

COSC6323 - Exercise 11

April 2021

Instructions

SUBMIT:

1. FirstName.LastName.rmd
2. FirstName.LastName.pdf

1 Task

You are working with the results of the 2-way unreplicated block design experiment (Table 1). The data is balanced. The first column (count) represents the number of individuals captured. Year represents the year when the survey was conducted. The Month shows that for each year there were 5 survey events in each year. Each year is a “treatment” (or “group”) and the month variable represents a “block”. This is a common sort of experimental design; the blocks are set up to take care of any possible variation and to provide replication for the treatment. In this instance you wish to know if there is any significant difference due to the year.

1. Apply Friedman test. Comment on the results.
2. Apply post-hoc tests (`pairwise.wilcox.test`). Comment on the results.

Count	Month	Year
2	1	2004
48	1	2005
40	1	2006
3	2	2004
120	2	2005
81	2	2006
2	3	2004
16	3	2005
36	3	2006
7	4	2004
21	4	2004
17	4	2006
2	5	2004
14	5	2005
17	5	2006

Table 1. Data on surveys of amphibians.