**2. heatmap.Rmd**

**Processed Data:**

inventory

tree\_probs

**Probabilities:**

Same format as tree\_probs, just that the est\_prob column is different.

|  |  |
| --- | --- |
| tree\_probs | Probabilities for simulation 1. |
| abund\_prob | Probabilities for simulation 2. |
| abund\_prob\_all | Probabilities for simulation 3. |
| tree\_probs | Probabilities for simulation 1. |

**Plot-Level Dissimilarity (observed and simulated):**

|  |  |
| --- | --- |
| dissim\_obs | Data frame that contains dissimilarity between observed plots. |
| dissim\_pop\_1 | Data frame that contains dissimilarity between simulation 1 plots. |
| dissim\_pop\_3 | Data frame that contains dissimilarity between simulation 3 plots. |

--------------------------------(after subtraction from observed vegdist() matrix)--------------------------

|  |  |
| --- | --- |
| dissim\_difference | This data frame contains the difference in vegdist() values between the observed and simulation 1 population, **repeated 100 times.** |
| dissim\_diff\_abund | Same as dissim\_difference, but between observed and simulation 2 population. |
| dissim\_diff\_abund\_2 | Same as dissim\_difference, but between observed and simulation 3 population. |

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**Summarised vegdist() Data Frames: Reduce 100 data frames to one summary data frame.**

|  |  |
| --- | --- |
| obs\_df | Observed dissimilarity |
| pop\_1\_median | Median dissimilarity between plots in simulation 1. |
| pop\_3\_median | Median dissimilarity between plots in simulation 1. |
| dissim\_diff\_median | Difference in median dissimilarity between plots in observed simulation 1. |
| dissim\_median\_abund | Difference in median dissimilarity between plots in observed simulation 2. |
| dissim\_median\_abund\_all | Difference in median dissimilarity between plots in observed simulation 3. |

**Heat Map Plots:**

|  |  |
| --- | --- |
| dissim\_heatmap\_obs | Heat map of dissimilarity between plots (Observed Population) |
|  |  |
| dissim\_heatmap\_pop1 | Heat map of dissimilarity between plots (Simulation 1 Population) |
| dissim\_heatmap\_pop3 | Heat map of dissimilarity between plots (Simulation 3 Population) |

--------------------------------(after subtraction from observed vegdist() matrix)--------------------------

|  |  |
| --- | --- |
| dissim\_heatmap | Heat map of difference in dissimilarity between observed and simulation 1 plots. |
| dissim\_heatmap\_abund | Heat map of difference in dissimilarity between observed and simulation 2 plots. |
| dissim\_heatmap\_abund\_all | Heat map of difference in dissimilarity between observed and simulation 3 plots. |
| median\_range | Data frame of the range of values for all the heat maps. This is used to set the range for a common legend when comparing heat maps. |

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**Misc:**

|  |  |
| --- | --- |
| abundance\_matrix | Species abundance matrix for the observed population. Rows are plots, columns are species. |
| plot\_rep | Row of repeated plot numbers, to facilitate summarising data. |
| n\_plots | Data frame with total number of trees for each plot. |