

How residence time constrains diversity

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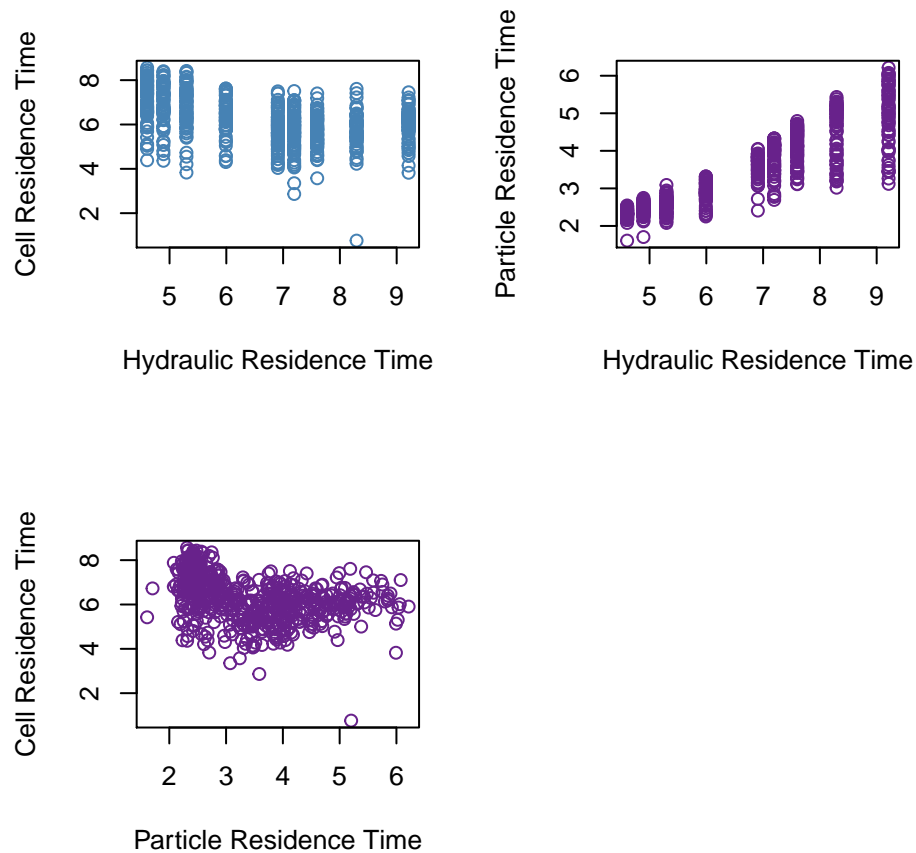
INTRODUCTION

Here, we explore the constraining influence of ... alpha (α) diversity. We will quantify general components of α -diversity: **richness** and **evenness**. From there, we ... **species-abundance distributions (SAD)**.

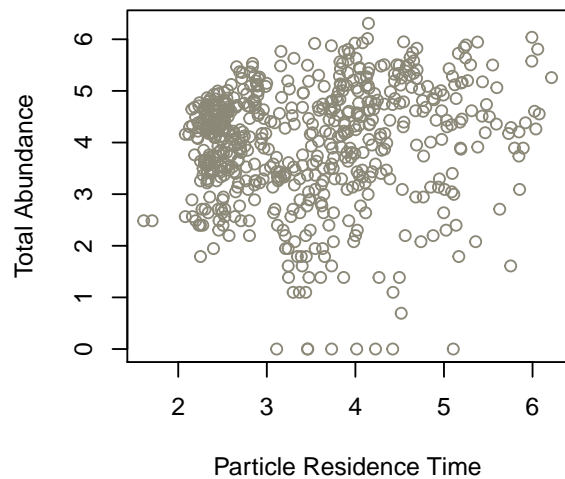
Load Data

```
sim.data <- read.csv("~/GitHub/hydrobide/results/simulated_data/SimData.csv")
```

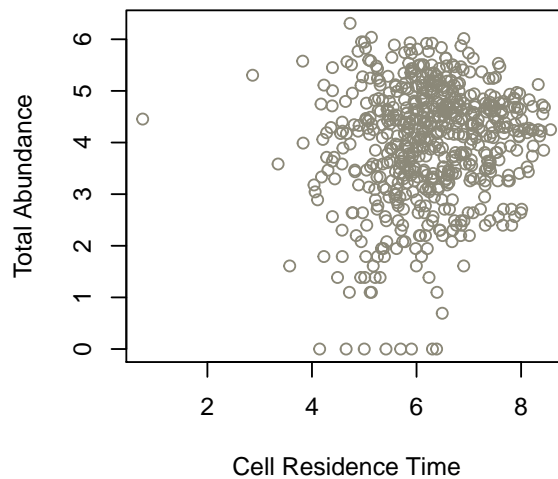
Univariate relationships



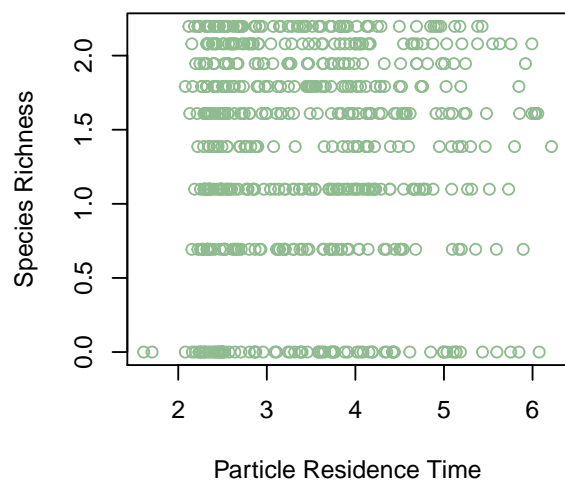
N vs. Tau



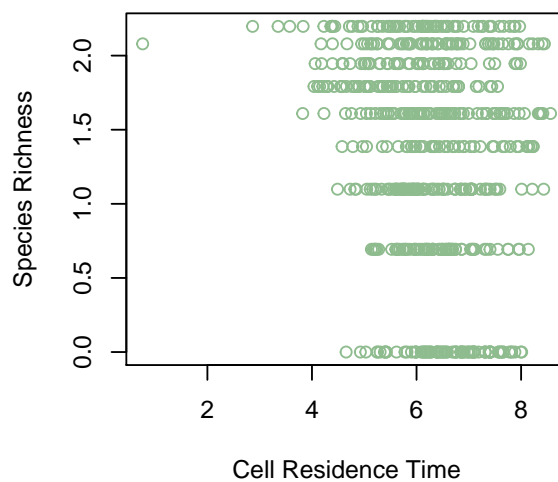
N vs. Tau



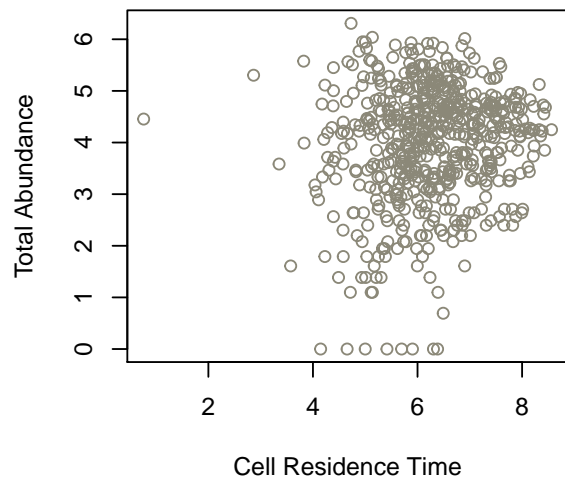
S vs. Tau



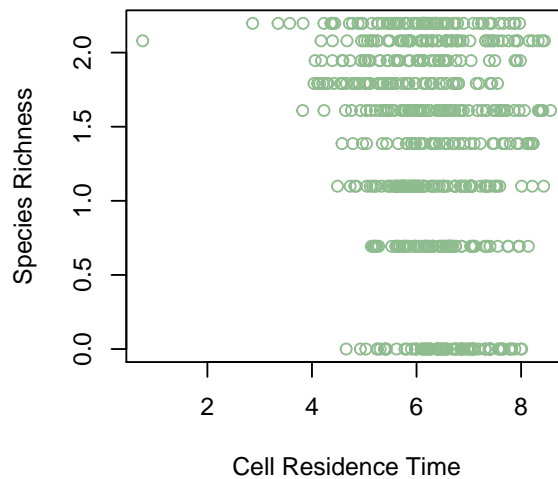
S vs. Tau



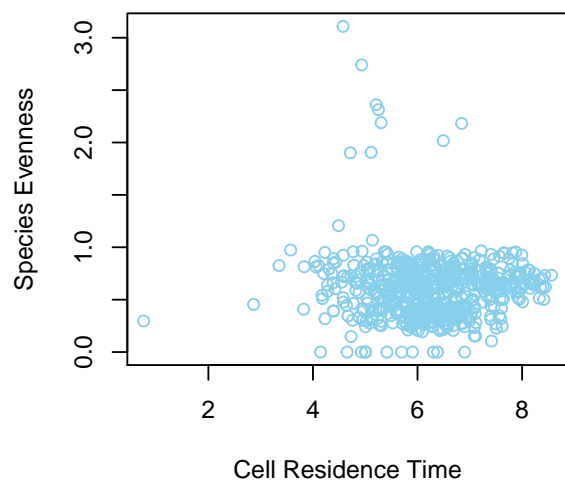
N vs. Tau



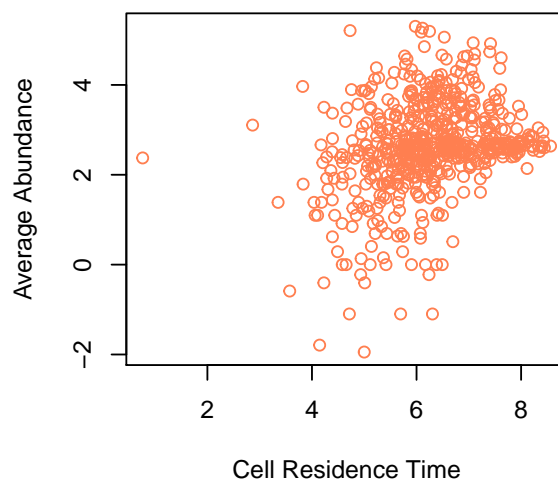
S vs. Tau

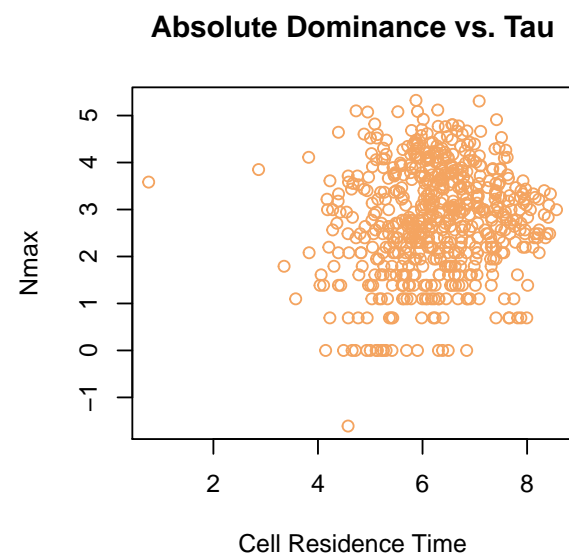
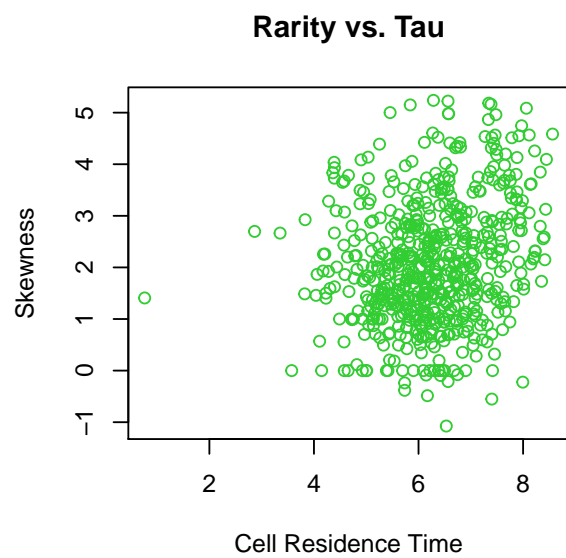
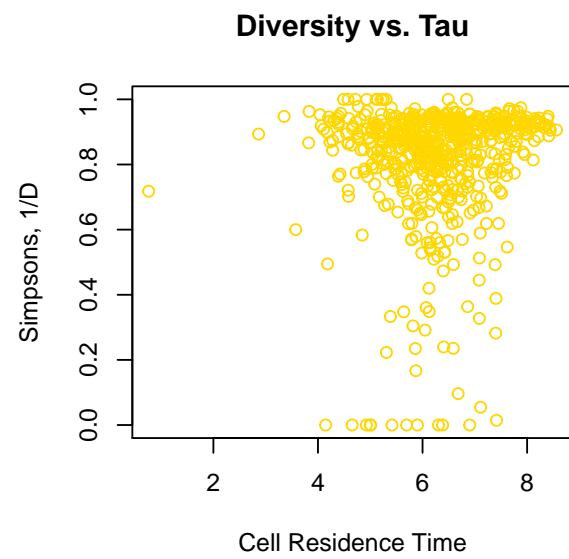
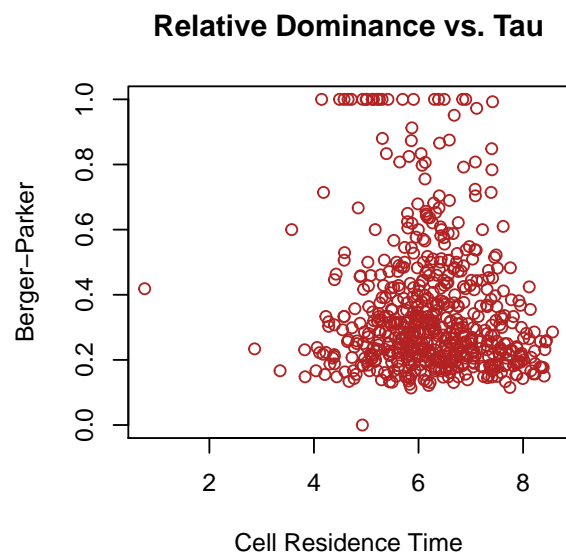


Evenness vs. Tau

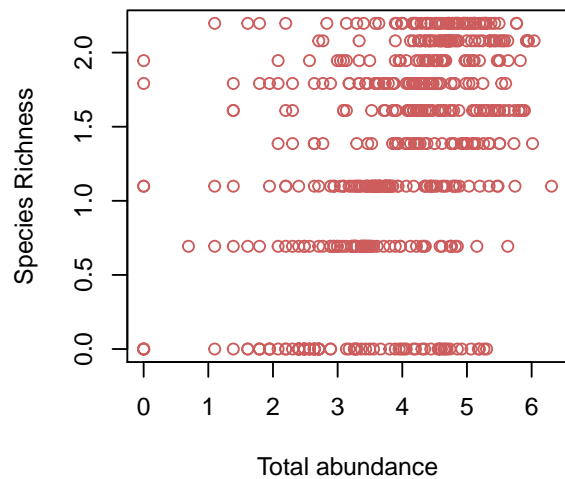


N/S vs. Tau

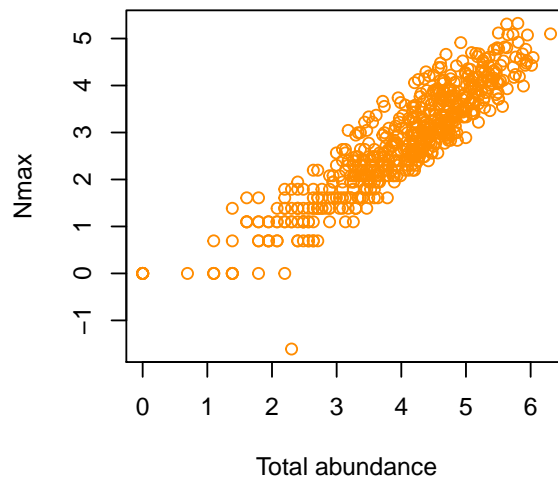




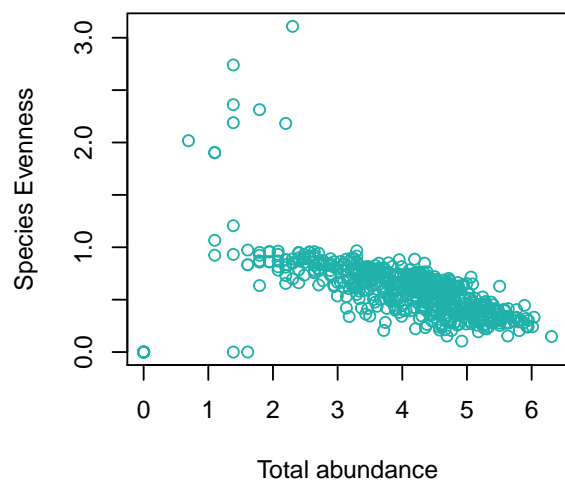
S vs. N



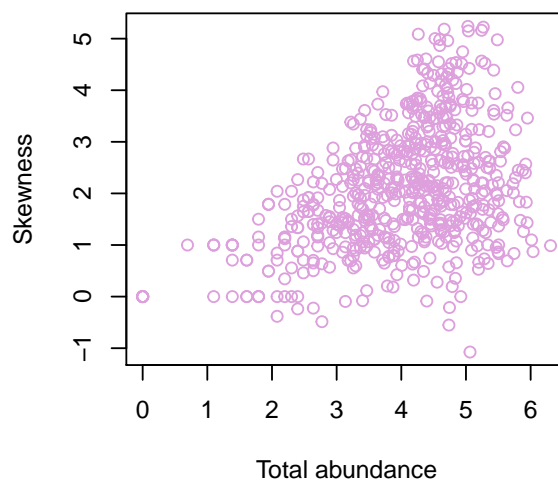
Nmax vs. N



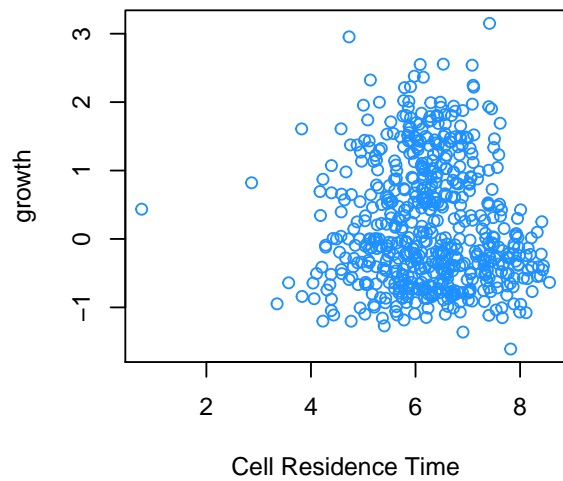
Evenness vs. N



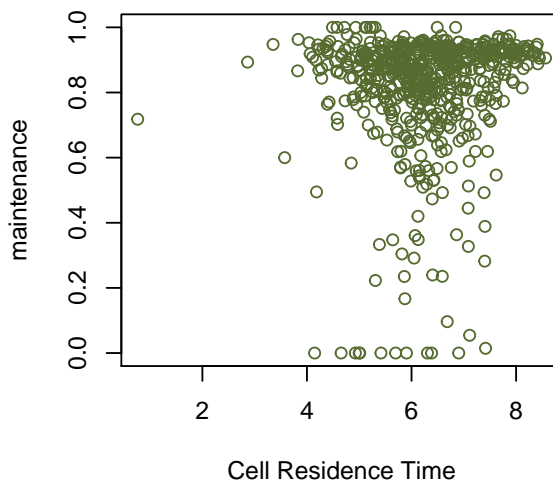
Rarity vs. N



Per capita growth vs. Tau



Per capita maintenance vs. Tau



Immigration vs. Tau

