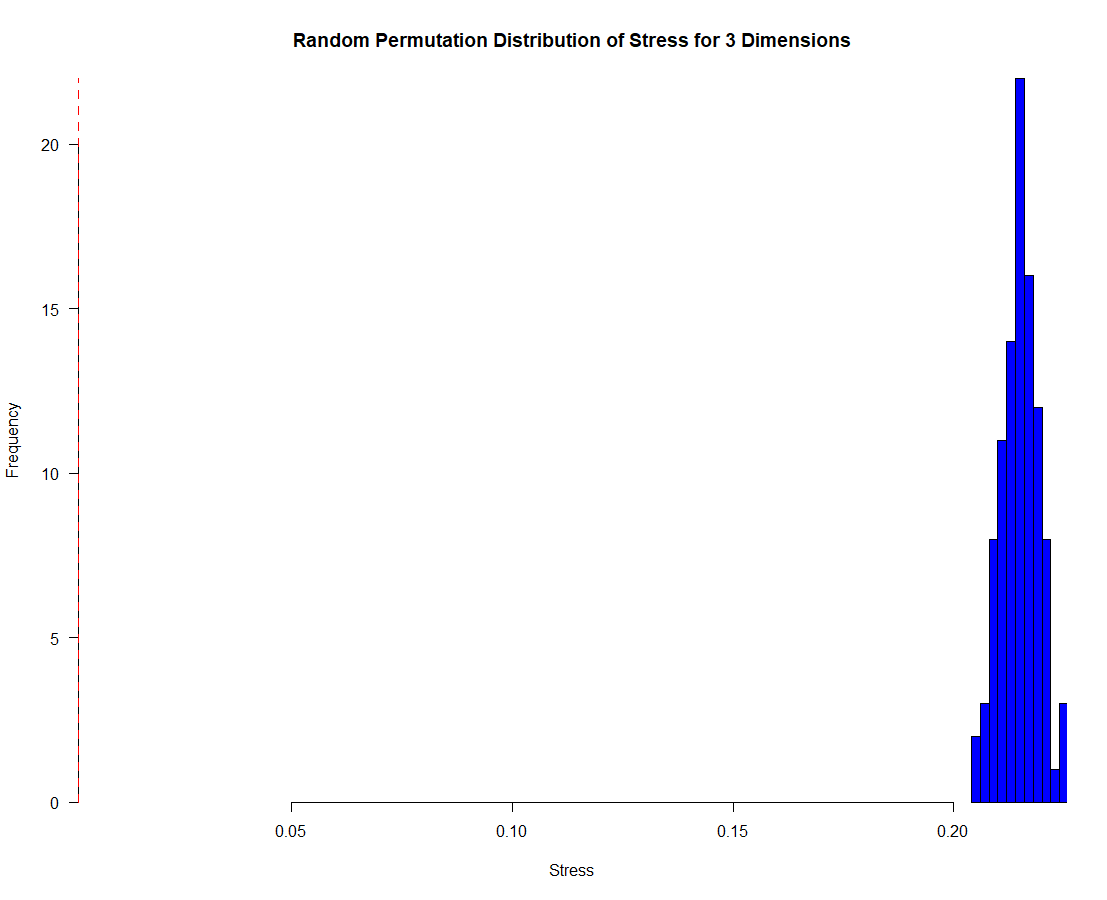


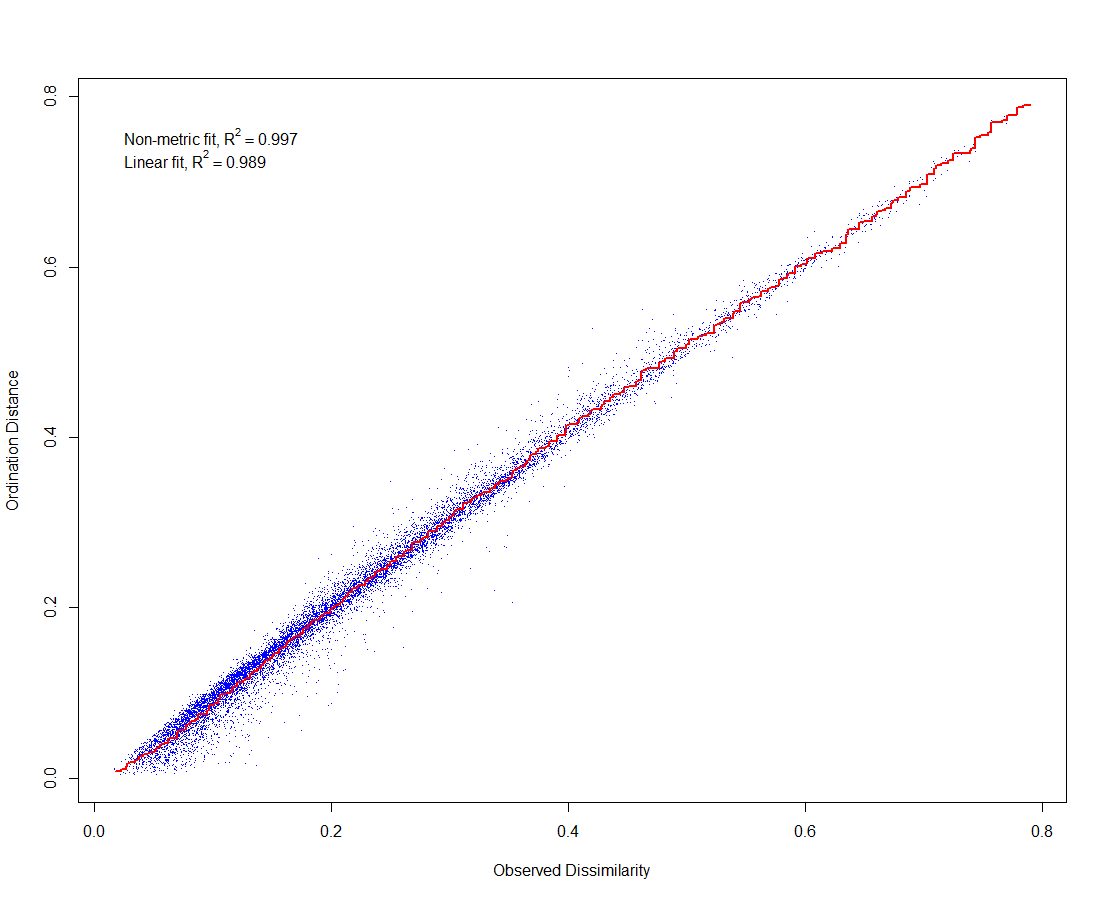


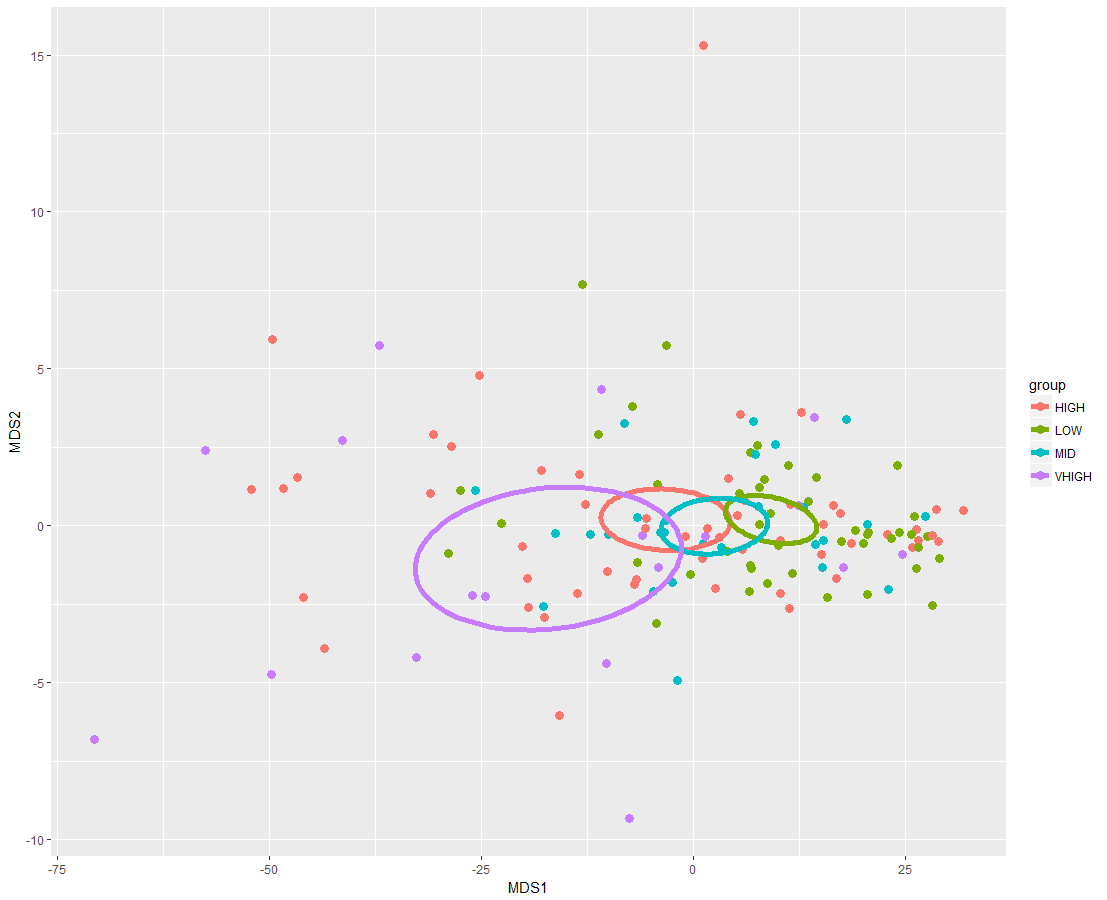
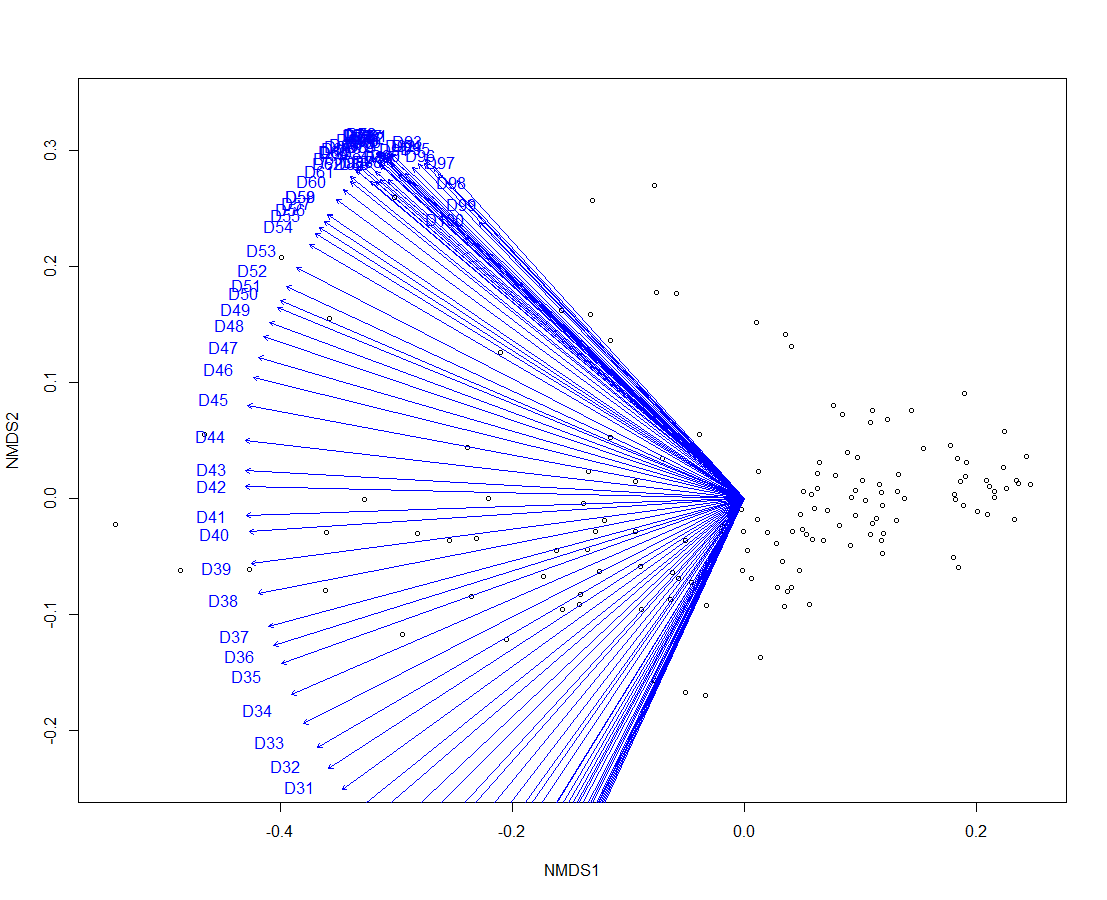


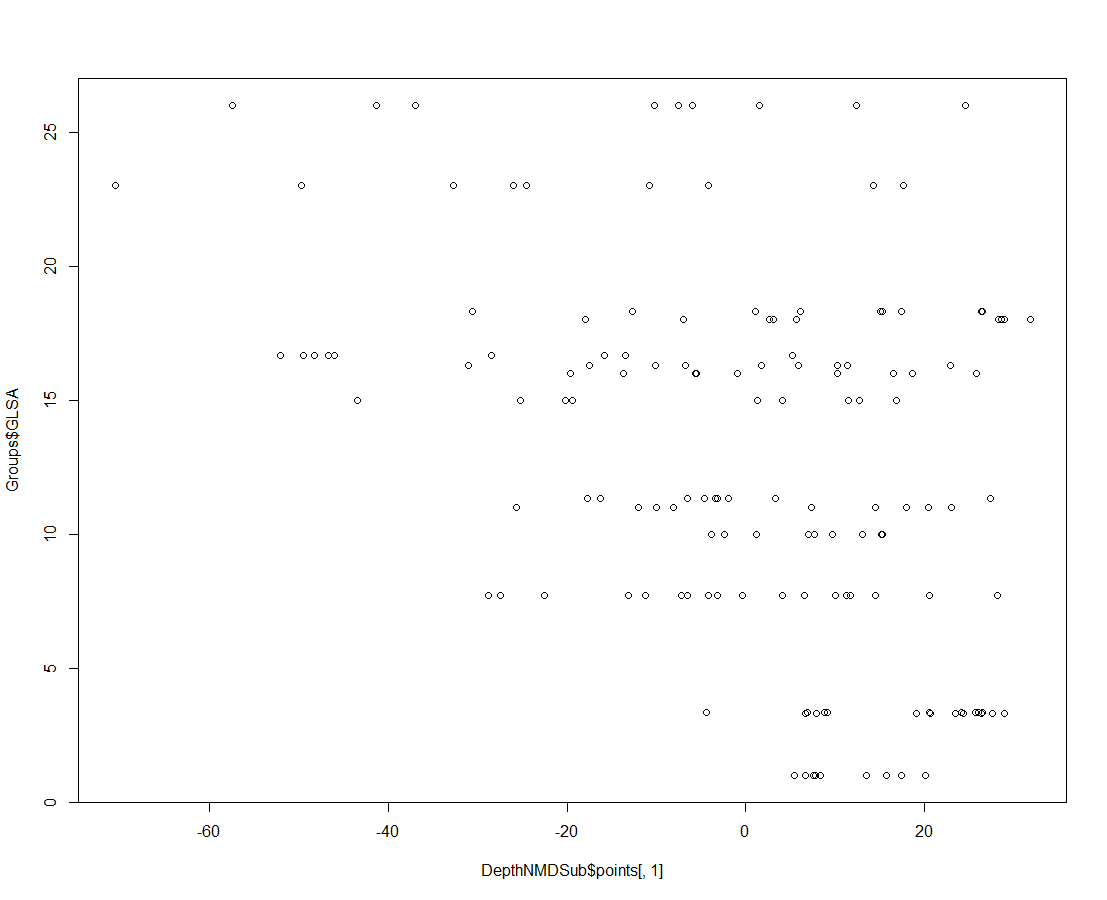
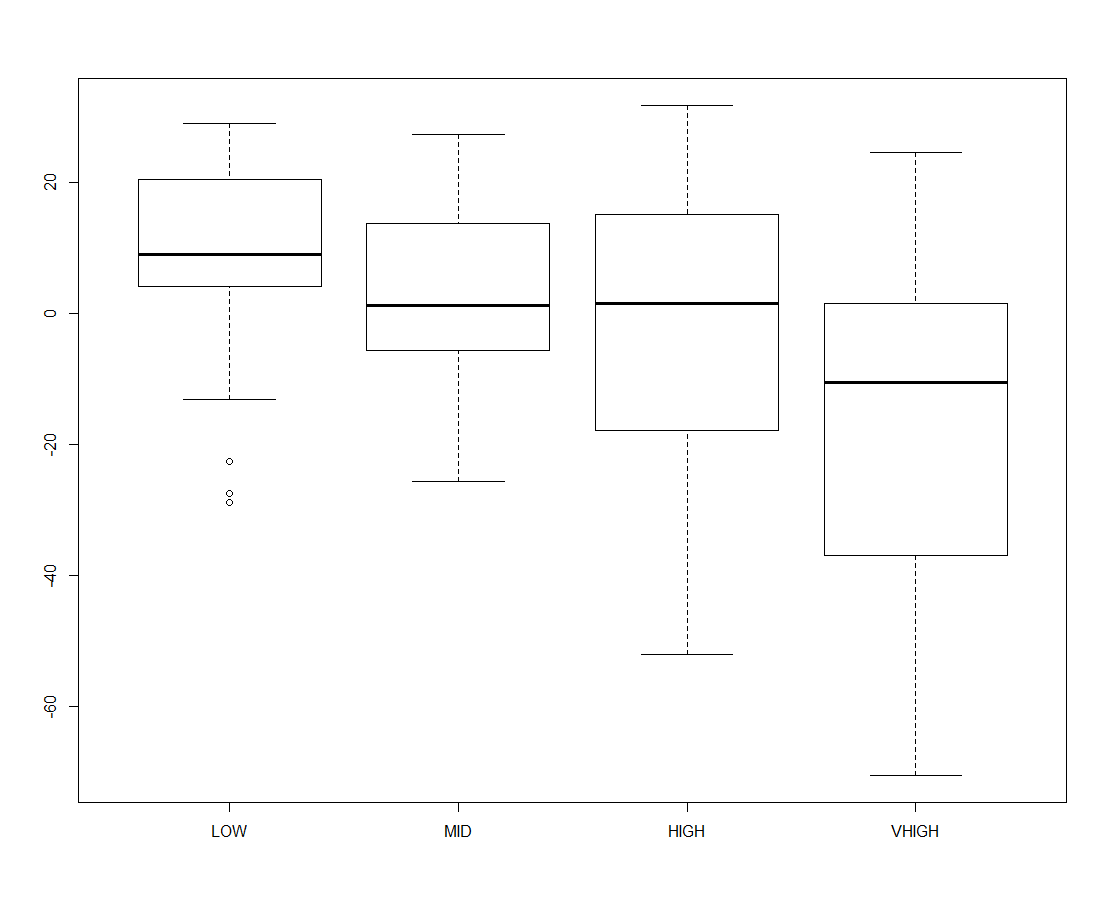
**DEPTH**











**MANTEL TEST**

**Full matrix with Gowers:**

Mantel statistic based on Pearson's product-moment correlation

Call:

mantel(xdis = OMAN, ydis = DMAN, method = "pearson")

Mantel statistic r: 0.06597

Significance: 0.089

Upper quantiles of permutations (null model):

90% 95% 97.5% 99%

0.0598 0.0812 0.0962 0.1159

Permutation: free

Number of permutations: 999

**Subset with Euc:**

Mantel statistic based on Pearson's product-moment correlation

Call:

mantel(xdis = OMAN, ydis = DMAN, method = "pearson")

Mantel statistic r: 0.1843

Significance: 0.001

Upper quantiles of permutations (null model):

90% 95% 97.5% 99%

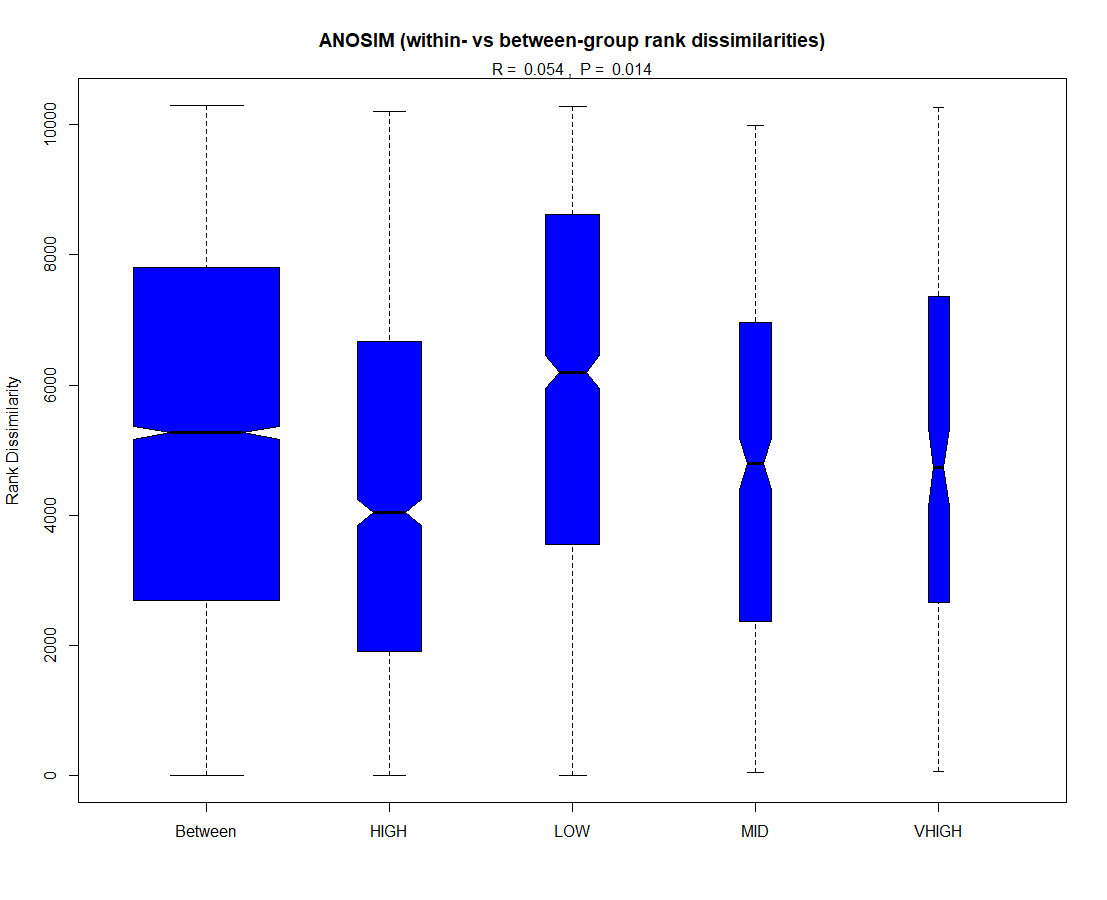
0.0623 0.0802 0.1009 0.1178

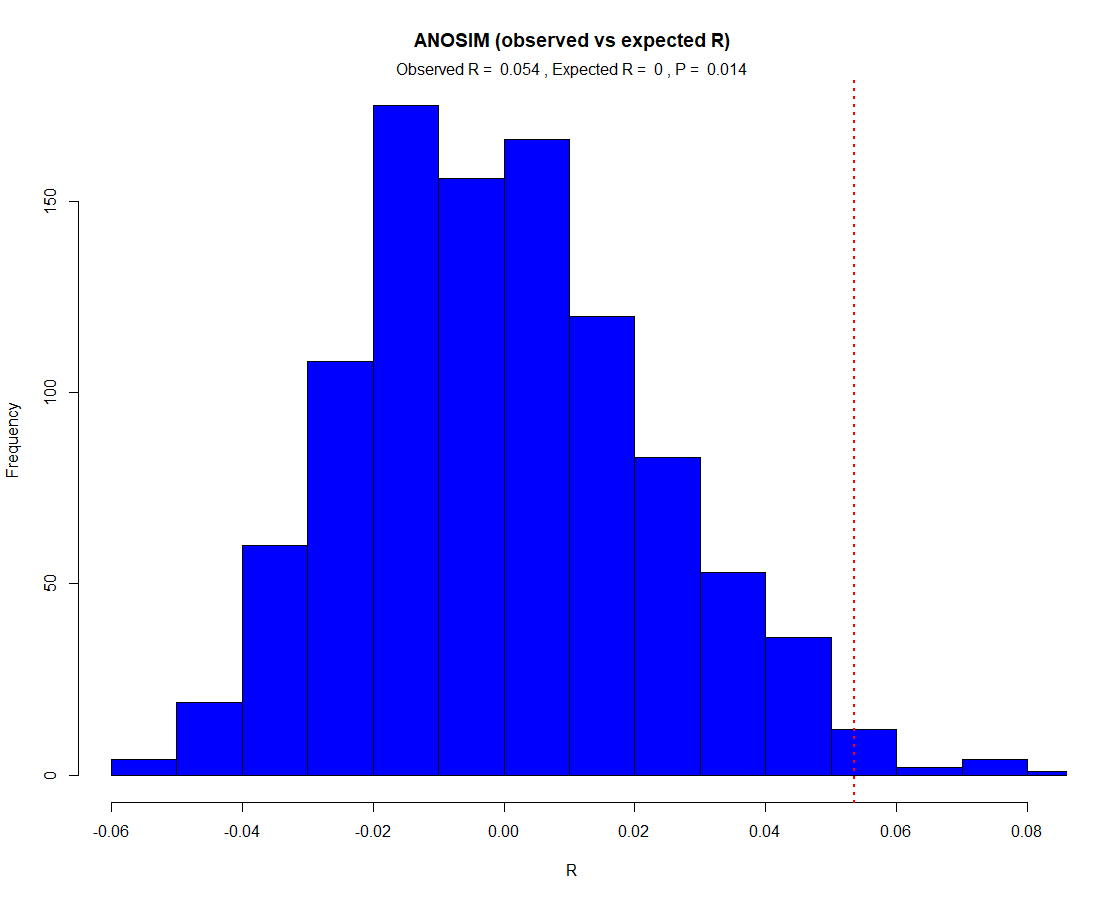
Permutation: free

Number of permutations: 999

**Anosim analysis**

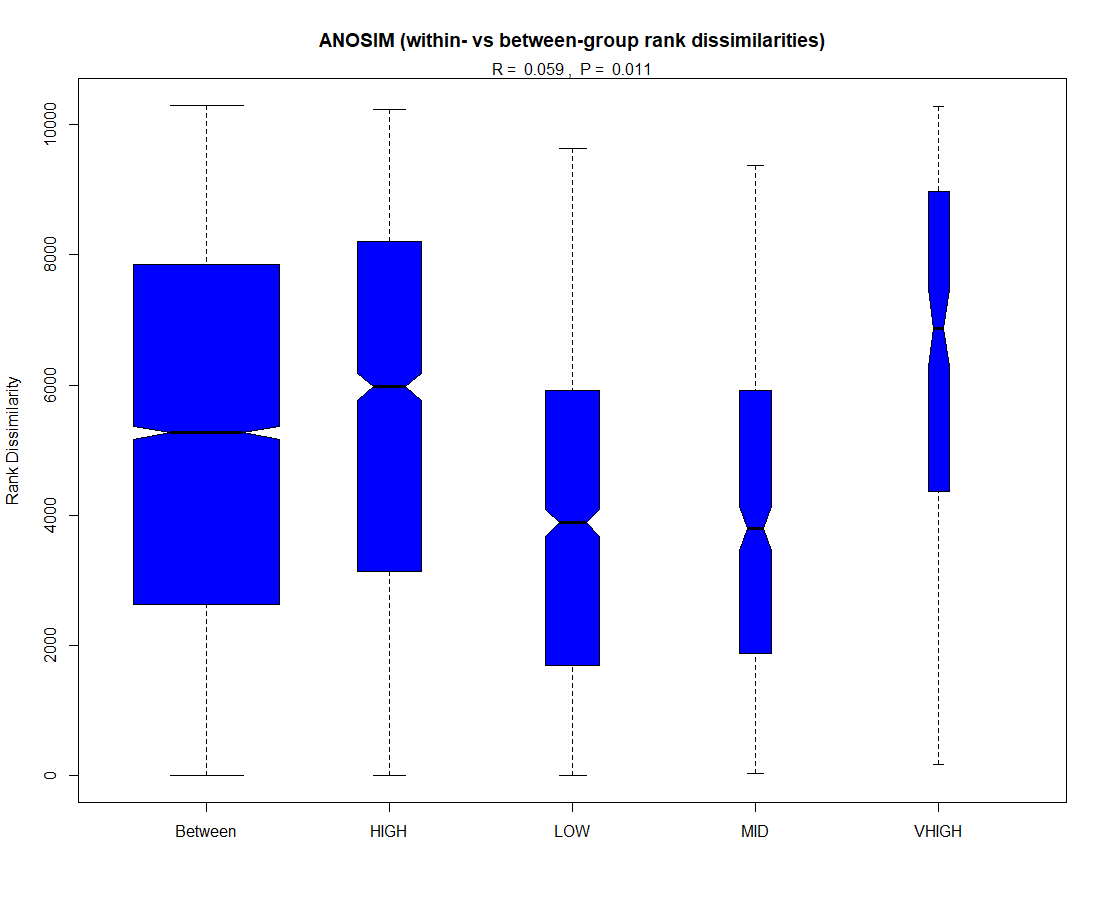
**Open**

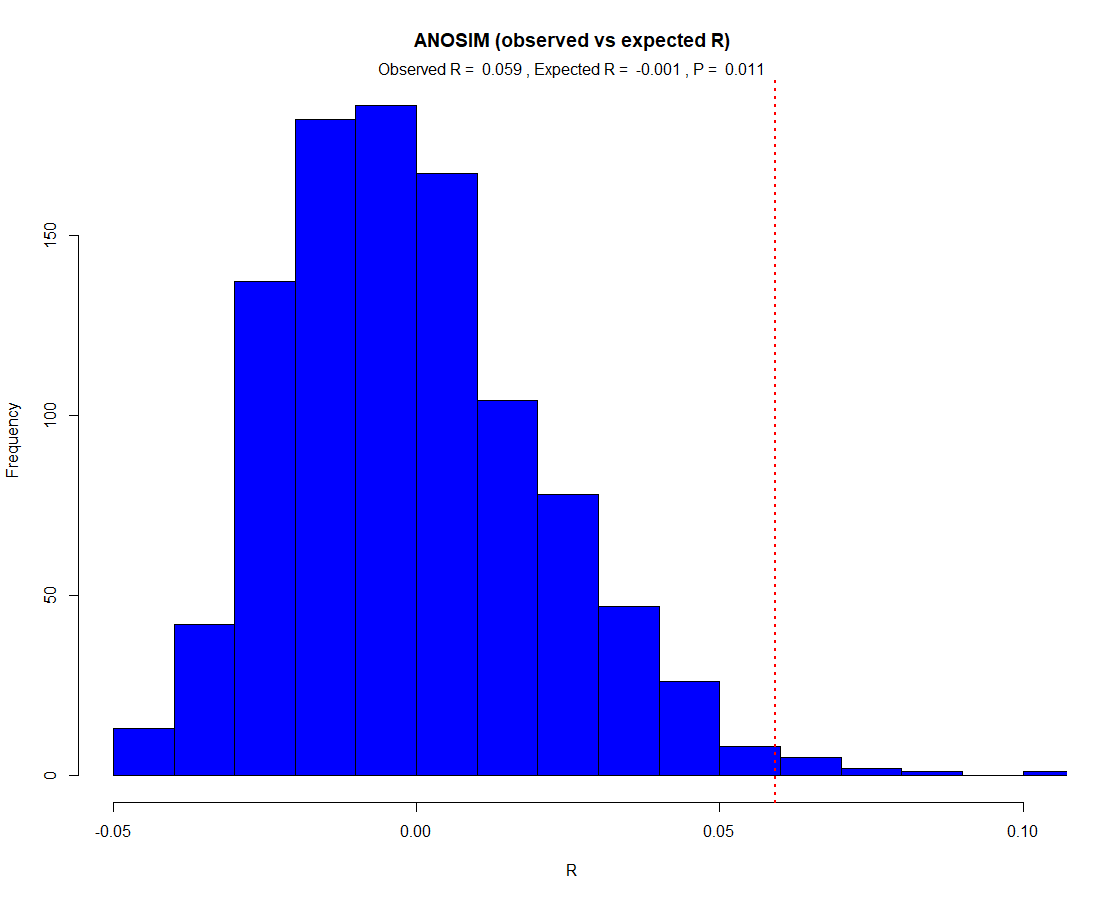




|  |  |  |  |
| --- | --- | --- | --- |
| ANOSIM R Statistic for Openness | | | |
| Overall 0.05356, P = 0.014\* | | | |
|  | High | Mid | Low |
| Vhigh | 0.1101 | 0.105\* | 0.07485 |
| High |  | 0.0267 | 0.06955\*\* |
| Mid |  |  | -0.0457 |
|  | \*p<0.05 | \*\*p<0.01 |  |

**Depth**





|  |  |  |  |
| --- | --- | --- | --- |
| ANOSIM R Statistic for Depth | | | |
| Overall 0.05913, P = 0.011\* | | | |
|  | High | Mid | Low |
| Vhigh | 0.08483 | 0.2055\*\* | 0.3541\*\* |
| High |  | -0.07476 | 0.03108 |
| Mid |  |  | 0.04885 |
|  | \*p<0.05 | \*\*p<0.01 |  |