

QUARTERLY REPORT

NON-TARGET PESTICIDE EFFECTS STUDY

Summary of 2015 sample data

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1 EXPLORATION OF SAMPLE MASS - FAMILY COUNT

Initial statistical exploration of the relationship between sample mass and family level diversity was undertaken using simple linear regression for each block, site, sample date, and method, by insect order. Assessment of this relationship is needed to evaluate the suitability of sample mass and family count as measures of insect abundance and diversity, respectively, and to characterize the degree to which these signals either support or contradict each other in quantifying non-target pesticide effects. In summary, there appears to be a fixed effect of sample mass on family count, with random effects from each of the aforementioned factors. However, the family count and mass data are not normally distributed (see Sections 3 and 4), indicating the need for a general linear mixed model using either a Poisson or negative binomial distribution to make more robust inferences (see Section 2).

In this section, all of the individual regressions, residual distributions, and normal probability plots are shown along with summary and test statistics for each regression. Residual distribution and normal probability were only conducted where the insect order was present in samples from all three sampling methods.

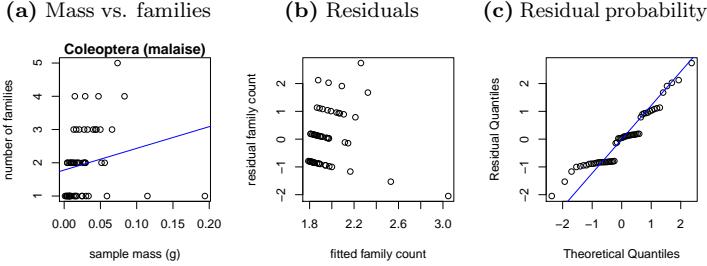


Figure 1: (a) Scatter plot showing effect of sample mass on family count in malaise traps for order Coleoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 malaise Coleoptera
2 Call:
3 lm(formula = temp.frame)
4 
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -2.04754 -0.83021  0.04349  0.81422  2.73834
8 
9 Coefficients:
10              Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 1.7813    0.1809  9.849  1.17e-13 ***
12 temp.mass   6.5272    4.2720  1.528    0.132
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 1.014 on 54 degrees of freedom
17 Multiple R-squared: 0.04144, Adjusted R-squared: 0.02369
18 F-statistic: 2.335 on 1 and 54 DF, p-value: 0.1324

```

Figure 2: Verbatim R output of the results of linear regression of family count on sample mass in malaise traps for Coleoptera.

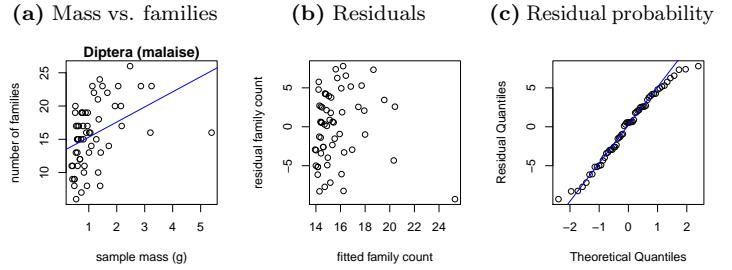


Figure 3: (a) Scatter plot showing effect of sample mass on family count in malaise traps for order Diptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 malaise Diptera
2 Call:
3 lm(formula = temp.frame)
4 
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -9.2933 -3.0763  0.5549  3.5269  7.7887
8 
9 Coefficients:
10             Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 13.0480   0.9630 13.549 <2e-16 ***
12 temp.mass   2.2715   0.6652  3.415  0.00117 **
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 4.462 on 58 degrees of freedom
17 Multiple R-squared: 0.1674, Adjusted R-squared: 0.153
18 F-statistic: 11.66 on 1 and 58 DF, p-value: 0.001171

```

Figure 4: Verbatim R output of the results of linear regression of family count on sample mass in malaise traps for Diptera.

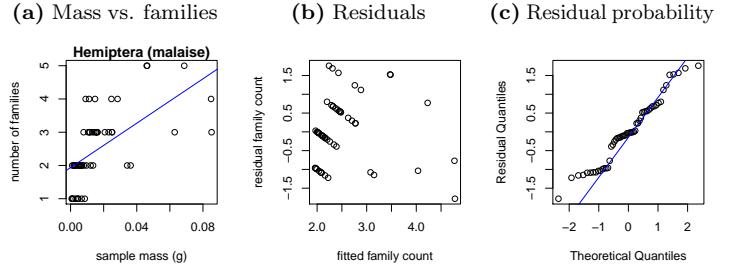


Figure 5: (a) Scatter plot showing effect of sample mass on family count in malaise traps for order Hemiptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

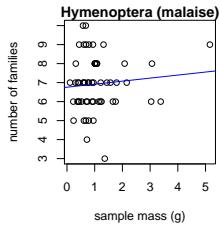
```

1 malaise Hemiptera
2 Call:
3 lm(formula = temp.frame)
4 
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -1.77990 -0.86472 -0.03631  0.56984  1.76009
8 
9 Coefficients:
10            Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 1.9362    0.1526 12.692 <2e-16 ***
12 temp.mass   33.3770   5.9045  5.653 6.42e-07 ***
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 0.8662 on 53 degrees of freedom
17 Multiple R-squared: 0.3761, Adjusted R-squared: 0.3644
18 F-statistic: 31.95 on 1 and 53 DF, p-value: 6.424e-07

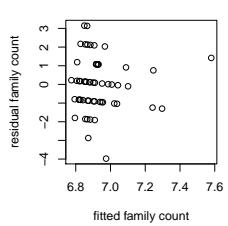
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Figure 6: Verbatim R output of the results of linear regression of family count on sample mass in malaise traps for Hemiptera.

(a) Mass vs. families



(b) Residuals



(c) Residual probability

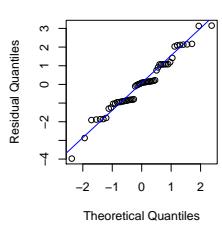


Figure 7: (a) Scatter plot showing effect of sample mass on family count in malaise traps for order Hymenoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

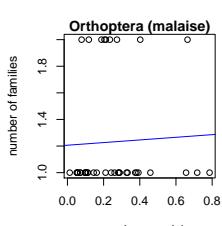
```

1 malaise Hymenoptera
2 Call:
3 lm(formula = temp.frame)
4 
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -3.9748 -0.9086  0.0898  1.0705  3.1505
8 
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 6.7574    0.3053 22.131 <2e-16 ***
12 temp.mass   0.1595    0.2202  0.724   0.472
13 ---
14 Signif
. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
15 
16 Residual standard error: 1.444 on 55 degrees of freedom
17 Multiple R-squared:  0.009444, Adjusted R-squared: -0.008566
18 F-statistic: 0.5244 on 1 and 55 DF, p-value: 0.4721

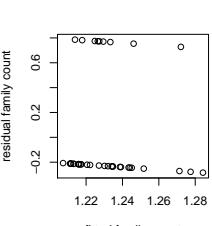
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Figure 8: Verbatim R output of the results of linear regression of family count on sample mass in malaise traps for Hymenoptera.

(a) Mass vs. families



(b) Residuals



(c) Residual probability

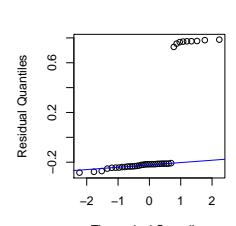
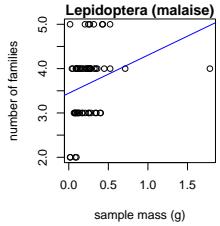
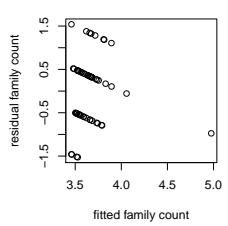


Figure 11: (a) Scatter plot showing effect of sample mass on family count in malaise traps for order Orthoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

(a) Mass vs. families



(b) Residuals



(c) Residual probability

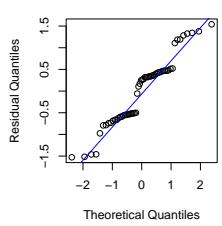
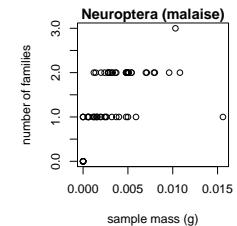
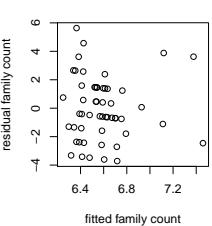


Figure 9: (a) Scatter plot showing effect of sample mass on family count in malaise traps for order Lepidoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

(a) Mass vs. families



(b) Residuals



(c) Residual probability

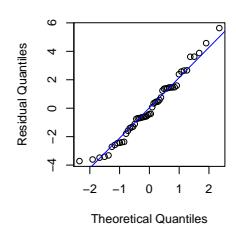


Figure 13: Scatter plot showing effect of sample mass on family count in malaise traps: (a) Neuroptera.

1 malaise Lepidoptera

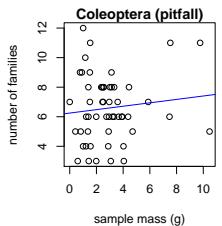
```

2 Call:
3 lm(formula = temp.frame)
4 
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -1.5277 -0.5831  0.2536  0.4476  1.5408
8 
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 3.4451    0.1444 23.864 <2e-16 ***
12 temp.mass   0.8582    0.4133  2.077   0.0424 *
13 ---
14 Signif
. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
15 
16 Residual standard error: 0.7843 on 56 degrees of freedom
17 Multiple R-squared:  0.0715, Adjusted R-squared:  0.05492
18 F-statistic: 4.312 on 1 and 56 DF, p-value: 0.04243

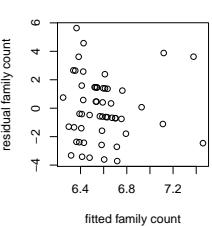
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Figure 10: Verbatim R output of the results of linear regression of family count on sample mass in malaise traps for Lepidoptera.

(a) Mass vs. families



(b) Residuals



(c) Residual probability

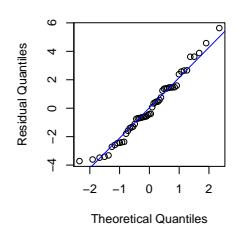


Figure 14: (a) Scatter plot showing effect of sample mass on family count in pitfall traps for order Coleoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 pitfall Coleoptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min    1Q Median    3Q   Max
7 -3.7170 -1.4067 -0.4112  1.4579  5.6344
8
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 6.2494    0.5223 11.964 <2e-16 ***
12 temp.mass   0.1154    0.1452  0.795   0.43
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 2.239 on 51 degrees of freedom
17 Multiple R-squared: 0.01224, Adjusted R-squared: -0.007133
18 F-statistic: 0.6317 on 1 and 51 DF, p-value: 0.4304

```

Figure 15: Verbatim R output of the results of linear regression of family count on sample mass in pitfall traps for Coleoptera.

```

1 pitfall Hemiptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min    1Q Median    3Q   Max
7 -1.9357 -0.4202 -0.1182  0.5295  2.1575
8
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 2.0024    0.1785 11.218 1.69e-15 ***
12 temp.mass   17.9510   6.1494  2.919  0.00518 **
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 0.8797 on 52 degrees of freedom
17 Multiple R-squared: 0.1408, Adjusted R-squared: 0.1243
18 F-statistic: 8.521 on 1 and 52 DF, p-value: 0.005177

```

Figure 19: Verbatim R output of the results of linear regression of family count on sample mass in pitfall traps for Hemiptera.

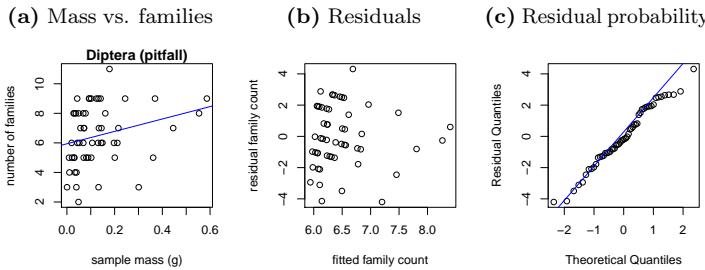


Figure 16: (a) Scatter plot showing effect of sample mass on family count in pitfall traps for order Diptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

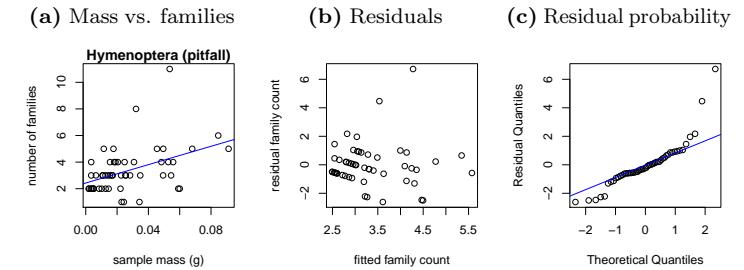


Figure 20: (a) Scatter plot showing effect of sample mass on family count in pitfall traps for order Hymenoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 pitfall Diptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min    1Q Median    3Q   Max
7 -4.201 -1.193 -0.193  1.764  4.312
8
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 5.9393    0.3797 15.642 <2e-16 ***
12 temp.mass   4.1940    2.0891  2.008   0.0499 *
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 1.961 on 52 degrees of freedom
17 Multiple R-squared: 0.07193, Adjusted R-squared: 0.05408
18 F-statistic: 4.03 on 1 and 52 DF, p-value: 0.0499

```

Figure 17: Verbatim R output of the results of linear regression of family count on sample mass in pitfall traps for Diptera.

```

1 pitfall Hymenoptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min    1Q Median    3Q   Max
7 -2.6107 -0.6090 -0.2264  0.5458  6.7230
8
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 2.427    0.344  7.053 4.96e-09 ***
12 temp.mass   34.523   10.017  3.446  0.00116 **
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 1.566 on 50 degrees of freedom
17 Multiple R-squared: 0.1919, Adjusted R-squared: 0.1758
18 F-statistic: 11.88 on 1 and 50 DF, p-value: 0.00116

```

Figure 21: Verbatim R output of the results of linear regression of family count on sample mass in pitfall traps for Hymenoptera.

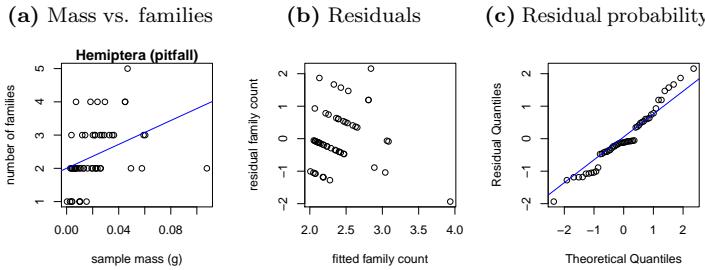


Figure 18: (a) Scatter plot showing effect of sample mass on family count in pitfall traps for order Hemiptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

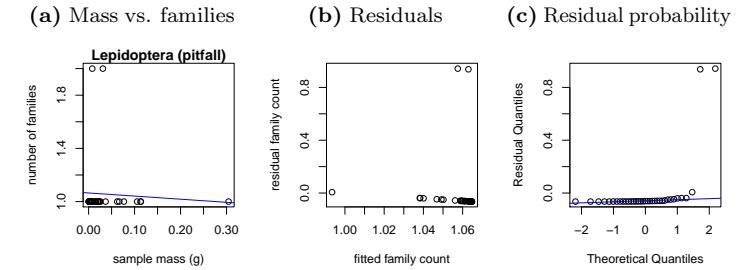


Figure 22: (a) Scatter plot showing effect of sample mass on family count in pitfall traps for order Lepidoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 pitfall Lepidoptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -0.06474 -0.06390 -0.06120 -0.05319  0.94248
8
9 Coefficients:
10              Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 1.06481   0.04658  22.858 <2e-16 ***
12 temp.mass   -0.23442   0.71205  -0.329   0.744
13 ---
14 Signif
. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
15
16 Residual standard error: 0.2387 on 33 degrees of freedom
17 Multiple R-squared:  0.003274, Adjusted R-squared:  -0.02693
18 F-statistic: 0.1084 on 1 and 33 DF, p-value: 0.7441

```

Figure 23: Verbatim R output of the results of linear regression of family count on sample mass in pitfall traps for Lepidoptera.

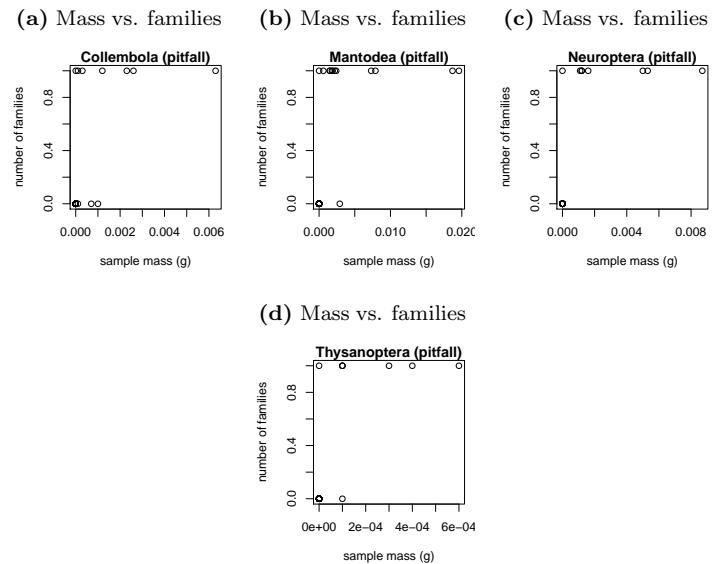


Figure 26: Scatter plot showing effect of sample mass on family count in pitfall traps: (a) Collembola, (b) Mantodea, (c) Neuroptera, (d) Thysanoptera.

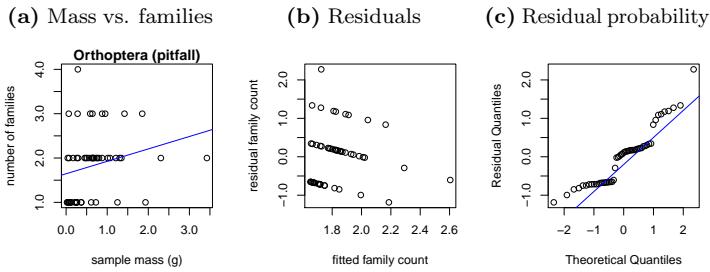


Figure 24: (a) Scatter plot showing effect of sample mass on family count in pitfall traps for order Orthoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

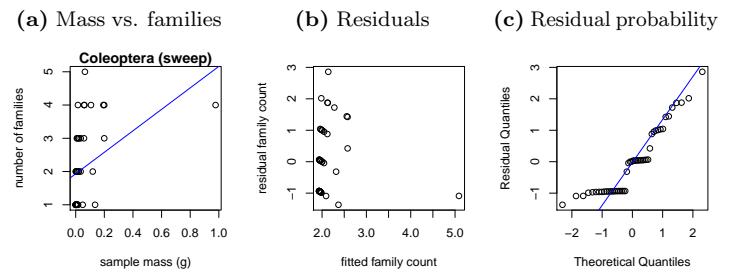


Figure 27: (a) Scatter plot showing effect of sample mass on family count in sweep samples for order Coleoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 pitfall Orthoptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -1.1864 -0.6755  0.1094  0.2725  2.2746
8
9 Coefficients:
10             Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 1.6454   0.1454  11.317 1.6e-15 ***
12 temp.mass   0.2801   0.1579   1.773   0.0822 .
13 ---
14 Signif
. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
15
16 Residual standard error: 0.7378 on 51 degrees of freedom
17 Multiple R-squared:  0.05807, Adjusted R-squared:  0.0396
18 F-statistic: 3.144 on 1 and 51 DF, p-value: 0.08218

```

Figure 25: Verbatim R output of the results of linear regression of family count on sample mass in pitfall traps for Orthoptera.

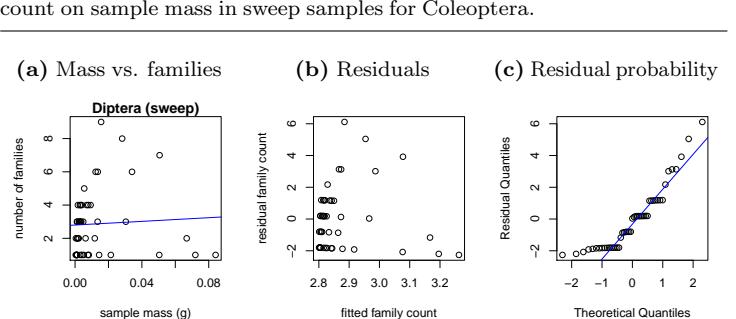


Figure 29: (a) Scatter plot showing effect of sample mass on family count in sweep samples for order Diptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 sweep Diptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -2.2625 -1.8044  0.0337  1.1606  6.1154
8
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 2.7986    0.3565   7.85 5.71e-10 ***
12 temp.mass   5.5168   14.9188    0.37   0.713
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 2.026 on 45 degrees of freedom
17 Multiple R-squared: 0.00303, Adjusted R-squared: -0.01913
18 F-statistic: 0.1367 on 1 and 45 DF, p-value: 0.7133

```

Figure 30: Verbatim R output of the results of linear regression of family count on sample mass in sweep samples for Diptera.

```

1 sweep Hymenoptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -1.9558 -0.6956 -0.5165  0.3885  3.3265
8
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 1.5096    0.2032   7.428 1.08e-08 ***
12 temp.mass   68.8648   11.5647   5.955 8.86e-07 ***
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 1.104 on 35 degrees of freedom
17 Multiple R-squared: 0.5033, Adjusted R-squared: 0.4891
18 F-statistic: 35.46 on 1 and 35 DF, p-value: 8.857e-07

```

Figure 34: Verbatim R output of the results of linear regression of family count on sample mass in sweep samples for Hymenoptera.

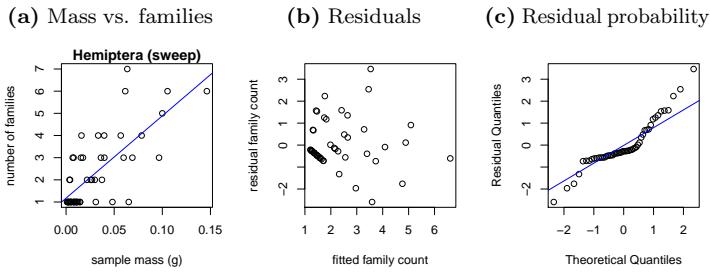


Figure 31: (a) Scatter plot showing effect of sample mass on family count in sweep samples for order Hemiptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

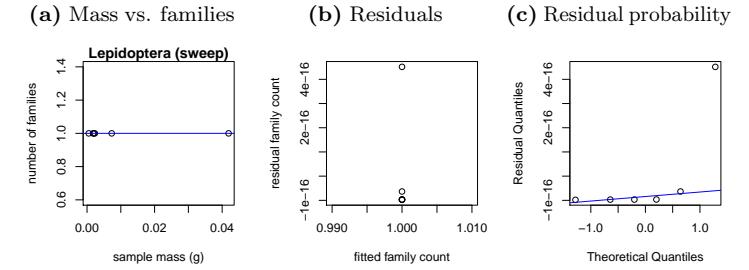


Figure 35: (a) Scatter plot showing effect of sample mass on family count in sweep samples for order Lepidoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 sweep Hemiptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   Min     1Q   Median     3Q    Max
7 -2.5914 -0.5607 -0.2798  0.5293  3.4642
8
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 1.1747    0.2048   5.735 5.63e-07 ***
12 temp.mass   37.1234   4.7404   7.831 3.04e-10 ***
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 1.096 on 50 degrees of freedom
17 Multiple R-squared: 0.5509, Adjusted R-squared: 0.5419
18 F-statistic: 61.33 on 1 and 50 DF, p-value: 3.035e-10

```

Figure 32: Verbatim R output of the results of linear regression of family count on sample mass in sweep samples for Hemiptera.

```

1 sweep Lepidoptera
2 Call:
3 lm(formula = temp.frame)
4
5 Residuals:
6   1      2      3      4      5      6
7 4.516e-16 -9.691e-17 -9.674e-17 -9.649e-17 -9.800e-17 -6.343e-17
8
9 Coefficients:
10 Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 1.000e+00 1.196e-16 8.359e+15 <2e-16 ***
12 temp.mass  -8.350e-16 6.865e-15 -1.220e-01  0.909
13 ---
14 Signif
15 . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16 Residual standard error: 2.478e-16 on 4 degrees of freedom
17 Multiple R-squared: 0.4127, Adjusted R-squared: 0.2658
18 F-statistic: 2.81 on 1 and 4 DF, p-value: 0.169

```

Figure 36: Verbatim R output of the results of linear regression of family count on sample mass in sweep samples for Lepidoptera.

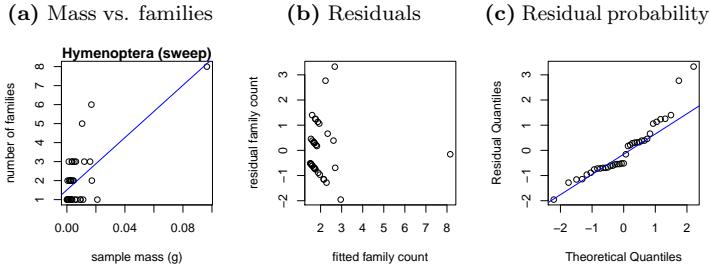


Figure 33: (a) Scatter plot showing effect of sample mass on family count in sweep samples for order Hymenoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

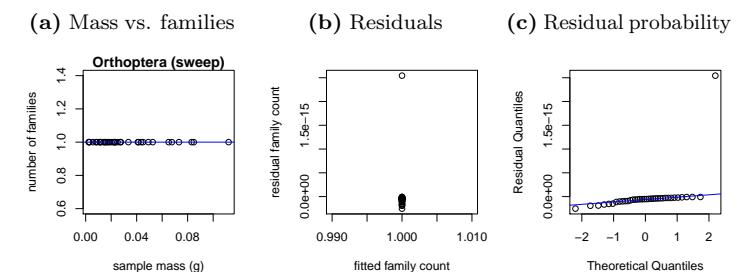


Figure 37: (a) Scatter plot showing effect of sample mass on family count in sweep samples for order Orthoptera, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 sweep Orthoptera
2 Call:
3 lm(formula = temp.frame)
4 
5 Residuals:
6   Min     1Q Median     3Q    Max
7 -2.534e-16 -9.662e-17 -5.256e-17 -2.899e-17  2.544e-15
8 
9 Coefficients:
10            Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 1.000e+00 1.169e-16 8.553e+15 <2e-16 ***
12 temp.mass   2.234e-15 2.835e-15 7.880e-01    0.436
13 ---
14 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
15 
16 Residual standard error: 4.465e-16 on 34 degrees of freedom
17 Multiple R-squared:  0.5032, Adjusted R-squared:  0.4886
18 F-statistic: 34.44 on 1 and 34 DF, p-value: 1.277e-06

```

Figure 38: Verbatim R output of the results of linear regression of family count on sample mass in sweep samples for Orthoptera.

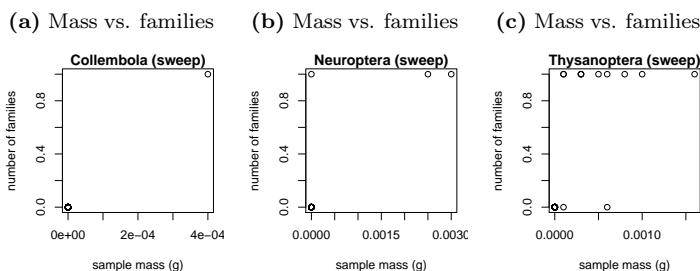


Figure 39: Scatter plot showing effect of sample mass on family count in sweep samples: (a) Collembola, (b) Mantodea, (c) Neuroptera, (d) Thysanoptera.

2 GENERAL LINEAR MIXED-EFFECTS MODEL

To better examine the relationship between sample mass and family diversity, a general linear mixed-effects model can be used to account for the non-normal distribution of the family count and dry weight data. Because the family diversity of a sample is a form of count data, a Poisson distribution can be used to model the data within a simple GLMM (Fig. 41). This model features family count as the dependent variable, with insect order as a random effect, sampling method as a random effect, and sample mass as a fixed effect. Because the Poisson distribution assumes a variance equal to the mean, while the GLMM has a deviance greater than the degrees of freedom, the model is over-dispersed and likely has a slightly biased variance. Thus a model based on negative binomial distribution (Figs. 40 and 42), of which the Poisson distribution is a special case, can be used to better fit the data; see likelihood ratio test in Fig. 43. In both models, mass is a significant fixed effect; removal of any effect, random or fixed, produces a significantly less likely fit to the data, indicating that the sampling method and insect order has a significant effect on the relationship between family diversity and sample mass within each test group (Fig. 44).

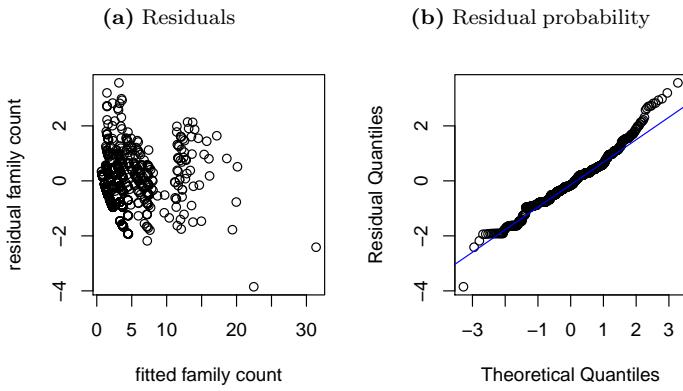


Figure 40: General linear mixed-effects model based on negative binomial distribution: (a) scatter plot of fitted values and residuals, and (b) normal probability plot of the residuals.

```

1 Generalized linear mixed model fit
  by maximum likelihood (Laplace Approximation) [glmerMod]
2 Family: poisson ( log )
3 Formula: family_count ~ mass + (1 | order) + (1 | method)
4 Data: raw
  .data[with(raw.data, mass > 0 & family_count > 0), ]
5
6   AIC      BIC      logLik  deviance df.resid
7  3578.9  3598.3  -1785.5    3570.9     942
8
9 Scaled residuals:
10  Min    1Q  Median    3Q    Max
11 -3.3270 -0.6659 -0.1349  0.4582  4.9910
12
13 Random effects:
14 Groups Name        Variance Std.Dev.
15 order  (Intercept) 0.3794  0.6159
16 method (Intercept) 0.1502  0.3875
17 Number of obs: 946, groups: order, 11; method, 3
18
19 Fixed effects:
20   Estimate Std. Error z value Pr(>|z|)
21 (Intercept)  0.59879  0.29918  2.001  0.0453 *
22 mass        0.19436  0.01227 15.834 <2e-16 ***
23 ---
24 Signif
  . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
25
26 Correlation of Fixed Effects:
27   (Intr)
28 mass -0.008

```

Figure 41: Verbatim R output of the results of fitting a general linear mixed-effects model based on a Poisson distribution.

```

1 Generalized linear mixed model fit
  by maximum likelihood (Laplace Approximation) [glmerMod]
2 Family: Negative Binomial(43.7543) ( log )
3 Formula: family_count ~ mass + (1 | order) + (1 | method)
4 Data: raw
  .data[with(raw.data, mass > 0 & family_count > 0), ]
5
6   AIC      BIC      logLik  deviance df.resid
7  3574.0  3598.3  -1782.0    3564.0     941
8
9 Scaled residuals:
10  Min    1Q  Median    3Q    Max
11 -2.9952 -0.6286 -0.1483  0.4291  4.7868
12
13 Random effects:
14 Groups Name        Variance Std.Dev.
15 order  (Intercept) 0.3727  0.6105
16 method (Intercept) 0.1402  0.3744
17 Number of obs: 946, groups: order, 11; method, 3
18
19 Fixed effects:
20   Estimate Std. Error z value Pr(>|z|)
21 (Intercept)  0.6010  0.2929  2.052  0.0402 *
22 mass        0.2068  0.0145 14.263 <2e-16 ***
23 ---
24 Signif
  . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
25
26 Correlation of Fixed Effects:
27   (Intr)
28 mass -0.009

```

Figure 42: Verbatim R output of the results of fitting a general linear mixed-effects model based on a negative binomial distribution ($\vartheta = 43.75$).

```

1 Likelihood ratio test
2
3 Model 1: family_count ~ mass + (1 | order) + (1 | method)
4 Model 2: family_count ~ mass + (1 | order) + (1 | method)
5   #Df LogLik Df Chisq Pr(>Chisq)
6  1   4 -1785.5
7  2   5 -1782.0  1 6.8946  0.008646 **
8 ---
9 Signif
  . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 43: Likelihood ration test comparing general linear mixed-effects models based on **1** Poisson and **2** negative binomial distributions, respectively.

```

1 Likelihood ratio test
2
3 Model 1: family_count ~ mass + (1 | order) + (1 | method)
4 Model 2: family_count ~ (1 | order) + (1 | method)
5 Model 3: family_count ~ mass + (1 | method)
6 Model 4: family_count ~ mass + (1 | order)
7   #Df LogLik Df Chisq Pr(>Chisq)
8  1   5 -1782.0
9  2   4 -1865.2 -1 166.26 < 2.2e-16 ***
10 3   4 -2108.4  0 486.50 < 2.2e-16 ***
11 4   4 -1878.4  0 460.06 < 2.2e-16 ***
12 ---
13 Signif
  . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 44: Verbatim R output of the results of linear regression of family count on sample mass in sweep samples for Orthoptera.

3 MASS AND FAMILY COUNT BETWEEN BLOCKS

Statistical exploration of the differences between treatment blocks and sampling dates in terms of sample mass and family level diversity was undertaken using two-way analyses of variance. These were conducted individually for both dependent variables, for each sampling method and insect order, with sampling week crossed by treatment block as the factors of the ANOVA. Overall, there are very few differences between the site-wise means within each block and date, although the block and sampling date terms (and their interaction) were frequently significant, indicating a possible random effect from these factors.

In this section, all of the interaction plots for sample mass and family count plots are shown along with summary and test statistics for each ANOVA, including a Shapiro-Wilk test of normality for each comparison. Although the assumption of normality is nearly always rejected, Levine tests on this data (and bulk data, see Section 4) suggest that the samples are homoscedastic. Because the ANOVA is robust to violations of the assumption of normality (as long as the data exhibit equal variance), this test was used for ease of use and interpretability. Tukey-Kramer tests for multiple comparisons are additionally provided for each ANOVA, along with graphical representation of test results (beginning at Fig. 238a).

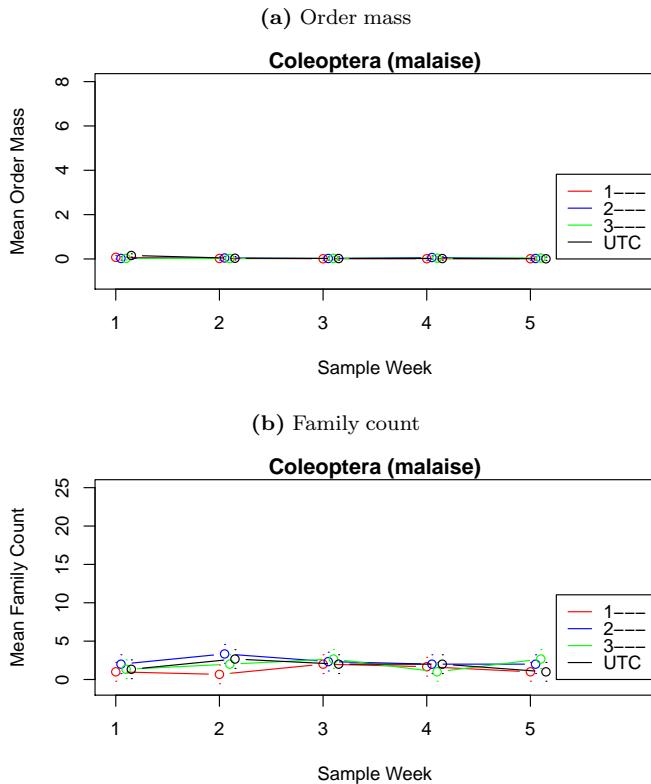


Figure 45: Interaction plot of (a) sample mass and (b) family count for order Coleoptera, between treatment blocks and sampling dates.

```

1 Coleoptera malaise
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.00390 0.001300  0.325  0.807
7 event       4 0.02126 0.005315  1.328  0.276
8 block:event 12 0.03952 0.003293  0.823  0.627
9 Residuals  40 0.16008 0.004002

```

Figure 46: Verbatim R output of the results of an ANOVA of sample mass in malaise samples for Coleoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.9036 0.5818
4          40

```

Figure 47: Verbatim R output of the results of Levene's test on sample mass in malaise samples for Coleoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.71139, p-value = 1.48e-09

```

Figure 48: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in malaise samples for Coleoptera.

```

1 sample families
2
3   Df Sum Sq Mean Sq F value Pr(>F)
4 block      3  8.73  2.911  2.646 0.0621 .
5 event       4  6.17  1.542  1.402 0.2510
6 block:event 12 13.43  1.119  1.018 0.4517
7 Residuals  40 44.00  1.100
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 49: Verbatim R output of the results of an ANOVA of family count in malaise samples for Coleoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.5775 0.9004
4          40

```

Figure 50: Verbatim R output of the results of Levene's test on family count in malaise samples for Coleoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.95706, p-value = 0.03386

```

Figure 51: Verbatim R output of the results of Shapiro-Wilk's test on family count in malaise samples for Coleoptera.

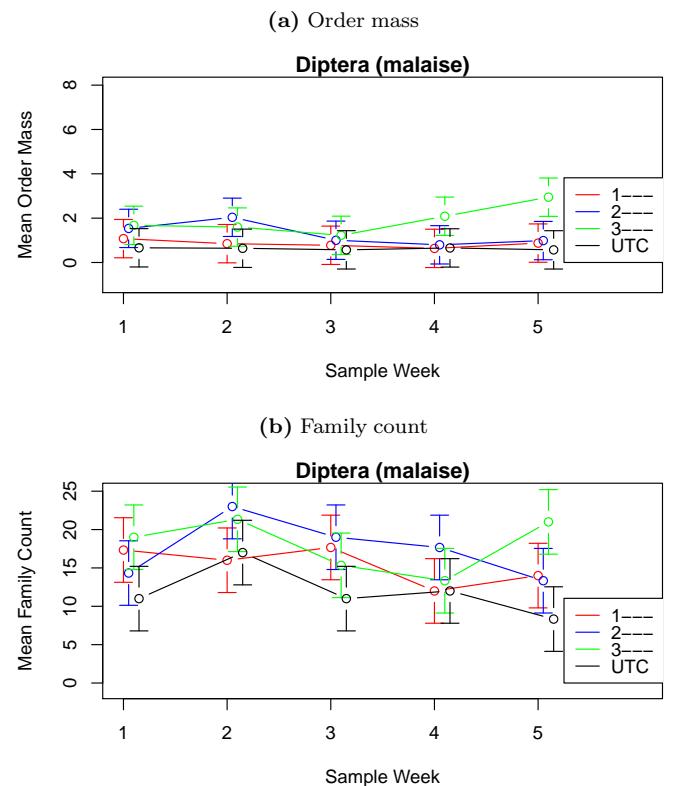


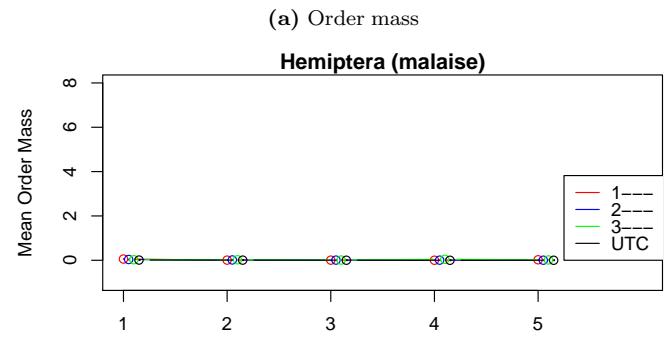
Figure 52: Interaction plot of (a) sample mass and (b) family count for order Diptera, between treatment blocks and sampling dates.

```

1 Diptera malaise
2
3 sample mass
4
5          Df Sum Sq Mean Sq F value    Pr(>F)
6 block      3 14.425  4.808   8.760 0.000138 ***
7 event       4  1.672  0.418   0.762 0.556401
8 block:event 12  6.944  0.579   1.054 0.421957
9 Residuals   40 21.956  0.549
10 ---
11 Signif
  . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 53: Verbatim R output of the results of an ANOVA of sample mass in malaise samples for Diptera.

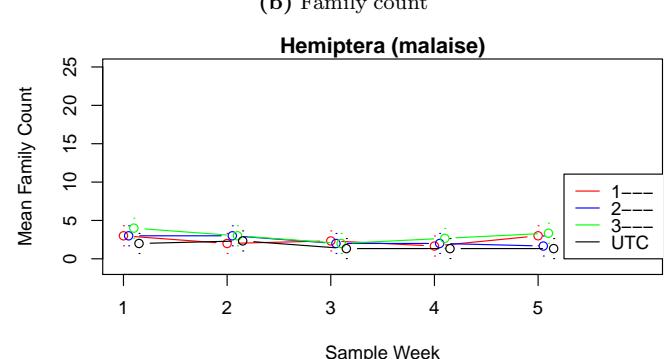


```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.9248 0.5591
4   40

```

Figure 54: Verbatim R output of the results of Levene's test on sample mass in malaise samples for Diptera.



```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.90104, p-value = 0.0001435

```

Figure 55: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in malaise samples for Diptera.

```

1 sample families
2
3          Df Sum Sq Mean Sq F value    Pr(>F)
4 block      3 347.9  115.97   8.921 0.00012 ***
5 event       4 233.2  58.31   4.485 0.00435 **
6 block:event 12 285.8  23.82   1.832 0.07556 .
7 Residuals   40 520.0   13.00
8 ---
9 Signif
  . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 56: Verbatim R output of the results of an ANOVA of family count in malaise samples for Diptera.

Figure 59: Interaction plot of (a) sample mass and (b) family count for order Hemiptera, between treatment blocks and sampling dates.

```

1 Hemiptera malaise
2
3 sample mass
4
5          Df Sum Sq Mean Sq F value    Pr(>F)
6 block      3 0.003175 0.0010582   4.385 0.00926 **
7 event       4 0.004093 0.0010231   4.240 0.00592 **
8 block:event 12 0.005632 0.0004693   1.945 0.05763 .
9 Residuals   40 0.009653 0.0002413
10 ---
11 Signif
  . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 60: Verbatim R output of the results of an ANOVA of sample mass in malaise samples for Hemiptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  1.1294 0.3612
4   40

```

Figure 61: Verbatim R output of the results of Levene's test on sample mass in malaise samples for Hemiptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.9128, p-value = 0.0003982

```

Figure 62: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in malaise samples for Hemiptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.2961 0.997
4   40

```

Figure 57: Verbatim R output of the results of Levene's test on family count in malaise samples for Diptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.96916, p-value = 0.1327

```

Figure 58: Verbatim R output of the results of Shapiro-Wilk's test on family count in malaise samples for Diptera.

```

1 sample families
2
3          Df Sum Sq Mean Sq F value    Pr(>F)
4 block      3 13.38   4.461   3.569 0.0223 *
5 event       4 10.23   2.558   2.047 0.1061
6 block:event 12  8.03   0.669   0.536 0.8783
7 Residuals   40 50.00   1.250
8 ---
9 Signif
  . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 63: Verbatim R output of the results of an ANOVA of family count in malaise samples for Hemiptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.5895 0.8918
4   40

```

Figure 64: Verbatim R output of the results of Levene's test on family count in malaise samples for Hemiptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.95788, p-value = 0.03711

```

Figure 65: Verbatim R output of the results of Shapiro-Wilk's test on family count in malaise samples for Hemiptera.

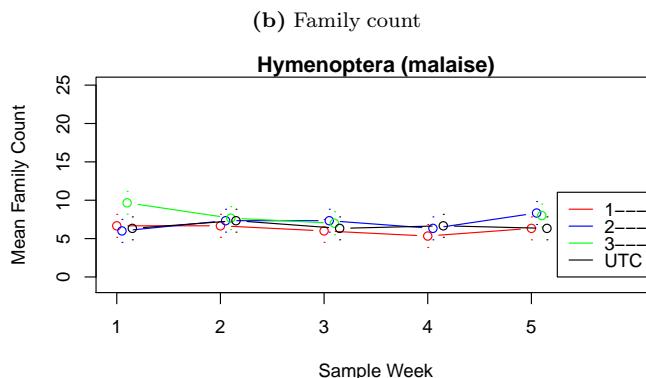
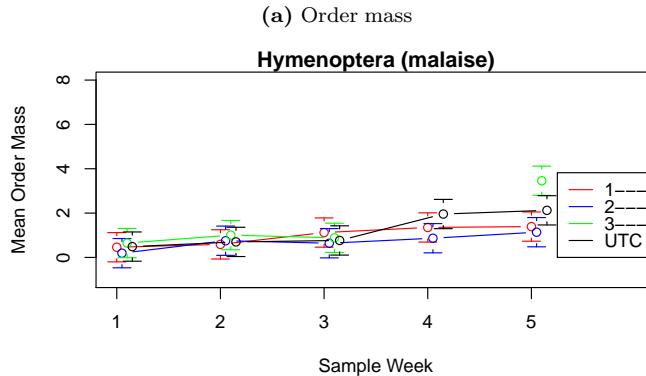


Figure 66: Interaction plot of (a) sample mass and (b) family count for order Hymenoptera, between treatment blocks and sampling dates.

```

1 Hymenoptera malaise
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value    Pr(>F)
6 block      3  4.461  1.487   4.664  0.00717 ***
7 event       4 19.282  4.821  15.120  1.76e-07 ***
8 block:event 11  7.109  0.646   2.027  0.05285 .
9 Residuals   38 12.115  0.319
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 67: Verbatim R output of the results of an ANOVA of sample mass in malaise samples for Hymenoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 18  1.4405 0.1687
4   38

```

Figure 68: Verbatim R output of the results of Levene's test on sample mass in malaise samples for Hymenoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.87674, p-value = 3.171e-05

```

Figure 69: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in malaise samples for Hymenoptera.

```

1 sample families
2
3   Df Sum Sq Mean Sq F value    Pr(>F)
4 block      3  25.87  8.623  5.285  0.00381 **
5 event       4   5.77  1.443  0.884  0.48247
6 block:event 11  22.08  2.007  1.230  0.30151
7 Residuals   38  62.00  1.632
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 70: Verbatim R output of the results of an ANOVA of family count in malaise samples for Hymenoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 18  0.6691 0.8185
4   38

```

Figure 71: Verbatim R output of the results of Levene's test on family count in malaise samples for Hymenoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.97428, p-value = 0.2638

```

Figure 72: Verbatim R output of the results of Shapiro-Wilk's test on family count in malaise samples for Hymenoptera.

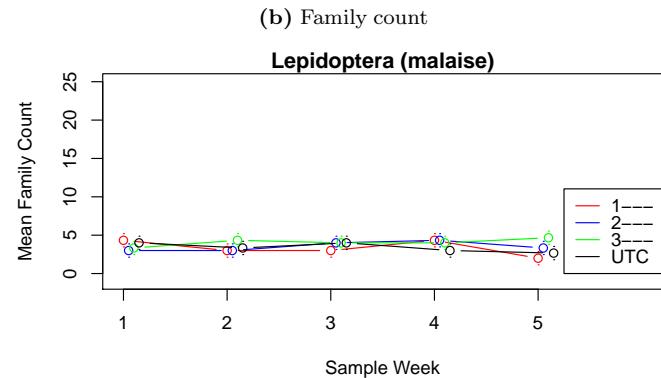
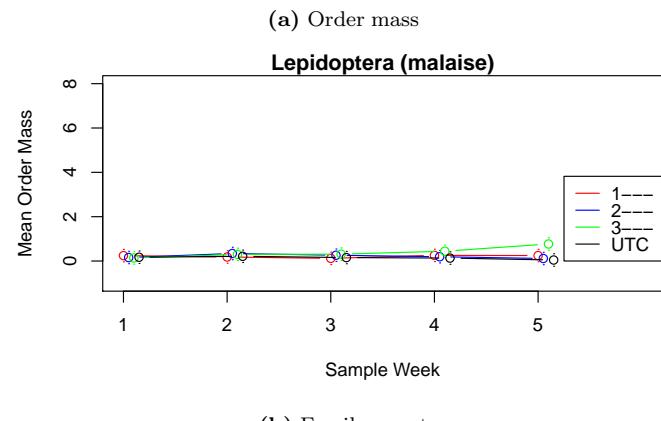


Figure 73: Interaction plot of (a) sample mass and (b) family count for order Lepidoptera, between treatment blocks and sampling dates.

```

1 Lepidoptera malaise
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value    Pr(>F)
6 block      3  0.5074  0.16914   2.928  0.0453 *
7 event       4  0.0975  0.02438   0.422  0.7918
8 block:event 12  0.7560  0.06300   1.090  0.3938
9 Residuals   40  2.3111  0.05778
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 74: Verbatim R output of the results of an ANOVA of sample mass in malaise samples for Lepidoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.8305 0.6609
4      40

```

Figure 75: Verbatim R output of the results of Levene's test on sample mass in malaise samples for Lepidoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.79655, p-value = 1.108e-07

```

Figure 76: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in malaise samples for Lepidoptera.

```

1 sample families
2
3   Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 4.983  1.661  3.020 0.0408 *
5 event       4 4.167  1.042  1.894 0.1304
6 block:event 12 19.433  1.619  2.944 0.0051 **
7 Residuals   40 22.000  0.550
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 77: Verbatim R output of the results of an ANOVA of family count in malaise samples for Lepidoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.6238 0.8651
4      40

```

Figure 78: Verbatim R output of the results of Levene's test on family count in malaise samples for Lepidoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.92346, p-value = 0.00106

```

Figure 79: Verbatim R output of the results of Shapiro-Wilk's test on family count in malaise samples for Lepidoptera.

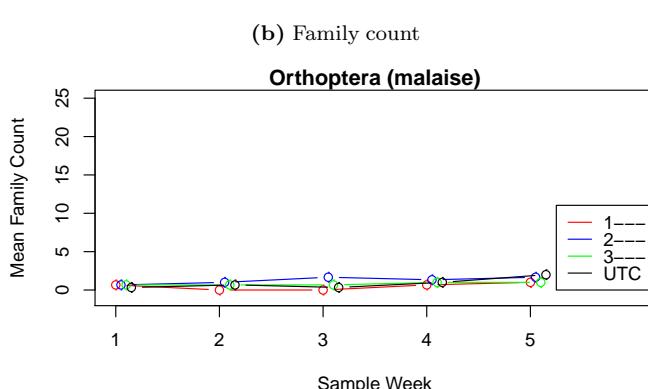
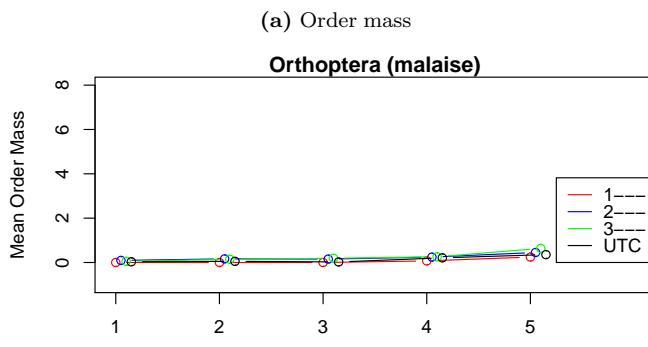


Figure 80: Interaction plot of (a) sample mass and (b) family count for order Orthoptera, between treatment blocks and sampling dates.

```

1 Orthoptera malaise
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.3408 0.11360  5.729 0.00233 **
7 event       4 1.1013 0.27532 13.886 3.46e-07 ***
8 block:event 12 0.1174 0.00979  0.494 0.90629
9 Residuals   40 0.7931 0.01983
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 81: Verbatim R output of the results of an ANOVA of sample mass in malaise samples for Orthoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.6022 0.8823
4      40

```

Figure 82: Verbatim R output of the results of Levene's test on sample mass in malaise samples for Orthoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.97762, p-value = 0.3365

```

Figure 83: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in malaise samples for Orthoptera.

```

1 sample families
2
3   Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 4.850  1.6167  5.389 0.00328 **
5 event       4 6.233  1.5583  5.194 0.00182 **
6 block:event 12 4.567  0.3806  1.269 0.27430
7 Residuals   40 12.000  0.3000
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 84: Verbatim R output of the results of an ANOVA of family count in malaise samples for Orthoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.5099 0.9419
4      40

```

Figure 85: Verbatim R output of the results of Levene's test on family count in malaise samples for Orthoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.92188, p-value = 0.0009135

```

Figure 86: Verbatim R output of the results of Shapiro-Wilk's test on family count in malaise samples for Orthoptera.

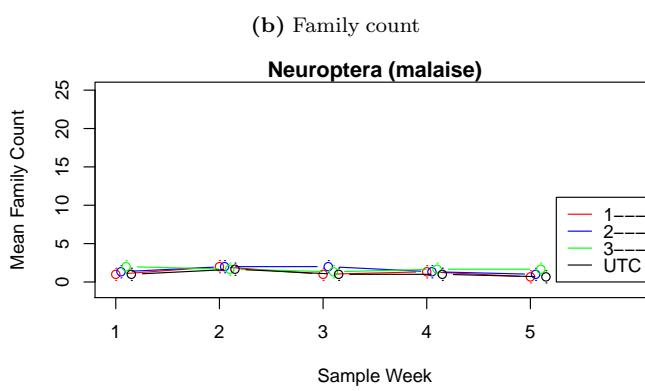
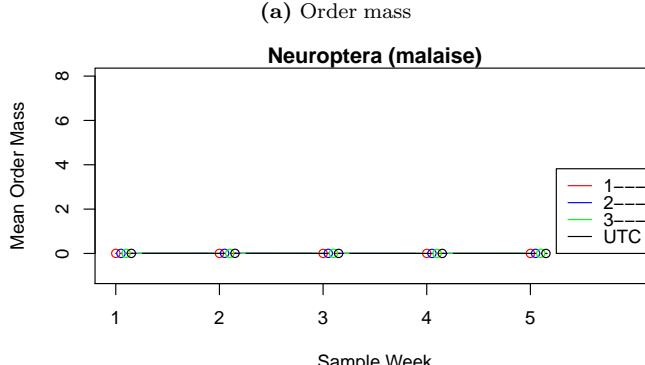


Figure 87: Interaction plot of (a) sample mass and (b) family count for order Neuroptera, between treatment blocks and sampling dates.

```

1 Neuroptera malaise
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block 3 0.0000429 1.430e-05 1.506 0.228
7 event 4 0.0000246 6.159e-06 0.649 0.631
8 block:event 12 0.0001382 1.152e-05 1.213 0.308
9 Residuals 40 0.0003797 9.493e-06

```

Figure 88: Verbatim R output of the results of an ANOVA of sample mass in malaise samples for Neuroptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2 Df F value Pr(>F)
3 group 19 0.4473 0.9689
4 40

```

Figure 89: Verbatim R output of the results of Levene's test on sample mass in malaise samples for Neuroptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.96538, p-value = 0.0865

```

Figure 90: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in malaise samples for Neuroptera.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block 3 3.533 1.1778 2.524 0.0713 .
5 event 4 4.267 1.0667 2.286 0.0769 .
6 block:event 12 3.467 0.2889 0.619 0.8132
7 Residuals 40 18.667 0.4667
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 91: Verbatim R output of the results of an ANOVA of family count in malaise samples for Neuroptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2 Df F value Pr(>F)
3 group 19 0.6316 0.8587
4 40

```

Figure 92: Verbatim R output of the results of Levene's test on family count in malaise samples for Neuroptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.93234, p-value = 0.002499

```

Figure 93: Verbatim R output of the results of Shapiro-Wilk's test on family count in malaise samples for Neuroptera.

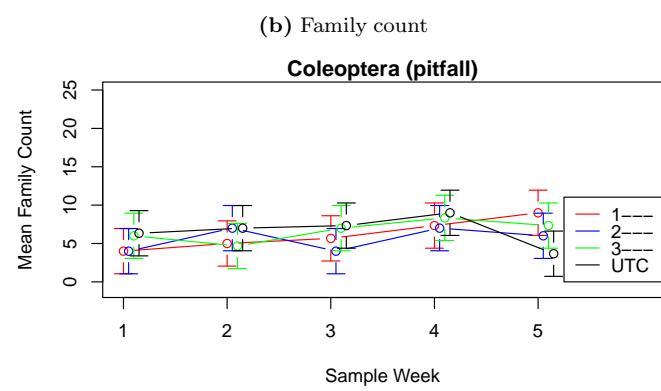
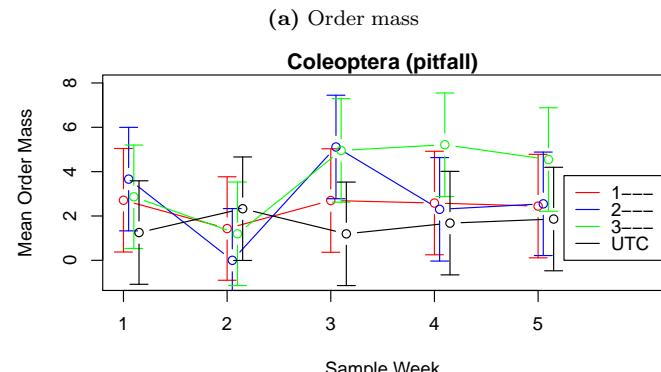


Figure 94: Interaction plot of (a) sample mass and (b) family count for order Coleoptera, between treatment blocks and sampling dates.

```

1 Coleoptera pitfall
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block 3 34.16 11.388 2.845 0.0496 *
7 event 4 33.86 8.465 2.115 0.0968 .
8 block:event 12 49.49 4.124 1.031 0.4411
9 Residuals 40 160.09 4.002
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 95: Verbatim R output of the results of an ANOVA of sample mass in pitfall samples for Coleoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2 Df F value Pr(>F)
3 group 19 0.9862 0.4952
4 40

```

Figure 96: Verbatim R output of the results of Levene's test on sample mass in pitfall samples for Coleoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.93552, p-value = 0.003434

```

Figure 97: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in pitfall samples for Coleoptera.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block 3 11.52 3.839 0.601 0.618
5 event 4 52.43 13.108 2.054 0.105
6 block:event 12 90.90 7.575 1.187 0.325
7 Residuals 40 255.33 6.383

```

Figure 98: Verbatim R output of the results of an ANOVA of family count in pitfall samples for Coleoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.3518 0.9915
4  40

```

Figure 99: Verbatim R output of the results of Levene's test on family count in pitfall samples for Coleoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.98591, p-value = 0.7174

```

Figure 100: Verbatim R output of the results of Shapiro-Wilk's test on family count in pitfall samples for Coleoptera.

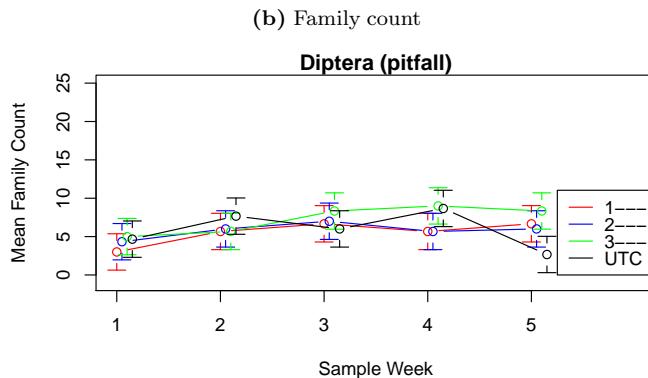
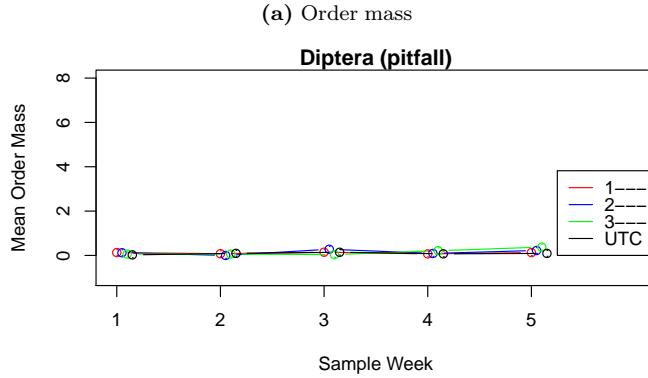


Figure 101: Interaction plot of (a) sample mass and (b) family count for order Diptera, between treatment blocks and sampling dates.

```

1 Diptera pitfall
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.0402 0.01341  1.058 0.3778
7 event       4 0.1607 0.04018  3.170 0.0236 *
8 block:event 12 0.2720 0.02266  1.788 0.0840 .
9 Residuals   40 0.5070 0.01268
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 102: Verbatim R output of the results of an ANOVA of sample mass in pitfall samples for Diptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.7445 0.7521
4  40

```

Figure 103: Verbatim R output of the results of Levene's test on sample mass in pitfall samples for Diptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.94508, p-value = 0.0092

```

Figure 104: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in pitfall samples for Diptera.

```

1 sample families
2
3   Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 26.93  8.978  2.181 0.1053
5 event       4 67.27 16.817  4.085 0.0072 **
6 block:event 12 78.07  6.506  1.580 0.1369
7 Residuals   40 164.67  4.117
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 105: Verbatim R output of the results of an ANOVA of family count in pitfall samples for Diptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.6766 0.8189
4  40

```

Figure 106: Verbatim R output of the results of Levene's test on family count in pitfall samples for Diptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.96611, p-value = 0.09394

```

Figure 107: Verbatim R output of the results of Shapiro-Wilk's test on family count in pitfall samples for Diptera.

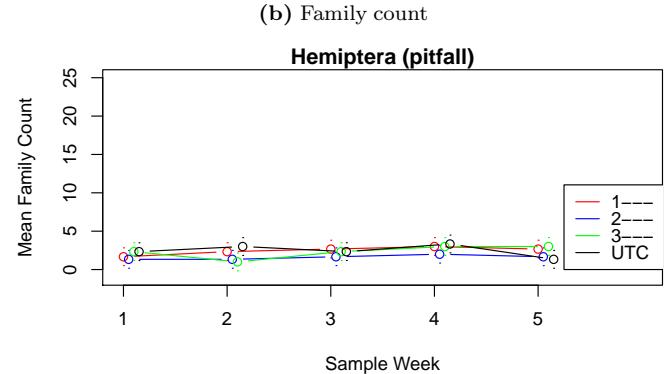
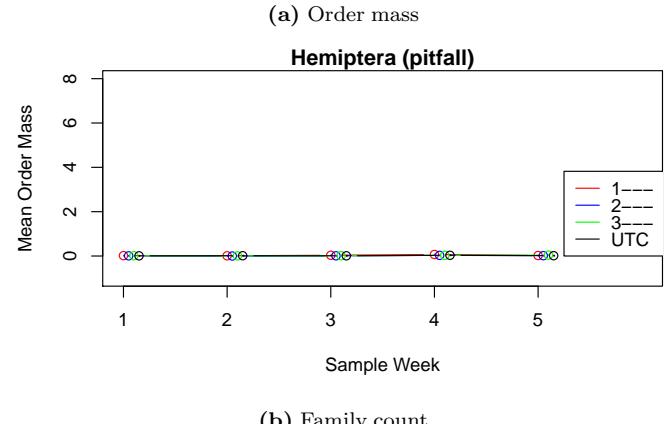


Figure 108: Interaction plot of (a) sample mass and (b) family count for order Hemiptera, between treatment blocks and sampling dates.

```

1 Hemiptera pitfall
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.002927 0.0009756  5.511 0.0029 **
7 event       4 0.008375 0.0020937 11.828 1.96e-06 ***
8 block:event 12 0.003863 0.0003219  1.818 0.0781 .
9 Residuals   40 0.007080 0.0001770
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 109: Verbatim R output of the results of an ANOVA of sample mass in pitfall samples for Hemiptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.7198 0.7771
4      40

```

Figure 110: Verbatim R output of the results of Levene's test on sample mass in pitfall samples for Hemiptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.96982, p-value = 0.143

```

Figure 111: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in pitfall samples for Hemiptera.

```

1 sample families
2
3          Df Sum Sq Mean Sq F value Pr(>F)
4 block      3  7.78  2.5944  2.638 0.0626 .
5 event       4  6.77  1.6917  1.720 0.1645
6 block:event 12 12.30  1.0250  1.042 0.4315
7 Residuals   40 39.33  0.9833
8 ---
9 Signif
. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 112: Verbatim R output of the results of an ANOVA of family count in pitfall samples for Hemiptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.588 0.8929
4      40

```

Figure 113: Verbatim R output of the results of Levene's test on family count in pitfall samples for Hemiptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.96595, p-value = 0.09223

```

Figure 114: Verbatim R output of the results of Shapiro-Wilk's test on family count in pitfall samples for Hemiptera.

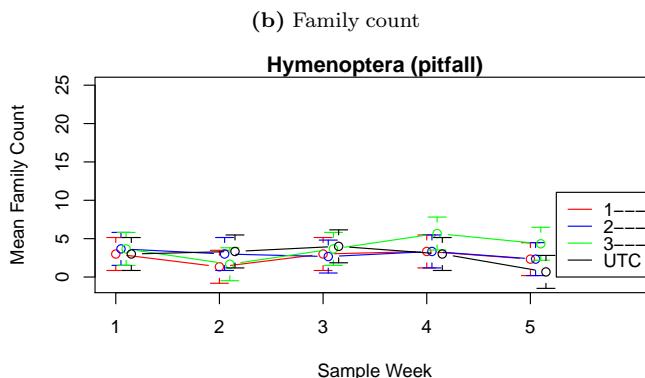
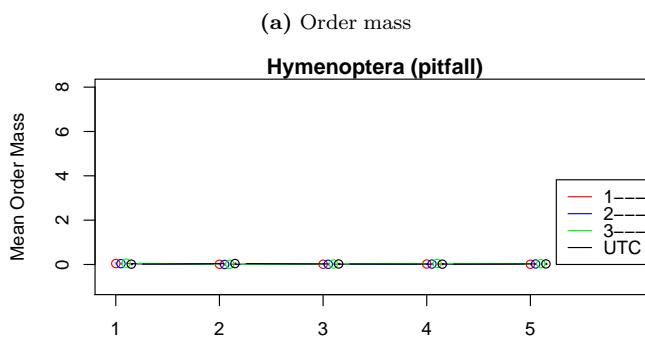


Figure 115: Interaction plot of (a) sample mass and (b) family count for order Hymenoptera, between treatment blocks and sampling dates.

```

1 Hymenoptera pitfall
2
3 sample mass
4
5          Df Sum Sq Mean Sq F value Pr(>F)
6 block      3  0.002314 0.0007713  2.119 0.1130
7 event       4  0.004349 0.0010873  2.987 0.0301 *
8 block:event 12 0.006666 0.0005555  1.526 0.1552
9 Residuals   40 0.014559 0.0003640
10 ---
11 Signif
. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 116: Verbatim R output of the results of an ANOVA of sample mass in pitfall samples for Hymenoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.8187 0.6736
4      40

```

Figure 117: Verbatim R output of the results of Levene's test on sample mass in pitfall samples for Hymenoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.94321, p-value = 0.007554

```

Figure 118: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in pitfall samples for Hymenoptera.

```

1 sample families
2
3          Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 12.45  4.150  1.227 0.313
5 event       4 20.27  5.067  1.498 0.221
6 block:event 12 34.80  2.900  0.857 0.594
7 Residuals   40 135.33 3.383

```

Figure 119: Verbatim R output of the results of an ANOVA of family count in pitfall samples for Hymenoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.6173 0.8704
4      40

```

Figure 120: Verbatim R output of the results of Levene's test on family count in pitfall samples for Hymenoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.90267, p-value = 0.0001649

```

Figure 121: Verbatim R output of the results of Shapiro-Wilk's test on family count in pitfall samples for Hymenoptera.

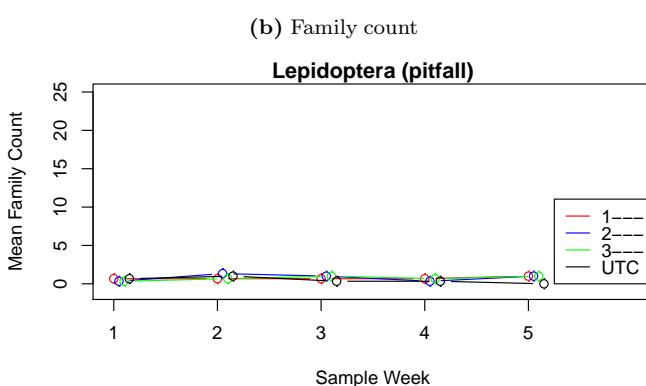
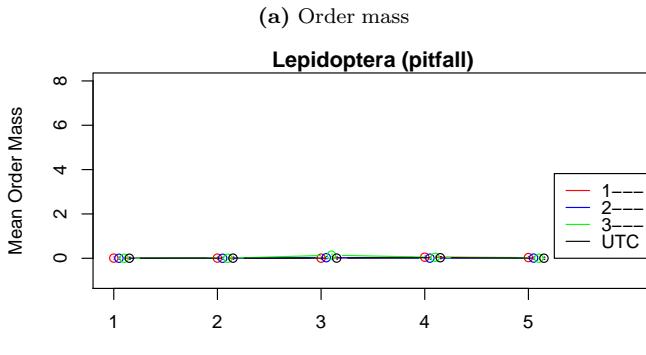


Figure 122: Interaction plot of (a) sample mass and (b) family count for order Lepidoptera, between treatment blocks and sampling dates.

```

1 Lepidoptera pitfall
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block 3 0.00855 0.002849 1.627 0.198
7 event 4 0.01607 0.004017 2.294 0.076 .
8 block:event 12 0.03299 0.002749 1.570 0.140
9 Residuals 40 0.07004 0.001751
10 ---
11 Signif
   . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 123: Verbatim R output of the results of an ANOVA of sample mass in pitfall samples for Lepidoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19 1.8073 0.05717 .
4 40
5 ---
6 Signif
   . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 124: Verbatim R output of the results of Levene's test on sample mass in pitfall samples for Lepidoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.73291, p-value = 4.04e-09

```

Figure 125: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in pitfall samples for Lepidoptera.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block 3 0.983 0.3278 1.035 0.387
5 event 4 1.567 0.3917 1.237 0.311
6 block:event 12 3.767 0.3139 0.991 0.474
7 Residuals 40 12.667 0.3167

```

Figure 126: Verbatim R output of the results of an ANOVA of family count in pitfall samples for Lepidoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19 0.4596 0.9644
4 40

```

Figure 127: Verbatim R output of the results of Levene's test on family count in pitfall samples for Lepidoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.95335, p-value = 0.02244

```

Figure 128: Verbatim R output of the results of Shapiro-Wilk's test on family count in pitfall samples for Lepidoptera.

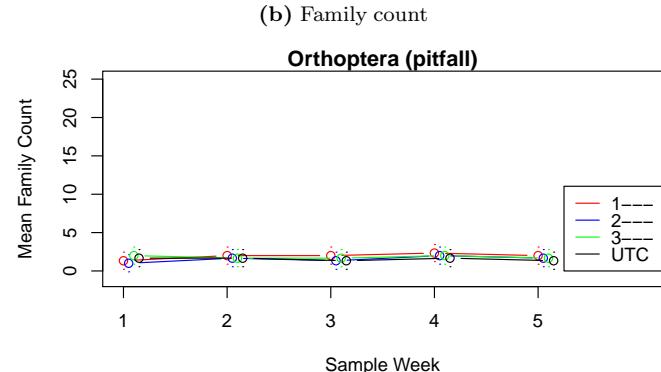
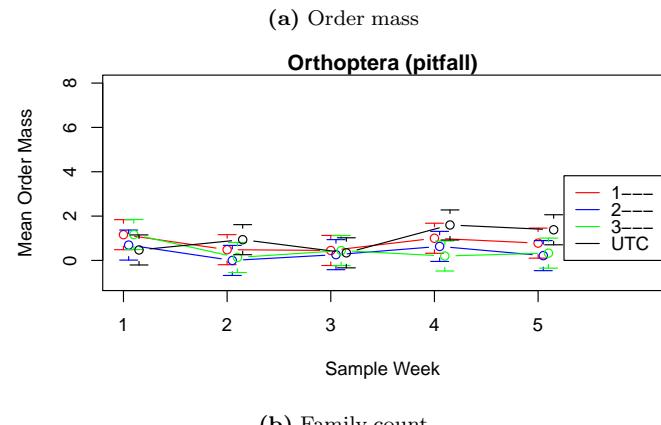


Figure 129: Interaction plot of (a) sample mass and (b) family count for order Orthoptera, between treatment blocks and sampling dates.

```

1 Orthoptera pitfall
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block 3 3.373 1.1243 3.330 0.0289 *
7 event 4 2.848 0.7120 2.109 0.0976 .
8 block:event 12 5.054 0.4212 1.247 0.2868
9 Residuals 40 13.504 0.3376
10 ---
11 Signif
   . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 130: Verbatim R output of the results of an ANOVA of sample mass in pitfall samples for Orthoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19 0.743 0.7537
4 40

```

Figure 131: Verbatim R output of the results of Levene's test on sample mass in pitfall samples for Orthoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.90797, p-value = 0.00026

```

Figure 132: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in pitfall samples for Orthoptera.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block      3   1.80   0.6000   0.655  0.585
5 event       4   1.77   0.4417   0.482  0.749
6 block:event 12   2.37   0.1972   0.215  0.997
7 Residuals   40  36.67   0.9167

```

Figure 133: Verbatim R output of the results of an ANOVA of family count in pitfall samples for Orthoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.5098 0.9419
4      40

```

Figure 134: Verbatim R output of the results of Levene's test on family count in pitfall samples for Orthoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.97452, p-value = 0.2412

```

Figure 135: Verbatim R output of the results of Shapiro-Wilk's test on family count in pitfall samples for Orthoptera.

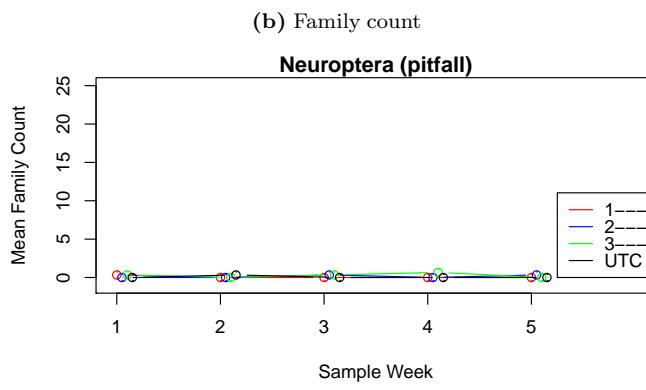
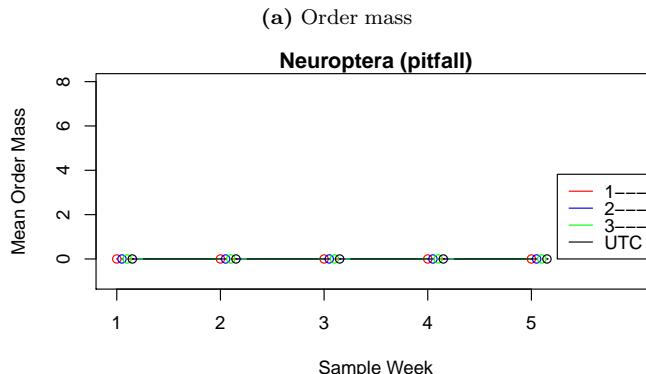


Figure 136: Interaction plot of (a) sample mass and (b) family count for order Neuroptera, between treatment blocks and sampling dates.

```

1 Neuroptera pitfall
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 8.470e-06 2.824e-06   1.251  0.304
7 event       4 6.240e-06 1.561e-06   0.691  0.602
8 block:event 12 2.075e-05 1.729e-06   0.766  0.680
9 Residuals   40 9.029e-05 2.257e-06

```

Figure 137: Verbatim R output of the results of an ANOVA of sample mass in pitfall samples for Neuroptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.8269 0.6647
4      40

```

Figure 138: Verbatim R output of the results of Levene's test on sample mass in pitfall samples for Neuroptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.64401, p-value = 8.511e-11

```

Figure 139: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in pitfall samples for Neuroptera.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block      3   0.400   0.1333   1.143  0.343
5 event       4   0.100   0.0250   0.214  0.929
6 block:event 12   1.767   0.1472   1.262  0.278
7 Residuals   40  4.667   0.1167

```

Figure 140: Verbatim R output of the results of an ANOVA of family count in pitfall samples for Neuroptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.6842 0.8117
4      40

```

Figure 141: Verbatim R output of the results of Levene's test on family count in pitfall samples for Neuroptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.75545, p-value = 1.225e-08

```

Figure 142: Verbatim R output of the results of Shapiro-Wilk's test on family count in pitfall samples for Neuroptera.

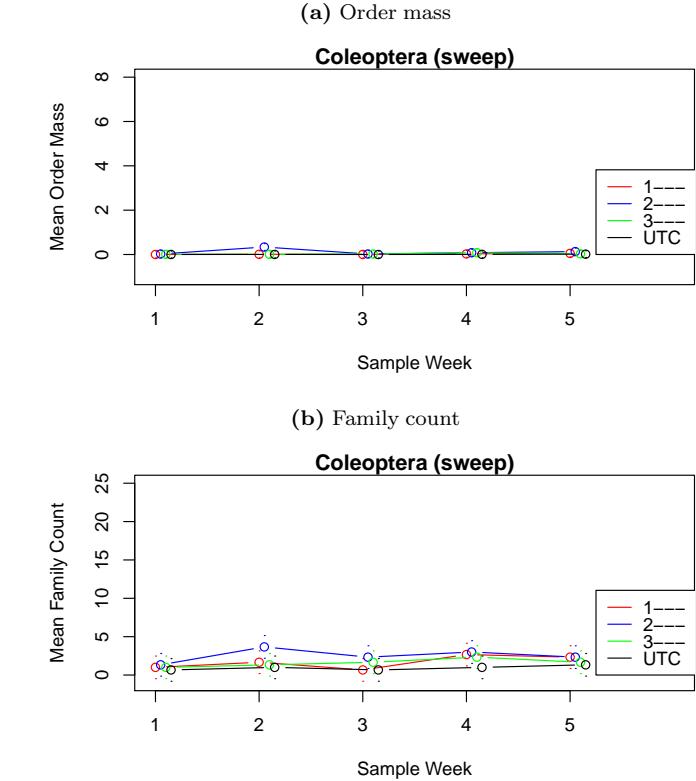


Figure 143: Interaction plot of (a) sample mass and (b) family count for order Coleoptera, between treatment blocks and sampling dates.

```

1 Coleoptera sweep
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.1190 0.03968   2.305  0.0914 .
7 event       4 0.0549 0.01371   0.797  0.5345
8 block:event 12 0.1651 0.01376   0.799  0.6488
9 Residuals   40 0.6886 0.01721
10 ---
11 Signif
   . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 144: Verbatim R output of the results of an ANOVA of sample mass in sweep samples for Coleoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.8936 0.5925
4      40

```

Figure 145: Verbatim R output of the results of Levene's test on sample mass in sweep samples for Coleoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.53431, p-value = 1.641e-12

```

Figure 146: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in sweep samples for Coleoptera.

```

1 sample families
2
3   Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 19.38  6.461  4.038 0.0134 *
5 event       4 12.23  3.058  1.911 0.1273
6 block:event 12  9.37  0.781  0.488 0.9099
7 Residuals   40 64.00  1.600
8 ---
9 Signif
. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 147: Verbatim R output of the results of an ANOVA of family count in sweep samples for Coleoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.5263 0.933
4      40

```

Figure 148: Verbatim R output of the results of Levene's test on family count in sweep samples for Coleoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.97314, p-value = 0.2073

```

Figure 149: Verbatim R output of the results of Shapiro-Wilk's test on family count in sweep samples for Coleoptera.

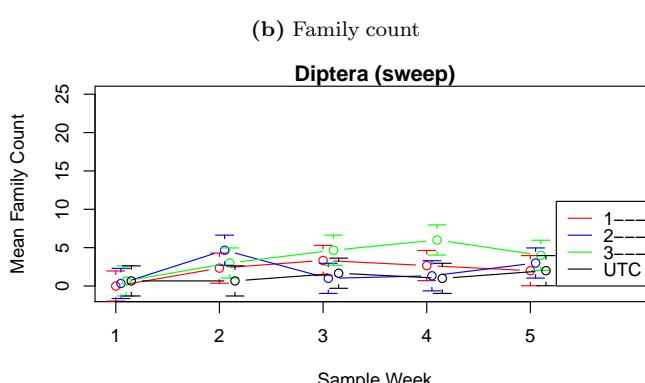
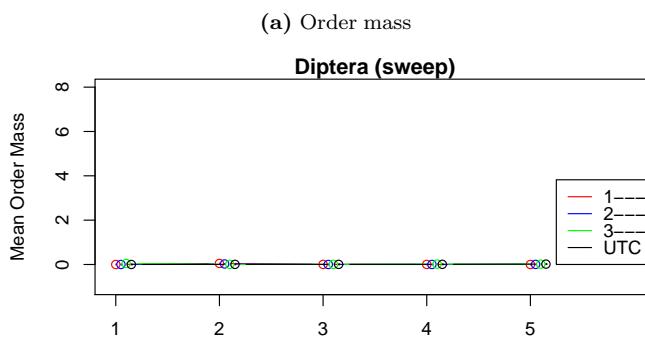


Figure 150: Interaction plot of (a) sample mass and (b) family count for order Diptera, between treatment blocks and sampling dates.

```

1 Diptera sweep
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.001383 0.0004610 2.042 0.12342
7 event       4 0.001764 0.0004410 1.953 0.12035
8 block:event 12 0.007912 0.0006593 2.920 0.00541 **
9 Residuals   40 0.009031 0.0002258
10 ---
11 Signif
. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 151: Verbatim R output of the results of an ANOVA of sample mass in sweep samples for Diptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  1.3753 0.1943
4      40

```

Figure 152: Verbatim R output of the results of Levene's test on sample mass in sweep samples for Diptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.80278, p-value = 1.585e-07

```

Figure 153: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in sweep samples for Diptera.

```

1 sample families
2
3   Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 47.65 15.883 5.606 0.00264 **
5 event       4 50.50 12.625 4.456 0.00451 **
6 block:event 12 57.77  4.814 1.699 0.10374
7 Residuals   40 113.33  2.833
8 ---
9 Signif
. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 154: Verbatim R output of the results of an ANOVA of family count in sweep samples for Diptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  1.1484 0.3454
4      40

```

Figure 155: Verbatim R output of the results of Levene's test on family count in sweep samples for Diptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.95754, p-value = 0.03571

```

Figure 156: Verbatim R output of the results of Shapiro-Wilk's test on family count in sweep samples for Diptera.

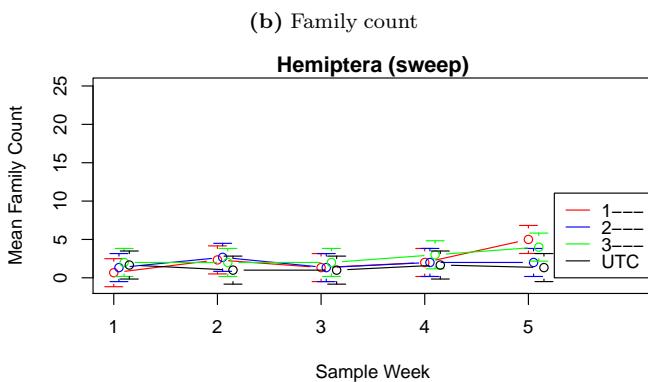
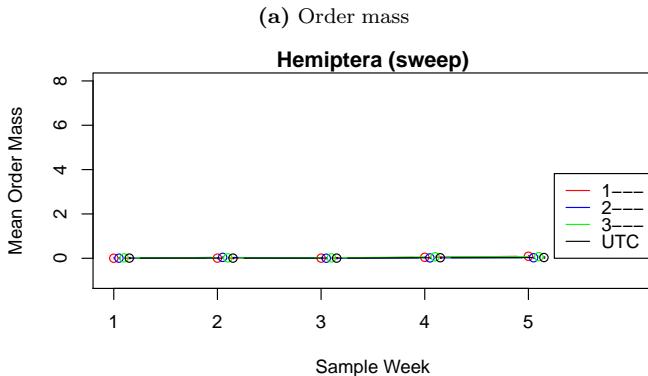


Figure 157: Interaction plot of (a) sample mass and (b) family count for order Hemiptera, between treatment blocks and sampling dates.

```

1 Hemiptera sweep
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block 3 0.005504 0.001835 3.348 0.0284 *
7 event 4 0.020188 0.005047 9.209 2.26e-05 ***
8 block:event 12 0.011767 0.000981 1.789 0.0837 .
9 Residuals 40 0.021922 0.000548
10 ---
11 Signif
   . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 158: Verbatim R output of the results of an ANOVA of sample mass in sweep samples for Hemiptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.6272 0.8623
4      40

```

Figure 159: Verbatim R output of the results of Levene's test on sample mass in sweep samples for Hemiptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.947, p-value = 0.01129

```

Figure 160: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in sweep samples for Hemiptera.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block 3 13.38  4.461  1.821 0.1589
5 event  4 22.57  5.642  2.303 0.0752 .
6 block:event 12 25.03  2.086  0.851 0.5997
7 Residuals 40 98.00  2.450
8 ---
9 Signif
   . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 161: Verbatim R output of the results of an ANOVA of family count in sweep samples for Hemiptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.4906 0.9514
4      40

```

Figure 162: Verbatim R output of the results of Levene's test on family count in sweep samples for Hemiptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.97236, p-value = 0.1901

```

Figure 163: Verbatim R output of the results of Shapiro-Wilk's test on family count in sweep samples for Hemiptera.

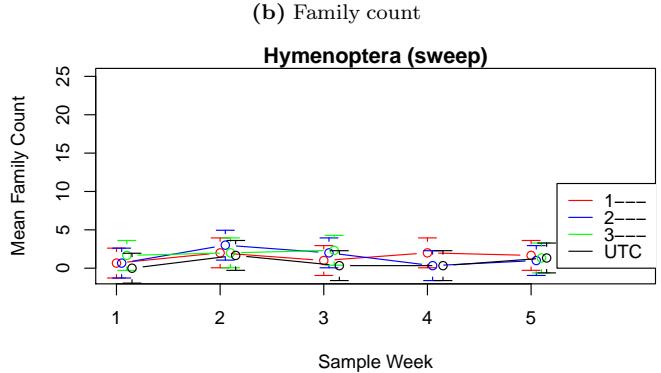
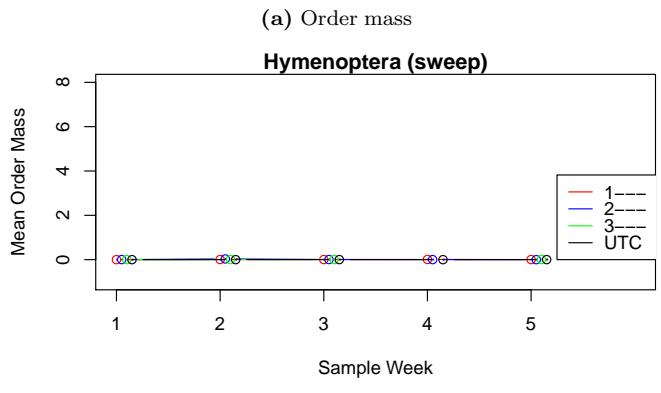


Figure 164: Interaction plot of (a) sample mass and (b) family count for order Hymenoptera, between treatment blocks and sampling dates.

```

1 Hymenoptera sweep
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block 3 0.000447 0.0001489 0.800 0.502
7 event  4 0.000650 0.0001626 0.873 0.489
8 block:event 11 0.001698 0.0001544 0.829 0.613
9 Residuals 38 0.007078 0.0001863

```

Figure 165: Verbatim R output of the results of an ANOVA of sample mass in sweep samples for Hymenoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 18  0.8461 0.6392
4      38

```

Figure 166: Verbatim R output of the results of Levene's test on sample mass in sweep samples for Hymenoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.6064, p-value = 4.157e-11

```

Figure 167: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in sweep samples for Hymenoptera.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block      3   8.73   2.911   1.050  0.382
5 event       4  13.26   3.314   1.196  0.329
6 block:event 11  13.34   1.213   0.438  0.929
7 Residuals   38 105.33   2.772

```

Figure 168: Verbatim R output of the results of an ANOVA of family count in sweep samples for Hymenoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 18  0.7014 0.7882
4     38

```

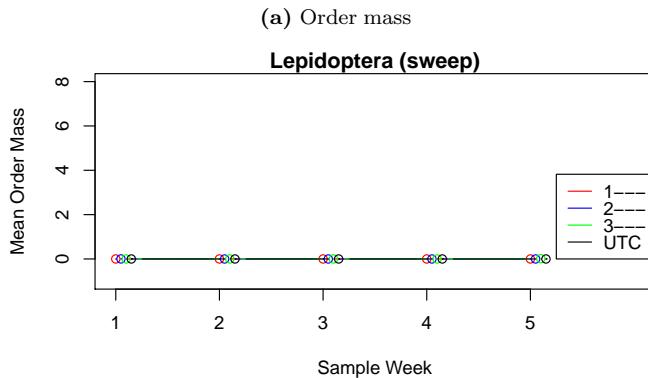
Figure 169: Verbatim R output of the results of Levene's test on family count in sweep samples for Hymenoptera.

```

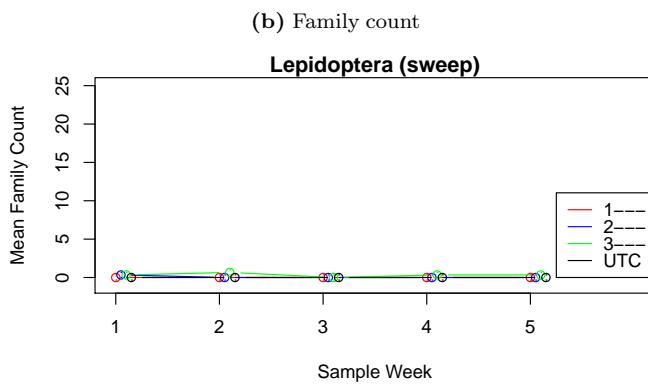
1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.92126, p-value = 0.001196

```

Figure 170: Verbatim R output of the results of Shapiro-Wilk's test on family count in sweep samples for Hymenoptera.



(a) Order mass



(b) Family count

Figure 171: Interaction plot of (a) sample mass and (b) family count for order Lepidoptera, between treatment blocks and sampling dates.

```

1 Lepidoptera sweep
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.0001051 3.504e-05  1.155  0.339
7 event       4 0.0001025 2.561e-05  0.844  0.506
8 block:event 12 0.0003484 2.904e-05  0.957  0.504
9 Residuals   40 0.0012138 3.034e-05

```

Figure 172: Verbatim R output of the results of an ANOVA of sample mass in sweep samples for Lepidoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.9639 0.518
4     40

```

Figure 173: Verbatim R output of the results of Levene's test on sample mass in sweep samples for Lepidoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.36669, p-value = 1.195e-14

```

Figure 174: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in sweep samples for Lepidoptera.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block      3   1.133   0.3778   4.533 0.00792 **
5 event       4   0.233   0.0583   0.700 0.59654
6 block:event 12   0.700   0.0583   0.700 0.74180
7 Residuals   40   3.333   0.0833
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 175: Verbatim R output of the results of an ANOVA of family count in sweep samples for Lepidoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.7895 0.705
4     40

```

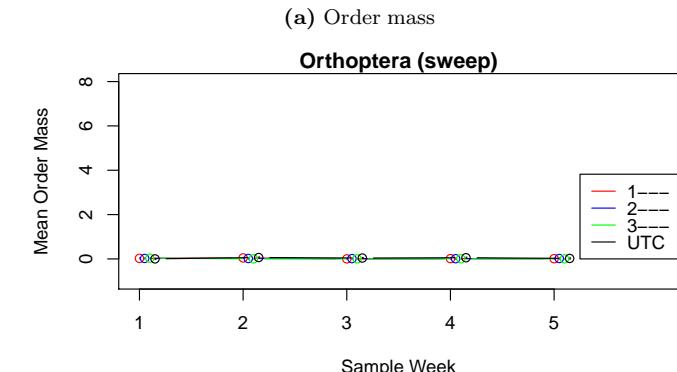
Figure 176: Verbatim R output of the results of Levene's test on family count in sweep samples for Lepidoptera.

```

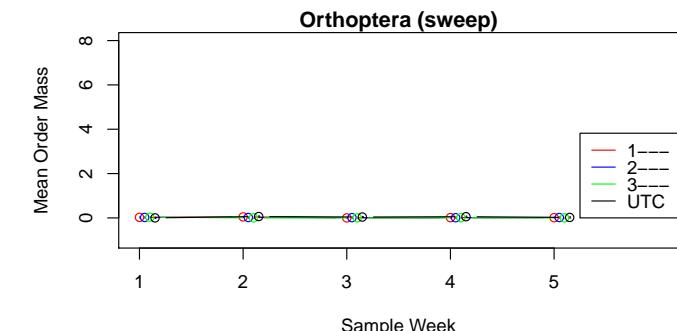
1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.67579, p-value = 3.114e-10

```

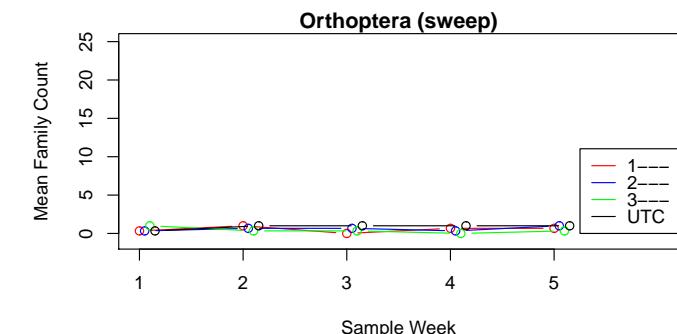
Figure 177: Verbatim R output of the results of Shapiro-Wilk's test on family count in sweep samples for Lepidoptera.



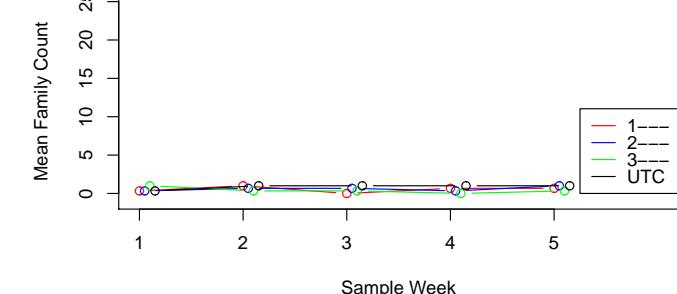
(a) Order mass



(b) Family count



(a) Order mass



(b) Family count

Figure 178: Interaction plot of (a) sample mass and (b) family count for order Orthoptera, between treatment blocks and sampling dates.

```

1 Orthoptera sweep
2
3 sample mass
4
5          Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.005632 0.0018772   4.227 0.0109 *
7 event       4 0.002977 0.0007443   1.676 0.1745
8 block:event 12 0.010665 0.0008887   2.001 0.0503 .
9 Residuals   40 0.017763 0.0004441
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 179: Verbatim R output of the results of an ANOVA of sample mass in sweep samples for Orthoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.8912 0.5951
4    40

```

Figure 180: Verbatim R output of the results of Levene's test on sample mass in sweep samples for Orthoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.93833, p-value = 0.004564

```

Figure 181: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in sweep samples for Orthoptera.

```

1 sample families
2
3          Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 1.733  0.5778   3.152 0.0353 *
5 event       4 0.900  0.2250   1.227 0.3146
6 block:event 12 4.433  0.3694   2.015 0.0486 *
7 Residuals   40 7.333  0.1833
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 182: Verbatim R output of the results of an ANOVA of family count in sweep samples for Orthoptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.4737 0.9588
4    40

```

Figure 183: Verbatim R output of the results of Levene's test on family count in sweep samples for Orthoptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.89386, p-value = 7.918e-05

```

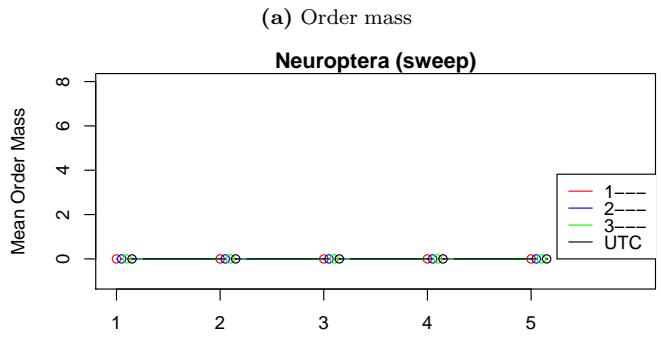
Figure 184: Verbatim R output of the results of Shapiro-Wilk's test on family count in sweep samples for Orthoptera.

```

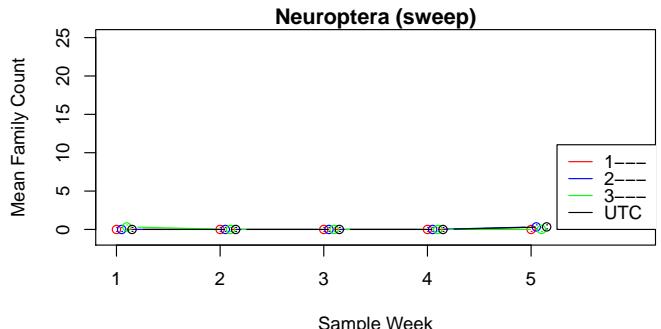
1 Neuroptera sweep
2
3 sample mass
4
5          Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 5.130e-07 1.708e-07   0.672  0.574
7 event       4 7.670e-07 1.917e-07   0.754  0.561
8 block:event 12 3.300e-06 2.750e-07   1.082  0.400
9 Residuals   40 1.017e-05 2.542e-07

```

Figure 185: Verbatim R output of the results of an ANOVA of sample mass in sweep samples for Neuroptera.



(a) Order mass



(b) Family count

Figure 186: Interaction plot of (a) sample mass and (b) family count for order Neuroptera, between treatment blocks and sampling dates.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.9482 0.5344
4    40

```

Figure 187: Verbatim R output of the results of Levene's test on sample mass in sweep samples for Neuroptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.39918, p-value = 2.863e-14

```

Figure 188: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in sweep samples for Neuroptera.

```

1 sample families
2
3          Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 0.0500 0.01667   0.333  0.801
5 event       4 0.2667 0.06667   1.333  0.274
6 block:event 12 0.5333 0.04444   0.889  0.565
7 Residuals   40 2.0000 0.05000

```

Figure 189: Verbatim R output of the results of an ANOVA of family count in sweep samples for Neuroptera.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.8947 0.5913
4    40

```

Figure 190: Verbatim R output of the results of Levene's test on family count in sweep samples for Neuroptera.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.48984, p-value = 3.985e-13

```

Figure 191: Verbatim R output of the results of Shapiro-Wilk's test on family count in sweep samples for Neuroptera.

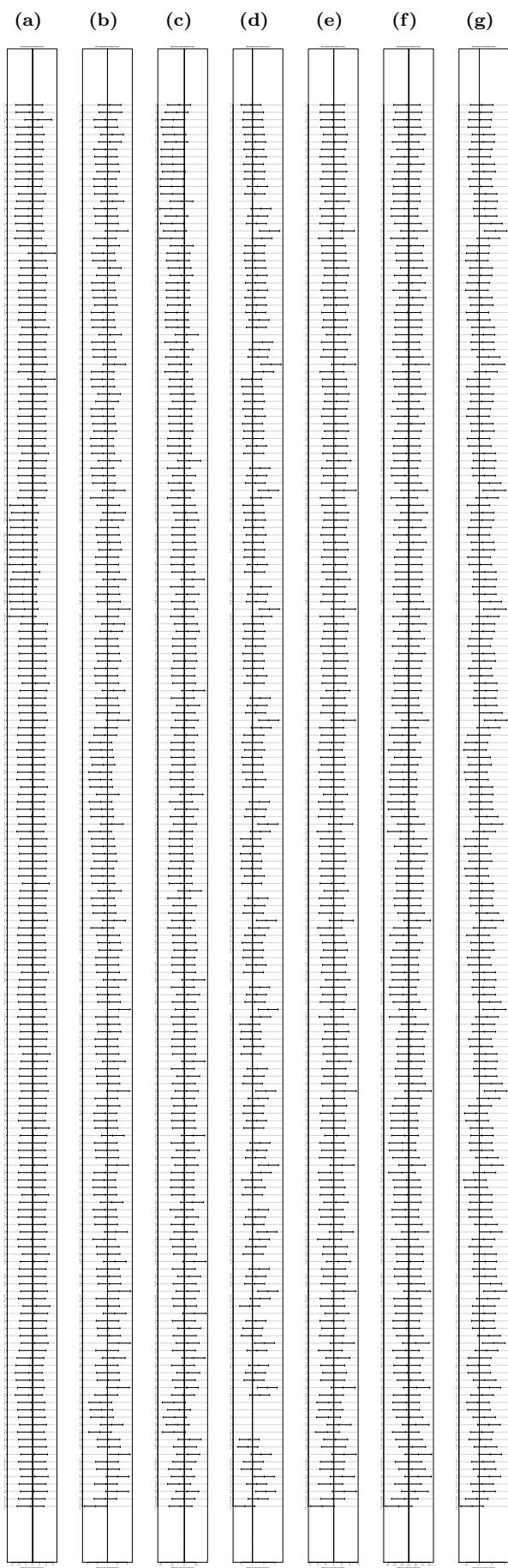


Figure 192: Post-hoc Tukey-Kramer comparisons of sample mass between malaise blocks and dates for: (a) Coleoptera, (b) Diptera, (c) Hemiptera, (d) Hymenoptera, (e) Lepidoptera, (f) Neuroptera, and (g) Orthoptera.

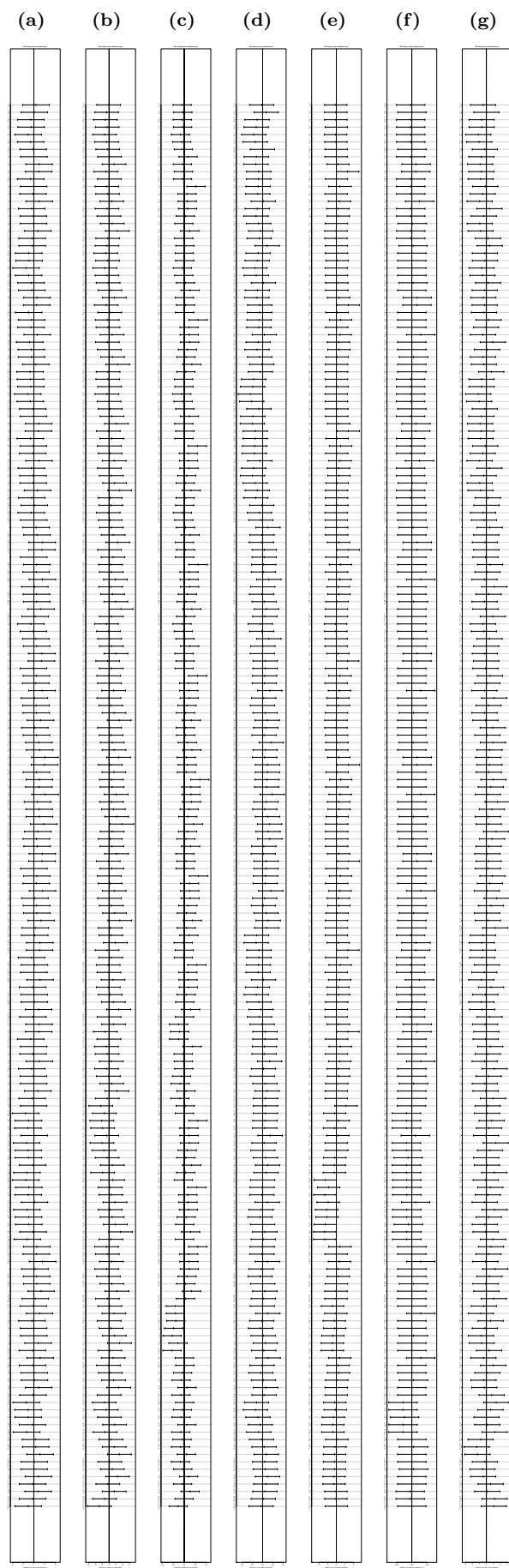


Figure 193: Post-hoc Tukey-Kramer comparisons of sample mass between pitfall blocks and dates for: (a) Coleoptera, (b) Diptera, (c) Hemiptera, (d) Hymenoptera, (e) Lepidoptera, (f) Neuroptera, and (g) Orthoptera.

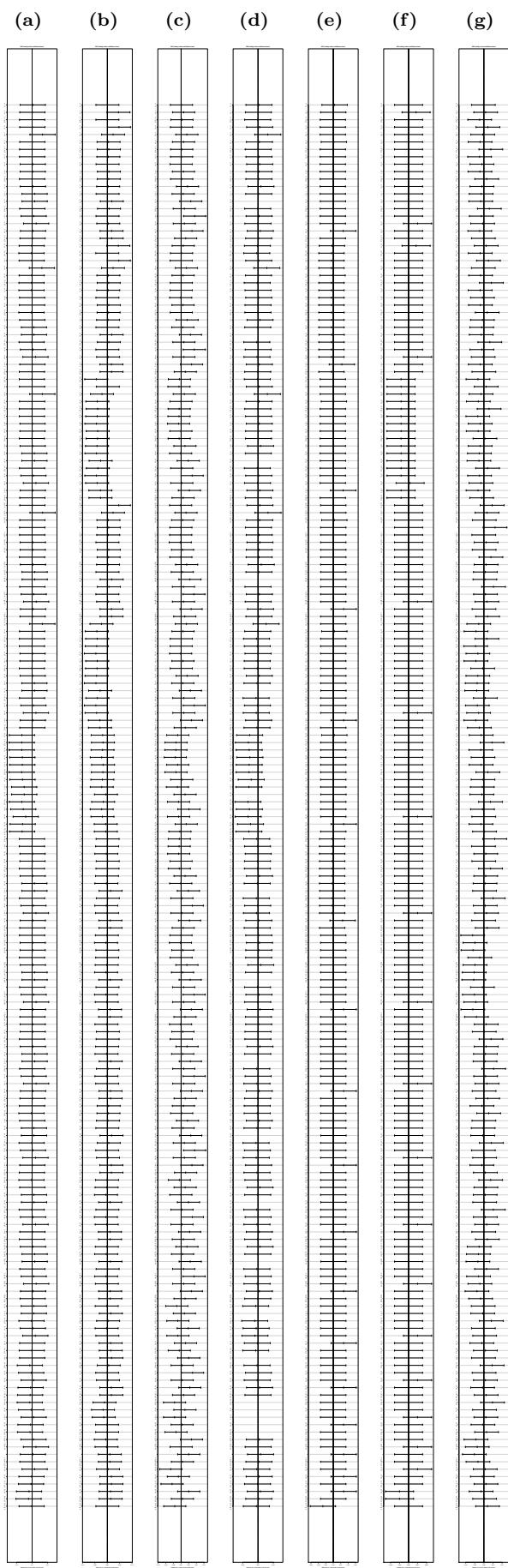


Figure 194: Post-hoc Tukey-Kramer comparisons of sample mass between sweep blocks and dates for: (a) Coleoptera, (b) Diptera, (c) Hemiptera, (d) Hymenoptera, (e) Lepidoptera, (f) Neuroptera, and (g) Orthoptera.

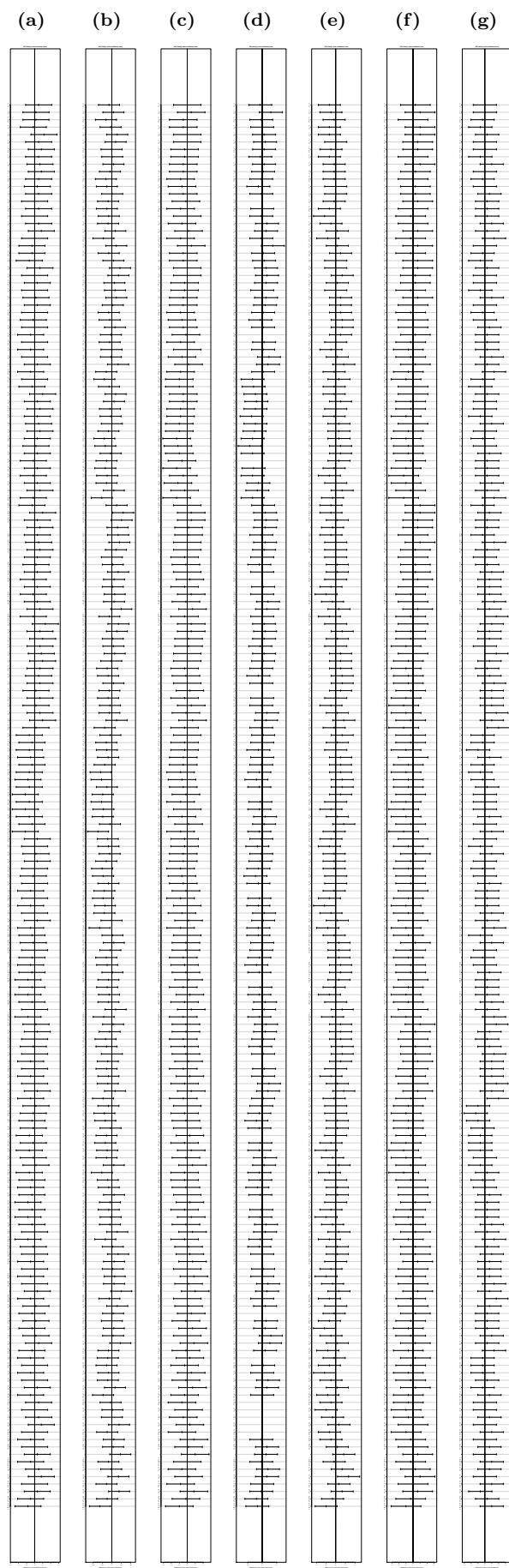


Figure 195: Post-hoc Tukey-Kramer comparisons of family count between malaise blocks and dates for: (a) Coleoptera, (b) Diptera, (c) Hemiptera, (d) Hymenoptera, (e) Lepidoptera, (f) Neuroptera, and (g) Orthoptera.

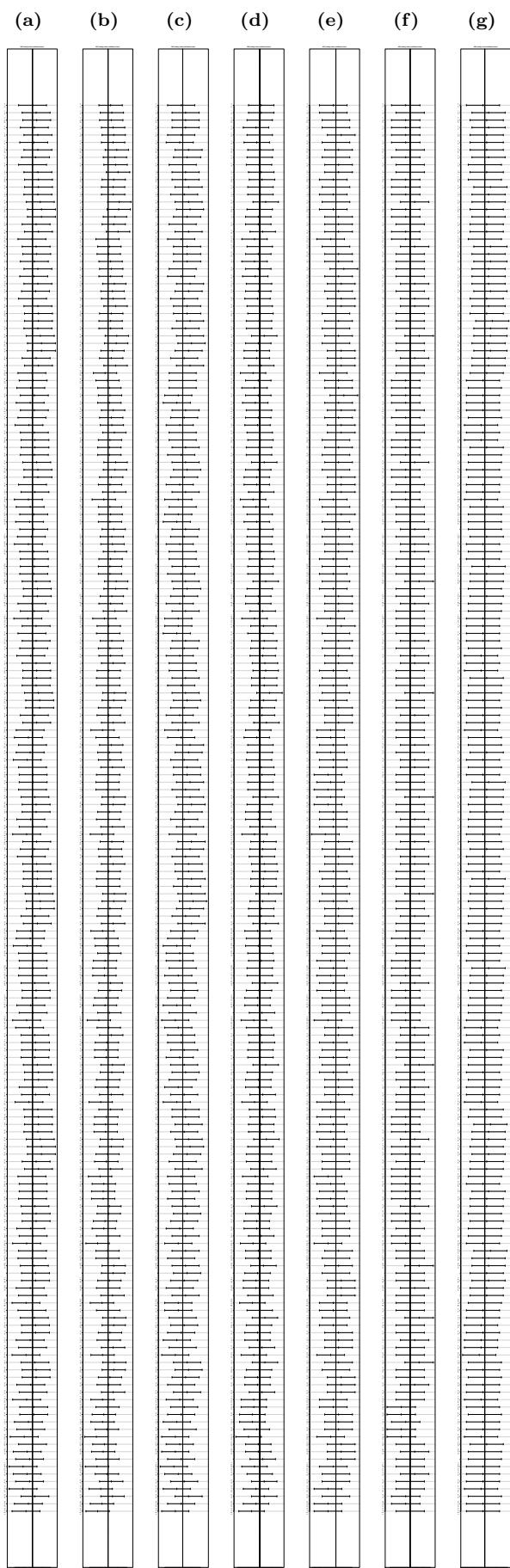


Figure 196: Post-hoc Tukey-Kramer comparisons of family count between pitfall blocks and dates for: (a) Coleoptera, (b) Diptera, (c) Hemiptera, (d) Hymenoptera, (e) Lepidoptera, (f) Neuroptera, and (g) Orthoptera.

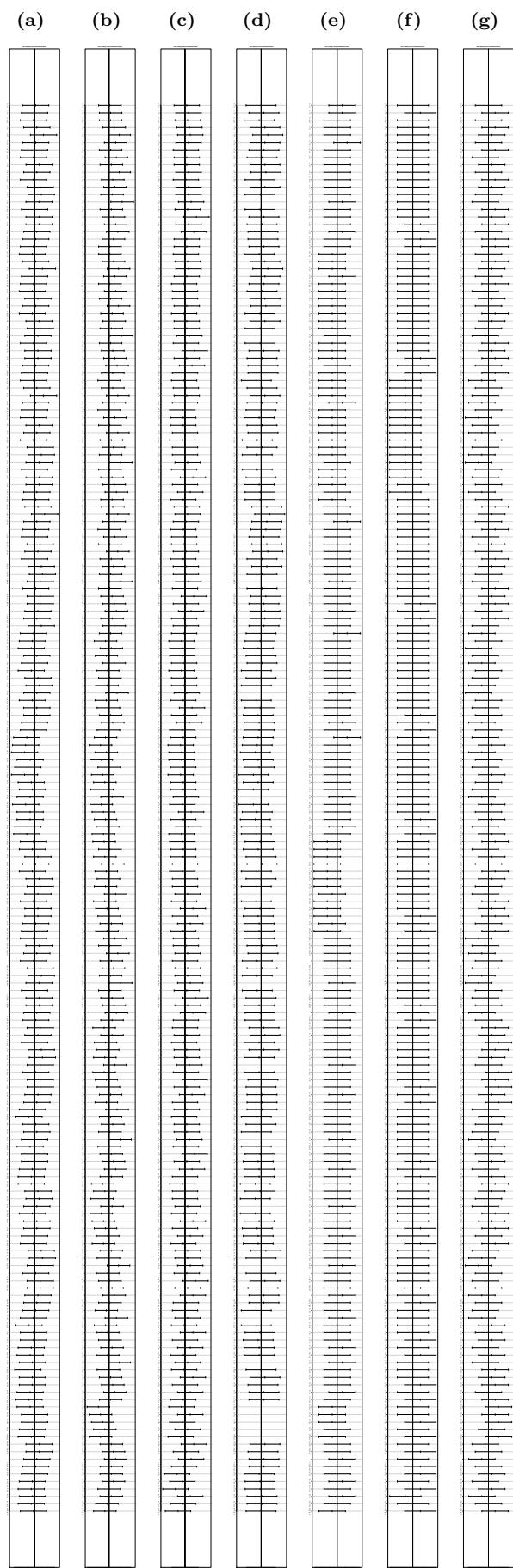


Figure 197: Post-hoc Tukey-Kramer comparisons of family count between sweep blocks and dates for: (a) Coleoptera, (b) Diptera, (c) Hemiptera, (d) Hymenoptera, (e) Lepidoptera, (f) Neuroptera, and (g) Orthoptera.

4 BULK SAMPLE COMPARISONS BETWEEN BLOCKS

Analysis of aggregate sample properties between treatment blocks and sampling dates in terms of total sample mass and family level diversity was conducted using two-way ANOVA, by sampling method and dependent variable, and combined in MANOVA. Additionally, a GLMM was fit to the aggregate data to explore whether the relationship between family diversity and sample weight transcends orders. As before, there were very few differences between the site-wise means within each block and date, although the block, sampling date, and sampling method terms (and their interaction) were significant, indicating a random effect from these factors.

Unsurprisingly, there were significant differences in the performance of the various sampling methods, as shown in Fig. #. Furthermore, aggregate mass and family count covaried in the MANOVA and were correlated in the GLMM; the GLMM based on a negative binomial distribution additionally was a better fit to the data (see Fig. #). While less over-dispersed than before, the data still violated the assumption of normality, but was homoscedastic (Figs. #). Of note, the UTC block had the lowest aggregate dry sample weight and family level insect diversity of the four blocks (see Figs. #), calling into question its utility as a control plot.

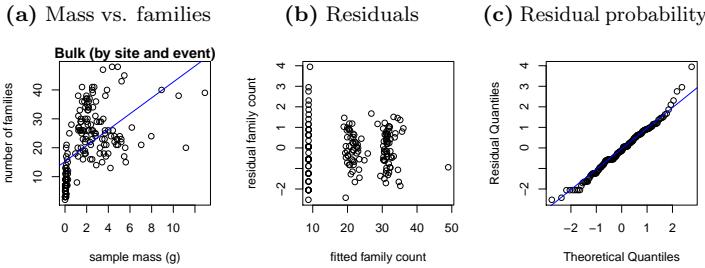


Figure 198: General linear mixed-effects model based on negative binomial distribution: (a) Scatter plot showing effect of sample mass on family count in aggregate data, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 Generalized linear mixed model fit
   by maximum likelihood (Laplace Approximation) [glmerMod]
2 Family: poisson ( log )
3 Formula: family_count ~ mass + (1 | method)
4 Data: bulk
   .data[with(bulk.data, mass > 0 & family_count > 0), ]
5
6   AIC      BIC      logLik deviance df.resid
7  1125.6   1135.1   -559.8    1119.6     167
8
9 Scaled residuals:
10  Min    1Q   Median    3Q   Max
11 -2.6205 -0.8935 -0.1843  0.8782  5.8862
12
13 Random effects:
14 Groups Name        Variance Std.Dev.
15 method (Intercept) 0.2473  0.4973
16 Number of obs: 170, groups: method, 3
17
18 Fixed effects:
19             Estimate Std. Error z value Pr(>|z|)
20 (Intercept) 2.822292  0.288393 9.786 < 2e-16 ***
21 mass        0.038725  0.008436  4.590 4.43e-06 ***
22 ---
23 Signif
   . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
24
25 Correlation of Fixed Effects:
26   (Intr)
27 mass -0.066

```

Figure 199: Verbatim R output of the results of fitting a general linear mixed-effects model based on a Poisson distribution.

```

1 Generalized linear mixed model fit
   by maximum likelihood (Laplace Approximation) [glmerMod]
2 Family: Negative Binomial(30.9896) ( log )
3 Formula: family_count ~ mass + (1 | method)
4 Data: bulk
   .data[with(bulk.data, mass > 0 & family_count > 0), ]
5
6   AIC      BIC      logLik deviance df.resid
7  1104.9   1117.5   -548.5    1096.9     166
8
9 Scaled residuals:
10  Min    1Q   Median    3Q   Max
11 -2.0371 -0.6748 -0.1314  0.6673  5.1487
12
13 Random effects:
14 Groups Name        Variance Std.Dev.
15 method (Intercept) 0.2441  0.4941
16 Number of obs: 170, groups: method, 3
17
18 Fixed effects:
19             Estimate Std. Error z value Pr(>|z|)
20 (Intercept) 2.81687  0.28753 9.797 < 2e-16 ***
21 mass        0.04115  0.01221  3.372 0.000747 ***
22 ---
23 Signif
   . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
24
25 Correlation of Fixed Effects:
26   (Intr)
27 mass -0.094

```

Figure 200: Verbatim R output of the results of fitting a general linear mixed-effects model based on a negative binomial distribution ($\vartheta = 30.99$).

```

1 Likelihood ratio test
2
3 Model 1: family_count ~ mass + (1 | method)
4 Model 2: family_count ~ mass + (1 | method)
5 #Df LogLik Df Chisq Pr(>Chisq)
6 1 3 -559.82
7 2 4 -548.47  1 22.698  1.895e-06 ***
8 ---
9 Signif
   . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 201: Likelihood ration test comparing general linear mixed-effects models based on **1** Poisson and **2** negative binomial distributions, respectively.

```

1 Call:
2 lm(formula
   = family_count ~ mass, data = bulk.data[with(bulk.data,
3   mass > 0 & family_count > 0), ])
4
5 Residuals:
6   Min    1Q   Median    3Q   Max
7  -25.942 -8.087 -1.648  6.974 22.107
8
9 Coefficients:
10            Estimate Std. Error t value Pr(>|t|)
11 (Intercept) 15.2581   1.0427 14.633 < 2e-16 ***
12 mass        2.7484   0.3373  8.147 8.12e-14 ***
13 ---
14 Signif
   . codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
15
16 Residual standard error: 9.744 on 168 degrees of freedom
17 Multiple R-squared:  0.2832, Adjusted R-squared:  0.2789
18 F-statistic: 66.38 on 1 and 168 DF, p-value: 8.118e-14

```

Figure 202: Verbatim R output of the results of linear regression of family count on sample mass for all aggregate data.

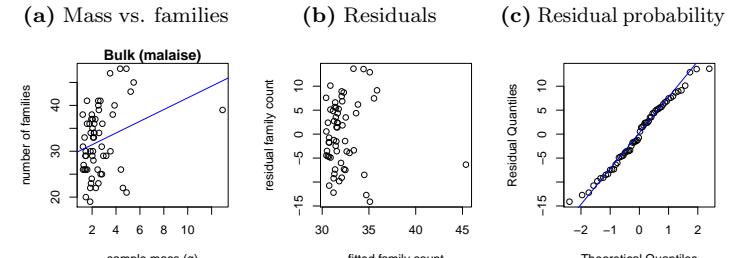


Figure 203: Linear regression by sample method: (a) Scatter plot showing effect of sample mass on family count in malaise sample aggregate data, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 malaise bulk
2 Call:
3 lm(formula
   = family_count ~ mass, data = bulk.data[with(bulk.data,
4   mass > 0 & family_count > 0 & method == method.type), ])
5
6 Residuals:
7   Min     1Q   Median     3Q    Max
8 -14.1048 -4.7708 -0.0931  5.3112 13.6548
9
10 Coefficients:
11             Estimate Std. Error t value Pr(>|t|)
12 (Intercept) 28.8662   1.6744 17.240 <2e-16 ***
13 mass         1.2777   0.5315  2.404  0.0194 *
14 ---
15 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16
17 Residual standard error: 7.022 on 58 degrees of freedom
18 Multiple R-squared: 0.0906, Adjusted R-squared: 0.07492
19 F-statistic: 5.778 on 1 and 58 DF, p-value: 0.01944

```

Figure 204: Verbatim R output of the results of linear regression of family count on sample mass for malaise sample aggregate data.

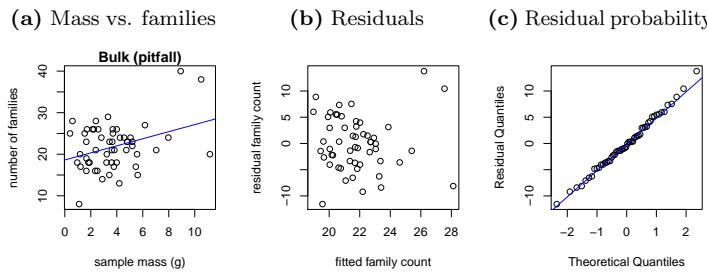


Figure 205: Linear regression by sample method: (a) Scatter plot showing effect of sample mass on family count in pitfall sample aggregate data, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 pitfall bulk
2 Call:
3 lm(formula
   = family_count ~ mass, data = bulk.data[with(bulk.data,
4   mass > 0 & family_count > 0 & method == method.type), ])
5
6 Residuals:
7   Min     1Q   Median     3Q    Max
8 -11.5617 -3.5484 -0.3737  3.1997 13.7907
9
10 Coefficients:
11             Estimate Std. Error t value Pr(>|t|)
12 (Intercept) 18.6258   1.3714 13.582 <2e-16 ***
13 mass        0.8506   0.3145  2.704  0.00923 **
14 ---
15 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16
17 Residual standard error: 5.227 on 52 degrees of freedom
18 Multiple R-squared: 0.1233, Adjusted R-squared: 0.1064
19 F-statistic: 7.312 on 1 and 52 DF, p-value: 0.009234

```

Figure 206: Verbatim R output of the results of linear regression of family count on sample mass for pitfall sample aggregate data in sweep samples for Orthoptera.

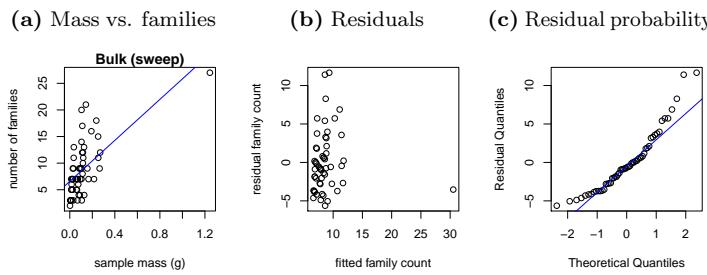


Figure 207: Linear regression by sample method: (a) Scatter plot showing effect of sample mass on family count in sweep sample aggregate data, with line of best fit (blue), (b) scatter plot of fitted values and residuals, and (c) normal probability plot of the residuals.

```

1 sweep bulk
2 Call:
3 lm(formula
   = family_count ~ mass, data = bulk.data[with(bulk.data,
4   mass > 0 & family_count > 0 & method == method.type), ])
5
6 Residuals:
7   Min     1Q   Median     3Q    Max
8 -5.6268 -2.7884 -0.6754  1.8251 11.6687
9
10 Coefficients:
11             Estimate Std. Error t value Pr(>|t|)
12 (Intercept) 6.5825   0.6353 10.36 1.91e-14 ***
13 mass        19.2493   3.1451  6.12 1.09e-07 ***
14 ---
15 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
16
17 Residual standard error: 3.961 on 54 degrees of freedom
18 Multiple R-squared: 0.4096, Adjusted R-squared: 0.3986
19 F-statistic: 37.46 on 1 and 54 DF, p-value: 1.093e-07

```

Figure 208: Verbatim R output of the results of linear regression of family count on sample mass for sweep sample aggregate data.

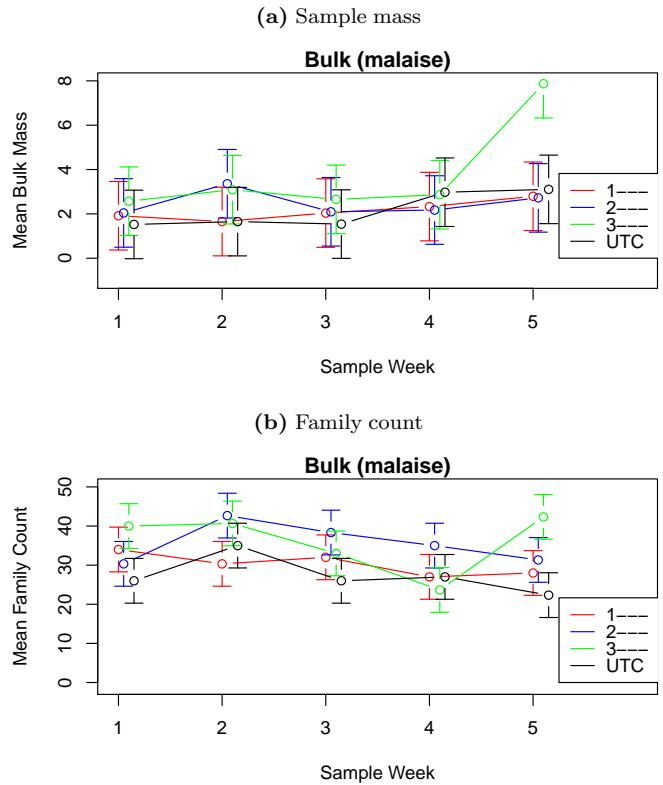


Figure 209: Interaction plot of (a) sample mass and (b) family count for malaise sample aggregate data, between treatment blocks and sampling dates.

```

1 malaise
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value Pr(>F)
6 block      3  28.09  9.364  5.335 0.00347 **
7 event       4  35.37  8.843  5.038 0.00220 **
8 block:event 12  40.88  3.407  1.941 0.05820 .
9 Residuals  40  70.22  1.755
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 210: Verbatim R output of the results of an ANOVA of sample mass in aggregate malaise samples.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.6959 0.8006
4   40

```

Figure 211: Verbatim R output of the results of Levene's test on sample mass in aggregate malaise samples.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.87197, p-value = 1.446e-05

```

Figure 212: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in aggregate malaise samples.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block      3  796.7 265.57 11.066 2.01e-05 ***
5 event       4  510.3 127.58  5.316 0.00157 **
6 block:event 12  878.2  73.18  3.049 0.00398 **
7 Residuals   40  960.0  24.00
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 213: Verbatim R output of the results of an ANOVA of family count in aggregate malaise samples.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2 Df F value Pr(>F)
3 group 19 0.4024 0.9821
4 40

```

Figure 214: Verbatim R output of the results of Levene's test on family count in aggregate malaise samples.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.99404, p-value = 0.9925

```

Figure 215: Verbatim R output of the results of Shapiro-Wilk's test on family count in aggregate malaise samples.

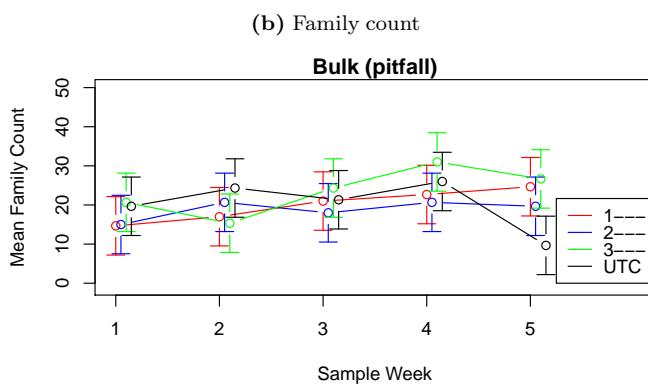
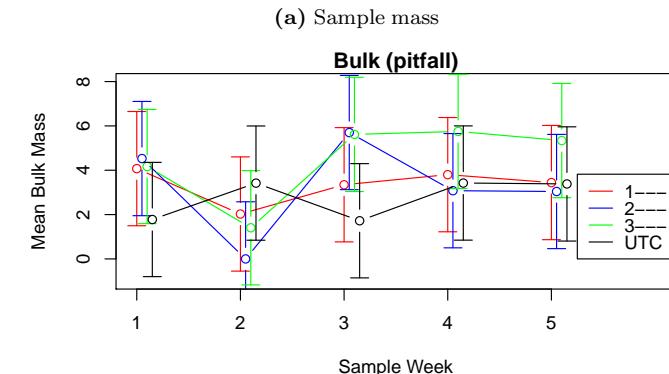


Figure 216: Interaction plot of (a) sample mass and (b) family count for pitfall sample aggregate data, between treatment blocks and sampling dates.

```

1 pitfall
2
3 sample mass
4
5 Df Sum Sq Mean Sq F value Pr(>F)
6 block      3  23.31  7.770  1.593 0.2061
7 event       4  46.94 11.734  2.406 0.0654 .
8 block:event 12  64.85  5.404  1.108 0.3806
9 Residuals   40 195.09  4.877
10 ---
11 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 217: Verbatim R output of the results of an ANOVA of sample mass in aggregate pitfall samples.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2 Df F value Pr(>F)
3 group 19 0.9251 0.5588
4 40

```

Figure 218: Verbatim R output of the results of Levene's test on sample mass in aggregate pitfall samples.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.95667, p-value = 0.03242

```

Figure 219: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in aggregate pitfall samples.

```

1 sample families
2
3 Df Sum Sq Mean Sq F value Pr(>F)
4 block      3  191.3  63.75  1.556 0.2152
5 event       4  381.7  95.43  2.329 0.0726 .
6 block:event 12  803.3  66.94  1.633 0.1210
7 Residuals   40 1639.3  40.98
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 220: Verbatim R output of the results of an ANOVA of family count in aggregate pitfall samples.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2 Df F value Pr(>F)
3 group 19 0.6779 0.8177
4 40

```

Figure 221: Verbatim R output of the results of Levene's test on family count in aggregate pitfall samples.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.96288, p-value = 0.06514

```

Figure 222: Verbatim R output of the results of Shapiro-Wilk's test on family count in aggregate pitfall samples.

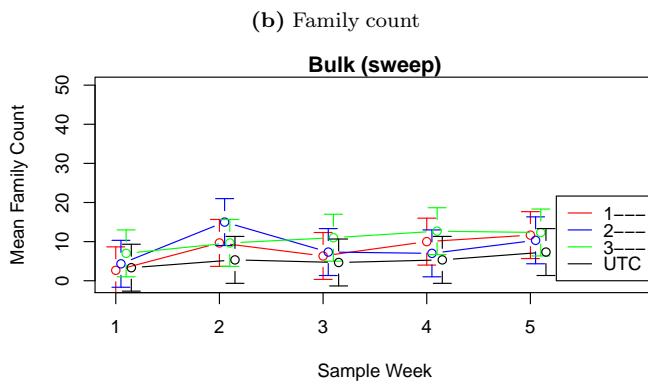
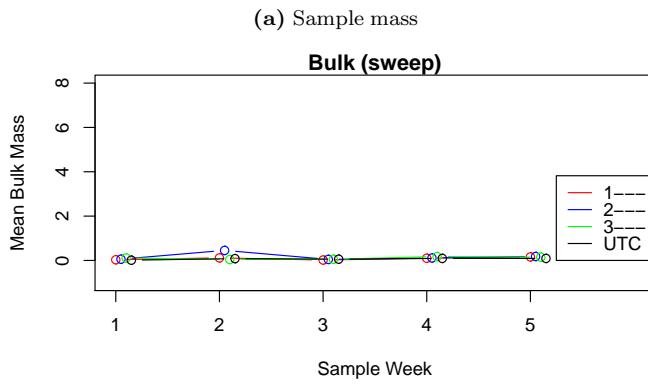


Figure 223: Interaction plot of (a) sample mass and (b) family count for sweep sample aggregate data, between treatment blocks and sampling dates.

```

1 sweep
2
3 sample mass
4
5   Df Sum Sq Mean Sq F value Pr(>F)
6 block      3 0.0905 0.03017  1.107  0.357
7 event       4 0.1541 0.03854  1.415  0.247
8 block:event 12 0.2760 0.02300  0.844  0.607
9 Residuals   40 1.0897 0.02724

```

Figure 224: Verbatim R output of the results of an ANOVA of sample mass in aggregate sweep samples.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.929 0.5547
4   40

```

Figure 225: Verbatim R output of the results of Levene's test on sample mass in aggregate sweep samples.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.60392, p-value = 1.844e-11

```

Figure 226: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in aggregate sweep samples.

```

1 sample families
2
3   Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 222.2  74.06  2.805 0.0519 .
5 event       4 286.2  71.56  2.711 0.0435 *
6 block:event 12 155.2  12.94  0.490 0.9085
7 Residuals   40 1056.0  26.40
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 227: Verbatim R output of the results of an ANOVA of family count in aggregate sweep samples.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.7016 0.7951
4   40

```

Figure 228: Verbatim R output of the results of Levene's test on family count in aggregate sweep samples.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.97287, p-value = 0.2011

```

Figure 229: Verbatim R output of the results of Shapiro-Wilk's test on family count in aggregate sweep samples.

	Df	Pillai approx	F	num Df	den Df
1					
2 bulk.data\$block	3	0.22798	5.146	6	240
3 bulk.data\$event	4	0.19430	3.228	8	240
4 bulk.data\$method	2	1.22260	94.360	4	240
5 bulk.data\$block:bulk.data\$event				12	240
6 bulk.data\$block:bulk.data\$method				6	240
7 bulk.data\$event:bulk.data\$method				8	240
8 bulk.data\$block:bulk.data\$event:bulk.data\$method	24	0.43016	1.370	48	240
9 Residuals					120
10					Pr(>F)
11 bulk.					5.372e-05 ***
12 bulk.data\$block					0.001661 **
13 bulk.					< 2.2e-16 ***
14 bulk.data\$block:bulk.data\$event					0.035739 *
15 bulk.data\$block:bulk.data\$method					0.047332 *
16 bulk.					2.822e-05 ***
17 bulk.data\$block:bulk.data\$event:bulk.data\$method					0.066343 .
18 Residuals					
19 ---					
20 Signif					
. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					
21					Df Pillai approx
					F num Df den
					Df Pr(>F)
22 super.bulk.data\$block	3	0.40424	3.3777	6	80 0.00509 **
23 super.bulk.data\$event	4	0.39488	2.4601	8	80 0.01952 *
24 super.bulk.data\$block:super.					bulk.data\$event 12 0.54293 1.2421 24 80 0.23373
25 Residuals					40
26 ---					
27 Signif					
. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1					

Figure 230: Verbatim R output of the results of MANOVA with Pillai test on mass and family count in aggregate samples.

```

1 bulk sample mass
2
3   Df Sum Sq Mean Sq F value Pr(>F)
4 block      3 100.7  33.56  3.466 0.0249 *
5 event       4  90.3  22.59  2.332 0.0722 .
6 block:event 12 107.4   8.95  0.925 0.5324
7 Residuals   40 387.3   9.68
8 ---
9 Signif
  . codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 231: Verbatim R output of the results of an ANOVA of sample mass in aggregate samples.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.9594 0.5228
4   40

```

Figure 232: Verbatim R output of the results of Levene's test on sample mass in aggregate samples.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(mass.model)
4 W = 0.92909, p-value = 0.001817

```

Figure 233: Verbatim R output of the results of Shapiro-Wilk's test on sample mass in aggregate samples.

```

1 sample families
2
3          Df Sum Sq Mean Sq F value    Pr(>F)
4 block      3   2450   816.5    7.120 0.000608 ***
5 event       4    888   222.1    1.937 0.123078
6 block:event 12   2220   185.0    1.613 0.126981
7 Residuals  40   4587   114.7
8 ---
9 Signif
. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Figure 234: Verbatim R output of the results of an ANOVA of family count in aggregate samples.

```

1 Levene's Test for Homogeneity of Variance (center = median)
2   Df F value Pr(>F)
3 group 19  0.6943 0.8021
4

```

Figure 235: Verbatim R output of the results of Levene's test on family count in aggregate samples.

```

1 Shapiro-Wilk normality test
2
3 data: residuals(family.model)
4 W = 0.96107, p-value = 0.05309

```

Figure 236: Verbatim R output of the results of Shapiro-Wilk's test on family count in aggregate samples.

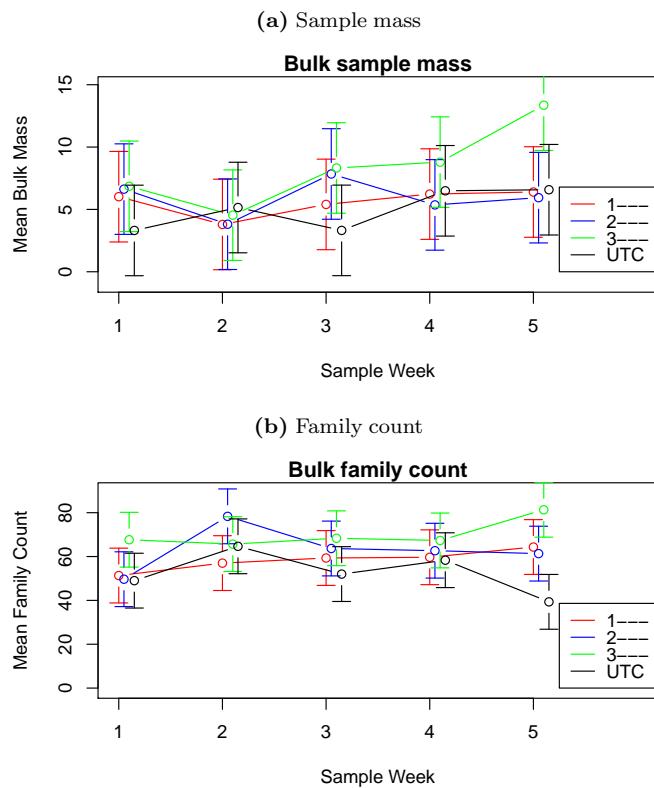


Figure 237: Interaction plot of (a) sample mass and (b) family count for sample aggregate data, between treatment blocks and sampling dates.

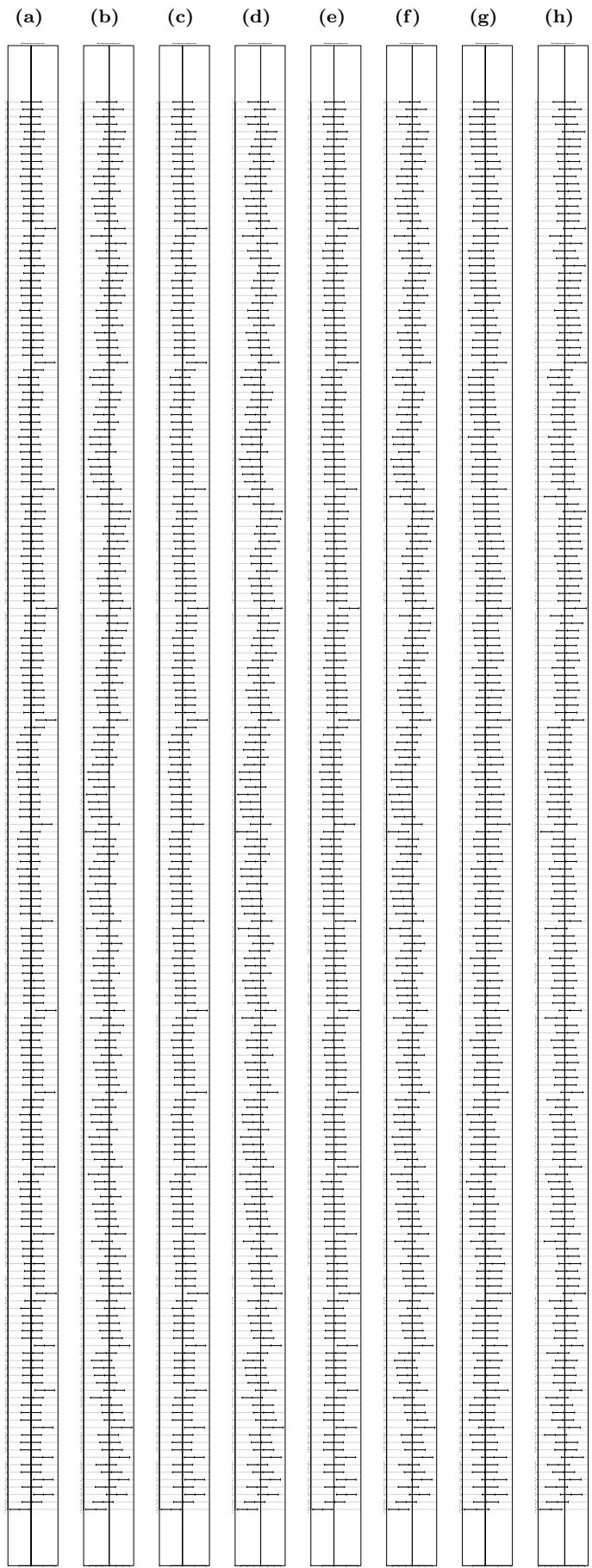


Figure 238: Post-hoc Tukey-Kramer comparisons of mass and family count between sweep blocks and dates for: (a) and (b) – malaise, (c) and (d) – pitfall, (e) and (f) – sweep, and (g) and (h) – combined methods, respectively.

A R SCRIPT

```

# Andrew Jansen
# created iv.15.2018

# Miscellaneous Functions -----
#Import the data
GetData = function(file.name) {
  test.data = data.frame(read.csv(file.name, sep = ';'))
  return(test.data)
}

#For ANOVA
SqDev = function(x) {var(x) * (length(x) - 1)}

# Analysis 1 -----
# correspondence b/w sample weight and diversity, by sample method and order
Analysis1 = function(raw.data) {
  #Create folder for plots
  dir.create("plots/mass-vs-count/scatter")
  dir.create("plots/mass-vs-count/residual")
  dir.create("plots/mass-vs-count/ggplot")

  name = "mass-vs-count.txt"
  capture.output(cat("Linear Regression by sample method and order\n\n"),
    file = name)

  #Orders that don't break the script... droplevels not removing unused orders.
  orders = c("Coleoptera",
            "Diptera",
            "Hemiptera",
            "Hymenoptera",
            "Lepidoptera",
            "Orthoptera")
  for (method.type in levels(raw.data$method)) {
    for (name.order in orders) {
      # Regression via linear model
      temp.mass = raw.data[with(raw.data, year == 2015
                                 & method == method.type
                                 & order == name.order
                                 & mass > 0
                                 & family_count > 0), ]$mass
      temp.family = raw.data[with(raw.data, year == 2015
                                   & method == method.type
                                   & order == name.order
                                   & mass > 0
                                   & family_count > 0), ]$family_count
      temp.frame = data.frame(temp.family, temp.mass)
      lin.mod = lm(temp.frame)

      # Write linear model output to console and file
      cat(method.type, name.order)
      data.summary = summary(lin.mod)
      print(data.summary)

      capture.output(cat(method.type, name.order), file = name, append = TRUE)
      capture.output(data.summary, file = name, append = TRUE)

      # Make scatter plots for each order
      plot(family_count ~ mass,
            data = raw.data[with(raw.data, year == 2015
                                 & method == method.type
                                 & order == name.order
                                 & mass > 0
                                 & family_count > 0), ],
            xlab = "sample mass (g)",
            ylab = "number of families",
            main = paste(name.order, " (", method.type, ")", sep = ""))
      abline(lin.mod, col = "blue")
      dev.copy(pdf,
              paste("plots/mass-vs-count/scatter/2015",
                    method.type,
                    name.order,
                    "mass-vs-count.pdf",
                    sep = "_"),
              width = 3,
              height = 3
            )
      dev.off()

      # Plot the residuals vs. the fitted values
      plot(residuals(lin.mod) ~ fitted(lin.mod),
            data = temp.frame,
            xlab = "fitted family count",
            ylab = "residual family count",
            main = NULL
          )
      dev.copy(pdf,
              paste("plots/mass-vs-count/residual/2015",
                    method.type,
                    name.order,
                    "residual.pdf",
                    sep = "_"),
              width = 3,
              height = 3
            )
    }
  }
}

```

```

95 }
96 dev.off()
97
98 # Make a normal probability plot of the residuals
99 qqnorm(lin.mod$residuals,
100     ylab = "Residual Quantiles",
101     main = NULL
102 )
103 qqline(lin.mod$residuals,
104     probs = c(0.25, 0.75),
105     col = 'blue'
106 )
107
108 dev.copy(pdf,
109     paste("plots/mass-vs-count/qqplot/2015",
110         method.type,
111         name.order,
112         "qqplot.pdf",
113         sep = "_"),
114         width = 3,
115         height = 3
116 )
117 dev.off()
118 }
119 }
120 }
121
122 # Analysis 2 -----
123 # linear mixed model: sample weight and diversity per order and sample method
124 Analysis2 = function(raw.data) {
125 dir.create("plots/glmm")
126 name = "general_linear_mixed_model.txt"
127 capture.output(cat("General Linear Mixed Model, negative binomial\n\n"),
128     file = name)
129
130 # Mixed linear model with mass as fixed effect and order and method as random
131 mixed.lmer.poisson = glmer(family_count ~ mass + (1 | order) + (1 | method),
132     data = raw.data[with(raw.data, mass > 0
133         & family_count > 0), ],
134     family = poisson)
135
136 print(summary(mixed.lmer.poisson))
137
138 mixed.lmer.nb = glmer.nb(family_count ~ mass + (1 | order) + (1 | method),
139     data = raw.data[with(raw.data, mass > 0
140         & family_count > 0), ],
141     family = negative.binomial)
142
143 print(summary(mixed.lmer.nb))
144
145 print(lrtest(mixed.lmer.poisson, mixed.lmer.nb))
146
147 mixed.lmer.nomass = glmer.nb(family_count ~ (1 | order) + (1 | method),
148     data = raw.data[with(raw.data, mass > 0
149         & family_count > 0), ],
150     family = negative.binomial)
151
152 mixed.lmer.noorder = glmer.nb(family_count ~ mass + (1 | method),
153     data = raw.data[with(raw.data, mass > 0
154         & family_count > 0), ],
155     family = negative.binomial)
156
157 mixed.lmer.nomethod = glmer.nb(family_count ~ mass + (1 | order),
158     data = raw.data[with(raw.data, mass > 0
159         & family_count > 0), ],
160     family = negative.binomial)
161
162 print(lrtest(mixed.lmer.nb,
163     mixed.lmer.nomass,
164     mixed.lmer.noorder,
165     mixed.lmer.nomethod))
166
167 capture.output(summary(mixed.lmer.poisson), file = name, append = TRUE)
168 capture.output(summary(mixed.lmer.nb), file = name, append = TRUE)
169 capture.output(lrtest(mixed.lmer.poisson, mixed.lmer.nb),
170     file = name, append = TRUE)
171 capture.output(lrtest(mixed.lmer.nb,
172     mixed.lmer.nomass,
173     mixed.lmer.noorder,
174     mixed.lmer.nomethod),
175     file = name, append = TRUE)
176
177 plot(fitted(mixed.lmer.nb),
178     residuals(mixed.lmer.nb),
179     xlab = "fitted family count",
180     ylab = "residual family count"
181 )
182 dev.copy(pdf,
183     paste("plots/glmm/2015_glmm_residual.pdf",
184         sep = "_"),
185         width = 3,
186         height = 3
187 )
188 dev.off()
189

```

```

190 qqnorm(residuals(mixed.lmer.nb),
191     ylab = "Residual Quantiles",
192     main = NULL
193 )
194 qqline(residuals(mixed.lmer.nb),
195     probs = c(0.25, 0.75),
196     col = 'blue'
197 )
198 dev.copy(pdf,
199     paste("plots/glmm/2015_glmm_qqplot.pdf",
200         sep = "_"),
201     width = 3,
202     height = 3
203 )
204 dev.off()
205 }
206
207 # Analysis 3 -----
208 #   comparisons between blocks for diversity and weight of individual orders
209 Analysis3 = function(raw.data) {
210     dir.create("plots/blocks")
211     dir.create("plots/blocks/tukeyHSD")
212     dir.create("plots/blocks/tukeyHSD/mass")
213     dir.create("plots/blocks/tukeyHSD/family")
214     dir.create("plots/blocks/interaction")
215     dir.create("plots/blocks/interaction/mass")
216     dir.create("plots/blocks/interaction/family")
217
218     name = "blocks.txt"
219     capture.output(cat("Analyses of Variance (order, method) \n\n"), file = name)
220
221     #Orders that don't break the script... droplevels not removing unused orders.
222     orders = c("Coleoptera",
223               "Diptera",
224               "Hemiptera",
225               "Hymenoptera",
226               "Lepidoptera",
227               "Orthoptera",
228               "Neuroptera")
229
230     raw.data.2015 = raw.data[raw.data$year == 2015, ]
231
232     for (method.type in levels(raw.data.2015$method)) {
233         for (name.order in orders) {
234             capture.output(cat(name.order, method.type, "\n\n"),
235                           file = name, append = TRUE)
236             temp.data = raw.data.2015[with(raw.data.2015,
237                 method == method.type
238                 & order == name.order), ]
239             temp.data$event = factor(temp.data$event)
240             mass.model = lm(mass ~ block * event, temp.data)
241             family.model = lm(family_count ~ block * event, temp.data)
242             mass.aov = aov(mass.model)
243             family.aov = aov(family.model)
244
245             capture.output(cat("sample mass", "\n\n"), file = name, append = TRUE)
246             capture.output(summary(mass.aov), file = name, append = TRUE)
247             capture.output(leveneTest(mass.model), file = name, append = TRUE)
248             capture.output(shapiro.test(residuals(mass.model)),
249                           file = name, append = TRUE)
250             capture.output(TukeyHSD(mass.aov), file = name, append = TRUE)
251
252             par(mar = c(4, 4, 2, 0.6) + 0.1)
253             plot(TukeyHSD(mass.aov))
254             dev.copy(pdf,
255                     paste("plots/blocks/tukeyHSD/mass/mass",
256                           method.type,
257                           name.order,
258                           "anova.pdf",
259                           sep = "-"),
260                     width = 7.5,
261                     height = 200
262             )
263             dev.off()
264             par(mar = c(4, 4, 1.1, 0.6) + 0.1)
265
266             mass.anova = anova(mass.model)
267             MS.res = mass.anova$Mean[4]
268             nu = mass.anova$DF[4]
269             means = tapply(temp.data$mass,
270                           list(temp.data$block, temp.data$event),
271                           mean)
272             alpha = 0.05
273             n = tapply(temp.data$mass,
274                           list(temp.data$block, temp.data$event),
275                           length)
276             se = sqrt(MS.res / n)
277             t.critical = qt(1 - alpha / 2, nu)
278             inter = t.critical * se
279
280             plotCI(x = 1:5,
281                     y = means[,],
282                     uiw = inter[,],
283                     type = "b",
284                     xaxt = "n",

```

```

285     col = "red",
286     xlab = "Sample Week",
287     ylab = "Mean Order Mass",
288     ylim = c(-1, 8),
289     xlim = c(1, 6),
290     main = paste(name.order, " (", method.type, ") ", sep = ""))
291 )
292 plotCI(x = 1:5 + 0.05,
293         y = means[2,],
294         uiw = inter[2,],
295         type = "b",
296         xaxt = "n",
297         col = "blue",
298         add = TRUE
299 )
300 plotCI(x = 1:5 + 0.1,
301         y = means[3,],
302         uiw = inter[3,],
303         type = "b",
304         xaxt = "n",
305         col = "green",
306         add = TRUE
307 )
308 plotCI(x = 1:5 + 0.15,
309         y = means[4,],
310         uiw = inter[4,],
311         type = "b",
312         xaxt = "n",
313         col = "black",
314         add = TRUE
315 )
316 axis(1, at = 1:5, labels = c(1, 2, 3, 4, 5))
317 legend(x = 5.25,
318         y = 0,
319         yjust = 0,
320         lty = 1,
321         col = c("red", "blue", "green", "black"),
322         legend = c("1---", "2---", "3---", "UTC"),
323         bty = "o"
324 )
325 dev.copy(pdf,
326             paste("plots/blocks/interaction/mass/mass",
327                   method.type,
328                   name.order,
329                   "interplot.pdf",
330                   sep = "_"),
331             width = 6,
332             height = 3
333 )
334 dev.off()
335
336 capture.output(cat("sample families", "\n\n"), file = name, append = TRUE)
337 capture.output(summary(family.aov), file = name, append = TRUE)
338 capture.output(leveneTest(family.model), file = name, append = TRUE)
339 capture.output(shapiro.test(residuals(family.model)),
340                 file = name, append = TRUE)
341 capture.output(TukeyHSD(family.aov), file = name, append = TRUE)
342
343 par(mar = c(4, 4, 2, 0.6) + 0.1)
344 plot(TukeyHSD(family.aov))
345 dev.copy(pdf,
346             paste("plots/blocks/tukeyHSD/family/family",
347                   method.type,
348                   name.order,
349                   "anova.pdf",
350                   sep = "_"),
351             width = 7.5,
352             height = 200
353 )
354 dev.off()
355 par(mar = c(4, 4, 1.1, 0.6) + 0.1)
356
357 family.anova = anova(family.model)
358 MS.res = family.anova$Mean[4]
359 nu = family.anova$df[4]
360 means = tapply(temp.data$family_count,
361                 list(temp.data$block, temp.data$event),
362                 mean)
363 alpha = 0.05
364 n = tapply(temp.data$family_count,
365             list(temp.data$block, temp.data$event),
366             length)
367 se = sqrt(MS.res / n)
368 t.critical = qt(1 - alpha / 2, nu)
369 inter = t.critical * se
370
371 plotCI(x = 1:5,
372         y = means[1,],
373         uiw = inter[1,],
374         type = "b",
375         xaxt = "n",
376         col = "red",
377         xlab = "Sample Week",
378         ylab = "Mean Family Count",
379         ylim = c(-1, 25),

```

```

380         xlim = c(1, 6),
381         main = paste(name.order, " (", method.type, ") ", sep = ""))
382     )
383     plotCI(x = 1:5 + 0.05,
384             y = means[2,],
385             uiw = inter[2,],
386             type = "b",
387             xaxt = "n",
388             col = "blue",
389             add = TRUE
390   )
391   plotCI(x = 1:5 + 0.1,
392           y = means[3,],
393           uiw = inter[3,],
394           type = "b",
395           xaxt = "n",
396           col = "green",
397           add = TRUE
398   )
399   plotCI(x = 1:5 + 0.15,
400           y = means[4,],
401           uiw = inter[4,],
402           type = "b",
403           xaxt = "n",
404           col = "black",
405           add = TRUE
406   )
407   axis(1, at = 1:5, labels = c(1, 2, 3, 4, 5))
408   legend(x = 5.25,
409           y = 0,
410           yjust = 0,
411           ity = 1,
412           col = c("red", "blue", "green", "black"),
413           legend = c("1---", "2---", "3---", "UTC      "),
414           bty = "o"
415   )
416   dev.copy(pdf,
417             paste("plots/blocks/interaction/family/family",
418                   method.type,
419                   name.order,
420                   "interplot.pdf",
421                   sep = "_"),
422             width = 6,
423             height = 3
424   )
425   dev.off()
426 }
427 }
428 }
429
# Analysis 4 -----
430 # comparisons between blocks for bulk diversity and sample weight
431 # all comparisons (here and below) by sample method and in bulk
432 Analysis4 = function(raw.data) {
433   dir.create("plots/bulk")
434
435   name = "bulk.txt"
436   capture.output(cat("Analyses of Variance (bulk) \n\n"), file = name)
437
438   raw.data.2015 = raw.data[raw.data$year == 2015, ]
439   raw.data.2015$event = factor(raw.data.2015$event)
440
441   bulk.data = aggregate(formula = (cbind(mass, family_count)
442                                     ~ site + event + block + method),
443                         data = raw.data.2015,
444                         FUN = sum
445   )
446
447   bulk.lm = lm(family_count ~ mass,
448                 data = bulk.data[with(bulk.data, mass > 0
449                               & family_count > 0), ])
450   capture.output(summary(bulk.lm), file = name, append = TRUE)
451
452   plot(family_count ~ mass,
453         data = bulk.data[with(bulk.data, mass > 0 & family_count > 0), ],
454         xlab = "sample mass (g)",
455         ylab = "number of families",
456         main = "Bulk (by site and event)"
457   )
458   abline(bulk.lm, col = "blue")
459   dev.copy(pdf, "plots/bulk/2015_bulk_scatter.pdf", width = 3, height = 3)
460   dev.off()
461
462   # bulk by method
463   for (method.type in levels(raw.data$method)) {
464     # Regression via linear model
465     lin.mod = lm(family_count ~ mass,
466                   data = bulk.data[with(bulk.data, mass > 0
467                               & family_count > 0
468                               & method == method.type), ])
469
470     plot(family_count ~ mass,
471           data = bulk.data[with(bulk.data, mass > 0
472                               & family_count > 0
473                               & method == method.type), ],

```

```

475     xlab = "sample mass (g)",
476     ylab = "number of families",
477     main = paste("Bulk (", method.type, ")", sep = "") )
478   )
479
480 capture.output(cat(method.type, "bulk"), file = name, append = TRUE)
481 capture.output(summary(lin.mod), file = name, append = TRUE)
482
483 #scatterplot for each method
484 abline(lin.mod, col = "blue")
485 dev.copy(pdf,
486   paste("plots/bulk/2015_bulk",
487     method.type,
488     "scatter.pdf",
489     sep = "_"),
490     width = 3,
491     height = 3
492   )
493 dev.off()
494
495 # Plot the residuals vs. the fitted values
496 plot(residuals(lin.mod) ~ fitted(lin.mod),
497   data = bulk.data,
498   xlab = "fitted family count",
499   ylab = "residual family count",
500   main = NULL
501 )
502 dev.copy(pdf,
503   paste("plots/bulk/2015_bulk",
504     method.type,
505     "residual.pdf",
506     sep = "_"),
507     width = 3,
508     height = 3
509   )
510 dev.off()
511
512 # Make a normal probability plot of the residuals
513 qqnorm(lin.mod$residuals,
514   ylab = "Residual Quantiles",
515   main = NULL
516 )
517 qqline(lin.mod$residuals,
518   probs = c(0.25, 0.75),
519   col = 'blue'
520 )
521
522 dev.copy(pdf,
523   paste("plots/bulk/2015_bulk",
524     method.type,
525     "qqplot.pdf",
526     sep = "_"),
527     width = 3,
528     height = 3
529   )
530 dev.off()
531 }
532
533 mixed.lmer.poisson = glmer(family_count ~ mass + (1 | method),
534   data = bulk.data[with(bulk.data, mass > 0
535     & family_count > 0), ],
536   family = poisson)
537
538 mixed.lmer.nb = glmer.nb(family_count ~ mass + (1 | method),
539   data = bulk.data[with(bulk.data, mass > 0
540     & family_count > 0), ],
541   family = negative.binomial)
542
543 print(summary(bulk.lm))
544 print(summary(mixed.lmer.poisson))
545 print(summary(mixed.lmer.nb))
546 print(lrtest(mixed.lmer.poisson, mixed.lmer.nb))
547
548 capture.output(summary(bulk.lm), file = name, append = TRUE)
549 capture.output(summary(mixed.lmer.poisson), file = name, append = TRUE)
550 capture.output(summary(mixed.lmer.nb), file = name, append = TRUE)
551 capture.output(lrtest(mixed.lmer.poisson, mixed.lmer.nb),
552   file = name, append = TRUE)
553
554 plot(fitted(mixed.lmer.nb),
555   residuals(mixed.lmer.nb),
556   xlab = "fitted family count",
557   ylab = "residual family count"
558 )
559 dev.copy(pdf,
560   paste("plots/bulk/2015_bulk_residual.pdf",
561     sep = "_"),
562     width = 3,
563     height = 3
564   )
565 dev.off()
566
567 qqnorm(residuals(mixed.lmer.nb),
568   ylab = "Residual Quantiles",
569   main = NULL

```

```

570 )
571 qqline(residuals(mixed.lmer.nb),
572     probs = c(0.25, 0.75),
573     col = 'blue'
574 )
575 dev.copy(pdf,
576     paste("plots/bulk/2015_bulk_qqplot.pdf",
577         sep = " - "),
578     width = 3,
579     height = 3
580 )
581 dev.off()
582
583 capture.output(summary(mixed.lmer.poisson), file = name, append = TRUE)
584 capture.output(summary(mixed.lmer.nb), file = name, append = TRUE)
585 capture.output(lrtest(mixed.lmer.poisson, mixed.lmer.nb),
586     file = name, append = TRUE)
587
588 for (method.type in levels(raw.data$method)) {
589 capture.output(cat(method.type, "\n\n"),
590     file = name, append = TRUE)
591 temp.data = bulk.data[with(bulk.data, method == method.type), ]
592 mass.model = lm(mass ~ block * event, temp.data)
593 family.model = lm(family_count ~ block * event, temp.data)
594 mass.aov = aov(mass.model)
595 family.aov = aov(family.model)
596
597 capture.output(cat("sample mass", "\n\n"), file = name, append = TRUE)
598 capture.output(summary(mass.aov), file = name, append = TRUE)
599 capture.output(leveneTest(mass.model), file = name, append = TRUE)
600 capture.output(shapiro.test(residuals(mass.model)),
601     file = name, append = TRUE)
602 capture.output(TukeyHSD(mass.aov), file = name, append = TRUE)
603
604 par(mar = c(4, 4, 2, 0.6) + 0.1)
605 plot(TukeyHSD(mass.aov))
606 dev.copy(pdf,
607     paste("plots/bulk/2015_mass",
608         method.type,
609         "anova.pdf",
610         sep = " - "),
611     width = 7.5,
612     height = 200
613 )
614 dev.off()
615 par(mar = c(4, 4, 1.1, 0.6) + 0.1)
616
617 mass.anova = anova(mass.model)
618 MS.res = mass.anova$Mean[4]
619 nu = mass.anova$Df[4]
620 means = tapply(temp.data$mass,
621     list(temp.data$block, temp.data$event),
622     mean)
623 alpha = 0.05
624 n = tapply(temp.data$mass,
625     list(temp.data$block, temp.data$event),
626     length)
627 se = sqrt(MS.res / n)
628 t.critical = qt(1 - alpha / 2, nu)
629 inter = t.critical * se
630
631 plotCI(x = 1:5,
632     y = means[1,],
633     uiw = inter[1,],
634     type = "b",
635     xaxt = "n",
636     col = "red",
637     xlab = "Sample Week",
638     ylab = "Mean Bulk Mass",
639     ylim = c(-1, 8),
640     xlim = c(1, 6),
641     main = paste("Bulk (", method.type, ") ", sep = ""))
642 )
643 plotCI(x = 1:5 + 0.05,
644     y = means[2,],
645     uiw = inter[2,],
646     type = "b",
647     xaxt = "n",
648     col = "blue",
649     add = TRUE
650 )
651 plotCI(x = 1:5 + 0.1,
652     y = means[3,],
653     uiw = inter[3,],
654     type = "b",
655     xaxt = "n",
656     col = "green",
657     add = TRUE
658 )
659 plotCI(x = 1:5 + 0.15,
660     y = means[4,],
661     uiw = inter[4,],
662     type = "b",
663     xaxt = "n",
664     col = "black",

```

```

665         add = TRUE
666     )
667     axis(1, at = 1:5, labels = c(1, 2, 3, 4, 5))
668     legend(x = 5.25,
669             y = 0,
670             yjust = 0,
671             lty = 1,
672             col = c("red", "blue", "green", "black"),
673             legend = c("1---", "2---", "3---", "UTC      "),
674             bty = "o"
675     )
676     dev.copy(pdf,
677               paste("plots/bulk/2015_mass",
678                     method.type,
679                     "interplot.pdf",
680                     sep = "_"),
681               width = 6,
682               height = 3
683   )
684   dev.off()
685
686 capture.output(cat("sample families", "\n\n"), file = name, append = TRUE)
687 capture.output(summary(family.aov), file = name, append = TRUE)
688 capture.output(leveneTest(family.model), file = name, append = TRUE)
689 capture.output(shapiro.test(residuals(family.model)),
690                 file = name, append = TRUE)
691 capture.output(TukeyHSD(family.aov), file = name, append = TRUE)
692
693 par(mar = c(4, 4, 2, 0.6) + 0.1)
694 plot(TukeyHSD(family.aov))
695 dev.copy(pdf,
696           paste("plots/bulk/2015_family",
697                 method.type,
698                 "anova.pdf",
699                 sep = "_"),
700           width = 7.5,
701           height = 200
702   )
703 dev.off()
704 par(mar = c(4, 4, 1.1, 0.6) + 0.1)
705
706 family.anova = anova(family.model)
707 MS.res = family.anova$Mean[4]
708 nu = family.anova$Df[4]
709 means = tapply(temp.data$family_count,
710                 list(temp.data$block, temp.data$event),
711                 mean)
712 alpha = 0.05
713 n = tapply(temp.data$family_count,
714             list(temp.data$block, temp.data$event),
715             length)
716 se = sqrt(MS.res / n)
717 t.critical = qt(1 - alpha / 2, nu)
718 inter = t.critical * se
719
720 plotCI(x = 1:5,
721           y = means[1,],
722           uiw = inter[1,],
723           type = "b",
724           xaxt = "n",
725           col = "red",
726           xlab = "Sample Week",
727           ylab = "Mean Family Count",
728           ylim = c(-1, 50),
729           xlim = c(1, 6),
730           main = paste("Bulk (", method.type, ")"))
731
732 plotCI(x = 1:5 + 0.05,
733           y = means[2,],
734           uiw = inter[2,],
735           type = "b",
736           xaxt = "n",
737           col = "blue",
738           add = TRUE
739   )
740 plotCI(x = 1:5 + 0.1,
741           y = means[3,],
742           uiw = inter[3,],
743           type = "b",
744           xaxt = "n",
745           col = "green",
746           add = TRUE
747   )
748 plotCI(x = 1:5 + 0.15,
749           y = means[4,],
750           uiw = inter[4,],
751           type = "b",
752           xaxt = "n",
753           col = "black",
754           add = TRUE
755   )
756 axis(1, at = 1:5, labels = c(1, 2, 3, 4, 5))
757 legend(x = 5.25,
758         y = 0,
759         yjust = 0,

```

```

760
761     lty = 1,
762     col = c("red", "blue", "green", "black"),
763     legend = c("1---", "2---", "3---", "UTC      "),
764     bty = "o"
765   )
766   dev.copy(pdf,
767             paste("plots/bulk/2015_family",
768                   method.type,
769                   "interplot.pdf",
770                   sep = "_"),
771             width = 6,
772             height = 3
773   )
774   dev.off()
775 }
776 Y <- cbind(bulk.data$mass, bulk.data$family_count)
777 fit <- manova(Y ~ bulk.data$block * bulk.data$event * bulk.data$method)
778 print(summary(fit, test = "Pillai"))
779 capture.output(summary(fit, test = "Pillai"), file = name, append = TRUE)
780 print(summary.aov(fit, test = "Pillai"))
781
782 # Mix methods and orders together for complete picture of plot
783 super.bulk.data = aggregate(formula = (cbind(mass, family_count)
784                             ~ site + event + block),
785                             data = raw.data.2015,
786                             FUN = sum
787 )
788 Y <- cbind(super.bulk.data$mass, super.bulk.data$family_count)
789 fit <- manova(Y ~ super.bulk.data$block * super.bulk.data$event)
790 print(summary(fit, test = "Pillai"))
791 capture.output(summary(fit, test = "Pillai"), file = name, append = TRUE)
792 print(summary.aov(fit, test = "Pillai"))
793
794 temp.data = super.bulk.data
795 mass.model = lm(mass ~ block * event, temp.data)
796 family.model = lm(family_count ~ block * event, temp.data)
797 mass.aov = aov(mass.model)
798 family.aov = aov(family.model)
799
800 capture.output(cat("bulk sample mass", "\n\n"), file = name, append = TRUE)
801 capture.output(summary(mass.aov), file = name, append = TRUE)
802 capture.output(leveneTest(mass.model), file = name, append = TRUE)
803 capture.output(shapiro.test(residuals(mass.model)),
804                 file = name, append = TRUE)
805 capture.output(TukeyHSD(mass.aov), file = name, append = TRUE)
806
807 par(mar = c(4, 4, 2, 0.6) + 0.1)
808 plot(TukeyHSD(mass.aov))
809 dev.copy(pdf, "plots/bulk/2015_bulk_mass_anova.pdf", width = 7.5, height = 200)
810 dev.off()
811 par(mar = c(4, 4, 1.1, 0.6) + 0.1)
812
813 mass.anova = anova(mass.model)
814 MS.res = mass.anova$Mean[4]
815 nu = mass.anova$Df[4]
816 means = tapply(temp.data$mass,
817                 list(temp.data$block, temp.data$event),
818                 mean)
819 alpha = 0.05
820 n = tapply(temp.data$mass,
821             list(temp.data$block, temp.data$event),
822             length)
823 se = sqrt(MS.res / n)
824 t.critical = qt(1 - alpha / 2, nu)
825 inter = t.critical * se
826
827 plotCI(x = 1:5,
828         y = means[1,],
829         uiw = inter[1,],
830         type = "b",
831         xaxt = "n",
832         col = "red",
833         xlab = "Sample Week",
834         ylab = "Mean Bulk Mass",
835         ylim = c(-1, 15),
836         xlim = c(1, 6),
837         main = "Bulk sample mass")
838
839 plotCI(x = 1:5 + 0.05,
840         y = means[2,],
841         uiw = inter[2,],
842         type = "b",
843         xaxt = "n",
844         col = "blue",
845         add = TRUE)
846
847 plotCI(x = 1:5 + 0.1,
848         y = means[3,],
849         uiw = inter[3,],
850         type = "b",
851         xaxt = "n",
852         col = "green",
853         add = TRUE)
854

```

```

855     y = means[4,],
856     uiw = inter[4,],
857     type = "b",
858     xaxt = "n",
859     col = "black",
860     add = TRUE
861 )
862 axis(1, at = 1:5, labels = c(1, 2, 3, 4, 5))
863 legend(x = 5.25,
864         y = 0,
865         yjust = 0,
866         lty = 1,
867         col = c("red", "blue", "green", "black"),
868         legend = c("1---", "2---", "3---", "UTC"),
869         bty = "o"
870 )
871 dev.copy(pdf,
872           "plots/bulk/2015_bulk_mass_interplot.pdf",
873           width = 6,
874           height = 3
875 )
876 dev.off()
877
878 capture.output(cat("sample families", "\n\n"), file = name, append = TRUE)
879 capture.output(summary(family.aov), file = name, append = TRUE)
880 capture.output(leveneTest(family.model), file = name, append = TRUE)
881 capture.output(shapiro.test(residuals(family.model)),
882                 file = name, append = TRUE)
883 capture.output(TukeyHSD(family.aov), file = name, append = TRUE)
884
885 par(mar = c(4, 4, 2, 0.6) + 0.1)
886 plot(TukeyHSD(family.aov))
887 dev.copy(pdf,
888           "plots/bulk/2015_bulk_family_anova.pdf",
889           width = 7.5,
890           height = 200
891 )
892 dev.off()
893 par(mar = c(4, 4, 1.1, 0.6) + 0.1)
894
895 family.anova = anova(family.model)
896 MS.res = family.anova$Mean[4]
897 nu = family.anova$Df[4]
898 means = tapply(temp.data$family_count,
899                 list(temp.data$block, temp.data$event),
900                 mean)
901 alpha = 0.05
902 n = tapply(temp.data$family_count,
903             list(temp.data$block, temp.data$event),
904             length)
905 se = sqrt(MS.res / n)
906 t.critical = qt(1 - alpha / 2, nu)
907 inter = t.critical * se
908
909 plotCI(x = 1:5,
910         y = means[1,],
911         uiw = inter[1,],
912         type = "b",
913         xaxt = "n",
914         col = "red",
915         xlab = "Sample Week",
916         ylab = "Mean Family Count",
917         ylim = c(-1, 90),
918         xlim = c(1, 6),
919         main = "Bulk family count"
920 )
921 plotCI(x = 1:5 + 0.05,
922         y = means[2,],
923         uiw = inter[2,],
924         type = "b",
925         xaxt = "n",
926         col = "blue",
927         add = TRUE
928 )
929 plotCI(x = 1:5 + 0.1,
930         y = means[3,],
931         uiw = inter[3,],
932         type = "b",
933         xaxt = "n",
934         col = "green",
935         add = TRUE
936 )
937 plotCI(x = 1:5 + 0.15,
938         y = means[4,],
939         uiw = inter[4,],
940         type = "b",
941         xaxt = "n",
942         col = "black",
943         add = TRUE
944 )
945 axis(1, at = 1:5, labels = c(1, 2, 3, 4, 5))
946 legend(x = 5.25,
947         y = 0,
948         yjust = 0,
949         lty = 1,

```

```

950     col = c("red", "blue", "green", "black"),
951     legend = c("1---", "2---", "3---", "UTC           "),
952     bty = "o"
953   )
954   dev.copy(pdf,
955     "plots/bulk/2015_Bulk_family_interplot.pdf",
956     width = 6,
957     height = 3
958   )
959   dev.off()
960 }
961
# Main Function -----
962 main = function() {
963   #Clear workspace
964   rm(list = ls())
965
966   #Load gplots for plotCI
967   library(gplots)
968   library(car)
969   library(lme4)
970   library(lmtest)
971
972   #Create folder for plots
973   dir.create("plots")
974
975   #Minimal margins on graphs
976   par(mar = c(4, 4, 1.1, 0.6) + 0.1)
977
978   #Run analysis functions
979   readline(prompt = "reading raw_data.txt: press enter to continue.")
980   raw.data = GetData("raw_data.txt")
981
982   readline(prompt = "first analysis: press enter to continue.")
983   Analysis1(raw.data)
984
985   readline(prompt = "second analysis: press enter to continue.")
986   Analysis2(raw.data)
987
988   readline(prompt = "third analysis: press enter to continue.")
989   Analysis3(raw.data)
990
991   readline(prompt = "fourth analysis: press enter to continue.")
992   Analysis4(raw.data)
993
994 }
995
# Execute Code -----
996 main()
997

```

analysis.R

B RAW DATA 2015 – 2016

```

1 method;year;month;day;block;site;event;order;mass;family_count;family_list
2 malaise;2015;vi;24;1;A;1;Coleoptera;0.0062;1;Coccinellidae
3 malaise;2015;vi;24;1;A;1;Collembola;0.0;0;NA
4 malaise;2015;vi;24;1;A;1;Diptera;1.6655;22;Anthomyiidae
    ,Asilidae,Bombyliidae,Calliphoridae,Ceratopogonidae,Chironomidae,Chloropidae,Heleomyzidae,Lauxaniidae,Lonchaetidae,Milichiidae
    ,Muscidae,Periscelididae,Phoridae,Pipunculidae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae,Tephritidae,Therevidae,Ulidiidae
5 malaise;2015;vi;24;1;A;1;Hemiptera;0.0849;4;Alydidae,Cicadellidae,Lygaeidae,Miridae
6 malaise;2015;vi;24;1;A;1;Hymenoptera;0.3817;6;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Vespidae
7 malaise;2015;vi;24;1;A;1;Lepidoptera;0.4229;5;Gelechiidae,Hepialidae,Noctuidae,Pieridae,Pyralidae
8 malaise;2015;vi;24;1;A;1;Mantodea;0;0;NA
9 malaise;2015;vi;24;1;A;1;Neuroptera;0.0037;1;Chrysopidae
10 malaise;2015;vi;24;1;A;1;Orthoptera;0.0;0;NA
11 malaise;2015;vi;24;1;A;1;Thysanoptera;0.0;0;NA
12 malaise;2015;vi;24;1;A;1;Trichoptera;0;0;NA
13 malaise;2015;vi;24;1;B;1;Coleoptera;0.0243;1;Coccinellidae
14 malaise;2015;vi;24;1;B;1;Collembola;0.0;0;NA
15 malaise
    ;2015;vi;24;1;B;1;Diptera;0.963;19;Anthomyiidae,Asilidae,Bombyliidae,Calliphoridae,Chironomidae,Chloropidae,Conopidae,Culicidae
    ,Dolichopodidae,Heleomyzidae,Lauxaniidae,Muscidae,Pipunculidae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae,Tipulidae,Ulidiidae
16 malaise;2015;vi;24;1;B;1;Hemiptera;0.0687;5;Cicadellidae,Coreidae,Lygaeidae,Miridae,Pentatomidae
17 malaise;2015;vi;24;1;B;1;Hymenoptera;0.6073;7;Braconidae,Chrysidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae
18 malaise;2015;vi;24;1;B;1;Lepidoptera;0.2711;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
19 malaise;2015;vi;24;1;B;1;Mantodea;0;0;NA
20 malaise;2015;vi;24;1;B;1;Neuroptera;0.0059;1;Chrysopidae
21 malaise;2015;vi;24;1;B;1;Orthoptera;0.0;0;NA
22 malaise;2015;vi;24;1;B;1;Thysanoptera;0.0;0;NA
23 malaise;2015;vi;24;1;B;1;Trichoptera;0;0;NA
24 malaise;2015;vi;24;1;C;1;Coleoptera;0.194;1;Cleridae
25 malaise;2015;vi;24;1;C;1;Collembola;0.0;0;NA
26 malaise;2015;vi;24;1;C;1;Diptera;0.5989;11;
    Anthomyiidae,Chironomidae,Chloropidae,Culicidae,Heleomyzidae,Lauxaniidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae
27 malaise;2015;vi;24;1;C;1;Hemiptera;0.0156;0;NA
28 malaise;2015;vi;24;1;C;1;Hymenoptera;0.391;7;Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
29 malaise;2015;vi;24;1;C;1;Lepidoptera;0.0396;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
30 malaise;2015;vi;24;1;C;1;Mantodea;0;0;NA
31 malaise;2015;vi;24;1;C;1;Neuroptera;0.0032;1;Hemerobiidae
32 malaise;2015;vi;24;1;C;1;Orthoptera;0.0;2;Acrididae,Tettigoniidae
33 malaise;2015;vi;24;1;C;1;Thysanoptera;0.0;0;NA
34 malaise;2015;vi;24;1;C;1;Trichoptera;0;0;NA
35 malaise;2015;vi;25;2;A;1;Coleoptera;0.0131;3;Anobiidae,Chrysomelidae,Coccinellidae
36 malaise;2015;vi;25;2;A;1;Collembola;0.0;0;NA
37 malaise;2015;vi;25;2;A;1;Diptera;2.1772;17;Anthomyiidae,Calliphoridae,Ceratopogonidae,Chloropidae,Dolichopodidae,Heleomyzidae
    ,Lauxaniidae,Milichiidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Sciaridae,Sepsidae,Syrphidae,Tachinidae,Tephritidae
38 malaise;2015;vi;25;2;A;1;Hemiptera;0.025;3;Cicadellidae,Lygaeidae,Miridae
39 malaise;2015;vi;25;2;A;1;Hymenoptera;0.1102;7;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
40 malaise;2015;vi;25;2;A;1;Lepidoptera;0.2533;3;Gelechiidae,Noctuidae,Pyralidae
41 malaise;2015;vi;25;2;A;1;Mantodea;0;0;NA
42 malaise;2015;vi;25;2;A;1;Neuroptera;0.0013;1;Hemerobiidae
43 malaise;2015;vi;25;2;A;1;Orthoptera;0.0;0;NA
44 malaise;2015;vi;25;2;A;1;Thysanoptera;0.0;0;NA
45 malaise;2015;vi;25;2;A;1;Trichoptera;0;0;NA
46 malaise;2015;vi;25;2;B;1;Coleoptera;0.03;1;Coccinellidae
47 malaise;2015;vi;25;2;B;1;Collembola;0.0;0;NA
48 malaise;2015;vi;25;2;B;1;Diptera;1.0078;13;Anthomyiidae,Asilidae,
    Calliphoridae,Chloropidae,Dolichopodidae,Heleomyzidae,Lauxaniidae,Muscidae,Phoridae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae
49 malaise;2015;vi;25;2;B;1;Hemiptera;0.0163;3;Cicadellidae,Lygaeidae,Miridae
50 malaise;2015;vi;25;2;B;1;Hymenoptera;0.2282;6;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Sphecidae,Vespidae
51 malaise;2015;vi;25;2;B;1;Lepidoptera;0.0818;3;Gelechiidae,Noctuidae,Pyralidae
52 malaise;2015;vi;25;2;B;1;Mantodea;0;0;NA
53 malaise;2015;vi;25;2;B;1;Neuroptera;0.0054;2;Chrysopidae,Hemerobiidae
54 malaise;2015;vi;25;2;B;1;Orthoptera;0.0712;1;Acrididae
55 malaise;2015;vi;25;2;B;1;Thysanoptera;0.0;0;NA
56 malaise;2015;vi;25;2;B;1;Trichoptera;0;0;NA
57 malaise;2015;vi;25;2;C;1;Coleoptera;0.0295;2;Chrysomelidae,Coccinellidae
58 malaise;2015;vi;25;2;C;1;Collembola;0.0;0;NA
59 malaise;2015;vi;25;2;C;1;Diptera;1.4279;13;Calliphoridae,Chloropidae
    ,Dolichopodidae,Heleomyzidae,Lauxaniidae,Muscidae,Phoridae,Sarcophagidae,Sciaridae,Sepsidae,Syrphidae,Tachinidae,Tephritidae
60 malaise;2015;vi;25;2;C;1;Hemiptera;0.0629;3;Cicadellidae,Coreidae,Miridae
61 malaise;2015;vi;25;2;C;1;Hymenoptera;0.2373;5;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae
62 malaise;2015;vi;25;2;C;1;Lepidoptera;0.1376;3;Gelechiidae,Noctuidae,Pyralidae
63 malaise;2015;vi;25;2;C;1;Mantodea;0;0;NA
64 malaise;2015;vi;25;2;C;1;Neuroptera;0.002;1;Chrysopidae
65 malaise;2015;vi;25;2;C;1;Orthoptera;0.2109;1;Acrididae
66 malaise;2015;vi;25;2;C;1;Thysanoptera;0.0;0;NA
67 malaise;2015;vi;25;2;C;1;Trichoptera;0;0;NA
68 malaise;2015;vi;26;3;A;1;Coleoptera;0.0515;2;Coccinellidae,Melyridae
69 malaise;2015;vi;26;3;A;1;Collembola;0.0;0;NA
70 malaise;2015;vi;26;3;A;1;Diptera;3.2444;23;Anthomyiidae,Asilidae
    ,Bombyliidae,Calliphoridae,Ceratopogonidae,Chironomidae,Chloropidae,Conopidae,Culicidae,Dolichopodidae,Heleomyzidae,Lauxaniidae
    ,Milichiidae,Muscidae,Mycetophilidae,Phoridae,Pipunculidae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae,Tephritidae,Tipulidae
71 malaise;2015;vi;26;3;A;1;Hemiptera;0.0463;5;Alydidae,Cicadellidae,Miridae,Nabidae,Rhopalidae
72 malaise;2015;vi;26;3;A;1;Hymenoptera
    ;0.6784;10;Braconidae,Chrysidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Proctotrupidae,Sphecidae,Tiphiidae,Vespidae
73 malaise;2015;vi;26;3;A;1;Lepidoptera;0.2606;4;Gelechiidae,Noctuidae,Pieridae,Pyralidae
74 malaise;2015;vi;26;3;A;1;Mantodea;0;0;NA
75 malaise;2015;vi;26;3;A;1;Neuroptera;0.0103;3;Chrysopidae,Hemerobiidae,Myrmeliontidae
76 malaise;2015;vi;26;3;A;1;Orthoptera;0.0555;1;Tettigoniidae
77 malaise;2015;vi;26;3;A;1;Thysanoptera;0;0;NA
78 malaise;2015;vi;26;3;A;1;Trichoptera;0;0;NA
79 malaise;2015;vi;26;3;B;1;Coleoptera;0.0084;1;Coccinellidae
80 malaise;2015;vi;26;3;B;1;Collembola;0.0;0;NA
81 malaise;2015;vi;26;3;B;1;Diptera;1.2691;15;Anthomyiidae,Asilidae,Calliphoridae,Chloropidae,
    Conopidae,Dolichopodidae,Heleomyzidae,Lauxaniidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Syrphidae,Tachinidae,Tephritidae
82 malaise;2015;vi;26;3;B;1;Hemiptera;0.0112;4;Cicadellidae,Lygaeidae,Miridae

```

83 malaise;2015;vi;26;3;
 B;1;Hymenoptera;0.689;9;Braconidae,Chrysidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae,Vespidae
 84 malaise;2015;vi;26;3;B;1;Lepidoptera;0.0718;3;Gelechiidae,Noctuidae,Pyralidae
 85 malaise;2015;vi;26;3;B;1;Mantodea;0;0;NA
 86 malaise;2015;vi;26;3;B;1;Neuroptera;0;0;1;Hemerobiidae
 87 malaise;2015;vi;26;3;B;1;Orthoptera;0.1026;1;Acrididae
 88 malaise;2015;vi;26;3;B;1;Thysanoptera;0;0;NA
 89 malaise;2015;vi;26;3;B;1;Trichoptera;0;0;NA
 90 malaise;2015;vi;26;3;C;1;Coleoptera;0.025;1;Coccinellidae
 91 malaise;2015;vi;26;3;C;1;Collembola;0;0;0;NA
 92 malaise;2015;vi;26;3;
 C;1;Diptera;0.5146;19;Anthomyiidae,Calliphoridae,Chironomidae,Chloropidae,Dolichopodidae,Heleomyzidae,Lauxaniidae,
 Lonchaetidae,Milichiidae,Muscidae,Phoridae,Pipunculidae,Psychodidae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae,Ulidiidae
 93 malaise;2015;vi;26;3;C;1;Hemiptera;0.0155;3;Cicadellidae,Lygaeidae,Miridae
 94 malaise;2015;vi;26;3;C;1;Hymenoptera
 ;0.5773;10;Bethylidae,Braconidae,Chrysidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Scelionidae,Sphecidae,Tiphidae
 95 malaise;2015;vi;26;3;C;1;Lepidoptera;0.0802;3;Gelechiidae,Noctuidae,Pyralidae
 96 malaise;2015;vi;26;3;C;1;Mantodea;0;0;NA
 97 malaise;2015;vi;26;3;C;1;Neuroptera;0.002;2;Chrysopidae,Hemerobiidae
 98 malaise;2015;vi;26;3;C;1;Orthoptera;0;0;0;NA
 99 malaise;2015;vi;26;3;C;1;Thysanoptera;0;0;NA
 100 malaise;2015;vi;26;3;C;1;Trichoptera;0;0;NA
 101 malaise;2015;vi;27;UTC;1;1;Coleoptera;0.436;0;NA
 102 malaise;2015;vi;27;UTC;1;1;Collembola;0;0;NA
 103 malaise;2015;vi;27;UTC;1;1;Diptera;0.5484;6;Anthomyiidae,Chloropidae,Muscidae,Sarcophagidae,Syrphidae,Tachinidae
 104 malaise;2015;vi;27;UTC;1;1;Hemiptera;0;0;0;NA
 105 malaise;2015;vi;27;UTC;1;1;Hymenoptera;0.4285;7;Braconidae,Chrysidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Tiphidae
 106 malaise;2015;vi;27;UTC;1;1;Lepidoptera;0.3235;4;Gelechiidae,Hesperiidae,Noctuidae,Pyralidae
 107 malaise;2015;vi;27;UTC;1;1;Mantodea;0;0;NA
 108 malaise;2015;vi;27;UTC;1;1;Neuroptera;0.0016;1;Chrysopidae
 109 malaise;2015;vi;27;UTC;1;1;Orthoptera;0.0967;1;Acrididae
 110 malaise;2015;vi;27;UTC;1;1;Thysanoptera;0;0;NA
 111 malaise;2015;vi;27;UTC;1;1;Trichoptera;0;0;NA
 112 malaise;2015;vi;27;UTC;2;1;Coleoptera;0.0323;3;Anobiidae,Cleridae,Coccinellidae
 113 malaise;2015;vi;27;UTC;2;1;Collembola;0;0;NA
 114 malaise;2015;vi;27;UTC;2;1;Diptera;0.4211;11;Asilidae
 ,Ceratopogonidae,Chloropidae,Dolichopodidae,Lauxaniidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Syrphidae,Tachinidae
 115 malaise;2015;vi;27;UTC;2;1;Hemiptera;0.0247;4;Cicadellidae,Delphacidae,Miridae,Pentatomidae
 116 malaise;2015;vi;27;UTC;2;1;Hymenoptera;0.7197;4;Halictidae,Mutillidae,Pompilidae,Tiphidae
 117 malaise;2015;vi;27;UTC;2;1;Lepidoptera;0.1685;3;Gelechiidae,Noctuidae,Pyralidae
 118 malaise;2015;vi;27;UTC;2;1;Mantodea;0;0;NA
 119 malaise;2015;vi;27;UTC;2;1;Neuroptera;0.0015;1;Hemerobiidae
 120 malaise;2015;vi;27;UTC;2;1;Orthoptera;0;0;0;NA
 121 malaise;2015;vi;27;UTC;2;1;Thysanoptera;0;0;NA
 122 malaise;2015;vi;27;UTC;2;1;Trichoptera;0;0;NA
 123 malaise;2015;vi;27;UTC;3;1;Coleoptera;0.004;1;Coccinellidae
 124 malaise;2015;vi;27;UTC;3;1;Collembola;0;0;NA
 125 malaise;2015;vi;27;UTC;3;1;Diptera;1.0184;16;Anthomyiidae,Asilidae,Calliphoridae,Ceratopogonidae,Chironomidae,
 Chloropidae,Dolichopodidae,Heleomyzidae,Lauxaniidae,Muscidae,Pipunculidae,Sarcophagidae,Sciaridae,Sepsidae,Syrphidae,Tachinidae
 126 malaise;2015;vi;27;UTC;3;1;Hemiptera;0.0064;2;Cicadellidae,Miridae
 127 malaise;2015;
 vi;27;UTC;3;1;Hymenoptera;0.3185;8;Braconidae,Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 128 malaise;2015;vi;27;UTC;3;1;Lepidoptera;0.0164;5;Crambidae,Gelechiidae,Noctuidae,Pterophoridae,Pyralidae
 129 malaise;2015;vi;27;UTC;3;1;Mantodea;0;0;NA
 130 malaise;2015;vi;27;UTC;3;1;Neuroptera;0.005;1;Chrysopidae
 131 malaise;2015;vi;27;UTC;3;1;Orthoptera;0;0;0;NA
 132 malaise;2015;vi;27;UTC;3;1;Thysanoptera;0;0;NA
 133 malaise;2015;vi;27;UTC;3;1;Trichoptera;0;0;NA
 134 malaise;2015;vii;01;1;A;2;Coleoptera;0.0096;1;Coccinellidae
 135 malaise;2015;vii;01;1;A;2;Collembola;0;0;0;NA
 136 malaise;2015;vii;01;1;A;2;Diptera;1.357;18;Anthomyiidae,Bombyliidae,Calliphoridae,Ceratopogonidae,Chironomidae,Chloropidae,Culicidae
 ,Ephydriidae,Heleomyzidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae,Tephritidae,Ulidiidae
 137 malaise;2015;vii;01;1;A;2;Hemiptera;0.0106;3;Anthocoridae,Cicadellidae,Miridae
 138 malaise;2015;vii;01;1;A;2;Hymenoptera;0.3063;7;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 139 malaise;2015;vii;01;1;A;2;Lepidoptera;0.3419;4;Gelechiidae,Hesperiidae,Noctuidae,Pyralidae
 140 malaise;2015;vii;01;1;A;2;Mantodea;0;0;NA
 141 malaise;2015;vii;01;1;A;2;Neuroptera;0.0048;2;Chrysopidae,Hemerobiidae
 142 malaise;2015;vii;01;1;A;2;Orthoptera;0;0;0;NA
 143 malaise;2015;vii;01;1;A;2;Thysanoptera;0;0;0;NA
 144 malaise;2015;vii;01;1;A;2;Trichoptera;0;0;NA
 145 malaise;2015;vii;01;1;B;2;Coleoptera;0;0;0;NA
 146 malaise;2015;vii;01;1;B;2;Collembola;0;0;0;NA
 147 malaise;2015;vii;01;1;B;2;Diptera;0.5909;13;Anthomyiidae,Ceratopogonidae
 ,Chloropidae,Ephydriidae,Heleomyzidae,Lauxaniidae,Muscidae,Phoridae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae,Tephritidae
 148 malaise;2015;vii;01;1;B;2;Hemiptera;0.0056;2;Cicadellidae,Miridae
 149 malaise;2015;vii;01;1;B;2;Hymenoptera;0.7632;7;Braconidae,Halictidae,Ichneumonidae,Melittidae,Mutillidae,Pompilidae,Tiphidae
 150 malaise;2015;vii;01;1;B;2;Lepidoptera;0.0963;2;Gelechiidae,Noctuidae
 151 malaise;2015;vii;01;1;B;2;Mantodea;0;0;NA
 152 malaise;2015;vii;01;1;B;2;Neuroptera;0.0028;2;Chloropidae,Hemerobiidae
 153 malaise;2015;vii;01;1;B;2;Orthoptera;0;0;0;NA
 154 malaise;2015;vii;01;1;B;2;Thysanoptera;0;0;0;NA
 155 malaise;2015;vii;01;1;B;2;Trichoptera;0;0;0;NA
 156 malaise;2015;vii;01;1;C;2;Coleoptera;0.059;1;Cerambycidae
 157 malaise;2015;vii;01;1;C;2;Collembola;0;0;0;NA
 158 malaise;2015;vii;01;1;C;2;Diptera;0.598;17;Anthomyiidae,Ceratopogonidae,Chironomidae,Chloropidae,Conopidae,Drosophilidae
 ,Ephydriidae,Lauxaniidae,Muscidae,Phoridae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae,Tephritidae,Tipulidae,Ulidiidae
 159 malaise;2015;vii;01;1;C;2;Hemiptera;0.0067;1;Cicadellidae
 160 malaise;2015;vii;01;1;C;2;Hymenoptera;0.6965;6;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Tiphidae
 161 malaise;2015;vii;01;1;C;2;Lepidoptera;0.1052;3;Gelechiidae,Noctuidae,Pyralidae
 162 malaise;2015;vii;01;1;C;2;Mantodea;0;0;NA
 163 malaise;2015;vii;01;1;C;2;Neuroptera;0.003;2;Chrysopidae,Hemerobiidae
 164 malaise;2015;vii;01;1;C;2;Orthoptera;0;0;0;NA
 165 malaise;2015;vii;01;1;C;2;Thysanoptera;0;0;0;NA
 166 malaise;2015;vii;01;1;C;2;Trichoptera;0;0;0;NA
 167 malaise;2015;vii;03;2;A;2;Coleoptera;0.04;3;Cleridae,Coccinellidae,Melyridae

168 malaise;2015;vii;03;2;A;2;Collembola;0.0;0;NA
 169 malaise;2015;vii;03;2;A;2;Diptera
 ;2.1488;20;Anthomyiidae,Calliphoridae,Ceratopogonidae,Chironomidae,Chloropidae,Conopidae,Culicidae,Dolichopodidae,Drosophilidae,
 ,Heleomyzidae,Milichiidae,Muscidae,Phoridae,Sarcophagidae,Scatopsidae,Sciaridae,Syrphidae,Tachinidae,Therevidae,Ulidiidae
 170 malaise;2015;vii;03;2;A;2;Hemiptera;0.0121;2;Cicadellidae,Miridae
 171 malaise;2015;vii;03;2;
 A;2;Hymenoptera;0.9369;9;Braconidae,Chrysidae,Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
 172 malaise;2015;vii;03;2;A;2;Lepidoptera;0.4039;3;Gelechiidae,Noctuidae,Pyralidae
 173 malaise;2015;vii;03;2;A;2;Mantodea;0;0;NA
 174 malaise;2015;vii;03;2;A;2;Neuroptera;0.0048;2;Chrysopidae,Hemerobiidae
 175 malaise;2015;vii;03;2;A;2;Orthoptera;0.3324;1;Acrididae
 176 malaise;2015;vii;03;2;A;2;Thysanoptera;0.0;0;NA
 177 malaise;2015;vii;03;2;A;2;Trichoptera;0;0;NA
 178 malaise;2015;vii;03;2;B;2;Coleoptera;0.0205;2;Cleridae,Coccinellidae
 179 malaise;2015;vii;03;2;B;2;Collembola;0.0;0;NA
 180 malaise;2015;vii;03;2;B;2;Diptera;1.4902;23;Agromyzidae,Anthomyiidae,
 Bombyliidae,Calliphoridae,Ceratopogonidae,Chironomidae,Chloropidae,Dolichopodidae,Heleomyzidae,Milichiidae,Muscidae
 ,Phoridae,Pipunculidae,Sarcophagidae,Scatopsidae,Sciaridae,Sepsidae,Syrphidae,Tachinidae,Tephritisidae,Tipulidae,Ulidiidae
 181 malaise;2015;vii;03;2;B;2;Hemiptera;0.0091;4;Berytidae,Cicadellidae,Lygaeidae,Miridae
 182 malaise;2015;vii;03;2;B;2;Hymenoptera;0.7362;6;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae
 183 malaise;2015;vii;03;2;B;2;Lepidoptera;0.3333;3;Gelechiidae,Noctuidae,Pyralidae
 184 malaise;2015;vii;03;2;B;2;Mantodea;0;0;NA
 185 malaise;2015;vii;03;2;B;2;Neuroptera;0.0051;2;Chrysopidae,Hemerobiidae
 186 malaise;2015;vii;03;2;B;2;Orthoptera;0.0991;1;Acrididae
 187 malaise;2015;vii;03;2;B;2;Thysanoptera;0.0;0;NA
 188 malaise;2015;vii;03;2;B;2;Trichoptera;0;0;NA
 189 malaise;2015;vii;03;2;C;2;Coleoptera;0.0736;5;Anobiidae,Chrysomelidae,Cleridae,Coccinellidae,Melyridae
 190 malaise;2015;vii;03;2;C;2;Collembola;0.0;0;NA
 191 malaise;2015;vii;03;2;C;2;Diptera;2.476;26;Acroceridae,Anthomyiidae,Bombyliidae,Calliphoridae
 ,Canacidae,Ceratopogonidae,Chironomidae,Chloropidae,Conopidae,Dolichopodidae,Ephydriidae,Heleomyzidae,Lauxaniidae,Milichiidae
 ,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Sciaridae,Sepsidae,Syrphidae,Tachinidae,Tephritisidae,Tipulidae,Ulidiidae
 192 malaise;2015;vii;03;2;C;2;Hemiptera;0.023;3;Cicadellidae,Lygaeidae,Miridae
 193 malaise;2015;vii;03;2;C;2;Hymenoptera;0.5866;7;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
 194 malaise;2015;vii;03;2;C;2;Lepidoptera;0.2797;3;Gelechiidae,Noctuidae,Pyralidae
 195 malaise;2015;vii;03;2;C;2;Mantodea;0;0;NA
 196 malaise;2015;vii;03;2;C;2;Neuroptera;0.00960000000000000001;2;Chrysopidae,Hemerobiidae
 197 malaise;2015;vii;03;2;C;2;Orthoptera;0.0571;1;Tettigoniidae
 198 malaise;2015;vii;03;2;C;2;Thysanoptera;0.0;0;NA
 199 malaise;2015;vii;03;2;C;2;Trichoptera;0;0;NA
 200 malaise;2015;vii;04;UTC;1;2;Coleoptera;0.043;3;Buprestidae,Chrysomelidae,Coccinellidae
 201 malaise;2015;vii;04;UTC;1;2;Collembola;0.0;0;NA
 202 malaise;2015;vii;04;UTC;1;2;Diptera;0.6199;15;Anthomyiidae,Ceratopogonidae,Chironomidae,Chloropidae
 ,Culicidae,Dolichopodidae,Ephydriidae,Heleomyzidae,Lauxaniidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae,Tephritisidae
 203 malaise;2015;vii;04;UTC;1;2;Hemiptera;0.0022;2;Cicadellidae,Miridae
 204 malaise;2015;vii;04;UTC;1;2;Hymenoptera;0.4408;6;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae
 205 malaise;2015;vii;04;UTC;1;2;Lepidoptera;0.121;3;Gelechiidae,Noctuidae,Pyralidae
 206 malaise;2015;vii;04;UTC;1;2;Mantodea;0;0;NA
 207 malaise;2015;vii;04;UTC;1;2;Neuroptera;0.0079;2;Chrysopidae,Hemerobiidae
 208 malaise;2015;vii;04;UTC;1;2;Orthoptera;0;0;NA
 209 malaise;2015;vii;04;UTC;1;2;Thysanoptera;0.0;0;NA
 210 malaise;2015;vii;04;UTC;1;2;Trichoptera;0;0;NA
 211 malaise;2015;vii;04;UTC;2;2;Coleoptera;0.0445;3;Anthicidae,Cleridae,Coccinellidae
 212 malaise;2015;vii;04;UTC;2;2;Collembola;0.0;0;NA
 213 malaise;2015;vii
 ;04;UTC;2;2;Diptera;0.7541;19;Anthomyiidae,Calliphoridae,Cecidomyiidae,Ceratopogonidae,Chironomidae,Chloropidae,Dolichopodidae,
 Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Sciaridae,Sepsidae,Simuliidae,Syrphidae,Tachinidae,Tephritisidae,Tipulidae,Ulidiidae
 214 malaise;2015;vii;04;UTC;2;2;Hemiptera;0.0115;3;Cicadellidae,Miridae,Rhopalidae
 215 malaise;2015;vii;04;UTC;2;2;
 Hymenoptera;0.4408;9;Braconidae,Chalcididae,Chrysidae,Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Tiphiidae
 216 malaise;2015;vii;04;UTC;2;2;Lepidoptera;0.1683;4;Crambidae,Gelechiidae,Geometridae,Noctuidae
 217 malaise;2015;vii;04;UTC;2;2;Mantodea;0;0;NA
 218 malaise;2015;vii;04;UTC;2;2;Neuroptera;0.007;2;Chrysopidae,Hemerobiidae
 219 malaise;2015;vii;04;UTC;2;2;Orthoptera;0.1452;1;Acrididae
 220 malaise;2015;vii;04;UTC;2;2;Thysanoptera;0.0;0;NA
 221 malaise;2015;vii;04;UTC;2;2;Trichoptera;0;0;NA
 222 malaise;2015;vii;04;UTC;3;2;Coleoptera;0.0094;2;Anobiidae,Coccinellidae
 223 malaise;2015;vii;04;UTC;3;2;Collembola;0.0;0;NA
 224 malaise;2015;vii;04;UTC;3;2;Diptera;0.5479;17;Anthomyiidae,Ceratopogonidae,Chironomidae,Chloropidae,Dolichopodidae,Lauxaniidae
 ,Milichiidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Sciaridae,Sepsidae,Syrphidae,Tachinidae,Tephritisidae,Tipulidae
 225 malaise;2015;vii;04;UTC;3;2;Hemiptera;0.008;2;Cicadellidae,Miridae
 226 malaise;2015;vii;04;UTC;3;2;Hymenoptera;1.219;7;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
 227 malaise;2015;vii;04;UTC;3;2;Lepidoptera;0.3481;3;Gelechiidae,Noctuidae,Pyralidae
 228 malaise;2015;vii;04;UTC;3;2;Mantodea;0;0;NA
 229 malaise;2015;vii;04;UTC;3;2;Neuroptera;0.0011;1;Hemerobiidae
 230 malaise;2015;vii;04;UTC;3;2;Orthoptera;0.0127;1;Gryllidae
 231 malaise;2015;vii;04;UTC;3;2;Thysanoptera;0.0;0;NA
 232 malaise;2015;vii;04;UTC;3;2;Trichoptera;0;0;NA
 233 malaise;2015;vii;06;3;A;2;Coleoptera;0.0473;4;Chrysomelidae,Cleridae,Coccinellidae,Melyridae
 234 malaise;2015;vii;06;3;A;2;Collembola;0.0;0;NA
 235 malaise;2015;vii;06;3;A;2;Diptera;2.8634;23;Anthomyiidae,Asilidae
 ,Bombyliidae,Ceratopogonidae,Chironomidae,Chloropidae,Conopidae,Culicidae,Dolichopodidae,Drosophilidae,Ephydriidae,Heleomyzidae
 ,Milichiidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae,Tephritisidae,Therevidae,Ulidiidae
 236 malaise;2015;vii;06;3;A;2;Hemiptera;0.046;5;Cicadellidae,Lygaeidae,Miridae,Pentatomidae,Rhopalidae
 237 malaise
 ;2015;vii;06;3;A;2;Hymenoptera;1.0577;8;Braconidae,Evanidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
 238 malaise;2015;vii;06;3;A;2;Lepidoptera;0.5219;5;Crambidae,Gelechiidae,Noctuidae,Pieridae,Pyralidae
 239 malaise;2015;vii;06;3;A;2;Mantodea;0;0;NA
 240 malaise;2015;vii;06;3;A;2;Neuroptera;0.0049;2;Chrysopidae,Hemerobiidae
 241 malaise;2015;vii;06;3;A;2;Orthoptera;0.327;1;Tettigoniidae
 242 malaise;2015;vii;06;3;A;2;Thysanoptera;0.0;0;NA
 243 malaise;2015;vii;06;3;A;2;Trichoptera;0;0;NA
 244 malaise;2015;vii;06;3;B;2;Coleoptera;0.0045;1;Coccinellidae
 245 malaise;2015;vii;06;3;B;2;Collembola;0.0;0;NA
 246 malaise;2015;vii;06;3;B;2;Diptera;1.1841;22;Anthomyiidae,
 Bombyliidae,Ceratopogonidae,Chironomidae,Chloropidae,Culicidae,Dolichopodidae,Drosophilidae,Ephydriidae,Heleomyzidae,Lauxaniidae

, Milichiidae, Muscidae, Phoridae, Sarcophagidae, Scatopsidae, Sciaridae, Syrphidae, Tachinidae, Tephritidae, Tipulidae, Ulidiidae
 247 malaise; 2015; vii; 06; 3; B; 2; Hemiptera; 0.0136; 2; Cicadellidae, Miridae
 248 malaise; 2015; vii; 06; 3; B; 2; Hymenoptera; 0.9579; 7; Braconidae, Halictidae, Ichneumonidae, Mutillidae, Pompilidae, Sphecidae, Tiphidae
 249 malaise; 2015; vii; 06; 3; B; 2; Lepidoptera; 0.2471; 5; Crambidae, Gelechiidae, Hesperiidae, Noctuidae, Pyralidae
 250 malaise; 2015; vii; 06; 3; B; 2; Mantodea; 0; 0; NA
 251 malaise; 2015; vii; 06; 3; B; 2; Neuroptera; 0.0012000000000000001; 2; Chrysopidae, Hemerobiidae
 252 malaise; 2015; vii; 06; 3; B; 2; Orthoptera; 0.112; 1; Tettigoniidae
 253 malaise; 2015; vii; 06; 3; B; 2; Thysanoptera; 0.0; 0; NA
 254 malaise; 2015; vii; 06; 3; B; 2; Trichoptera; 0; 0; NA
 255 malaise; 2015; vii; 06; 3; C; 2; Coleoptera; 0.0075; 1; Coccinellidae
 256 malaise; 2015; vii; 06; 3; C; 2; Collembola; 0.0; 0; NA
 257 malaise; 2015; vii
 ; 06; 3; C; 2; Diptera; 0.746; 19; Anthomyiidae, Bombyliidae, Calliphoridae, Culicidae, Dolichopodidae, Ephydriidae, Heleomyzidae
 , Lauxaniidae, Lonchaetidae, Milichiidae, Muscidae, Phoridae, Sarcophagidae, Syrphidae, Tachinidae, Therevidae, Ulidiidae
 258 malaise; 2015; vii; 06; 3; C; 2; Hemiptera; 0.0066; 2; Cicadellidae, Miridae
 259 malaise; 2015;
 vii; 06; 3; C; 2; Hymenoptera; 1.0006; 8; Bethylidae, Braconidae, Halictidae, Ichneumonidae, Mutillidae, Pompilidae, Sphecidae, Tiphidae
 260 malaise; 2015; vii; 06; 3; C; 2; Lepidoptera; 0.1229; 3; Gelechiidae, Noctuidae, Pyralidae
 261 malaise; 2015; vii; 06; 3; C; 2; Mantodea; 0; 0; NA
 262 malaise; 2015; vii; 06; 3; C; 2; Neuroptera; 0.0; 1; Hemerobiidae
 263 malaise; 2015; vii; 06; 3; C; 2; Orthoptera; 0.0; 0; NA
 264 malaise; 2015; vii; 06; 3; C; 2; Thysanoptera; 0.0; 0; NA
 265 malaise; 2015; vii; 06; 3; C; 2; Trichoptera; 0; 0; NA
 266 malaise; 2015; vii; 08; 1; A; 3; Coleoptera; 0.0085; 2; Cleridae, Coccinellidae
 267 malaise; 2015; vii; 08; 1; A; 3; Collembola; 0; 0; NA
 268 malaise; 2015; vii; 08; 1; A; 3; Diptera; 1.1289; 23; Anthomyiidae, Bombyliidae, Calliphoridae
 , Cecidomyiidae, Ceratopogonidae, Chironomidae, Chloropidae, Chryomyidae, Conopidae, Drosophilidae, Heleomyzidae, Lauxaniidae
 , Lonchaetidae, Milichiidae, Muscidae, Phoridae, Pipunculidae, Sarcophagidae, Sciaridae, Syrphidae, Tachinidae, Tephritidae, Ulidiidae
 269 malaise; 2015; vii; 08; 1; A; 3; Hemiptera; 0.0045; 2; Cicadellidae, Miridae
 270 malaise; 2015; vii; 08; 1; A; 3; Hymenoptera; 0.7858; 5; Halictidae, Mutillidae, Pompilidae, Sphecidae, Tiphidae
 271 malaise; 2015; vii; 08; 1; A; 3; Lepidoptera; 0.2504; 3; Gelechiidae, Noctuidae, Pyralidae
 272 malaise; 2015; vii; 08; 1; A; 3; Mantodea; 0; 0; NA
 273 malaise; 2015; vii; 08; 1; A; 3; Neuroptera; 0.0006; 1; Hemerobiidae
 274 malaise; 2015; vii; 08; 1; A; 3; Orthoptera; 0.0; 0; NA
 275 malaise; 2015; vii; 08; 1; A; 3; Thysanoptera; 0.0; 0; NA
 276 malaise; 2015; vii; 08; 1; A; 3; Trichoptera; 0; 0; NA
 277 malaise; 2015; vii; 08; 1; B; 3; Coleoptera; 0.0043; 2; Anobiidae, Lycidae
 278 malaise; 2015; vii; 08; 1; B; 3; Collembola; 0; 0; NA
 279 malaise; 2015; vii; 08; 1; B; 3; Diptera; 0.6168; 15; Anthomyiidae, Asilidae, Ceratopogonidae, Chloropidae
 , Culicidae, Ephydriidae, Heleomyzidae, Lauxaniidae, Muscidae, Phoridae, Sarcophagidae, Scatopsidae, Syrphidae, Tachinidae, Ulidiidae
 280 malaise; 2015; vii; 08; 1; B; 3; Hemiptera; 0.0116; 3; Cicadellidae, Lygaeidae, Miridae
 281 malaise; 2015; vii; 08; 1; B; 3; Hymenoptera; 1.4382; 7; Braconidae, Halictidae, Ichneumonidae, Mutillidae, Pompilidae, Sphecidae, Tiphidae
 282 malaise; 2015; vii; 08; 1; B; 3; Lepidoptera; 0.0; 3; Gelechiidae, Noctuidae, Pyralidae
 283 malaise; 2015; vii; 08; 1; B; 3; Mantodea; 0; 0; NA
 284 malaise; 2015; vii; 08; 1; B; 3; Neuroptera; 0.0; 0; NA
 285 malaise; 2015; vii; 08; 1; B; 3; Orthoptera; 0.0; 0; NA
 286 malaise; 2015; vii; 08; 1; B; 3; Thysanoptera; 0.0; 0; NA
 287 malaise; 2015; vii; 08; 1; B; 3; Trichoptera; 0; 0; NA
 288 malaise; 2015; vii; 08; 1; C; 3; Coleoptera; 0.0183; 2; Coccinellidae, Elateridae
 289 malaise; 2015; vii; 08; 1; C; 3; Collembola; 0; 0; NA
 290 malaise; 2015; vii; 08; 1; C; 3; Diptera; 0.582; 15; Anthomyiidae, Ceratopogonidae, Chloropidae, Culicidae
 , Dolichopodidae, Ephydriidae, Heleomyzidae, Lauxaniidae, Muscidae, Phoridae, Sarcophagidae, Syrphidae, Tachinidae, Tephritidae, Tipulidae
 291 malaise; 2015; vii; 08; 1; C; 3; Hemiptera; 0.005; 2; Cicadellidae, Miridae
 292 malaise; 2015; vii; 08; 1; C; 3; Hymenoptera; 1.1418; 6; Braconidae, Formicidae, Halictidae, Ichneumonidae, Mutillidae, Pompilidae
 293 malaise; 2015; vii; 08; 1; C; 3; Lepidoptera; 0.1089; 3; Gelechiidae, Noctuidae, Pyralidae
 294 malaise; 2015; vii; 08; 1; C; 3; Mantodea; 0; 0; NA
 295 malaise; 2015; vii; 08; 1; C; 3; Neuroptera; 0.0033; 2; Chrysopidae, Hemerobiidae
 296 malaise; 2015; vii; 08; 1; C; 3; Orthoptera; 0.0; 0; NA
 297 malaise; 2015; vii; 08; 1; C; 3; Thysanoptera; 0.0; 0; NA
 298 malaise; 2015; vii; 08; 1; C; 3; Trichoptera; 0; 0; NA
 299 malaise; 2015; vii; 10; 2; A; 3; Coleoptera; 0.029; 4; Chrysomelidae, Cleridae, Coccinellidae, Melyridae
 300 malaise; 2015; vii; 10; 2; A; 3; Collembola; 0; 0; NA
 301 malaise; 2015; vii; 10; 2; A; 3; Diptera; 1.3257; 21; Agromyzidae
 , Anthomyiidae, Bombyliidae, Calliphoridae, Chironomidae, Chloropidae, Dolichopodidae, Drosophilidae, Heleomyzidae, Lauxaniidae
 , Muscidae, Phoridae, Pipunculidae, Psychodidae, Sarcophagidae, Scatopsidae, Sciaridae, Syrphidae, Tachinidae, Tephritidae, Ulidiidae
 302 malaise; 2015; vii; 10; 2; A; 3; Hemiptera; 0.0086; 1; Cicadellidae
 303 malaise; 2015; vii; 10; 2; A; 3; Hymenoptera; 0.7861; 7; Formicidae, Halictidae, Ichneumonidae, Mutillidae, Pompilidae, Sphecidae, Tiphidae
 304 malaise; 2015; vii; 10; 2; A; 3; Lepidoptera; 0.2772; 4; Crambidae, Gelechiidae, Noctuidae, Pyralidae
 305 malaise; 2015; vii; 10; 2; A; 3; Mantodea; 0; 0; NA
 306 malaise; 2015; vii; 10; 2; A; 3; Neuroptera; 0.0108; 2; Chrysopidae, Hemerobiidae
 307 malaise; 2015; vii; 10; 2; A; 3; Orthoptera; 0.0784; 2; Acrididae, Tettigoniidae
 308 malaise; 2015; vii; 10; 2; A; 3; Thysanoptera; 0.0; 0; NA
 309 malaise; 2015; vii; 10; 2; A; 3; Trichoptera; 0; 0; NA
 310 malaise; 2015; vii; 10; 2; B; 3; Coleoptera; 0.029; 2; Cerambycidae, Chrysomelidae
 311 malaise; 2015; vii; 10; 2; B; 3; Collembola; 0; 0; NA
 312 malaise; 2015; vii; 10; 2; B; 3; Diptera; 0.7986; 17; Acroceridae, Anthomyiidae, Calliphoridae, Ceratopogonidae, Chloropidae, Dolichopodidae
 , Heleomyzidae, Lauxaniidae, Muscidae, Phoridae, Pipunculidae, Sarcophagidae, Scatopsidae, Sciaridae, Syrphidae, Tachinidae, Tipulidae
 313 malaise; 2015; vii; 10; 2; B; 3; Hemiptera; 0.016; 3; Cicadellidae, Coreidae, Miridae
 314 malaise; 2015; vii; 10; 2; B; 3; Hymenoptera; 0.5258; 6; Braconidae, Halictidae, Ichneumonidae, Mutillidae, Pompilidae, Sphecidae
 315 malaise; 2015; vii; 10; 2; B; 3; Lepidoptera; 0.1445; 4; Crambidae, Gelechiidae, Noctuidae, Pyralidae
 316 malaise; 2015; vii; 10; 2; B; 3; Mantodea; 0; 0; NA
 317 malaise; 2015; vii; 10; 2; B; 3; Neuroptera; 0.0037; 2; Chrysopidae, Hemerobiidae
 318 malaise; 2015; vii; 10; 2; B; 3; Orthoptera; 0.2739; 2; Acrididae, Tettigoniidae
 319 malaise; 2015; vii; 10; 2; B; 3; Thysanoptera; 0.0; 0; NA
 320 malaise; 2015; vii; 10; 2; B; 3; Trichoptera; 0; 0; NA
 321 malaise; 2015; vii; 10; 2; C; 3; Coleoptera; 0.0075; 1; Cleridae
 322 malaise; 2015; vii; 10; 2; C; 3; Collembola; 0; 0; NA
 323 malaise; 2015; vii; 10; 2; C
 ; 3; Diptera; 0.8835; 19; Anthomyiidae, Calliphoridae, Ceratopogonidae, Chloropidae, Culicidae, Dolichopodidae, Drosophilidae, Heleomyzidae
 , Milichiidae, Muscidae, Phoridae, Sarcophagidae, Scatopsidae, Sciaridae, Syrphidae, Tachinidae, Tephritidae, Tipulidae, Ulidiidae
 324 malaise; 2015; vii; 10; 2; C; 3; Hemiptera; 0.0; 2; Cicadellidae, Pentatomidae
 325 malaise; 2015; vii; 10; 2;
 C; 3; Hymenoptera; 0.6092; 9; Bethylidae, Braconidae, Formicidae, Halictidae, Ichneumonidae, Mutillidae, Pompilidae, Sphecidae, Tiphidae
 326 malaise; 2015; vii; 10; 2; C; 3; Lepidoptera; 0.3602; 4; Crambidae, Gelechiidae, Noctuidae, Pyralidae
 327 malaise; 2015; vii; 10; 2; C; 3; Mantodea; 0; 0; NA

328 malaise;2015;vii;10;2;C;3;Neuroptera;0.0028;2;Chrysopidae,Hemerobiidae
 329 malaise;2015;vii;10;2;C;3;Orthoptera;0.1119;1;Acrididae
 330 malaise;2015;vii;10;2;C;3;Thysanoptera;0.0;NA
 331 malaise;2015;vii;10;2;C;3;Trichoptera;0;0;NA
 332 malaise;2015;vii;11;UTC;1;3;Coleoptera;0.0027;1;Lampyridae
 333 malaise;2015;vii;11;UTC;1;3;Collembola;0.0;0;NA
 334 malaise;2015;
 vii;11;UTC;1;3;Diptera;0.4841;8;Anthomyiidae,Chloropidae,Heleomyzidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae
 335 malaise;2015;vii;11;UTC;1;3;Hemiptera;0.0024;2;Cicadellidae,Miridae
 336 malaise;2015;vii;11;UTC;1;3;Hymenoptera;1.2465;6;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 337 malaise;2015;vii;11;UTC;1;3;Lepidoptera;0.1046;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 338 malaise;2015;vii;11;UTC;1;3;Mantodea;0;0;NA
 339 malaise;2015;vii;11;UTC;1;3;Neuroptera;0.0048;1;Chrysopidae
 340 malaise;2015;vii;11;UTC;1;3;Orthoptera;0.0;0;NA
 341 malaise;2015;vii;11;UTC;1;3;Thysanoptera;0.0;0;NA
 342 malaise;2015;vii;11;UTC;1;3;Trichoptera;0;0;NA
 343 malaise;2015;vii;11;UTC;2;3;Coleoptera;0.0066;2;Bruchidae,Coccinellidae
 344 malaise;2015;vii;11;UTC;2;3;Collembola;0.0;0;NA
 345 malaise;2015;vii;11;UTC;2;3;Diptera;0.6861;12;Anthomyiidae
 ,Asilidae,Calliphoridae,Ceratopogonidae,Chloropidae,Heleomyzidae,Muscidae,Phoridae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae
 346 malaise;2015;vii;11;UTC;2;3;Hemiptera;0.0031;1;Cicadellidae
 347 malaise;2015;vii;11;UTC;2;3;Hymenoptera;0.4022;6;Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Tiphidae
 348 malaise;2015;vii;11;UTC;2;3;Lepidoptera;0.1203;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 349 malaise;2015;vii;11;UTC;2;3;Mantodea;0;0;NA
 350 malaise;2015;vii;11;UTC;2;3;Neuroptera;0.0006;1;Chrysopidae
 351 malaise;2015;vii;11;UTC;2;3;Orthoptera;0.0708;1;Acrididae
 352 malaise;2015;vii;11;UTC;2;3;Thysanoptera;0.0;0;NA
 353 malaise;2015;vii;11;UTC;2;3;Trichoptera;0;0;NA
 354 malaise;2015;vii;11;UTC;3;3;Coleoptera;0.0499;3;Bruchidae,Chrysomelidae,Cleridae
 355 malaise;2015;vii;11;UTC;3;3;Collembola;0.0;0;NA
 356 malaise;2015;vii;11;UTC;3;3;Diptera;0.54;13;Anthomyiidae,Ceratopogonidae
 ,Chironomidae,Chloropidae,Lauxaniidae,Milichiidae,Muscidae,Phoridae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae,Tephritidae
 357 malaise;2015;vii;11;UTC;3;3;Hemiptera;0.0042;1;Miridae
 358 malaise;2015;vii;11;UTC;3;3;Hymenoptera;0.648;7;Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 359 malaise;2015;vii;11;UTC;3;3;Lepidoptera;0.2413;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 360 malaise;2015;vii;11;UTC;3;3;Mantodea;0;0;NA
 361 malaise;2015;vii;11;UTC;3;3;Neuroptera;0.0006;1;Chrysopidae
 362 malaise;2015;vii;11;UTC;3;3;Orthoptera;0.0;0;NA
 363 malaise;2015;vii;11;UTC;3;3;Thysanoptera;0.0;0;NA
 364 malaise;2015;vii;11;UTC;3;3;Trichoptera;0;0;NA
 365 malaise;2015;vii;13;3;A;3;Coleoptera;0.066;3;Chrysomelidae,Coccinellidae,Melyridae
 366 malaise;2015;vii;13;3;A;3;Collembola;0.0;0;NA
 367 malaise;2015;vii;13;3;A;3;Diptera
 ,1.9372;20;Anthomyiidae,Bombyliidae,Calliphoridae,Ceratopogonidae,Chironomidae,Chloropidae,Culicidae,Drosophilidae,Ephydriidae
 ,Heleomyzidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae,Tephritidae,Tipulidae,Ulidiidae
 368 malaise;2015;vii;13;3;A;3;Hemiptera;0.0251;3;Cicadellidae,Lygaeidae,Pentatomidae
 369 malaise;2015;vii;13;3;A;3;Hymenoptera;0.9534;5;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae
 370 malaise;2015;vii;13;3;A;3;Lepidoptera;0.4483;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 371 malaise;2015;vii;13;3;A;3;Mantodea;0;0;NA
 372 malaise;2015;vii;13;3;A;3;Neuroptera;0.008;2;Chrysopidae,Hemerobiidae
 373 malaise;2015;vii;13;3;A;3;Orthoptera;0.288;1;Tettigoniidae
 374 malaise;2015;vii;13;3;A;3;Thysanoptera;0.0;0;NA
 375 malaise;2015;vii;13;3;A;3;Trichoptera;0;0;NA
 376 malaise;2015;vii;13;3;B;3;Coleoptera;0.0147;4;Bruchidae,Chrysomelidae,Coccinellidae,Melyridae
 377 malaise;2015;vii;13;3;B;3;Collembola;0.0;0;NA
 378 malaise;2015;vii;13;3;B;3;Diptera;0.9111;16;Acroceridae,Anthomyiidae,Calliphoridae,Ceratopogonidae,Chironomidae
 ,Chloropidae,Ephydriidae,Heleomyzidae,Milichiidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae,Tephritidae,Ulidiidae
 379 malaise;2015;vii;13;3;B;3;Hemiptera;0.0017;1;Cicadellidae
 380 malaise;2015;vii;13;3;
 B;3;Hymenoptera;0.7955;9;Formicidae,Halictidae,Ichneumonidae,Megachilidae,Mutillidae,Formicidae,Pompilidae,Sphecidae,Tiphidae
 381 malaise;2015;vii;13;3;B;3;Lepidoptera;0.2532;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 382 malaise;2015;vii;13;3;B;3;Mantodea;0;0;NA
 383 malaise;2015;vii;13;3;B;3;Neuroptera;0.0028;2;Chrysopidae,Hemerobiidae
 384 malaise;2015;vii;13;3;B;3;Orthoptera;0.2861;1;Tettigoniidae
 385 malaise;2015;vii;13;3;B;3;Thysanoptera;0.0;0;NA
 386 malaise;2015;vii;13;3;B;3;Trichoptera;0;0;NA
 387 malaise;2015;vii;13;3;C;3;Coleoptera;0.0038;1;Coccinellidae
 388 malaise;2015;vii;13;3;C;3;Collembola;0.0;0;NA
 389 malaise;2015;vii;13;3;C;3;Diptera;0.8273;10;
 Anthomyiidae,Bombyliidae,Muscidae,Psychodidae,Sarcophagidae,Scathophagidae,Syrphidae,Tachinidae,Tephritidae,Acalyptratae
 390 malaise;2015;vii;13;3;C;3;Hemiptera;0.0096;2;Cicadellidae,Miridae
 391 malaise;2015;vii;13;3;C;3;Hymenoptera;0.902;7;Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 392 malaise;2015;vii;13;3;C;3;Lepidoptera;0.2257;4;Gelechiidae,Hesperiidae,Noctuidae,Pyralidae
 393 malaise;2015;vii;13;3;C;3;Mantodea;0;0;NA
 394 malaise;2015;vii;13;3;C;3;Neuroptera;0.0;0;NA
 395 malaise;2015;vii;13;3;C;3;Orthoptera;0.0;0;NA
 396 malaise;2015;vii;13;3;C;3;Thysanoptera;0.0;0;NA
 397 malaise;2015;vii;13;3;C;3;Trichoptera;0;0;NA
 398 malaise;2015;vii;15;1;A;4;Coleoptera;0.0145;2;Curculionidae,Melyridae
 399 malaise;2015;vii;15;1;A;4;Collembola;0.0;0;NA
 400 malaise;2015;vii;15;1;A;4;Diptera;0.6811;12;Anthomyiidae,Asilidae
 ,Calliphoridae,Ceratopogonidae,Chamaemyiidae,Chironomidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae,Tephritidae
 401 malaise;2015;vii;15;1;A;4;Hemiptera;0.003;2;Cicadellidae,Miridae
 402 malaise;2015;vii;15;1;A;4;Hymenoptera;0.6117;5;Formicidae,Halictidae,Ichneumonidae,Mutillidae,Sphecidae
 403 malaise;2015;vii;15;1;A;4;Lepidoptera;0.2736;4;Gelechiidae,Hesperiidae,Noctuidae,Pyralidae
 404 malaise;2015;vii;15;1;A;4;Mantodea;0;0;NA
 405 malaise;2015;vii;15;1;A;4;Neuroptera;0.0025;1;Chrysopidae
 406 malaise;2015;vii;15;1;A;4;Orthoptera;0.0;0;NA
 407 malaise;2015;vii;15;1;A;4;Thysanoptera;0.0;0;NA
 408 malaise;2015;vii;15;1;A;4;Trichoptera;0;0;NA
 409 malaise;2015;vii;15;1;B;4;Coleoptera;0.0043;2;Chrysomelidae,Coccinellidae
 410 malaise;2015;vii;15;1;B;4;Collembola;0.0;0;NA
 411 malaise;2015;vii;15;1;
 B;4;Diptera;0.417;9;Anthomyiidae,Chloropidae,Conopidae,Heleomyzidae,Muscidae,Sarcophagidae,Syrphidae,Tachinidae,Tephritidae
 412 malaise;2015;vii;15;1;B;4;Hemiptera;0.0051;2;Cicadellidae,Miridae

413 malaise;2015;
 v7;i15;1;B;4;Hymenoptera;2.0802;8;Braconidae,Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
 414 malaise;2015;v7;i15;1;B;4;Lepidoptera;0.2662;5;Crambidae,Gelechiidae,Geometridae,Pyralidae,Noctuidae
 415 malaise;2015;v7;i15;1;B;4;Mantodea;0;0;NA
 416 malaise;2015;v7;i15;1;B;4;Neuroptera;0.005;2;Chrysopidae,Hemerobiidae
 417 malaise;2015;v7;i15;1;B;4;Orthoptera;0.1618;1;Tettigoniidae
 418 malaise;2015;v7;i15;1;B;4;Thysanoptera;0.0;0;NA
 419 malaise;2015;v7;i15;1;B;4;Trichoptera;0;0;NA
 420 malaise;2015;v7;i15;1;C;4;Coleoptera;0.013;1;Chrysomelidae
 421 malaise;2015;v7;i15;1;C;4;Collembola;0.0;0;NA
 422 malaise;2015;v7;i15;1;C;4;Diptera;0.8107;15;Anthomyiidae,Asilidae,Calliphoridae,Chironomidae,
 Chloropidae,Culicidae,Heleomyzidae,Muscidae,Phoridae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae,Tephritidae,Tipulidae
 423 malaise;2015;v7;i15;1;C;4;Hemiptera;0.001;1;Cicadellidae
 424 malaise;2015;v7;i15;1;C;4;Hymenoptera;1.3629;3;Ichneumonidae,Mutillidae,Pompilidae
 425 malaise;2015;v7;i15;1;C;4;Lepidoptera;0.2198;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 426 malaise;2015;v7;i15;1;C;4;Mantodea;0;0;NA
 427 malaise;2015;v7;i15;1;C;4;Neuroptera;0.0012;1;Hemerobiidae
 428 malaise;2015;v7;i15;1;C;4;Orthoptera;0.0514;1;Tettigoniidae
 429 malaise;2015;v7;i15;1;C;4;Thysanoptera;0.0;0;NA
 430 malaise;2015;v7;i15;1;C;4;Trichoptera;0;0;NA
 431 malaise;2015;v7;i17;2;A;4;Coleoptera;0.0559;2;Coccinellidae,Scarabaeidae
 432 malaise;2015;v7;i17;2;A;4;Collembola;0.0;0;NA
 433 malaise;2015;v7;i17;2;A
 ;4;Diptera;0.7792;19;Anthomyiidae,Calliphoridae,Cecidomyiidae,Ceratopogonidae,Chironomidae,Chloropidae,Culicidae,Dolichopodidae
 ,Ephydriidae,Heleomyzidae,Milichiidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Scatopsidae,Sepsidae,Syrphidae,Tachinidae
 434 malaise;2015;v7;i17;2;A;4;Hemiptera;0.0046;1;Cicadellidae
 435 malaise;2015;v7;i17;2;A;4;Hymenoptera;0.9071;6;Encyrtidae,Formicidae,Ichneumonidae,Mutillidae,Pompilidae,Tiphiidae
 436 malaise;2015;v7;i17;2;A;4;Lepidoptera;0.0986;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 437 malaise;2015;v7;i17;2;A;4;Mantodea;0;0;NA
 438 malaise;2015;v7;i17;2;A;4;Neuroptera;0.0;0;NA
 439 malaise;2015;v7;i17;2;A;4;Orthoptera;0.242;1;Acrididae
 440 malaise;2015;v7;i17;2;A;4;Thysanoptera;0.0;0;NA
 441 malaise;2015;v7;i17;2;A;4;Trichoptera;0;0;NA
 442 malaise;2015;v7;i17;2;B;4;Coleoptera;0.1148;1;Scarabaeidae
 443 malaise;2015;v7;i17;2;B;4;Collembola;0.0;0;NA
 444 malaise;2015;v7;i17;2;B;4;Diptera
 ;0.5212;20;Acroceridae,Anthomyiidae,Bombyliidae,Calliphoridae,Ceratopogonidae,Chironomidae,Chloropidae,Lauxaniidae,Milichiidae
 ,Muscidae,Mycetophilidae,Phoridae,Pipunculidae,Sarcophagidae,Sepsidae,Syrphidae,Tabanidae,Tephritidae,Tipulidae
 445 malaise;2015;v7;i17;2;B;4;Hemiptera;0.001;2;Cicadellidae,Miridae
 446 malaise;2015;v7;i17;2;B;4;Hymenoptera;0.6813;5;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Tiphiidae
 447 malaise;2015;v7;i17;2;B;4;Lepidoptera;0.05;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 448 malaise;2015;v7;i17;2;B;4;Mantodea;0;0;NA
 449 malaise;2015;v7;i17;2;B;4;Neuroptera;0.0024000000000000002;2;Chrysopidae,Hemerobiidae
 450 malaise;2015;v7;i17;2;B;4;Orthoptera;0.2048;2;Acrididae,Tettigoniidae
 451 malaise;2015;v7;i17;2;B;4;Thysanoptera;0.0;0;NA
 452 malaise;2015;v7;i17;2;B;4;Trichoptera;0;0;NA
 453 malaise;2015;v7;i17;2;C;4;Coleoptera;0.0275;3;Chrysomelidae,Coccinellidae,Curculionidae
 454 malaise;2015;v7;i17;2;C;4;Collembola;0.0;0;NA
 455 malaise;2015;v7;i17;2;C;4;Diptera;1.0907;14;Anthomyiidae,Bombyliidae,Calliphoridae,Ceratopogonidae
 ,Chironomidae,Dolichopodidae,Drosophilidae,Heleomyzidae,Milichiidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae
 456 malaise;2015;v7;i17;2;C;4;Hemiptera;0.0143;3;Cicadellidae,Lygaeidae,Miridae
 457 malaise;2015;
 v7;i17;2;C;4;Hymenoptera;1.0097;8;Bethylidae,Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
 458 malaise;2015;v7;i17;2;C;4;Lepidoptera;0.4302;5;Crambidae,Gelechiidae,Hesperiidae,Noctuidae,Pyralidae
 459 malaise;2015;v7;i17;2;C;4;Mantodea;0;0;NA
 460 malaise;2015;v7;i17;2;C;4;Neuroptera;0.00480000000000004;2;Chrysopidae,Hemerobiidae
 461 malaise;2015;v7;i17;2;C;4;Orthoptera;0.281;1;Tettigoniidae
 462 malaise;2015;v7;i17;2;C;4;Thysanoptera;0.0;0;NA
 463 malaise;2015;v7;i17;2;C;4;Trichoptera;0;0;NA
 464 malaise;2015;v7;i18;UTC;1;4;Coleoptera;0.0067;1;Lampyridae
 465 malaise;2015;v7;i18;UTC;1;4;Collembola;0.0;0;NA
 466 malaise;2015;
 v7;i18;UTC;1;4;Diptera;0.9355;8;Anthomyiidae,Chloropidae,Heleomyzidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae
 467 malaise;2015;v7;i18;UTC;1;4;Hemiptera;0.0;2;Cicadellidae,Miridae
 468 malaise;2015;v7;i18;UTC;1;4;Hymenoptera;3.0384;6;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
 469 malaise;2015;v7;i18;UTC;1;4;Lepidoptera;0.1393;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 470 malaise;2015;v7;i18;UTC;1;4;Mantodea;0;0;NA
 471 malaise;2015;v7;i18;UTC;1;4;Neuroptera;0.0019;1;Chrysopidae
 472 malaise;2015;v7;i18;UTC;1;4;Orthoptera;0.4568;0;NA
 473 malaise;2015;v7;i18;UTC;1;4;Thysanoptera;0.0;0;NA
 474 malaise;2015;v7;i18;UTC;1;4;Trichoptera;0;0;NA
 475 malaise;2015;v7;i18;UTC;2;4;Coleoptera;0.0208;3;Chrysomelidae,Coccinellidae,Melyridae
 476 malaise;2015;v7;i18;UTC;2;4;Collembola;0.0;0;NA
 477 malaise;2015;v7;i18;UTC;2;4;Diptera;0.6444;17;Anthomyiidae,Asilidae,Camillidae,Cecidomyiidae,Ceratopogonidae,Chironomidae
 ,Chloropidae,Heleomyzidae,Longchaetidae,Muscidae,Phoridae,Sarcophagidae,Sciariidae,Sepsidae,Syrphidae,Tachinidae,Ulidiidae
 478 malaise;2015;v7;i18;UTC;2;4;Hemiptera;0.003;2;Cicadellidae,Miridae
 479 malaise;2015;
 v7;i18;UTC;2;4;Hymenoptera;1.0787;8;Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Pteromalidae,Sphecidae,Tiphiidae
 480 malaise;2015;v7;i18;UTC;2;4;Lepidoptera;0.1749;3;Gelechiidae,Noctuidae,Pyralidae
 481 malaise;2015;v7;i18;UTC;2;4;Mantodea;0;0;NA
 482 malaise;2015;v7;i18;UTC;2;4;Neuroptera;0.0014;2;Chrysopidae,Hemerobiidae
 483 malaise;2015;v7;i18;UTC;2;4;Orthoptera;0.1183;2;Acrididae,Tettigoniidae
 484 malaise;2015;v7;i18;UTC;2;4;Thysanoptera;0.0;0;NA
 485 malaise;2015;v7;i18;UTC;2;4;Trichoptera;0;0;NA
 486 malaise;2015;v7;i18;UTC;3;4;Coleoptera;0.0277;2;Coccinellidae,Scarabaeidae
 487 malaise;2015;v7;i18;UTC;3;4;Collembola;0.0;0;NA
 488 malaise;2015;v7;i18;UTC;3;4;Diptera;0.3901;11;
 Anthomyiidae,Ceratopogonidae,Chloropidae,Culicidae,Heleomyzidae,Muscidae,Phoridae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae
 489 malaise;2015;v7;i18;UTC;3;4;Hemiptera;0.0;0;NA
 490 malaise;2015;v7;i18;UTC;3;4;Hymenoptera;1.7558;6;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphiidae
 491 malaise;2015;v7;i18;UTC;3;4;Lepidoptera;0.0829;2;Gelechiidae,Noctuidae
 492 malaise;2015;v7;i18;UTC;3;4;Mantodea;0;0;NA
 493 malaise;2015;v7;i18;UTC;3;4;Neuroptera;0.0;0;NA
 494 malaise;2015;v7;i18;UTC;3;4;Orthoptera;0.0539;1;Tettigoniidae
 495 malaise;2015;v7;i18;UTC;3;4;Thysanoptera;0.0;0;NA

496 malaise;2015;vii;18;UTC;3;4;Trichoptera;0;0;NA
 497 malaise;2015;vii;20;3;A;4;Coleoptera;0.0845;0;NA
 498 malaise;2015;vii;20;3;A;4;Collembola;0.0;0;NA
 499 malaise;2015;vii;20;3;A;4;Diptera;3.2036;16;Anthomyiidae,Bombyliidae,Calliphoridae,Ceratopogonidae,Chironomidae,
 ,Chloropidae,Culicidae,Muscidae,Mycetophilidae,Pipunculidae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae,Tephritidae,Tipulidae
 500 malaise;2015;vii;20;3;A;4;Hemiptera;0.0131;3;Berytidae,Cicadellidae,Lygaeidae
 501 malaise;2015;vii;20;3;A;4;Lepidoptera;0.7128;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 502 malaise;2015;vii;20;3;A;4;Mantodea;0;0;NA
 503 malaise;2015;vii;20;3;A;4;Neuroptera;0.005;2;Chrysopidae,Hemerobiidae
 504 malaise;2015;vii;20;3;A;4;Orthoptera;0.3922;1;Tettigoniidae
 505 malaise;2015;vii;20;3;A;4;Thysanoptera;0.0;0;NA
 506 malaise;2015;vii;20;3;A;4;Trichoptera;0;0;NA
 507 malaise;2015;vii;20;3;B;4;Coleoptera;0.007;1;Melyridae
 508 malaise;2015;vii;20;3;B;4;Collembola;0.0;0;NA
 509 malaise;2015;vii;20;3;B;4;Diptera;1.7153;14;Anthomyiidae,Ceratopogonidae,Chironomidae,
 ,Chloropidae,Culicidae,Heleomyzidae,Drosophilidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae,Tephritidae,Ulidiidae
 510 malaise;2015;vii;20;3;B;4;Hemiptera;0.0852;3;Cicadellidae,Lygaeidae,Pentatomidae
 511 malaise;2015;vii;20;3;B;4;Lepidoptera;0.523;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 512 malaise;2015;vii;20;3;B;4;Mantodea;0;0;NA
 513 malaise;2015;vii;20;3;B;4;Neuroptera;0.0036;2;Chrysopidae,Hemerobiidae
 514 malaise;2015;vii;20;3;B;4;Orthoptera;0.3815;1;Tettigoniidae
 515 malaise;2015;vii;20;3;B;4;Thysanoptera;0.0;0;NA
 516 malaise;2015;vii;20;3;B;4;Trichoptera;0;0;NA
 517 malaise;2015;vii;20;3;C;4;Coleoptera;0.0125;2;Chrysomelidae,Coccinellidae
 518 malaise;2015;vii;20;3;C;4;Collembola;0.0;0;NA
 519 malaise;2015;vii;20;3;C;4;Diptera;1.3353;10;
 Agromyzidae,Anthomyiidae,Asilidae,Calliphoridae,Drosophilidae,Muscidae,Sarcophagidae,Scathophagidae,Syrphidae,Tachinidae
 520 malaise;2015;vii;20;3;C;4;Hemiptera;0.0363;2;Cicadellidae,Pentatomidae
 521 malaise;2015;vii;20;3;C;4;Lepidoptera;0.0895;4;Crambidae,Gelechiidae,Hesperiidae,Pyralidae
 522 malaise;2015;vii;20;3;C;4;Mantodea;0;0;NA
 523 malaise;2015;vii;20;3;C;4;Neuroptera;0.0005;1;Hemerobiidae
 524 malaise;2015;vii;20;3;C;4;Orthoptera;0.0;0;1;Tettigoniidae
 525 malaise;2015;vii;20;3;C;4;Thysanoptera;0.0;0;NA
 526 malaise;2015;vii;20;3;C;4;Trichoptera;0;0;NA
 527 malaise;2015;vii;22;1;A;5;Coleoptera;0.0157;1;Cleridae
 528 malaise;2015;vii;22;1;A;5;Collembola;0;0;0;NA
 529 malaise;2015;vii;22;1;A;5;Diptera;0.726;15;Agromyzidae,Asilidae,Calliphoridae,Chloropidae
 ,Heleomyzidae,Lauxaniidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae,Tephritidae,Ulidiidae
 530 malaise;2015;vii;22;1;A;5;Hemiptera;0.0207;3;Alydidae,Cicadellidae,Lygaeidae
 531 malaise;2015;vii;22;1;A;5;Hymenoptera;0.9479;6;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 532 malaise;2015;vii;22;1;A;5;Lepidoptera;0.2063;3;Gelechiidae,Noctuidae,Pyralidae
 533 malaise;2015;vii;22;1;A;5;Mantodea;0;0;NA
 534 malaise;2015;vii;22;1;A;5;Neuroptera;0.0;0;NA
 535 malaise;2015;vii;22;1;A;5;Orthoptera;0.0996;1;Tettigoniidae
 536 malaise;2015;vii;22;1;A;5;Thysanoptera;0.0;0;NA
 537 malaise;2015;vii;22;1;A;5;Trichoptera;0;0;NA
 538 malaise;2015;vii;22;1;B;5;Coleoptera;0.0012;1;Coccinellidae
 539 malaise;2015;vii;22;1;B;5;Collembola;0;0;0;NA
 540 malaise;2015;vii;22;1;B;5;Diptera;0.8454;11;Anthomyiidae
 ,Chloropidae,Dolichopodidae,Heleomyzidae,Muscidae,Mycetophilidae,Sarcophagidae,Scatopsidae,Sciaridae,Syrphidae,Tachinidae
 541 malaise;2015;vii;22;1;B;5;Hemiptera;0.0148;4;Alydidae,Cicadellidae,Miridae,Rhopalidae
 542 malaise;2015;vii;22;1;B;5;Hymenoptera;1.5685;7;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Proctotrupidae,Sphecidae,Tiphidae
 543 malaise;2015;vii;22;1;B;5;Lepidoptera;0.1342;0;NA
 544 malaise;2015;vii;22;1;B;5;Mantodea;0;0;NA
 545 malaise;2015;vii;22;1;B;5;Neuroptera;0.0015;1;Hemerobiidae
 546 malaise;2015;vii;22;1;B;5;Orthoptera;0.2609;1;Acrididae
 547 malaise;2015;vii;22;1;B;5;Thysanoptera;0.0;0;NA
 548 malaise;2015;vii;22;1;B;5;Trichoptera;0;0;NA
 549 malaise;2015;vii;22;1;C;5;Coleoptera;0.0153;1;Chrysomelidae
 550 malaise;2015;vii;22;1;C;5;Collembola;0;0;0;NA
 551 malaise;2015;vii;22;1;C;5;Diptera;1.0535;16;Agromyzidae,Anthomyiidae,Asilidae,Calliphoridae,Ceratopogonidae
 ,Chironomidae,Chloropidae,Ephydriidae,Heleomyzidae,Muscidae,Phoridae,Sarcophagidae,Sepsidae,Syrphidae,Tachinidae,Tephritidae
 552 malaise;2015;vii;22;1;C;5;Hemiptera;0.0342;2;Cicadellidae,Pentatomidae
 553 malaise;2015;vii;22;1;C;5;Hymenoptera;1.6571;6;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 554 malaise;2015;vii;22;1;C;5;Lepidoptera;0.3971;3;Gelechiidae,Noctuidae,Pyralidae
 555 malaise;2015;vii;22;1;C;5;Mantodea;0;0;NA
 556 malaise;2015;vii;22;1;C;5;Neuroptera;0.0024;1;Hemerobiidae
 557 malaise;2015;vii;22;1;C;5;Orthoptera;0.3749;1;Tettigoniidae
 558 malaise;2015;vii;22;1;C;5;Thysanoptera;0.0;0;NA
 559 malaise;2015;vii;22;1;C;5;Trichoptera;0;0;NA
 560 malaise;2015;vii;24;2;A;5;Coleoptera;0.0336;1;Cleridae
 561 malaise;2015;vii;24;2;A;5;Collembola;0;0;0;NA
 562 malaise;2015;vii;24;2;A;5;Diptera;0.9507;17;Anthomyiidae,Calliphoridae,Camillidae,Ceratopogonidae,Chloropidae,Dolichopodidae
 ,Drosophilidae,Heleomyzidae,Milichiidae,Muscidae,Phoridae,Sarcophagidae,Scatopsidae,Sepsidae,Syrphidae,Tachinidae,Therevidae
 563 malaise;2015;vii;24;2;A;5;Hemiptera;0.0045;1;Rhopalidae
 564 malaise;2015;
 vii;24;2;A;5;Hymenoptera;1.0108;8;Braconidae,Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 565 malaise;2015;vii;24;2;A;5;Lepidoptera;0.0882;3;Crambidae,Gelechiidae,Noctuidae
 566 malaise;2015;vii;24;2;A;5;Mantodea;0;0;NA
 567 malaise;2015;vii;24;2;A;5;Neuroptera;0.0;0;NA
 568 malaise;2015;vii;24;2;A;5;Orthoptera;0.7174;1;Acrididae
 569 malaise;2015;vii;24;2;A;5;Thysanoptera;0.0;0;NA
 570 malaise;2015;vii;24;2;A;5;Trichoptera;0;0;NA
 571 malaise;2015;vii;24;2;B;5;Coleoptera;0.0166;3;Bruchidae,Cleridae,Coccinellidae
 572 malaise;2015;vii;24;2;B;5;Collembola;0;0;0;NA
 573 malaise;2015;vii;24;2;B;5;Diptera;0.605;15;Anthomyiidae,Asilidae,Bombyliidae,Ceratopogonidae
 ,Chloropidae,Dolichopodidae,Heleomyzidae,Muscidae,Phoridae,Pipunculidae,Sarcophagidae,Scatopsidae,Sepsidae,Syrphidae,Tachinidae
 574 malaise;2015;vii;24;2;B;5;Hemiptera;0.0025;2;Cicadellidae,Miridae
 575 malaise;
 ;2015;vii;24;2;B;5;Hymenoptera;1.0859;8;Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae,Vespidae
 576 malaise;2015;vii;24;2;B;5;Lepidoptera;0.0659;3;Crambidae,Gelechiidae,Noctuidae
 577 malaise;2015;vii;24;2;B;5;Mantodea;0;0;NA
 578 malaise;2015;vii;24;2;B;5;Neuroptera;0.004;1;Chrysopidae
 579 malaise;2015;vii;24;2;B;5;Orthoptera;0.4025;2;Acrididae,Tettigoniidae
 580 malaise;2015;vii;24;2;B;5;Thysanoptera;0.0;0;NA

581 malaise;2015;vii;24;2;B;5;Trichoptera;0;0;NA
 582 malaise;2015;vii;24;2;C;5;Coleoptera;0.0171;2;Chrysomelidae,Cleridae
 583 malaise;2015;vii;24;2;C;5;Collembola;0;0;NA
 584 malaise;2015;
 vii;24;2;C;5;Diptera;1.4064;8;Anthomyiidae,Calliphoridae,Muscidae,Sarcophagidae,Syrphidae,Tachinidae,Tipulidae,Acalyptratae
 585 malaise;2015;vii;24;2;C;5;Hemiptera;0.0069;2;Cicadellidae,Miridae
 586 malaise;2015;vii;24;2;
 C;5;Hymenoptera;1.3181;9;Braconidae,Chalcidae,Chrysidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 587 malaise;2015;vii;24;2;C;5;Lepidoptera;0.1876;4;Gelechiidae,Geometridae,Noctuidae,Pyralidae
 588 malaise;2015;vii;24;2;C;5;Mantodea;0;0;NA
 589 malaise;2015;vii;24;2;C;5;Neuroptera;0.0071;2;Chrysopidae,Hemerobiidae
 590 malaise;2015;vii;24;2;C;5;Orthoptera;0.2348;2;Acrididae,Tettigoniidae
 591 malaise;2015;vii;24;2;C;5;Thysanoptera;0;0;NA
 592 malaise;2015;vii;24;2;C;5;Trichoptera;0;0;NA
 593 malaise;2015;vii;25;UTC;1;5;Coleoptera;0;0;NA
 594 malaise;2015;vii;25;UTC;1;5;Collembola;0;0;NA
 595 malaise;2015;vii;25;UTC;1;5;Diptera;0.735;7;Anthomyiidae,Asilidae,Muscidae,Phoridae,Sarcophagidae,Syrphidae,Tachinidae
 596 malaise;2015;vii;25;UTC;1;5;Hemiptera;0.0019;2;Cicadellidae,Miridae
 597 malaise;2015;vii;25;UTC;1;5;Hymenoptera;3.3824;6;Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 598 malaise;2015;vii;25;UTC;1;5;Lepidoptera;0.0997;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 599 malaise;2015;vii;25;UTC;1;5;Mantodea;0;0;NA
 600 malaise;2015;vii;25;UTC;1;5;Neuroptera;0;0;0;NA
 601 malaise;2015;vii;25;UTC;1;5;Orthoptera;0.6638;2;Acrididae,Tettigoniidae
 602 malaise;2015;vii;25;UTC;1;5;Thysanoptera;0;0;NA
 603 malaise;2015;vii;25;UTC;1;5;Trichoptera;0;0;NA
 604 malaise;2015;vii;25;UTC;2;5;Coleoptera;0.01;2;Chrysomelidae,Coccinellidae
 605 malaise;2015;vii;25;UTC;2;5;Collembola;0;0;NA
 606 malaise;2015;vii;25;UTC
 ;2;5;Diptera;0.4856;9;Anthomyiidae,Asilidae,Calliphoridae,Chironomidae,Muscidae,Sarcophagidae,Syrphidae,Tachinidae,Acalyptratae
 607 malaise;2015;vii;25;UTC;2;5;Hemiptera;0.0007;1;Cicadellidae
 608 malaise;2015;vii;25;UTC;2;5;Hymenoptera;1.2022;6;Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae
 609 malaise;2015;vii;25;UTC;2;5;Lepidoptera;0.0205;2;Gelechiidae,Pyralidae
 610 malaise;2015;vii;25;UTC;2;5;Mantodea;0;0;NA
 611 malaise;2015;vii;25;UTC;2;5;Neuroptera;0.0026;1;Chrysopidae
 612 malaise;2015;vii;25;UTC;2;5;Orthoptera;0.188;2;Acrididae,Tettigoniidae
 613 malaise;2015;vii;25;UTC;2;5;Thysanoptera;0;0;0;NA
 614 malaise;2015;vii;25;UTC;2;5;Trichoptera;0;0;NA
 615 malaise;2015;vii;25;UTC;3;5;Coleoptera;0.0174;1;Coccinellidae
 616 malaise;2015;vii;25;UTC;3;5;Collembola;0;0;0;NA
 617 malaise;2015;vii;25;UTC
 ;3;5;Diptera;0.4873;9;Anthomyiidae,Asilidae,Chironomidae,Chloropidae,Heleomyzidae,Muscidae,Sarcophagidae,Syrphidae,Tachinidae
 618 malaise;2015;vii;25;UTC;3;5;Hemiptera;0.001;1;Cicadellidae
 619 malaise;2015;vii;25;UTC;3;5;Hymenoptera;1.7895;7;Bethylidae,Braconidae,Halictidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 620 malaise;2015;vii;25;UTC;3;5;Lepidoptera;0.0159;2;Gelechiidae,Pyralidae
 621 malaise;2015;vii;25;UTC;3;5;Mantodea;0;0;NA
 622 malaise;2015;vii;25;UTC;3;5;Neuroptera;0;0;1;Hemerobiidae
 623 malaise;2015;vii;25;UTC;3;5;Orthoptera;0.2124;2;Acrididae,Tettigoniidae
 624 malaise;2015;vii;25;UTC;3;5;Thysanoptera;0;0;0;NA
 625 malaise;2015;vii;25;UTC;3;5;Trichoptera;0;0;NA
 626 malaise;2015;vii;27;3;A;5;Coleoptera;0.0832;4;Chrysomelidae,Cleridae,Coccinellidae,Melyridae
 627 malaise;2015;vii;27;3;A;5;Collembola;0;0;0;NA
 628 malaise;2015;vii;27;3;A;5;Diptera;5.3908;16;Anthomyiidae,Asilidae,Bombyliidae,Calliphoridae,Ceratopogonidae
 ,Chironomidae,Chloropidae,Clusiidae,Heleomyzidae,Muscidae,Phoridae,Sarcophagidae,Sciaridae,Syrphidae,Tachinidae,Tephritisidae
 629 malaise;2015;vii;27;3;A;5;Hemiptera;0.0284;4;Cicadellidae,Lygaeidae,Pentatomidae,Rhopalidae
 630 malaise;2015;
 vii;27;3;A;5;Hymenoptera;5.1568;9;Apidae,Braconidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae,Vespidae
 631 malaise;2015;vii;27;3;A;5;Lepidoptera;1.7829;4;Crambidae,Gelechiidae,Noctuidae,Pyralidae
 632 malaise;2015;vii;27;3;A;5;Mantodea;0;0;NA
 633 malaise;2015;vii;27;3;A;5;Neuroptera;0.0156;1;Chrysopidae
 634 malaise;2015;vii;27;3;A;5;Orthoptera;0.4586;1;Tettigoniidae
 635 malaise;2015;vii;27;3;A;5;Thysanoptera;0;0;0;NA
 636 malaise;2015;vii;27;3;A;5;Trichoptera;0;0;NA
 637 malaise;2015;vii;27;3;B;5;Coleoptera;0.012;2;Chrysomelidae,Coccinellidae
 638 malaise;2015;vii;27;3;B;5;Collembola;0;0;0;NA
 639 malaise;2015;vii;27;3;B;5;Diptera;2.0534;23;Agromyzidae,Anthomyiidae
 ,Asilidae,Bombyliidae,Calliphoridae,Cecidomyiidae,Ceratopogonidae,Culicidae,Drosophilidae,Ephydriidae,Heleomyzidae,Milichiidae
 ,Muscidae,Mycetophilidae,Phoridae,Psychodidae,Sarcophagidae,Sciariidae,Syrphidae,Tachinidae,Tipulidae,Ulidiidae
 640 malaise;2015;vii;27;3;B;5;Hemiptera;0.0079;3;Cicadellidae,Lygaeidae,Rhopalidae
 641 malaise;2015;vii;27;3;B;5;Hymenoptera;2.1551;7;Formicidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 642 malaise;2015;vii;27;3;B;5;Lepidoptera;0.2045;5;Crambidae,Gelechiidae,Hesperiidae,Pyralidae,Pteromalidae
 643 malaise;2015;vii;27;3;B;5;Mantodea;0;0;NA
 644 malaise;2015;vii;27;3;B;5;Neuroptera;0.0054;2;Chrysopidae,Hemerobiidae
 645 malaise;2015;vii;27;3;B;5;Orthoptera;0.7858;1;Tettigoniidae
 646 malaise;2015;vii;27;3;B;5;Thysanoptera;0;0;0;NA
 647 malaise;2015;vii;27;3;B;5;Trichoptera;0;0;NA
 648 malaise;2015;vii;27;3;C;5;Coleoptera;0.026;2;Chrysomelidae,Coccinellidae
 649 malaise;2015;vii;27;3;C;5;Collembola;0;0;0;NA
 650 malaise;2015;vii;27;3;C;5;Diptera;1.3926;24;Agromyzidae,Anthomyiidae,Asilidae,
 Bombyliidae,Calliphoridae,Carnidae,Cecidomyiidae,Ceratopogonidae,Chironomidae,Chloropidae,Culicidae,Dolichopodidae,Heleomyzidae
 ,Lauxaniidae,Lonchaetidae,Muscidae,Phoridae,Psychodidae,Rhinophoridae,Sarcophagidae,Simuliidae,Syrphidae,Tachinidae,Tephritisidae
 651 malaise;2015;vii;27;3;C;5;Hemiptera;0.0153;3;Cicadellidae,Lygaeidae,Pentatomidae
 652 malaise;2015;
 vii;27;3;C;5;Hymenoptera;3.0673;8;Braconidae,Chrysidae,Halictidae,Ichneumonidae,Mutillidae,Pompilidae,Sphecidae,Tiphidae
 653 malaise;2015;vii;27;3;C;5;Lepidoptera;0.3166;5;Crambidae,Gelechiidae,Hesperiidae,Noctuidae,Pyralidae
 654 malaise;2015;vii;27;3;C;5;Mantodea;0;0;NA
 655 malaise;2015;vii;27;3;C;5;Neuroptera;0.003199999999999997;2;Chrysopidae,Hemerobiidae
 656 malaise;2015;vii;27;3;C;5;Orthoptera;0.6558;1;Tettigoniidae
 657 malaise;2015;vii;27;3;C;5;Thysanoptera;0;0;0;NA
 658 malaise;2015;vii;27;3;C;5;Trichoptera;0;0;NA
 659 malaise;2016;vi;22;1;A;1;Blattodea;0;0;0;NA
 660 malaise;2016;vi;22;1;A;1;Coleoptera;0.0048;0;NA
 661 malaise;2016;vi;22;1;A;1;Collembola;0;0;0;NA
 662 malaise;2016;vi;22;1;A;1;Diptera;0.7349;0;NA
 663 malaise;2016;vi;22;1;A;1;Hemiptera;0.0037;0;NA
 664 malaise;2016;vi;22;1;A;1;Hymenoptera;0.901;0;NA

665 malaise;2016;vi;22;1;A;1;Lepidoptera;0.2492;0;NA
 666 malaise;2016;vi;22;1;A;1;Mantodea;0.0;0;NA
 667 malaise;2016;vi;22;1;A;1;Neuroptera;0.0003;0;NA
 668 malaise;2016;vi;22;1;A;1;Orthoptera;0.0003;0;NA
 669 malaise;2016;vi;22;1;A;1;Psocoptera;0.0;0;NA
 670 malaise;2016;vi;22;1;A;1;Thysanoptera;0.0;0;NA
 671 malaise;2016;vi;22;1;A;1;Trichoptera;0.0;0;NA
 672 malaise;2016;vi;22;1;B;1;Blattodea;0.0;0;NA
 673 malaise;2016;vi;22;1;B;1;Coleoptera;0.0104;0;NA
 674 malaise;2016;vi;22;1;B;1;Collembola;0.0;0;NA
 675 malaise;2016;vi;22;1;B;1;Diptera;1.0462;0;NA
 676 malaise;2016;vi;22;1;B;1;Hemiptera;0.0197;0;NA
 677 malaise;2016;vi;22;1;B;1;Hymenoptera;1.8174;0;NA
 678 malaise;2016;vi;22;1;B;1;Lepidoptera;0.5513;0;NA
 679 malaise;2016;vi;22;1;B;1;Mantodea;0.0;0;NA
 680 malaise;2016;vi;22;1;B;1;Neuroptera;0.0007;0;NA
 681 malaise;2016;vi;22;1;B;1;Orthoptera;0.0164;0;NA
 682 malaise;2016;vi;22;1;B;1;Psocoptera;0.0;0;NA
 683 malaise;2016;vi;22;1;B;1;Thysanoptera;0.0;0;NA
 684 malaise;2016;vi;22;1;B;1;Trichoptera;0.0;0;NA
 685 malaise;2016;vi;22;1;C;1;Blattodea;0.0;0;NA
 686 malaise;2016;vi;22;1;C;1;Coleoptera;0.0282;0;NA
 687 malaise;2016;vi;22;1;C;1;Collembola;0.0;0;NA
 688 malaise;2016;vi;22;1;C;1;Diptera;2.3384;0;NA
 689 malaise;2016;vi;22;1;C;1;Hemiptera;0.0025;0;NA
 690 malaise;2016;vi;22;1;C;1;Hymenoptera;0.8929;0;NA
 691 malaise;2016;vi;22;1;C;1;Lepidoptera;0.6385;0;NA
 692 malaise;2016;vi;22;1;C;1;Mantodea;0.0;0;NA
 693 malaise;2016;vi;22;1;C;1;Neuroptera;0.003;0;NA
 694 malaise;2016;vi;22;1;C;1;Orthoptera;0.059;0;NA
 695 malaise;2016;vi;22;1;C;1;Psocoptera;0.0;0;NA
 696 malaise;2016;vi;22;1;C;1;Thysanoptera;0.0;0;NA
 697 malaise;2016;vi;22;1;C;1;Trichoptera;0.0;0;NA
 698 malaise;2016;vi;23;2;A;1;Blattodea;0.0;0;NA
 699 malaise;2016;vi;23;2;A;1;Coleoptera;0.0019;0;NA
 700 malaise;2016;vi;23;2;A;1;Collembola;0.0;0;NA
 701 malaise;2016;vi;23;2;A;1;Diptera;1.5751;0;NA
 702 malaise;2016;vi;23;2;A;1;Hemiptera;0.0183;0;NA
 703 malaise;2016;vi;23;2;A;1;Hymenoptera;1.4039;0;NA
 704 malaise;2016;vi;23;2;A;1;Lepidoptera;0.2392;0;NA
 705 malaise;2016;vi;23;2;A;1;Mantodea;0.0;0;NA
 706 malaise;2016;vi;23;2;A;1;Neuroptera;0.0;0;NA
 707 malaise;2016;vi;23;2;A;1;Orthoptera;0.0;0;NA
 708 malaise;2016;vi;23;2;A;1;Psocoptera;0.0;0;NA
 709 malaise;2016;vi;23;2;A;1;Thysanoptera;0.0;0;NA
 710 malaise;2016;vi;23;2;A;1;Trichoptera;0.0;0;NA
 711 malaise;2016;vi;23;2;B;1;Blattodea;0.0;0;NA
 712 malaise;2016;vi;23;2;B;1;Coleoptera;0.0195;0;NA
 713 malaise;2016;vi;23;2;B;1;Collembola;0.0;0;NA
 714 malaise;2016;vi;23;2;B;1;Diptera;0.7362;0;NA
 715 malaise;2016;vi;23;2;B;1;Hemiptera;0.0047;0;NA
 716 malaise;2016;vi;23;2;B;1;Hymenoptera;1.4348;0;NA
 717 malaise;2016;vi;23;2;B;1;Lepidoptera;0.3091;0;NA
 718 malaise;2016;vi;23;2;B;1;Mantodea;0.0;0;NA
 719 malaise;2016;vi;23;2;B;1;Neuroptera;0.0019;0;NA
 720 malaise;2016;vi;23;2;B;1;Orthoptera;0.0;0;NA
 721 malaise;2016;vi;23;2;B;1;Psocoptera;0.0;0;NA
 722 malaise;2016;vi;23;2;B;1;Thysanoptera;0.0;0;NA
 723 malaise;2016;vi;23;2;B;1;Trichoptera;0.0;0;NA
 724 malaise;2016;vi;23;2;C;1;Blattodea;0.0;0;NA
 725 malaise;2016;vi;23;2;C;1;Coleoptera;0.002;0;NA
 726 malaise;2016;vi;23;2;C;1;Collembola;0.0;0;NA
 727 malaise;2016;vi;23;2;C;1;Diptera;0.94;0;NA
 728 malaise;2016;vi;23;2;C;1;Hemiptera;0.0381;0;NA
 729 malaise;2016;vi;23;2;C;1;Hymenoptera;0.5971;0;NA
 730 malaise;2016;vi;23;2;C;1;Lepidoptera;0.2176;0;NA
 731 malaise;2016;vi;23;2;C;1;Mantodea;0.0;0;NA
 732 malaise;2016;vi;23;2;C;1;Neuroptera;0.0022;0;NA
 733 malaise;2016;vi;23;2;C;1;Orthoptera;0.0;0;NA
 734 malaise;2016;vi;23;2;C;1;Psocoptera;0.0;0;NA
 735 malaise;2016;vi;23;2;C;1;Thysanoptera;0.0;0;NA
 736 malaise;2016;vi;23;2;C;1;Trichoptera;0.0;0;NA
 737 malaise;2016;vi;24;3;A;1;Blattodea;0.0;0;NA
 738 malaise;2016;vi;24;3;A;1;Coleoptera;0.0276;0;NA
 739 malaise;2016;vi;24;3;A;1;Collembola;0.0;0;NA
 740 malaise;2016;vi;24;3;A;1;Diptera;1.9894;0;NA
 741 malaise;2016;vi;24;3;A;1;Hemiptera;0.0049;0;NA
 742 malaise;2016;vi;24;3;A;1;Hymenoptera;0.5414;0;NA
 743 malaise;2016;vi;24;3;A;1;Lepidoptera;0.4904;0;NA
 744 malaise;2016;vi;24;3;A;1;Mantodea;0.0;0;NA
 745 malaise;2016;vi;24;3;A;1;Neuroptera;0.0;0;NA
 746 malaise;2016;vi;24;3;A;1;Orthoptera;0.0096;0;NA
 747 malaise;2016;vi;24;3;A;1;Psocoptera;0.0;0;NA
 748 malaise;2016;vi;24;3;A;1;Thysanoptera;0.0;0;NA
 749 malaise;2016;vi;24;3;A;1;Trichoptera;0.0;0;NA
 750 malaise;2016;vi;24;3;B;1;Blattodea;0.0;0;NA
 751 malaise;2016;vi;24;3;B;1;Coleoptera;0.0;0;NA
 752 malaise;2016;vi;24;3;B;1;Collembola;0.0;0;NA
 753 malaise;2016;vi;24;3;B;1;Diptera;0.7243;0;NA
 754 malaise;2016;vi;24;3;B;1;Hemiptera;0.0118;0;NA
 755 malaise;2016;vi;24;3;B;1;Hymenoptera;1.5011;0;NA
 756 malaise;2016;vi;24;3;B;1;Lepidoptera;0.1868;0;NA
 757 malaise;2016;vi;24;3;B;1;Mantodea;0.0;0;NA
 758 malaise;2016;vi;24;3;B;1;Neuroptera;0.0;0;NA
 759 malaise;2016;vi;24;3;B;1;Orthoptera;0.0011;0;NA

760 malaise;2016;vi;24;3;B;1;Psocoptera;0.0;0;NA
 761 malaise;2016;vi;24;3;B;1;Thysanoptera;0.0;0;NA
 762 malaise;2016;vi;24;3;B;1;Trichoptera;0.0;0;NA
 763 malaise;2016;vi;24;3;C;1;Blattodea;0.0;0;NA
 764 malaise;2016;vi;24;3;C;1;Coleoptera;0.0053;0;NA
 765 malaise;2016;vi;24;3;C;1;Collembola;0.0;0;NA
 766 malaise;2016;vi;24;3;C;1;Diptera;0.421;0;NA
 767 malaise;2016;vi;24;3;C;1;Hemiptera;0.0137;0;NA
 768 malaise;2016;vi;24;3;C;1;Hymenoptera;1.5524;0;NA
 769 malaise;2016;vi;24;3;C;1;Lepidoptera;0.1053;0;NA
 770 malaise;2016;vi;24;3;C;1;Mantodea;0.0;0;NA
 771 malaise;2016;vi;24;3;C;1;Neuroptera;0.0001;0;NA
 772 malaise;2016;vi;24;3;C;1;Orthoptera;0.042;0;NA
 773 malaise;2016;vi;24;3;C;1;Psocoptera;0.0;0;NA
 774 malaise;2016;vi;24;3;C;1;Thysanoptera;0.0;0;NA
 775 malaise;2016;vi;24;3;C;1;Trichoptera;0.0;0;NA
 776 malaise;2016;vi;25;UTC;1;1;Blattodea;0.0;0;NA
 777 malaise;2016;vi;25;UTC;1;1;Coleoptera;0.0108;0;NA
 778 malaise;2016;vi;25;UTC;1;1;Collembola;0.0;0;NA
 779 malaise;2016;vi;25;UTC;1;1;Diptera;0.4033;0;NA
 780 malaise;2016;vi;25;UTC;1;1;Hemiptera;0.0276;0;NA
 781 malaise;2016;vi;25;UTC;1;1;Hymenoptera;1.3619;0;NA
 782 malaise;2016;vi;25;UTC;1;1;Lepidoptera;0.1386;0;NA
 783 malaise;2016;vi;25;UTC;1;1;Mantodea;0.0;0;NA
 784 malaise;2016;vi;25;UTC;1;1;Neuroptera;0.0;0;NA
 785 malaise;2016;vi;25;UTC;1;1;Orthoptera;0.0549;0;NA
 786 malaise;2016;vi;25;UTC;1;1;Psocoptera;0.0;0;NA
 787 malaise;2016;vi;25;UTC;1;1;Thysanoptera;0.0;0;NA
 788 malaise;2016;vi;25;UTC;1;1;Trichoptera;0.0;0;NA
 789 malaise;2016;vi;25;UTC;2;1;Blattodea;0.0;0;NA
 790 malaise;2016;vi;25;UTC;2;1;Coleoptera;0.0142;0;NA
 791 malaise;2016;vi;25;UTC;2;1;Collembola;0.0;0;NA
 792 malaise;2016;vi;25;UTC;2;1;Diptera;0.6445;0;NA
 793 malaise;2016;vi;25;UTC;2;1;Hemiptera;0.0023;0;NA
 794 malaise;2016;vi;25;UTC;2;1;Hymenoptera;0.5128;0;NA
 795 malaise;2016;vi;25;UTC;2;1;Lepidoptera;0.0312;0;NA
 796 malaise;2016;vi;25;UTC;2;1;Mantodea;0.0;0;NA
 797 malaise;2016;vi;25;UTC;2;1;Neuroptera;0.0013;0;NA
 798 malaise;2016;vi;25;UTC;2;1;Orthoptera;0.0;0;NA
 799 malaise;2016;vi;25;UTC;2;1;Psocoptera;0.0;0;NA
 800 malaise;2016;vi;25;UTC;2;1;Thysanoptera;0.0;0;NA
 801 malaise;2016;vi;25;UTC;2;1;Trichoptera;0.0;0;NA
 802 malaise;2016;vi;25;UTC;3;1;Blattodea;0.0;0;NA
 803 malaise;2016;vi;25;UTC;3;1;Coleoptera;0.0056;0;NA
 804 malaise;2016;vi;25;UTC;3;1;Collembola;0.0;0;NA
 805 malaise;2016;vi;25;UTC;3;1;Diptera;0.578;0;NA
 806 malaise;2016;vi;25;UTC;3;1;Hemiptera;0.0035;0;NA
 807 malaise;2016;vi;25;UTC;3;1;Hymenoptera;1.6974;0;NA
 808 malaise;2016;vi;25;UTC;3;1;Lepidoptera;0.1344;0;NA
 809 malaise;2016;vi;25;UTC;3;1;Mantodea;0.0;0;NA
 810 malaise;2016;vi;25;UTC;3;1;Neuroptera;0.0004;0;NA
 811 malaise;2016;vi;25;UTC;3;1;Orthoptera;0.0091;0;NA
 812 malaise;2016;vi;25;UTC;3;1;Psocoptera;0.0;0;NA
 813 malaise;2016;vi;25;UTC;3;1;Thysanoptera;0.0;0;NA
 814 malaise;2016;vi;25;UTC;3;1;Trichoptera;0.0;0;NA
 815 malaise;2016;vi;29;1;A;2;Blattodea;0.0;0;NA
 816 malaise;2016;vi;29;1;A;2;Coleoptera;0.0203;0;NA
 817 malaise;2016;vi;29;1;A;2;Collembola;0.0;0;NA
 818 malaise;2016;vi;29;1;A;2;Diptera;3.0155;0;NA
 819 malaise;2016;vi;29;1;A;2;Hemiptera;0.0113;0;NA
 820 malaise;2016;vi;29;1;A;2;Hymenoptera;0.8978;0;NA
 821 malaise;2016;vi;29;1;A;2;Lepidoptera;0.2082;0;NA
 822 malaise;2016;vi;29;1;A;2;Mantodea;0.0;0;NA
 823 malaise;2016;vi;29;1;A;2;Neuroptera;0.0009;0;NA
 824 malaise;2016;vi;29;1;A;2;Orthoptera;0.05;0;NA
 825 malaise;2016;vi;29;1;A;2;Psocoptera;0.0;0;NA
 826 malaise;2016;vi;29;1;A;2;Thysanoptera;0.0;0;NA
 827 malaise;2016;vi;29;1;A;2;Trichoptera;0.0;0;NA
 828 malaise;2016;vi;29;1;B;2;Blattodea;0.0;0;NA
 829 malaise;2016;vi;29;1;B;2;Coleoptera;0.0382;0;NA
 830 malaise;2016;vi;29;1;B;2;Collembola;0.0;0;NA
 831 malaise;2016;vi;29;1;B;2;Diptera;0.0;0;NA
 832 malaise;2016;vi;29;1;B;2;Hemiptera;0.0658;0;NA
 833 malaise;2016;vi;29;1;B;2;Hymenoptera;2.4005;0;NA
 834 malaise;2016;vi;29;1;B;2;Lepidoptera;0.2944;0;NA
 835 malaise;2016;vi;29;1;B;2;Mantodea;0.0;0;NA
 836 malaise;2016;vi;29;1;B;2;Neuroptera;0.0015;0;NA
 837 malaise;2016;vi;29;1;B;2;Orthoptera;0.0453;0;NA
 838 malaise;2016;vi;29;1;B;2;Psocoptera;0.0;0;NA
 839 malaise;2016;vi;29;1;B;2;Thysanoptera;0.0;0;NA
 840 malaise;2016;vi;29;1;B;2;Trichoptera;0.0;0;NA
 841 malaise;2016;vi;29;1;C;2;Blattodea;0.0;0;NA
 842 malaise;2016;vi;29;1;C;2;Coleoptera;0.0;0;NA
 843 malaise;2016;vi;29;1;C;2;Collembola;0.0;0;NA
 844 malaise;2016;vi;29;1;C;2;Diptera;0.8964;0;NA
 845 malaise;2016;vi;29;1;C;2;Hemiptera;0.0016;0;NA
 846 malaise;2016;vi;29;1;C;2;Hymenoptera;1.5507;0;NA
 847 malaise;2016;vi;29;1;C;2;Lepidoptera;0.1367;0;NA
 848 malaise;2016;vi;29;1;C;2;Mantodea;0.0;0;NA
 849 malaise;2016;vi;29;1;C;2;Neuroptera;0.0004;0;NA
 850 malaise;2016;vi;29;1;C;2;Orthoptera;0.0;0;NA
 851 malaise;2016;vi;29;1;C;2;Psocoptera;0.0;0;NA
 852 malaise;2016;vi;29;1;C;2;Thysanoptera;0.0;0;NA
 853 malaise;2016;vi;29;1;C;2;Trichoptera;0.0;0;NA
 854 malaise;2016;vi;30;2;A;2;Blattodea;0.0;0;NA

855 malaise;2016;vi;30;2;A;2;Coleoptera;0.0013;0;NA
 856 malaise;2016;vi;30;2;A;2;Collembola;0.0;0;NA
 857 malaise;2016;vi;30;2;A;2;Diptera;2.0636;0;NA
 858 malaise;2016;vi;30;2;A;2;Hemiptera;0.022;0;NA
 859 malaise;2016;vi;30;2;A;2;Hymenoptera;1.3161;0;NA
 860 malaise;2016;vi;30;2;A;2;Lepidoptera;0.3831;0;NA
 861 malaise;2016;vi;30;2;A;2;Mantodea;0.0;0;NA
 862 malaise;2016;vi;30;2;A;2;Neuroptera;0.0;0;NA
 863 malaise;2016;vi;30;2;A;2;Orthoptera;0.0545;0;NA
 864 malaise;2016;vi;30;2;A;2;Psocoptera;0.0;0;NA
 865 malaise;2016;vi;30;2;A;2;Thysanoptera;0.0;0;NA
 866 malaise;2016;vi;30;2;A;2;Trichoptera;0.0;0;NA
 867 malaise;2016;vi;30;2;B;2;Blattodea;0.0;0;NA
 868 malaise;2016;vi;30;2;B;2;Coleoptera;0.0043;0;NA
 869 malaise;2016;vi;30;2;B;2;Collembola;0.0;0;NA
 870 malaise;2016;vi;30;2;B;2;Diptera;0.7807;0;NA
 871 malaise;2016;vi;30;2;B;2;Hemiptera;0.0015;0;NA
 872 malaise;2016;vi;30;2;B;2;Hymenoptera;1.304;0;NA
 873 malaise;2016;vi;30;2;B;2;Lepidoptera;0.138;0;NA
 874 malaise;2016;vi;30;2;B;2;Mantodea;0.0;0;NA
 875 malaise;2016;vi;30;2;B;2;Neuroptera;0.0031;0;NA
 876 malaise;2016;vi;30;2;B;2;Orthoptera;0.028;0;NA
 877 malaise;2016;vi;30;2;B;2;Psocoptera;0.0;0;NA
 878 malaise;2016;vi;30;2;B;2;Thysanoptera;0.0;0;NA
 879 malaise;2016;vi;30;2;B;2;Trichoptera;0.0;0;NA
 880 malaise;2016;vi;30;2;C;2;Blattodea;0.0;0;NA
 881 malaise;2016;vi;30;2;C;2;Coleoptera;0.0;0;NA
 882 malaise;2016;vi;30;2;C;2;Collembola;0.0;0;NA
 883 malaise;2016;vi;30;2;C;2;Diptera;0.7604;0;NA
 884 malaise;2016;vi;30;2;C;2;Hemiptera;0.0013;0;NA
 885 malaise;2016;vi;30;2;C;2;Hymenoptera;0.6808;0;NA
 886 malaise;2016;vi;30;2;C;2;Lepidoptera;0.1152;0;NA
 887 malaise;2016;vi;30;2;C;2;Mantodea;0.0;0;NA
 888 malaise;2016;vi;30;2;C;2;Neuroptera;0.0;0;NA
 889 malaise;2016;vi;30;2;C;2;Orthoptera;0.0;0;NA
 890 malaise;2016;vi;30;2;C;2;Psocoptera;0.0;0;NA
 891 malaise;2016;vi;30;2;C;2;Thysanoptera;0.0;0;NA
 892 malaise;2016;vi;30;2;C;2;Trichoptera;0.0;0;NA
 893 malaise;2016;vii;01;3;A;2;Blattodea;0.0;0;NA
 894 malaise;2016;vii;01;3;A;2;Coleoptera;0.0105;0;NA
 895 malaise;2016;vii;01;3;A;2;Collembola;0.0;0;NA
 896 malaise;2016;vii;01;3;A;2;Diptera;1.5445;0;NA
 897 malaise;2016;vii;01;3;A;2;Hemiptera;0.0068;0;NA
 898 malaise;2016;vii;01;3;A;2;Hymenoptera;1.0702;0;NA
 899 malaise;2016;vii;01;3;A;2;Lepidoptera;0.2515;0;NA
 900 malaise;2016;vii;01;3;A;2;Mantodea;0.0;0;NA
 901 malaise;2016;vii;01;3;A;2;Neuroptera;0.0014;0;NA
 902 malaise;2016;vii;01;3;A;2;Orthoptera;0.1444;0;NA
 903 malaise;2016;vii;01;3;A;2;Psocoptera;0.0;0;NA
 904 malaise;2016;vii;01;3;A;2;Thysanoptera;0.0;0;NA
 905 malaise;2016;vii;01;3;A;2;Trichoptera;0.0;0;NA
 906 malaise;2016;vii;01;3;B;2;Blattodea;0.0;0;NA
 907 malaise;2016;vii;01;3;B;2;Coleoptera;0.0;0;NA
 908 malaise;2016;vii;01;3;B;2;Collembola;0.0;0;NA
 909 malaise;2016;vii;01;3;B;2;Diptera;0.4979;0;NA
 910 malaise;2016;vii;01;3;B;2;Hemiptera;0.0083;0;NA
 911 malaise;2016;vii;01;3;B;2;Hymenoptera;2.0758;0;NA
 912 malaise;2016;vii;01;3;B;2;Lepidoptera;0.2695;0;NA
 913 malaise;2016;vii;01;3;B;2;Mantodea;0.0;0;NA
 914 malaise;2016;vii;01;3;B;2;Neuroptera;0.0003;0;NA
 915 malaise;2016;vii;01;3;B;2;Orthoptera;0.0438;0;NA
 916 malaise;2016;vii;01;3;B;2;Psocoptera;0.0;0;NA
 917 malaise;2016;vii;01;3;B;2;Thysanoptera;0.0;0;NA
 918 malaise;2016;vii;01;3;B;2;Trichoptera;0.0;0;NA
 919 malaise;2016;vii;01;3;C;2;Blattodea;0.0;0;NA
 920 malaise;2016;vii;01;3;C;2;Coleoptera;0.0098;0;NA
 921 malaise;2016;vii;01;3;C;2;Collembola;0.0;0;NA
 922 malaise;2016;vii;01;3;C;2;Diptera;0.4716;0;NA
 923 malaise;2016;vii;01;3;C;2;Hemiptera;0.0031;0;NA
 924 malaise;2016;vii;01;3;C;2;Hymenoptera;2.1251;0;NA
 925 malaise;2016;vii;01;3;C;2;Lepidoptera;0.3915;0;NA
 926 malaise;2016;vii;01;3;C;2;Mantodea;0.0;0;NA
 927 malaise;2016;vii;01;3;C;2;Neuroptera;0.0;0;NA
 928 malaise;2016;vii;01;3;C;2;Orthoptera;0.1174;0;NA
 929 malaise;2016;vii;01;3;C;2;Psocoptera;0.0;0;NA
 930 malaise;2016;vii;01;3;C;2;Thysanoptera;0.0;0;NA
 931 malaise;2016;vii;01;3;C;2;Trichoptera;0.0;0;NA
 932 malaise;2016;vii;02;UTC;1;2;Blattodea;0.0;0;NA
 933 malaise;2016;vii;02;UTC;1;2;Coleoptera;0.0;0;NA
 934 malaise;2016;vii;02;UTC;1;2;Collembola;0.0;0;NA
 935 malaise;2016;vii;02;UTC;1;2;Diptera;0.3667;0;NA
 936 malaise;2016;vii;02;UTC;1;2;Hemiptera;0.0136;0;NA
 937 malaise;2016;vii;02;UTC;1;2;Hymenoptera;0.0135;0;NA
 938 malaise;2016;vii;02;UTC;1;2;Lepidoptera;0.3189;0;NA
 939 malaise;2016;vii;02;UTC;1;2;Mantodea;0.0;0;NA
 940 malaise;2016;vii;02;UTC;1;2;Neuroptera;0.0001;0;NA
 941 malaise;2016;vii;02;UTC;1;2;Orthoptera;0.1498;0;NA
 942 malaise;2016;vii;02;UTC;1;2;Psocoptera;0.0;0;NA
 943 malaise;2016;vii;02;UTC;1;2;Thysanoptera;0.0;0;NA
 944 malaise;2016;vii;02;UTC;1;2;Trichoptera;0.0;0;NA
 945 malaise;2016;vii;02;UTC;2;2;Blattodea;0.0;0;NA
 946 malaise;2016;vii;02;UTC;2;2;Coleoptera;0.0091;0;NA
 947 malaise;2016;vii;02;UTC;2;2;Collembola;0.0;0;NA
 948 malaise;2016;vii;02;UTC;2;2;Diptera;0.5859;0;NA
 949 malaise;2016;vii;02;UTC;2;2;Hemiptera;0.0014;0;NA

950 malaise;2016;vii;02;UTC;2;2;Hymenoptera;1.1289;0;NA
 951 malaise;2016;vii;02;UTC;2;2;Lepidoptera;0.5602;0;NA
 952 malaise;2016;vii;02;UTC;2;2;Mantodea;0.0;0;NA
 953 malaise;2016;vii;02;UTC;2;2;Neuroptera;0.0001;0;NA
 954 malaise;2016;vii;02;UTC;2;2;Orthoptera;0.0;0;NA
 955 malaise;2016;vii;02;UTC;2;2;Psocoptera;0.0;0;NA
 956 malaise;2016;vii;02;UTC;2;2;Thysanoptera;0.0;0;NA
 957 malaise;2016;vii;02;UTC;2;2;Trichoptera;0.0;0;NA
 958 malaise;2016;vii;02;UTC;3;2;Blattodea;0.0;0;NA
 959 malaise;2016;vii;02;UTC;3;2;Coleoptera;0.0013;0;NA
 960 malaise;2016;vii;02;UTC;3;2;Collembola;0.0;0;NA
 961 malaise;2016;vii;02;UTC;3;2;Diptera;0.4405;0;NA
 962 malaise;2016;vii;02;UTC;3;2;Hemiptera;0.0029;0;NA
 963 malaise;2016;vii;02;UTC;3;2;Hymenoptera;1.4273;0;NA
 964 malaise;2016;vii;02;UTC;3;2;Lepidoptera;0.1146;0;NA
 965 malaise;2016;vii;02;UTC;3;2;Mantodea;0.0;0;NA
 966 malaise;2016;vii;02;UTC;3;2;Neuroptera;0.0008;0;NA
 967 malaise;2016;vii;02;UTC;3;2;Orthoptera;0.0288;0;NA
 968 malaise;2016;vii;02;UTC;3;2;Psocoptera;0.0;0;NA
 969 malaise;2016;vii;02;UTC;3;2;Thysanoptera;0.0;0;NA
 970 malaise;2016;vii;02;UTC;3;2;Trichoptera;0.0;0;NA
 971 malaise;2016;vii;06;1;A;3;Blattodea;0.0;0;NA
 972 malaise;2016;vii;06;1;A;3;Coleoptera;0.0317;0;NA
 973 malaise;2016;vii;06;1;A;3;Collembola;0.0;0;NA
 974 malaise;2016;vii;06;1;A;3;Diptera;1.4866;0;NA
 975 malaise;2016;vii;06;1;A;3;Hemiptera;0.0278;0;NA
 976 malaise;2016;vii;06;1;A;3;Hymenoptera;2.0862;0;NA
 977 malaise;2016;vii;06;1;A;3;Lepidoptera;0.5014;0;NA
 978 malaise;2016;vii;06;1;A;3;Mantodea;0.0;0;NA
 979 malaise;2016;vii;06;1;A;3;Neuroptera;0.0027;0;NA
 980 malaise;2016;vii;06;1;A;3;Orthoptera;0.0;0;NA
 981 malaise;2016;vii;06;1;A;3;Psocoptera;0.0;0;NA
 982 malaise;2016;vii;06;1;A;3;Thysanoptera;0.0;0;NA
 983 malaise;2016;vii;06;1;A;3;Trichoptera;0.0;0;NA
 984 malaise;2016;vii;06;1;B;3;Blattodea;0.0;0;NA
 985 malaise;2016;vii;06;1;B;3;Coleoptera;0.0619;0;NA
 986 malaise;2016;vii;06;1;B;3;Collembola;0.0;0;NA
 987 malaise;2016;vii;06;1;B;3;Diptera;0.8817;0;NA
 988 malaise;2016;vii;06;1;B;3;Hemiptera;0.0153;0;NA
 989 malaise;2016;vii;06;1;B;3;Hymenoptera;3.3941;0;NA
 990 malaise;2016;vii;06;1;B;3;Lepidoptera;0.8101;0;NA
 991 malaise;2016;vii;06;1;B;3;Mantodea;0.0;0;NA
 992 malaise;2016;vii;06;1;B;3;Neuroptera;0.0025;0;NA
 993 malaise;2016;vii;06;1;B;3;Orthoptera;0.0109;0;NA
 994 malaise;2016;vii;06;1;B;3;Psocoptera;0.0;0;NA
 995 malaise;2016;vii;06;1;B;3;Thysanoptera;0.0;0;NA
 996 malaise;2016;vii;06;1;B;3;Trichoptera;0.0;0;NA
 997 malaise;2016;vii;06;1;C;3;Blattodea;0.0;0;NA
 998 malaise;2016;vii;06;1;C;3;Coleoptera;0.0;0;NA
 999 malaise;2016;vii;06;1;C;3;Collembola;0.0;0;NA
 1000 malaise;2016;vii;06;1;C;3;Diptera;0.5235;0;NA
 1001 malaise;2016;vii;06;1;C;3;Hemiptera;0.0047;0;NA
 1002 malaise;2016;vii;06;1;C;3;Hymenoptera;1.715;0;NA
 1003 malaise;2016;vii;06;1;C;3;Lepidoptera;0.1949;0;NA
 1004 malaise;2016;vii;06;1;C;3;Mantodea;0.0;0;NA
 1005 malaise;2016;vii;06;1;C;3;Neuroptera;0.0016;0;NA
 1006 malaise;2016;vii;06;1;C;3;Orthoptera;0.144;0;NA
 1007 malaise;2016;vii;06;1;C;3;Psocoptera;0.0;0;NA
 1008 malaise;2016;vii;06;1;C;3;Thysanoptera;0.0;0;NA
 1009 malaise;2016;vii;06;1;C;3;Trichoptera;0.0;0;NA
 1010 malaise;2016;vii;07;2;A;3;Blattodea;0.0;0;NA
 1011 malaise;2016;vii;07;2;A;3;Coleoptera;0.0361;0;NA
 1012 malaise;2016;vii;07;2;A;3;Collembola;0.0;0;NA
 1013 malaise;2016;vii;07;2;A;3;Diptera;1.7508;0;NA
 1014 malaise;2016;vii;07;2;A;3;Hemiptera;0.0097;0;NA
 1015 malaise;2016;vii;07;2;A;3;Hymenoptera;1.3103;0;NA
 1016 malaise;2016;vii;07;2;A;3;Lepidoptera;0.5978;0;NA
 1017 malaise;2016;vii;07;2;A;3;Mantodea;0.0;0;NA
 1018 malaise;2016;vii;07;2;A;3;Neuroptera;0.0012;0;NA
 1019 malaise;2016;vii;07;2;A;3;Orthoptera;0.0;0;NA
 1020 malaise;2016;vii;07;2;A;3;Psocoptera;0.0;0;NA
 1021 malaise;2016;vii;07;2;A;3;Thysanoptera;0.0;0;NA
 1022 malaise;2016;vii;07;2;A;3;Trichoptera;0;0;NA
 1023 malaise;2016;vii;07;2;B;3;Blattodea;0.0;0;NA
 1024 malaise;2016;vii;07;2;B;3;Coleoptera;0.0467;0;NA
 1025 malaise;2016;vii;07;2;B;3;Collembola;0.0;0;NA
 1026 malaise;2016;vii;07;2;B;3;Diptera;0.71;0;NA
 1027 malaise;2016;vii;07;2;B;3;Hemiptera;0.0087;0;NA
 1028 malaise;2016;vii;07;2;B;3;Hymenoptera;1.2268;0;NA
 1029 malaise;2016;vii;07;2;B;3;Lepidoptera;0.4693;0;NA
 1030 malaise;2016;vii;07;2;B;3;Mantodea;0.0;0;NA
 1031 malaise;2016;vii;07;2;B;3;Neuroptera;0.0027;0;NA
 1032 malaise;2016;vii;07;2;B;3;Orthoptera;0.0172;0;NA
 1033 malaise;2016;vii;07;2;B;3;Psocoptera;0.0;0;NA
 1034 malaise;2016;vii;07;2;B;3;Thysanoptera;0.0;0;NA
 1035 malaise;2016;vii;07;2;B;3;Trichoptera;0.0;0;NA
 1036 malaise;2016;vii;07;2;C;3;Blattodea;0.0;0;NA
 1037 malaise;2016;vii;07;2;C;3;Coleoptera;0.0;0;NA
 1038 malaise;2016;vii;07;2;C;3;Collembola;0.0;0;NA
 1039 malaise;2016;vii;07;2;C;3;Diptera;0.8573;0;NA
 1040 malaise;2016;vii;07;2;C;3;Hemiptera;0.0041;0;NA
 1041 malaise;2016;vii;07;2;C;3;Hymenoptera;0.8021;0;NA
 1042 malaise;2016;vii;07;2;C;3;Lepidoptera;0.2126;0;NA
 1043 malaise;2016;vii;07;2;C;3;Mantodea;0.0;0;NA
 1044 malaise;2016;vii;07;2;C;3;Neuroptera;0.0046;0;NA

1045 malaise;2016;vii;07;2;C;3;Orthoptera;0.0;0;NA
 1046 malaise;2016;vii;07;2;C;3;Psocoptera;0.0;0;NA
 1047 malaise;2016;vii;07;2;C;3;Thysanoptera;0.0;0;NA
 1048 malaise;2016;vii;07;2;C;3;Trichoptera;0.0;0;NA
 1049 malaise;2016;vii;08;3;A;3;Blattodea;0.0;0;NA
 1050 malaise;2016;vii;08;3;A;3;Coleoptera;0.048;0;NA
 1051 malaise;2016;vii;08;3;A;3;Collembola;0.0;0;NA
 1052 malaise;2016;vii;08;3;A;3;Diptera;0.9945;0;NA
 1053 malaise;2016;vii;08;3;A;3;Hemiptera;0.0109;0;NA
 1054 malaise;2016;vii;08;3;A;3;Hymenoptera;1.831;0;NA
 1055 malaise;2016;vii;08;3;A;3;Lepidoptera;0.1162;0;NA
 1056 malaise;2016;vii;08;3;A;3;Mantodea;0.0;0;NA
 1057 malaise;2016;vii;08;3;A;3;Neuroptera;0.0;0;NA
 1058 malaise;2016;vii;08;3;A;3;Orthoptera;0.1203;0;NA
 1059 malaise;2016;vii;08;3;A;3;Psocoptera;0.0;0;NA
 1060 malaise;2016;vii;08;3;A;3;Thysanoptera;0.0;0;NA
 1061 malaise;2016;vii;08;3;A;3;Trichoptera;0.0;0;NA
 1062 malaise;2016;vii;08;3;B;3;Blattodea;0.0;0;NA
 1063 malaise;2016;vii;08;3;B;3;Coleoptera;0.0082;0;NA
 1064 malaise;2016;vii;08;3;B;3;Collembola;0.0;0;NA
 1065 malaise;2016;vii;08;3;B;3;Diptera;0.2525;0;NA
 1066 malaise;2016;vii;08;3;B;3;Hemiptera;0.0;0;NA
 1067 malaise;2016;vii;08;3;B;3;Hymenoptera;4.0784;0;NA
 1068 malaise;2016;vii;08;3;B;3;Lepidoptera;0.1006;0;NA
 1069 malaise;2016;vii;08;3;B;3;Mantodea;0.0;0;NA
 1070 malaise;2016;vii;08;3;B;3;Neuroptera;0.0001;0;NA
 1071 malaise;2016;vii;08;3;B;3;Orthoptera;0.0;0;NA
 1072 malaise;2016;vii;08;3;B;3;Psocoptera;0.0;0;NA
 1073 malaise;2016;vii;08;3;B;3;Thysanoptera;0.0;0;NA
 1074 malaise;2016;vii;08;3;B;3;Trichoptera;0.0;0;NA
 1075 malaise;2016;vii;08;3;C;3;Blattodea;0.0;0;NA
 1076 malaise;2016;vii;08;3;C;3;Coleoptera;0.0015;0;NA
 1077 malaise;2016;vii;08;3;C;3;Collembola;0.0;0;NA
 1078 malaise;2016;vii;08;3;C;3;Diptera;0.292;0;NA
 1079 malaise;2016;vii;08;3;C;3;Hemiptera;0.0008;0;NA
 1080 malaise;2016;vii;08;3;C;3;Hymenoptera;0.0008;0;NA
 1081 malaise;2016;vii;08;3;C;3;Lepidoptera;0.1347;0;NA
 1082 malaise;2016;vii;08;3;C;3;Mantodea;0.0;0;NA
 1083 malaise;2016;vii;08;3;C;3;Neuroptera;0.0;0;NA
 1084 malaise;2016;vii;08;3;C;3;Orthoptera;0.0662;0;NA
 1085 malaise;2016;vii;08;3;C;3;Psocoptera;0.0;0;NA
 1086 malaise;2016;vii;08;3;C;3;Thysanoptera;0.0;0;NA
 1087 malaise;2016;vii;08;3;C;3;Trichoptera;0.0;0;NA
 1088 malaise;2016;vii;09;UTC;1;3;Blattodea;0.0;0;NA
 1089 malaise;2016;vii;09;UTC;1;3;Coleoptera;0.0074;0;NA
 1090 malaise;2016;vii;09;UTC;1;3;Collembola;0.0;0;NA
 1091 malaise;2016;vii;09;UTC;1;3;Diptera;0.1794;0;NA
 1092 malaise;2016;vii;09;UTC;1;3;Hemiptera;0.0031;0;NA
 1093 malaise;2016;vii;09;UTC;1;3;Hymenoptera;2.1515;0;NA
 1094 malaise;2016;vii;09;UTC;1;3;Lepidoptera;0.0156;0;NA
 1095 malaise;2016;vii;09;UTC;1;3;Mantodea;0.0;0;NA
 1096 malaise;2016;vii;09;UTC;1;3;Neuroptera;0.0003;0;NA
 1097 malaise;2016;vii;09;UTC;1;3;Orthoptera;0.1936;0;NA
 1098 malaise;2016;vii;09;UTC;1;3;Psocoptera;0.0;0;NA
 1099 malaise;2016;vii;09;UTC;1;3;Thysanoptera;0.0;0;NA
 1100 malaise;2016;vii;09;UTC;1;3;Trichoptera;0.0;0;NA
 1101 malaise;2016;vii;09;UTC;2;3;Blattodea;0.0;0;NA
 1102 malaise;2016;vii;09;UTC;2;3;Coleoptera;0.0;0;NA
 1103 malaise;2016;vii;09;UTC;2;3;Collembola;0.0;0;NA
 1104 malaise;2016;vii;09;UTC;2;3;Diptera;0.4031;0;NA
 1105 malaise;2016;vii;09;UTC;2;3;Hemiptera;0.0004;0;NA
 1106 malaise;2016;vii;09;UTC;2;3;Hymenoptera;1.47;0;NA
 1107 malaise;2016;vii;09;UTC;2;3;Lepidoptera;0.1609;0;NA
 1108 malaise;2016;vii;09;UTC;2;3;Mantodea;0.0;0;NA
 1109 malaise;2016;vii;09;UTC;2;3;Neuroptera;0.0005;0;NA
 1110 malaise;2016;vii;09;UTC;2;3;Orthoptera;0.0164;0;NA
 1111 malaise;2016;vii;09;UTC;2;3;Psocoptera;0.0;0;NA
 1112 malaise;2016;vii;09;UTC;2;3;Thysanoptera;0.0;0;NA
 1113 malaise;2016;vii;09;UTC;2;3;Trichoptera;0.0;0;NA
 1114 malaise;2016;vii;09;UTC;3;3;Blattodea;0.0;0;NA
 1115 malaise;2016;vii;09;UTC;3;3;Coleoptera;0.0;0;NA
 1116 malaise;2016;vii;09;UTC;3;3;Collembola;0.0;0;NA
 1117 malaise;2016;vii;09;UTC;3;3;Diptera;0.3958;0;NA
 1118 malaise;2016;vii;09;UTC;3;3;Hemiptera;0.0002;0;NA
 1119 malaise;2016;vii;09;UTC;3;3;Hymenoptera;1.8857;0;NA
 1120 malaise;2016;vii;09;UTC;3;3;Lepidoptera;0.2028;0;NA
 1121 malaise;2016;vii;09;UTC;3;3;Mantodea;0.0;0;NA
 1122 malaise;2016;vii;09;UTC;3;3;Neuroptera;0.0;0;NA
 1123 malaise;2016;vii;09;UTC;3;3;Orthoptera;0.0314;0;NA
 1124 malaise;2016;vii;09;UTC;3;3;Psocoptera;0.0;0;NA
 1125 malaise;2016;vii;09;UTC;3;3;Thysanoptera;0.0;0;NA
 1126 malaise;2016;vii;09;UTC;3;3;Trichoptera;0.0;0;NA
 1127 malaise;2016;vii;13;1;A;4;Blattodea;0.0;0;NA
 1128 malaise;2016;vii;13;1;A;4;Coleoptera;0.0151;0;NA
 1129 malaise;2016;vii;13;1;A;4;Collembola;0.0;0;NA
 1130 malaise;2016;vii;13;1;A;4;Diptera;1.4941;0;NA
 1131 malaise;2016;vii;13;1;A;4;Hemiptera;0.007;0;NA
 1132 malaise;2016;vii;13;1;A;4;Hymenoptera;3.2734;0;NA
 1133 malaise;2016;vii;13;1;A;4;Lepidoptera;0.1189;0;NA
 1134 malaise;2016;vii;13;1;A;4;Mantodea;0.0;0;NA
 1135 malaise;2016;vii;13;1;A;4;Neuroptera;0.0037;0;NA
 1136 malaise;2016;vii;13;1;A;4;Orthoptera;0.147;0;NA
 1137 malaise;2016;vii;13;1;A;4;Psocoptera;0.0;0;NA
 1138 malaise;2016;vii;13;1;A;4;Thysanoptera;0.0;0;NA
 1139 malaise;2016;vii;13;1;A;4;Trichoptera;0.0;0;NA

1140	malaise;2016;vii;13;1;B;4;Blattodea;0.0;0;NA
1141	malaise;2016;vii;13;1;B;4;Coleoptera;0.0377;0;NA
1142	malaise;2016;vii;13;1;B;4;Collembola;0.0;0;NA
1143	malaise;2016;vii;13;1;B;4;Diptera;0.6691;0;NA
1144	malaise;2016;vii;13;1;B;4;Hemiptera;0.0082;0;NA
1145	malaise;2016;vii;13;1;B;4;Hymenoptera;3.2734;0;NA
1146	malaise;2016;vii;13;1;B;4;Lepidoptera;0.0292;0;NA
1147	malaise;2016;vii;13;1;B;4;Mantodea;0.0;0;NA
1148	malaise;2016;vii;13;1;B;4;Neuroptera;0.0005;0;NA
1149	malaise;2016;vii;13;1;B;4;Orthoptera;0.0579;0;NA
1150	malaise;2016;vii;13;1;B;4;Psocoptera;0.0;0;NA
1151	malaise;2016;vii;13;1;B;4;Thysanoptera;0.0;0;NA
1152	malaise;2016;vii;13;1;B;4;Trichoptera;0.0;0;NA
1153	malaise;2016;vii;13;1;C;4;Blattodea;0.0;0;NA
1154	malaise;2016;vii;13;1;C;4;Coleoptera;0.0;0;NA
1155	malaise;2016;vii;13;1;C;4;Collembola;0.0;0;NA
1156	malaise;2016;vii;13;1;C;4;Diptera;0.2585;0;NA
1157	malaise;2016;vii;13;1;C;4;Hemiptera;0.0038;0;NA
1158	malaise;2016;vii;13;1;C;4;Hymenoptera;2.3015;0;NA
1159	malaise;2016;vii;13;1;C;4;Lepidoptera;0.114;0;NA
1160	malaise;2016;vii;13;1;C;4;Mantodea;0.0;0;NA
1161	malaise;2016;vii;13;1;C;4;Neuroptera;0.0018;0;NA
1162	malaise;2016;vii;13;1;C;4;Orthoptera;0.151;0;NA
1163	malaise;2016;vii;13;1;C;4;Psocoptera;0.0;0;NA
1164	malaise;2016;vii;13;1;C;4;Thysanoptera;0.0;0;NA
1165	malaise;2016;vii;13;1;C;4;Trichoptera;0.0;0;NA
1166	malaise;2016;vii;14;2;A;4;Blattodea;0.0;0;NA
1167	malaise;2016;vii;14;2;A;4;Coleoptera;0.004;0;NA
1168	malaise;2016;vii;14;2;A;4;Collembola;0.0;0;NA
1169	malaise;2016;vii;14;2;A;4;Diptera;1.9774;0;NA
1170	malaise;2016;vii;14;2;A;4;Hemiptera;0.0004;0;NA
1171	malaise;2016;vii;14;2;A;4;Hymenoptera;1.9018;0;NA
1172	malaise;2016;vii;14;2;A;4;Lepidoptera;0.132;0;NA
1173	malaise;2016;vii;14;2;A;4;Mantodea;0.0;0;NA
1174	malaise;2016;vii;14;2;A;4;Neuroptera;0.0;0;NA
1175	malaise;2016;vii;14;2;A;4;Orthoptera;0.0481;0;NA
1176	malaise;2016;vii;14;2;A;4;Psocoptera;0.0;0;NA
1177	malaise;2016;vii;14;2;A;4;Thysanoptera;0.0;0;NA
1178	malaise;2016;vii;14;2;A;4;Trichoptera;0.0;0;NA
1179	malaise;2016;vii;14;2;B;4;Blattodea;0.0;0;NA
1180	malaise;2016;vii;14;2;B;4;Coleoptera;0.0025;0;NA
1181	malaise;2016;vii;14;2;B;4;Collembola;0.0;0;NA
1182	malaise;2016;vii;14;2;B;4;Diptera;0.7147;0;NA
1183	malaise;2016;vii;14;2;B;4;Hemiptera;0.0048;0;NA
1184	malaise;2016;vii;14;2;B;4;Hymenoptera;1.9354;0;NA
1185	malaise;2016;vii;14;2;B;4;Lepidoptera;0.1267;0;NA
1186	malaise;2016;vii;14;2;B;4;Mantodea;0.0;0;NA
1187	malaise;2016;vii;14;2;B;4;Neuroptera;0.0;0;NA
1188	malaise;2016;vii;14;2;B;4;Orthoptera;0.0;0;NA
1189	malaise;2016;vii;14;2;B;4;Psocoptera;0.0;0;NA
1190	malaise;2016;vii;14;2;B;4;Thysanoptera;0.0;0;NA
1191	malaise;2016;vii;14;2;B;4;Trichoptera;0.0;0;NA
1192	malaise;2016;vii;14;2;C;4;Blattodea;0.0;0;NA
1193	malaise;2016;vii;14;2;C;4;Coleoptera;0.0156;0;NA
1194	malaise;2016;vii;14;2;C;4;Collembola;0.0;0;NA
1195	malaise;2016;vii;14;2;C;4;Diptera;1.4573;0;NA
1196	malaise;2016;vii;14;2;C;4;Hemiptera;0.0006;0;NA
1197	malaise;2016;vii;14;2;C;4;Hymenoptera;1.5946;0;NA
1198	malaise;2016;vii;14;2;C;4;Lepidoptera;0.0326;0;NA
1199	malaise;2016;vii;14;2;C;4;Mantodea;0.0;0;NA
1200	malaise;2016;vii;14;2;C;4;Neuroptera;0.0021;0;NA
1201	malaise;2016;vii;14;2;C;4;Orthoptera;0.1776;0;NA
1202	malaise;2016;vii;14;2;C;4;Psocoptera;0.0;0;NA
1203	malaise;2016;vii;14;2;C;4;Thysanoptera;0.0;0;NA
1204	malaise;2016;vii;14;2;C;4;Trichoptera;0.0;0;NA
1205	malaise;2016;vii;15;3;A;4;Blattodea;0.0;0;NA
1206	malaise;2016;vii;15;3;A;4;Coleoptera;0.0388;0;NA
1207	malaise;2016;vii;15;3;A;4;Collembola;0.0;0;NA
1208	malaise;2016;vii;15;3;A;4;Diptera;1.6295;0;NA
1209	malaise;2016;vii;15;3;A;4;Hemiptera;0.0011;0;NA
1210	malaise;2016;vii;15;3;A;4;Hymenoptera;0.0;0;NA
1211	malaise;2016;vii;15;3;A;4;Lepidoptera;0.0771;0;NA
1212	malaise;2016;vii;15;3;A;4;Mantodea;0.0;0;NA
1213	malaise;2016;vii;15;3;A;4;Neuroptera;0.0004;0;NA
1214	malaise;2016;vii;15;3;A;4;Orthoptera;0.0;0;NA
1215	malaise;2016;vii;15;3;A;4;Psocoptera;0.0;0;NA
1216	malaise;2016;vii;15;3;A;4;Thysanoptera;0.0;0;NA
1217	malaise;2016;vii;15;3;A;4;Trichoptera;0.0;0;NA
1218	malaise;2016;vii;15;3;B;4;Blattodea;0.0;0;NA
1219	malaise;2016;vii;15;3;B;4;Coleoptera;0.0034;0;NA
1220	malaise;2016;vii;15;3;B;4;Collembola;0.0;0;NA
1221	malaise;2016;vii;15;3;B;4;Diptera;0.734;0;NA
1222	malaise;2016;vii;15;3;B;4;Hemiptera;0.0;0;NA
1223	malaise;2016;vii;15;3;B;4;Hymenoptera;3.5154;0;NA
1224	malaise;2016;vii;15;3;B;4;Lepidoptera;0.011;0;NA
1225	malaise;2016;vii;15;3;B;4;Mantodea;0.0;0;NA
1226	malaise;2016;vii;15;3;B;4;Neuroptera;0.0005;0;NA
1227	malaise;2016;vii;15;3;B;4;Orthoptera;0.0;0;NA
1228	malaise;2016;vii;15;3;B;4;Psocoptera;0.0;0;NA
1229	malaise;2016;vii;15;3;B;4;Thysanoptera;0.0;0;NA
1230	malaise;2016;vii;15;3;B;4;Trichoptera;0.0;0;NA
1231	malaise;2016;vii;15;3;C;4;Blattodea;0.0;0;NA
1232	malaise;2016;vii;15;3;C;4;Coleoptera;0.0;0;NA
1233	malaise;2016;vii;15;3;C;4;Collembola;0.0;0;NA
1234	malaise;2016;vii;15;3;C;4;Diptera;0.9183;0;NA

1235	malaise;2016;vii;15;3;C;4;Hemiptera;0.0868;0;NA
1236	malaise;2016;vii;15;3;C;4;Hymenoptera;2.78;0;NA
1237	malaise;2016;vii;15;3;C;4;Lepidoptera;0.067;0;NA
1238	malaise;2016;vii;15;3;C;4;Mantodea;0.0;0;NA
1239	malaise;2016;vii;15;3;C;4;Neuroptera;0.0014;0;NA
1240	malaise;2016;vii;15;3;C;4;Orthoptera;0.0747;0;NA
1241	malaise;2016;vii;15;3;C;4;Psocoptera;0.0;0;NA
1242	malaise;2016;vii;15;3;C;4;Thysanoptera;0.0;0;NA
1243	malaise;2016;vii;15;3;C;4;Trichoptera;0.0;0;NA
1244	malaise;2016;vii;16;UTC;1;4;Blattodea;0.0;0;NA
1245	malaise;2016;vii;16;UTC;1;4;Coleoptera;0.0022;0;NA
1246	malaise;2016;vii;16;UTC;1;4;Collembola;0.0;0;NA
1247	malaise;2016;vii;16;UTC;1;4;Diptera;0.2841;0;NA
1248	malaise;2016;vii;16;UTC;1;4;Hemiptera;0.0001;0;NA
1249	malaise;2016;vii;16;UTC;1;4;Hymenoptera;2.5535;0;NA
1250	malaise;2016;vii;16;UTC;1;4;Lepidoptera;0.0508;0;NA
1251	malaise;2016;vii;16;UTC;1;4;Mantodea;0.0;0;NA
1252	malaise;2016;vii;16;UTC;1;4;Neuroptera;0.0007;0;NA
1253	malaise;2016;vii;16;UTC;1;4;Orthoptera;0.1889;0;NA
1254	malaise;2016;vii;16;UTC;1;4;Psocoptera;0.0;0;NA
1255	malaise;2016;vii;16;UTC;1;4;Thysanoptera;0.0;0;NA
1256	malaise;2016;vii;16;UTC;1;4;Trichoptera;0.0;0;NA
1257	malaise;2016;vii;16;UTC;2;4;Blattodea;0.0;0;NA
1258	malaise;2016;vii;16;UTC;2;4;Coleoptera;0.0267;0;NA
1259	malaise;2016;vii;16;UTC;2;4;Collembola;0.0;0;NA
1260	malaise;2016;vii;16;UTC;2;4;Diptera;0.4744;0;NA
1261	malaise;2016;vii;16;UTC;2;4;Hemiptera;0.0;0;NA
1262	malaise;2016;vii;16;UTC;2;4;Hymenoptera;1.1205;0;NA
1263	malaise;2016;vii;16;UTC;2;4;Lepidoptera;0.0202;0;NA
1264	malaise;2016;vii;16;UTC;2;4;Mantodea;0.0;0;NA
1265	malaise;2016;vii;16;UTC;2;4;Neuroptera;0.0002;0;NA
1266	malaise;2016;vii;16;UTC;2;4;Orthoptera;0.1236;0;NA
1267	malaise;2016;vii;16;UTC;2;4;Psocoptera;0.0;0;NA
1268	malaise;2016;vii;16;UTC;2;4;Thysanoptera;0.0;0;NA
1269	malaise;2016;vii;16;UTC;2;4;Trichoptera;0.0;0;NA
1270	malaise;2016;vii;16;UTC;3;4;Blattodea;0.0;0;NA
1271	malaise;2016;vii;16;UTC;3;4;Coleoptera;0.0123;0;NA
1272	malaise;2016;vii;16;UTC;3;4;Collembola;0.0;0;NA
1273	malaise;2016;vii;16;UTC;3;4;Diptera;0.8869;0;NA
1274	malaise;2016;vii;16;UTC;3;4;Hemiptera;0.0;0;NA
1275	malaise;2016;vii;16;UTC;3;4;Hymenoptera;2.3447;0;NA
1276	malaise;2016;vii;16;UTC;3;4;Lepidoptera;0.0419;0;NA
1277	malaise;2016;vii;16;UTC;3;4;Mantodea;0.0;0;NA
1278	malaise;2016;vii;16;UTC;3;4;Neuroptera;0.0005;0;NA
1279	malaise;2016;vii;16;UTC;3;4;Orthoptera;0.127;0;NA
1280	malaise;2016;vii;16;UTC;3;4;Psocoptera;0.0;0;NA
1281	malaise;2016;vii;16;UTC;3;4;Thysanoptera;0.0;0;NA
1282	malaise;2016;vii;16;UTC;3;4;Trichoptera;0.0;0;NA
1283	malaise;2016;vii;20;1;A;5;Blattodea;0.0;0;NA
1284	malaise;2016;vii;20;1;A;5;Coleoptera;0.0129;0;NA
1285	malaise;2016;vii;20;1;A;5;Collembola;0.0;0;NA
1286	malaise;2016;vii;20;1;A;5;Diptera;1.3466;0;NA
1287	malaise;2016;vii;20;1;A;5;Hemiptera;0.0021;0;NA
1288	malaise;2016;vii;20;1;A;5;Hymenoptera;5.0687;0;NA
1289	malaise;2016;vii;20;1;A;5;Lepidoptera;0.1523;0;NA
1290	malaise;2016;vii;20;1;A;5;Mantodea;0.0;0;NA
1291	malaise;2016;vii;20;1;A;5;Neuroptera;0.0;0;NA
1292	malaise;2016;vii;20;1;A;5;Orthoptera;0.0;0;NA
1293	malaise;2016;vii;20;1;A;5;Psocoptera;0.0;0;NA
1294	malaise;2016;vii;20;1;A;5;Thysanoptera;0.0;0;NA
1295	malaise;2016;vii;20;1;A;5;Trichoptera;0.0;0;NA
1296	malaise;2016;vii;20;1;B;5;Blattodea;0.0;0;NA
1297	malaise;2016;vii;20;1;B;5;Coleoptera;0.013;0;NA
1298	malaise;2016;vii;20;1;B;5;Collembola;0.0;0;NA
1299	malaise;2016;vii;20;1;B;5;Diptera;0.6022;0;NA
1300	malaise;2016;vii;20;1;B;5;Hemiptera;0.005;0;NA
1301	malaise;2016;vii;20;1;B;5;Hymenoptera;7.781;0;NA
1302	malaise;2016;vii;20;1;B;5;Lepidoptera;0.0835;0;NA
1303	malaise;2016;vii;20;1;B;5;Mantodea;0.0;0;NA
1304	malaise;2016;vii;20;1;B;5;Neuroptera;0.0003;0;NA
1305	malaise;2016;vii;20;1;B;5;Orthoptera;0.0304;0;NA
1306	malaise;2016;vii;20;1;B;5;Psocoptera;0.0;0;NA
1307	malaise;2016;vii;20;1;B;5;Thysanoptera;0.0;0;NA
1308	malaise;2016;vii;20;1;B;5;Trichoptera;0.0;0;NA
1309	malaise;2016;vii;20;1;C;5;Blattodea;0.0;0;NA
1310	malaise;2016;vii;20;1;C;5;Coleoptera;0.0;0;NA
1311	malaise;2016;vii;20;1;C;5;Collembola;0.0;0;NA
1312	malaise;2016;vii;20;1;C;5;Diptera;0.6596;0;NA
1313	malaise;2016;vii;20;1;C;5;Hemiptera;0.0003;0;NA
1314	malaise;2016;vii;20;1;C;5;Hymenoptera;3.7639;0;NA
1315	malaise;2016;vii;20;1;C;5;Lepidoptera;0.0763;0;NA
1316	malaise;2016;vii;20;1;C;5;Mantodea;0.0;0;NA
1317	malaise;2016;vii;20;1;C;5;Neuroptera;0.0005;0;NA
1318	malaise;2016;vii;20;1;C;5;Orthoptera;0.1279;0;NA
1319	malaise;2016;vii;20;1;C;5;Psocoptera;0.0;0;NA
1320	malaise;2016;vii;20;1;C;5;Thysanoptera;0.0;0;NA
1321	malaise;2016;vii;20;1;C;5;Trichoptera;0.0;0;NA
1322	malaise;2016;vii;22;3;A;5;Blattodea;0.0;0;NA
1323	malaise;2016;vii;22;3;A;5;Coleoptera;0.0167;0;NA
1324	malaise;2016;vii;22;3;A;5;Collembola;0.0;0;NA
1325	malaise;2016;vii;22;3;A;5;Diptera;1.1183;0;NA
1326	malaise;2016;vii;22;3;A;5;Hemiptera;0.0;0;NA
1327	malaise;2016;vii;22;3;A;5;Hymenoptera;3.7315;0;NA
1328	malaise;2016;vii;22;3;A;5;Lepidoptera;0.0918;0;NA
1329	malaise;2016;vii;22;3;A;5;Mantodea;0.0;0;NA

1330	malaise;2016;vii;22;3;A;5;Neuroptera;0.0109;0;NA
1331	malaise;2016;vii;22;3;A;5;Orthoptera;0.0898;0;NA
1332	malaise;2016;vii;22;3;A;5;Psocoptera;0.0;0;NA
1333	malaise;2016;vii;22;3;A;5;Thysanoptera;0.0;0;NA
1334	malaise;2016;vii;22;3;A;5;Trichoptera;0.0;0;NA
1335	malaise;2016;vii;22;3;B;5;Blattodea;0.0;0;NA
1336	malaise;2016;vii;22;3;B;5;Coleoptera;0.0029;0;NA
1337	malaise;2016;vii;22;3;B;5;Collembola;0.0;0;NA
1338	malaise;2016;vii;22;3;B;5;Diptera;0.2653;0;NA
1339	malaise;2016;vii;22;3;B;5;Hemiptera;0.0008;0;NA
1340	malaise;2016;vii;22;3;B;5;Hymenoptera;3.7315;0;NA
1341	malaise;2016;vii;22;3;B;5;Lepidoptera;0.0844;0;NA
1342	malaise;2016;vii;22;3;B;5;Mantodea;0.0;0;NA
1343	malaise;2016;vii;22;3;B;5;Neuroptera;0.0;0;NA
1344	malaise;2016;vii;22;3;B;5;Orthoptera;0.0482;0;NA
1345	malaise;2016;vii;22;3;B;5;Psocoptera;0.0;0;NA
1346	malaise;2016;vii;22;3;B;5;Thysanoptera;0.0;0;NA
1347	malaise;2016;vii;22;3;B;5;Trichoptera;0.0;0;NA
1348	malaise;2016;vii;22;3;C;5;Blattodea;0.0;0;NA
1349	malaise;2016;vii;22;3;C;5;Coleoptera;0.0009;0;NA
1350	malaise;2016;vii;22;3;C;5;Collembola;0.0;0;NA
1351	malaise;2016;vii;22;3;C;5;Diptera;0.3269;0;NA
1352	malaise;2016;vii;22;3;C;5;Hemiptera;0.0;0;NA
1353	malaise;2016;vii;22;3;C;5;Hymenoptera;4.0816;0;NA
1354	malaise;2016;vii;22;3;C;5;Lepidoptera;0.062;0;NA
1355	malaise;2016;vii;22;3;C;5;Mantodea;0.0;0;NA
1356	malaise;2016;vii;22;3;C;5;Neuroptera;0.002;0;NA
1357	malaise;2016;vii;22;3;C;5;Orthoptera;0.0;0;NA
1358	malaise;2016;vii;22;3;C;5;Psocoptera;0.0;0;NA
1359	malaise;2016;vii;22;3;C;5;Thysanoptera;0.0;0;NA
1360	malaise;2016;vii;22;3;C;5;Trichoptera;0.0;0;NA
1361	malaise;2016;vii;23;2;A;5;Blattodea;0.0;0;NA
1362	malaise;2016;vii;23;2;A;5;Coleoptera;0.0;0;NA
1363	malaise;2016;vii;23;2;A;5;Collembola;0.0;0;NA
1364	malaise;2016;vii;23;2;A;5;Diptera;1.6927;0;NA
1365	malaise;2016;vii;23;2;A;5;Hemiptera;0.0041;0;NA
1366	malaise;2016;vii;23;2;A;5;Hymenoptera;2.9037;0;NA
1367	malaise;2016;vii;23;2;A;5;Lepidoptera;0.1525;0;NA
1368	malaise;2016;vii;23;2;A;5;Mantodea;0.0;0;NA
1369	malaise;2016;vii;23;2;A;5;Neuroptera;0.0003;0;NA
1370	malaise;2016;vii;23;2;A;5;Orthoptera;0.1192;0;NA
1371	malaise;2016;vii;23;2;A;5;Psocoptera;0.0;0;NA
1372	malaise;2016;vii;23;2;A;5;Thysanoptera;0.0;0;NA
1373	malaise;2016;vii;23;2;A;5;Trichoptera;0.0;0;NA
1374	malaise;2016;vii;23;2;B;5;Blattodea;0.0;0;NA
1375	malaise;2016;vii;23;2;B;5;Coleoptera;0.0007;0;NA
1376	malaise;2016;vii;23;2;B;5;Collembola;0.0;0;NA
1377	malaise;2016;vii;23;2;B;5;Diptera;0.8974;0;NA
1378	malaise;2016;vii;23;2;B;5;Hemiptera;0.003;0;NA
1379	malaise;2016;vii;23;2;B;5;Hymenoptera;5.7133;0;NA
1380	malaise;2016;vii;23;2;B;5;Lepidoptera;0.1293;0;NA
1381	malaise;2016;vii;23;2;B;5;Mantodea;0.0;0;NA
1382	malaise;2016;vii;23;2;B;5;Neuroptera;0.0022;0;NA
1383	malaise;2016;vii;23;2;B;5;Orthoptera;0.0295;0;NA
1384	malaise;2016;vii;23;2;B;5;Psocoptera;0.0;0;NA
1385	malaise;2016;vii;23;2;B;5;Thysanoptera;0.0;0;NA
1386	malaise;2016;vii;23;2;B;5;Trichoptera;0.0;0;NA
1387	malaise;2016;vii;23;2;C;5;Blattodea;0.0;0;NA
1388	malaise;2016;vii;23;2;C;5;Coleoptera;0.0041;0;NA
1389	malaise;2016;vii;23;2;C;5;Collembola;0.0;0;NA
1390	malaise;2016;vii;23;2;C;5;Diptera;1.6096;0;NA
1391	malaise;2016;vii;23;2;C;5;Hemiptera;0.0023;0;NA
1392	malaise;2016;vii;23;2;C;5;Hymenoptera;1.9501;0;NA
1393	malaise;2016;vii;23;2;C;5;Lepidoptera;0.0297;0;NA
1394	malaise;2016;vii;23;2;C;5;Mantodea;0.0;0;NA
1395	malaise;2016;vii;23;2;C;5;Neuroptera;0.0011;0;NA
1396	malaise;2016;vii;23;2;C;5;Orthoptera;0.0;0;NA
1397	malaise;2016;vii;23;2;C;5;Psocoptera;0.0;0;NA
1398	malaise;2016;vii;23;2;C;5;Thysanoptera;0.0;0;NA
1399	malaise;2016;vii;23;2;C;5;Trichoptera;0.0;0;NA
1400	malaise;2016;vii;23;UTC;1;5;Blattodea;0.0;0;NA
1401	malaise;2016;vii;23;UTC;1;5;Coleoptera;0.005;0;NA
1402	malaise;2016;vii;23;UTC;1;5;Collembola;0.0;0;NA
1403	malaise;2016;vii;23;UTC;1;5;Diptera;0.3299;0;NA
1404	malaise;2016;vii;23;UTC;1;5;Hemiptera;0.0005;0;NA
1405	malaise;2016;vii;23;UTC;1;5;Hymenoptera;3.2082;0;NA
1406	malaise;2016;vii;23;UTC;1;5;Lepidoptera;0.0042;0;NA
1407	malaise;2016;vii;23;UTC;1;5;Mantodea;0.0;0;NA
1408	malaise;2016;vii;23;UTC;1;5;Neuroptera;0.0001;0;NA
1409	malaise;2016;vii;23;UTC;1;5;Orthoptera;0.3316;0;NA
1410	malaise;2016;vii;23;UTC;1;5;Psocoptera;0.0;0;NA
1411	malaise;2016;vii;23;UTC;1;5;Thysanoptera;0.0;0;NA
1412	malaise;2016;vii;23;UTC;1;5;Trichoptera;0.0;0;NA
1413	malaise;2016;vii;23;UTC;2;5;Blattodea;0.0;0;NA
1414	malaise;2016;vii;23;UTC;2;5;Coleoptera;0.0007;0;NA
1415	malaise;2016;vii;23;UTC;2;5;Collembola;0.0;0;NA
1416	malaise;2016;vii;23;UTC;2;5;Diptera;0.3386;0;NA
1417	malaise;2016;vii;23;UTC;2;5;Hemiptera;0.0003;0;NA
1418	malaise;2016;vii;23;UTC;2;5;Hymenoptera;1.7079;0;NA
1419	malaise;2016;vii;23;UTC;2;5;Lepidoptera;0.0534;0;NA
1420	malaise;2016;vii;23;UTC;2;5;Mantodea;0.0;0;NA
1421	malaise;2016;vii;23;UTC;2;5;Neuroptera;0.0005;0;NA
1422	malaise;2016;vii;23;UTC;2;5;Orthoptera;0.0;0;NA
1423	malaise;2016;vii;23;UTC;2;5;Psocoptera;0.0;0;NA
1424	malaise;2016;vii;23;UTC;2;5;Thysanoptera;0.0;0;NA

1425	malaise;2016;vii;23;UTC;2;5;Trichoptera;0.0;0;NA
1426	malaise;2016;vii;23;UTC;3;5;Blattodea;0.0;0;NA
1427	malaise;2016;vii;23;UTC;3;5;Coleoptera;0.0101;0;NA
1428	malaise;2016;vii;23;UTC;3;5;Collembola;0.0;0;NA
1429	malaise;2016;vii;23;UTC;3;5;Diptera;0.5328;0;NA
1430	malaise;2016;vii;23;UTC;3;5;Hemiptera;0.0141;0;NA
1431	malaise;2016;vii;23;UTC;3;5;Hymenoptera;3.6207;0;NA
1432	malaise;2016;vii;23;UTC;3;5;Lepidoptera;0.0048;0;NA
1433	malaise;2016;vii;23;UTC;3;5;Mantodea;0.0;0;NA
1434	malaise;2016;vii;23;UTC;3;5;Neuroptera;0.0;0;NA
1435	malaise;2016;vii;23;UTC;3;5;Orthoptera;0.0869;0;NA
1436	malaise;2016;vii;23;UTC;3;5;Psocoptera;0.0;0;NA
1437	malaise;2016;vii;23;UTC;3;5;Thysanoptera;0.0;0;NA
1438	malaise;2016;vii;23;UTC;3;5;Trichoptera;0.0;0;NA
1439	pitfall;2015;vi;24;1;A;1;Coleoptera;2.061;0;NA
1440	pitfall;2015;vi;24;1;A;1;Collembola;0.0;0;NA
1441	pitfall;2015;vi;24;1;A;1;Diptera;0.2896;0;NA
1442	pitfall;2015;vi;24;1;A;1;Hemiptera;0.0264;0;NA
1443	pitfall;2015;vi;24;1;A;1;Hymenoptera;0.0271;0;NA
1444	pitfall;2015;vi;24;1;A;1;Lepidoptera;0.0;0;NA
1445	pitfall;2015;vi;24;1;A;1;Mantodea;0.0029;0;NA
1446	pitfall;2015;vi;24;1;A;1;Neuroptera;0.0;0;NA
1447	pitfall;2015;vi;24;1;A;1;Orthoptera;1.4243;0;NA
1448	pitfall;2015;vi;24;1;A;1;Phasmatodea;0;0;NA
1449	pitfall;2015;vi;24;1;A;1;Thysanoptera;0.0;0;NA
1450	pitfall;2015;vi;24;1;A;1;Trichoptera;0;0;NA
1451	pitfall;2015;vi;24;1;B;1;Coleoptera;2.751;6;Carabidae,Chrysomelidae,Curculionidae,Meloidae,Tenebrionidae,Trogidae
1452	pitfall;2015;vi;24;1;B;1;Collembola;0.0;0;NA
1453	pitfall;2015;vi;24;1;B;1;Diptera;0.0703;5;Asilidae,Calliphoridae,Chloropidae,Phoridae,Sarcophagidae
1454	pitfall;2015;vi;24;1;B;1;Hemiptera;0.0223;2;Cicadellidae,Pentatomidae
1455	pitfall;2015;vi;24;1;B;1;Hymenoptera;0.0172;3;Formicidae,Mutillidae,Pompilidae
1456	pitfall;2015;vi;24;1;B;1;Lepidoptera;0.0209;1;Pyralidae
1457	pitfall;2015;vi;24;1;B;1;Mantodea;0.0006;1;Mantidae
1458	pitfall;2015;vi;24;1;B;1;Neuroptera;0.0;0;NA
1459	pitfall;2015;vi;24;1;B;1;Orthoptera;1.853;3;Acrididae,Gryllidae,Rhaphidophoridae
1460	pitfall;2015;vi;24;1;B;1;Phasmatodea;0;0;NA
1461	pitfall;2015;vi;24;1;B;1;Thysanoptera;0.0;0;NA
1462	pitfall;2015;vi;24;1;B;1;Trichoptera;0;0;NA
1463	pitfall;2015;vi;24;1;C;1;Coleoptera;3.3163;6;Carabidae,Chrysomelidae,Curculionidae,Histeridae,Meloidae,Tenebrionidae
1464	pitfall;2015;vi;24;1;C;1;Collembola;0;0;NA
1465	pitfall;2015;vi;24;1;C;1;Diptera;0.0339;4;Anthomyiidae,Calliphoridae,Chloropidae,Sarcophagidae
1466	pitfall;2015;vi;24;1;C;1;Hemiptera;0.0037;3;Cicadellidae,Lygaeidae,Margarodidae
1467	pitfall;2015;vi;24;1;C;1;Hymenoptera;0.0846;6;Betillyidae,Formicidae,Mutillidae,Pompilidae,Scelionidae,Sphecidae
1468	pitfall;2015;vi;24;1;C;1;Lepidoptera;0.0043;1;Pyralidae
1469	pitfall;2015;vi;24;1;C;1;Mantodea;0.0015;1;Mantidae
1470	pitfall;2015;vi;24;1;C;1;Neuroptera;0.0011;1;Chrysopidae
1471	pitfall;2015;vi;24;1;C;1;Orthoptera;0.2084;1;Acrididae
1472	pitfall;2015;vi;24;1;C;1;Phasmatodea;0;0;NA
1473	pitfall;2015;vi;24;1;C;1;Thysanoptera;0.0;0;NA
1474	pitfall;2015;vi;24;1;C;1;Trichoptera;0;0;NA
1475	pitfall;2015;vi;25;2;A;1;Coleoptera;4.0514;3;Carabidae,Curculionidae,Tenebrionidae
1476	pitfall;2015;vi;25;2;A;1;Collembola;0;0;NA
1477	pitfall;2015;vi;25;2;A;1;Diptera;0.0298;5;Anthomyiidae,Calliphoridae,Chloropidae,Phoridae,Sarcophagidae
1478	pitfall;2015;vi;25;2;A;1;Hemiptera;0.0038;1;Cicadellidae
1479	pitfall;2015;vi;25;2;A;1;Hymenoptera;0.0348;3;Formicidae,Pompilidae,Sphecidae
1480	pitfall;2015;vi;25;2;A;1;Lepidoptera;0;0;NA
1481	pitfall;2015;vi;25;2;A;1;Mantodea;0.0;0;NA
1482	pitfall;2015;vi;25;2;A;1;Neuroptera;0.0;0;NA
1483	pitfall;2015;vi;25;2;A;1;Orthoptera;0.0762;1;Acrididae
1484	pitfall;2015;vi;25;2;A;1;Phasmatodea;0;0;NA
1485	pitfall;2015;vi;25;2;A;1;Thysanoptera;0.0;0;NA
1486	pitfall;2015;vi;25;2;A;1;Trichoptera;0;0;NA
1487	pitfall;2015;vi;25;2;B;1;Coleoptera;4.0245;4;Carabidae,Chrysomelidae,Curculionidae,Tenebrionidae
1488	pitfall;2015;vi;25;2;B;1;Collembola;0;0;NA
1489	pitfall;2015;vi;25;2;B;1;Diptera;0.1326;3;Calliphoridae,Chloropidae,Sarcophagidae
1490	pitfall;2015;vi;25;2;B;1;Hemiptera;0.0107;2;Cicadellidae,Lygaeidae
1491	pitfall;2015;vi;25;2;B;1;Hymenoptera;0.0483;4;Formicidae,Pompilidae,Scelionidae,Sphecidae
1492	pitfall;2015;vi;25;2;B;1;Lepidoptera;0.0039;1;Gelechiidae
1493	pitfall;2015;vi;25;2;B;1;Mantodea;0.0073;1;Mantidae
1494	pitfall;2015;vi;25;2;B;1;Neuroptera;0.0;0;NA
1495	pitfall;2015;vi;25;2;B;1;Orthoptera;1.3825;0;NA
1496	pitfall;2015;vi;25;2;B;1;Phasmatodea;0;0;NA
1497	pitfall;2015;vi;25;2;B;1;Thysanoptera;0.0;0;NA
1498	pitfall;2015;vi;25;2;B;1;Trichoptera;0;0;NA
1499	pitfall;2015;vi;25;2;C;1;Coleoptera;2.9145;5;Carabidae,Cleridae,Curculionidae,Meloidae,Tenebrionidae
1500	pitfall;2015;vi;25;2;C;1;Collembola;0;0;NA
1501	pitfall;2015;vi;25;2;C;1;Diptera;0.2006;5;Anthomyiidae,Calliphoridae,Chloropidae,Phoridae,Sarcophagidae
1502	pitfall;2015;vi;25;2;C;1;Hemiptera;0.0099;1;Cicadellidae
1503	pitfall;2015;vi;25;2;C;1;Hymenoptera;0.0308;4;Formicidae,Mutillidae,Pompilidae,Sphecidae
1504	pitfall;2015;vi;25;2;C;1;Lepidoptera;0;0;NA
1505	pitfall;2015;vi;25;2;C;1;Mantodea;0;0;NA
1506	pitfall;2015;vi;25;2;C;1;Neuroptera;0;0;NA
1507	pitfall;2015;vi;25;2;C;1;Orthoptera;0.62;2;Acrididae,Gryllidae
1508	pitfall;2015;vi;25;2;C;1;Phasmatodea;0;0;NA
1509	pitfall;2015;vi;25;2;C;1;Thysanoptera;0;0;NA
1510	pitfall;2015;vi;25;2;C;1;Trichoptera;0;0;NA
1511	pitfall;2015;vi;26;3;A;1;Coleoptera;3.9004;6;Carabidae,Chrysomelidae,Cleridae,Curculionidae,Meloidae,Tenebrionidae
1512	pitfall;2015;vi;26;3;A;1;Collembola;0;0;NA
1513	pitfall;2015;vi;26;3;A;1;Diptera;0.134;7;Anthomyiidae,Asilidae,Calliphoridae,Muscidae,Phoridae,Sarcophagidae,Scatopsidae
1514	pitfall;2015;vi;26;3;A;1;Hemiptera;0.0161;2;Cicadellidae,Lygaeidae
1515	pitfall;2015;vi;26;3;A;1;Hymenoptera;0.0527;4;Formicidae,Pompilidae,Scelionidae,Sphecidae
1516	pitfall;2015;vi;26;3;A;1;Lepidoptera;0;0;NA
1517	pitfall;2015;vi;26;3;A;1;Mantodea;0.0015;1;Mantidae
1518	pitfall;2015;vi;26;3;A;1;Neuroptera;0.0;0;NA
1519	pitfall;2015;vi;26;3;A;1;Orthoptera;0.9517;3;Acrididae,Gryllidae,Rhaphidophoridae

1520 pitfall;2015;vi;26;3;A;1;Phasmatodea;0;0;NA
 1521 pitfall;2015;vi;26;3;A;1;Thysanoptera;0.0003;1;Thripidae
 1522 pitfall;2015;vi;26;3;A;1;Trichoptera;0;0;NA
 1523 pitfall;2015;vi;26;3;
 B;1;Coleoptera;3.1374;8;Carabidae,Chrysomelidae,Curculionidae,Endomychidae,Melyridae,Staphylinidae,Silphidae,Tenebrionidae
 1524 pitfall;2015;vi;26;3;B;1;Collembola;0.0;0;NA
 1525 pitfall;2015;vi;26;3;B;1;Diptera;0.0397;3;Chloropidae,Phoridae,Sarcophagidae
 1526 pitfall;2015;vi;26;3;B;1;Hemiptera;0.0072;4;Anthocoridae,Cicadellidae,Lygaeidae,Miridae
 1527 pitfall;2015;vi;26;3;B;1;Hymenoptera;0.068;5;Eucoilidae,Formicidae,Mutillidae,Pompilidae,Scelionidae
 1528 pitfall;2015;vi;26;3;B;1;Lepidoptera;0.0047;1;Gelechiidae
 1529 pitfall;2015;vi;26;3;B;1;Mantodea;0.0024;1;Mantidae
 1530 pitfall;2015;vi;26;3;B;1;Neuroptera;0.0;0;NA
 1531 pitfall;2015;vi;26;3;B;1;Orthoptera;1.3025;2;Acrididae,Rhaphidophoridae
 1532 pitfall;2015;vi;26;3;B;1;Phasmatodea;0;0;NA
 1533 pitfall;2015;vi;26;3;B;1;Thysanoptera;0.0;0;NA
 1534 pitfall;2015;vi;26;3;B;1;Trichoptera;0;0;NA
 1535 pitfall;2015;vi;26;3;C;1;Coleoptera;1.5572;4;Carabidae,Chrysomelidae,Curculionidae,Tenebrionidae
 1536 pitfall;2015;vi;26;3;C;1;Collembola;0.0;0;NA
 1537 pitfall;2015;vi;26;3;C;1;Diptera;0.0088;5;Chloropidae,Dolichopodidae,Phoridae,Sarcophagidae,Sciaridae
 1538 pitfall;2015;vi;26;3;C;1;Hemiptera;0.0102;1;Cicadellidae
 1539 pitfall;2015;vi;26;3;C;1;Hymenoptera;0.0591;2;Formicidae,Pompilidae
 1540 pitfall;2015;vi;26;3;C;1;Lepidoptera;0;0;NA
 1541 pitfall;2015;vi;26;3;C;1;Mantodea;0.0;0;NA
 1542 pitfall;2015;vi;26;3;C;1;Neuroptera;0.0012;1;Chrysopidae
 1543 pitfall;2015;vi;26;3;C;1;Orthoptera;1.2496;1;Acrididae
 1544 pitfall;2015;vi;26;3;C;1;Phasmatodea;0;0;NA
 1545 pitfall;2015;vi;26;3;C;1;Thysanoptera;0.0;0;NA
 1546 pitfall;2015;vi;26;3;C;1;Trichoptera;0;0;NA
 1547 pitfall;2015;vi;27;UTC;1;1;Coleoptera;1.0001;4;Cerambycidae,Chrysomelidae,Curculionidae,Tenebrionidae
 1548 pitfall;2015;vi;27;UTC;1;1;Collembola;0.0;0;NA
 1549 pitfall;2015;vi;27;UTC;1;1;Diptera;0.0215;5;Anthomyiidae,Chloropidae,Phoridae,Sarcophagidae,Sciaridae
 1550 pitfall;2015;vi;27;UTC;1;1;Hemiptera;0.0183;4;Alydidae,Cicadellidae,Lygaeidae,Tingidae
 1551 pitfall;2015;vi;27;UTC;1;1;Hymenoptera;0.019;4;Chrysidae,Formicidae,Pompilidae,Scelionidae
 1552 pitfall;2015;vi;27;UTC;1;1;Lepidoptera;0.0079;1;Gelechiidae
 1553 pitfall;2015;vi;27;UTC;1;1;Mantodea;0.0;1;Mantidae
 1554 pitfall;2015;vi;27;UTC;1;1;Neuroptera;0.0;0;NA
 1555 pitfall;2015;vi;27;UTC;1;1;Orthoptera;0.1077;1;Acrididae
 1556 pitfall;2015;vi;27;UTC;1;1;Phasmatodea;0;0;NA
 1557 pitfall;2015;vi;27;UTC;1;1;Thysanoptera;0.0;0;NA
 1558 pitfall;2015;vi;27;UTC;1;1;Trichoptera;0;0;NA
 1559 pitfall;2015;vi;27;UTC;2;1;Coleoptera;1.9865;6;Carabidae,Chrysomelidae,Curculionidae,Histeridae,Meloidae,Tenebrionidae
 1560 pitfall;2015;vi;27;UTC;2;1;Collembola;0.0;0;NA
 1561 pitfall;2015;vi;27;UTC;2;1;Diptera;0.0005;3;Chloropidae,Phoridae,Sciaridae
 1562 pitfall;2015;vi;27;UTC;2;1;Hemiptera;0.0037;2;Cicadellidae,Rhopalidae
 1563 pitfall;2015;vi;27;UTC;2;1;Hymenoptera;0.0032;2;Formicidae,Scelionidae
 1564 pitfall;2015;vi;27;UTC;2;1;Lepidoptera;0;0;NA
 1565 pitfall;2015;vi;27;UTC;2;1;Mantodea;0.0022;1;Mantidae
 1566 pitfall;2015;vi;27;UTC;2;1;Neuroptera;0.0;0;NA
 1567 pitfall;2015;vi;27;UTC;2;1;Orthoptera;0.5094;2;Acrididae,Gryllidae
 1568 pitfall;2015;vi;27;UTC;2;1;Phasmatodea;0;0;NA
 1569 pitfall;2015;vi;27;UTC;2;1;Thysanoptera;0.0;0;NA
 1570 pitfall;2015;vi;27;UTC;2;1;Trichoptera;0;0;NA
 1571 pitfall;2015;vi;27;UTC;3;1;Coleoptera
 0.7706;9;Carabidae,Cerambycidae,Chrysomelidae,Curculionidae,Endomychidae,Histeridae,Scarabaeidae,Staphylinidae,Tenebrionidae
 1572 pitfall;2015;vi;27;UTC;3;1;Collembola;0.0;0;NA
 1573 pitfall;2015;vi;27;UTC;3;1;Diptera;0.0522;6;Anthomyiidae,Calliphoridae,Chloropidae,Phoridae,Sarcophagidae,Scatopsidae
 1574 pitfall;2015;vi;27;UTC;3;1;Hemiptera;0.0026;1;Cicadellidae
 1575 pitfall;2015;vi;27;UTC;3;1;Hymenoptera;0.0254;3;Formicidae,Mutillidae,Sphecidae
 1576 pitfall;2015;vi;27;UTC;3;1;Lepidoptera;0.0003;1;Pyralidae
 1577 pitfall;2015;vi;27;UTC;3;1;Mantodea;0.0019;1;Mantidae
 1578 pitfall;2015;vi;27;UTC;3;1;Neuroptera;0.0;0;NA
 1579 pitfall;2015;vi;27;UTC;3;1;Orthoptera;0.8012;2;Acrididae,Gryllidae
 1580 pitfall;2015;vi;27;UTC;3;1;Phasmatodea;0;0;NA
 1581 pitfall;2015;vi;27;UTC;3;1;Thysanoptera;0.0;0;NA
 1582 pitfall;2015;vi;27;UTC;3;1;Trichoptera;0;0;NA
 1583 pitfall;2015;vii;01;1;A;2;Coleoptera;1.4238;3;Carabidae,Silphidae,Tenebrionidae
 1584 pitfall;2015;vii;01;1;A;2;Collembola;0;0;NA
 1585 pitfall;2015;vii;01;1;A;2;Diptera;0.1307;6;Anthomyiidae,Bombyliidae,Chloropidae,Phoridae,Sarcophagidae,Scatopsidae
 1586 pitfall;2015;vii;01;1;A;2;Hemiptera;0.0202;3;Cicadellidae,Lygaeidae,Miridae
 1587 pitfall;2015;vii;01;1;A;2;Hymenoptera;0.0102;2;Formicidae,Sphecidae
 1588 pitfall;2015;vii;01;1;A;2;Lepidoptera;0;0;0;NA
 1589 pitfall;2015;vii;01;1;A;2;Mantodea;0;0;NA
 1590 pitfall;2015;vii;01;1;A;2;Neuroptera;0;0;0;NA
 1591 pitfall;2015;vii;01;1;B;2;Orthoptera;0.0745;2;Acrididae,Mogoplistidae
 1592 pitfall;2015;vii;01;1;A;2;Phasmatodea;0;0;0;NA
 1593 pitfall;2015;vii;01;1;A;2;Thysanoptera;0.0;0;NA
 1594 pitfall;2015;vii;01;1;A;2;Trichoptera;0;0;NA
 1595 pitfall;2015;vii;01;1;B;2;Coleoptera;2.4549;7;Carabidae,Cerambycidae,Chrysomelidae,Curculionidae,Histeridae,Meloidae,Tenebrionidae
 1596 pitfall;2015;vii;01;1;B;2;Collembola;0;0;0;NA
 1597 pitfall;2015;vii;01;1;B;2;Diptera;0.0688;6;Anthomyiidae,Calliphoridae,Chloropidae,Ephydriidae,Phoridae,Sarcophagidae
 1598 pitfall;2015;vii;01;1;B;2;Hemiptera;0.0062;2;Cicadellidae,Lygaeidae
 1599 pitfall;2015;vii;01;1;B;2;Hymenoptera;0.0112;0;NA
 1600 pitfall;2015;vii;01;1;B;2;Lepidoptera;0.0228;1;Noctuidae
 1601 pitfall;2015;vii;01;1;B;2;Mantodea;0;0;0;NA
 1602 pitfall;2015;vii;01;1;B;2;Neuroptera;0;0;0;NA
 1603 pitfall;2015;vii;01;1;B;2;Orthoptera;0.6444;2;Acrididae,Gryllidae
 1604 pitfall;2015;vii;01;1;B;2;Phasmatodea;0;0;0;NA
 1605 pitfall;2015;vii;01;1;B;2;Thysanoptera;0;0;0;NA
 1606 pitfall;2015;vii;01;1;B;2;Trichoptera;0;0;0;NA
 1607 pitfall;2015;vii;01;1;C;2;Coleoptera;0.4242;5;Bruchidae,Carabidae,Cleridae,Meloidae,Tenebrionidae
 1608 pitfall;2015;vii;01;1;C;2;Collembola;0;0;0;NA
 1609 pitfall;2015;vii;01;1;C;2;Diptera;0.0313;5;Anthomyiidae,Asilidae,Calliphoridae,Ephydriidae,Sarcophagidae
 1610 pitfall;2015;vii;01;1;C;2;Hemiptera;0.0042;2;Cicadellidae,Lygaeidae
 1611 pitfall;2015;vii;01;1;C;2;Hymenoptera;0.0127;2;Formicidae,Sphecidae
 1612 pitfall;2015;vii;01;1;C;2;Lepidoptera;0.0026;1;Gelechiidae

1613 pitfall;2015;vii;01;1;C;2;Mantodea;0.0;0;NA
 1614 pitfall;2015;vii;01;1;C;2;Neuroptera;0.0;0;NA
 1615 pitfall;2015;vii;01;1;C;2;Orthoptera;0.7354;2;Acrididae, Gryllidae
 1616 pitfall;2015;vii;01;1;C;2;Phasmatodea;0.0;0;NA
 1617 pitfall;2015;vii;01;1;C;2;Thysanoptera;0.0;0;NA
 1618 pitfall;2015;vii;01;1;C;2;Trichoptera;0;0;NA
 1619 pitfall;2015;vii;03;2;A;2;Coleoptera;0;11;
 Carabidae, Chrysomelidae, Cleridae, Elateridae, Histeridae, Meloidae, Melyridae, Nitidulidae, Scarabaeidae, Silphidae, Tenebrionidae
 1620 pitfall;2015;vii;03;2;A;2;Collembola;0;0;NA
 1621 pitfall;2015;vii;03;2;A;2;Diptera;0;6;Anthomyiidae, Calliphoridae, Chloropidae, Ephydriidae, Sarcophagidae, Sciaridae
 1622 pitfall;2015;vii;03;2;A;2;Hemiptera;0;2;Cicadellidae, Lygaeidae
 1623 pitfall;2015;vii;03;2;A;2;Hymenoptera;0;3;Encyrtidae, Formicidae, Pompilidae
 1624 pitfall;2015;vii;03;2;A;2;Lepidoptera;0;2;Gelechiidae, Noctuidae
 1625 pitfall;2015;vii;03;2;A;2;Mantodea;0;0;NA
 1626 pitfall;2015;vii;03;2;A;2;Neuroptera;0;0;NA
 1627 pitfall;2015;vii;03;2;A;2;Orthoptera;0;2;Acrididae, Gryllidae
 1628 pitfall;2015;vii;03;2;A;2;Phasmatodea;0;0;NA
 1629 pitfall;2015;vii;03;2;A;2;Thysanoptera;0;0;NA
 1630 pitfall;2015;vii;03;2;A;2;Trichoptera;0;0;NA
 1631 pitfall;2015;vii;03;2;B;2;Coleoptera;0;6;Carabidae, Chrysomelidae, Curculionidae, Scarabaeidae, Staphylinidae, Tenebrionidae
 1632 pitfall;2015;vii;03;2;B;2;Collembola;0;1;Entomobryidae
 1633 pitfall;2015;vii;03;2;B;2;Diptera;0;5;Anthomyiidae, Calliphoridae, Chloropidae, Phoridae, Sarcophagidae
 1634 pitfall;2015;vii;03;2;B;2;Hemiptera;0;1;Cicadellidae
 1635 pitfall;2015;vii;03;2;B;2;Hymenoptera;0;3;Eucoilidae, Formicidae, Pompilidae
 1636 pitfall;2015;vii;03;2;B;2;Lepidoptera;0;1;Gelechiidae
 1637 pitfall;2015;vii;03;2;B;2;Mantodea;0;0;NA
 1638 pitfall;2015;vii;03;2;B;2;Neuroptera;0;0;NA
 1639 pitfall;2015;vii;03;2;B;2;Orthoptera;0;2;Acrididae, Gryllidae
 1640 pitfall;2015;vii;03;2;B;2;Phasmatodea;0;0;NA
 1641 pitfall;2015;vii;03;2;B;2;Thysanoptera;0;0;NA
 1642 pitfall;2015;vii;03;2;B;2;Trichoptera;0;0;NA
 1643 pitfall;2015;vii;03;2;C;2;Coleoptera;0;4;Carabidae, Chrysomelidae, Cleridae, Tenebrionidae
 1644 pitfall;2015;vii;03;2;C;2;Collembola;0;0;NA
 1645 pitfall;2015;vii;03;2;C;2;Diptera;0;7;Calliphoridae, Chloropidae, Dolichopodidae, Muscidae, Phoridae, Sarcophagidae, Sciaridae
 1646 pitfall;2015;vii;03;2;C;2;Hemiptera;0;1;Cicadellidae
 1647 pitfall;2015;vii;03;2;C;2;Hymenoptera;0;3;Formicidae, Pompilidae, Sphecidae
 1648 pitfall;2015;vii;03;2;C;2;Lepidoptera;0;1;Gelechiidae
 1649 pitfall;2015;vii;03;2;C;2;Mantodea;0;0;NA
 1650 pitfall;2015;vii;03;2;C;2;Neuroptera;0;0;NA
 1651 pitfall;2015;vii;03;2;C;2;Orthoptera;0;1;Acrididae
 1652 pitfall;2015;vii;03;2;C;2;Phasmatodea;0;0;NA
 1653 pitfall;2015;vii;03;2;C;2;Thysanoptera;0;0;NA
 1654 pitfall;2015;vii;03;2;C;2;Trichoptera;0;0;NA
 1655 pitfall;2015;vii;04;UTC;1;2;Coleoptera;2.9429;6;Carabidae, Curculionidae, Trogidae, Scarabaeidae, Staphylinidae
 1656 pitfall;2015;vii;04;UTC;1;2;Collembola;0.0;0;NA
 1657 pitfall;2015;
 vii;04;UTC;1;2;Diptera;0.0491;8;Anthomyiidae, Asilidae, Calliphoridae, Chloropidae, Muscidae, Phoridae, Sarcophagidae, Scatopsidae
 1658 pitfall;2015;vii;04;UTC;1;2;Hemiptera;0.012;3;Cicadellidae, Coreidae, Lygaeidae
 1659 pitfall;2015;vii;04;UTC;1;2;Hymenoptera;0.0283;3;Formicidae, Pompilidae, Scelionidae
 1660 pitfall;2015;vii;04;UTC;1;2;Lepidoptera;0.0062;1;Pyralidae
 1661 pitfall;2015;vii;04;UTC;1;2;Mantodea;0.0;0;NA
 1662 pitfall;2015;vii;04;UTC;1;2;Neuroptera;0.0;0;NA
 1663 pitfall;2015;vii;04;UTC;1;2;Orthoptera;1.2094;2;Acrididae, Gryllidae
 1664 pitfall;2015;vii;04;UTC;1;2;Phasmatodea;0;0;NA
 1665 pitfall;2015;vii;04;UTC;1;2;Thysanoptera;0.0001;1;Thripidae
 1666 pitfall;2015;vii;04;UTC;1;2;Trichoptera;0;0;NA
 1667 pitfall;2015;vii;
 04;UTC;2;2;Coleoptera;2.5332;8;Anthicidae, Carabidae, Colydiidae, Curculionidae, Scarabaeidae, Staphylinidae, Tenebrionidae, Trogidae
 1668 pitfall;2015;vii;04;UTC;2;2;Collembola;0.0;0;NA
 1669 pitfall;2015;
 vii;04;UTC;2;2;Diptera;0.161;8;Anthomyiidae, Asilidae, Calliphoridae, Chloropidae, Dolichopodidae, Phoridae, Sarcophagidae, Sciaridae
 1670 pitfall;2015;vii;04;UTC;2;2;Hemiptera;0.0054;2;Cicadellidae, Dictyopharidae
 1671 pitfall;2015;vii;04;UTC;2;2;Hymenoptera;0.0051;2;Formicidae, Scelionidae
 1672 pitfall;2015;vii;04;UTC;2;2;Lepidoptera;0.0094;1;Pyralidae
 1673 pitfall;2015;vii;04;UTC;2;2;Mantodea;0.0;0;NA
 1674 pitfall;2015;vii;04;UTC;2;2;Neuroptera;0.0012;1;Chrysopidae
 1675 pitfall;2015;vii;04;UTC;2;2;Orthoptera;0.7241;1;Acrididae
 1676 pitfall;2015;vii;04;UTC;2;2;Phasmatodea;0;0;NA
 1677 pitfall;2015;vii;04;UTC;2;2;Thysanoptera;0.0;0;NA
 1678 pitfall;2015;vii;04;UTC;2;2;Trichoptera;0;0;NA
 1679 pitfall;
 2015;vii;04;UTC;3;2;Coleoptera;1.5079;7;Carabidae, Chrysomelidae, Elateridae, Scarabaeidae, Silphidae, Staphylinidae, Tenebrionidae
 1680 pitfall;2015;vii;04;UTC;3;2;Collembola;0.0;0;NA
 1681 pitfall;2015;vii;04;UTC;3;2;Diptera;0.0709;7;Chloropidae, Dolichopodidae, Ephydriidae, Phoridae, Sarcophagidae, Scatopsidae, Sciaridae
 1682 pitfall;2015;vii;04;UTC;3;2;Hemiptera;0.0237;4;Alydidae, Cicadellidae, Lygaeidae, Pentatomidae
 1683 pitfall;2015;vii;04;UTC;3;2;Hymenoptera;0.0912;5;Eucoilidae, Formicidae, Mutillidae, Pompilidae, Scelionidae
 1684 pitfall;2015;vii;04;UTC;3;2;Lepidoptera;0.003;1;Pyralidae
 1685 pitfall;2015;vii;04;UTC;3;2;Mantodea;0.0;0;NA
 1686 pitfall;2015;vii;04;UTC;3;2;Neuroptera;0.0;0;NA
 1687 pitfall;2015;vii;04;UTC;3;2;Orthoptera;0.8756;2;Acrididae, Gryllidae
 1688 pitfall;2015;vii;04;UTC;3;2;Phasmatodea;0;0;NA
 1689 pitfall;2015;vii;04;UTC;3;2;Thysanoptera;0.0;0;NA
 1690 pitfall;2015;vii;04;UTC;3;2;Trichoptera;0;0;NA
 1691 pitfall;2015;vii;06;3;A;2;Coleoptera;3.59;7;Carabidae, Cerambycidae, Chrysomelidae, Elateridae, Silphidae, Staphylinidae, Tenebrionidae
 1692 pitfall;2015;vii;06;3;A;2;Collembola;0.0;0;NA
 1693 pitfall;2015;
 vii;06;3;A;2;Diptera;0.0781;8;Anthomyiidae, Asilidae, Chloropidae, Dolichopodidae, Ephydriidae, Phoridae, Sarcophagidae, Scatopsidae
 1694 pitfall;2015;vii;06;3;A;2;Hemiptera;0.0102;1;Cicadellidae
 1695 pitfall;2015;vii;06;3;A;2;Hymenoptera;0.0154;3;Formicidae, Pompilidae, Pteromalidae
 1696 pitfall;2015;vii;06;3;A;2;Lepidoptera;0.0063;1;Pyralidae
 1697 pitfall;2015;vii;06;3;A;2;Mantodea;0.0;0;NA
 1698 pitfall;2015;vii;06;3;A;2;Neuroptera;0.0;0;NA
 1699 pitfall;2015;vii;06;3;A;2;Orthoptera;0.1128;1;Acrididae
 1700 pitfall;2015;vii;06;3;A;2;Phasmatodea;0.0;0;NA
 1701 pitfall;2015;vii;06;3;A;2;Thysanoptera;0.0;0;NA

1702	pitfall;2015;vii;06;3;A;2;Trichoptera;0;0;NA
1703	pitfall;2015;vii;06;3;B;2;Coleoptera;0;0;7;Carabidae,Elateridae,Endomychidae,Histeridae,Scarabaeidae,Staphylinidae,Tenebrionidae
1704	pitfall;2015;vii;06;3;B;2;Collembola;0;0;0;NA
1705	pitfall;2015;vii;06;3; B;2;Diptera;0.1019;9;Anthomyiidae,Calliphoridae,Chloropidae,Ephydriidae,Muscidae,Phoridae,Sarcophagidae,Scatopsidae,Sciaridae
1706	pitfall;2015;vii;06;3;B;2;Hemiptera;0.0081;2;Cicadellidae,Tingidae
1707	pitfall;2015;vii;06;3;B;2;Hymenoptera;0.005;2;Formicidae,Scelionidae
1708	pitfall;2015;vii;06;3;B;2;Lepidoptera;0.0009;1;Gelechiidae
1709	pitfall;2015;vii;06;3;B;2;Mantodea;0;0;0;NA
1710	pitfall;2015;vii;06;3;B;2;Neuroptera;0;0;0;NA
1711	pitfall;2015;vii;06;3;B;2;Orthoptera;0.2858;4;Acrididae,Gryllidae,Mogoplistidae,Rhaphidophoridae
1712	pitfall;2015;vii;06;3;B;2;Phasmatodea;0;0;0;NA
1713	pitfall;2015;vii;06;3;B;2;Thysanoptera;0;0;0;NA
1714	pitfall;2015;vii;06;3;B;2;Trichoptera;0;0;NA
1715	pitfall;2015;vii;06;3;C;2;Coleoptera;0;0;NA
1716	pitfall;2015;vii;06;3;C;2;Collembola;0;0;NA
1717	pitfall;2015;vii;06;3;C;2;Diptera;0;0;NA
1718	pitfall;2015;vii;06;3;C;2;Hemiptera;0;0;NA
1719	pitfall;2015;vii;06;3;C;2;Hymenoptera;0;0;NA
1720	pitfall;2015;vii;06;3;C;2;Lepidoptera;0;0;NA
1721	pitfall;2015;vii;06;3;C;2;Mantodea;0;0;NA
1722	pitfall;2015;vii;06;3;C;2;Neuroptera;0;0;NA
1723	pitfall;2015;vii;06;3;C;2;Orthoptera;0;0;NA
1724	pitfall;2015;vii;06;3;C;2;Phasmatodea;0;0;NA
1725	pitfall;2015;vii;06;3;C;2;Thysanoptera;0;0;NA
1726	pitfall;2015;vii;06;3;C;2;Trichoptera;0;0;NA
1727	pitfall;2015;vii;08;1;A;3;Coleoptera;2.5047;7;Carabidae,Endomychidae,Nitidulidae,Scarabaeidae,Silphidae,Tenebrionidae
1728	pitfall;2015;vii;08;1;A;3;Collembola;0;0;0;NA
1729	pitfall;2015;vii;08;1;A;3; Diptera;0.2441;9;Anthomyiidae,Calliphoridae,Carnidae,Chloropidae,Dolichopodidae,Muscidae,Pipunculidae,Sarcophagidae,Tachinidae
1730	pitfall;2015;vii;08;1;A;3;Hemiptera;0.0217;3;Alydidae,Cicadellidae,Lygaeidae
1731	pitfall;2015;vii;08;1;A;3;Hymenoptera;0.0019;2;Braconidae,Formicidae
1732	pitfall;2015;vii;08;1;A;3;Lepidoptera;0.001;1;Gelechiidae
1733	pitfall;2015;vii;08;1;A;3;Mantodea;0;0;0;NA
1734	pitfall;2015;vii;08;1;A;3;Neuroptera;0;0;0;NA
1735	pitfall;2015;vii;08;1;A;3;Orthoptera;0.0396;2;Acrididae,Rhaphidophoridae
1736	pitfall;2015;vii;08;1;A;3;Phasmatodea;0;0;0;NA
1737	pitfall;2015;vii;08;1;A;3;Thysanoptera;0;0;0;NA
1738	pitfall;2015;vii;08;1;A;3;Trichoptera;0;0;NA
1739	pitfall;2015;vii;08;1;B;3;Coleoptera;4.3715;6;Carabidae,Chrysomelidae,Histeridae,Meloidae,Scarabaeidae,Silphidae
1740	pitfall;2015;vii;08;1;B;3;Collembola;0;0;0;NA
1741	pitfall;2015;vii;08;1;B;3;Diptera;0.1062;6;Anthomyiidae,Asilidae,Chloropidae,Dolichopodidae,Phoridae,Sarcophagidae
1742	pitfall;2015;vii;08;1;B;3;Hemiptera;0.0494;2;Cicadellidae,Pentatomidae
1743	pitfall;2015;vii;08;1;B;3;Hymenoptera;0.0181;4;Formicidae,Pompilidae,Scelionidae,Sphecidae
1744	pitfall;2015;vii;08;1;B;3;Lepidoptera;0;0;0;NA
1745	pitfall;2015;vii;08;1;B;3;Mantodea;0;0;0;NA
1746	pitfall;2015;vii;08;1;B;3;Neuroptera;0;0;0;NA
1747	pitfall;2015;vii;08;1;B;3;Orthoptera;1.0141;2;Acrididae,Gryllidae
1748	pitfall;2015;vii;08;1;B;3;Phasmatodea;0;0;0;NA
1749	pitfall;2015;vii;08;1;B;3;Thysanoptera;0;0;0;NA
1750	pitfall;2015;vii;08;1;B;3;Trichoptera;0;0;NA
1751	pitfall;2015;vii;08;1;C;3;Coleoptera;1.2152;4;Carabidae,Elateridae,Scarabaeidae,Tenebrionidae
1752	pitfall;2015;vii;08;1;C;3;Collembola;0;0;0;NA
1753	pitfall;2015;vii;08;1;C;3;Diptera;0.089;5;Asilidae,Calliphoridae,Chloropidae,Dolichopodidae,Sarcophagidae
1754	pitfall;2015;vii;08;1;C;3;Hemiptera;0.0328;3;Cicadellidae,Cixiidae,Pentatomidae
1755	pitfall;2015;vii;08;1;C;3;Hymenoptera;0.0167;3;Formicidae,Mutillidae,Pompilidae
1756	pitfall;2015;vii;08;1;C;3;Lepidoptera;0.0154;1;Noctuidae
1757	pitfall;2015;vii;08;1;C;3;Mantodea;0.0018;1;Mantidae
1758	pitfall;2015;vii;08;1;C;3;Neuroptera;0;0;0;NA
1759	pitfall;2015;vii;08;1;C;3;Orthoptera;0.2933;2;Acrididae,Gryllidae
1760	pitfall;2015;vii;08;1;C;3;Phasmatodea;0;0;0;NA
1761	pitfall;2015;vii;08;1;C;3;Thysanoptera;0;0;0;NA
1762	pitfall;2015;vii;08;1;C;3;Trichoptera;0;0;NA
1763	pitfall;2015;vii;10;2;A;3;Coleoptera;10.472;5;Carabidae,Histeridae,Meloidae,Silphidae,Tenebrionidae
1764	pitfall;2015;vii;10;2;A;3;Collembola;0;0;0;NA
1765	pitfall;2015;vii; 10;2;A;3;Diptera;0.5539;8;Anthomyiidae,Calliphoridae,Chloropidae,Dolichopodidae,Drosophilidae,Phoridae,Sarcophagidae,Sciaridae
1766	pitfall;2015;vii;10;2;A;3;Hemiptera;0.0131;2;Cicadellidae,Lygaeidae
1767	pitfall;2015;vii;10;2;A;3;Hymenoptera;0.0085;2;Formicidae,Halictidae
1768	pitfall;2015;vii;10;2;A;3;Lepidoptera;0.0667;1;Noctuidae
1769	pitfall;2015;vii;10;2;A;3;Mantodea;0;0;0;NA
1770	pitfall;2015;vii;10;2;A;3;Neuroptera;0.0053;1;Chrysopidae
1771	pitfall;2015;vii;10;2;A;3;Orthoptera;0.045;1;Acrididae
1772	pitfall;2015;vii;10;2;A;3;Phasmatodea;0;0;0;NA
1773	pitfall;2015;vii;10;2;A;3;Thysanoptera;0;0;0;NA
1774	pitfall;2015;vii;10;2;A;3;Trichoptera;0;0;NA
1775	pitfall;2015;vii;10;2;B;3;Coleoptera;2.8844;4;Carabidae,Cleridae,Silphidae,Tenebrionidae
1776	pitfall;2015;vii;10;2;B;3;Collembola;0;0;0;NA
1777	pitfall;2015;vii;10;2;B;3;Diptera;0.2115;6;Anthomyiidae,Calliphoridae,Chloropidae,Dolichopodidae,Muscidae,Sarcophagidae
1778	pitfall;2015;vii;10;2;B;3;Hemiptera;0.0098;2;Cicadellidae,Lygaeidae
1779	pitfall;2015;vii;10;2;B;3;Hymenoptera;0.0142;3;Diapriidae,Formicidae,Scelionidae
1780	pitfall;2015;vii;10;2;B;3;Lepidoptera;0.0003;1;Gelechiidae
1781	pitfall;2015;vii;10;2;B;3;Mantodea;0;0;0;NA
1782	pitfall;2015;vii;10;2;B;3;Neuroptera;0;0;0;NA
1783	pitfall;2015;vii;10;2;B;3;Orthoptera;0.4793;2;Acrididae,Gryllidae
1784	pitfall;2015;vii;10;2;B;3;Phasmatodea;0;0;0;NA
1785	pitfall;2015;vii;10;2;B;3;Thysanoptera;0;0;0;NA
1786	pitfall;2015;vii;10;2;B;3;Trichoptera;0;0;NA
1787	pitfall;2015;vii;10;2;C;3;Coleoptera;1.9845;3;Carabidae,Curculionidae,Tenebrionidae
1788	pitfall;2015;vii;10;2;C;3;Collembola;0.0001;0;NA
1789	pitfall;2015;vii;10;2;C;3;Diptera;0.0722;7;Anthomyiidae,Calliphoridae,Chloropidae,Dolichopodidae,Phoridae,Sarcophagidae,Sciaridae
1790	pitfall;2015;vii;10;2;C;3;Hemiptera;0.0042;1;Cicadellidae
1791	pitfall;2015;vii;10;2;C;3;Hymenoptera;0.0065;3;Formicidae,Mutillidae,Scelionidae
1792	pitfall;2015;vii;10;2;C;3;Lepidoptera;0.0154;1;Noctuidae
1793	pitfall;2015;vii;10;2;C;3;Mantodea;0;0;0;NA

1794 pitfall;2015;vii;10;2;C;3;Neuroptera;0.0;0;NA
 1795 pitfall;2015;vii;10;2;C;3;Orthoptera;0.2562;1;Gryllidae
 1796 pitfall;2015;vii;10;2;C;3;Phasmatodea;0.0;0;NA
 1797 pitfall;2015;vii;10;2;C;3;Thysanoptera;0.0;0;NA
 1798 pitfall;2015;vii;10;2;C;3;Trichoptera;0;0;NA
 1799 pitfall;2015;vii;11;UTC;1;3;Coleoptera;0.8213;5;Carabidae,Chrysomelidae,Elateridae,Scarabaeidae,Trogidae
 1800 pitfall;2015;vii;11;UTC;1;3;Collembola;0.0;0;NA
 1801 pitfall;2015;
 vii;11;UTC;1;3;Diptera;0.0566;7;Anthomyiidae,Calliphoridae,Ceratopogonidae,Chloropidae,Heleomyzidae,Phoridae,Sarcophagidae
 1802 pitfall;2015;vii;11;UTC;1;3;Hemiptera;0.0029;2;Cicadellidae,Lygaeidae
 1803 pitfall;2015;vii;11;UTC;1;3;Hymenoptera;0.0545;3;Formicidae,Pompilidae,Scelionidae
 1804 pitfall;2015;vii;11;UTC;1;3;Lepidoptera;0.0;0;NA
 1805 pitfall;2015;vii;11;UTC;1;3;Mantodea;0.0;0;NA
 1806 pitfall;2015;vii;11;UTC;1;3;Neuroptera;0.0;0;NA
 1807 pitfall;2015;vii;11;UTC;1;3;Orthoptera;0.0225;1;Acrididae
 1808 pitfall;2015;vii;11;UTC;1;3;Phasmatodea;0;0;NA
 1809 pitfall;2015;vii;11;UTC;1;3;Thysanoptera;0.0;0;NA
 1810 pitfall;2015;vii;11;UTC;1;3;Trichoptera;0;0;NA
 1811 pitfall;2015;vii;11;UTC;2;3;Coleoptera;1.2316;6;Carabidae,Elateridae,Scarabaeidae,Silphidae,Tenebrionidae,Trogidae
 1812 pitfall;2015;vii;11;UTC;2;3;Collembola;0.0;0;NA
 1813 pitfall;2015;vii;11;UTC;2;3;Diptera;0.3008;3;Anthomyiidae,Calliphoridae,Sarcophagidae
 1814 pitfall;2015;vii;11;UTC;2;3;Hemiptera;0.0043;2;Cicadellidae,Lygaeidae
 1815 pitfall;2015;vii;11;UTC;2;3;Hymenoptera;0.0115;5;Eucoilidae,Formicidae,Pompilidae,Scelionidae,Sclerogibbidae
 1816 pitfall;2015;vii;11;UTC;2;3;Lepidoptera;0.0255;1;Noctuidae
 1817 pitfall;2015;vii;11;UTC;2;3;Mantodea;0.0;0;NA
 1818 pitfall;2015;vii;11;UTC;2;3;Neuroptera;0.0;0;NA
 1819 pitfall;2015;vii;11;UTC;2;3;Orthoptera;0.2436;1;Acrididae
 1820 pitfall;2015;vii;11;UTC;2;3;Phasmatodea;0;0;NA
 1821 pitfall;2015;vii;11;UTC;2;3;Thysanoptera;0.0;0;NA
 1822 pitfall;2015;vii;11;UTC;2;3;Trichoptera;0;0;NA
 1823 pitfall;2015;vii;11;UTC;3;3;Coleoptera;1.5323;11;Anthicidae
 ,Carabidae,Chrysomelidae,Curculionidae,Histeridae,Nitidulidae,Scarabaeidae,Silphidae,Staphylinidae,Tenebrionidae,Trogidae
 1824 pitfall;2015;vii;11;UTC;3;3;Collembola;0.0;0;NA
 1825 pitfall;2015;vii;
 ;11;UTC;3;3;Diptera;0.0684;8;Anthomyiidae,Chloropidae,Dolichopodidae,Calliphoridae,Muscidae,Sarcophagidae,Scatopsidae,Sepsidae
 1826 pitfall;2015;vii;11;UTC;3;3;Hemiptera;0.0218;3;Alydidae,Cicadellidae,Lygaeidae
 1827 pitfall;2015;vii;11;UTC;3;3;Hymenoptera;0.0035;4;Dryinidae,Eucoilidae,Formicidae,Scelionidae
 1828 pitfall;2015;vii;11;UTC;3;3;Lepidoptera;0;0;NA
 1829 pitfall;2015;vii;11;UTC;3;3;Mantodea;0.0;0;NA
 1830 pitfall;2015;vii;11;UTC;3;3;Neuroptera;0.0;0;NA
 1831 pitfall;2015;vii;11;UTC;3;3;Orthoptera;0.7635;2;Acrididae,Gryllidae
 1832 pitfall;2015;vii;11;UTC;3;3;Phasmatodea;0;0;NA
 1833 pitfall;2015;vii;11;UTC;3;3;Thysanoptera;0.0;0;NA
 1834 pitfall;2015;vii;11;UTC;3;3;Trichoptera;0;0;NA
 1835 pitfall;2015;
 vii;13;3;A;3;Coleoptera;4.437;8;Carabidae,Chrysomelidae,Elateridae,Melyridae,Scarabaeidae,Silphidae,Staphylinidae,Tenebrionidae
 1836 pitfall;2015;vii;13;3;A;3;Collembola;0.0;0;NA
 1837 pitfall;2015;vii;13;3;
 A;3;Diptera;0.0314;8;Anthomyiidae,Calliphoridae,Chloropidae,Dolichopodidae,Ephydriidae,Sarcophagidae,Sciaridae,Sphaeroceridae
 1838 pitfall;2015;vii;13;3;A;3;Hemiptera;0.0068;2;Cicadellidae,Lygaeidae
 1839 pitfall;2015;vii;13;3;A;3;Hymenoptera;0.0035;3;Bethylidae,Formicidae,Scelionidae
 1840 pitfall;2015;vii;13;3;A;3;Lepidoptera;0.1055;1;Noctuidae
 1841 pitfall;2015;vii;13;3;A;3;Mantodea;0.0;0;NA
 1842 pitfall;2015;vii;13;3;A;3;Neuroptera;0.0;0;NA
 1843 pitfall;2015;vii;13;3;A;3;Orthoptera;0.6106;1;Gryllidae
 1844 pitfall;2015;vii;13;3;A;3;Phasmatodea;0;0;NA
 1845 pitfall;2015;vii;13;3;A;3;Thysanoptera;0.0;0;NA
 1846 pitfall;2015;vii;13;3;A;3;Trichoptera;0;0;NA
 1847 pitfall
 ;2015;vii;13;3;B;3;Coleoptera;2.9639;7;Carabidae,Chrysomelidae,Elateridae,Endomychidae,Scarabaeidae,Staphylinidae,Tenebrionidae
 1848 pitfall;2015;vii;13;3;B;3;Collembola;0.0;0;NA
 1849 pitfall;2015;vii;
 ;13;3;B;3;Diptera;0.0378;8;Anthomyiidae,Ceratopogonidae,Chloropidae,Culicidae,Dolichopodidae,Phoridae,Sarcophagidae,Sciaridae
 1850 pitfall;2015;vii;13;3;B;3;Hemiptera;0.02;2;Cicadellidae,Lygaeidae
 1851 pitfall;2015;vii;13;3;B;3;Hymenoptera;0.0177;5;Chalcididae,Eucoilidae,Formicidae,Scelionidae,Vespidae
 1852 pitfall;2015;vii;13;3;B;3;Lepidoptera;0.0072;1;Pyralidae
 1853 pitfall;2015;vii;13;3;B;3;Mantodea;0.0;0;NA
 1854 pitfall;2015;vii;13;3;B;3;Neuroptera;0.0;0;NA
 1855 pitfall;2015;vii;13;3;B;3;Orthoptera;0.6415;3;Gryllidae,Mogoplistidae,Rhaphidophoridae
 1856 pitfall;2015;vii;13;3;B;3;Phasmatodea;0;0;NA
 1857 pitfall;2015;vii;13;3;B;3;Thysanoptera;0.0;0;NA
 1858 pitfall;2015;vii;13;3;B;3;Trichoptera;0;0;NA
 1859 pitfall;2015;vii;13;3;C;3;Coleoptera;7.4718;6;Carabidae,Cleridae,Histeridae,Nitidulidae,Silphidae,Tenebrionidae
 1860 pitfall;2015;vii;13;3;C;3;Collembola;0.0;0;NA
 1861 pitfall;2015;vii;13;3;C;3;Diptera
 ;0.0432;9;Anthomyiidae,Cecidomyiidae,Chloropidae,Dolichopodidae,Drosophilidae,Phoridae,Sarcophagidae,Sciaridae,Tachinidae
 1862 pitfall;2015;vii;13;3;C;3;Hemiptera;0.0142;3;Alydidae,Cicadellidae,Lygaeidae
 1863 pitfall;2015;vii;13;3;C;3;Hymenoptera;0.0494;3;Formicidae,Pompilidae,Scelionidae
 1864 pitfall;2015;vii;13;3;C;3;Lepidoptera;0.3044;1;Noctuidae
 1865 pitfall;2015;vii;13;3;C;3;Mantodea;0.0;0;NA
 1866 pitfall;2015;vii;13;3;C;3;Neuroptera;0.005;1;Myrmeliontidae
 1867 pitfall;2015;vii;13;3;C;3;Orthoptera;0.0795;1;Acrididae
 1868 pitfall;2015;vii;13;3;C;3;Phasmatodea;0;0;NA
 1869 pitfall;2015;vii;13;3;C;3;Thysanoptera;0.0;0;NA
 1870 pitfall;2015;vii;13;3;C;3;Trichoptera;0;0;NA
 1871 pitfall;2015;vii;
 ;15;1;A;4;Coleoptera;1.3972;8;Carabidae,Chrysomelidae,Melyridae,Nitidulidae,Scarabaeidae,Staphylinidae,Tenebrionidae,Trogidae
 1872 pitfall;2015;vii;15;1;A;4;Collembola;0.0;0;NA
 1873 pitfall;2015;vii;15;1;A;4;Diptera;0.1449;7;Anthomyiidae,Asilidae,Chloropidae,Calliphoridae,Muscidae,Sarcophagidae,Tachinidae
 1874 pitfall;2015;vii;15;1;A;4;Hemiptera;0.0591;3;Cicadellidae,Lygaeidae,Pentatomidae
 1875 pitfall;2015;vii;15;1;A;4;Hymenoptera;0.0455;5;Eucoilidae,Formicidae,Scelionidae,Sphecidae,Vespidae
 1876 pitfall;2015;vii;15;1;A;4;Lepidoptera;0;0;NA
 1877 pitfall;2015;vii;15;1;A;4;Mantodea;0.0;0;NA
 1878 pitfall;2015;vii;15;1;A;4;Neuroptera;0.0;0;NA
 1879 pitfall;2015;vii;15;1;A;4;Orthoptera;0.586;3;Acrididae,Gryllidae,Mogoplistidae

1880	pitfall;2015;vii;15;1;A;4;Phasmatodea;0.0;0;NA
1881	pitfall;2015;vii;15;1;A;4;Thysanoptera;0.0;0;NA
1882	pitfall;2015;vii;15;1;A;4;Trichoptera;0;0;NA
1883	pitfall;2015;vii;15;1;B;4;Coleoptera;3.9319;6;Carabidae,Chrysomelidae,Histeridae,Melyridae,Scarabaeidae,Staphylinidae
1884	pitfall;2015;vii;15;1;B;4;Collembola;0.0007;0;NA
1885	pitfall;2015;vii;15;1;B;4;Diptera;0.0401;4;Anthomyiidae,Chloropidae,Sarcophagidae,Sciaridae
1886	pitfall;2015;vii;15;1;B;4;Hemiptera;0.1077;2;Alydidae,Lygaeidae
1887	pitfall;2015;vii;15;1;B;4;Hymenoptera;0.0043;2;Formicidae,Scelionidae
1888	pitfall;2015;vii;15;1;B;4;Lepidoptera;0.0369;1;Noctuidae
1889	pitfall;2015;vii;15;1;B;4;Mantodea;0;0;NA
1890	pitfall;2015;vii;15;1;B;4;Neuroptera;0.0;0;NA
1891	pitfall;2015;vii;15;1;B;4;Orthoptera;1.3453;2;Acrididae,Gryllidae
1892	pitfall;2015;vii;15;1;B;4;Phasmatodea;0.0;0;NA
1893	pitfall;2015;vii;15;1;B;4;Thysanoptera;0.0;0;NA
1894	pitfall;2015;vii;15;1;B;4;Trichoptera;0;0;NA
1895	pitfall;2015;vii; ;15;1;C;4;Coleoptera;2.4248;8;Carabidae,Cerambycidae,Nitidulidae,Ochodeidae,Scarabaeidae,Staphylinidae,Tenebrionidae,Trogidae
1896	pitfall;2015;vii;15;1;C;4;Collembola;0;0;0;NA
1897	pitfall;2015;vii;15;1;C;4;Diptera;0.0197;6;Anthomyiidae,Chloropidae,Culicidae,Drosophilidae,Sarcophagidae,Sciaridae
1898	pitfall;2015;vii;15;1;C;4;Hemiptera;0.0449;4;Aradidae,Cicadellidae,Lygaeidae,Pentatomidae
1899	pitfall;2015;vii;15;1;C;4;Hymenoptera;0.0126;3;Formicidae,Pompilidae,Scelionidae
1900	pitfall;2015;vii;15;1;C;4;Lepidoptera;0.1136;1;Noctuidae
1901	pitfall;2015;vii;15;1;C;4;Mantodea;0.0187;1;Mantidae
1902	pitfall;2015;vii;15;1;C;4;Neuroptera;0.0;0;NA
1903	pitfall;2015;vii;15;1;C;4;Orthoptera;1.0689;2;Acrididae,Gryllidae
1904	pitfall;2015;vii;15;1;C;4;Phasmatodea;0.0;0;NA
1905	pitfall;2015;vii;15;1;C;4;Thysanoptera;0.0;0;NA
1906	pitfall;2015;vii;15;1;C;4;Trichoptera;0;0;NA
1907	pitfall;2015;vii;17;2;A;4;Coleoptera;1.3628;5;Carabidae,Cleridae,Histeridae,Meloidae,Tenebrionidae
1908	pitfall;2015;vii;17;2;A;4;Collembola;0.0003;1;Entomobryidae
1909	pitfall;2015;vii;17;2;A;4;Diptera;0.0438;6;Anthomyiidae,Chloropidae,Heleomyzidae,Muscidae,Sarcophagidae,Sciaridae
1910	pitfall;2015;vii;17;2;A;4;Hemiptera;0.0578;2;Cicadellidae,Pentatomidae
1911	pitfall;2015;vii;17;2;A;4;Hymenoptera;0.0226;3;Apidae,Formicidae,Pompilidae
1912	pitfall;2015;vii;17;2;A;4;Lepidoptera;0.0165;1;Noctuidae
1913	pitfall;2015;vii;17;2;A;4;Mantodea;0;0;0;NA
1914	pitfall;2015;vii;17;2;A;4;Neuroptera;0.0;0;NA
1915	pitfall;2015;vii;17;2;A;4;Orthoptera;0.877;3;Acrididae,Gryllidae,Rhaphidophoridae
1916	pitfall;2015;vii;17;2;A;4;Phasmatodea;0.0;0;NA
1917	pitfall;2015;vii;17;2;A;4;Thysanoptera;0.0;0;NA
1918	pitfall;2015;vii;17;2;A;4;Trichoptera;0;0;NA
1919	pitfall;2015; vii;17;2;B;4;Coleoptera;2.5364;8;Anthicidae,Carabidae,Chrysomelidae,Cleridae,Endomychidae,Nitidulidae,Staphylinidae,Trogidae
1920	pitfall;2015;vii;17;2;B;4;Collembola;0;0;0;NA
1921	pitfall;2015;vii;17;2;B;4;Diptera;0.0106;4;Chloropidae,Drosophilidae,Sarcophagidae,Sciaridae
1922	pitfall;2015;vii;17;2;B;4;Hemiptera;0.013;2;Cicadellidae,Lygaeidae
1923	pitfall;2015;vii;17;2;B;4;Hymenoptera;0.0248;4;Eulophidae,Formicidae,Ichneumonidae,Scelionidae
1924	pitfall;2015;vii;17;2;B;4;Lepidoptera;0;0;0;NA
1925	pitfall;2015;vii;17;2;B;4;Mantodea;0;0;0;NA
1926	pitfall;2015;vii;17;2;B;4;Neuroptera;0;0;0;NA
1927	pitfall;2015;vii;17;2;B;4;Orthoptera;0.648;2;Acrididae,Gryllidae
1928	pitfall;2015;vii;17;2;B;4;Phasmatodea;0;0;0;NA
1929	pitfall;2015;vii;17;2;B;4;Thysanoptera;0;0;0;NA
1930	pitfall;2015;vii;17;2;B;4;Trichoptera;0;0;NA
1931	pitfall;2015;vii;17;2;C;4;Coleoptera;3.0007;8;Carabidae,Cleridae,Elateridae,Meloidae,Nitidulidae,Silphidae,Tenebrionidae,Trogidae
1932	pitfall;2015;vii;17;2;C;4;Collembola;0;0;0;NA
1933	pitfall;2015;vii;17;2;C;4;Diptera;0.2158;7;Anthomyiidae,Chloropidae,Dolichopodidae,Phoridae,Sarcophagidae,Sciaridae,Tachinidae
1934	pitfall;2015;vii;17;2;C;4;Hemiptera;0.0192;2;Cicadellidae,Lygaeidae
1935	pitfall;2015;vii;17;2;C;4;Hymenoptera;0.0107;3;Formicidae,Scelionidae,Vespidae
1936	pitfall;2015;vii;17;2;C;4;Lepidoptera;0;0;0;NA
1937	pitfall;2015;vii;17;2;C;4;Mantodea;0;0;0;NA
1938	pitfall;2015;vii;17;2;C;4;Neuroptera;0;0;0;NA
1939	pitfall;2015;vii;17;2;C;4;Orthoptera;0.3716;1;Gryllidae
1940	pitfall;2015;vii;17;2;C;4;Phasmatodea;0;0;0;NA
1941	pitfall;2015;vii;17;2;C;4;Thysanoptera;0;0;0;NA
1942	pitfall;2015;vii;17;2;C;4;Trichoptera;0;0;NA
1943	pitfall;2015;vii;18;UTC;1;4;Coleoptera;1.1664;10; Carabidae,Chrysomelidae,Cleridae,Corylophidae,Elateridae,Nitidulidae,Scarabaeidae,Staphylinidae,Tenebrionidae
1944	pitfall;2015;vii;18;UTC;1;4;Collembola;0;0;0;NA
1945	pitfall;2015;vii;18;UTC ;1;4;Diptera;0.0941;9;Anthomyiidae,Calliphoridae,Chloropidae,Ephydriidae,Heleomyzidae,Muscidae,Phoridae,Sarcophagidae,Sciaridae
1946	pitfall;2015;vii;18;UTC;1;4;Hemiptera;0.0468;5;Aphididae,Cicadellidae,Lygaeidae,Pentatomidae,Rhopalidae
1947	pitfall;2015;vii;18;UTC;1;4;Hymenoptera;0.011;3;Formicidae,Pompilidae,Scelionidae
1948	pitfall;2015;vii;18;UTC;1;4;Lepidoptera;0.0768;1;Geometridae
1949	pitfall;2015;vii;18;UTC;1;4;Mantodea;0;0;0;NA
1950	pitfall;2015;vii;18;UTC;1;4;Neuroptera;0;0;0;NA
1951	pitfall;2015;vii;18;UTC;1;4;Orthoptera;1.932;1;Acrididae
1952	pitfall;2015;vii;18;UTC;1;4;Phasmatodea;0;0;0;NA
1953	pitfall;2015;vii;18;UTC;1;4;Thysanoptera;0;0;0;NA
1954	pitfall;2015;vii;18;UTC;1;4;Trichoptera;0;0;0;NA
1955	pitfall;2015; vii;18;UTC;2;4;Coleoptera;2.3612;8;Carabidae,Cleridae,Curculionidae,Elateridae,Meloidae,Scarabaeidae,Silphidae,Tenebrionidae
1956	pitfall;2015;vii;18;UTC;2;4;Collembola;0;0;0;NA
1957	pitfall;2015;vii;18;UTC;2;4; Diptera;0.0928;9;Anthomyiidae,Asilidae,Calliphoridae,Chloropidae,Dolichopodidae,Ephydriidae,Sarcophagidae,Scatopsidae,Sciaridae
1958	pitfall;2015;vii;18;UTC;2;4;Hemiptera;0.0236;2;Cicadellidae,Lygaeidae
1959	pitfall;2015;vii;18;UTC;2;4;Hymenoptera;0.0222;2;Formicidae,Mutillidae
1960	pitfall;2015;vii;18;UTC;2;4;Lepidoptera;0;0;0;NA
1961	pitfall;2015;vii;18;UTC;2;4;Mantodea;0;0;0;NA
1962	pitfall;2015;vii;18;UTC;2;4;Neuroptera;0;0;0;NA
1963	pitfall;2015;vii;18;UTC;2;4;Orthoptera;2.3056;2;Acrididae,Gryllidae
1964	pitfall;2015;vii;18;UTC;2;4;Phasmatodea;0;0;0;NA
1965	pitfall;2015;vii;18;UTC;2;4;Thysanoptera;0;0;0;NA
1966	pitfall;2015;vii;18;UTC;2;4;Trichoptera;0;0;0;NA
1967	pitfall;2015;vii;18;UTC;3;4; Coleoptera;1.5071;9;Carabidae,Chrysomelidae,Cleridae,Histeridae,Nitidulidae,Scarabaeidae,Staphylinidae,Tenebrionidae,Trogidae

1968	pitfall;2015;vii;18;UTC;3;4;Collembola;0.0;0;NA
1969	pitfall;2015; vii;18;UTC;3;4;Diptera;0.0281;8;Anthomyiidae,Chloropidae,Dolichopodidae,Ephydriidae,Phoridae,Sarcophagidae,Scatopsidae,Sciaridae
1970	pitfall;2015;vii;18;UTC;3;4;Hemiptera;0.0272;3;Cicadellidae,Lygaeidae,Pentatomidae
1971	pitfall;2015;vii;18;UTC;3;4;Hymenoptera;0.0155;4;Eucoilidae,Formicidae,Scelionidae,Tiphidae
1972	pitfall;2015;vii;18;UTC;3;4;Lepidoptera;0.0;0;NA
1973	pitfall;2015;vii;18;UTC;3;4;Mantodea;0.0;0;NA
1974	pitfall;2015;vii;18;UTC;3;4;Neuroptera;0.0;0;NA
1975	pitfall;2015;vii;18;UTC;3;4;Orthoptera;0.56;2;Acrididae,Gryllidae
1976	pitfall;2015;vii;18;UTC;3;4;Phasmatodea;0;0;NA
1977	pitfall;2015;vii;18;UTC;3;4;Thysanoptera;0.0;0;NA
1978	pitfall;2015;vii;18;UTC;3;4;Trichoptera;0;0;NA
1979	pitfall;2015;vii;20;3;A;4;Coleoptera;9.7651;11;Anthicidae ,Carabidae,Chrysomelidae,Curculionidae,Elateridae,Histeridae,Nitidulidae,Scarabaeidae,Silphidae,Staphylinidae,Tenebrionidae
1980	pitfall;2015;vii;20;3;A;4;Collembola;0.0012;1;Entomobryidae
1981	pitfall;2015;vii;20;3;A;4;Diptera ;0.3694;9;Anthomyiidae,Calliphoridae,Chloropidae,Dolichopodidae,Heleomyzidae,Phoridae,Sarcophagidae,Sciaridae,Sphaeroceridae
1982	pitfall;2015;vii;20;3;A;4;Hemiptera;0.0294;4;Cicadellidae,Lygaeidae,Miridae,Tingidae
1983	pitfall;2015; vii;20;3;A;4;Hymenoptera;0.0321;8;Encyrtidae,Formicidae,Halictidae,Mutillidae,Mymaridae,Sphecidae,Scelionidae,Tetracampidae
1984	pitfall;2015;vii;20;3;A;4;Lepidoptera;0.113;1;Noctuidae
1985	pitfall;2015;vii;20;3;A;4;Mantodea;0.0;0;NA
1986	pitfall;2015;vii;20;3;A;4;Neuroptera;0.0087;1;Myrmeliontidae
1987	pitfall;2015;vii;20;3;A;4;Orthoptera;0.1728;2;Gryllidae,Rhaphidophoridae
1988	pitfall;2015;vii;20;3;A;4;Phasmatodea;0.0;0;NA
1989	pitfall;2015;vii;20;3;A;4;Thysanoptera;0.0006;1;Thripidae
1990	pitfall;2015;vii;20;3;A;4;Trichoptera;0;0;NA
1991	pitfall;2015; vii;20;3;B;4;Coleoptera;0.0001;7;Carabidae,Cerambycidae,Chrysomelidae,Endomychidae,Scarabaeidae,Staphylinidae,Tenebrionidae
1992	pitfall;2015;vii;20;3;B;4;Collembola;0.0001;1;Entomobryidae
1993	pitfall;2015;vii;20;3;B;4; Diptera;0.1412;9;Anthomyiidae,Chloropidae,Dolichopodidae,Heleomyzidae,Phoridae,Sarcophagidae,Scatopsidae,Sciaridae,Tachinidae
1994	pitfall;2015;vii;20;3;B;4;Hemiptera;0.0363;3;Cicadellidae,Lygaeidae,Miridae
1995	pitfall;2015;vii;20;3;B;4;Hymenoptera;0.0495;5;Diapriidae,Formicidae,Halictidae,Mutillidae,Pompilidae
1996	pitfall;2015;vii;20;3;B;4;Lepidoptera;0.0;0;NA
1997	pitfall;2015;vii;20;3;B;4;Mantodea;0.0;0;NA
1998	pitfall;2015;vii;20;3;B;4;Neuroptera;0.0;1;Chrysopidae
1999	pitfall;2015;vii;20;3;B;4;Orthoptera;0.3623;1;Acrididae
2000	pitfall;2015;vii;20;3;B;4;Phasmatodea;0.0;0;NA
2001	pitfall;2015;vii;20;3;B;4;Thysanoptera;0.0001;1;Thripidae
2002	pitfall;2015;vii;20;3;B;4;Trichoptera;0;0;NA
2003	pitfall;2015;vii;20;3;C;4;Coleoptera;5.8783;7;Carabidae,Chrysomelidae,Cleridae,Elateridae,Nitidulidae,Staphylinidae,Tenebrionidae
2004	pitfall;2015;vii;20;3;C;4;Collembola;0.0023;1;Entomobryidae
2005	pitfall;2015;vii;20;3; C;4;Diptera;0.1241;9;Anthomyiidae,Calliphoridae,Chloropidae,Ephydriidae,Muscidae,Phoridae,Sarcophagidae,Scatopsidae,Sciaridae
2006	pitfall;2015;vii;20;3;C;4;Hemiptera;0.0262;2;Cicadellidae,Lygaeidae
2007	pitfall;2015;vii;20;3;C;4;Hymenoptera;0.0558;4;Formicidae,Mutillidae,Scelionidae,Tiphidae
2008	pitfall;2015;vii;20;3;C;4;Lepidoptera;0.0195;1;Noctuidae
2009	pitfall;2015;vii;20;3;C;4;Mantodea;0.0;0;NA
2010	pitfall;2015;vii;20;3;C;4;Neuroptera;0.0;0;NA
2011	pitfall;2015;vii;20;3;C;4;Orthoptera;0.0642;3;Acrididae,Mogoplistidae,Tettigoniidae
2012	pitfall;2015;vii;20;3;C;4;Phasmatodea;0.0;0;NA
2013	pitfall;2015;vii;20;3;C;4;Thysanoptera;0.0;0;NA
2014	pitfall;2015;vii;20;3;C;4;Trichoptera;0;0;NA
2015	pitfall;2015;vii;22;1;A;5;Coleoptera;1.0068;12;Carabidae,Chrysomelidae ,Cleridae,Curculionidae,Histeridae,Meloidae,Melyridae,Scarabaeidae,Staphylinidae,Trogidae,Endomychidae
2016	pitfall;2015;vii;22;1;A;5;Collembola;0;0;NA
2017	pitfall;2015;vii;22;1;A;5;Diptera;0.1489;6;Anthomyiidae,Asilidae,Calliphoridae,Chloropidae,Muscidae,Sarcophagidae
2018	pitfall;2015;vii;22;1;A;5;Hemiptera;0.035;3;Cicadellidae,Lygaeidae,Psyllidae
2019	pitfall;2015;vii;22;1;A;5;Hymenoptera;0.0037;2;Formicidae,Sphecidae
2020	pitfall;2015;vii;22;1;A;5;Lepidoptera;0.0;0;NA
2021	pitfall;2015;vii;22;1;A;5;Mantodea;0.0;0;NA
2022	pitfall;2015;vii;22;1;A;5;Neuroptera;0.0;0;NA
2023	pitfall;2015;vii;22;1;A;5;Orthoptera;0.2661;1;Acrididae
2024	pitfall;2015;vii;22;1;A;5;Phasmatodea;0.0694;1;Heteronemiidae
2025	pitfall;2015;vii;22;1;A;5;Thysanoptera;0.0;0;NA
2026	pitfall;2015;vii;22;1;A;5;Trichoptera;0;0;NA
2027	pitfall;2015;vii;22;1;B;5;Coleoptera .3.1287;9;Carabidae,Chrysomelidae,Endomychidae,Histeridae,Nitidulidae,Scarabaeidae,Staphylinidae,Tenebrionidae,Trogidae
2028	pitfall;2015;vii;22;1;B;5;Collembola;0;0;0;NA
2029	pitfall;2015;vii;22;1; B;5;Diptera;0.1324;9;Anthomyiidae,Asilidae,Calliphoridae,Cecidomyiidae,Chloropidae,Ephydriidae,Muscidae,Sarcophagidae,Sciaridae
2030	pitfall;2015;vii;22;1;B;5;Hemiptera;0.0069;2;Cicadellidae,Lygaeidae
2031	pitfall;2015;vii;22;1;B;5;Hymenoptera;0.0021;2;Formicidae,Scelionidae
2032	pitfall;2015;vii;22;1;B;5;Lepidoptera;0.0623;1;Noctuidae
2033	pitfall;2015;vii;22;1;B;5;Mantodea;0.0079;1;Mantidae
2034	pitfall;2015;vii;22;1;B;5;Neuroptera;0.0;0;NA
2035	pitfall;2015;vii;22;1;B;5;Orthoptera;0.6547;2;Acrididae,Gryllidae
2036	pitfall;2015;vii;22;1;B;5;Phasmatodea;0.0;0;NA
2037	pitfall;2015;vii;22;1;B;5;Thysanoptera;0.0;0;NA
2038	pitfall;2015;vii;22;1;B;5;Trichoptera;0;0;NA
2039	pitfall;2015;vii;22;1;C;5;Coleoptera;3.2023;6;Carabidae,Curculionidae,Melyridae,Nitidulidae,Staphylinidae,Tenebrionidae
2040	pitfall;2015;vii;22;1;C;5;Collembola;0;0;0;NA
2041	pitfall;2015;vii;22;1;C;5;Diptera;0.102;5;Anthomyiidae,Chloropidae,Muscidae,Sarcophagidae,Sciaridae
2042	pitfall;2015;vii;22;1;C;5;Hemiptera;0.0257;3;Cicadellidae,Lygaeidae,Pentatomidae
2043	pitfall;2015;vii;22;1;C;5;Hymenoptera;0.0255;3;Formicidae,Pompilidae,Scelionidae
2044	pitfall;2015;vii;22;1;C;5;Lepidoptera;0.0311;2;Noctuidae,Pyralidae
2045	pitfall;2015;vii;22;1;C;5;Mantodea;0.0;0;NA
2046	pitfall;2015;vii;22;1;C;5;Neuroptera;0.0;0;NA
2047	pitfall;2015;vii;22;1;C;5;Orthoptera;1.421;3;Acrididae,Gryllidae,Rhaphidophoridae
2048	pitfall;2015;vii;22;1;C;5;Phasmatodea;0.0;0;NA
2049	pitfall;2015;vii;22;1;C;5;Thysanoptera;0.0004;1;Thripidae
2050	pitfall;2015;vii;22;1;C;5;Trichoptera;0;0;NA
2051	pitfall;2015;vii;24;2;A;5;Coleoptera;3.0764;3;Carabidae,Silphidae,Tenebrionidae
2052	pitfall;2015;vii;24;2;A;5;Collembola;0.0026;1;Entomobryidae

2053 pitfall;2015;vii;24;2;A;5;Diptera;0.0814;5;Anthomyiidae,Calliphoridae,Chloropidae,Sarcophagidae,Sepsidae
 2054 pitfall;2015;vii;24;2;A;5;Hemiptera;0.0067;2;Cicadellidae,Lygaeidae
 2055 pitfall;2015;vii;24;2;A;5;Hymenoptera;0.0146;2;Formicidae,Pompilidae
 2056 pitfall;2015;vii;24;2;A;5;Lepidoptera;0.0033;1;Pyralidae
 2057 pitfall;2015;vii;24;2;A;5;Mantodea;0.0;0;NA
 2058 pitfall;2015;vii;24;2;A;5;Neuroptera;0.0;0;NA
 2059 pitfall;2015;vii;24;2;A;5;Orthoptera;0.2413;1;Gryllidae
 2060 pitfall;2015;vii;24;2;A;5;Phasmatodea;0.0;0;NA
 2061 pitfall;2015;vii;24;2;A;5;Thysanoptera;0.0;0;NA
 2062 pitfall;2015;vii;24;2;A;5;Trichoptera;0;0;NA
 2063 pitfall;2015;vii;24;2;B;5;Coleoptera;3.6583;6;Anthicidae,Carabidae,Chrysomelidae,Cleridae,Silphidae,Tenebrionidae
 2064 pitfall;2015;vii;24;2;B;5;Collembola;0.0063;1;Entomobryidae
 2065 pitfall;2015;vii;24;2;B;5;Diptera;0.1433;6;Anthomyiidae,Calliphoridae,Phoridae,Sarcophagidae,Sciaridae,Tachinidae
 2066 pitfall;2015;vii;24;2;B;5;Hemiptera;0.0153;1;Cicadellidae
 2067 pitfall;2015;vii;24;2;B;5;Hymenoptera;0.0343;1;Formicidae
 2068 pitfall;2015;vii;24;2;B;5;Lepidoptera;0.0011;1;Gelechiidae
 2069 pitfall;2015;vii;24;2;B;5;Mantodea;0.0;0;NA
 2070 pitfall;2015;vii;24;2;B;5;Neuroptera;0.0016;1;Chrysopidae
 2071 pitfall;2015;vii;24;2;B;5;Orthoptera;0.1295;1;Arididae
 2072 pitfall;2015;vii;24;2;B;5;Phasmatodea;0.0;0;NA
 2073 pitfall;2015;vii;24;2;B;5;Thysanoptera;0.0;0;NA
 2074 pitfall;2015;vii;24;2;B;5;Trichoptera;0;0;NA
 2075 pitfall;2015;vii;24;2;
 C;5;Coleoptera;0.9112;9;Carabidae,Chrysomelidae,Cleridae,Elateridae,Meloidae,Nitidulidae,Silphidae,Staphylinidae,Tenebrionidae
 2076 pitfall;2015;vii;24;2;C;5;Collembola;0;0;0;NA
 2077 pitfall;2015;vii;24;2;C;5;Diptera;0.4455;7;Anthomyiidae,Asilidae,Calliphoridae,Chloropidae,Phoridae,Sarcophagidae,Sciaridae
 2078 pitfall;2015;vii;24;2;C;5;Hemiptera;0.0258;2;Cicadellidae,Lygaeidae
 2079 pitfall;2015;vii;24;2;C;5;Hymenoptera;0.0205;4;Formicidae,Mymaridae,Pompilidae,Scelionidae
 2080 pitfall;2015;vii;24;2;C;5;Lepidoptera;0.0245;1;Noctuidae
 2081 pitfall;2015;vii;24;2;C;5;Mantodea;0.0;0;NA
 2082 pitfall;2015;vii;24;2;C;5;Neuroptera;0.0;0;NA
 2083 pitfall;2015;vii;24;2;C;5;Orthoptera;0.2792;3;Arididae,Gryllidae,Rhaphidophoridae
 2084 pitfall;2015;vii;24;2;C;5;Phasmatodea;0.0;0;NA
 2085 pitfall;2015;vii;24;2;C;5;Thysanoptera;0.0;0;NA
 2086 pitfall;2015;vii;24;2;C;5;Trichoptera;0;0;NA
 2087 pitfall;2015;
 vii;25;UTC;1;5;Coleoptera;3.3271;8;Carabidae,Cerambycidae,Chrysomelidae,Cleridae,Nitidulidae,Silphidae,Tenebrionidae,Trogidae
 2088 pitfall;2015;vii;25;UTC;1;5;Collembola;0;0;0;NA
 2089 pitfall;2015;vii;25;UTC;1;5;Diptera;0.1974;6;Anthomyiidae,Chloropidae,Dolichopodidae,Ephydriidae,Phoridae,Sarcophagidae
 2090 pitfall;2015;vii;25;UTC;1;5;Hemiptera;0.0288;3;Alydidae,Cicadellidae,Lygaeidae
 2091 pitfall;2015;vii;25;UTC;1;5;Hymenoptera;0.06;2;Formicidae,Pompilidae
 2092 pitfall;2015;vii;25;UTC;1;5;Lepidoptera;0;0;0;NA
 2093 pitfall;2015;vii;25;UTC;1;5;Mantodea;0.0;0;NA
 2094 pitfall;2015;vii;25;UTC;1;5;Neuroptera;0.0;0;NA
 2095 pitfall;2015;vii;25;UTC;1;5;Orthoptera;3.4257;2;Arididae,Gryllidae
 2096 pitfall;2015;vii;25;UTC;1;5;Phasmatodea;0;0;NA
 2097 pitfall;2015;vii;25;UTC;1;5;Thysanoptera;0.0;0;NA
 2098 pitfall;2015;vii;25;UTC;1;5;Trichoptera;0;0;NA
 2099 pitfall;2015;vii;25;UTC;2;5;Coleoptera;0.6003;3;Carabidae,Tenebrionidae,Trogidae
 2100 pitfall;2015;vii;25;UTC;2;5;Collembola;0;0;0;NA
 2101 pitfall;2015;vii;25;UTC;2;5;Diptera;0.0486;2;Calliphoridae,Sarcophagidae
 2102 pitfall;2015;vii;25;UTC;2;5;Hemiptera;0.0003;1;Cicadellidae
 2103 pitfall;2015;vii;25;UTC;2;5;Hymenoptera;0.0;0;NA
 2104 pitfall;2015;vii;25;UTC;2;5;Lepidoptera;0;0;0;NA
 2105 pitfall;2015;vii;25;UTC;2;5;Mantodea;0.0;0;NA
 2106 pitfall;2015;vii;25;UTC;2;5;Neuroptera;0.0;0;NA
 2107 pitfall;2015;vii;25;UTC;2;5;Orthoptera;0.4511;2;Arididae,Gryllidae
 2108 pitfall;2015;vii;25;UTC;2;5;Phasmatodea;0;0;NA
 2109 pitfall;2015;vii;25;UTC;2;5;Thysanoptera;0.0;0;NA
 2110 pitfall;2015;vii;25;UTC;2;5;Trichoptera;0;0;NA
 2111 pitfall;2015;vii;25;UTC;3;5;Coleoptera;1.6593;0;NA
 2112 pitfall;2015;vii;25;UTC;3;5;Collembola;0;0;0;NA
 2113 pitfall;2015;vii;25;UTC;3;5;Diptera;0.0313;0;NA
 2114 pitfall;2015;vii;25;UTC;3;5;Hemiptera;0.0163;0;NA
 2115 pitfall;2015;vii;25;UTC;3;5;Hymenoptera;0.0185;0;NA
 2116 pitfall;2015;vii;25;UTC;3;5;Lepidoptera;0.0113;0;NA
 2117 pitfall;2015;vii;25;UTC;3;5;Mantodea;0.0;0;NA
 2118 pitfall;2015;vii;25;UTC;3;5;Neuroptera;0.0;0;NA
 2119 pitfall;2015;vii;25;UTC;3;5;Orthoptera;0.2717;0;NA
 2120 pitfall;2015;vii;25;UTC;3;5;Phasmatodea;0;0;NA
 2121 pitfall;2015;vii;25;UTC;3;5;Thysanoptera;0.0001;0;NA
 2122 pitfall;2015;vii;25;UTC;3;5;Trichoptera;0;0;NA
 2123 pitfall;2015;vii;27;3;A;5;Coleoptera;7.5335;11;
 Carabidae,Chrysomelidae,Curculionidae,Elateridae,Meloidae,Melyridae,Scarabaeidae,Silphidae,Staphylinidae,Tenebrionidae,Trogidae
 2124 pitfall;2015;vii;27;3;A;5;Collembola;0;0;0;NA
 2125 pitfall;2015;vii;27;3;A;5;Diptera
 ;0.5867;9;Anthomyiidae,Calliphoridae,Cecidomyiidae,Chloropidae,Dolichopodidae,Heleomyzidae,Muscidae,Sarcophagidae,Scatopsidae
 2126 pitfall;2015;vii;27;3;A;5;Hemiptera;0.0449;4;Cicadellidae,Coreidae,Lygaeidae,Nabidae
 2127 pitfall;2015;vii;27;3;A;5;Hymenoptera;0.0536;11;
 Bethylidae,Diapriidae,Encyrtidae,Eucolidae,Formicidae,Halictidae,Mutillidae,Pompilidae,Scelionidae,Sphecidae,Tiphiidae
 2128 pitfall;2015;vii;27;3;A;5;Lepidoptera;0.008;2;Crambidae,Noctuidae
 2129 pitfall;2015;vii;27;3;A;5;Mantodea;0;0;0;NA
 2130 pitfall;2015;vii;27;3;A;5;Neuroptera;0.0;0;NA
 2131 pitfall;2015;vii;27;3;A;5;Orthoptera;0.689;2;Arididae,Gryllidae
 2132 pitfall;2015;vii;27;3;A;5;Phasmatodea;0;0;0;NA
 2133 pitfall;2015;vii;27;3;A;5;Thysanoptera;0.0001;1;Thripidae
 2134 pitfall;2015;vii;27;3;A;5;Trichoptera;0;0;NA
 2135 pitfall;2015;vii;27;3;B;5;Coleoptera;1.402;6;Carabidae,Cerambycidae,Curculionidae,Nitidulidae,Ochodeidae,Tenebrionidae
 2136 pitfall;2015;vii;27;3;B;5;Collembola;0.001;0;NA
 2137 pitfall;2015;vii;27;3;B;5;Diptera;0.3614;5;Anthomyiidae,Asilidae,Calliphoridae,Chloropidae,Sarcophagidae
 2138 pitfall;2015;vii;27;3;B;5;Hemiptera;0.0603;3;Alydidae,Cicadellidae,Lygaeidae
 2139 pitfall;2015;vii;27;3;B;5;Hymenoptera;0.0243;1;Formicidae
 2140 pitfall;2015;vii;27;3;B;5;Lepidoptera;0;0;0;NA
 2141 pitfall;2015;vii;27;3;B;5;Mantodea;0.0196;1;Mantidae
 2142 pitfall;2015;vii;27;3;B;5;Neuroptera;0;0;0;NA

2143 pitfall;2015;vii;27;3;B;5;Orthoptera;0.0355;1;Acriidae
 2144 pitfall;2015;vii;27;3;B;5;Phasmatodea;0.0;0;NA
 2145 pitfall;2015;vii;27;3;B;5;Thysanoptera;0.0;1;Thripidae
 2146 pitfall;2015;vii;27;3;B;5;Trichoptera;0;0;NA
 2147 pitfall;2015;vii;27;3;C;5;Coleoptera;4.7066;5;Carabidae, Chrysomelidae, Cleridae, Elateridae, Tenebrionidae
 2148 pitfall;2015;vii;27;3;C;5;Collembola;0.0;0;NA
 2149 pitfall;2015;vii;27;3;C;5;Diptera;0.1785;11;Anthomyiidae
 , Calliphoridae, Chloropidae, Dolichopodidae, Muscidae, Phoridae, Sarcophagidae, Scathophagidae, Scatopsidae, Sciaridae, Syrphidae
 2150 pitfall;2015;vii;27;3;C;5;Hemiptera;0.0223;2;Cicadellidae, Lygaeidae
 2151 pitfall;2015;vii;27;3;C;5;Hymenoptera;0.0229;1;Formicidae
 2152 pitfall;2015;vii;27;3;C;5;Lepidoptera;0.0039;1;Pyralidae
 2153 pitfall;2015;vii;27;3;C;5;Mantodea;0.0;0;NA
 2154 pitfall;2015;vii;27;3;C;5;Neuroptera;0.0;0;NA
 2155 pitfall;2015;vii;27;3;C;5;Orthoptera;0.2627;2;Acriidae, Gryllidae
 2156 pitfall;2015;vii;27;3;C;5;Phasmatodea;0.0;0;NA
 2157 pitfall;2015;vii;27;3;C;5;Thysanoptera;0.0;0;NA
 2158 pitfall;2015;vii;27;3;C;5;Trichoptera;0;0;NA
 2159 pitfall;2016;vi;22;1;A;1;Blattodea;0;0;NA
 2160 pitfall;2016;vi;22;1;A;1;Coleoptera;0.3014;0;NA
 2161 pitfall;2016;vi;22;1;A;1;Collembola;0.0;0;NA
 2162 pitfall;2016;vi;22;1;A;1;Diptera;0.3548;0;NA
 2163 pitfall;2016;vi;22;1;A;1;Hemiptera;0.0614;0;NA
 2164 pitfall;2016;vi;22;1;A;1;Hymenoptera;0.0598;0;NA
 2165 pitfall;2016;vi;22;1;A;1;Lepidoptera;0.0018;0;NA
 2166 pitfall;2016;vi;22;1;A;1;Mantodea;0.0021;0;NA
 2167 pitfall;2016;vi;22;1;A;1;Neuroptera;0.0023;0;NA
 2168 pitfall;2016;vi;22;1;A;1;Orthoptera;0.1716;0;NA
 2169 pitfall;2016;vi;22;1;A;1;Psocoptera;0.0;0;NA
 2170 pitfall;2016;vi;22;1;A;1;Thysanoptera;0.0;0;NA
 2171 pitfall;2016;vi;22;1;B;1;Blattodea;0;0;NA
 2172 pitfall;2016;vi;22;1;B;1;Coleoptera;1.7292;0;NA
 2173 pitfall;2016;vi;22;1;B;1;Collembola;0.0;0;NA
 2174 pitfall;2016;vi;22;1;B;1;Diptera;0.0747;0;NA
 2175 pitfall;2016;vi;22;1;B;1;Hemiptera;0.0907;0;NA
 2176 pitfall;2016;vi;22;1;B;1;Hymenoptera;0.0151;0;NA
 2177 pitfall;2016;vi;22;1;B;1;Lepidoptera;0.0161;0;NA
 2178 pitfall;2016;vi;22;1;B;1;Mantodea;0.0;0;NA
 2179 pitfall;2016;vi;22;1;B;1;Neuroptera;0.0;0;NA
 2180 pitfall;2016;vi;22;1;B;1;Orthoptera;1.1607;0;NA
 2181 pitfall;2016;vi;22;1;B;1;Psocoptera;0.0;0;NA
 2182 pitfall;2016;vi;22;1;B;1;Thysanoptera;0.0;0;NA
 2183 pitfall;2016;vi;22;1;C;1;Blattodea;0;0;NA
 2184 pitfall;2016;vi;22;1;C;1;Coleoptera;0.9338;0;NA
 2185 pitfall;2016;vi;22;1;C;1;Collembola;0.0;0;NA
 2186 pitfall;2016;vi;22;1;C;1;Diptera;0.0172;0;NA
 2187 pitfall;2016;vi;22;1;C;1;Hemiptera;0.0482;0;NA
 2188 pitfall;2016;vi;22;1;C;1;Hymenoptera;0.0053;0;NA
 2189 pitfall;2016;vi;22;1;C;1;Lepidoptera;0.0032;0;NA
 2190 pitfall;2016;vi;22;1;C;1;Mantodea;0.0;0;NA
 2191 pitfall;2016;vi;22;1;C;1;Neuroptera;0.0;0;NA
 2192 pitfall;2016;vi;22;1;C;1;Orthoptera;0.7332;0;NA
 2193 pitfall;2016;vi;22;1;C;1;Psocoptera;0.0;0;NA
 2194 pitfall;2016;vi;22;1;C;1;Thysanoptera;0.0001;0;NA
 2195 pitfall;2016;vi;23;2;A;1;Blattodea;0;0;NA
 2196 pitfall;2016;vi;23;2;A;1;Coleoptera;1.6965;0;NA
 2197 pitfall;2016;vi;23;2;A;1;Collembola;0.0;0;NA
 2198 pitfall;2016;vi;23;2;A;1;Diptera;0.0298;0;NA
 2199 pitfall;2016;vi;23;2;A;1;Hemiptera;0.0163;0;NA
 2200 pitfall;2016;vi;23;2;A;1;Hymenoptera;0.0157;0;NA
 2201 pitfall;2016;vi;23;2;A;1;Lepidoptera;0.0;0;NA
 2202 pitfall;2016;vi;23;2;A;1;Mantodea;0.0;0;NA
 2203 pitfall;2016;vi;23;2;A;1;Neuroptera;0.0;0;NA
 2204 pitfall;2016;vi;23;2;A;1;Orthoptera;0.4047;0;NA
 2205 pitfall;2016;vi;23;2;A;1;Psocoptera;0.0;0;NA
 2206 pitfall;2016;vi;23;2;A;1;Thysanoptera;0.0001;0;NA
 2207 pitfall;2016;vi;23;2;B;1;Blattodea;0;0;NA
 2208 pitfall;2016;vi;23;2;B;1;Coleoptera;0.1986;0;NA
 2209 pitfall;2016;vi;23;2;B;1;Collembola;0.0;0;NA
 2210 pitfall;2016;vi;23;2;B;1;Diptera;0.0607;0;NA
 2211 pitfall;2016;vi;23;2;B;1;Hemiptera;0.0272;0;NA
 2212 pitfall;2016;vi;23;2;B;1;Hymenoptera;0.0154;0;NA
 2213 pitfall;2016;vi;23;2;B;1;Lepidoptera;0.0;0;NA
 2214 pitfall;2016;vi;23;2;B;1;Mantodea;0.0;0;NA
 2215 pitfall;2016;vi;23;2;B;1;Neuroptera;0.0;0;NA
 2216 pitfall;2016;vi;23;2;B;1;Orthoptera;0.6994;0;NA
 2217 pitfall;2016;vi;23;2;B;1;Psocoptera;0.0;0;NA
 2218 pitfall;2016;vi;23;2;B;1;Thysanoptera;0.0004;0;NA
 2219 pitfall;2016;vi;23;2;C;1;Blattodea;0;0;NA
 2220 pitfall;2016;vi;23;2;C;1;Coleoptera;1.383;0;NA
 2221 pitfall;2016;vi;23;2;C;1;Collembola;0.0;0;NA
 2222 pitfall;2016;vi;23;2;C;1;Diptera;0.1599;0;NA
 2223 pitfall;2016;vi;23;2;C;1;Hemiptera;0.0644;0;NA
 2224 pitfall;2016;vi;23;2;C;1;Hymenoptera;0.0128;0;NA
 2225 pitfall;2016;vi;23;2;C;1;Lepidoptera;0.0;0;NA
 2226 pitfall;2016;vi;23;2;C;1;Mantodea;0.0;0;NA
 2227 pitfall;2016;vi;23;2;C;1;Neuroptera;0.0;0;NA
 2228 pitfall;2016;vi;23;2;C;1;Orthoptera;0.0041;0;NA
 2229 pitfall;2016;vi;23;2;C;1;Psocoptera;0.0;0;NA
 2230 pitfall;2016;vi;23;2;C;1;Thysanoptera;0.0;0;NA
 2231 pitfall;2016;vi;24;3;A;1;Blattodea;0;0;NA
 2232 pitfall;2016;vi;24;3;A;1;Coleoptera;2.5904;0;NA
 2233 pitfall;2016;vi;24;3;A;1;Collembola;0.0;0;NA
 2234 pitfall;2016;vi;24;3;A;1;Diptera;0.0792;0;NA
 2235 pitfall;2016;vi;24;3;A;1;Hemiptera;0.1125;0;NA
 2236 pitfall;2016;vi;24;3;A;1;Hymenoptera;0.0183;0;NA

2237 pitfall;2016;vi;24;3;A;1;Lepidoptera;0.0;0;NA
 2238 pitfall;2016;vi;24;3;A;1;Mantodea;0.0006;0;NA
 2239 pitfall;2016;vi;24;3;A;1;Neuroptera;0.0;0;NA
 2240 pitfall;2016;vi;24;3;A;1;Orthoptera;1.9751;0;NA
 2241 pitfall;2016;vi;24;3;A;1;Psocoptera;0.0003;0;NA
 2242 pitfall;2016;vi;24;3;A;1;Thysanoptera;0.0;0;NA
 2243 pitfall;2016;vi;24;3;B;1;Blattodea;0;0;NA
 2244 pitfall;2016;vi;24;3;B;1;Coleoptera;0.8915;0;NA
 2245 pitfall;2016;vi;24;3;B;1;Collembola;0.0;0;NA
 2246 pitfall;2016;vi;24;3;B;1;Diptera;0.0182;0;NA
 2247 pitfall;2016;vi;24;3;B;1;Hemiptera;0.0145;0;NA
 2248 pitfall;2016;vi;24;3;B;1;Hymenoptera;0.0232;0;NA
 2249 pitfall;2016;vi;24;3;B;1;Lepidoptera;0.0069;0;NA
 2250 pitfall;2016;vi;24;3;B;1;Mantodea;0.0011;0;NA
 2251 pitfall;2016;vi;24;3;B;1;Neuroptera;0.0;0;NA
 2252 pitfall;2016;vi;24;3;B;1;Orthoptera;1.0273;0;NA
 2253 pitfall;2016;vi;24;3;B;1;Psocoptera;0.0;0;NA
 2254 pitfall;2016;vi;24;3;B;1;Thysanoptera;0.0;0;NA
 2255 pitfall;2016;vi;24;3;C;1;Blattodea;0;0;NA
 2256 pitfall;2016;vi;24;3;C;1;Coleoptera;2.9011;0;NA
 2257 pitfall;2016;vi;24;3;C;1;Collembola;0.0;0;NA
 2258 pitfall;2016;vi;24;3;C;1;Diptera;0.0053;0;NA
 2259 pitfall;2016;vi;24;3;C;1;Hemiptera;0.0216;0;NA
 2260 pitfall;2016;vi;24;3;C;1;Hymenoptera;0.0034;0;NA
 2261 pitfall;2016;vi;24;3;C;1;Lepidoptera;0.0;0;NA
 2262 pitfall;2016;vi;24;3;C;1;Mantodea;0.0;0;NA
 2263 pitfall;2016;vi;24;3;C;1;Neuroptera;0.0;0;NA
 2264 pitfall;2016;vi;24;3;C;1;Orthoptera;0.1687;0;NA
 2265 pitfall;2016;vi;24;3;C;1;Psocoptera;0.0;0;NA
 2266 pitfall;2016;vi;24;3;C;1;Thysanoptera;0.0;0;NA
 2267 pitfall;2016;vi;25;UTC;1;1;Blattodea;0;0;NA
 2268 pitfall;2016;vi;25;UTC;1;1;Coleoptera;1.3787;0;NA
 2269 pitfall;2016;vi;25;UTC;1;1;Collembola;0.0;0;NA
 2270 pitfall;2016;vi;25;UTC;1;1;Diptera;0.0034;0;NA
 2271 pitfall;2016;vi;25;UTC;1;1;Hemiptera;0.0451;0;NA
 2272 pitfall;2016;vi;25;UTC;1;1;Hymenoptera;0.0055;0;NA
 2273 pitfall;2016;vi;25;UTC;1;1;Lepidoptera;0.0;0;NA
 2274 pitfall;2016;vi;25;UTC;1;1;Mantodea;0.0;0;NA
 2275 pitfall;2016;vi;25;UTC;1;1;Neuroptera;0.0;0;NA
 2276 pitfall;2016;vi;25;UTC;1;1;Orthoptera;0.4383;0;NA
 2277 pitfall;2016;vi;25;UTC;1;1;Psocoptera;0.0;0;NA
 2278 pitfall;2016;vi;25;UTC;1;1;Thysanoptera;0.0;0;NA
 2279 pitfall;2016;vi;25;UTC;2;1;Blattodea;0;0;NA
 2280 pitfall;2016;vi;25;UTC;2;1;Coleoptera;2.4707;0;NA
 2281 pitfall;2016;vi;25;UTC;2;1;Collembola;0.0;0;NA
 2282 pitfall;2016;vi;25;UTC;2;1;Diptera;0.0332;0;NA
 2283 pitfall;2016;vi;25;UTC;2;1;Hemiptera;0.0117;0;NA
 2284 pitfall;2016;vi;25;UTC;2;1;Hymenoptera;0.0053;0;NA
 2285 pitfall;2016;vi;25;UTC;2;1;Lepidoptera;0.0025;0;NA
 2286 pitfall;2016;vi;25;UTC;2;1;Mantodea;0.0;0;NA
 2287 pitfall;2016;vi;25;UTC;2;1;Neuroptera;0.0;0;NA
 2288 pitfall;2016;vi;25;UTC;2;1;Orthoptera;0.4523;0;NA
 2289 pitfall;2016;vi;25;UTC;2;1;Psocoptera;0.0;0;NA
 2290 pitfall;2016;vi;25;UTC;2;1;Thysanoptera;0.0;0;NA
 2291 pitfall;2016;vi;25;UTC;3;1;Blattodea;0;0;NA
 2292 pitfall;2016;vi;25;UTC;3;1;Coleoptera;1.2826;0;NA
 2293 pitfall;2016;vi;25;UTC;3;1;Collembola;0.0;0;NA
 2294 pitfall;2016;vi;25;UTC;3;1;Diptera;0.0712;0;NA
 2295 pitfall;2016;vi;25;UTC;3;1;Hemiptera;0.0787;0;NA
 2296 pitfall;2016;vi;25;UTC;3;1;Hymenoptera;0.0157;0;NA
 2297 pitfall;2016;vi;25;UTC;3;1;Lepidoptera;0.0;0;NA
 2298 pitfall;2016;vi;25;UTC;3;1;Mantodea;0.0;0;NA
 2299 pitfall;2016;vi;25;UTC;3;1;Neuroptera;0.0;0;NA
 2300 pitfall;2016;vi;25;UTC;3;1;Orthoptera;0.4103;0;NA
 2301 pitfall;2016;vi;25;UTC;3;1;Psocoptera;0.0;0;NA
 2302 pitfall;2016;vi;25;UTC;3;1;Thysanoptera;0.0;0;NA
 2303 pitfall;2016;vi;29;1;A;2;Blattodea;0;0;NA
 2304 pitfall;2016;vi;29;1;A;2;Coleoptera;0.613;0;NA
 2305 pitfall;2016;vi;29;1;A;2;Collembola;0.0;0;NA
 2306 pitfall;2016;vi;29;1;A;2;Diptera;0.3642;0;NA
 2307 pitfall;2016;vi;29;1;A;2;Hemiptera;0.0201;0;NA
 2308 pitfall;2016;vi;29;1;A;2;Hymenoptera;0.0266;0;NA
 2309 pitfall;2016;vi;29;1;A;2;Lepidoptera;0.0033;0;NA
 2310 pitfall;2016;vi;29;1;A;2;Mantodea;0.0;0;NA
 2311 pitfall;2016;vi;29;1;A;2;Neuroptera;0.0122;0;NA
 2312 pitfall;2016;vi;29;1;A;2;Orthoptera;0.0295;0;NA
 2313 pitfall;2016;vi;29;1;A;2;Psocoptera;0.0001;0;NA
 2314 pitfall;2016;vi;29;1;A;2;Thysanoptera;0.0;0;NA
 2315 pitfall;2016;vi;29;1;B;2;Blattodea;0;0;NA
 2316 pitfall;2016;vi;29;1;B;2;Coleoptera;1.7339;0;NA
 2317 pitfall;2016;vi;29;1;B;2;Collembola;0.0;0;NA
 2318 pitfall;2016;vi;29;1;B;2;Diptera;0.0403;0;NA
 2319 pitfall;2016;vi;29;1;B;2;Hemiptera;0.0388;0;NA
 2320 pitfall;2016;vi;29;1;B;2;Hymenoptera;0.008;0;NA
 2321 pitfall;2016;vi;29;1;B;2;Lepidoptera;0.0038;0;NA
 2322 pitfall;2016;vi;29;1;B;2;Mantodea;0.0;0;NA
 2323 pitfall;2016;vi;29;1;B;2;Neuroptera;0.0;0;NA
 2324 pitfall;2016;vi;29;1;B;2;Orthoptera;0.0173;0;NA
 2325 pitfall;2016;vi;29;1;B;2;Psocoptera;0.0;0;NA
 2326 pitfall;2016;vi;29;1;B;2;Thysanoptera;0.0009;0;NA
 2327 pitfall;2016;vi;29;1;C;2;Blattodea;0;0;NA
 2328 pitfall;2016;vi;29;1;C;2;Coleoptera;1.3013;0;NA
 2329 pitfall;2016;vi;29;1;C;2;Collembola;0.0;0;NA
 2330 pitfall;2016;vi;29;1;C;2;Diptera;0.0634;0;NA
 2331 pitfall;2016;vi;29;1;C;2;Hemiptera;0.0162;0;NA

2332 pitfall;2016;vi;29;1;C;2;Hymenoptera;0.0192;0;NA
 2333 pitfall;2016;vi;29;1;C;2;Lepidoptera;0.004;0;NA
 2334 pitfall;2016;vi;29;1;C;2;Mantodea;0.0;0;NA
 2335 pitfall;2016;vi;29;1;C;2;Neuroptera;0.0;0;NA
 2336 pitfall;2016;vi;29;1;C;2;Orthoptera;0.1539;0;NA
 2337 pitfall;2016;vi;29;1;C;2;Psocoptera;0.0;0;NA
 2338 pitfall;2016;vi;29;1;C;2;Thysanoptera;0.0;0;NA
 2339 pitfall;2016;vi;30;2;A;2;Blattodea;0;0;NA
 2340 pitfall;2016;vi;30;2;A;2;Coleoptera;4.6123;0;NA
 2341 pitfall;2016;vi;30;2;A;2;Collembola;0.0;0;NA
 2342 pitfall;2016;vi;30;2;A;2;Diptera;0.0352;0;NA
 2343 pitfall;2016;vi;30;2;A;2;Hemiptera;0.0114;0;NA
 2344 pitfall;2016;vi;30;2;A;2;Hymenoptera;0.0292;0;NA
 2345 pitfall;2016;vi;30;2;A;2;Lepidoptera;0.0097;0;NA
 2346 pitfall;2016;vi;30;2;A;2;Mantodea;0.0015;0;NA
 2347 pitfall;2016;vi;30;2;A;2;Neuroptera;0.0;0;NA
 2348 pitfall;2016;vi;30;2;A;2;Orthoptera;0.0064;0;NA
 2349 pitfall;2016;vi;30;2;A;2;Psocoptera;0.0;0;NA
 2350 pitfall;2016;vi;30;2;A;2;Thysanoptera;0.0007;0;NA
 2351 pitfall;2016;vi;30;2;B;2;Blattodea;0;0;NA
 2352 pitfall;2016;vi;30;2;B;2;Coleoptera;11.571;0;NA
 2353 pitfall;2016;vi;30;2;B;2;Collembola;0.0;0;NA
 2354 pitfall;2016;vi;30;2;B;2;Diptera;0.0744;0;NA
 2355 pitfall;2016;vi;30;2;B;2;Hemiptera;0.0108;0;NA
 2356 pitfall;2016;vi;30;2;B;2;Hymenoptera;0.0565;0;NA
 2357 pitfall;2016;vi;30;2;B;2;Lepidoptera;0.0134;0;NA
 2358 pitfall;2016;vi;30;2;B;2;Mantodea;0.0;0;NA
 2359 pitfall;2016;vi;30;2;B;2;Neuroptera;0.0;0;NA
 2360 pitfall;2016;vi;30;2;B;2;Orthoptera;0.2479;0;NA
 2361 pitfall;2016;vi;30;2;B;2;Psocoptera;0.0;0;NA
 2362 pitfall;2016;vi;30;2;B;2;Thysanoptera;0.0;0;NA
 2363 pitfall;2016;vi;30;2;C;2;Blattodea;0;0;NA
 2364 pitfall;2016;vi;30;2;C;2;Coleoptera;11.571;0;NA
 2365 pitfall;2016;vi;30;2;C;2;Collembola;0.0;0;NA
 2366 pitfall;2016;vi;30;2;C;2;Diptera;0.0822;0;NA
 2367 pitfall;2016;vi;30;2;C;2;Hemiptera;0.0397;0;NA
 2368 pitfall;2016;vi;30;2;C;2;Hymenoptera;0.0082;0;NA
 2369 pitfall;2016;vi;30;2;C;2;Lepidoptera;0.0009;0;NA
 2370 pitfall;2016;vi;30;2;C;2;Mantodea;0.0;0;NA
 2371 pitfall;2016;vi;30;2;C;2;Neuroptera;0.0;0;NA
 2372 pitfall;2016;vi;30;2;C;2;Orthoptera;0.7038;0;NA
 2373 pitfall;2016;vi;30;2;C;2;Psocoptera;0.0001;0;NA
 2374 pitfall;2016;vi;30;2;C;2;Thysanoptera;0.0;0;NA
 2375 pitfall;2016;vii;01;3;A;2;Blattodea;0;0;NA
 2376 pitfall;2016;vii;01;3;A;2;Coleoptera;1.4;0;NA
 2377 pitfall;2016;vii;01;3;A;2;Collembola;0.0;0;NA
 2378 pitfall;2016;vii;01;3;A;2;Diptera;0.0782;0;NA
 2379 pitfall;2016;vii;01;3;A;2;Hemiptera;0.044;0;NA
 2380 pitfall;2016;vii;01;3;A;2;Hymenoptera;0.0446;0;NA
 2381 pitfall;2016;vii;01;3;A;2;Lepidoptera;0.0134;0;NA
 2382 pitfall;2016;vii;01;3;A;2;Mantodea;0.0;0;NA
 2383 pitfall;2016;vii;01;3;A;2;Neuroptera;0.0;0;NA
 2384 pitfall;2016;vii;01;3;A;2;Orthoptera;0.8082;0;NA
 2385 pitfall;2016;vii;01;3;A;2;Psocoptera;0.0;0;NA
 2386 pitfall;2016;vii;01;3;A;2;Thysanoptera;0.0009;0;NA
 2387 pitfall;2016;vii;01;3;B;2;Blattodea;0;0;NA
 2388 pitfall;2016;vii;01;3;B;2;Coleoptera;1.0568;0;NA
 2389 pitfall;2016;vii;01;3;B;2;Collembola;0.0;0;NA
 2390 pitfall;2016;vii;01;3;B;2;Diptera;0.0779;0;NA
 2391 pitfall;2016;vii;01;3;B;2;Hemiptera;0.0111;0;NA
 2392 pitfall;2016;vii;01;3;B;2;Hymenoptera;0.0215;0;NA
 2393 pitfall;2016;vii;01;3;B;2;Lepidoptera;0.0;0;NA
 2394 pitfall;2016;vii;01;3;B;2;Mantodea;0.0;0;NA
 2395 pitfall;2016;vii;01;3;B;2;Neuroptera;0.0;0;NA
 2396 pitfall;2016;vii;01;3;B;2;Orthoptera;0.2744;0;NA
 2397 pitfall;2016;vii;01;3;B;2;Psocoptera;0.0;0;NA
 2398 pitfall;2016;vii;01;3;B;2;Thysanoptera;0.0001;0;NA
 2399 pitfall;2016;vii;01;3;C;2;Blattodea;0;0;NA
 2400 pitfall;2016;vii;01;3;C;2;Coleoptera;1.7175;0;NA
 2401 pitfall;2016;vii;01;3;C;2;Collembola;0.0;0;NA
 2402 pitfall;2016;vii;01;3;C;2;Diptera;0.0145;0;NA
 2403 pitfall;2016;vii;01;3;C;2;Hemiptera;0.0197;0;NA
 2404 pitfall;2016;vii;01;3;C;2;Hymenoptera;0.0331;0;NA
 2405 pitfall;2016;vii;01;3;C;2;Lepidoptera;0.0017;0;NA
 2406 pitfall;2016;vii;01;3;C;2;Mantodea;0.0;0;NA
 2407 pitfall;2016;vii;01;3;C;2;Neuroptera;0.0006;0;NA
 2408 pitfall;2016;vii;01;3;C;2;Orthoptera;0.0261;0;NA
 2409 pitfall;2016;vii;01;3;C;2;Psocoptera;0.0;0;NA
 2410 pitfall;2016;vii;01;3;C;2;Thysanoptera;0.0;0;NA
 2411 pitfall;2016;vii;02;UTC;1;2;Blattodea;0;0;NA
 2412 pitfall;2016;vii;02;UTC;1;2;Coleoptera;1.035;0;NA
 2413 pitfall;2016;vii;02;UTC;1;2;Collembola;0.0;0;NA
 2414 pitfall;2016;vii;02;UTC;1;2;Diptera;0.0092;0;NA
 2415 pitfall;2016;vii;02;UTC;1;2;Hemiptera;0.0542;0;NA
 2416 pitfall;2016;vii;02;UTC;1;2;Hymenoptera;0.0446;0;NA
 2417 pitfall;2016;vii;02;UTC;1;2;Lepidoptera;0.0015;0;NA
 2418 pitfall;2016;vii;02;UTC;1;2;Mantodea;0.0035;0;NA
 2419 pitfall;2016;vii;02;UTC;1;2;Neuroptera;0.0;0;NA
 2420 pitfall;2016;vii;02;UTC;1;2;Orthoptera;0.3069;0;NA
 2421 pitfall;2016;vii;02;UTC;1;2;Psocoptera;0.0;0;NA
 2422 pitfall;2016;vii;02;UTC;1;2;Thysanoptera;0.0;0;NA
 2423 pitfall;2016;vii;02;UTC;2;2;Blattodea;0;0;NA
 2424 pitfall;2016;vii;02;UTC;2;2;Coleoptera;3.0867;0;NA
 2425 pitfall;2016;vii;02;UTC;2;2;Collembola;0.0;0;NA
 2426 pitfall;2016;vii;02;UTC;2;2;Diptera;0.0962;0;NA

2427 pitfall;2016;vii;02;UTC;2;2;Hemiptera;0.0097;0;NA
 2428 pitfall;2016;vii;02;UTC;2;2;Hymenoptera;0.0103;0;NA
 2429 pitfall;2016;vii;02;UTC;2;2;Lepidoptera;0.;0;NA
 2430 pitfall;2016;vii;02;UTC;2;2;Mantodea;0.;0;NA
 2431 pitfall;2016;vii;02;UTC;2;2;Neuroptera;0.;0;NA
 2432 pitfall;2016;vii;02;UTC;2;2;Orthoptera;0.503;0;NA
 2433 pitfall;2016;vii;02;UTC;2;2;Psocoptera;0.;0;NA
 2434 pitfall;2016;vii;02;UTC;2;2;Thysanoptera;0.0003;0;NA
 2435 pitfall;2016;vii;02;UTC;3;2;Blattodea;0.;0;NA
 2436 pitfall;2016;vii;02;UTC;3;2;Coleoptera;0.3533;0;NA
 2437 pitfall;2016;vii;02;UTC;3;2;Collembola;0.;0;NA
 2438 pitfall;2016;vii;02;UTC;3;2;Diptera;0.0329;0;NA
 2439 pitfall;2016;vii;02;UTC;3;2;Hemiptera;0.0945;0;NA
 2440 pitfall;2016;vii;02;UTC;3;2;Hymenoptera;0.008;0;NA
 2441 pitfall;2016;vii;02;UTC;3;2;Lepidoptera;0.0007;0;NA
 2442 pitfall;2016;vii;02;UTC;3;2;Mantodea;0.;0;NA
 2443 pitfall;2016;vii;02;UTC;3;2;Neuroptera;0.0005;0;NA
 2444 pitfall;2016;vii;02;UTC;3;2;Orthoptera;0.2272;0;NA
 2445 pitfall;2016;vii;02;UTC;3;2;Psocoptera;0.;0;NA
 2446 pitfall;2016;vii;02;UTC;3;2;Thysanoptera;0.;0;NA
 2447 pitfall;2016;vii;06;1;A;3;Blattodea;0.;0;NA
 2448 pitfall;2016;vii;06;1;A;3;Coleoptera;0.;0;NA
 2449 pitfall;2016;vii;06;1;A;3;Collembola;0.;0;NA
 2450 pitfall;2016;vii;06;1;A;3;Diptera;0.;0;NA
 2451 pitfall;2016;vii;06;1;A;3;Hemiptera;0.;0;NA
 2452 pitfall;2016;vii;06;1;A;3;Hymenoptera;0.;0;NA
 2453 pitfall;2016;vii;06;1;A;3;Lepidoptera;0.;0;NA
 2454 pitfall;2016;vii;06;1;A;3;Mantodea;0.;0;NA
 2455 pitfall;2016;vii;06;1;A;3;Neuroptera;0.;0;NA
 2456 pitfall;2016;vii;06;1;A;3;Orthoptera;0.;0;NA
 2457 pitfall;2016;vii;06;1;A;3;Psocoptera;0.;0;NA
 2458 pitfall;2016;vii;06;1;A;3;Thysanoptera;0.;0;NA
 2459 pitfall;2016;vii;06;1;B;3;Blattodea;0.;0;NA
 2460 pitfall;2016;vii;06;1;B;3;Coleoptera;0.;0;NA
 2461 pitfall;2016;vii;06;1;B;3;Collembola;0.;0;NA
 2462 pitfall;2016;vii;06;1;B;3;Diptera;0.;0;NA
 2463 pitfall;2016;vii;06;1;B;3;Hemiptera;0.;0;NA
 2464 pitfall;2016;vii;06;1;B;3;Hymenoptera;0.;0;NA
 2465 pitfall;2016;vii;06;1;B;3;Lepidoptera;0.;0;NA
 2466 pitfall;2016;vii;06;1;B;3;Mantodea;0.;0;NA
 2467 pitfall;2016;vii;06;1;B;3;Neuroptera;0.;0;NA
 2468 pitfall;2016;vii;06;1;B;3;Orthoptera;0.;0;NA
 2469 pitfall;2016;vii;06;1;B;3;Psocoptera;0.;0;NA
 2470 pitfall;2016;vii;06;1;B;3;Thysanoptera;0.;0;NA
 2471 pitfall;2016;vii;06;1;C;3;Blattodea;0.;0;NA
 2472 pitfall;2016;vii;06;1;C;3;Coleoptera;0.;0;NA
 2473 pitfall;2016;vii;06;1;C;3;Collembola;0.;0;NA
 2474 pitfall;2016;vii;06;1;C;3;Diptera;0.;0;NA
 2475 pitfall;2016;vii;06;1;C;3;Hemiptera;0.;0;NA
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 2477 pitfall;2016;vii;06;1;C;3;Lepidoptera;0.;0;NA
 2478 pitfall;2016;vii;06;1;C;3;Mantodea;0.;0;NA
 2479 pitfall;2016;vii;06;1;C;3;Neuroptera;0.;0;NA
 2480 pitfall;2016;vii;06;1;C;3;Orthoptera;0.;0;NA
 2481 pitfall;2016;vii;06;1;C;3;Psocoptera;0.;0;NA
 2482 pitfall;2016;vii;06;1;C;3;Thysanoptera;0.;0;NA
 2483 pitfall;2016;vii;07;2;A;3;Blattodea;0.;0;NA
 2484 pitfall;2016;vii;07;2;A;3;Coleoptera;0.;0;NA
 2485 pitfall;2016;vii;07;2;A;3;Collembola;0.;0;NA
 2486 pitfall;2016;vii;07;2;A;3;Diptera;0.;0;NA
 2487 pitfall;2016;vii;07;2;A;3;Hemiptera;0.;0;NA
 2488 pitfall;2016;vii;07;2;A;3;Hymenoptera;0.;0;NA
 2489 pitfall;2016;vii;07;2;A;3;Lepidoptera;0.;0;NA
 2490 pitfall;2016;vii;07;2;A;3;Mantodea;0.;0;NA
 2491 pitfall;2016;vii;07;2;A;3;Neuroptera;0.;0;NA
 2492 pitfall;2016;vii;07;2;A;3;Orthoptera;0.;0;NA
 2493 pitfall;2016;vii;07;2;A;3;Psocoptera;0.;0;NA
 2494 pitfall;2016;vii;07;2;A;3;Thysanoptera;0.;0;NA
 2495 pitfall;2016;vii;07;2;B;3;Blattodea;0.;0;NA
 2496 pitfall;2016;vii;07;2;B;3;Coleoptera;0.;0;NA
 2497 pitfall;2016;vii;07;2;B;3;Collembola;0.;0;NA
 2498 pitfall;2016;vii;07;2;B;3;Diptera;0.;0;NA
 2499 pitfall;2016;vii;07;2;B;3;Hemiptera;0.;0;NA
 2500 pitfall;2016;vii;07;2;B;3;Hymenoptera;0.;0;NA
 2501 pitfall;2016;vii;07;2;B;3;Lepidoptera;0.;0;NA
 2502 pitfall;2016;vii;07;2;B;3;Mantodea;0.;0;NA
 2503 pitfall;2016;vii;07;2;B;3;Neuroptera;0.;0;NA
 2504 pitfall;2016;vii;07;2;B;3;Orthoptera;0.;0;NA
 2505 pitfall;2016;vii;07;2;B;3;Psocoptera;0.;0;NA
 2506 pitfall;2016;vii;07;2;B;3;Thysanoptera;0.;0;NA
 2507 pitfall;2016;vii;07;2;C;3;Blattodea;0.;0;NA
 2508 pitfall;2016;vii;07;2;C;3;Coleoptera;0.;0;NA
 2509 pitfall;2016;vii;07;2;C;3;Collembola;0.;0;NA
 2510 pitfall;2016;vii;07;2;C;3;Diptera;0.;0;NA
 2511 pitfall;2016;vii;07;2;C;3;Hemiptera;0.;0;NA
 2512 pitfall;2016;vii;07;2;C;3;Hymenoptera;0.;0;NA
 2513 pitfall;2016;vii;07;2;C;3;Lepidoptera;0.;0;NA
 2514 pitfall;2016;vii;07;2;C;3;Mantodea;0.;0;NA
 2515 pitfall;2016;vii;07;2;C;3;Neuroptera;0.;0;NA
 2516 pitfall;2016;vii;07;2;C;3;Orthoptera;0.;0;NA
 2517 pitfall;2016;vii;07;2;C;3;Psocoptera;0.;0;NA
 2518 pitfall;2016;vii;07;2;C;3;Thysanoptera;0.;0;NA
 2519 pitfall;2016;vii;08;3;A;3;Blattodea;0.;0;NA
 2520 pitfall;2016;vii;08;3;A;3;Coleoptera;0.9926;0;NA
 2521 pitfall;2016;vii;08;3;A;3;Collembola;0.;0;NA

2522 pitfall;2016;vii;08;3;A;3;Diptera;0.2607;0;NA
 2523 pitfall;2016;vii;08;3;A;3;Hemiptera;0.0941;0;NA
 2524 pitfall;2016;vii;08;3;A;3;Hymenoptera;0.0485;0;NA
 2525 pitfall;2016;vii;08;3;A;3;Lepidoptera;0.2645;0;NA
 2526 pitfall;2016;vii;08;3;A;3;Mantodea;0.0;0;NA
 2527 pitfall;2016;vii;08;3;A;3;Neuroptera;0.0002;0;NA
 2528 pitfall;2016;vii;08;3;A;3;Orthoptera;1.201;0;NA
 2529 pitfall;2016;vii;08;3;A;3;Psocoptera;0.0001;0;NA
 2530 pitfall;2016;vii;08;3;A;3;Thysanoptera;0.0;0;NA
 2531 pitfall;2016;vii;08;3;B;3;Blattodea;0;0;NA
 2532 pitfall;2016;vii;08;3;B;3;Coleoptera;0.1563;0;NA
 2533 pitfall;2016;vii;08;3;B;3;Collembola;0.0;0;NA
 2534 pitfall;2016;vii;08;3;B;3;Diptera;0.0731;0;NA
 2535 pitfall;2016;vii;08;3;B;3;Hemiptera;0.0099;0;NA
 2536 pitfall;2016;vii;08;3;B;3;Hymenoptera;0.0061;0;NA
 2537 pitfall;2016;vii;08;3;B;3;Lepidoptera;0.0;0;NA
 2538 pitfall;2016;vii;08;3;B;3;Mantodea;0.0;0;NA
 2539 pitfall;2016;vii;08;3;B;3;Neuroptera;0.0013;0;NA
 2540 pitfall;2016;vii;08;3;B;3;Orthoptera;0.013;0;NA
 2541 pitfall;2016;vii;08;3;B;3;Psocoptera;0.0;0;NA
 2542 pitfall;2016;vii;08;3;B;3;Thysanoptera;0.0;0;NA
 2543 pitfall;2016;vii;08;3;C;3;Blattodea;0;0;NA
 2544 pitfall;2016;vii;08;3;C;3;Coleoptera;0.1153;0;NA
 2545 pitfall;2016;vii;08;3;C;3;Collembola;0.0;0;NA
 2546 pitfall;2016;vii;08;3;C;3;Diptera;0.0624;0;NA
 2547 pitfall;2016;vii;08;3;C;3;Hemiptera;0.0111;0;NA
 2548 pitfall;2016;vii;08;3;C;3;Hymenoptera;0.0302;0;NA
 2549 pitfall;2016;vii;08;3;C;3;Lepidoptera;0.0;0;NA
 2550 pitfall;2016;vii;08;3;C;3;Mantodea;0.0;0;NA
 2551 pitfall;2016;vii;08;3;C;3;Neuroptera;0.0;0;NA
 2552 pitfall;2016;vii;08;3;C;3;Orthoptera;0.2204;0;NA
 2553 pitfall;2016;vii;08;3;C;3;Psocoptera;0.0;0;NA
 2554 pitfall;2016;vii;08;3;C;3;Thysanoptera;0.0;0;NA
 2555 pitfall;2016;vii;09;UTC;1;3;Blattodea;0.0;0;NA
 2556 pitfall;2016;vii;09;UTC;1;3;Coleoptera;0.4111;0;NA
 2557 pitfall;2016;vii;09;UTC;1;3;Collembola;0.0;0;NA
 2558 pitfall;2016;vii;09;UTC;1;3;Diptera;0.0254;0;NA
 2559 pitfall;2016;vii;09;UTC;1;3;Hemiptera;0.05;0;NA
 2560 pitfall;2016;vii;09;UTC;1;3;Hymenoptera;0.0243;0;NA
 2561 pitfall;2016;vii;09;UTC;1;3;Lepidoptera;0.001;0;NA
 2562 pitfall;2016;vii;09;UTC;1;3;Mantodea;0.0039;0;NA
 2563 pitfall;2016;vii;09;UTC;1;3;Neuroptera;0.0;0;NA
 2564 pitfall;2016;vii;09;UTC;1;3;Orthoptera;0.25;0;NA
 2565 pitfall;2016;vii;09;UTC;1;3;Psocoptera;0.0;0;NA
 2566 pitfall;2016;vii;09;UTC;1;3;Thysanoptera;0.0;0;NA
 2567 pitfall;2016;vii;09;UTC;2;3;Blattodea;0.0266;0;NA
 2568 pitfall;2016;vii;09;UTC;2;3;Coleoptera;1.8412;0;NA
 2569 pitfall;2016;vii;09;UTC;2;3;Collembola;0.0;0;NA
 2570 pitfall;2016;vii;09;UTC;2;3;Diptera;0.1819;0;NA
 2571 pitfall;2016;vii;09;UTC;2;3;Hemiptera;0.0065;0;NA
 2572 pitfall;2016;vii;09;UTC;2;3;Hymenoptera;0.0395;0;NA
 2573 pitfall;2016;vii;09;UTC;2;3;Lepidoptera;0.0;0;NA
 2574 pitfall;2016;vii;09;UTC;2;3;Mantodea;0.0;0;NA
 2575 pitfall;2016;vii;09;UTC;2;3;Neuroptera;0.0;0;NA
 2576 pitfall;2016;vii;09;UTC;2;3;Orthoptera;0.2127;0;NA
 2577 pitfall;2016;vii;09;UTC;2;3;Psocoptera;0.0;0;NA
 2578 pitfall;2016;vii;09;UTC;2;3;Thysanoptera;0.0;0;NA
 2579 pitfall;2016;vii;09;UTC;3;3;Blattodea;0.0;0;NA
 2580 pitfall;2016;vii;09;UTC;3;3;Coleoptera;0.9547;0;NA
 2581 pitfall;2016;vii;09;UTC;3;3;Collembola;0.0;0;NA
 2582 pitfall;2016;vii;09;UTC;3;3;Diptera;0.0981;0;NA
 2583 pitfall;2016;vii;09;UTC;3;3;Hemiptera;0.0698;0;NA
 2584 pitfall;2016;vii;09;UTC;3;3;Hymenoptera;0.0355;0;NA
 2585 pitfall;2016;vii;09;UTC;3;3;Lepidoptera;0.0;0;NA
 2586 pitfall;2016;vii;09;UTC;3;3;Mantodea;0.0022;0;NA
 2587 pitfall;2016;vii;09;UTC;3;3;Neuroptera;0.0;0;NA
 2588 pitfall;2016;vii;09;UTC;3;3;Orthoptera;2.8878;0;NA
 2589 pitfall;2016;vii;09;UTC;3;3;Psocoptera;0.0;0;NA
 2590 pitfall;2016;vii;09;UTC;3;3;Thysanoptera;0.0;0;NA
 2591 pitfall;2016;vii;13;1;A;4;Blattodea;0.0;0;NA
 2592 pitfall;2016;vii;13;1;A;4;Coleoptera;0.9004;0;NA
 2593 pitfall;2016;vii;13;1;A;4;Collembola;0.0001;0;NA
 2594 pitfall;2016;vii;13;1;A;4;Diptera;0.5591;0;NA
 2595 pitfall;2016;vii;13;1;A;4;Hemiptera;0.0404;0;NA
 2596 pitfall;2016;vii;13;1;A;4;Hymenoptera;0.2004;0;NA
 2597 pitfall;2016;vii;13;1;A;4;Lepidoptera;0.0014;0;NA
 2598 pitfall;2016;vii;13;1;A;4;Mantodea;0.0;0;NA
 2599 pitfall;2016;vii;13;1;A;4;Neuroptera;0.0;0;NA
 2600 pitfall;2016;vii;13;1;A;4;Orthoptera;0.0157;0;NA
 2601 pitfall;2016;vii;13;1;A;4;Psocoptera;0.0;0;NA
 2602 pitfall;2016;vii;13;1;A;4;Thysanoptera;0.0;0;NA
 2603 pitfall;2016;vii;13;1;B;4;Blattodea;0.0;0;NA
 2604 pitfall;2016;vii;13;1;B;4;Coleoptera;2.4216;0;NA
 2605 pitfall;2016;vii;13;1;B;4;Collembola;0.0;0;NA
 2606 pitfall;2016;vii;13;1;B;4;Diptera;0.0871;0;NA
 2607 pitfall;2016;vii;13;1;B;4;Hemiptera;0.0293;0;NA
 2608 pitfall;2016;vii;13;1;B;4;Hymenoptera;0.0098;0;NA
 2609 pitfall;2016;vii;13;1;B;4;Lepidoptera;0.002;0;NA
 2610 pitfall;2016;vii;13;1;B;4;Mantodea;0.0008;0;NA
 2611 pitfall;2016;vii;13;1;B;4;Neuroptera;0.0001;0;NA
 2612 pitfall;2016;vii;13;1;B;4;Orthoptera;0.2155;0;NA
 2613 pitfall;2016;vii;13;1;B;4;Psocoptera;0.0;0;NA
 2614 pitfall;2016;vii;13;1;B;4;Thysanoptera;0.0;0;NA
 2615 pitfall;2016;vii;13;1;C;4;Blattodea;0.0;0;NA
 2616 pitfall;2016;vii;13;1;C;4;Coleoptera;0.3809;0;NA

2617 pitfall;2016;vii;13;1;C;4;Collembola;0.0;0;NA
 2618 pitfall;2016;vii;13;1;C;4;Diptera;0.0563;0;NA
 2619 pitfall;2016;vii;13;1;C;4;Hemiptera;0.0178;0;NA
 2620 pitfall;2016;vii;13;1;C;4;Hymenoptera;0.0503;0;NA
 2621 pitfall;2016;vii;13;1;C;4;Lepidoptera;0.0027;0;NA
 2622 pitfall;2016;vii;13;1;C;4;Mantodea;0.0;0;NA
 2623 pitfall;2016;vii;13;1;C;4;Neuroptera;0.0008;0;NA
 2624 pitfall;2016;vii;13;1;C;4;Orthoptera;1.2866;0;NA
 2625 pitfall;2016;vii;13;1;C;4;Psocoptera;0.0003;0;NA
 2626 pitfall;2016;vii;13;1;C;4;Thysanoptera;0.0;0;NA
 2627 pitfall;2016;vii;14;2;A;4;Blattodea;0;0;NA
 2628 pitfall;2016;vii;14;2;A;4;Coleoptera;5.7309;0;NA
 2629 pitfall;2016;vii;14;2;A;4;Collembola;0.0;0;NA
 2630 pitfall;2016;vii;14;2;A;4;Diptera;0.0794;0;NA
 2631 pitfall;2016;vii;14;2;A;4;Hemiptera;0.005;0;NA
 2632 pitfall;2016;vii;14;2;A;4;Hymenoptera;0.0067;0;NA
 2633 pitfall;2016;vii;14;2;A;4;Lepidoptera;0.0;0;NA
 2634 pitfall;2016;vii;14;2;A;4;Mantodea;0.0026;0;NA
 2635 pitfall;2016;vii;14;2;A;4;Neuroptera;0.0;0;NA
 2636 pitfall;2016;vii;14;2;A;4;Orthoptera;0.0128;0;NA
 2637 pitfall;2016;vii;14;2;A;4;Psocoptera;0.0;0;NA
 2638 pitfall;2016;vii;14;2;A;4;Thysanoptera;0.0;0;NA
 2639 pitfall;2016;vii;14;2;B;4;Blattodea;0;0;NA
 2640 pitfall;2016;vii;14;2;B;4;Coleoptera;4.1105;0;NA
 2641 pitfall;2016;vii;14;2;B;4;Collembola;0.0;0;NA
 2642 pitfall;2016;vii;14;2;B;4;Diptera;0.069;0;NA
 2643 pitfall;2016;vii;14;2;B;4;Hemiptera;0.0077;0;NA
 2644 pitfall;2016;vii;14;2;B;4;Hymenoptera;0.0303;0;NA
 2645 pitfall;2016;vii;14;2;B;4;Lepidoptera;0.0;0;NA
 2646 pitfall;2016;vii;14;2;B;4;Mantodea;0.0;0;NA
 2647 pitfall;2016;vii;14;2;B;4;Neuroptera;0.0001;0;NA
 2648 pitfall;2016;vii;14;2;B;4;Orthoptera;0.1525;0;NA
 2649 pitfall;2016;vii;14;2;B;4;Psocoptera;0.0;0;NA
 2650 pitfall;2016;vii;14;2;B;4;Thysanoptera;0.0001;0;NA
 2651 pitfall;2016;vii;14;2;C;4;Blattodea;0;0;NA
 2652 pitfall;2016;vii;14;2;C;4;Coleoptera;0.4916;0;NA
 2653 pitfall;2016;vii;14;2;C;4;Collembola;0.0;0;NA
 2654 pitfall;2016;vii;14;2;C;4;Diptera;0.1582;0;NA
 2655 pitfall;2016;vii;14;2;C;4;Hemiptera;0.0059;0;NA
 2656 pitfall;2016;vii;14;2;C;4;Hymenoptera;0.0407;0;NA
 2657 pitfall;2016;vii;14;2;C;4;Lepidoptera;0.0012;0;NA
 2658 pitfall;2016;vii;14;2;C;4;Mantodea;0.0;0;NA
 2659 pitfall;2016;vii;14;2;C;4;Neuroptera;0.001;0;NA
 2660 pitfall;2016;vii;14;2;C;4;Orthoptera;0.1635;0;NA
 2661 pitfall;2016;vii;14;2;C;4;Psocoptera;0.0;0;NA
 2662 pitfall;2016;vii;14;2;C;4;Thysanoptera;0.0;0;NA
 2663 pitfall;2016;vii;15;3;A;4;Blattodea;0;0;NA
 2664 pitfall;2016;vii;15;3;A;4;Coleoptera;1.2592;0;NA
 2665 pitfall;2016;vii;15;3;A;4;Collembola;0.0;0;NA
 2666 pitfall;2016;vii;15;3;A;4;Diptera;0.2811;0;NA
 2667 pitfall;2016;vii;15;3;A;4;Hemiptera;0.0271;0;NA
 2668 pitfall;2016;vii;15;3;A;4;Hymenoptera;0.0338;0;NA
 2669 pitfall;2016;vii;15;3;A;4;Lepidoptera;0.0017;0;NA
 2670 pitfall;2016;vii;15;3;A;4;Mantodea;0.0;0;NA
 2671 pitfall;2016;vii;15;3;A;4;Neuroptera;0.0;0;NA
 2672 pitfall;2016;vii;15;3;A;4;Orthoptera;0.473;0;NA
 2673 pitfall;2016;vii;15;3;A;4;Psocoptera;0.0;0;NA
 2674 pitfall;2016;vii;15;3;A;4;Thysanoptera;0.0001;0;NA
 2675 pitfall;2016;vii;15;3;B;4;Blattodea;0;0;NA
 2676 pitfall;2016;vii;15;3;B;4;Coleoptera;0.0682;0;NA
 2677 pitfall;2016;vii;15;3;B;4;Collembola;0.0;0;NA
 2678 pitfall;2016;vii;15;3;B;4;Diptera;0.083;0;NA
 2679 pitfall;2016;vii;15;3;B;4;Hemiptera;0.0129;0;NA
 2680 pitfall;2016;vii;15;3;B;4;Hymenoptera;0.0153;0;NA
 2681 pitfall;2016;vii;15;3;B;4;Lepidoptera;0.0034;0;NA
 2682 pitfall;2016;vii;15;3;B;4;Mantodea;0.0;0;NA
 2683 pitfall;2016;vii;15;3;B;4;Neuroptera;0.024;0;NA
 2684 pitfall;2016;vii;15;3;B;4;Orthoptera;0.0033;0;NA
 2685 pitfall;2016;vii;15;3;B;4;Psocoptera;0.0;0;NA
 2686 pitfall;2016;vii;15;3;B;4;Thysanoptera;0.0;0;NA
 2687 pitfall;2016;vii;15;3;C;4;Blattodea;0;0;NA
 2688 pitfall;2016;vii;15;3;C;4;Coleoptera;1.5929;0;NA
 2689 pitfall;2016;vii;15;3;C;4;Collembola;0.0;0;NA
 2690 pitfall;2016;vii;15;3;C;4;Diptera;0.033;0;NA
 2691 pitfall;2016;vii;15;3;C;4;Hemiptera;0.0085;0;NA
 2692 pitfall;2016;vii;15;3;C;4;Hymenoptera;0.0416;0;NA
 2693 pitfall;2016;vii;15;3;C;4;Lepidoptera;0.0;0;NA
 2694 pitfall;2016;vii;15;3;C;4;Mantodea;0.0;0;NA
 2695 pitfall;2016;vii;15;3;C;4;Neuroptera;0.0033;0;NA
 2696 pitfall;2016;vii;15;3;C;4;Orthoptera;0.1931;0;NA
 2697 pitfall;2016;vii;15;3;C;4;Psocoptera;0.0;0;NA
 2698 pitfall;2016;vii;15;3;C;4;Thysanoptera;0.0;0;NA
 2699 pitfall;2016;vii;16;UTC;1;4;Blattodea;0;0;NA
 2700 pitfall;2016;vii;16;UTC;1;4;Coleoptera;0.2482;0;NA
 2701 pitfall;2016;vii;16;UTC;1;4;Collembola;0.0;0;NA
 2702 pitfall;2016;vii;16;UTC;1;4;Diptera;0.018;0;NA
 2703 pitfall;2016;vii;16;UTC;1;4;Hemiptera;0.0221;0;NA
 2704 pitfall;2016;vii;16;UTC;1;4;Hymenoptera;0.0581;0;NA
 2705 pitfall;2016;vii;16;UTC;1;4;Lepidoptera;0.0;0;NA
 2706 pitfall;2016;vii;16;UTC;1;4;Mantodea;0.0;0;NA
 2707 pitfall;2016;vii;16;UTC;1;4;Neuroptera;0.0;0;NA
 2708 pitfall;2016;vii;16;UTC;1;4;Orthoptera;0.3445;0;NA
 2709 pitfall;2016;vii;16;UTC;1;4;Psocoptera;0.0;0;NA
 2710 pitfall;2016;vii;16;UTC;1;4;Thysanoptera;0.0;0;NA
 2711 pitfall;2016;vii;16;UTC;2;4;Blattodea;0;0;NA

2712 pitfall;2016;vii;16;UTC;2;4;Coleoptera;1.4536;0;NA
 2713 pitfall;2016;vii;16;UTC;2;4;Collembola;0.0;0;NA
 2714 pitfall;2016;vii;16;UTC;2;4;Diptera;0.0499;0;NA
 2715 pitfall;2016;vii;16;UTC;2;4;Hemiptera;0.0163;0;NA
 2716 pitfall;2016;vii;16;UTC;2;4;Hymenoptera;0.0169;0;NA
 2717 pitfall;2016;vii;16;UTC;2;4;Lepidoptera;0.0;0;NA
 2718 pitfall;2016;vii;16;UTC;2;4;Mantodea;0.0131;0;NA
 2719 pitfall;2016;vii;16;UTC;2;4;Neuroptera;0.0012;0;NA
 2720 pitfall;2016;vii;16;UTC;2;4;Orthoptera;0.3406;0;NA
 2721 pitfall;2016;vii;16;UTC;2;4;Psocoptera;0.0;0;NA
 2722 pitfall;2016;vii;16;UTC;2;4;Thysanoptera;0.0;0;NA
 2723 pitfall;2016;vii;16;UTC;3;4;Blattodea;0;0;NA
 2724 pitfall;2016;vii;16;UTC;3;4;Coleoptera;3.3479;0;NA
 2725 pitfall;2016;vii;16;UTC;3;4;Collembola;0;0;NA
 2726 pitfall;2016;vii;16;UTC;3;4;Diptera;0.1017;0;NA
 2727 pitfall;2016;vii;16;UTC;3;4;Hemiptera;0.0938;0;NA
 2728 pitfall;2016;vii;16;UTC;3;4;Hymenoptera;0.0789;0;NA
 2729 pitfall;2016;vii;16;UTC;3;4;Lepidoptera;0.0021;0;NA
 2730 pitfall;2016;vii;16;UTC;3;4;Mantodea;0;0;NA
 2731 pitfall;2016;vii;16;UTC;3;4;Neuroptera;0.0;0;NA
 2732 pitfall;2016;vii;16;UTC;3;4;Orthoptera;1.4503;0;NA
 2733 pitfall;2016;vii;16;UTC;3;4;Psocoptera;0.0;0;NA
 2734 pitfall;2016;vii;16;UTC;3;4;Thysanoptera;0.0;0;NA
 2735 pitfall;2016;vii;20;1;A;5;Blattodea;0;0;NA
 2736 pitfall;2016;vii;20;1;A;5;Coleoptera;0.3622;0;NA
 2737 pitfall;2016;vii;20;1;A;5;Collembola;0;0;NA
 2738 pitfall;2016;vii;20;1;A;5;Diptera;0.0423;0;NA
 2739 pitfall;2016;vii;20;1;A;5;Hemiptera;0.0295;0;NA
 2740 pitfall;2016;vii;20;1;A;5;Hymenoptera;0.0647;0;NA
 2741 pitfall;2016;vii;20;1;A;5;Lepidoptera;0.0013;0;NA
 2742 pitfall;2016;vii;20;1;A;5;Mantodea;0;0;NA
 2743 pitfall;2016;vii;20;1;A;5;Neuroptera;0.0015;0;NA
 2744 pitfall;2016;vii;20;1;A;5;Orthoptera;0.0;0;NA
 2745 pitfall;2016;vii;20;1;A;5;Psocoptera;0.0;0;NA
 2746 pitfall;2016;vii;20;1;A;5;Thysanoptera;0.0001;0;NA
 2747 pitfall;2016;vii;20;1;B;5;Blattodea;0;0;NA
 2748 pitfall;2016;vii;20;1;B;5;Coleoptera;2.8849;0;NA
 2749 pitfall;2016;vii;20;1;B;5;Collembola;0;0;NA
 2750 pitfall;2016;vii;20;1;B;5;Diptera;0.0202;0;NA
 2751 pitfall;2016;vii;20;1;B;5;Hemiptera;0.0079;0;NA
 2752 pitfall;2016;vii;20;1;B;5;Hymenoptera;0.0221;0;NA
 2753 pitfall;2016;vii;20;1;B;5;Lepidoptera;0;0;NA
 2754 pitfall;2016;vii;20;1;B;5;Mantodea;0;0;NA
 2755 pitfall;2016;vii;20;1;B;5;Neuroptera;0.001;0;NA
 2756 pitfall;2016;vii;20;1;B;5;Orthoptera;0.1287;0;NA
 2757 pitfall;2016;vii;20;1;B;5;Psocoptera;0.0;0;NA
 2758 pitfall;2016;vii;20;1;B;5;Thysanoptera;0.0;0;NA
 2759 pitfall;2016;vii;20;1;C;5;Blattodea;0;0;NA
 2760 pitfall;2016;vii;20;1;C;5;Coleoptera;0.7489;0;NA
 2761 pitfall;2016;vii;20;1;C;5;Collembola;0;0;NA
 2762 pitfall;2016;vii;20;1;C;5;Diptera;0.0145;0;NA
 2763 pitfall;2016;vii;20;1;C;5;Hemiptera;0.0091;0;NA
 2764 pitfall;2016;vii;20;1;C;5;Hymenoptera;0.049;0;NA
 2765 pitfall;2016;vii;20;1;C;5;Lepidoptera;0.001;0;NA
 2766 pitfall;2016;vii;20;1;C;5;Mantodea;0.0096;0;NA
 2767 pitfall;2016;vii;20;1;C;5;Neuroptera;0.0;0;NA
 2768 pitfall;2016;vii;20;1;C;5;Orthoptera;1.0602;0;NA
 2769 pitfall;2016;vii;20;1;C;5;Psocoptera;0.0;0;NA
 2770 pitfall;2016;vii;20;1;C;5;Thysanoptera;0.0;0;NA
 2771 pitfall;2016;vii;22;3;A;5;Blattodea;0;0;NA
 2772 pitfall;2016;vii;22;3;A;5;Coleoptera;1.6114;0;NA
 2773 pitfall;2016;vii;22;3;A;5;Collembola;0;0;NA
 2774 pitfall;2016;vii;22;3;A;5;Diptera;0.0908;0;NA
 2775 pitfall;2016;vii;22;3;A;5;Hemiptera;0.031;0;NA
 2776 pitfall;2016;vii;22;3;A;5;Hymenoptera;0.0513;0;NA
 2777 pitfall;2016;vii;22;3;A;5;Lepidoptera;0;0;NA
 2778 pitfall;2016;vii;22;3;A;5;Mantodea;0;0;NA
 2779 pitfall;2016;vii;22;3;A;5;Neuroptera;0.0108;0;NA
 2780 pitfall;2016;vii;22;3;A;5;Orthoptera;0.9491;0;NA
 2781 pitfall;2016;vii;22;3;A;5;Psocoptera;0;0;NA
 2782 pitfall;2016;vii;22;3;A;5;Thysanoptera;0.0;0;NA
 2783 pitfall;2016;vii;22;3;B;5;Blattodea;0;0;NA
 2784 pitfall;2016;vii;22;3;B;5;Coleoptera;0.5608;0;NA
 2785 pitfall;2016;vii;22;3;B;5;Collembola;0;0;NA
 2786 pitfall;2016;vii;22;3;B;5;Diptera;0.0185;0;NA
 2787 pitfall;2016;vii;22;3;B;5;Hemiptera;0.0095;0;NA
 2788 pitfall;2016;vii;22;3;B;5;Hymenoptera;0.0644;0;NA
 2789 pitfall;2016;vii;22;3;B;5;Lepidoptera;0;0;NA
 2790 pitfall;2016;vii;22;3;B;5;Mantodea;0;0;NA
 2791 pitfall;2016;vii;22;3;B;5;Neuroptera;0;0;NA
 2792 pitfall;2016;vii;22;3;B;5;Orthoptera;0.6394;0;NA
 2793 pitfall;2016;vii;22;3;B;5;Psocoptera;0;0;NA
 2794 pitfall;2016;vii;22;3;B;5;Thysanoptera;0.0001;0;NA
 2795 pitfall;2016;vii;22;3;C;5;Blattodea;0;0;NA
 2796 pitfall;2016;vii;22;3;C;5;Coleoptera;0.7028;0;NA
 2797 pitfall;2016;vii;22;3;C;5;Collembola;0;0;NA
 2798 pitfall;2016;vii;22;3;C;5;Diptera;0.152;0;NA
 2799 pitfall;2016;vii;22;3;C;5;Hemiptera;0.0071;0;NA
 2800 pitfall;2016;vii;22;3;C;5;Hymenoptera;0.0466;0;NA
 2801 pitfall;2016;vii;22;3;C;5;Lepidoptera;0;0;NA
 2802 pitfall;2016;vii;22;3;C;5;Mantodea;0.0053;0;NA
 2803 pitfall;2016;vii;22;3;C;5;Neuroptera;0;0;NA
 2804 pitfall;2016;vii;22;3;C;5;Orthoptera;0;0;NA
 2805 pitfall;2016;vii;22;3;C;5;Psocoptera;0;0;NA
 2806 pitfall;2016;vii;22;3;C;5;Thysanoptera;0.0;0;NA

2807 pitfall;2016;vii;23;2;A;5;Blattodea;0;0;NA
 2808 pitfall;2016;vii;23;2;A;5;Coleoptera;5.322;0;NA
 2809 pitfall;2016;vii;23;2;A;5;Collembola;0.0;0;NA
 2810 pitfall;2016;vii;23;2;A;5;Diptera;0.0556;0;NA
 2811 pitfall;2016;vii;23;2;A;5;Hemiptera;0.0096;0;NA
 2812 pitfall;2016;vii;23;2;A;5;Hymenoptera;0.0134;0;NA
 2813 pitfall;2016;vii;23;2;A;5;Lepidoptera;0.0005;0;NA
 2814 pitfall;2016;vii;23;2;A;5;Mantodea;0.003;0;NA
 2815 pitfall;2016;vii;23;2;A;5;Neuroptera;0.0;0;NA
 2816 pitfall;2016;vii;23;2;A;5;Orthoptera;0.0905;0;NA
 2817 pitfall;2016;vii;23;2;A;5;Psocoptera;0;0;NA
 2818 pitfall;2016;vii;23;2;A;5;Thysanoptera;0.0;0;NA
 2819 pitfall;2016;vii;23;2;B;5;Blattodea;0;0;NA
 2820 pitfall;2016;vii;23;2;B;5;Coleoptera;5.9393;0;NA
 2821 pitfall;2016;vii;23;2;B;5;Collembola;0.0;0;NA
 2822 pitfall;2016;vii;23;2;B;5;Diptera;0.0972;0;NA
 2823 pitfall;2016;vii;23;2;B;5;Hemiptera;0.0133;0;NA
 2824 pitfall;2016;vii;23;2;B;5;Hymenoptera;0.0334;0;NA
 2825 pitfall;2016;vii;23;2;B;5;Lepidoptera;0.0;0;NA
 2826 pitfall;2016;vii;23;2;B;5;Mantodea;0.0031;0;NA
 2827 pitfall;2016;vii;23;2;B;5;Neuroptera;0.0;0;NA
 2828 pitfall;2016;vii;23;2;B;5;Orthoptera;0.0314;0;NA
 2829 pitfall;2016;vii;23;2;B;5;Psocoptera;0;0;NA
 2830 pitfall;2016;vii;23;2;B;5;Thysanoptera;0.0;0;NA
 2831 pitfall;2016;vii;23;2;C;5;Blattodea;0;0;NA
 2832 pitfall;2016;vii;23;2;C;5;Coleoptera;1.0042;0;NA
 2833 pitfall;2016;vii;23;2;C;5;Collembola;0.0;0;NA
 2834 pitfall;2016;vii;23;2;C;5;Diptera;0.0896;0;NA
 2835 pitfall;2016;vii;23;2;C;5;Hemiptera;0.0112;0;NA
 2836 pitfall;2016;vii;23;2;C;5;Hymenoptera;0.1643;0;NA
 2837 pitfall;2016;vii;23;2;C;5;Lepidoptera;0.0;0;NA
 2838 pitfall;2016;vii;23;2;C;5;Mantodea;0.0;0;NA
 2839 pitfall;2016;vii;23;2;C;5;Neuroptera;0.0;0;NA
 2840 pitfall;2016;vii;23;2;C;5;Orthoptera;0.1919;0;NA
 2841 pitfall;2016;vii;23;2;C;5;Psocoptera;0;0;NA
 2842 pitfall;2016;vii;23;2;C;5;Thysanoptera;0.0;0;NA
 2843 pitfall;2016;vii;23;UTC;1;5;Blattodea;0;0;NA
 2844 pitfall;2016;vii;23;UTC;1;5;Coleoptera;0.2891;0;NA
 2845 pitfall;2016;vii;23;UTC;1;5;Collembola;0.0;0;NA
 2846 pitfall;2016;vii;23;UTC;1;5;Diptera;0.0342;0;NA
 2847 pitfall;2016;vii;23;UTC;1;5;Hemiptera;0.019;0;NA
 2848 pitfall;2016;vii;23;UTC;1;5;Hymenoptera;0.046;0;NA
 2849 pitfall;2016;vii;23;UTC;1;5;Lepidoptera;0.0276;0;NA
 2850 pitfall;2016;vii;23;UTC;1;5;Mantodea;0.0;0;NA
 2851 pitfall;2016;vii;23;UTC;1;5;Neuroptera;0.0;0;NA
 2852 pitfall;2016;vii;23;UTC;1;5;Orthoptera;0.663;0;NA
 2853 pitfall;2016;vii;23;UTC;1;5;Psocoptera;0.0;0;NA
 2854 pitfall;2016;vii;23;UTC;1;5;Thysanoptera;0.0;0;NA
 2855 pitfall;2016;vii;23;UTC;2;5;Blattodea;0;0;NA
 2856 pitfall;2016;vii;23;UTC;2;5;Coleoptera;5.2756;0;NA
 2857 pitfall;2016;vii;23;UTC;2;5;Collembola;0.0;0;NA
 2858 pitfall;2016;vii;23;UTC;2;5;Diptera;0.0417;0;NA
 2859 pitfall;2016;vii;23;UTC;2;5;Hemiptera;0.0131;0;NA
 2860 pitfall;2016;vii;23;UTC;2;5;Hymenoptera;0.0318;0;NA
 2861 pitfall;2016;vii;23;UTC;2;5;Lepidoptera;0.0;0;NA
 2862 pitfall;2016;vii;23;UTC;2;5;Mantodea;0.0053;0;NA
 2863 pitfall;2016;vii;23;UTC;2;5;Neuroptera;0.0;0;NA
 2864 pitfall;2016;vii;23;UTC;2;5;Orthoptera;0.3415;0;NA
 2865 pitfall;2016;vii;23;UTC;2;5;Psocoptera;0.0;0;NA
 2866 pitfall;2016;vii;23;UTC;2;5;Thysanoptera;0.0002;0;NA
 2867 pitfall;2016;vii;23;UTC;3;5;Blattodea;0;0;NA
 2868 pitfall;2016;vii;23;UTC;3;5;Coleoptera;4.6751;0;NA
 2869 pitfall;2016;vii;23;UTC;3;5;Collembola;0.0;0;NA
 2870 pitfall;2016;vii;23;UTC;3;5;Diptera;0.042;0;NA
 2871 pitfall;2016;vii;23;UTC;3;5;Hemiptera;0.0501;0;NA
 2872 pitfall;2016;vii;23;UTC;3;5;Hymenoptera;0.127;0;NA
 2873 pitfall;2016;vii;23;UTC;3;5;Lepidoptera;0.0014;0;NA
 2874 pitfall;2016;vii;23;UTC;3;5;Mantodea;0.0;0;NA
 2875 pitfall;2016;vii;23;UTC;3;5;Neuroptera;0.0;0;NA
 2876 pitfall;2016;vii;23;UTC;3;5;Orthoptera;1.2485;0;NA
 2877 pitfall;2016;vii;23;UTC;3;5;Psocoptera;0.0;0;NA
 2878 pitfall;2016;vii;23;UTC;3;5;Thysanoptera;0.0;0;NA
 2879 sweep;2015;vi;24;1;A;1;Coleoptera;0.0035;2;Bruchidae,Mordellidae
 2880 sweep;2015;vi;24;1;A;1;Collembola;0.0;0;NA
 2881 sweep;2015;vi;24;1;A;1;Diptera;0.0;0;NA
 2882 sweep;2015;vi;24;1;A;1;Hemiptera;0.0039;1;Miridae
 2883 sweep;2015;vi;24;1;A;1;Hymenoptera;0.0;0;NA
 2884 sweep;2015;vi;24;1;A;1;Lepidoptera;0.0;0;NA
 2885 sweep;2015;vi;24;1;A;1;Mantodea;0;0;NA
 2886 sweep;2015;vi;24;1;A;1;Neuroptera;0.0;0;NA
 2887 sweep;2015;vi;24;1;A;1;Orthoptera;0.0;0;NA
 2888 sweep;2015;vi;24;1;A;1;Thysanoptera;0.0;0;NA
 2889 sweep;2015;vi;24;1;A;1;Trichoptera;0;0;NA
 2890 sweep;2015;vi;24;1;B;1;Coleoptera;0.001;1;Chrysomelidae
 2891 sweep;2015;vi;24;1;B;1;Collembola;0.0;0;NA
 2892 sweep;2015;vi;24;1;B;1;Diptera;0;0;NA
 2893 sweep;2015;vi;24;1;B;1;Hemiptera;0.0027;1;Cicadellidae
 2894 sweep;2015;vi;24;1;B;1;Hymenoptera;0.0025;2;Halictidae,Scelionidae
 2895 sweep;2015;vi;24;1;B;1;Lepidoptera;0.0;0;NA
 2896 sweep;2015;vi;24;1;B;1;Mantodea;0;0;NA
 2897 sweep;2015;vi;24;1;B;1;Neuroptera;0.0;0;NA
 2898 sweep;2015;vi;24;1;B;1;Orthoptera;0.0526;1;Acrididae
 2899 sweep;2015;vi;24;1;B;1;Thysanoptera;0.0;0;NA
 2900 sweep;2015;vi;24;1;B;1;Trichoptera;0;0;NA
 2901 sweep;2015;vi;24;1;C;1;Coleoptera;0.0001;0;NA

2902 sweep;2015;vi;24;1;C;1;Collembola;0.0;0;NA
 2903 sweep;2015;vi;24;1;C;1;Diptera;0.0;0;NA
 2904 sweep;2015;vi;24;1;C;1;Hemiptera;0.003;0;NA
 2905 sweep;2015;vi;24;1;C;1;Hymenoptera;0.0001;0;NA
 2906 sweep;2015;vi;24;1;C;1;Lepidoptera;0.0019;0;NA
 2907 sweep;2015;vi;24;1;C;1;Mantodea;0;0;NA
 2908 sweep;2015;vi;24;1;C;1;Neuroptera;0.0;0;NA
 2909 sweep;2015;vi;24;1;C;1;Orthoptera;0.0225;0;NA
 2910 sweep;2015;vi;24;1;C;1;Thysanoptera;0.0;0;NA
 2911 sweep;2015;vi;24;1;C;1;Trichoptera;0;0;NA
 2912 sweep;2015;vi;25;2;A;1;Coleoptera;0.0489;1;Chrysomelidae
 2913 sweep;2015;vi;25;2;A;1;Collembola;0.0;0;NA
 2914 sweep;2015;vi;25;2;A;1;Diptera;0.0;0;NA
 2915 sweep;2015;vi;25;2;A;1;Hemiptera;0.0069;3;Cicadellidae,Miridae,Psyllidae
 2916 sweep;2015;vi;25;2;A;1;Hymenoptera;0.0092;1;Halictidae
 2917 sweep;2015;vi;25;2;A;1;Lepidoptera;0.0073;1;Gelechiidae
 2918 sweep;2015;vi;25;2;A;1;Mantodea;0;0;NA
 2919 sweep;2015;vi;25;2;A;1;Neuroptera;0.0;0;NA
 2920 sweep;2015;vi;25;2;A;1;Orthoptera;0.003;0;NA
 2921 sweep;2015;vi;25;2;A;1;Thysanoptera;0.0;0;NA
 2922 sweep;2015;vi;25;2;A;1;Trichoptera;0;0;NA
 2923 sweep;2015;vi;25;2;B;1;Coleoptera;0.0071;0;NA
 2924 sweep;2015;vi;25;2;B;1;Collembola;0.0;0;NA
 2925 sweep;2015;vi;25;2;B;1;Diptera;0.0007;0;NA
 2926 sweep;2015;vi;25;2;B;1;Hemiptera;0.0052;0;NA
 2927 sweep;2015;vi;25;2;B;1;Hymenoptera;0.0025;0;NA
 2928 sweep;2015;vi;25;2;B;1;Lepidoptera;0.0;0;NA
 2929 sweep;2015;vi;25;2;B;1;Mantodea;0;0;NA
 2930 sweep;2015;vi;25;2;B;1;Neuroptera;0.0;0;NA
 2931 sweep;2015;vi;25;2;B;1;Orthoptera;0.0196;0;NA
 2932 sweep;2015;vi;25;2;B;1;Thysanoptera;0.0;0;NA
 2933 sweep;2015;vi;25;2;B;1;Trichoptera;0;0;NA
 2934 sweep;2015;vi;25;2;C;1;Coleoptera;0.0118;3;Chrysomelidae,Melyridae,Mordellidae
 2935 sweep;2015;vi;25;2;C;1;Collembola;0.0;0;NA
 2936 sweep;2015;vi;25;2;C;1;Diptera;0.001;1;Sarcophagidae
 2937 sweep;2015;vi;25;2;C;1;Hemiptera;0.0053;1;Cicadellidae
 2938 sweep;2015;vi;25;2;C;1;Hymenoptera;0.0001;1;Pteromalidae
 2939 sweep;2015;vi;25;2;C;1;Lepidoptera;0;0;NA
 2940 sweep;2015;vi;25;2;C;1;Mantodea;0;0;NA
 2941 sweep;2015;vi;25;2;C;1;Neuroptera;0.0;0;NA
 2942 sweep;2015;vi;25;2;C;1;Orthoptera;0.0435;1;Acrididae
 2943 sweep;2015;vi;25;2;C;1;Thysanoptera;0.0;0;NA
 2944 sweep;2015;vi;25;2;C;1;Trichoptera;0;0;NA
 2945 sweep;2015;vi;26;3;A;1;Coleoptera;0.0213;2;Chrysomelidae,Melyridae
 2946 sweep;2015;vi;26;3;A;1;Collembola;0.0;0;NA
 2947 sweep;2015;vi;26;3;A;1;Diptera;0.0012;0;NA
 2948 sweep;2015;vi;26;3;A;1;Hemiptera;0.0396;4;Alydidae,Cicadellidae,Lygaeidae,Miridae
 2949 sweep;2015;vi;26;3;A;1;Hymenoptera;0.0027;2;Braconidae,Perilampidae
 2950 sweep;2015;vi;26;3;A;1;Lepidoptera;0;0;NA
 2951 sweep;2015;vi;26;3;A;1;Mantodea;0;0;NA
 2952 sweep;2015;vi;26;3;A;1;Neuroptera;0.0025;1;Hemerobiidae
 2953 sweep;2015;vi;26;3;A;1;Orthoptera;0.0492;1;Acrididae
 2954 sweep;2015;vi;26;3;A;1;Thysanoptera;0.0;0;NA
 2955 sweep;2015;vi;26;3;A;1;Trichoptera;0;0;NA
 2956 sweep;2015;vi;26;3;B;1;Coleoptera;0.0;0;NA
 2957 sweep;2015;vi;26;3;B;1;Collembola;0.0;0;NA
 2958 sweep;2015;vi;26;3;B;1;Diptera;0.0841;1;Asilidae
 2959 sweep;2015;vi;26;3;B;1;Hemiptera;0.0146;1;Cicadellidae
 2960 sweep;2015;vi;26;3;B;1;Hymenoptera;0;0;NA
 2961 sweep;2015;vi;26;3;B;1;Lepidoptera;0.0018;1;Pyralidae
 2962 sweep;2015;vi;26;3;B;1;Mantodea;0;0;NA
 2963 sweep;2015;vi;26;3;B;1;Neuroptera;0.0;0;NA
 2964 sweep;2015;vi;26;3;B;1;Orthoptera;0.0276;1;Acrididae
 2965 sweep;2015;vi;26;3;B;1;Thysanoptera;0.0;0;NA
 2966 sweep;2015;vi;26;3;B;1;Trichoptera;0;0;NA
 2967 sweep;2015;vi;26;3;C;1;Coleoptera;0.0061;1;Chrysomelidae
 2968 sweep;2015;vi;26;3;C;1;Collembola;0.0;0;NA
 2969 sweep;2015;vi;26;3;C;1;Diptera;0.0504;1;Asilidae
 2970 sweep;2015;vi;26;3;C;1;Hemiptera;0.0054;1;Cicadellidae
 2971 sweep;2015;vi;26;3;C;1;Hymenoptera;0.0037;3;Braconidae,Formicidae,Scelionidae
 2972 sweep;2015;vi;26;3;C;1;Lepidoptera;0;0;NA
 2973 sweep;2015;vi;26;3;C;1;Mantodea;0;0;NA
 2974 sweep;2015;vi;26;3;C;1;Neuroptera;0.0;0;NA
 2975 sweep;2015;vi;26;3;C;1;Orthoptera;0.0271;1;Acrididae
 2976 sweep;2015;vi;26;3;C;1;Thysanoptera;0.0;0;NA
 2977 sweep;2015;vi;26;3;C;1;Trichoptera;0;0;NA
 2978 sweep;2015;vi;27;UTC;1;1;Coleoptera;0.0015;1;Chrysomelidae
 2979 sweep;2015;vi;27;UTC;1;1;Collembola;0.0;0;NA
 2980 sweep;2015;vi;27;UTC;1;1;Diptera;0.0;0;NA
 2981 sweep;2015;vi;27;UTC;1;1;Hemiptera;0.0036;2;Cicadellidae,Lygaeidae
 2982 sweep;2015;vi;27;UTC;1;1;Hymenoptera;0.0;0;NA
 2983 sweep;2015;vi;27;UTC;1;1;Lepidoptera;0.0;0;NA
 2984 sweep;2015;vi;27;UTC;1;1;Mantodea;0;0;NA
 2985 sweep;2015;vi;27;UTC;1;1;Neuroptera;0.0;0;NA
 2986 sweep;2015;vi;27;UTC;1;1;Orthoptera;0.0031;0;NA
 2987 sweep;2015;vi;27;UTC;1;1;Thysanoptera;0.0;0;NA
 2988 sweep;2015;vi;27;UTC;1;1;Trichoptera;0;0;NA
 2989 sweep;2015;vi;27;UTC;2;1;Coleoptera;0.0;0;NA
 2990 sweep;2015;vi;27;UTC;2;1;Collembola;0.0;0;NA
 2991 sweep;2015;vi;27;UTC;2;1;Diptera;0.0011;1;Chloropidae
 2992 sweep;2015;vi;27;UTC;2;1;Hemiptera;0.001;1;Cicadellidae
 2993 sweep;2015;vi;27;UTC;2;1;Hymenoptera;0.0;0;NA
 2994 sweep;2015;vi;27;UTC;2;1;Lepidoptera;0.0;0;NA
 2995 sweep;2015;vi;27;UTC;2;1;Mantodea;0;0;NA
 2996 sweep;2015;vi;27;UTC;2;1;Neuroptera;0.0;0;NA

2997 sweep;2015;vi;27;UTC;2;1;Orthoptera;0.0;0;NA
 2998 sweep;2015;vi;27;UTC;2;1;Thysanoptera;0.0;0;NA
 2999 sweep;2015;vi;27;UTC;2;1;Trichoptera;0;0;NA
 3000 sweep;2015;vi;27;UTC;3;1;Coleoptera;0.0002;1;Chrysomelidae
 3001 sweep;2015;vi;27;UTC;3;1;Collembola;0.0;0;NA
 3002 sweep;2015;vi;27;UTC;3;1;Diptera;0.0004;1;Chloropidae
 3003 sweep;2015;vi;27;UTC;3;1;Hemiptera;0.0218;2;Cicadellidae,Pentatomidae
 3004 sweep;2015;vi;27;UTC;3;1;Hymenoptera;0.0;0;NA
 3005 sweep;2015;vi;27;UTC;3;1;Lepidoptera;0.0;0;NA
 3006 sweep;2015;vi;27;UTC;3;1;Mantodea;0;0;NA
 3007 sweep;2015;vi;27;UTC;3;1;Neuroptera;0.0;0;NA
 3008 sweep;2015;vi;27;UTC;3;1;Orthoptera;0.0024;1;Acrididae
 3009 sweep;2015;vi;27;UTC;3;1;Thysanoptera;0.0;0;NA
 3010 sweep;2015;vi;27;UTC;3;1;Trichoptera;0;0;NA
 3011 sweep;2015;vii;01;1;A;2;Coleoptera;0.0084;2;Melyridae,Mordellidae
 3012 sweep;2015;vii;01;1;A;2;Collembola;0.0004;1;Sminthuridae
 3013 sweep;2015;vii;01;1;A;2;Diptera;0.0029;4;Asilidae,Chloropidae,Dolichopodidae,Sarcophagidae
 3014 sweep;2015;vii;01;1;A;2;Hemiptera;0.016;4;Cicadellidae,Dictyopharidae,Miridae,Rhopalidae
 3015 sweep;2015;vii;01;1;A;2;Hymenoptera;0.0024;1;Pteromalidae
 3016 sweep;2015;vii;01;1;A;2;Lepidoptera;0.0;0;NA
 3017 sweep;2015;vii;01;1;A;2;Mantodea;0;0;NA
 3018 sweep;2015;vii;01;1;A;2;Neuroptera;0.0;0;NA
 3019 sweep;2015;vii;01;1;A;2;Orthoptera;0.0057;1;Acrididae
 3020 sweep;2015;vii;01;1;A;2;Thysanoptera;0.0;0;NA
 3021 sweep;2015;vii;01;1;A;2;Trichoptera;0;0;NA
 3022 sweep;2015;vii;01;1;B;2;Coleoptera;0.0004;2;Chrysomelidae,Phalacridae
 3023 sweep;2015;vii;01;1;B;2;Collembola;0;0;NA
 3024 sweep;2015;vii;01;1;B;2;Diptera;0.0668;2;Asilidae,Chloropidae
 3025 sweep;2015;vii;01;1;B;2;Hemiptera;0.0;2;Cicadellidae,Rhopalidae
 3026 sweep;2015;vii;01;1;B;2;Hymenoptera;0.0046;2;Halictidae,Scelionidae
 3027 sweep;2015;vii;01;1;B;2;Lepidoptera;0.0;0;NA
 3028 sweep;2015;vii;01;1;B;2;Mantodea;0;0;NA
 3029 sweep;2015;vii;01;1;B;2;Neuroptera;0.0;0;NA
 3030 sweep;2015;vii;01;1;B;2;Orthoptera;0.0231;1;Acrididae
 3031 sweep;2015;vii;01;1;B;2;Thysanoptera;0.0;0;NA
 3032 sweep;2015;vii;01;1;B;2;Trichoptera;0;0;NA
 3033 sweep;2015;vii;01;1;C;2;Coleoptera;0.0166;1;Cleridae
 3034 sweep;2015;vii;01;1;C;2;Collembola;0;0;NA
 3035 sweep;2015;vii;01;1;C;2;Diptera;0.072;1;Asilidae
 3036 sweep;2015;vii;01;1;C;2;Hemiptera;0.0024;1;Cicadellidae
 3037 sweep;2015;vii;01;1;C;2;Hymenoptera;0.012;3;Halictidae,Scelionidae,Vespidae
 3038 sweep;2015;vii;01;1;C;2;Lepidoptera;0;0;NA
 3039 sweep;2015;vii;01;1;C;2;Mantodea;0;0;NA
 3040 sweep;2015;vii;01;1;C;2;Neuroptera;0.0;0;NA
 3041 sweep;2015;vii;01;1;C;2;Orthoptera;0.1121;1;Acrididae
 3042 sweep;2015;vii;01;1;C;2;Thysanoptera;0.0;0;NA
 3043 sweep;2015;vii;01;1;C;2;Trichoptera;0;0;NA
 3044 sweep;2015;vii;03;2;A;2;Coleoptera;0.0156;4;Chrysomelidae,Endomychidae,Melyridae,Mordellidae
 3045 sweep;2015;vii;03;2;A;2;Collembola;0;0;NA
 3046 sweep;2015;vii;03;2;A;2;Diptera;0.0069;4;Chloropidae,Dolichopodidae,Muscidae,Tephritidae
 3047 sweep;2015;vii;03;2;A;2;Hemiptera;0.0082;1;Cicadellidae
 3048 sweep;2015;vii;03;2;A;2;Hymenoptera;0.0003;0;NA
 3049 sweep;2015;vii;03;2;A;2;Lepidoptera;0;0;NA
 3050 sweep;2015;vii;03;2;A;2;Mantodea;0;0;NA
 3051 sweep;2015;vii;03;2;A;2;Neuroptera;0.0;0;NA
 3052 sweep;2015;vii;03;2;A;2;Orthoptera;0.0005;0;NA
 3053 sweep;2015;vii;03;2;A;2;Thysanoptera;0.0006;0;NA
 3054 sweep;2015;vii;03;2;A;2;Trichoptera;0;0;NA
 3055 sweep;2015;vii;03;2;B;2;Coleoptera;0.0182;3;Chrysomelidae,Melyridae,Mordellidae
 3056 sweep;2015;vii;03;2;B;2;Collembola;0;0;NA
 3057 sweep;2015;vii;03;2;B;2;Diptera;0.0135;3;Chloropidae,Dolichopodidae,Tephritidae
 3058 sweep;2015;vii;03;2;B;2;Hemiptera;0.0092;1;Cicadellidae
 3059 sweep;2015;vii;03;2;B;2;Hymenoptera;0.0014;1;Halictidae
 3060 sweep;2015;vii;03;2;B;2;Lepidoptera;0;0;NA
 3061 sweep;2015;vii;03;2;B;2;Mantodea;0;0;NA
 3062 sweep;2015;vii;03;2;B;2;Neuroptera;0.0;0;NA
 3063 sweep;2015;vii;03;2;B;2;Orthoptera;0.0414;1;Acrididae
 3064 sweep;2015;vii;03;2;B;2;Thysanoptera;0.0;0;NA
 3065 sweep;2015;vii;03;2;B;2;Trichoptera;0;0;NA
 3066 sweep;2015;vii;03;2;C;2;Coleoptera;0.9772;1;Chrysomelidae,Meloidae,Melyridae,Mordellidae
 3067 sweep;2015;vii;03;2;C;2;Collembola;0;0;NA
 3068 sweep;2015;vii;03;2;C;2;Diptera;0.0506;7;Anthomyiidae,Chloropidae,Lauxaniidae,Muscidae,Syrphidae,Tachinidae,Tephritidae
 3069 sweep;2015;vii;03;2;C;2;Hemiptera;0.1054;6;Anthocoridae,Cicadellidae,Lygaeidae,Miridae,Nabidae,Reduviidae
 3070 sweep;2015;
 vii;03;2;C;2;Hymenoptera;0.0965;8;Apidae,Braconidae,Formicidae,Halictidae,Ichneumonidae,Pompilidae,Pteromalidae,Scelionidae
 3071 sweep;2015;vii;03;2;C;2;Lepidoptera;0.0;0;NA
 3072 sweep;2015;vii;03;2;C;2;Mantodea;0;0;NA
 3073 sweep;2015;vii;03;2;C;2;Neuroptera;0.0;0;NA
 3074 sweep;2015;vii;03;2;C;2;Orthoptera;0.014;1;Acrididae
 3075 sweep;2015;vii;03;2;C;2;Thysanoptera;0.0003;1;Thripidae
 3076 sweep;2015;vii;03;2;C;2;Trichoptera;0;0;NA
 3077 sweep;2015;vii;04;UTC;1;2;Coleoptera;0.0;0;NA
 3078 sweep;2015;vii;04;UTC;1;2;Collembola;0.0;0;NA
 3079 sweep;2015;vii;04;UTC;1;2;Diptera;0.0;0;NA
 3080 sweep;2015;vii;04;UTC;1;2;Hemiptera;0.0;1;Cicadellidae
 3081 sweep;2015;vii;04;UTC;1;2;Hymenoptera;0.0027;1;Braconidae
 3082 sweep;2015;vii;04;UTC;1;2;Lepidoptera;0.0;0;NA
 3083 sweep;2015;vii;04;UTC;1;2;Mantodea;0;0;NA
 3084 sweep;2015;vii;04;UTC;1;2;Neuroptera;0.0;0;NA
 3085 sweep;2015;vii;04;UTC;1;2;Orthoptera;0.0651;1;Acrididae
 3086 sweep;2015;vii;04;UTC;1;2;Thysanoptera;0.0;0;NA
 3087 sweep;2015;vii;04;UTC;1;2;Trichoptera;0;0;NA
 3088 sweep;2015;vii;04;UTC;2;2;Coleoptera;0.0102;2;Chrysomelidae,Cleridae
 3089 sweep;2015;vii;04;UTC;2;2;Collembola;0;0;0;NA
 3090 sweep;2015;vii;04;UTC;2;2;Diptera;0.0042;1;Chloropidae

3091 sweep;2015;vii;04;UTC;2;2;Hemiptera;0.0144;1;Cicadellidae
 3092 sweep;2015;vii;04;UTC;2;2;Hymenoptera;0.0013;3;Bethylidae,Braconidae,Formicidae
 3093 sweep;2015;vii;04;UTC;2;2;Lepidoptera;0.0;;NA
 3094 sweep;2015;vii;04;UTC;2;2;Mantodea;0;0;NA
 3095 sweep;2015;vii;04;UTC;2;2;Neuroptera;0.0;0;NA
 3096 sweep;2015;vii;04;UTC;2;2;Orthoptera;0.0831;1;Acrididae
 3097 sweep;2015;vii;04;UTC;2;2;Thysanoptera;0.0;0;NA
 3098 sweep;2015;vii;04;UTC;2;2;Trichoptera;0;0;NA
 3099 sweep;2015;vii;04;UTC;3;2;Coleoptera;0.0002;1;Chrysomelidae
 3100 sweep;2015;vii;04;UTC;3;2;Collembola;0.0;0;NA
 3101 sweep;2015;vii;04;UTC;3;2;Diptera;0.0144;1;Asilidae
 3102 sweep;2015;vii;04;UTC;3;2;Hemiptera;0.0077;1;Cicadellidae
 3103 sweep;2015;vii;04;UTC;3;2;Hymenoptera;0.0005;1;Pteromalidae
 3104 sweep;2015;vii;04;UTC;3;2;Lepidoptera;0.0;0;NA
 3105 sweep;2015;vii;04;UTC;3;2;Mantodea;0;0;NA
 3106 sweep;2015;vii;04;UTC;3;2;Neuroptera;0.0;0;NA
 3107 sweep;2015;vii;04;UTC;3;2;Orthoptera;0.0409;1;Acrididae
 3108 sweep;2015;vii;04;UTC;3;2;Thysanoptera;0.0;0;NA
 3109 sweep;2015;vii;04;UTC;3;2;Trichoptera;0;0;NA
 3110 sweep;2015;vii;06;3;A;2;Coleoptera;0.0207;2;Chrysomelidae,Mordellidae
 3111 sweep;2015;vii;06;3;A;2;Collembola;0.0;0;NA
 3112 sweep;2015;vii;06;3;A;2;Diptera;0.0136;6;Chloropidae,Dolichopodidae,Ephydriidae,Phoridae,Syrphidae,Tachinidae
 3113 sweep;2015;vii;06;3;A;2;Hemiptera;0.0398;3;Cicadellidae,Lygaeidae,Miridae
 3114 sweep;2015;vii;06;3;A;2;Hymenoptera;0.0169;6;Braconidae,Eucoilidae,Formicidae,Halictidae,Pteromalidae,Scelionidae
 3115 sweep;2015;vii;06;3;A;2;Lepidoptera;0.0021;Pyralidae
 3116 sweep;2015;vii;06;3;A;2;Mantodea;0;0;NA
 3117 sweep;2015;vii;06;3;A;2;Neuroptera;0.0;0;NA
 3118 sweep;2015;vii;06;3;A;2;Orthoptera;0.011;1;Acrididae
 3119 sweep;2015;vii;06;3;A;2;Thysanoptera;0.0003;1;Thripidae
 3120 sweep;2015;vii;06;3;A;2;Trichoptera;0;0;NA
 3121 sweep;2015;vii;06;3;B;2;Coleoptera;0.0057;2;Chrysomelidae,Coccinellidae
 3122 sweep;2015;vii;06;3;B;2;Collembola;0.0;0;NA
 3123 sweep;2015;vii;06;3;B;2;Diptera;0.0013;3;Chloropidae,Dolichopodidae,Ephydriidae
 3124 sweep;2015;vii;06;3;B;2;Hemiptera;0.0175;3;Cicadellidae,Lygaeidae,Miridae
 3125 sweep;2015;vii;06;3;B;2;Hymenoptera;0.0;0;NA
 3126 sweep;2015;vii;06;3;B;2;Lepidoptera;0.0023;1;Pyralidae
 3127 sweep;2015;vii;06;3;B;2;Mantodea;0;0;NA
 3128 sweep;2015;vii;06;3;B;2;Neuroptera;0.0;0;NA
 3129 sweep;2015;vii;06;3;B;2;Orthoptera;0.0;0;NA
 3130 sweep;2015;vii;06;3;B;2;Thysanoptera;0.0;0;NA
 3131 sweep;2015;vii;06;3;B;2;Trichoptera;0;0;NA
 3132 sweep;2015;vii;06;3;C;2;Coleoptera;0.0;0;NA
 3133 sweep;2015;vii;06;3;C;2;Collembola;0.0;0;NA
 3134 sweep;2015;vii;06;3;C;2;Diptera;0.0;0;NA
 3135 sweep;2015;vii;06;3;C;2;Hemiptera;0.0;0;NA
 3136 sweep;2015;vii;06;3;C;2;Hymenoptera;0.0;0;NA
 3137 sweep;2015;vii;06;3;C;2;Lepidoptera;0.0;0;NA
 3138 sweep;2015;vii;06;3;C;2;Mantodea;0;0;NA
 3139 sweep;2015;vii;06;3;C;2;Neuroptera;0.0;0;NA
 3140 sweep;2015;vii;06;3;C;2;Orthoptera;0.0;0;NA
 3141 sweep;2015;vii;06;3;C;2;Thysanoptera;0.0;0;NA
 3142 sweep;2015;vii;06;3;C;2;Trichoptera;0;0;NA
 3143 sweep;2015;vii;08;1;A;3;Coleoptera;0.0025;0;NA
 3144 sweep;2015;vii;08;1;A;3;Collembola;0.0;0;NA
 3145 sweep;2015;vii;08;1;A;3;Diptera;0.0022;2;Dolichopodidae,Tachinidae
 3146 sweep;2015;vii;08;1;A;3;Hemiptera;0.0041;2;Cicadellidae,Miridae
 3147 sweep;2015;vii;08;1;A;3;Hymenoptera;0.0036;1;Halictidae
 3148 sweep;2015;vii;08;1;A;3;Lepidoptera;0.0;0;NA
 3149 sweep;2015;vii;08;1;A;3;Mantodea;0;0;NA
 3150 sweep;2015;vii;08;1;A;3;Neuroptera;0.0;0;NA
 3151 sweep;2015;vii;08;1;A;3;Orthoptera;0.0021;0;NA
 3152 sweep;2015;vii;08;1;A;3;Thysanoptera;0.0;0;NA
 3153 sweep;2015;vii;08;1;A;3;Trichoptera;0;0;NA
 3154 sweep;2015;vii;08;1;B;3;Coleoptera;0.0046;1;Chrysomelidae
 3155 sweep;2015;vii;08;1;B;3;Collembola;0.0;0;NA
 3156 sweep;2015;vii;08;1;B;3;Diptera;0.0093;4;Carnidae,Chloropidae,Dolichopodidae,Ephydriidae
 3157 sweep;2015;vii;08;1;B;3;Hemiptera;0.0108;1;Cicadellidae
 3158 sweep;2015;vii;08;1;B;3;Hymenoptera;0.0031;1;Halictidae
 3159 sweep;2015;vii;08;1;B;3;Lepidoptera;0.0;0;NA
 3160 sweep;2015;vii;08;1;B;3;Mantodea;0;0;NA
 3161 sweep;2015;vii;08;1;B;3;Neuroptera;0.0;0;NA
 3162 sweep;2015;vii;08;1;B;3;Orthoptera;0.0016;0;NA
 3163 sweep;2015;vii;08;1;B;3;Thysanoptera;0.0;0;NA
 3164 sweep;2015;vii;08;1;B;3;Trichoptera;0;0;NA
 3165 sweep;2015;vii;08;1;C;3;Coleoptera;0.0005;1;Chrysomelidae
 3166 sweep;2015;vii;08;1;C;3;Collembola;0.0;0;NA
 3167 sweep;2015;vii;08;1;C;3;Diptera;0.0017;4;Chloropidae,Dolichopodidae,Ephydriidae,Heleomyzidae
 3168 sweep;2015;vii;08;1;C;3;Hemiptera;0.0047;1;Cicadellidae
 3169 sweep;2015;vii;08;1;C;3;Hymenoptera;0.0055;1;Braconidae
 3170 sweep;2015;vii;08;1;C;3;Lepidoptera;0.0;0;NA
 3171 sweep;2015;vii;08;1;C;3;Mantodea;0;0;NA
 3172 sweep;2015;vii;08;1;C;3;Neuroptera;0.0;0;NA
 3173 sweep;2015;vii;08;1;C;3;Orthoptera;0.0;0;NA
 3174 sweep;2015;vii;08;1;C;3;Thysanoptera;0.0;0;NA
 3175 sweep;2015;vii;08;1;C;3;Trichoptera;0;0;NA
 3176 sweep;2015;vii;10;2;A;3;Coleoptera;0.058;3;Chrysomelidae,Melyridae,Mordellidae
 3177 sweep;2015;vii;10;2;A;3;Collembola;0.0;0;NA
 3178 sweep;2015;vii;10;2;A;3;Diptera;0.0016;2;Anthomyiidae,Conopidae
 3179 sweep;2015;vii;10;2;A;3;Hemiptera;0.0078;3;Cicadellidae,Lygaeidae,Psyllidae
 3180 sweep;2015;vii;10;2;A;3;Hymenoptera;0.016;3;Formicidae,Halictidae,Vespidae
 3181 sweep;2015;vii;10;2;A;3;Lepidoptera;0.0;0;NA
 3182 sweep;2015;vii;10;2;A;3;Mantodea;0;0;NA
 3183 sweep;2015;vii;10;2;A;3;Neuroptera;0.0;0;NA
 3184 sweep;2015;vii;10;2;A;3;Orthoptera;0.0335;1;Acrididae
 3185 sweep;2015;vii;10;2;A;3;Thysanoptera;0.0;0;NA

3186 sweep;2015;vii;10;2;A;3;Trichoptera;0;0;NA
 3187 sweep;2015;vii;10;2;B;3;Coleoptera;0.0086;2;Chrysomelidae, Mordellidae
 3188 sweep;2015;vii;10;2;B;3;Collembola;0;0;NA
 3189 sweep;2015;vii;10;2;B;3;Diptera;0.0009;1;Chloropidae
 3190 sweep;2015;vii;10;2;B;3;Hemiptera;0.0022;1;Cicadellidae
 3191 sweep;2015;vii;10;2;B;3;Hymenoptera;0.0024;2;Formicidae, Halictidae
 3192 sweep;2015;vii;10;2;B;3;Lepidoptera;0;0;NA
 3193 sweep;2015;vii;10;2;B;3;Mantodea;0;0;NA
 3194 sweep;2015;vii;10;2;B;3;Neuroptera;0;0;NA
 3195 sweep;2015;vii;10;2;B;3;Orthoptera;0.008;1;Acrididae
 3196 sweep;2015;vii;10;2;B;3;Thysanoptera;0;0;NA
 3197 sweep;2015;vii;10;2;B;3;Trichoptera;0;0;NA
 3198 sweep;2015;vii;10;2;C;3;Coleoptera;0.0022;2;Melyridae, Mordellidae
 3199 sweep;2015;vii;10;2;C;3;Collembola;0;0;NA
 3200 sweep;2015;vii;10;2;C;3;Diptera;0.0007;0;NA
 3201 sweep;2015;vii;10;2;C;3;Hemiptera;0.0;0;NA
 3202 sweep;2015;vii;10;2;C;3;Hymenoptera;0.0007;1;Bethylidae
 3203 sweep;2015;vii;10;2;C;3;Lepidoptera;0;0;NA
 3204 sweep;2015;vii;10;2;C;3;Mantodea;0;0;NA
 3205 sweep;2015;vii;10;2;C;3;Neuroptera;0;0;NA
 3206 sweep;2015;vii;10;2;C;3;Orthoptera;0;0;NA
 3207 sweep;2015;vii;10;2;C;3;Thysanoptera;0.0001;0;NA
 3208 sweep;2015;vii;10;2;C;3;Trichoptera;0;0;NA
 3209 sweep;2015;vii;11;UTC;1;3;Coleoptera;0;0;NA
 3210 sweep;2015;vii;11;UTC;1;3;Collembola;0;0;NA
 3211 sweep;2015;vii;11;UTC;1;3;Diptera;0.0052;1;Chloropidae
 3212 sweep;2015;vii;11;UTC;1;3;Hemiptera;0.0028;1;Cicadellidae
 3213 sweep;2015;vii;11;UTC;1;3;Hymenoptera;0;0;NA
 3214 sweep;2015;vii;11;UTC;1;3;Lepidoptera;0;0;NA
 3215 sweep;2015;vii;11;UTC;1;3;Mantodea;0;0;NA
 3216 sweep;2015;vii;11;UTC;1;3;Neuroptera;0;0;NA
 3217 sweep;2015;vii;11;UTC;1;3;Orthoptera;0.0224;1;Acrididae
 3218 sweep;2015;vii;11;UTC;1;3;Thysanoptera;0;0;NA
 3219 sweep;2015;vii;11;UTC;1;3;Trichoptera;0;0;NA
 3220 sweep;2015;vii;11;UTC;2;3;Coleoptera;0.0003;1;Chrysomelidae
 3221 sweep;2015;vii;11;UTC;2;3;Collembola;0;0;NA
 3222 sweep;2015;vii;11;UTC;2;3;Diptera;0.0082;1;Chloropidae
 3223 sweep;2015;vii;11;UTC;2;3;Hemiptera;0.0083;1;Cicadellidae
 3224 sweep;2015;vii;11;UTC;2;3;Hymenoptera;0;0;NA
 3225 sweep;2015;vii;11;UTC;2;3;Lepidoptera;0;0;NA
 3226 sweep;2015;vii;11;UTC;2;3;Mantodea;0;0;NA
 3227 sweep;2015;vii;11;UTC;2;3;Neuroptera;0;0;NA
 3228 sweep;2015;vii;11;UTC;2;3;Orthoptera;0.0732;1;Acrididae
 3229 sweep;2015;vii;11;UTC;2;3;Thysanoptera;0;0;NA
 3230 sweep;2015;vii;11;UTC;2;3;Trichoptera;0;0;NA
 3231 sweep;2015;vii;11;UTC;3;3;Coleoptera;0.0004;1;Chrysomelidae
 3232 sweep;2015;vii;11;UTC;3;3;Collembola;0;0;NA
 3233 sweep;2015;vii;11;UTC;3;3;Diptera;0.0037;3;Carnidae, Chloropidae, Ephydriidae
 3234 sweep;2015;vii;11;UTC;3;3;Hemiptera;0.0106;1;Cicadellidae
 3235 sweep;2015;vii;11;UTC;3;3;Hymenoptera;0.0112;1;Mutillidae
 3236 sweep;2015;vii;11;UTC;3;3;Lepidoptera;0;0;NA
 3237 sweep;2015;vii;11;UTC;3;3;Mantodea;0;0;NA
 3238 sweep;2015;vii;11;UTC;3;3;Neuroptera;0;0;NA
 3239 sweep;2015;vii;11;UTC;3;3;Orthoptera;0.025;1;Acrididae
 3240 sweep;2015;vii;11;UTC;3;3;Thysanoptera;0;0;NA
 3241 sweep;2015;vii;11;UTC;3;3;Trichoptera;0;0;NA
 3242 sweep;2015;vii;13;3;A;3;Coleoptera;0.0586;4;Buprestidae, Chrysomelidae, Cleridae, Melyridae
 3243 sweep;2015;vii;13;3;A;3;Collembola;0;0;NA
 3244 sweep;2015;vii;13;3;A;3;Diptera;0.0123;6;Anthomyiidae, Carnidae, Chloropidae, Scatopsidae, Syrphidae, Tachinidae
 3245 sweep;2015;vii;13;3;A;3;Hemiptera;0.0298;2;Cicadellidae, Miridae
 3246 sweep;2015;vii;13;3;A;3;Hymenoptera;0.0105;5;Braconidae, Ichneumonidae, Perilampidae, Pompilidae, Pteromalidae
 3247 sweep;2015;vii;13;3;A;3;Lepidoptera;0;0;NA
 3248 sweep;2015;vii;13;3;A;3;Mantodea;0;0;NA
 3249 sweep;2015;vii;13;3;A;3;Neuroptera;0;0;NA
 3250 sweep;2015;vii;13;3;A;3;Orthoptera;0;0;NA
 3251 sweep;2015;vii;13;3;A;3;Thysanoptera;0;0;NA
 3252 sweep;2015;vii;13;3;A;3;Trichoptera;0;0;NA
 3253 sweep;2015;vii;13;3;B;3;Coleoptera;0.0046;1;Chrysomelidae
 3254 sweep;2015;vii;13;3;B;3;Collembola;0;0;NA
 3255 sweep;2015;vii;13;3;B;3;Diptera;0.004;4;Chloropidae, Dolichopodidae, Ephydriidae, Syrphidae
 3256 sweep;2015;vii;13;3;B;3;Hemiptera;0.0154;3;Cicadellidae, Lygaeidae, Miridae
 3257 sweep;2015;vii;13;3;B;3;Hymenoptera;0.0015;2;Braconidae, Scelionidae
 3258 sweep;2015;vii;13;3;B;3;Lepidoptera;0;0;NA
 3259 sweep;2015;vii;13;3;B;3;Mantodea;0;0;NA
 3260 sweep;2015;vii;13;3;B;3;Neuroptera;0;0;NA
 3261 sweep;2015;vii;13;3;B;3;Orthoptera;0.0089;1;Acrididae
 3262 sweep;2015;vii;13;3;B;3;Thysanoptera;0;0;NA
 3263 sweep;2015;vii;13;3;B;3;Trichoptera;0;0;NA
 3264 sweep;2015;vii;13;3;C;3;Coleoptera;0;0;NA
 3265 sweep;2015;vii;13;3;C;3;Collembola;0;0;NA
 3266 sweep;2015;vii;13;3;C;3;Diptera;0.0033;4;Carnidae, Chloropidae, Ephydriidae, Scatopsidae
 3267 sweep;2015;vii;13;3;C;3;Hemiptera;0.0105;1;Cicadellidae
 3268 sweep;2015;vii;13;3;C;3;Hymenoptera;0;0;NA
 3269 sweep;2015;vii;13;3;C;3;Lepidoptera;0;0;NA
 3270 sweep;2015;vii;13;3;C;3;Mantodea;0;0;NA
 3271 sweep;2015;vii;13;3;C;3;Neuroptera;0;0;NA
 3272 sweep;2015;vii;13;3;C;3;Orthoptera;0;0;NA
 3273 sweep;2015;vii;13;3;C;3;Thysanoptera;0;0;NA
 3274 sweep;2015;vii;13;3;C;3;Trichoptera;0;0;NA
 3275 sweep;2015;vii;15;1;A;4;Coleoptera;0.0079;3;Buprestidae, Chrysomelidae, Curculionidae
 3276 sweep;2015;vii;15;1;A;4;Collembola;0;0;NA
 3277 sweep;2015;vii;15;1;A;4;Diptera;0.0063;2;Ephydriidae, Tephritidae
 3278 sweep;2015;vii;15;1;A;4;Hemiptera;0.0568;4;Cicadellidae, Dictyopharidae, Pentatomidae, Rhopalidae
 3279 sweep;2015;vii;15;1;A;4;Hymenoptera;0.0172;2;Apidae, Halictidae
 3280 sweep;2015;vii;15;1;A;4;Lepidoptera;0;0;NA

3281 sweep;2015;vii;15;1;A;4;Mantodea;0;0;NA
 3282 sweep;2015;vii;15;1;A;4;Neuroptera;0.0;0;NA
 3283 sweep;2015;vii;15;1;A;4;Orthoptera;0.022;1;Acrididae
 3284 sweep;2015;vii;15;1;A;4;Thysanoptera;0.0;0;NA
 3285 sweep;2015;vii;15;1;A;4;Trichoptera;0;0;NA
 3286 sweep;2015;vii;15;1;B;4;Coleoptera;0.0609;4;Carabidae,Chrysomelidae,Cleridae,Melyridae
 3287 sweep;2015;vii;15;1;B;4;Collembola;0;0;NA
 3288 sweep;2015;vii;15;1;B;4;Diptera;0.0025;3;Chloropidae,Dolichopodidae,Ephydriidae
 3289 sweep;2015;vii;15;1;B;4;Hemiptera;0.0482;1;Cicadellidae
 3290 sweep;2015;vii;15;1;B;4;Hymenoptera;0.0052;3;Braconidae,Formicidae,Scelionidae
 3291 sweep;2015;vii;15;1;B;4;Lepidoptera;0;0;NA
 3292 sweep;2015;vii;15;1;B;4;Mantodea;0;0;NA
 3293 sweep;2015;vii;15;1;B;4;Neuroptera;0.0;0;NA
 3294 sweep;2015;vii;15;1;B;4;Orthoptera;0.0027;0;NA
 3295 sweep;2015;vii;15;1;B;4;Thysanoptera;0.0;0;NA
 3296 sweep;2015;vii;15;1;B;4;Trichoptera;0;0;NA
 3297 sweep;2015;vii;15;1;C;4;Coleoptera;0.0122;1;Melyridae
 3298 sweep;2015;vii;15;1;C;4;Collembola;0;0;NA
 3299 sweep;2015;vii;15;1;C;4;Diptera;0.0023;3;Chloropidae,Ephydriidae,Tachinidae
 3300 sweep;2015;vii;15;1;C;4;Hemiptera;0.0309;1;Cicadellidae
 3301 sweep;2015;vii;15;1;C;4;Hymenoptera;0.0094;1;Formicidae
 3302 sweep;2015;vii;15;1;C;4;Lepidoptera;0;0;NA
 3303 sweep;2015;vii;15;1;C;4;Mantodea;0;0;NA
 3304 sweep;2015;vii;15;1;C;4;Neuroptera;0.0;0;NA
 3305 sweep;2015;vii;15;1;C;4;Orthoptera;0.0164;1;Acrididae
 3306 sweep;2015;vii;15;1;C;4;Thysanoptera;0.0;0;NA
 3307 sweep;2015;vii;15;1;C;4;Trichoptera;0;0;NA
 3308 sweep;2015;vii;17;2;A;4;Coleoptera;0.0071;2;Melyridae,Mordellidae
 3309 sweep;2015;vii;17;2;A;4;Collembola;0;0;NA
 3310 sweep;2015;vii;17;2;A;4;Diptera;0;0;NA
 3311 sweep;2015;vii;17;2;A;4;Hemiptera;0.0049;1;Cicadellidae
 3312 sweep;2015;vii;17;2;A;4;Hymenoptera;0.0005;0;NA
 3313 sweep;2015;vii;17;2;A;4;Lepidoptera;0;0;NA
 3314 sweep;2015;vii;17;2;A;4;Mantodea;0;0;NA
 3315 sweep;2015;vii;17;2;A;4;Neuroptera;0.0;0;NA
 3316 sweep;2015;vii;17;2;A;4;Orthoptera;0.0017;0;NA
 3317 sweep;2015;vii;17;2;A;4;Thysanoptera;0.0;0;NA
 3318 sweep;2015;vii;17;2;A;4;Trichoptera;0;0;NA
 3319 sweep;2015;vii;17;2;B;4;Coleoptera;0.0353;3;Chrysomelidae,Melyridae,Mordellidae
 3320 sweep;2015;vii;17;2;B;4;Collembola;0;0;NA
 3321 sweep;2015;vii;17;2;B;4;Diptera;0.0007;1;Dolichopodidae
 3322 sweep;2015;vii;17;2;B;4;Hemiptera;0.0126;1;Cicadellidae
 3323 sweep;2015;vii;17;2;B;4;Hymenoptera;0.0005;1;Pteromalidae
 3324 sweep;2015;vii;17;2;B;4;Lepidoptera;0;0;NA
 3325 sweep;2015;vii;17;2;B;4;Mantodea;0;0;NA
 3326 sweep;2015;vii;17;2;B;4;Neuroptera;0.0;0;NA
 3327 sweep;2015;vii;17;2;B;4;Orthoptera;0.0187;1;Acrididae
 3328 sweep;2015;vii;17;2;B;4;Thysanoptera;0.0;0;NA
 3329 sweep;2015;vii;17;2;B;4;Trichoptera;0;0;NA
 3330 sweep;2015;vii;17;2;C;4;Coleoptera;0.1993;4;Chrysomelidae,Meloidae,Melyridae,Mordellidae
 3331 sweep;2015;vii;17;2;C;4;Collembola;0;0;NA
 3332 sweep;2015;vii;17;2;C;4;Diptera;0.003;3;Chloropidae,Dolichopodidae,Ephydriidae
 3333 sweep;2015;vii;17;2;C;4;Hemiptera;0.0334;4;Cicadellidae,Dictyopharidae,Lygaeidae,Nabidae
 3334 sweep;2015;vii;17;2;C;4;Hymenoptera;0.0085;0;NA
 3335 sweep;2015;vii;17;2;C;4;Lepidoptera;0;0;0;NA
 3336 sweep;2015;vii;17;2;C;4;Mantodea;0;0;NA
 3337 sweep;2015;vii;17;2;C;4;Neuroptera;0.0;0;NA
 3338 sweep;2015;vii;17;2;C;4;Orthoptera;0.0087;0;NA
 3339 sweep;2015;vii;17;2;C;4;Thysanoptera;0.0;0;NA
 3340 sweep;2015;vii;17;2;C;4;Trichoptera;0;0;NA
 3341 sweep;2015;vii;18;UTC;1;4;Coleoptera;0.0031;1;Chrysomelidae
 3342 sweep;2015;vii;18;UTC;1;4;Collembola;0;0;0;NA
 3343 sweep;2015;vii;18;UTC;1;4;Diptera;0.0077;1;Chloropidae
 3344 sweep;2015;vii;18;UTC;1;4;Hemiptera;0.0014;1;Cicadellidae
 3345 sweep;2015;vii;18;UTC;1;4;Hymenoptera;0;0;0;NA
 3346 sweep;2015;vii;18;UTC;1;4;Lepidoptera;0;0;0;NA
 3347 sweep;2015;vii;18;UTC;1;4;Mantodea;0;0;NA
 3348 sweep;2015;vii;18;UTC;1;4;Neuroptera;0;0;0;NA
 3349 sweep;2015;vii;18;UTC;1;4;Orthoptera;0.0676;1;Acrididae
 3350 sweep;2015;vii;18;UTC;1;4;Thysanoptera;0;0;0;NA
 3351 sweep;2015;vii;18;UTC;1;4;Trichoptera;0;0;NA
 3352 sweep;2015;vii;18;UTC;2;4;Coleoptera;0.0084;1;Meloidae
 3353 sweep;2015;vii;18;UTC;2;4;Collembola;0;0;0;NA
 3354 sweep;2015;vii;18;UTC;2;4;Diptera;0.0015;0;NA
 3355 sweep;2015;vii;18;UTC;2;4;Hemiptera;0.0115;1;Cicadellidae
 3356 sweep;2015;vii;18;UTC;2;4;Hymenoptera;0;0;0;NA
 3357 sweep;2015;vii;18;UTC;2;4;Lepidoptera;0;0;0;NA
 3358 sweep;2015;vii;18;UTC;2;4;Mantodea;0;0;NA
 3359 sweep;2015;vii;18;UTC;2;4;Neuroptera;0;0;0;NA
 3360 sweep;2015;vii;18;UTC;2;4;Orthoptera;0.0848;1;Acrididae
 3361 sweep;2015;vii;18;UTC;2;4;Thysanoptera;0;0;0;NA
 3362 sweep;2015;vii;18;UTC;2;4;Trichoptera;0;0;NA
 3363 sweep;2015;vii;18;UTC;3;4;Coleoptera;0.0089;1;Cleridae
 3364 sweep;2015;vii;18;UTC;3;4;Collembola;0;0;0;NA
 3365 sweep;2015;vii;18;UTC;3;4;Diptera;0.0118;2;Chloropidae,Heleomyzidae
 3366 sweep;2015;vii;18;UTC;3;4;Hemiptera;0.0598;3;Cicadellidae,Lygaeidae,Nabidae
 3367 sweep;2015;vii;18;UTC;3;4;Hymenoptera;0.0001;1;Formicidae
 3368 sweep;2015;vii;18;UTC;3;4;Lepidoptera;0;0;0;NA
 3369 sweep;2015;vii;18;UTC;3;4;Mantodea;0;0;NA
 3370 sweep;2015;vii;18;UTC;3;4;Neuroptera;0;0;0;NA
 3371 sweep;2015;vii;18;UTC;3;4;Orthoptera;0.0115;1;Acrididae
 3372 sweep;2015;vii;18;UTC;3;4;Thysanoptera;0.0001;1;Thripidae
 3373 sweep;2015;vii;18;UTC;3;4;Trichoptera;0;0;NA
 3374 sweep;2015;vii;20;3;A;4;Coleoptera;0.1069;4;Chrysomelidae,Coccinellidae,Curculionidae,Melyridae
 3375 sweep;2015;vii;20;3;A;4;Collembola;0;0;NA

3376 sweep;2015;vii
 ;20;3;A;4;Diptera;0.0156;9;Carnidae,Chloropidae,Dolichopodidae,Ephydriidae,Muscidae,Scatopsidae,Syrphidae,Tachinidae,Tephritisidae
 3377 sweep;2015;vii;20;3;A;4;Hemiptera;0.0966;3;Cicadellidae,Lygaeidae,Nabidae
 3378 sweep;2015;vii;20;3;A;4;Lepidoptera;0.0005;1;Pyralidae
 3379 sweep;2015;vii;20;3;A;4;Mantodea;0;0;NA
 3380 sweep;2015;vii;20;3;A;4;Neuroptera;0;0;0;NA
 3381 sweep;2015;vii;20;3;A;4;Orthoptera;0.0143;0;NA
 3382 sweep;2015;vii;20;3;A;4;Thysanoptera;0.0016;1;Thripidae
 3383 sweep;2015;vii;20;3;A;4;Trichoptera;0;0;NA
 3384 sweep;2015;vii;20;3;B;4;Coleoptera;0.0056;2;Chrysomelidae,Cleridae
 3385 sweep;2015;vii;20;3;B;4;Collembola;0;0;NA
 3386 sweep;2015;vii;20;3;B;4;Diptera;0.0341;6;Chloropidae,Dolichopodidae,Ephydriidae,Phoridae,Syrphidae,Tachinidae
 3387 sweep;2015;vii;20;3;B;4;Hemiptera;0.0785;4;Cicadellidae,Dictyopharidae,Lygaeidae,Tingidae
 3388 sweep;2015;vii;20;3;B;4;Lepidoptera;0;0;0;NA
 3389 sweep;2015;vii;20;3;B;4;Mantodea;0;0;NA
 3390 sweep;2015;vii;20;3;B;4;Neuroptera;0;0;0;NA
 3391 sweep;2015;vii;20;3;B;4;Orthoptera;0.0074;0;NA
 3392 sweep;2015;vii;20;3;B;4;Thysanoptera;0.001;1;Thripidae
 3393 sweep;2015;vii;20;3;B;4;Trichoptera;0;0;NA
 3394 sweep;2015;vii;20;3;C;4;Coleoptera;0.1355;1;Carabidae
 3395 sweep;2015;vii;20;3;C;4;Collembola;0;0;0;NA
 3396 sweep;2015;vii;20;3;C;4;Diptera;0.0049;3;Chloropidae,Lauxaniidae,Scatopsidae
 3397 sweep;2015;vii;20;3;C;4;Hemiptera;0.0257;2;Cicadellidae,Miridae
 3398 sweep;2015;vii;20;3;C;4;Lepidoptera;0;0;0;NA
 3399 sweep;2015;vii;20;3;C;4;Mantodea;0;0;NA
 3400 sweep;2015;vii;20;3;C;4;Neuroptera;0;0;0;NA
 3401 sweep;2015;vii;20;3;C;4;Orthoptera;0;0;0;NA
 3402 sweep;2015;vii;20;3;C;4;Thysanoptera;0.0001;1;Thripidae
 3403 sweep;2015;vii;20;3;C;4;Trichoptera;0;0;NA
 3404 sweep;2015;vii;22;1;A;5;Coleoptera;0.0231;3;Chrysomelidae,Curculionidae,Melyridae
 3405 sweep;2015;vii;22;1;A;5;Collembola;0;0;NA
 3406 sweep;2015;vii;22;1;A;5;Diptera;0.0011;3;Carnidae,Chloropidae,Dolichopodidae
 3407 sweep;2015;vii;22;1;A;5;Hemiptera;0.0615;6;Cicadellidae,Dictyopharidae,Lygaeidae,Miridae,Nabidae,Reduviidae
 3408 sweep;2015;vii;22;1;A;5;Hymenoptera;0.0066;1;Vespidae
 3409 sweep;2015;vii;22;1;A;5;Lepidoptera;0;0;0;NA
 3410 sweep;2015;vii;22;1;A;5;Mantodea;0;0;NA
 3411 sweep;2015;vii;22;1;A;5;Neuroptera;0;0;0;NA
 3412 sweep;2015;vii;22;1;A;5;Orthoptera;0.0117;1;Acrididae
 3413 sweep;2015;vii;22;1;A;5;Thysanoptera;0;0;0;NA
 3414 sweep;2015;vii;22;1;A;5;Trichoptera;0;0;NA
 3415 sweep;2015;vii;22;1;B;5;Coleoptera;0.0099;2;Chrysomelidae,Melyridae
 3416 sweep;2015;vii;22;1;B;5;Collembola;0;0;NA
 3417 sweep;2015;vii;22;1;B;5;Diptera;0.0012;1;Chloropidae
 3418 sweep;2015;vii;22;1;B;5;Hemiptera;0.0689;3;Cicadellidae,Miridae,Nabidae
 3419 sweep;2015;vii;22;1;B;5;Hymenoptera;0.003;2;Formicidae,Ichneumonidae
 3420 sweep;2015;vii;22;1;B;5;Lepidoptera;0;0;0;NA
 3421 sweep;2015;vii;22;1;B;5;Mantodea;0;0;NA
 3422 sweep;2015;vii;22;1;B;5;Neuroptera;0;0;0;NA
 3423 sweep;2015;vii;22;1;B;5;Orthoptera;0.0204;1;Acrididae
 3424 sweep;2015;vii;22;1;B;5;Thysanoptera;0;0;0;NA
 3425 sweep;2015;vii;22;1;B;5;Trichoptera;0;0;NA
 3426 sweep;2015;vii;22;1;C;5;Coleoptera;0.1192;2;Chrysomelidae,Melyridae
 3427 sweep;2015;vii;22;1;C;5;Collembola;0;0;0;NA
 3428 sweep;2015;vii;22;1;C;5;Diptera;0.0005;2;Ephydriidae,Phoridae
 3429 sweep;2015;vii;22;1;C;5;Hemiptera;0.1463;6;Cicadellidae,Dictyopharidae,Lygaeidae,Miridae,Reduviidae,Scutelleridae
 3430 sweep;2015;vii;22;1;C;5;Hymenoptera;0.004;2;Braconidae,Formicidae
 3431 sweep;2015;vii;22;1;C;5;Lepidoptera;0;0;0;NA
 3432 sweep;2015;vii;22;1;C;5;Mantodea;0;0;NA
 3433 sweep;2015;vii;22;1;C;5;Neuroptera;0;0;0;NA
 3434 sweep;2015;vii;22;1;C;5;Orthoptera;0;0;0;NA
 3435 sweep;2015;vii;22;1;C;5;Thysanoptera;0;0;0;NA
 3436 sweep;2015;vii;22;1;C;5;Trichoptera;0;0;NA
 3437 sweep;2015;vii;24;2;A;5;Coleoptera;0;0;0;NA
 3438 sweep;2015;vii;24;2;A;5;Collembola;0;0;0;NA
 3439 sweep;2015;vii;24;2;A;5;Diptera;0.0055;5;Chloropidae,Dolichopodidae,Muscidae,Pipunculidae,Scatopsidae
 3440 sweep;2015;vii;24;2;A;5;Hemiptera;0;0;1;Cicadellidae
 3441 sweep;2015;vii;24;2;A;5;Hymenoptera;0;0;0;NA
 3442 sweep;2015;vii;24;2;A;5;Lepidoptera;0;0;0;NA
 3443 sweep;2015;vii;24;2;A;5;Mantodea;0;0;NA
 3444 sweep;2015;vii;24;2;A;5;Neuroptera;0;0;0;NA
 3445 sweep;2015;vii;24;2;A;5;Orthoptera;0.0155;1;Acrididae
 3446 sweep;2015;vii;24;2;A;5;Thysanoptera;0;0;0;NA
 3447 sweep;2015;vii;24;2;A;5;Trichoptera;0;0;NA
 3448 sweep;2015;vii;24;2;B;5;Coleoptera;0.1994;3;Chrysomelidae,Mordellidae,Tenebrionidae
 3449 sweep;2015;vii;24;2;B;5;Collembola;0;0;0;NA
 3450 sweep;2015;vii;24;2;B;5;Diptera;0.0031;1;Chloropidae
 3451 sweep;2015;vii;24;2;B;5;Hemiptera;0.0373;2;Cicadellidae,Lygaeidae
 3452 sweep;2015;vii;24;2;B;5;Hymenoptera;0;0014;1;Formicidae
 3453 sweep;2015;vii;24;2;B;5;Lepidoptera;0;0;0;NA
 3454 sweep;2015;vii;24;2;B;5;Mantodea;0;0;NA
 3455 sweep;2015;vii;24;2;B;5;Neuroptera;0;0;0;NA
 3456 sweep;2015;vii;24;2;B;5;Orthoptera;0.0232;1;Acrididae
 3457 sweep;2015;vii;24;2;B;5;Thysanoptera;0.0005;1;Thripidae
 3458 sweep;2015;vii;24;2;B;5;Trichoptera;0;0;NA
 3459 sweep;2015;vii;24;2;C;5;Coleoptera;0.1934;4;Chrysomelidae,Cleridae,Melyridae,Mordellidae
 3460 sweep;2015;vii;24;2;C;5;Collembola;0;0;0;NA
 3461 sweep;2015;vii;24;2;C;5;Diptera;0.0033;3;Chloropidae,Lonchaetidae,Muscidae
 3462 sweep;2015;vii;24;2;C;5;Hemiptera;0.0362;3;Cicadellidae,Lygaeidae,Miridae
 3463 sweep;2015;vii;24;2;C;5;Hymenoptera;0.0005;2;Formicidae,Pteromalidae
 3464 sweep;2015;vii;24;2;C;5;Lepidoptera;0;0;0;NA
 3465 sweep;2015;vii;24;2;C;5;Mantodea;0;0;NA
 3466 sweep;2015;vii;24;2;C;5;Neuroptera;0.003;1;Chrysopidae
 3467 sweep;2015;vii;24;2;C;5;Orthoptera;0.015;1;Acrididae
 3468 sweep;2015;vii;24;2;C;5;Thysanoptera;0.0003;1;Thripidae
 3469 sweep;2015;vii;24;2;C;5;Trichoptera;0;0;NA

3470 sweep;2015;vii;25;UTC;1;5;Coleoptera;0.0095;1;Melyridae
 3471 sweep;2015;vii;25;UTC;1;5;Collembola;0.0;0;NA
 3472 sweep;2015;vii;25;UTC;1;5;Diptera;0.0304;3;Chloropidae,Muscidae,Sarcophagidae
 3473 sweep;2015;vii;25;UTC;1;5;Hemiptera;0.0651;1;Cicadellidae
 3474 sweep;2015;vii;25;UTC;1;5;Hymenoptera;0.0062;3;Formicidae,Pteromalidae,Tiphiidae
 3475 sweep;2015;vii;25;UTC;1;5;Lepidoptera;0.0;0;NA
 3476 sweep;2015;vii;25;UTC;1;5;Mantodea;0;0;NA
 3477 sweep;2015;vii;25;UTC;1;5;Neuroptera;0.0;0;NA
 3478 sweep;2015;vii;25;UTC;1;5;Orthoptera;0.045;1;Acrididae
 3479 sweep;2015;vii;25;UTC;1;5;Thysanoptera;0.0;0;NA
 3480 sweep;2015;vii;25;UTC;1;5;Trichoptera;0;0;NA
 3481 sweep;2015;vii;25;UTC;2;5;Coleoptera;0.0343;2;Chrysomelidae,Cleridae
 3482 sweep;2015;vii;25;UTC;2;5;Collembola;0.0;0;NA
 3483 sweep;2015;vii;25;UTC;2;5;Diptera;0.0214;1;Chloropidae
 3484 sweep;2015;vii;25;UTC;2;5;Hemiptera;0.0269;2;Cicadellidae,Nabidae
 3485 sweep;2015;vii;25;UTC;2;5;Hymenoptera;0.003;1;Formicidae
 3486 sweep;2015;vii;25;UTC;2;5;Lepidoptera;0.0;0;NA
 3487 sweep;2015;vii;25;UTC;2;5;Mantodea;0;0;NA
 3488 sweep;2015;vii;25;UTC;2;5;Neuroptera;0.0;0;NA
 3489 sweep;2015;vii;25;UTC;2;5;Orthoptera;0.0177;1;Acrididae
 3490 sweep;2015;vii;25;UTC;2;5;Thysanoptera;0.0;0;NA
 3491 sweep;2015;vii;25;UTC;2;5;Trichoptera;0;0;NA
 3492 sweep;2015;vii;25;UTC;3;5;Coleoptera;0.0038;1;Chrysomelidae
 3493 sweep;2015;vii;25;UTC;3;5;Collembola;0.0;0;NA
 3494 sweep;2015;vii;25;UTC;3;5;Diptera;0.0013;2;Chloropidae,Tephritisidae
 3495 sweep;2015;vii;25;UTC;3;5;Hemiptera;0.0077;1;Cicadellidae
 3496 sweep;2015;vii;25;UTC;3;5;Hymenoptera;0.0;0;NA
 3497 sweep;2015;vii;25;UTC;3;5;Lepidoptera;0.0;0;NA
 3498 sweep;2015;vii;25;UTC;3;5;Mantodea;0;0;NA
 3499 sweep;2015;vii;25;UTC;3;5;Neuroptera;0.0;1;Myrmeliontidae
 3500 sweep;2015;vii;25;UTC;3;5;Orthoptera;0.003;1;Acrididae
 3501 sweep;2015;vii;25;UTC;3;5;Thysanoptera;0.0;0;NA
 3502 sweep;2015;vii;25;UTC;3;5;Trichoptera;0;0;NA
 3503 sweep;2015;vii;27;3;A;5;Coleoptera;0.03;0;NA
 3504 sweep;2015;vii;27;3;A;5;Collembola;0;0;NA
 3505 sweep;2015;vii;27;3;A;5;Diptera;0.0158;0;NA
 3506 sweep;2015;vii;27;3;A;5;Hemiptera;0.0595;0;NA
 3507 sweep;2015;vii;27;3;A;5;Hymenoptera;0.0007;0;NA
 3508 sweep;2015;vii;27;3;A;5;Lepidoptera;0.0;0;NA
 3509 sweep;2015;vii;27;3;A;5;Mantodea;0;0;NA
 3510 sweep;2015;vii;27;3;A;5;Neuroptera;0.0;0;NA
 3511 sweep;2015;vii;27;3;A;5;Orthoptera;0.0037;0;NA
 3512 sweep;2015;vii;27;3;A;5;Thysanoptera;0.0;0;NA
 3513 sweep;2015;vii;27;3;A;5;Trichoptera;0;0;NA
 3514 sweep;2015;vii;27;3;B;5;Coleoptera;0.0644;5;Chrysomelidae,Colydiidae,Meloidae,Melyridae,Mordellidae
 3515 sweep;2015;vii;27;3;B;5;Collembola;0.0;0;NA
 3516 sweep;2015;vii;27;3;B;5;Diptera;0.0079;4;Chloropidae,Dolichopodidae,Ephydriidae,Tephritisidae
 3517 sweep;2015;vii;27;3;B;5;Hemiptera;0.0636;7;Anthocoridae,Cicadellidae,Lygaeidae,Miridae,Nabidae,Pentatomidae,Rhopalidae
 3518 sweep;2015;vii;27;3;B;5;Hymenoptera;0.0034;3;Formicidae,Pteromalidae,Tiphiidae
 3519 sweep;2015;vii;27;3;B;5;Lepidoptera;0.0;0;NA
 3520 sweep;2015;vii;27;3;B;5;Mantodea;0;0;NA
 3521 sweep;2015;vii;27;3;B;5;Neuroptera;0.0;0;NA
 3522 sweep;2015;vii;27;3;B;5;Orthoptera;0.0027;1;Acrididae
 3523 sweep;2015;vii;27;3;B;5;Thysanoptera;0.0008;1;Thripidae
 3524 sweep;2015;vii;27;3;B;5;Trichoptera;0;0;NA
 3525 sweep;2015;vii;27;3;C;5;Coleoptera;0.0;0;NA
 3526 sweep;2015;vii;27;3;C;5;Collembola;0.0;0;NA
 3527 sweep;2015;
 vii;27;3;C;5;Diptera;0.0282;8;Chloropidae,Culicidae,Ephydriidae,Lauxaniidae,Sarcophagidae,Scatopsidae,Syrphidae,Tephritisidae
 3528 sweep;2015;vii;27;3;C;5;Hemiptera;0.1;5;Cicadellidae,Lygaeidae,Miridae,Nabidae,Pentatomidae
 3529 sweep;2015;vii;27;3;C;5;Hymenoptera;0.021;1;Halictidae
 3530 sweep;2015;vii;27;3;C;5;Lepidoptera;0.0419;1;Noctuidae
 3531 sweep;2015;vii;27;3;C;5;Mantodea;0;0;NA
 3532 sweep;2015;vii;27;3;C;5;Neuroptera;0.0;0;NA
 3533 sweep;2015;vii;27;3;C;5;Orthoptera;0.0;0;NA
 3534 sweep;2015;vii;27;3;C;5;Thysanoptera;0.0006;1;Thripidae
 3535 sweep;2015;vii;27;3;C;5;Trichoptera;0;0;NA
 3536 sweep;2016;vi;22;1;A;1;Coleoptera;0.0018;0;NA
 3537 sweep;2016;vi;22;1;A;1;Collembola;0.0;0;NA
 3538 sweep;2016;vi;22;1;A;1;Diptera;0.0119;0;NA
 3539 sweep;2016;vi;22;1;A;1;Hemiptera;0.0426;0;NA
 3540 sweep;2016;vi;22;1;A;1;Hymenoptera;0.0098;0;NA
 3541 sweep;2016;vi;22;1;A;1;Lepidoptera;0.0;0;NA
 3542 sweep;2016;vi;22;1;A;1;Mantodea;0.0;0;NA
 3543 sweep;2016;vi;22;1;A;1;Neuroptera;0.0001;0;NA
 3544 sweep;2016;vi;22;1;A;1;Orthoptera;0.2391;0;NA
 3545 sweep;2016;vi;22;1;A;1;Phasmatodea;0.0419;0;NA
 3546 sweep;2016;vi;22;1;A;1;Psocoptera;0.0;0;NA
 3547 sweep;2016;vi;22;1;A;1;Thysanoptera;0.0001;0;NA
 3548 sweep;2016;vi;22;1;A;1;Trichoptera;0;0;NA
 3549 sweep;2016;vi;22;1;B;1;Coleoptera;0.0032;0;NA
 3550 sweep;2016;vi;22;1;B;1;Collembola;0.0;0;NA
 3551 sweep;2016;vi;22;1;B;1;Diptera;0.0008;0;NA
 3552 sweep;2016;vi;22;1;B;1;Hemiptera;0.0079;0;NA
 3553 sweep;2016;vi;22;1;B;1;Hymenoptera;0.0004;0;NA
 3554 sweep;2016;vi;22;1;B;1;Lepidoptera;0.0054;0;NA
 3555 sweep;2016;vi;22;1;B;1;Mantodea;0.0;0;NA
 3556 sweep;2016;vi;22;1;B;1;Neuroptera;0.0006;0;NA
 3557 sweep;2016;vi;22;1;B;1;Orthoptera;0.2819;0;NA
 3558 sweep;2016;vi;22;1;B;1;Phasmatodea;0.0;0;NA
 3559 sweep;2016;vi;22;1;B;1;Psocoptera;0.0001;0;NA
 3560 sweep;2016;vi;22;1;B;1;Thysanoptera;0.0001;0;NA
 3561 sweep;2016;vi;22;1;B;1;Trichoptera;0;0;NA
 3562 sweep;2016;vi;22;1;C;1;Coleoptera;0.0123;0;NA
 3563 sweep;2016;vi;22;1;C;1;Collembola;0.0;0;NA

3564 sweep;2016;vi;22;1;C;1;Diptera;0.0533;0;NA
 3565 sweep;2016;vi;22;1;C;1;Hemiptera;0.0263;0;NA
 3566 sweep;2016;vi;22;1;C;1;Hymenoptera;0.0006;0;NA
 3567 sweep;2016;vi;22;1;C;1;Lepidoptera;0.0;0;NA
 3568 sweep;2016;vi;22;1;C;1;Mantodea;0.0;0;NA
 3569 sweep;2016;vi;22;1;C;1;Neuroptera;0.0;0;NA
 3570 sweep;2016;vi;22;1;C;1;Orthoptera;0.5359;0;NA
 3571 sweep;2016;vi;22;1;C;1;Phasmatodea;0.0;0;NA
 3572 sweep;2016;vi;22;1;C;1;Psocoptera;0.0;0;NA
 3573 sweep;2016;vi;22;1;C;1;Thysanoptera;0.0009;0;NA
 3574 sweep;2016;vi;22;1;C;1;Trichoptera;0;0;NA
 3575 sweep;2016;vi;23;2;A;1;Coleoptera;0.0042;0;NA
 3576 sweep;2016;vi;23;2;A;1;Collembola;0.0;0;NA
 3577 sweep;2016;vi;23;2;A;1;Diptera;0.0085;0;NA
 3578 sweep;2016;vi;23;2;A;1;Hemiptera;0.0203;0;NA
 3579 sweep;2016;vi;23;2;A;1;Hymenoptera;0.0;0;NA
 3580 sweep;2016;vi;23;2;A;1;Lepidoptera;0.0;0;NA
 3581 sweep;2016;vi;23;2;A;1;Mantodea;0.0;0;NA
 3582 sweep;2016;vi;23;2;A;1;Neuroptera;0.0;0;NA
 3583 sweep;2016;vi;23;2;A;1;Orthoptera;0.0;0;NA
 3584 sweep;2016;vi;23;2;A;1;Phasmatodea;0.0;0;NA
 3585 sweep;2016;vi;23;2;A;1;Psocoptera;0.0;0;NA
 3586 sweep;2016;vi;23;2;A;1;Thysanoptera;0.0;0;NA
 3587 sweep;2016;vi;23;2;A;1;Trichoptera;0;0;NA
 3588 sweep;2016;vi;23;2;B;1;Coleoptera;0.012;0;NA
 3589 sweep;2016;vi;23;2;B;1;Collembola;0.0;0;NA
 3590 sweep;2016;vi;23;2;B;1;Diptera;0.0092;0;NA
 3591 sweep;2016;vi;23;2;B;1;Hemiptera;0.019;0;NA
 3592 sweep;2016;vi;23;2;B;1;Hymenoptera;0.0007;0;NA
 3593 sweep;2016;vi;23;2;B;1;Lepidoptera;0.0;0;NA
 3594 sweep;2016;vi;23;2;B;1;Mantodea;0.0;0;NA
 3595 sweep;2016;vi;23;2;B;1;Neuroptera;0.0009;0;NA
 3596 sweep;2016;vi;23;2;B;1;Orthoptera;0.0;0;NA
 3597 sweep;2016;vi;23;2;B;1;Phasmatodea;0.0;0;NA
 3598 sweep;2016;vi;23;2;B;1;Psocoptera;0.0;0;NA
 3599 sweep;2016;vi;23;2;B;1;Thysanoptera;0.0004;0;NA
 3600 sweep;2016;vi;23;2;B;1;Trichoptera;0;0;NA
 3601 sweep;2016;vi;23;2;C;1;Coleoptera;0.007;0;NA
 3602 sweep;2016;vi;23;2;C;1;Collembola;0.0;0;NA
 3603 sweep;2016;vi;23;2;C;1;Diptera;0.0032;0;NA
 3604 sweep;2016;vi;23;2;C;1;Hemiptera;0.0153;0;NA
 3605 sweep;2016;vi;23;2;C;1;Hymenoptera;0.03;0;NA
 3606 sweep;2016;vi;23;2;C;1;Lepidoptera;0.0;0;NA
 3607 sweep;2016;vi;23;2;C;1;Mantodea;0.0;0;NA
 3608 sweep;2016;vi;23;2;C;1;Neuroptera;0.0;0;NA
 3609 sweep;2016;vi;23;2;C;1;Orthoptera;0.0;0;NA
 3610 sweep;2016;vi;23;2;C;1;Phasmatodea;0.0;0;NA
 3611 sweep;2016;vi;23;2;C;1;Psocoptera;0.0;0;NA
 3612 sweep;2016;vi;23;2;C;1;Thysanoptera;0.0;0;NA
 3613 sweep;2016;vi;23;2;C;1;Trichoptera;0;0;NA
 3614 sweep;2016;vi;24;3;A;1;Coleoptera;0.0059;0;NA
 3615 sweep;2016;vi;24;3;A;1;Collembola;0.0001;0;NA
 3616 sweep;2016;vi;24;3;A;1;Diptera;0.0001;0;NA
 3617 sweep;2016;vi;24;3;A;1;Hemiptera;0.0227;0;NA
 3618 sweep;2016;vi;24;3;A;1;Hymenoptera;0.0002;0;NA
 3619 sweep;2016;vi;24;3;A;1;Lepidoptera;0.0;0;NA
 3620 sweep;2016;vi;24;3;A;1;Mantodea;0.0;0;NA
 3621 sweep;2016;vi;24;3;A;1;Neuroptera;0.0;0;NA
 3622 sweep;2016;vi;24;3;A;1;Orthoptera;0.1589;0;NA
 3623 sweep;2016;vi;24;3;A;1;Phasmatodea;0;0;NA
 3624 sweep;2016;vi;24;3;A;1;Psocoptera;0.0;0;NA
 3625 sweep;2016;vi;24;3;A;1;Thysanoptera;0.0005;0;NA
 3626 sweep;2016;vi;24;3;A;1;Trichoptera;0;0;NA
 3627 sweep;2016;vi;24;3;B;1;Coleoptera;0.0031;0;NA
 3628 sweep;2016;vi;24;3;B;1;Collembola;0.0001;0;NA
 3629 sweep;2016;vi;24;3;B;1;Diptera;0.0;0;NA
 3630 sweep;2016;vi;24;3;B;1;Hemiptera;0.0076;0;NA
 3631 sweep;2016;vi;24;3;B;1;Hymenoptera;0.0;0;NA
 3632 sweep;2016;vi;24;3;B;1;Lepidoptera;0.0;0;NA
 3633 sweep;2016;vi;24;3;B;1;Mantodea;0.0;0;NA
 3634 sweep;2016;vi;24;3;B;1;Neuroptera;0.0;0;NA
 3635 sweep;2016;vi;24;3;B;1;Orthoptera;0.2635;0;NA
 3636 sweep;2016;vi;24;3;B;1;Phasmatodea;0;0;NA
 3637 sweep;2016;vi;24;3;B;1;Psocoptera;0.0;0;NA
 3638 sweep;2016;vi;24;3;B;1;Thysanoptera;0.0005;0;NA
 3639 sweep;2016;vi;24;3;B;1;Trichoptera;0;0;NA
 3640 sweep;2016;vi;24;3;C;1;Coleoptera;0.0077;0;NA
 3641 sweep;2016;vi;24;3;C;1;Collembola;0.0;0;NA
 3642 sweep;2016;vi;24;3;C;1;Diptera;0.0007;0;NA
 3643 sweep;2016;vi;24;3;C;1;Hemiptera;0.0163;0;NA
 3644 sweep;2016;vi;24;3;C;1;Hymenoptera;0.0;0;NA
 3645 sweep;2016;vi;24;3;C;1;Lepidoptera;0.0;0;NA
 3646 sweep;2016;vi;24;3;C;1;Mantodea;0.0;0;NA
 3647 sweep;2016;vi;24;3;C;1;Neuroptera;0.0;0;NA
 3648 sweep;2016;vi;24;3;C;1;Orthoptera;0.1955;0;NA
 3649 sweep;2016;vi;24;3;C;1;Phasmatodea;0;0;NA
 3650 sweep;2016;vi;24;3;C;1;Psocoptera;0.0;0;NA
 3651 sweep;2016;vi;24;3;C;1;Thysanoptera;0.0007;0;NA
 3652 sweep;2016;vi;24;3;C;1;Trichoptera;0;0;NA
 3653 sweep;2016;vi;25;UTC;1;1;Coleoptera;0.0003;0;NA
 3654 sweep;2016;vi;25;UTC;1;1;Collembola;0.0;0;NA
 3655 sweep;2016;vi;25;UTC;1;1;Diptera;0.0;0;NA
 3656 sweep;2016;vi;25;UTC;1;1;Hemiptera;0.0109;0;NA
 3657 sweep;2016;vi;25;UTC;1;1;Hymenoptera;0.0001;0;NA
 3658 sweep;2016;vi;25;UTC;1;1;Lepidoptera;0.0;0;NA

3659 sweep;2016;vi;25;UTC;1;1;Mantodea;0.0;0;NA
 3660 sweep;2016;vi;25;UTC;1;1;Neuroptera;0.0;0;NA
 3661 sweep;2016;vi;25;UTC;1;1;Orthoptera;3.4393;0;NA
 3662 sweep;2016;vi;25;UTC;1;1;Phasmatodea;0.0;0;NA
 3663 sweep;2016;vi;25;UTC;1;1;Psocoptera;0.0;0;NA
 3664 sweep;2016;vi;25;UTC;1;1;Thysanoptera;0.0;0;NA
 3665 sweep;2016;vi;25;UTC;1;1;Trichoptera;0;0;NA
 3666 sweep;2016;vi;25;UTC;2;1;Coleoptera;0.0;0;NA
 3667 sweep;2016;vi;25;UTC;2;1;Collembola;0.0;0;NA
 3668 sweep;2016;vi;25;UTC;2;1;Diptera;0.0;0;NA
 3669 sweep;2016;vi;25;UTC;2;1;Hemiptera;0.0175;0;NA
 3670 sweep;2016;vi;25;UTC;2;1;Hymenoptera;0.0;0;NA
 3671 sweep;2016;vi;25;UTC;2;1;Lepidoptera;0.0021;0;NA
 3672 sweep;2016;vi;25;UTC;2;1;Mantodea;0.0;0;NA
 3673 sweep;2016;vi;25;UTC;2;1;Neuroptera;0.0;0;NA
 3674 sweep;2016;vi;25;UTC;2;1;Orthoptera;1.8712;0;NA
 3675 sweep;2016;vi;25;UTC;2;1;Phasmatodea;0.0;0;NA
 3676 sweep;2016;vi;25;UTC;2;1;Psocoptera;0.0;0;NA
 3677 sweep;2016;vi;25;UTC;2;1;Thysanoptera;0.0006;0;NA
 3678 sweep;2016;vi;25;UTC;2;1;Trichoptera;0;0;NA
 3679 sweep;2016;vi;25;UTC;3;1;Coleoptera;0.0007;0;NA
 3680 sweep;2016;vi;25;UTC;3;1;Collembola;0.0;0;NA
 3681 sweep;2016;vi;25;UTC;3;1;Diptera;0.0006;0;NA
 3682 sweep;2016;vi;25;UTC;3;1;Hemiptera;0.06;0;NA
 3683 sweep;2016;vi;25;UTC;3;1;Hymenoptera;0.0;0;NA
 3684 sweep;2016;vi;25;UTC;3;1;Lepidoptera;0.0;0;NA
 3685 sweep;2016;vi;25;UTC;3;1;Mantodea;0.0;0;NA
 3686 sweep;2016;vi;25;UTC;3;1;Neuroptera;0.0;0;NA
 3687 sweep;2016;vi;25;UTC;3;1;Orthoptera;1.8784;0;NA
 3688 sweep;2016;vi;25;UTC;3;1;Phasmatodea;0.0;0;NA
 3689 sweep;2016;vi;25;UTC;3;1;Psocoptera;0.0;0;NA
 3690 sweep;2016;vi;25;UTC;3;1;Thysanoptera;0.0;0;NA
 3691 sweep;2016;vi;25;UTC;3;1;Trichoptera;0;0;NA
 3692 sweep;2016;vi;29;1;A;2;Coleoptera;0.0;0;NA
 3693 sweep;2016;vi;29;1;A;2;Collembola;0.0;0;NA
 3694 sweep;2016;vi;29;1;A;2;Diptera;0.0043;0;NA
 3695 sweep;2016;vi;29;1;A;2;Hemiptera;0.0383;0;NA
 3696 sweep;2016;vi;29;1;A;2;Hymenoptera;0.0001;0;NA
 3697 sweep;2016;vi;29;1;A;2;Lepidoptera;0.0;0;NA
 3698 sweep;2016;vi;29;1;A;2;Mantodea;0.0;0;NA
 3699 sweep;2016;vi;29;1;A;2;Neuroptera;0.0001;0;NA
 3700 sweep;2016;vi;29;1;A;2;Orthoptera;0.0738;0;NA
 3701 sweep;2016;vi;29;1;A;2;Phasmatodea;0.0;0;NA
 3702 sweep;2016;vi;29;1;A;2;Psocoptera;0.0;0;NA
 3703 sweep;2016;vi;29;1;A;2;Thysanoptera;0.0;0;NA
 3704 sweep;2016;vi;29;1;A;2;Trichoptera;0;0;NA
 3705 sweep;2016;vi;29;1;B;2;Coleoptera;0.0077;0;NA
 3706 sweep;2016;vi;29;1;B;2;Collembola;0.0;0;NA
 3707 sweep;2016;vi;29;1;B;2;Diptera;0.1284;0;NA
 3708 sweep;2016;vi;29;1;B;2;Hemiptera;0.0493;0;NA
 3709 sweep;2016;vi;29;1;B;2;Hymenoptera;0.0004;0;NA
 3710 sweep;2016;vi;29;1;B;2;Lepidoptera;0.0;0;NA
 3711 sweep;2016;vi;29;1;B;2;Mantodea;0.0;0;NA
 3712 sweep;2016;vi;29;1;B;2;Neuroptera;0.0006;0;NA
 3713 sweep;2016;vi;29;1;B;2;Orthoptera;0.4628;0;NA
 3714 sweep;2016;vi;29;1;B;2;Phasmatodea;0.0;0;NA
 3715 sweep;2016;vi;29;1;B;2;Psocoptera;0.0;0;NA
 3716 sweep;2016;vi;29;1;B;2;Thysanoptera;0.0001;0;NA
 3717 sweep;2016;vi;29;1;B;2;Trichoptera;0;0;NA
 3718 sweep;2016;vi;29;1;C;2;Coleoptera;0.0077;0;NA
 3719 sweep;2016;vi;29;1;C;2;Collembola;0.0;0;NA
 3720 sweep;2016;vi;29;1;C;2;Diptera;0.0004;0;NA
 3721 sweep;2016;vi;29;1;C;2;Hemiptera;0.0868;0;NA
 3722 sweep;2016;vi;29;1;C;2;Hymenoptera;0.001;0;NA
 3723 sweep;2016;vi;29;1;C;2;Lepidoptera;0.0;0;NA
 3724 sweep;2016;vi;29;1;C;2;Mantodea;0.0;0;NA
 3725 sweep;2016;vi;29;1;C;2;Neuroptera;0.0005;0;NA
 3726 sweep;2016;vi;29;1;C;2;Orthoptera;0.3892;0;NA
 3727 sweep;2016;vi;29;1;C;2;Phasmatodea;0.0;0;NA
 3728 sweep;2016;vi;29;1;C;2;Psocoptera;0.0;0;NA
 3729 sweep;2016;vi;29;1;C;2;Thysanoptera;0.0012;0;NA
 3730 sweep;2016;vi;29;1;C;2;Trichoptera;0;0;NA
 3731 sweep;2016;vi;30;2;A;2;Coleoptera;0.0012;0;NA
 3732 sweep;2016;vi;30;2;A;2;Collembola;0.0;0;NA
 3733 sweep;2016;vi;30;2;A;2;Diptera;0.0001;0;NA
 3734 sweep;2016;vi;30;2;A;2;Hemiptera;0.0001;0;NA
 3735 sweep;2016;vi;30;2;A;2;Hymenoptera;0.0;0;NA
 3736 sweep;2016;vi;30;2;A;2;Lepidoptera;0.0;0;NA
 3737 sweep;2016;vi;30;2;A;2;Mantodea;0.0;0;NA
 3738 sweep;2016;vi;30;2;A;2;Neuroptera;0.0;0;NA
 3739 sweep;2016;vi;30;2;A;2;Orthoptera;0.0;0;NA
 3740 sweep;2016;vi;30;2;A;2;Phasmatodea;0.0;0;NA
 3741 sweep;2016;vi;30;2;A;2;Psocoptera;0.0;0;NA
 3742 sweep;2016;vi;30;2;A;2;Thysanoptera;0.0;0;NA
 3743 sweep;2016;vi;30;2;A;2;Trichoptera;0;0;NA
 3744 sweep;2016;vi;30;2;B;2;Coleoptera;0.0055;0;NA
 3745 sweep;2016;vi;30;2;B;2;Collembola;0.0;0;NA
 3746 sweep;2016;vi;30;2;B;2;Diptera;0.0;0;NA
 3747 sweep;2016;vi;30;2;B;2;Hemiptera;0.0411;0;NA
 3748 sweep;2016;vi;30;2;B;2;Hymenoptera;0.0001;0;NA
 3749 sweep;2016;vi;30;2;B;2;Lepidoptera;0.0008;0;NA
 3750 sweep;2016;vi;30;2;B;2;Mantodea;0.0;0;NA
 3751 sweep;2016;vi;30;2;B;2;Neuroptera;0.0;0;NA
 3752 sweep;2016;vi;30;2;B;2;Orthoptera;0.0;0;NA
 3753 sweep;2016;vi;30;2;B;2;Phasmatodea;0.0;0;NA

3754 sweep;2016;vi;30;2;B;2;Psocoptera;0.0;0;NA
 3755 sweep;2016;vi;30;2;B;2;Thysanoptera;0.0003;0;NA
 3756 sweep;2016;vi;30;2;B;2;Trichoptera;0;0;NA
 3757 sweep;2016;vi;30;2;C;2;Coleoptera;0.0074;0;NA
 3758 sweep;2016;vi;30;2;C;2;Collembola;0.0;0;NA
 3759 sweep;2016;vi;30;2;C;2;Diptera;0.0008;0;NA
 3760 sweep;2016;vi;30;2;C;2;Hemiptera;0.021;0;NA
 3761 sweep;2016;vi;30;2;C;2;Hymenoptera;0.0016;0;NA
 3762 sweep;2016;vi;30;2;C;2;Lepidoptera;0.0031;0;NA
 3763 sweep;2016;vi;30;2;C;2;Mantodea;0.0;0;NA
 3764 sweep;2016;vi;30;2;C;2;Neuroptera;0.0;0;NA
 3765 sweep;2016;vi;30;2;C;2;Orthoptera;0.0;0;NA
 3766 sweep;2016;vi;30;2;C;2;Phasmatodea;0.0243;0;NA
 3767 sweep;2016;vi;30;2;C;2;Psocoptera;0.0007;0;NA
 3768 sweep;2016;vi;30;2;C;2;Thysanoptera;0.0;0;NA
 3769 sweep;2016;vi;30;2;C;2;Trichoptera;0;0;NA
 3770 sweep;2016;vii;01;3;A;2;Coleoptera;0.0324;0;NA
 3771 sweep;2016;vii;01;3;A;2;Collembola;0.0;0;NA
 3772 sweep;2016;vii;01;3;A;2;Diptera;0.0028;0;NA
 3773 sweep;2016;vii;01;3;A;2;Hemiptera;0.0;0;NA
 3774 sweep;2016;vii;01;3;A;2;Hymenoptera;0.0005;0;NA
 3775 sweep;2016;vii;01;3;A;2;Lepidoptera;0.0;0;NA
 3776 sweep;2016;vii;01;3;A;2;Mantodea;0.0;0;NA
 3777 sweep;2016;vii;01;3;A;2;Neuroptera;0.0;0;NA
 3778 sweep;2016;vii;01;3;A;2;Orthoptera;0.2068;0;NA
 3779 sweep;2016;vii;01;3;A;2;Phasmatodea;0;0;NA
 3780 sweep;2016;vii;01;3;A;2;Psocoptera;0.0;0;NA
 3781 sweep;2016;vii;01;3;A;2;Thysanoptera;0.0;0;NA
 3782 sweep;2016;vii;01;3;A;2;Trichoptera;0;0;NA
 3783 sweep;2016;vii;01;3;B;2;Coleoptera;0.0184;0;NA
 3784 sweep;2016;vii;01;3;B;2;Collembola;0;0;NA
 3785 sweep;2016;vii;01;3;B;2;Diptera;0.0;0;NA
 3786 sweep;2016;vii;01;3;B;2;Hemiptera;0.0517;0;NA
 3787 sweep;2016;vii;01;3;B;2;Hymenoptera;0.0;0;NA
 3788 sweep;2016;vii;01;3;B;2;Lepidoptera;0.0;0;NA
 3789 sweep;2016;vii;01;3;B;2;Mantodea;0.0;0;NA
 3790 sweep;2016;vii;01;3;B;2;Neuroptera;0.0114;0;NA
 3791 sweep;2016;vii;01;3;B;2;Orthoptera;0.0865;0;NA
 3792 sweep;2016;vii;01;3;B;2;Phasmatodea;0;0;NA
 3793 sweep;2016;vii;01;3;B;2;Psocoptera;0.0;0;NA
 3794 sweep;2016;vii;01;3;B;2;Thysanoptera;0.0;0;NA
 3795 sweep;2016;vii;01;3;B;2;Trichoptera;0;0;NA
 3796 sweep;2016;vii;01;3;C;2;Coleoptera;0.015;0;NA
 3797 sweep;2016;vii;01;3;C;2;Collembola;0.0005;0;NA
 3798 sweep;2016;vii;01;3;C;2;Diptera;0.001;0;NA
 3799 sweep;2016;vii;01;3;C;2;Hemiptera;0.0674;0;NA
 3800 sweep;2016;vii;01;3;C;2;Hymenoptera;0.0003;0;NA
 3801 sweep;2016;vii;01;3;C;2;Lepidoptera;0.0;0;NA
 3802 sweep;2016;vii;01;3;C;2;Mantodea;0.0;0;NA
 3803 sweep;2016;vii;01;3;C;2;Neuroptera;0.0;0;NA
 3804 sweep;2016;vii;01;3;C;2;Orthoptera;0.1672;0;NA
 3805 sweep;2016;vii;01;3;C;2;Phasmatodea;0;0;NA
 3806 sweep;2016;vii;01;3;C;2;Psocoptera;0.0006;0;NA
 3807 sweep;2016;vii;01;3;C;2;Thysanoptera;0.0001;0;NA
 3808 sweep;2016;vii;01;3;C;2;Trichoptera;0;0;NA
 3809 sweep;2016;vii;02;UTC;1;2;Coleoptera;0.0;0;NA
 3810 sweep;2016;vii;02;UTC;1;2;Collembola;0.0;0;NA
 3811 sweep;2016;vii;02;UTC;1;2;Diptera;0.0;0;NA
 3812 sweep;2016;vii;02;UTC;1;2;Hemiptera;0.0072;0;NA
 3813 sweep;2016;vii;02;UTC;1;2;Hymenoptera;0.0;0;NA
 3814 sweep;2016;vii;02;UTC;1;2;Lepidoptera;0.0;0;NA
 3815 sweep;2016;vii;02;UTC;1;2;Mantodea;0.0;0;NA
 3816 sweep;2016;vii;02;UTC;1;2;Neuroptera;0.0;0;NA
 3817 sweep;2016;vii;02;UTC;1;2;Orthoptera;0.0;0;NA
 3818 sweep;2016;vii;02;UTC;1;2;Phasmatodea;0.0;0;NA
 3819 sweep;2016;vii;02;UTC;1;2;Psocoptera;0.0;0;NA
 3820 sweep;2016;vii;02;UTC;1;2;Thysanoptera;0.0004;0;NA
 3821 sweep;2016;vii;02;UTC;1;2;Trichoptera;0;0;NA
 3822 sweep;2016;vii;02;UTC;2;2;Coleoptera;0.0;0;NA
 3823 sweep;2016;vii;02;UTC;2;2;Collembola;0.0;0;NA
 3824 sweep;2016;vii;02;UTC;2;2;Diptera;0.0041;0;NA
 3825 sweep;2016;vii;02;UTC;2;2;Hemiptera;0.0039;0;NA
 3826 sweep;2016;vii;02;UTC;2;2;Hymenoptera;0.002;0;NA
 3827 sweep;2016;vii;02;UTC;2;2;Lepidoptera;0.0;0;NA
 3828 sweep;2016;vii;02;UTC;2;2;Mantodea;0.0;0;NA
 3829 sweep;2016;vii;02;UTC;2;2;Neuroptera;0.0;0;NA
 3830 sweep;2016;vii;02;UTC;2;2;Orthoptera;0.0;0;NA
 3831 sweep;2016;vii;02;UTC;2;2;Phasmatodea;0.0;0;NA
 3832 sweep;2016;vii;02;UTC;2;2;Psocoptera;0.0;0;NA
 3833 sweep;2016;vii;02;UTC;2;2;Thysanoptera;0.0004;0;NA
 3834 sweep;2016;vii;02;UTC;2;2;Trichoptera;0;0;NA
 3835 sweep;2016;vii;02;UTC;3;2;Coleoptera;0.0;0;NA
 3836 sweep;2016;vii;02;UTC;3;2;Collembola;0.0;0;NA
 3837 sweep;2016;vii;02;UTC;3;2;Diptera;0.0;0;NA
 3838 sweep;2016;vii;02;UTC;3;2;Hemiptera;0.0065;0;NA
 3839 sweep;2016;vii;02;UTC;3;2;Hymenoptera;0.0;0;NA
 3840 sweep;2016;vii;02;UTC;3;2;Lepidoptera;0.0;0;NA
 3841 sweep;2016;vii;02;UTC;3;2;Mantodea;0.0;0;NA
 3842 sweep;2016;vii;02;UTC;3;2;Neuroptera;0.0;0;NA
 3843 sweep;2016;vii;02;UTC;3;2;Orthoptera;0.0;0;NA
 3844 sweep;2016;vii;02;UTC;3;2;Phasmatodea;0.0;0;NA
 3845 sweep;2016;vii;02;UTC;3;2;Psocoptera;0.0;0;NA
 3846 sweep;2016;vii;02;UTC;3;2;Thysanoptera;0.0004;0;NA
 3847 sweep;2016;vii;02;UTC;3;2;Trichoptera;0;0;NA
 3848 sweep;2016;vii;06;1;A;3;Coleoptera;0.0029;0;NA

3849 sweep;2016;vii;06;1;A;3;Collembola;0.0;0;NA
 3850 sweep;2016;vii;06;1;A;3;Diptera;0.0;0;NA
 3851 sweep;2016;vii;06;1;A;3;Hemiptera;0.0334;0;NA
 3852 sweep;2016;vii;06;1;A;3;Hymenoptera;0.0;0;NA
 3853 sweep;2016;vii;06;1;A;3;Lepidoptera;0.0;0;NA
 3854 sweep;2016;vii;06;1;A;3;Mantodea;0.0;0;NA
 3855 sweep;2016;vii;06;1;A;3;Neuroptera;0.0;0;NA
 3856 sweep;2016;vii;06;1;A;3;Orthoptera;0.1183;0;NA
 3857 sweep;2016;vii;06;1;A;3;Phasmatodea;0;0;NA
 3858 sweep;2016;vii;06;1;A;3;Psocoptera;0;0;NA
 3859 sweep;2016;vii;06;1;A;3;Thysanoptera;0.0003;0;NA
 3860 sweep;2016;vii;06;1;A;3;Trichoptera;0;0;NA
 3861 sweep;2016;vii;06;1;B;3;Coleoptera;0.0045;0;NA
 3862 sweep;2016;vii;06;1;B;3;Collembola;0.0;0;NA
 3863 sweep;2016;vii;06;1;B;3;Diptera;0.0;0;NA
 3864 sweep;2016;vii;06;1;B;3;Hemiptera;0.0238;0;NA
 3865 sweep;2016;vii;06;1;B;3;Hymenoptera;0.0;0;NA
 3866 sweep;2016;vii;06;1;B;3;Lepidoptera;0.0;0;NA
 3867 sweep;2016;vii;06;1;B;3;Mantodea;0.0;0;NA
 3868 sweep;2016;vii;06;1;B;3;Neuroptera;0.0;0;NA
 3869 sweep;2016;vii;06;1;B;3;Orthoptera;0.5882;0;NA
 3870 sweep;2016;vii;06;1;B;3;Phasmatodea;0;0;NA
 3871 sweep;2016;vii;06;1;B;3;Psocoptera;0.0;0;NA
 3872 sweep;2016;vii;06;1;B;3;Thysanoptera;0.0;0;NA
 3873 sweep;2016;vii;06;1;B;3;Trichoptera;0;0;NA
 3874 sweep;2016;vii;06;1;C;3;Coleoptera;0;0;NA
 3875 sweep;2016;vii;06;1;C;3;Collembola;0;0;NA
 3876 sweep;2016;vii;06;1;C;3;Diptera;0.0;0;NA
 3877 sweep;2016;vii;06;1;C;3;Hemiptera;0.0091;0;NA
 3878 sweep;2016;vii;06;1;C;3;Hymenoptera;0.0001;0;NA
 3879 sweep;2016;vii;06;1;C;3;Lepidoptera;0;0;NA
 3880 sweep;2016;vii;06;1;C;3;Mantodea;0;0;NA
 3881 sweep;2016;vii;06;1;C;3;Neuroptera;0;0;NA
 3882 sweep;2016;vii;06;1;C;3;Orthoptera;0.2269;0;NA
 3883 sweep;2016;vii;06;1;C;3;Phasmatodea;0;0;NA
 3884 sweep;2016;vii;06;1;C;3;Psocoptera;0;0;NA
 3885 sweep;2016;vii;06;1;C;3;Thysanoptera;0.0006;0;NA
 3886 sweep;2016;vii;06;1;C;3;Trichoptera;0;0;NA
 3887 sweep;2016;vii;07;2;A;3;Coleoptera;0.004;0;NA
 3888 sweep;2016;vii;07;2;A;3;Collembola;0;0;NA
 3889 sweep;2016;vii;07;2;A;3;Diptera;0;0;NA
 3890 sweep;2016;vii;07;2;A;3;Hemiptera;0.006;0;NA
 3891 sweep;2016;vii;07;2;A;3;Hymenoptera;0.0016;0;NA
 3892 sweep;2016;vii;07;2;A;3;Lepidoptera;0.0;0;NA
 3893 sweep;2016;vii;07;2;A;3;Mantodea;0;0;NA
 3894 sweep;2016;vii;07;2;A;3;Neuroptera;0;0;NA
 3895 sweep;2016;vii;07;2;A;3;Orthoptera;0;0;NA
 3896 sweep;2016;vii;07;2;A;3;Phasmatodea;0;0;NA
 3897 sweep;2016;vii;07;2;A;3;Psocoptera;0;0;NA
 3898 sweep;2016;vii;07;2;A;3;Thysanoptera;0.0001;0;NA
 3899 sweep;2016;vii;07;2;A;3;Trichoptera;0;0;NA
 3900 sweep;2016;vii;07;2;B;3;Coleoptera;0.0048;0;NA
 3901 sweep;2016;vii;07;2;B;3;Collembola;0;0;NA
 3902 sweep;2016;vii;07;2;B;3;Diptera;0;0;NA
 3903 sweep;2016;vii;07;2;B;3;Hemiptera;0.0215;0;NA
 3904 sweep;2016;vii;07;2;B;3;Hymenoptera;0.0001;0;NA
 3905 sweep;2016;vii;07;2;B;3;Lepidoptera;0;0;NA
 3906 sweep;2016;vii;07;2;B;3;Mantodea;0;0;NA
 3907 sweep;2016;vii;07;2;B;3;Neuroptera;0;0;NA
 3908 sweep;2016;vii;07;2;B;3;Orthoptera;0;0;NA
 3909 sweep;2016;vii;07;2;B;3;Phasmatodea;0;0;NA
 3910 sweep;2016;vii;07;2;B;3;Psocoptera;0;0;NA
 3911 sweep;2016;vii;07;2;B;3;Thysanoptera;0.0003;0;NA
 3912 sweep;2016;vii;07;2;B;3;Trichoptera;0;0;NA
 3913 sweep;2016;vii;07;2;C;3;Coleoptera;0;0;NA
 3914 sweep;2016;vii;07;2;C;3;Collembola;0;0;NA
 3915 sweep;2016;vii;07;2;C;3;Diptera;0;0;NA
 3916 sweep;2016;vii;07;2;C;3;Hemiptera;0.0077;0;NA
 3917 sweep;2016;vii;07;2;C;3;Hymenoptera;0.0001;0;NA
 3918 sweep;2016;vii;07;2;C;3;Lepidoptera;0;0;NA
 3919 sweep;2016;vii;07;2;C;3;Mantodea;0;0;NA
 3920 sweep;2016;vii;07;2;C;3;Neuroptera;0;0;NA
 3921 sweep;2016;vii;07;2;C;3;Orthoptera;0;0;NA
 3922 sweep;2016;vii;07;2;C;3;Phasmatodea;0;0;NA
 3923 sweep;2016;vii;07;2;C;3;Psocoptera;0;0;NA
 3924 sweep;2016;vii;07;2;C;3;Thysanoptera;0.0001;0;NA
 3925 sweep;2016;vii;07;2;C;3;Trichoptera;0;0;NA
 3926 sweep;2016;vii;08;3;A;3;Coleoptera;0.0124;0;NA
 3927 sweep;2016;vii;08;3;A;3;Collembola;0.0001;0;NA
 3928 sweep;2016;vii;08;3;A;3;Diptera;0.0001;0;NA
 3929 sweep;2016;vii;08;3;A;3;Hemiptera;0.0535;0;NA
 3930 sweep;2016;vii;08;3;A;3;Hymenoptera;0;0;NA
 3931 sweep;2016;vii;08;3;A;3;Lepidoptera;0;0;NA
 3932 sweep;2016;vii;08;3;A;3;Mantodea;0;0;NA
 3933 sweep;2016;vii;08;3;A;3;Neuroptera;0;0;NA
 3934 sweep;2016;vii;08;3;A;3;Orthoptera;0.1943;0;NA
 3935 sweep;2016;vii;08;3;A;3;Phasmatodea;0;0;NA
 3936 sweep;2016;vii;08;3;A;3;Psocoptera;0;0;NA
 3937 sweep;2016;vii;08;3;A;3;Thysanoptera;0.0004;0;NA
 3938 sweep;2016;vii;08;3;A;3;Trichoptera;0;0;NA
 3939 sweep;2016;vii;08;3;B;3;Coleoptera;0;0;NA
 3940 sweep;2016;vii;08;3;B;3;Collembola;0.0008;0;NA
 3941 sweep;2016;vii;08;3;B;3;Diptera;0.0008;0;NA
 3942 sweep;2016;vii;08;3;B;3;Hemiptera;0.0196;0;NA
 3943 sweep;2016;vii;08;3;B;3;Hymenoptera;0;0;NA

3944 sweep;2016;vii;08;3;B;3;Lepidoptera;0.0;0;NA
 3945 sweep;2016;vii;08;3;B;3;Mantodea;0.0;0;NA
 3946 sweep;2016;vii;08;3;B;3;Neuroptera;0.0;0;NA
 3947 sweep;2016;vii;08;3;B;3;Orthoptera;0.3826;0;NA
 3948 sweep;2016;vii;08;3;B;3;Phasmatodea;0;0;NA
 3949 sweep;2016;vii;08;3;B;3;Psocoptera;0.0;0;NA
 3950 sweep;2016;vii;08;3;B;3;Thysanoptera;0.0009;0;NA
 3951 sweep;2016;vii;08;3;B;3;Trichoptera;0;0;NA
 3952 sweep;2016;vii;08;3;C;3;Coleoptera;0.0;0;NA
 3953 sweep;2016;vii;08;3;C;3;Collembola;0.0;0;NA
 3954 sweep;2016;vii;08;3;C;3;Diptera;0.0018;0;NA
 3955 sweep;2016;vii;08;3;C;3;Hemiptera;0.0365;0;NA
 3956 sweep;2016;vii;08;3;C;3;Hymenoptera;0.0018;0;NA
 3957 sweep;2016;vii;08;3;C;3;Lepidoptera;0.0;0;NA
 3958 sweep;2016;vii;08;3;C;3;Mantodea;0.0;0;NA
 3959 sweep;2016;vii;08;3;C;3;Neuroptera;0.0;0;NA
 3960 sweep;2016;vii;08;3;C;3;Orthoptera;0.172;0;NA
 3961 sweep;2016;vii;08;3;C;3;Phasmatodea;0;0;NA
 3962 sweep;2016;vii;08;3;C;3;Psocoptera;0.0;0;NA
 3963 sweep;2016;vii;08;3;C;3;Thysanoptera;0.0012;0;NA
 3964 sweep;2016;vii;08;3;C;3;Trichoptera;0;0;NA
 3965 sweep;2016;vii;09;UTC;1;3;Coleoptera;0.0011;0;NA
 3966 sweep;2016;vii;09;UTC;1;3;Collembola;0.0;0;NA
 3967 sweep;2016;vii;09;UTC;1;3;Diptera;0.0;0;NA
 3968 sweep;2016;vii;09;UTC;1;3;Hemiptera;0.0067;0;NA
 3969 sweep;2016;vii;09;UTC;1;3;Hymenoptera;0.0009;0;NA
 3970 sweep;2016;vii;09;UTC;1;3;Lepidoptera;0.0;0;NA
 3971 sweep;2016;vii;09;UTC;1;3;Mantodea;0.0;0;NA
 3972 sweep;2016;vii;09;UTC;1;3;Neuroptera;0.0;0;NA
 3973 sweep;2016;vii;09;UTC;1;3;Orthoptera;1.2253;0;NA
 3974 sweep;2016;vii;09;UTC;1;3;Phasmatodea;0;0;NA
 3975 sweep;2016;vii;09;UTC;1;3;Psocoptera;0.0;0;NA
 3976 sweep;2016;vii;09;UTC;1;3;Thysanoptera;0.0001;0;NA
 3977 sweep;2016;vii;09;UTC;1;3;Trichoptera;0;0;NA
 3978 sweep;2016;vii;09;UTC;2;3;Coleoptera;0.015;0;NA
 3979 sweep;2016;vii;09;UTC;2;3;Collembola;0.0;0;NA
 3980 sweep;2016;vii;09;UTC;2;3;Diptera;0.0;0;NA
 3981 sweep;2016;vii;09;UTC;2;3;Hemiptera;0.0119;0;NA
 3982 sweep;2016;vii;09;UTC;2;3;Hymenoptera;0.0;0;NA
 3983 sweep;2016;vii;09;UTC;2;3;Lepidoptera;0.0;0;NA
 3984 sweep;2016;vii;09;UTC;2;3;Mantodea;0.0;0;NA
 3985 sweep;2016;vii;09;UTC;2;3;Neuroptera;0.0;0;NA
 3986 sweep;2016;vii;09;UTC;2;3;Orthoptera;2.6204;0;NA
 3987 sweep;2016;vii;09;UTC;2;3;Phasmatodea;0;0;NA
 3988 sweep;2016;vii;09;UTC;2;3;Psocoptera;0.0;0;NA
 3989 sweep;2016;vii;09;UTC;2;3;Thysanoptera;0.0007;0;NA
 3990 sweep;2016;vii;09;UTC;2;3;Trichoptera;0;0;NA
 3991 sweep;2016;vii;09;UTC;3;3;Coleoptera;0.0;0;NA
 3992 sweep;2016;vii;09;UTC;3;3;Collembola;0.0;0;NA
 3993 sweep;2016;vii;09;UTC;3;3;Diptera;0.0;0;NA
 3994 sweep;2016;vii;09;UTC;3;3;Hemiptera;0.0191;0;NA
 3995 sweep;2016;vii;09;UTC;3;3;Hymenoptera;0.0016;0;NA
 3996 sweep;2016;vii;09;UTC;3;3;Lepidoptera;0.0;0;NA
 3997 sweep;2016;vii;09;UTC;3;3;Mantodea;0.0;0;NA
 3998 sweep;2016;vii;09;UTC;3;3;Neuroptera;0.0;0;NA
 3999 sweep;2016;vii;09;UTC;3;3;Orthoptera;0.6218;0;NA
 4000 sweep;2016;vii;09;UTC;3;3;Phasmatodea;0;0;NA
 4001 sweep;2016;vii;09;UTC;3;3;Psocoptera;0.0;0;NA
 4002 sweep;2016;vii;09;UTC;3;3;Thysanoptera;0.0;0;NA
 4003 sweep;2016;vii;09;UTC;3;3;Trichoptera;0;0;NA
 4004 sweep;2016;vii;13;1;A;4;Coleoptera;0.0;0;NA
 4005 sweep;2016;vii;13;1;A;4;Collembola;0.0;0;NA
 4006 sweep;2016;vii;13;1;A;4;Diptera;0.0;0;NA
 4007 sweep;2016;vii;13;1;A;4;Hemiptera;0.0159;0;NA
 4008 sweep;2016;vii;13;1;A;4;Hymenoptera;0.0;0;NA
 4009 sweep;2016;vii;13;1;A;4;Lepidoptera;0.0;0;NA
 4010 sweep;2016;vii;13;1;A;4;Mantodea;0.0;0;NA
 4011 sweep;2016;vii;13;1;A;4;Neuroptera;0.0;0;NA
 4012 sweep;2016;vii;13;1;A;4;Orthoptera;0.2685;0;NA
 4013 sweep;2016;vii;13;1;A;4;Phasmatodea;0;0;NA
 4014 sweep;2016;vii;13;1;A;4;Psocoptera;0.0;0;NA
 4015 sweep;2016;vii;13;1;A;4;Thysanoptera;0.0;0;NA
 4016 sweep;2016;vii;13;1;A;4;Trichoptera;0;0;NA
 4017 sweep;2016;vii;13;1;B;4;Coleoptera;0.0043;0;NA
 4018 sweep;2016;vii;13;1;B;4;Collembola;0.0;0;NA
 4019 sweep;2016;vii;13;1;B;4;Diptera;0.0;0;NA
 4020 sweep;2016;vii;13;1;B;4;Hemiptera;0.0094;0;NA
 4021 sweep;2016;vii;13;1;B;4;Hymenoptera;0.0002;0;NA
 4022 sweep;2016;vii;13;1;B;4;Lepidoptera;0.0;0;NA
 4023 sweep;2016;vii;13;1;B;4;Mantodea;0.0;0;NA
 4024 sweep;2016;vii;13;1;B;4;Neuroptera;0.0;0;NA
 4025 sweep;2016;vii;13;1;B;4;Orthoptera;0.1638;0;NA
 4026 sweep;2016;vii;13;1;B;4;Phasmatodea;0;0;NA
 4027 sweep;2016;vii;13;1;B;4;Psocoptera;0.0;0;NA
 4028 sweep;2016;vii;13;1;B;4;Thysanoptera;0.0001;0;NA
 4029 sweep;2016;vii;13;1;B;4;Trichoptera;0;0;NA
 4030 sweep;2016;vii;13;1;C;4;Coleoptera;0.0012;0;NA
 4031 sweep;2016;vii;13;1;C;4;Collembola;0.0;0;NA
 4032 sweep;2016;vii;13;1;C;4;Diptera;0.0;0;NA
 4033 sweep;2016;vii;13;1;C;4;Hemiptera;0.0137;0;NA
 4034 sweep;2016;vii;13;1;C;4;Hymenoptera;0.0009;0;NA
 4035 sweep;2016;vii;13;1;C;4;Lepidoptera;0.0;0;NA
 4036 sweep;2016;vii;13;1;C;4;Mantodea;0.0;0;NA
 4037 sweep;2016;vii;13;1;C;4;Neuroptera;0.0;0;NA
 4038 sweep;2016;vii;13;1;C;4;Orthoptera;0.196;0;NA

4039 sweep;2016;vii;13;1;C;4;Phasmatodea;0;0;NA
 4040 sweep;2016;vii;13;1;C;4;Psocoptera;0.0;0;NA
 4041 sweep;2016;vii;13;1;C;4;Thysanoptera;0.0006;0;NA
 4042 sweep;2016;vii;13;1;C;4;Trichoptera;0;0;NA
 4043 sweep;2016;vii;14;2;A;4;Coleoptera;0.0;0;NA
 4044 sweep;2016;vii;14;2;A;4;Collembola;0.0;0;NA
 4045 sweep;2016;vii;14;2;A;4;Diptera;0.0003;0;NA
 4046 sweep;2016;vii;14;2;A;4;Hemiptera;0.0137;0;NA
 4047 sweep;2016;vii;14;2;A;4;Hymenoptera;0.0001;0;NA
 4048 sweep;2016;vii;14;2;A;4;Lepidoptera;0.0;0;NA
 4049 sweep;2016;vii;14;2;A;4;Mantodea;0.0;0;NA
 4050 sweep;2016;vii;14;2;A;4;Neuroptera;0.0;0;NA
 4051 sweep;2016;vii;14;2;A;4;Orthoptera;0.0;0;NA
 4052 sweep;2016;vii;14;2;A;4;Phasmatodea;0.0;0;NA
 4053 sweep;2016;vii;14;2;A;4;Psocoptera;0.0;0;NA
 4054 sweep;2016;vii;14;2;A;4;Thysanoptera;0.0;0;NA
 4055 sweep;2016;vii;14;2;A;4;Trichoptera;0;0;NA
 4056 sweep;2016;vii;14;2;B;4;Coleoptera;0.0149;0;NA
 4057 sweep;2016;vii;14;2;B;4;Collembola;0.0;0;NA
 4058 sweep;2016;vii;14;2;B;4;Diptera;0.0007;0;NA
 4059 sweep;2016;vii;14;2;B;4;Hemiptera;0.05;0;NA
 4060 sweep;2016;vii;14;2;B;4;Hymenoptera;0.0001;0;NA
 4061 sweep;2016;vii;14;2;B;4;Lepidoptera;0.0002;0;NA
 4062 sweep;2016;vii;14;2;B;4;Mantodea;0.0;0;NA
 4063 sweep;2016;vii;14;2;B;4;Neuroptera;0.0;0;NA
 4064 sweep;2016;vii;14;2;B;4;Orthoptera;0.0;0;NA
 4065 sweep;2016;vii;14;2;B;4;Phasmatodea;0.0;0;NA
 4066 sweep;2016;vii;14;2;B;4;Psocoptera;0.0;0;NA
 4067 sweep;2016;vii;14;2;B;4;Thysanoptera;0.0001;0;NA
 4068 sweep;2016;vii;14;2;B;4;Trichoptera;0;0;NA
 4069 sweep;2016;vii;14;2;C;4;Coleoptera;0.0;0;NA
 4070 sweep;2016;vii;14;2;C;4;Collembola;0.0;0;NA
 4071 sweep;2016;vii;14;2;C;4;Diptera;0.0;0;NA
 4072 sweep;2016;vii;14;2;C;4;Hemiptera;0.0265;0;NA
 4073 sweep;2016;vii;14;2;C;4;Hymenoptera;0.0021;0;NA
 4074 sweep;2016;vii;14;2;C;4;Lepidoptera;0.0;0;NA
 4075 sweep;2016;vii;14;2;C;4;Mantodea;0.0;0;NA
 4076 sweep;2016;vii;14;2;C;4;Neuroptera;0.0;0;NA
 4077 sweep;2016;vii;14;2;C;4;Orthoptera;0.0;0;NA
 4078 sweep;2016;vii;14;2;C;4;Phasmatodea;0.0;0;NA
 4079 sweep;2016;vii;14;2;C;4;Psocoptera;0.0;0;NA
 4080 sweep;2016;vii;14;2;C;4;Thysanoptera;0.0001;0;NA
 4081 sweep;2016;vii;14;2;C;4;Trichoptera;0;0;NA
 4082 sweep;2016;vii;15;3;A;4;Coleoptera;0.035;0;NA
 4083 sweep;2016;vii;15;3;A;4;Collembola;0.0;0;NA
 4084 sweep;2016;vii;15;3;A;4;Diptera;0.0009;0;NA
 4085 sweep;2016;vii;15;3;A;4;Hemiptera;0.0159;0;NA
 4086 sweep;2016;vii;15;3;A;4;Hymenoptera;0.0004;0;NA
 4087 sweep;2016;vii;15;3;A;4;Lepidoptera;0.0;0;NA
 4088 sweep;2016;vii;15;3;A;4;Mantodea;0.0;0;NA
 4089 sweep;2016;vii;15;3;A;4;Neuroptera;0.0;0;NA
 4090 sweep;2016;vii;15;3;A;4;Orthoptera;0.0;0;NA
 4091 sweep;2016;vii;15;3;A;4;Phasmatodea;0.0;0;NA
 4092 sweep;2016;vii;15;3;A;4;Psocoptera;0.0;0;NA
 4093 sweep;2016;vii;15;3;A;4;Thysanoptera;0.0001;0;NA
 4094 sweep;2016;vii;15;3;A;4;Trichoptera;0;0;NA
 4095 sweep;2016;vii;15;3;B;4;Coleoptera;0.0;0;NA
 4096 sweep;2016;vii;15;3;B;4;Collembola;0.0;0;NA
 4097 sweep;2016;vii;15;3;B;4;Diptera;0.0001;0;NA
 4098 sweep;2016;vii;15;3;B;4;Hemiptera;0.0145;0;NA
 4099 sweep;2016;vii;15;3;B;4;Hymenoptera;0.0;0;NA
 4100 sweep;2016;vii;15;3;B;4;Lepidoptera;0.0;0;NA
 4101 sweep;2016;vii;15;3;B;4;Mantodea;0.0;0;NA
 4102 sweep;2016;vii;15;3;B;4;Neuroptera;0.0;0;NA
 4103 sweep;2016;vii;15;3;B;4;Orthoptera;0.0;0;NA
 4104 sweep;2016;vii;15;3;B;4;Phasmatodea;0.0;0;NA
 4105 sweep;2016;vii;15;3;B;4;Psocoptera;0.0;0;NA
 4106 sweep;2016;vii;15;3;B;4;Thysanoptera;0.0006;0;NA
 4107 sweep;2016;vii;15;3;B;4;Trichoptera;0;0;NA
 4108 sweep;2016;vii;15;3;C;4;Coleoptera;0.0055;0;NA
 4109 sweep;2016;vii;15;3;C;4;Collembola;0.0;0;NA
 4110 sweep;2016;vii;15;3;C;4;Diptera;0.0002;0;NA
 4111 sweep;2016;vii;15;3;C;4;Hemiptera;0.0121;0;NA
 4112 sweep;2016;vii;15;3;C;4;Hymenoptera;0.0;0;NA
 4113 sweep;2016;vii;15;3;C;4;Lepidoptera;0.0;0;NA
 4114 sweep;2016;vii;15;3;C;4;Mantodea;0.0;0;NA
 4115 sweep;2016;vii;15;3;C;4;Neuroptera;0.0107;0;NA
 4116 sweep;2016;vii;15;3;C;4;Orthoptera;0.0;0;NA
 4117 sweep;2016;vii;15;3;C;4;Phasmatodea;0.0;0;NA
 4118 sweep;2016;vii;15;3;C;4;Psocoptera;0.0;0;NA
 4119 sweep;2016;vii;15;3;C;4;Thysanoptera;0.0005;0;NA
 4120 sweep;2016;vii;15;3;C;4;Trichoptera;0;0;NA
 4121 sweep;2016;vii;16;UTC;1;4;Coleoptera;0.0095;0;NA
 4122 sweep;2016;vii;16;UTC;1;4;Collembola;0.0;0;NA
 4123 sweep;2016;vii;16;UTC;1;4;Diptera;0.0;0;NA
 4124 sweep;2016;vii;16;UTC;1;4;Hemiptera;0.0028;0;NA
 4125 sweep;2016;vii;16;UTC;1;4;Hymenoptera;0.0006;0;NA
 4126 sweep;2016;vii;16;UTC;1;4;Lepidoptera;0.0;0;NA
 4127 sweep;2016;vii;16;UTC;1;4;Mantodea;0.0;0;NA
 4128 sweep;2016;vii;16;UTC;1;4;Neuroptera;0.0;0;NA
 4129 sweep;2016;vii;16;UTC;1;4;Orthoptera;0.0;0;NA
 4130 sweep;2016;vii;16;UTC;1;4;Phasmatodea;0.0;0;NA
 4131 sweep;2016;vii;16;UTC;1;4;Psocoptera;0.0;0;NA
 4132 sweep;2016;vii;16;UTC;1;4;Thysanoptera;0.0001;0;NA
 4133 sweep;2016;vii;16;UTC;1;4;Trichoptera;0;0;NA

4134 sweep;2016;vii;16;UTC;2;4;Coleoptera;0.0;0;NA
 4135 sweep;2016;vii;16;UTC;2;4;Collembola;0.0;0;NA
 4136 sweep;2016;vii;16;UTC;2;4;Diptera;0.0;0;NA
 4137 sweep;2016;vii;16;UTC;2;4;Hemiptera;0.0257;0;NA
 4138 sweep;2016;vii;16;UTC;2;4;Hymenoptera;0.0;0;NA
 4139 sweep;2016;vii;16;UTC;2;4;Lepidoptera;0.0;0;NA
 4140 sweep;2016;vii;16;UTC;2;4;Mantodea;0.0;0;NA
 4141 sweep;2016;vii;16;UTC;2;4;Neuroptera;0.0;0;NA
 4142 sweep;2016;vii;16;UTC;2;4;Orthoptera;0.0;0;NA
 4143 sweep;2016;vii;16;UTC;2;4;Phasmatodea;0.0;0;NA
 4144 sweep;2016;vii;16;UTC;2;4;Psocoptera;0.0;0;NA
 4145 sweep;2016;vii;16;UTC;2;4;Thysanoptera;0.0001;0;NA
 4146 sweep;2016;vii;16;UTC;2;4;Trichoptera;0;0;NA
 4147 sweep;2016;vii;16;UTC;3;4;Coleoptera;0.0;0;NA
 4148 sweep;2016;vii;16;UTC;3;4;Collembola;0.0;0;NA
 4149 sweep;2016;vii;16;UTC;3;4;Diptera;0.0;0;NA
 4150 sweep;2016;vii;16;UTC;3;4;Hemiptera;0.0194;0;NA
 4151 sweep;2016;vii;16;UTC;3;4;Hymenoptera;0.0001;0;NA
 4152 sweep;2016;vii;16;UTC;3;4;Lepidoptera;0.0;0;NA
 4153 sweep;2016;vii;16;UTC;3;4;Mantodea;0.0;0;NA
 4154 sweep;2016;vii;16;UTC;3;4;Neuroptera;0.0;0;NA
 4155 sweep;2016;vii;16;UTC;3;4;Orthoptera;0.0;0;NA
 4156 sweep;2016;vii;16;UTC;3;4;Phasmatodea;0.0;0;NA
 4157 sweep;2016;vii;16;UTC;3;4;Psocoptera;0.0;0;NA
 4158 sweep;2016;vii;16;UTC;3;4;Thysanoptera;0.0001;0;NA
 4159 sweep;2016;vii;16;UTC;3;4;Trichoptera;0;0;NA
 4160 sweep;2016;vii;20;1;A;5;Coleoptera;0.0;0;NA
 4161 sweep;2016;vii;20;1;A;5;Collembola;0.0001;0;NA
 4162 sweep;2016;vii;20;1;A;5;Diptera;0.0001;0;NA
 4163 sweep;2016;vii;20;1;A;5;Hemiptera;0.0073;0;NA
 4164 sweep;2016;vii;20;1;A;5;Hymenoptera;0.001;0;NA
 4165 sweep;2016;vii;20;1;A;5;Lepidoptera;0.0;0;NA
 4166 sweep;2016;vii;20;1;A;5;Mantodea;0.0;0;NA
 4167 sweep;2016;vii;20;1;A;5;Neuroptera;0.0;0;NA
 4168 sweep;2016;vii;20;1;A;5;Orthoptera;0.0;0;NA
 4169 sweep;2016;vii;20;1;A;5;Phasmatodea;0.0;0;NA
 4170 sweep;2016;vii;20;1;A;5;Psocoptera;0.0;0;NA
 4171 sweep;2016;vii;20;1;A;5;Thysanoptera;0.0;0;NA
 4172 sweep;2016;vii;20;1;A;5;Trichoptera;0;0;NA
 4173 sweep;2016;vii;20;1;B;5;Coleoptera;0.0;0;NA
 4174 sweep;2016;vii;20;1;B;5;Collembola;0.0;0;NA
 4175 sweep;2016;vii;20;1;B;5;Diptera;0.0;0;NA
 4176 sweep;2016;vii;20;1;B;5;Hemiptera;0.0297;0;NA
 4177 sweep;2016;vii;20;1;B;5;Hymenoptera;0.0;0;NA
 4178 sweep;2016;vii;20;1;B;5;Lepidoptera;0.0;0;NA
 4179 sweep;2016;vii;20;1;B;5;Mantodea;0.0;0;NA
 4180 sweep;2016;vii;20;1;B;5;Neuroptera;0.0;0;NA
 4181 sweep;2016;vii;20;1;B;5;Orthoptera;0.0;0;NA
 4182 sweep;2016;vii;20;1;B;5;Phasmatodea;0.0;0;NA
 4183 sweep;2016;vii;20;1;B;5;Psocoptera;0.0;0;NA
 4184 sweep;2016;vii;20;1;B;5;Thysanoptera;0.0;0;NA
 4185 sweep;2016;vii;20;1;B;5;Trichoptera;0;0;NA
 4186 sweep;2016;vii;20;1;C;5;Coleoptera;0.001;0;NA
 4187 sweep;2016;vii;20;1;C;5;Collembola;0.0;0;NA
 4188 sweep;2016;vii;20;1;C;5;Diptera;0.0;0;NA
 4189 sweep;2016;vii;20;1;C;5;Hemiptera;0.0832;0;NA
 4190 sweep;2016;vii;20;1;C;5;Hymenoptera;0.0004;0;NA
 4191 sweep;2016;vii;20;1;C;5;Lepidoptera;0.0;0;NA
 4192 sweep;2016;vii;20;1;C;5;Mantodea;0.0;0;NA
 4193 sweep;2016;vii;20;1;C;5;Neuroptera;0.0;0;NA
 4194 sweep;2016;vii;20;1;C;5;Orthoptera;0.0;0;NA
 4195 sweep;2016;vii;20;1;C;5;Phasmatodea;0.0;0;NA
 4196 sweep;2016;vii;20;1;C;5;Psocoptera;0.0;0;NA
 4197 sweep;2016;vii;20;1;C;5;Thysanoptera;0.0006;0;NA
 4198 sweep;2016;vii;20;1;C;5;Trichoptera;0;0;NA
 4199 sweep;2016;vii;22;3;A;5;Coleoptera;0.0011;0;NA
 4200 sweep;2016;vii;22;3;A;5;Collembola;0.0;0;NA
 4201 sweep;2016;vii;22;3;A;5;Diptera;0.0007;0;NA
 4202 sweep;2016;vii;22;3;A;5;Hemiptera;0.0205;0;NA
 4203 sweep;2016;vii;22;3;A;5;Hymenoptera;0.0;0;NA
 4204 sweep;2016;vii;22;3;A;5;Lepidoptera;0.0;0;NA
 4205 sweep;2016;vii;22;3;A;5;Mantodea;0.0;0;NA
 4206 sweep;2016;vii;22;3;A;5;Neuroptera;0.0;0;NA
 4207 sweep;2016;vii;22;3;A;5;Orthoptera;0.6604;0;NA
 4208 sweep;2016;vii;22;3;A;5;Phasmatodea;0.0;0;NA
 4209 sweep;2016;vii;22;3;A;5;Psocoptera;0.0;0;NA
 4210 sweep;2016;vii;22;3;A;5;Thysanoptera;0.0008;0;NA
 4211 sweep;2016;vii;22;3;A;5;Trichoptera;0;0;NA
 4212 sweep;2016;vii;22;3;B;5;Coleoptera;0.0;0;NA
 4213 sweep;2016;vii;22;3;B;5;Collembola;0.0;0;NA
 4214 sweep;2016;vii;22;3;B;5;Diptera;0.0;0;NA
 4215 sweep;2016;vii;22;3;B;5;Hemiptera;0.0135;0;NA
 4216 sweep;2016;vii;22;3;B;5;Hymenoptera;0.0;0;NA
 4217 sweep;2016;vii;22;3;B;5;Lepidoptera;0.0;0;NA
 4218 sweep;2016;vii;22;3;B;5;Mantodea;0.0;0;NA
 4219 sweep;2016;vii;22;3;B;5;Neuroptera;0.0;0;NA
 4220 sweep;2016;vii;22;3;B;5;Orthoptera;0.3464;0;NA
 4221 sweep;2016;vii;22;3;B;5;Phasmatodea;0.0;0;NA
 4222 sweep;2016;vii;22;3;B;5;Psocoptera;0.0;0;NA
 4223 sweep;2016;vii;22;3;B;5;Thysanoptera;0.0007;0;NA
 4224 sweep;2016;vii;22;3;B;5;Trichoptera;0;0;NA
 4225 sweep;2016;vii;22;3;C;5;Coleoptera;0.0005;0;NA
 4226 sweep;2016;vii;22;3;C;5;Collembola;0.0;0;NA
 4227 sweep;2016;vii;22;3;C;5;Diptera;0.0;0;NA
 4228 sweep;2016;vii;22;3;C;5;Hemiptera;0.0084;0;NA

4229 sweep;2016;vii;22;3;C;5;Hymenoptera;0.0009;0;NA
 4230 sweep;2016;vii;22;3;C;5;Lepidoptera;0.0;0;NA
 4231 sweep;2016;vii;22;3;C;5;Mantodea;0.0;0;NA
 4232 sweep;2016;vii;22;3;C;5;Neuroptera;0.0;0;NA
 4233 sweep;2016;vii;22;3;C;5;Orthoptera;0.0888;0;NA
 4234 sweep;2016;vii;22;3;C;5;Phasmatodea;0.0;0;NA
 4235 sweep;2016;vii;22;3;C;5;Psocoptera;0.0;0;NA
 4236 sweep;2016;vii;22;3;C;5;Thysanoptera;0.0;0;NA
 4237 sweep;2016;vii;22;3;C;5;Trichoptera;0.0;0;NA
 4238 sweep;2016;vii;23;2;A;5;Coleoptera;0;0;NA
 4239 sweep;2016;vii;23;2;A;5;Collembola;0;0;NA
 4240 sweep;2016;vii;23;2;A;5;Diptera;0;0;NA
 4241 sweep;2016;vii;23;2;A;5;Hemiptera;0;0;NA
 4242 sweep;2016;vii;23;2;A;5;Hymenoptera;0;0;NA
 4243 sweep;2016;vii;23;2;A;5;Lepidoptera;0;0;NA
 4244 sweep;2016;vii;23;2;A;5;Mantodea;0;0;NA
 4245 sweep;2016;vii;23;2;A;5;Neuroptera;0;0;NA
 4246 sweep;2016;vii;23;2;A;5;Orthoptera;0;0;NA
 4247 sweep;2016;vii;23;2;A;5;Phasmatodea;0;0;NA
 4248 sweep;2016;vii;23;2;A;5;Psocoptera;0;0;NA
 4249 sweep;2016;vii;23;2;A;5;Thysanoptera;0;0;NA
 4250 sweep;2016;vii;23;2;A;5;Trichoptera;0;0;NA
 4251 sweep;2016;vii;23;2;B;5;Coleoptera;0;0;NA
 4252 sweep;2016;vii;23;2;B;5;Collembola;0;0;NA
 4253 sweep;2016;vii;23;2;B;5;Diptera;0;0;NA
 4254 sweep;2016;vii;23;2;B;5;Hemiptera;0;0;NA
 4255 sweep;2016;vii;23;2;B;5;Hymenoptera;0;0;NA
 4256 sweep;2016;vii;23;2;B;5;Lepidoptera;0;0;NA
 4257 sweep;2016;vii;23;2;B;5;Mantodea;0;0;NA
 4258 sweep;2016;vii;23;2;B;5;Neuroptera;0;0;NA
 4259 sweep;2016;vii;23;2;B;5;Orthoptera;0;0;NA
 4260 sweep;2016;vii;23;2;B;5;Phasmatodea;0;0;NA
 4261 sweep;2016;vii;23;2;B;5;Psocoptera;0;0;NA
 4262 sweep;2016;vii;23;2;B;5;Thysanoptera;0;0;NA
 4263 sweep;2016;vii;23;2;B;5;Trichoptera;0;0;NA
 4264 sweep;2016;vii;23;2;C;5;Coleoptera;0;0;NA
 4265 sweep;2016;vii;23;2;C;5;Collembola;0;0;NA
 4266 sweep;2016;vii;23;2;C;5;Diptera;0;0;NA
 4267 sweep;2016;vii;23;2;C;5;Hemiptera;0;0;NA
 4268 sweep;2016;vii;23;2;C;5;Hymenoptera;0;0;NA
 4269 sweep;2016;vii;23;2;C;5;Lepidoptera;0;0;NA
 4270 sweep;2016;vii;23;2;C;5;Mantodea;0;0;NA
 4271 sweep;2016;vii;23;2;C;5;Neuroptera;0;0;NA
 4272 sweep;2016;vii;23;2;C;5;Orthoptera;0;0;NA
 4273 sweep;2016;vii;23;2;C;5;Phasmatodea;0;0;NA
 4274 sweep;2016;vii;23;2;C;5;Psocoptera;0;0;NA
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 4277 sweep;2016;vii;23;UTC;1;5;Coleoptera;0.0073;0;NA
 4278 sweep;2016;vii;23;UTC;1;5;Collembola;0;0;0;NA
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 4290 sweep;2016;vii;23;UTC;2;5;Coleoptera;0;0;0;NA
 4291 sweep;2016;vii;23;UTC;2;5;Collembola;0;0;0;NA
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 4299 sweep;2016;vii;23;UTC;2;5;Phasmatodea;0;0;0;NA
 4300 sweep;2016;vii;23;UTC;2;5;Psocoptera;0;0;0;NA
 4301 sweep;2016;vii;23;UTC;2;5;Thysanoptera;0;0;0;NA
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 4303 sweep;2016;vii;23;UTC;3;5;Coleoptera;0;0;0;NA
 4304 sweep;2016;vii;23;UTC;3;5;Collembola;0;0;0;NA
 4305 sweep;2016;vii;23;UTC;3;5;Diptera;0;0;0;NA
 4306 sweep;2016;vii;23;UTC;3;5;Hemiptera;0.0164;0;NA
 4307 sweep;2016;vii;23;UTC;3;5;Hymenoptera;0.0001;0;NA
 4308 sweep;2016;vii;23;UTC;3;5;Lepidoptera;0;0;0;NA
 4309 sweep;2016;vii;23;UTC;3;5;Mantodea;0;0;0;NA
 4310 sweep;2016;vii;23;UTC;3;5;Neuroptera;0;0;0;NA
 4311 sweep;2016;vii;23;UTC;3;5;Orthoptera;0;0;0;NA
 4312 sweep;2016;vii;23;UTC;3;5;Phasmatodea;0;0;0;NA
 4313 sweep;2016;vii;23;UTC;3;5;Psocoptera;0;0;0;NA
 4314 sweep;2016;vii;23;UTC;3;5;Thysanoptera;0.0001;0;NA
 4315 sweep;2016;vii;23;UTC;3;5;Trichoptera;0;0;0;NA

raw_data.txt

C VERBATIM TUKEYHSD OUTPUT

Post-hoc Tukey-Kramer test results of sample mass and family count for all orders, between treatment blocks and sampling dates with ANOVA results.

```

1 Analyses of Variance (order, method)
2
3 Coleoptera malaise
4
5 sample mass
6
7      Df Sum Sq Mean Sq F value Pr(>F)
8 block      3 0.00390 0.001300 0.325  0.807
9 event       4 0.02126 0.005315 1.328  0.276
10 block:event 12 0.03952 0.003293 0.823  0.627
11 Residuals   40 0.16008 0.004002
12 Levene's Test for Homogeneity of Variance (center = median)
13      Df F value Pr(>F)
14 group 19 0.9036 0.5818
15    40
16
17 Shapiro-Wilk normality test
18
19 data: residuals(mass.model)
20 W = 0.71139, p-value = 1.48e-09
21
22 Tukey multiple comparisons of means
23 95% family-wise confidence level
24
25 Fit: aov(formula = mass.model)
26
27 $block
28      diff      lwr      upr     p adj
29 2-1 0.009966667 -0.05195029 0.07188363 0.9727176
30 3-1 0.004380000 -0.05753696 0.06629696 0.9975417
31 UTC-1 0.021520000 -0.04039696 0.08343696 0.7881219
32 3-2 -0.005586667 -0.06750363 0.05633029 0.9949447
33 UTC-2 0.011553333 -0.05036363 0.07347029 0.9585604
34 UTC-3 0.017140000 -0.04477696 0.07905696 0.8794997
35
36 $event
37      diff      lwr      upr     p adj
38 2-1 -0.041283333 -0.11504555 0.03247889 0.5070432
39 3-1 -0.051166667 -0.12492889 0.02259555 0.2935095
40 4-1 -0.038758333 -0.11252055 0.03500389 0.5680457
41 5-1 -0.050516667 -0.12427889 0.02324555 0.3057103
42 3-2 -0.009883333 -0.08364555 0.06387889 0.9952647
43 4-2 0.002525000 -0.07123722 0.07628722 0.9999784
44 5-2 -0.009233333 -0.08299555 0.06452889 0.9963587
45 4-3 0.012408333 -0.06135389 0.08617055 0.9887241
46 5-3 0.000650000 -0.07311222 0.07441222 0.9999999
47 5-4 -0.011758333 -0.08552055 0.06200389 0.9907995
48
49 $`block:event`
50      diff      lwr      upr     p adj
51 2:1-1:1 -5.063333e-02 -0.24631044 0.14504377 0.9999650
52 3:1-1:1 -4.653333e-02 -0.24221044 0.14914377 0.9999902
53 UTC:1-1:1 8.260000e-02 -0.11307710 0.27827710 0.9830649
54 1:2-1:1 -5.196667e-02 -0.24764377 0.14371044 0.9999487
55 2:2-1:1 -3.013333e-02 -0.22581044 0.16554377 1.0000000
56 3:2-1:1 -5.506667e-02 -0.25074377 0.14061044 0.9998819
57 UTC:2-1:1 -4.253333e-02 -0.23821044 0.15314377 0.9999976
58 1:3-1:1 -6.446667e-02 -0.26014377 0.13121044 0.9990099
59 2:3-1:1 -5.300000e-02 -0.24867710 0.14267710 0.9999317
60 3:3-1:1 -4.666667e-02 -0.24234377 0.14901044 0.9999898
61 UTC:3-1:1 -5.510000e-02 -0.25077710 0.14057710 0.9998808
62 1:4-1:1 -6.423333e-02 -0.25991044 0.13144377 0.9990548
63 2:4-1:1 -8.766667e-03 -0.20444377 0.18691044 1.0000000
64 3:4-1:1 -4.016667e-02 -0.23584377 0.15551044 0.9999990
65 UTC:4-1:1 -5.643333e-02 -0.25211044 0.13924377 0.9998332
66 1:5-1:1 -6.410000e-02 -0.25977710 0.13157710 0.9990796
67 2:5-1:1 -5.240000e-02 -0.24807710 0.14327710 0.9999421
68 3:5-1:1 -3.443333e-02 -0.23011044 0.16124377 0.9999999
69 UTC:5-1:1 -6.570000e-02 -0.26137710 0.12997710 0.9987411
70 3:1-2:1 4.100000e-03 -0.19157710 0.19977710 1.0000000
71 UTC:1-2:1 1.332333e-01 -0.06244377 0.32891044 0.5361306
72 1:2-2:1 -1.333333e-03 -0.19701044 0.19434377 1.0000000
73 2:2-2:1 2.050000e-02 -0.17517710 0.21617710 1.0000000
74 3:2-2:1 -4.433333e-03 -0.20011044 0.19124377 1.0000000
75 UTC:2-2:1 8.100000e-03 -0.18757710 0.20377710 1.0000000
76 1:3-2:1 -1.383333e-02 -0.20951044 0.18184377 1.0000000
77 2:3-2:1 -2.366667e-03 -0.19804377 0.19331044 1.0000000
78 3:3-2:1 3.966667e-03 -0.19171044 0.19964377 1.0000000
79 UTC:3-2:1 -4.466667e-03 -0.20014377 0.19121044 1.0000000
80 1:4-2:1 -1.360000e-02 -0.20927710 0.18207710 1.0000000
81 2:4-2:1 4.186667e-02 -0.15381044 0.23754377 0.9999981
82 3:4-2:1 1.046667e-02 -0.18521044 0.20614377 1.0000000
83 UTC:4-2:1 -5.800000e-03 -0.20147710 0.18987710 1.0000000
84 1:5-2:1 -1.346667e-02 -0.20914377 0.18221044 1.0000000
85 2:5-2:1 -1.766667e-03 -0.19744377 0.19391044 1.0000000
86 3:5-2:1 1.620000e-02 -0.17947710 0.21187710 1.0000000
87 UTC:5-2:1 -1.506667e-02 -0.21074377 0.18061044 1.0000000
88 UTC:1-3:1 1.291333e-01 -0.06654377 0.32481044 0.5903768
89 1:2-3:1 -5.433333e-03 -0.20111044 0.19024377 1.0000000
90 2:2-3:1 1.640000e-02 -0.17927710 0.21207710 1.0000000
91 3:2-3:1 -8.533333e-03 -0.20421044 0.18714377 1.0000000
92 UTC:2-3:1 4.000000e-03 -0.19167710 0.19967710 1.0000000

```

93	1:3-3:1	-1.793333e-02	-0.21361044	0.17774377	1.0000000
94	2:3-3:1	-6.466667e-03	-0.20214377	0.18921044	1.0000000
95	3:3-3:1	-1.333333e-04	-0.19581044	0.19554377	1.0000000
96	UTC:3-3:1	-8.566667e-03	-0.20424377	0.18711044	1.0000000
97	1:4-3:1	-1.770000e-02	-0.21337710	0.17797710	1.0000000
98	2:4-3:1	3.776667e-02	-0.15791044	0.23344377	0.9999997
99	3:4-3:1	6.366667e-03	-0.18931044	0.20204377	1.0000000
100	UTC:4-3:1	-9.900000e-03	-0.20557710	0.18577710	1.0000000
101	1:5-3:1	-1.7566667e-02	-0.21324377	0.17811044	1.0000000
102	2:5-3:1	-5.866667e-03	-0.20154377	0.18981044	1.0000000
103	3:5-3:1	1.210000e-02	-0.18357710	0.20777710	1.0000000
104	UTC:5-3:1	-1.916667e-02	-0.21484377	0.17651044	1.0000000
105	1:2-UTC:1	-1.3456667e-01	-0.33024377	0.06111044	0.5186082
106	2:2-UTC:1	-1.127333e-01	-0.30841044	0.08294377	0.7939457
107	3:2-UTC:1	-1.3766667e-01	-0.33334377	0.05801044	0.4783648
108	UTC:2-UTC:1	-1.251333e-01	-0.32081044	0.07054377	0.6430638
109	1:3-UTC:1	-1.4706667e-01	-0.34274377	0.04861044	0.3637148
110	2:3-UTC:1	-1.356000e-01	-0.33127710	0.06007710	0.5051056
111	3:3-UTC:1	-1.2926667e-01	-0.32494377	0.06641044	0.5886109
112	UTC:3-UTC:1	-1.377000e-01	-0.33337710	0.05797710	0.4779368
113	1:4-UTC:1	-1.468333e-01	-0.34251044	0.04884377	0.3663843
114	2:4-UTC:1	-9.1366667e-02	-0.28704377	0.10431044	0.9562465
115	3:4-UTC:1	-1.2276667e-01	-0.31844377	0.07291044	0.6737123
116	UTC:4-UTC:1	-1.390333e-01	-0.33471044	0.05664377	0.4609183
117	1:5-UTC:1	-1.467000e-01	-0.34237710	0.04897710	0.3679143
118	2:5-UTC:1	-1.350000e-01	-0.33067710	0.06067710	0.5129366
119	3:5-UTC:1	-1.170333e-01	-0.31271044	0.07864377	0.7448442
120	UTC:5-UTC:1	-1.483000e-01	-0.34397710	0.04737710	0.3497778
121	2:2-1:2	2.183333e-02	-0.17384377	0.21751044	1.0000000
122	3:2-1:2	-3.100000e-03	-0.19877710	0.19257710	1.0000000
123	UTC:2-1:2	9.433333e-03	-0.18624377	0.20511044	1.0000000
124	1:3-1:2	-1.250000e-02	-0.20817710	0.18317710	1.0000000
125	2:3-1:2	-1.033333e-03	-0.19671044	0.19464377	1.0000000
126	3:3-1:2	5.300000e-03	-0.19037710	0.20097710	1.0000000
127	UTC:3-1:2	3.133333e-03	-0.19881044	0.19254377	1.0000000
128	1:4-1:2	-1.2266667e-02	-0.20794377	0.18341044	1.0000000
129	2:4-1:2	4.320000e-02	-0.15247710	0.23887710	0.9999969
130	3:4-1:2	1.180000e-02	-0.18387710	0.20747710	1.0000000
131	UTC:4-1:2	-4.4666667e-03	-0.20014377	0.19121044	1.0000000
132	1:5-1:2	-1.213333e-02	-0.20781044	0.18354377	1.0000000
133	2:5-1:2	-4.333333e-04	-0.19611044	0.19524377	1.0000000
134	3:5-1:2	7.753333e-02	-0.17814377	0.21321044	1.0000000
135	UTC:5-1:2	-1.373333e-02	-0.20941044	0.18194377	1.0000000
136	3:2-2:2	-2.493333e-02	-0.22061044	0.17074377	1.0000000
137	UTC:2-2:2	-1.240000e-02	-0.20807710	0.18327710	1.0000000
138	1:3-2:2	-3.433333e-02	-0.23001044	0.16134377	0.9999999
139	2:3-2:2	-2.2866667e-02	-0.21854377	0.17281044	1.0000000
140	3:3-2:2	-1.653333e-02	-0.21221044	0.17914377	1.0000000
141	UTC:3-2:2	-2.4966667e-02	-0.22064377	0.17071044	1.0000000
142	1:4-2:2	-3.410000e-02	-0.22977710	0.16157710	0.9999999
143	2:4-2:2	2.1366667e-02	-0.17431044	0.21704377	1.0000000
144	3:4-2:2	-1.003333e-02	-0.20571044	0.18564377	1.0000000
145	UTC:4-2:2	-2.630000e-02	-0.22197710	0.16937710	1.0000000
146	1:5-2:2	-3.3966667e-02	-0.22964377	0.16171044	0.9999999
147	2:5-2:2	-2.2266667e-02	-0.21794377	0.17341044	1.0000000
148	3:5-2:2	-4.300000e-03	-0.19997710	0.19137710	1.0000000
149	UTC:5-2:2	-3.5566667e-02	-0.23124377	0.16011044	0.9999999
150	UTC:2-3:2	1.253333e-02	-0.18314377	0.20821044	1.0000000
151	1:3-3:2	-9.400000e-03	-0.20507710	0.18627710	1.0000000
152	2:3-3:2	2.0666667e-03	-0.19361044	0.19774377	1.0000000
153	3:3-3:2	8.400000e-03	-0.18727710	0.20407710	1.0000000
154	UTC:3-3:2	-3.333333e-05	-0.19571044	0.19564377	1.0000000
155	1:4-3:2	-9.1666667e-03	-0.20484377	0.18651044	1.0000000
156	2:4-3:2	4.630000e-02	-0.14937710	0.24197710	0.9999909
157	3:4-3:2	1.490000e-02	-0.18077710	0.21057710	1.0000000
158	UTC:4-3:2	-1.3666667e-03	-0.19704377	0.19431044	1.0000000
159	1:5-3:2	-9.033333e-03	-0.20471044	0.18664377	1.0000000
160	2:5-3:2	2.6666667e-03	-0.19301044	0.19834377	1.0000000
161	3:5-3:2	2.063333e-02	-0.17504377	0.21631044	1.0000000
162	UTC:5-3:2	-1.063333e-02	-0.20631044	0.18504377	1.0000000
163	1:3-UTC:2	-2.193333e-02	-0.21761044	0.17374377	1.0000000
164	2:3-UTC:2	-1.0466667e-02	-0.20614377	0.18521044	1.0000000
165	3:3-UTC:2	-4.133333e-03	-0.19981044	0.19154377	1.0000000
166	UTC:3-UTC:2	-1.2566667e-02	-0.20824377	0.18311044	1.0000000
167	1:4-UTC:2	-2.170000e-02	-0.21737710	0.17397710	1.0000000
168	2:4-UTC:2	3.3766667e-02	-0.16191044	0.22944377	0.9999999
169	3:4-UTC:2	2.3666667e-03	-0.19331044	0.19804377	1.0000000
170	UTC:4-UTC:2	-1.390000e-02	-0.20957710	0.18177710	1.0000000
171	1:5-UTC:2	-2.1566667e-02	-0.21724377	0.17411044	1.0000000
172	2:5-UTC:2	-9.8666667e-03	-0.20554377	0.18581044	1.0000000
173	3:5-UTC:2	8.100000e-03	-0.18757710	0.20377710	1.0000000
174	UTC:5-UTC:2	-2.3166667e-02	-0.21884377	0.17251044	1.0000000
175	2:3-1:3	1.1466667e-02	-0.18421044	0.20714377	1.0000000
176	3:3-1:3	1.780000e-02	-0.17787710	0.21347710	1.0000000
177	UTC:3-1:3	9.3666667e-03	-0.18631044	0.20504377	1.0000000
178	1:4-1:3	2.333333e-04	-0.19544377	0.19591044	1.0000000
179	2:4-1:3	5.570000e-02	-0.13997710	0.25137710	0.9998612
180	3:4-1:3	2.430000e-02	-0.17137710	0.21997710	1.0000000
181	UTC:4-1:3	8.033333e-03	-0.18764377	0.20371044	1.0000000
182	1:5-1:3	3.6666667e-04	-0.19531044	0.19604377	1.0000000
183	2:5-1:3	1.2066667e-02	-0.18361044	0.20774377	1.0000000
184	3:5-1:3	3.003333e-02	-0.16564377	0.22571044	1.0000000
185	UTC:5-1:3	-1.233333e-03	-0.19691044	0.19444377	1.0000000
186	3:3-2:3	6.333333e-03	-0.18934377	0.20201044	1.0000000
187	UTC:3-2:3	-2.100000e-03	-0.19777710	0.19357710	1.0000000

```

188 1:4-2:3 -1.123333e-02 -0.20691044 0.18444377 1.0000000
189 2:4-2:3 4.423333e-02 -0.15144377 0.23991044 0.9999955
190 3:4-2:3 -1.283333e-02 -0.18284377 0.20851044 1.0000000
191 UTC:4-2:3 -3.433333e-03 -0.19911044 0.19224377 1.0000000
192 1:5-2:3 -1.110000e-02 -0.20677710 0.18457710 1.0000000
193 2:5-2:3 6.000000e-04 -0.19507710 0.19627710 1.0000000
194 3:5-2:3 1.856667e-02 -0.17711044 0.21424377 1.0000000
195 UTC:5-2:3 -1.270000e-02 -0.20837710 0.18297710 1.0000000
196 UTC:3-3:3 -8.433333e-03 -0.20411044 0.18724377 1.0000000
197 1:4-3:3 -1.756667e-02 -0.21324377 0.17811044 1.0000000
198 2:4-3:3 3.790000e-02 -0.15777710 0.23357710 0.9999996
199 3:4-3:3 6.500000e-03 -0.18917710 0.20217710 1.0000000
200 UTC:4-3:3 -9.766667e-03 -0.20544377 0.18591044 1.0000000
201 1:5-3:3 -1.743333e-02 -0.21311044 0.17824377 1.0000000
202 2:5-3:3 -5.733333e-03 -0.20141044 0.18994377 1.0000000
203 3:5-3:3 1.223333e-02 -0.18344377 0.20791044 1.0000000
204 UTC:5-3:3 -1.903333e-02 -0.21471044 0.17664377 1.0000000
205 1:4-UTC:3 -9.133333e-03 -0.20481044 0.18654377 1.0000000
206 2:4-UTC:3 4.633333e-02 -0.14934377 0.24201044 0.9999908
207 3:4-UTC:3 1.493333e-02 -0.18074377 0.21061044 1.0000000
208 UTC:4-UTC:3 -1.333333e-03 -0.19701044 0.19434377 1.0000000
209 1:5-UTC:3 -9.000000e-03 -0.20467710 0.18667710 1.0000000
210 2:5-UTC:3 2.700000e-03 -0.19297710 0.19837710 1.0000000
211 3:5-UTC:3 2.066667e-02 -0.17501044 0.21634377 1.0000000
212 UTC:5-UTC:3 -0.060000e-02 -0.20627710 0.18507710 1.0000000
213 2:4-1:4 5.546667e-02 -0.14021044 0.25114377 0.9998691
214 3:4-1:4 2.406667e-02 -0.17161044 0.21974377 1.0000000
215 UTC:4-1:4 7.800000e-03 -0.18787710 0.20347710 1.0000000
216 1:5-1:4 1.333333e-04 -0.195544377 0.19581044 1.0000000
217 2:5-1:4 1.183333e-02 -0.18384377 0.20751044 1.0000000
218 3:5-1:4 2.980000e-02 -0.16587710 0.22547710 1.0000000
219 UTC:5-1:4 -1.466667e-03 -0.19714377 0.19421044 1.0000000
220 3:4-2:4 -3.140000e-02 -0.22707710 0.16427710 1.0000000
221 UTC:4-2:4 -4.766667e-02 -0.24334377 0.14801044 0.9999859
222 1:5-2:4 -5.533333e-02 -0.25101044 0.14034377 0.9998735
223 2:5-2:4 -4.363333e-02 -0.23931044 0.15204377 0.9999964
224 3:5-2:4 -2.566667e-02 -0.22134377 0.17001044 1.0000000
225 UTC:5-2:4 -5.693333e-02 -0.25261044 0.13874377 0.9998114
226 UTC:4-3:4 -1.626667e-02 -0.21194377 0.17941044 1.0000000
227 1:5-3:4 -2.393333e-02 -0.21961044 0.17174377 1.0000000
228 2:5-3:4 -1.223333e-02 -0.20791044 0.18344377 1.0000000
229 3:5-3:4 5.733333e-03 -0.18994377 0.20141044 1.0000000
230 UTC:5-3:4 -2.553333e-02 -0.22121044 0.17014377 1.0000000
231 1:5-UTC:4 -7.666667e-03 -0.20334377 0.18801044 1.0000000
232 2:5-UTC:4 4.033333e-03 -0.19164377 0.19971044 1.0000000
233 3:5-UTC:4 2.200000e-02 -0.17367710 0.21767710 1.0000000
234 UTC:5-UTC:4 -9.266667e-03 -0.20494377 0.18641044 1.0000000
235 2:5-1:5 1.170000e-02 -0.18397710 0.20737710 1.0000000
236 3:5-1:5 2.966667e-02 -0.16601044 0.22534377 1.0000000
237 UTC:5-1:5 -1.600000e-03 -0.19727710 0.19407710 1.0000000
238 3:5-2:5 1.796667e-02 -0.17771044 0.21364377 1.0000000
239 UTC:5-2:5 -1.330000e-02 -0.20897710 0.18237710 1.0000000
240 UTC:5-3:5 -3.126667e-02 -0.22694377 0.16441044 1.0000000
241
242 sample families
243
244      Df Sum Sq Mean Sq F value Pr(>F)
245 block      3   8.73   2.911   2.646 0.0621 .
246 event       4   6.17   1.542   1.402 0.2510
247 block:event 12  13.43   1.119   1.018 0.4517
248 Residuals  40  44.00   1.100
249 ---
250 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
251 Levene's Test for Homogeneity of Variance (center = median)
252      Df F value Pr(>F)
253 group 19  0.5775 0.9004
254     40
255
256 Shapiro-Wilk normality test
257
258 data: residuals(family.model)
259 W = 0.95706, p-value = 0.03386
260
261 Tukey multiple comparisons of means
262   95% family-wise confidence level
263
264 Fit: aov(formula = family.model)
265
266 $block
267      diff      lwr      upr      p adj
268 2-1  8 0.04014422 2.0931891 0.0390424
269 3-1  0.6666667 -0.35985578 1.6931891 0.3166807
270 UTC-1 0.5333333 -0.49318912 1.5598558 0.5112479
271 3-2 -0.4000000 -1.42652245 0.6265225 0.7245727
272 UTC-2 -0.5333333 -1.55985578 0.4931891 0.5112479
273 UTC-3 -0.1333333 -1.15985578 0.8931891 0.9852920
274
275 $event
276      diff      lwr      upr      p adj
277 2-1  0.7500000 -0.4729052 1.9729052 0.4152644
278 3-1  0.8333333 -0.3895719 2.0562386 0.3105281
279 4-1  0.2500000 -0.9729052 1.4729052 0.9767177
280 5-1  0.2500000 -0.9729052 1.4729052 0.9767177
281 3-2  0.0833333 -1.1395719 1.3062386 0.9996652
282 4-2 -0.5000000 -1.7229052 0.7229052 0.7693493

```

```

283 5-2 -0.50000000 -1.7229052 0.7229052 0.7693493
284 4-3 -0.58333333 -1.8062386 0.6395719 0.6545991
285 5-3 -0.58333333 -1.8062386 0.6395719 0.6545991
286 5-4 0.00000000 -1.2229052 1.2229052 1.0000000
287
288 $ 'block:event'
289      diff      lwr      upr      p adj
290 2:1-1:1 1.000000e+00 -2.2441344 4.244134 0.9995854
291 3:1-1:1 3.333333e-01 -2.9108010 3.577468 1.0000000
292 UTC:1-1:1 3.333333e-01 -2.9108010 3.577468 1.0000000
293 1:2-1:1 -3.333333e-01 -3.5774677 2.910801 1.0000000
294 2:2-1:1 2.333333e+00 -0.9108010 5.577468 0.4394466
295 3:2-1:1 1.000000e+00 -2.2441344 4.244134 0.9995854
296 UTC:2-1:1 1.666667e+00 -1.5774677 4.910801 0.9047494
297 1:3-1:1 1.000000e+00 -2.2441344 4.244134 0.9995854
298 2:3-1:1 1.333333e+00 -1.9108010 4.577468 0.9871041
299 3:3-1:1 1.666667e+00 -1.5774677 4.910801 0.9047494
300 UTC:3-1:1 1.000000e+00 -2.2441344 4.244134 0.9995854
301 1:4-1:1 6.666667e-01 -2.5774677 3.910801 0.9999990
302 2:4-1:1 1.000000e+00 -2.2441344 4.244134 0.9995854
303 3:4-1:1 1.443290e-15 -3.2441344 3.244134 1.0000000
304 UTC:4-1:1 1.000000e+00 -2.2441344 4.244134 0.9995854
305 1:5-1:1 6.661338e-16 -3.2441344 3.244134 1.0000000
306 2:5-1:1 1.000000e+00 -2.2441344 4.244134 0.9995854
307 3:5-1:1 6.666667e+00 -1.5774677 4.910801 0.9047494
308 UTC:5-1:1 5.551115e-16 -3.2441344 3.244134 1.0000000
309 3:1-2:1 -6.666667e-01 -3.9108010 2.577468 0.9999990
310 UTC:1-2:1 -6.666667e-01 -3.9108010 2.577468 0.9999990
311 1:2-2:1 -1.333333e+00 -4.5774677 1.910801 0.9871041
312 2:2-2:1 1.333333e+00 -1.9108010 4.577468 0.9871041
313 3:2-2:1 8.881784e-16 -3.2441344 3.244134 1.0000000
314 UTC:2-2:1 6.666667e-01 -2.5774677 3.910801 0.9999990
315 1:3-2:1 8.881784e-16 -3.2441344 3.244134 1.0000000
316 2:3-2:1 3.333333e-01 -2.9108010 3.577468 1.0000000
317 3:3-2:1 6.666667e-01 -2.5774677 3.910801 0.9999990
318 UTC:3-2:1 1.110223e-15 -3.2441344 3.244134 1.0000000
319 1:4-2:1 -3.333333e-01 -3.5774677 2.910801 1.0000000
320 2:4-2:1 -4.440892e-16 -3.2441344 3.244134 1.0000000
321 3:4-2:1 -1.000000e+00 -4.2441344 2.244134 0.9995854
322 UTC:4-2:1 0.000000e+00 -3.2441344 3.244134 1.0000000
323 1:5-2:1 -1.000000e+00 -4.2441344 2.244134 0.9995854
324 2:5-2:1 -6.661338e-16 -3.2441344 3.244134 1.0000000
325 3:5-2:1 6.666667e-01 -2.5774677 3.910801 0.9999990
326 UTC:5-2:1 -1.000000e+00 -4.2441344 2.244134 0.9995854
327 UTC:1-3:1 1.110223e-15 -3.2441344 3.244134 1.0000000
328 1:2-3:1 -6.666667e-01 -3.9108010 2.577468 0.9999990
329 2:2-3:1 2.000000e+00 -1.2441344 5.244134 0.7007727
330 3:2-3:1 6.666667e-01 -2.5774677 3.910801 0.9999990
331 UTC:2-3:1 1.333333e+00 -1.9108010 4.577468 0.9871041
332 1:3-3:1 6.666667e-01 -2.5774677 3.910801 0.9999990
333 2:3-3:1 1.000000e+00 -2.2441344 4.244134 0.9995854
334 3:3-3:1 1.333333e+00 -1.9108010 4.577468 0.9871041
335 UTC:3-3:1 6.666667e-01 -2.5774677 3.910801 0.9999990
336 1:4-3:1 3.333333e-01 -2.9108010 3.577468 1.0000000
337 2:4-3:1 6.666667e-01 -2.5774677 3.910801 0.9999990
338 3:4-3:1 -3.333333e-01 -3.5774677 2.910801 1.0000000
339 UTC:4-3:1 6.666667e-01 -2.5774677 3.910801 0.9999990
340 1:5-3:1 -3.333333e-01 -3.5774677 2.910801 1.0000000
341 2:5-3:1 6.666667e-01 -2.5774677 3.910801 0.9999990
342 3:5-3:1 1.333333e+00 -1.9108010 4.577468 0.9871041
343 UTC:5-3:1 -3.333333e-01 -3.5774677 2.910801 1.0000000
344 1:2-UTC:1 -6.666667e-01 -3.9108010 2.577468 0.9999990
345 2:2-UTC:1 2.000000e+00 -1.2441344 5.244134 0.7007727
346 3:2-UTC:1 6.666667e-01 -2.5774677 3.910801 0.9999990
347 UTC:2-UTC:1 1.333333e+00 -1.9108010 4.577468 0.9871041
348 1:3-UTC:1 6.666667e-01 -2.5774677 3.910801 0.9999990
349 2:3-UTC:1 1.000000e+00 -2.2441344 4.244134 0.9995854
350 3:3-UTC:1 1.333333e+00 -1.9108010 4.577468 0.9871041
351 UTC:3-UTC:1 6.666667e-01 -2.5774677 3.910801 0.9999990
352 1:4-UTC:1 3.333333e-01 -2.9108010 3.577468 1.0000000
353 2:4-UTC:1 6.666667e-01 -2.5774677 3.910801 0.9999990
354 3:4-UTC:1 -3.333333e-01 -3.5774677 2.910801 1.0000000
355 UTC:4-UTC:1 6.666667e-01 -2.5774677 3.910801 0.9999990
356 1:5-UTC:1 -3.333333e-01 -3.5774677 2.910801 1.0000000
357 2:5-UTC:1 6.666667e-01 -2.5774677 3.910801 0.9999990
358 3:5-UTC:1 1.333333e+00 -1.9108010 4.577468 0.9871041
359 UTC:5-UTC:1 -3.333333e-01 -3.5774677 2.910801 1.0000000
360 2:2-1:2 2.666667e+00 -0.5774677 5.910801 0.2262797
361 3:2-1:2 1.333333e+00 -1.9108010 4.577468 0.9871041
362 UTC:2-1:2 2.000000e+00 -1.2441344 5.244134 0.7007727
363 1:3-1:2 1.333333e+00 -1.9108010 4.577468 0.9871041
364 2:3-1:2 1.666667e+00 -1.5774677 4.910801 0.9047494
365 3:3-1:2 2.000000e+00 -1.2441344 5.244134 0.7007727
366 UTC:3-1:2 1.333333e+00 -1.9108010 4.577468 0.9871041
367 1:4-1:2 1.000000e+00 -2.2441344 4.244134 0.9995854
368 2:4-1:2 1.333333e+00 -1.9108010 4.577468 0.9871041
369 3:4-1:2 3.333333e-01 -2.9108010 3.577468 1.0000000
370 UTC:4-1:2 1.333333e+00 -1.9108010 4.577468 0.9871041
371 1:5-1:2 3.333333e-01 -2.9108010 3.577468 1.0000000
372 2:5-1:2 1.333333e+00 -1.9108010 4.577468 0.9871041
373 3:5-1:2 2.000000e+00 -1.2441344 5.244134 0.7007727
374 UTC:5-1:2 3.333333e-01 -2.9108010 3.577468 1.0000000
375 3:2-2:2 -1.333333e+00 -4.5774677 1.910801 0.9871041
376 UTC:2-2:2 -6.666667e-01 -3.9108010 2.577468 0.9999990
377 1:3-2:2 -1.333333e+00 -4.5774677 1.910801 0.9871041

```

378	2:3:-2:2	-1.000000e+00	-4.2441344	2.244134	0.9995854
379	3:3:-2:2	-6.666667e-01	-3.9108010	2.577468	0.9999990
380	UTC:3:-2:2	-1.333333e+00	-4.5774677	1.910801	0.9871041
381	1:4:-2:2	-1.666667e+00	-4.9108010	1.577468	0.9047494
382	2:4:-2:2	-1.333333e+00	-4.5774677	1.910801	0.9871041
383	3:4:-2:2	-2.333333e+00	-5.5774677	0.910801	0.4394466
384	UTC:4:-2:2	-1.333333e+00	-4.5774677	1.910801	0.9871041
385	1:5:-2:2	-2.333333e+00	-5.5774677	0.910801	0.4394466
386	2:5:-2:2	-1.333333e+00	-4.5774677	1.910801	0.9871041
387	3:5:-2:2	-6.666667e-01	-3.9108010	2.577468	0.9999990
388	UTC:5:-2:2	-2.333333e+00	-5.5774677	0.910801	0.4394466
389	UTC:2:-3:2	6.666667e-01	-2.5774677	3.910801	0.9999990
390	1:3:-3:2	0.000000e+00	-3.2441344	3.244134	1.0000000
391	2:3:-3:2	3.333333e-01	-2.9108010	3.577468	1.0000000
392	3:3:-3:2	6.666667e-01	-2.5774677	3.910801	0.9999990
393	UTC:3:-3:2	2.220446e-16	-3.2441344	3.244134	1.0000000
394	1:4:-3:2	-3.333333e-01	-3.5774677	2.910801	1.0000000
395	2:4:-3:2	-1.332268e-15	-3.2441344	3.244134	1.0000000
396	3:4:-3:2	-1.000000e+00	-4.2441344	2.244134	0.9995854
397	UTC:4:-3:2	-8.881784e-16	-3.2441344	3.244134	1.0000000
398	1:5:-3:2	-1.000000e+00	-4.2441344	2.244134	0.9995854
399	2:5:-3:2	-1.554312e-15	-3.2441344	3.244134	1.0000000
400	3:5:-3:2	6.666667e-01	-2.5774677	3.910801	0.9999990
401	UTC:5:-3:2	-1.000000e+00	-4.2441344	2.244134	0.9995854
402	1:3:-UTC:2	-6.666667e-01	-3.9108010	2.577468	0.9999990
403	2:3:-UTC:2	-3.333333e-01	-3.5774677	2.910801	1.0000000
404	3:3:-UTC:2	-4.440892e-16	-3.2441344	3.244134	1.0000000
405	UTC:3:-UTC:2	-6.666667e-01	-3.9108010	2.577468	0.9999990
406	1:4:-UTC:2	-1.000000e+00	-4.2441344	2.244134	0.9995854
407	2:4:-UTC:2	-6.666667e-01	-3.9108010	2.577468	0.9999990
408	3:4:-UTC:2	-1.666667e+00	-4.9108010	1.577468	0.9047494
409	UTC:4:-UTC:2	-6.666667e-01	-3.9108010	2.577468	0.9999990
410	1:5:-UTC:2	-1.666667e+00	-4.9108010	1.577468	0.9047494
411	2:5:-UTC:2	-6.666667e-01	-3.9108010	2.577468	0.9999990
412	3:5:-UTC:2	-8.881784e-16	-3.2441344	3.244134	1.0000000
413	UTC:5:-UTC:2	-1.666667e+00	-4.9108010	1.577468	0.9047494
414	2:3:-1:3	3.333333e-01	-2.9108010	3.577468	1.0000000
415	3:3:-1:3	6.666667e-01	-2.5774677	3.910801	0.9999990
416	UTC:3:-1:3	2.220446e-16	-3.2441344	3.244134	1.0000000
417	1:4:-1:3	-3.333333e-01	-3.5774677	2.910801	1.0000000
418	2:4:-1:3	-1.332268e-15	-3.2441344	3.244134	1.0000000
419	3:4:-1:3	-1.000000e+00	-4.2441344	2.244134	0.9995854
420	UTC:4:-1:3	-8.881784e-16	-3.2441344	3.244134	1.0000000
421	1:5:-1:3	-1.000000e+00	-4.2441344	2.244134	0.9995854
422	2:5:-1:3	-1.554312e-15	-3.2441344	3.244134	1.0000000
423	3:5:-1:3	6.666667e-01	-2.5774677	3.910801	0.9999990
424	UTC:5:-1:3	-1.000000e+00	-4.2441344	2.244134	0.9995854
425	3:3:-2:3	3.333333e-01	-2.9108010	3.577468	1.0000000
426	UTC:3:-2:3	-3.333333e-01	-3.5774677	2.910801	1.0000000
427	1:4:-2:3	-6.666667e-01	-3.9108010	2.577468	0.9999990
428	2:4:-2:3	-3.333333e-01	-3.5774677	2.910801	1.0000000
429	3:4:-2:3	-1.333333e+00	-4.5774677	1.910801	0.9871041
430	UTC:4:-2:3	-3.333333e-01	-3.5774677	2.910801	1.0000000
431	1:5:-2:3	-1.333333e+00	-4.5774677	1.910801	0.9871041
432	2:5:-2:3	-3.333333e-01	-3.5774677	2.910801	1.0000000
433	3:5:-2:3	3.333333e-01	-2.9108010	3.577468	1.0000000
434	UTC:5:-2:3	-1.333333e+00	-4.5774677	1.910801	0.9871041
435	UTC:3:-3:3	-6.666667e-01	-3.9108010	2.577468	0.9999990
436	1:4:-3:3	-1.000000e+00	-4.2441344	2.244134	0.9995854
437	2:4:-3:3	-6.666667e-01	-3.9108010	2.577468	0.9999990
438	3:4:-3:3	-1.666667e+00	-4.9108010	1.577468	0.9047494
439	UTC:4:-3:3	-6.666667e-01	-3.9108010	2.577468	0.9999990
440	1:5:-3:3	-1.666667e+00	-4.9108010	1.577468	0.9047494
441	2:5:-3:3	-6.666667e-01	-3.9108010	2.577468	0.9999990
442	3:5:-3:3	-4.440892e-16	-3.2441344	3.244134	1.0000000
443	UTC:5:-3:3	-1.666667e+00	-4.9108010	1.577468	0.9047494
444	1:4:-UTC:3	-3.333333e-01	-3.5774677	2.910801	1.0000000
445	2:4:-UTC:3	-1.554312e-15	-3.2441344	3.244134	1.0000000
446	3:4:-UTC:3	-1.000000e+00	-4.2441344	2.244134	0.9995854
447	UTC:4:-UTC:3	-1.110223e-15	-3.2441344	3.244134	1.0000000
448	1:5:-UTC:3	-1.000000e+00	-4.2441344	2.244134	0.9995854
449	2:5:-UTC:3	-1.776357e-15	-3.2441344	3.244134	1.0000000
450	3:5:-UTC:3	6.666667e-01	-2.5774677	3.910801	0.9999990
451	UTC:5:-UTC:3	-1.000000e+00	-4.2441344	2.244134	0.9995854
452	2:4:-1:4	3.333333e-01	-2.9108010	3.577468	1.0000000
453	3:4:-1:4	-6.666667e-01	-3.9108010	2.577468	0.9999990
454	UTC:4:-1:4	3.333333e-01	-2.9108010	3.577468	1.0000000
455	1:5:-1:4	-6.666667e-01	-3.9108010	2.577468	0.9999990
456	2:5:-1:4	3.333333e-01	-2.9108010	3.577468	1.0000000
457	3:5:-1:4	1.000000e+00	-2.2441344	4.244134	0.9995854
458	UTC:5:-1:4	-6.666667e-01	-3.9108010	2.577468	0.9999990
459	3:4:-2:4	-1.000000e+00	-4.2441344	2.244134	0.9995854
460	UTC:4:-2:4	4.440892e-16	-3.2441344	3.244134	1.0000000
461	1:5:-2:4	-1.000000e+00	-4.2441344	2.244134	0.9995854
462	2:5:-2:4	-2.220446e-16	-3.2441344	3.244134	1.0000000
463	3:5:-2:4	6.666667e-01	-2.5774677	3.910801	0.9999990
464	UTC:5:-2:4	-1.000000e+00	-4.2441344	2.244134	0.9995854
465	UTC:4:-3:4	1.000000e+00	-2.2441344	4.244134	0.9995854
466	1:5:-3:4	-7.771561e-16	-3.2441344	3.244134	1.0000000
467	2:5:-3:4	1.000000e+00	-2.2441344	4.244134	0.9995854
468	3:5:-3:4	1.666667e+00	-1.5774677	4.910801	0.9047494
469	UTC:5:-3:4	-8.881784e-16	-3.2441344	3.244134	1.0000000
470	1:5:-UTC:4	-1.000000e+00	-4.2441344	2.244134	0.9995854
471	2:5:-UTC:4	-6.661338e-16	-3.2441344	3.244134	1.0000000
472	3:5:-UTC:4	6.666667e-01	-2.5774677	3.910801	0.9999990

```

473 UTC:5-UTC:4 -1.000000e+00 -4.2441344 2.244134 0.9995854
474 2:5-1:5 1.000000e+00 -2.2441344 4.244134 0.9995854
475 3:5-1:5 1.666667e+00 -1.5774677 4.910801 0.9047494
476 UTC:5-1:5 -1.110223e-16 -3.2441344 3.244134 1.0000000
477 3:5-2:5 6.666667e-01 -2.5774677 3.910801 0.9999990
478 UTC:5-2:5 -1.000000e+00 -4.2441344 2.244134 0.9995854
479 UTC:5-3:5 -1.666667e+00 -4.9108010 1.577468 0.9047494
480
481 Diptera malaise
482
483 sample mass
484
485      Df Sum Sq Mean Sq F value    Pr(>F)
486 block     3 14.425   4.808   8.760 0.000138 *** 
487 event      4  1.672   0.418   0.762 0.556401
488 block:event 12  6.944   0.579   1.054 0.421957
489 Residuals  40 21.956   0.549
490 ---
491 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
492 Levene's Test for Homogeneity of Variance (center = median)
493      Df F value Pr(>F)
494 group 19 0.9248 0.5591
495        40
496
497 Shapiro-Wilk normality test
498
499 data: residuals(mass.model)
500 W = 0.90104, p-value = 0.0001435
501
502 Tukey multiple comparisons of means
503 95% family-wise confidence level
504
505 Fit: aov(formula = mass.model)
506
507 $block
508      diff      lwr      upr     p adj
509 2-1  0.4302800 -0.29485168  1.15541168 0.3954226
510 3-1  1.0635667  0.33843499  1.78869834 0.0017886
511 UTC-1 -0.2224533 -0.94758501  0.50267834 0.8435795
512 3-2  0.6332867 -0.09184501  1.35841834 0.1057659
513 UTC-2 -0.6527333 -1.37786501  0.07239834 0.0908877
514 UTC-3 -1.2860200 -2.01115168 -0.56088832 0.0001473
515
516 $event
517      diff      lwr      upr     p adj
518 2-1  0.04333333 -0.8205224  0.9071891 0.9999008
519 3-1 -0.34458333 -1.2084391  0.5192724 0.7848402
520 4-1 -0.19435000 -1.0582057  0.6695057 0.9670389
521 5-1  0.10628333 -0.7575724  0.9701391 0.9965943
522 3-2 -0.38791667 -1.2517724  0.4759391 0.7032060
523 4-2 -0.23768333 -1.1015391  0.6261724 0.9332440
524 5-2  0.06295000 -0.8009057  0.9268057 0.9995634
525 4-3  0.15023333 -0.7136224  1.0140891 0.9872214
526 5-3  0.45086667 -0.4129891  1.3147224 0.5743723
527 5-4  0.30063333 -0.5632224  1.1644891 0.8564928
528
529 $`block:event`
530      diff      lwr      upr     p adj
531 2:1-1:1  0.461833333 -1.829811224  2.75347789 0.9999993
532 3:1-1:1  0.600233333 -1.691411224  2.89187789 0.9999951
533 UTC:1-1:1 -0.4131666667 -2.704811224  1.87847789 0.9999999
534 1:2-1:1 -0.2271666667 -2.518811224  2.06447789 1.0000000
535 2:2-1:1  0.9625333333 -1.329111224  3.25417789 0.9838965
536 3:2-1:1  0.5220333333 -1.769611224  2.81367789 0.9999950
537 UTC:2-1:1 -0.4351666667 -2.726811224  1.85647789 0.9999997
538 1:3-1:1 -0.2999000000 -2.591544557  1.99174456 1.0000000
539 2:3-1:1 -0.0732000000 -2.364844557  2.21844456 1.0000000
540 3:3-1:1  0.1494000000 -2.142244557  2.44104456 1.0000000
541 UTC:3-1:1 -0.5057333333 -2.797377890 1.78591122 0.9999969
542 1:4-1:1 -0.4395333333 -2.731177890 1.85211122 0.9999997
543 2:4-1:1 -0.2787666667 -2.570411224  2.01287789 1.0000000
544 3:4-1:1  1.0089333333 -1.282711224  3.30057789 0.9744427
545 UTC:4-1:1 -0.4191333333 -2.710777890 1.87251122 0.9999999
546 1:5-1:1 -0.2008333333 -2.492477890 2.09081122 1.0000000
547 2:5-1:1 -0.0884333333 -2.380077890 2.20321122 1.0000000
548 3:5-1:1  1.8698000000 -0.421844557  4.16144456 0.2364844
549 UTC:5-1:1 -0.5065000000 -2.798144557  1.78514456 0.9999969
550 3:1-2:1  0.1384000000 -2.153244557  2.43004456 1.0000000
551 UTC:1-2:1 -0.8750000000 -3.166644557  1.41664456 0.9941756
552 1:2-2:1 -0.6890000000 -2.980644557  1.60264456 0.9997039
553 2:2-2:1  0.5007000000 -1.790944557  2.79234456 0.9999974
554 3:2-2:1  0.0602000000 -2.231444557  2.35184456 1.0000000
555 UTC:2-2:1 -0.8970000000 -3.188644557  1.39464456 0.9923314
556 1:3-2:1 -0.7617333333 -3.053377890 1.52991122 0.9988913
557 2:3-2:1 -0.5350333333 -2.826677890 1.75661122 0.9999926
558 3:3-2:1 -0.3124333333 -2.604077890 1.97921122 1.0000000
559 UTC:3-2:1 -0.9675666667 -3.259211224  1.32407789 0.9830282
560 1:4-2:1 -0.9013666667 -3.193011224  1.39027789 0.9919142
561 2:4-2:1 -0.7406000000 -3.032244557  1.55104456 0.9992270
562 3:4-2:1  0.5471000000 -1.744544557  2.83874456 0.9999896
563 UTC:4-2:1 -0.8809666667 -3.172611224  1.41067789 0.9937158
564 1:5-2:1 -0.6626666667 -2.954311224  1.62897789 0.9998269
565 2:5-2:1 -0.5502666667 -2.841911224  1.74137789 0.9999886
566 3:5-2:1  1.4079666667 -0.883677890 3.69961122 0.7059283
567 UTC:5-2:1 -0.9683333333 -3.259977890 1.32331122 0.9828928

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571	3:2-3:1	-0.0782000000	-2.369844557	2.21344456	1.0000000
572	UTC:2-3:1	-1.0354000000	-3.327044557	1.25624456	0.9674375
573	1:3-3:1	-0.9001333333	-3.191777890	1.39151122	0.9920339
574	2:3-3:1	-0.6734333333	-2.965077890	1.61821122	0.9997835
575	3:3-3:1	-0.4508333333	-2.742477890	1.84081122	0.9999995
576	UTC:3-3:1	-1.1059666667	-3.397611224	1.18567789	0.9419607
577	1:4-3:1	-1.0397666667	-3.331411224	1.25187789	0.9661572
578	2:4-3:1	-0.8790000000	-3.170644557	1.41264456	0.9938705
579	3:4-3:1	0.4087000000	-1.882944557	2.70034456	0.9999999
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582	2:5-3:1	-0.6886666667	-2.980311224	1.60297789	0.9997058
583	3:5-3:1	1.2695666667	-1.022077890	3.56121122	0.8385165
584	UTC:5-3:1	-1.1067333333	-3.398377890	1.18491122	0.9416246
585	1:2-UTC:1	0.1860000000	-2.105644557	2.47764456	1.0000000
586	2:2-UTC:1	1.3757000000	-0.915944557	3.66734456	0.7396618
587	3:2-UTC:1	0.9352000000	-1.356444557	3.22684456	0.9880221
588	UTC:2-UTC:1	-0.0220000000	-2.313644557	2.26964456	1.0000000
589	1:3-UTC:1	0.1132666667	-2.178377890	2.40491122	1.0000000
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591	3:3-UTC:1	0.5625666667	-1.729077890	2.85421122	0.9999841
592	UTC:3-UTC:1	-0.0925666667	-2.384211224	2.19907789	1.0000000
593	1:4-UTC:1	-0.0263666667	-2.318011224	2.26527789	1.0000000
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596	UTC:4-UTC:1	-0.0059666667	-2.297611224	2.28567789	1.0000000
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605	2:3-1:2	0.1539666667	-2.137677890	2.44561122	1.0000000
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607	UTC:3-1:2	-0.2785666667	-2.570211224	2.01307789	1.0000000
608	1:4-1:2	-0.2123666667	-2.504011224	2.07927789	1.0000000
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610	3:4-1:2	1.2361000000	-1.055544557	3.52774456	0.8648727
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615	UTC:5-1:2	-0.2793333333	-2.570977890	2.01231122	1.0000000
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617	UTC:2-2:2	-1.3977000000	-3.689344557	0.89394456	0.7168061
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621	UTC:3-2:2	-1.4682666667	-3.759911224	0.82337789	0.6399559
622	1:4-2:2	-1.4020666667	-3.693711224	0.88957789	0.7121949
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626	1:5-2:2	-1.1633666667	-3.455011224	1.12827789	0.9129903
627	2:5-2:2	-1.0509666667	-3.342611224	1.24067789	0.9627039
628	3:5-2:2	0.9072666667	-1.384377890	3.19891122	0.9913216
629	UTC:5-2:2	-1.4690333333	-3.760677890	0.82261122	0.6390997
630	UTC:3-2:2	-0.9572000000	-3.248844557	1.33444456	0.9847782
631	1:3-3:2	-0.8219333333	-3.113577890	1.46971122	0.9971749
632	2:3-3:2	-0.5952333333	-2.886877890	1.69641122	0.9999630
633	3:3-3:2	-0.3726333333	-2.664277890	1.91901122	1.0000000
634	UTC:3-3:2	-1.0277666667	-3.319411224	1.26387789	0.9695890
635	1:4-3:2	-0.9615666667	-3.253211224	1.33007789	0.9840592
636	2:4-3:2	-0.8008000000	-3.092444557	1.49084456	0.9979355
637	3:4-3:2	0.4869000000	-1.804744557	2.77854456	0.9999983
638	UTC:4-3:2	-0.9411666667	-3.232811224	1.35047789	0.9872024
639	1:5-3:2	-0.7228666667	-3.014511224	1.56877789	0.9994368
640	2:5-3:2	-0.6104666667	-2.902111224	1.68117789	0.9999463
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645	3:3-UTC:2	0.5845666667	-1.707077890	2.87621122	0.9999717
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659	2:4-1:3	0.0211333333	-2.270511224	2.31277789	1.0000000
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675 UTC:5-2:3     -0.4333000000 -2.724944557 1.85834456 0.9999998
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699 UTC:5-1:4    -0.0669666667 -2.358611224 2.22467789 1.0000000
700 3:4-2:4      1.2877000000 -1.003944557 3.57934456 0.8231894
701 UTC:4-2:4    -0.1403666667 -2.432011224 2.15127789 1.0000000
702 1:5-2:4      0.0779333333 -2.213711224 2.36957789 1.0000000
703 2:5-2:4      0.1903333333 -2.101311224 2.48197789 1.0000000
704 3:5-2:4      2.1485666667 -0.143077890 4.44021122 0.0886388
705 UTC:5-2:4    -0.2277333333 -2.519377890 2.06391122 1.0000000
706 UTC:4-3:4    -1.4280666667 -3.719711224 0.86357789 0.6842925
707 1:5-3:4      -1.2097666667 -3.501411224 1.08187789 0.8837697
708 2:5-3:4      -1.0973666667 -3.389011224 1.19427789 0.9456394
709 3:5-3:4      0.8608666667 -1.430777890 3.15251122 0.9951553
710 UTC:5-3:4    -1.5154333333 -3.807077890 0.77621122 0.5868633
711 1:5-UTC:4   -0.2183000000 -2.073344557 2.50994456 1.0000000
712 2:5-UTC:4   0.3307000000 -1.960944557 2.62234456 1.0000000
713 3:5-UTC:4   2.2889333333 -0.002711224 4.58057789 0.0505639
714 UTC:5-UTC:4 -0.0873666667 -2.379011224 2.20427789 1.0000000
715 2:5-1:5      0.1124000000 -2.179244557 2.40404456 1.0000000
716 3:5-1:5      2.0706333333 -0.221011224 4.36227789 0.1189045
717 UTC:5-1:5   -0.3056666667 -2.597311224 1.98597789 1.0000000
718 3:5-2:5      1.9582333333 -0.333411224 4.24987789 0.1770356
719 UTC:5-2:5   -0.4180666667 -2.709711224 1.87357789 0.9999999
720 UTC:5-3:5   -2.3763000000 -4.667944557 -0.08465544 0.0350006
721
722 sample families
723
724      Df Sum Sq Mean Sq F value Pr(>F)
725 block       3  347.9  115.97  8.921 0.00012 ***
726 event       4  233.2   58.31  4.485 0.00435 **
727 block:event 12  285.8   23.82  1.832 0.07556 .
728 Residuals   40  520.0   13.00
729 ---
730 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
731 Levene's Test for Homogeneity of Variance (center = median)
732      Df F value Pr(>F)
733 group      19  0.2961  0.997
734      40
735
736 Shapiro-Wilk normality test
737
738 data: residuals(family.model)
739 W = 0.96916, p-value = 0.1327
740
741 Tukey multiple comparisons of means
742 95% family-wise confidence level
743
744 Fit: aov(formula = family.model)
745
746 $block
747      diff      lwr      upr      p adj
748 2-1  2.0666667 -1.462269  5.595602695 0.4070113
749 3-1  2.6000000 -0.928936  6.128936028 0.2144863
750 UTC-1 -3.5333333 -7.062269 -0.004397305 0.0496129
751 3-2  0.5333333 -2.995603  4.062269362 0.9772221
752 UTC-2 -5.6000000 -9.128936 -2.071063972 0.0006861
753 UTC-3 -6.1333333 -9.662269 -2.604397305 0.0001982
754
755 $event
756      diff      lwr      upr      p adj
757 2-1  3.9166667 -0.2873859  8.1207192 0.0782929

```

```

758 3-1 0.3333333 -3.8707192 4.5373859 0.9993906
759 4-18 -5.8707192 2.5373859 0.7885762
760 5-1 -1.2500000 -5.4540525 2.9540525 0.9133580
761 3-2 -3.5833333 -7.7873859 0.6207192 0.1270965
762 4-2 -5.5833333 -9.7873859 -1.3792808 0.0042573
763 5-2 -5.1666667 -9.3707192 -0.9626141 0.0093805
764 4-3 -2.0000000 -6.2040525 2.2040525 0.6568477
765 5-3 -1.5833333 -5.7873859 2.6207192 0.8178194
766 5-4 0.4166667 -3.7873859 4.6207192 0.9985339
767
768 $ 'block:event'
769      diff      lwr      upr   p adj
770 2:1-1:1 -3.00000e+00 -14.1525497 8.1525497 0.9999382
771 3:1-1:1 1.666667e+00 -9.4858830 12.8192163 1.0000000
772 UTC:1-1:1 -6.333333e+00 -17.4858830 4.8192163 0.8111604
773 1:2-1:1 -1.333333e+00 -12.4858830 9.8192163 1.0000000
774 2:2-1:1 5.666667e+00 -5.4858830 16.8192163 0.9123987
775 3:2-1:1 4.000000e+00 -7.1525497 15.1525497 0.9971752
776 UTC:2-1:1 -3.333333e-01 -11.4858830 10.8192163 1.0000000
777 1:3-1:1 3.333333e-01 -10.8192163 11.4858830 1.0000000
778 2:3-1:1 1.666667e+00 -9.4858830 12.8192163 1.0000000
779 3:3-1:1 -2.000000e+00 -13.1525497 9.1525497 0.9999999
780 UTC:3-1:1 -6.333333e+00 -17.4858830 4.8192163 0.8111604
781 1:4-1:1 -5.333333e+00 -16.4858830 5.8192163 0.9462492
782 2:4-1:1 3.333333e-01 -10.8192163 11.4858830 1.0000000
783 3:4-1:1 -4.000000e+00 -15.1525497 7.1525497 0.9971752
784 UTC:4-1:1 -5.333333e+00 -16.4858830 5.8192163 0.9462492
785 1:5-1:1 -3.333333e+00 -14.4858830 7.8192163 0.9997268
786 2:5-1:1 -4.000000e+00 -15.1525497 7.1525497 0.9971752
787 3:5-1:1 3.666667e+00 -7.4858830 14.8192163 0.9990357
788 UTC:5-1:1 -9.000000e+00 -20.1525497 2.1525497 0.2520625
789 3:1-2:1 4.666667e+00 -6.4858830 15.8192163 0.9844990
790 UTC:1-2:1 -3.333333e+00 -14.4858830 7.8192163 0.9997268
791 1:2-2:1 1.666667e+00 -9.4858830 12.8192163 1.0000000
792 2:2-2:1 8.666667e+00 -2.4858830 19.8192163 0.3091670
793 3:2-2:1 7.000000e+00 -4.1525497 18.1525497 0.6730469
794 UTC:2-2:1 2.666667e+00 -8.4858830 13.8192163 0.9999894
795 1:3-2:1 3.333333e+00 -7.8192163 14.4858830 0.9997268
796 2:3-2:1 4.666667e+00 -6.4858830 15.8192163 0.9844990
797 3:3-2:1 1.000000e+00 -10.1525497 12.1525497 1.0000000
798 UTC:3-2:1 -3.333333e+00 -14.4858830 7.8192163 0.9997268
799 1:4-2:1 -2.333333e+00 -13.4858830 8.8192163 0.9999987
800 2:4-2:1 3.333333e+00 -7.8192163 14.4858830 0.9997268
801 3:4-2:1 -1.000000e+00 -12.1525497 10.1525497 1.0000000
802 UTC:4-2:1 -2.333333e+00 -13.4858830 8.8192163 0.9999987
803 1:5-2:1 -3.333333e-01 -11.4858830 10.8192163 1.0000000
804 2:5-2:1 -1.000000e+00 -12.1525497 10.1525497 1.0000000
805 3:5-2:1 6.666667e+00 -4.4858830 17.8192163 0.7455972
806 UTC:5-2:1 -6.000000e+00 -17.1525497 5.1525497 0.8672644
807 UTC:1-3:1 -8.000000e+00 -19.1525497 3.1525497 0.4441454
808 1:2-3:1 -3.000000e+00 -14.1525497 8.1525497 0.9999382
809 2:2-3:1 4.000000e+00 -7.1525497 15.1525497 0.9971752
810 3:2-3:1 2.333333e+00 -8.8192163 13.4858830 0.9999987
811 UTC:2-3:1 -2.000000e+00 -13.1525497 9.1525497 0.9999999
812 1:3-3:1 -1.333333e+00 -12.4858830 9.8192163 1.0000000
813 2:3-3:1 1.065814e-14 -11.1525497 11.1525497 1.0000000
814 3:3-3:1 -3.666667e+00 -14.8192163 7.4858830 0.9990357
815 UTC:3-3:1 -8.000000e+00 -19.1525497 3.1525497 0.4441454
816 1:4-3:1 -7.000000e+00 -18.1525497 4.1525497 0.6730469
817 2:4-3:1 -1.333333e+00 -12.4858830 9.8192163 1.0000000
818 3:4-3:1 -5.666667e+00 -16.8192163 5.4858830 0.9123987
819 UTC:4-3:1 -7.000000e+00 -18.1525497 4.1525497 0.6730469
820 1:5-3:1 -5.000000e+00 -16.1525497 6.1525497 0.9696873
821 2:5-3:1 -5.666667e+00 -16.8192163 5.4858830 0.9123987
822 3:5-3:1 2.000000e+00 -9.1525497 13.1525497 0.9999999
823 UTC:5-3:1 -1.066667e+01 -21.8192163 0.4858830 0.0748785
824 1:2-UTC:1 5.000000e+00 -6.1525497 16.1525497 0.9696873
825 2:2-UTC:1 1.200000e+01 0.8474503 23.1525497 0.0237061
826 3:2-UTC:1 1.033333e+01 -0.8192163 21.4858830 0.0976374
827 UTC:2-UTC:1 6.000000e+00 -5.1525497 17.1525497 0.8672644
828 1:3-UTC:1 6.666667e+00 -4.4858830 17.8192163 0.7455972
829 2:3-UTC:1 8.000000e+00 -3.1525497 19.1525497 0.4441454
830 3:3-UTC:1 4.333333e+00 -6.8192163 15.4858830 0.9929268
831 UTC:3-UTC:1 -1.776357e-15 -11.1525497 11.1525497 1.0000000
832 1:4-UTC:1 1.000000e+00 -10.1525497 12.1525497 1.0000000
833 2:4-UTC:1 6.666667e+00 -4.4858830 17.8192163 0.7455972
834 3:4-UTC:1 2.333333e+00 -8.8192163 13.4858830 0.9999987
835 UTC:4-UTC:1 1.000000e+00 -10.1525497 12.1525497 1.0000000
836 1:5-UTC:1 3.000000e+00 -8.1525497 14.1525497 0.9999382
837 2:5-UTC:1 2.333333e+00 -8.8192163 13.4858830 0.9999987
838 3:5-UTC:1 1.000000e+01 -1.1525497 21.1525497 0.1259931
839 UTC:5-UTC:1 -2.666667e+00 -13.8192163 8.4858830 0.9999894
840 2:2-1:2 7.000000e+00 -4.1525497 18.1525497 0.6730469
841 3:2-1:2 5.333333e+00 -5.8192163 16.4858830 0.9462492
842 UTC:2-1:2 1.000000e+00 -10.1525497 12.1525497 1.0000000
843 1:3-1:2 1.666667e+00 -9.4858830 12.8192163 1.0000000
844 2:3-1:2 3.000000e+00 -8.1525497 14.1525497 0.9999382
845 3:3-1:2 -6.666667e-01 -11.8192163 10.4858830 1.0000000
846 UTC:3-1:2 -5.000000e+00 -16.1525497 6.1525497 0.9696873
847 1:4-1:2 -4.000000e+00 -15.1525497 7.1525497 0.9971752
848 2:4-1:2 1.666667e+00 -9.4858830 12.8192163 1.0000000
849 3:4-1:2 -2.666667e+00 -13.8192163 8.4858830 0.9999894
850 UTC:4-1:2 -4.000000e+00 -15.1525497 7.1525497 0.9971752
851 1:5-1:2 -2.000000e+00 -13.1525497 9.1525497 0.9999999
852 2:5-1:2 -2.666667e+00 -13.8192163 8.4858830 0.9999894

```

853	3:5-1:2	5.000000e+00	-6.1525497	16.1525497	0.9696873
854	UTC:5-1:2	-7.666667e+00	-18.8192163	3.4858830	0.5192783
855	3:2-2:2	-1.666667e+00	-12.8192163	9.4858830	1.0000000
856	UTC:2-2:2	-6.000000e+00	-17.1525497	5.1525497	0.8672644
857	1:3-2:2	-5.333333e+00	-16.4858830	5.8192163	0.9462492
858	2:3-2:2	-4.000000e+00	-15.1525497	7.1525497	0.9971752
859	3:3-2:2	-7.666667e+00	-18.8192163	3.4858830	0.5192783
860	UTC:3-2:2	-1.200000e+01	-23.1525497	-0.8474503	0.0237061
861	1:4-2:2	-1.100000e+01	-22.1525497	0.1525497	0.0568756
862	2:4-2:2	-5.333333e+00	-16.4858830	5.8192163	0.9462492
863	3:4-2:2	-9.666667e+00	-20.8192163	1.4858830	0.1607575
864	UTC:4-2:2	-1.100000e+01	-22.1525497	0.1525497	0.0568756
865	1:5-2:2	-9.000000e+00	-20.1525497	2.1525497	0.2520625
866	2:5-2:2	-9.666667e+00	-20.8192163	1.4858830	0.1607575
867	3:5-2:2	-2.000000e+00	-13.1525497	9.1525497	0.9999999
868	UTC:5-2:2	-1.4666667e+01	-25.8192163	-3.5141170	0.0017699
869	UTC:2-3:2	-4.333333e+00	-15.4858830	6.8192163	0.9929268
870	1:3-3:2	-3.666667e+00	-14.8192163	7.4858830	0.9990357
871	2:3-3:2	-2.333333e+00	-13.4858830	8.8192163	0.9999987
872	3:3-3:2	-6.000000e+00	-17.1525497	5.1525497	0.8672644
873	UTC:3-3:2	-1.033333e+01	-21.4858830	0.8192163	0.0976374
874	1:4-3:2	-9.333333e+00	-20.4858830	1.8192163	0.2026259
875	2:4-3:2	-3.666667e+00	-14.8192163	7.4858830	0.9990357
876	3:4-3:2	-8.000000e+00	-19.1525497	3.1525497	0.4441454
877	UTC:4-3:2	-9.333333e+00	-20.4858830	1.8192163	0.2026259
878	1:5-3:2	-7.333333e+00	-18.4858830	3.8192163	0.5965503
879	2:5-3:2	-8.000000e+00	-19.1525497	3.1525497	0.4441454
880	3:5-3:2	-3.333333e-01	-11.4858830	10.8192163	1.0000000
881	UTC:5-3:2	-1.300000e+01	-24.1525497	-1.8474503	0.0092922
882	1:3-UTC:2	6.666667e-01	-10.4858830	11.8192163	1.0000000
883	2:3-UTC:2	2.000000e+00	-9.1525497	13.1525497	0.9999999
884	3:3-UTC:2	-1.666667e+00	-12.8192163	9.4858830	1.0000000
885	UTC:3-UTC:2	-6.000000e+00	-17.1525497	5.1525497	0.8672644
886	1:4-UTC:2	-5.000000e+00	-16.1525497	6.1525497	0.9696873
887	2:4-UTC:2	6.666667e-01	-10.4858830	11.8192163	1.0000000
888	3:4-UTC:2	-3.666667e+00	-14.8192163	7.4858830	0.9990357
889	UTC:4-UTC:2	-5.000000e+00	-16.1525497	6.1525497	0.9696873
890	1:5-UTC:2	-3.000000e+00	-14.1525497	8.1525497	0.9999382
891	2:5-UTC:2	-3.666667e+00	-14.8192163	7.4858830	0.9990357
892	3:5-UTC:2	4.000000e+00	-7.1525497	15.1525497	0.9971752
893	UTC:5-UTC:2	-8.666667e+00	-19.8192163	2.4858830	0.3091670
894	2:3-1:3	1.333333e+00	-9.8192163	12.4858830	1.0000000
895	3:3-1:3	-2.333333e+00	-13.4858830	8.8192163	0.9999987
896	UTC:3-1:3	-6.666667e+00	-17.8192163	4.4858830	0.7455972
897	1:4-1:3	-5.666667e+00	-16.8192163	5.4858830	0.9123987
898	2:4-1:3	0.000000e+00	-11.1525497	11.1525497	1.0000000
899	3:4-1:3	-4.333333e+00	-15.4858830	6.8192163	0.9929268
900	UTC:4-1:3	-5.666667e+00	-16.8192163	5.4858830	0.9123987
901	1:5-1:3	-3.666667e+00	-14.8192163	7.4858830	0.9990357
902	2:5-1:3	-4.333333e+00	-15.4858830	6.8192163	0.9929268
903	3:5-1:3	3.333333e+00	-7.8192163	14.4858830	0.9997268
904	UTC:5-1:3	-9.333333e+00	-20.4858830	1.8192163	0.2026259
905	3:3-2:3	-3.666667e+00	-14.8192163	7.4858830	0.9990357
906	UTC:3-2:3	-8.000000e+00	-19.1525497	3.1525497	0.4441454
907	1:4-2:3	-7.000000e+00	-18.1525497	4.1525497	0.6730469
908	2:4-2:3	-1.333333e+00	-12.4858830	9.8192163	1.0000000
909	3:4-2:3	-5.666667e+00	-16.8192163	5.4858830	0.9123987
910	UTC:4-2:3	-7.000000e+00	-18.1525497	4.1525497	0.6730469
911	1:5-2:3	-5.000000e+00	-16.1525497	6.1525497	0.9696873
912	2:5-2:3	-5.666667e+00	-16.8192163	5.4858830	0.9123987
913	3:5-2:3	2.000000e+00	-9.1525497	13.1525497	0.9999999
914	UTC:5-2:3	-1.0666667e+01	-21.8192163	0.4858830	0.0748785
915	UTC:3-3:3	-4.333333e+00	-15.4858830	6.8192163	0.9929268
916	1:4-3:3	-3.333333e+00	-14.4858830	7.8192163	0.9997268
917	2:4-3:3	2.333333e+00	-8.8192163	13.4858830	0.9999987
918	3:4-3:3	-2.000000e+00	-13.1525497	9.1525497	0.9999999
919	UTC:4-3:3	-3.333333e+00	-14.4858830	7.8192163	0.9997268
920	1:5-3:3	-1.333333e+00	-12.4858830	9.8192163	1.0000000
921	2:5-3:3	-2.000000e+00	-13.1525497	9.1525497	0.9999999
922	3:5-3:3	5.666667e+00	-5.4858830	16.8192163	0.9123987
923	UTC:5-3:3	-7.000000e+00	-18.1525497	4.1525497	0.6730469
924	1:4-UTC:3	1.000000e+00	-10.1525497	12.1525497	1.0000000
925	2:4-UTC:3	6.666667e+00	-4.4858830	17.8192163	0.7455972
926	3:4-UTC:3	2.333333e+00	-8.8192163	13.4858830	0.9999987
927	UTC:4-UTC:3	1.000000e+00	-10.1525497	12.1525497	1.0000000
928	1:5-UTC:3	3.000000e+00	-8.1525497	14.1525497	0.99999382
929	2:5-UTC:3	2.333333e+00	-8.8192163	13.4858830	0.9999987
930	3:5-UTC:3	1.000000e+01	-1.1525497	21.1525497	0.1259931
931	UTC:5-UTC:3	-2.666667e+00	-13.8192163	8.4858830	0.9999894
932	2:4-1:4	5.666667e+00	-5.4858830	16.8192163	0.9123987
933	3:4-1:4	1.333333e+00	-9.8192163	12.4858830	1.0000000
934	UTC:4-1:4	1.776357e-15	-11.1525497	11.1525497	1.0000000
935	1:5-1:4	2.000000e+00	-9.1525497	13.1525497	0.9999999
936	2:5-1:4	1.333333e+00	-9.8192163	12.4858830	1.0000000
937	3:5-1:4	9.000000e+00	-2.1525497	20.1525497	0.2520625
938	UTC:5-1:4	-3.666667e+00	-14.8192163	7.4858830	0.9990357
939	3:4-2:4	-4.333333e+00	-15.4858830	6.8192163	0.9929268
940	UTC:4-2:4	-5.666667e+00	-16.8192163	5.4858830	0.9123987
941	1:5-2:4	-3.666667e+00	-14.8192163	7.4858830	0.9990357
942	2:5-2:4	-4.333333e+00	-15.4858830	6.8192163	0.9929268
943	3:5-2:4	3.333333e+00	-7.8192163	14.4858830	0.9997268
944	UTC:5-2:4	9.333333e+00	-20.4858830	1.8192163	0.2026259
945	UTC:4-3:4	-1.333333e+00	-12.4858830	9.8192163	1.0000000
946	1:5-3:4	6.666667e-01	-10.4858830	11.8192163	1.0000000
947	2:5-3:4	8.881784e-15	-11.1525497	11.1525497	1.0000000

```

948 3:5-3:4      7.666667e+00 -3.4858830 18.8192163 0.5192783
949 UTC:5-3:4    -5.000000e+00 -16.1525497 6.1525497 0.9696873
950 1:5-UTC:4    2.000000e+00 -9.1525497 13.1525497 0.9999999
951 2:5-UTC:4    1.333333e+00 -9.8192163 12.4858830 1.0000000
952 3:5-UTC:4    9.000000e+00 -2.1525497 20.1525497 0.2520625
953 UTC:5-UTC:4 -3.666667e+00 -14.8192163 7.4858830 0.9990357
954 2:5-1:5      -6.666667e-01 -11.8192163 10.4858830 1.0000000
955 3:5-1:5      7.000000e+00 -4.1525497 18.1525497 0.6730469
956 UTC:5-1:5    -5.666667e+00 -16.8192163 5.4858830 0.9123987
957 3:5-2:5      7.666667e+00 -3.4858830 18.8192163 0.5192783
958 UTC:5-2:5    -5.000000e+00 -16.1525497 6.1525497 0.9696873
959 UTC:5-3:5    -1.266667e+01 -23.8192163 -1.5141170 0.0127713
960
961 Hemiptera malaise
962
963 sample mass
964
965          Df   Sum Sq  Mean Sq F value Pr(>F)
966 block      3  0.003175 0.0010582  4.385 0.00926 ** 
967 event       4  0.004093 0.0010231  4.240 0.00592 ** 
968 block:event 12  0.005632 0.0004693  1.945 0.05763 .
969 Residuals   40  0.009653 0.0002413
970 ---
971 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
972 Levene's Test for Homogeneity of Variance (center = median)
973          Df F value Pr(>F)
974 group     19  1.1294 0.3612
975          40
976
977 Shapiro-Wilk normality test
978
979 data: residuals(mass.model)
980 W = 0.9128, p-value = 0.0003982
981
982 Tukey multiple comparisons of means
983 95% family-wise confidence level
984
985 Fit: aov(formula = mass.model)
986
987 $block
988          diff      lwr      upr     p adj
989 2-1  -0.005680000 -0.020884760 0.0095247599 0.7494977
990 3-1  0.004653333 -0.010551427 0.0198580932 0.8445090
991 UTC-1 -0.014860000 -0.030064760 0.0003447599 0.0575203
992 3-2  0.010333333 -0.004871427 0.0255380932 0.2784234
993 UTC-2 -0.009180000 -0.024384760 0.0060247599 0.3801527
994 UTC-3 -0.019513333 -0.034718093 -0.0043085735 0.0072198
995
996 $event
997          diff      lwr      upr     p adj
998 2-1 -0.0185416667 -0.03665523 -0.0004281025 0.0425597
999 3-1 -0.0238083333 -0.04192190 -0.0056947691 0.0047575
1000 4-1 -0.0175750000 -0.03568856 0.0005385642 0.0609689
1001 5-1 -0.0198916667 -0.03800523 -0.0017781025 0.0251308
1002 3-2 -0.0052666667 -0.02338023 0.0128468975 0.9195721
1003 4-2  0.0009666667 -0.01714690 0.0190802309 0.9998731
1004 5-2 -0.0013500000 -0.01946356 0.0167635642 0.9995228
1005 4-3  0.0062333333 -0.01188023 0.0243468975 0.8614001
1006 5-3  0.0039166667 -0.01419690 0.0220302309 0.9714368
1007 5-4 -0.0023166667 -0.02043023 0.0157968975 0.9960430
1008
1009 $`block:event`
1010          diff      lwr      upr     p adj
1011 2:1-1:1  -0.0216666667 -0.069718498 0.0263851649 0.9680383
1012 3:1-1:1  -0.0320666667 -0.080118498 0.0159851649 0.5711820
1013 UTC:1-1:1 -0.0460333333 -0.094085165 0.0020184982 0.0738282
1014 1:2-1:1  -0.0487666667 -0.096818498 -0.0007148351 0.0433748
1015 2:2-1:1  -0.0416666667 -0.089718498 0.0063851649 0.1603082
1016 3:2-1:1  -0.0343333333 -0.082385165 0.0137184982 0.4510697
1017 UTC:2-1:1 -0.0491666667 -0.097218498 -0.0011148351 0.0400230
1018 1:3-1:1  -0.0493666667 -0.097418498 -0.0013148351 0.0384366
1019 2:3-1:1  -0.0482000000 -0.096251832 -0.0001481685 0.0485566
1020 3:3-1:1  -0.0442666667 -0.092318498 0.0037851649 0.1022484
1021 UTC:3-1:1 -0.0531666667 -0.101218498 -0.0051148351 0.0173516
1022 1:4-1:1  -0.0533666667 -0.101418498 -0.0053148351 0.0166187
1023 2:4-1:1  -0.0497666667 -0.097818498 -0.0017148351 0.0354339
1024 3:4-1:1  -0.0115333333 -0.059585165 0.0365184982 0.9999887
1025 UTC:4-1:1 -0.0554000000 -0.103451832 -0.0073481685 0.0106472
1026 1:5-1:1  -0.0331666667 -0.081218498 0.0148851649 0.5121314
1027 2:5-1:1  -0.0517666667 -0.099818498 -0.0037148351 0.0233905
1028 3:5-1:1  -0.0392000000 -0.087251832 0.0088518315 0.2367144
1029 UTC:5-1:1 -0.0552000000 -0.103251832 -0.0071481685 0.0111294
1030 3:1-2:1  -0.0104000000 -0.058451832 0.0376518315 0.9999978
1031 UTC:1-2:1 -0.0243666667 -0.072418498 0.0236851649 0.9137299
1032 1:2-2:1  -0.0271000000 -0.075151832 0.0209518315 0.8190766
1033 2:2-2:1  -0.0200000000 -0.068051832 0.0280518315 0.9853167
1034 3:2-2:1  -0.0126666667 -0.060718498 0.0353851649 0.9999540
1035 UTC:2-2:1 -0.0275000000 -0.075551832 0.0205518315 0.8020174
1036 1:3-2:1  -0.0277000000 -0.075751832 0.0203518315 0.7932166
1037 2:3-2:1  -0.0265333333 -0.074585165 0.0215184982 0.8419335
1038 3:3-2:1  -0.0226000000 -0.070651832 0.0254518315 0.9533888
1039 UTC:3-2:1 -0.0315000000 -0.079551832 0.0165518315 0.6017423
1040 1:4-2:1  -0.0317000000 -0.079751832 0.0163518315 0.5909636
1041 2:4-2:1  -0.0281000000 -0.076151832 0.0199518315 0.7751035
1042 3:4-2:1  0.0101333333 -0.037918498 0.0581851649 0.9999985

```

1043	UTC:4-2:1	-0.03373333333	-0.081785165	0.0143184982	0.4821891
1044	1:5-2:1	-0.011500000	-0.059551832	0.0365518315	0.9999892
1045	2:5-2:1	-0.030100000	-0.078151832	0.0179518315	0.6761880
1046	3:5-2:1	-0.0175333333	-0.065585165	0.0305184982	0.9965389
1047	UTC:5-2:1	-0.0335333333	-0.081585165	0.0145184982	0.4927037
1048	UTC:1-3:1	-0.0139666667	-0.062018498	0.0340851649	0.9998141
1049	1:2-3:1	-0.016700000	-0.064751832	0.0313518315	0.9980685
1050	2:2-3:1	-0.009600000	-0.057651832	0.0384518315	0.9999994
1051	3:2-3:1	-0.0022666667	-0.050318498	0.0457851649	1.0000000
1052	UTC:2-3:1	-0.017100000	-0.065151832	0.0309518315	0.9974273
1053	1:3-3:1	-0.017300000	-0.065351832	0.0307518315	0.9970447
1054	2:3-3:1	-0.0161333333	-0.064185165	0.0319184982	0.9987415
1055	3:3-3:1	-0.012200000	-0.060251832	0.0358518315	0.9999736
1056	UTC:3-3:1	-0.021100000	-0.069151832	0.0269518315	0.9750758
1057	1:4-3:1	-0.021300000	-0.069351832	0.0267518315	0.9727410
1058	2:4-3:1	-0.017700000	-0.065751832	0.0303518315	0.9961350
1059	3:4-3:1	0.0205333333	-0.027518498	0.0685851649	0.9808710
1060	UTC:4-3:1	-0.0233333333	-0.071385165	0.0247184982	0.9389212
1061	1:5-3:1	-0.001100000	-0.049151832	0.0469518315	1.0000000
1062	2:5-3:1	-0.019700000	-0.067751832	0.0283518315	0.9874337
1063	3:5-3:1	-0.0071333333	-0.055185165	0.0409184982	1.0000000
1064	UTC:5-3:1	-0.0231333333	-0.071185165	0.0249184982	0.9431391
1065	1:2-UTC:1	-0.0027333333	-0.050785165	0.0453184982	1.0000000
1066	2:2-UTC:1	0.0043666667	-0.043685165	0.0524184982	1.0000000
1067	3:2-UTC:1	0.011700000	-0.036351832	0.0597518315	0.9999860
1068	UTC:2-UTC:1	-0.0031333333	-0.051185165	0.0449184982	1.0000000
1069	1:3-UTC:1	-0.0033333333	-0.051385165	0.0447184982	1.0000000
1070	2:3-UTC:1	-0.0021666667	-0.050218498	0.0458851649	1.0000000
1071	3:3-UTC:1	0.0017666667	-0.046285165	0.0498184982	1.0000000
1072	UTC:3-UTC:1	-0.0071333333	-0.055185165	0.0409184982	1.0000000
1073	1:4-UTC:1	-0.0073333333	-0.055385165	0.0407184982	1.0000000
1074	2:4-UTC:1	-0.0037333333	-0.051785165	0.0443184982	1.0000000
1075	3:4-UTC:1	0.0345000000	-0.013551832	0.0825518315	0.4425543
1076	UTC:4-UTC:1	-0.0093666667	-0.057418498	0.0386851649	0.9999996
1077	1:5-UTC:1	0.0128666667	-0.035185165	0.0609184982	0.9999421
1078	2:5-UTC:1	-0.0057333333	-0.053785165	0.0423184982	1.0000000
1079	3:5-UTC:1	0.0068333333	-0.041218498	0.0548851649	1.0000000
1080	UTC:5-UTC:1	-0.0091666667	-0.057218498	0.0388851649	0.9999997
1081	2:2-1:2	0.007100000	-0.040951832	0.0551518315	1.0000000
1082	3:2-1:2	0.0144333333	-0.033618498	0.0624851649	0.9997077
1083	UTC:2-1:2	-0.0004000000	-0.048451832	0.0476518315	1.0000000
1084	1:3-1:2	-0.0006000000	-0.048651832	0.0474518315	1.0000000
1085	2:3-1:2	0.0005666667	-0.047485165	0.0486184982	1.0000000
1086	3:3-1:2	0.0045000000	-0.043551832	0.0525518315	1.0000000
1087	UTC:3-1:2	-0.0044000000	-0.052451832	0.0436518315	1.0000000
1088	1:4-1:2	-0.0046000000	-0.052651832	0.0434518315	1.0000000
1089	2:4-1:2	-0.0010000000	-0.049051832	0.0470518315	1.0000000
1090	3:4-1:2	0.0372333333	-0.010818498	0.0852851649	0.3137565
1091	UTC:4-1:2	-0.0066333333	-0.054685165	0.0414184982	1.0000000
1092	1:5-1:2	0.0156000000	-0.032451832	0.0636518315	0.9991801
1093	2:5-1:2	-0.0030000000	-0.051051832	0.0450518315	1.0000000
1094	3:5-1:2	0.0095666667	-0.038485165	0.0576184982	0.9999994
1095	UTC:5-1:2	-0.0064333333	-0.054485165	0.0416184982	1.0000000
1096	3:2-2:2	0.0073333333	-0.040718498	0.0553851649	1.0000000
1097	UTC:2-2:2	-0.0075000000	-0.055551832	0.0405518315	1.0000000
1098	1:3-2:2	-0.0077000000	-0.055751832	0.0403518315	1.0000000
1099	2:3-2:2	-0.0065333333	-0.054585165	0.0415184982	1.0000000
1100	3:3-2:2	-0.0026000000	-0.050651832	0.0454518315	1.0000000
1101	UTC:3-2:2	-0.0115000000	-0.059551832	0.0365518315	0.9999892
1102	1:4-2:2	-0.0117000000	-0.059751832	0.0363518315	0.9999860
1103	2:4-2:2	-0.0081000000	-0.056151832	0.0399518315	1.0000000
1104	3:4-2:2	0.0301333333	-0.017918498	0.0781851649	0.6744488
1105	UTC:4-2:2	-0.0137333333	-0.061785165	0.0343184982	0.9998531
1106	1:5-2:2	0.0085000000	-0.039551832	0.0565518315	0.9999999
1107	2:5-2:2	-0.0101000000	-0.058151832	0.0379518315	0.9999986
1108	3:5-2:2	0.0024666667	-0.045585165	0.0505184982	1.0000000
1109	UTC:5-2:2	-0.0135333333	-0.061585165	0.0345184982	0.9998805
1110	UTC:2-3:2	-0.0148333333	-0.062885165	0.0332184982	0.9995773
1111	1:3-3:2	-0.0150333333	-0.063085165	0.0330184982	0.9994947
1112	2:3-3:2	-0.0138666667	-0.061918498	0.0341851649	0.9998318
1113	3:3-3:2	-0.0099333333	-0.057985165	0.0381184982	0.9999989
1114	UTC:3-3:2	-0.0188333333	-0.066885165	0.0292184982	0.9922202
1115	1:4-3:2	-0.0190333333	-0.067085165	0.0290184982	0.9912746
1116	2:4-3:2	-0.0154333333	-0.063485165	0.0326184982	0.9992867
1117	3:4-3:2	0.0228000000	-0.025251832	0.0708518315	0.9497124
1118	UTC:4-3:2	-0.0210666667	-0.069118498	0.0269851649	0.9754498
1119	1:5-3:2	0.0011666667	-0.046885165	0.0492184982	1.0000000
1120	2:5-3:2	-0.0174333333	-0.065485165	0.0306184982	0.9967639
1121	3:5-3:2	-0.0048666667	-0.052918498	0.0431851649	1.0000000
1122	UTC:5-3:2	-0.0208666667	-0.068918498	0.0271851649	0.9776046
1123	1:3-UTC:2	-0.0002000000	-0.048251832	0.0478518315	1.0000000
1124	2:3-UTC:2	0.0009666667	-0.047085165	0.0490184982	1.0000000
1125	3:3-UTC:2	0.0049000000	-0.043151832	0.0529518315	1.0000000
1126	UTC:3-UTC:2	-0.0040000000	-0.052051832	0.0440518315	1.0000000
1127	1:4-UTC:2	-0.0042000000	-0.052251832	0.0438518315	1.0000000
1128	2:4-UTC:2	-0.0006000000	-0.048651832	0.0474518315	1.0000000
1129	3:4-UTC:2	0.0376333333	-0.010418498	0.0856851649	0.2969400
1130	UTC:4-UTC:2	-0.0062333333	-0.054285165	0.0418184982	1.0000000
1131	1:5-UTC:2	0.0160000000	-0.032051832	0.0640518315	0.9988667
1132	2:5-UTC:2	-0.0026000000	-0.050651832	0.0454518315	1.0000000
1133	3:5-UTC:2	0.0099666667	-0.038085165	0.0580184982	0.9999989
1134	UTC:5-UTC:2	-0.0060333333	-0.054085165	0.0420184982	1.0000000
1135	2:3-1:3	0.0011666667	-0.046885165	0.0492184982	1.0000000
1136	3:3-1:3	0.0051000000	-0.042951832	0.0531518315	1.0000000
1137	UTC:3-1:3	-0.0038000000	-0.051851832	0.0442518315	1.0000000

```

1138 1:4-1:3 -0.0040000000 -0.052051832 0.0440518315 1.0000000
1139 2:4-1:3 -0.0004000000 -0.048451832 0.0476518315 1.0000000
1140 3:4-1:3 0.0378333333 -0.010218498 0.0858851649 0.2887475
1141 UTC:4-1:3 -0.0060333333 -0.054085165 0.0420184982 1.0000000
1142 1:5-1:3 0.0162000000 -0.031851832 0.0642518315 0.9986746
1143 2:5-1:3 -0.0024000000 -0.050451832 0.0456518315 1.0000000
1144 3:5-1:3 0.0101666667 -0.037885165 0.0582184982 0.9999984
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1149 2:4-2:3 -0.0015666667 -0.049618498 0.0464851649 1.0000000
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1151 UTC:4-2:3 -0.0072000000 -0.055291832 0.0408518315 1.0000000
1152 1:5-2:3 0.0150333333 -0.033018498 0.0630851649 0.9994947
1153 2:5-2:3 -0.0035666667 -0.051618498 0.0444851649 1.0000000
1154 3:5-2:3 0.0090000000 -0.039051832 0.0570518315 0.9999998
1155 UTC:5-2:3 -0.0070000000 -0.055051832 0.0410518315 1.0000000
1156 UTC:3-3:3 -0.0089000000 -0.056951832 0.0391518315 0.9999998
1157 1:4-3:3 -0.0091000000 -0.057151832 0.0389518315 0.9999997
1158 2:4-3:3 -0.0055000000 -0.053551832 0.0425518315 1.0000000
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1160 UTC:4-3:3 -0.0111333333 -0.059185165 0.0369184982 0.9999935
1161 1:5-3:3 0.0111000000 -0.036951832 0.0591518315 0.9999938
1162 2:5-3:3 -0.0075000000 -0.055551832 0.0405518315 1.0000000
1163 3:5-3:3 0.0050666667 -0.042985165 0.0531184982 1.0000000
1164 UTC:5-3:3 -0.0109333333 -0.058985165 0.0371184982 0.9999951
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1166 2:4-UTC:3 0.0034000000 -0.044651832 0.0514518315 1.0000000
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1168 UTC:4-UTC:3 -0.0022333333 -0.050285165 0.0458184982 1.0000000
1169 1:5-UTC:3 0.0200000000 -0.028051832 0.0680518315 0.9853167
1170 2:5-UTC:3 0.0014000000 -0.046651832 0.0494518315 1.0000000
1171 3:5-UTC:3 0.0139666667 -0.034085165 0.0620184982 0.9998141
1172 UTC:5-UTC:3 -0.0020333333 -0.050085165 0.0460184982 1.0000000
1173 2:4-1:4 0.0036000000 -0.044451832 0.0516518315 1.0000000
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1181 UTC:4-2:4 -0.0056333333 -0.053685165 0.0424184982 1.0000000
1182 1:5-2:4 0.0166000000 -0.031451832 0.0646518315 0.9982057
1183 2:5-2:4 -0.0020000000 -0.050051832 0.0460518315 1.0000000
1184 3:5-2:4 0.0105666667 -0.037485165 0.0586184982 0.9999971
1185 UTC:5-2:4 -0.0054333333 -0.053485165 0.0426184982 1.0000000
1186 UTC:4-3:4 -0.0438666667 -0.091918498 0.0041851649 0.1098345
1187 1:5-3:4 -0.0216333333 -0.069685165 0.0264184982 0.9684891
1188 2:5-3:4 -0.0402333333 -0.088285165 0.0078184982 0.2019989
1189 3:5-3:4 -0.0276666667 -0.075718498 0.0203851649 0.7946956
1190 UTC:5-3:4 -0.0436666667 -0.091718498 0.0043851649 0.1138003
1191 1:5-UTC:4 0.0222333333 -0.025818498 0.0702851649 0.9596244
1192 2:5-UTC:4 0.0036333333 -0.044418498 0.0516851649 1.0000000
1193 3:5-UTC:4 0.0162000000 -0.031851832 0.0642518315 0.9986746
1194 UTC:5-UTC:4 0.0002000000 -0.047851832 0.0482518315 1.0000000
1195 2:5-1:5 -0.0186000000 -0.066651832 0.0294518315 0.9932165
1196 3:5-1:5 -0.0060333333 -0.054085165 0.0420184982 1.0000000
1197 UTC:5-1:5 -0.0220333333 -0.070085165 0.0260184982 0.9627591
1198 3:5-2:5 0.0125666667 -0.035485165 0.0606184982 0.9999590
1199 UTC:5-2:5 -0.0034333333 -0.051485165 0.0446184982 1.0000000
1200 UTC:5-3:5 -0.0160000000 -0.064051832 0.0320518315 0.9988667
1201
1202 sample families
1203
1204      Df Sum Sq Mean Sq F value Pr(>F)
1205 block      3 13.38   4.461  3.569 0.0223 *
1206 event      4 10.23   2.558  2.047 0.1061
1207 block:event 12  8.03   0.669  0.536  0.8783
1208 Residuals  40 50.00   1.250
1209 ---
1210 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1211 Levene's Test for Homogeneity of Variance (center = median)
1212      Df F value Pr(>F)
1213 group 19  0.5895 0.8918
1214      40
1215
1216 Shapiro-Wilk normality test
1217
1218 data: residuals(family.model)
1219 W = 0.95788, p-value = 0.03711
1220
1221 Tukey multiple comparisons of means
1222    95% family-wise confidence level
1223
1224 Fit: aov(formula = family.model)
1225
1226 $block
1227      diff     lwr      upr   p adj
1228 2-1 -0.06666667 -1.1609433  1.0276099 0.9984238
1229 3-1  0.60000000 -0.4942766  1.6942766 0.4648526
1230 UTC-1 -0.73333333 -1.8276099  0.3609433 0.2900888
1231 3-2  0.66666667 -0.4276099  1.7609433 0.3722204
1232 UTC-2 -0.66666667 -1.7609433  0.4276099 0.3722204

```

```

1233 UTC-3 -1.33333333 -2.4276099 -0.2390567 0.0115526
1234
1235 $event
1236     diff      lwr      upr      p adj
1237 2-1 -0.4166667 -1.7202880 0.8869547 0.8902758
1238 3-1 -1.0833333 -2.3869547 0.2202880 0.1437711
1239 4-1 -1.0833333 -2.3869547 0.2202880 0.1437711
1240 5-1 -0.6666667 -1.9702880 0.6369547 0.5932678
1241 3-2 -0.6666667 -1.9702880 0.6369547 0.5932678
1242 4-2 -0.6666667 -1.9702880 0.6369547 0.5932678
1243 5-2 -0.2500000 -1.5536214 1.0536214 0.9816006
1244 4-3  0.0000000 -1.3036214 1.3036214 1.0000000
1245 5-3  0.4166667 -0.8869547 1.7202880 0.8902758
1246 5-4  0.4166667 -0.8869547 1.7202880 0.8902758
1247
1248 $`block:event`  

1249     diff      lwr      upr      p adj
1250 2:1-1:1  6.661338e-15 -3.458259 3.4582588 1.0000000
1251 3:1-1:1  1.000000e+00 -2.458259 4.4582588 0.9998269
1252 UTC:1-1:1 -1.000000e+00 -4.458259 2.4582588 0.9998269
1253 1:2-1:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1254 2:2-1:1  3.108624e-15 -3.458259 3.4582588 1.0000000
1255 3:2-1:1  4.440892e-15 -3.458259 3.4582588 1.0000000
1256 UTC:2-1:1 -6.666667e-01 -4.124926 2.7915922 0.9999997
1257 1:3-1:1  -6.666667e-01 -4.124926 2.7915922 0.9999997
1258 2:3-1:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1259 3:3-1:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1260 UTC:3-1:1 -1.666667e+00 -5.124926 1.7915922 0.9426299
1261 1:4-1:1  -1.333333e+00 -4.791592 2.1249255 0.9935081
1262 2:4-1:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1263 3:4-1:1  -3.333333e-01 -3.791592 3.1249255 1.0000000
1264 UTC:4-1:1 -1.666667e+00 -5.124926 1.7915922 0.9426299
1265 1:5-1:1  6.2172494e-15 -3.458259 3.4582588 1.0000000
1266 2:5-1:1  -1.333333e+00 -4.791592 2.1249255 0.9935081
1267 3:5-1:1  -3.333333e-01 -3.124926 3.7915922 1.0000000
1268 UTC:5-1:1 -1.666667e+00 -5.124926 1.7915922 0.9426299
1269 3:1-2:1  1.000000e+00 -2.458259 4.4582588 0.9998269
1270 UTC:1-2:1 -1.000000e+00 -4.458259 2.4582588 0.9998269
1271 1:2-2:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1272 2:2-2:1  -3.552714e-15 -3.458259 3.4582588 1.0000000
1273 3:2-2:1  -2.220446e-15 -3.458259 3.4582588 1.0000000
1274 UTC:2-2:1 -6.666667e-01 -4.124926 2.7915922 0.9999997
1275 1:3-2:1  -6.666667e-01 -4.124926 2.7915922 0.9999997
1276 2:3-2:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1277 3:3-2:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1278 UTC:3-2:1 -1.666667e+00 -5.124926 1.7915922 0.9426299
1279 1:4-2:1  -1.333333e+00 -4.791592 2.1249255 0.9935081
1280 2:4-2:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1281 3:4-2:1  -3.333333e-01 -3.791592 3.1249255 1.0000000
1282 UTC:4-2:1 -1.666667e+00 -5.124926 1.7915922 0.9426299
1283 1:5-2:1  -4.440892e-16 -3.458259 3.4582588 1.0000000
1284 2:5-2:1  -1.333333e+00 -4.791592 2.1249255 0.9935081
1285 3:5-2:1  -3.333333e-01 -3.124926 3.7915922 1.0000000
1286 UTC:5-2:1 -1.666667e+00 -5.124926 1.7915922 0.9426299
1287 UTC:1-3:1  -2.000000e+00 -5.458259 1.4582588 0.7892170
1288 1:2-3:1  -2.000000e+00 -5.458259 1.4582588 0.7892170
1289 2:2-3:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1290 3:2-3:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1291 UTC:2-3:1 -1.666667e+00 -5.124926 1.7915922 0.9426299
1292 1:3-3:1  -1.666667e+00 -5.124926 1.7915922 0.9426299
1293 2:3-3:1  -2.000000e+00 -5.458259 1.4582588 0.7892170
1294 3:3-3:1  -2.000000e+00 -5.458259 1.4582588 0.7892170
1295 UTC:3-3:1 -2.666667e+00 -6.124926 0.7915922 0.3215312
1296 1:4-3:1  -2.333333e+00 -5.791592 1.1249255 0.5520695
1297 2:4-3:1  -2.000000e+00 -5.458259 1.4582588 0.7892170
1298 3:4-3:1  -1.333333e+00 -4.791592 2.1249255 0.9935081
1299 UTC:4-3:1 -2.666667e+00 -6.124926 0.7915922 0.3215312
1300 1:5-3:1  -1.000000e+00 -4.458259 2.4582588 0.9998269
1301 2:5-3:1  -2.333333e+00 -5.791592 1.1249255 0.5520695
1302 3:5-3:1  -6.666667e-01 -4.124926 2.7915922 0.9999997
1303 UTC:5-3:1  -2.666667e+00 -6.124926 0.7915922 0.3215312
1304 1:2-UTC:1  1.554312e-15 -3.458259 3.4582588 1.0000000
1305 2:2-UTC:1  1.000000e+00 -2.458259 4.4582588 0.9998269
1306 3:2-UTC:1  1.000000e+00 -2.458259 4.4582588 0.9998269
1307 UTC:2-UTC:1  3.333333e-01 -3.124926 3.7915922 1.0000000
1308 1:3-UTC:1  3.333333e-01 -3.124926 3.7915922 1.0000000
1309 2:3-UTC:1  0.000000e+00 -3.458259 3.4582588 1.0000000
1310 3:3-UTC:1  1.776357e-15 -3.458259 3.4582588 1.0000000
1311 UTC:3-UTC:1 -6.666667e-01 -4.124926 2.7915922 0.9999997
1312 1:4-UTC:1  -3.333333e-01 -3.791592 3.1249255 1.0000000
1313 2:4-UTC:1  0.000000e+00 -3.458259 3.4582588 1.0000000
1314 3:4-UTC:1  6.666667e-01 -2.791592 4.1249255 0.9999997
1315 UTC:4-UTC:1 -6.666667e-01 -4.124926 2.7915922 0.9999997
1316 1:5-UTC:1  1.000000e+00 -2.458259 4.4582588 0.9998269
1317 2:5-UTC:1  -3.333333e-01 -3.791592 3.1249255 1.0000000
1318 3:5-UTC:1  1.333333e+00 -2.124926 4.7915922 0.9935081
1319 UTC:5-UTC:1 -6.666667e-01 -4.124926 2.7915922 0.9999997
1320 2:2-1:2  1.000000e+00 -2.458259 4.4582588 0.9998269
1321 3:2-1:2  1.000000e+00 -2.458259 4.4582588 0.9998269
1322 UTC:2-1:2  3.333333e-01 -3.124926 3.7915922 1.0000000
1323 1:3-1:2  3.333333e-01 -3.124926 3.7915922 1.0000000
1324 2:3-1:2  -1.554312e-15 -3.458259 3.4582588 1.0000000
1325 3:3-1:2  2.220446e-16 -3.458259 3.4582588 1.0000000
1326 UTC:3-1:2  -6.666667e-01 -4.124926 2.7915922 0.9999997
1327 1:4-1:2  -3.333333e-01 -3.791592 3.1249255 1.0000000

```

1328	2:4-1:2	-1.554312e-15	-3.458259	3.4582588	1.0000000
1329	3:4-1:2	6.666667e-01	-2.791592	4.1249255	0.9999997
1330	UTC:4-1:2	-6.666667e-01	-4.124926	2.7915922	0.9999997
1331	1:5-1:2	-1.000000e+00	-2.458259	4.4582588	0.9998269
1332	2:5-1:2	-3.333333e-01	-3.791592	3.1249255	1.0000000
1333	3:5-1:2	1.333333e+00	-2.124926	4.7915922	0.9935081
1334	UTC:5-1:2	-6.666667e-01	-4.124926	2.7915922	0.9999997
1335	3:2-2:2	1.332268e-15	-3.458259	3.4582588	1.0000000
1336	UTC:2-2:2	-6.666667e-01	-4.124926	2.7915922	0.9999997
1337	1:3-2:2	-6.666667e-01	-4.124926	2.7915922	0.9999997
1338	2:3-2:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1339	3:3-2:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1340	UTC:3-2:2	-1.666667e+00	-5.124926	1.7915922	0.9426299
1341	1:4-2:2	-1.333333e+00	-4.791592	2.1249255	0.9935081
1342	2:4-2:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1343	3:4-2:2	-3.333333e-01	-3.791592	3.1249255	1.0000000
1344	UTC:4-2:2	-1.666667e+00	-5.124926	1.7915922	0.9426299
1345	1:5-2:2	3.108624e-15	-3.458259	3.4582588	1.0000000
1346	2:5-2:2	-1.333333e+00	-4.791592	2.1249255	0.9935081
1347	3:5-2:2	3.333333e-01	-3.124926	3.7915922	1.0000000
1348	UTC:5-2:2	-1.666667e+00	-5.124926	1.7915922	0.9426299
1349	UTC:2-3:2	-6.666667e-01	-4.124926	2.7915922	0.9999997
1350	1:3-3:2	-6.666667e-01	-4.124926	2.7915922	0.9999997
1351	2:3-3:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1352	3:3-3:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1353	UTC:3-3:2	-1.666667e+00	-5.124926	1.7915922	0.9426299
1354	1:4-3:2	-1.333333e+00	-4.791592	2.1249255	0.9935081
1355	2:4-3:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1356	3:4-3:2	-3.333333e-01	-3.791592	3.1249255	1.0000000
1357	UTC:4-3:2	-1.666667e+00	-5.124926	1.7915922	0.9426299
1358	1:5-3:2	1.776357e-15	-3.458259	3.4582588	1.0000000
1359	2:5-3:2	-1.333333e+00	-4.791592	2.1249255	0.9935081
1360	3:5-3:2	3.333333e-01	-3.124926	3.7915922	1.0000000
1361	UTC:5-3:2	-1.666667e+00	-5.124926	1.7915922	0.9426299
1362	1:3-UTC:2	-1.776357e-15	-3.458259	3.4582588	1.0000000
1363	2:3-UTC:2	-3.333333e-01	-3.791592	3.1249255	1.0000000
1364	3:3-UTC:2	-3.333333e-01	-3.791592	3.1249255	1.0000000
1365	UTC:3-UTC:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1366	1:4-UTC:2	-6.666667e-01	-4.124926	2.7915922	0.9999997
1367	2:4-UTC:2	-3.333333e-01	-3.791592	3.1249255	1.0000000
1368	3:4-UTC:2	3.333333e-01	-3.124926	3.7915922	1.0000000
1369	UTC:4-UTC:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1370	1:5-UTC:2	6.666667e-01	-2.791592	4.1249255	0.9999997
1371	2:5-UTC:2	-6.666667e-01	-4.124926	2.7915922	0.9999997
1372	3:5-UTC:2	1.000000e+00	-2.458259	4.4582588	0.9998269
1373	UTC:5-UTC:2	-1.000000e+00	-4.458259	2.4582588	0.9998269
1374	2:3-1:3	-3.333333e-01	-3.791592	3.1249255	1.0000000
1375	3:3-1:3	-3.333333e-01	-3.791592	3.1249255	1.0000000
1376	UTC:3-1:3	-1.000000e+00	-4.458259	2.4582588	0.9998269
1377	1:4-1:3	-6.666667e-01	-4.124926	2.7915922	0.9999997
1378	2:4-1:3	-3.333333e-01	-3.791592	3.1249255	1.0000000
1379	3:4-1:3	3.333333e-01	-3.124926	3.7915922	1.0000000
1380	UTC:4-1:3	-1.000000e+00	-4.458259	2.4582588	0.9998269
1381	1:5-1:3	6.666667e-01	-2.791592	4.1249255	0.9999997
1382	2:5-1:3	-6.666667e-01	-4.124926	2.7915922	0.9999997
1383	3:5-1:3	1.000000e+00	-2.458259	4.4582588	0.9998269
1384	UTC:5-1:3	-1.000000e+00	-4.458259	2.4582588	0.9998269
1385	3:3-2:3	1.776357e-15	-3.458259	3.4582588	1.0000000
1386	UTC:3-2:3	-6.666667e-01	-4.124926	2.7915922	0.9999997
1387	1:4-2:3	-3.333333e-01	-3.791592	3.1249255	1.0000000
1388	2:4-2:3	0.000000e+00	-3.458259	3.4582588	1.0000000
1389	3:4-2:3	6.666667e-01	-2.791592	4.1249255	0.9999997
1390	UTC:4-2:3	-6.666667e-01	-4.124926	2.7915922	0.9999997
1391	1:5-2:3	1.000000e+00	-2.458259	4.4582588	0.9998269
1392	2:5-2:3	-3.333333e-01	-3.791592	3.1249255	1.0000000
1393	3:5-2:3	1.333333e+00	-2.124926	4.7915922	0.9935081
1394	UTC:5-2:3	-6.666667e-01	-4.124926	2.7915922	0.9999997
1395	UTC:3-3:3	-6.666667e-01	-4.124926	2.7915922	0.9999997
1396	1:4-3:3	-3.333333e-01	-3.791592	3.1249255	1.0000000
1397	2:4-3:3	-1.776357e-15	-3.458259	3.4582588	1.0000000
1398	3:4-3:3	6.666667e-01	-2.791592	4.1249255	0.9999997
1399	UTC:4-3:3	-6.666667e-01	-4.124926	2.7915922	0.9999997
1400	1:5-3:3	1.000000e+00	-2.458259	4.4582588	0.9998269
1401	2:5-3:3	-3.333333e-01	-3.791592	3.1249255	1.0000000
1402	3:5-3:3	1.333333e+00	-2.124926	4.7915922	0.9935081
1403	UTC:5-3:3	-6.666667e-01	-4.124926	2.7915922	0.9999997
1404	1:4-UTC:3	3.333333e-01	-3.124926	3.7915922	1.0000000
1405	2:4-UTC:3	6.666667e-01	-2.791592	4.1249255	0.9999997
1406	3:4-UTC:3	1.333333e+00	-2.124926	4.7915922	0.9935081
1407	UTC:4-UTC:3	-2.220446e-16	-3.458259	3.4582588	1.0000000
1408	1:5-UTC:3	1.666667e+00	-1.791592	5.1249255	0.9426299
1409	2:5-UTC:3	3.333333e-01	-3.124926	3.7915922	1.0000000
1410	3:5-UTC:3	2.000000e+00	-1.458259	5.4582588	0.7892170
1411	UTC:5-UTC:3	2.220446e-16	-3.458259	3.4582588	1.0000000
1412	2:4-1:4	3.333333e-01	-3.124926	3.7915922	1.0000000
1413	3:4-1:4	1.000000e+00	-2.458259	4.4582588	0.9998269
1414	UTC:4-1:4	-3.333333e-01	-3.791592	3.1249255	1.0000000
1415	1:5-1:4	1.333333e+00	-2.124926	4.7915922	0.9935081
1416	2:5-1:4	0.000000e+00	-3.458259	3.4582588	1.0000000
1417	3:5-1:4	1.666667e+00	-1.791592	5.1249255	0.9426299
1418	UTC:5-1:4	-3.333333e-01	-3.791592	3.1249255	1.0000000
1419	3:4-2:4	6.666667e-01	-2.791592	4.1249255	0.9999997
1420	UTC:4-2:4	-6.666667e-01	-4.124926	2.7915922	0.9999997
1421	1:5-2:4	1.000000e+00	-2.458259	4.4582588	0.9998269
1422	2:5-2:4	-3.333333e-01	-3.791592	3.1249255	1.0000000

```

1423 3:5-2:4      1.333333e+00 -2.124926 4.7915922 0.9935081
1424 UTC:5-2:4    -6.666667e-01 -4.124926 2.7915922 0.9999997
1425 UTC:4-3:4    -1.333333e+00 -4.791592 2.1249255 0.9935081
1426 1:5-3:4      3.333333e-01 -3.124926 3.7915922 1.0000000
1427 2:5-3:4      -1.000000e+00 -4.458259 2.4582588 0.9998269
1428 3:5-3:4      6.666667e-01 -2.791592 4.1249255 0.9999997
1429 UTC:5-3:4    -1.333333e+00 -4.791592 2.1249255 0.9935081
1430 1:5-UTC:4    1.666667e+00 -1.791592 5.1249255 0.9426299
1431 2:5-UTC:4    3.333333e-01 -3.124926 3.7915922 1.0000000
1432 3:5-UTC:4    2.000000e+00 -1.458259 5.4582588 0.7892170
1433 UTC:5-UTC:4  4.440892e-16 -3.458259 3.4582588 1.0000000
1434 2:5-1:5      -1.333333e+00 -4.791592 2.1249255 0.9935081
1435 3:5-1:5      3.333333e-01 -3.124926 3.7915922 1.0000000
1436 UTC:5-1:5    -1.666667e+00 -5.124926 1.7915922 0.9426299
1437 3:5-2:5      1.666667e+00 -1.791592 5.1249255 0.9426299
1438 UTC:5-2:5    -3.333333e-01 -3.791592 3.1249255 1.0000000
1439 UTC:5-3:5    -2.000000e+00 -5.458259 1.4582588 0.7892170
1440
1441 Hymenoptera malaise
1442
1443 sample mass
1444
1445      Df Sum Sq Mean Sq F value    Pr(>F)
1446 block      3  4.461   1.487   4.664  0.00717 ***
1447 event      4 19.282   4.821  15.120 1.76e-07 ***
1448 block:event 11  7.109   0.646   2.027  0.05285 .
1449 Residuals   38 12.115   0.319
1450 ---
1451 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1452 Levene's Test for Homogeneity of Variance (center = median)
1453      Df F value Pr(>F)
1454 group     18  1.4405 0.1687
1455      38
1456
1457 Shapiro-Wilk normality test
1458
1459 data: residuals(mass.model)
1460 W = 0.87674, p-value = 3.171e-05
1461
1462 Tukey multiple comparisons of means
1463 95% family-wise confidence level
1464
1465 Fit: aov(formula = mass.model)
1466
1467 $block
1468      diff      lwr      upr     p adj
1469 2-1  -0.2647133 -0.81859912 0.2891724 0.5785744
1470 3-1   0.5165767 -0.07090792 1.1040613 0.1020260
1471 UTC-1  0.2247267 -0.32915912 0.7786124 0.6977054
1472 3-2   0.7812900  0.19380541 1.3687746 0.0051980
1473 UTC-2  0.4894400 -0.06444578 1.0433258 0.0995695
1474 UTC-3  -0.2918500 -0.87933459 0.2956346 0.5472139
1475
1476 $event
1477      diff      lwr      upr     p adj
1478 2-1  0.3146167 -0.34535148 0.9745848 0.6532037
1479 3-1  0.4056167 -0.25435148 1.0655848 0.4113151
1480 4-1  1.0769736  0.36412654 1.7898207 0.0009568
1481 5-1  1.5812083  0.92124018 2.2411765 0.0000004
1482 3-2  0.0910000 -0.56896815 0.7509681 0.9946514
1483 4-2  0.7623569  0.04950987 1.4752040 0.0309734
1484 5-2  1.2665917  0.60662352 1.9265598 0.0000267
1485 4-3  0.6713569 -0.04149013 1.3842040 0.0732388
1486 5-3  1.1755917  0.51562352 1.8355598 0.0000910
1487 5-4  0.5042347 -0.20861235 1.2170818 0.2738706
1488
1489 $`block:event`
1490      diff      lwr      upr     p adj
1491 2:1-1:1  -0.268100000 -2.02062760 1.4844276 1.0000000
1492 3:1-1:1  0.188233333 -1.56429426 1.9407609 1.0000000
1493 UTC:1-1:1 0.028900000 -1.72362760 1.7814276 1.0000000
1494 1:2-1:1  0.128666667 -1.62386093 1.8811943 1.0000000
1495 2:2-1:1  0.293233333 -1.45929426 2.0457609 1.0000000
1496 3:2-1:1  0.545400000 -1.20712760 2.2979276 0.9994874
1497 UTC:2-1:1 0.240200000 -1.51232760 1.9927276 1.0000000
1498 1:3-1:1  0.661933333 -1.09059426 2.4144609 0.9944948
1499 2:3-1:1  0.180366667 -1.57216093 1.9328943 1.0000000
1500 3:3-1:1  0.423633333 -1.32889426 2.1761609 0.9999860
1501 UTC:3-1:1 0.305566667 -1.44696093 2.0580943 0.9999999
1502 1:4-1:1  0.891600000 -0.86092760 2.6441276 0.9083480
1503 2:4-1:1  0.406033333 -1.34649426 2.1585609 0.9999927
1504 3:4-1:1  NA       NA       NA       NA
1505 UTC:4-1:1  1.497633333 -0.25489426 3.2501609 0.1753396
1506 1:5-1:1  0.931166667 -0.82136093 2.6836943 0.8744420
1507 2:5-1:1  0.678266667 -1.07426093 2.4307943 0.9927840
1508 3:5-1:1  2.999733333  1.24720574 4.7522609 0.0000189
1509 UTC:5-1:1  1.664700000 -0.08782760 3.4172276 0.0791040
1510 3:1-2:1  0.456333333 -1.29619426 2.2088609 0.9999576
1511 UTC:1-2:1 0.297000000 -1.45552760 2.0495276 1.0000000
1512 1:2-2:1  0.396766667 -1.35576093 2.1492943 0.9999949
1513 2:2-2:1  0.561333333 -1.19119426 2.3138609 0.9992529
1514 3:2-2:1  0.813500000 -0.93902760 2.5660276 0.9565556
1515 UTC:2-2:1 0.508300000 -1.24422760 2.2608276 0.9998023
1516 1:3-2:1  0.930033333 -0.82249426 2.6825609 0.8755028
1517 2:3-2:1  0.448466667 -1.30406093 2.2009943 0.9999672

```

1518	3:3-2:1	0.691733333	-1.06079426	2.4442609	0.9910684
1519	UTC:3-2:1	0.573666667	-1.17886093	2.3261943	0.9990124
1520	1:4-2:1	1.159700000	-0.59282760	2.9122276	0.5801690
1521	2:4-2:1	0.674133333	-1.07839426	2.4266609	0.9932532
1522	3:4-2:1	NA	NA	NA	NA
1523	UTC:4-2:1	1.765733333	0.01320574	3.5182609	0.0465709
1524	1:5-2:1	1.199266667	-0.55326093	2.9517943	0.5220110
1525	2:5-2:1	0.946366667	-0.80616093	2.6988943	0.8597130
1526	3:5-2:1	3.267833333	1.51530574	5.0203609	0.0000032
1527	UTC:5-2:1	1.932800000	0.18027240	3.6853276	0.0182101
1528	UTC:1-3:1	-0.159333333	-1.91186093	1.5931943	1.0000000
1529	1:2-3:1	-0.059566667	-1.81209426	1.6929609	1.0000000
1530	2:2-3:1	0.105000000	-1.64752760	1.8575276	1.0000000
1531	3:2-3:1	0.357166667	-1.39536093	2.1096943	0.9999990
1532	UTC:2-3:1	0.051966667	-1.70056093	1.8044943	1.0000000
1533	1:3-3:1	0.473700000	-1.27882760	2.2262276	0.9999270
1534	2:3-3:1	-0.007866667	-1.76039426	1.7446609	1.0000000
1535	3:3-3:1	0.235400000	-1.51712760	1.9879276	1.0000000
1536	UTC:3-3:1	0.117333333	-1.63519426	1.8698609	1.0000000
1537	1:4-3:1	0.703366667	-1.04916093	2.4558943	0.9893343
1538	2:4-3:1	0.217800000	-1.53472760	1.9703276	1.0000000
1539	3:4-3:1	NA	NA	NA	NA
1540	UTC:4-3:1	1.309400000	-0.44312760	3.0619276	0.3696004
1541	1:5-3:1	0.742933333	-1.00959426	2.4954609	0.9813465
1542	2:5-3:1	0.490033333	-1.26249426	2.2425609	0.9998815
1543	3:5-3:1	2.811500000	1.05897240	4.5640276	0.000063
1544	UTC:5-3:1	1.476466667	-0.27606093	3.2289943	0.1923458
1545	1:2-UTC:1	0.099766667	-1.65276093	1.8522943	1.0000000
1546	2:2-UTC:1	0.264333333	-1.48819426	2.0168609	1.0000000
1547	3:2-UTC:1	0.516500000	-1.23602760	2.2690276	0.9997536
1548	UTC:2-UTC:1	0.211300000	-1.54122760	1.9638276	1.0000000
1549	1:3-UTC:1	0.633033333	-1.11949426	2.3855609	0.9967031
1550	2:3-UTC:1	0.151466667	-1.60106093	1.9039943	1.0000000
1551	3:3-UTC:1	0.394733333	-1.35779426	2.1472609	0.9999953
1552	UTC:3-UTC:1	0.276666667	-1.47586093	2.0291943	1.0000000
1553	1:4-UTC:1	0.862700000	-0.88982760	2.6152276	0.9290209
1554	2:4-UTC:1	0.377133333	-1.37539426	2.1296609	0.9999977
1555	3:4-UTC:1	NA	NA	NA	NA
1556	UTC:4-UTC:1	1.468733333	-0.28379426	3.2212609	0.1988607
1557	1:5-UTC:1	0.902266667	-0.85026093	2.6547943	0.8998455
1558	2:5-UTC:1	0.649366667	-1.10316093	2.4018943	0.9955707
1559	3:5-UTC:1	2.970833333	1.21830574	4.7233609	0.0000229
1560	UTC:5-UTC:1	1.635800000	-0.11672760	3.3883276	0.0914771
1561	2:2-1:2	0.164566667	-1.58796093	1.9170943	1.0000000
1562	3:2-1:2	0.416733333	-1.33579426	2.1692609	0.9999891
1563	UTC:2-1:2	0.111533333	-1.64099426	1.8640609	1.0000000
1564	1:3-1:2	0.533266667	-1.21926093	2.2857943	0.9996201
1565	2:3-1:2	0.051700000	-1.70082760	1.8042276	1.0000000
1566	3:3-1:2	0.294966667	-1.45756093	2.0474943	1.0000000
1567	UTC:3-1:2	0.176900000	-1.57562760	1.9294276	1.0000000
1568	1:4-1:2	0.762933333	-0.98959426	2.5154609	0.9758513
1569	2:4-1:2	0.277366667	-1.47516093	2.0298943	1.0000000
1570	3:4-1:2	NA	NA	NA	NA
1571	UTC:4-1:2	1.368966667	-0.38356093	3.1214943	0.2977530
1572	1:5-1:2	0.802500000	-0.95002760	2.5550276	0.9614760
1573	2:5-1:2	0.549600000	-1.20292760	2.3021276	0.9994328
1574	3:5-1:2	2.871066667	1.11853907	4.6235943	0.0000446
1575	UTC:5-1:2	1.536033333	-0.21649426	3.2885609	0.1474848
1576	3:2-2:2	0.252166667	-1.50036093	2.0046943	1.0000000
1577	UTC:2-2:2	-0.053033333	-1.80556093	1.6994943	1.0000000
1578	1:3-2:2	0.368700000	-1.38382760	2.1212276	0.9999884
1579	2:3-2:2	-0.112866667	-1.86539426	1.6396609	1.0000000
1580	3:3-2:2	0.130400000	-1.62212760	1.8829276	1.0000000
1581	UTC:3-2:2	0.012333333	-1.74019426	1.7648609	1.0000000
1582	1:4-2:2	0.598366667	-1.15416093	2.3508943	0.9983252
1583	2:4-2:2	0.112800000	-1.63972760	1.8653276	1.0000000
1584	3:4-2:2	NA	NA	NA	NA
1585	UTC:4-2:2	1.204400000	-0.54812760	2.9569276	0.5145286
1586	1:5-2:2	0.637933333	-1.11459426	2.3904609	0.9963922
1587	2:5-2:2	0.385033333	-1.36749426	2.1375609	0.9999968
1588	3:5-2:2	2.706500000	0.95397240	4.4590276	0.0001335
1589	UTC:5-2:2	1.371466667	-0.38106093	3.1239943	0.2949391
1590	UTC:2-3:2	-0.305200000	-2.05772760	1.4473276	0.9999999
1591	1:3-3:2	0.116533333	-1.63599426	1.8690609	1.0000000
1592	2:3-3:2	-0.365033333	-2.11756093	1.3874943	0.9999986
1593	3:3-3:2	-0.121766667	-1.87429426	1.6307609	1.0000000
1594	UTC:3-3:2	-0.239833333	-1.99236093	1.5126943	1.0000000
1595	1:4-3:2	0.346200000	-1.40632760	2.0987276	0.9999994
1596	2:4-3:2	-0.139366667	-1.89189426	1.6131609	1.0000000
1597	3:4-3:2	NA	NA	NA	NA
1598	UTC:4-3:2	0.952233333	-0.80029426	2.7047609	0.8537819
1599	1:5-3:2	0.385766667	-1.36676093	2.1382943	0.9999967
1600	2:5-3:2	0.132866667	-1.61966093	1.8853943	1.0000000
1601	3:5-3:2	2.454333333	0.70180574	4.2068609	0.0007044
1602	UTC:5-3:2	1.119300000	-0.63322760	2.8718276	0.6395015
1603	1:3-UTC:2	0.421733333	-1.33079426	2.1742609	0.9999870
1604	2:3-UTC:2	-0.059833333	-1.81236093	1.6926943	1.0000000
1605	3:3-UTC:2	0.183433333	-1.56909426	1.9359609	1.0000000
1606	UTC:3-UTC:2	0.065366667	-1.68716093	1.8178943	1.0000000
1607	1:4-UTC:2	0.651400000	-1.10112760	2.4039276	0.9954095
1608	2:4-UTC:2	0.165833333	-1.58669426	1.9183609	1.0000000
1609	3:4-UTC:2	NA	NA	NA	NA
1610	UTC:4-UTC:2	1.257433333	-0.49509426	3.0099609	0.4389893
1611	1:5-UTC:2	0.690966667	-1.06156093	2.4434943	0.9911741
1612	2:5-UTC:2	0.438066667	-1.31446093	2.1905943	0.9999768

```

1613 3:5-UTC:2 2.759533333 1.00700574 4.5120609 0.0000938
1614 UTC:5-UTC:2 1.424500000 -0.32802760 3.1770276 0.2392928
1615 2:3-1:3 -0.481566667 -2.23409426 1.2709609 0.9999075
1616 3:3-1:3 -0.238300000 -1.99082760 1.5142276 1.0000000
1617 UTC:3-1:3 -0.356366667 -2.10889426 1.3961609 0.9999991
1618 1:4-1:3 0.229666667 -1.52286093 1.9821943 1.0000000
1619 2:4-1:3 -0.255900000 -2.00842760 1.4966276 1.0000000
1620 3:4-1:3 NA NA NA NA
1621 UTC:4-1:3 0.835700000 -0.91682760 2.5882276 0.9452846
1622 1:5-1:3 0.269233333 -1.48329426 2.0217609 1.0000000
1623 2:5-1:3 0.016333333 -1.73619426 1.7688609 1.0000000
1624 3:5-1:3 2.337800000 0.58527240 4.0903276 0.0014988
1625 UTC:5-1:3 1.002766667 -0.74976093 2.7552943 0.7973446
1626 3:3-2:3 0.243266667 -1.50926093 1.9957943 1.0000000
1627 UTC:3-2:3 0.125200000 -1.62732760 1.8777276 1.0000000
1628 1:4-2:3 0.711233333 -1.04129426 2.4637609 0.9880164
1629 2:4-2:3 0.225666667 -1.52686093 1.9781943 1.0000000
1630 3:4-2:3 NA NA NA NA
1631 UTC:4-2:3 1.317266667 -0.43526093 3.0697943 0.3596060
1632 1:5-2:3 0.750800000 -1.00172760 2.5033276 0.9793141
1633 2:5-2:3 0.497900000 -1.25462760 2.2504276 0.9998518
1634 3:5-2:3 2.819366667 1.06683907 4.5718943 0.0000629
1635 UTC:5-2:3 1.484333333 -0.26819426 3.2368609 0.1858850
1636 UTC:3-3:3 -0.118066667 -1.87059426 1.6344609 1.0000000
1637 1:4-3:3 0.467966667 -1.28456093 2.2204943 0.9999387
1638 2:4-3:3 -0.017600000 -1.77012760 1.7349276 1.0000000
1639 3:4-3:3 NA NA NA NA
1640 UTC:4-3:3 1.074000000 -0.67852760 2.8265276 0.7042088
1641 1:5-3:3 0.507533333 -1.24499426 2.2600609 0.9998064
1642 2:5-3:3 0.254633333 -1.49789426 2.0071609 1.0000000
1643 3:5-3:3 2.576100000 0.82357240 4.3286276 0.0003167
1644 UTC:5-3:3 1.241066667 -0.51146093 2.9935943 0.4618893
1645 1:4-UTC:3 0.586033333 -1.16649426 2.3385609 0.9987070
1646 2:4-UTC:3 0.100466667 -1.65206093 1.8529943 1.0000000
1647 3:4-UTC:3 NA NA NA NA
1648 UTC:4-UTC:3 1.192066667 -0.56046093 2.9445943 0.5325394
1649 1:5-UTC:3 0.625600000 -1.12692760 2.3781276 0.9971318
1650 2:5-UTC:3 0.372700000 -1.37982760 2.1252276 0.9999981
1651 3:5-UTC:3 2.694166667 0.94163907 4.4466943 0.0001449
1652 UTC:5-UTC:3 1.359133333 -0.39339426 3.1116609 0.3089837
1653 2:4-1:4 -0.485566667 -2.23809426 1.2669609 0.9998959
1654 3:4-1:4 NA NA NA NA
1655 UTC:4-1:4 0.606033333 -1.14649426 2.3585609 0.9980425
1656 1:5-1:4 0.039566667 -1.71296093 1.7920943 1.0000000
1657 2:5-1:4 -0.213333333 -1.96586093 1.5391943 1.0000000
1658 3:5-1:4 2.108133333 0.35560574 3.8606609 0.0063683
1659 UTC:5-1:4 0.773100000 -0.97942760 2.5256276 0.9726251
1660 3:4-2:4 NA NA NA NA
1661 UTC:4-2:4 1.091600000 -0.66092760 2.8441276 0.6794204
1662 1:5-2:4 0.525133333 -1.22739426 2.2776609 0.9996912
1663 2:5-2:4 0.272233333 -1.48029426 2.0247609 1.0000000
1664 3:5-2:4 2.593700000 0.84117240 4.3462276 0.0002820
1665 UTC:5-2:4 1.258666667 -0.49386093 3.0111943 0.4372816
1666 UTC:4-3:4 NA NA NA NA
1667 1:5-3:4 NA NA NA NA
1668 2:5-3:4 NA NA NA NA
1669 3:5-3:4 NA NA NA NA
1670 UTC:5-3:4 NA NA NA NA
1671 1:5-UTC:4 -0.566466667 -2.31899426 1.1860609 0.9991598
1672 2:5-UTC:4 -0.819366667 -2.57189426 0.9331609 0.9537546
1673 3:5-UTC:4 1.502100000 -0.25042760 3.2546276 0.1719034
1674 UTC:5-UTC:4 0.167066667 -1.58546093 1.9195943 1.0000000
1675 2:5-1:5 -0.252900000 -2.00542760 1.4996276 1.0000000
1676 3:5-1:5 0.068566667 0.31603907 3.8210943 0.0081112
1677 UTC:5-1:5 0.733533333 -1.01899426 2.4860609 0.9835686
1678 3:5-2:5 2.321466667 0.56893907 4.0739943 0.0016646
1679 UTC:5-2:5 0.986433333 -0.76609426 2.7389609 0.8165903
1680 UTC:5-3:5 -1.335033333 -3.08756093 0.4174943 0.3375827
1681
1682 sample families
1683
1684      Df Sum Sq Mean Sq F value Pr(>F)
1685 block      3 25.87   8.623   5.285 0.00381 ***
1686 event      4  5.77   1.443   0.884 0.48247
1687 block:event 11 22.08   2.007   1.230 0.30151
1688 Residuals  38 62.00   1.632
1689 ---
1690 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1691 Levene's Test for Homogeneity of Variance (center = median)
1692      Df F value Pr(>F)
1693 group 18  0.6691 0.8185
1694      38
1695
1696 Shapiro-Wilk normality test
1697
1698 data: residuals(family.model)
1699 W = 0.97428, p-value = 0.2638
1700
1701 Tukey multiple comparisons of means
1702  95% family-wise confidence level
1703
1704 Fit: aov(formula = family.model)
1705
1706 $block
1707      diff      lwr      upr     p adj
```

```

1708 2-1    0.8666667 -0.3863483  2.1196816 0.2629707
1709 3-1    1.8833333  0.5543103  3.2123564 0.0026955
1710 UTC-1   0.4000000 -0.8530149  1.6530149 0.8264229
1711 3-2    1.0166667 -0.3123564  2.3456897 0.1863879
1712 UTC-2   -0.4666667 -1.7196816  0.7863483 0.7499873
1713 UTC-3   -1.4833333 -2.8123564 -0.1543103 0.0236145
1714
1715 $event
1716      diff     lwr      upr     p adj
1717 2-1 8.333333e-02 -1.4096639 1.5763306 0.9998465
1718 3-18 -1.9929973 0.9929973 0.8716261
1719 4-1 -6.902778e-01 -2.3028991 0.9223436 0.7367453
1720 5-1 8.333333e-02 -1.4096639 1.5763306 0.9998465
1721 3-2 -5.833333e-01 -2.0763306 0.9096639 0.7957440
1722 4-2 -7.736111e-01 -2.3862325 0.8390102 0.6478810
1723 5-2 8.881784e-16 -1.4929973 1.4929973 1.0000000
1724 4-3 -1.902778e-01 -1.8028991 1.4223436 0.9970704
1725 5-3 5.833333e-01 -0.9096639 2.0763306 0.7957440
1726 5-4 7.736111e-01 -0.8390102 2.3862325 0.6478810
1727
1728 $'block:event'
1729      diff     lwr      upr     p adj
1730 2:1-1:1 -6.666667e-01 -4.6312806 3.2979472 1.0000000
1731 3:1-1:1 3.000000e+00 -0.9646139 6.9646139 0.3485257
1732 UTC:1-1:1 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1733 1:2-1:1 1.065814e-14 -3.9646139 3.9646139 1.0000000
1734 2:2-1:1 6.666667e-01 -3.2979472 4.6312806 1.0000000
1735 3:2-1:1 1.000000e+00 -2.9646139 4.9646139 0.9999735
1736 UTC:2-1:1 6.666667e-01 -3.2979472 4.6312806 1.0000000
1737 1:3-1:1 -6.666667e-01 -4.6312806 3.2979472 1.0000000
1738 2:3-1:1 6.666667e-01 -3.2979472 4.6312806 1.0000000
1739 3:3-1:1 3.333333e-01 -3.6312806 4.2979472 1.0000000
1740 UTC:3-1:1 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1741 1:4-1:1 -1.333333e+00 -5.2979472 2.6312806 0.9986113
1742 2:4-1:1 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1743 3:4-1:1 NA NA NA NA
1744 UTC:4-1:1 1.065814e-14 -3.9646139 3.9646139 1.0000000
1745 1:5-1:1 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1746 2:5-1:1 1.666667e+00 -2.2979472 5.6312806 0.9828357
1747 3:5-1:1 1.333333e+00 -2.6312806 5.2979472 0.9986113
1748 UTC:5-1:1 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1749 3:1-2:1 3.666667e+00 -0.2979472 7.6312806 0.0985170
1750 UTC:1-2:1 3.333333e-01 -3.6312806 4.2979472 1.0000000
1751 1:2-2:1 6.666667e-01 -3.2979472 4.6312806 1.0000000
1752 2:2-2:1 1.333333e+00 -2.6312806 5.2979472 0.9986113
1753 3:2-2:1 1.666667e+00 -2.2979472 5.6312806 0.9828357
1754 UTC:2-2:1 1.333333e+00 -2.6312806 5.2979472 0.9986113
1755 1:3-2:1 8.881784e-16 -3.9646139 3.9646139 1.0000000
1756 2:3-2:1 1.333333e+00 -2.6312806 5.2979472 0.9986113
1757 3:3-2:1 1.000000e+00 -2.9646139 4.9646139 0.9999735
1758 UTC:3-2:1 3.333333e-01 -3.6312806 4.2979472 1.0000000
1759 1:4-2:1 -6.666667e-01 -4.6312806 3.2979472 1.0000000
1760 2:4-2:1 3.333333e-01 -3.6312806 4.2979472 1.0000000
1761 3:4-2:1 NA NA NA NA
1762 UTC:4-2:1 6.666667e-01 -3.2979472 4.6312806 1.0000000
1763 1:5-2:1 3.333333e-01 -3.6312806 4.2979472 1.0000000
1764 2:5-2:1 2.333333e+00 -1.6312806 6.2979472 0.7614993
1765 3:5-2:1 2.000000e+00 -1.9646139 5.9646139 0.9140549
1766 UTC:5-2:1 3.333333e-01 -3.6312806 4.2979472 1.0000000
1767 UTC:1-3:1 -3.333333e+00 -7.2979472 0.6312806 0.1948470
1768 1:2-3:1 -3.000000e+00 -6.9646139 0.9646139 0.3485257
1769 2:2-3:1 -2.333333e+00 -6.2979472 1.6312806 0.7614993
1770 3:2-3:1 -2.000000e+00 -5.9646139 1.9646139 0.9140549
1771 UTC:2-3:1 -2.333333e+00 -6.2979472 1.6312806 0.7614993
1772 1:3-3:1 -3.666667e+00 -7.6312806 0.2979472 0.0985170
1773 2:3-3:1 -2.333333e+00 -6.2979472 1.6312806 0.7614993
1774 3:3-3:1 -2.666667e+00 -6.6312806 1.2979472 0.5520495
1775 UTC:3-3:1 -3.333333e+00 -7.2979472 0.6312806 0.1948470
1776 1:4-3:1 -4.333333e+00 -8.2979472 -0.3687194 0.0201309
1777 2:4-3:1 -3.333333e+00 -7.2979472 0.6312806 0.1948470
1778 3:4-3:1 NA NA NA NA
1779 UTC:4-3:1 -3.000000e+00 -6.9646139 0.9646139 0.3485257
1780 1:5-3:1 -3.333333e+00 -7.2979472 0.6312806 0.1948470
1781 2:5-3:1 -1.333333e+00 -5.2979472 2.6312806 0.9986113
1782 3:5-3:1 -1.666667e+00 -5.6312806 2.2979472 0.9828357
1783 UTC:5-3:1 -3.333333e+00 -7.2979472 0.6312806 0.1948470
1784 1:2-UTC:1 3.333333e-01 -3.6312806 4.2979472 1.0000000
1785 2:2-UTC:1 1.000000e+00 -2.9646139 4.9646139 0.9999735
1786 3:2-UTC:1 1.333333e+00 -2.6312806 5.2979472 0.9986113
1787 UTC:2-UTC:1 1.000000e+00 -2.9646139 4.9646139 0.9999735
1788 1:3-UTC:1 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1789 2:3-UTC:1 1.000000e+00 -2.9646139 4.9646139 0.9999735
1790 3:3-UTC:1 6.666667e-01 -3.2979472 4.6312806 1.0000000
1791 UTC:3-UTC:1 -8.881784e-16 -3.9646139 3.9646139 1.0000000
1792 1:4-UTC:1 -1.000000e+00 -4.9646139 2.9646139 0.9999735
1793 2:4-UTC:1 0.000000e+00 -3.9646139 3.9646139 1.0000000
1794 3:4-UTC:1 NA NA NA NA
1795 UTC:4-UTC:1 3.333333e-01 -3.6312806 4.2979472 1.0000000
1796 1:5-UTC:1 -8.881784e-16 -3.9646139 3.9646139 1.0000000
1797 2:5-UTC:1 2.000000e+00 -1.9646139 5.9646139 0.9140549
1798 3:5-UTC:1 1.666667e+00 -2.2979472 5.6312806 0.9828357
1799 UTC:5-UTC:1 -8.881784e-16 -3.9646139 3.9646139 1.0000000
1800 2:2-1:2 6.666667e-01 -3.2979472 4.6312806 1.0000000
1801 3:2-1:2 1.000000e+00 -2.9646139 4.9646139 0.9999735
1802 UTC:2-1:2 6.666667e-01 -3.2979472 4.6312806 1.0000000

```

1803	1:3-1:2	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1804	2:3-1:2	6.666667e-01	-3.2979472	4.6312806	1.0000000
1805	3:3-1:2	3.333333e-01	-3.6312806	4.2979472	1.0000000
1806	UTC:3-1:2	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1807	1:4-1:2	-1.333333e+00	-5.2979472	2.6312806	0.9986113
1808	2:4-1:2	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1809	3:4-1:2	NA	NA	NA	NA
1810	UTC:4-1:2	0.000000e+00	-3.9646139	3.9646139	1.0000000
1811	1:5-1:2	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1812	2:5-1:2	1.666667e+00	-2.2979472	5.6312806	0.9828357
1813	3:5-1:2	1.333333e+00	-2.6312806	5.2979472	0.9986113
1814	UTC:5-1:2	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1815	3:2-2:2	3.333333e-01	-3.6312806	4.2979472	1.0000000
1816	UTC:2-2:2	8.881784e-16	-3.9646139	3.9646139	1.0000000
1817	1:3-2:2	-1.333333e+00	-5.2979472	2.6312806	0.9986113
1818	2:3-2:2	8.881784e-16	-3.9646139	3.9646139	1.0000000
1819	3:3-2:2	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1820	UTC:3-2:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1821	1:4-2:2	-2.000000e+00	-5.9646139	1.9646139	0.9140549
1822	2:4-2:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1823	3:4-2:2	NA	NA	NA	NA
1824	UTC:4-2:2	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1825	1:5-2:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1826	2:5-2:2	1.000000e+00	-2.9646139	4.9646139	0.9999735
1827	3:5-2:2	6.666667e-01	-3.2979472	4.6312806	1.0000000
1828	UTC:5-2:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1829	UTC:2-3:2	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1830	1:3-3:2	-1.666667e+00	-5.6312806	2.2979472	0.9828357
1831	2:3-3:2	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1832	3:3-3:2	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1833	UTC:3-3:2	-1.333333e+00	-5.2979472	2.6312806	0.9986113
1834	1:4-3:2	-2.333333e+00	-6.2979472	1.6312806	0.7614993
1835	2:4-3:2	-1.333333e+00	-5.2979472	2.6312806	0.9986113
1836	3:4-3:2	NA	NA	NA	NA
1837	UTC:4-3:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1838	1:5-3:2	-1.333333e+00	-5.2979472	2.6312806	0.9986113
1839	2:5-3:2	6.666667e-01	-3.2979472	4.6312806	1.0000000
1840	3:5-3:2	3.333333e-01	-3.6312806	4.2979472	1.0000000
1841	UTC:5-3:2	-1.333333e+00	-5.2979472	2.6312806	0.9986113
1842	1:3-UTC:2	-1.333333e+00	-5.2979472	2.6312806	0.9986113
1843	2:3-UTC:2	0.000000e+00	-3.9646139	3.9646139	1.0000000
1844	3:3-UTC:2	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1845	UTC:3-3:UTC:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1846	1:4-UTC:2	-2.000000e+00	-5.9646139	1.9646139	0.9140549
1847	2:4-UTC:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1848	3:4-UTC:2	NA	NA	NA	NA
1849	UTC:4-UTC:2	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1850	1:5-UTC:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1851	2:5-UTC:2	1.000000e+00	-2.9646139	4.9646139	0.9999735
1852	3:5-UTC:2	6.666667e-01	-3.2979472	4.6312806	1.0000000
1853	UTC:5-UTC:2	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1854	2:3-1:3	1.333333e+00	-2.6312806	5.2979472	0.9986113
1855	3:3-1:3	1.000000e+00	-2.9646139	4.9646139	0.9999735
1856	UTC:3-1:3	3.333333e-01	-3.6312806	4.2979472	1.0000000
1857	1:4-1:3	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1858	2:4-1:3	3.333333e-01	-3.6312806	4.2979472	1.0000000
1859	3:4-1:3	NA	NA	NA	NA
1860	UTC:4-1:3	6.666667e-01	-3.2979472	4.6312806	1.0000000
1861	1:5-1:3	3.333333e-01	-3.6312806	4.2979472	1.0000000
1862	2:5-1:3	2.333333e+00	-1.6312806	6.2979472	0.7614993
1863	3:5-1:3	2.000000e+00	-1.9646139	5.9646139	0.9140549
1864	UTC:5-1:3	3.333333e-01	-3.6312806	4.2979472	1.0000000
1865	3:3-2:3	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1866	UTC:3-2:3	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1867	1:4-2:3	-2.000000e+00	-5.9646139	1.9646139	0.9140549
1868	2:4-2:3	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1869	3:4-2:3	NA	NA	NA	NA
1870	UTC:4-2:3	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1871	1:5-2:3	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1872	2:5-2:3	1.000000e+00	-2.9646139	4.9646139	0.9999735
1873	3:5-2:3	6.666667e-01	-3.2979472	4.6312806	1.0000000
1874	UTC:5-2:3	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1875	UTC:3-3:3	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1876	1:4-3:3	-1.666667e+00	-5.6312806	2.2979472	0.9828357
1877	2:4-3:3	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1878	3:4-3:3	NA	NA	NA	NA
1879	UTC:4-3:3	-3.333333e-01	-4.2979472	3.6312806	1.0000000
1880	1:5-3:3	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1881	2:5-3:3	1.333333e+00	-2.6312806	5.2979472	0.9986113
1882	3:5-3:3	1.000000e+00	-2.9646139	4.9646139	0.9999735
1883	UTC:5-3:3	-6.666667e-01	-4.6312806	3.2979472	1.0000000
1884	1:4-UTC:3	-1.000000e+00	-4.9646139	2.9646139	0.9999735
1885	2:4-UTC:3	8.881784e-16	-3.9646139	3.9646139	1.0000000
1886	3:4-UTC:3	NA	NA	NA	NA
1887	UTC:4-UTC:3	3.333333e-01	-3.6312806	4.2979472	1.0000000
1888	1:5-UTC:3	0.000000e+00	-3.9646139	3.9646139	1.0000000
1889	2:5-UTC:3	2.000000e+00	-1.9646139	5.9646139	0.9140549
1890	3:5-UTC:3	1.666667e+00	-2.2979472	5.6312806	0.9828357
1891	UTC:5-UTC:3	0.000000e+00	-3.9646139	3.9646139	1.0000000
1892	2:4-1:4	1.000000e+00	-2.9646139	4.9646139	0.9999735
1893	3:4-1:4	NA	NA	NA	NA
1894	UTC:4-1:4	1.333333e+00	-2.6312806	5.2979472	0.9986113
1895	1:5-1:4	1.000000e+00	-2.9646139	4.9646139	0.9999735
1896	2:5-1:4	3.000000e+00	-0.9646139	6.9646139	0.3485257
1897	3:5-1:4	2.666667e+00	-1.2979472	6.6312806	0.5520495

```

1898 UTC:5-1:4 1.000000e+00 -2.9646139 4.9646139 0.9999735
1899 3:4-2:4 NA NA NA NA NA
1900 UTC:4-2:4 3.333333e-01 -3.6312806 4.2979472 1.0000000
1901 1:5-2:4 -8.881784e-16 -3.9646139 3.9646139 1.0000000
1902 2:5-2:4 2.000000e+00 -1.9646139 5.9646139 0.9140549
1903 3:5-2:4 1.666667e+00 -2.2979472 5.6312806 0.9828357
1904 UTC:5-2:4 -8.881784e-16 -3.9646139 3.9646139 1.0000000
1905 UTC:4-3:4 NA NA NA NA NA
1906 1:5-3:4 NA NA NA NA NA
1907 2:5-3:4 NA NA NA NA NA
1908 3:5-3:4 NA NA NA NA NA
1909 UTC:5-3:4 NA NA NA NA NA
1910 1:5-UTC:4 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1911 2:5-UTC:4 1.666667e+00 -2.2979472 5.6312806 0.9828357
1912 3:5-UTC:4 1.333333e+00 -2.6312806 5.2979472 0.9986113
1913 UTC:5-UTC:4 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1914 2:5-1:5 2.000000e+00 -1.9646139 5.9646139 0.9140549
1915 3:5-1:5 1.666667e+00 -2.2979472 5.6312806 0.9828357
1916 UTC:5-1:5 0.000000e+00 -3.9646139 3.9646139 1.0000000
1917 3:5-2:5 -3.333333e-01 -4.2979472 3.6312806 1.0000000
1918 UTC:5-2:5 -2.000000e+00 -5.9646139 1.9646139 0.9140549
1919 UTC:5-3:5 -1.666667e+00 -5.6312806 2.2979472 0.9828357
1920
1921 Lepidoptera malaise
1922
1923 sample mass
1924
1925 Df Sum Sq Mean Sq F value Pr(>F)
1926 block 3 0.5074 0.16914 2.928 0.0453 *
1927 event 4 0.0975 0.02438 0.422 0.7918
1928 block:event 12 0.7560 0.06300 1.090 0.3938
1929 Residuals 40 2.3111 0.05778
1930 ---
1931 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1932 Levene's Test for Homogeneity of Variance (center = median)
1933 Df F value Pr(>F)
1934 group 19 0.8305 0.6609
1935 40
1936
1937 Shapiro-Wilk normality test
1938
1939 data: residuals(mass.model)
1940 W = 0.79655, p-value = 1.108e-07
1941
1942 Tukey multiple comparisons of means
1943 95% family-wise confidence level
1944
1945 Fit: aov(formula = mass.model)
1946
1947 $block
1948 diff lwr upr p adj
1949 2-1 0.00390000 -0.23136095 0.23916095 0.9999679
1950 3-1 0.18183333 -0.05342761 0.41709428 0.1798772
1951 UTC-1 -0.06588667 -0.30114761 0.16937428 0.8758360
1952 3-2 0.17793333 -0.05732761 0.41319428 0.1952024
1953 UTC-2 -0.06978667 -0.30504761 0.16547428 0.8562330
1954 UTC-3 -0.24772000 -0.48298095 -0.01245905 0.0357071
1955
1956 $event
1957 diff lwr upr p adj
1958 2-1 0.08019167 -0.2000768 0.3604601 0.9237888
1959 3-1 0.03394167 -0.2463268 0.3142101 0.9967967
1960 4-1 0.07779167 -0.2024768 0.3580601 0.9312263
1961 5-1 0.11600833 -0.1642601 0.3962768 0.7613397
1962 3-2 -0.04625000 -0.3265184 0.2340184 0.9895124
1963 4-2 -0.00240000 -0.2826684 0.2778684 0.9999999
1964 5-2 0.03581667 -0.2444518 0.3160851 0.9960553
1965 4-3 0.04385000 -0.2364184 0.3241184 0.9914296
1966 5-3 0.08206667 -0.1982018 0.3623351 0.9176575
1967 5-4 0.03821667 -0.2420518 0.3184851 0.9949343
1968
1969 $`block:event`
1970 diff lwr upr p adj
1971 2:1-1:1 -0.086966667 -0.83046538 0.65653204 1.0000000
1972 3:1-1:1 -0.107000000 -0.85049871 0.63649871 1.0000000
1973 UTC:1-1:1 -0.075066667 -0.81856538 0.66843204 1.0000000
1974 1:2-1:1 -0.063400000 -0.80689871 0.68009871 1.0000000
1975 2:2-1:1 0.094433333 -0.64906538 0.83793204 1.0000000
1976 3:2-1:1 0.052766667 -0.69073204 0.79626538 1.0000000
1977 UTC:2-1:1 -0.032066667 -0.77556538 0.71143204 1.0000000
1978 1:3-1:1 -0.124766667 -0.86826538 0.61873204 1.0000000
1979 2:3-1:1 0.016100000 -0.72739871 0.75959871 1.0000000
1980 3:3-1:1 0.064533333 -0.67896538 0.80803204 1.0000000
1981 UTC:3-1:1 -0.089133333 -0.83263204 0.65436538 1.0000000
1982 1:4-1:1 0.008666667 -0.73483204 0.75216538 1.0000000
1983 2:4-1:1 -0.051600000 -0.79509871 0.69189871 1.0000000
1984 3:4-1:1 0.197233333 -0.54626538 0.94073204 0.9999495
1985 UTC:4-1:1 -0.112166667 -0.85566538 0.63133204 1.0000000
1986 1:5-1:1 0.001333333 -0.74216538 0.74483204 1.0000000
1987 2:5-1:1 -0.130633333 -0.87413204 0.61286538 0.9999999
1988 3:5-1:1 0.523466667 -0.22003204 1.26696538 0.4770622
1989 UTC:5-1:1 -0.199166667 -0.94266538 0.54433204 0.9999418
1990 3:1-2:1 -0.020033333 -0.76353204 0.72346538 1.0000000
1991 UTC:1-2:1 0.011900000 -0.73159871 0.75539871 1.0000000
1992 1:2-2:1 0.023566667 -0.71993204 0.76706538 1.0000000

```

1993	2:2-2:1	0.181400000	-0.56209871	0.92489871	0.9999855
1994	3:2-2:1	0.139733333	-0.60376538	0.88323204	0.9999998
1995	UTC:2-2:1	0.054900000	-0.68859871	0.79839871	1.0000000
1996	1:3-2:1	-0.037800000	-0.78129871	0.70569871	1.0000000
1997	2:3-2:1	0.103066667	-0.64043204	0.84656538	1.0000000
1998	3:3-2:1	0.151500000	-0.59199871	0.89499871	0.9999992
1999	UTC:3-2:1	-0.002166667	-0.74566538	0.74133204	1.0000000
2000	1:4-2:1	0.095633333	-0.64786538	0.83913204	1.0000000
2001	2:4-2:1	0.035366667	-0.70813204	0.77886538	1.0000000
2002	3:4-2:1	0.284200000	-0.45929871	1.02769871	0.9941025
2003	UTC:4-2:1	-0.025200000	-0.76869871	0.71829871	1.0000000
2004	1:5-2:1	0.088300000	-0.65519871	0.83179871	1.0000000
2005	2:5-2:1	-0.043666667	-0.78716538	0.69983204	1.0000000
2006	3:5-2:1	0.610433333	-0.13306538	1.35393204	0.227846
2007	UTC:5-2:1	-0.112200000	-0.85569871	0.63129871	1.0000000
2008	UTC:1-3:1	0.031933333	-0.71156538	0.77543204	1.0000000
2009	1:2-3:1	0.043600000	-0.69989871	0.78709871	1.0000000
2010	2:2-3:1	0.201433333	-0.54206538	0.94493204	0.9999314
2011	3:2-3:1	0.159766667	-0.58373204	0.90326538	0.9999980
2012	UTC:2-3:1	0.074933333	-0.66856538	0.81843204	1.0000000
2013	1:3-3:1	-0.017766667	-0.76126538	0.72573204	1.0000000
2014	2:3-3:1	0.123100000	-0.62039871	0.86659871	1.0000000
2015	3:3-3:1	0.171533333	-0.57196538	0.91503204	0.9999939
2016	UTC:3-3:1	0.017866667	-0.72563204	0.76136538	1.0000000
2017	1:4-3:1	0.115666667	-0.62783204	0.85916538	1.0000000
2018	2:4-3:1	0.055400000	-0.68809871	0.79889871	1.0000000
2019	3:4-3:1	0.304233333	-0.43926538	1.04773204	0.9876810
2020	UTC:4-3:1	-0.005166667	-0.74866538	0.73833204	1.0000000
2021	1:5-3:1	0.108333333	-0.63516538	0.85183204	1.0000000
2022	2:5-3:1	-0.023633333	-0.76713204	0.71986538	1.0000000
2023	3:5-3:1	0.630466667	-0.11303204	1.37396538	0.1862205
2024	UTC:5-3:1	-0.092166667	-0.83566538	0.65133204	1.0000000
2025	1:2-UTC:1	0.011666667	-0.73183204	0.75516538	1.0000000
2026	2:2-UTC:1	0.169500000	-0.57399871	0.91299871	0.9999949
2027	3:2-UTC:1	0.127833333	-0.61566538	0.87133204	0.9999999
2028	UTC:2-UTC:1	0.043000000	-0.70049871	0.78649871	1.0000000
2029	1:3-UTC:1	-0.049700000	-0.79319871	0.69379871	1.0000000
2030	2:3-UTC:1	0.091166667	-0.65233204	0.83466538	1.0000000
2031	3:3-UTC:1	0.139600000	-0.60389871	0.88309871	0.9999998
2032	UTC:3-UTC:1	-0.014066667	-0.75756538	0.72943204	1.0000000
2033	1:4-UTC:1	0.083733333	-0.65976538	0.82723204	1.0000000
2034	2:4-UTC:1	0.023466667	-0.72003204	0.76696538	1.0000000
2035	3:4-UTC:1	0.272300000	-0.47119871	1.01579871	0.9963852
2036	UTC:4-UTC:1	-0.037100000	-0.78059871	0.70639871	1.0000000
2037	1:5-UTC:1	0.076400000	-0.66709871	0.81989871	1.0000000
2038	2:5-UTC:1	-0.055566667	-0.79906538	0.68793204	1.0000000
2039	3:5-UTC:1	0.598533333	-0.14496538	1.34203204	0.2555875
2040	UTC:5-UTC:1	-0.124100000	-0.86759871	0.61939871	1.0000000
2041	2:2-1:2	0.157833333	-0.58566538	0.90133204	0.9999984
2042	3:2-1:2	0.116166667	-0.62733204	0.85966538	1.0000000
2043	UTC:2-1:2	0.031333333	-0.71216538	0.77483204	1.0000000
2044	1:3-1:2	-0.061366667	-0.80486538	0.68213204	1.0000000
2045	2:3-1:2	0.079500000	-0.66399871	0.82299871	1.0000000
2046	3:3-1:2	0.127933333	-0.61556538	0.87143204	0.9999999
2047	UTC:3-1:2	-0.025733333	-0.76923204	0.71776538	1.0000000
2048	1:4-1:2	0.072066667	-0.67143204	0.81556538	1.0000000
2049	2:4-1:2	0.011800000	-0.73169871	0.75529871	1.0000000
2050	3:4-1:2	0.260633333	-0.48286538	1.00413204	0.9978545
2051	UTC:4-1:2	-0.048766667	-0.79226538	0.69473204	1.0000000
2052	1:5-1:2	0.064733333	-0.67876538	0.80823204	1.0000000
2053	2:5-1:2	-0.067233333	-0.81073204	0.67626538	1.0000000
2054	3:5-1:2	0.586866667	-0.15663204	1.33036538	0.2848880
2055	UTC:5-1:2	-0.135766667	-0.87926538	0.60773204	0.9999999
2056	3:2-2:2	-0.041666667	-0.78516538	0.70183204	1.0000000
2057	UTC:2-2:2	-0.126500000	-0.86999871	0.61699871	1.0000000
2058	1:3-2:2	-0.219200000	-0.96269871	0.52429871	0.9997736
2059	2:3-2:2	-0.078333333	-0.82183204	0.66516538	1.0000000
2060	3:3-2:2	-0.029900000	-0.77339871	0.71359871	1.0000000
2061	UTC:3-2:2	-0.183566667	-0.92706538	0.55993204	0.9999827
2062	1:4-2:2	-0.085766667	-0.82926538	0.65773204	1.0000000
2063	2:4-2:2	-0.146033333	-0.88953204	0.59746538	0.9999995
2064	3:4-2:2	0.102800000	-0.64069871	0.84629871	1.0000000
2065	UTC:4-2:2	-0.206600000	-0.95009871	0.53689871	0.9999013
2066	1:5-2:2	-0.093100000	-0.83659871	0.65039871	1.0000000
2067	2:5-2:2	-0.222506667	-0.96856538	0.51843204	0.9996752
2068	3:5-2:2	0.429033333	-0.31446538	1.17253204	0.7919643
2069	UTC:5-2:2	-0.293600000	-1.03709871	0.44989871	0.9915587
2070	UTC:2-3:2	-0.084833333	-0.82833204	0.65866538	1.0000000
2071	1:3-3:2	-0.177533333	-0.92103204	0.56596538	0.9999896
2072	2:3-3:2	-0.036666667	-0.78016538	0.70683204	1.0000000
2073	3:3-3:2	0.011766667	-0.73173204	0.75526538	1.0000000
2074	UTC:3-3:2	-0.141900000	-0.88539871	0.60159871	0.9999997
2075	1:4-3:2	-0.044100000	-0.78759871	0.69939871	1.0000000
2076	2:4-3:2	-0.104366667	-0.84786538	0.63913204	1.0000000
2077	3:4-3:2	0.144466667	-0.59903204	0.88796538	0.9999996
2078	UTC:4-3:2	-0.164933333	-0.90843204	0.57856538	0.9999967
2079	1:5-3:2	-0.051433333	-0.79493204	0.69206538	1.0000000
2080	2:5-3:2	-0.183400000	-0.92689871	0.56009871	0.9999829
2081	3:5-3:2	0.470700000	-0.27279871	1.21419871	0.6593525
2082	UTC:5-3:2	-0.251933333	-0.99543204	0.49156538	0.9985878
2083	1:3-UTC:2	-0.092700000	-0.83619871	0.65079871	1.0000000
2084	2:3-UTC:2	0.048166667	-0.69533204	0.79166538	1.0000000
2085	3:3-UTC:2	0.096600000	-0.64689871	0.84009871	1.0000000
2086	UTC:3-UTC:2	-0.057066667	-0.80056538	0.68643204	1.0000000
2087	1:4-UTC:2	0.040733333	-0.70276538	0.78423204	1.0000000

```

2088 2:4-UTC:2 -0.019533333 -0.76303204 0.72396538 1.0000000
2089 3:4-UTC:2 0.229300000 -0.51419871 0.97279871 0.9995825
2090 UTC:4-UTC:2 -0.080100000 -0.82359871 0.66339871 1.0000000
2091 1:5-UTC:2 0.033400000 -0.71009871 0.77689871 1.0000000
2092 2:5-UTC:2 -0.098566667 -0.84206538 0.64493204 1.0000000
2093 3:5-UTC:2 0.555533333 -0.18796538 1.29903204 0.3735937
2094 UTC:5-UTC:2 -0.167100000 -0.91059871 0.57639871 0.9999959
2095 2:3-1:3 0.140866667 -0.60263204 0.88436538 0.9999997
2096 3:3-1:3 0.189300000 -0.55419871 0.93279871 0.9999725
2097 UTC:3-1:3 0.035633333 -0.70786538 0.77913204 1.0000000
2098 1:4-1:3 0.133433333 -0.61006538 0.87693204 0.9999999
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2100 3:4-1:3 0.322000000 -0.42149871 1.06549871 0.9781814
2101 UTC:4-1:3 0.012600000 -0.73089871 0.75609871 1.0000000
2102 1:5-1:3 0.126100000 -0.61739871 0.86959871 1.0000000
2103 2:5-1:3 -0.005866667 -0.74936538 0.73763204 1.0000000
2104 3:5-1:3 0.648233333 -0.09526538 1.39173204 0.1543381
2105 UTC:5-1:3 -0.074400000 -0.81789871 0.66909871 1.0000000
2106 3:3-2:3 0.048433333 -0.69506538 0.79193204 1.0000000
2107 UTC:3-2:3 -0.105233333 -0.84873204 0.63826538 1.0000000
2108 1:4-2:3 -0.007433333 -0.75093204 0.73606538 1.0000000
2109 2:4-2:3 -0.067700000 -0.81119871 0.67579871 1.0000000
2110 3:4-2:3 0.181133333 -0.56236538 0.92463204 0.9999858
2111 UTC:4-2:3 -0.128266667 -0.87176538 0.61523204 0.9999999
2112 1:5-2:3 -0.014766667 -0.75826538 0.72873204 1.0000000
2113 2:5-2:3 -0.146733333 -0.89023204 0.59676538 0.9999995
2114 3:5-2:3 0.507366667 -0.23613204 1.25086538 0.5322120
2115 UTC:5-2:3 -0.215266667 -0.95876538 0.52823204 0.9998238
2116 UTC:3-3:3 -0.153666667 -0.89716538 0.58983204 0.9999989
2117 1:4-3:3 -0.055866667 -0.79936538 0.68763204 1.0000000
2118 2:4-3:3 -0.116133333 -0.85963204 0.62736538 1.0000000
2119 3:4-3:3 0.132700000 -0.61079871 0.87619871 0.9999999
2120 UTC:4-3:3 -0.176700000 -0.92019871 0.56679871 0.9999903
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2126 2:4-UTC:3 0.037533333 -0.70596538 0.78103204 1.0000000
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2128 UTC:4-UTC:3 -0.023033333 -0.76653204 0.72046538 1.0000000
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2130 2:5-UTC:3 -0.041500000 -0.78499871 0.70199871 1.0000000
2131 3:5-UTC:3 0.612600000 -0.13089871 1.35609871 0.2230788
2132 UTC:5-UTC:3 -0.110033333 -0.85353204 0.63346538 1.0000000
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2135 UTC:4-1:4 -0.120833333 -0.86433204 0.62266538 1.0000000
2136 1:5-1:4 -0.007333333 -0.75083204 0.73616538 1.0000000
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2138 3:5-1:4 0.514800000 -0.22869871 1.25829871 0.5065755
2139 UTC:5-1:4 -0.207833333 -0.95133204 0.53566538 0.9998926
2140 3:4-2:4 0.248833333 -0.49466538 0.99233204 0.9987911
2141 UTC:4-2:4 -0.060566667 -0.80406538 0.68293204 1.0000000
2142 1:5-2:4 0.052933333 -0.69056538 0.79643204 1.0000000
2143 2:5-2:4 -0.079033333 -0.82253204 0.66446538 1.0000000
2144 3:5-2:4 0.575066667 -0.16843204 1.31856538 0.3166354
2145 UTC:5-2:4 -0.147566667 -0.89106538 0.59593204 0.9999994
2146 UTC:4-3:4 -0.309400000 -1.05289871 0.43409871 0.9853443
2147 1:5-3:4 -0.195900000 -0.93939871 0.54759871 0.9999543
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2149 3:5-3:4 0.326233333 -0.41726538 1.06973204 0.9752531
2150 UTC:5-3:4 -0.396400000 -1.13989871 0.34709871 0.8753387
2151 1:5-UTC:4 0.113500000 -0.62999871 0.85699871 1.0000000
2152 2:5-UTC:4 -0.018466667 -0.76196538 0.72503204 1.0000000
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2154 UTC:5-UTC:4 -0.087000000 -0.83049871 0.65649871 1.0000000
2155 2:5-1:5 -0.131966667 -0.87546538 0.61153204 0.9999999
2156 3:5-1:5 0.522133333 -0.22136538 1.26563204 0.4815707
2157 UTC:5-1:5 -0.200500000 -0.94399871 0.54299871 0.9999359
2158 3:5-2:5 0.654100000 -0.08939871 1.39759871 0.1448101
2159 UTC:5-2:5 -0.068533333 -0.81203204 0.67496538 1.0000000
2160 UTC:5-3:5 -0.722633333 -1.46613204 0.02086538 0.0649991
2161
2162 sample families
2163
2164      Df Sum Sq Mean Sq F value Pr(>F)
2165 block      3  4.983   1.661   3.020  0.0408 *
2166 event      4  4.167   1.042   1.894  0.1304
2167 block:event 12 19.433   1.619   2.944  0.0051 **
2168 Residuals  40 22.000    0.550
2169 ---
2170 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
2171 Levene's Test for Homogeneity of Variance (center = median)
2172      Df F value Pr(>F)
2173 group 19  0.6238  0.8651
2174      40
2175
2176 Shapiro-Wilk normality test
2177
2178 data: residuals(family.model)
2179 W = 0.92346, p-value = 0.00106
2180
2181 Tukey multiple comparisons of means
2182      95% family-wise confidence level

```

```

2183
2184 Fit: aov(formula = family.model)
2185
2186 $block
2187   diff      lwr      upr    p adj
2188 2-1  0.2000000 -0.525860986  0.92586099  0.8809426
2189 3-1  0.73333333  0.007472347 1.45919432  0.0468802
2190 UTC-1 0.06666667 -0.659194319  0.79252765  0.9946726
2191 3-2  0.53333333 -0.192527653  1.25919432  0.2165390
2192 UTC-2 -0.13333333 -0.859194319  0.59252765  0.9603453
2193 UTC-3 -0.66666667 -1.392527653  0.05919432  0.0817762
2194
2195 $event
2196   diff      lwr      upr    p adj
2197 2-1 -0.2500000 -1.1147246  0.6147246  0.9210880
2198 3-1  0.08333333 -0.7813912  0.9480579  0.9986866
2199 4-1  0.2500000 -0.6147246  1.1147246  0.9210880
2200 5-1 -0.5000000 -1.3647246  0.3647246  0.4746234
2201 3-2  0.33333333 -0.5313912  1.1980579  0.8049816
2202 4-2  0.5000000 -0.3647246  1.3647246  0.4746234
2203 5-2 -0.2500000 -1.1147246  0.6147246  0.9210880
2204 4-3  0.16666667 -0.6980579  1.0313912  0.9812553
2205 5-3 -0.58333333 -1.4480579  0.2813912  0.3203088
2206 5-4 -0.7500000 -1.6147246  0.1147246  0.1163450
2207
2208 $`block:event`
2209   diff      lwr      upr    p adj
2210 2:1-1:1 -1.333333e+00 -3.6272827  0.96061607 0.7829004
2211 3:1-1:1 -1.000000e+00 -3.2939494  1.29394940 0.9767550
2212 UTC:1-1:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2213 1:2-1:1 -1.333333e+00 -3.6272827  0.96061607 0.7829004
2214 2:2-1:1 -1.333333e+00 -3.6272827  0.96061607 0.7829004
2215 3:2-1:1 -8.881784e-16 -2.2939494  2.29394940 1.0000000
2216 UTC:2-1:1 -1.000000e+00 -3.2939494  1.29394940 0.9767550
2217 1:3-1:1 -1.333333e+00 -3.6272827  0.96061607 0.7829004
2218 2:3-1:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2219 3:3-1:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2220 UTC:3-1:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2221 1:4-1:1  1.776357e-15 -2.2939494  2.29394940 1.0000000
2222 2:4-1:1  0.000000e+00 -2.2939494  2.29394940 1.0000000
2223 3:4-1:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2224 UTC:4-1:1 -1.333333e+00 -3.6272827  0.96061607 0.7829004
2225 1:5-1:1 -2.333333e+00 -4.6272827 -0.03938393 0.0424274
2226 2:5-1:1 -1.000000e+00 -3.2939494  1.29394940 0.9767550
2227 3:5-1:1  3.333333e-01 -1.9606161  2.62728274 1.0000000
2228 UTC:5-1:1 -1.666667e+00 -3.9606161  0.62728274 0.4217776
2229 3:1-2:1  3.333333e-01 -1.9606161  2.62728274 1.0000000
2230 UTC:1-2:1 1.000000e+00 -1.2939494  3.29394940 0.9767550
2231 1:2-2:1  8.881784e-16 -2.2939494  2.29394940 1.0000000
2232 2:2-2:1  1.776357e-15 -2.2939494  2.29394940 1.0000000
2233 3:2-2:1  1.333333e+00 -0.9606161  3.62728274 0.7829004
2234 UTC:2-2:1 3.333333e-01 -1.9606161  2.62728274 1.0000000
2235 1:3-2:1  2.220446e-15 -2.2939494  2.29394940 1.0000000
2236 2:3-2:1  1.000000e+00 -1.2939494  3.29394940 0.9767550
2237 3:3-2:1  1.000000e+00 -1.2939494  3.29394940 0.9767550
2238 UTC:3-2:1 3.000000e+00 -1.2939494  3.29394940 0.9767550
2239 1:4-2:1  1.333333e+00 -0.9606161  3.62728274 0.7829004
2240 2:4-2:1  1.333333e+00 -0.9606161  3.62728274 0.7829004
2241 3:4-2:1  1.000000e+00 -1.2939494  3.29394940 0.9767550
2242 UTC:4-2:1 8.881784e-16 -2.2939494  2.29394940 1.0000000
2243 1:5-2:1 -1.000000e+00 -3.2939494  1.29394940 0.9767550
2244 2:5-2:1  3.333333e-01 -1.9606161  2.62728274 1.0000000
2245 3:5-2:1  1.666667e+00 -0.6272827  3.96061607 0.4217776
2246 UTC:5-2:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2247 UTC:1-3:1 6.666667e-01 -1.6272827  2.96061607 0.9998144
2248 1:2-3:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2249 2:2-3:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2250 3:2-3:1  1.000000e+00 -1.2939494  3.29394940 0.9767550
2251 UTC:2-3:1 -4.440892e-16 -2.2939494  2.29394940 1.0000000
2252 1:3-3:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2253 2:3-3:1  6.666667e-01 -1.6272827  2.96061607 0.9998144
2254 3:3-3:1  6.666667e-01 -1.6272827  2.96061607 0.9998144
2255 UTC:3-3:1 6.666667e-01 -1.6272827  2.96061607 0.9998144
2256 1:4-3:1  1.000000e+00 -1.2939494  3.29394940 0.9767550
2257 2:4-3:1  1.000000e+00 -1.2939494  3.29394940 0.9767550
2258 3:4-3:1  6.666667e-01 -1.6272827  2.96061607 0.9998144
2259 UTC:4-3:1 -3.333333e-01 -2.6272827  1.96061607 1.0000000
2260 1:5-3:1 -1.333333e+00 -3.6272827  0.96061607 0.7829004
2261 2:5-3:1 -1.332268e-15 -2.2939494  2.29394940 1.0000000
2262 3:5-3:1  1.333333e+00 -0.9606161  3.62728274 0.7829004
2263 UTC:5-3:1 -6.666667e-01 -2.9606161  1.62728274 0.9998144
2264 1:2-UTC:1 -1.000000e+00 -3.2939494  1.29394940 0.9767550
2265 2:2-UTC:1 -1.000000e+00 -3.2939494  1.29394940 0.9767550
2266 3:2-UTC:1  3.333333e-01 -1.9606161  2.62728274 1.0000000
2267 UTC:2-UTC:1 -6.666667e-01 -2.9606161  1.62728274 0.9998144
2268 1:3-UTC:1 -1.000000e+00 -3.2939494  1.29394940 0.9767550
2269 2:3-UTC:1  8.881784e-16 -2.2939494  2.29394940 1.0000000
2270 3:3-UTC:1  0.000000e+00 -2.2939494  2.29394940 1.0000000
2271 UTC:3-UTC:1 -4.440892e-16 -2.2939494  2.29394940 1.0000000
2272 1:4-UTC:1  3.333333e-01 -1.9606161  2.62728274 1.0000000
2273 2:4-UTC:1  3.333333e-01 -1.9606161  2.62728274 1.0000000
2274 3:4-UTC:1 -8.881784e-16 -2.2939494  2.29394940 1.0000000
2275 UTC:4-UTC:1 -1.000000e+00 -3.2939494  1.29394940 0.9767550
2276 1:5-UTC:1 -2.000000e+00 -4.2939494  0.29394940 0.1543505
2277 2:5-UTC:1 -6.666667e-01 -2.9606161  1.62728274 0.9998144

```

2278	3:5-UTC:1	6.666667e-01	-1.6272827	2.96061607	0.9998144
2279	UTC:5-UTC:1	-1.333333e+00	-3.6272827	0.96061607	0.7829004
2280	2:2-1:2	8.881784e-16	-2.2939494	2.29394940	1.0000000
2281	3:2-1:2	1.333333e+00	-0.9606161	3.62728274	0.7829004
2282	UTC:2-1:2	3.333333e-01	-1.9606161	2.62728274	1.0000000
2283	1:3-1:2	1.332268e-15	-2.2939494	2.29394940	1.0000000
2284	2:3-1:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2285	3:3-1:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2286	UTC:3-1:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2287	1:4-1:2	1.333333e+00	-0.9606161	3.62728274	0.7829004
2288	2:4-1:2	1.333333e+00	-0.9606161	3.62728274	0.7829004
2289	3:4-1:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2290	UTC:4-1:2	0.000000e+00	-2.2939494	2.29394940	1.0000000
2291	1:5-1:2	-1.000000e+00	-3.2939494	1.29394940	0.9767550
2292	2:5-1:2	3.333333e-01	-1.9606161	2.62728274	1.0000000
2293	3:5-1:2	1.666667e+00	-0.6272827	3.96061607	0.4217776
2294	UTC:5-1:2	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2295	3:2-2:2	1.333333e+00	-0.9606161	3.62728274	0.7829004
2296	UTC:2-2:2	3.333333e-01	-1.9606161	2.62728274	1.0000000
2297	1:3-2:2	4.440892e-16	-2.2939494	2.29394940	1.0000000
2298	2:3-2:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2299	3:3-2:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2300	UTC:3-2:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2301	1:4-2:2	1.333333e+00	-0.9606161	3.62728274	0.7829004
2302	2:4-2:2	1.333333e+00	-0.9606161	3.62728274	0.7829004
2303	3:4-2:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2304	UTC:4-2:2	-8.881784e-16	-2.2939494	2.29394940	1.0000000
2305	1:5-2:2	-1.000000e+00	-3.2939494	1.29394940	0.9767550
2306	2:5-2:2	3.333333e-01	-1.9606161	2.62728274	1.0000000
2307	3:5-2:2	1.666667e+00	-0.6272827	3.96061607	0.4217776
2308	UTC:5-2:2	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2309	UTC:2-3:2	-1.000000e+00	-3.2939494	1.29394940	0.9767550
2310	1:3-3:2	-1.333333e+00	-3.6272827	0.96061607	0.7829004
2311	2:3-3:2	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2312	3:3-3:2	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2313	UTC:3-3:2	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2314	1:4-3:2	2.664535e-15	-2.2939494	2.29394940	1.0000000
2315	2:4-3:2	8.881784e-16	-2.2939494	2.29394940	1.0000000
2316	3:4-3:2	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2317	UTC:4-3:2	-1.333333e+00	-3.6272827	0.96061607	0.7829004
2318	1:5-3:2	-2.333333e+00	-4.6272827	-0.03938393	0.0424274
2319	2:5-3:2	-1.000000e+00	-3.2939494	1.29394940	0.9767550
2320	3:5-3:2	3.333333e-01	-1.9606161	2.62728274	1.0000000
2321	UTC:5-3:2	-1.666667e+00	-3.9606161	0.62728274	0.4217776
2322	1:3-UTC:2	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2323	2:3-UTC:2	6.666667e-01	-1.6272827	2.96061607	0.9998144
2324	3:3-UTC:2	6.666667e-01	-1.6272827	2.96061607	0.9998144
2325	UTC:3-UTC:2	6.666667e-01	-1.6272827	2.96061607	0.9998144
2326	1:4-UTC:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2327	2:4-UTC:2	1.000000e+00	-1.2939494	3.29394940	0.9767550
2328	3:4-UTC:2	6.666667e-01	-1.6272827	2.96061607	0.9998144
2329	UTC:4-UTC:2	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2330	1:5-UTC:2	-1.333333e+00	-3.6272827	0.96061607	0.7829004
2331	2:5-UTC:2	-8.881784e-16	-2.2939494	2.29394940	1.0000000
2332	3:5-UTC:2	1.333333e+00	-0.9606161	3.62728274	0.7829004
2333	UTC:5-UTC:2	-6.666667e-01	-2.9606161	1.62728274	0.9998144
2334	2:3-1:3	1.000000e+00	-1.2939494	3.29394940	0.9767550
2335	3:3-1:3	1.000000e+00	-1.2939494	3.29394940	0.9767550
2336	UTC:3-1:3	1.000000e+00	-1.2939494	3.29394940	0.9767550
2337	1:4-1:3	1.333333e+00	-0.9606161	3.62728274	0.7829004
2338	2:4-1:3	1.333333e+00	-0.9606161	3.62728274	0.7829004
2339	3:4-1:3	1.000000e+00	-1.2939494	3.29394940	0.9767550
2340	UTC:4-1:3	-1.332268e-15	-2.2939494	2.29394940	1.0000000
2341	1:5-1:3	-1.000000e+00	-3.2939494	1.29394940	0.9767550
2342	2:5-1:3	3.333333e-01	-1.9606161	2.62728274	1.0000000
2343	3:5-1:3	1.666667e+00	-0.6272827	3.96061607	0.4217776
2344	UTC:5-1:3	-3.333333e-01	-2.6272827	1.96061607	1.0000000
2345	3:3-2:3	-8.881784e-16	-2.2939494	2.29394940	1.0000000
2346	UTC:3-2:3	-1.332268e-15	-2.2939494	2.29394940	1.0000000
2347	1:4-2:3	3.333333e-01	-1.9606161	2.62728274	1.0000000
2348	2:4-2:3	3.333333e-01	-1.9606161	2.62728274	1.0000000
2349	3:4-2:3	-1.776357e-15	-2.2939494	2.29394940	1.0000000
2350	UTC:4-2:3	-1.000000e+00	-3.2939494	1.29394940	0.9767550
2351	1:5-2:3	-2.000000e+00	-4.2939494	0.29394940	0.1543505
2352	2:5-2:3	-6.666667e-01	-2.9606161	1.62728274	0.9998144
2353	3:5-2:3	6.666667e-01	-1.6272827	2.96061607	0.9998144
2354	UTC:5-2:3	-1.333333e+00	-3.6272827	0.96061607	0.7829004
2355	UTC:3-3:3	-4.440892e-16	-2.2939494	2.29394940	1.0000000
2356	1:4-3:3	3.333333e-01	-1.9606161	2.62728274	1.0000000
2357	2:4-3:3	3.333333e-01	-1.9606161	2.62728274	1.0000000
2358	3:4-3:3	-8.881784e-16	-2.2939494	2.29394940	1.0000000
2359	UTC:4-3:3	-1.000000e+00	-3.2939494	1.29394940	0.9767550
2360	1:5-3:3	-2.000000e+00	-4.2939494	0.29394940	0.1543505
2361	2:5-3:3	-6.666667e-01	-2.9606161	1.62728274	0.9998144
2362	3:5-3:3	6.666667e-01	-1.6272827	2.96061607	0.9998144
2363	UTC:5-3:3	-1.333333e+00	-3.6272827	0.96061607	0.7829004
2364	1:4-UTC:3	3.333333e-01	-1.9606161	2.62728274	1.0000000
2365	2:4-UTC:3	3.333333e-01	-1.9606161	2.62728274	1.0000000
2366	3:4-UTC:3	-4.440892e-16	-2.2939494	2.29394940	1.0000000
2367	UTC:4-UTC:3	-1.000000e+00	-3.2939494	1.29394940	0.9767550
2368	1:5-UTC:3	-2.000000e+00	-4.2939494	0.29394940	0.1543505
2369	2:5-UTC:3	-6.666667e-01	-2.9606161	1.62728274	0.9998144
2370	3:5-UTC:3	6.666667e-01	-1.6272827	2.96061607	0.9998144
2371	UTC:5-UTC:3	-1.333333e+00	-3.6272827	0.96061607	0.7829004
2372	2:4-1:4	-1.776357e-15	-2.2939494	2.29394940	1.0000000

```

2373 3:4-1:4 -3.333333e-01 -2.6272827 1.96061607 1.0000000
2374 UTC:4-1:4 -1.333333e+00 -3.6272827 0.96061607 0.7829004
2375 1:5-1:4 -2.333333e+00 -4.6272827 -0.03938393 0.0424274
2376 2:5-1:4 -1.000000e+00 -3.2939494 1.29394940 0.9767550
2377 3:5-1:4 3.333333e-01 -1.9606161 2.62728274 1.0000000
2378 UTC:5-1:4 -1.666667e+00 -3.9606161 0.62728274 0.4217776
2379 3:4-2:4 -3.333333e-01 -2.6272827 1.96061607 1.0000000
2380 UTC:4-2:4 -1.333333e+00 -3.6272827 0.96061607 0.7829004
2381 1:5-2:4 -2.333333e+00 -4.6272827 -0.03938393 0.0424274
2382 2:5-2:4 -1.000000e+00 -3.2939494 1.29394940 0.9767550
2383 3:5-2:4 3.333333e-01 -1.9606161 2.62728274 1.0000000
2384 UTC:5-2:4 -1.666667e+00 -3.9606161 0.62728274 0.4217776
2385 UTC:4-3:4 -1.000000e+00 -3.2939494 1.29394940 0.9767550
2386 1:5-3:4 -2.000000e+00 -4.2939494 0.29394940 0.1543505
2387 2:5-3:4 -6.666667e-01 -2.9606161 1.62728274 0.9998144
2388 3:5-3:4 6.666667e-01 -1.6272827 2.96061607 0.9998144
2389 UTC:5-3:4 -1.333333e+00 -3.6272827 0.96061607 0.7829004
2390 1:5-UTC:4 -1.000000e+00 -3.2939494 1.29394940 0.9767550
2391 2:5-UTC:4 3.333333e-01 -1.9606161 2.62728274 1.0000000
2392 3:5-UTC:4 1.666667e+00 -0.6272827 3.96061607 0.4217776
2393 UTC:5-UTC:4 -3.333333e-01 -2.6272827 1.96061607 1.0000000
2394 2:5-1:5 1.333333e+00 -0.9606161 3.62728274 0.7829004
2395 3:5-1:5 2.666667e+00 0.3727173 4.96061607 0.0096139
2396 UTC:5-1:5 6.666667e-01 -1.6272827 2.96061607 0.9998144
2397 3:5-2:5 1.333333e+00 -0.9606161 3.62728274 0.7829004
2398 UTC:5-2:5 -6.666667e-01 -2.9606161 1.62728274 0.9998144
2399 UTC:5-3:5 -2.000000e+00 -4.2939494 0.29394940 0.1543505
2400
2401 Orthoptera malaise
2402
2403 sample mass
2404
2405      Df Sum Sq Mean Sq F value    Pr(>F)
2406 block      3 0.3408 0.11360   5.729  0.00233 ***
2407 event       4 1.1013 0.27532  13.886 3.46e-07 ***
2408 block:event 12 0.1174 0.00979  0.494  0.90629
2409 Residuals   40 0.7931 0.01983
2410 ---
2411 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
2412 Levene's Test for Homogeneity of Variance (center = median)
2413      Df F value Pr(>F)
2414 group     19  0.6022  0.8823
2415        40
2416
2417 Shapiro-Wilk normality test
2418
2419 data: residuals(mass.model)
2420 W = 0.97762, p-value = 0.3365
2421
2422 Tukey multiple comparisons of means
2423  95% family-wise confidence level
2424
2425 Fit: aov(formula = mass.model)
2426
2427 $block
2428      diff      lwr      upr     p adj
2429 2-1  0.15792000  0.02010125 0.29573875 0.0192064
2430 3-1  0.19310000  0.05528125 0.33091875 0.0029774
2431 UTC-1 0.07133333 -0.06648542 0.20915209 0.5144635
2432 3-2  0.03518000 -0.10263875 0.17299875 0.9025028
2433 UTC-2 -0.08658667 -0.22440542 0.05123209 0.3453100
2434 UTC-3 -0.12176667 -0.25958542 0.01605209 0.0998935
2435
2436 $event
2437      diff      lwr      upr     p adj
2438 2-1  0.045716667 -0.11846803 0.2099014 0.9304787
2439 3-1  0.047683333 -0.11650136 0.2118680 0.9198798
2440 4-1  0.150566667 -0.01361803 0.3147514 0.0858466
2441 5-1  0.376466667  0.21228197 0.5406514 0.0000008
2442 3-2  0.001966667 -0.16221803 0.1661514 0.9999997
2443 4-2  0.104850000 -0.05933469 0.2690347 0.3745186
2444 5-2  0.330750000  0.16656531 0.4949347 0.0000101
2445 4-3  0.102883333 -0.06130136 0.2670680 0.3935508
2446 5-3  0.328783333  0.16459864 0.4929680 0.0000112
2447 5-4  0.225900000  0.06171531 0.3900847 0.0028758
2448
2449 $`block:event`
2450      diff      lwr      upr     p adj
2451 2:1-1:1  9.403333e-02 -0.341517348 0.5295840 0.9999978
2452 3:1-1:1  5.270000e-02 -0.382850682 0.4882507 1.0000000
2453 UTC:1-1:1 3.223333e-02 -0.403317348 0.4677840 1.0000000
2454 1:2-1:1  2.208881e-16 -0.435550682 0.4355507 1.0000000
2455 2:2-1:1  1.628667e-01 -0.272684015 0.5984173 0.9954030
2456 3:2-1:1  1.463333e-01 -0.289217348 0.5818840 0.9987309
2457 UTC:2-1:1 5.263333e-02 -0.382917348 0.4881840 1.0000000
2458 1:3-1:1  1.780983e-16 -0.435550682 0.4355507 1.0000000
2459 2:3-1:1  1.547333e-01 -0.280817348 0.5902840 0.9974794
2460 3:3-1:1  1.913667e-01 -0.244184015 0.6269173 0.9749357
2461 UTC:3-1:1 2.360000e-02 -0.411950682 0.4591507 1.0000000
2462 1:4-1:1  7.106667e-02 -0.364484015 0.5066173 1.0000000
2463 2:4-1:1  2.426000e-01 -0.192950682 0.6781507 0.8327935
2464 3:4-1:1  2.579000e-01 -0.177650682 0.6934507 0.7586045
2465 UTC:4-1:1 2.096667e-01 -0.225884015 0.6452173 0.9431803
2466 1:5-1:1  2.451333e-01 -0.190417348 0.6806840 0.8213983
2467 2:5-1:1  4.515667e-01  0.016015985 0.8871173 0.0350588

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2468	3:5-1:1	6.334000e-01	0.197849318	1.0689507	0.0003520
2469	UTC:5-1:1	3.547333e-01	-0.080817348	0.7902840	0.2390059
2470	3:1-2:1	-4.133333e-02	-0.476884015	0.3942173	1.0000000
2471	UTC:1-2:1	-6.180000e-02	-0.497350682	0.3737507	1.0000000
2472	1:2-2:1	-9.403333e-02	-0.529584015	0.3415173	0.9999978
2473	2:2-2:1	6.883333e-02	-0.366717348	0.5043840	1.0000000
2474	3:2-2:1	5.230000e-02	-0.383250682	0.4878507	1.0000000
2475	UTC:2-2:1	-4.140000e-02	-0.476950682	0.3941507	1.0000000
2476	1:3-2:1	-9.403333e-02	-0.529584015	0.3415173	0.9999978
2477	2:3-2:1	6.070000e-02	-0.374850682	0.4962507	1.0000000
2478	3:3-2:1	9.733333e-02	-0.338217348	0.5328840	0.9999963
2479	UTC:3-2:1	-7.043333e-02	-0.505984015	0.3651173	1.0000000
2480	1:4-2:1	-2.296667e-02	-0.458517348	0.4125840	1.0000000
2481	2:4-2:1	1.485667e-01	-0.286984015	0.5841173	0.9984663
2482	3:4-2:1	1.638667e-01	-0.271684015	0.5994173	0.9950702
2483	UTC:4-2:1	1.156333e-01	-0.319917348	0.5511840	0.9999489
2484	1:5-2:1	1.511000e-01	-0.284450682	0.5866507	0.9981106
2485	2:5-2:1	3.575333e-01	-0.078017348	0.7930840	0.2281365
2486	3:5-2:1	5.393667e-01	0.103815985	0.9749173	0.0041999
2487	UTC:5-2:1	2.607000e-01	-0.174850682	0.6962507	0.7437757
2488	UTC:1-3:1	-2.046667e-02	-0.456017348	0.4150840	1.0000000
2489	1:2-3:1	-5.270000e-02	-0.488250682	0.3828507	1.0000000
2490	2:2-3:1	1.101667e-01	-0.325384015	0.5457173	0.9999750
2491	3:2-3:1	9.363333e-02	-0.341917348	0.5291840	0.9999980
2492	UTC:2-3:1	-6.666667e-05	-0.435617348	0.4354840	1.0000000
2493	1:3-3:1	-5.270000e-02	-0.488250682	0.3828507	1.0000000
2494	2:3-3:1	1.020333e-01	-0.333517348	0.5375840	0.9999922
2495	3:3-3:1	1.386667e-01	-0.296884015	0.5742173	0.9993640
2496	UTC:3-3:1	-2.910000e-02	-0.464650682	0.4064507	1.0000000
2497	1:4-3:1	1.836667e-02	-0.417184015	0.4539173	1.0000000
2498	2:4-3:1	1.899900e-01	-0.245650682	0.6254507	0.9767188
2499	3:4-3:1	2.052000e-01	-0.230350682	0.6407507	0.9526955
2500	UTC:4-3:1	1.569667e-01	-0.278584015	0.5925173	0.9970096
2501	1:5-3:1	1.924333e-01	-0.243117348	0.6279840	0.9735753
2502	2:5-3:1	3.988667e-01	-0.036684015	0.8344173	0.1071653
2503	3:5-3:1	5.807000e-01	0.145149318	1.0162507	0.0014380
2504	UTC:5-3:1	3.020333e-01	-0.133517348	0.7375840	0.5038993
2505	1:2-UTC:1	-3.222333e-02	-0.467784015	0.4033173	1.0000000
2506	2:2-UTC:1	1.306333e-01	-0.304917348	0.5661840	0.9997135
2507	3:2-UTC:1	1.141000e-01	-0.321450682	0.5496507	0.9999580
2508	UTC:2-UTC:1	2.040000e-02	-0.415150682	0.4559507	1.0000000
2509	1:3-UTC:1	-3.223333e-02	-0.467784015	0.4033173	1.0000000
2510	2:3-UTC:1	1.225000e-01	-0.313050682	0.5580507	0.9998828
2511	3:3-UTC:1	1.591333e-01	-0.276417348	0.5946840	0.9964855
2512	UTC:3-UTC:1	-8.633333e-03	-0.444184015	0.4269173	1.0000000
2513	1:4-UTC:1	3.883333e-02	-0.396717348	0.4743840	1.0000000
2514	2:4-UTC:1	2.103667e-01	-0.225184015	0.6459173	0.9415770
2515	3:4-UTC:1	2.256667e-01	-0.209884015	0.6612173	0.8985453
2516	UTC:4-UTC:1	1.774333e-01	-0.258117348	0.6129840	0.9882395
2517	1:5-UTC:1	2.129000e-01	-0.222650682	0.6484507	0.9355147
2518	2:5-UTC:1	4.193333e-01	-0.016217348	0.8548840	0.0706950
2519	3:5-UTC:1	6.011667e-01	0.165615985	1.0367173	0.0008362
2520	UTC:5-UTC:1	3.225000e-01	-0.113050682	0.7580507	0.3890367
2521	2:2-1:2	1.628667e-01	-0.272684015	0.5984173	0.9954030
2522	3:2-1:2	1.463333e-01	-0.289217348	0.5818840	0.9987309
2523	UTC:2-1:2	5.263333e-02	-0.382917348	0.4881840	1.0000000
2524	1:3-1:2	-4.278985e-17	-0.435550682	0.4355507	1.0000000
2525	2:3-1:2	1.547333e-01	-0.280817348	0.5902840	0.9974794
2526	3:3-1:2	1.913667e-01	-0.244184015	0.6269173	0.9749357
2527	UTC:3-1:2	2.360000e-02	-0.411950682	0.4591507	1.0000000
2528	1:4-1:2	7.106667e-02	-0.364484015	0.5066173	1.0000000
2529	2:4-1:2	2.426000e-01	-0.192950682	0.6781507	0.8327935
2530	3:4-1:2	2.579000e-01	-0.177650682	0.6934507	0.7586045
2531	UTC:4-1:2	2.096667e-01	-0.225884015	0.6452173	0.9431803
2532	1:5-1:2	2.451333e-01	-0.190417348	0.6806840	0.8213983
2533	2:5-1:2	4.515667e-01	0.016015985	0.8871173	0.0350588
2534	3:5-1:2	6.334000e-01	0.197849318	1.0689507	0.0003520
2535	UTC:5-1:2	3.547333e-01	-0.080817348	0.7902840	0.2390059
2536	3:2-2:2	-1.653333e-02	-0.452084015	0.4190173	1.0000000
2537	UTC:2-2:2	-1.102333e-01	-0.545784015	0.3253173	0.9999748
2538	1:3-2:2	-1.628667e-01	-0.598417348	0.2726840	0.9954030
2539	2:3-2:2	-8.133333e-03	-0.443684015	0.4274173	1.0000000
2540	3:3-2:2	2.850000e-02	-0.407050682	0.4640507	1.0000000
2541	UTC:3-2:2	-1.392667e-01	-0.574817348	0.2962840	0.9993270
2542	1:4-2:2	-9.180000e-02	-0.527350682	0.3437507	0.9999985
2543	2:4-2:2	7.973333e-02	-0.355817348	0.5152840	0.9999999
2544	3:4-2:2	9.503333e-02	-0.340517348	0.5305840	0.9999975
2545	UTC:4-2:2	4.680000e-02	-0.388750682	0.4823507	1.0000000
2546	1:5-2:2	8.226667e-02	-0.353284015	0.5178173	0.9999998
2547	2:5-2:2	2.887000e-01	-0.146850682	0.7242507	0.5828383
2548	3:5-2:2	4.705333e-01	0.034982652	0.9060840	0.0226866
2549	UTC:5-2:2	1.918667e-01	-0.243684015	0.6274173	0.9743048
2550	UTC:2-3:2	-9.370000e-02	-0.529250682	0.3418507	0.9999980
2551	1:3-3:2	-1.463333e-01	-0.581884015	0.2892173	0.9987309
2552	2:3-3:2	8.400000e-03	-0.427150682	0.4439507	1.0000000
2553	3:3-3:2	4.503333e-02	-0.390517348	0.4805840	1.0000000
2554	UTC:3-3:2	-1.227333e-01	-0.558284015	0.3128173	0.9998796
2555	1:4-3:2	-7.526667e-02	-0.510817348	0.3602840	0.9999999
2556	2:4-3:2	9.626667e-02	-0.339284015	0.5318173	0.9999969
2557	3:4-3:2	1.115667e-01	-0.323984015	0.5471173	0.9999699
2558	UTC:4-3:2	6.333333e-02	-0.372217348	0.4988840	1.0000000
2559	1:5-3:2	9.880000e-02	-0.336750682	0.5343507	0.9999953
2560	2:5-3:2	3.052333e-01	-0.130317348	0.7407840	0.4852672
2561	3:5-3:2	4.870667e-01	0.051515985	0.9226173	0.0153432
2562	UTC:5-3:2	2.084000e-01	-0.227150682	0.6439507	0.9460033

```

2563 1:3-UTC:2 -5.263333e-02 -0.488184015 0.3829173 1.0000000
2564 2:3-UTC:2 1.021000e-01 -0.333450682 0.5376507 0.9999922
2565 3:3-UTC:2 1.387333e-01 -0.296817348 0.5742840 0.9993599
2566 UTC:3-UTC:2 -2.903333e-02 -0.464584015 0.4065173 1.0000000
2567 1:4-UTC:2 1.843333e-02 -0.417117348 0.4539840 1.0000000
2568 2:4-UTC:2 1.899667e-01 -0.245584015 0.6255173 0.9766399
2569 3:4-UTC:2 2.052667e-01 -0.230284015 0.6408173 0.9525624
2570 UTC:4-UTC:2 1.570333e-01 -0.278517348 0.5925840 0.9969945
2571 1:5-UTC:2 1.925000e-01 -0.243050682 0.6280507 0.9734884
2572 2:5-UTC:2 3.989333e-01 -0.036617348 0.8344840 0.1070246
2573 3:5-UTC:2 5.807667e-01 0.145215985 1.0163173 0.0014354
2574 UTC:5-UTC:2 3.021000e-01 -0.133450682 0.7376507 0.5035093
2575 2:3-1:3 1.547333e-01 -0.280817348 0.5902840 0.9974794
2576 3:3-1:3 1.913667e-01 -0.244184015 0.6269173 0.9749357
2577 UTC:3-1:3 2.360000e-02 -0.411950682 0.4591507 1.0000000
2578 1:4-1:3 7.106667e-02 -0.364484015 0.5066173 1.0000000
2579 2:4-1:3 2.426000e-01 -0.192950682 0.6781507 0.8327935
2580 3:4-1:3 2.579000e-01 -0.177650682 0.6934507 0.7586045
2581 UTC:4-1:3 2.096667e-01 -0.225884015 0.6452173 0.9431803
2582 1:5-1:3 2.451333e-01 -0.190417348 0.6806840 0.8213983
2583 2:5-1:3 4.515667e-01 0.016015985 0.8871173 0.0350588
2584 3:5-1:3 6.334000e-01 0.197849318 1.0689507 0.0003520
2585 UTC:5-1:3 3.547333e-01 -0.080817348 0.7902840 0.2390059
2586 3:3-2:3 3.663333e-02 -0.398917348 0.4721840 1.0000000
2587 UTC:3-2:3 -1.311333e-01 -0.566684015 0.3044173 0.9996983
2588 1:4-2:3 -8.366667e-02 -0.519217348 0.3518840 0.9999997
2589 2:4-2:3 8.786667e-02 -0.347684015 0.5234173 0.9999993
2590 3:4-2:3 1.031667e-01 -0.332384015 0.5387173 0.9999908
2591 UTC:4-2:3 5.493333e-02 -0.380617348 0.4904840 1.0000000
2592 1:5-2:3 9.040000e-02 -0.345150682 0.5259507 0.9999989
2593 2:5-2:3 2.968333e-01 -0.138717348 0.7323840 0.5345089
2594 3:5-2:3 4.786667e-01 0.043115985 0.9142173 0.0187399
2595 UTC:5-2:3 2.000000e-01 -0.235550682 0.6395507 0.9622771
2596 UTC:3-3:3 -1.677667e-01 -0.603317348 0.2677840 0.9935766
2597 1:4-3:3 -1.203000e-01 -0.555850682 0.3152507 0.9999095
2598 2:4-3:3 5.123333e-02 -0.384317348 0.4867840 1.0000000
2599 3:4-3:3 6.653333e-02 -0.369017348 0.5020840 1.0000000
2600 UTC:4-3:3 1.830000e-02 -0.417250682 0.4538507 1.0000000
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2605 1:4-UTC:3 4.746667e-02 -0.388084015 0.4830173 1.0000000
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2607 3:4-UTC:3 2.343000e-01 -0.201250682 0.6698507 0.8673559
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2609 1:5-UTC:3 2.215333e-01 -0.214017348 0.6570840 0.9117067
2610 2:5-UTC:3 4.279667e-01 -0.007584015 0.8635173 0.0588929
2611 3:5-UTC:3 6.098000e-01 0.174249318 1.0453507 0.0006640
2612 UTC:5-UTC:3 3.311333e-01 -0.104417348 0.7666840 0.3445874
2613 2:4-1:4 1.715333e-01 -0.264017348 0.6070840 0.9918010
2614 3:4-1:4 1.868333e-01 -0.248717348 0.6223840 0.9801331
2615 UTC:4-1:4 1.386000e-01 -0.296950682 0.5741507 0.9993680
2616 1:5-1:4 1.740667e-01 -0.261484015 0.6096173 0.9903973
2617 2:5-1:4 3.805000e-01 -0.055050682 0.8160507 0.1521980
2618 3:5-1:4 5.623333e-01 0.126782652 0.9978840 0.0023250
2619 UTC:5-1:4 2.836667e-01 -0.151884015 0.7192173 0.6127532
2620 3:4-2:4 1.530000e-02 -0.420250682 0.4508507 1.0000000
2621 UTC:4-2:4 -3.293333e-02 -0.468484015 0.4026173 1.0000000
2622 1:5-2:4 2.533333e-03 -0.433017348 0.4380840 1.0000000
2623 2:5-2:4 2.089667e-01 -0.226584015 0.6445173 0.9447527
2624 3:5-2:4 3.908000e-01 -0.044750682 0.8263507 0.1253645
2625 UTC:5-2:4 1.121333e-01 -0.323417348 0.5476840 0.9999675
2626 UTC:4-3:4 -4.823333e-02 -0.483784015 0.3873173 1.0000000
2627 1:5-3:4 -1.276667e-02 -0.448317348 0.4227840 1.0000000
2628 2:5-3:4 1.936667e-01 -0.241884015 0.6292173 0.9719337
2629 3:5-3:4 3.755000e-01 -0.060050682 0.8110507 0.1667770
2630 UTC:5-3:4 9.683333e-02 -0.338717348 0.5323840 0.9999966
2631 1:5-UTC:4 3.546667e-02 -0.400084015 0.4710173 1.0000000
2632 2:5-UTC:4 2.419000e-01 -0.193650682 0.6774507 0.8358744
2633 3:5-UTC:4 4.237333e-01 -0.011817348 0.8592840 0.0644435
2634 UTC:5-UTC:4 1.450667e-01 -0.290484015 0.5806173 0.9988627
2635 2:5-1:5 2.064333e-01 -0.229117348 0.6419840 0.9501900
2636 3:5-1:5 3.882667e-01 -0.047284015 0.8238173 0.1315782
2637 UTC:5-1:5 1.096000e-01 -0.325950682 0.5451507 0.9999769
2638 3:5-2:5 1.818333e-01 -0.253717348 0.6173840 0.9848566
2639 UTC:5-2:5 -9.683333e-02 -0.532384015 0.3387173 0.9999966
2640 UTC:5-3:5 -2.786667e-01 -0.714217348 0.1568840 0.6422608
2641 sample families
2643
2644 Df Sum Sq Mean Sq F value Pr(>F)
2645 block 3 4.850 1.6167 5.389 0.00328 ** 
2646 event 4 6.233 1.5583 5.194 0.00182 ** 
2647 block:event 12 4.567 0.3806 1.269 0.27430
2648 Residuals 40 12.000 0.3000
2649 ---
2650 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
2651 Levene's Test for Homogeneity of Variance (center = median)
2652 Df F value Pr(>F)
2653 group 19 0.5099 0.9419
2654 40
2655
2656 Shapiro-Wilk normality test
2657

```

```

2658 data: residuals(family.model)
2659 W = 0.92188, p-value = 0.0009135
2660
2661 Tukey multiple comparisons of means
2662 95% family-wise confidence level
2663
2664 Fit: aov(formula = family.model)
2665
2666 $block
2667   diff      lwr      upr     p adj
2668 2-1  0.80000000  0.2639161 1.3360839 0.0014622
2669 3-1  0.33333333 -0.2027505  0.8694172 0.3543379
2670 UTC-1 0.40000000 -0.1360839  0.9360839 0.2050677
2671 3-2 -0.46666667 -1.0027505  0.0694172 0.1074464
2672 UTC-2 -0.40000000 -0.9360839  0.1360839 0.2050677
2673 UTC-3  0.06666667 -0.4694172  0.6027505 0.9870397
2674
2675 $event
2676   diff      lwr      upr     p adj
2677 2-1 -2.220446e-16 -0.6386414 0.6386414 1.0000000
2678 3-1  8.333333e-02 -0.5553081 0.7219748 0.9957246
2679 4-1  4.166667e-01 -0.2219748 1.0553081 0.3531568
2680 5-1  8.333333e-01  0.1946919 1.4719748 0.0051385
2681 3-2  8.333333e-02 -0.5553081 0.7219748 0.9957246
2682 4-2  4.166667e-01 -0.2219748 1.0553081 0.3531568
2683 5-2  8.333333e-01  0.1946919 1.4719748 0.0051385
2684 4-3  3.333333e-01 -0.3053081 0.9719748 0.5743405
2685 5-3  7.500000e-01  0.1113586 1.3886414 0.0142770
2686 5-4  4.166667e-01 -0.2219748 1.0553081 0.3531568
2687
2688 $`block:event`
2689   diff      lwr      upr     p adj
2690 2:1-1:1 -8.881784e-16 -1.69419391 1.6941939 1.0000000
2691 3:1-1:1 -1.110223e-15 -1.69419391 1.6941939 1.0000000
2692 UTC:1-1:1 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2693 1:2-1:1 -6.666667e-01 -2.36086058 1.0275272 0.9918754
2694 2:2-1:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2695 3:2-1:1 -4.440892e-16 -1.69419391 1.6941939 1.0000000
2696 UTC:2-1:1 -5.551115e-16 -1.69419391 1.6941939 1.0000000
2697 1:3-1:1 -6.666667e-01 -2.36086058 1.0275272 0.9918754
2698 2:3-1:1  1.000000e+00 -0.69419391 2.6941939 0.7628598
2699 3:3-1:1 -8.881784e-16 -1.69419391 1.6941939 1.0000000
2700 UTC:3-1:1 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2701 1:4-1:1 -5.551115e-16 -1.69419391 1.6941939 1.0000000
2702 2:4-1:1  6.666667e-01 -1.02752725 2.3608606 0.9918754
2703 3:4-1:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2704 UTC:4-1:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2705 1:5-1:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2706 2:5-1:1  1.000000e+00 -0.69419391 2.6941939 0.7628598
2707 3:5-1:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2708 UTC:5-1:1  1.333333e+00 -0.36086058 3.0275272 0.2894165
2709 3:1-2:1 -2.220446e-16 -1.69419391 1.6941939 1.0000000
2710 UTC:1-2:1 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2711 1:2-2:1 -6.666667e-01 -2.36086058 1.0275272 0.9918754
2712 2:2-2:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2713 3:2-2:1  4.440892e-16 -1.69419391 1.6941939 1.0000000
2714 UTC:2-2:1  3.330669e-16 -1.69419391 1.6941939 1.0000000
2715 1:3-2:1 -6.666667e-01 -2.36086058 1.0275272 0.9918754
2716 2:3-2:1  1.000000e+00 -0.69419391 2.6941939 0.7628598
2717 3:3-2:1  0.000000e+00 -1.69419391 1.6941939 1.0000000
2718 UTC:3-2:1 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2719 1:4-2:1  3.330669e-16 -1.69419391 1.6941939 1.0000000
2720 2:4-2:1  6.666667e-01 -1.02752725 2.3608606 0.9918754
2721 3:4-2:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2722 UTC:4-2:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2723 1:5-2:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2724 2:5-2:1  1.000000e+00 -0.69419391 2.6941939 0.7628598
2725 3:5-2:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2726 UTC:5-2:1  1.333333e+00 -0.36086058 3.0275272 0.2894165
2727 UTC:1-3:1 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2728 1:2-3:1 -6.666667e-01 -2.36086058 1.0275272 0.9918754
2729 2:2-3:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2730 3:2-3:1  6.661338e-16 -1.69419391 1.6941939 1.0000000
2731 UTC:2-3:1  5.551115e-16 -1.69419391 1.6941939 1.0000000
2732 1:3-3:1 -6.666667e-01 -2.36086058 1.0275272 0.9918754
2733 2:3-3:1  1.000000e+00 -0.69419391 2.6941939 0.7628598
2734 3:3-3:1  2.220446e-16 -1.69419391 1.6941939 1.0000000
2735 UTC:3-3:1 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2736 1:4-3:1  5.551115e-16 -1.69419391 1.6941939 1.0000000
2737 2:4-3:1  6.666667e-01 -1.02752725 2.3608606 0.9918754
2738 3:4-3:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2739 UTC:4-3:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2740 1:5-3:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2741 2:5-3:1  1.000000e+00 -0.69419391 2.6941939 0.7628598
2742 3:5-3:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2743 UTC:5-3:1  1.333333e+00 -0.36086058 3.0275272 0.2894165
2744 1:2-UTC:1 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2745 2:2-UTC:1  6.666667e-01 -1.02752725 2.3608606 0.9918754
2746 3:2-UTC:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2747 UTC:2-UTC:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2748 1:3-UTC:1 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2749 2:3-UTC:1  1.333333e+00 -0.36086058 3.0275272 0.2894165
2750 3:3-UTC:1  3.333333e-01 -1.36086058 2.0275272 0.9999995
2751 UTC:3-UTC:1 -6.106227e-16 -1.69419391 1.6941939 1.0000000
2752 1:4-UTC:1  3.333333e-01 -1.36086058 2.0275272 0.9999995

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2753	2:4-UTC:1	1.000000e+00	-0.69419391	2.6941939	0.7628598
2754	3:4-UTC:1	6.666667e-01	-1.02752725	2.3608606	0.9918754
2755	UTC:4-UTC:1	6.666667e-01	-1.02752725	2.3608606	0.9918754
2756	1:5-UTC:1	6.666667e-01	-1.02752725	2.3608606	0.9918754
2757	2:5-UTC:1	1.333333e+00	-0.36086058	3.0275272	0.2894165
2758	3:5-UTC:1	6.666667e-01	-1.02752725	2.3608606	0.9918754
2759	UTC:5-UTC:1	1.666667e+00	-0.02752725	3.3608606	0.0582571
2760	2:2-1:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2761	3:2-1:2	6.666667e-01	-1.02752725	2.3608606	0.9918754
2762	UTC:2-1:2	6.666667e-01	-1.02752725	2.3608606	0.9918754
2763	1:3-1:2	4.163336e-16	-1.69419391	1.6941939	1.0000000
2764	2:3-1:2	1.666667e+00	-0.02752725	3.3608606	0.0582571
2765	3:3-1:2	6.666667e-01	-1.02752725	2.3608606	0.9918754
2766	UTC:3-1:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2767	1:4-1:2	6.666667e-01	-1.02752725	2.3608606	0.9918754
2768	2:4-1:2	1.333333e+00	-0.36086058	3.0275272	0.2894165
2769	3:4-1:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2770	UTC:4-1:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2771	1:5-1:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2772	2:5-1:2	1.666667e+00	-0.02752725	3.3608606	0.0582571
2773	3:5-1:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2774	UTC:5-1:2	2.000000e+00	0.30580609	3.6941939	0.0079187
2775	3:2-2:2	-3.333333e-01	-2.02752725	1.3608606	0.9999995
2776	UTC:2-2:2	-3.333333e-01	-2.02752725	1.3608606	0.9999995
2777	1:3-2:2	-1.000000e+00	-2.69419391	0.6941939	0.7628598
2778	2:3-2:2	6.666667e-01	-1.02752725	2.3608606	0.9918754
2779	3:3-2:2	-3.333333e-01	-2.02752725	1.3608606	0.9999995
2780	UTC:3-2:2	-6.666667e-01	-2.36086058	1.0275272	0.9918754
2781	1:4-2:2	-3.333333e-01	-2.02752725	1.3608606	0.9999995
2782	2:4-2:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2783	3:4-2:2	-4.440892e-16	-1.69419391	1.6941939	1.0000000
2784	UTC:4-2:2	-8.881784e-16	-1.69419391	1.6941939	1.0000000
2785	1:5-2:2	-6.661338e-16	-1.69419391	1.6941939	1.0000000
2786	2:5-2:2	6.666667e-01	-1.02752725	2.3608606	0.9918754
2787	3:5-2:2	0.000000e+00	-1.69419391	1.6941939	1.0000000
2788	UTC:5-2:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2789	UTC:2-3:2	-1.110223e-16	-1.69419391	1.6941939	1.0000000
2790	1:3-3:2	-6.666667e-01	-2.36086058	1.0275272	0.9918754
2791	2:3-3:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2792	3:3-3:2	-4.440892e-16	-1.69419391	1.6941939	1.0000000
2793	UTC:3-3:2	-3.333333e-01	-2.02752725	1.3608606	0.9999995
2794	1:4-3:2	-1.110223e-16	-1.69419391	1.6941939	1.0000000
2795	2:4-3:2	6.666667e-01	-1.02752725	2.3608606	0.9918754
2796	3:4-3:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2797	UTC:4-3:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2798	1:5-3:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2799	2:5-3:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2800	3:5-3:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2801	UTC:5-3:2	1.333333e+00	-0.36086058	3.0275272	0.2894165
2802	1:3-UTC:2	-6.666667e-01	-2.36086058	1.0275272	0.9918754
2803	2:3-UTC:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2804	3:3-UTC:2	-3.330669e-16	-1.69419391	1.6941939	1.0000000
2805	UTC:3-UTC:2	-3.333333e-01	-2.02752725	1.3608606	0.9999995
2806	1:4-UTC:2	0.000000e+00	-1.69419391	1.6941939	1.0000000
2807	2:4-UTC:2	6.666667e-01	-1.02752725	2.3608606	0.9918754
2808	3:4-UTC:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2809	UTC:4-UTC:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2810	1:5-UTC:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2811	2:5-UTC:2	1.000000e+00	-0.69419391	2.6941939	0.7628598
2812	3:5-UTC:2	3.333333e-01	-1.36086058	2.0275272	0.9999995
2813	UTC:5-UTC:2	1.333333e+00	-0.36086058	3.0275272	0.2894165
2814	2:3-1:3	1.666667e+00	-0.02752725	3.3608606	0.0582571
2815	3:3-1:3	6.666667e-01	-1.02752725	2.3608606	0.9918754
2816	UTC:3-1:3	3.333333e-01	-1.36086058	2.0275272	0.9999995
2817	1:4-1:3	6.666667e-01	-1.02752725	2.3608606	0.9918754
2818	2:4-1:3	1.333333e+00	-0.36086058	3.0275272	0.2894165
2819	3:4-1:3	1.000000e+00	-0.69419391	2.6941939	0.7628598
2820	UTC:4-1:3	1.000000e+00	-0.69419391	2.6941939	0.7628598
2821	1:5-1:3	1.000000e+00	-0.69419391	2.6941939	0.7628598
2822	2:5-1:3	1.666667e+00	-0.02752725	3.3608606	0.0582571
2823	3:5-1:3	1.000000e+00	-0.69419391	2.6941939	0.7628598
2824	UTC:5-1:3	2.000000e+00	0.30580609	3.6941939	0.0079187
2825	3:3-2:3	-1.000000e+00	-2.69419391	0.6941939	0.7628598
2826	UTC:3-2:3	-1.333333e+00	-3.02752725	0.3608606	0.2894165
2827	1:4-2:3	-1.000000e+00	-2.69419391	0.6941939	0.7628598
2828	2:4-2:3	-3.333333e-01	-2.02752725	1.3608606	0.9999995
2829	3:4-2:3	-6.666667e-01	-2.36086058	1.0275272	0.9918754
2830	UTC:4-2:3	-6.666667e-01	-2.36086058	1.0275272	0.9918754
2831	1:5-2:3	-6.666667e-01	-2.36086058	1.0275272	0.9918754
2832	2:5-2:3	-1.110223e-15	-1.69419391	1.6941939	1.0000000
2833	3:5-2:3	-6.666667e-01	-2.36086058	1.0275272	0.9918754
2834	UTC:5-2:3	3.333333e-01	-1.36086058	2.0275272	0.9999995
2835	UTC:3-3:3	3.333333e-01	-2.02752725	1.3608606	0.9999995
2836	1:4-3:3	3.330669e-16	-1.69419391	1.6941939	1.0000000
2837	2:4-3:3	6.666667e-01	-1.02752725	2.3608606	0.9918754
2838	3:4-3:3	3.333333e-01	-1.36086058	2.0275272	0.9999995
2839	UTC:4-3:3	3.333333e-01	-1.36086058	2.0275272	0.9999995
2840	1:5-3:3	3.333333e-01	-1.36086058	2.0275272	0.9999995
2841	2:5-3:3	1.000000e+00	-0.69419391	2.6941939	0.7628598
2842	3:5-3:3	3.333333e-01	-1.36086058	2.0275272	0.9999995
2843	UTC:5-3:3	1.333333e+00	-0.36086058	3.0275272	0.2894165
2844	1:4-UTC:3	3.333333e-01	-1.36086058	2.0275272	0.9999995
2845	2:4-UTC:3	1.000000e+00	-0.69419391	2.6941939	0.7628598
2846	3:4-UTC:3	6.666667e-01	-1.02752725	2.3608606	0.9918754
2847	UTC:4-UTC:3	6.666667e-01	-1.02752725	2.3608606	0.9918754

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2848 1:5-UTC:3 6.666667e-01 -1.02752725 2.3608606 0.9918754
2849 2:5-UTC:3 1.333333e+00 -0.36086058 3.0275272 0.2894165
2850 3:5-UTC:3 6.666667e-01 -1.02752725 2.3608606 0.9918754
2851 UTC:5-UTC:3 6.666667e+00 -0.02752725 3.3608606 0.0582571
2852 2:4-1:4 6.666667e-01 -1.02752725 2.3608606 0.9918754
2853 3:4-1:4 3.333333e-01 -1.36086058 2.0275272 0.9999995
2854 UTC:4-1:4 3.333333e-01 -1.36086058 2.0275272 0.9999995
2855 1:5-1:4 3.333333e-01 -1.36086058 2.0275272 0.9999995
2856 2:5-1:4 1.000000e+00 -0.69419391 2.6941939 0.7628598
2857 3:5-1:4 3.333333e-01 -1.36086058 2.0275272 0.9999995
2858 UTC:5-1:4 3.333333e+00 -0.36086058 3.0275272 0.2894165
2859 3:4-2:4 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2860 UTC:4-2:4 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2861 1:5-2:4 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2862 2:5-2:4 3.333333e-01 -1.36086058 2.0275272 0.9999995
2863 3:5-2:4 -3.333333e-01 -2.02752725 1.3608606 0.9999995
2864 UTC:5-2:4 6.666667e-01 -1.02752725 2.3608606 0.9918754
2865 UTC:4-3:4 -4.440892e-16 -1.69419391 1.6941939 1.0000000
2866 1:5-3:4 -2.220446e-16 -1.69419391 1.6941939 1.0000000
2867 2:5-3:4 6.666667e-01 -1.02752725 2.3608606 0.9918754
2868 3:5-3:4 4.440892e-16 -1.69419391 1.6941939 1.0000000
2869 UTC:5-3:4 1.000000e+00 -0.69419391 2.6941939 0.7628598
2870 1:5-UTC:4 2.220446e-16 -1.69419391 1.6941939 1.0000000
2871 2:5-UTC:4 6.666667e-01 -1.02752725 2.3608606 0.9918754
2872 3:5-UTC:4 8.881784e-16 -1.69419391 1.6941939 1.0000000
2873 UTC:5-UTC:4 1.000000e+00 -0.69419391 2.6941939 0.7628598
2874 2:5-1:5 6.666667e-01 -1.02752725 2.3608606 0.9918754
2875 3:5-1:5 6.661338e-16 -1.69419391 1.6941939 1.0000000
2876 UTC:5-1:5 1.000000e+00 -0.69419391 2.6941939 0.7628598
2877 3:5-2:5 -6.666667e-01 -2.36086058 1.0275272 0.9918754
2878 UTC:5-2:5 3.333333e-01 -1.36086058 2.0275272 0.9999995
2879 UTC:5-3:5 1.000000e+00 -0.69419391 2.6941939 0.7628598
2880
2881 Neuroptera malaise
2882
2883 sample mass
2884
2885      Df   Sum Sq  Mean Sq F value Pr(>F)
2886 block     3 0.0000429 1.430e-05  1.506  0.228
2887 event     4 0.0000246 6.159e-06  0.649  0.631
2888 block:event 12 0.0001382 1.152e-05  1.213  0.308
2889 Residuals  40 0.0003797 9.493e-06
2890 Levene's Test for Homogeneity of Variance (center = median)
2891      Df F value Pr(>F)
2892 group 19  0.4473 0.9689
2893    40
2894
2895 Shapiro-Wilk normality test
2896
2897 data: residuals(mass.model)
2898 W = 0.96538, p-value = 0.0865
2899
2900 Tukey multiple comparisons of means
2901  95% family-wise confidence level
2902
2903 Fit: aov(formula = mass.model)
2904
2905 $block
2906      diff      lwr      upr      p adj
2907 2-1  1.593333e-03 -0.001422320 0.004608987 0.4969119
2908 3-1  1.506667e-03 -0.001508987 0.004522320 0.5440629
2909 UTC-1 -2.600000e-04 -0.003275654 0.002755654 0.9955805
2910 3-2 -8.666667e-05 -0.003102320 0.00292898725
2911 UTC-2 -1.853333e-03 -0.004868987 0.001162320 0.3645618
2912 UTC-3 -1.766667e-03 -0.004782320 0.001248987 0.4067139
2913
2914 $event
2915      diff      lwr      upr      p adj
2916 2-1  8.583333e-04 -0.002734242 0.004450908 0.9591482
2917 3-1 -3.250000e-04 -0.003917575 0.003267575 0.9989754
2918 4-1 -1.133333e-03 -0.004725908 0.002459242 0.8948145
2919 5-1 -8.333333e-06 -0.003600908 0.003584242 1.0000000
2920 3-2 -1.183333e-03 -0.004775908 0.002409242 0.8792040
2921 4-2 -1.991667e-03 -0.005584242 0.001600908 0.5164057
2922 5-2 -8.666667e-04 -0.004459242 0.002725908 0.9577263
2923 4-3 -8.083333e-04 -0.004400908 0.002784242 0.9670276
2924 5-3  3.166667e-04 -0.003275908 0.003909242 0.9990749
2925 5-4  1.125000e-03 -0.002467575 0.004717575 0.8973007
2926
2927 $`block:event`
2928      diff      lwr      upr      p adj
2929 2:1-1:1 -1.366667e-03 -0.010897083 0.008163749 1.0000000
2930 3:1-1:1 -1.666667e-04 -0.009697083 0.009363749 1.0000000
2931 UTC:1-1:1 -1.566667e-03 -0.011097083 0.007963749 1.0000000
2932 1:2-1:1 -7.333333e-04 -0.010263749 0.008797083 1.0000000
2933 2:2-1:1  2.233333e-03 -0.007297083 0.011763749 0.9999922
2934 3:2-1:1 -2.233333e-03 -0.011763749 0.007297083 0.9999922
2935 UTC:2-1:1  1.066667e-03 -0.008463749 0.010597083 1.0000000
2936 1:3-1:1 -2.966667e-03 -0.012497083 0.006563749 0.9995274
2937 2:3-1:1  1.500000e-03 -0.008030416 0.011030416 1.0000000
2938 3:3-1:1 -6.666667e-04 -0.010197083 0.008863749 1.0000000
2939 UTC:3-1:1 -2.266667e-03 -0.011797083 0.007263749 0.9999902
2940 1:4-1:1 -1.366667e-03 -0.010897083 0.008163749 1.0000000
2941 2:4-1:1 -1.866667e-03 -0.011397083 0.007663749 0.9999996
2942 3:4-1:1 -1.233333e-03 -0.010763749 0.008297083 1.0000000

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2943	UTC:4-1:1	-3.166667e-03	-0.012697083	0.006363749	0.9988967
2944	1:5-1:1	-2.966667e-03	-0.012497083	0.006563749	0.9995274
2945	2:5-1:1	-5.666667e-04	-0.010097083	0.008963749	1.0000000
2946	3:5-1:1	3.800000e-03	-0.005730416	0.013330416	0.9906323
2947	UTC:5-1:1	-3.400000e-03	-0.012930416	0.006130416	0.9973495
2948	3:1-2:1	1.200000e-03	-0.008330416	0.010730416	1.0000000
2949	UTC:1-2:1	-2.000000e-04	-0.009730416	0.009330416	1.0000000
2950	1:2-2:1	6.333333e-04	-0.008897083	0.010163749	1.0000000
2951	2:2-2:1	3.600000e-03	-0.005930416	0.013130416	0.9948408
2952	3:2-2:1	-8.666667e-04	-0.010397083	0.008663749	1.0000000
2953	UTC:2-2:1	2.433333e-03	-0.007097083	0.011963749	0.9999713
2954	1:3-2:1	-1.600000e-03	-0.011130416	0.007930416	1.0000000
2955	2:3-2:1	2.866667e-03	-0.006663749	0.012397083	0.9997021
2956	3:3-2:1	7.000000e-04	-0.008830416	0.010230416	1.0000000
2957	UTC:3-2:1	-9.000000e-04	-0.010430416	0.008630416	1.0000000
2958	1:4-2:1	0.000000e+00	-0.009530416	0.009530416	1.0000000
2959	2:4-2:1	-5.000000e-04	-0.010030416	0.009030416	1.0000000
2960	3:4-2:1	1.333333e-04	-0.009397083	0.009663749	1.0000000
2961	UTC:4-2:1	-1.800000e-03	-0.011330416	0.007730416	0.9999998
2962	1:5-2:1	-1.600000e-03	-0.011130416	0.007930416	1.0000000
2963	2:5-2:1	8.000000e-04	-0.008730416	0.010330416	1.0000000
2964	3:5-2:1	5.166667e-03	-0.004363749	0.014697083	0.8601423
2965	UTC:5-2:1	-2.033333e-03	-0.011563749	0.007497083	0.9999982
2966	UTC:1-3:1	-1.400000e-03	-0.010930416	0.008130416	1.0000000
2967	1:2-3:1	5.666667e-04	-0.01097083	0.008963749	1.0000000
2968	2:2-3:1	2.400000e-03	-0.007130416	0.011930416	0.9999766
2969	3:2-3:1	-2.066667e-03	-0.011597083	0.007463749	0.9999977
2970	UTC:2-3:1	1.233333e-03	-0.008297083	0.010763749	1.0000000
2971	1:3-3:1	-2.800000e-03	-0.012330416	0.006730416	0.9997842
2972	2:3-3:1	1.666667e-03	-0.007863749	0.011197083	0.9999999
2973	3:3-3:1	-5.000000e-04	-0.010030416	0.009030416	1.0000000
2974	UTC:3-3:1	-2.100000e-03	-0.011630416	0.007430416	0.9999970
2975	1:4-3:1	-1.200000e-03	-0.010730416	0.008330416	1.0000000
2976	2:4-3:1	-1.700000e-03	-0.011230416	0.007830416	0.9999999
2977	3:4-3:1	-1.066667e-03	-0.010597083	0.008463749	1.0000000
2978	UTC:4-3:1	-3.000000e-03	-0.012530416	0.006530416	0.9994520
2979	1:5-3:1	-2.800000e-03	-0.012330416	0.006730416	0.9997842
2980	2:5-3:1	-4.000000e-04	-0.009930416	0.009130416	1.0000000
2981	3:5-3:1	3.966667e-03	-0.005563749	0.013497083	0.9853188
2982	UTC:5-3:1	-3.233333e-03	-0.012763749	0.006297083	0.9985660
2983	1:2-UTC:1	8.333333e-04	-0.008697083	0.010363749	1.0000000
2984	2:2-UTC:1	3.800000e-03	-0.005730416	0.013330416	0.9906323
2985	3:2-UTC:1	-6.666667e-04	-0.010197083	0.008863749	1.0000000
2986	UTC:2-UTC:1	2.633333e-03	-0.006897083	0.012163749	0.9999090
2987	1:3-UTC:1	-1.400000e-03	-0.010930416	0.008130416	1.0000000
2988	2:3-UTC:1	3.066667e-03	-0.006463749	0.012597083	0.9992693
2989	3:3-UTC:1	9.000000e-04	-0.008630416	0.010430416	1.0000000
2990	UTC:3-UTC:1	-7.000000e-04	-0.010230416	0.008830416	1.0000000
2991	1:4-UTC:1	2.000000e-04	-0.009330416	0.009730416	1.0000000
2992	2:4-UTC:1	-3.000000e-04	-0.009830416	0.009230416	1.0000000
2993	3:4-UTC:1	3.333333e-04	-0.009197083	0.009863749	1.0000000
2994	UTC:4-UTC:1	-1.600000e-03	-0.011130416	0.007930416	1.0000000
2995	1:5-UTC:1	-1.400000e-03	-0.010930416	0.008130416	1.0000000
2996	2:5-UTC:1	1.000000e-03	-0.008530416	0.010530416	1.0000000
2997	3:5-UTC:1	5.366667e-03	-0.004163749	0.014897083	0.8208063
2998	UTC:5-UTC:1	-1.833333e-03	-0.011363749	0.007697083	0.9999997
2999	2:2-1:2	2.966667e-03	-0.006563749	0.012497083	0.9995274
3000	3:2-1:2	-1.500000e-03	-0.011030416	0.008030416	1.0000000
3001	UTC:2-1:2	1.800000e-03	-0.007730416	0.011330416	0.9999998
3002	1:3-1:2	-2.233333e-03	-0.011763749	0.007297083	0.9999922
3003	2:3-1:2	2.233333e-03	-0.007297083	0.011763749	0.9999922
3004	3:3-1:2	6.666667e-05	-0.009463749	0.009597083	1.0000000
3005	UTC:3-1:2	-1.533333e-03	-0.011063749	0.007997083	1.0000000
3006	1:4-1:2	-6.333333e-04	-0.010163749	0.008897083	1.0000000
3007	2:4-1:2	-1.133333e-03	-0.010663749	0.008397083	1.0000000
3008	3:4-1:2	-5.000000e-04	-0.010030416	0.009030416	1.0000000
3009	UTC:4-1:2	-2.433333e-03	-0.011963749	0.007097083	0.9999713
3010	1:5-1:2	-2.233333e-03	-0.011763749	0.007297083	0.9999922
3011	2:5-1:2	1.666667e-04	-0.009363749	0.009697083	1.0000000
3012	3:5-1:2	4.533333e-03	-0.004997083	0.014063749	0.9486317
3013	UTC:5-1:2	2.666667e-03	-0.012197083	0.006863749	0.9998911
3014	3:2-2:2	-4.466667e-03	-0.013997083	0.005063749	0.9547923
3015	UTC:2-2:2	-1.166667e-03	-0.010697083	0.008363749	1.0000000
3016	1:3-2:2	-5.200000e-03	-0.014730416	0.004330416	0.8539481
3017	2:3-2:2	-7.333333e-04	-0.010263749	0.008797083	1.0000000
3018	3:3-2:2	-2.900000e-03	-0.012430416	0.006630416	0.9996515
3019	UTC:3-2:2	-4.500000e-03	-0.014030416	0.005030416	0.9517817
3020	1:4-2:2	3.600000e-03	-0.013130416	0.005930416	0.9948408
3021	2:4-2:2	-4.100000e-03	-0.013630416	0.005430416	0.9795604
3022	3:4-2:2	-3.466667e-03	-0.012997083	0.006063749	0.9966633
3023	UTC:4-2:2	-5.400000e-03	-0.014930416	0.004130416	0.8137617
3024	1:5-2:2	-5.200000e-03	-0.014730416	0.004430416	0.8539481
3025	2:5-2:2	-2.800000e-03	-0.012330416	0.006730416	0.9997842
3026	3:5-2:2	1.566667e-03	-0.007963749	0.011097083	1.0000000
3027	UTC:5-2:2	-5.633333e-03	-0.015163749	0.003897083	0.7609577
3028	UTC:2-3:2	3.300000e-03	-0.006230416	0.012830416	0.9981540
3029	1:3-3:2	-7.333333e-04	-0.010263749	0.008797083	1.0000000
3030	2:3-3:2	3.733333e-03	-0.005797083	0.013263749	0.9922655
3031	3:3-3:2	1.566667e-03	-0.007963749	0.011097083	1.0000000
3032	UTC:3-3:2	-3.333333e-05	-0.009563749	0.009497083	1.0000000
3033	1:4-3:2	8.666667e-04	-0.008663749	0.010397083	1.0000000
3034	2:4-3:2	3.666667e-04	-0.009163749	0.009897083	1.0000000
3035	3:4-3:2	1.000000e-03	-0.008530416	0.010530416	1.0000000
3036	UTC:4-3:2	-9.333333e-04	-0.010463749	0.008597083	1.0000000
3037	1:5-3:2	-7.333333e-04	-0.010263749	0.008797083	1.0000000

```

3038 2:5-3:2      1.666667e-03 -0.007863749 0.011197083 0.9999999
3039 3:5-3:2      6.033333e-03 -0.003497083 0.015563749 0.6594208
3040 UTC:5-3:2     -1.666667e-03 -0.010697083 0.008363749 1.0000000
3041 1:3-UTC:2     -4.033333e-03 -0.013563749 0.005497083 0.9826246
3042 2:3-UTC:2     4.333333e-04 -0.009097083 0.009963749 1.0000000
3043 3:3-UTC:2     -1.733333e-03 -0.011263749 0.007797083 0.9999999
3044 UTC:3-UTC:2   -3.333333e-03 -0.012863749 0.006197083 0.9979128
3045 1:4-UTC:2     -2.433333e-03 -0.011963749 0.007097083 0.9999713
3046 2:4-UTC:2     -2.933333e-03 -0.012463749 0.006597083 0.9995936
3047 3:4-UTC:2     -2.300000e-03 -0.011830416 0.007230416 0.9999877
3048 UTC:4-UTC:2   -4.233333e-03 -0.013763749 0.005297083 0.9722031
3049 1:5-UTC:2     -4.033333e-03 -0.013563749 0.005497083 0.9826246
3050 2:5-UTC:2     -1.633333e-03 -0.011163749 0.007897083 1.0000000
3051 3:5-UTC:2     -2.733333e-03 -0.006797083 0.012263749 0.9998457
3052 UTC:5-UTC:2   -4.466667e-03 -0.013997083 0.005063749 0.9547923
3053 2:3-1:3      4.466667e-03 -0.005063749 0.013997083 0.9547923
3054 3:3-1:3      2.300000e-03 -0.007230416 0.011830416 0.9999877
3055 UTC:3-1:3    7.000000e-04 -0.008830416 0.010230416 1.0000000
3056 1:4-1:3      1.600000e-03 -0.007930416 0.011130416 1.0000000
3057 2:4-1:3      1.100000e-03 -0.008430416 0.010630416 1.0000000
3058 3:4-1:3      1.733333e-03 -0.007797083 0.011263749 0.9999999
3059 UTC:4-1:3    -2.000000e-04 -0.009730416 0.009330416 1.0000000
3060 1:5-1:3      1.734723e-18 -0.009530416 0.009530416 1.0000000
3061 2:5-1:3      2.400000e-03 -0.007130416 0.011930416 0.9999766
3062 3:5-1:3      6.766667e-03 -0.002763749 0.016297083 0.4622019
3063 UTC:5-1:3    -4.333333e-04 -0.009963749 0.009097083 1.0000000
3064 3:3-2:3      -2.166667e-03 -0.011697083 0.007363749 0.9999951
3065 UTC:3-2:3    -3.766667e-03 -0.013297083 0.005763749 0.9914805
3066 1:4-2:3      -2.866667e-03 -0.012397083 0.006663749 0.9997021
3067 2:4-2:3      -3.366667e-03 -0.012897083 0.006163749 0.9976453
3068 3:4-2:3      -2.733333e-03 -0.012263749 0.006797083 0.9998457
3069 UTC:4-2:3    -4.666667e-03 -0.014197083 0.004863749 0.9345901
3070 1:5-2:3      -4.466667e-03 -0.013997083 0.005063749 0.9547923
3071 2:5-2:3      -2.066667e-03 -0.011597083 0.007463749 0.9999977
3072 3:5-2:3      2.300000e-03 -0.007230416 0.011830416 0.9999877
3073 UTC:5-2:3    -4.900000e-03 -0.014430416 0.004630416 0.9041978
3074 UTC:3-3:3    -1.600000e-03 -0.011130416 0.007930416 1.0000000
3075 1:4-3:3      -7.000000e-04 -0.010230416 0.008830416 1.0000000
3076 2:4-3:3      -1.200000e-03 -0.010730416 0.008330416 1.0000000
3077 3:4-3:3      -5.666667e-04 -0.010097083 0.008963749 1.0000000
3078 UTC:4-3:3    -2.500000e-03 -0.012030416 0.007030416 0.9999572
3079 1:5-3:3      -2.300000e-03 -0.011830416 0.007230416 0.9999877
3080 2:5-3:3      1.000000e-04 -0.009430416 0.009630416 1.0000000
3081 3:5-3:3      4.466667e-03 -0.005063749 0.013997083 0.9547923
3082 UTC:5-3:3    -2.733333e-03 -0.012263749 0.006797083 0.9998457
3083 1:4-UTC:3    9.000000e-04 -0.008630416 0.010430416 1.0000000
3084 2:4-UTC:3    4.000000e-04 -0.009130416 0.009930416 1.0000000
3085 3:4-UTC:3    1.033333e-03 -0.008497083 0.010563749 1.0000000
3086 UTC:4-UTC:3 -9.000000e-04 -0.010430416 0.008630416 1.0000000
3087 1:5-UTC:3    -7.000000e-04 -0.010230416 0.008830416 1.0000000
3088 2:5-UTC:3    1.700000e-03 -0.007830416 0.011230416 0.9999999
3089 3:5-UTC:3    6.066667e-03 -0.003463749 0.015597083 0.6505380
3090 UTC:5-UTC:3 -1.133333e-03 -0.010663749 0.008397083 1.0000000
3091 2:4-1:4      -5.000000e-04 -0.010030416 0.009030416 1.0000000
3092 3:4-1:4      1.333333e-04 -0.009397083 0.009663749 1.0000000
3093 UTC:4-1:4    -1.800000e-03 -0.011330416 0.007730416 0.9999998
3094 1:5-1:4      -1.600000e-03 -0.011130416 0.007930416 1.0000000
3095 2:5-1:4      8.000000e-04 -0.008730416 0.010330416 1.0000000
3096 3:5-1:4      5.166667e-03 -0.004363749 0.014697083 0.8601423
3097 UTC:5-1:4    -2.033333e-03 -0.011563749 0.007497083 0.9999982
3098 3:4-2:4      6.333333e-04 -0.008897083 0.010163749 1.0000000
3099 UTC:4-2:4    -1.300000e-03 -0.010830416 0.008230416 1.0000000
3100 1:5-2:4      -1.100000e-03 -0.010630416 0.008430416 1.0000000
3101 2:5-2:4      1.300000e-03 -0.008230416 0.010830416 1.0000000
3102 3:5-2:4      5.666667e-03 -0.003863749 0.015197083 0.7529617
3103 UTC:5-2:4    -1.533333e-03 -0.011063749 0.007997083 1.0000000
3104 UTC:4-3:4    -1.933333e-03 -0.011463749 0.007597083 0.9999992
3105 1:5-3:4      -1.733333e-03 -0.011263749 0.007797083 0.9999999
3106 2:5-3:4      6.666667e-04 -0.008863749 0.010197083 1.0000000
3107 3:5-3:4      5.033333e-03 -0.004497083 0.014563749 0.8834072
3108 UTC:5-3:4    -2.166667e-03 -0.011697083 0.007363749 0.9999951
3109 1:5-UTC:4    2.000000e-04 -0.009330416 0.009730416 1.0000000
3110 2:5-UTC:4    2.600000e-03 -0.006930416 0.012130416 0.9999242
3111 3:5-UTC:4    6.966667e-03 -0.002563749 0.016497083 0.4111745
3112 UTC:5-UTC:4 -2.333333e-04 -0.009763749 0.009297083 1.0000000
3113 2:5-1:5      2.400000e-03 -0.007130416 0.011930416 0.9999766
3114 3:5-1:5      6.766667e-03 -0.002763749 0.016297083 0.4622019
3115 UTC:5-1:5    -4.333333e-04 -0.009963749 0.009097083 1.0000000
3116 3:5-2:5      4.366667e-03 -0.005163749 0.013897083 0.9630147
3117 UTC:5-2:5    -2.833333e-03 -0.012363749 0.006697083 0.9997461
3118 UTC:5-3:5    -7.200000e-03 -0.016730416 0.002330416 0.3550616
3119
3120 sample families
3121
3122             Df Sum Sq Mean Sq F value Pr(>F)
3123 block         3  3.533   1.1778   2.524 0.0713 .
3124 event         4  4.267   1.0667   2.286 0.0769 .
3125 block:event  12  3.467   0.2889   0.619 0.8132
3126 Residuals    40 18.667   0.4667
3127 ---
3128 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
3129 Levene's Test for Homogeneity of Variance (center = median)
3130          Df F value Pr(>F)
3131 group        19  0.6316 0.8587
3132          40

```

```

3133
3134 Shapiro-Wilk normality test
3135
3136 data: residuals(family.model)
3137 W = 0.93234, p-value = 0.002499
3138
3139 Tukey multiple comparisons of means
3140 95% family-wise confidence level
3141
3142 Fit: aov(formula = family.model)
3143
3144 $block
3145   diff      lwr      upr    p adj
3146 2-1  0.3333333 -0.3352807 1.00194739 0.5458370
3147 3-1  0.4666667 -0.2019474 1.13528072 0.2566641
3148 UTC-1 -0.1333333 -0.8019474 0.53528072 0.9501155
3149 3-2  0.1333333 -0.5352807 0.80194739 0.9501155
3150 UTC-2 -0.4666667 -1.1352807 0.20194739 0.2566641
3151 UTC-3 -0.6000000 -1.2686141 0.06861405 0.0923440
3152
3153 $event
3154   diff      lwr      upr    p adj
3155 2-1  5.000000e-01 -0.2965258 1.29652580 0.3917931
3156 3-1  2.220446e-16 -0.7965258 0.79652580 1.0000000
3157 4-1  0.000000e+00 -0.7965258 0.79652580 1.0000000
3158 5-1 -3.333333e-01 -1.1298591 0.46319247 0.7540226
3159 3-2 -5.000000e-01 -1.2965258 0.29652580 0.3917931
3160 4-2 -5.000000e-01 -1.2965258 0.29652580 0.3917931
3161 5-2 -8.333333e-01 -1.6298591 -0.03680753 0.0363889
3162 4-3 -2.220446e-16 -0.7965258 0.79652580 1.0000000
3163 5-3 -3.333333e-01 -1.1298591 0.46319247 0.7540226
3164 5-4 -3.333333e-01 -1.1298591 0.46319247 0.7540226
3165
3166 $`block:event`
3167   diff      lwr      upr    p adj
3168 2:1-1:1  3.333333e-01 -1.779698 2.4463644 1.0000000
3169 3:1-1:1  1.000000e+00 -1.113031 3.1130311 0.9508229
3170 UTC:1-1:1 1.110223e-16 -2.113031 2.1130311 1.0000000
3171 1:2-1:1  1.000000e+00 -1.113031 3.1130311 0.9508229
3172 2:2-1:1  1.000000e+00 -1.113031 3.1130311 0.9508229
3173 3:2-1:1  6.666667e-01 -1.446364 2.7796977 0.9994353
3174 UTC:2-1:1 6.666667e-01 -1.446364 2.7796977 0.9994353
3175 1:3-1:1 -1.110223e-16 -2.113031 2.1130311 1.0000000
3176 2:3-1:1  1.000000e+00 -1.113031 3.1130311 0.9508229
3177 3:3-1:1  3.333333e-01 -1.779698 2.4463644 1.0000000
3178 UTC:3-1:1 1.110223e-16 -2.113031 2.1130311 1.0000000
3179 1:4-1:1  3.333333e-01 -1.779698 2.4463644 1.0000000
3180 2:4-1:1  3.333333e-01 -1.779698 2.4463644 1.0000000
3181 3:4-1:1  6.666667e-01 -1.446364 2.7796977 0.9994353
3182 UTC:4-1:1 1.110223e-16 -2.113031 2.1130311 1.0000000
3183 1:5-1:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3184 2:5-1:1  0.000000e+00 -2.113031 2.1130311 1.0000000
3185 3:5-1:1  6.666667e-01 -1.446364 2.7796977 0.9994353
3186 UTC:5-1:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3187 3:1-2:1  6.666667e-01 -1.446364 2.7796977 0.9994353
3188 UTC:1-2:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3189 1:2-2:1  6.666667e-01 -1.446364 2.7796977 0.9994353
3190 2:2-2:1  6.666667e-01 -1.446364 2.7796977 0.9994353
3191 3:2-2:1  3.333333e-01 -1.779698 2.4463644 1.0000000
3192 UTC:2-2:1 3.333333e-01 -1.779698 2.4463644 1.0000000
3193 1:3-2:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3194 2:3-2:1  6.666667e-01 -1.446364 2.7796977 0.9994353
3195 3:3-2:1  0.000000e+00 -2.113031 2.1130311 1.0000000
3196 UTC:3-2:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3197 1:4-2:1  2.220446e-16 -2.113031 2.1130311 1.0000000
3198 2:4-2:1  4.440892e-16 -2.113031 2.1130311 1.0000000
3199 3:4-2:1  3.333333e-01 -1.779698 2.4463644 1.0000000
3200 UTC:4-2:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3201 1:5-2:1 -6.666667e-01 -2.779698 1.4463644 0.9994353
3202 2:5-2:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3203 3:5-2:1  3.333333e-01 -1.779698 2.4463644 1.0000000
3204 UTC:5-2:1 -6.666667e-01 -2.779698 1.4463644 0.9994353
3205 UTC:1-3:1 -1.000000e+00 -3.113031 1.1130311 0.9508229
3206 1:2-3:1  6.661338e-16 -2.113031 2.1130311 1.0000000
3207 2:2-3:1  6.661338e-16 -2.113031 2.1130311 1.0000000
3208 3:2-3:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3209 UTC:2-3:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3210 1:3-3:1 -1.000000e+00 -3.113031 1.1130311 0.9508229
3211 2:3-3:1  1.110223e-15 -2.113031 2.1130311 1.0000000
3212 3:3-3:1 -6.666667e-01 -2.779698 1.4463644 0.9994353
3213 UTC:3-3:1 -1.000000e+00 -3.113031 1.1130311 0.9508229
3214 1:4-3:1 -6.666667e-01 -2.779698 1.4463644 0.9994353
3215 2:4-3:1 -6.666667e-01 -2.779698 1.4463644 0.9994353
3216 3:4-3:1 -3.333333e-01 -2.446364 2.7796977 1.0000000
3217 UTC:4-3:1 -1.000000e+00 -3.113031 1.1130311 0.9508229
3218 1:5-3:1 -1.333333e+00 -3.446364 0.7796977 0.6646207
3219 2:5-3:1 -1.000000e+00 -3.113031 1.1130311 0.9508229
3220 3:5-3:1 -3.333333e-01 -2.446364 1.7796977 1.0000000
3221 UTC:5-3:1 -1.333333e+00 -3.446364 0.7796977 0.6646207
3222 1:2-UTC:1 1.000000e+00 -1.113031 3.1130311 0.9508229
3223 2:2-UTC:1 1.000000e+00 -1.113031 3.1130311 0.9508229
3224 3:2-UTC:1 6.666667e-01 -1.446364 2.7796977 0.9994353
3225 UTC:2-UTC:1 6.666667e-01 -1.446364 2.7796977 0.9994353
3226 1:3-UTC:1 -2.220446e-16 -2.113031 2.1130311 1.0000000
3227 2:3-UTC:1 1.000000e+00 -1.113031 3.1130311 0.9508229

```

3228	3:3-UTC:1	3.333333e-01	-1.779698	2.4463644	1.0000000
3229	UTC:3-UTC:1	0.000000e+00	-2.113031	2.1130311	1.0000000
3230	1:4-UTC:1	3.333333e-01	-1.779698	2.4463644	1.0000000
3231	2:4-UTC:1	3.333333e-01	-1.779698	2.4463644	1.0000000
3232	3:4-UTC:1	6.666667e-01	-1.446364	2.7796977	0.9994353
3233	UTC:4-UTC:1	0.000000e+00	-2.113031	2.1130311	1.0000000
3234	1:5-UTC:1	-3.333333e-01	-2.446364	1.7796977	1.0000000
3235	2:5-UTC:1	-1.110223e-16	-2.113031	2.1130311	1.0000000
3236	3:5-UTC:1	6.666667e-01	-1.446364	2.7796977	0.9994353
3237	UTC:5-UTC:1	-3.333333e-01	-2.446364	1.7796977	1.0000000
3238	2:2-1:2	0.000000e+00	-2.113031	2.1130311	1.0000000
3239	3:2-1:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3240	UTC:2-1:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3241	1:3-1:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3242	2:3-1:2	4.440892e-16	-2.113031	2.1130311	1.0000000
3243	3:3-1:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3244	UTC:3-1:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3245	1:4-1:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3246	2:4-1:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3247	3:4-1:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3248	UTC:4-1:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3249	1:5-1:2	-1.333333e+00	-3.446364	0.7796977	0.6646207
3250	2:5-1:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3251	3:5-1:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3252	UTC:5-1:2	-1.333333e+00	-3.446364	0.7796977	0.6646207
3253	3:2-2:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3254	UTC:2-2:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3255	1:3-2:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3256	2:3-2:2	4.440892e-16	-2.113031	2.1130311	1.0000000
3257	3:3-2:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3258	UTC:3-2:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3259	1:4-2:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3260	2:4-2:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3261	3:4-2:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3262	UTC:4-2:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3263	1:5-2:2	-1.333333e+00	-3.446364	0.7796977	0.6646207
3264	2:5-2:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3265	3:5-2:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3266	UTC:5-2:2	-1.333333e+00	-3.446364	0.7796977	0.6646207
3267	UTC:2-3:2	4.440892e-16	-2.113031	2.1130311	1.0000000
3268	1:3-3:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3269	2:3-3:2	-3.333333e-01	-1.779698	2.4463644	1.0000000
3270	3:3-3:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3271	UTC:3-3:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3272	1:4-3:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3273	2:4-3:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3274	3:4-3:2	0.000000e+00	-2.113031	2.1130311	1.0000000
3275	UTC:4-3:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3276	1:5-3:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3277	2:5-3:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3278	3:5-3:2	0.000000e+00	-2.113031	2.1130311	1.0000000
3279	UTC:5-3:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3280	1:3-UTC:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3281	2:3-UTC:2	3.333333e-01	-1.779698	2.4463644	1.0000000
3282	3:3-UTC:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3283	UTC:3-UTC:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3284	1:4-UTC:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3285	2:4-UTC:2	-3.333333e-01	-2.446364	1.7796977	1.0000000
3286	3:4-UTC:2	-4.440892e-16	-2.113031	2.1130311	1.0000000
3287	UTC:4-UTC:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3288	1:5-UTC:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3289	2:5-UTC:2	-6.666667e-01	-2.779698	1.4463644	0.9994353
3290	3:5-UTC:2	-4.440892e-16	-2.113031	2.1130311	1.0000000
3291	UTC:5-UTC:2	-1.000000e+00	-3.113031	1.1130311	0.9508229
3292	2:3-1:3	1.000000e+00	-1.113031	3.1130311	0.9508229
3293	3:3-1:3	3.333333e-01	-1.779698	2.4463644	1.0000000
3294	UTC:3-1:3	2.220446e-16	-2.113031	2.1130311	1.0000000
3295	1:4-1:3	3.333333e-01	-1.779698	2.4463644	1.0000000
3296	2:4-1:3	3.333333e-01	-1.779698	2.4463644	1.0000000
3297	3:4-1:3	6.666667e-01	-1.446364	2.7796977	0.9994353
3298	UTC:4-1:3	2.220446e-16	-2.113031	2.1130311	1.0000000
3299	1:5-1:3	-3.333333e-01	-2.446364	1.7796977	1.0000000
3300	2:5-1:3	1.110223e-16	-2.113031	2.1130311	1.0000000
3301	3:5-1:3	6.666667e-01	-1.446364	2.7796977	0.9994353
3302	UTC:5-1:3	-3.333333e-01	-2.446364	1.7796977	1.0000000
3303	3:3-2:3	-6.666667e-01	-2.779698	1.4463644	0.9994353
3304	UTC:3-2:3	-1.000000e+00	-3.113031	1.1130311	0.9508229
3305	1:4-2:3	-6.666667e-01	-2.779698	1.4463644	0.9994353
3306	2:4-2:3	-6.666667e-01	-2.779698	1.4463644	0.9994353
3307	3:4-2:3	-3.333333e-01	-2.446364	1.7796977	1.0000000
3308	UTC:4-2:3	-1.000000e+00	-3.113031	1.1130311	0.9508229
3309	1:5-2:3	-1.333333e+00	-3.446364	0.7796977	0.6646207
3310	2:5-2:3	-1.000000e+00	-3.113031	1.1130311	0.9508229
3311	3:5-2:3	-3.333333e-01	-2.446364	1.7796977	1.0000000
3312	UTC:5-2:3	-1.333333e+00	-3.446364	0.7796977	0.6646207
3313	UTC:3-3:3	-3.333333e-01	-2.446364	1.7796977	1.0000000
3314	1:4-3:3	2.220446e-16	-2.113031	2.1130311	1.0000000
3315	2:4-3:3	4.440892e-16	-2.113031	2.1130311	1.0000000
3316	3:4-3:3	3.333333e-01	-1.779698	2.4463644	1.0000000
3317	UTC:4-3:3	-3.333333e-01	-2.446364	1.7796977	1.0000000
3318	1:5-3:3	-6.666667e-01	-2.779698	1.4463644	0.9994353
3319	2:5-3:3	-3.333333e-01	-2.446364	1.7796977	1.0000000
3320	3:5-3:3	3.333333e-01	-1.779698	2.4463644	1.0000000
3321	UTC:5-3:3	-6.666667e-01	-2.779698	1.4463644	0.9994353
3322	1:4-UTC:3	3.333333e-01	-1.779698	2.4463644	1.0000000

```

3323 2:4-UTC:3 3.333333e-01 -1.779698 2.4463644 1.0000000
3324 3:4-UTC:3 6.666667e-01 -1.446364 2.7796977 0.9994353
3325 UTC:4-UTC:3 -0.000000e+00 -2.113031 2.1130311 1.0000000
3326 1:5-UTC:3 -3.333333e-01 -2.446364 1.7796977 1.0000000
3327 2:5-UTC:3 -1.110223e-16 -2.113031 2.1130311 1.0000000
3328 3:5-UTC:3 6.666667e-01 -1.446364 2.7796977 0.9994353
3329 UTC:5-UTC:3 -3.333333e-01 -2.446364 1.7796977 1.0000000
3330 2:4-1:4 2.220446e-16 -2.113031 2.1130311 1.0000000
3331 3:4-1:4 3.333333e-01 -1.779698 2.4463644 1.0000000
3332 UTC:4-1:4 -3.333333e-01 -2.446364 1.7796977 1.0000000
3333 1:5-1:4 -6.666667e-01 -2.779698 1.4463644 0.9994353
3334 2:5-1:4 -3.333333e-01 -2.446364 1.7796977 1.0000000
3335 3:5-1:4 3.333333e-01 -1.779698 2.4463644 1.0000000
3336 UTC:5-1:4 -6.666667e-01 -2.779698 1.4463644 0.9994353
3337 3:4-2:4 3.333333e-01 -1.779698 2.4463644 1.0000000
3338 UTC:4-2:4 -3.333333e-01 -2.446364 1.7796977 1.0000000
3339 1:5-2:4 -6.666667e-01 -2.779698 1.4463644 0.9994353
3340 2:5-2:4 -3.333333e-01 -2.446364 1.7796977 1.0000000
3341 3:5-2:4 3.333333e-01 -1.779698 2.4463644 1.0000000
3342 UTC:5-2:4 -6.666667e-01 -2.779698 1.4463644 0.9994353
3343 UTC:4-3:4 -6.666667e-01 -2.779698 1.4463644 0.9994353
3344 1:5-3:4 -1.000000e+00 -3.113031 1.1130311 0.9508229
3345 2:5-3:4 -6.666667e-01 -2.779698 1.4463644 0.9994353
3346 3:5-3:4 0.000000e+00 -2.113031 2.1130311 1.0000000
3347 UTC:5-3:4 -1.000000e+00 -3.113031 1.1130311 0.9508229
3348 1:5-UTC:4 -3.333333e-01 -2.446364 1.7796977 1.0000000
3349 2:5-UTC:4 -1.110223e-16 -2.113031 2.1130311 1.0000000
3350 3:5-UTC:4 6.666667e-01 -1.446364 2.7796977 0.9994353
3351 UTC:5-UTC:4 -3.333333e-01 -2.446364 1.7796977 1.0000000
3352 2:5-1:5 3.333333e-01 -1.779698 2.4463644 1.0000000
3353 3:5-1:5 1.000000e+00 -1.113031 3.1130311 0.9508229
3354 UTC:5-1:5 -3.330669e-16 -2.113031 2.1130311 1.0000000
3355 3:5-2:5 6.666667e-01 -1.446364 2.7796977 0.9994353
3356 UTC:5-2:5 -3.333333e-01 -2.446364 1.7796977 1.0000000
3357 UTC:5-3:5 -1.000000e+00 -3.113031 1.1130311 0.9508229
3358
3359 Coleoptera pitfall
3360
3361 sample mass
3362
3363      Df Sum Sq Mean Sq F value Pr(>F)
3364 block     3  34.16  11.388   2.845 0.0496 *
3365 event      4   33.86   8.465   2.115 0.0968 .
3366 block:event 12  49.49   4.124   1.031 0.4411
3367 Residuals  40 160.09    4.002
3368 ---
3369 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
3370 Levene's Test for Homogeneity of Variance (center = median)
3371      Df F value Pr(>F)
3372 group 19   0.9862 0.4952
3373      40
3374
3375 Shapiro-Wilk normality test
3376
3377 data: residuals(mass.model)
3378 W = 0.93552, p-value = 0.003434
3379
3380 Tukey multiple comparisons of means
3381 95% family-wise confidence level
3382
3383 Fit: aov(formula = mass.model)
3384
3385 $block
3386      diff      lwr      upr     p adj
3387 2-1  0.3508533 -1.6071970  2.308904 0.9630216
3388 3-1  1.3819333 -0.5761170  3.339984 0.2477566
3389 UTC-1 -0.7111000 -2.6691504  1.246950 0.7652081
3390 3-2  1.0310800 -0.9269704  2.989130 0.4997852
3391 UTC-2 -1.0619533 -3.0200037  0.896097 0.4743493
3392 UTC-3 -2.0930333 -4.0510837 -0.134983 0.0321779
3393
3394 $event
3395      diff      lwr      upr     p adj
3396 2-1 -1.3828333 -3.71547595 0.9498093 0.4495573
3397 3-1  0.86827500 -1.46436762 3.2009176 0.8240401
3398 4-1  0.32175833 -2.01088428 2.6544010 0.9947049
3399 5-1  0.22846667 -2.10417595 2.5611093 0.9986004
3400 3-2  2.25110833 -0.08153428 4.5837510 0.0630973
3401 4-2  1.70459167 -0.62805095 4.0372343 0.2455639
3402 5-2  1.61130000 -0.72134262 3.9439426 0.2975032
3403 4-3 -0.54651667 -2.87915928 1.7861260 0.9618913
3404 5-3 -0.63980833 -2.97245095 1.6928343 0.9339505
3405 5-4 -0.09329167 -2.42593428 2.2393510 0.9999598
3406
3407 $`block:event`
3408      diff      lwr      upr     p adj
3409 2:1-1:1  0.95403333 -5.234023  7.142089 1.0000000
3410 3:1-1:1  0.15556667 -6.032489  6.343623 1.0000000
3411 UTC:1-1:1 -1.45703333 -7.645089  4.731023 0.9999916
3412 1:2-1:1 -1.27513333 -7.463189  4.912923 0.9999990
3413 2:2-1:1 -2.70943333 -8.897489  3.478623 0.9757520
3414 3:2-1:1 -1.51276667 -7.700823  4.675289 0.9999851
3415 UTC:2-1:1 -0.38143333 -6.569489  5.806623 1.0000000
3416 1:3-1:1 -0.01230000 -6.200356  6.175756 1.0000000
3417 2:3-1:1  2.40420000 -3.783856  8.592256 0.9929324

```

3418	3:3-1:1	2.24813333	-3.939923	8.436189	0.9967111
3419	UTC:3-1:1	-1.51436667	-7.702423	4.673689	0.9999848
3420	1:4-1:1	-0.12480000	-6.312856	6.063256	1.0000000
3421	2:4-1:1	-0.40946667	-6.597523	5.778589	1.0000000
3422	3:4-1:1	2.50506667	-3.682989	8.693123	0.9889914
3423	UTC:4-1:1	-1.03120000	-7.219256	5.156856	1.0000000
3424	1:5-1:1	-0.26350000	-6.451556	5.924556	1.0000000
3425	2:5-1:1	-0.16080000	-6.348856	6.027256	1.0000000
3426	3:5-1:1	1.83793333	-4.350123	8.025989	0.9997493
3427	UTC:5-1:1	-0.84720000	-7.035256	5.340856	1.0000000
3428	3:1-2:1	-0.79846667	-6.986523	5.389589	1.0000000
3429	UTC:1-2:1	-2.41106667	-8.599123	3.776989	0.9927071
3430	1:2-2:1	-2.22916667	-8.417223	3.958889	0.9970243
3431	2:2-2:1	-3.66346667	-9.851523	2.524589	0.7588365
3432	3:2-2:1	-2.46680000	-8.654856	3.721256	0.9906536
3433	UTC:2-2:1	-1.33546667	-7.523523	4.852589	0.9999979
3434	1:3-2:1	-0.96633333	-7.154389	5.221723	1.0000000
3435	2:3-2:1	1.45016667	-4.737889	7.638223	0.9999922
3436	3:3-2:1	1.29410000	-4.893956	7.482156	0.9999987
3437	UTC:3-2:1	-2.46840000	-8.656456	3.719656	0.9905884
3438	1:4-2:1	-1.07883333	-7.266889	5.109223	0.9999999
3439	2:4-2:1	-1.36350000	-7.551556	4.824556	0.9999970
3440	3:4-2:1	1.55103333	-4.637023	7.739089	0.9999782
3441	UTC:4-2:1	-1.98523333	-8.173289	4.202823	0.9992971
3442	1:5-2:1	-1.21753333	-7.405589	4.970523	0.999995
3443	2:5-2:1	-1.11483333	-7.302889	5.073223	0.9999999
3444	3:5-2:1	0.88390000	-5.304156	7.071956	1.0000000
3445	UTC:5-2:1	-1.80123333	-7.989289	4.386823	0.9998103
3446	UTC:1-3:1	-1.61260000	-7.800656	4.575456	0.9999611
3447	1:2-3:1	-1.43070000	-7.618756	4.757356	0.9999937
3448	2:2-3:1	-2.86500000	-9.053056	3.323056	0.9593960
3449	3:2-3:1	-1.66833333	-7.856389	4.519723	0.9999361
3450	UTC:2-3:1	-0.53700000	-6.725056	5.651056	1.0000000
3451	1:3-3:1	-0.16786667	-6.355923	6.020189	1.0000000
3452	2:3-3:1	2.24863333	-3.939423	8.436689	0.9967024
3453	3:3-3:1	2.09256667	-4.095489	8.280623	0.9986231
3454	UTC:3-3:1	-1.66993333	-7.857989	4.518123	0.9999352
3455	1:4-3:1	-0.28036667	-6.468423	5.907689	1.0000000
3456	2:4-3:1	-0.56503333	-6.753089	5.623023	1.0000000
3457	3:4-3:1	2.34950000	-3.838556	8.537556	0.9945322
3458	UTC:4-3:1	-1.18676667	-7.374823	5.001289	0.9999997
3459	1:5-3:1	-0.41906667	-6.607123	5.768989	1.0000000
3460	2:5-3:1	-0.31636667	-6.504423	5.871689	1.0000000
3461	3:5-3:1	1.68236667	-4.505689	7.870423	0.9999279
3462	UTC:5-3:1	-1.00276667	-7.190823	5.185289	1.0000000
3463	1:2-UTC:1	0.18190000	-6.006156	6.369956	1.0000000
3464	2:2-UTC:1	-1.25240000	-7.440456	4.935656	0.9999992
3465	3:2-UTC:1	-0.05573333	-6.243789	6.132323	1.0000000
3466	UTC:2-UTC:1	1.07560000	-5.112456	7.263656	0.9999999
3467	1:3-UTC:1	1.44473333	-4.743323	7.632789	0.9999926
3468	2:3-UTC:1	3.86123333	-2.326823	10.049289	0.6822509
3469	3:3-UTC:1	3.70516667	-2.482889	9.893223	0.7432894
3470	UTC:3-UTC:1	-0.05733333	-6.245389	6.130723	1.0000000
3471	1:4-UTC:1	1.33223333	-4.855823	7.520289	0.9999979
3472	2:4-UTC:1	1.04756667	-5.140489	7.235623	1.0000000
3473	3:4-UTC:1	3.96210000	-2.225956	10.150156	0.6410367
3474	UTC:4-UTC:1	0.42583333	-5.762223	6.613889	1.0000000
3475	1:5-UTC:1	1.19353333	-4.994523	7.381589	0.9999997
3476	2:5-UTC:1	1.29623333	-4.891823	7.484289	0.9999987
3477	3:5-UTC:1	3.29496667	-2.893089	9.483023	0.8764547
3478	UTC:5-UTC:1	0.60983333	-5.578223	6.797889	1.0000000
3479	2:2-1:2	-1.43430000	-7.622356	4.753756	0.9999934
3480	3:2-1:2	-0.23763333	-6.425689	5.950423	1.0000000
3481	UTC:2-1:2	0.89370000	-5.294356	7.081756	1.0000000
3482	1:3-1:2	1.26283333	-4.925223	7.450889	0.9999991
3483	2:3-1:2	3.67933333	-2.508723	9.867389	0.7529646
3484	3:3-1:2	3.52326667	-2.664789	9.711323	0.8081121
3485	UTC:3-1:2	-0.23923333	-6.427289	5.948823	1.0000000
3486	1:4-1:2	1.15033333	-5.037723	7.338389	0.9999998
3487	2:4-1:2	0.86566667	-5.322389	7.053723	1.0000000
3488	3:4-1:2	3.78020000	-2.407856	9.968256	0.7144491
3489	UTC:4-1:2	0.24393333	-5.944123	6.431989	1.0000000
3490	1:5-1:2	1.01163333	-5.176423	7.199689	1.0000000
3491	2:5-1:2	1.11433333	-5.073723	7.302389	0.9999999
3492	3:5-1:2	3.11306667	-3.074989	9.301123	0.9188733
3493	UTC:5-1:2	0.42793333	-5.760123	6.615989	1.0000000
3494	3:2-2:2	1.19666667	-4.991389	7.384723	0.9999996
3495	UTC:2-2:2	2.32800000	-3.860056	8.516056	0.9950732
3496	1:3-2:2	2.69713333	-3.490923	8.885189	0.9767900
3497	2:3-2:2	5.11363333	-1.074423	11.301689	0.2191286
3498	3:3-2:2	4.95756667	-1.230489	11.145623	0.2626212
3499	UTC:3-2:2	1.19506667	-4.992989	7.383123	0.9999996
3500	1:4-2:2	2.58463333	-3.603423	8.772689	0.9847820
3501	2:4-2:2	2.29996667	-3.888089	8.488023	0.9957114
3502	3:4-2:2	5.21450000	-0.973556	11.402556	0.1939301
3503	UTC:4-2:2	1.67823333	-4.509823	7.866289	0.9999304
3504	1:5-2:2	2.44593333	-3.742123	8.633989	0.9914710
3505	2:5-2:2	2.54863333	-3.639423	8.736689	0.9868203
3506	3:5-2:2	4.54736667	-1.640689	10.735423	0.4020411
3507	UTC:5-2:2	1.86223333	-4.325823	8.050289	0.9997001
3508	UTC:2-3:2	1.13133333	-5.056723	7.319389	0.9999999
3509	1:3-3:2	1.50046667	-4.687589	7.688523	0.9999868
3510	2:3-3:2	3.91696667	-2.271089	10.105023	0.6596048
3511	3:3-3:2	3.76090000	-2.427156	9.948956	0.7219655
3512	UTC:3-3:2	-0.00160000	-6.189656	6.186456	1.0000000

```

3513 1:4-3:2    1.38796667 -4.800089  7.576023  0.9999961
3514 2:4-3:2    1.10330000 -5.084756  7.291356  0.9999999
3515 3:4-3:2    4.01783333 -2.170223 10.205889 0.6178996
3516 UTC:4-3:2   0.48156667 -5.706489  6.669623  1.0000000
3517 1:5-3:2    1.24926667 -4.938789  7.437323  0.9999993
3518 2:5-3:2    1.35196667 -4.836089  7.540023  0.9999974
3519 3:5-3:2    3.35070000 -2.837356  9.538756  0.8612689
3520 UTC:5-3:2   0.66556667 -5.522489  6.853623  1.0000000
3521 1:3-UTC:2   0.36913333 -5.818923  6.557189  1.0000000
3522 2:3-UTC:2   2.78563333 -3.402423  8.973689  0.9685184
3523 3:3-UTC:2   2.62956667 -3.558489  8.817623  0.9818999
3524 UTC:3-UTC:2 -1.13293333 -7.320989  5.055123  0.9999999
3525 1:4-UTC:2   0.25663333 -5.931423  6.444689  1.0000000
3526 2:4-UTC:2   -0.02803333 -6.216089  6.160023  1.0000000
3527 3:4-UTC:2   2.88650000 -3.301556  9.074556  0.9566253
3528 UTC:4-UTC:2 -0.64976667 -6.837823  5.538289  1.0000000
3529 1:5-UTC:2   0.11793333 -6.070123  6.305989  1.0000000
3530 2:5-UTC:2   0.22063333 -5.967423  6.408689  1.0000000
3531 3:5-UTC:2   2.21936667 -3.968689  8.407423  0.9971760
3532 UTC:5-UTC:2 -0.46576667 -6.653823  5.722289  1.0000000
3533 2:3-1:3    2.41650000 -3.771556  8.604556  0.9925247
3534 3:3-1:3    2.26043333 -3.927623  8.448489  0.9964935
3535 UTC:3-1:3   -1.50206667 -7.690123  4.685989  0.9999866
3536 1:4-1:3    -0.11250000 -6.300556  6.075556  1.0000000
3537 2:4-1:3    -0.39716667 -6.585223  5.790889  1.0000000
3538 3:4-1:3    2.51736667 -3.670689  8.705423  0.9884097
3539 UTC:4-1:3   -1.01890000 -7.206956  5.169156  1.0000000
3540 1:5-1:3    -0.25120000 -6.439256  5.936856  1.0000000
3541 2:5-1:3    -0.14850000 -6.336556  6.039556  1.0000000
3542 3:5-1:3    1.85023333 -4.337823  8.038289  0.9997254
3543 UTC:5-1:3   -0.83490000 -7.022956  5.353156  1.0000000
3544 3:3-2:3    -0.15606667 -6.344123  6.031989  1.0000000
3545 UTC:3-2:3   -3.91856667 -10.106623 2.269489 0.6589497
3546 1:4-2:3    -2.52900000 -8.717056  3.659056  0.9878372
3547 2:4-2:3    -2.81366667 -9.001723  3.374389  0.9654896
3548 3:4-2:3    0.10086667 -6.087189  6.288923  1.0000000
3549 UTC:4-2:3   -3.43540000 -9.623456  2.752656  0.8362988
3550 1:5-2:3    -2.66770000 -8.855756  3.520356  0.9791363
3551 2:5-2:3    -2.56500000 -8.753056  3.623056  0.9859222
3552 3:5-2:3    -0.56626667 -6.754323  5.621789  1.0000000
3553 UTC:5-2:3   -3.25140000 -9.439456  2.936656  0.8876170
3554 UTC:3-3:3   -3.76250000 -9.950556  2.425556  0.7213449
3555 1:4-3:3    -2.37293333 -8.560989  3.815123  0.9938879
3556 2:4-3:3    -2.65760000 -8.845656  3.530456  0.9798979
3557 3:4-3:3    0.25693333 -5.931123  6.444989  1.0000000
3558 UTC:4-3:3   -3.27933333 -9.467389  2.908723  0.8805322
3559 1:5-3:3    -2.51163333 -8.699689  3.676423  0.9886838
3560 2:5-3:3    -2.40893333 -8.596989  3.779123  0.9927777
3561 3:5-3:3    -0.41020000 -6.598256  5.777856  1.0000000
3562 UTC:5-3:3   -3.09533333 -9.283389  3.092723  0.9224199
3563 1:4-UTC:3   1.38956667 -4.798489  7.577623  0.9999960
3564 2:4-UTC:3   1.10490000 -5.083156  7.292956  0.9999999
3565 3:4-UTC:3   4.01943333 -2.168623 10.207489 0.6172328
3566 UTC:4-4:UTC:3 0.48316667 -5.704889  6.671223  1.0000000
3567 1:5-UTC:3   1.25086667 -4.937189  7.438923  0.9999993
3568 2:5-UTC:3   1.35356667 -4.834489  7.541623  0.9999973
3569 3:5-UTC:3   3.35230000 -2.835756  9.540356  0.8608181
3570 UTC:5-UTC:3 0.66716667 -5.520889  6.855223  1.0000000
3571 2:4-1:4    -0.28466667 -6.472723  5.903389  1.0000000
3572 3:4-1:4    2.62986667 -3.558189  8.817923  0.9818793
3573 UTC:4-1:4   -0.90640000 -7.094456  5.281656  1.0000000
3574 1:5-1:4    -0.13870000 -6.326756  6.049356  1.0000000
3575 2:5-1:4    -0.03600000 -6.224056  6.152056  1.0000000
3576 3:5-1:4    1.96273333 -4.225323  8.150789  0.9993944
3577 UTC:5-1:4   -0.72240000 -6.910456  5.465656  1.0000000
3578 3:4-2:4    2.91453333 -3.273523  9.102589  0.9528121
3579 UTC:4-2:4   -0.62173333 -6.809789  5.566323  1.0000000
3580 1:5-2:4    0.14596667 -6.042089  6.334023  1.0000000
3581 2:5-2:4    0.24866667 -5.939389  6.436723  1.0000000
3582 3:5-2:4    2.24740000 -3.940656  8.435456  0.9967237
3583 UTC:5-2:4   -0.43773333 -6.625789  5.750323  1.0000000
3584 UTC:4-3:4   -3.53626667 -9.724323 2.651789  0.8037558
3585 1:5-3:4    -2.76856667 -8.956623  3.419489  0.9702629
3586 2:5-3:4    -2.66586667 -8.853923  3.522189  0.9792761
3587 3:5-3:4    -0.66713333 -6.855189  5.520923  1.0000000
3588 UTC:5-3:4   -3.35226667 -9.540323  2.835789  0.8608275
3589 1:5-UTC:4   0.76770000 -5.420356  6.955756  1.0000000
3590 2:5-UTC:4   0.87040000 -5.317656  7.058456  1.0000000
3591 3:5-UTC:4   2.86913333 -3.318923  9.057189  0.9588736
3592 UTC:5-UTC:4 0.18400000 -6.004056  6.372056  1.0000000
3593 2:5-1:5    0.10270000 -6.085356  6.290756  1.0000000
3594 3:5-1:5    2.10143333 -4.086623  8.289489  0.9985485
3595 UTC:5-1:5   -0.58370000 -6.771756  5.604356  1.0000000
3596 3:5-2:5    1.99873333 -4.189323  8.186789  0.9992324
3597 UTC:5-2:5   -0.68640000 -6.874456  5.501656  1.0000000
3598 UTC:5-3:5   -2.68513333 -8.873189  3.502923  0.9777697
3599
3600 sample families
3601
3602      Df Sum Sq Mean Sq F value Pr(>F)
3603 block      3 11.52   3.839  0.601  0.618
3604 event      4 52.43  13.108  2.054  0.105
3605 block:event 12 90.90  7.575  1.187  0.325
3606 Residuals  40 255.33  6.383
3607 Levene's Test for Homogeneity of Variance (center = median)

```

```

3608 Df F value Pr(>F)
3609 group 19 0.3518 0.9915
3610      40
3611
3612 Shapiro-Wilk normality test
3613
3614 data: residuals(family.model)
3615 W = 0.98591, p-value = 0.7174
3616
3617 Tukey multiple comparisons of means
3618   95% family-wise confidence level
3619
3620 Fit: aov(formula = family.model)
3621
3622 $block
3623   diff      lwr      upr     p adj
3624 2-1 -6.000000e-01 -3.072839 1.872839 0.9148026
3625 3-1  4.666667e-01 -2.006173 2.939506 0.9572259
3626 UTC-1 4.666667e-01 -2.006173 2.939506 0.9572259
3627 3-2  1.066667e+00 -1.406173 3.539506 0.6574173
3628 UTC-2 1.066667e+00 -1.406173 3.539506 0.6574173
3629 UTC-3 -8.881784e-16 -2.472839 2.472839 1.0000000
3630
3631 $event
3632   diff      lwr      upr     p adj
3633 2-1  0.83333333 -2.1125817 3.779248 0.9266631
3634 3-1  0.91666667 -2.0292484 3.862582 0.8993972
3635 4-1  2.83333333 -0.1125817 5.779248 0.0644597
3636 5-1  1.41666667 -1.5292484 4.362582 0.6477299
3637 3-2  0.08333333 -2.8625817 3.029248 0.9999899
3638 4-2  2.00000000 -0.9459151 4.945915 0.3141220
3639 5-2  0.58333333 -2.3625817 3.529248 0.9792911
3640 4-3  1.91666667 -1.0292484 4.862582 0.3559151
3641 5-3  0.50000000 -2.4459151 3.445915 0.9883391
3642 5-4 -1.41666667 -4.3625817 1.529248 0.6477299
3643
3644 $`block:event`
3645   diff      lwr      upr     p adj
3646 2:1-1:1  9.325873e-15 -7.814951 7.814951 1.0000000
3647 3:1-1:1  2.000000e+00 -5.814951 9.814951 0.9999703
3648 UTC:1-1:1 2.333333e+00 -5.481618 10.148284 0.9997307
3649 1:2-1:1  1.000000e+00 -6.814951 8.814951 1.0000000
3650 2:2-1:1  3.000000e+00 -4.814951 10.814951 0.9938146
3651 3:2-1:1  6.666667e-01 -7.148284 8.481618 1.0000000
3652 UTC:2-1:1 3.000000e+00 -4.814951 10.814951 0.9938146
3653 1:3-1:1  1.666667e+00 -6.148284 9.481618 0.9999982
3654 2:3-1:1  5.329071e-15 -7.814951 7.814951 1.0000000
3655 3:3-1:1  3.000000e+00 -4.814951 10.814951 0.9938146
3656 UTC:3-1:1 3.333333e+00 -4.481618 11.148284 0.9812154
3657 1:4-1:1  3.333333e+00 -4.481618 11.148284 0.9812154
3658 2:4-1:1  3.000000e+00 -4.814951 10.814951 0.9938146
3659 3:4-1:1  4.333333e+00 -3.481618 12.148284 0.8375794
3660 UTC:4-1:1 5.000000e+00 -2.814951 12.814951 0.6422705
3661 1:5-1:1  5.000000e+00 -2.814951 12.814951 0.6422705
3662 2:5-1:1  2.000000e+00 -5.814951 9.814951 0.9999703
3663 3:5-1:1  3.333333e+00 -4.481618 11.148284 0.9812154
3664 UTC:5-1:1 -3.333333e-01 -8.148284 7.481618 1.0000000
3665 3:1-2:1  2.000000e+00 -5.814951 9.814951 0.9999703
3666 UTC:1-2:1 2.333333e+00 -5.481618 10.148284 0.9997307
3667 1:2-2:1  1.000000e+00 -6.814951 8.814951 1.0000000
3668 2:2-2:1  3.000000e+00 -4.814951 10.814951 0.9938146
3669 3:2-2:1  6.666667e-01 -7.148284 8.481618 1.0000000
3670 UTC:2-2:1 3.000000e+00 -4.814951 10.814951 0.9938146
3671 1:3-2:1  1.666667e+00 -6.148284 9.481618 0.9999982
3672 2:3-2:1 -3.996803e-15 -7.814951 7.814951 1.0000000
3673 3:3-2:1  3.000000e+00 -4.814951 10.814951 0.9938146
3674 UTC:3-2:1 3.333333e+00 -4.481618 11.148284 0.9812154
3675 1:4-2:1  3.333333e+00 -4.481618 11.148284 0.9812154
3676 2:4-2:1  3.000000e+00 -4.814951 10.814951 0.9938146
3677 3:4-2:1  4.333333e+00 -3.481618 12.148284 0.8375794
3678 UTC:4-2:1 5.000000e+00 -2.814951 12.814951 0.6422705
3679 1:5-2:1  5.000000e+00 -2.814951 12.814951 0.6422705
3680 2:5-2:1  2.000000e+00 -5.814951 9.814951 0.9999703
3681 3:5-2:1  3.333333e+00 -4.481618 11.148284 0.9812154
3682 UTC:5-2:1 -3.333333e-01 -8.148284 7.481618 1.0000000
3683 UTC:1-3:1 3.333333e-01 -7.481618 8.148284 1.0000000
3684 1:2-3:1 -1.000000e+00 -8.814951 6.814951 1.0000000
3685 2:2-3:1  1.000000e+00 -6.814951 8.814951 1.0000000
3686 3:2-3:1 -1.333333e+00 -9.148284 6.481618 1.0000000
3687 UTC:2-3:1 1.000000e+00 -6.814951 8.814951 1.0000000
3688 1:3-3:1 -3.333333e-01 -8.148284 7.481618 1.0000000
3689 2:3-3:1 -2.000000e+00 -9.814951 5.814951 0.9999703
3690 3:3-3:1  1.000000e+00 -6.814951 8.814951 1.0000000
3691 UTC:3-3:1 1.333333e+00 -6.481618 9.148284 1.0000000
3692 1:4-3:1  1.333333e+00 -6.481618 9.148284 1.0000000
3693 2:4-3:1  1.000000e+00 -6.814951 8.814951 1.0000000
3694 3:4-3:1  2.333333e+00 -5.481618 10.148284 0.9997307
3695 UTC:4-3:1 3.000000e+00 -4.814951 10.814951 0.9938146
3696 1:5-3:1  3.000000e+00 -4.814951 10.814951 0.9938146
3697 2:5-3:1  8.881784e-16 -7.814951 7.814951 1.0000000
3698 3:5-3:1  1.333333e+00 -6.481618 9.148284 1.0000000
3699 UTC:5-3:1 -2.333333e+00 -10.148284 5.481618 0.9997307
3700 1:2-UTC:1 -1.333333e+00 -9.148284 6.481618 1.0000000
3701 2:2-UTC:1  6.666667e-01 -7.148284 8.481618 1.0000000
3702 3:2-UTC:1 -1.666667e+00 -9.481618 6.148284 0.9999982

```

3703	UTC:2-UTC:1	6.666667e-01	-7.148284	8.481618	1.0000000
3704	1:3-UTC:1	-6.666667e-01	-8.481618	7.148284	1.0000000
3705	2:3-UTC:1	-2.333333e+00	-10.148284	5.481618	0.9997307
3706	3:3-UTC:1	6.666667e-01	-7.148284	8.481618	1.0000000
3707	UTC:3-UTC:1	1.000000e+00	-6.814951	8.814951	1.0000000
3708	1:4-UTC:1	1.000000e+00	-6.814951	8.814951	1.0000000
3709	2:4-UTC:1	6.666667e-01	-7.148284	8.481618	1.0000000
3710	3:4-UTC:1	2.000000e+00	-5.814951	9.814951	0.9999703
3711	UTC:4-UTC:1	2.666667e+00	-5.148284	10.481618	0.9984593
3712	1:5-UTC:1	2.666667e+00	-5.148284	10.481618	0.9984593
3713	2:5-UTC:1	-3.333333e-01	-8.148284	7.481618	1.0000000
3714	3:5-UTC:1	1.000000e+00	-6.814951	8.814951	1.0000000
3715	UTC:5-UTC:1	-2.666667e+00	-10.481618	5.148284	0.9984593
3716	2:2-1:2	2.000000e+00	-5.814951	9.814951	0.9999703
3717	3:2-1:2	-3.333333e-01	-8.148284	7.481618	1.0000000
3718	UTC:2-1:2	2.000000e+00	-5.814951	9.814951	0.9999703
3719	1:3-1:2	6.666667e-01	-7.148284	8.481618	1.0000000
3720	2:3-1:2	-1.000000e+00	-8.814951	6.814951	1.0000000
3721	3:3-1:2	2.000000e+00	-5.814951	9.814951	0.9999703
3722	UTC:3-1:2	2.333333e+00	-5.481618	10.148284	0.9997307
3723	1:4-1:2	2.333333e+00	-5.481618	10.148284	0.9997307
3724	2:4-1:2	2.000000e+00	-5.814951	9.814951	0.9999703
3725	3:4-1:2	3.333333e+00	-4.481618	11.148284	0.9812154
3726	UTC:4-1:2	4.000000e+00	-3.814951	11.814951	0.9073818
3727	1:5-1:2	4.000000e+00	-3.814951	11.814951	0.9073818
3728	2:5-1:2	1.000000e+00	-6.814951	8.814951	1.0000000
3729	3:5-1:2	2.333333e+00	-5.481618	10.148284	0.9997307
3730	UTC:5-1:2	-1.333333e+00	-9.148284	6.481618	1.0000000
3731	3:2-2:2	-2.333333e+00	-10.148284	5.481618	0.9997307
3732	UTC:2-2:2	2.664535e-15	-7.814951	7.814951	1.0000000
3733	1:3-2:2	-1.333333e+00	-9.148284	6.481618	1.0000000
3734	2:3-2:2	-3.000000e+00	-10.814951	4.814951	0.9938146
3735	3:3-2:2	3.552714e-15	-7.814951	7.814951	1.0000000
3736	UTC:3-2:2	3.333333e-01	-7.481618	8.148284	1.0000000
3737	1:4-2:2	3.333333e-01	-7.481618	8.148284	1.0000000
3738	2:4-2:2	1.776357e-15	-7.814951	7.814951	1.0000000
3739	3:4-2:2	1.333333e+00	-6.481618	9.148284	1.0000000
3740	UTC:4-2:2	2.000000e+00	-5.814951	9.814951	0.9999703
3741	1:5-2:2	2.000000e+00	-5.814951	9.814951	0.9999703
3742	2:5-2:2	-1.000000e+00	-8.814951	6.814951	1.0000000
3743	3:5-2:2	3.333333e-01	-7.481618	8.148284	1.0000000
3744	UTC:5-2:2	-3.333333e+00	-11.148284	4.481618	0.9812154
3745	UTC:2-3:2	2.333333e+00	-5.481618	10.148284	0.9997307
3746	1:3-3:2	1.000000e+00	-6.814951	8.814951	1.0000000
3747	2:3-3:2	-6.666667e-01	-8.481618	7.148284	1.0000000
3748	3:3-3:2	2.333333e+00	-5.481618	10.148284	0.9997307
3749	UTC:3-3:2	2.666667e+00	-5.148284	10.481618	0.9984593
3750	1:4-3:2	2.666667e+00	-5.148284	10.481618	0.9984593
3751	2:4-3:2	2.333333e+00	-5.481618	10.148284	0.9997307
3752	3:4-3:2	3.666667e+00	-4.148284	11.481618	0.9543608
3753	UTC:4-3:2	4.333333e+00	-3.481618	12.148284	0.8375794
3754	1:5-3:2	4.333333e+00	-3.481618	12.148284	0.8375794
3755	2:5-3:2	1.333333e+00	-6.481618	9.148284	1.0000000
3756	3:5-3:2	2.666667e+00	-5.148284	10.481618	0.9984593
3757	UTC:5-3:2	-1.000000e+00	-8.814951	6.814951	1.0000000
3758	1:3-UTC:2	-1.333333e+00	-9.148284	6.481618	1.0000000
3759	2:3-UTC:2	-3.000000e+00	-10.814951	4.814951	0.9938146
3760	3:3-UTC:2	8.881784e-16	-7.814951	7.814951	1.0000000
3761	UTC:3-UTC:2	3.333333e-01	-7.481618	8.148284	1.0000000
3762	1:4-UTC:2	3.333333e-01	-7.481618	8.148284	1.0000000
3763	2:4-UTC:2	-8.881784e-16	-7.814951	7.814951	1.0000000
3764	3:4-UTC:2	1.333333e+00	-6.481618	9.148284	1.0000000
3765	UTC:4-UTC:2	2.000000e+00	-5.814951	9.814951	0.9999703
3766	1:5-UTC:2	2.000000e+00	-5.814951	9.814951	0.9999703
3767	2:5-UTC:2	-1.000000e+00	-8.814951	6.814951	1.0000000
3768	3:5-UTC:2	3.333333e-01	-7.481618	8.148284	1.0000000
3769	UTC:5-UTC:2	-3.333333e+00	-11.148284	4.481618	0.9812154
3770	2:3-1:3	-1.666667e+00	-9.481618	6.148284	0.9999982
3771	3:3-1:3	1.333333e+00	-6.481618	9.148284	1.0000000
3772	UTC:3-1:3	1.666667e+00	-6.148284	9.481618	0.9999982
3773	1:4-1:3	1.666667e+00	-6.148284	9.481618	0.9999982
3774	2:4-1:3	1.333333e+00	-6.481618	9.148284	1.0000000
3775	3:4-1:3	2.666667e+00	-5.148284	10.481618	0.9984593
3776	UTC:4-1:3	3.333333e+00	-4.481618	11.148284	0.9812154
3777	1:5-1:3	3.333333e+00	-4.481618	11.148284	0.9812154
3778	2:5-1:3	3.333333e-01	-7.481618	8.148284	1.0000000
3779	3:5-1:3	1.666667e+00	-6.148284	9.481618	0.9999982
3780	UTC:5-1:3	-2.000000e+00	-9.814951	5.814951	0.9999703
3781	3:3-2:3	3.000000e+00	-4.814951	10.814951	0.9938146
3782	UTC:3-2:3	3.333333e+00	-4.481618	11.148284	0.9812154
3783	1:4-2:3	3.333333e+00	-4.481618	11.148284	0.9812154
3784	2:4-2:3	3.000000e+00	-4.814951	10.814951	0.9938146
3785	3:4-2:3	4.333333e+00	-3.481618	12.148284	0.8375794
3786	UTC:4-2:3	5.000000e+00	-2.814951	12.814951	0.6422705
3787	1:5-2:3	5.000000e+00	-2.814951	12.814951	0.6422705
3788	2:5-2:3	2.000000e+00	-5.814951	9.814951	0.9999703
3789	3:5-2:3	3.333333e+00	-4.481618	11.148284	0.9812154
3790	UTC:5-2:3	-3.333333e-01	-8.148284	7.481618	1.0000000
3791	UTC:3-3:3	3.333333e-01	-7.481618	8.148284	1.0000000
3792	1:4-3:3	3.333333e-01	-7.481618	8.148284	1.0000000
3793	2:4-3:3	-1.776357e-15	-7.814951	7.814951	1.0000000
3794	3:4-3:3	1.333333e+00	-6.481618	9.148284	1.0000000
3795	UTC:4-3:3	2.000000e+00	-5.814951	9.814951	0.9999703
3796	1:5-3:3	2.000000e+00	-5.814951	9.814951	0.9999703
3797	2:5-3:3	-1.000000e+00	-8.814951	6.814951	1.0000000

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3798 3:5-3:3    3.333333e-01 -7.481618 8.148284 1.0000000
3799 UTC:5-3:3 -3.333333e+00 -11.148284 4.481618 0.9812154
3800 1:4-UTC:3 2.664535e-15 -7.814951 7.814951 1.0000000
3801 2:4-UTC:3 -3.333333e-01 -8.148284 7.481618 1.0000000
3802 3:4-UTC:3 1.000000e+00 -6.814951 8.814951 1.0000000
3803 UTC:4-UTC:3 1.666667e+00 -6.148284 9.481618 0.9999982
3804 1:5-UTC:3 1.666667e+00 -6.148284 9.481618 0.9999982
3805 2:5-UTC:3 -1.333333e+00 -9.148284 6.481618 1.0000000
3806 3:5-UTC:3 2.664535e-15 -7.814951 7.814951 1.0000000
3807 UTC:5-UTC:3 -3.666667e+00 -11.481618 4.148284 0.9543608
3808 2:4-1:4 -3.333333e-01 -8.148284 7.481618 1.0000000
3809 3:4-1:4 1.000000e+00 -6.814951 8.814951 1.0000000
3810 UTC:4-1:4 1.666667e+00 -6.148284 9.481618 0.9999982
3811 1:5-1:4 1.666667e+00 -6.148284 9.481618 0.9999982
3812 2:5-1:4 -1.333333e+00 -9.148284 6.481618 1.0000000
3813 3:5-1:4 0.000000e+00 -7.814951 7.814951 1.0000000
3814 UTC:5-1:4 -3.666667e+00 -11.481618 4.148284 0.9543608
3815 3:4-2:4 1.333333e+00 -6.481618 9.148284 1.0000000
3816 UTC:4-2:4 2.000000e+00 -5.814951 9.814951 0.9999703
3817 1:5-2:4 2.000000e+00 -5.814951 9.814951 0.9999703
3818 2:5-2:4 -1.000000e+00 -8.814951 6.814951 1.0000000
3819 3:5-2:4 3.333333e-01 -7.481618 8.148284 1.0000000
3820 UTC:5-2:4 -3.333333e+00 -11.148284 4.481618 0.9812154
3821 UTC:4-3:4 6.666667e-01 -7.148284 8.481618 1.0000000
3822 1:5-3:4 6.666667e-01 -7.148284 8.481618 1.0000000
3823 2:5-3:4 -2.333333e+00 -10.148284 5.481618 0.9997307
3824 3:5-3:4 -1.000000e+00 -8.814951 6.814951 1.0000000
3825 UTC:5-3:4 -4.666667e+00 -12.481618 3.148284 0.7470488
3826 1:5-UTC:4 -1.776357e-15 -7.814951 7.814951 1.0000000
3827 2:5-UTC:4 -3.000000e+00 -10.814951 4.814951 0.9938146
3828 3:5-UTC:4 -1.666667e+00 -9.481618 6.148284 0.9999982
3829 UTC:5-UTC:4 -5.333333e+00 -13.148284 2.481618 0.5320875
3830 2:5-1:5 -3.000000e+00 -10.814951 4.814951 0.9938146
3831 3:5-1:5 -1.666667e+00 -9.481618 6.148284 0.9999982
3832 UTC:5-1:5 -5.333333e+00 -13.148284 2.481618 0.5320875
3833 3:5-2:5 1.333333e+00 -6.481618 9.148284 1.0000000
3834 UTC:5-2:5 -2.333333e+00 -10.148284 5.481618 0.9997307
3835 UTC:5-3:5 -3.666667e+00 -11.481618 4.148284 0.9543608
3836
3837 Diptera pitfall
3838
3839 sample mass
3840
3841      Df Sum Sq Mean Sq F value Pr(>F)
3842 block      3 0.0402 0.01341   1.058 0.3778
3843 event      4 0.1607 0.04018   3.170 0.0236 *
3844 block:event 12 0.2720 0.02266   1.788 0.0840 .
3845 Residuals  40 0.5070 0.01268
3846 ---
3847 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
3848 Levene's Test for Homogeneity of Variance (center = median)
3849      Df F value Pr(>F)
3850 group 19  0.7445 0.7521
3851 40
3852
3853 Shapiro-Wilk normality test
3854
3855 data: residuals(mass.model)
3856 W = 0.94508, p-value = 0.0092
3857
3858 Tukey multiple comparisons of means
3859  95% family-wise confidence level
3860
3861 Fit: aov(formula = mass.model)
3862
3863 $block
3864      diff      lwr      upr     p adj
3865 2-1  0.032606667 -0.07758452 0.14279785 0.8571191
3866 3-1  0.038953333 -0.07123785 0.14914452 0.7794920
3867 UTC-1 -0.025240000 -0.13543118 0.08495118 0.9270376
3868 3-2  0.006346667 -0.10384452 0.11653785 0.9986666
3869 UTC-2 -0.057846667 -0.1680378525 0.5024179
3870 UTC-3 -0.064193333 -0.17438452 0.04599785 0.4116481
3871
3872 $event
3873      diff      lwr      upr     p adj
3874 2-1 -0.02680833 -0.15808006 0.10446339 0.9768056
3875 3-1  0.06680000 -0.06447173 0.19807173 0.5978029
3876 4-1  0.02592500 -0.10534673 0.15719673 0.9794920
3877 5-1  0.12032500 -0.01094673 0.25159673 0.0860872
3878 3-2  0.09360833 -0.03766339 0.22488006 0.2677117
3879 4-2  0.05273333 -0.07853839 0.18400506 0.7805002
3880 5-2  0.14713333  0.01586161 0.27840506 0.0212974
3881 4-3 -0.04087500 -0.17214673 0.09039673 0.8991742
3882 5-3  0.05352500 -0.07774673 0.18479673 0.7711103
3883 5-4  0.09440000 -0.03687173 0.22567173 0.2600086
3884
3885 $`block:event`
3886      diff      lwr      upr     p adj
3887 2:1-1:1 -0.010266667 -0.358505523 0.33797219 1.0000000
3888 3:1-1:1 -0.070433333 -0.418672190 0.27780552 0.9999992
3889 UTC:1-1:1 -0.106533333 -0.454772190 0.24170552 0.9996255
3890 1:2-1:1 -0.054333333 -0.402572190 0.29390552 1.0000000
3891 2:2-1:1 -0.131266667 -0.479505523 0.21697219 0.9949625
3892 3:2-1:1 -0.071266667 -0.419505523 0.27697219 0.9999991

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3893	UTC:2-1:1	-0.0376000000	-0.385838856	0.31063886	1.0000000
3894	1:3-1:1	0.0151666667	-0.333072190	0.36340552	1.0000000
3895	2:3-1:1	0.1479333333	-0.200305523	0.49617219	0.9819583
3896	3:3-1:1	-0.0938000000	-0.442038856	0.25443886	0.9999369
3897	UTC:3-1:1	0.0106666667	-0.337572190	0.35890552	1.0000000
3898	1:4-1:1	-0.0630333333	-0.411272190	0.28520552	0.9999999
3899	2:4-1:1	-0.0412000000	-0.389438856	0.30703886	1.0000000
3900	3:4-1:1	0.0803000000	-0.267938856	0.42853886	0.9999939
3901	UTC:4-1:1	-0.0596000000	-0.407838856	0.28863886	1.0000000
3902	1:5-1:1	-0.0035000000	-0.351738856	0.34473886	1.0000000
3903	2:5-1:1	0.0921333333	-0.256105523	0.44037219	0.9999514
3904	3:5-1:1	0.2442666667	-0.103972190	0.59250552	0.4836642
3905	UTC:5-1:1	-0.0388333333	-0.387072190	0.30940552	1.0000000
3906	3:1-2:1	0.0601666667	-0.408405523	0.28807219	0.9999999
3907	UTC:1-2:1	-0.0962666667	-0.444505523	0.25197219	0.9999084
3908	1:2-2:1	-0.0440666667	-0.392305523	0.30417219	1.0000000
3909	2:2-2:1	-0.1210000000	-0.469238856	0.22723886	0.9980739
3910	3:2-2:1	-0.0610000000	-0.409238856	0.28723886	0.9999999
3911	UTC:2-2:1	-0.0273333333	-0.375572190	0.32090552	1.0000000
3912	1:3-2:1	0.0254333333	-0.322805523	0.37367219	1.0000000
3913	2:3-2:1	0.1582000000	-0.190038856	0.50643886	0.9657704
3914	3:3-2:1	-0.0835333333	-0.431772190	0.26470552	0.9999888
3915	UTC:3-2:1	0.0209333333	-0.327305523	0.36917219	1.0000000
3916	1:4-2:1	-0.0527666667	-0.401005523	0.29547219	1.0000000
3917	2:4-2:1	-0.0309333333	-0.379172190	0.31730552	1.0000000
3918	3:4-2:1	0.0905666667	-0.257672190	0.43880552	0.9999623
3919	UTC:4-2:1	-0.0493333333	-0.397572190	0.29890552	1.0000000
3920	1:5-2:1	0.0067666667	-0.341472190	0.35500552	1.0000000
3921	2:5-2:1	0.1024000000	-0.245838856	0.45063886	0.9997816
3922	3:5-2:1	0.2545333333	-0.093705523	0.60277219	0.4113571
3923	UTC:5-2:1	-0.0285666667	-0.376805523	0.31967219	1.0000000
3924	UTC:1-3:1	-0.0361000000	-0.384338856	0.31213886	1.0000000
3925	1:2-3:1	0.0161000000	-0.332138856	0.36433886	1.0000000
3926	2:2-3:1	-0.0608333333	-0.409072190	0.28740552	0.9999999
3927	3:2-3:1	-0.0008333333	-0.349072190	0.34740552	1.0000000
3928	UTC:2-3:1	0.0328333333	-0.315405523	0.38107219	1.0000000
3929	1:3-3:1	0.0856000000	-0.262638856	0.43383886	0.9999838
3930	2:3-3:1	0.2183666667	-0.129872190	0.56660552	0.6745506
3931	3:3-3:1	-0.0233666667	-0.371605523	0.32487219	1.0000000
3932	UTC:3-3:1	0.0811000000	-0.267138856	0.42933886	0.9999929
3933	1:4-3:1	0.0074000000	-0.340838856	0.35563886	1.0000000
3934	2:4-3:1	0.0292333333	-0.319005523	0.37747219	1.0000000
3935	3:4-3:1	0.1507333333	-0.197505523	0.49897219	0.9783001
3936	UTC:4-3:1	0.0108333333	-0.337405523	0.35907219	1.0000000
3937	1:5-3:1	0.0669333333	-0.281305523	0.41517219	0.9999997
3938	2:5-3:1	0.1625666667	-0.185672190	0.51080552	0.9563290
3939	3:5-3:1	0.3147000000	-0.033538856	0.66293886	0.1187720
3940	UTC:5-3:1	0.0316000000	-0.316638856	0.37983886	1.0000000
3941	1:2-UTC:1	0.0522000000	-0.296038856	0.40043886	1.0000000
3942	2:2-UTC:1	-0.0247333333	-0.372972190	0.32350552	1.0000000
3943	3:2-UTC:1	0.0352666667	-0.312972190	0.38350552	1.0000000
3944	UTC:2-UTC:1	0.0689333333	-0.279305523	0.41717219	0.9999995
3945	1:3-UTC:1	0.1217000000	-0.226538856	0.46993886	0.9979333
3946	2:3-UTC:1	0.2544666667	-0.093772190	0.60270552	0.4118116
3947	3:3-UTC:1	0.0127333333	-0.335505523	0.36097219	1.0000000
3948	UTC:3-UTC:1	0.1172000000	-0.231038856	0.46543886	0.9987032
3949	1:4-UTC:1	0.0435000000	-0.304738856	0.39173886	1.0000000
3950	2:4-UTC:1	0.0653333333	-0.282905523	0.41357219	0.9999998
3951	3:4-UTC:1	0.1868333333	-0.161405523	0.53507219	0.8697725
3952	UTC:4-UTC:1	0.0469333333	-0.301305523	0.39517219	1.0000000
3953	1:5-UTC:1	0.1030333333	-0.245205523	0.45127219	0.9997623
3954	2:5-UTC:1	0.1986666667	-0.149572190	0.54690552	0.8057871
3955	3:5-UTC:1	0.3508000000	0.002561144	0.69903886	0.0466190
3956	UTC:5-UTC:1	0.0677000000	-0.280538856	0.41593886	0.9999996
3957	2:2-1:2	-0.0769333333	-0.425172190	0.27130552	0.9999969
3958	3:2-1:2	-0.0169333333	-0.365172190	0.33130552	1.0000000
3959	UTC:2-1:2	0.0167333333	-0.331505523	0.36497219	1.0000000
3960	1:3-1:2	0.0695000000	-0.278738856	0.41773886	0.9999994
3961	2:3-1:2	0.2022666667	-0.145972190	0.55050552	0.7837982
3962	3:3-1:2	-0.0394666667	-0.387705523	0.30877219	1.0000000
3963	UTC:3-1:2	0.0650000000	-0.283238856	0.41323886	0.9999998
3964	1:4-1:2	-0.0087000000	-0.356938856	0.33953886	1.0000000
3965	2:4-1:2	0.0131333333	-0.335105523	0.36137219	1.0000000
3966	3:4-1:2	0.1346333333	-0.213605523	0.48287219	0.9933071
3967	UTC:4-1:2	-0.0052666667	-0.353505523	0.34297219	1.0000000
3968	1:5-1:2	0.0508333333	-0.297405523	0.39907219	1.0000000
3969	2:5-1:2	0.1464666667	-0.201772190	0.49470552	0.9836730
3970	3:5-1:2	0.2986000000	-0.049638856	0.64683886	0.1730099
3971	UTC:5-1:2	0.0155000000	-0.332738856	0.36373886	1.0000000
3972	3:2-2:2	0.0600000000	-0.288238856	0.40823886	0.9999999
3973	UTC:2-2:2	0.0936666667	-0.254572190	0.44190552	0.9999382
3974	1:3-2:2	0.1464333333	-0.201805523	0.49467219	0.9837104
3975	2:3-2:2	0.2792000000	-0.069038856	0.62743886	0.2615271
3976	3:3-2:2	0.0374666667	-0.310772190	0.38570552	1.0000000
3977	UTC:3-2:2	0.1419333333	-0.206305523	0.49017219	0.9881797
3978	1:4-2:2	0.0682333333	-0.280005523	0.41647219	0.9999996
3979	2:4-2:2	0.0900666667	-0.258172190	0.43830552	0.9999652
3980	3:4-2:2	0.2115666667	-0.136672190	0.55980552	0.7225278
3981	UTC:4-2:2	0.0716666667	-0.276572190	0.41990552	0.9999990
3982	1:5-2:2	0.1277666667	-0.220472190	0.47600552	0.9963094
3983	2:5-2:2	0.2234000000	-0.124838856	0.57163886	0.6378841
3984	3:5-2:2	0.3755333333	0.027294477	0.72377219	0.0231380
3985	UTC:5-2:2	0.0924333333	-0.255805523	0.44067219	0.9999491
3986	UTC:2-3:2	0.0336666667	-0.314572190	0.38190552	1.0000000
3987	1:3-3:2	0.0864333333	-0.261805523	0.43467219	0.9999812

3988	2:3-3:2	0.2192000000	-0.129038856	0.56743886	0.6685352
3989	3:3-3:2	-0.0225333333	-0.370772190	0.32570552	1.0000000
3990	UTC:3-3:2	0.0819333333	-0.266305523	0.43017219	0.9999917
3991	1:4-3:2	0.0082333333	-0.340005523	0.35647219	1.0000000
3992	2:4-3:2	0.0300666667	-0.318172190	0.37830552	1.0000000
3993	3:4-3:2	0.1515666667	-0.196672190	0.49980552	0.9771085
3994	UTC:4-3:2	0.0116666667	-0.336572190	0.35990552	1.0000000
3995	1:5-3:2	0.0677666667	-0.280472190	0.41600552	0.9999996
3996	2:5-3:2	0.1634000000	-0.184838856	0.51163886	0.9543337
3997	3:5-3:2	0.3155333333	-0.032705523	0.66377219	0.1163946
3998	UTC:5-3:2	0.0324333333	-0.315805523	0.38067219	1.0000000
3999	1:3-UTC:2	0.0527666667	-0.295472190	0.40100552	1.0000000
4000	2:3-UTC:2	0.1855333333	-0.162705523	0.53377219	0.8759585
4001	3:3-UTC:2	-0.0562000000	-0.404438856	0.29203886	1.0000000
4002	UTC:3-3:UTC:2	0.0482666667	-0.299972190	0.39650552	1.0000000
4003	1:4-UTC:2	-0.0254333333	-0.373672190	0.32280552	1.0000000
4004	2:4-UTC:2	-0.0036000000	-0.351838856	0.34463886	1.0000000
4005	3:4-UTC:2	0.1179000000	-0.230338856	0.46613886	0.9986027
4006	UTC:4-UTC:2	-0.0220000000	-0.370238856	0.32623886	1.0000000
4007	1:5-UTC:2	0.0341000000	-0.314138856	0.38233886	1.0000000
4008	2:5-UTC:2	0.1297333333	-0.218505523	0.47797219	0.9955955
4009	3:5-UTC:2	0.2818666667	-0.066372190	0.63010552	0.2477803
4010	UTC:5-UTC:2	-0.0012333333	-0.349472190	0.34700552	1.0000000
4011	2:3-1:3	0.1327666667	-0.215472190	0.48100552	0.9942725
4012	3:3-1:3	-0.1089666667	-0.457205523	0.23927219	0.9994936
4013	UTC:3-1:3	-0.0045000000	-0.352738856	0.34373886	1.0000000
4014	1:4-1:3	-0.0782000000	-0.426438856	0.27003886	0.9999960
4015	2:4-1:3	-0.0563666667	-0.404605523	0.29187219	1.0000000
4016	3:4-1:3	0.0651333333	-0.283105523	0.41337219	0.9999998
4017	UTC:4-1:3	-0.0747666667	-0.423005523	0.27347219	0.9999980
4018	1:5-1:3	-0.0186666667	-0.366905523	0.32957219	1.0000000
4019	2:5-1:3	0.0769666667	-0.271272190	0.42520552	0.9999969
4020	3:5-1:3	0.2291000000	-0.119138856	0.57733886	0.5956851
4021	UTC:5-1:3	-0.0540000000	-0.402238856	0.29423886	1.0000000
4022	3:3-2:3	-0.2417333333	-0.589972190	0.10650552	0.5020963
4023	UTC:3-2:3	-0.1372666667	-0.485505523	0.21097219	0.9917231
4024	1:4-2:3	-0.2109666667	-0.559205523	0.13727219	0.7266493
4025	2:4-2:3	-0.1891333333	-0.537372190	0.15910552	0.8584043
4026	3:4-2:3	-0.0676333333	-0.415872190	0.28060552	0.9999996
4027	UTC:4-2:3	-0.2075333333	-0.555772190	0.14070552	0.7498169
4028	1:5-2:3	-0.1514333333	-0.499672190	0.19680552	0.9773025
4029	2:5-2:3	-0.0558000000	-0.404038856	0.29243886	1.0000000
4030	3:5-2:3	0.0963333333	-0.251905523	0.44457219	0.9999974
4031	UTC:5-2:3	-0.1867666667	-0.535005523	0.16147219	0.8700939
4032	UTC:3-3:3	0.1044666667	-0.243772190	0.45270552	0.9997128
4033	1:4-3:3	0.0307666667	-0.317472190	0.37900552	1.0000000
4034	2:4-3:3	0.0526000000	-0.2956338856	0.40083886	1.0000000
4035	3:4-3:3	0.1741000000	-0.174138856	0.52233886	0.9227447
4036	UTC:4-3:3	0.0342000000	-0.314038856	0.38243886	1.0000000
4037	1:5-3:3	0.0903000000	-0.2579338856	0.43853886	0.9999639
4038	2:5-3:3	0.1859333333	-0.162305523	0.53417219	0.8740737
4039	3:5-3:3	0.3380666667	-0.010172190	0.68630552	0.0656885
4040	UTC:5-3:3	0.0549666667	-0.293272190	0.40320552	1.0000000
4041	1:4-UTC:3	-0.0737000000	-0.421938856	0.27453886	0.9999984
4042	2:4-UTC:3	-0.0518666667	-0.400105523	0.29637219	1.0000000
4043	3:4-UTC:3	0.0696333333	-0.278605523	0.41787219	0.9999994
4044	UTC:4-UTC:3	-0.0702666667	-0.418505523	0.27797219	0.9999993
4045	1:5-UTC:3	-0.0141666667	-0.362405523	0.33407219	1.0000000
4046	2:5-UTC:3	0.0814666667	-0.266772190	0.42970552	0.9999924
4047	3:5-UTC:3	0.2336000000	-0.114638856	0.58183886	0.5621914
4048	UTC:5-UTC:3	-0.0495000000	-0.3977338856	0.29873886	1.0000000
4049	2:4-1:4	0.0218333333	-0.326405523	0.37007219	1.0000000
4050	3:4-1:4	0.1433333333	-0.204905523	0.49157219	0.9869089
4051	UTC:4-1:4	0.0034333333	-0.344805523	0.35167219	1.0000000
4052	1:5-1:4	0.0595333333	-0.288705523	0.40777219	1.0000000
4053	2:5-1:4	0.1551666667	-0.193072190	0.50340552	0.9713797
4054	3:5-1:4	0.3073000000	-0.040938856	0.65553886	0.1416821
4055	UTC:5-1:4	0.0242000000	-0.3240338856	0.37243886	1.0000000
4056	3:4-2:4	0.1215000000	-0.2267338856	0.469733886	0.9979743
4057	UTC:4-2:4	-0.0184000000	-0.366638856	0.32983886	1.0000000
4058	1:5-2:4	0.0377000000	-0.3105338856	0.38593886	1.0000000
4059	2:5-2:4	0.1333333333	-0.214905523	0.48157219	0.9939923
4060	3:5-2:4	0.2854666667	-0.062772190	0.63370552	0.2300257
4061	UTC:5-2:4	0.0023666667	-0.345872190	0.35060552	1.0000000
4062	UTC:4-3:4	-0.1399000000	-0.4881338856	0.20833886	0.9898485
4063	1:5-3:4	-0.0838000000	-0.4320338856	0.26443886	0.9999883
4064	2:5-3:4	0.0118333333	-0.336405523	0.36007219	1.0000000
4065	3:5-3:4	0.1639666667	-0.184272190	0.51220552	0.9529403
4066	UTC:5-3:4	-0.1191333333	-0.467372190	0.22910552	0.9984095
4067	1:5-UTC:4	0.0561000000	-0.2921338856	0.40433886	1.0000000
4068	2:5-UTC:4	0.1517333333	-0.196505523	0.49997219	0.9768643
4069	3:5-UTC:4	0.3038666667	-0.044372190	0.65210552	0.1534580
4070	UTC:5-UTC:4	0.0207666667	-0.327472190	0.36900552	1.0000000
4071	2:5-1:5	0.0956333333	-0.252605523	0.44387219	0.9999166
4072	3:5-1:5	0.2477666667	-0.100472190	0.59600552	0.4585357
4073	UTC:5-1:5	-0.0353333333	-0.383572190	0.31290552	1.0000000
4074	3:5-2:5	0.1521333333	-0.196105523	0.50037219	0.9762702
4075	UTC:5-2:5	-0.1309666667	-0.479205523	0.21727219	0.9950919
4076	UTC:5-3:5	-0.2831000000	-0.631338856	0.06513886	0.2415937
4077	sample families				
4079		Df	Sum Sq	Mean Sq	F value Pr(>F)
4081	block	3	26.93	8.978	2.181 0.1053
4082	event	4	67.27	16.817	4.085 0.0072 **

```

4083 block:event 12 78.07 6.506 1.580 0.1369
4084 Residuals 40 164.67 4.117
4085 ---
4086 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
4087 Levene's Test for Homogeneity of Variance (center = median)
4088 Df F value Pr(>F)
4089 group 19 0.6766 0.8189
4090 40
4091
4092 Shapiro-Wilk normality test
4093
4094 data: residuals(family.model)
4095 W = 0.96611, p-value = 0.09394
4096
4097 Tukey multiple comparisons of means
4098 95% family-wise confidence level
4099
4100 Fit: aov(formula = family.model)
4101
4102 $block
4103      diff     lwr      upr    p adj
4104 2-1 0.2666667 -1.7191766 2.2525099 0.9838016
4105 3-1 1.7333333 -0.2525099 3.7191766 0.1060584
4106 UTC-1 0.4000000 -1.5858432 2.3858432 0.9487091
4107 3-2 1.4666667 -0.5191766 3.4525099 0.2126614
4108 UTC-2 0.1333333 -1.8525099 2.1191766 0.9978950
4109 UTC-3 -1.3333333 -3.3191766 0.6525099 0.2885101
4110
4111 $event
4112      diff     lwr      upr    p adj
4113 2-1 2.0000000 -0.3657525 4.365753 0.1323540
4114 3-1 2.7500000 0.3842475 5.115753 0.0156263
4115 4-1 3.0000000 0.6342475 5.365753 0.0068951
4116 5-1 1.6666667 -0.6990858 4.032419 0.2789388
4117 3-2 0.7500000 -1.6157525 3.115753 0.8931255
4118 4-2 1.0000000 -1.3657525 3.365753 0.7471993
4119 5-2 -0.3333333 -2.6990858 2.032419 0.9942547
4120 4-3 0.2500000 -2.1157525 2.615753 0.9981158
4121 5-3 -1.0833333 -3.4490858 1.282419 0.6879601
4122 5-4 -1.3333333 -3.6990858 1.032419 0.5001461
4123
4124 $`block:event`
4125      diff     lwr      upr    p adj
4126 2:1-1:1 1.333333e+00 -4.9425569 7.60922360 0.9999983
4127 3:1-1:1 2.000000e+00 -4.2758903 8.27589027 0.9993558
4128 UTC:1-1:1 1.666667e+00 -4.6092236 7.94255693 0.9999467
4129 1:2-1:1 2.666667e+00 -3.6092236 8.94255693 0.9819150
4130 2:2-1:1 3.000000e+00 -3.2758903 9.27589027 0.9464359
4131 3:2-1:1 2.666667e+00 -3.6092236 8.94255693 0.9819150
4132 UTC:2-1:1 4.666667e+00 -1.6092236 10.94255693 0.3817996
4133 1:3-1:1 3.666667e+00 -2.6092236 9.94255693 0.7762956
4134 2:3-1:1 4.000000e+00 -2.2758903 10.27589027 0.6484969
4135 3:3-1:1 5.333333e+00 -0.9425569 11.60922360 0.1835990
4136 UTC:3-1:1 3.000000e+00 -3.2758903 9.27589027 0.9464359
4137 1:4-1:1 2.666667e+00 -3.6092236 8.94255693 0.9819150
4138 2:4-1:1 2.666667e+00 -3.6092236 8.94255693 0.9819150
4139 3:4-1:1 6.000000e+00 -0.2758903 12.27589027 0.0751453
4140 UTC:4-1:1 5.666667e+00 -0.6092236 11.94255693 0.1195391
4141 1:5-1:1 3.666667e+00 -2.6092236 9.94255693 0.7762956
4142 2:5-1:1 3.000000e+00 -3.2758903 9.27589027 0.9464359
4143 3:5-1:1 5.333333e+00 -0.9425569 11.60922360 0.1835990
4144 UTC:5-1:1 -3.333333e-01 -6.6092236 5.94255693 1.0000000
4145 3:1-2:1 6.666667e-01 -5.6092236 6.94255693 1.0000000
4146 UTC:1-2:1 3.333333e-01 -5.9425569 6.60922360 1.0000000
4147 1:2-2:1 1.333333e+00 -4.9425569 7.60922360 0.9999983
4148 2:2-2:1 1.666667e+00 -4.6092236 7.94255693 0.9999487
4149 3:2-2:1 1.333333e+00 -4.9425569 7.60922360 0.9999983
4150 UTC:2-2:1 3.333333e+00 -2.9425569 9.60922360 0.8786256
4151 1:3-2:1 2.333333e+00 -3.9425569 8.60922360 0.9956961
4152 2:3-2:1 2.666667e+00 -3.6092236 8.94255693 0.9819150
4153 3:3-2:1 4.000000e+00 -2.2758903 10.27589027 0.6484969
4154 UTC:3-2:1 1.666667e+00 -4.6092236 7.94255693 0.9999487
4155 1:4-2:1 1.333333e+00 -4.9425569 7.60922360 0.9999983
4156 2:4-2:1 1.333333e+00 -4.9425569 7.60922360 0.9999983
4157 3:4-2:1 4.666667e+00 -1.6092236 10.94255693 0.3817996
4158 UTC:4-2:1 4.333333e+00 -1.9425569 10.60922360 0.5115019
4159 1:5-2:1 2.333333e+00 -3.9425569 8.60922360 0.9956961
4160 2:5-2:1 1.666667e+00 -4.6092236 7.94255693 0.9999487
4161 3:5-2:1 4.000000e+00 -2.2758903 10.27589027 0.6484969
4162 UTC:5-2:1 -1.666667e+00 -7.9425569 4.60922360 0.9999487
4163 UTC:1-3:1 -3.333333e-01 -6.6092236 5.94255693 1.0000000
4164 1:2-3:1 6.666667e-01 -5.6092236 6.94255693 1.0000000
4165 2:2-3:1 1.000000e+00 -5.2758903 7.27589027 1.0000000
4166 3:2-3:1 6.666667e-01 -5.6092236 6.94255693 1.0000000
4167 UTC:2-3:1 2.666667e+00 -3.6092236 8.94255693 0.9819150
4168 1:3-3:1 1.666667e+00 -4.6092236 7.94255693 0.9999487
4169 2:3-3:1 2.000000e+00 -4.2758903 8.27589027 0.9993558
4170 3:3-3:1 3.333333e+00 -2.9425569 9.60922360 0.8786256
4171 UTC:3-3:1 1.000000e+00 -5.2758903 7.27589027 1.0000000
4172 1:4-3:1 6.666667e-01 -5.6092236 6.94255693 1.0000000
4173 2:4-3:1 6.666667e-01 -5.6092236 6.94255693 1.0000000
4174 3:4-3:1 4.000000e+00 -2.2758903 10.27589027 0.6484969
4175 UTC:4-3:1 3.666667e+00 -2.6092236 9.94255693 0.7762956
4176 1:5-3:1 1.666667e+00 -4.6092236 7.94255693 0.9999487
4177 2:5-3:1 1.000000e+00 -5.2758903 7.27589027 1.0000000

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4178	3:5-3:1	3.333333e+00	-2.9425569	9.60922360	0.8786256
4179	UTC:5-3:1	-2.333333e+00	-8.6092236	3.94255693	0.9956961
4180	1:2-UTC:1	1.000000e+00	-5.2758903	7.27589027	1.0000000
4181	2:2-UTC:1	1.333333e+00	-4.9425569	7.60922360	0.9999983
4182	3:2-UTC:1	1.000000e+00	-5.2758903	7.27589027	1.0000000
4183	UTC:2-UTC:1	3.000000e+00	-3.2758903	9.27589027	0.9464359
4184	1:3-UTC:1	2.000000e+00	-4.2758903	8.27589027	0.9993558
4185	2:3-UTC:1	2.333333e+00	-3.9425569	8.60922360	0.9956961
4186	3:3-UTC:1	3.666667e+00	-2.6092236	9.94255693	0.7762956
4187	UTC:3-UTC:1	1.333333e+00	-4.9425569	7.60922360	0.9999983
4188	1:4-UTC:1	1.000000e+00	-5.2758903	7.27589027	1.0000000
4189	2:4-UTC:1	1.000000e+00	-5.2758903	7.27589027	1.0000000
4190	3:4-UTC:1	4.333333e+00	-1.9425569	10.60922360	0.5115019
4191	UTC:4-UTC:1	4.000000e+00	-2.2758903	10.27589027	0.6484969
4192	1:5-UTC:1	2.000000e+00	-4.2758903	8.27589027	0.9993558
4193	2:5-UTC:1	1.333333e+00	-4.9425569	7.60922360	0.9999983
4194	3:5-UTC:1	3.666667e+00	-2.6092236	9.94255693	0.7762956
4195	UTC:5-UTC:1	-2.000000e+00	-8.2758903	4.27589027	0.9993558
4196	2:2-1:2	3.333333e-01	-5.9425569	6.60922360	1.0000000
4197	3:2-1:2	-8.881784e-16	-6.2758903	6.27589027	1.0000000
4198	UTC:2-1:2	2.000000e+00	-4.2758903	8.27589027	0.9993558
4199	1:3-1:2	1.000000e+00	-5.2758903	7.27589027	1.0000000
4200	2:3-1:2	1.333333e+00	-4.9425569	7.60922360	0.9999983
4201	3:3-1:2	2.666667e+00	-3.6092236	8.94255693	0.9819150
4202	UTC:3-1:2	3.333333e-01	-5.9425569	6.60922360	1.0000000
4203	1:4-1:2	-8.881784e-16	-6.2758903	6.27589027	1.0000000
4204	2:4-1:2	-8.881784e-16	-6.2758903	6.27589027	1.0000000
4205	3:4-1:2	3.333333e+00	-2.9425569	9.60922360	0.8786256
4206	UTC:4-1:2	3.000000e+00	-3.2758903	9.27589027	0.9464359
4207	1:5-1:2	1.000000e+00	-5.2758903	7.27589027	1.0000000
4208	2:5-1:2	3.333333e-01	-5.9425569	6.60922360	1.0000000
4209	3:5-1:2	2.666667e+00	-3.6092236	8.94255693	0.9819150
4210	UTC:5-1:2	-3.000000e+00	-9.2758903	3.27589027	0.9464359
4211	3:2-2:2	-3.333333e-01	-6.6092236	5.94255693	1.0000000
4212	UTC:2-2:2	1.666667e+00	-4.6092236	7.94255693	0.9999487
4213	1:3-2:2	6.666667e-01	-5.6092236	6.94255693	1.0000000
4214	2:3-2:2	1.000000e+00	-5.2758903	7.27589027	1.0000000
4215	3:3-2:2	2.333333e+00	-3.9425569	8.60922360	0.9956961
4216	UTC:3-2:2	-8.881784e-16	-6.2758903	6.27589027	1.0000000
4217	1:4-2:2	-3.333333e-01	-6.6092236	5.94255693	1.0000000
4218	2:4-2:2	-3.333333e-01	-6.6092236	5.94255693	1.0000000
4219	3:4-2:2	3.000000e+00	-3.2758903	9.27589027	0.9464359
4220	UTC:4-2:2	2.666667e+00	-3.6092236	8.94255693	0.9819150
4221	1:5-2:2	6.666667e-01	-5.6092236	6.94255693	1.0000000
4222	2:5-2:2	-1.776357e-15	-6.2758903	6.27589027	1.0000000
4223	3:5-2:2	2.333333e+00	-3.9425569	8.60922360	0.9956961
4224	UTC:5-2:2	-3.333333e+00	-9.6092236	2.94255693	0.8786256
4225	UTC:2-3:2	2.000000e+00	-4.2758903	8.27589027	0.9993558
4226	1:3-3:2	1.000000e+00	-5.2758903	7.27589027	1.0000000
4227	2:3-3:2	1.333333e+00	-4.9425569	7.60922360	0.9999983
4228	3:3-3:2	2.666667e+00	-3.6092236	8.94255693	0.9819150
4229	UTC:3-3:2	3.333333e-01	-5.9425569	6.60922360	1.0000000
4230	1:4-3:2	0.000000e+00	-6.2758903	6.27589027	1.0000000
4231	2:4-3:2	0.000000e+00	-6.2758903	6.27589027	1.0000000
4232	3:4-3:2	3.333333e+00	-2.9425569	9.60922360	0.8786256
4233	UTC:4-3:2	3.000000e+00	-3.2758903	9.27589027	0.9464359
4234	1:5-3:2	1.000000e+00	-5.2758903	7.27589027	1.0000000
4235	2:5-3:2	3.333333e-01	-5.9425569	6.60922360	1.0000000
4236	3:5-3:2	2.666667e+00	-3.6092236	8.94255693	0.9819150
4237	UTC:5-3:2	-3.000000e+00	-9.2758903	3.27589027	0.9464359
4238	1:3-UTC:2	-1.000000e+00	-7.2758903	5.27589027	1.0000000
4239	2:3-UTC:2	-6.666667e-01	-6.9425569	5.60922360	1.0000000
4240	3:3-UTC:2	6.666667e-01	-5.6092236	6.94255693	1.0000000
4241	UTC:3-UTC:2	-1.666667e+00	-7.9425569	4.60922360	0.9999487
4242	1:4-UTC:2	-2.000000e+00	-8.2758903	4.27589027	0.9993558
4243	2:4-UTC:2	-2.000000e+00	-8.2758903	4.27589027	0.9993558
4244	3:4-UTC:2	1.333333e+00	-4.9425569	7.60922360	0.9999983
4245	UTC:4-UTC:2	1.000000e+00	-5.2758903	7.27589027	1.0000000
4246	1:5-UTC:2	-1.000000e+00	-7.2758903	5.27589027	1.0000000
4247	2:5-UTC:2	-1.666667e+00	-7.9425569	4.60922360	0.9999487
4248	3:5-UTC:2	6.666667e-01	-5.6092236	6.94255693	1.0000000
4249	UTC:5-UTC:2	-5.000000e+00	-11.2758903	1.27589027	0.2708666
4250	2:3-1:3	3.333333e-01	-5.9425569	6.60922360	1.0000000
4251	3:3-1:3	1.666667e+00	-4.6092236	7.94255693	0.9999487
4252	UTC:3-1:3	-6.666667e-01	-6.9425569	5.60922360	1.0000000
4253	1:4-1:3	-1.000000e+00	-7.2758903	5.27589027	1.0000000
4254	2:4-1:3	-1.000000e+00	-7.2758903	5.27589027	1.0000000
4255	3:4-1:3	2.333333e+00	-3.9425569	8.60922360	0.9956961
4256	UTC:4-1:3	2.000000e+00	-4.2758903	8.27589027	0.9993558
4257	1:5-1:3	-4.440892e-15	-6.2758903	6.27589027	1.0000000
4258	2:5-1:3	-6.666667e-01	-6.9425569	5.60922360	1.0000000
4259	3:5-1:3	1.666667e+00	-4.6092236	7.94255693	0.9999487
4260	UTC:5-1:3	-4.000000e+00	-10.2758903	2.27589027	0.6484969
4261	3:3-2:3	1.333333e+00	-4.9425569	7.60922360	0.9999983
4262	UTC:3-2:3	-1.000000e+00	-7.2758903	5.27589027	1.0000000
4263	1:4-2:3	-1.333333e+00	-7.6092236	4.94255693	0.9999983
4264	2:4-2:3	-1.333333e+00	-7.6092236	4.94255693	0.9999983
4265	3:4-2:3	2.000000e+00	-4.2758903	8.27589027	0.9993558
4266	UTC:4-2:3	1.666667e+00	-4.6092236	7.94255693	0.9999487
4267	1:5-2:3	-3.333333e-01	-6.6092236	5.94255693	1.0000000
4268	2:5-2:3	-1.000000e+00	-7.2758903	5.27589027	1.0000000
4269	3:5-2:3	1.333333e+00	-4.9425569	7.60922360	0.9999983
4270	UTC:5-2:3	-4.333333e+00	-10.6092236	1.94255693	0.5115019
4271	UTC:3-3:3	-2.333333e+00	-8.6092236	3.94255693	0.9956961
4272	1:4-3:3	-2.666667e+00	-8.9425569	3.60922360	0.9819150

```

4273 2:4-3:3 -2.666667e+00 -8.9425569 3.60922360 0.9819150
4274 3:4-3:3 6.666667e-01 -5.6092236 6.94255693 1.0000000
4275 UTC:4-3:3 3.333333e-01 -5.9425569 6.60922360 1.0000000
4276 1:5-3:3 -1.666667e+00 -7.9425569 4.60922360 0.9999487
4277 2:5-3:3 -2.333333e+00 -8.6092236 3.94255693 0.9956961
4278 3:5-3:3 -3.552714e-15 -6.2758903 6.27589027 1.0000000
4279 UTC:5-3:3 -5.666667e+00 -11.9425569 0.60922360 0.1195391
4280 1:4-UTC:3 -3.333333e-01 -6.6092236 5.94255693 1.0000000
4281 2:4-UTC:3 -3.333333e-01 -6.6092236 5.94255693 1.0000000
4282 3:4-UTC:3 3.000000e+00 -3.2758903 9.27589027 0.9464359
4283 UTC:4-UTC:3 2.666667e+00 -3.6092236 8.94255693 0.9819150
4284 1:5-UTC:3 6.666667e-01 -5.6092236 6.94255693 1.0000000
4285 2:5-UTC:3 -8.881784e-16 -6.2758903 6.27589027 1.0000000
4286 3:5-UTC:3 2.333333e+00 -3.9425569 8.60922360 0.9956961
4287 UTC:5-UTC:3 -3.333333e+00 -9.6092236 2.94255693 0.8786256
4288 2:4-1:4 0.000000e+00 -6.2758903 6.27589027 1.0000000
4289 3:4-1:4 3.333333e+00 -2.9425569 9.60922360 0.8786256
4290 UTC:4-1:4 3.000000e+00 -3.2758903 9.27589027 0.9464359
4291 1:5-1:4 1.000000e+00 -5.2758903 7.27589027 1.0000000
4292 2:5-1:4 3.333333e-01 -5.9425569 6.60922360 1.0000000
4293 3:5-1:4 2.666667e+00 -3.6092236 8.94255693 0.9819150
4294 UTC:5-1:4 -3.000000e+00 -9.2758903 3.27589027 0.9464359
4295 3:4-2:4 3.333333e+00 -2.9425569 9.60922360 0.8786256
4296 UTC:4-2:4 3.000000e+00 -3.2758903 9.27589027 0.9464359
4297 1:5-2:4 1.000000e+00 -5.2758903 7.27589027 1.0000000
4298 2:5-2:4 3.333333e-01 -5.9425569 6.60922360 1.0000000
4299 3:5-2:4 2.666667e+00 -3.6092236 8.94255693 0.9819150
4300 UTC:5-2:4 -3.000000e+00 -9.2758903 3.27589027 0.9464359
4301 UTC:4-3:4 -3.333333e-01 -6.6092236 5.94255693 1.0000000
4302 1:5-3:4 -2.333333e+00 -8.6092236 3.94255693 0.9956961
4303 2:5-3:4 -3.000000e+00 -9.2758903 3.27589027 0.9464359
4304 3:5-3:4 -6.666667e-01 -6.9425569 5.60922360 1.0000000
4305 UTC:5-3:4 -6.333333e+00 -12.6092236 -0.05744307 0.0458241
4306 1:5-UTC:4 -2.000000e+00 -8.2758903 4.27589027 0.9993558
4307 2:5-UTC:4 -2.666667e+00 -8.9425569 3.60922360 0.9819150
4308 3:5-UTC:4 -3.333333e-01 -6.6092236 5.94255693 1.0000000
4309 UTC:5-UTC:4 -6.000000e+00 -12.2758903 0.27589027 0.0751453
4310 2:5-1:5 -6.666667e-01 -6.9425569 5.60922360 1.0000000
4311 3:5-1:5 1.666667e+00 -4.6092236 7.94255693 0.9999487
4312 UTC:5-1:5 -4.000000e+00 -10.2758903 2.27589027 0.6484969
4313 3:5-2:5 2.333333e+00 -3.9425569 8.60922360 0.9956961
4314 UTC:5-2:5 -3.333333e+00 -9.6092236 2.94255693 0.8786256
4315 UTC:5-3:5 -5.666667e+00 -11.9425569 0.60922360 0.1195391
4316
4317 Hemiptera pitfall
4318
4319 sample mass
4320
4321      Df   Sum Sq   Mean Sq F value    Pr(>F)
4322 block     3 0.002927 0.0009756  5.511  0.0029 ** 
4323 event     4 0.008375 0.0020937 11.828 1.96e-06 ***
4324 block:event 12 0.003863 0.0003219  1.818  0.0781 .
4325 Residuals 40 0.007080 0.0001770
4326 ---
4327 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
4328 Levene's Test for Homogeneity of Variance (center = median)
4329      Df F value Pr(>F)
4330 group 19  0.7198 0.7771
4331      40
4332
4333 Shapiro-Wilk normality test
4334
4335 data: residuals(mass.model)
4336 W = 0.96982, p-value = 0.143
4337
4338 Tukey multiple comparisons of means
4339  95% family-wise confidence level
4340
4341 Fit: aov(formula = mass.model)
4342
4343 $block
4344      diff      lwr      upr     p adj
4345 2-1 -0.018460000 -0.031481879 -0.005438121 0.0026219
4346 3-1 -0.010266667 -0.023288546 0.002755213 0.1663658
4347 UTC-1 -0.015233333 -0.028255213 -0.002211454 0.0162741
4348 3-2  0.008193333 -0.004828546 0.021215213 0.3440195
4349 UTC-2  0.003226667 -0.009795213 0.016248546 0.9098905
4350 UTC-3 -0.004966667 -0.017988546 0.008055213 0.7374418
4351
4352 $event
4353      diff      lwr      upr     p adj
4354 2-1 -0.003741667 -0.019254746 0.011771413 0.9577535
4355 3-1  0.005508333 -0.010004746 0.021021413 0.8473584
4356 4-1  0.029691667  0.014178587 0.045204746 0.0000253
4357 5-1  0.012783333 -0.002729746 0.028296413 0.1495882
4358 3-2  0.009250000 -0.006263079 0.024763079 0.4436997
4359 4-2  0.033433333  0.017920254 0.048946413 0.0000028
4360 5-2  0.016525000  0.001011921 0.032038079 0.0318258
4361 4-3  0.024183333  0.008670254 0.039696413 0.0006066
4362 5-3  0.007275000 -0.008238079 0.022788079 0.6687497
4363 5-4 -0.016908333 -0.032421413 -0.001395254 0.0266704
4364
4365 $`block:event`
4366      diff      lwr      upr     p adj
4367 2:1-1:1 -9.333333e-03 -0.050486575 0.0318199082 0.9999953

```

4368	3:1-1:1	-6.300000e-03	-0.047453242	0.0348532415	1.0000000
4369	UTC:1-1:1	-9.266667e-03	-0.050419908	0.0318865748	0.9999958
4370	1:2-1:1	-7.266667e-03	-0.048419908	0.0338865748	0.9999999
4371	2:2-1:1	-1.746667e-02	-0.058619908	0.0236865748	0.9821162
4372	3:2-1:1	-1.136667e-02	-0.052519908	0.0297865748	0.9999095
4373	UTC:2-1:1	-3.766667e-03	-0.044919908	0.0373865748	1.0000000
4374	1:3-1:1	1.716667e-02	-0.023986575	0.0583199082	0.9849813
4375	2:3-1:1	-8.433333e-03	-0.049586575	0.0327199082	0.9999991
4376	3:3-1:1	-3.800000e-03	-0.044953242	0.0373532415	1.0000000
4377	UTC:3-1:1	-7.800000e-03	-0.048953242	0.0333532415	0.9999997
4378	1:4-1:1	5.310000e-02	0.011946758	0.0942532415	0.0023458
4379	2:4-1:1	1.253333e-02	-0.028619908	0.0536865748	0.9996474
4380	3:4-1:1	1.316667e-02	-0.027986575	0.0543199082	0.9993217
4381	UTC:4-1:1	1.506667e-02	-0.026086575	0.0562199082	0.9964002
4382	1:5-1:1	5.066667e-03	-0.036086575	0.0462199082	1.0000000
4383	2:5-1:1	-1.533333e-03	-0.042686575	0.0396199082	1.0000000
4384	3:5-1:1	2.503333e-02	-0.016119908	0.0661865748	0.7206978
4385	UTC:5-1:1	-2.333333e-03	-0.043486575	0.0388199082	1.0000000
4386	3:1-2:1	3.033333e-03	-0.038119908	0.0441865748	1.0000000
4387	UTC:1-2:1	6.666667e-05	-0.041086575	0.0412199082	1.0000000
4388	1:2-2:1	2.066667e-03	-0.039086575	0.0432199082	1.0000000
4389	2:2-2:1	-8.133333e-03	-0.049286575	0.0330199082	0.9999995
4390	3:2-2:1	-2.033333e-03	-0.043186575	0.0391199082	1.0000000
4391	UTC:2-2:1	5.566667e-03	-0.035586575	0.0467199082	1.0000000
4392	1:3-2:1	2.650000e-02	-0.014653242	0.0676532415	0.6316763
4393	2:3-2:1	9.000000e-04	-0.040253242	0.0420532415	1.0000000
4394	3:3-2:1	5.533333e-03	-0.0356119908	0.0466865748	1.0000000
4395	UTC:3-2:1	1.533333e-03	-0.0396119908	0.0426865748	1.0000000
4396	1:4-2:1	6.243333e-02	0.021280092	0.1035865748	0.0001674
4397	2:4-2:1	2.186667e-02	-0.019286575	0.0630199082	0.8782798
4398	3:4-2:1	2.250000e-02	-0.018653242	0.0636532415	0.8519414
4399	UTC:4-2:1	2.440000e-02	-0.016753242	0.0655532415	0.7568190
4400	1:5-2:1	1.440000e-02	-0.026753242	0.0555532415	0.9979015
4401	2:5-2:1	7.800000e-03	-0.033353242	0.0489532415	0.9999997
4402	3:5-2:1	3.436667e-02	-0.006786575	0.07551199082	0.2053686
4403	UTC:5-2:1	7.000000e-03	-0.034153242	0.0481532415	1.0000000
4404	UTC:1-3:1	-2.966667e-03	-0.044119908	0.0381865748	1.0000000
4405	1:2-3:1	-9.666667e-04	-0.042119908	0.0401865748	1.0000000
4406	2:2-3:1	-1.116667e-02	-0.052319908	0.0299865748	0.9999299
4407	3:2-3:1	-5.066667e-03	-0.046219908	0.0360865748	1.0000000
4408	UTC:2-3:1	2.533333e-03	-0.0386119908	0.0436865748	1.0000000
4409	1:3-3:1	2.346667e-02	-0.017686575	0.06461199082	0.8063328
4410	2:3-3:1	-2.133333e-03	-0.043286575	0.03901199082	1.0000000
4411	3:3-3:1	2.500000e-03	-0.038653242	0.0436532415	1.0000000
4412	UTC:3-3:1	-1.500000e-03	-0.042653242	0.0396532415	1.0000000
4413	1:4-3:1	5.940000e-02	0.018246758	0.1005532415	0.0003999
4414	2:4-3:1	1.883333e-02	-0.022319908	0.0599865748	0.9634082
4415	3:4-3:1	1.946667e-02	-0.021686575	0.06061199082	0.9510235
4416	UTC:4-3:1	2.136667e-02	-0.019786575	0.06251199082	0.8969750
4417	1:5-3:1	1.136667e-02	-0.029786575	0.05251199082	0.9999095
4418	2:5-3:1	4.766667e-03	-0.036386575	0.04591199082	1.0000000
4419	3:5-3:1	3.133333e-02	-0.0098119908	0.0724865748	0.3421659
4420	UTC:5-3:1	3.966667e-03	-0.037186575	0.04511199082	1.0000000
4421	1:2-UTC:1	2.000000e-03	-0.039153242	0.0431532415	1.0000000
4422	2:2-UTC:1	-8.200000e-03	-0.049353242	0.0329532415	0.9999994
4423	3:2-UTC:1	-2.100000e-03	-0.043253242	0.0390532415	1.0000000
4424	UTC:2-UTC:1	5.500000e-03	-0.035653242	0.0466532415	1.0000000
4425	1:3-UTC:1	2.643333e-02	-0.0147119908	0.0675865748	0.6358319
4426	2:3-UTC:1	8.333333e-04	-0.0403119908	0.0419865748	1.0000000
4427	3:3-UTC:1	5.466667e-03	-0.035686575	0.04661199082	1.0000000
4428	UTC:3-3:UTC:1	1.466667e-03	-0.039686575	0.04261199082	1.0000000
4429	1:4-UTC:1	6.236667e-02	0.021213425	0.10351199082	0.0001706
4430	2:4-UTC:1	2.180000e-02	-0.019353242	0.0629532415	0.8808807
4431	3:4-UTC:1	2.243333e-02	-0.0187119908	0.0635865748	0.8548507
4432	UTC:4-UTC:1	2.433333e-02	-0.0168119908	0.0654865748	0.7605124
4433	1:5-UTC:1	1.433333e-02	-0.0268119908	0.0554865748	0.9980169
4434	2:5-UTC:1	7.733333e-03	-0.0334119908	0.0488865748	0.9999998
4435	3:5-UTC:1	3.430000e-02	-0.006853242	0.0754532415	0.2078761
4436	UTC:5-UTC:1	6.933333e-03	-0.0342119908	0.0480865748	1.0000000
4437	2:2-1:2	-1.020000e-02	-0.051353242	0.0309532415	0.9999816
4438	3:2-1:2	-4.100000e-03	-0.045253242	0.0370532415	1.0000000
4439	UTC:2-1:2	3.500000e-03	-0.037653242	0.0446532415	1.0000000
4440	1:3-1:2	2.443333e-02	-0.0167119908	0.0655865748	0.7549640
4441	2:3-1:2	-1.166667e-03	-0.0423119908	0.0399865748	1.0000000
4442	3:3-1:2	3.466667e-03	-0.037686575	0.04461199082	1.0000000
4443	UTC:3-1:2	-5.333333e-04	-0.041686575	0.04061199082	1.0000000
4444	1:4-1:2	6.036667e-02	0.019213425	0.10151199082	0.0003033
4445	2:4-1:2	1.980000e-02	-0.021353242	0.0609532415	0.9434312
4446	3:4-1:2	2.043333e-02	-0.0207119908	0.0615865748	0.9268374
4447	UTC:4-1:2	2.233333e-02	-0.0188119908	0.0634865748	0.8591550
4448	1:5-1:2	1.233333e-02	-0.0288119908	0.0534865748	0.9997166
4449	2:5-1:2	5.733333e-03	-0.0354119908	0.0468865748	1.0000000
4450	3:5-1:2	3.230000e-02	-0.008853242	0.0734532415	0.2935975
4451	UTC:5-1:2	4.933333e-03	-0.0362119908	0.0460865748	1.0000000
4452	3:2-2:2	6.100000e-03	-0.035053242	0.0472532415	1.0000000
4453	UTC:2-2:2	1.370000e-02	-0.027493242	0.0548532415	0.9988697
4454	1:3-2:2	3.463333e-02	-0.0065119908	0.0757865748	0.1955621
4455	2:3-2:2	9.033333e-03	-0.032119908	0.0501865748	0.9999972
4456	3:3-2:2	1.366667e-02	-0.027486575	0.05481199082	0.9989041
4457	UTC:3-2:2	9.666667e-03	-0.031486575	0.05081199082	0.9999919
4458	1:4-2:2	7.056667e-02	0.029413425	0.11171199082	0.0000157
4459	2:4-2:2	3.000000e-02	-0.011153242	0.0711532415	0.4159563
4460	3:4-2:2	3.063333e-02	-0.0105119908	0.0717865748	0.3800013
4461	UTC:4-2:2	3.253333e-02	-0.0086119908	0.0736865748	0.2825537
4462	1:5-2:2	2.253333e-02	-0.0186119908	0.0636865748	0.8504749

4463	2:5-2:2	1.593333e-02	-0.025219908	0.0570865748	0.9931992
4464	3:5-2:2	4.250000e-02	0.001346758	0.0836532415	0.0364769
4465	UTC:5-2:2	5.133333e-02	-0.026019908	0.0562865748	0.9962100
4466	UTC:2-3:2	7.600000e-03	-0.033553242	0.0487532415	0.9999998
4467	1:3-3:2	2.853333e-02	-0.012619908	0.0696865748	0.5041748
4468	2:3-3:2	2.933333e-03	-0.038219908	0.0440865748	1.0000000
4469	3:3-3:2	7.566667e-03	-0.033586575	0.0487199082	0.9999998
4470	UTC:3-3:2	3.566667e-03	-0.037586575	0.0447199082	1.0000000
4471	1:4-3:2	6.446667e-02	0.023313425	0.1056199082	0.0000930
4472	2:4-3:2	2.390000e-02	-0.017253242	0.0650532415	0.7839533
4473	3:4-3:2	2.453333e-02	-0.016619908	0.0656865748	0.7493666
4474	UTC:4-3:2	2.643333e-02	-0.014719908	0.0675865748	0.6358319
4475	1:5-3:2	1.643333e-02	-0.024719908	0.0575865748	0.9904810
4476	2:5-3:2	9.833333e-03	-0.031319908	0.0509865748	0.9999895
4477	3:5-3:2	3.640000e-02	-0.004753242	0.0775532415	0.1393170
4478	UTC:5-3:2	9.033333e-03	-0.032119908	0.0501865748	0.9999972
4479	1:3-UTC:2	2.093333e-02	-0.020219908	0.0620865748	0.9116539
4480	2:3-UTC:2	-4.666667e-03	-0.045819908	0.0364865748	1.0000000
4481	3:3-UTC:2	-3.333333e-05	-0.0411186575	0.0411199082	1.0000000
4482	UTC:3-UTC:2	-4.033333e-03	-0.045186575	0.0371199082	1.0000000
4483	1:4-UTC:2	5.686667e-02	0.015713425	0.0980199082	0.0008210
4484	2:4-UTC:2	1.630000e-02	-0.024853242	0.0574532415	0.9912792
4485	3:4-UTC:2	1.693333e-02	-0.024219908	0.0580865748	0.9869499
4486	UTC:4-UTC:2	1.883333e-02	-0.022319908	0.0599865748	0.9634082
4487	1:5-UTC:2	8.833333e-03	-0.032319908	0.0499865748	0.9999980
4488	2:5-UTC:2	2.233333e-03	-0.038919908	0.0433865748	1.0000000
4489	3:5-UTC:2	2.880000e-02	-0.012353242	0.0699532415	0.4877297
4490	UTC:5-UTC:2	1.433333e-03	-0.039719908	0.0425865748	1.0000000
4491	2:3-1:3	-2.560000e-02	-0.066753242	0.0155532415	0.6870215
4492	3:3-1:3	-2.096667e-02	-0.062119908	0.0201865748	0.9105751
4493	UTC:3-1:3	-2.496667e-02	-0.066119908	0.0161865748	0.7245819
4494	1:4-1:3	3.593333e-02	-0.005219908	0.0770865748	0.1527468
4495	2:4-1:3	-4.633333e-03	-0.045786575	0.0365199082	1.0000000
4496	3:4-1:3	-4.000000e-03	-0.045153242	0.0371532415	1.0000000
4497	UTC:4-1:3	-2.100000e-03	-0.043253242	0.0390532415	1.0000000
4498	1:5-1:3	-1.210000e-02	-0.053253242	0.0290532415	0.9997819
4499	2:5-1:3	-1.870000e-02	-0.059853242	0.0224532415	0.9656924
4500	3:5-1:3	7.866667e-03	-0.033286575	0.0490199082	0.9999997
4501	UTC:5-1:3	-1.950000e-02	-0.060653242	0.0216532415	0.9502986
4502	3:3-2:3	4.633333e-03	-0.036519908	0.0457865748	1.0000000
4503	UTC:3-2:3	6.333333e-04	-0.040519908	0.0417865748	1.0000000
4504	1:4-2:3	6.153333e-02	-0.020380092	0.1026865748	0.0002170
4505	2:4-2:3	2.096667e-02	-0.020186575	0.0621199082	0.9105751
4506	3:4-2:3	2.160000e-02	-0.019553242	0.0627532415	0.8884841
4507	UTC:4-2:3	2.350000e-02	-0.017653242	0.0646532415	0.8046513
4508	1:5-2:3	1.350000e-02	-0.027653242	0.0546532415	0.9990628
4509	2:5-2:3	6.900000e-03	-0.034253242	0.0480532415	1.0000000
4510	3:5-2:3	3.346667e-02	-0.007686575	0.0746199082	0.2411215
4511	UTC:5-2:3	6.100000e-03	-0.035053242	0.0472532415	1.0000000
4512	UTC:3-3:3	-4.000000e-03	-0.045153242	0.0371532415	1.0000000
4513	1:4-3:3	5.690000e-02	0.015746758	0.0980532415	0.0008133
4514	2:4-3:3	1.633333e-02	-0.024819908	0.0574865748	0.9910849
4515	3:4-3:3	1.696667e-02	-0.024186575	0.0581199082	0.9866819
4516	UTC:4-3:3	1.886667e-02	-0.022286575	0.0600199082	0.9628201
4517	1:5-3:3	8.866667e-03	-0.032286575	0.0500199082	0.9999979
4518	2:5-3:3	2.266667e-03	-0.038886575	0.0434199082	1.0000000
4519	3:5-3:3	2.883333e-02	-0.012319908	0.0699865748	0.4856843
4520	UTC:5-3:3	1.466667e-03	-0.039686575	0.0426199082	1.0000000
4521	1:4-UTC:3	6.090000e-02	0.019746758	0.1020532415	0.0002603
4522	2:4-UTC:3	2.033333e-02	-0.020819908	0.0614865748	0.9296512
4523	3:4-UTC:3	2.096667e-02	-0.020186575	0.0621199082	0.9105751
4524	UTC:4-UTC:3	2.286667e-02	-0.018286575	0.0640199082	0.8353820
4525	1:5-UTC:3	1.286667e-02	-0.028286575	0.0540199082	0.9994991
4526	2:5-UTC:3	6.266667e-03	-0.034886575	0.0474199082	1.0000000
4527	3:5-UTC:3	3.283333e-02	-0.008319908	0.0739865748	0.2687549
4528	UTC:5-UTC:3	5.466667e-03	-0.035686575	0.0466199082	1.0000000
4529	2:4-1:4	4.056667e-02	-0.081719908	0.0005865748	0.0571822
4530	3:4-1:4	-3.993333e-02	-0.081086575	0.0012199082	0.0659503
4531	UTC:4-1:4	-3.803333e-02	-0.079186575	0.0031199082	0.0996588
4532	1:5-1:4	-4.803333e-02	-0.089186575	-0.0068800918	0.0091409
4533	2:5-1:4	-5.463333e-02	-0.095786575	-0.0134800918	0.0015349
4534	3:5-1:4	-2.806667e-02	-0.069219908	0.0130865748	0.5332435
4535	UTC:5-1:4	-5.543333e-02	-0.096586575	-0.0142800918	0.0012279
4536	3:4-2:4	6.333333e-04	-0.040519908	0.0417865748	1.0000000
4537	UTC:4-2:4	2.533333e-03	-0.038619908	0.0436865748	1.0000000
4538	1:5-2:4	-7.466667e-03	-0.048619908	0.0336865748	0.9999999
4539	2:5-2:4	-1.406667e-02	-0.055219908	0.0270865748	0.9984261
4540	3:5-2:4	1.250000e-02	-0.028653242	0.0536532415	0.9996599
4541	UTC:5-2:4	-1.486667e-02	-0.056019908	0.0262865748	0.9969235
4542	UTC:4-3:4	1.900000e-03	-0.039253242	0.0430532415	1.0000000
4543	1:5-3:4	-8.100000e-03	-0.049253242	0.0330532415	0.9999995
4544	2:5-3:4	-1.470000e-02	-0.055853242	0.0264532415	0.9973094
4545	3:5-3:4	1.186667e-02	-0.029286575	0.0530199082	0.9998336
4546	UTC:5-3:4	-1.550000e-02	-0.056653242	0.0256532415	0.9950084
4547	1:5-UTC:4	-1.000000e-02	-0.051153242	0.0311532415	0.9999864
4548	2:5-UTC:4	-1.660000e-02	-0.057753242	0.0245532415	0.9894016
4549	3:5-UTC:4	9.966667e-03	-0.031186575	0.0511199082	0.9999871
4550	UTC:5-UTC:4	-1.740000e-02	-0.058553242	0.0237532415	0.9827869
4551	2:5-1:5	-6.600000e-03	-0.047753242	0.0345532415	1.0000000
4552	3:5-1:5	1.996667e-02	-0.021186575	0.0611199082	0.9393442
4553	UTC:5-1:5	-7.400000e-03	-0.048553242	0.0337532415	0.9999999
4554	3:5-2:5	2.656667e-02	-0.014586575	0.0677199082	0.6275143
4555	UTC:5-2:5	-8.000000e-04	-0.041953242	0.0403532415	1.0000000
4556	UTC:5-3:5	-2.736667e-02	-0.068519908	0.0137865748	0.5772507

```

4558 sample families
4559
4560      Df Sum Sq Mean Sq F value Pr(>F)
4561 block     3   7.78   2.5944   2.638 0.0626 .
4562 event     4   6.77   1.6917   1.720 0.1645
4563 block:event 12  12.30   1.0250   1.042 0.4315
4564 Residuals  40  39.33   0.9833
4565 ---
4566 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
4567 Levene's Test for Homogeneity of Variance (center = median)
4568   Df F value Pr(>F)
4569 group 19   0.588 0.8929
4570      40
4571
4572 Shapiro-Wilk normality test
4573
4574 data: residuals(family.model)
4575 W = 0.96595, p-value = 0.09223
4576
4577 Tukey multiple comparisons of means
4578   95% family-wise confidence level
4579
4580 Fit: aov(formula = family.model)
4581
4582 $block
4583      diff      lwr      upr    p adj
4584 2-1 -8.666667e-01 -1.8372269  0.1038936 0.0947017
4585 3-1 -1.333333e-01 -1.1038936  0.8372269  0.9826975
4586 UTC-1 4.440892e-16 -0.9705602  0.9705602 1.0000000
4587 3-2  7.333333e-01 -0.2372269  1.7038936 0.1959139
4588 UTC-2 8.666667e-01 -0.1038936  1.8372269  0.0947017
4589 UTC-3 1.333333e-01 -0.8372269  1.1038936 0.9826975
4590
4591 $event
4592      diff      lwr      upr    p adj
4593 2-1 8.881784e-16 -1.1562369  1.1562369 1.0000000
4594 3-1 3.333333e-01 -0.8229036  1.4895703
4595 4-1 9.166667e-01 -0.2395703  2.0729036 0.1778709
4596 5-1 2.500000e-01 -0.9062369  1.4062369 0.9714414
4597 3-2 3.333333e-01 -0.8229036  1.4895703 0.9218336
4598 4-2 9.166667e-01 -0.2395703  2.0729036 0.1778709
4599 5-2 2.500000e-01 -0.9062369  1.4062369 0.9714414
4600 4-3 5.833333e-01 -0.5729036  1.7395703 0.6056165
4601 5-3 -8.333333e-02 -1.2395703  1.0729036 0.9995820
4602 5-4 -6.666667e-01 -1.8229036  0.4895703 0.4774594
4603
4604 $`block:event`
4605      diff      lwr      upr    p adj
4606 2:1-1:1 -3.333333e-01 -3.4006094  2.733943 1.0000000
4607 3:1-1:1  6.666667e-01 -2.4006094  3.733943 0.9999976
4608 UTC:1-1:1 6.666667e-01 -2.4006094  3.733943 0.9999976
4609 1:2-1:1  6.666667e-01 -2.4006094  3.733943 0.9999976
4610 2:2-1:1 -3.333333e-01 -3.4006094  2.733943 1.0000000
4611 3:2-1:1 -6.666667e-01 -3.7339428  2.400609 0.9999976
4612 UTC:2-1:1 1.333333e+00 -1.7339428  4.400609 0.9773824
4613 1:3-1:1  1.000000e+00 -2.0672761  4.067276 0.9991343
4614 2:3-1:1  1.776357e-15 -3.0672761  3.067276 1.0000000
4615 3:3-1:1  6.666667e-01 -2.4006094  3.733943 0.9999976
4616 UTC:3-1:1 6.666667e-01 -2.4006094  3.733943 0.9999976
4617 1:4-1:1  1.333333e+00 -1.7339428  4.400609 0.9773824
4618 2:4-1:1  3.333333e-01 -2.7339428  3.400609 1.0000000
4619 3:4-1:1  1.333333e+00 -1.7339428  4.400609 0.9773824
4620 UTC:4-1:1 1.666667e+00 -1.4006094  4.733943 0.8579521
4621 1:5-1:1  1.000000e+00 -2.0672761  4.067276 0.9991343
4622 2:5-1:1  1.998401e-15 -3.0672761  3.067276 1.0000000
4623 3:5-1:1  1.333333e+00 -1.7339428  4.400609 0.9773824
4624 UTC:5-1:1 -3.333333e-01 -3.4006094  2.733943 1.0000000
4625 3:1-2:1  1.000000e+00 -2.0672761  4.067276 0.9991343
4626 UTC:1-2:1 1.000000e+00 -2.0672761  4.067276 0.9991343
4627 1:2-2:1  1.000000e+00 -2.0672761  4.067276 0.9991343
4628 2:2-2:1 -1.776357e-15 -3.0672761  3.067276 1.0000000
4629 3:2-2:1 -3.333333e-01 -3.4006094  2.733943 1.0000000
4630 UTC:2-2:1 1.666667e+00 -1.4006094  4.733943 0.8579521
4631 1:3-2:1  1.333333e+00 -1.7339428  4.400609 0.9773824
4632 2:3-2:1  3.333333e-01 -2.7339428  3.400609 1.0000000
4633 3:3-2:1  1.000000e+00 -2.0672761  4.067276 0.9991343
4634 UTC:3-2:1 1.000000e+00 -2.0672761  4.067276 0.9991343
4635 1:4-2:1  1.666667e+00 -1.4006094  4.733943 0.8579521
4636 2:4-2:1  6.666667e-01 -2.4006094  3.733943 0.9999976
4637 3:4-2:1  1.666667e+00 -1.4006094  4.733943 0.8579521
4638 UTC:4-2:1 2.000000e+00 -1.0672761  5.067276 0.6107864
4639 1:5-2:1  1.333333e+00 -1.7339428  4.400609 0.9773824
4640 2:5-2:1  3.333333e-01 -2.7339428  3.400609 1.0000000
4641 3:5-2:1  1.666667e+00 -1.4006094  4.733943 0.8579521
4642 UTC:5-2:1 -8.881784e-16 -3.0672761  3.067276 1.0000000
4643 UTC:1-3:1 -4.440892e-16 -3.0672761  3.067276 1.0000000
4644 1:2-3:1  8.881784e-16 -3.0672761  3.067276 1.0000000
4645 2:2-3:1 -1.000000e+00 -4.0672761  2.067276 0.9991343
4646 3:2-3:1 -1.333333e+00 -4.4006094  1.733943 0.9773824
4647 UTC:2-3:1 6.666667e-01 -2.4006094  3.733943 0.9999976
4648 1:3-3:1  3.333333e-01 -2.7339428  3.400609 1.0000000
4649 2:3-3:1 -6.666667e-01 -3.7339428  2.400609 0.9999976
4650 3:3-3:1  1.776357e-15 -3.0672761  3.067276 1.0000000
4651 UTC:3-3:1 8.881784e-16 -3.0672761  3.067276 1.0000000
4652 1:4-3:1  6.666667e-01 -2.4006094  3.733943 0.9999976

```

4653	2:4-3:1	-3.333333e-01	-3.4006094	2.733943	1.0000000
4654	3:4-3:1	6.666667e-01	-2.4006094	3.733943	0.9999976
4655	UTC:4-3:1	1.000000e+00	-2.0672761	4.067276	0.9991343
4656	1:5-3:1	3.333333e-01	-2.7339428	3.400609	1.0000000
4657	2:5-3:1	-6.666667e-01	-3.7339428	2.400609	0.9999976
4658	3:5-3:1	6.666667e-01	-2.4006094	3.733943	0.9999976
4659	UTC:5-3:1	-1.000000e+00	-4.0672761	2.067276	0.9991343
4660	1:2-UTC:1	1.332268e-15	-3.0672761	3.067276	1.0000000
4661	2:2-UTC:1	-1.000000e+00	-4.0672761	2.067276	0.9991343
4662	3:2-UTC:1	-1.333333e+00	-4.4006094	1.733943	0.9773824
4663	UTC:2-UTC:1	6.666667e-01	-2.4006094	3.733943	0.9999976
4664	1:3-UTC:1	3.333333e-01	-2.7339428	3.400609	1.0000000
4665	2:3-UTC:1	-6.666667e-01	-3.7339428	2.400609	0.9999976
4666	3:3-UTC:1	2.220446e-15	-3.0672761	3.067276	1.0000000
4667	UTC:3-UTC:1	1.332268e-15	-3.0672761	3.067276	1.0000000
4668	1:4-UTC:1	6.666667e-01	-2.4006094	3.733943	0.9999976
4669	2:4-UTC:1	-3.333333e-01	-3.4006094	2.733943	1.0000000
4670	3:4-UTC:1	6.666667e-01	-2.4006094	3.733943	0.9999976
4671	UTC:4-UTC:1	1.000000e+00	-2.0672761	4.067276	0.9991343
4672	1:5-UTC:1	3.333333e-01	-2.7339428	3.400609	1.0000000
4673	2:5-UTC:1	-6.666667e-01	-3.7339428	2.400609	0.9999976
4674	3:5-UTC:1	6.666667e-01	-2.4006094	3.733943	0.9999976
4675	UTC:5-UTC:1	-1.000000e+00	-4.0672761	2.067276	0.9991343
4676	2:2-1:2	-1.000000e+00	-4.0672761	2.067276	0.9991343
4677	3:2-1:2	-1.333333e+00	-4.4006094	1.733943	0.9773824
4678	UTC:2-1:2	6.666667e-01	-2.4006094	3.733943	0.9999976
4679	1:3-1:2	3.333333e-01	-2.7339428	3.400609	1.0000000
4680	2:3-1:2	-6.666667e-01	-3.7339428	2.400609	0.9999976
4681	3:3-1:2	8.881784e-16	-3.0672761	3.067276	1.0000000
4682	UTC:3-1:2	0.000000e+00	-3.0672761	3.067276	1.0000000
4683	1:4-1:2	6.666667e-01	-2.4006094	3.733943	0.9999976
4684	2:4-1:2	-3.333333e-01	-3.4006094	2.733943	1.0000000
4685	3:4-1:2	6.666667e-01	-2.4006094	3.733943	0.9999976
4686	UTC:4-1:2	1.000000e+00	-2.0672761	4.067276	0.9991343
4687	1:5-1:2	3.333333e-01	-2.7339428	3.400609	1.0000000
4688	2:5-1:2	-6.666667e-01	-3.7339428	2.400609	0.9999976
4689	3:5-1:2	6.666667e-01	-2.4006094	3.733943	0.9999976
4690	UTC:5-1:2	-1.000000e+00	-4.0672761	2.067276	0.9991343
4691	3:2-2:2	-3.333333e-01	-3.4006094	2.733943	1.0000000
4692	UTC:2-2:2	1.666667e+00	-1.4006094	4.733943	0.8579521
4693	1:3-2:2	1.333333e+00	-1.7339428	4.400609	0.9773824
4694	2:3-2:2	3.333333e-01	-2.7339428	3.400609	1.0000000
4695	3:3-2:2	1.000000e+00	-2.0672761	4.067276	0.9991343
4696	UTC:3-2:2	1.000000e+00	-2.0672761	4.067276	0.9991343
4697	1:4-2:2	1.666667e+00	-1.4006094	4.733943	0.8579521
4698	2:4-2:2	6.666667e-01	-2.4006094	3.733943	0.9999976
4699	3:4-2:2	1.666667e+00	-1.4006094	4.733943	0.8579521
4700	UTC:4-2:2	2.000000e+00	-1.0672761	5.067276	0.6107864
4701	1:5-2:2	1.333333e+00	-1.7339428	4.400609	0.9773824
4702	2:5-2:2	3.333333e-01	-2.7339428	3.400609	1.0000000
4703	3:5-2:2	1.666667e+00	-1.4006094	4.733943	0.8579521
4704	UTC:5-2:2	8.881784e-16	-3.0672761	3.067276	1.0000000
4705	UTC:2-3:2	2.000000e+00	-1.0672761	5.067276	0.6107864
4706	1:3-3:2	1.666667e+00	-1.4006094	4.733943	0.8579521
4707	2:3-3:2	6.666667e-01	-2.4006094	3.733943	0.9999976
4708	3:3-3:2	1.333333e+00	-1.7339428	4.400609	0.9773824
4709	UTC:3-3:2	1.333333e+00	-1.7339428	4.400609	0.9773824
4710	1:4-3:2	2.000000e+00	-1.0672761	5.067276	0.6107864
4711	2:4-3:2	1.000000e+00	-2.0672761	4.067276	0.9991343
4712	3:4-3:2	2.000000e+00	-1.0672761	5.067276	0.6107864
4713	UTC:4-3:2	2.333333e+00	-0.7339428	5.400609	0.3436015
4714	1:5-3:2	1.666667e+00	-1.4006094	4.733943	0.8579521
4715	2:5-3:2	6.666667e-01	-2.4006094	3.733943	0.9999976
4716	3:5-3:2	2.000000e+00	-1.0672761	5.067276	0.6107864
4717	UTC:5-3:2	3.333333e-01	-2.7339428	3.400609	1.0000000
4718	1:3-UTC:2	-3.333333e-01	-3.4006094	2.733943	1.0000000
4719	2:3-UTC:2	-1.333333e+00	-4.4006094	1.733943	0.9773824
4720	3:3-UTC:2	-6.666667e-01	-3.7339428	2.400609	0.9999976
4721	UTC:3-UTC:2	-6.666667e-01	-3.7339428	2.400609	0.9999976
4722	1:4-UTC:2	1.332268e-15	-3.0672761	3.067276	1.0000000
4723	2:4-UTC:2	-1.000000e+00	-4.0672761	2.067276	0.9991343
4724	3:4-UTC:2	4.440892e-16	-3.0672761	3.067276	1.0000000
4725	UTC:4-UTC:2	3.333333e-01	-2.7339428	3.400609	1.0000000
4726	1:5-UTC:2	-3.333333e-01	-3.4006094	2.733943	1.0000000
4727	2:5-UTC:2	-1.333333e+00	-4.4006094	1.733943	0.9773824
4728	3:5-UTC:2	4.440892e-16	-3.0672761	3.067276	1.0000000
4729	UTC:5-UTC:2	-1.666667e+00	-4.7339428	1.400609	0.8579521
4730	2:3-1:3	-1.000000e+00	-4.0672761	2.067276	0.9991343
4731	3:3-1:3	-3.333333e-01	-3.4006094	2.733943	1.0000000
4732	UTC:3-1:3	-3.333333e-01	-3.4006094	2.733943	1.0000000
4733	1:4-1:3	3.333333e-01	-2.7339428	3.400609	1.0000000
4734	2:4-1:3	-6.666667e-01	-3.7339428	2.400609	0.9999976
4735	3:4-1:3	3.333333e-01	-2.7339428	3.400609	1.0000000
4736	UTC:4-1:3	6.666667e-01	-2.4006094	3.733943	0.9999976
4737	1:5-1:3	4.440892e-16	-3.0672761	3.067276	1.0000000
4738	2:5-1:3	-1.000000e+00	-4.0672761	2.067276	0.9991343
4739	3:5-1:3	3.333333e-01	-2.7339428	3.400609	1.0000000
4740	UTC:5-1:3	-1.333333e+00	-4.4006094	1.733943	0.9773824
4741	3:3-2:3	6.666667e-01	-2.4006094	3.733943	0.9999976
4742	UTC:3-2:3	6.666667e-01	-2.4006094	3.733943	0.9999976
4743	1:4-2:3	1.333333e+00	-1.7339428	4.400609	0.9773824
4744	2:4-2:3	3.333333e-01	-2.7339428	3.400609	1.0000000
4745	3:4-2:3	1.333333e+00	-1.7339428	4.400609	0.9773824
4746	UTC:4-2:3	1.666667e+00	-1.4006094	4.733943	0.8579521
4747	1:5-2:3	1.000000e+00	-2.0672761	4.067276	0.9991343

```

4748 2:5-2:3    2.220446e-16 -3.0672761 3.067276 1.0000000
4749 3:5-2:3    1.333333e+00 -1.7339428 4.400609 0.9773824
4750 UTC:5-2:3   -3.333333e-01 -3.4006094 2.733943 1.0000000
4751 UTC:3-3:3   -8.881784e-16 -3.0672761 3.067276 1.0000000
4752 1:4-3:3    6.666667e-01 -2.4006094 3.733943 0.9999976
4753 2:4-3:3    -3.333333e-01 -3.4006094 2.733943 1.0000000
4754 3:4-3:3    6.666667e-01 -2.4006094 3.733943 0.9999976
4755 UTC:4-3:3   1.000000e+00 -2.0672761 4.067276 0.9991343
4756 1:5-3:3    3.333333e-01 -2.7339428 3.400609 1.0000000
4757 2:5-3:3    -6.666667e-01 -3.7339428 2.400609 0.9999976
4758 3:5-3:3    6.666667e-01 -2.4006094 3.733943 0.9999976
4759 UTC:5-3:3   -1.000000e+00 -4.0672761 2.067276 0.9991343
4760 1:4-UTC:3   6.666667e-01 -2.4006094 3.733943 0.9999976
4761 2:4-UTC:3   -3.333333e-01 -3.4006094 2.733943 1.0000000
4762 3:4-UTC:3   6.666667e-01 -2.4006094 3.733943 0.9999976
4763 UTC:4-UTC:3  1.000000e+00 -2.0672761 4.067276 0.9991343
4764 1:5-UTC:3   3.333333e-01 -2.7339428 3.400609 1.0000000
4765 2:5-UTC:3   -6.666667e-01 -3.7339428 2.400609 0.9999976
4766 3:5-UTC:3   6.666667e-01 -2.4006094 3.733943 0.9999976
4767 UTC:5-UTC:3 -1.000000e+00 -4.0672761 2.067276 0.9991343
4768 2:4-1:4    -1.000000e+00 -4.0672761 2.067276 0.9991343
4769 3:4-1:4    -8.881784e-16 -3.0672761 3.067276 1.0000000
4770 UTC:4-1:4   3.333333e-01 -2.7339428 3.400609 1.0000000
4771 1:5-1:4    -3.333333e-01 -3.4006094 2.733943 1.0000000
4772 2:5-1:4    -3.333333e+00 -4.4006094 1.733943 0.9773824
4773 3:5-1:4    -8.881784e-16 -3.0672761 3.067276 1.0000000
4774 UTC:5-1:4   -1.666667e+00 -4.7339428 1.400609 0.8579521
4775 3:4-2:4    1.000000e+00 -2.0672761 4.067276 0.9991343
4776 UTC:4-2:4   1.333333e+00 -1.7339428 4.400609 0.9773824
4777 1:5-2:4    6.666667e-01 -2.4006094 3.733943 0.9999976
4778 2:5-2:4    -3.333333e-01 -3.4006094 2.733943 1.0000000
4779 3:5-2:4    1.000000e+00 -2.0672761 4.067276 0.9991343
4780 UTC:5-2:4   -6.666667e-01 -3.7339428 2.400609 0.9999976
4781 UTC:4-3:4   3.333333e-01 -2.7339428 3.400609 1.0000000
4782 1:5-3:4    -3.333333e-01 -3.4006094 2.733943 1.0000000
4783 2:5-3:4    -1.333333e+00 -4.4006094 1.733943 0.9773824
4784 3:5-3:4    0.000000e+00 -3.0672761 3.067276 1.0000000
4785 UTC:5-3:4   -1.666667e+00 -4.7339428 1.400609 0.8579521
4786 1:5-UTC:4   -6.666667e-01 -3.7339428 2.400609 0.9999976
4787 2:5-UTC:4   -1.666667e+00 -4.7339428 1.400609 0.8579521
4788 3:5-UTC:4   -3.333333e-01 -3.4006094 2.733943 1.0000000
4789 UTC:5-UTC:4 -2.000000e+00 -5.0672761 1.067276 0.6107864
4790 2:5-1:5    -1.000000e+00 -4.0672761 2.067276 0.9991343
4791 3:5-1:5    3.333333e-01 -2.7339428 3.400609 1.0000000
4792 UTC:5-1:5   -1.333333e+00 -4.4006094 1.733943 0.9773824
4793 3:5-2:5    1.333333e+00 -1.7339428 4.400609 0.9773824
4794 UTC:5-2:5   -3.333333e-01 -3.4006094 2.733943 1.0000000
4795 UTC:5-3:5   -1.666667e+00 -4.7339428 1.400609 0.8579521
4796

4797 Hymenoptera pitfall
4798
4799 sample mass
4800
4801      Df Sum Sq Mean Sq F value Pr(>F)
4802 block     3 0.002314 0.0007713 2.119 0.1130
4803 event     4 0.004349 0.0010873 2.987 0.0301 *
4804 block:event 12 0.006666 0.0005555 1.526 0.1552
4805 Residuals 40 0.014559 0.0003640
4806 ---
4807 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
4808 Levene's Test for Homogeneity of Variance (center = median)
4809      Df F value Pr(>F)
4810 group 19 0.8187 0.6736
4811      40
4812
4813 Shapiro-Wilk normality test
4814
4815 data: residuals(mass.model)
4816 W = 0.94321, p-value = 0.007554
4817
4818 Tukey multiple comparisons of means
4819      95% family-wise confidence level
4820
4821 Fit: aov(formula = mass.model)
4822
4823 $block
4824      diff      lwr      upr      p adj
4825 2-1  -0.001520000 -0.020193015 0.017153015 0.9962718
4826 3-1   0.014373333 -0.004299682 0.033046348 0.1827293
4827 UTC-1  0.005033333 -0.013639682 0.023706348 0.8875344
4828 3-2   0.015893333 -0.002779682 0.034566348 0.1195455
4829 UTC-2  0.006553333 -0.012119682 0.025226348 0.7832162
4830 UTC-3 -0.009340000 -0.028013015 0.009333015 0.5431166
4831 $event
4832      diff      lwr      upr      p adj
4833 2-1  -0.024258333 -0.04650366 -0.0020130061 0.0265647
4834 3-1  -0.022016667 -0.04426199 0.0002286606 0.0535786
4835 4-1  -0.013633333 -0.03587866 0.0086119939 0.4159744
4836 5-1  -0.015850000 -0.03809533 0.0063953272 0.2684591
4837 3-2   0.002241667 -0.02000366 0.0244869939 0.9984354
4838 4-2   0.010625000 -0.01162033 0.0328703272 0.6535006
4839 5-2   0.008408333 -0.01383699 0.0306536606 0.8158718
4840 4-3   0.008383333 -0.01386199 0.0306286606 0.8174803
4841 5-3   0.006166667 -0.01607866 0.0284119939 0.9315201

```

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4843 5-4 -0.002216667 -0.02446199  0.0200286606 0.9985026
4844
4845 $`block:event`  

4846          diff      lwr      upr    p adj  

4847 2:1-1:1   -5.000000e-03 -0.06401261  0.0540126109 1.0000000
4848 3:1-1:1    1.696667e-02 -0.04204594  0.0759792776 0.9998403
4849 UTC:1-1:1   -2.710000e-02 -0.08611261  0.0319126109 0.9622512
4850 1:2-1:1   -3.160000e-02 -0.09061261  0.0274126109 0.8714973
4851 2:2-1:1   -4.296667e-02 -0.10197928  0.0160459443 0.4180805
4852 3:2-1:1   -3.616667e-02 -0.09517928  0.0228459443 0.7096525
4853 UTC:2-1:1   -1.433333e-03 -0.06044594  0.0575792776 1.0000000
4854 1:3-1:1   -3.073333e-02 -0.08974594  0.0282792776 0.8946279
4855 2:3-1:1   -3.323333e-02 -0.09224594  0.0257792776 0.8207124
4856 3:3-1:1   -1.943333e-02 -0.07844594  0.0395792776 0.9990155
4857 UTC:3-1:1   -1.980000e-02 -0.07881261  0.0392126109 0.9987522
4858 1:4-1:1   -2.216667e-02 -0.08117928  0.0368459443 0.9951595
4859 2:4-1:1   -2.360000e-02 -0.08261261  0.0354126109 0.9903284
4860 3:4-1:1    2.833333e-03 -0.05617928  0.0618459443 1.0000000
4861 UTC:4-1:1   -2.673333e-02 -0.08574594  0.0322792776 0.9666387
4862 1:5-1:1   -3.253333e-02 -0.09154594  0.0264792776 0.8435878
4863 2:5-1:1   -1.983333e-02 -0.07884594  0.0391792776 0.9987255
4864 3:5-1:1   -9.366667e-03 -0.06837928  0.0496459443 1.0000000
4865 UTC:5-1:1   -1.680000e-02 -0.07581261  0.0422126109 0.9998609
4866 3:1-2:1    2.196667e-02 -0.03704594  0.0809792776 0.9956367
4867 UTC:1-2:1   -2.210000e-02 -0.08111261  0.0369126109 0.9953231
4868 1:2-2:1   -2.660000e-02 -0.08561261  0.0324126109 0.9681368
4869 2:2-2:1   -3.796667e-02 -0.09697928  0.0210459443 0.6331377
4870 3:2-2:1   -3.116667e-02 -0.09017928  0.0278459443 0.8834039
4871 UTC:2-2:1   -3.566667e-03 -0.05544594  0.0625792776 1.0000000
4872 1:3-2:1   -2.573333e-02 -0.08474594  0.0332792776 0.9766852
4873 2:3-2:1   -2.823333e-02 -0.08724594  0.0307792776 0.9460471
4874 3:3-2:1   -1.443333e-02 -0.07344594  0.0445792776 0.9999850
4875 UTC:3-2:1   -1.480000e-02 -0.07381261  0.0442126109 0.9999780
4876 1:4-2:1   -1.716667e-02 -0.07617928  0.0418459443 0.9998119
4877 2:4-2:1   -1.860000e-02 -0.07761261  0.0404126109 0.9994427
4878 3:4-2:1    7.833333e-03 -0.05117928  0.0668459443 1.0000000
4879 UTC:4-2:1   -2.173333e-02 -0.08074594  0.0372792776 0.9961434
4880 1:5-2:1   -2.753333e-02 -0.08654594  0.0314792776 0.9565405
4881 2:5-2:1   -1.483333e-02 -0.07384594  0.0441792776 0.9999773
4882 3:5-2:1   -4.366667e-03 -0.06337928  0.05646459443 1.0000000
4883 UTC:5-2:1   -1.180000e-02 -0.07081261  0.0472126109 0.9999994
4884 UTC:1-3:1   -4.406667e-02 -0.10307928  0.0149459443 0.3746253
4885 1:2-3:1   -4.856667e-02 -0.10757928  0.0104459443 0.2246445
4886 2:2-3:1   -5.993333e-02 -0.11894594 -0.0009207224 0.0430728
4887 3:2-3:1   -5.313333e-02 -0.11214594  0.0058792776 0.1221341
4888 UTC:2-3:1   -1.840000e-02 -0.07741261  0.0406126109 0.9995170
4889 1:3-3:1   -4.770000e-02 -0.10671261  0.0113126109 0.2497316
4890 2:3-3:1   -5.020000e-02 -0.10921261  0.0088126109 0.1823941
4891 3:3-3:1   -3.640000e-02 -0.09541261  0.0226126109 0.6999870
4892 UTC:3-3:1   -3.676667e-02 -0.09577928  0.0222459443 0.6846204
4893 1:4-3:1   -3.913333e-02 -0.09814594  0.0198792776 0.5820708
4894 2:4-3:1   -4.056667e-02 -0.09957928  0.0184459443 0.5193105
4895 3:4-3:1   -1.413333e-02 -0.07314594  0.0448792776 0.9999891
4896 UTC:4-3:1   -4.370000e-02 -0.10271261  0.0153126109 0.3888570
4897 1:5-3:1   -4.950000e-02 -0.10851261  0.0095126109 0.1997049
4898 2:5-3:1   -3.680000e-02 -0.09581261  0.0222126109 0.6832135
4899 3:5-3:1   -2.633333e-02 -0.08534594  0.0326792776 0.9709824
4900 UTC:5-3:1   -3.376667e-02 -0.09277928  0.0252459443 0.8022363
4901 1:2-UTC:1   -4.500000e-03 -0.06351261  0.0545126109 1.0000000
4902 2:2-UTC:1   -1.586667e-02 -0.07487928  0.0431459443 0.9999386
4903 3:2-UTC:1   -9.066667e-03 -0.06807928  0.0499459443 1.0000000
4904 UTC:2-UTC:1   2.566667e-02 -0.03334594  0.0846792776 0.9772618
4905 1:3-UTC:1   -3.633333e-03 -0.06264594  0.0553792776 1.0000000
4906 2:3-UTC:1   -6.133333e-03 -0.06514594  0.0528792776 1.0000000
4907 3:3-UTC:1   7.666667e-03 -0.05134594  0.0666792776 1.0000000
4908 UTC:3-UTC:1   7.300000e-03 -0.05171261  0.0663126109 1.0000000
4909 1:4-UTC:1   4.933333e-03 -0.05407928  0.0639459443 1.0000000
4910 2:4-UTC:1   3.500000e-03 -0.05551261  0.0625126109 1.0000000
4911 3:4-UTC:1   2.993333e-02 -0.02907928  0.0889459443 0.9135404
4912 UTC:4-UTC:1   3.666667e-04 -0.05864594  0.0593792776 1.0000000
4913 1:5-UTC:1   -5.433333e-03 -0.06444594  0.0535792776 1.0000000
4914 2:5-UTC:1   7.266667e-03 -0.05174594  0.0662792776 1.0000000
4915 3:5-UTC:1   1.773333e-02 -0.04127928  0.0767459443 0.9997060
4916 UTC:5-UTC:1   -1.030000e-02 -0.04871261  0.0693126109 0.9999999
4917 2:2-1:2   -1.136667e-02 -0.07037928  0.0476459443 0.9999997
4918 3:2-1:2   -4.566667e-03 -0.06357928  0.0544459443 1.0000000
4919 UTC:2-1:2   3.016667e-02 -0.02884594  0.0891792776 0.9082669
4920 1:3-1:2   8.666667e-04 -0.05814594  0.0598792776 1.0000000
4921 2:3-1:2   -1.633333e-03 -0.06064594  0.0573792776 1.0000000
4922 3:3-1:2   -1.216667e-02 -0.04684594  0.0711792776 0.9999990
4923 UTC:3-1:2   -1.180000e-02 -0.04721261  0.0708126109 0.9999994
4924 1:4-1:2   9.433333e-03 -0.04957928  0.0684459443 1.0000000
4925 2:4-1:2   8.000000e-03 -0.05101261  0.0670126109 1.0000000
4926 3:4-1:2   3.443333e-02 -0.02457928  0.0934459443 0.7779626
4927 UTC:4-1:2   4.866667e-03 -0.05414594  0.0638792776 1.0000000
4928 1:5-1:2   -9.333333e-04 -0.05994594  0.0580792776 1.0000000
4929 2:5-1:2   1.176667e-02 -0.04724594  0.0707792776 0.9999994
4930 3:5-1:2   2.223333e-02 -0.03677928  0.0812459443 0.9949911
4931 UTC:5-1:2   1.480000e-02 -0.04421261  0.0738126109 0.9999780
4932 3:2-2:2   6.800000e-03 -0.05221261  0.0658126109 1.0000000
4933 UTC:2-2:2   4.153333e-02 -0.01747928  0.1005459443 0.4777006
4934 1:3-2:2   1.223333e-02 -0.04677928  0.0712459443 0.9999989
4935 2:3-2:2   9.733333e-03 -0.04927928  0.0687459443 1.0000000
4936 3:3-2:2   2.353333e-02 -0.03547928  0.0825459443 0.9906169
4937 UTC:3-2:2   2.316667e-02 -0.03584594  0.0821792776 0.9920819

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4938	1:4-2:2	2.080000e-02	-0.03821261	0.0798126109	0.9977080
4939	2:4-2:2	1.936667e-02	-0.03964594	0.0783792776	0.9990578
4940	3:4-2:2	4.580000e-02	-0.01321261	0.1048126109	0.3112000
4941	UTC:4-2:2	1.623333e-02	-0.04277928	0.0752459443	0.9999146
4942	1:5-2:2	1.043333e-02	-0.04857928	0.0694459443	0.9999999
4943	2:5-2:2	2.313333e-02	-0.03587928	0.0821459443	0.9922053
4944	3:5-2:2	3.360000e-02	-0.02541261	0.0926126109	0.8081035
4945	UTC:5-2:2	2.616667e-02	-0.03284594	0.0851792776	0.9726616
4946	UTC:2-3:2	3.473333e-02	-0.02427928	0.0937459443	0.7666433
4947	1:3-3:2	5.433333e-03	-0.05357928	0.0644459443	1.0000000
4948	2:3-3:2	2.933333e-03	-0.05607928	0.0619459443	1.0000000
4949	3:3-3:2	1.673333e-02	-0.04227928	0.0757459443	0.9998685
4950	UTC:3-3:2	1.636667e-02	-0.04264594	0.0753792776	0.9999040
4951	1:4-3:2	1.400000e-02	-0.04501261	0.0730126109	0.999906
4952	2:4-3:2	1.256667e-02	-0.04644594	0.0715792776	0.999983
4953	3:4-3:2	3.900000e-02	-0.02001261	0.0980126109	0.5879278
4954	UTC:4-3:2	9.433333e-03	-0.04957928	0.0684459443	1.0000000
4955	1:5-3:2	3.633333e-03	-0.05537928	0.0626459443	1.0000000
4956	2:5-3:2	1.633333e-02	-0.04267928	0.0753459443	0.9999067
4957	3:5-3:2	2.680000e-02	-0.03221261	0.0858126109	0.9658704
4958	UTC:5-3:2	1.936667e-02	-0.03964594	0.0783792776	0.9990578
4959	1:3-UTC:2	-2.930000e-02	-0.08831261	0.0297126109	0.9268540
4960	2:3-UTC:2	-3.180000e-02	-0.09081261	0.0272126109	0.8657744
4961	3:3-UTC:2	-1.800000e-02	-0.07701261	0.0410126109	0.9996401
4962	UTC:3-UTC:2	-1.836667e-02	-0.07737928	0.0406459443	0.9995285
4963	1:4-UTC:2	-2.073333e-02	-0.07974594	0.0382792776	0.9977953
4964	2:4-UTC:2	-2.216667e-02	-0.08117928	0.0368459443	0.9951595
4965	3:4-UTC:2	4.266667e-03	-0.05474594	0.0632792776	1.0000000
4966	UTC:4-UTC:2	-2.530000e-02	-0.08431261	0.0337126109	0.9802409
4967	1:5-UTC:2	-3.110000e-02	-0.09011261	0.0279126109	0.8851753
4968	2:5-UTC:2	-1.840000e-02	-0.07741261	0.0406126109	0.9995170
4969	3:5-UTC:2	-7.933333e-03	-0.06694594	0.0510792776	1.0000000
4970	UTC:5-UTC:2	-1.536667e-02	-0.07437928	0.0436459443	0.9999616
4971	2:3-1:3	-2.500000e-03	-0.06151261	0.0565126109	1.0000000
4972	3:3-1:3	1.130000e-02	-0.04771261	0.0703126109	0.9999997
4973	UTC:3-1:3	1.093333e-02	-0.04807928	0.0699459443	0.9999998
4974	1:4-1:3	8.566667e-03	-0.05044594	0.0675792776	1.0000000
4975	2:4-1:3	7.133333e-03	-0.05187928	0.0661459443	1.0000000
4976	3:4-1:3	3.356667e-02	-0.02544594	0.0925792776	0.8092669
4977	UTC:4-1:3	4.000000e-03	-0.05501261	0.0630126109	1.0000000
4978	1:5-1:3	-1.800000e-03	-0.06081261	0.0572126109	1.0000000
4979	2:5-1:3	1.090000e-02	-0.04811261	0.0699126109	0.9999998
4980	3:5-1:3	2.136667e-02	-0.03764594	0.0803792776	0.9968402
4981	UTC:5-1:3	1.393333e-02	-0.04507928	0.0729459443	0.9999912
4982	3:3-2:3	1.380000e-02	-0.04521261	0.0728126109	0.9999924
4983	UTC:3-2:3	1.343333e-02	-0.04557928	0.0724459443	0.9999950
4984	1:4-2:3	1.106667e-02	-0.04794594	0.0700792776	0.9999998
4985	2:4-2:3	9.633333e-03	-0.04937928	0.0686459443	1.0000000
4986	3:4-2:3	3.606667e-02	-0.02294594	0.0950792776	0.7137657
4987	UTC:4-2:3	6.500000e-03	-0.05251261	0.0655126109	1.0000000
4988	1:5-2:3	7.000000e-04	-0.05831261	0.0597126109	1.0000000
4989	2:5-2:3	1.340000e-02	-0.04561261	0.0724126109	0.9999952
4990	3:5-2:3	2.386667e-02	-0.03514594	0.0828792776	0.9891027
4991	UTC:5-2:3	1.643333e-02	-0.04257928	0.0754459443	0.9998983
4992	UTC:3-3:3	-3.666667e-04	-0.05937928	0.0586459443	1.0000000
4993	1:4-3:3	-2.733333e-03	-0.06174594	0.0562792776	1.0000000
4994	2:4-3:3	-4.166667e-03	-0.06317928	0.0548459443	1.0000000
4995	3:4-3:3	2.226667e-02	-0.03674594	0.0812792776	0.9949051
4996	UTC:4-3:3	-7.300000e-03	-0.06631261	0.0517126109	1.0000000
4997	1:5-3:3	-1.310000e-02	-0.07211261	0.0459126109	0.9999967
4998	2:5-3:3	-4.000000e-04	-0.05941261	0.0586126109	1.0000000
4999	3:5-3:3	1.0066667e-02	-0.04894594	0.0690792776	1.0000000
5000	UTC:5-3:3	2.633333e-03	-0.05637928	0.0616459443	1.0000000
5001	1:4-UTC:3	-2.366667e-03	-0.06137928	0.0566459443	1.0000000
5002	2:4-UTC:3	-3.800000e-03	-0.06281261	0.0552126109	1.0000000
5003	3:4-UTC:3	2.263333e-02	-0.03637928	0.0816459443	0.9938765
5004	UTC:4-UTC:3	-6.933333e-03	-0.06594594	0.0520792776	1.0000000
5005	1:5-UTC:3	-1.273333e-02	-0.07174594	0.0462792776	0.9999979
5006	2:5-UTC:3	-3.333333e-05	-0.05904594	0.0589792776	1.0000000
5007	3:5-UTC:3	1.043333e-02	-0.04857928	0.0694459443	0.9999999
5008	UTC:5-UTC:3	3.000000e-03	-0.05601261	0.0620126109	1.0000000
5009	2:4-1:4	-1.433333e-03	-0.06044594	0.0575792776	1.0000000
5010	3:4-1:4	2.500000e-02	-0.03401261	0.0840126109	0.9824464
5011	UTC:4-1:4	-4.566667e-03	-0.06357928	0.0544459443	1.0000000
5012	1:5-1:4	-1.036667e-02	-0.06937928	0.0486459443	0.9999999
5013	2:5-1:4	2.333333e-03	-0.05667928	0.0613459443	1.0000000
5014	3:5-1:4	1.280000e-02	-0.04621261	0.0718126109	0.9999977
5015	UTC:5-1:4	5.366667e-03	-0.05364594	0.0643792776	1.0000000
5016	3:4-2:4	2.643333e-02	-0.03257928	0.0894459443	0.9699385
5017	UTC:4-2:4	-3.133333e-03	-0.06214594	0.0558792776	1.0000000
5018	1:5-2:4	-8.933333e-03	-0.06794594	0.0500792776	1.0000000
5019	2:5-2:4	3.766667e-03	-0.05524594	0.0627792776	1.0000000
5020	3:5-2:4	1.423333e-02	-0.04477928	0.0732459443	0.9999878
5021	UTC:5-2:4	6.800000e-03	-0.05221261	0.0658126109	1.0000000
5022	UTC:4-3:4	-2.956667e-02	-0.08857928	0.0294459443	0.9214256
5023	1:5-3:4	-3.536667e-02	-0.09437928	0.0236459443	0.7420140
5024	2:5-3:4	-2.266667e-02	-0.08167928	0.0363459443	0.9937751
5025	3:5-3:4	-1.220000e-02	-0.07121261	0.0468126109	0.9999989
5026	UTC:5-3:4	-1.963333e-02	-0.07864594	0.0393792776	0.9988785
5027	1:5-UTC:4	-5.800000e-03	-0.06481261	0.0532126109	1.0000000
5028	2:5-UTC:4	6.900000e-03	-0.05211261	0.0659126109	1.0000000
5029	3:5-UTC:4	1.736667e-02	-0.04164594	0.0763792776	0.9997792
5030	UTC:5-UTC:4	9.933333e-03	-0.04907928	0.0689459443	1.0000000
5031	2:5-1:5	1.270000e-02	-0.04631261	0.0717126109	0.9999980
5032	3:5-1:5	2.316667e-02	-0.03584594	0.0821792776	0.9920819

```

5033 UTC:5-1:5 1.573333e-02 -0.04327928 0.0747459443 0.9999457
5034 3:5-2:5 1.046667e-02 -0.04854594 0.0694792776 0.9999999
5035 UTC:5-2:5 3.033333e-03 -0.05597928 0.0620459443 1.0000000
5036 UTC:5-3:5 -7.433333e-03 -0.06644594 0.0515792776 1.0000000
5037
5038 sample families
5039
5040      Df Sum Sq Mean Sq F value Pr(>F)
5041 block      3 12.45   4.150   1.227  0.313
5042 event       4 20.27   5.067   1.498  0.221
5043 block:event 12 34.80   2.900   0.857  0.594
5044 Residuals  40 135.33   3.383
5045 Levene's Test for Homogeneity of Variance (center = median)
5046      Df F value Pr(>F)
5047 group 19  0.6173 0.8704
5048     40
5049
5050 Shapiro-Wilk normality test
5051
5052 data: residuals(family.model)
5053 W = 0.90267, p-value = 0.0001649
5054
5055 Tukey multiple comparisons of means
5056 95% family-wise confidence level
5057
5058 Fit: aov(formula = family.model)
5059
5060 $block
5061      diff      lwr      upr    p adj
5062 2-1  0.4 -1.40029848 0.9328316
5063 3-1  1.2 -0.6002984 3.0002984 0.2946050
5064 UTC-1 0.2 -1.6002984 2.0002984 0.9906775
5065 3-2  0.8 -1.0002984 2.6002984 0.6359307
5066 UTC-2 -0.2 -2.0002984 1.6002984 0.9906775
5067 UTC-3 -1.0 -2.8002984 0.8002984 0.4535296
5068
5069 $event
5070      diff      lwr      upr    p adj
5071 2-1 -1.000000e+00 -3.1447114 1.1447114 0.6734650
5072 3-1  1.776357e-15 -2.1447114 2.1447114 1.0000000
5073 4-1  5.000000e-01 -1.6447114 2.6447114 0.9625590
5074 5-1 -9.166667e-01 -3.0613780 1.2280447 0.7394998
5075 3-2  1.000000e+00 -1.1447114 3.1447114 0.6734650
5076 4-2  1.500000e+00 -0.6447114 3.6447114 0.2857476
5077 5-2  8.333333e-02 -2.0613780 2.2280447 0.9999641
5078 4-3  5.000000e-01 -1.6447114 2.6447114 0.9625590
5079 5-3 -9.166667e-01 -3.0613780 1.2280447 0.7394998
5080 5-4 -1.416667e+00 -3.5613780 0.7280447 0.3409240
5081
5082 $`block:event`
5083      diff      lwr      upr    p adj
5084 2:1-1:1  6.666667e-01 -5.022844 6.3561769 1.0000000
5085 3:1-1:1  6.666667e-01 -5.022844 6.3561769 1.0000000
5086 UTC:1-1:1 4.884981e-15 -5.689510 5.6895102 1.0000000
5087 1:2-1:1 -1.666667e+00 -7.356177 4.0228436 0.9997928
5088 2:2-1:1  4.440892e-15 -5.689510 5.6895102 1.0000000
5089 3:2-1:1 -1.333333e+00 -7.022844 4.3561769 0.9999922
5090 UTC:2-1:1 3.333333e-01 -5.356177 6.0228436 1.0000000
5091 1:3-1:1  4.884981e-15 -5.689510 5.6895102 1.0000000
5092 2:3-1:1 -3.333333e-01 -6.022844 5.3561769 1.0000000
5093 3:3-1:1  6.666667e-01 -5.022844 6.3561769 1.0000000
5094 UTC:3-1:1 1.000000e+00 -4.689510 6.6895102 0.9999999
5095 1:4-1:1  3.333333e-01 -5.356177 6.0228436 1.0000000
5096 2:4-1:1  3.333333e-01 -5.356177 6.0228436 1.0000000
5097 3:4-1:1  2.666667e+00 -3.022844 8.3561769 0.9547722
5098 UTC:4-1:1 5.773160e-15 -5.689510 5.6895102 1.0000000
5099 1:5-1:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5100 2:5-1:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5101 3:5-1:1  1.333333e+00 -4.356177 7.0228436 0.9999922
5102 UTC:5-1:1 -2.333333e+00 -8.022844 3.3561769 0.9873898
5103 3:1-2:1 -3.552714e-15 -5.689510 5.6895102 1.0000000
5104 UTC:1-2:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5105 1:2-2:1 -2.333333e+00 -8.022844 3.3561769 0.9873898
5106 2:2-2:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5107 3:2-2:1 -2.000000e+00 -7.689510 3.6895102 0.9977811
5108 UTC:2-2:1 -3.333333e-01 -6.022844 5.3561769 1.0000000
5109 1:3-2:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5110 2:3-2:1 -1.000000e+00 -6.689510 4.6895102 0.9999999
5111 3:3-2:1 -1.332268e-15 -5.689510 5.6895102 1.0000000
5112 UTC:3-2:1 3.333333e-01 -5.356177 6.0228436 1.0000000
5113 1:4-2:1 -3.333333e-01 -6.022844 5.3561769 1.0000000
5114 2:4-2:1 -3.333333e-01 -6.022844 5.3561769 1.0000000
5115 3:4-2:1  2.000000e+00 -3.689510 7.6895102 0.9977811
5116 UTC:4-2:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5117 1:5-2:1 -1.333333e+00 -7.022844 4.3561769 0.9999922
5118 2:5-2:1 -1.333333e+00 -7.022844 4.3561769 0.9999922
5119 3:5-2:1  6.666667e-01 -5.022844 6.3561769 1.0000000
5120 UTC:5-2:1 -3.000000e+00 -8.689510 2.6895102 0.8847375
5121 UTC:1-3:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5122 1:2-3:1 -2.333333e+00 -8.022844 3.3561769 0.9873898
5123 2:2-3:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5124 3:2-3:1 -2.000000e+00 -7.689510 3.6895102 0.9977811
5125 UTC:2-3:1 -3.333333e-01 -6.022844 5.3561769 1.0000000
5126 1:3-3:1 -6.666667e-01 -6.356177 5.0228436 1.0000000
5127 2:3-3:1 -1.000000e+00 -6.689510 4.6895102 0.9999999

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5128	3:3-3:1	2.220446e-15	-5.689510	5.6895102	1.0000000
5129	UTC:3-3:1	3.333333e-01	-5.356177	6.0228436	1.0000000
5130	1:4-3:1	-3.333333e-01	-6.022844	5.3561769	1.0000000
5131	2:4-3:1	-3.333333e-01	-6.022844	5.3561769	1.0000000
5132	3:4-3:1	2.000000e+00	-3.689510	7.6895102	0.99977811
5133	UTC:4-3:1	-6.666667e-01	-6.356177	5.0228436	1.0000000
5134	1:5-3:1	-1.333333e+00	-7.022844	4.3561769	0.9999922
5135	2:5-3:1	-1.333333e+00	-7.022844	4.3561769	0.9999922
5136	3:5-3:1	6.666667e-01	-5.022844	6.3561769	1.0000000
5137	UTC:5-3:1	-3.000000e+00	-8.689510	2.6895102	0.8847375
5138	1:2-UTC:1	-1.666667e+00	-7.356177	4.0228436	0.9997928
5139	2:2-UTC:1	-4.440892e-16	-5.689510	5.6895102	1.0000000
5140	3:2-UTC:1	-1.333333e+00	-7.022844	4.3561769	0.9999922
5141	UTC:2-UTC:1	3.333333e-01	-5.356177	6.0228436	1.0000000
5142	1:3-UTC:1	0.000000e+00	-5.689510	5.6895102	1.0000000
5143	2:3-UTC:1	-3.333333e-01	-6.022844	5.3561769	1.0000000
5144	3:3-UTC:1	6.666667e-01	-5.022844	6.3561769	1.0000000
5145	UTC:3-UTC:1	1.000000e+00	-4.689510	6.6895102	0.9999999
5146	1:4-UTC:1	3.333333e-01	-5.356177	6.0228436	1.0000000
5147	2:4-UTC:1	3.333333e-01	-5.356177	6.0228436	1.0000000
5148	3:4-UTC:1	2.666667e+00	-3.022844	8.3561769	0.9547722
5149	UTC:4-UTC:1	8.881784e-16	-5.689510	5.6895102	1.0000000
5150	1:5-UTC:1	-6.666667e-01	-6.356177	5.0228436	1.0000000
5151	2:5-UTC:1	-6.666667e-01	-6.356177	5.0228436	1.0000000
5152	3:5-UTC:1	1.333333e+00	-4.356177	7.0228436	0.9999922
5153	UTC:5-UTC:1	-2.333333e+00	-8.022844	3.3561769	0.9873898
5154	2:2-1:2	1.666667e+00	-4.022844	7.3561769	0.9997928
5155	3:2-1:2	3.333333e-01	-5.356177	6.0228436	1.0000000
5156	UTC:2-1:2	2.000000e+00	-3.689510	7.6895102	0.99977811
5157	1:3-1:2	1.666667e+00	-4.022844	7.3561769	0.9997928
5158	2:3-1:2	1.333333e+00	-4.356177	7.0228436	0.9999922
5159	3:3-1:2	2.333333e+00	-3.356177	8.0228436	0.9873898
5160	UTC:3-1:2	2.666667e+00	-3.022844	8.3561769	0.9547722
5161	1:4-1:2	2.000000e+00	-3.689510	7.6895102	0.99977811
5162	2:4-1:2	2.000000e+00	-3.689510	7.6895102	0.99977811
5163	3:4-1:2	4.333333e+00	-1.356177	10.0228436	0.3416180
5164	UTC:4-1:2	1.666667e+00	-4.022844	7.3561769	0.99997928
5165	1:5-1:2	1.000000e+00	-4.689510	6.6895102	0.9999999
5166	2:5-1:2	1.000000e+00	-4.689510	6.6895102	0.9999999
5167	3:5-1:2	3.000000e+00	-2.689510	8.6895102	0.8847375
5168	UTC:5-1:2	-6.666667e-01	-6.356177	5.0228436	1.0000000
5169	3:2-2:2	-1.333333e+00	-7.022844	4.3561769	0.9999922
5170	UTC:2-2:2	3.333333e-01	-5.356177	6.0228436	1.0000000
5171	1:3-2:2	4.440892e-16	-5.689510	5.6895102	1.0000000
5172	2:3-2:2	-3.333333e-01	-6.022844	5.3561769	1.0000000
5173	3:3-2:2	6.666667e-01	-5.022844	6.3561769	1.0000000
5174	UTC:3-2:2	1.000000e+00	-4.689510	6.6895102	0.9999999
5175	1:4-2:2	3.333333e-01	-5.356177	6.0228436	1.0000000
5176	2:4-2:2	3.333333e-01	-5.356177	6.0228436	1.0000000
5177	3:4-2:2	2.666667e+00	-3.022844	8.3561769	0.9547722
5178	UTC:4-2:2	1.332268e-15	-5.689510	5.6895102	1.0000000
5179	1:5-2:2	-6.666667e-01	-6.356177	5.0228436	1.0000000
5180	2:5-2:2	-6.666667e-01	-6.356177	5.0228436	1.0000000
5181	3:5-2:2	1.333333e+00	-4.356177	7.0228436	0.9999922
5182	UTC:5-2:2	-2.333333e+00	-8.022844	3.3561769	0.9873898
5183	UTC:2-3:2	1.666667e+00	-4.022844	7.3561769	0.9997928
5184	1:3-3:2	1.333333e+00	-4.356177	7.0228436	0.9999922
5185	2:3-3:2	1.000000e+00	-4.689510	6.6895102	0.9999999
5186	3:3-3:2	2.000000e+00	-3.689510	7.6895102	0.99977811
5187	UTC:3-3:2	2.333333e+00	-3.356177	8.0228436	0.9873898
5188	1:4-3:2	1.666667e+00	-4.022844	7.3561769	0.9997928
5189	2:4-3:2	1.666667e+00	-4.022844	7.3561769	0.9997928
5190	3:4-3:2	4.000000e+00	-1.689510	9.6895102	0.4796009
5191	UTC:4-3:2	1.333333e+00	-4.356177	7.0228436	0.9999922
5192	1:5-3:2	6.666667e-01	-5.022844	6.3561769	1.0000000
5193	2:5-3:2	6.666667e-01	-5.022844	6.3561769	1.0000000
5194	3:5-3:2	2.666667e+00	-3.022844	8.3561769	0.9547722
5195	UTC:5-3:2	-1.000000e+00	-6.689510	4.6895102	0.9999999
5196	1:3-UTC:2	-3.333333e-01	-6.022844	5.3561769	1.0000000
5197	2:3-UTC:2	-6.666667e-01	-6.356177	5.0228436	1.0000000
5198	3:3-UTC:2	3.333333e-01	-5.356177	6.0228436	1.0000000
5199	UTC:3-UTC:2	6.666667e-01	-5.022844	6.3561769	1.0000000
5200	1:4-UTC:2	4.440892e-16	-5.689510	5.6895102	1.0000000
5201	2:4-UTC:2	-8.881784e-16	-5.689510	5.6895102	1.0000000
5202	3:4-UTC:2	2.333333e+00	-3.356177	8.0228436	0.9873898
5203	UTC:4-UTC:2	-3.333333e-01	-6.022844	5.3561769	1.0000000
5204	1:5-UTC:2	-1.000000e+00	-6.689510	4.6895102	0.9999999
5205	2:5-UTC:2	-1.000000e+00	-6.689510	4.6895102	0.9999999
5206	3:5-UTC:2	1.000000e+00	-4.689510	6.6895102	0.9999999
5207	UTC:5-UTC:2	-2.666667e+00	-8.356177	3.0228436	0.9547722
5208	2:3-1:3	-3.333333e-01	-6.022844	5.3561769	1.0000000
5209	3:3-1:3	6.666667e-01	-5.022844	6.3561769	1.0000000
5210	UTC:3-1:3	1.000000e+00	-4.689510	6.6895102	0.9999999
5211	1:4-1:3	3.333333e-01	-5.356177	6.0228436	1.0000000
5212	2:4-1:3	3.333333e-01	-5.356177	6.0228436	1.0000000
5213	3:4-1:3	2.666667e+00	-3.022844	8.3561769	0.9547722
5214	UTC:4-1:3	8.881784e-16	-5.689510	5.6895102	1.0000000
5215	1:5-1:3	-6.666667e-01	-6.356177	5.0228436	1.0000000
5216	2:5-1:3	-6.666667e-01	-6.356177	5.0228436	1.0000000
5217	3:5-1:3	1.333333e+00	-4.356177	7.0228436	0.9999922
5218	UTC:5-1:3	-2.333333e+00	-8.022844	3.3561769	0.9873898
5219	3:3-2:3	1.000000e+00	-4.689510	6.6895102	0.9999999
5220	UTC:3-2:3	1.333333e+00	-4.356177	7.0228436	0.9999922
5221	1:4-2:3	6.666667e-01	-5.022844	6.3561769	1.0000000
5222	2:4-2:3	6.666667e-01	-5.022844	6.3561769	1.0000000

```

5223 3:4-2:3    3.000000e+00 -2.689510 8.6895102 0.8847375
5224 UTC:4-2:3   3.333333e-01 -5.356177 6.0228436 1.0000000
5225 1:5-2:3    -3.333333e-01 -6.022844 5.3561769 1.0000000
5226 2:5-2:3    -3.333333e-01 -6.022844 5.3561769 1.0000000
5227 3:5-2:3    1.666667e+00 -4.022844 7.3561769 0.9997928
5228 UTC:5-2:3   -2.000000e+00 -7.689510 3.6895102 0.9977811
5229 UTC:3-3:3   3.333333e-01 -5.356177 6.0228436 1.0000000
5230 1:4-3:3    -3.333333e-01 -6.022844 5.3561769 1.0000000
5231 2:4-3:3    -3.333333e-01 -6.022844 5.3561769 1.0000000
5232 3:4-3:3    2.000000e+00 -3.689510 7.6895102 0.9977811
5233 UTC:4-3:3   -6.666667e-01 -6.356177 5.0228436 1.0000000
5234 1:5-3:3    -1.333333e+00 -7.022844 4.3561769 0.9999922
5235 2:5-3:3    -1.333333e+00 -7.022844 4.3561769 0.9999922
5236 3:5-3:3    6.666667e-01 -5.022844 6.3561769 1.0000000
5237 UTC:5-3:3   -3.000000e+00 -8.689510 2.6895102 0.8847375
5238 1:4-UTC:3   -6.666667e-01 -6.356177 5.0228436 1.0000000
5239 2:4-UTC:3   -6.666667e-01 -6.356177 5.0228436 1.0000000
5240 3:4-UTC:3   1.666667e+00 -4.022844 7.3561769 0.9997928
5241 UTC:4-UTC:3 -1.000000e+00 -6.689510 4.6895102 0.9999999
5242 1:5-UTC:3   -1.666667e+00 -7.356177 4.0228436 0.9997928
5243 2:5-UTC:3   -1.666667e+00 -7.356177 4.0228436 0.9997928
5244 3:5-UTC:3   3.333333e-01 -5.356177 6.0228436 1.0000000
5245 UTC:5-UTC:3 -3.333333e+00 -9.022844 2.3561769 0.7726871
5246 2:4-1:4    -1.332268e-15 -5.689510 5.6895102 1.0000000
5247 3:4-1:4    2.333333e+00 -3.356177 8.0228436 0.9873898
5248 UTC:4-1:4   -3.333333e-01 -6.022844 5.3561769 1.0000000
5249 1:5-1:4    -1.000000e+00 -6.689510 4.6895102 0.9999999
5250 2:5-1:4    -1.000000e+00 -6.689510 4.6895102 0.9999999
5251 3:5-1:4    1.000000e+00 -4.689510 6.6895102 0.9999999
5252 UTC:5-1:4   -2.666667e+00 -8.356177 3.0228436 0.9547722
5253 3:4-2:4    2.333333e+00 -3.356177 8.0228436 0.9873898
5254 UTC:4-2:4   -3.333333e-01 -6.022844 5.3561769 1.0000000
5255 1:5-2:4    -1.000000e+00 -6.689510 4.6895102 0.9999999
5256 2:5-2:4    -1.000000e+00 -6.689510 4.6895102 0.9999999
5257 3:5-2:4    1.000000e+00 -4.689510 6.6895102 0.9999999
5258 UTC:5-2:4   -2.666667e+00 -8.356177 3.0228436 0.9547722
5259 UTC:4-3:4   -2.666667e+00 -8.356177 3.0228436 0.9547722
5260 1:5-3:4    -3.333333e+00 -9.022844 2.3561769 0.7726871
5261 2:5-3:4    -3.333333e+00 -9.022844 2.3561769 0.7726871
5262 3:5-3:4    -1.333333e+00 -7.022844 4.3561769 0.9999922
5263 UTC:5-3:4   -5.000000e+00 -10.689510 0.6895102 0.1459308
5264 1:5-UTC:4   -6.666667e-01 -6.356177 5.0228436 1.0000000
5265 2:5-UTC:4   -6.666667e-01 -6.356177 5.0228436 1.0000000
5266 3:5-UTC:4   1.333333e+00 -4.356177 7.0228436 0.9999922
5267 UTC:5-UTC:4 -2.333333e+00 -8.022844 3.3561769 0.9873898
5268 2:5-1:5    -4.440892e-16 -5.689510 5.6895102 1.0000000
5269 3:5-1:5    2.000000e+00 -3.689510 7.6895102 0.9977811
5270 UTC:5-1:5   -1.666667e+00 -7.356177 4.0228436 0.9997928
5271 3:5-2:5    2.000000e+00 -3.689510 7.6895102 0.9977811
5272 UTC:5-2:5   -1.666667e+00 -7.356177 4.0228436 0.9997928
5273 UTC:5-3:5   -3.666667e+00 -9.356177 2.0228436 0.6303252
5274
5275 Lepidoptera pitfall
5276
5277 sample mass
5278
5279      Df Sum Sq Mean Sq F value Pr(>F)
5280 block     3 0.00855 0.002849  1.627  0.198
5281 event      4 0.01607 0.004017  2.294  0.076 .
5282 block:event 12 0.03299 0.002749  1.570  0.140
5283 Residuals  40 0.07004 0.001751
5284 ---
5285 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
5286 Levene's Test for Homogeneity of Variance (center = median)
5287      Df F value Pr(>F)
5288 group 19 1.8073 0.05717 .
5289        40
5290 ---
5291 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
5292
5293 Shapiro-Wilk normality test
5294
5295 data: residuals(mass.model)
5296 W = 0.73291, p-value = 4.04e-09
5297
5298 Tukey multiple comparisons of means
5299  95% family-wise confidence level
5300
5301 Fit: aov(formula = mass.model)
5302
5303 $block
5304      diff      lwr      upr      p adj
5305 2-1  -0.01194667 -0.05290198 0.02900864 0.8622118
5306 3-1   0.01750000 -0.02345531 0.05845531 0.6640783
5307 UTC-1 -0.01136667 -0.05232198 0.02958864 0.8786937
5308 3-2   0.02944667 -0.01150864 0.07040198 0.2331533
5309 UTC-2  0.00058000 -0.04037531 0.04153531 0.9999800
5310 UTC-3 -0.02886667 -0.06982198 0.01208864 0.2488140
5311
5312 $event
5313      diff      lwr      upr      p adj
5314 2-1  0.0007666667 -0.048023755 0.04955709 0.9999990
5315 3-1  0.0416166667 -0.007173755 0.09040709 0.1266392
5316 4-1  0.0278583333 -0.020932088 0.07664875 0.4872134
5317 5-1  0.0086250000 -0.040165422 0.05741542 0.9864136

```

5318	3-2	0.0408500000	-0.007940422	0.08964042	0.1387276
5319	4-2	0.0270916667	-0.021698755	0.07588209	0.5148444
5320	5-2	0.0078583333	-0.040932088	0.05664875	0.9904324
5321	4-3	-0.0137583333	-0.062548755	0.03503209	0.9274387
5322	5-3	-0.0329916667	-0.081782088	0.01579875	0.3180037
5323	5-4	-0.0192333333	-0.068023755	0.02955709	0.7919725
5324					
5325		\$ 'block:event'			
5326		diff	lwr	upr	p adj
5327	2:1-1:1	-7.100000e-03	-0.1365316842	0.1223316842	1.0000000
5328	3:1-1:1	-6.833333e-03	-0.136265018	0.1225983509	1.0000000
5329	UTC:1-1:1	-5.666667e-03	-0.135098351	0.1237650175	1.0000000
5330	1:2-1:1	6.666667e-05	-0.129365018	0.1294983509	1.0000000
5331	2:2-1:1	-8.400000e-03	-0.137831684	0.1210316842	1.0000000
5332	3:2-1:1	-6.000000e-03	-0.135431684	0.1234316842	1.0000000
5333	UTC:2-1:1	-2.200000e-03	-0.131631684	0.1272316842	1.0000000
5334	1:3-1:1	-2.933333e-03	-0.132365018	0.1264983509	1.0000000
5335	2:3-1:1	1.906667e-02	-0.110365018	0.1484983509	1.0000000
5336	3:3-1:1	1.306333e-01	0.001201649	0.2600650175	0.0457666
5337	UTC:3-1:1	1.000000e-04	-0.129331684	0.1295316842	1.0000000
5338	1:4-1:1	4.176667e-02	-0.087665018	0.1711983509	0.9992418
5339	2:4-1:1	-2.900000e-03	-0.132331684	0.1265316842	1.0000000
5340	3:4-1:1	3.576667e-02	-0.093665018	0.1651983509	0.9999088
5341	UTC:4-1:1	1.720000e-02	-0.112231684	0.1466316842	1.0000000
5342	1:5-1:1	2.273333e-02	-0.106698351	0.1521650175	0.9999999
5343	2:5-1:1	1.233333e-03	-0.128198351	0.1306650175	1.0000000
5344	3:5-1:1	-4.433333e-03	-0.133865018	0.1249983509	1.0000000
5345	UTC:5-1:1	-4.633333e-03	-0.134065018	0.1247983509	1.0000000
5346	3:1-2:1	2.666667e-04	-0.129165018	0.1296983509	1.0000000
5347	UTC:1-2:1	1.433333e-03	-0.127998351	0.1308650175	1.0000000
5348	1:2-2:1	7.166667e-03	-0.122265018	0.1365983509	1.0000000
5349	2:2-2:1	-1.300000e-03	-0.130731684	0.1281316842	1.0000000
5350	3:2-2:1	1.100000e-03	-0.128331684	0.1305316842	1.0000000
5351	UTC:2-2:1	4.900000e-03	-0.124531684	0.1343316842	1.0000000
5352	1:3-2:1	4.166667e-03	-0.125265018	0.1335983509	1.0000000
5353	2:3-2:1	2.616667e-02	-0.103265018	0.1555983509	0.9999993
5354	3:3-2:1	1.377333e-01	0.008301649	0.2671650175	0.0267156
5355	UTC:3-2:1	7.200000e-03	-0.122231684	0.1366316842	1.0000000
5356	1:4-2:1	4.886667e-02	-0.080565018	0.1782983509	0.9948702
5357	2:4-2:1	4.200000e-03	-0.125231684	0.1336316842	1.0000000
5358	3:4-2:1	4.286667e-02	-0.086565018	0.1722983509	0.9989413
5359	UTC:4-2:1	2.430000e-02	-0.105131684	0.1537316842	0.9999998
5360	1:5-2:1	2.983333e-02	-0.099598351	0.1592650175	0.9999940
5361	2:5-2:1	8.333333e-03	-0.121098351	0.1377650175	1.0000000
5362	3:5-2:1	2.666667e-03	-0.126765018	0.1320983509	1.0000000
5363	UTC:5-2:1	2.466667e-03	-0.126965018	0.1318983509	1.0000000
5364	UTC:1-3:1	1.166667e-03	-0.128265018	0.1305983509	1.0000000
5365	1:2-3:1	6.900000e-03	-0.122531684	0.1363316842	1.0000000
5366	2:2-3:1	-1.566667e-03	-0.130998351	0.1278650175	1.0000000
5367	3:2-3:1	8.333333e-04	-0.128598351	0.1302650175	1.0000000
5368	UTC:2-3:1	4.633333e-03	-0.124798351	0.1340650175	1.0000000
5369	1:3-3:1	3.900000e-03	-0.125531684	0.1333316842	1.0000000
5370	2:3-3:1	2.590000e-02	-0.103531684	0.1553316842	0.9999994
5371	3:3-3:1	1.374667e-01	0.008034982	0.2668983509	0.0272736
5372	UTC:3-3:1	6.933333e-03	-0.122498351	0.1363650175	1.0000000
5373	1:4-3:1	4.860000e-02	-0.080831684	0.1780316842	0.9951797
5374	2:4-3:1	3.933333e-03	-0.125498351	0.1333650175	1.0000000
5375	3:4-3:1	4.260000e-02	-0.086831684	0.1720316842	0.9990222
5376	UTC:4-3:1	2.403333e-02	-0.105398351	0.1534650175	0.9999998
5377	1:5-3:1	2.956667e-02	-0.099865018	0.1589983509	0.9999947
5378	2:5-3:1	8.066667e-03	-0.121365018	0.1374983509	1.0000000
5379	3:5-3:1	2.400000e-03	-0.127031684	0.1318316842	1.0000000
5380	UTC:5-3:1	2.200000e-03	-0.127231684	0.1316316842	1.0000000
5381	1:2-UTC:1	5.733333e-03	-0.123698351	0.1351650175	1.0000000
5382	2:2-UTC:1	-2.733333e-03	-0.132165018	0.1266983509	1.0000000
5383	3:2-UTC:1	-3.333333e-04	-0.129765018	0.1290983509	1.0000000
5384	UTC:2-UTC:1	3.466667e-03	-0.125965018	0.1328983509	1.0000000
5385	1:3-UTC:1	2.733333e-03	-0.126698351	0.1321650175	1.0000000
5386	2:3-UTC:1	2.473333e-02	-0.104698351	0.1541650175	0.9999997
5387	3:3-UTC:1	1.363333e-01	0.006868316	0.2657316842	0.0298433
5388	UTC:3-UTC:1	5.766667e-03	-0.123665018	0.1351983509	1.0000000
5389	1:4-UTC:1	4.743333e-02	-0.081998351	0.1768650175	0.9963583
5390	2:4-UTC:1	2.766667e-03	-0.126665018	0.1321983509	1.0000000
5391	3:4-UTC:1	4.143333e-02	-0.087998351	0.1708650175	0.9993168
5392	UTC:4-UTC:1	2.286667e-02	-0.106565018	0.1522983509	0.9999999
5393	1:5-UTC:1	2.840000e-02	-0.101031684	0.1578316842	0.9999972
5394	2:5-UTC:1	6.900000e-03	-0.122531684	0.1363316842	1.0000000
5395	3:5-UTC:1	1.233333e-03	-0.128198351	0.1306650175	1.0000000
5396	UTC:5-UTC:1	1.033333e-03	-0.128398351	0.1304650175	1.0000000
5397	2:2-1:2	-8.466667e-03	-0.137898351	0.1209650175	1.0000000
5398	3:2-1:2	-6.066667e-03	-0.135498351	0.1233650175	1.0000000
5399	UTC:2-1:2	-2.266667e-03	-0.131698351	0.1271650175	1.0000000
5400	1:3-1:2	-3.000000e-03	-0.132431684	0.1264316842	1.0000000
5401	2:3-1:2	1.900000e-02	-0.110431684	0.1484316842	1.0000000
5402	3:3-1:2	1.305667e-01	0.001134982	0.2599983509	0.0459928
5403	UTC:3-1:2	3.333333e-05	-0.129398351	0.1294650175	1.0000000
5404	1:4-1:2	4.170000e-02	-0.087731684	0.1711316842	0.9992573
5405	2:4-1:2	-2.966667e-03	-0.132398351	0.1264650175	1.0000000
5406	3:4-1:2	3.570000e-02	-0.093731684	0.1651316842	0.9999112
5407	UTC:4-1:2	1.713333e-02	-0.112298351	0.1465650175	1.0000000
5408	1:5-1:2	2.266667e-02	-0.106765018	0.1520983509	0.9999999
5409	2:5-1:2	1.166667e-03	-0.128265018	0.1305983509	1.0000000
5410	3:5-1:2	-4.500000e-03	-0.133931684	0.1249316842	1.0000000
5411	UTC:5-1:2	-4.700000e-03	-0.134131684	0.1247316842	1.0000000
5412	3:2-2:2	2.400000e-03	-0.127031684	0.1318316842	1.0000000

5413	UTC:2-2:2	6.200000e-03	-0.123231684	0.1356316842	1.0000000
5414	1:3-2:2	5.466667e-03	-0.123965018	0.1348983509	1.0000000
5415	2:3-2:2	2.746667e-02	-0.101965018	0.1568983509	0.9999984
5416	3:3-2:2	1.390333e-01	0.009601649	0.2684650175	0.0241431
5417	UTC:3-2:2	8.500000e-03	-0.120931684	0.1379316842	1.0000000
5418	1:4-2:2	5.016667e-02	-0.079265018	0.1795983509	0.9931170
5419	2:4-2:2	5.500000e-03	-0.123931684	0.1349316842	1.0000000
5420	3:4-2:2	4.416667e-02	-0.085265018	0.1735983509	0.9984588
5421	UTC:4-2:2	2.560000e-02	-0.103831684	0.1550316842	0.9999995
5422	1:5-2:2	3.113333e-02	-0.098298351	0.1605650175	0.9999883
5423	2:5-2:2	9.633333e-03	-0.119798351	0.1390650175	1.0000000
5424	3:5-2:2	3.966667e-03	-0.125465018	0.1333983509	1.0000000
5425	UTC:5-2:2	3.766667e-03	-0.125665018	0.1331983509	1.0000000
5426	UTC:2-3:2	3.800000e-03	-0.125531684	0.1332316842	1.0000000
5427	1:3-3:2	3.066667e-03	-0.126365018	0.1324983509	1.0000000
5428	2:3-3:2	2.506667e-02	-0.104365018	0.1544983509	0.9999996
5429	3:3-3:2	1.366333e-01	0.007201649	0.2660650175	0.0290873
5430	UTC:3-3:2	6.100000e-03	-0.123331684	0.1355316842	1.0000000
5431	1:4-3:2	4.776667e-02	-0.081665018	0.1771983509	0.9960492
5432	2:4-3:2	3.100000e-03	-0.126331684	0.1325316842	1.0000000
5433	3:4-3:2	4.176667e-02	-0.087665018	0.1711983509	0.9992418
5434	UTC:4-3:2	2.320000e-02	-0.106231684	0.1526316842	0.9999999
5435	1:5-3:2	2.873333e-02	-0.100698351	0.1581650175	0.9999966
5436	2:5-3:2	7.233333e-03	-0.122198351	0.1366650175	1.0000000
5437	3:5-3:2	1.566667e-03	-0.127865018	0.1309983509	1.0000000
5438	UTC:5-3:2	1.366667e-03	-0.128065018	0.1307983509	1.0000000
5439	1:3-UTC:2	-7.333333e-04	-0.130165018	0.1286983509	1.0000000
5440	2:3-UTC:2	2.126667e-02	-0.108165018	0.1506983509	1.0000000
5441	3:3-UTC:2	1.328333e-01	0.003401649	0.2622650175	0.0388432
5442	UTC:3-UTC:2	2.300000e-03	-0.127131684	0.1317316842	1.0000000
5443	1:4-UTC:2	4.396667e-02	-0.085465018	0.1733983509	0.9985434
5444	2:4-UTC:2	-7.000000e-04	-0.130131684	0.1287316842	1.0000000
5445	3:4-UTC:2	3.796667e-02	-0.091465018	0.1673983509	0.9997889
5446	UTC:4-UTC:2	1.940000e-02	-0.110031684	0.1488316842	1.0000000
5447	1:5-UTC:2	2.493333e-02	-0.104498351	0.1543650175	0.9999997
5448	2:5-UTC:2	3.433333e-03	-0.125998351	0.1328650175	1.0000000
5449	3:5-UTC:2	-2.233333e-03	-0.131665018	0.1271983509	1.0000000
5450	UTC:5-UTC:2	-2.433333e-03	-0.131865018	0.1269983509	1.0000000
5451	2:3-1:3	2.200000e-02	-0.107431684	0.1514316842	1.0000000
5452	3:3-1:3	1.335667e-01	0.004134982	0.2629983509	0.0367555
5453	UTC:3-1:3	3.033333e-03	-0.126398351	0.1324650175	1.0000000
5454	1:4-1:3	4.470000e-02	-0.084731684	0.1741316842	0.9982123
5455	2:4-1:3	3.333333e-05	-0.129398351	0.1294650175	1.0000000
5456	3:4-1:3	3.870000e-02	-0.090731684	0.1681316842	0.9997254
5457	UTC:4-1:3	2.013333e-02	-0.109298351	0.1495650175	1.0000000
5458	1:5-1:3	2.566667e-02	-0.103765018	0.1550983509	0.9999995
5459	2:5-1:3	4.166667e-03	-0.125265018	0.1335983509	1.0000000
5460	3:5-1:3	-1.500000e-03	-0.130931684	0.1279316842	1.0000000
5461	UTC:5-1:3	-1.700000e-03	-0.131131684	0.1277316842	1.0000000
5462	3:3-2:3	1.115667e-01	-0.017865018	0.2409983509	0.1669793
5463	UTC:3-2:3	-1.896667e-02	-0.148398351	0.1104650175	1.0000000
5464	1:4-2:3	2.270000e-02	-0.106731684	0.1521316842	0.9999999
5465	2:4-2:3	-2.196667e-02	-0.151398351	0.1074650175	1.0000000
5466	3:4-2:3	1.670000e-02	-0.112731684	0.1461316842	1.0000000
5467	UTC:4-2:3	-1.866667e-03	-0.131298351	0.1275650175	1.0000000
5468	1:5-2:3	3.666667e-03	-0.125765018	0.1330983509	1.0000000
5469	2:5-2:3	-1.783333e-02	-0.147265018	0.1115983509	1.0000000
5470	3:5-2:3	-2.350000e-02	-0.152931684	0.1059316842	0.9999999
5471	UTC:5-2:3	-2.370000e-02	-0.153131684	0.1057316842	0.9999999
5472	UTC:3-3:3	-1.305333e-01	-0.259965018	-0.0011016491	0.0461062
5473	1:4-3:3	-8.886667e-02	-0.218298351	0.0405650175	0.5214461
5474	2:4-3:3	-1.335333e-01	-0.262965018	-0.0041016491	0.0368482
5475	3:4-3:3	-9.486667e-02	-0.224298351	0.0345650175	0.4065480
5476	UTC:4-3:3	-1.134333e-01	-0.242865018	0.0159983509	0.1488132
5477	1:5-3:3	-1.079000e-01	-0.237331684	0.0215316842	0.2076053
5478	2:5-3:3	-1.294000e-01	-0.258831684	0.0000316842	0.0501162
5479	3:5-3:3	-1.350667e-01	-0.264498351	-0.0056349825	0.0327999
5480	UTC:5-3:3	-1.352667e-01	-0.264698351	-0.0058349825	0.0323029
5481	1:4-UTC:3	4.166667e-02	-0.087765018	0.1710983509	0.9992650
5482	2:4-UTC:3	-3.000000e-03	-0.132431684	0.1264316842	1.0000000
5483	3:4-UTC:3	3.566667e-02	-0.093765018	0.1650983509	0.9999124
5484	UTC:4-UTC:3	1.710000e-02	-0.112331684	0.1465316842	1.0000000
5485	1:5-UTC:3	2.263333e-02	-0.106798351	0.1520650175	0.9999999
5486	2:5-UTC:3	1.133333e-03	-0.128298351	0.1305650175	1.0000000
5487	3:5-UTC:3	-4.533333e-03	-0.133965018	0.1248983509	1.0000000
5488	UTC:5-UTC:3	-4.733333e-03	-0.134165018	0.1246983509	1.0000000
5489	2:4-1:4	-4.466667e-02	-0.174098351	0.0847650175	0.9982286
5490	3:4-1:4	-6.000000e-03	-0.135431684	0.1234316842	1.0000000
5491	UTC:4-1:4	-2.456667e-02	-0.153998351	0.1048650175	0.9999997
5492	1:5-1:4	-1.903333e-02	-0.148465018	0.1103983509	1.0000000
5493	2:5-1:4	-4.053333e-02	-0.169965018	0.0888983509	0.9994881
5494	3:5-1:4	-4.620000e-02	-0.175631684	0.0832316842	0.9973324
5495	UTC:5-1:4	-4.640000e-02	-0.175831684	0.0830316842	0.9971913
5496	3:4-2:4	3.866667e-02	-0.090765018	0.1680983509	0.9997286
5497	UTC:4-2:4	2.010000e-02	-0.109331684	0.1495316842	1.0000000
5498	1:5-2:4	2.563333e-02	-0.103798351	0.1550650175	0.9999995
5499	2:5-2:4	4.133333e-03	-0.125298351	0.1335650175	1.0000000
5500	3:5-2:4	-1.533333e-03	-0.130965018	0.1278983509	1.0000000
5501	UTC:5-2:4	-1.733333e-03	-0.131165018	0.1276983509	1.0000000
5502	UTC:4-3:4	-1.856667e-02	-0.147998351	0.1108650175	1.0000000
5503	1:5-3:4	-1.303333e-02	-0.142465018	0.1163983509	1.0000000
5504	2:5-3:4	-3.453333e-02	-0.163965018	0.0948983509	0.9999451
5505	3:5-3:4	-4.020000e-02	-0.169631684	0.0892316842	0.9995413
5506	UTC:5-3:4	-4.040000e-02	-0.169831684	0.0890316842	0.9995100
5507	1:5-UTC:4	5.533333e-03	-0.123898351	0.1349650175	1.0000000

```

5508 2:5-UTC:4 -1.596667e-02 -0.145398351 0.1134650175 1.0000000
5509 3:5-UTC:4 -2.163333e-02 -0.151065018 0.1077983509 1.0000000
5510 UTC:5-UTC:4 -2.183333e-02 -0.151265018 0.1075983509 1.0000000
5511 2:5-1:5 -2.150000e-02 -0.150931684 0.1079316842 1.0000000
5512 3:5-1:5 -2.716667e-02 -0.156598351 0.1022650175 0.9999986
5513 UTC:5-1:5 -2.736667e-02 -0.156798351 0.1020650175 0.9999985
5514 3:5-2:5 -5.666667e-03 -0.135098351 0.1237650175 1.0000000
5515 UTC:5-2:5 -5.866667e-03 -0.135298351 0.1235650175 1.0000000
5516 UTC:5-3:5 -2.000000e-04 -0.129631684 0.1292316842 1.0000000
5517
5518 sample families
5519
5520      Df Sum Sq Mean Sq F value Pr(>F)
5521 block     3  0.983  0.3278   1.035  0.387
5522 event     4  1.567  0.3917   1.237  0.311
5523 block:event 12  3.767  0.3139   0.991  0.474
5524 Residuals 40 12.667  0.3167
5525 Levene's Test for Homogeneity of Variance (center = median)
5526      Df F value Pr(>F)
5527 group 19  0.4596 0.9644
5528      40
5529
5530 Shapiro-Wilk normality test
5531
5532 data: residuals(family.model)
5533 W = 0.95335, p-value = 0.02244
5534
5535 Tukey multiple comparisons of means
5536   95% family-wise confidence level
5537
5538 Fit: aov(formula = family.model)
5539
5540 $block
5541      diff      lwr      upr    p adj
5542 2-1  6.666667e-02 -0.4841071 0.6174405 0.9880214
5543 3-1  1.110223e-16 -0.5507738 0.5507738 1.0000000
5544 UTC-1 -2.666667e-01 -0.8174405 0.2841071 0.5697090
5545 3-2 -6.666667e-02 -0.6174405 0.4841071 0.9880214
5546 UTC-2 -3.333333e-01 -0.8841071 0.2174405 0.3780414
5547 UTC-3 -2.666667e-01 -0.8174405 0.2841071 0.5697090
5548
5549 $event
5550      diff      lwr      upr    p adj
5551 2-1  4.166667e-01 -0.2394750 1.0728084 0.3801657
5552 3-1  2.500000e-01 -0.4061417 0.9061417 0.8114989
5553 4-1 -1.110223e-16 -0.6561417 0.6561417 1.0000000
5554 5-1  2.500000e-01 -0.4061417 0.9061417 0.8114989
5555 3-2 -1.666667e-01 -0.8228084 0.4894750 0.9493255
5556 4-2 -4.166667e-01 -1.0728084 0.2394750 0.3801657
5557 5-2 -1.666667e-01 -0.8228084 0.4894750 0.9493255
5558 4-3 -2.500000e-01 -0.9061417 0.4061417 0.8114989
5559 5-3 -4.440892e-16 -0.6561417 0.6561417 1.0000000
5560 5-4  2.500000e-01 -0.4061417 0.9061417 0.8114989
5561
5562 $`block:event`
5563      diff      lwr      upr    p adj
5564 2:1-1:1 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5565 3:1-1:1 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5566 UTC:1-1:1 5.551115e-16 -1.7406188 1.7406188 1.0000000
5567 1:2-1:1 5.551115e-16 -1.7406188 1.7406188 1.0000000
5568 2:2-1:1 6.666667e-01 -1.0739521 2.4072854 0.9939701
5569 3:2-1:1 4.440892e-16 -1.7406188 1.7406188 1.0000000
5570 UTC:2-1:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5571 1:3-1:1 9.992007e-16 -1.7406188 1.7406188 1.0000000
5572 2:3-1:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5573 3:3-1:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5574 UTC:3-1:1 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5575 1:4-1:1 5.551115e-16 -1.7406188 1.7406188 1.0000000
5576 2:4-1:1 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5577 3:4-1:1 4.440892e-16 -1.7406188 1.7406188 1.0000000
5578 UTC:4-1:1 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5579 1:5-1:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5580 2:5-1:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5581 3:5-1:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5582 UTC:5-1:1 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5583 3:1-2:1 -3.885781e-16 -1.7406188 1.7406188 1.0000000
5584 UTC:1-2:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5585 1:2-2:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5586 2:2-2:1 1.000000e+00 -0.7406188 2.7406188 0.7973670
5587 3:2-2:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5588 UTC:2-2:1 6.666667e-01 -1.0739521 2.4072854 0.9939701
5589 1:3-2:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5590 2:3-2:1 6.666667e-01 -1.0739521 2.4072854 0.9939701
5591 3:3-2:1 6.666667e-01 -1.0739521 2.4072854 0.9939701
5592 UTC:3-2:1 -3.885781e-16 -1.7406188 1.7406188 1.0000000
5593 1:4-2:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5594 2:4-2:1 -7.216450e-16 -1.7406188 1.7406188 1.0000000
5595 3:4-2:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5596 UTC:4-2:1 -3.885781e-16 -1.7406188 1.7406188 1.0000000
5597 1:5-2:1 6.666667e-01 -1.0739521 2.4072854 0.9939701
5598 2:5-2:1 6.666667e-01 -1.0739521 2.4072854 0.9939701
5599 3:5-2:1 6.666667e-01 -1.0739521 2.4072854 0.9939701
5600 UTC:5-2:1 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5601 UTC:1-3:1 3.333333e-01 -1.4072854 2.0739521 0.9999997
5602 1:2-3:1 3.333333e-01 -1.4072854 2.0739521 0.9999997

```

5603	2:2-3:1	1.000000e+00	-0.7406188	2.7406188	0.7973670
5604	3:2-3:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5605	UTC:2-3:1	6.666667e-01	-1.0739521	2.4072854	0.9939701
5606	1:3-3:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5607	2:3-3:1	6.666667e-01	-1.0739521	2.4072854	0.9939701
5608	3:3-3:1	6.666667e-01	-1.0739521	2.4072854	0.9939701
5609	UTC:3-3:1	0.000000e+00	-1.7406188	1.7406188	1.0000000
5610	1:4-3:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5611	2:4-3:1	-3.330669e-16	-1.7406188	1.7406188	1.0000000
5612	3:4-3:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5613	UTC:4-3:1	0.000000e+00	-1.7406188	1.7406188	1.0000000
5614	1:5-3:1	6.666667e-01	-1.0739521	2.4072854	0.9939701
5615	2:5-3:1	6.666667e-01	-1.0739521	2.4072854	0.9939701
5616	3:5-3:1	6.666667e-01	-1.0739521	2.4072854	0.9939701
5617	UTC:5-3:1	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5618	1:2-UTC:1	0.000000e+00	-1.7406188	1.7406188	1.0000000
5619	2:2-UTC:1	6.666667e-01	-1.0739521	2.4072854	0.9939701
5620	3:2-UTC:1	-1.110223e-16	-1.7406188	1.7406188	1.0000000
5621	UTC:2-UTC:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5622	1:3-UTC:1	4.440892e-16	-1.7406188	1.7406188	1.0000000
5623	2:3-UTC:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5624	3:3-UTC:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5625	UTC:3-UTC:1	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5626	1:4-UTC:1	0.000000e+00	-1.7406188	1.7406188	1.0000000
5627	2:4-UTC:1	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5628	3:4-UTC:1	-1.110223e-16	-1.7406188	1.7406188	1.0000000
5629	UTC:4-UTC:1	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5630	1:5-UTC:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5631	2:5-UTC:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5632	3:5-UTC:1	3.333333e-01	-1.4072854	2.0739521	0.9999997
5633	UTC:5-UTC:1	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5634	2:2-1:2	6.666667e-01	-1.0739521	2.4072854	0.9939701
5635	3:2-1:2	-1.110223e-16	-1.7406188	1.7406188	1.0000000
5636	UTC:2-1:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5637	1:3-1:2	4.440892e-16	-1.7406188	1.7406188	1.0000000
5638	2:3-1:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5639	3:3-1:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5640	UTC:3-1:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5641	1:4-1:2	0.000000e+00	-1.7406188	1.7406188	1.0000000
5642	2:4-1:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5643	3:4-1:2	-1.110223e-16	-1.7406188	1.7406188	1.0000000
5644	UTC:4-1:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5645	1:5-1:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5646	2:5-1:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5647	3:5-1:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5648	UTC:5-1:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5649	3:2-2:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5650	UTC:2-2:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5651	1:3-2:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5652	2:3-2:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5653	3:3-2:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5654	UTC:3-2:2	-1.000000e+00	-2.7406188	0.7406188	0.7973670
5655	1:4-2:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5656	2:4-2:2	-1.000000e+00	-2.7406188	0.7406188	0.7973670
5657	3:4-2:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5658	UTC:4-2:2	-1.000000e+00	-2.7406188	0.7406188	0.7973670
5659	1:5-2:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5660	2:5-2:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5661	3:5-2:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5662	UTC:5-2:2	-1.333333e+00	-3.0739521	0.4072854	0.3322450
5663	UTC:2-3:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5664	1:3-3:2	5.551115e-16	-1.7406188	1.7406188	1.0000000
5665	2:3-3:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5666	3:3-3:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5667	UTC:3-3:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5668	1:4-3:2	-1.110223e-16	-1.7406188	1.7406188	1.0000000
5669	2:4-3:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5670	3:4-3:2	0.000000e+00	-1.7406188	1.7406188	1.0000000
5671	UTC:4-3:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5672	1:5-3:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5673	2:5-3:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5674	3:5-3:2	3.333333e-01	-1.4072854	2.0739521	0.9999997
5675	UTC:5-3:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5676	1:3-UTC:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5677	2:3-UTC:2	-2.220446e-16	-1.7406188	1.7406188	1.0000000
5678	3:3-UTC:2	4.440892e-16	-1.7406188	1.7406188	1.0000000
5679	UTC:3-UTC:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5680	1:4-UTC:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5681	2:4-UTC:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5682	3:4-UTC:2	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5683	UTC:4-UTC:2	-6.666667e-01	-2.4072854	1.0739521	0.9939701
5684	1:5-UTC:2	-6.661338e-16	-1.7406188	1.7406188	1.0000000
5685	2:5-UTC:2	4.440892e-16	-1.7406188	1.7406188	1.0000000
5686	3:5-UTC:2	-4.440892e-16	-1.7406188	1.7406188	1.0000000
5687	UTC:5-UTC:2	-1.000000e+00	-2.7406188	0.7406188	0.7973670
5688	2:3-1:3	3.333333e-01	-1.4072854	2.0739521	0.9999997
5689	3:3-1:3	3.333333e-01	-1.4072854	2.0739521	0.9999997
5690	UTC:3-1:3	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5691	1:4-1:3	-4.440892e-16	-1.7406188	1.7406188	1.0000000
5692	2:4-1:3	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5693	3:4-1:3	-5.551115e-16	-1.7406188	1.7406188	1.0000000
5694	UTC:4-1:3	-3.333333e-01	-2.0739521	1.4072854	0.9999997
5695	1:5-1:3	3.333333e-01	-1.4072854	2.0739521	0.9999997
5696	2:5-1:3	3.333333e-01	-1.4072854	2.0739521	0.9999997
5697	3:5-1:3	3.333333e-01	-1.4072854	2.0739521	0.9999997

```

5698 UTC:5-1:3 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5699 3:3-2:3 2.220446e-16 -1.7406188 1.7406188 1.0000000
5700 UTC:3-2:3 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5701 1:4-2:3 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5702 2:4-2:3 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5703 3:4-2:3 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5704 UTC:4-2:3 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5705 1:5-2:3 -8.881784e-16 -1.7406188 1.7406188 1.0000000
5706 2:5-2:3 2.220446e-16 -1.7406188 1.7406188 1.0000000
5707 3:5-2:3 -6.661338e-16 -1.7406188 1.7406188 1.0000000
5708 UTC:5-2:3 -1.000000e+00 -2.7406188 0.7406188 0.7973670
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5710 1:4-3:3 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5711 2:4-3:3 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5712 3:4-3:3 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5713 UTC:4-3:3 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5714 1:5-3:3 -1.110223e-15 -1.7406188 1.7406188 1.0000000
5715 2:5-3:3 0.000000e+00 -1.7406188 1.7406188 1.0000000
5716 3:5-3:3 -8.881784e-16 -1.7406188 1.7406188 1.0000000
5717 UTC:5-3:3 -1.000000e+00 -2.7406188 0.7406188 0.7973670
5718 1:4-UTC:3 3.333333e-01 -1.4072854 2.0739521 0.9999997
5719 2:4-UTC:3 -3.330669e-16 -1.7406188 1.7406188 1.0000000
5720 3:4-UTC:3 3.333333e-01 -1.4072854 2.0739521 0.9999997
5721 UTC:4-UTC:3 0.000000e+00 -1.7406188 1.7406188 1.0000000
5722 1:5-UTC:3 6.666667e-01 -1.0739521 2.4072854 0.9939701
5723 2:5-UTC:3 6.666667e-01 -1.0739521 2.4072854 0.9939701
5724 3:5-UTC:3 6.666667e-01 -1.0739521 2.4072854 0.9939701
5725 UTC:5-UTC:3 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5726 2:4-1:4 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5727 3:4-1:4 -1.110223e-16 -1.7406188 1.7406188 1.0000000
5728 UTC:4-1:4 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5729 1:5-1:4 3.333333e-01 -1.4072854 2.0739521 0.9999997
5730 2:5-1:4 3.333333e-01 -1.4072854 2.0739521 0.9999997
5731 3:5-1:4 3.333333e-01 -1.4072854 2.0739521 0.9999997
5732 UTC:5-1:4 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5733 3:4-2:4 3.333333e-01 -1.4072854 2.0739521 0.9999997
5734 UTC:4-2:4 3.330669e-16 -1.7406188 1.7406188 1.0000000
5735 1:5-2:4 6.666667e-01 -1.0739521 2.4072854 0.9939701
5736 2:5-2:4 6.666667e-01 -1.0739521 2.4072854 0.9939701
5737 3:5-2:4 6.666667e-01 -1.0739521 2.4072854 0.9939701
5738 UTC:5-2:4 -3.333333e-01 -2.0739521 1.4072854 0.9999997
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5740 1:5-3:4 3.333333e-01 -1.4072854 2.0739521 0.9999997
5741 2:5-3:4 3.333333e-01 -1.4072854 2.0739521 0.9999997
5742 3:5-3:4 3.333333e-01 -1.4072854 2.0739521 0.9999997
5743 UTC:5-3:4 -6.666667e-01 -2.4072854 1.0739521 0.9939701
5744 1:5-UTC:4 6.666667e-01 -1.0739521 2.4072854 0.9939701
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5747 UTC:5-UTC:4 -3.333333e-01 -2.0739521 1.4072854 0.9999997
5748 2:5-1:5 1.110223e-15 -1.7406188 1.7406188 1.0000000
5749 3:5-1:5 2.220446e-16 -1.7406188 1.7406188 1.0000000
5750 UTC:5-1:5 -1.000000e+00 -2.7406188 0.7406188 0.7973670
5751 3:5-2:5 -8.881784e-16 -1.7406188 1.7406188 1.0000000
5752 UTC:5-2:5 -1.000000e+00 -2.7406188 0.7406188 0.7973670
5753 UTC:5-3:5 -1.000000e+00 -2.7406188 0.7406188 0.7973670
5754
5755 Orthoptera pitfall
5756
5757 sample mass
5758
5759 Df Sum Sq Mean Sq F value Pr(>F)
5760 block 3 3.373 1.1243 3.330 0.0289 *
5761 event 4 2.848 0.7120 2.109 0.0976 .
5762 block:event 12 5.054 0.4212 1.247 0.2868
5763 Residuals 40 13.504 0.3376
5764 ---
5765 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
5766 Levene's Test for Homogeneity of Variance (center = median)
5767 Df F value Pr(>F)
5768 group 19 0.743 0.7537
5769 40
5770
5771 Shapiro-Wilk normality test
5772
5773 data: residuals(mass.model)
5774 W = 0.90797, p-value = 0.00026
5775
5776 Tukey multiple comparisons of means
5777 95% family-wise confidence level
5778
5779 Fit: aov(formula = mass.model)
5780
5781 $block
5782 diff lwr upr p adj
5783 2-1 -0.41488000 -0.98357576 0.1538158 0.2219562
5784 3-1 -0.32056667 -0.88926243 0.2481291 0.4406456
5785 UTC-1 0.17160667 -0.39708910 0.7403024 0.8499061
5786 3-2 0.09431333 -0.47438243 0.6630091 0.9702985
5787 UTC-2 0.58648667 0.01779090 1.155182425
5788 UTC-3 0.49217333 -0.07652243 1.0608691 0.1105110
5789
5790 $event
5791 diff lwr upr p adj
5792 2-1 -0.48537500 -1.1628673 0.1921173 0.2634266

```

5793	3-1	-0.49981667	-1.1773089	0.1776756	0.2371539
5794	4-1	-0.01606667	-0.6935589	0.6614256	0.9999950
5795	5-1	-0.19658333	-0.8740756	0.4809089	0.9201211
5796	3-2	-0.01444167	-0.6919339	0.6630506	0.9999967
5797	4-2	0.46930833	-0.2081839	1.1468006	0.2948190
5798	5-2	0.28879167	-0.3887006	0.9662839	0.7413744
5799	4-3	0.48375000	-0.1937423	1.1612423	0.2664988
5800	5-3	0.30323333	-0.3742589	0.9807256	0.7057145
5801	5-4	-0.18051667	-0.8580089	0.4969756	0.9401943
5802	5803 \$`block:event`				
5804	2:1-1:1	-0.46900000	-2.2662578	1.3282578	0.9999603
5806	3:1-1:1	0.00603333	-1.7912244	1.8032911	1.0000000
5807	UTC:1-1:1	-0.68913333	-2.4863911	1.1081244	0.9938939
5808	1:2-1:1	-0.67713333	-2.4743911	1.1201244	0.9949906
5809	2:2-1:1	-1.16190000	-2.9591578	0.6353578	0.6251216
5810	3:2-1:1	-1.02903333	-2.8262911	0.7682244	0.8014754
5811	UTC:2-1:1	-0.22553333	-2.0227911	1.5717244	1.0000000
5812	1:3-1:1	-0.71290000	-2.5101578	1.0843578	0.9911406
5813	2:3-1:1	-0.90173333	-2.6989911	0.8955244	0.9205562
5814	3:3-1:1	-0.71803333	-2.5152911	1.0792244	0.9904310
5815	UTC:3-1:1	-0.81870000	-2.6159578	0.9785578	0.9649093
5816	1:4-1:1	-0.16183333	-1.9590911	1.6354244	1.0000000
5817	2:4-1:1	-0.52970000	-2.3269578	1.2675578	0.9997746
5818	3:4-1:1	-0.96213333	-2.7593911	0.8351244	0.8717385
5819	UTC:4-1:1	0.43730000	-1.3599578	2.2345578	0.9999861
5820	1:5-1:1	-0.38130000	-2.1785578	1.4159578	0.9999984
5821	2:5-1:1	-0.94523333	-2.7424911	0.8520244	0.8868461
5822	3:5-1:1	-0.83283333	-2.6300911	0.9644244	0.9590818
5823	UTC:5-1:1	0.22093333	-1.5763244	2.0181911	1.0000000
5824	3:1-2:1	0.47503333	-1.3222244	2.2722911	0.9999521
5825	UTC:1-2:1	-0.22013333	-2.0173911	1.5771244	1.0000000
5826	1:2-2:1	-0.20813333	-2.0053911	1.5891244	1.0000000
5827	2:2-2:1	-0.69290000	-2.4901578	1.1043578	0.9935116
5828	3:2-2:1	-0.56003333	-2.3572911	1.2372244	0.9995209
5829	UTC:2-2:1	0.243466667	-1.5537911	2.0407244	1.0000000
5830	1:3-2:1	-0.24390000	-2.0411578	1.5533578	1.0000000
5831	2:3-2:1	-0.43273333	-2.2299911	1.3645244	0.9999882
5832	3:3-2:1	-0.24903333	-2.0462911	1.5482244	1.0000000
5833	UTC:3-2:1	-0.34970000	-2.1469578	1.4475578	0.9999996
5834	1:4-2:1	0.307166667	-1.4900911	2.1044244	1.0000000
5835	2:4-2:1	-0.06070000	-1.8579578	1.7365578	1.0000000
5836	3:4-2:1	-0.49313333	-2.2903911	1.3041244	0.9999177
5837	UTC:4-2:1	0.90630000	-0.8909578	2.7035578	0.9173681
5838	1:5-2:1	0.08770000	-1.7095578	1.8849578	1.0000000
5839	2:5-2:1	-0.47623333	-2.2734911	1.3210244	0.9999503
5840	3:5-2:1	-0.36383333	-2.1610911	1.4334244	0.9999992
5841	UTC:5-2:1	0.68993333	-1.1073244	2.4871911	0.9938143
5842	UTC:1-3:1	-0.695166667	-2.4924244	1.1020911	0.9932723
5843	1:2-3:1	-0.683166667	-2.4804244	1.1140911	0.9944615
5844	2:2-3:1	-1.167933333	-2.9651911	0.6293244	0.6164722
5845	3:2-3:1	-1.035066667	-2.8323244	0.7621911	0.7943820
5846	UTC:2-3:1	-0.231566667	-2.0288244	1.5656911	1.0000000
5847	1:3-3:1	-0.71893333	-2.5161911	1.0783244	0.9903020
5848	2:3-3:1	-0.907766667	-2.7050244	0.8894911	0.9163268
5849	3:3-3:1	-0.724066667	-2.5213244	1.0731911	0.9895392
5850	UTC:3-3:1	-0.82473333	-2.6219911	0.9725244	0.9625014
5851	1:4-3:1	-0.167866667	-1.9651244	1.6293911	1.0000000
5852	2:4-3:1	-0.53573333	-2.3329911	1.2615244	0.9997367
5853	3:4-3:1	-0.968166667	-2.7654244	0.8290911	0.8660765
5854	UTC:4-3:1	0.431266667	-1.3659911	2.2285244	0.9999888
5855	1:5-3:1	-0.387333333	-2.1845911	1.4099244	0.9999979
5856	2:5-3:1	-0.951266667	-2.7485244	0.8459911	0.8815807
5857	3:5-3:1	-0.838866667	-2.6361244	0.9583911	0.9563922
5858	UTC:5-3:1	0.21490000	-1.5823578	2.0121578	1.0000000
5859	1:2-UTC:1	-0.01200000	-1.7852578	1.8092578	1.0000000
5860	2:2-UTC:1	-0.472766667	-2.2700244	1.3244911	0.9999554
5861	3:2-UTC:1	-0.33990000	-2.1371578	1.4573578	0.9999998
5862	UTC:2-UTC:1	0.46360000	-1.3336578	2.2608578	0.9999666
5863	1:3-UTC:1	-0.023766667	-1.8210244	1.7734911	1.0000000
5864	2:3-UTC:1	-0.21260000	-2.0098578	1.5846578	1.0000000
5865	3:3-UTC:1	-0.02890000	-1.8261578	1.7683578	1.0000000
5866	UTC:3-UTC:1	-0.129566667	-1.9268244	1.6676911	1.0000000
5867	1:4-UTC:1	0.52730000	-1.2699578	2.3245578	0.9997883
5868	2:4-UTC:1	0.15943333	-1.6378244	1.9566911	1.0000000
5869	3:4-UTC:1	-0.27300000	-2.0702578	1.5242578	1.0000000
5870	UTC:4-UTC:1	1.12643333	-0.6708244	2.9236911	0.6753253
5871	1:5-UTC:1	0.30783333	-1.4894244	2.1050911	1.0000000
5872	2:5-UTC:1	-0.25610000	-2.0533578	1.5411578	1.0000000
5873	3:5-UTC:1	-0.14370000	-1.9409578	1.6535578	1.0000000
5874	UTC:5-UTC:1	0.910066667	-0.8871911	2.7073244	0.9146769
5875	2:2-1:2	-0.484766667	-2.2820244	1.3124911	0.9999357
5876	3:2-1:2	-0.35190000	-2.1491578	1.4453578	0.9999996
5877	UTC:2-1:2	0.45160000	-1.3456578	2.2488578	0.9999774
5878	1:3-1:2	-0.035766667	-1.8330244	1.7614911	1.0000000
5879	2:3-1:2	-0.22460000	-2.0218578	1.5726578	1.0000000
5880	3:3-1:2	-0.04090000	-1.8381578	1.7563578	1.0000000
5881	UTC:3-1:2	-0.141566667	-1.9388244	1.6556911	1.0000000
5882	1:4-1:2	0.51530000	-1.2819578	2.3125578	0.9998463
5883	2:4-1:2	0.14743333	-1.6498244	1.9446911	1.0000000
5884	3:4-1:2	-0.28500000	-2.0822578	1.5122578	1.0000000
5885	UTC:4-1:2	1.11443333	-0.6828244	2.9116911	0.6919578
5886	1:5-1:2	0.29583333	-1.5014244	2.0930911	1.0000000
5887	2:5-1:2	-0.26810000	-2.0653578	1.5291578	1.0000000

5888	3:5-1:2	-0.155700000	-1.9529578	1.6415578	1.0000000
5889	UTC:5-1:2	0.898066667	-0.8991911	2.6953244	0.9230569
5890	3:2-2:2	0.132866667	-1.6643911	1.9301244	1.0000000
5891	UTC:2-2:2	0.936366667	-0.8608911	2.7336244	0.8943242
5892	1:3-2:2	0.449000000	-1.3482578	2.2462578	0.9999793
5893	2:3-2:2	0.260166667	-1.5370911	2.0574244	1.0000000
5894	3:3-2:2	0.443866667	-1.3533911	2.2411244	0.9999826
5895	UTC:3-2:2	0.343200000	-1.4540578	2.1404578	0.9999997
5896	1:4-2:2	1.000066667	-0.7971911	2.7973244	0.8338622
5897	2:4-2:2	0.632200000	-1.1650578	2.4294578	0.9977631
5898	3:4-2:2	0.199766667	-1.5974911	1.9970244	1.0000000
5899	UTC:4-2:2	1.599200000	-0.1980578	3.3964578	0.1333733
5900	1:5-2:2	0.780600000	-1.0166578	2.5778578	0.9775671
5901	2:5-2:2	0.216666667	-1.5805911	2.0139244	1.0000000
5902	3:5-2:2	0.329066667	-1.4681911	2.1263244	0.9999999
5903	UTC:5-2:2	1.382833333	-0.4144244	3.1800911	0.3250616
5904	UTC:2-3:2	0.803500000	-0.9937578	2.6007578	0.9704698
5905	1:3-3:2	0.316133333	-1.4811244	2.1133911	0.9999999
5906	2:3-3:2	0.127300000	-1.6699578	1.9245578	1.0000000
5907	3:3-3:2	0.311000000	-1.4862578	2.1082578	0.9999999
5908	UTC:3-3:2	0.210333333	-1.5869244	2.0075911	1.0000000
5909	1:4-3:2	0.867200000	-0.9300578	2.6644578	0.9420563
5910	2:4-3:2	0.499333333	-1.2979244	2.2965911	0.9999015
5911	3:4-3:2	0.066900000	-1.7303578	1.8641578	1.0000000
5912	UTC:4-3:2	1.466333333	-0.3309244	3.2635911	0.2365663
5913	1:5-3:2	0.647733333	-1.1495244	2.4449911	0.9970082
5914	2:5-3:2	0.083800000	-1.7134578	1.8810578	1.0000000
5915	3:5-3:2	0.196200000	-1.6010578	1.9934578	1.0000000
5916	UTC:5-3:2	1.249966667	-0.5472911	3.0472244	0.4987235
5917	1:3-UTC:2	-0.487366667	-2.2846244	1.3098911	0.9999305
5918	2:3-UTC:2	-0.676200000	-2.4734578	1.1210578	0.9950686
5919	3:3-UTC:2	-0.492500000	-2.2897578	1.3047578	0.9999192
5920	UTC:3-UTC:2	-0.593166667	-2.3904244	1.2040911	0.9989872
5921	1:4-UTC:2	0.063700000	-1.7335578	1.8609578	1.0000000
5922	2:4-UTC:2	-0.304166667	-2.1014244	1.4930911	1.0000000
5923	3:4-UTC:2	-0.736600000	-2.5338578	1.0606578	0.9874742
5924	UTC:4-UTC:2	0.662833333	-1.1344244	2.4600911	0.9960797
5925	1:5-UTC:2	-0.155766667	-1.9530244	1.6414911	1.0000000
5926	2:5-UTC:2	-0.719700000	-2.5169578	1.0775578	0.9901910
5927	3:5-UTC:2	-0.607300000	-2.4045578	1.1899578	0.9986363
5928	UTC:5-UTC:2	0.446466667	-1.3507911	2.2437244	0.9999810
5929	2:3-1:3	-0.188833333	-1.9860911	1.6084244	1.0000000
5930	3:3-1:3	-0.005133333	-1.8023911	1.7921244	1.0000000
5931	UTC:3-1:3	-0.105800000	-1.9030578	1.6914578	1.0000000
5932	1:4-1:3	0.551066667	-1.2461911	2.3483244	0.9996139
5933	2:4-1:3	0.183200000	-1.6140578	1.9804578	1.0000000
5934	3:4-1:3	-0.249233333	-2.0464911	1.5480244	1.0000000
5935	UTC:4-1:3	1.150200000	-0.6470578	2.9474578	0.6418214
5936	1:5-1:3	0.331600000	-1.4656578	2.1288578	0.9999998
5937	2:5-1:3	-0.232333333	-2.0295911	1.5649244	1.0000000
5938	3:5-1:3	-0.119933333	-1.9171911	1.6773244	1.0000000
5939	UTC:5-1:3	0.933833333	-0.8634244	2.7310911	0.8964038
5940	3:3-2:3	0.183700000	-1.6135578	1.9809578	1.0000000
5941	UTC:3-2:3	0.083033333	-1.7142244	1.8802911	1.0000000
5942	1:4-2:3	0.739900000	-1.0573578	2.5371578	0.9868800
5943	2:4-2:3	0.372033333	-1.4252244	2.1692911	0.9999989
5944	3:4-2:3	-0.060400000	-1.8576578	1.7368578	1.0000000
5945	UTC:4-2:3	1.339033333	-0.4582244	3.1362911	0.3784713
5946	1:5-2:3	0.520433333	-1.2768244	2.3176911	0.9998235
5947	2:5-2:3	-0.043500000	-1.8407578	1.7537578	1.0000000
5948	3:5-2:3	0.068900000	-1.7283578	1.8661578	1.0000000
5949	UTC:5-2:3	1.122666667	-0.6745911	2.9199244	0.6805695
5950	UTC:3-3:3	-0.100666667	-1.8979244	1.6965911	1.0000000
5951	1:4-3:3	0.556200000	-1.2410578	2.3534578	0.9995628
5952	2:4-3:3	0.188833333	-1.6089244	1.9855911	1.0000000
5953	3:4-3:3	-0.244100000	-2.0413578	1.5531578	1.0000000
5954	UTC:4-3:3	1.155333333	-0.6419244	2.9525911	0.6345078
5955	1:5-3:3	0.336733333	-1.4605244	2.1339911	0.9999998
5956	2:5-3:3	-0.227200000	-2.0244578	1.5700578	1.0000000
5957	3:5-3:3	-0.114800000	-1.9120578	1.6824578	1.0000000
5958	UTC:5-3:3	0.938966667	-0.8582911	2.7362244	0.8921635
5959	1:4-UTC:3	0.656866667	-1.1403911	2.4541244	0.9964718
5960	2:4-UTC:3	0.289000000	-1.5082578	2.0862578	1.0000000
5961	3:4-UTC:3	-0.143433333	-1.9406911	1.6538244	1.0000000
5962	UTC:4-UTC:3	1.256000000	-0.5412578	3.0532578	0.4902100
5963	1:5-UTC:3	0.437400000	-1.3598578	2.2346578	0.9999861
5964	2:5-UTC:3	-0.126533333	-1.9237911	1.6707244	1.0000000
5965	3:5-UTC:3	-0.014133333	-1.8113911	1.7831244	1.0000000
5966	UTC:5-UTC:3	1.039633333	-0.7576244	2.8368911	0.7889378
5967	2:4-1:4	-0.367866667	-2.1651244	1.4293911	0.9999991
5968	3:4-1:4	-0.800300000	-2.5975578	0.9969578	0.9715513
5969	UTC:4-1:4	0.599133333	-1.1981244	2.3963911	0.9988499
5970	1:5-1:4	-0.219466667	-2.0167244	1.5777911	1.0000000
5971	2:5-1:4	-0.783400000	-2.5806578	1.0138578	0.9767771
5972	3:5-1:4	-0.671000000	-2.4682578	1.1262578	0.9954849
5973	UTC:5-1:4	0.382766667	-1.4144911	2.1800244	0.9999983
5974	3:4-2:4	-0.432433333	-2.2296911	1.3648244	0.9999883
5975	UTC:4-2:4	0.967000000	-0.8302578	2.7642578	0.8671823
5976	1:5-2:4	0.148400000	-1.6488578	1.9456578	1.0000000
5977	2:5-2:4	-0.415533333	-2.2127911	1.3817244	0.9999937
5978	3:5-2:4	-0.303133333	-2.1003911	1.4941244	1.0000000
5979	UTC:5-2:4	0.750633333	-1.0466244	2.5478911	0.9847917
5980	UTC:4-3:4	1.399433333	-0.3978244	3.1966911	0.3060264
5981	1:5-3:4	0.580833333	-1.2164244	2.3780911	0.9992269
5982	2:5-3:4	0.016900000	-1.7803578	1.8141578	1.0000000

```

5983 3:5-3:4      0.129300000 -1.6679578 1.9265578 1.0000000
5984 UTC:5-3:4    1.183066667 -0.6141911 2.9803244 0.5947000
5985 1:5-UTC:4    -0.818600000 -2.6158578 0.9786578 0.9649483
5986 2:5-UTC:4    -1.382533333 -3.1797911 0.4147244 0.3254120
5987 3:5-UTC:4    -1.270133333 -3.0673911 0.5271244 0.4704297
5988 UTC:5-UTC:4  -0.216366667 -2.0136244 1.5808911 1.0000000
5989 2:5-1:5      -0.563933333 -2.3611911 1.2333244 0.9994748
5990 3:5-1:5      -0.451533333 -2.2487911 1.3457244 0.9999774
5991 UTC:5-1:5    0.602233333 -1.1950244 2.3994911 0.9987725
5992 3:5-2:5      0.112400000 -1.6848578 1.9096578 1.0000000
5993 UTC:5-2:5    1.166166667 -0.6310911 2.9634244 0.6190072
5994 UTC:5-3:5    1.053766667 -0.7434911 2.8510244 0.7716945
5995
5996 sample families
5997
5998   Df Sum Sq Mean Sq F value Pr(>F)
5999 block      3  1.80  0.6000  0.655  0.585
6000 event      4  1.77  0.4417  0.482  0.749
6001 block:event 12  2.37  0.1972  0.215  0.997
6002 Residuals   40 36.67  0.9167
6003 Levene's Test for Homogeneity of Variance (center = median)
6004   Df F value Pr(>F)
6005 group 19  0.5098 0.9419
6006      40
6007
6008 Shapiro-Wilk normality test
6009
6010 data: residuals(family.model)
6011 W = 0.97452, p-value = 0.2412
6012
6013 Tukey multiple comparisons of means
6014   95% family-wise confidence level
6015
6016 Fit: aov(formula = family.model)
6017
6018 $block
6019   diff      lwr      upr     p adj
6020 2-1  -4.000000e-01 -1.3370825 0.5370825 0.6647964
6021 3-1  -1.333333e-01 -1.0704158 0.8037492 0.9808512
6022 UTC-1 -4.000000e-01 -1.3370825 0.5370825 0.6647964
6023 3-2   2.6666667e-01 -0.6704158 1.2037492 0.8706355
6024 UTC-2 -4.440892e-16 -0.9370825 0.9370825 1.0000000
6025 UTC-3 -2.6666667e-01 -1.2037492 0.6704158 0.8706355
6026
6027 $event
6028   diff      lwr      upr     p adj
6029 2-1  0.25000000 -0.8663546 1.3663546 0.9675818
6030 3-1  0.08333333 -1.0330213 1.1996880 0.9995198
6031 4-1  0.50000000 -0.6163546 1.6163546 0.7051958
6032 5-1  0.166666667 -0.9496880 1.2830213 0.9928302
6033 3-2  -0.166666667 -1.2830213 0.9496880 0.9928302
6034 4-2  0.25000000 -0.8663546 1.3663546 0.9675818
6035 5-2  -0.08333333 -1.1996880 1.0330213 0.9995198
6036 4-3  0.416666667 -0.6996880 1.5330213 0.8226177
6037 5-3  0.08333333 -1.0330213 1.1996880 0.9995198
6038 5-4  -0.33333333 -1.4496880 0.7830213 0.9121372
6039
6040 $`block:event`
6041   diff      lwr      upr     p adj
6042 2:1-1:1  -3.333333e-01 -3.294809 2.628143 1.0000000
6043 3:1-1:1  6.666667e-01 -2.294809 3.628143 0.9999958
6044 UTC:1-1:1 3.333333e-01 -2.628143 3.294809 1.0000000
6045 1:2-1:1  6.666667e-01 -2.294809 3.628143 0.9999958
6046 2:2-1:1  3.333333e-01 -2.628143 3.294809 1.0000000
6047 3:2-1:1  3.333333e-01 -2.628143 3.294809 1.0000000
6048 UTC:2-1:1 3.333333e-01 -2.628143 3.294809 1.0000000
6049 1:3-1:1  6.666667e-01 -2.294809 3.628143 0.9999958
6050 2:3-1:1  6.217249e-15 -2.961476 2.961476 1.0000000
6051 3:3-1:1  3.333333e-01 -2.628143 3.294809 1.0000000
6052 UTC:3-1:1 5.995204e-15 -2.961476 2.961476 1.0000000
6053 1:4-1:1  1.000000e+00 -1.961476 3.961476 0.9986480
6054 2:4-1:1  6.666667e-01 -2.294809 3.628143 0.9999958
6055 3:4-1:1  6.666667e-01 -2.294809 3.628143 0.9999958
6056 UTC:4-1:1 3.333333e-01 -2.628143 3.294809 1.0000000
6057 1:5-1:1  6.666667e-01 -2.294809 3.628143 0.9999958
6058 2:5-1:1  3.333333e-01 -2.628143 3.294809 1.0000000
6059 3:5-1:1  3.333333e-01 -2.628143 3.294809 1.0000000
6060 UTC:5-1:1 6.217249e-15 -2.961476 2.961476 1.0000000
6061 3:1-2:1  1.000000e+00 -1.961476 3.961476 0.9986480
6062 UTC:1-2:1 6.666667e-01 -2.294809 3.628143 0.9999958
6063 1:2-2:1  1.000000e+00 -1.961476 3.961476 0.9986480
6064 2:2-2:1  6.666667e-01 -2.294809 3.628143 0.9999958
6065 3:2-2:1  6.666667e-01 -2.294809 3.628143 0.9999958
6066 UTC:2-2:1 6.666667e-01 -2.294809 3.628143 0.9999958
6067 1:3-2:1  1.000000e+00 -1.961476 3.961476 0.9986480
6068 2:3-2:1  3.333333e-01 -2.628143 3.294809 1.0000000
6069 3:3-2:1  6.666667e-01 -2.294809 3.628143 0.9999958
6070 UTC:3-2:1 3.333333e-01 -2.628143 3.294809 1.0000000
6071 1:4-2:1  1.333333e+00 -1.628143 4.294809 0.9684777
6072 2:4-2:1  1.000000e+00 -1.961476 3.961476 0.9986480
6073 3:4-2:1  1.000000e+00 -1.961476 3.961476 0.9986480
6074 UTC:4-2:1 6.666667e-01 -2.294809 3.628143 0.9999958
6075 1:5-2:1  1.000000e+00 -1.961476 3.961476 0.9986480
6076 2:5-2:1  6.666667e-01 -2.294809 3.628143 0.9999958
6077 3:5-2:1  6.666667e-01 -2.294809 3.628143 0.9999958

```

6078	UTC:5-2:1	3.333333e-01	-2.628143	3.294809	1.0000000
6079	UTC:1-3:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6080	1:2-3:1	8.881784e-16	-2.961476	2.961476	1.0000000
6081	2:2-3:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6082	3:2-3:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6083	UTC:2-3:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6084	1:3-3:1	8.881784e-16	-2.961476	2.961476	1.0000000
6085	2:3-3:1	-6.666667e-01	-3.628143	2.294809	0.9999958
6086	3:3-3:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6087	UTC:3-3:1	-6.666667e-01	-3.628143	2.294809	0.9999958
6088	1:4-3:1	3.333333e-01	-2.628143	3.294809	1.0000000
6089	2:4-3:1	2.220446e-16	-2.961476	2.961476	1.0000000
6090	3:4-3:1	-4.440892e-16	-2.961476	2.961476	1.0000000
6091	UTC:4-3:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6092	1:5-3:1	2.220446e-16	-2.961476	2.961476	1.0000000
6093	2:5-3:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6094	3:5-3:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6095	UTC:5-3:1	-6.666667e-01	-3.628143	2.294809	0.9999958
6096	1:2-UTC:1	3.333333e-01	-2.628143	3.294809	1.0000000
6097	2:2-UTC:1	0.000000e+00	-2.961476	2.961476	1.0000000
6098	3:2-UTC:1	2.220446e-16	-2.961476	2.961476	1.0000000
6099	UTC:2-UTC:1	0.000000e+00	-2.961476	2.961476	1.0000000
6100	1:3-UTC:1	3.333333e-01	-2.628143	3.294809	1.0000000
6101	2:3-UTC:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6102	3:3-UTC:1	-6.661338e-16	-2.961476	2.961476	1.0000000
6103	UTC:3-UTC:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6104	1:4-UTC:1	6.666667e-01	-2.294809	3.628143	0.9999958
6105	2:4-UTC:1	3.333333e-01	-2.628143	3.294809	1.0000000
6106	3:4-UTC:1	3.333333e-01	-2.628143	3.294809	1.0000000
6107	UTC:4-UTC:1	4.440892e-16	-2.961476	2.961476	1.0000000
6108	1:5-UTC:1	3.333333e-01	-2.628143	3.294809	1.0000000
6109	2:5-UTC:1	4.440892e-16	-2.961476	2.961476	1.0000000
6110	3:5-UTC:1	4.440892e-16	-2.961476	2.961476	1.0000000
6111	UTC:5-UTC:1	-3.333333e-01	-3.294809	2.628143	1.0000000
6112	2:2-1:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6113	3:2-1:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6114	UTC:2-1:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6115	1:3-1:2	0.000000e+00	-2.961476	2.961476	1.0000000
6116	2:3-1:2	-6.666667e-01	-3.628143	2.294809	0.9999958
6117	3:3-1:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6118	UTC:3-1:2	-6.666667e-01	-3.628143	2.294809	0.9999958
6119	1:4-1:2	3.333333e-01	-2.628143	3.294809	1.0000000
6120	2:4-1:2	-6.661338e-16	-2.961476	2.961476	1.0000000
6121	3:4-1:2	-1.332268e-15	-2.961476	2.961476	1.0000000
6122	UTC:4-1:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6123	1:5-1:2	-6.661338e-16	-2.961476	2.961476	1.0000000
6124	2:5-1:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6125	3:5-1:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6126	UTC:5-1:2	-6.666667e-01	-3.628143	2.294809	0.9999958
6127	3:2-2:2	2.220446e-16	-2.961476	2.961476	1.0000000
6128	UTC:2-2:2	0.000000e+00	-2.961476	2.961476	1.0000000
6129	1:3-2:2	3.333333e-01	-2.628143	3.294809	1.0000000
6130	2:3-2:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6131	3:3-2:2	-6.661338e-16	-2.961476	2.961476	1.0000000
6132	UTC:3-2:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6133	1:4-2:2	6.666667e-01	-2.294809	3.628143	0.9999958
6134	2:4-2:2	3.333333e-01	-2.628143	3.294809	1.0000000
6135	3:4-2:2	3.333333e-01	-2.628143	3.294809	1.0000000
6136	UTC:4-2:2	4.440892e-16	-2.961476	2.961476	1.0000000
6137	1:5-2:2	3.333333e-01	-2.628143	3.294809	1.0000000
6138	2:5-2:2	4.440892e-16	-2.961476	2.961476	1.0000000
6139	3:5-2:2	4.440892e-16	-2.961476	2.961476	1.0000000
6140	UTC:5-2:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6141	UTC:2-3:2	-2.220446e-16	-2.961476	2.961476	1.0000000
6142	1:3-3:2	3.333333e-01	-2.628143	3.294809	1.0000000
6143	2:3-3:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6144	3:3-3:2	8.881784e-16	-2.961476	2.961476	1.0000000
6145	UTC:3-3:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6146	1:4-3:2	6.666667e-01	-2.294809	3.628143	0.9999958
6147	2:4-3:2	3.333333e-01	-2.628143	3.294809	1.0000000
6148	3:4-3:2	3.333333e-01	-2.628143	3.294809	1.0000000
6149	UTC:4-3:2	2.220446e-16	-2.961476	2.961476	1.0000000
6150	1:5-3:2	3.333333e-01	-2.628143	3.294809	1.0000000
6151	2:5-3:2	2.220446e-16	-2.961476	2.961476	1.0000000
6152	3:5-3:2	2.220446e-16	-2.961476	2.961476	1.0000000
6153	UTC:5-3:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6154	1:3-UTC:2	3.333333e-01	-2.628143	3.294809	1.0000000
6155	2:3-UTC:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6156	3:3-UTC:2	-6.661338e-16	-2.961476	2.961476	1.0000000
6157	UTC:3-UTC:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6158	1:4-UTC:2	6.666667e-01	-2.294809	3.628143	0.9999958
6159	2:4-UTC:2	3.333333e-01	-2.628143	3.294809	1.0000000
6160	3:4-UTC:2	3.333333e-01	-2.628143	3.294809	1.0000000
6161	UTC:4-UTC:2	4.440892e-16	-2.961476	2.961476	1.0000000
6162	1:5-UTC:2	3.333333e-01	-2.628143	3.294809	1.0000000
6163	2:5-UTC:2	4.440892e-16	-2.961476	2.961476	1.0000000
6164	3:5-UTC:2	4.440892e-16	-2.961476	2.961476	1.0000000
6165	UTC:5-UTC:2	-3.333333e-01	-3.294809	2.628143	1.0000000
6166	2:3-1:3	-6.666667e-01	-3.628143	2.294809	0.9999958
6167	3:3-1:3	-3.333333e-01	-3.294809	2.628143	1.0000000
6168	UTC:3-1:3	-6.666667e-01	-3.628143	2.294809	0.9999958
6169	1:4-1:3	3.333333e-01	-2.628143	3.294809	1.0000000
6170	2:4-1:3	-6.661338e-16	-2.961476	2.961476	1.0000000
6171	3:4-1:3	-1.332268e-15	-2.961476	2.961476	1.0000000
6172	UTC:4-1:3	-3.333333e-01	-3.294809	2.628143	1.0000000

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6173 1:5-1:3 -6.661338e-16 -2.961476 2.961476 1.0000000
6174 2:5-1:3 -3.333333e-01 -3.294809 2.628143 1.0000000
6175 3:5-1:3 -3.333333e-01 -3.294809 2.628143 1.0000000
6176 UTC:5-1:3 -6.666667e-01 -3.628143 2.294809 0.9999958
6177 3:3-2:3 3.333333e-01 -2.628143 3.294809 1.0000000
6178 UTC:3-2:3 -2.220446e-16 -2.961476 2.961476 1.0000000
6179 1:4-2:3 1.000000e+00 -1.961476 3.961476 0.9986480
6180 2:4-2:3 6.666667e-01 -2.294809 3.628143 0.9999958
6181 3:4-2:3 6.666667e-01 -2.294809 3.628143 0.9999958
6182 UTC:4-2:3 3.333333e-01 -2.628143 3.294809 1.0000000
6183 1:5-2:3 6.666667e-01 -2.294809 3.628143 0.9999958
6184 2:5-2:3 3.333333e-01 -2.628143 3.294809 1.0000000
6185 3:5-2:3 3.333333e-01 -2.628143 3.294809 1.0000000
6186 UTC:5-2:3 0.000000e+00 -2.961476 2.961476 1.0000000
6187 UTC:3-3:3 -3.333333e-01 -3.294809 2.628143 1.0000000
6188 1:4-3:3 6.666667e-01 -2.294809 3.628143 0.9999958
6189 2:4-3:3 3.333333e-01 -2.628143 3.294809 1.0000000
6190 3:4-3:3 3.333333e-01 -2.628143 3.294809 1.0000000
6191 UTC:4-3:3 1.110223e-15 -2.961476 2.961476 1.0000000
6192 1:5-3:3 3.333333e-01 -2.628143 3.294809 1.0000000
6193 2:5-3:3 1.110223e-15 -2.961476 2.961476 1.0000000
6194 3:5-3:3 1.110223e-15 -2.961476 2.961476 1.0000000
6195 UTC:5-3:3 -3.333333e-01 -3.294809 2.628143 1.0000000
6196 1:4-UTC:3 1.000000e+00 -1.961476 3.961476 0.9986480
6197 2:4-UTC:3 6.666667e-01 -2.294809 3.628143 0.9999958
6198 3:4-UTC:3 6.666667e-01 -2.294809 3.628143 0.9999958
6199 UTC:4-UTC:3 3.333333e-01 -2.628143 3.294809 1.0000000
6200 1:5-UTC:3 6.666667e-01 -2.294809 3.628143 0.9999958
6201 2:5-UTC:3 3.333333e-01 -2.628143 3.294809 1.0000000
6202 3:5-UTC:3 3.333333e-01 -2.628143 3.294809 1.0000000
6203 UTC:5-UTC:3 2.220446e-16 -2.961476 2.961476 1.0000000
6204 2:4-1:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6205 3:4-1:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6206 UTC:4-1:4 -6.666667e-01 -3.628143 2.294809 0.9999958
6207 1:5-1:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6208 2:5-1:4 -6.666667e-01 -3.628143 2.294809 0.9999958
6209 3:5-1:4 -6.666667e-01 -3.628143 2.294809 0.9999958
6210 UTC:5-1:4 -1.000000e+00 -3.961476 1.961476 0.9986480
6211 3:4-2:4 -6.661338e-16 -2.961476 2.961476 1.0000000
6212 UTC:4-2:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6213 1:5-2:4 0.000000e+00 -2.961476 2.961476 1.0000000
6214 2:5-2:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6215 3:5-2:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6216 UTC:5-2:4 -6.666667e-01 -3.628143 2.294809 0.9999958
6217 UTC:4-3:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6218 1:5-3:4 6.661338e-16 -2.961476 2.961476 1.0000000
6219 2:5-3:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6220 3:5-3:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6221 UTC:5-3:4 -6.666667e-01 -3.628143 2.294809 0.9999958
6222 1:5-UTC:4 3.333333e-01 -2.628143 3.294809 1.0000000
6223 2:5-UTC:4 0.000000e+00 -2.961476 2.961476 1.0000000
6224 3:5-UTC:4 0.000000e+00 -2.961476 2.961476 1.0000000
6225 UTC:5-UTC:4 -3.333333e-01 -3.294809 2.628143 1.0000000
6226 2:5-1:5 -3.333333e-01 -3.294809 2.628143 1.0000000
6227 3:5-1:5 -3.333333e-01 -3.294809 2.628143 1.0000000
6228 UTC:5-1:5 -6.666667e-01 -3.628143 2.294809 0.9999958
6229 3:5-2:5 0.000000e+00 -2.961476 2.961476 1.0000000
6230 UTC:5-2:5 -3.333333e-01 -3.294809 2.628143 1.0000000
6231 UTC:5-3:5 -3.333333e-01 -3.294809 2.628143 1.0000000
6232
6233 Neuroptera pitfall
6234
6235 sample mass
6236
6237 Df Sum Sq Mean Sq F value Pr(>F)
6238 block 3 8.470e-06 2.824e-06 1.251 0.304
6239 event 4 6.240e-06 1.561e-06 0.691 0.602
6240 block:event 12 2.075e-05 1.729e-06 0.766 0.680
6241 Residuals 40 9.029e-05 2.257e-06
6242 Levene's Test for Homogeneity of Variance (center = median)
6243 Df F value Pr(>F)
6244 group 19 0.8269 0.6647
6245 40
6246
6247 Shapiro-Wilk normality test
6248
6249 data: residuals(mass.model)
W = 0.64401, p-value = 8.511e-11
6250
6251 Tukey multiple comparisons of means
95% family-wise confidence level
6252
6253 Fit: aov(formula = mass.model)
6254
6255 $block
6256
6257 diff lwr upr p adj
6258 2-1 3.866667e-04 -0.0010837957 0.0018571291 0.8945803
6259 3-1 9.200000e-04 -0.0005504624 0.0023904624 0.3489374
6260 UTC-1 6.666667e-06 -0.0014637957 0.0014771291 0.9999993
6261 3-2 5.333333e-04 -0.0009371291 0.0020037957 0.7659096
6262 UTC-2 -3.800000e-04 -0.0018504624 0.0010904624 0.8992881
6263 UTC-3 -9.133333e-04 -0.0023837957 0.0005571291 0.3552846
6264
6265
6266 $event
6267 diff lwr upr p adj

```

```

6268 2-1 -9.166667e-05 -0.0018434415 0.001660108 0.9998827
6269 3-1 6.666667e-04 -0.0010851081 0.002418441 0.8121488
6270 4-1 5.333333e-04 -0.0012184415 0.002285108 0.9063207
6271 5-1 -5.833333e-05 -0.0018101081 0.001693441 0.9999806
6272 3-2 7.583333e-04 -0.0009934415 0.002510108 0.7304358
6273 4-2 6.250000e-04 -0.0011267748 0.002376775 0.8451126
6274 5-2 3.333333e-05 -0.0017184415 0.001785108 0.9999979
6275 4-3 -1.333333e-04 -0.0018851081 0.001618441 0.9994814
6276 5-3 -7.250000e-04 -0.0024767748 0.001026775 0.7614236
6277 5-4 -5.916667e-04 -0.0023434415 0.001160108 0.8692534
6278
6279 $'block:event'
6280
6281 2:1-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6282 3:1-1:1 3.333333e-05 -0.004613791 0.004680458 1.0000000
6283 UTC:1-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6284 1:2-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6285 2:2-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6286 3:2-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6287 UTC:2-1:1 3.333333e-05 -0.004613791 0.004680458 1.0000000
6288 1:3-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6289 2:3-1:1 1.400000e-03 -0.003247124 0.006047124 0.9996957
6290 3:3-1:1 1.300000e-03 -0.003347124 0.005947124 0.9998914
6291 UTC:3-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6292 1:4-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6293 2:4-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6294 3:4-1:1 2.533333e-03 -0.002113791 0.007180458 0.8548097
6295 UTC:4-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6296 1:5-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6297 2:5-1:1 1.666667e-04 -0.004480458 0.004813791 1.0000000
6298 3:5-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6299 UTC:5-1:1 -3.666667e-04 -0.005013791 0.004280458 1.0000000
6300 3:1-2:1 4.000000e-04 -0.004247124 0.005047124 1.0000000
6301 UTC:1-2:1 7.770116e-19 -0.004647124 0.004647124 1.0000000
6302 1:2-2:1 2.439455e-19 -0.004647124 0.004647124 1.0000000
6303 2:2-2:1 1.084202e-18 -0.004647124 0.004647124 1.0000000
6304 3:2-2:1 1.174552e-18 -0.004647124 0.004647124 1.0000000
6305 UTC:2-2:1 4.000000e-04 -0.004247124 0.005047124 1.0000000
6306 1:3-2:1 8.492917e-19 -0.004647124 0.004647124 1.0000000
6307 2:3-2:1 1.766667e-03 -0.002880458 0.006413791 0.9944537
6308 3:3-2:1 1.666667e-03 -0.002980458 0.006313791 0.9971768
6309 UTC:3-2:1 7.408715e-19 -0.004647124 0.004647124 1.0000000
6310 1:4-2:1 1.445603e-18 -0.004647124 0.004647124 1.0000000
6311 2:4-2:1 7.408715e-19 -0.004647124 0.004647124 1.0000000
6312 3:4-2:1 2.900000e-03 -0.001747124 0.007547124 0.6821008
6313 UTC:4-2:1 1.554023e-18 -0.004647124 0.004647124 1.0000000
6314 1:5-2:1 4.698209e-19 -0.004647124 0.004647124 1.0000000
6315 2:5-2:1 5.333333e-04 -0.004113791 0.005180458 1.0000000
6316 3:5-2:1 7.408715e-19 -0.004647124 0.004647124 1.0000000
6317 UTC:5-2:1 5.782412e-19 -0.004647124 0.004647124 1.0000000
6318 UTC:1-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6319 1:2-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6320 2:2-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6321 3:2-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6322 UTC:2-3:1 4.336809e-19 -0.004647124 0.004647124 1.0000000
6323 1:3-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6324 2:3-3:1 1.366667e-03 -0.003280458 0.006013791 0.9997813
6325 3:3-3:1 1.266667e-03 -0.003380458 0.005913791 0.9999251
6326 UTC:3-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6327 1:4-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6328 2:4-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6329 3:4-3:1 2.500000e-03 -0.002147124 0.007147124 0.8673094
6330 UTC:4-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6331 1:5-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6332 2:5-3:1 1.333333e-04 -0.004513791 0.004780458 1.0000000
6333 3:5-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6334 UTC:5-3:1 -4.000000e-04 -0.005047124 0.004247124 1.0000000
6335 1:2-UTC:1 -5.330661e-19 -0.004647124 0.004647124 1.0000000
6336 2:2-UTC:1 3.071906e-19 -0.004647124 0.004647124 1.0000000
6337 3:2-UTC:1 3.975408e-19 -0.004647124 0.004647124 1.0000000
6338 UTC:2-UTC:1 4.000000e-04 -0.004247124 0.005047124 1.0000000
6339 1:3-UTC:1 7.228014e-20 -0.004647124 0.004647124 1.0000000
6340 2:3-UTC:1 1.766667e-03 -0.002880458 0.006413791 0.9944537
6341 3:3-UTC:1 1.666667e-03 -0.002980458 0.006313791 0.9971768
6342 UTC:3-UTC:1 -3.614007e-20 -0.004647124 0.004647124 1.0000000
6343 1:4-UTC:1 6.685913e-19 -0.004647124 0.004647124 1.0000000
6344 2:4-UTC:1 -3.614007e-20 -0.004647124 0.004647124 1.0000000
6345 3:4-UTC:1 2.900000e-03 -0.001747124 0.007547124 0.6821008
6346 UTC:4-UTC:1 7.770116e-19 -0.004647124 0.004647124 1.0000000
6347 1:5-UTC:1 -3.071906e-19 -0.004647124 0.004647124 1.0000000
6348 2:5-UTC:1 5.333333e-04 -0.004113791 0.005180458 1.0000000
6349 3:5-UTC:1 -3.614007e-20 -0.004647124 0.004647124 1.0000000
6350 UTC:5-UTC:1 -1.987704e-19 -0.004647124 0.004647124 1.0000000
6351 2:2-1:2 8.402567e-19 -0.004647124 0.004647124 1.0000000
6352 3:2-1:2 9.306069e-19 -0.004647124 0.004647124 1.0000000
6353 UTC:2-1:2 4.000000e-04 -0.004247124 0.005047124 1.0000000
6354 1:3-1:2 6.053462e-19 -0.004647124 0.004647124 1.0000000
6355 2:3-1:2 1.766667e-03 -0.002880458 0.006413791 0.9944537
6356 3:3-1:2 1.666667e-03 -0.002980458 0.006313791 0.9971768
6357 UTC:3-1:2 4.969260e-19 -0.004647124 0.004647124 1.0000000
6358 1:4-1:2 1.201657e-18 -0.004647124 0.004647124 1.0000000
6359 2:4-1:2 4.969260e-19 -0.004647124 0.004647124 1.0000000
6360 3:4-1:2 2.900000e-03 -0.001747124 0.007547124 0.6821008
6361 UTC:4-1:2 1.310078e-18 -0.004647124 0.004647124 1.0000000
6362 1:5-1:2 2.258755e-19 -0.004647124 0.004647124 1.0000000

```

6363	2:5-1:2	5.333333e-04	-0.004113791	0.005180458	1.0000000
6364	3:5-1:2	4.969260e-19	-0.004647124	0.004647124	1.0000000
6365	UTC:1-2:2	3.342957e-19	-0.004647124	0.004647124	1.0000000
6366	3:2-2:2	9.035018e-20	-0.004647124	0.004647124	1.0000000
6367	UTC:2-2:2	4.000000e-04	-0.004247124	0.005047124	1.0000000
6368	1:3-2:2	-2.349105e-19	-0.004647124	0.004647124	1.0000000
6369	2:3-2:2	1.766667e-03	-0.002880458	0.006413791	0.9944537
6370	3:3-2:2	1.666667e-03	-0.002980458	0.006313791	0.9971768
6371	UTC:3-2:2	-3.433307e-19	-0.004647124	0.004647124	1.0000000
6372	1:4-2:2	3.614007e-19	-0.004647124	0.004647124	1.0000000
6373	2:4-2:2	-3.433307e-19	-0.004647124	0.004647124	1.0000000
6374	3:4-2:2	2.900000e-03	-0.001747124	0.007547124	0.6821008
6375	UTC:4-2:2	4.698209e-19	-0.004647124	0.004647124	1.0000000
6376	1:5-2:2	-6.143812e-19	-0.004647124	0.004647124	1.0000000
6377	2:5-2:2	5.333333e-04	-0.004113791	0.005180458	1.0000000
6378	3:5-2:2	-3.433307e-19	-0.004647124	0.004647124	1.0000000
6379	UTC:5-2:2	-5.059610e-19	-0.004647124	0.004647124	1.0000000
6380	UTC:2-3:2	4.000000e-04	-0.004247124	0.005047124	1.0000000
6381	1:3-3:2	-3.252607e-19	-0.004647124	0.004647124	1.0000000
6382	2:3-3:2	1.766667e-03	-0.002880458	0.006413791	0.9944537
6383	3:3-3:2	1.666667e-03	-0.002980458	0.006313791	0.9971768
6384	UTC:3-3:2	-4.336809e-19	-0.004647124	0.004647124	1.0000000
6385	1:4-3:2	2.710505e-19	-0.004647124	0.004647124	1.0000000
6386	2:4-3:2	-4.336809e-19	-0.004647124	0.004647124	1.0000000
6387	3:4-3:2	2.900000e-03	-0.001747124	0.007547124	0.6821008
6388	UTC:4-3:2	3.794708e-19	-0.004647124	0.004647124	1.0000000
6389	1:5-3:2	-7.047314e-19	-0.004647124	0.004647124	1.0000000
6390	2:5-3:2	5.333333e-04	-0.004113791	0.005180458	1.0000000
6391	3:5-3:2	-4.336809e-19	-0.004647124	0.004647124	1.0000000
6392	UTC:5-3:2	-5.963112e-19	-0.004647124	0.004647124	1.0000000
6393	1:3-UTC:2	-4.000000e-04	-0.005047124	0.004247124	1.0000000
6394	2:3-UTC:2	1.366667e-03	-0.003280458	0.006013791	0.9997813
6395	3:3-UTC:2	1.266667e-03	-0.003380458	0.005913791	0.9999251
6396	UTC:3-UTC:2	-4.000000e-04	-0.005047124	0.004247124	1.0000000
6397	1:4-UTC:2	-4.000000e-04	-0.005047124	0.004247124	1.0000000
6398	2:4-UTC:2	-4.000000e-04	-0.005047124	0.004247124	1.0000000
6399	3:4-UTC:2	2.500000e-03	-0.002147124	0.007147124	0.8673094
6400	UTC:4-UTC:2	-4.000000e-04	-0.005047124	0.004247124	1.0000000
6401	1:5-UTC:2	-4.000000e-04	-0.005047124	0.004247124	1.0000000
6402	2:5-UTC:2	1.333333e-04	-0.004513791	0.004780458	1.0000000
6403	3:5-UTC:2	-4.000000e-04	-0.005047124	0.004247124	1.0000000
6404	UTC:5-UTC:2	-4.000000e-04	-0.005047124	0.004247124	1.0000000
6405	2:3-1:3	1.766667e-03	-0.002880458	0.006413791	0.9944537
6406	3:3-1:3	1.666667e-03	-0.002980458	0.006313791	0.9971768
6407	UTC:3-1:3	-1.084202e-19	-0.004647124	0.004647124	1.0000000
6408	1:4-1:3	5.963112e-19	-0.004647124	0.004647124	1.0000000
6409	2:4-1:3	-1.084202e-19	-0.004647124	0.004647124	1.0000000
6410	3:4-1:3	2.900000e-03	-0.001747124	0.007547124	0.6821008
6411	UTC:4-1:3	7.047314e-19	-0.004647124	0.004647124	1.0000000
6412	1:5-1:3	-3.794708e-19	-0.004647124	0.004647124	1.0000000
6413	2:5-1:3	5.333333e-04	-0.004113791	0.005180458	1.0000000
6414	3:5-1:3	-1.084202e-19	-0.004647124	0.004647124	1.0000000
6415	UTC:5-1:3	-2.710505e-19	-0.004647124	0.004647124	1.0000000
6416	3:3-2:3	-1.000000e-04	-0.004747124	0.004547124	1.0000000
6417	UTC:3-2:3	-1.766667e-03	-0.006413791	0.002880458	0.9944537
6418	1:4-2:3	-1.766667e-03	-0.006413791	0.002880458	0.9944537
6419	2:4-2:3	-1.766667e-03	-0.006413791	0.002880458	0.9944537
6420	3:4-2:3	1.133333e-03	-0.003513791	0.005780458	0.9999856
6421	UTC:4-2:3	-1.766667e-03	-0.006413791	0.002880458	0.9944537
6422	1:5-2:3	-1.766667e-03	-0.006413791	0.002880458	0.9944537
6423	2:5-2:3	-1.233333e-03	-0.005880458	0.003413791	0.9999492
6424	3:5-2:3	-1.766667e-03	-0.006413791	0.002880458	0.9944537
6425	UTC:5-2:3	-1.766667e-03	-0.006413791	0.002880458	0.9944537
6426	UTC:3-3:3	-1.666667e-03	-0.006313791	0.002980458	0.9971768
6427	1:4-3:3	-1.666667e-03	-0.006313791	0.002980458	0.9971768
6428	2:4-3:3	-1.666667e-03	-0.006313791	0.002980458	0.9971768
6429	3:4-3:3	1.233333e-03	-0.003413791	0.005880458	0.9999492
6430	UTC:4-3:3	-1.666667e-03	-0.006313791	0.002980458	0.9971768
6431	1:5-3:3	-1.666667e-03	-0.006313791	0.002980458	0.9971768
6432	2:5-3:3	-1.133333e-03	-0.005780458	0.003513791	0.9999856
6433	3:5-3:3	-1.666667e-03	-0.006313791	0.002980458	0.9971768
6434	UTC:5-3:3	-1.666667e-03	-0.006313791	0.002980458	0.9971768
6435	1:4-UTC:3	7.047314e-19	-0.004647124	0.004647124	1.0000000
6436	2:4-UTC:3	0.000000e+00	-0.004647124	0.004647124	1.0000000
6437	3:4-UTC:3	2.900000e-03	-0.001747124	0.007547124	0.6821008
6438	UTC:4-UTC:3	8.131516e-19	-0.004647124	0.004647124	1.0000000
6439	1:5-UTC:3	-2.710505e-19	-0.004647124	0.004647124	1.0000000
6440	2:5-UTC:3	5.333333e-04	-0.004113791	0.005180458	1.0000000
6441	3:5-UTC:3	0.000000e+00	-0.004647124	0.004647124	1.0000000
6442	UTC:5-UTC:3	-1.626303e-19	-0.004647124	0.004647124	1.0000000
6443	2:4-1:4	-7.047314e-19	-0.004647124	0.004647124	1.0000000
6444	3:4-1:4	2.900000e-03	-0.001747124	0.007547124	0.6821008
6445	UTC:4-1:4	1.084202e-19	-0.004647124	0.004647124	1.0000000
6446	1:5-1:4	-9.757820e-19	-0.004647124	0.004647124	1.0000000
6447	2:5-1:4	5.333333e-04	-0.004113791	0.005180458	1.0000000
6448	3:5-1:4	-7.047314e-19	-0.004647124	0.004647124	1.0000000
6449	UTC:5-1:4	-8.673617e-19	-0.004647124	0.004647124	1.0000000
6450	3:4-2:4	2.900000e-03	-0.001747124	0.007547124	0.6821008
6451	UTC:4-2:4	8.131516e-19	-0.004647124	0.004647124	1.0000000
6452	1:5-2:4	-2.710505e-19	-0.004647124	0.004647124	1.0000000
6453	2:5-2:4	5.333333e-04	-0.004113791	0.005180458	1.0000000
6454	3:5-2:4	0.000000e+00	-0.004647124	0.004647124	1.0000000
6455	UTC:5-2:4	-1.626303e-19	-0.004647124	0.004647124	1.0000000
6456	UTC:4-3:4	-2.900000e-03	-0.007547124	0.001747124	0.6821008
6457	1:5-3:4	-2.900000e-03	-0.007547124	0.001747124	0.6821008

```

6458 2:5-3:4 -2.366667e-03 -0.007013791 0.002280458 0.9108454
6459 3:5-3:4 -2.900000e-03 -0.007547124 0.001747124 0.6821008
6460 UTC:5-3:4 -2.900000e-03 -0.007547124 0.001747124 0.6821008
6461 1:5-UTC:4 -1.084202e-18 -0.004647124 0.004647124 1.0000000
6462 2:5-UTC:4 5.333333e-04 -0.004113791 0.005180458 1.0000000
6463 3:5-UTC:4 -8.131516e-19 -0.004647124 0.004647124 1.0000000
6464 UTC:5-UTC:4 -9.757820e-19 -0.004647124 0.004647124 1.0000000
6465 2:5-1:5 5.333333e-04 -0.004113791 0.005180458 1.0000000
6466 3:5-1:5 2.710505e-19 -0.004647124 0.004647124 1.0000000
6467 UTC:5-1:5 1.084202e-19 -0.004647124 0.004647124 1.0000000
6468 3:5-2:5 -5.333333e-04 -0.005180458 0.004113791 1.0000000
6469 UTC:5-2:5 -5.333333e-04 -0.005180458 0.004113791 1.0000000
6470 UTC:5-3:5 -1.626303e-19 -0.004647124 0.004647124 1.0000000
6471
6472 sample families
6473
6474      Df Sum Sq Mean Sq F value Pr(>F)
6475 block      3  0.400  0.1333  1.143  0.343
6476 event      4  0.100  0.0250  0.214  0.929
6477 block:event 12  1.767  0.1472  1.262  0.278
6478 Residuals  40  4.667  0.1167
6479 Levene's Test for Homogeneity of Variance (center = median)
6480      Df F value Pr(>F)
6481 group 19  0.6842 0.8117
6482      40
6483
6484 Shapiro-Wilk normality test
6485
6486 data: residuals(family.model)
6487 W = 0.75545, p-value = 1.225e-08
6488
6489 Tukey multiple comparisons of means
6490   95% family-wise confidence level
6491
6492 Fit: aov(formula = family.model)
6493
6494 $block
6495      diff      lwr      upr     p adj
6496 2-1  6.666667e-02 -0.2676404 0.4009737 0.9501155
6497 3-1  2.000000e-01 -0.1343070 0.5343070 0.3882185
6498 UTC-1 -1.387779e-17 -0.3343070 0.3343070 1.0000000
6499 3-2  1.333333e-01 -0.2009737 0.4676404 0.7100858
6500 UTC-2 -6.666667e-02 -0.4009737 0.2676404 0.9501155
6501 UTC-3 -2.000000e-01 -0.5343070 0.1343070 0.3882185
6502
6503 $event
6504      diff      lwr      upr     p adj
6505 2-1 -8.333333e-02 -0.4815962 0.3149296 0.9746518
6506 3-1  5.551115e-17 -0.3982629 0.3982629 1.0000000
6507 4-1  0.000000e+00 -0.3982629 0.3982629 1.0000000
6508 5-1 -8.333333e-02 -0.4815962 0.3149296 0.9746518
6509 3-2  8.333333e-02 -0.3149296 0.4815962 0.9746518
6510 4-2  8.333333e-02 -0.3149296 0.4815962 0.9746518
6511 5-2 -1.387779e-17 -0.3982629 0.3982629 1.0000000
6512 4-3 -5.551115e-178 0.3982629 1.0000000
6513 5-3 -8.333333e-02 -0.4815962 0.3149296 0.9746518
6514 5-4 -8.333333e-02 -0.4815962 0.3149296 0.9746518
6515
6516 $ 'block:event'
6517      diff      lwr      upr     p adj
6518 2:1-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6519 3:1-1:1 -7.216450e-16 -1.0565155 1.0565155 1.0000000
6520 UTC:1-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6521 1:2-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6522 2:2-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6523 3:2-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6524 UTC:2-1:1 -1.665335e-16 -1.0565155 1.0565155 1.0000000
6525 1:3-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6526 2:3-1:1 -1.665335e-16 -1.0565155 1.0565155 1.0000000
6527 3:3-1:1 -2.220446e-16 -1.0565155 1.0565155 1.0000000
6528 UTC:3-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6529 1:4-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6530 2:4-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6531 3:4-1:1 -3.333333e-01 -0.7231822 1.3898489 0.9994353
6532 UTC:4-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6533 1:5-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6534 2:5-1:1 -3.330669e-16 -1.0565155 1.0565155 1.0000000
6535 3:5-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6536 UTC:5-1:1 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6537 3:1-2:1 -3.333333e-01 -0.7231822 1.3898489 0.9994353
6538 UTC:1-2:1 -1.619075e-16 -1.0565155 1.0565155 1.0000000
6539 1:2-2:1 -2.266705e-16 -1.0565155 1.0565155 1.0000000
6540 2:2-2:1  3.469447e-16 -1.0565155 1.0565155 1.0000000
6541 3:2-2:1  6.291264e-16 -1.0565155 1.0565155 1.0000000
6542 UTC:2-2:1 3.333333e-01 -0.7231822 1.3898489 0.9994353
6543 1:3-2:1  4.348374e-16 -1.0565155 1.0565155 1.0000000
6544 2:3-2:1  3.333333e-01 -0.7231822 1.3898489 0.9994353
6545 3:3-2:1  3.333333e-01 -0.7231822 1.3898489 0.9994353
6546 UTC:3-2:1 3.238150e-16 -1.0565155 1.0565155 1.0000000
6547 1:4-2:1  2.821817e-16 -1.0565155 1.0565155 1.0000000
6548 2:4-2:1  4.348374e-16 -1.0565155 1.0565155 1.0000000
6549 3:4-2:1  6.666667e-01 -0.3898489 1.7231822 0.6646207
6550 UTC:4-2:1 2.405483e-16 -1.0565155 1.0565155 1.0000000
6551 1:5-2:1  2.405483e-16 -1.0565155 1.0565155 1.0000000
6552 2:5-2:1  3.333333e-01 -0.7231822 1.3898489 0.9994353

```

6553	3:5-2:1	3.515706e-16	-1.0565155	1.0565155	1.0000000
6554	UTC:5-2:1	3.932040e-16	-1.0565155	1.0565155	1.0000000
6555	UTC:1-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6556	1:2-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6557	2:2-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6558	3:2-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6559	UTC:2-3:1	5.551115e-16	-1.0565155	1.0565155	1.0000000
6560	1:3-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6561	2:3-3:1	5.551115e-16	-1.0565155	1.0565155	1.0000000
6562	3:3-3:1	4.996004e-16	-1.0565155	1.0565155	1.0000000
6563	UTC:3-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6564	1:4-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6565	2:4-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6566	3:4-3:1	3.333333e-01	-0.7231822	1.3898489	0.9994353
6567	UTC:4-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6568	1:5-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6569	2:5-3:1	3.885781e-16	-1.0565155	1.0565155	1.0000000
6570	3:5-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6571	UTC:5-3:1	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6572	1:2-UTC:1	-3.885781e-16	-1.0565155	1.0565155	1.0000000
6573	2:2-UTC:1	1.850372e-16	-1.0565155	1.0565155	1.0000000
6574	3:2-UTC:1	4.672189e-16	-1.0565155	1.0565155	1.0000000
6575	UTC:2-UTC:1	3.333333e-01	-0.7231822	1.3898489	0.9994353
6576	1:3-UTC:1	2.729298e-16	-1.0565155	1.0565155	1.0000000
6577	2:3-UTC:1	3.333333e-01	-0.7231822	1.3898489	0.9994353
6578	3:3-UTC:1	3.333333e-01	-0.7231822	1.3898489	0.9994353
6579	UTC:3-UTC:1	1.619075e-16	-1.0565155	1.0565155	1.0000000
6580	1:4-UTC:1	1.202742e-16	-1.0565155	1.0565155	1.0000000
6581	2:4-UTC:1	2.729298e-16	-1.0565155	1.0565155	1.0000000
6582	3:4-UTC:1	6.666667e-01	-0.3898489	1.7231822	0.6646207
6583	UTC:4-UTC:1	7.864080e-17	-1.0565155	1.0565155	1.0000000
6584	1:5-UTC:1	7.864080e-17	-1.0565155	1.0565155	1.0000000
6585	2:5-UTC:1	3.333333e-01	-0.7231822	1.3898489	0.9994353
6586	3:5-UTC:1	1.896631e-16	-1.0565155	1.0565155	1.0000000
6587	UTC:5-UTC:1	2.312965e-16	-1.0565155	1.0565155	1.0000000
6588	2:2-1:2	5.736152e-16	-1.0565155	1.0565155	1.0000000
6589	3:2-1:2	8.557969e-16	-1.0565155	1.0565155	1.0000000
6590	UTC:2-1:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6591	1:3-1:2	6.615079e-16	-1.0565155	1.0565155	1.0000000
6592	2:3-1:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6593	3:3-1:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6594	UTC:3-1:2	5.504856e-16	-1.0565155	1.0565155	1.0000000
6595	1:4-1:2	5.088522e-16	-1.0565155	1.0565155	1.0000000
6596	2:4-1:2	6.615079e-16	-1.0565155	1.0565155	1.0000000
6597	3:4-1:2	6.666667e-01	-0.3898489	1.7231822	0.6646207
6598	UTC:4-1:2	4.672189e-16	-1.0565155	1.0565155	1.0000000
6599	1:5-1:2	4.672189e-16	-1.0565155	1.0565155	1.0000000
6600	2:5-1:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6601	3:5-1:2	5.782412e-16	-1.0565155	1.0565155	1.0000000
6602	UTC:5-1:2	6.198745e-16	-1.0565155	1.0565155	1.0000000
6603	3:2-2:2	2.821817e-16	-1.0565155	1.0565155	1.0000000
6604	UTC:2-2:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6605	1:3-2:2	8.789266e-17	-1.0565155	1.0565155	1.0000000
6606	2:3-2:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6607	3:3-2:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6608	UTC:3-2:2	-2.312965e-17	-1.0565155	1.0565155	1.0000000
6609	1:4-2:2	-6.476301e-17	-1.0565155	1.0565155	1.0000000
6610	2:4-2:2	8.789266e-17	-1.0565155	1.0565155	1.0000000
6611	3:4-2:2	6.666667e-01	-0.3898489	1.7231822	0.6646207
6612	UTC:4-2:2	-1.063964e-16	-1.0565155	1.0565155	1.0000000
6613	1:5-2:2	-1.063964e-16	-1.0565155	1.0565155	1.0000000
6614	2:5-2:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6615	3:5-2:2	4.625929e-18	-1.0565155	1.0565155	1.0000000
6616	UTC:5-2:2	4.625929e-17	-1.0565155	1.0565155	1.0000000
6617	UTC:2-3:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6618	1:3-3:2	-1.942890e-16	-1.0565155	1.0565155	1.0000000
6619	2:3-3:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6620	3:3-3:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6621	UTC:3-3:2	-3.053113e-16	-1.0565155	1.0565155	1.0000000
6622	1:4-3:2	-3.469447e-16	-1.0565155	1.0565155	1.0000000
6623	2:4-3:2	-1.942890e-16	-1.0565155	1.0565155	1.0000000
6624	3:4-3:2	6.666667e-01	-0.3898489	1.7231822	0.6646207
6625	UTC:4-3:2	-3.885781e-16	-1.0565155	1.0565155	1.0000000
6626	1:5-3:2	-3.885781e-16	-1.0565155	1.0565155	1.0000000
6627	2:5-3:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6628	3:5-3:2	-2.7755558e-16	-1.0565155	1.0565155	1.0000000
6629	UTC:5-3:2	-2.359224e-16	-1.0565155	1.0565155	1.0000000
6630	1:3-UTC:2	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6631	2:3-UTC:2	0.000000e+00	-1.0565155	1.0565155	1.0000000
6632	3:3-UTC:2	-5.551115e-17	-1.0565155	1.0565155	1.0000000
6633	UTC:3-UTC:2	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6634	1:4-UTC:2	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6635	2:4-UTC:2	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6636	3:4-UTC:2	3.333333e-01	-0.7231822	1.3898489	0.9994353
6637	UTC:4-UTC:2	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6638	1:5-UTC:2	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6639	2:5-UTC:2	-1.665335e-16	-1.0565155	1.0565155	1.0000000
6640	3:5-UTC:2	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6641	UTC:5-UTC:2	-3.333333e-01	-1.3898489	0.7231822	0.9994353
6642	2:3-1:3	3.333333e-01	-0.7231822	1.3898489	0.9994353
6643	3:3-1:3	3.333333e-01	-0.7231822	1.3898489	0.9994353
6644	UTC:3-1:3	-1.110223e-16	-1.0565155	1.0565155	1.0000000
6645	1:4-1:3	-1.526557e-16	-1.0565155	1.0565155	1.0000000
6646	2:4-1:3	0.000000e+00	-1.0565155	1.0565155	1.0000000
6647	3:4-1:3	6.666667e-01	-0.3898489	1.7231822	0.6646207

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6648 UTC:4-1:3 -1.942890e-16 -1.0565155 1.0565155 1.0000000
6649 1:5-1:3 -1.942890e-16 -1.0565155 1.0565155 1.0000000
6650 2:5-1:3 3.333333e-01 -0.7231822 1.3898489 0.9994353
6651 3:5-1:3 -8.326673e-17 -1.0565155 1.0565155 1.0000000
6652 UTC:5-1:3 -4.163336e-17 -1.0565155 1.0565155 1.0000000
6653 3:3-2:3 -5.551115e-17 -1.0565155 1.0565155 1.0000000
6654 UTC:3-2:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6655 1:4-2:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6656 2:4-2:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6657 3:4-2:3 3.333333e-01 -0.7231822 1.3898489 0.9994353
6658 UTC:4-2:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6659 1:5-2:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6660 2:5-2:3 -1.665335e-16 -1.0565155 1.0565155 1.0000000
6661 3:5-2:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6662 UTC:5-2:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6663 UTC:3-3:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
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6665 2:4-3:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6666 3:4-3:3 3.333333e-01 -0.7231822 1.3898489 0.9994353
6667 UTC:4-3:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6668 1:5-3:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6669 2:5-3:3 -1.110223e-16 -1.0565155 1.0565155 1.0000000
6670 3:5-3:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6671 UTC:5-3:3 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6672 1:4-UTC:3 -4.163336e-17 -1.0565155 1.0565155 1.0000000
6673 2:4-UTC:3 1.110223e-16 -1.0565155 1.0565155 1.0000000
6674 3:4-UTC:3 6.666667e-01 -0.3898489 1.7231822 0.6646207
6675 UTC:4-UTC:3 -8.326673e-17 -1.0565155 1.0565155 1.0000000
6676 1:5-UTC:3 -8.326673e-17 -1.0565155 1.0565155 1.0000000
6677 2:5-UTC:3 3.333333e-01 -0.7231822 1.3898489 0.9994353
6678 3:5-UTC:3 2.775558e-17 -1.0565155 1.0565155 1.0000000
6679 UTC:5-UTC:3 6.938894e-17 -1.0565155 1.0565155 1.0000000
6680 2:4-1:4 1.526557e-16 -1.0565155 1.0565155 1.0000000
6681 3:4-1:4 6.666667e-01 -0.3898489 1.7231822 0.6646207
6682 UTC:4-1:4 -4.163336e-17 -1.0565155 1.0565155 1.0000000
6683 1:5-1:4 -4.163336e-17 -1.0565155 1.0565155 1.0000000
6684 2:5-1:4 3.333333e-01 -0.7231822 1.3898489 0.9994353
6685 3:5-1:4 6.938894e-17 -1.0565155 1.0565155 1.0000000
6686 UTC:5-1:4 1.110223e-16 -1.0565155 1.0565155 1.0000000
6687 3:4-2:4 6.666667e-01 -0.3898489 1.7231822 0.6646207
6688 UTC:4-2:4 -1.942890e-16 -1.0565155 1.0565155 1.0000000
6689 1:5-2:4 -1.942890e-16 -1.0565155 1.0565155 1.0000000
6690 2:5-2:4 3.333333e-01 -0.7231822 1.3898489 0.9994353
6691 3:5-2:4 -8.326673e-17 -1.0565155 1.0565155 1.0000000
6692 UTC:5-2:4 -4.163336e-17 -1.0565155 1.0565155 1.0000000
6693 UTC:4-3:4 -6.666667e-01 -1.7231822 0.3898489 0.6646207
6694 1:5-3:4 -6.666667e-01 -1.7231822 0.3898489 0.6646207
6695 2:5-3:4 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6696 3:5-3:4 -6.666667e-01 -1.7231822 0.3898489 0.6646207
6697 UTC:5-3:4 -6.666667e-01 -1.7231822 0.3898489 0.6646207
6698 1:5-UTC:4 0.000000e+00 -1.0565155 1.0565155 1.0000000
6699 2:5-UTC:4 3.333333e-01 -0.7231822 1.3898489 0.9994353
6700 3:5-UTC:4 1.110223e-16 -1.0565155 1.0565155 1.0000000
6701 UTC:5-UTC:4 1.526557e-16 -1.0565155 1.0565155 1.0000000
6702 2:5-1:5 3.333333e-01 -0.7231822 1.3898489 0.9994353
6703 3:5-1:5 1.110223e-16 -1.0565155 1.0565155 1.0000000
6704 UTC:5-1:5 1.526557e-16 -1.0565155 1.0565155 1.0000000
6705 3:5-2:5 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6706 UTC:5-2:5 -3.333333e-01 -1.3898489 0.7231822 0.9994353
6707 UTC:5-3:5 4.163336e-17 -1.0565155 1.0565155 1.0000000
6708
6709 Coleoptera sweep
6710
6711 sample mass
6712
6713 Df Sum Sq Mean Sq F value Pr(>F)
6714 block 3 0.1190 0.03968 2.305 0.0914 .
6715 event 4 0.0549 0.01371 0.797 0.5345
6716 block:event 12 0.1651 0.01376 0.799 0.6488
6717 Residuals 40 0.6886 0.01721
6718 ---
6719 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
6720 Levene's Test for Homogeneity of Variance (center = median)
6721 Df F value Pr(>F)
6722 group 19 0.8936 0.5925
6723 40
6724
6725 Shapiro-Wilk normality test
6726
6727 data: residuals(mass.model)
6728 W = 0.53431, p-value = 1.641e-12
6729
6730 Tukey multiple comparisons of means
6731 95% family-wise confidence level
6732
6733 Fit: aov(formula = mass.model)
6734
6735 $block
6736 diff lwr upr p adj
6737 2-1 0.10075333 -0.02766269 0.22916936 0.1696282
6738 3-1 0.01257333 -0.11584269 0.14098936 0.9935671
6739 UTC-1 -0.01266667 -0.14108269 0.11574936 0.9934255
6740 3-2 -0.08818000 -0.21659603 0.04023603 0.2699113
6741 UTC-2 -0.11342000 -0.24183603 0.01499603 0.1000651
6742 UTC-3 -0.02524000 -0.15365603 0.10317603 0.9520849

```

```

6743
6744 $event
6745     diff      lwr      upr      p adj
6746 2-1  0.080975000 -0.07200814 0.23395814 0.5611295
6747 3-1  0.003233333 -0.14974981 0.15621648 0.9999968
6748 4-1  0.040800000 -0.11218314 0.19378314 0.9400028
6749 5-1  0.048791667 -0.10419148 0.20177481 0.8910338
6750 3-2 -0.077741667 -0.23072481 0.07524148 0.5990525
6751 4-2 -0.040175000 -0.19315814 0.11280814 0.9431130
6752 5-2 -0.032183333 -0.18516648 0.12079981 0.9741493
6753 4-3  0.037566667 -0.11541648 0.19054981 0.9549921
6754 5-3  0.045558333 -0.10742481 0.19854148 0.9129057
6755 5-4  0.007991667 -0.14499148 0.16097481 0.9998835
6756
6757 $`block:event`
6758     diff      lwr      upr      p adj
6759 2:1-1:1  0.0210666667 -0.38476844 0.42690177 1.0000000
6760 3:1-1:1  0.007600000 -0.39823510 0.41343510 1.0000000
6761 UTC:1-1:1 -0.0009666667 -0.40680177 0.40486844 1.0000000
6762 1:2-1:1  0.0069333333 -0.39890177 0.41276844 1.0000000
6763 2:2-1:1  0.3354666667 -0.07036844 0.74130177 0.2187463
6764 3:2-1:1  0.0072666667 -0.39856844 0.41310177 1.0000000
6765 UTC:2-1:1  0.0019333333 -0.40390177 0.40776844 1.0000000
6766 1:3-1:1  0.001000000 -0.40483510 0.40683510 1.0000000
6767 2:3-1:1  0.021400000 -0.38443510 0.42723510 1.0000000
6768 3:3-1:1  0.0195333333 -0.38630177 0.42536844 1.0000000
6769 UTC:3-1:1 -0.001300000 -0.40713510 0.40453510 1.0000000
6770 1:4-1:1  0.0254666667 -0.38036844 0.43130177 1.0000000
6771 2:4-1:1  0.0790333333 -0.32680177 0.48486844 0.9999996
6772 3:4-1:1  0.0811333333 -0.32470177 0.48696844 0.9999994
6773 UTC:4-1:1  0.0052666667 -0.40056844 0.41110177 1.0000000
6774 1:5-1:1  0.049200000 -0.35663510 0.45503510 1.0000000
6775 2:5-1:1  0.129400000 -0.27643510 0.53523510 0.9993514
6776 3:5-1:1  0.0299333333 -0.37590177 0.43576844 1.0000000
6777 UTC:5-1:1  0.0143333333 -0.39150177 0.42016844 1.0000000
6778 3:1-2:1  -0.0134666667 -0.41930177 0.39236844 1.0000000
6779 UTC:1-2:1 -0.0220333333 -0.42786844 0.38380177 1.0000000
6780 1:2-2:1  -0.0141333333 -0.41996844 0.39170177 1.0000000
6781 2:2-2:1  0.314400000 -0.09143510 0.72023510 0.3140830
6782 3:2-2:1  -0.013800000 -0.41963510 0.39203510 1.0000000
6783 UTC:2-2:1 -0.0191333333 -0.42496844 0.38670177 1.0000000
6784 1:3-2:1  -0.0200666667 -0.42590177 0.38576844 1.0000000
6785 2:3-2:1  0.0003333333 -0.40550177 0.40616844 1.0000000
6786 3:3-2:1  -0.0015333333 -0.40736844 0.40430177 1.0000000
6787 UTC:3-2:1 -0.0223666667 -0.42820177 0.38346844 1.0000000
6788 1:4-2:1  0.004400000 -0.40143510 0.41023510 1.0000000
6789 2:4-2:1  0.0579666667 -0.34786844 0.46380177 1.0000000
6790 3:4-2:1  0.0600666667 -0.34576844 0.46590177 1.0000000
6791 UTC:4-2:1 -0.015800000 -0.42163510 0.39003510 1.0000000
6792 1:5-2:1  0.0281333333 -0.37770177 0.43396844 1.0000000
6793 2:5-2:1  0.1083333333 -0.29750177 0.51416844 0.9999447
6794 3:5-2:1  0.0088666667 -0.39696844 0.41470177 1.0000000
6795 UTC:5-2:1  0.0067333333 -0.41256844 0.39910177 1.0000000
6796 UTC:1-3:1 -0.0085666667 -0.41440177 0.39726844 1.0000000
6797 1:2-3:1  -0.0006666667 -0.40650177 0.40516844 1.0000000
6798 2:2-3:1  0.3278666667 -0.07796844 0.73370177 0.2504770
6799 3:2-3:1  -0.0003333333 -0.40616844 0.40550177 1.0000000
6800 UTC:2-3:1 -0.0056666667 -0.41150177 0.40016844 1.0000000
6801 1:3-3:1  -0.006600000 -0.41243510 0.39923510 1.0000000
6802 2:3-3:1  0.013800000 -0.39203510 0.41963510 1.0000000
6803 3:3-3:1  0.0119333333 -0.39390177 0.41776844 1.0000000
6804 UTC:3-3:1 -0.008900000 -0.41473510 0.39693510 1.0000000
6805 1:4-3:1  0.0178666667 -0.38796844 0.42370177 1.0000000
6806 2:4-3:1  0.0714333333 -0.33440177 0.47726844 0.9999999
6807 3:4-3:1  0.0735333333 -0.33230177 0.47936844 0.9999999
6808 UTC:4-3:1 -0.0023333333 -0.40816844 0.40350177 1.0000000
6809 1:5-3:1  0.041600000 -0.36423510 0.44743510 1.0000000
6810 2:5-3:1  0.121800000 -0.28403510 0.52763510 0.9997110
6811 3:5-3:1  0.0223333333 -0.38350177 0.42816844 1.0000000
6812 UTC:5-3:1  0.0067333333 -0.39910177 0.41256844 1.0000000
6813 1:2-UTC:1  0.007900000 -0.39793510 0.41373510 1.0000000
6814 2:2-UTC:1  0.3364333333 -0.06940177 0.74226844 0.2149272
6815 3:2-UTC:1  0.0082333333 -0.39760177 0.41406844 1.0000000
6816 UTC:2-UTC:1  0.002900000 -0.40293510 0.40873510 1.0000000
6817 1:3-UTC:1  0.0019666667 -0.40386844 0.40780177 1.0000000
6818 2:3-UTC:1  0.0223666667 -0.38346844 0.42820177 1.0000000
6819 3:3-UTC:1  0.020500000 -0.38533510 0.42633510 1.0000000
6820 UTC:3-UTC:1 -0.0003333333 -0.40616844 0.40550177 1.0000000
6821 1:4-UTC:1  0.0264333333 -0.37940177 0.43226844 1.0000000
6822 2:4-UTC:1  0.080000000 -0.32583510 0.48583510 0.9999995
6823 3:4-UTC:1  0.082100000 -0.32373510 0.48793510 0.9999992
6824 UTC:4-UTC:1  0.0062333333 -0.39960177 0.41206844 1.0000000
6825 1:5-UTC:1  0.0501666667 -0.35566844 0.45600177 1.0000000
6826 2:5-UTC:1  0.1303666667 -0.27546844 0.53620177 0.9992852
6827 3:5-UTC:1  0.030900000 -0.37493510 0.43673510 1.0000000
6828 UTC:5-UTC:1  0.015300000 -0.39053510 0.42113510 1.0000000
6829 2:2-1:2  0.3285333333 -0.07730177 0.73436844 0.2475724
6830 3:2-1:2  0.0003333333 -0.40550177 0.40616844 1.0000000
6831 UTC:2-1:2 -0.005000000 -0.41083510 0.40083510 1.0000000
6832 1:3-1:2  -0.0059333333 -0.41176844 0.39990177 1.0000000
6833 2:3-1:2  0.0144666667 -0.39136844 0.42030177 1.0000000
6834 3:3-1:2  0.012600000 -0.39323510 0.41843510 1.0000000
6835 UTC:3-1:2 -0.0082333333 -0.41406844 0.39760177 1.0000000
6836 1:4-1:2  0.0185333333 -0.38730177 0.42436844 1.0000000
6837 2:4-1:2  0.072100000 -0.33373510 0.47793510 0.9999999

```

6838	3:4-1:2	0.0742000000	-0.33163510	0.48003510	0.99999999
6839	UTC:4-1:2	-0.0016666667	-0.40750177	0.40416844	1.00000000
6840	1:5-1:2	0.0422666667	-0.36356844	0.44810177	1.00000000
6841	2:5-1:2	0.1224666667	-0.28336844	0.52830177	0.9996887
6842	3:5-1:2	0.0230000000	-0.38283510	0.42883510	1.00000000
6843	UTC:5-1:2	0.0074000000	-0.39843510	0.41323510	1.00000000
6844	3:2-2:2	-0.3282000000	-0.73403510	0.07763510	0.2490218
6845	UTC:2-2:2	-0.3335333333	-0.73936844	0.07230177	0.2265309
6846	1:3-2:2	-0.3344666667	-0.74030177	0.07136844	0.2227484
6847	2:3-2:2	-0.3140666667	-0.71990177	0.09176844	0.3157741
6848	3:3-2:2	-0.3159333333	-0.72176844	0.0890177	0.3063747
6849	UTC:3-2:2	-0.3367666667	-0.74260177	0.06906844	0.2136216
6850	1:4-2:2	-0.3100000000	-0.71583510	0.09583510	0.3368407
6851	2:4-2:2	-0.2564333333	-0.66226844	0.14940177	0.6624455
6852	3:4-2:2	-0.2543333333	-0.66016844	0.15150177	0.6754753
6853	UTC:4-2:2	-0.3302000000	-0.73603510	0.07563510	0.2404128
6854	1:5-2:2	-0.2862666667	-0.69210177	0.11956844	0.4737564
6855	2:5-2:2	-0.2060666667	-0.61190177	0.19976844	0.9128538
6856	3:5-2:2	-0.3055333333	-0.71136844	0.10030177	0.3608771
6857	UTC:5-2:2	-0.3211333333	-0.72696844	0.08470177	0.2811152
6858	UTC:2-3:2	-0.0053333333	-0.41116844	0.40050177	1.0000000
6859	1:3-3:2	-0.0062666667	-0.41210177	0.39956844	1.0000000
6860	2:3-3:2	0.0141333333	-0.39170177	0.41996844	1.0000000
6861	3:3-3:2	0.0122666667	-0.39356844	0.41810177	1.0000000
6862	UTC:3-3:2	-0.0085666667	-0.41440177	0.39726844	1.0000000
6863	1:4-3:2	0.0182000000	-0.38763510	0.42403510	1.0000000
6864	2:4-3:2	0.0717666667	-0.33406844	0.47760177	0.9999999
6865	3:4-3:2	0.0738666667	-0.33196844	0.47970177	0.9999999
6866	UTC:4-3:2	-0.0020000000	-0.40783510	0.40383510	1.0000000
6867	1:5-3:2	0.0419333333	-0.36390177	0.44776844	1.0000000
6868	2:5-3:2	0.1221333333	-0.28370177	0.52796844	0.9997000
6869	3:5-3:2	0.0226666667	-0.38316844	0.42850177	1.0000000
6870	UTC:5-3:2	0.0070666667	-0.39876844	0.41290177	1.0000000
6871	1:3-UTC:2	-0.0009333333	-0.40676844	0.40490177	1.0000000
6872	2:3-UTC:2	0.0194666667	-0.38636844	0.42530177	1.0000000
6873	3:3-UTC:2	0.0176000000	-0.38823510	0.42343510	1.0000000
6874	UTC:3-UTC:2	-0.0032333333	-0.40906844	0.40260177	1.0000000
6875	1:4-UTC:2	0.0235333333	-0.38230177	0.42936844	1.0000000
6876	2:4-UTC:2	0.0771000000	-0.32873510	0.48293510	0.9999997
6877	3:4-UTC:2	0.0792000000	-0.32663510	0.48503510	0.9999996
6878	UTC:4-UTC:2	0.0033333333	-0.40250177	0.40916844	1.0000000
6879	1:5-UTC:2	0.0472666667	-0.35856844	0.45310177	1.0000000
6880	2:5-UTC:2	0.1274666667	-0.27836844	0.53330177	0.9994678
6881	3:5-UTC:2	0.0280000000	-0.37783510	0.43383510	1.0000000
6882	UTC:5-UTC:2	0.0124000000	-0.39343510	0.41823510	1.0000000
6883	2:3-1:3	0.0204000000	-0.38543510	0.42623510	1.0000000
6884	3:3-1:3	0.0185333333	-0.38730177	0.42436844	1.0000000
6885	UTC:3-1:3	-0.0023000000	-0.40813510	0.40353510	1.0000000
6886	1:4-1:3	0.0244666667	-0.38136844	0.43030177	1.0000000
6887	2:4-1:3	0.0780333333	-0.32780177	0.48386844	0.9999997
6888	3:4-1:3	0.0801333333	-0.32570177	0.48596844	0.9999995
6889	UTC:4-1:3	0.0042666667	-0.40156844	0.41010177	1.0000000
6890	1:5-1:3	0.0482000000	-0.35763510	0.45403510	1.0000000
6891	2:5-1:3	0.1284000000	-0.27743510	0.53423510	0.9994141
6892	3:5-1:3	0.0289333333	-0.37690177	0.43476844	1.0000000
6893	UTC:5-1:3	0.0133333333	-0.39250177	0.41916844	1.0000000
6894	3:3-2:3	-0.0018666667	-0.40770177	0.40396844	1.0000000
6895	UTC:3-2:3	-0.0227000000	-0.42853510	0.38313510	1.0000000
6896	1:4-2:3	0.0040666667	-0.40176844	0.40990177	1.0000000
6897	2:4-2:3	0.0576333333	-0.34820177	0.46346844	1.0000000
6898	3:4-2:3	0.0597333333	-0.34610177	0.46556844	1.0000000
6899	UTC:4-2:3	-0.0161333333	-0.42196844	0.38970177	1.0000000
6900	1:5-2:3	0.0278000000	-0.37803510	0.43363510	1.0000000
6901	2:5-2:3	0.1080000000	-0.29783510	0.51383510	0.9999471
6902	3:5-2:3	0.0085333333	-0.39730177	0.41436844	1.0000000
6903	UTC:5-2:3	-0.0070666667	-0.41290177	0.39876844	1.0000000
6904	UTC:3-3:3	-0.0208333333	-0.42666844	0.38500177	1.0000000
6905	1:4-3:3	0.0059333333	-0.39990177	0.41176844	1.0000000
6906	2:4-3:3	0.0595000000	-0.34633510	0.46533510	1.0000000
6907	3:4-3:3	0.0616000000	-0.34423510	0.46743510	1.0000000
6908	UTC:4-3:3	-0.0142666667	-0.42010177	0.39156844	1.0000000
6909	1:5-3:3	0.0296666667	-0.37616844	0.43550177	1.0000000
6910	2:5-3:3	0.1098666667	-0.29596844	0.51570177	0.9999322
6911	3:5-3:3	0.0104000000	-0.39543510	0.41623510	1.0000000
6912	UTC:5-3:3	-0.0052000000	-0.41103510	0.40063510	1.0000000
6913	1:4-UTC:3	0.0267666667	-0.37906844	0.43260177	1.0000000
6914	2:4-UTC:3	0.0803333333	-0.32550177	0.48616844	0.9999995
6915	3:4-UTC:3	0.0824333333	-0.32340177	0.48826844	0.9999992
6916	UTC:4-UTC:3	0.0065666667	-0.39926844	0.41240177	1.0000000
6917	1:5-UTC:3	0.0505000000	-0.35533510	0.45633510	1.0000000
6918	2:5-UTC:3	0.1307000000	-0.27513510	0.53653510	0.9992611
6919	3:5-UTC:3	0.0312333333	-0.37460177	0.43706844	1.0000000
6920	UTC:5-UTC:3	0.0156333333	-0.39020177	0.42146844	1.0000000
6921	2:4-1:4	0.0535666667	-0.35226844	0.45940177	1.0000000
6922	3:4-1:4	0.0556666667	-0.35016844	0.46150177	1.0000000
6923	UTC:4-1:4	-0.0202000000	-0.42603510	0.38563510	1.0000000
6924	1:5-1:4	0.0237333333	-0.38210177	0.42956844	1.0000000
6925	2:5-1:4	0.1039333333	-0.30190177	0.50976844	0.9999700
6926	3:5-1:4	0.0044666667	-0.40136844	0.41030177	1.0000000
6927	UTC:5-1:4	-0.0111333333	-0.41696844	0.39470177	1.0000000
6928	3:4-2:4	0.0021000000	-0.40373510	0.40793510	1.0000000
6929	UTC:4-2:4	-0.0737666667	-0.47960177	0.33206844	0.9999999
6930	1:5-2:4	-0.0298333333	-0.43566844	0.37600177	1.0000000
6931	2:5-2:4	0.0503666667	-0.35546844	0.45620177	1.0000000
6932	3:5-2:4	-0.0491000000	-0.45493510	0.35673510	1.0000000

```

6933 UTC:5-2:4 -0.0647000000 -0.47053510 0.34113510 1.0000000
6934 UTC:4-3:4 -0.0758666667 -0.48170177 0.32996844 0.9999998
6935 1:5-3:4 -0.0319333333 -0.43776844 0.37390177 1.0000000
6936 2:5-3:4 0.0482666667 -0.35756844 0.45410177 1.0000000
6937 3:5-3:4 -0.0512000000 -0.45703510 0.35463510 1.0000000
6938 UTC:5-3:4 -0.0668000000 -0.47263510 0.33903510 1.0000000
6939 1:5-UTC:4 -0.0439333333 -0.36190177 0.44976844 1.0000000
6940 2:5-UTC:4 0.1241333333 -0.28170177 0.52996844 0.9996263
6941 3:5-UTC:4 0.0246666667 -0.38116844 0.43050177 1.0000000
6942 UTC:5-UTC:4 0.0090666667 -0.39676844 0.41490177 1.0000000
6943 2:5-1:5 0.0802000000 -0.32563510 0.48603510 0.9999995
6944 3:5-1:5 -0.0192666667 -0.42510177 0.38656844 1.0000000
6945 UTC:5-1:5 -0.0348666667 -0.44070177 0.37096844 1.0000000
6946 3:5-2:5 -0.0994666667 -0.50530177 0.30636844 0.9999845
6947 UTC:5-2:5 -0.1150666667 -0.52090177 0.29076844 0.9998687
6948 UTC:5-3:5 -0.0156000000 -0.42143510 0.39023510 1.0000000
6949
6950 sample families
6951
6952 Df Sum Sq Mean Sq F value Pr(>F)
6953 block 3 19.38 6.461 4.038 0.0134 *
6954 event 4 12.23 3.058 1.911 0.1273
6955 block:event 12 9.37 0.781 0.488 0.9099
6956 Residuals 40 64.00 1.600
6957 ---
6958 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
6959 Levene's Test for Homogeneity of Variance (center = median)
6960 Df F value Pr(>F)
6961 group 19 0.5263 0.933
6962 40
6963
6964 Shapiro-Wilk normality test
6965
6966 data: residuals(family.model)
6967 W = 0.97314, p-value = 0.2073
6968
6969 Tukey multiple comparisons of means
6970 95% family-wise confidence level
6971
6972 Fit: aov(formula = family.model)
6973
6974 $block
6975 diff lwr upr p adj
6976 2-1 0.86666667 -0.371366 2.1046993 0.2542775
6977 3-1 -0.06666667 -1.304699 1.1713660 0.9989090
6978 UTC-1 -0.73333333 -1.971366 0.5046993 0.3969755
6979 3-2 -0.93333333 -2.171366 0.3046993 0.1975358
6980 UTC-2 -1.60000008 -0.3619673 0.0067567
6981 UTC-3 -0.66666667 -1.904699 0.5713660 0.4805446
6982
6983 $event
6984 diff lwr upr p adj
6985 2-1 9.166667e-01 -0.5582125 2.3915459 0.4018100
6986 3-1 3.333333e-01 -1.1415459 1.8082125 0.9664949
6987 4-1 1.250000e+00 -0.2248792 2.7248792 0.1307257
6988 5-1 9.166667e-01 -0.5582125 2.3915459 0.4018100
6989 3-2 -5.833333e-01 -2.0582125 0.8915459 0.7899895
6990 4-2 3.333333e-01 -1.1415459 1.8082125 0.9664949
6991 5-2 -8.881784e-16 -1.4748792 1.4748792 1.0000000
6992 4-3 9.166667e-01 -0.5582125 2.3915459 0.4018100
6993 5-3 5.833333e-01 -0.8915459 2.0582125 0.7899895
6994 5-4 -3.333333e-01 -1.8082125 1.1415459 0.9664949
6995
6996 $`block:event`
6997 diff lwr upr p adj
6998 2:1-1:1 3.333333e-01 -3.5792399 4.2459066 1.0000000
6999 3:1-1:1 1.332268e-15 -3.9125732 3.9125732 1.0000000
7000 UTC:1-1:1 -3.333333e-01 -4.2459066 3.5792399 1.0000000
7001 1:2-1:1 6.666667e-01 -3.2459066 4.5792399 1.0000000
7002 2:2-1:1 2.666667e+00 -1.2459066 6.5792399 0.5343783
7003 3:2-1:1 3.333333e-01 -3.5792399 4.2459066 1.0000000
7004 UTC:2-1:1 1.776357e-15 -3.9125732 3.9125732 1.0000000
7005 1:3-1:1 -3.333333e-01 -4.2459066 3.5792399 1.0000000
7006 2:3-1:1 1.333333e+00 -2.5792399 5.2459066 0.9984840
7007 3:3-1:1 6.666667e-01 -3.2459066 4.5792399 1.0000000
7008 UTC:3-1:1 -3.333333e-01 -4.2459066 3.5792399 1.0000000
7009 1:4-1:1 1.666667e+00 -2.2459066 5.5792399 0.9814568
7010 2:4-1:1 2.000000e+00 -1.9125732 5.9125732 0.9082908
7011 3:4-1:1 1.333333e+00 -2.5792399 5.2459066 0.9984840
7012 UTC:4-1:1 6.661338e-16 -3.9125732 3.9125732 1.0000000
7013 1:5-1:1 1.333333e+00 -2.5792399 5.2459066 0.9984840
7014 2:5-1:1 1.333333e+00 -2.5792399 5.2459066 0.9984840
7015 3:5-1:1 6.666667e-01 -3.2459066 4.5792399 1.0000000
7016 UTC:5-1:1 3.333333e-01 -3.5792399 4.2459066 1.0000000
7017 3:1-2:1 -3.333333e-01 -4.2459066 3.5792399 1.0000000
7018 UTC:1-2:1 -6.666667e-01 -4.5792399 3.2459066 1.0000000
7019 1:2-2:1 3.333333e-01 -3.5792399 4.2459066 1.0000000
7020 2:2-2:1 2.333333e+00 -1.5792399 6.2459066 0.7488525
7021 3:2-2:1 2.664535e-15 -3.9125732 3.9125732 1.0000000
7022 UTC:2-2:1 -3.333333e-01 -4.2459066 3.5792399 1.0000000
7023 1:3-2:1 -6.666667e-01 -4.5792399 3.2459066 1.0000000
7024 2:3-2:1 1.000000e+00 -2.9125732 4.9125732 0.9999708
7025 3:3-2:1 3.333333e-01 -3.5792399 4.2459066 1.0000000
7026 UTC:3-2:1 -6.666667e-01 -4.5792399 3.2459066 1.0000000
7027 1:4-2:1 1.333333e+00 -2.5792399 5.2459066 0.9984840

```

7028	2:4-2:1	1.666667e+00	-2.2459066	5.5792399	0.9814568
7029	3:4-2:1	1.000000e+00	-2.9125732	4.9125732	0.9999708
7030	UTC:4-2:1	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7031	1:5-2:1	1.000000e+00	-2.9125732	4.9125732	0.9999708
7032	2:5-2:1	1.000000e+00	-2.9125732	4.9125732	0.9999708
7033	3:5-2:1	3.333333e-01	-3.5792399	4.2459066	1.0000000
7034	UTC:5-2:1	2.220446e-15	-3.9125732	3.9125732	1.0000000
7035	UTC:1-3:1	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7036	1:2-3:1	6.666667e-01	-3.2459066	4.5792399	1.0000000
7037	2:2-3:1	2.666667e+00	-1.2459066	6.5792399	0.5343783
7038	3:2-3:1	3.333333e-01	-3.5792399	4.2459066	1.0000000
7039	UTC:2-3:1	4.440892e-16	-3.9125732	3.9125732	1.0000000
7040	1:3-3:1	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7041	2:3-3:1	1.333333e+00	-2.5792399	5.2459066	0.9984840
7042	3:3-3:1	6.666667e-01	-3.2459066	4.5792399	1.0000000
7043	UTC:3-3:1	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7044	1:4-3:1	1.666667e+00	-2.2459066	5.5792399	0.9814568
7045	2:4-3:1	2.000000e+00	-1.9125732	5.9125732	0.9082908
7046	3:4-3:1	1.333333e+00	-2.5792399	5.2459066	0.9984840
7047	UTC:4-3:1	-6.661338e-16	-3.9125732	3.9125732	1.0000000
7048	1:5-3:1	1.333333e+00	-2.5792399	5.2459066	0.9984840
7049	2:5-3:1	1.333333e+00	-2.5792399	5.2459066	0.9984840
7050	3:5-3:1	6.666667e-01	-3.2459066	4.5792399	1.0000000
7051	UTC:5-3:1	3.333333e-01	-3.5792399	4.2459066	1.0000000
7052	1:2-UTC:1	1.000000e+00	-2.9125732	4.9125732	0.9999708
7053	2:2-UTC:1	3.000000e+00	-0.9125732	6.9125732	0.3306583
7054	3:2-UTC:1	6.666667e-01	-3.2459066	4.5792399	1.0000000
7055	UTC:2-UTC:1	3.333333e-01	-3.5792399	4.2459066	1.0000000
7056	1:3-UTC:1	-1.332268e-15	-3.9125732	3.9125732	1.0000000
7057	2:3-UTC:1	1.666667e+00	-2.2459066	5.5792399	0.9814568
7058	3:3-UTC:1	1.000000e+00	-2.9125732	4.9125732	0.9999708
7059	UTC:3-UTC:1	-2.220446e-15	-3.9125732	3.9125732	1.0000000
7060	1:4-UTC:1	2.000000e+00	-1.9125732	5.9125732	0.9082908
7061	2:4-UTC:1	2.333333e+00	-1.5792399	6.2459066	0.7488525
7062	3:4-UTC:1	1.666667e+00	-2.2459066	5.5792399	0.9814568
7063	UTC:4-UTC:1	3.333333e-01	-3.5792399	4.2459066	1.0000000
7064	1:5-UTC:1	1.666667e+00	-2.2459066	5.5792399	0.9814568
7065	2:5-UTC:1	1.666667e+00	-2.2459066	5.5792399	0.9814568
7066	3:5-UTC:1	1.000000e+00	-2.9125732	4.9125732	0.9999708
7067	UTC:5-UTC:1	6.666667e-01	-3.2459066	4.5792399	1.0000000
7068	2:2-1:2	2.000000e+00	-1.9125732	5.9125732	0.9082908
7069	3:2-1:2	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7070	UTC:2-1:2	-6.666667e-01	-4.5792399	3.2459066	1.0000000
7071	1:3-1:2	-1.000000e+00	-4.9125732	2.9125732	0.9999708
7072	2:3-1:2	6.666667e-01	-3.2459066	4.5792399	1.0000000
7073	3:3-1:2	-1.776357e-15	-3.9125732	3.9125732	1.0000000
7074	UTC:3-1:2	-1.000000e+00	-4.9125732	2.9125732	0.9999708
7075	1:4-1:2	1.000000e+00	-2.9125732	4.9125732	0.9999708
7076	2:4-1:2	1.333333e+00	-2.5792399	5.2459066	0.9984840
7077	3:4-1:2	6.666667e-01	-3.2459066	4.5792399	1.0000000
7078	UTC:4-1:2	-6.666667e-01	-4.5792399	3.2459066	1.0000000
7079	1:5-1:2	6.666667e-01	-3.2459066	4.5792399	1.0000000
7080	2:5-1:2	6.666667e-01	-3.2459066	4.5792399	1.0000000
7081	3:5-1:2	-1.332268e-15	-3.9125732	3.9125732	1.0000000
7082	UTC:5-1:2	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7083	3:2-2:2	-2.333333e+00	-6.2459066	1.5792399	0.7488525
7084	UTC:2-2:2	-2.666667e+00	-6.5792399	1.2459066	0.5343783
7085	1:3-2:2	-3.000000e+00	-6.9125732	0.9125732	0.3306583
7086	2:3-2:2	-1.333333e+00	-5.2459066	2.5792399	0.9984840
7087	3:3-2:2	-2.000000e+00	-5.9125732	1.9125732	0.9082908
7088	UTC:3-2:2	-3.000000e+00	-6.9125732	0.9125732	0.3306583
7089	1:4-2:2	-1.000000e+00	-4.9125732	2.9125732	0.9999708
7090	2:4-2:2	-6.666667e-01	-4.5792399	3.2459066	1.0000000
7091	3:4-2:2	-1.333333e+00	-5.2459066	2.5792399	0.9984840
7092	UTC:4-2:2	-2.666667e+00	-6.5792399	1.2459066	0.5343783
7093	1:5-2:2	-1.333333e+00	-5.2459066	2.5792399	0.9984840
7094	2:5-2:2	-1.333333e+00	-5.2459066	2.5792399	0.9984840
7095	3:5-2:2	-2.000000e+00	-5.9125732	1.9125732	0.9082908
7096	UTC:5-2:2	-2.333333e+00	-6.2459066	1.5792399	0.7488525
7097	UTC:2-3:2	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7098	1:3-3:2	-6.666667e-01	-4.5792399	3.2459066	1.0000000
7099	2:3-3:2	1.000000e+00	-2.9125732	4.9125732	0.9999708
7100	3:3-3:2	3.333333e-01	-3.5792399	4.2459066	1.0000000
7101	UTC:3-3:2	-6.666667e-01	-4.5792399	3.2459066	1.0000000
7102	1:4-3:2	1.333333e+00	-2.5792399	5.2459066	0.9984840
7103	2:4-3:2	1.666667e+00	-2.2459066	5.5792399	0.9814568
7104	3:4-3:2	1.000000e+00	-2.9125732	4.9125732	0.9999708
7105	UTC:4-3:2	3.333333e-01	-4.2459066	3.5792399	1.0000000
7106	1:5-3:2	1.000000e+00	-2.9125732	4.9125732	0.9999708
7107	2:5-3:2	1.000000e+00	-2.9125732	4.9125732	0.9999708
7108	3:5-3:2	3.333333e-01	-3.5792399	4.2459066	1.0000000
7109	UTC:5-3:2	-4.440892e-16	-3.9125732	3.9125732	1.0000000
7110	1:3-UTC:2	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7111	2:3-UTC:2	1.333333e+00	-2.5792399	5.2459066	0.9984840
7112	3:3-UTC:2	6.666667e-01	-3.2459066	4.5792399	1.0000000
7113	UTC:3-UTC:2	-3.333333e-01	-4.2459066	3.5792399	1.0000000
7114	1:4-UTC:2	1.666667e+00	-2.2459066	5.5792399	0.9814568
7115	2:4-UTC:2	2.000000e+00	-1.9125732	5.9125732	0.9082908
7116	3:4-UTC:2	1.333333e+00	-2.5792399	5.2459066	0.9984840
7117	UTC:4-UTC:2	-1.110223e-15	-3.9125732	3.9125732	1.0000000
7118	1:5-UTC:2	1.333333e+00	-2.5792399	5.2459066	0.9984840
7119	2:5-UTC:2	1.333333e+00	-2.5792399	5.2459066	0.9984840
7120	3:5-UTC:2	6.666667e-01	-3.2459066	4.5792399	1.0000000
7121	UTC:5-UTC:2	3.333333e-01	-3.5792399	4.2459066	1.0000000
7122	2:3-1:3	1.666667e+00	-2.2459066	5.5792399	0.9814568

```

7123 3:3-1:3    1.000000e+00 -2.9125732 4.9125732 0.9999708
7124 UTC:3-1:3  -8.881784e-16 -3.9125732 3.9125732 1.0000000
7125 1:4-1:3    2.000000e+00 -1.9125732 5.9125732 0.9082908
7126 2:4-1:3    2.333333e+00 -1.5792399 6.2459066 0.7488525
7127 3:4-1:3    1.666667e+00 -2.2459066 5.5792399 0.9814568
7128 UTC:4-1:3  3.333333e-01 -3.5792399 4.2459066 1.0000000
7129 1:5-1:3    1.666667e+00 -2.2459066 5.5792399 0.9814568
7130 2:5-1:3    1.666667e+00 -2.2459066 5.5792399 0.9814568
7131 3:5-1:3    1.000000e+00 -2.9125732 4.9125732 0.9999708
7132 UTC:5-1:3  6.666667e-01 -3.2459066 4.5792399 1.0000000
7133 3:3-2:3    -6.666667e-01 -4.5792399 3.2459066 1.0000000
7134 UTC:3-2:3  -1.666667e+00 -5.5792399 2.2459066 0.9814568
7135 1:4-2:3    3.333333e-01 -3.5792399 4.2459066 1.0000000
7136 2:4-2:3    6.666667e-01 -3.2459066 4.5792399 1.0000000
7137 3:4-2:3    8.881784e-16 -3.9125732 3.9125732 1.0000000
7138 UTC:4-2:3  -1.333333e+00 -5.2459066 2.5792399 0.9984840
7139 1:5-2:3    8.881784e-16 -3.9125732 3.9125732 1.0000000
7140 2:5-2:3    0.000000e+00 -3.9125732 3.9125732 1.0000000
7141 3:5-2:3    -6.666667e-01 -4.5792399 3.2459066 1.0000000
7142 UTC:5-2:3  -1.000000e+00 -4.9125732 2.9125732 0.9999708
7143 UTC:3-3:3  -1.000000e+00 -4.9125732 2.9125732 0.9999708
7144 1:4-3:3    1.000000e+00 -2.9125732 4.9125732 0.9999708
7145 2:4-3:3    1.333333e+00 -2.5792399 5.2459066 0.9984840
7146 3:4-3:3    6.666667e-01 -3.2459066 4.5792399 1.0000000
7147 UTC:4-3:3  -6.666667e-01 -4.5792399 3.2459066 1.0000000
7148 1:5-3:3    6.666667e-01 -3.2459066 4.5792399 1.0000000
7149 2:5-3:3    6.666667e-01 -3.2459066 4.5792399 1.0000000
7150 3:5-3:3    4.440892e-16 -3.9125732 3.9125732 1.0000000
7151 UTC:5-3:3  -3.333333e-01 -4.2459066 3.5792399 1.0000000
7152 1:4-UTC:3  2.000000e+00 -1.9125732 5.9125732 0.9082908
7153 2:4-UTC:3  2.333333e+00 -1.5792399 6.2459066 0.7488525
7154 3:4-UTC:3  1.666667e+00 -2.2459066 5.5792399 0.9814568
7155 UTC:4-UTC:3 3.333333e-01 -3.5792399 4.2459066 1.0000000
7156 1:5-UTC:3  1.666667e+00 -2.2459066 5.5792399 0.9814568
7157 2:5-UTC:3  1.666667e+00 -2.2459066 5.5792399 0.9814568
7158 3:5-UTC:3  1.000000e+00 -2.9125732 4.9125732 0.9999708
7159 UTC:5-UTC:3 6.666667e-01 -3.2459066 4.5792399 1.0000000
7160 2:4-1:4    3.333333e-01 -3.5792399 4.2459066 1.0000000
7161 3:4-1:4    -3.333333e-01 -4.2459066 3.5792399 1.0000000
7162 UTC:4-1:4  -1.666667e+00 -5.5792399 2.2459066 0.9814568
7163 1:5-1:4    -3.333333e-01 -4.2459066 3.5792399 1.0000000
7164 2:5-1:4    -3.333333e-01 -4.2459066 3.5792399 1.0000000
7165 3:5-1:4    -1.000000e+00 -4.9125732 2.9125732 0.9999708
7166 UTC:5-1:4  -1.333333e+00 -5.2459066 2.5792399 0.9984840
7167 3:4-2:4    -6.666667e-01 -4.5792399 3.2459066 1.0000000
7168 UTC:4-2:4  -2.000000e+00 -5.9125732 1.9125732 0.9082908
7169 1:5-2:4    -6.666667e-01 -4.5792399 3.2459066 1.0000000
7170 2:5-2:4    -6.666667e-01 -4.5792399 3.2459066 1.0000000
7171 3:5-2:4    -1.333333e+00 -5.2459066 2.5792399 0.9984840
7172 UTC:5-2:4  -1.666667e+00 -5.5792399 2.2459066 0.9814568
7173 UTC:4-3:4  -1.333333e+00 -5.2459066 2.5792399 0.9984840
7174 1:5-3:4    0.000000e+00 -3.9125732 3.9125732 1.0000000
7175 2:5-3:4    -8.881784e-16 -3.9125732 3.9125732 1.0000000
7176 3:5-3:4    -6.666667e-01 -4.5792399 3.2459066 1.0000000
7177 UTC:5-3:4  -1.000000e+00 -4.9125732 2.9125732 0.9999708
7178 1:5-UTC:4  1.333333e+00 -2.5792399 5.2459066 0.9984840
7179 2:5-UTC:4  1.333333e+00 -2.5792399 5.2459066 0.9984840
7180 3:5-UTC:4  6.666667e-01 -3.2459066 4.5792399 1.0000000
7181 UTC:5-UTC:4 3.333333e-01 -3.5792399 4.2459066 1.0000000
7182 2:5-1:5    -8.881784e-16 -3.9125732 3.9125732 1.0000000
7183 3:5-1:5    -6.666667e-01 -4.5792399 3.2459066 1.0000000
7184 UTC:5-1:5  -1.000000e+00 -4.9125732 2.9125732 0.9999708
7185 3:5-2:5    -6.666667e-01 -4.5792399 3.2459066 1.0000000
7186 UTC:5-2:5  -1.000000e+00 -4.9125732 2.9125732 0.9999708
7187 UTC:5-3:5  -3.333333e-01 -4.2459066 3.5792399 1.0000000
7188
7189 Diptera sweep
7190
7191 sample mass
7192
7193      Df  Sum Sq  Mean Sq F value Pr(>F)
7194 block     3 0.001383 0.0004610  2.042 0.12342
7195 event     4 0.001764 0.0004410  1.953 0.12035
7196 block:event 12 0.007912 0.0006593  2.920 0.00541 ** 
7197 Residuals  40 0.009031 0.0002258
7198 ---
7199 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
7200 Levene's Test for Homogeneity of Variance (center = median)
7201   Df F value Pr(>F)
7202 group 19  1.3753 0.1943
7203   40
7204
7205 Shapiro-Wilk normality test
7206
7207 data: residuals(mass.model)
7208 W = 0.80278, p-value = 1.585e-07
7209
7210 Tukey multiple comparisons of means
7211   95% family-wise confidence level
7212
7213 Fit: aov(formula = mass.model)
7214
7215 $block
7216   diff          lwr          upr      p adj
7217 2-1  -0.00515333 -0.019859879 0.009553212 0.7840022

```

```

7218 3-1    0.007193333 -0.007513212 0.021899879 0.5614648
7219 UTC-1   -0.003833333 -0.018539879 0.010873212 0.8969834
7220 3-2    0.012346667 -0.002359879 0.027053212 0.1273052
7221 UTC-2   0.001320000 -0.013386546 0.016026546 0.9950225
7222 UTC-3   -0.011026667 -0.025733212 0.003679879 0.2015086
7223
7224 $event
7225      diff      lwr      upr      p adj
7226 2-1    0.008941667 -0.008578371 0.026461704 0.5951122
7227 3-1    -0.007150000 -0.024670037 0.010370037 0.7705417
7228 4-1    -0.004041667 -0.021561704 0.013478371 0.9639413
7229 5-1    -0.001600000 -0.019120037 0.015920037 0.9989366
7230 3-2    -0.016091667 -0.033611704 0.001428371 0.0850874
7231 4-2    -0.012983333 -0.030503371 0.004536704 0.2332398
7232 5-2    -0.010541667 -0.028061704 0.006978371 0.4345620
7233 4-3    0.003108333 -0.014411704 0.020628371 0.9862287
7234 5-3    0.005550000 -0.011970037 0.023070037 0.8933906
7235 5-4    0.002441667 -0.015078371 0.019961704 0.9944913
7236
7237 $ 'block:event'
7238      diff      lwr      upr      p adj
7239 2:1-1:1 5.666667e-04 -0.0459106511 0.0470439844 1.0000000
7240 3:1-1:1 4.523333e-02 -0.0012439844 0.0917106511 0.0642261
7241 UTC:1-1:1 5.000000e-04 -0.0459773178 0.0469773178 1.0000000
7242 1:2-1:1 4.723333e-02 0.0007560156 0.0937106511 0.0427981
7243 2:2-1:1 2.366667e-02 -0.0228106511 0.0701439844 0.9109342
7244 3:2-1:1 4.966667e-03 -0.0415106511 0.0514439844 1.0000000
7245 UTC:2-1:1 6.200000e-03 -0.0402773178 0.0526773178 1.0000000
7246 1:3-1:1 4.400000e-03 -0.0420773178 0.0508773178 1.0000000
7247 2:3-1:1 1.066667e-03 -0.0454106511 0.0475439844 1.0000000
7248 3:3-1:1 6.533333e-03 -0.0399439844 0.0530106511 1.0000000
7249 UTC:3-1:1 5.700000e-03 -0.0407773178 0.0521773178 1.0000000
7250 1:4-1:1 3.700000e-03 -0.0427773178 0.0501773178 1.0000000
7251 2:4-1:1 1.233333e-03 -0.0452439844 0.0477106511 1.0000000
7252 3:4-1:1 1.820000e-02 -0.0282773178 0.0646773178 0.9922956
7253 UTC:4-1:1 7.000000e-03 -0.0394773178 0.0534773178 1.0000000
7254 1:5-1:1 9.333333e-04 -0.0455439844 0.0474106511 1.0000000
7255 2:5-1:1 3.966667e-03 -0.0425106511 0.0504439844 1.0000000
7256 3:5-1:1 1.730000e-02 -0.0291773178 0.0637773178 0.9956383
7257 UTC:5-1:1 1.770000e-02 -0.0287773178 0.0641773178 0.9943431
7258 3:1-2:1 4.466667e-02 -0.0018106511 0.0911439844 0.0718129
7259 UTC:1-2:1 -6.666667e-05 -0.0465439844 0.0464106511 1.0000000
7260 1:2-2:1 4.666667e-02 0.0001893489 0.0931439844 0.0481009
7261 2:2-2:1 2.310000e-02 -0.0233773178 0.0695773178 0.9262511
7262 3:2-2:1 4.400000e-03 -0.0420773178 0.0508773178 1.0000000
7263 UTC:2-2:1 5.633333e-03 -0.0408439844 0.0521106511 1.0000000
7264 1:3-2:1 3.833333e-03 -0.0426439844 0.0503106511 1.0000000
7265 2:3-2:1 5.000000e-04 -0.0459773178 0.0469773178 1.0000000
7266 3:3-2:1 5.966667e-03 -0.0405106511 0.0524439844 1.0000000
7267 UTC:3-2:1 5.133333e-03 -0.0413439844 0.0516106511 1.0000000
7268 1:4-2:1 3.133333e-03 -0.0433439844 0.0496106511 1.0000000
7269 2:4-2:1 6.666667e-04 -0.0458106511 0.0471439844 1.0000000
7270 3:4-2:1 1.763333e-02 -0.0288439844 0.0641106511 0.9945786
7271 UTC:4-2:1 6.433333e-03 -0.0400439844 0.0529106511 1.0000000
7272 1:5-2:1 3.666667e-04 -0.0461106511 0.0468439844 1.0000000
7273 2:5-2:1 3.400000e-03 -0.0430773178 0.0498773178 1.0000000
7274 3:5-2:1 1.673333e-02 -0.0297439844 0.0632106511 0.9970443
7275 UTC:5-2:1 1.713333e-02 -0.0293439844 0.0636106511 0.9960999
7276 UTC:1-3:1 -4.473333e-02 -0.0912106511 0.0017439844 0.0708815
7277 1:2-3:1 2.000000e-03 -0.0444773178 0.0484773178 1.0000000
7278 2:2-3:1 -2.156667e-02 -0.0680439844 0.0249106511 0.9585829
7279 3:2-3:1 -4.026667e-02 -0.0867439844 0.0062106511 0.1612632
7280 UTC:2-3:1 -3.903333e-02 -0.0855106511 0.0074439844 0.1981511
7281 1:3-3:1 -4.083333e-02 -0.0873106511 0.0056439844 0.1462218
7282 2:3-3:1 -4.416667e-02 -0.0906439844 0.0023106511 0.0791445
7283 3:3-3:1 -3.870000e-02 -0.0851773178 0.0077773178 0.2091319
7284 UTC:3-3:1 -3.953333e-02 -0.0860106511 0.0069439844 0.1824949
7285 1:4-3:1 -4.153333e-02 -0.0880106511 0.0049439844 0.1292127
7286 2:4-3:1 -4.400000e-02 -0.0904773178 0.0024773178 0.0817282
7287 3:4-3:1 -2.703333e-02 -0.0735106511 0.0194439844 0.7820126
7288 UTC:4-3:1 -3.823333e-02 -0.0847106511 0.0082439844 0.2252445
7289 1:5-3:1 -4.430000e-02 -0.0907773178 0.0021773178 0.0771286
7290 2:5-3:1 -4.126667e-02 -0.0877439844 0.0052106511 0.1354926
7291 3:5-3:1 -2.793333e-02 -0.0744106511 0.0185439844 0.7380206
7292 UTC:5-3:1 -2.753333e-02 -0.0740106511 0.0189439844 0.7579664
7293 1:2-UTC:1 4.673333e-02 0.0002560156 0.0932106511 0.0474478
7294 2:2-UTC:1 2.316667e-02 -0.0233106511 0.0696439844 0.9245466
7295 3:2-UTC:1 4.466667e-03 -0.0420106511 0.0509439844 1.0000000
7296 UTC:2-UTC:1 5.700000e-03 -0.0407773178 0.0521773178 1.0000000
7297 1:3-UTC:1 3.900000e-03 -0.0425773178 0.0503773178 1.0000000
7298 2:3-UTC:1 5.666667e-04 -0.0459106511 0.0470439844 1.0000000
7299 3:3-UTC:1 6.033333e-03 -0.0404439844 0.0525106511 1.0000000
7300 UTC:3-UTC:1 5.200000e-03 -0.0412773178 0.0516773178 1.0000000
7301 1:4-UTC:1 3.200000e-03 -0.0432773178 0.0496773178 1.0000000
7302 2:4-UTC:1 7.333333e-04 -0.0457439844 0.0472106511 1.0000000
7303 3:4-UTC:1 1.770000e-02 -0.0287773178 0.0641773178 0.9943431
7304 UTC:4-UTC:1 6.500000e-03 -0.0399773178 0.0529773178 1.0000000
7305 1:5-UTC:1 4.333333e-04 -0.0460439844 0.0469106511 1.0000000
7306 2:5-UTC:1 3.466667e-03 -0.0430106511 0.0499439844 1.0000000
7307 3:5-UTC:1 1.680000e-02 -0.0296773178 0.0632773178 0.9969018
7308 UTC:5-UTC:1 1.720000e-02 -0.0292773178 0.0636773178 0.9959204
7309 2:2-1:2 -2.356667e-02 -0.0700439844 0.029106511 0.9137742
7310 3:2-1:2 -4.226667e-02 -0.0887439844 0.0042106511 0.1131605
7311 UTC:2-1:2 -4.103333e-02 -0.0875106511 0.0054439844 0.1411882
7312 1:3-1:2 -4.283333e-02 -0.0893106511 0.0036439844 0.1019225

```

7313	2:3-1:2	-4.616667e-02	-0.0926439844	0.0003106511	0.0532612
7314	3:3-1:2	-4.070000e-02	-0.0871773178	0.0057773178	0.1496565
7315	UTC:3-1:2	-1.153333e-02	-0.0880106511	0.0049439844	0.1292127
7316	1:4-1:2	-4.353333e-02	-0.0900106511	0.0029439844	0.0893523
7317	2:4-1:2	-4.600000e-02	-0.0924773178	0.0004773178	0.0550879
7318	3:4-1:2	-2.903333e-02	-0.0755106511	0.0174439844	0.6805142
7319	UTC:4-1:2	-4.023333e-02	-0.0867106511	0.0062439844	0.1621845
7320	1:5-1:2	-4.630000e-02	-0.0927773178	0.0001773178	0.0518389
7321	2:5-1:2	-4.326667e-02	-0.0897439844	0.0032106511	0.0939760
7322	3:5-1:2	-2.993333e-02	-0.0764106511	0.0165439844	0.6314014
7323	UTC:5-1:2	-2.953333e-02	-0.0760106511	0.0169439844	0.6533949
7324	3:2-2:2	-1.870000e-02	-0.0651773178	0.0277773178	0.9896832
7325	UTC:2-2:2	-1.746667e-02	-0.0639439844	0.02890106511	0.9951323
7326	1:3-2:2	-1.926667e-02	-0.0657439844	0.0272106511	0.9859114
7327	2:3-2:2	-2.260000e-02	-0.0690773178	0.0238773178	0.9382207
7328	3:3-2:2	-1.713333e-02	-0.0636106511	0.0293439844	0.9960999
7329	UTC:3-2:2	-1.796667e-02	-0.0644439844	0.0285106511	0.9933154
7330	1:4-2:2	-1.996667e-02	-0.0664439844	0.0265106511	0.9798391
7331	2:4-2:2	-2.243333e-02	-0.0689106511	0.0240439844	0.9418961
7332	3:4-2:2	-5.466667e-03	-0.0519439844	0.0410106511	1.0000000
7333	UTC:4-2:2	-1.666667e-02	-0.0631439844	0.0298106511	0.9971812
7334	1:5-2:2	-2.273333e-02	-0.0692106511	0.0237439844	0.9351681
7335	2:5-2:2	-1.970000e-02	-0.0661773178	0.0267773178	0.9823533
7336	3:5-2:2	-6.366667e-03	-0.0528439844	0.0401106511	1.0000000
7337	UTC:5-2:2	-5.966667e-03	-0.0524439844	0.0405106511	1.0000000
7338	UTC:2-3:2	-1.233333e-03	-0.0452439844	0.0477106511	1.0000000
7339	1:3-3:2	-5.666667e-04	-0.0470439844	0.0459106511	1.0000000
7340	2:3-3:2	-3.900000e-03	-0.0503773178	0.0425773178	1.0000000
7341	3:3-3:2	-1.566667e-03	-0.0449106511	0.0480439844	1.0000000
7342	UTC:3-3:2	7.333333e-04	-0.0457439844	0.0472106511	1.0000000
7343	1:4-3:2	-1.266667e-03	-0.0477439844	0.0452106511	1.0000000
7344	2:4-3:2	-3.733333e-03	-0.0502106511	0.0427439844	1.0000000
7345	3:4-3:2	1.323333e-02	-0.0332439844	0.0597106511	0.9998606
7346	UTC:4-3:2	2.033333e-03	-0.0444439844	0.0485106511	1.0000000
7347	1:5-3:2	-4.033333e-03	-0.0505106511	0.0424439844	1.0000000
7348	2:5-3:2	-1.000000e-03	-0.0474773178	0.0454773178	1.0000000
7349	3:5-3:2	1.233333e-02	-0.0341439844	0.0588106511	0.9999493
7350	UTC:5-3:2	1.273333e-02	-0.0337439844	0.0592106511	0.9999194
7351	1:3-UTC:2	-1.800000e-03	-0.0482773178	0.0446773178	1.0000000
7352	2:3-UTC:2	-5.133333e-03	-0.0516106511	0.0413439844	1.0000000
7353	3:3-UTC:2	3.333333e-04	-0.0461439844	0.0468106511	1.0000000
7354	UTC:3-UTC:2	-5.000000e-04	-0.0469773178	0.0459773178	1.0000000
7355	1:4-UTC:2	-2.500000e-03	-0.0489773178	0.0439773178	1.0000000
7356	2:4-UTC:2	-4.966667e-03	-0.0514439844	0.0415106511	1.0000000
7357	3:4-UTC:2	1.200000e-02	-0.0344773178	0.0584773178	0.9999661
7358	UTC:4-UTC:2	8.000000e-04	-0.0456773178	0.0472773178	1.0000000
7359	1:5-UTC:2	-5.266667e-03	-0.0517439844	0.0412106511	1.0000000
7360	2:5-UTC:2	-2.233333e-03	-0.0487106511	0.0442439844	1.0000000
7361	3:5-UTC:2	1.110000e-02	-0.0353773178	0.0575773178	0.9999895
7362	UTC:5-UTC:2	1.150000e-02	-0.0349773178	0.0579773178	0.9999821
7363	2:3-1:3	-3.333333e-03	-0.0498106511	0.0431439844	1.0000000
7364	3:3-1:3	2.133333e-03	-0.0443439844	0.0486106511	1.0000000
7365	UTC:3-1:3	1.300000e-03	-0.0451773178	0.0477773178	1.0000000
7366	1:4-1:3	-7.000000e-04	-0.0471773178	0.0457773178	1.0000000
7367	2:4-1:3	-3.166667e-03	-0.0496439844	0.0433106511	1.0000000
7368	3:4-1:3	1.380000e-02	-0.0326773178	0.0602773178	0.9997504
7369	UTC:4-1:3	2.600000e-03	-0.0438773178	0.0490773178	1.0000000
7370	1:5-1:3	-3.466667e-03	-0.0499439844	0.0430106511	1.0000000
7371	2:5-1:3	-4.333333e-04	-0.0469106511	0.0460439844	1.0000000
7372	3:5-1:3	1.290000e-02	-0.0335773178	0.0593773178	0.9999029
7373	UTC:5-1:3	1.330000e-02	-0.0331773178	0.0597773178	0.9998504
7374	3:3-2:3	5.466667e-03	-0.0410106511	0.0519439844	1.0000000
7375	UTC:3-2:3	4.633333e-03	-0.0418439844	0.0511106511	1.0000000
7376	1:4-2:3	2.633333e-03	-0.0438439844	0.0491106511	1.0000000
7377	2:4-2:3	1.666667e-04	-0.0463106511	0.0466439844	1.0000000
7378	3:4-2:3	1.713333e-02	-0.0293439844	0.0636106511	0.9960999
7379	UTC:4-2:3	5.933333e-03	-0.0405439844	0.0524106511	1.0000000
7380	1:5-2:3	-1.333333e-04	-0.0466106511	0.0463439844	1.0000000
7381	2:5-2:3	2.900000e-03	-0.0435773178	0.0493773178	1.0000000
7382	3:5-2:3	1.623333e-02	-0.0302439844	0.0627106511	0.9979476
7383	UTC:5-2:3	1.663333e-02	-0.0298439844	0.0631106511	0.9972477
7384	UTC:3-3:3	-8.333333e-04	-0.0473106511	0.0456439844	1.0000000
7385	1:4-3:3	-2.833333e-03	-0.0493106511	0.0436439844	1.0000000
7386	2:4-3:3	-5.300000e-03	-0.0517773178	0.0411773178	1.0000000
7387	3:4-3:3	1.166667e-02	-0.0348106511	0.0581439844	0.9999777
7388	UTC:4-3:3	4.666667e-04	-0.0460106511	0.0469439844	1.0000000
7389	1:5-3:3	-5.600000e-03	-0.0520773178	0.0408773178	1.0000000
7390	2:5-3:3	-2.566667e-03	-0.0490439844	0.0439106511	1.0000000
7391	3:5-3:3	1.076667e-02	-0.0357106511	0.0572439844	0.9999935
7392	UTC:5-3:3	1.116667e-02	-0.0353106511	0.0576439844	0.9999885
7393	1:4-UTC:3	-2.000000e-03	-0.0484773178	0.0444773178	1.0000000
7394	2:4-UTC:3	-4.466667e-03	-0.0509439844	0.0420106511	1.0000000
7395	3:4-UTC:3	1.250000e-02	-0.0339773178	0.0589773178	0.9999383
7396	UTC:4-UTC:3	1.300000e-03	-0.0451773178	0.0477773178	1.0000000
7397	1:5-UTC:3	-4.766667e-03	-0.0512439844	0.0417106511	1.0000000
7398	2:5-UTC:3	-1.733333e-03	-0.0482106511	0.0447439844	1.0000000
7399	3:5-UTC:3	1.160000e-02	-0.0348773178	0.0580773178	0.9999796
7400	UTC:5-UTC:3	1.200000e-02	-0.0344773178	0.0584773178	0.9999661
7401	2:4-1:4	-2.466667e-03	-0.0489439844	0.0440106511	1.0000000
7402	3:4-1:4	1.450000e-02	-0.0319773178	0.0609773178	0.9995132
7403	UTC:4-1:4	3.300000e-03	-0.0431773178	0.0497773178	1.0000000
7404	1:5-1:4	-2.766667e-03	-0.0492439844	0.0437106511	1.0000000
7405	2:5-1:4	2.666667e-04	-0.0462106511	0.0467439844	1.0000000
7406	3:5-1:4	1.360000e-02	-0.0328773178	0.0600773178	0.9997959
7407	UTC:5-1:4	1.400000e-02	-0.0324773178	0.0604773178	0.9996962

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7408 3:4-2:4    1.696667e-02 -0.0295106511 0.0634439844 0.9965201
7409 UTC:4-2:4   5.766667e-03 -0.0407106511 0.0522439844 1.0000000
7410 1:5-2:4    -3.000000e-04 -0.0467773178 0.0461773178 1.0000000
7411 2:5-2:4    2.733333e-03 -0.0437439844 0.0492106511 1.0000000
7412 3:5-2:4    1.606667e-02 -0.0304106511 0.0625439844 0.9981910
7413 UTC:5-2:4   1.646667e-02 -0.0300106511 0.0629439844 0.9975605
7414 UTC:4-3:4   -1.120000e-02 -0.0576773178 0.0352773178 0.9999880
7415 1:5-3:4    -1.726667e-02 -0.0637439844 0.0292106511 0.9957341
7416 2:5-3:4    -1.423333e-02 -0.0607106511 0.0322439844 0.9996202
7417 3:5-3:4    -9.000000e-04 -0.0473773178 0.0455773178 1.0000000
7418 UTC:5-3:4   -5.000000e-04 -0.0469773178 0.0459773178 1.0000000
7419 1:5-UTC:4   -6.066667e-03 -0.0525439844 0.0404106511 1.0000000
7420 2:5-UTC:4   -3.033333e-03 -0.0495106511 0.0434439844 1.0000000
7421 3:5-UTC:4   1.030000e-02 -0.0361773178 0.0567773178 0.9999967
7422 UTC:5-UTC:4 1.070000e-02 -0.0357773178 0.0571773178 0.9999941
7423 2:5-1:5    3.033333e-03 -0.0434439844 0.0495106511 1.0000000
7424 3:5-1:5    1.636667e-02 -0.0301106511 0.0628439844 0.9977333
7425 UTC:5-1:5   1.676667e-02 -0.0297106511 0.0632439844 0.9969737
7426 3:5-2:5    1.333333e-02 -0.0331439844 0.0598106511 0.9998451
7427 UTC:5-2:5   1.373333e-02 -0.0327439844 0.0602106511 0.9997665
7428 UTC:5-3:5   4.000000e-04 -0.0460773178 0.0468773178 1.0000000
7429
7430 sample families
7431
7432      Df Sum Sq Mean Sq F value Pr(>F)
7433 block      3  47.65 15.883  5.606 0.00264 ***
7434 event      4  50.50 12.625  4.456 0.00451 ***
7435 block:event 12  57.77  4.814  1.699 0.10374
7436 Residuals  40 113.33  2.833
7437 ---
7438 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
7439 Levene's Test for Homogeneity of Variance (center = median)
7440      Df F value Pr(>F)
7441 group 19  1.1484 0.3454
7442      40
7443
7444 Shapiro-Wilk normality test
7445
7446 data: residuals(family.model)
7447 W = 0.95754, p-value = 0.03571
7448
7449 Tukey multiple comparisons of means
7450 95% family-wise confidence level
7451
7452 Fit: aov(formula = family.model)
7453
7454 $block
7455      diff      lwr      upr     p adj
7456 2-1  1.332268e-15 -1.64748301  1.6474830 1.0000000
7457 3-1  1.600000e+00 -0.04748301  3.2474830 0.0597215
7458 UTC-1 -8.666667e-01 -2.51414968  0.7808163 0.5006469
7459 3-2  1.600000e+00 -0.04748301  3.2474830 0.0597215
7460 UTC-2 -8.666667e-01 -2.51414968  0.7808163 0.5006469
7461 UTC-3 -2.466667e+00 -4.11414968 -0.8191837 0.0014063
7462
7463 $event
7464      diff      lwr      upr     p adj
7465 2-1  2.250000e+00  0.2873390 4.212661 0.0176210
7466 3-1  2.250000e+00  0.2873390 4.212661 0.0176210
7467 4-1  2.333333e+00  0.3706723 4.295994 0.0127854
7468 5-1  2.333333e+00  0.3706723 4.295994 0.0127854
7469 3-2 -8.881784e-16 -1.9626610  1.962661 1.0000000
7470 4-2  8.333333e-02 -1.8793277  2.045994 0.9999489
7471 5-2  8.333333e-02 -1.8793277  2.045994 0.9999489
7472 4-3  8.333333e-02 -1.8793277  2.045994 0.9999489
7473 5-3  8.333333e-02 -1.8793277  2.045994 0.9999489
7474 5-4 -1.332268e-15 -1.9626610  1.962661 1.0000000
7475
7476 $`block:event`
7477      diff      lwr      upr     p adj
7478 2:1-1:1  3.333333e-01 -4.8732320  5.5398987 1.0000000
7479 3:1-1:1  6.666667e-01 -4.5398987  5.8732320 1.0000000
7480 UTC:1-1:1 6.666667e-01 -4.5398987  5.8732320 1.0000000
7481 1:2-1:1  2.333333e+00 -2.8732320  7.5398987 0.9697976
7482 2:2-1:1  4.666667e+00 -0.5398987  9.8732320 0.1263634
7483 3:2-1:1  3.000000e+00 -2.2065654  8.2065654 0.7937827
7484 UTC:2-1:1 6.666667e-01 -4.5398987  5.8732320 1.0000000
7485 1:3-1:1  3.333333e+00 -1.8732320  8.5398987 0.6412017
7486 2:3-1:1  1.000000e+00 -4.2065654  6.2065654 0.9999997
7487 3:3-1:1  4.666667e+00 -0.5398987  9.8732320 0.1263634
7488 UTC:3-1:1 1.666667e+00 -3.5398987  6.8732320 0.9993171
7489 1:4-1:1  2.666667e+00 -2.5398987  7.8732320 0.9069239
7490 2:4-1:1  1.333333e+00 -3.8732320  6.5398987 0.9999700
7491 3:4-1:1  6.000000e+00  0.7934346 11.2065654 0.0107075
7492 UTC:4-1:1 1.000000e+00 -4.2065654  6.2065654 0.9999997
7493 1:5-1:1  2.000000e+00 -3.2065654  7.2065654 0.9937694
7494 2:5-1:1  3.000000e+00 -2.2065654  8.2065654 0.7937827
7495 3:5-1:1  4.000000e+00 -1.2065654  9.2065654 0.3274842
7496 UTC:5-1:1 2.000000e+00 -3.2065654  7.2065654 0.9937694
7497 3:1-2:1  3.333333e-01 -4.8732320  5.5398987 1.0000000
7498 UTC:1-2:1 3.333333e-01 -4.8732320  5.5398987 1.0000000
7499 1:2-2:1  2.000000e+00 -3.2065654  7.2065654 0.9937694
7500 2:2-2:1  4.333333e+00 -0.8732320  9.5398987 0.2097286
7501 3:2-2:1  2.666667e+00 -2.5398987  7.8732320 0.9069239
7502 UTC:2-2:1 3.333333e-01 -4.8732320  5.5398987 1.0000000

```

7503	1:3-2:1	3.000000e+00	-2.2065654	8.2065654	0.7937827
7504	2:3-2:1	6.666667e-01	-4.5398987	5.8732320	1.0000000
7505	3:3-2:1	4.333333e+00	-0.8732320	9.5398987	0.2097286
7506	UTC:3-2:1	1.333333e+00	-3.8732320	6.5398987	0.9999700
7507	1:4-2:1	2.333333e+00	-2.8732320	7.5398987	0.9697976
7508	2:4-2:1	1.000000e+00	-4.2065654	6.2065654	0.9999997
7509	3:4-2:1	5.666667e+00	0.4601013	10.8732320	0.0208986
7510	UTC:4-2:1	6.666667e-01	-4.5398987	5.8732320	1.0000000
7511	1:5-2:1	1.666667e+00	-3.5398987	6.8732320	0.9993171
7512	2:5-2:1	2.666667e+00	-2.5398987	7.8732320	0.9069239
7513	3:5-2:1	3.666667e+00	-1.5398987	8.8732320	0.4766093
7514	UTC:5-2:1	1.666667e+00	-3.5398987	6.8732320	0.9993171
7515	UTC:1-3:1	6.661338e-16	-5.2065654	5.2065654	1.0000000
7516	1:2-3:1	1.666667e+00	-3.5398987	6.8732320	0.9993171
7517	2:2-3:1	4.000000e+00	-1.2065654	9.2065654	0.3274842
7518	3:2-3:1	2.333333e+00	-2.8732320	7.5398987	0.9697976
7519	UTC:2-3:1	1.887379e-15	-5.2065654	5.2065654	1.0000000
7520	1:3-3:1	2.666667e+00	-2.5398987	7.8732320	0.9069239
7521	2:3-3:1	3.333333e-01	-4.8732320	5.5398987	1.0000000
7522	3:3-3:1	4.000000e+00	-1.2065654	9.2065654	0.3274842
7523	UTC:3-3:1	1.000000e+00	-4.2065654	6.2065654	0.9999997
7524	1:4-3:1	2.000000e+00	-3.2065654	7.2065654	0.9937694
7525	2:4-3:1	6.666667e-01	-4.5398987	5.8732320	1.0000000
7526	3:4-3:1	5.333333e+00	0.1267680	10.5398987	0.0395800
7527	UTC:4-3:1	3.333333e-01	-4.8732320	5.5398987	1.0000000
7528	1:5-3:1	1.333333e+00	-3.8732320	6.5398987	0.9999700
7529	2:5-3:1	2.333333e+00	-2.8732320	7.5398987	0.9697976
7530	3:5-3:1	3.333333e+00	-1.8732320	8.5398987	0.6412017
7531	UTC:5-3:1	1.333333e+00	-3.8732320	6.5398987	0.9999700
7532	1:2-UTC:1	1.666667e+00	-3.5398987	6.8732320	0.9993171
7533	2:2-UTC:1	4.000000e+00	-1.2065654	9.2065654	0.3274842
7534	3:2-UTC:1	2.333333e+00	-2.8732320	7.5398987	0.9697976
7535	UTC:2-UTC:1	1.2212425e-15	-5.2065654	5.2065654	1.0000000
7536	1:3-UTC:1	2.666667e+00	-2.5398987	7.8732320	0.9069239
7537	2:3-UTC:1	3.333333e-01	-4.8732320	5.5398987	1.0000000
7538	3:3-UTC:1	4.000000e+00	-1.2065654	9.2065654	0.3274842
7539	UTC:3-UTC:1	1.000000e+00	-4.2065654	6.2065654	0.9999997
7540	1:4-UTC:1	2.000000e+00	-3.2065654	7.2065654	0.9937694
7541	2:4-UTC:1	6.666667e-01	-4.5398987	5.8732320	1.0000000
7542	3:4-UTC:1	5.333333e+00	0.1267680	10.5398987	0.0395800
7543	UTC:4-UTC:1	3.333333e-01	-4.8732320	5.5398987	1.0000000
7544	1:5-UTC:1	1.333333e+00	-3.8732320	6.5398987	0.9999700
7545	2:5-UTC:1	2.333333e+00	-2.8732320	7.5398987	0.9697976
7546	3:5-UTC:1	3.333333e+00	-1.8732320	8.5398987	0.6412017
7547	UTC:5-UTC:1	1.333333e+00	-3.8732320	6.5398987	0.9999700
7548	2:2-1:2	2.333333e+00	-2.8732320	7.5398987	0.9697976
7549	3:2-1:2	6.666667e-01	-4.5398987	5.8732320	1.0000000
7550	UTC:2-1:2	-1.666667e+00	-6.8732320	3.5398987	0.9993171
7551	1:3-1:2	1.000000e+00	-4.2065654	6.2065654	0.9999997
7552	2:3-1:2	-1.333333e+00	-6.5398987	3.8732320	0.9999700
7553	3:3-1:2	2.333333e+00	-2.8732320	7.5398987	0.9697976
7554	UTC:3-1:2	-6.666667e-01	-5.8732320	4.5398987	1.0000000
7555	1:4-1:2	3.333333e-01	-4.8732320	5.5398987	1.0000000
7556	2:4-1:2	-1.000000e+00	-6.2065654	4.2065654	0.9999997
7557	3:4-1:2	3.666667e+00	-1.5398987	8.8732320	0.4766093
7558	UTC:4-1:2	-1.333333e+00	-6.5398987	3.8732320	0.9999700
7559	1:5-1:2	-3.333333e-01	-5.5398987	4.8732320	1.0000000
7560	2:5-1:2	6.666667e-01	-4.5398987	5.8732320	1.0000000
7561	3:5-1:2	1.666667e+00	-3.5398987	6.8732320	0.9993171
7562	UTC:5-1:2	-3.333333e-01	-5.5398987	4.8732320	1.0000000
7563	3:2-2:2	-1.666667e+00	-6.8732320	3.5398987	0.9993171
7564	UTC:2-2:2	-4.000000e+00	-9.2065654	1.2065654	0.3274842
7565	1:3-2:2	-1.333333e+00	-6.5398987	3.8732320	0.9999700
7566	2:3-2:2	-3.666667e+00	-8.8732320	1.5398987	0.4766093
7567	3:3-2:2	-8.881784e-16	-5.2065654	5.2065654	1.0000000
7568	UTC:3-2:2	-3.000000e+00	-8.2065654	2.2065654	0.7937827
7569	1:4-2:2	-2.000000e+00	-7.2065654	3.2065654	0.9937694
7570	2:4-2:2	-3.333333e+00	-8.5398987	1.8732320	0.6412017
7571	3:4-2:2	1.333333e+00	-3.8732320	6.5398987	0.9999700
7572	UTC:4-2:2	-3.666667e+00	-8.8732320	1.5398987	0.4766093
7573	1:5-2:2	2.666667e+00	-7.8732320	2.5398987	0.9069239
7574	2:5-2:2	-1.666667e+00	-6.8732320	3.5398987	0.9993171
7575	3:5-2:2	-6.666667e-01	-5.8732320	4.5398987	1.0000000
7576	UTC:5-2:2	-2.666667e+00	-7.8732320	2.5398987	0.9069239
7577	UTC:2-3:2	-2.333333e+00	-7.5398987	2.8732320	0.9697976
7578	1:3-3:2	3.333333e-01	-4.8732320	5.5398987	1.0000000
7579	2:3-3:2	-2.000000e+00	-7.2065654	3.2065654	0.9937694
7580	3:3-3:2	1.666667e+00	-3.5398987	6.8732320	0.9993171
7581	UTC:3-3:2	-1.333333e+00	-6.5398987	3.8732320	0.9999700
7582	1:4-3:2	-3.333333e-01	-5.5398987	4.8732320	1.0000000
7583	2:4-3:2	-1.666667e+00	-6.8732320	3.5398987	0.9993171
7584	3:4-3:2	3.000000e+00	-2.2065654	8.2065654	0.7937827
7585	UTC:4-3:2	-2.000000e+00	-7.2065654	3.2065654	0.9937694
7586	1:5-3:2	-1.000000e+00	-6.2065654	4.2065654	0.9999997
7587	2:5-3:2	-2.220446e-15	-5.2065654	5.2065654	1.0000000
7588	3:5-3:2	1.000000e+00	-4.2065654	6.2065654	0.9999997
7589	UTC:5-3:2	-1.000000e+00	-6.2065654	4.2065654	0.9999997
7590	1:3-UTC:2	2.666667e+00	-2.5398987	7.8732320	0.9069239
7591	2:3-UTC:2	3.333333e-01	-4.8732320	5.5398987	1.0000000
7592	3:3-UTC:2	4.000000e+00	-1.2065654	9.2065654	0.3274842
7593	UTC:3-UTC:2	1.000000e+00	-4.2065654	6.2065654	0.9999997
7594	1:4-UTC:2	2.000000e+00	-3.2065654	7.2065654	0.9937694
7595	2:4-UTC:2	6.666667e-01	-4.5398987	5.8732320	1.0000000
7596	3:4-UTC:2	5.333333e+00	0.1267680	10.5398987	0.0395800
7597	UTC:4-UTC:2	3.333333e-01	-4.8732320	5.5398987	1.0000000

```

7598 1:5-UTC:2 1.333333e+00 -3.8732320 6.5398987 0.9999700
7599 2:5-UTC:2 2.333333e+00 -2.8732320 7.5398987 0.9697976
7600 3:5-UTC:2 3.333333e+00 -1.8732320 8.5398987 0.6412017
7601 UTC:5-UTC:2 1.333333e+00 -3.8732320 6.5398987 0.9999700
7602 2:3-1:3 -2.333333e+00 -7.5398987 2.8732320 0.9697976
7603 3:3-1:3 1.333333e+00 -3.8732320 6.5398987 0.9999700
7604 UTC:3-1:3 -1.666667e+00 -6.8732320 3.5398987 0.9993171
7605 1:4-1:3 -6.666667e-01 -5.8732320 4.5398987 1.0000000
7606 2:4-1:3 -2.000000e+00 -7.2065654 3.2065654 0.9937694
7607 3:4-1:3 2.666667e+00 -2.5398987 7.8732320 0.9069239
7608 UTC:4-1:3 -2.333333e+00 -7.5398987 2.8732320 0.9697976
7609 1:5-1:3 -1.333333e+00 -6.5398987 3.8732320 0.9999700
7610 2:5-1:3 -3.333333e-01 -5.5398987 4.8732320 1.0000000
7611 3:5-1:3 6.666667e-01 -4.5398987 5.8732320 1.0000000
7612 UTC:5-1:3 -1.333333e+00 -6.5398987 3.8732320 0.9999700
7613 3:3-2:3 3.666667e+00 -1.5398987 8.8732320 0.4766093
7614 UTC:3-2:3 6.666667e-01 -4.5398987 5.8732320 1.0000000
7615 1:4-2:3 1.666667e+00 -3.5398987 6.8732320 0.9993171
7616 2:4-2:3 3.333333e-01 -4.8732320 5.5398987 1.0000000
7617 3:4-2:3 5.000000e+00 -0.2065654 10.2065654 0.0722820
7618 UTC:4-2:3 -3.330669e-16 -5.2065654 5.2065654 1.0000000
7619 1:5-2:3 1.000000e+00 -4.2065654 6.2065654 0.9999997
7620 2:5-2:3 2.000000e+00 -3.2065654 7.2065654 0.9937694
7621 3:5-2:3 3.000000e+00 -2.2065654 8.2065654 0.7937827
7622 UTC:5-2:3 1.000000e+00 -4.2065654 6.2065654 0.9999997
7623 UTC:3-3:3 -3.000000e+00 -8.2065654 2.2065654 0.7937827
7624 1:4-3:3 -2.000000e+00 -7.2065654 3.2065654 0.9937694
7625 2:4-3:3 -3.333333e+00 -8.5398987 1.8732320 0.6412017
7626 3:4-3:3 1.333333e+00 -3.8732320 6.5398987 0.9999700
7627 UTC:4-3:3 -3.666667e+00 -8.8732320 1.5398987 0.4766093
7628 1:5-3:3 -2.666667e+00 -7.8732320 2.5398987 0.9069239
7629 2:5-3:3 -1.666667e+00 -6.8732320 3.5398987 0.9993171
7630 3:5-3:3 -6.666667e-01 -5.8732320 4.5398987 1.0000000
7631 UTC:5-3:3 -2.666667e+00 -7.8732320 2.5398987 0.9069239
7632 1:4-UTC:3 1.000000e+00 -4.2065654 6.2065654 0.9999997
7633 2:4-UTC:3 -3.333333e-01 -5.5398987 4.8732320 1.0000000
7634 3:4-UTC:3 4.333333e+00 -0.8732320 9.5398987 0.2097286
7635 UTC:4-UTC:3 -6.666667e-01 -5.8732320 4.5398987 1.0000000
7636 1:5-UTC:3 3.333333e-01 -4.8732320 5.5398987 1.0000000
7637 2:5-UTC:3 1.333333e+00 -3.8732320 6.5398987 0.9999700
7638 3:5-UTC:3 2.333333e+00 -2.8732320 7.5398987 0.9697976
7639 UTC:5-UTC:3 3.333333e-01 -4.8732320 5.5398987 1.0000000
7640 2:4-1:4 -1.333333e+00 -6.5398987 3.8732320 0.9999700
7641 3:4-1:4 3.333333e+00 -1.8732320 8.5398987 0.6412017
7642 UTC:4-1:4 -1.666667e+00 -6.8732320 3.5398987 0.9993171
7643 1:5-1:4 -6.666667e-01 -5.8732320 4.5398987 1.0000000
7644 2:5-1:4 3.333333e-01 -4.8732320 5.5398987 1.0000000
7645 3:5-1:4 1.333333e+00 -3.8732320 6.5398987 0.9999700
7646 UTC:5-1:4 -6.666667e-01 -5.8732320 4.5398987 1.0000000
7647 3:4-2:4 4.666667e+00 -0.5398987 9.8732320 0.1263634
7648 UTC:4-2:4 -3.333333e-01 -5.5398987 4.8732320 1.0000000
7649 1:5-2:4 6.666667e-01 -4.5398987 5.8732320 1.0000000
7650 2:5-2:4 1.666667e+00 -3.5398987 6.8732320 0.9993171
7651 3:5-2:4 2.666667e+00 -2.5398987 7.8732320 0.9069239
7652 UTC:5-2:4 6.666667e-01 -4.5398987 5.8732320 1.0000000
7653 UTC:4-3:4 -5.000000e+00 -10.2065654 0.2065654 0.0722820
7654 1:5-3:4 -4.000000e+00 -9.2065654 1.2065654 0.3274842
7655 2:5-3:4 -3.000000e+00 -8.2065654 2.2065654 0.7937827
7656 3:5-3:4 -2.000000e+00 -7.2065654 3.2065654 0.9937694
7657 UTC:5-3:4 -4.000000e+00 -9.2065654 1.2065654 0.3274842
7658 1:5-UTC:4 1.000000e+00 -4.2065654 6.2065654 0.9999997
7659 2:5-UTC:4 2.000000e+00 -3.2065654 7.2065654 0.9937694
7660 3:5-UTC:4 3.000000e+00 -2.2065654 8.2065654 0.7937827
7661 UTC:5-UTC:4 1.000000e+00 -4.2065654 6.2065654 0.9999997
7662 2:5-1:5 1.000000e+00 -4.2065654 6.2065654 0.9999997
7663 3:5-1:5 2.000000e+00 -3.2065654 7.2065654 0.9937694
7664 UTC:5-1:5 8.881784e-16 -5.2065654 5.2065654 1.0000000
7665 3:5-2:5 1.000000e+00 -4.2065654 6.2065654 0.9999997
7666 UTC:5-2:5 -1.000000e+00 -6.2065654 4.2065654 0.9999997
7667 UTC:5-3:5 -2.000000e+00 -7.2065654 3.2065654 0.9937694
7668
7669 Hemiptera sweep
7670 sample mass
7671
7672
7673 Df Sum Sq Mean Sq F value Pr(>F)
7674 block 3 0.005504 0.001835 3.348 0.0284 *
7675 event 4 0.020188 0.005047 9.209 2.26e-05 ***
7676 block:event 12 0.011767 0.000981 1.789 0.0837 .
7677 Residuals 40 0.021922 0.000548
7678 ---
7679 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
7680 Levene's Test for Homogeneity of Variance (center = median)
7681 Df F value Pr(>F)
7682 group 19 0.6272 0.8623
7683 40
7684 Shapiro-Wilk normality test
7685 data: residuals(mass.model)
7686 W = 0.947, p-value = 0.01129
7687
7688 Tukey multiple comparisons of means
7689 95% family-wise confidence level
7690
7691
7692

```

```

7693 Fit: aov(formula = mass.model)
7694
7695 $block
7696   diff      lwr      upr     p adj
7697 2-1 -0.012373333 -0.035286468 0.0105398016 0.4781015
7698 3-1  0.009086667 -0.013826468 0.0319998016 0.7136815
7699 UTC-1 -0.014506667 -0.037419802 0.0084064682 0.3386271
7700 3-2  0.021460000 -0.001453135 0.0443731349 0.0735176
7701 UTC-2 -0.002133333 -0.025046468 0.0207798016 0.9944540
7702 UTC-3 -0.023593333 -0.046506468 -0.0006801984 0.0414666
7703
7704 $event
7705   diff      lwr      upr     p adj
7706 2-1  0.008966667 -0.018329953 0.03626329 0.8802411
7707 3-1 -0.000500000 -0.027796619 0.02679662 0.9999982
7708 4-1  0.028941667 0.001645047 0.05623829 0.0329642
7709 5-1  0.046666667 0.019370047 0.07396329 0.0001603
7710 3-2 -0.009466667 -0.036763286 0.01782995 0.8580243
7711 4-2  0.019975000 -0.007321619 0.04727162 0.2443242
7712 5-2  0.037700000 0.010403381 0.06499662 0.0027538
7713 4-3  0.029441667 0.002145047 0.05673829 0.0289377
7714 5-3  0.047166667 0.019870047 0.07446329 0.0001361
7715 5-4  0.017725000 -0.009571619 0.04502162 0.3578601
7716
7717 $`block:event`
7718   diff      lwr      upr     p adj
7719 2:1-1:1  0.002600000 -6.981273e-02 0.075012725 1.0000000
7720 3:1-1:1  0.016666667 -5.574606e-02 0.089079392 0.9999941
7721 UTC:1-1:1 0.005600000 -6.681273e-02 0.078012725 1.0000000
7722 1:2-1:1  0.002933333 -6.947939e-02 0.075346059 1.0000000
7723 2:2-1:1  0.037733333 -3.467939e-02 0.110146059 0.8941911
7724 3:2-1:1  0.015900000 -5.651273e-02 0.088312725 0.9999972
7725 UTC:2-1:1 0.004166667 -6.824606e-02 0.076579392 1.0000000
7726 1:3-1:1  0.003333333 -6.907939e-02 0.075746059 1.0000000
7727 2:3-1:1  0.000133333 -7.227939e-02 0.072546059 1.0000000
7728 3:3-1:1  0.015366667 -5.704606e-02 0.087779392 0.9999984
7729 UTC:3-1:1 0.004033333 -6.837939e-02 0.076446059 1.0000000
7730 1:4-1:1  0.042100000 -3.031273e-02 0.114512725 0.7825723
7731 2:4-1:1  0.013766667 -5.864606e-02 0.086179392 0.9999997
7732 3:4-1:1  0.063733333 -8.679392e-03 0.136146059 0.1443628
7733 UTC:4-1:1 0.021033333 -5.137939e-02 0.093446059 0.9998158
7734 1:5-1:1  0.089033333 -1.662061e-02 0.161446059 0.0046316
7735 2:5-1:1  0.021300000 -5.111273e-02 0.093712725 0.9997807
7736 3:5-1:1  0.071166667 -1.246059e-03 0.143579392 0.0587807
7737 UTC:5-1:1 0.030033333 -4.237939e-02 0.102446059 0.9858370
7738 3:1-2:1  0.014066667 -5.834606e-02 0.086479392 0.9999996
7739 UTC:1-2:1 0.003000000 -6.941273e-02 0.075412725 1.0000000
7740 1:2-2:1  0.000333333 -7.207939e-02 0.072746059 1.0000000
7741 2:2-2:1  0.035133333 -3.727939e-02 0.107546059 0.9393408
7742 3:2-2:1  0.013300000 -5.911273e-02 0.085712725 0.9999998
7743 UTC:2-2:1 0.001566667 -7.084606e-02 0.073979392 1.0000000
7744 1:3-2:1  0.000733333 -7.167939e-02 0.073146059 1.0000000
7745 2:3-2:1  -0.002466667 -7.487939e-02 0.069946059 1.0000000
7746 3:3-2:1  0.012766667 -5.964606e-02 0.085179392 0.9999999
7747 UTC:3-2:1 0.001433333 -7.097939e-02 0.073846059 1.0000000
7748 1:4-2:1  0.039500000 -3.291273e-02 0.111912725 0.8541940
7749 2:4-2:1  0.011166667 -6.124606e-02 0.083579392 1.0000000
7750 3:4-2:1  0.061133333 -1.127939e-02 0.133546059 0.1916325
7751 UTC:4-2:1 0.018433333 -5.397939e-02 0.090846059 0.9999725
7752 1:5-2:1  0.086433333 -1.402061e-02 0.158846059 0.0068683
7753 2:5-2:1  0.018700000 -5.371273e-02 0.091112725 0.9999660
7754 3:5-2:1  0.068566667 -3.846059e-03 0.140979392 0.0815905
7755 UTC:5-2:1 0.027433333 -4.497939e-02 0.099846059 0.9946667
7756 UTC:1-3:1  -0.010666667 -8.347939e-02 0.061346059 1.0000000
7757 1:2-3:1  -0.013733333 -8.614606e-02 0.058679392 0.9999997
7758 2:2-3:1  0.021066667 -5.134606e-02 0.093479392 0.9998117
7759 3:2-3:1  -0.000766667 -7.317939e-02 0.071646059 1.0000000
7760 UTC:2-3:1  -0.012500000 -8.491273e-02 0.059912725 0.9999999
7761 1:3-3:1  -0.013333333 -8.574606e-02 0.059079392 0.9999998
7762 2:3-3:1  -0.016533333 -8.894606e-02 0.055879392 0.9999948
7763 3:3-3:1  -0.001300000 -7.371273e-02 0.071112725 1.0000000
7764 UTC:3-3:1  -0.012633333 -8.504606e-02 0.059779392 0.9999999
7765 1:4-3:1  0.025433333 -4.697939e-02 0.097846059 0.9978037
7766 2:4-3:1  -0.002900000 -7.531273e-02 0.069512725 1.0000000
7767 3:4-3:1  0.047066667 -2.534606e-02 0.119479392 0.6161214
7768 UTC:4-3:1  0.004366667 -6.804606e-02 0.076779392 1.0000000
7769 1:5-3:1  0.072366667 -4.605854e-05 0.144779392 0.0503025
7770 2:5-3:1  0.004633333 -6.777939e-02 0.077046059 1.0000000
7771 3:5-3:1  0.054500000 -1.791273e-02 0.126912725 0.3613686
7772 UTC:5-3:1  0.013366667 -5.904606e-02 0.085779392 0.9999998
7773 1:2-UTC:1 -0.002666667 -7.507939e-02 0.069746059 1.0000000
7774 2:2-UTC:1  0.032133333 -4.027939e-02 0.104546059 0.9724608
7775 3:2-UTC:1  0.010300000 -6.211273e-02 0.082712725 1.0000000
7776 UTC:2-UTC:1 -0.001433333 -7.384606e-02 0.070979392 1.0000000
7777 1:3-UTC:1 -0.002266667 -7.467939e-02 0.070146059 1.0000000
7778 2:3-UTC:1 -0.005466667 -7.787939e-02 0.066946059 1.0000000
7779 3:3-UTC:1  0.009766667 -6.264606e-02 0.082179392 1.0000000
7780 UTC:3-UTC:1 -0.001566667 -7.397939e-02 0.070846059 1.0000000
7781 1:4-UTC:1  0.036500000 -3.591273e-02 0.108912725 0.9176387
7782 2:4-UTC:1  0.008166667 -6.424606e-02 0.080579392 1.0000000
7783 3:4-UTC:1  0.058133333 -1.427939e-02 0.130546059 0.2595996
7784 UTC:4-UTC:1  0.015433333 -5.697939e-02 0.087846059 0.9999982
7785 1:5-UTC:1  0.083433333 -1.102061e-02 0.155846059 0.0107303
7786 2:5-UTC:1  0.015700000 -5.671273e-02 0.088112725 0.9999977
7787 3:5-UTC:1  0.065566667 -6.846059e-03 0.137979392 0.1170119

```

7788	UTC:5-UTC:1	0.0244333333	-4.797939e-02	0.096846059	0.9986606
7789	2:2-1:2	0.034800000	-3.761273e-02	0.107212725	0.9439712
7790	3:2-1:2	0.0129666667	-5.944606e-02	0.085379392	0.9999999
7791	UTC:2-1:2	0.0012333333	-7.117939e-02	0.073646059	1.0000000
7792	1:3-1:2	0.000400000	-7.201273e-02	0.072812725	1.0000000
7793	2:3-1:2	-0.002800000	-7.521273e-02	0.069612725	1.0000000
7794	3:3-1:2	0.0124333333	-5.997939e-02	0.084846059	1.0000000
7795	UTC:3-1:2	0.001100000	-7.131273e-02	0.073512725	1.0000000
7796	1:4-1:2	0.0391666667	-3.324606e-02	0.111579392	0.8623076
7797	2:4-1:2	0.0108333333	-6.157939e-02	0.083246059	1.0000000
7798	3:4-1:2	0.060800000	-1.161273e-02	0.133212725	0.1984586
7799	UTC:4-1:2	0.018100000	-5.431273e-02	0.090512725	0.9999791
7800	1:5-1:2	0.086100000	1.368727e-02	0.158512725	0.0072208
7801	2:5-1:2	0.0183666667	-5.404606e-02	0.090779392	0.9999740
7802	3:5-1:2	0.0682333333	-4.179392e-03	0.140646059	0.0850085
7803	UTC:5-1:2	0.027100000	-4.531273e-02	0.099512725	0.9953591
7804	3:2-2:2	-0.0218333333	-9.424606e-02	0.050579392	0.9996922
7805	UTC:2-2:2	-0.0335666667	-1.059794e-01	0.038846059	0.9589601
7806	1:3-2:2	-0.034400000	-1.068127e-01	0.038012725	0.9491962
7807	2:3-2:2	-0.037600000	-1.100127e-01	0.034812725	0.8969047
7808	3:3-2:2	-0.0223666667	-9.477939e-02	0.050046059	0.9995739
7809	UTC:3-2:2	-0.033700000	-1.061127e-01	0.038712725	0.9574969
7810	1:4-2:2	0.0043666667	-6.804606e-02	0.076779392	1.0000000
7811	2:4-2:2	-0.0239666667	-9.637939e-02	0.048446059	0.9989501
7812	3:4-2:2	0.026000000	-4.641273e-02	0.098412725	0.9971383
7813	UTC:4-2:2	-0.016700000	-8.911273e-02	0.055712725	0.9999939
7814	1:5-2:2	0.051300000	-2.111273e-02	0.123712725	0.4661051
7815	2:5-2:2	-0.0164333333	-8.884606e-02	0.055979392	0.9999953
7816	3:5-2:2	0.0334333333	-3.897939e-02	0.105846059	0.9603864
7817	UTC:5-2:2	-0.007700000	-8.011273e-02	0.064712725	1.0000000
7818	UTC:2-3:2	-0.0117333333	-8.414606e-02	0.060679392	1.0000000
7819	1:3-3:2	-0.0125666667	-8.497939e-02	0.059846059	0.9999999
7820	2:3-3:2	-0.0157666667	-8.817939e-02	0.056646059	0.9999975
7821	3:3-3:2	-0.0005333333	-7.294606e-02	0.071879392	1.0000000
7822	UTC:3-3:2	-0.0118666667	-8.427939e-02	0.060546059	1.0000000
7823	1:4-3:2	0.026200000	-4.621273e-02	0.098612725	0.9968663
7824	2:4-3:2	-0.0021333333	-7.454606e-02	0.070279392	1.0000000
7825	3:4-3:2	0.0478333333	-2.457939e-02	0.120246059	0.5887323
7826	UTC:4-3:2	0.0051333333	-6.727939e-02	0.077546059	1.0000000
7827	1:5-3:2	0.0731333333	7.206081e-04	0.145546059	0.0454751
7828	2:5-3:2	0.005400000	-6.701273e-02	0.077812725	1.0000000
7829	3:5-3:2	0.0552666667	-1.714606e-02	0.127679392	0.3382119
7830	UTC:5-3:2	0.0141333333	-5.827939e-02	0.086546059	0.9999996
7831	1:3-UTC:2	-0.0008333333	-7.324606e-02	0.071579392	1.0000000
7832	2:3-UTC:2	-0.0040333333	-7.644606e-02	0.068379392	1.0000000
7833	3:3-UTC:2	0.011200000	-6.121273e-02	0.083612725	1.0000000
7834	UTC:3-UTC:2	-0.0001333333	-7.254606e-02	0.072279392	1.0000000
7835	1:4-UTC:2	0.0379333333	-3.447939e-02	0.110346059	0.8900396
7836	2:4-UTC:2	0.009600000	-6.281273e-02	0.082012725	1.0000000
7837	3:4-UTC:2	0.0595666667	-1.284606e-02	0.131979392	0.2252842
7838	UTC:4-UTC:2	0.0168666667	-5.554606e-02	0.089279392	0.9999929
7839	1:5-UTC:2	0.0848666667	1.245394e-02	0.157279392	0.0086808
7840	2:5-UTC:2	0.0171333333	-5.527939e-02	0.089546059	0.9999909
7841	3:5-UTC:2	0.067000000	-5.412725e-03	0.139412725	0.0987420
7842	UTC:5-UTC:2	0.0258666667	-4.654606e-02	0.098279392	0.9973085
7843	2:3-1:3	-0.003200000	-7.561273e-02	0.069212725	1.0000000
7844	3:3-1:3	0.0120333333	-6.037939e-02	0.084446059	1.0000000
7845	UTC:3-1:3	0.000700000	-7.171273e-02	0.073112725	1.0000000
7846	1:4-1:3	0.0387666667	-3.364606e-02	0.111179392	0.8717001
7847	2:4-1:3	0.0104333333	-6.197939e-02	0.082846059	1.0000000
7848	3:4-1:3	0.060400000	-1.201273e-02	0.132812725	0.2068869
7849	UTC:4-1:3	0.017700000	-5.471273e-02	0.090112725	0.9999851
7850	1:5-1:3	0.085700000	1.328727e-02	0.158112725	0.0076665
7851	2:5-1:3	0.0179666667	-5.444606e-02	0.090379392	0.9999813
7852	3:5-1:3	0.0678333333	-4.579392e-03	0.140246059	0.0892717
7853	UTC:5-1:3	0.026700000	-4.571273e-02	0.099112725	0.9960900
7854	3:3-2:3	0.0152333333	-5.717939e-02	0.087646059	0.9999986
7855	UTC:3-2:3	0.003900000	-6.851273e-02	0.076312725	1.0000000
7856	1:4-2:3	0.0419666667	-3.044606e-02	0.114379392	0.7865766
7857	2:4-2:3	0.0136333333	-5.877939e-02	0.086046059	0.9999998
7858	3:4-2:3	0.063600000	-8.812725e-03	0.136012725	0.1465377
7859	UTC:4-2:3	0.020900000	-5.151273e-02	0.093312725	0.9998314
7860	1:5-2:3	0.088900000	1.648727e-02	0.161312725	0.0047268
7861	2:5-2:3	0.0211666667	-5.124606e-02	0.093579392	0.9997989
7862	3:5-2:3	0.0710333333	-1.379392e-03	0.143446059	0.0597969
7863	UTC:5-2:3	0.029900000	-4.251273e-02	0.102312725	0.9864702
7864	UTC:3-3:3	-0.0113333333	-8.374606e-02	0.061079392	1.0000000
7865	1:4-3:3	0.0267333333	-4.567939e-02	0.099146059	0.9960330
7866	2:4-3:3	-0.001600000	-7.401273e-02	0.070812725	1.0000000
7867	3:4-3:3	0.0483666667	-2.404606e-02	0.120779392	0.5696382
7868	UTC:4-3:3	0.0056666667	-6.674606e-02	0.078079392	1.0000000
7869	1:5-3:3	0.0736666667	1.253941e-03	0.146079392	0.0423669
7870	2:5-3:3	0.0059333333	-6.647939e-02	0.078346059	1.0000000
7871	3:5-3:3	0.055800000	-1.661273e-02	0.128212725	0.3226125
7872	UTC:5-3:3	0.0146666667	-5.774606e-02	0.087079392	0.9999992
7873	1:4-UTC:3	0.0380666667	-3.434606e-02	0.110479392	0.8872179
7874	2:4-UTC:3	0.0097333333	-6.267939e-02	0.082146059	1.0000000
7875	3:4-UTC:3	0.059700000	-1.271273e-02	0.132112725	0.2222641
7876	UTC:4-UTC:3	0.017000000	-5.541273e-02	0.089412725	0.9999920
7877	1:5-UTC:3	0.085000000	1.258727e-02	0.157412725	0.0085104
7878	2:5-UTC:3	0.0172666667	-5.514606e-02	0.089679392	0.9999898
7879	3:5-UTC:3	0.0671333333	-5.279392e-03	0.139546059	0.0971719
7880	UTC:5-UTC:3	0.026000000	-4.641273e-02	0.098412725	0.9971383
7881	2:4-1:4	-0.0283333333	-1.007461e-01	0.044079392	0.9923627
7882	3:4-1:4	0.0216333333	-5.077939e-02	0.094046059	0.9997285

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7883 UTC:4-1:4 -0.0210666667 -9.347939e-02 0.051346059 0.9998117
7884 1:5-1:4 0.0469333333 -2.547939e-02 0.119346059 0.6208688
7885 2:5-1:4 -0.020800000 -9.321273e-02 0.051612725 0.9998423
7886 3:5-1:4 0.0290666667 -4.334606e-02 0.101479392 0.9899376
7887 UTC:5-1:4 -0.0120666667 -8.447939e-02 0.060346059 1.0000000
7888 3:4-2:4 0.0499666667 -2.244606e-02 0.122379392 0.5126451
7889 UTC:4-2:4 0.0072666667 -6.514606e-02 0.079679392 1.0000000
7890 1:5-2:4 0.0752666667 2.853941e-03 0.147679392 0.0341607
7891 2:5-2:4 0.0075333333 -6.487939e-02 0.079946059 1.0000000
7892 3:5-2:4 0.057400000 -1.501273e-02 0.129812725 0.2784615
7893 UTC:5-2:4 0.0162666667 -5.614606e-02 0.088679392 0.9999960
7894 UTC:4-3:4 -0.042700000 -1.151127e-01 0.029712725 0.7641622
7895 1:5-3:4 0.025300000 -4.711273e-02 0.097712725 0.9979396
7896 2:5-3:4 -0.0424333333 -1.148461e-01 0.029979392 0.7724217
7897 3:5-3:4 0.0074333333 -6.497939e-02 0.079846059 1.0000000
7898 UTC:5-3:4 -0.033700000 -1.061127e-01 0.038712725 0.9574969
7899 1:5-UTC:4 0.068000000 -4.412725e-03 0.140412725 0.0874736
7900 2:5-UTC:4 0.0002666667 -7.214606e-02 0.072679392 1.0000000
7901 3:5-UTC:4 0.0501333333 -2.227939e-02 0.122546059 0.5067651
7902 UTC:5-UTC:4 0.009000000 -6.341273e-02 0.081412725 1.0000000
7903 2:5-1:5 -0.0677333333 -1.401461e-01 0.004679392 0.0903656
7904 3:5-1:5 -0.0178666667 -9.027939e-02 0.054546059 0.9999828
7905 UTC:5-1:5 -0.059000000 -1.314127e-01 0.013412725 0.2384461
7906 3:5-2:5 0.0498666667 -2.254606e-02 0.122279392 0.5161800
7907 UTC:5-2:5 0.0087333333 -6.367939e-02 0.081146059 1.0000000
7908 UTC:5-3:5 -0.0411333333 -1.135461e-01 0.031279392 0.8108368
7909
7910 sample families
7911
7912 Df Sum Sq Mean Sq F value Pr(>F)
7913 block 3 13.38 4.461 1.821 0.1589
7914 event 4 22.57 5.642 2.303 0.0752 .
7915 block:event 12 25.03 2.086 0.851 0.5997
7916 Residuals 40 98.00 2.450
7917 ---
7918 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
7919 Levene's Test for Homogeneity of Variance (center = median)
7920 Df F value Pr(>F)
7921 group 19 0.4906 0.9514
7922 40
7923
7924 Shapiro-Wilk normality test
7925
7926 data: residuals(family.model)
7927 W = 0.97236, p-value = 0.1901
7928
7929 Tukey multiple comparisons of means
7930 95% family-wise confidence level
7931
7932 Fit: aov(formula = family.model)
7933
7934 $block
7935 diff lwr upr p adj
7936 2-1 -0.4000000 -1.9319873 1.1319873 0.8965221
7937 3-1 0.3333333 -1.1986539 1.8653206 0.9365633
7938 UTC-1 -0.9333333 -2.4653206 0.5986539 0.3722204
7939 3-2 0.73333338 2.2653206 0.5788432
7940 UTC-2 -0.5333333 -2.0653206 0.9986539 0.7873007
7941 UTC-3 -1.2666667 -2.7986539 0.2653206 0.1362706
7942
7943 $event
7944 diff lwr upr p adj
7945 2-1 5.833333e-01 -1.2417366 2.408403 0.8902758
7946 3-1 -2.220446e-16 -1.8250699 1.825070 1.0000000
7947 4-1 7.500000e-01 -1.0750699 2.575070 0.7660655
7948 5-1 1.666667e+00 -0.1584032 3.491737 0.0879401
7949 3-2 -5.833333e-01 -2.4084032 1.241737 0.8902758
7950 4-2 1.666667e-01 -1.6584032 1.991737 0.9989368
7951 5-2 1.083333e+00 -0.7417366 2.908403 0.4482549
7952 4-3 7.500000e-01 -1.0750699 2.575070 0.7660655
7953 5-3 1.666667e+00 -0.1584032 3.491737 0.0879401
7954 5-4 9.166667e-01 -0.9084032 2.741737 0.6096409
7955
7956 $`block:event`
7957 diff lwr upr p adj
7958 2:1-1:1 6.666667e-01 -4.1748957 5.508229 1.0000000
7959 3:1-1:1 1.333333e+00 -3.5082290 6.174896 0.9999132
7960 UTC:1-1:1 1.000000e+00 -3.8415624 5.841562 0.9999989
7961 1:2-1:1 1.666667e+00 -3.1748957 6.508229 0.9982821
7962 2:2-1:1 2.000000e+00 -2.8415624 6.841562 0.9864097
7963 3:2-1:1 1.333333e+00 -3.5082290 6.174896 0.9999132
7964 UTC:2-1:1 3.333333e-01 -4.5082290 5.174896 1.0000000
7965 1:3-1:1 6.666667e-01 -4.1748957 5.508229 1.0000000
7966 2:3-1:1 6.666667e-01 -4.1748957 5.508229 1.0000000
7967 3:3-1:1 1.333333e+00 -3.5082290 6.174896 0.9999132
7968 UTC:3-1:1 3.333333e-01 -4.5082290 5.174896 1.0000000
7969 1:4-1:1 1.333333e+00 -3.5082290 6.174896 0.9999132
7970 2:4-1:1 1.333333e+00 -3.5082290 6.174896 0.9999132
7971 3:4-1:1 2.333333e+00 -2.5082290 7.174896 0.9426299
7972 UTC:4-1:1 1.000000e+00 -3.8415624 5.841562 0.9999989
7973 1:5-1:1 4.333333e+00 -0.5082290 9.174896 0.1277147
7974 2:5-1:1 1.333333e+00 -3.5082290 6.174896 0.9999132
7975 3:5-1:1 3.333333e+00 -1.5082290 8.174896 0.5165952
7976 UTC:5-1:1 6.666667e-01 -4.1748957 5.508229 1.0000000
7977 3:1-2:1 6.666667e-01 -4.1748957 5.508229 1.0000000

```

7978	UTC:1-2:1	3.333333e-01	-4.5082290	5.174896	1.0000000
7979	1:2-2:1	1.000000e+00	-3.8415624	5.841562	0.9999989
7980	2:2-2:1	1.333333e+00	-3.5082290	6.174896	0.9999132
7981	3:2-2:1	6.666667e-01	-4.1748957	5.508229	1.0000000
7982	UTC:2-2:1	-3.333333e-01	-5.1748957	4.508229	1.0000000
7983	1:3-2:1	-1.332268e-15	-4.8415624	4.841562	1.0000000
7984	2:3-2:1	-2.442491e-15	-4.8415624	4.841562	1.0000000
7985	3:3-2:1	6.666667e-01	-4.1748957	5.508229	1.0000000
7986	UTC:3-2:1	-3.333333e-01	-5.1748957	4.508229	1.0000000
7987	1:4-2:1	6.666667e-01	-4.1748957	5.508229	1.0000000
7988	2:4-2:1	6.666667e-01	-4.1748957	5.508229	1.0000000
7989	3:4-2:1	1.666667e+00	-3.1748957	6.508229	0.9982821
7990	UTC:4-2:1	3.333333e-01	-4.5082290	5.174896	1.0000000
7991	1:5-2:1	3.666667e+00	-1.1748957	8.508229	0.3509821
7992	2:5-2:1	6.666667e-01	-4.1748957	5.508229	1.0000000
7993	3:5-2:1	2.666667e+00	-2.1748957	7.508229	0.8445315
7994	UTC:5-2:1	-2.220446e-15	-4.8415624	4.841562	1.0000000
7995	UTC:1-3:1	3.333333e-01	-5.1748957	4.508229	1.0000000
7996	1:2-3:1	3.333333e-01	-4.5082290	5.174896	1.0000000
7997	2:2-3:1	6.666667e-01	-4.1748957	5.508229	1.0000000
7998	3:2-3:1	-1.776357e-15	-4.8415624	4.841562	1.0000000
7999	UTC:2-3:1	-1.000000e+00	-5.8415624	3.841562	0.9999989
8000	1:3-3:1	-6.666667e-01	-5.5082290	4.174896	1.0000000
8001	2:3-3:1	-6.666667e-01	-5.5082290	4.174896	1.0000000
8002	3:3-3:1	-2.886580e-15	-4.8415624	4.841562	1.0000000
8003	UTC:3-3:1	-1.000000e+00	-5.8415624	3.841562	0.9999989
8004	1:4-3:1	-1.332268e-15	-4.8415624	4.841562	1.0000000
8005	2:4-3:1	-4.440892e-16	-4.8415624	4.841562	1.0000000
8006	3:4-3:1	1.000000e+00	-3.8415624	5.841562	0.9999989
8007	UTC:4-3:1	3.333333e-01	-5.1748957	4.508229	1.0000000
8008	1:5-3:1	3.000000e+00	-1.8415624	7.841562	0.6930449
8009	2:5-3:1	2.664535e-15	-4.8415624	4.841562	1.0000000
8010	3:5-3:1	2.000000e+00	-2.8415624	6.841562	0.9864097
8011	UTC:5-3:1	-6.666667e-01	-5.5082290	4.174896	1.0000000
8012	1:2-UTC:1	6.666667e-01	-4.1748957	5.508229	1.0000000
8013	2:2-UTC:1	1.000000e+00	-3.8415624	5.841562	0.9999989
8014	3:2-UTC:1	3.333333e-01	-4.5082290	5.174896	1.0000000
8015	UTC:2-UTC:1	-6.666667e-01	-5.5082290	4.174896	1.0000000
8016	1:3-UTC:1	3.333333e-01	-5.1748957	4.508229	1.0000000
8017	2:3-UTC:1	3.333333e-01	-5.1748957	4.508229	1.0000000
8018	3:3-UTC:1	3.333333e-01	-4.5082290	5.174896	1.0000000
8019	UTC:3-UTC:1	-6.666667e-01	-5.5082290	4.174896	1.0000000
8020	1:4-UTC:1	3.333333e-01	-4.5082290	5.174896	1.0000000
8021	2:4-UTC:1	3.333333e-01	-4.5082290	5.174896	1.0000000
8022	3:4-UTC:1	1.333333e+00	-3.5082290	6.174896	0.9999132
8023	UTC:4-UTC:1	0.000000e+00	-4.8415624	4.841562	1.0000000
8024	1:5-UTC:1	3.333333e+00	-1.5082290	8.174896	0.5165952
8025	2:5-UTC:1	3.333333e-01	-4.5082290	5.174896	1.0000000
8026	3:5-UTC:1	2.333333e+00	-2.5082290	7.174896	0.9426299
8027	UTC:5-UTC:1	-3.333333e-01	-5.1748957	4.508229	1.0000000
8028	2:2-1:2	3.333333e-01	-4.5082290	5.174896	1.0000000
8029	3:2-1:2	-3.333333e-01	-5.1748957	4.508229	1.0000000
8030	UTC:2-1:2	-1.333333e+00	-6.1748957	3.508229	0.9999132
8031	1:3-1:2	-1.000000e+00	-5.8415624	3.841562	0.9999989
8032	2:3-1:2	-1.000000e+00	-5.8415624	3.841562	0.9999989
8033	3:3-1:2	-3.333333e-01	-5.1748957	4.508229	1.0000000
8034	UTC:3-1:2	-1.333333e+00	-6.1748957	3.508229	0.9999132
8035	1:4-1:2	-3.333333e-01	-5.1748957	4.508229	1.0000000
8036	2:4-1:2	-3.333333e-01	-5.1748957	4.508229	1.0000000
8037	3:4-1:2	6.666667e-01	-4.1748957	5.508229	1.0000000
8038	UTC:4-1:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8039	1:5-1:2	2.666667e+00	-2.1748957	7.508229	0.8445315
8040	2:5-1:2	3.333333e-01	-5.1748957	4.508229	1.0000000
8041	3:5-1:2	1.666667e+00	-3.1748957	6.508229	0.9982821
8042	UTC:5-1:2	-1.000000e+00	-5.8415624	3.841562	0.9999989
8043	3:2-2:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8044	UTC:2-2:2	-1.666667e+00	-6.5082290	3.174896	0.9982821
8045	1:3-2:2	-1.333333e+00	-6.1748957	3.508229	0.9999132
8046	2:3-2:2	-1.333333e+00	-6.1748957	3.508229	0.9999132
8047	3:3-2:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8048	UTC:3-2:2	-1.666667e+00	-6.5082290	3.174896	0.9982821
8049	1:4-2:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8050	2:4-2:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8051	3:4-2:2	3.333333e-01	-4.5082290	5.174896	1.0000000
8052	UTC:4-2:2	-1.000000e+00	-5.8415624	3.841562	0.9999989
8053	1:5-2:2	2.333333e+00	-2.5082290	7.174896	0.9426299
8054	2:5-2:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8055	3:5-2:2	1.333333e+00	-3.5082290	6.174896	0.9999132
8056	UTC:5-2:2	-1.333333e+00	-6.1748957	3.508229	0.9999132
8057	UTC:2-3:2	-1.000000e+00	-5.8415624	3.841562	0.9999989
8058	1:3-3:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8059	2:3-3:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8060	3:3-3:2	-1.110223e-15	-4.8415624	4.841562	1.0000000
8061	UTC:3-3:2	-1.000000e+00	-5.8415624	3.841562	0.9999989
8062	1:4-3:2	4.440892e-16	-4.8415624	4.841562	1.0000000
8063	2:4-3:2	1.332268e-15	-4.8415624	4.841562	1.0000000
8064	3:4-3:2	1.000000e+00	-3.8415624	5.841562	0.9999989
8065	UTC:4-3:2	-3.333333e-01	-5.1748957	4.508229	1.0000000
8066	1:5-3:2	3.000000e+00	-1.8415624	7.841562	0.6930449
8067	2:5-3:2	-8.881784e-16	-4.8415624	4.841562	1.0000000
8068	3:5-3:2	2.000000e+00	-2.8415624	6.841562	0.9864097
8069	UTC:5-3:2	-6.666667e-01	-5.5082290	4.174896	1.0000000
8070	1:3-UTC:2	3.333333e-01	-4.5082290	5.174896	1.0000000
8071	2:3-UTC:2	3.333333e-01	-4.5082290	5.174896	1.0000000
8072	3:3-UTC:2	1.000000e+00	-3.8415624	5.841562	0.9999989

```

8073 UTC:3-UTC:2 2.220446e-16 -4.8415624 4.841562 1.0000000
8074 1:4-UTC:2 1.000000e+00 -3.8415624 5.841562 0.9999989
8075 2:4-UTC:2 1.000000e+00 -3.8415624 5.841562 0.9999989
8076 3:4-UTC:2 2.000000e+00 -2.8415624 6.841562 0.9864097
8077 UTC:4-UTC:2 6.666667e-01 -4.1748957 5.508229 1.0000000
8078 1:5-UTC:2 4.000000e+00 -0.8415624 8.841562 0.2194388
8079 2:5-UTC:2 1.000000e+00 -3.8415624 5.841562 0.9999989
8080 3:5-UTC:2 3.000000e+00 -1.8415624 7.841562 0.6930449
8081 UTC:5-UTC:2 3.333333e-01 -4.5082290 5.174896 1.0000000
8082 2:3-1:3 -1.110223e-15 -4.8415624 4.841562 1.0000000
8083 3:3-1:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8084 UTC:3-1:3 -3.333333e-01 -5.1748957 4.508229 1.0000000
8085 1:4-1:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8086 2:4-1:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8087 3:4-1:3 1.666667e+00 -3.1748957 6.508229 0.9982821
8088 UTC:4-1:3 3.333333e-01 -4.5082290 5.174896 1.0000000
8089 1:5-1:3 3.666667e+00 -1.1748957 8.508229 0.3509821
8090 2:5-1:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8091 3:5-1:3 2.666667e+00 -2.1748957 7.508229 0.8445315
8092 UTC:5-1:3 -8.881784e-16 -4.8415624 4.841562 1.0000000
8093 3:3-2:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8094 UTC:3-2:3 -3.333333e-01 -5.1748957 4.508229 1.0000000
8095 1:4-2:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8096 2:4-2:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8097 3:4-2:3 1.666667e+00 -3.1748957 6.508229 0.9982821
8098 UTC:4-2:3 3.333333e-01 -4.5082290 5.174896 1.0000000
8099 1:5-2:3 3.666667e+00 -1.1748957 8.508229 0.3509821
8100 2:5-2:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8101 3:5-2:3 2.666667e+00 -2.1748957 7.508229 0.8445315
8102 UTC:5-2:3 2.220446e-16 -4.8415624 4.841562 1.0000000
8103 UTC:3-3:3 -1.000000e+00 -5.8415624 3.841562 0.9999989
8104 1:4-3:3 1.554312e-15 -4.8415624 4.841562 1.0000000
8105 2:4-3:3 2.442491e-15 -4.8415624 4.841562 1.0000000
8106 3:4-3:3 1.000000e+00 -3.8415624 5.841562 0.9999989
8107 UTC:4-3:3 -3.333333e-01 -5.1748957 4.508229 1.0000000
8108 1:5-3:3 3.000000e+00 -1.8415624 7.841562 0.6930449
8109 2:5-3:3 2.220446e-16 -4.8415624 4.841562 1.0000000
8110 3:5-3:3 2.000000e+00 -2.8415624 6.841562 0.9864097
8111 UTC:5-3:3 -6.666667e-01 -5.5082290 4.174896 1.0000000
8112 1:4-UTC:3 1.000000e+00 -3.8415624 5.841562 0.9999989
8113 2:4-UTC:3 1.000000e+00 -3.8415624 5.841562 0.9999989
8114 3:4-UTC:3 2.000000e+00 -2.8415624 6.841562 0.9864097
8115 UTC:4-UTC:3 6.666667e-01 -4.1748957 5.508229 1.0000000
8116 1:5-UTC:3 4.000000e+00 -0.8415624 8.841562 0.2194388
8117 2:5-UTC:3 1.000000e+00 -3.8415624 5.841562 0.9999989
8118 3:5-UTC:3 3.000000e+00 -1.8415624 7.841562 0.6930449
8119 UTC:5-UTC:3 3.333333e-01 -4.5082290 5.174896 1.0000000
8120 2:4-1:4 8.881784e-16 -4.8415624 4.841562 1.0000000
8121 3:4-1:4 1.000000e+00 -3.8415624 5.841562 0.9999989
8122 UTC:4-1:4 -3.333333e-01 -5.1748957 4.508229 1.0000000
8123 1:5-1:4 3.000000e+00 -1.8415624 7.841562 0.6930449
8124 2:5-1:4 -1.332268e-15 -4.8415624 4.841562 1.0000000
8125 3:5-1:4 2.000000e+00 -2.8415624 6.841562 0.9864097
8126 UTC:5-1:4 -6.666667e-01 -5.5082290 4.174896 1.0000000
8127 3:4-2:4 1.000000e+00 -3.8415624 5.841562 0.9999989
8128 UTC:4-2:4 -3.333333e-01 -5.1748957 4.508229 1.0000000
8129 1:5-2:4 3.000000e+00 -1.8415624 7.841562 0.6930449
8130 2:5-2:4 -2.220446e-15 -4.8415624 4.841562 1.0000000
8131 3:5-2:4 2.000000e+00 -2.8415624 6.841562 0.9864097
8132 UTC:5-2:4 -6.666667e-01 -5.5082290 4.174896 1.0000000
8133 UTC:4-3:4 -1.333333e+00 -6.1748957 3.508229 0.9999132
8134 1:5-3:4 2.000000e+00 -2.8415624 6.841562 0.9864097
8135 2:5-3:4 -1.000000e+00 -5.8415624 3.841562 0.9999989
8136 3:5-3:4 1.000000e+00 -3.8415624 5.841562 0.9999989
8137 UTC:5-3:4 -1.666667e+00 -6.5082290 3.174896 0.9982821
8138 1:5-UTC:4 3.333333e+00 -1.5082290 8.174896 0.5165952
8139 2:5-UTC:4 3.333333e-01 -4.5082290 5.174896 1.0000000
8140 3:5-UTC:4 2.333333e+00 -2.5082290 7.174896 0.9426299
8141 UTC:5-UTC:4 -3.333333e-01 -5.1748957 4.508229 1.0000000
8142 2:5-1:5 -3.000000e+00 -7.8415624 1.841562 0.6930449
8143 3:5-1:5 -1.000000e+00 -5.8415624 3.841562 0.9999989
8144 UTC:5-1:5 -3.666667e+00 -8.5082290 1.174896 0.3509821
8145 3:5-2:5 2.000000e+00 -2.8415624 6.841562 0.9864097
8146 UTC:5-2:5 -6.666667e-01 -5.5082290 4.174896 1.0000000
8147 UTC:5-3:5 -2.666667e+00 -7.5082290 2.174896 0.8445315
8148
8149 Hymenoptera sweep
8150
8151 sample mass
8152
8153 Df Sum Sq Mean Sq F value Pr(>F)
8154 block 3 0.000447 0.0001489 0.800 0.502
8155 event 4 0.000650 0.0001626 0.873 0.489
8156 block:event 11 0.001698 0.0001544 0.829 0.613
8157 Residuals 38 0.007078 0.0001863
8158 Levene's Test for Homogeneity of Variance (center = median)
8159 Df F value Pr(>F)
8160 group 18 0.8461 0.6392
8161 38
8162
8163 Shapiro-Wilk normality test
8164
8165 data: residuals(mass.model)
8166 W = 0.6064, p-value = 4.157e-11
8167

```

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8168 Tukey multiple comparisons of means
8169   95% family-wise confidence level
8170
8171 Fit: aov(formula = mass.model)
8172
8173 $block
8174   diff      lwr      upr     p adj
8175 2-1  0.0040866667 -0.009301503 0.017474836 0.8446301
8176 3-1 -0.0002466667 -0.014446965 0.013953632 0.9999628
8177 UTC-1 -0.0036133333 -0.017001503 0.009774836 0.8864706
8178 3-2 -0.0043333333 -0.018533632 0.009866965 0.8447402
8179 UTC-2 -0.0077000000 -0.021088170 0.005688170 0.4215050
8180 UTC-3 -0.0033666667 -0.017566965 0.010833632 0.9194094
8181
8182 $event
8183   diff      lwr      upr     p adj
8184 2-1  9.816667e-03 -0.006135657 0.025768991 0.4100453
8185 3-1  2.808333e-03 -0.013143991 0.018760657 0.9864743
8186 4-1  2.765556e-03 -0.014464924 0.019996035 0.9904509
8187 5-1  2.416667e-03 -0.013535657 0.018368991 0.9923327
8188 3-2 -7.008333e-03 -0.022960657 0.008943991 0.7179197
8189 4-2 -7.051111e-03 -0.024281590 0.010179368 0.7671863
8190 5-2 -7.400000e-03 -0.023352324 0.008552324 0.6757509
8191 4-3 -4.277778e-05 -0.017273257 0.017187702 1.0000000
8192 5-3 -3.916667e-04 -0.016343991 0.015560657 0.9999942
8193 5-4 -3.488889e-04 -0.017579368 0.016881590 0.9999973
8194
8195 $`block:event`
8196   diff      lwr      upr     p adj
8197 2:1-1:1  3.066667e-03 -0.039294299 0.045427633 1.0000000
8198 3:1-1:1  1.266667e-03 -0.041094299 0.043627633 1.0000000
8199 UTC:1-1:1 -8.666667e-04 -0.043227633 0.041494299 1.0000000
8200 1:2-1:1  5.466667e-03 -0.036894299 0.047827633 1.0000000
8201 2:2-1:1  3.186667e-02 -0.010494299 0.074227633 0.3582223
8202 3:2-1:1  4.766667e-03 -0.037594299 0.047127633 1.0000000
8203 UTC:2-1:1  6.333333e-04 -0.041727633 0.042994299 1.0000000
8204 1:3-1:1  3.200000e-03 -0.039160966 0.045560966 1.0000000
8205 2:3-1:1  5.500000e-03 -0.036860966 0.047860966 1.0000000
8206 3:3-1:1  3.133333e-03 -0.039227633 0.045494299 1.0000000
8207 UTC:3-1:1  2.866667e-03 -0.039494299 0.045227633 1.0000000
8208 1:4-1:1  9.733333e-03 -0.032627633 0.052094299 0.9999936
8209 2:4-1:1  2.300000e-03 -0.040060966 0.044660966 1.0000000
8210 3:4-1:1    NA      NA      NA      NA
8211 UTC:4-1:1 -8.333333e-04 -0.043194299 0.041527633 1.0000000
8212 1:5-1:1  3.666667e-03 -0.038694299 0.046027633 1.0000000
8213 2:5-1:1 -2.333333e-04 -0.042594299 0.042127633 1.0000000
8214 3:5-1:1  7.500000e-03 -0.034860966 0.049860966 0.9999999
8215 UTC:5-1:1  2.200000e-03 -0.040160966 0.044560966 1.0000000
8216 3:1-2:1 -1.800000e-03 -0.044160966 0.040560966 1.0000000
8217 UTC:1-2:1 -3.933333e-03 -0.046294299 0.038427633 1.0000000
8218 1:2-2:1  2.400000e-03 -0.039960966 0.044760966 1.0000000
8219 2:2-2:1  2.880000e-02 -0.013560966 0.071160966 0.5333797
8220 3:2-2:1  1.700000e-03 -0.040660966 0.044060966 1.0000000
8221 UTC:2-2:1 -2.433333e-03 -0.044794299 0.039927633 1.0000000
8222 1:3-2:1  1.333333e-04 -0.042227633 0.042494299 1.0000000
8223 2:3-2:1  2.433333e-03 -0.039927633 0.044794299 1.0000000
8224 3:3-2:1  6.666667e-05 -0.042294299 0.042427633 1.0000000
8225 UTC:3-2:1 -2.000000e-04 -0.042560966 0.042160966 1.0000000
8226 1:4-2:1  6.666667e-03 -0.035694299 0.049027633 1.0000000
8227 2:4-2:1 -7.666667e-04 -0.043127633 0.041594299 1.0000000
8228 3:4-2:1    NA      NA      NA      NA
8229 UTC:4-2:1 -3.900000e-03 -0.046260966 0.038460966 1.0000000
8230 1:5-2:1  6.000000e-04 -0.041760966 0.042960966 1.0000000
8231 2:5-2:1 -3.300000e-03 -0.045660966 0.039060966 1.0000000
8232 3:5-2:1  4.433333e-03 -0.037927633 0.046794299 1.0000000
8233 UTC:5-2:1 -8.666667e-04 -0.043227633 0.041494299 1.0000000
8234 UTC:1-3:1 -2.133333e-03 -0.044494299 0.040227633 1.0000000
8235 1:2-3:1  4.200000e-03 -0.038160966 0.046560966 1.0000000
8236 2:2-3:1  3.060000e-02 -0.011760966 0.072960966 0.4272360
8237 3:2-3:1  3.500000e-03 -0.038860966 0.045860966 1.0000000
8238 UTC:2-3:1 -6.333333e-04 -0.042994299 0.041727633 1.0000000
8239 1:3-3:1  1.933333e-03 -0.040427633 0.044294299 1.0000000
8240 2:3-3:1  4.233333e-03 -0.038127633 0.046594299 1.0000000
8241 3:3-3:1  1.866667e-03 -0.040494299 0.044227633 1.0000000
8242 UTC:3-3:1  1.600000e-03 -0.040760966 0.043960966 1.0000000
8243 1:4-3:1  8.466667e-03 -0.033894299 0.050827633 0.9999993
8244 2:4-3:1  1.033333e-03 -0.041327633 0.043394299 1.0000000
8245 3:4-3:1    NA      NA      NA      NA
8246 UTC:4-3:1 -2.100000e-03 -0.044460966 0.040260966 1.0000000
8247 1:5-3:1  2.400000e-03 -0.039960966 0.044760966 1.0000000
8248 2:5-3:1 -1.500000e-03 -0.043860966 0.040860966 1.0000000
8249 3:5-3:1  6.233333e-03 -0.036127633 0.048594299 1.0000000
8250 UTC:5-3:1  9.333333e-04 -0.041427633 0.043294299 1.0000000
8251 1:2-UTC:1  6.333333e-03 -0.036027633 0.048694299 1.0000000
8252 2:2-UTC:1  3.273333e-02 -0.009627633 0.075094299 0.3146915
8253 3:2-UTC:1  5.633333e-03 -0.036727633 0.047994299 1.0000000
8254 UTC:2-UTC:1  1.500000e-03 -0.040860966 0.043860966 1.0000000
8255 1:3-UTC:1  4.066667e-03 -0.038294299 0.046427633 1.0000000
8256 2:3-UTC:1  6.366667e-03 -0.035994299 0.048727633 1.0000000
8257 3:3-UTC:1  4.000000e-03 -0.038360966 0.046360966 1.0000000
8258 UTC:3-UTC:1  3.733333e-03 -0.038627633 0.046094299 1.0000000
8259 1:4-UTC:1  1.060000e-02 -0.031760966 0.052960966 0.9999765
8260 2:4-UTC:1  3.166667e-03 -0.039194299 0.045527633 1.0000000
8261 3:4-UTC:1    NA      NA      NA      NA
8262 UTC:4-UTC:1  3.333333e-05 -0.042327633 0.042394299 1.0000000

```

8263	1:5-UTC:1	4.533333e-03	-0.037827633	0.046894299	1.0000000
8264	2:5-UTC:1	6.333333e-04	-0.041727633	0.042994299	1.0000000
8265	3:5-UTC:1	8.366667e-03	-0.033994299	0.050727633	0.9999994
8266	UTC:5-UTC:1	3.0666667e-03	-0.039294299	0.045427633	1.0000000
8267	2:2:-1:2	2.640000e-02	-0.015960966	0.068760966	0.6785636
8268	3:2:-1:2	-7.000000e-04	-0.043060966	0.041660966	1.0000000
8269	UTC:2-1:2	-4.833333e-03	-0.047194299	0.037527633	1.0000000
8270	1:3:-1:2	-2.2666667e-03	-0.044627633	0.040094299	1.0000000
8271	2:3:-1:2	3.333333e-05	-0.042327633	0.042394299	1.0000000
8272	3:3:-1:2	-2.333333e-03	-0.044694299	0.040027633	1.0000000
8273	UTC:3-1:2	-2.600000e-03	-0.044960966	0.039760966	1.0000000
8274	1:4:-1:2	4.266667e-03	-0.038094299	0.046627633	1.0000000
8275	2:4:-1:2	-3.166667e-03	-0.045527633	0.039194299	1.0000000
8276	3:4:-1:2	NA	NA	NA	NA
8277	UTC:4:-1:2	-6.300000e-03	-0.048660966	0.036060966	1.0000000
8278	1:5:-1:2	-1.800000e-03	-0.044160966	0.040560966	1.0000000
8279	2:5:-1:2	-5.700000e-03	-0.048060966	0.036660966	1.0000000
8280	3:5:-1:2	2.033333e-03	-0.040327633	0.044394299	1.0000000
8281	UTC:5:-1:2	-3.266667e-03	-0.045627633	0.039094299	1.0000000
8282	3:2:-2:2	-2.710000e-02	-0.069460966	0.015260966	0.6367883
8283	UTC:2:-2:2	-3.123333e-02	-0.073594299	0.011127633	0.3919939
8284	1:3:-2:2	-2.866667e-02	-0.071027633	0.013694299	0.5414704
8285	2:3:-2:2	-2.636667e-02	-0.068727633	0.015994299	0.6805257
8286	3:3:-2:2	-2.873333e-02	-0.071094299	0.013627633	0.5374229
8287	UTC:3:-2:2	-2.900000e-02	-0.071360966	0.013360966	0.5212803
8288	1:4:-2:2	-2.213333e-02	-0.064494299	0.020227633	0.8884795
8289	2:4:-2:2	-2.956667e-02	-0.071927633	0.012794299	0.4873233
8290	3:4:-2:2	NA	NA	NA	NA
8291	UTC:4:-2:2	-3.270000e-02	-0.075060966	0.009660966	0.3163050
8292	1:5:-2:2	-2.820000e-02	-0.070560966	0.014160966	0.5698895
8293	2:5:-2:2	-3.210000e-02	-0.074460966	0.010260966	0.3461858
8294	3:5:-2:2	-2.436667e-02	-0.066727633	0.017994299	0.7908917
8295	UTC:5:-2:2	-2.966667e-02	-0.072027633	0.012694299	0.4813929
8296	UTC:2:-3:2	-4.133333e-03	-0.046494299	0.038227633	1.0000000
8297	1:3:-3:2	-1.566667e-03	-0.043927633	0.040794299	1.0000000
8298	2:3:-3:2	7.333333e-04	-0.041627633	0.043094299	1.0000000
8299	3:3:-3:2	-1.633333e-03	-0.043994299	0.040727633	1.0000000
8300	UTC:3:-3:2	-1.900000e-03	-0.044260966	0.040460966	1.0000000
8301	1:4:-3:2	4.966667e-03	-0.037394299	0.047327633	1.0000000
8302	2:4:-3:2	-2.466667e-03	-0.044827633	0.039894299	1.0000000
8303	3:4:-3:2	NA	NA	NA	NA
8304	UTC:4:-3:2	-5.600000e-03	-0.047960966	0.038760966	1.0000000
8305	1:5:-3:2	-1.100000e-03	-0.043460966	0.041260966	1.0000000
8306	2:5:-3:2	-5.000000e-03	-0.047360966	0.037360966	1.0000000
8307	3:5:-3:2	2.733333e-03	-0.039627633	0.045094299	1.0000000
8308	UTC:5:-3:2	-2.566667e-03	-0.044927633	0.039794299	1.0000000
8309	1:3:-UTC:2	2.566667e-03	-0.039794299	0.044927633	1.0000000
8310	2:3:-UTC:2	4.866667e-03	-0.037494299	0.047227633	1.0000000
8311	3:3:-UTC:2	2.500000e-03	-0.039860966	0.044860966	1.0000000
8312	UTC:3:-UTC:2	2.233333e-03	-0.040127633	0.044594299	1.0000000
8313	1:4:-UTC:2	9.100000e-03	-0.033260966	0.051460966	0.9999978
8314	2:4:-UTC:2	1.666667e-03	-0.040694299	0.044027633	1.0000000
8315	3:4:-UTC:2	NA	NA	NA	NA
8316	UTC:4:-4:2:2	-1.466667e-03	-0.043827633	0.040894299	1.0000000
8317	1:5:-UTC:2	3.033333e-03	-0.039327633	0.045394299	1.0000000
8318	2:5:-UTC:2	-8.666667e-04	-0.043227633	0.041494299	1.0000000
8319	3:5:-UTC:2	6.866667e-03	-0.035494299	0.049227633	1.0000000
8320	UTC:5:-UTC:2	1.566667e-03	-0.040794299	0.043927633	1.0000000
8321	2:3:-1:3	2.300000e-03	-0.040060966	0.044660966	1.0000000
8322	3:3:-1:3	-6.666667e-05	-0.042427633	0.042294299	1.0000000
8323	UTC:3:-1:3	-3.333333e-04	-0.042694299	0.042027633	1.0000000
8324	1:4:-1:3	6.533333e-03	-0.035827633	0.048894299	1.0000000
8325	2:4:-1:3	-9.000000e-04	-0.043260966	0.041460966	1.0000000
8326	3:4:-1:3	NA	NA	NA	NA
8327	UTC:4:-1:3	-4.033333e-03	-0.046394299	0.038327633	1.0000000
8328	1:5:-1:3	4.666667e-04	-0.041894299	0.042827633	1.0000000
8329	2:5:-1:3	-3.433333e-03	-0.045794299	0.038927633	1.0000000
8330	3:5:-1:3	4.300000e-03	-0.038060966	0.046660966	1.0000000
8331	UTC:5:-1:3	-1.000000e-03	-0.043360966	0.041360966	1.0000000
8332	3:3:-2:3	-2.366667e-03	-0.044727633	0.039994299	1.0000000
8333	UTC:3:-2:3	-2.633333e-03	-0.044994299	0.039727633	1.0000000
8334	1:4:-2:3	4.233333e-03	-0.038127633	0.046594299	1.0000000
8335	2:4:-2:3	-3.200000e-03	-0.045560966	0.039160966	1.0000000
8336	3:4:-2:3	NA	NA	NA	NA
8337	UTC:4:-2:3	-6.333333e-03	-0.048694299	0.036027633	1.0000000
8338	1:5:-2:3	-1.833333e-03	-0.044194299	0.040527633	1.0000000
8339	2:5:-2:3	-5.733333e-03	-0.048094299	0.036627633	1.0000000
8340	3:5:-2:3	2.000000e-03	-0.040360966	0.044360966	1.0000000
8341	UTC:5:-2:3	-3.300000e-03	-0.045660966	0.039060966	1.0000000
8342	UTC:3:-3:3	-2.666667e-04	-0.042627633	0.042094299	1.0000000
8343	1:4:-3:3	6.600000e-03	-0.035760966	0.048960966	1.0000000
8344	2:4:-3:3	-8.333333e-04	-0.043194299	0.041527633	1.0000000
8345	3:4:-3:3	NA	NA	NA	NA
8346	UTC:4:-3:3	-3.966667e-03	-0.046327633	0.038394299	1.0000000
8347	1:5:-3:3	5.333333e-04	-0.041827633	0.042894299	1.0000000
8348	2:5:-3:3	-3.366667e-03	-0.045727633	0.038994299	1.0000000
8349	3:5:-3:3	4.366667e-03	-0.037994299	0.046727633	1.0000000
8350	UTC:5:-3:3	-9.333333e-04	-0.043294299	0.041427633	1.0000000
8351	1:4:-UTC:3	6.866667e-03	-0.035494299	0.049227633	1.0000000
8352	2:4:-UTC:3	-5.666667e-04	-0.042927633	0.041794299	1.0000000
8353	3:4:-UTC:3	NA	NA	NA	NA
8354	UTC:4:-UTC:3	-3.700000e-03	-0.046060966	0.038660966	1.0000000
8355	1:5:-UTC:3	8.000000e-04	-0.041560966	0.043160966	1.0000000
8356	2:5:-UTC:3	-3.100000e-03	-0.045460966	0.039260966	1.0000000
8357	3:5:-UTC:3	4.633333e-03	-0.037727633	0.046994299	1.0000000

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8358 UTC:5-UTC:3 -6.666667e-04 -0.043027633 0.041694299 1.0000000
8359 2:4-1:4 -7.433333e-03 -0.049794299 0.034927633 0.9999999
8360 3:4-1:4 NA NA NA NA
8361 UTC:4-1:4 -1.0566667e-02 -0.052927633 0.031794299 0.9999776
8362 1:5-1:4 -6.0666667e-03 -0.048427633 0.036294299 1.0000000
8363 2:5-1:4 -9.9666667e-03 -0.052327633 0.032394299 0.9999908
8364 3:5-1:4 -2.233333e-03 -0.044594299 0.040127633 1.0000000
8365 UTC:5-1:4 -7.533333e-03 -0.049894299 0.034827633 0.9999999
8366 3:4-2:4 NA NA NA NA
8367 UTC:4-2:4 -3.133333e-03 -0.045494299 0.039227633 1.0000000
8368 1:5-2:4 1.3666667e-03 -0.040994299 0.043727633 1.0000000
8369 2:5-2:4 -2.533333e-03 -0.044894299 0.039827633 1.0000000
8370 3:5-2:4 5.200000e-03 -0.037160966 0.047560966 1.0000000
8371 UTC:5-2:4 -1.000000e-04 -0.042460966 0.042260966 1.0000000
8372 UTC:4-3:4 NA NA NA NA
8373 1:5-3:4 NA NA NA NA
8374 2:5-3:4 NA NA NA NA
8375 3:5-3:4 NA NA NA NA
8376 UTC:5-3:4 NA NA NA NA
8377 1:5-UTC:4 4.500000e-03 -0.037860966 0.046860966 1.0000000
8378 2:5-UTC:4 6.000000e-04 -0.041760966 0.042960966 1.0000000
8379 3:5-UTC:4 8.333333e-03 -0.034027633 0.050694299 0.9999995
8380 UTC:5-UTC:4 3.033333e-03 -0.039327633 0.045394299 1.0000000
8381 2:5-1:5 -3.900000e-03 -0.046260966 0.038460966 1.0000000
8382 3:5-1:5 3.833333e-03 -0.038527633 0.046194299 1.0000000
8383 UTC:5-1:5 -1.4666667e-03 -0.043827633 0.040894299 1.0000000
8384 3:5-2:5 7.733333e-03 -0.034627633 0.050094299 0.9999998
8385 UTC:5-2:5 2.433333e-03 -0.039927633 0.044794299 1.0000000
8386 UTC:5-3:5 -5.300000e-03 -0.047660966 0.037060966 1.0000000
8387
8388 sample families
8389
8390      Df Sum Sq Mean Sq F value Pr(>F)
8391 block      3   8.73   2.911   1.050   0.382
8392 event      4  13.26   3.314   1.196   0.329
8393 block:event 11  13.34   1.213   0.438   0.929
8394 Residuals  38 105.33   2.772
8395 Levene's Test for Homogeneity of Variance (center = median)
8396      Df F value Pr(>F)
8397 group 18  0.7014  0.7882
8398      38
8399
8400 Shapiro-Wilk normality test
8401
8402 data: residuals(family.model)
8403 W = 0.92126, p-value = 0.001196
8404
8405 Tukey multiple comparisons of means
8406   95% family-wise confidence level
8407
8408 Fit: aov(formula = family.model)
8409
8410 $block
8411      diff      lwr      upr     p adj
8412 2-1 -0.06666667 -1.699882 1.5665482 0.9995194
8413 3-1  0.36666667 -1.365619 2.0989526 0.9407862
8414 UTC-1 -0.73333333 -2.366548 0.8998815 0.6267420
8415 3-2  0.43333333 -1.298953 2.1656193 0.9069995
8416 UTC-2 -0.66666667 -2.299882 0.9665482 0.6937359
8417 UTC-3 -1.10000000 -2.832286 0.6322859 0.3347876
8418
8419 $event
8420      diff      lwr      upr     p adj
8421 2-1  1.41666667 -0.5293479 3.3626812 0.2477787
8422 3-1  0.66666667 -1.2793479 2.6126812 0.8621981
8423 4-1  0.29722222 -1.8047137 2.3991581 0.9941083
8424 5-1  0.58333333 -1.3626812 2.5293479 0.9101882
8425 3-2 -0.75000000 -2.6960145 1.1960145 0.8036544
8426 4-2 -1.11944444 -3.2213804 0.9824915 0.5532824
8427 5-2 -0.83333333 -2.7793479 1.1126812 0.7364505
8428 4-3 -0.36944444 -2.4713804 1.7324915 0.9865552
8429 5-3 -0.08333333 -2.0293479 1.8626812 0.9999465
8430 5-4  0.28611111 -1.8158248 2.3880470 0.9949102
8431
8432 $`block:event`
8433      diff      lwr      upr     p adj
8434 2:1-1:1 -1.110223e-15 -5.167589 5.167589 1.0000000
8435 3:1-1:1  1.000000e+00 -4.167589 6.167589 0.9999996
8436 UTC:1-1:1 -6.6666667e-01 -5.834256 4.500922 1.0000000
8437 1:2-1:1  1.333333e+00 -3.834256 6.500922 0.9999629
8438 2:2-1:1  2.333333e+00 -2.834256 7.500922 0.9660474
8439 3:2-1:1  1.333333e+00 -3.834256 6.500922 0.9999629
8440 UTC:2-1:1  1.000000e+00 -4.167589 6.167589 0.9999996
8441 1:3-1:1  3.333333e-01 -4.834256 5.500922 1.0000000
8442 2:3-1:1  1.333333e+00 -3.834256 6.500922 0.9999629
8443 3:3-1:1  1.666667e+00 -3.500922 6.834256 0.9991831
8444 UTC:3-1:1 -3.333333e-01 -5.500922 4.834256 1.0000000
8445 1:4-1:1  1.333333e+00 -3.834256 6.500922 0.9999629
8446 2:4-1:1 -3.333333e-01 -5.500922 4.834256 1.0000000
8447 3:4-1:1 NA NA NA NA
8448 UTC:4-1:1 -3.333333e-01 -5.500922 4.834256 1.0000000
8449 1:5-1:1  1.000000e+00 -4.167589 6.167589 0.9999996
8450 2:5-1:1  3.333333e-01 -4.834256 5.500922 1.0000000
8451 3:5-1:1  6.6666667e-01 -4.500922 5.834256 1.0000000
8452 UTC:5-1:1  6.6666667e-01 -4.500922 5.834256 1.0000000

```

8453	3:1-2:1	1.000000e+00	-4.167589	6.167589	0.9999996
8454	UTC:1-2:1	-6.666667e-01	-5.834256	4.500922	1.0000000
8455	1:2-2:1	1.333333e+00	-3.834256	6.500922	0.9999629
8456	2:2-2:1	2.333333e+00	-2.834256	7.500922	0.9660474
8457	3:2-2:1	1.333333e+00	-3.834256	6.500922	0.9999629
8458	UTC:2-2:1	1.000000e+00	-4.167589	6.167589	0.9999996
8459	1:3-2:1	3.333333e-01	-4.834256	5.500922	1.0000000
8460	2:3-2:1	1.333333e+00	-3.834256	6.500922	0.9999629
8461	3:3-2:1	1.666667e+00	-3.500922	6.834256	0.9991831
8462	UTC:3-2:1	-3.333333e-01	-5.500922	4.834256	1.0000000
8463	1:4-2:1	3.333333e+00	-3.834256	6.500922	0.9999629
8464	2:4-2:1	-3.333333e-01	-5.500922	4.834256	1.0000000
8465	3:4-2:1	NA	NA	NA	NA
8466	UTC:4-2:1	-3.333333e-01	-5.500922	4.834256	1.0000000
8467	1:5-2:1	1.000000e+00	-4.167589	6.167589	0.9999996
8468	2:5-2:1	3.333333e-01	-4.834256	5.500922	1.0000000
8469	3:5-2:1	6.666667e-01	-4.500922	5.834256	1.0000000
8470	UTC:5-2:1	6.666667e-01	-4.500922	5.834256	1.0000000
8471	UTC:1-3:1	-1.666667e+00	-6.834256	3.500922	0.9991831
8472	1:2-3:1	3.333333e-01	-4.834256	5.500922	1.0000000
8473	2:2-3:1	1.333333e+00	-3.834256	6.500922	0.9999629
8474	3:2-3:1	3.333333e-01	-4.834256	5.500922	1.0000000
8475	UTC:2-3:1	-2.220446e-16	-5.167589	5.167589	1.0000000
8476	1:3-3:1	-6.666667e-01	-5.834256	4.500922	1.0000000
8477	2:3-3:1	3.333333e-01	-4.834256	5.500922	1.0000000
8478	3:3-3:1	6.666667e-01	-4.500922	5.834256	1.0000000
8479	UTC:3-3:1	-1.333333e+00	-6.500922	3.834256	0.9999629
8480	1:4-3:1	3.333333e-01	-4.834256	5.500922	1.0000000
8481	2:4-3:1	-1.333333e+00	-6.500922	3.834256	0.9999629
8482	3:4-3:1	NA	NA	NA	NA
8483	UTC:4-3:1	-1.333333e+00	-6.500922	3.834256	0.9999629
8484	1:5-3:1	8.881784e-16	-5.167589	5.167589	1.0000000
8485	2:5-3:1	-6.666667e-01	-5.834256	4.500922	1.0000000
8486	3:5-3:1	-3.333333e-01	-5.500922	4.834256	1.0000000
8487	UTC:5-3:1	-3.333333e-01	-5.500922	4.834256	1.0000000
8488	1:2-UTC:1	2.000000e+00	-3.167589	7.167589	0.9927829
8489	2:2-UTC:1	3.000000e+00	-2.167589	8.167589	0.7793389
8490	3:2-UTC:1	2.000000e+00	-3.167589	7.167589	0.9927829
8491	UTC:2-UTC:1	1.666667e+00	-3.500922	6.834256	0.9991831
8492	1:3-UTC:1	1.000000e+00	-4.167589	6.167589	0.9999996
8493	2:3-UTC:1	2.000000e+00	-3.167589	7.167589	0.9927829
8494	3:3-UTC:1	2.333333e+00	-2.834256	7.500922	0.9660474
8495	UTC:3-UTC:1	3.333333e-01	-4.834256	5.500922	1.0000000
8496	1:4-UTC:1	2.000000e+00	-3.167589	7.167589	0.9927829
8497	2:4-UTC:1	3.333333e-01	-4.834256	5.500922	1.0000000
8498	3:4-UTC:1	NA	NA	NA	NA
8499	UTC:4-UTC:1	3.333333e-01	-4.834256	5.500922	1.0000000
8500	1:5-UTC:1	1.666667e+00	-3.500922	6.834256	0.9991831
8501	2:5-UTC:1	1.000000e+00	-4.167589	6.167589	0.9999996
8502	3:5-UTC:1	1.333333e+00	-3.834256	6.500922	0.9999629
8503	UTC:5-UTC:1	1.333333e+00	-3.834256	6.500922	0.9999629
8504	2:2-1:2	1.000000e+00	-4.167589	6.167589	0.9999996
8505	3:2-1:2	-4.440892e-16	-5.167589	5.167589	1.0000000
8506	UTC:2-1:2	-3.333333e-01	-5.500922	4.834256	1.0000000
8507	1:3-1:2	-1.000000e+00	-6.167589	4.167589	0.9999996
8508	2:3-1:2	8.881784e-16	-5.167589	5.167589	1.0000000
8509	3:3-1:2	3.333333e-01	-4.834256	5.500922	1.0000000
8510	UTC:3-1:2	-1.666667e+00	-6.834256	3.500922	0.9991831
8511	1:4-1:2	0.000000e+00	-5.167589	5.167589	1.0000000
8512	2:4-1:2	-1.666667e+00	-6.834256	3.500922	0.9991831
8513	3:4-1:2	NA	NA	NA	NA
8514	UTC:4-1:2	-1.666667e+00	-6.834256	3.500922	0.9991831
8515	1:5-1:2	-3.333333e-01	-5.500922	4.834256	1.0000000
8516	2:5-1:2	-1.000000e+00	-6.167589	4.167589	0.9999996
8517	3:5-1:2	-6.666667e-01	-5.834256	4.500922	1.0000000
8518	UTC:5-1:2	-6.666667e-01	-5.834256	4.500922	1.0000000
8519	3:2-2:2	-1.000000e+00	-6.167589	4.167589	0.9999996
8520	UTC:2-2:2	-1.333333e+00	-6.500922	3.834256	0.9999629
8521	1:3-2:2	-2.000000e+00	-7.167589	3.167589	0.9927829
8522	2:3-2:2	-1.000000e+00	-6.167589	4.167589	0.9999996
8523	3:3-2:2	-6.666667e-01	-5.834256	4.500922	1.0000000
8524	UTC:3-2:2	-2.666667e+00	-7.834256	2.500922	0.8981141
8525	1:4-2:2	-1.000000e+00	-6.167589	4.167589	0.9999996
8526	2:4-2:2	-2.666667e+00	-7.834256	2.500922	0.8981141
8527	3:4-2:2	NA	NA	NA	NA
8528	UTC:4-2:2	-2.666667e+00	-7.834256	2.500922	0.8981141
8529	1:5-2:2	-1.333333e+00	-6.500922	3.834256	0.9999629
8530	2:5-2:2	-2.000000e+00	-7.167589	3.167589	0.9927829
8531	3:5-2:2	-1.666667e+00	-6.834256	3.500922	0.9991831
8532	UTC:5-2:2	-1.666667e+00	-6.834256	3.500922	0.9991831
8533	UTC:2-3:2	-3.333333e-01	-5.500922	4.834256	1.0000000
8534	1:3-3:2	-1.000000e+00	-6.167589	4.167589	0.9999996
8535	2:3-3:2	1.32268e-15	-5.167589	5.167589	1.0000000
8536	3:3-3:2	3.333333e-01	-4.834256	5.500922	1.0000000
8537	UTC:3-3:2	-1.666667e+00	-6.834256	3.500922	0.9991831
8538	1:4-3:2	4.440892e-16	-5.167589	5.167589	1.0000000
8539	2:4-3:2	-1.666667e+00	-6.834256	3.500922	0.9991831
8540	3:4-3:2	NA	NA	NA	NA
8541	UTC:4-3:2	-1.666667e+00	-6.834256	3.500922	0.9991831
8542	1:5-3:2	-3.333333e-01	-5.500922	4.834256	1.0000000
8543	2:5-3:2	-1.000000e+00	-6.167589	4.167589	0.9999996
8544	3:5-3:2	-6.666667e-01	-5.834256	4.500922	1.0000000
8545	UTC:5-3:2	-6.666667e-01	-5.834256	4.500922	1.0000000
8546	1:3-UTC:2	-6.666667e-01	-5.834256	4.500922	1.0000000
8547	2:3-UTC:2	3.333333e-01	-4.834256	5.500922	1.0000000

```

8548 3:3-UTC:2 6.666667e-01 -4.500922 5.834256 1.0000000
8549 UTC:3-UTC:2 -1.333333e+00 -6.500922 3.834256 0.9999629
8550 1:4-UTC:2 3.333333e-01 -4.834256 5.500922 1.0000000
8551 2:4-UTC:2 -1.333333e+00 -6.500922 3.834256 0.9999629
8552 3:4-UTC:2 NA NA NA NA
8553 UTC:4-UTC:2 -1.333333e+00 -6.500922 3.834256 0.9999629
8554 1:5-UTC:2 1.110223e-15 -5.167589 5.167589 1.0000000
8555 2:5-UTC:2 -6.666667e-01 -5.834256 4.500922 1.0000000
8556 3:5-UTC:2 -3.333333e-01 -5.500922 4.834256 1.0000000
8557 UTC:5-UTC:2 -3.333333e-01 -5.500922 4.834256 1.0000000
8558 2:3-1:3 1.000000e+00 -4.167589 6.167589 0.9999996
8559 3:3-1:3 1.333333e+00 -3.834256 6.500922 0.9999629
8560 UTC:3-1:3 -6.666667e-01 -5.834256 4.500922 1.0000000
8561 1:4-1:3 1.000000e+00 -4.167589 6.167589 0.9999996
8562 2:4-1:3 -6.666667e-01 -5.834256 4.500922 1.0000000
8563 3:4-1:3 NA NA NA NA
8564 UTC:4-1:3 -6.666667e-01 -5.834256 4.500922 1.0000000
8565 1:5-1:3 6.666667e-01 -4.500922 5.834256 1.0000000
8566 2:5-1:3 4.440892e-16 -5.167589 5.167589 1.0000000
8567 3:5-1:3 3.333333e-01 -4.834256 5.500922 1.0000000
8568 UTC:5-1:3 3.333333e-01 -4.834256 5.500922 1.0000000
8569 3:3-2:3 3.333333e-01 -4.834256 5.500922 1.0000000
8570 UTC:3-2:3 -1.666667e+00 -6.834256 3.500922 0.9991831
8571 1:4-2:3 -8.881784e-16 -5.167589 5.167589 1.0000000
8572 2:4-2:3 -1.666667e+00 -6.834256 3.500922 0.9991831
8573 3:4-2:3 NA NA NA NA
8574 UTC:4-2:3 -1.666667e+00 -6.834256 3.500922 0.9991831
8575 1:5-2:3 -3.333333e-01 -5.500922 4.834256 1.0000000
8576 2:5-2:3 -1.000000e+00 -6.167589 4.167589 0.9999996
8577 3:5-2:3 -6.666667e-01 -5.834256 4.500922 1.0000000
8578 UTC:5-2:3 -6.666667e-01 -5.834256 4.500922 1.0000000
8579 UTC:3-3:3 -2.000000e+00 -7.167589 3.167589 0.9927829
8580 1:4-3:3 -3.333333e-01 -5.500922 4.834256 1.0000000
8581 2:4-3:3 -2.000000e+00 -7.167589 3.167589 0.9927829
8582 3:4-3:3 NA NA NA NA
8583 UTC:4-3:3 -2.000000e+00 -7.167589 3.167589 0.9927829
8584 1:5-3:3 -6.666667e-01 -5.834256 4.500922 1.0000000
8585 2:5-3:3 -1.333333e+00 -6.500922 3.834256 0.9999629
8586 3:5-3:3 -1.000000e+00 -6.167589 4.167589 0.9999996
8587 UTC:5-3:3 -1.000000e+00 -6.167589 4.167589 0.9999996
8588 1:4-UTC:3 1.666667e+00 -3.500922 6.834256 0.9991831
8589 2:4-UTC:3 7.216450e-16 -5.167589 5.167589 1.0000000
8590 3:4-UTC:3 NA NA NA NA
8591 UTC:4-UTC:3 1.221245e-15 -5.167589 5.167589 1.0000000
8592 1:5-UTC:3 1.333333e+00 -3.834256 6.500922 0.9999629
8593 2:5-UTC:3 6.666667e-01 -4.500922 5.834256 1.0000000
8594 3:5-UTC:3 1.000000e+00 -4.167589 6.167589 0.9999996
8595 UTC:5-UTC:3 1.000000e+00 -4.167589 6.167589 0.9999996
8596 2:4-1:4 -1.666667e+00 -6.834256 3.500922 0.9991831
8597 3:4-1:4 NA NA NA NA
8598 UTC:4-1:4 -1.666667e+00 -6.834256 3.500922 0.9991831
8599 1:5-1:4 -3.333333e-01 -5.500922 4.834256 1.0000000
8600 2:5-1:4 -1.000000e+00 -6.167589 4.167589 0.9999996
8601 3:5-1:4 -6.666667e-01 -5.834256 4.500922 1.0000000
8602 UTC:5-1:4 -6.666667e-01 -5.834256 4.500922 1.0000000
8603 3:4-2:4 NA NA NA NA
8604 UTC:4-2:4 4.996004e-16 -5.167589 5.167589 1.0000000
8605 1:5-2:4 1.333333e+00 -3.834256 6.500922 0.9999629
8606 2:5-2:4 6.666667e-01 -4.500922 5.834256 1.0000000
8607 3:5-2:4 1.000000e+00 -4.167589 6.167589 0.9999996
8608 UTC:5-2:4 1.000000e+00 -4.167589 6.167589 0.9999996
8609 UTC:4-3:4 NA NA NA NA
8610 1:5-3:4 NA NA NA NA
8611 2:5-3:4 NA NA NA NA
8612 3:5-3:4 NA NA NA NA
8613 UTC:5-3:4 NA NA NA NA
8614 1:5-UTC:4 1.333333e+00 -3.834256 6.500922 0.9999629
8615 2:5-UTC:4 6.666667e-01 -4.500922 5.834256 1.0000000
8616 3:5-UTC:4 1.000000e+00 -4.167589 6.167589 0.9999996
8617 UTC:5-UTC:4 1.000000e+00 -4.167589 6.167589 0.9999996
8618 2:5-1:5 -6.666667e-01 -5.834256 4.500922 1.0000000
8619 3:5-1:5 -3.333333e-01 -5.500922 4.834256 1.0000000
8620 UTC:5-1:5 -3.333333e-01 -5.500922 4.834256 1.0000000
8621 3:5-2:5 3.333333e-01 -4.834256 5.500922 1.0000000
8622 UTC:5-2:5 3.333333e-01 -4.834256 5.500922 1.0000000
8623 UTC:5-3:5 0.000000e+00 -5.167589 5.167589 1.0000000
8624 Lepidoptera sweep
8625 sample mass
8626
8627
8628
8629 Df Sum Sq Mean Sq F value Pr(>F)
8630 block 3 0.0001051 3.504e-05 1.155 0.339
8631 event 4 0.0001025 2.561e-05 0.844 0.506
8632 block:event 12 0.0003484 2.904e-05 0.957 0.504
8633 Residuals 40 0.0012138 3.034e-05
8634 Levene's Test for Homogeneity of Variance (center = median)
8635 Df F value Pr(>F)
8636 group 19 0.9639 0.518
8637 40
8638
8639 Shapiro-Wilk normality test
8640
8641 data: residuals(mass.model)
8642 W = 0.36669, p-value = 1.195e-14

```

```

8643
8644 Tukey multiple comparisons of means
8645   95% family-wise confidence level
8646
8647 Fit: aov(formula = mass.model)
8648
8649 $block
8650   diff      lwr      upr     p adj
8651 2-1  0.0003600000 -0.005031561 0.005751561 0.9979294
8652 3-1  0.0031066667 -0.002284894 0.008498227 0.4213153
8653 UTC-1 -0.0001266667 -0.005518227 0.005264894 0.9999088
8654 3-2  0.0027466667 -0.002644894 0.008138227 0.5278453
8655 UTC-2 -0.0004866667 -0.005878227 0.004904894 0.9949387
8656 UTC-3 -0.0032333333 -0.008624894 0.002158227 0.3860859
8657
8658 $event
8659   diff      lwr      upr     p adj
8660 2-1 -5.583333e-04 -0.006981347 0.005864680 0.9991242
8661 3-1 -9.166667e-04 -0.007339680 0.005506347 0.9939655
8662 4-1 -8.750000e-04 -0.007298014 0.005548014 0.9949526
8663 5-1  2.575000e-03 -0.003848014 0.008998014 0.7817484
8664 3-2 -3.583333e-04 -0.006781347 0.006064680 0.9998486
8665 4-2 -3.166667e-04 -0.006739680 0.006106347 0.9999074
8666 5-2  3.133333e-03 -0.003289680 0.009556347 0.6354164
8667 4-3  4.166667e-05 -0.006381347 0.006464680 1.0000000
8668 5-3  3.491667e-03 -0.002931347 0.009914680 0.5355387
8669 5-4  3.450000e-03 -0.002973014 0.009873014 0.5471211
8670
8671 $`block:event`
8672   diff      lwr      upr     p adj
8673 2:1-1:1  1.800000e-03 -0.015239030 0.018839030 1.0000000
8674 3:1-1:1 -3.333333e-05 -0.017072363 0.017005697 1.0000000
8675 UTC:1-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8676 1:2-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8677 2:2-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8678 3:2-1:1  8.000000e-04 -0.016239030 0.017839030 1.0000000
8679 UTC:2-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8680 1:3-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8681 2:3-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8682 3:3-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8683 UTC:3-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8684 1:4-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8685 2:4-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8686 3:4-1:1 -4.666667e-04 -0.017505697 0.016572363 1.0000000
8687 UTC:4-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8688 1:5-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8689 2:5-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8690 3:5-1:1  1.333333e-02 -0.003705697 0.030372363 0.2982622
8691 UTC:5-1:1 -6.333333e-04 -0.017672363 0.016405697 1.0000000
8692 3:1-2:1 -1.833333e-03 -0.018872363 0.015205697 1.0000000
8693 UTC:1-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8694 1:2-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8695 2:2-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8696 3:2-2:1 -1.000000e-03 -0.018039030 0.016039030 1.0000000
8697 UTC:2-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8698 1:3-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8699 2:3-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8700 3:3-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8701 UTC:3-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8702 1:4-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8703 2:4-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
8704 3:4-2:1 -2.266667e-03 -0.019305697 0.014772363 1.0000000
8705 UTC:4-2:1 -2.433333e-03 -0.019472363 0.014605697 1.0000000
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8713 3:2-3:1  8.333333e-04 -0.016205697 0.017872363 1.0000000
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8731 1:3-UTC:1 -9.667469e-19 -0.017039030 0.017039030 1.0000000
8732 2:3-UTC:1 -1.617268e-18 -0.017039030 0.017039030 1.0000000
8733 3:3-UTC:1  2.285860e-18 -0.017039030 0.017039030 1.0000000
8734 UTC:3-UTC:1 -3.460412e-18 -0.017039030 0.017039030 1.0000000
8735 1:4-UTC:1  2.719540e-18 -0.017039030 0.017039030 1.0000000
8736 2:4-UTC:1  4.427159e-19 -0.017039030 0.017039030 1.0000000
8737 3:4-UTC:1  1.666667e-04 -0.016872363 0.017205697 1.0000000

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8740	2:5-UTC:1	-1.617268e-18	-0.017039030	0.017039030	1.0000000
8741	3:5-UTC:1	1.396667e-02	-0.003072363	0.031005697	0.2301213
8742	UTC:5-UTC:1	-3.162256e-19	-0.017039030	0.017039030	1.0000000
8743	2:2-1:2	-7.228014e-19	-0.017039030	0.017039030	1.0000000
8744	3:2-1:2	1.433333e-03	-0.015605697	0.018472363	1.0000000
8745	UTC:2-1:2	-4.119968e-18	-0.017039030	0.017039030	1.0000000
8746	1:3-1:2	-2.565945e-18	-0.017039030	0.017039030	1.0000000
8747	2:3-1:2	-3.216466e-18	-0.017039030	0.017039030	1.0000000
8748	3:3-1:2	6.866614e-19	-0.017039030	0.017039030	1.0000000
8749	UTC:3-1:2	-5.059610e-18	-0.017039030	0.017039030	1.0000000
8750	1:4-1:2	1.120342e-18	-0.017039030	0.017039030	1.0000000
8751	2:4-1:2	-1.156482e-18	-0.017039030	0.017039030	1.0000000
8752	3:4-1:2	1.666667e-04	-0.016872363	0.017205697	1.0000000
8753	UTC:4-1:2	-5.710131e-18	-0.017039030	0.017039030	1.0000000
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8755	2:5-1:2	3.216466e-18	-0.017039030	0.017039030	1.0000000
8756	3:5-1:2	1.396667e-02	-0.003072363	0.031005697	0.2301213
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8762	3:3-2:2	1.409463e-18	-0.017039030	0.017039030	1.0000000
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8764	1:4-2:2	1.843144e-18	-0.017039030	0.017039030	1.0000000
8765	2:4-2:2	-4.336809e-19	-0.017039030	0.017039030	1.0000000
8766	3:4-2:2	1.666667e-04	-0.016872363	0.017205697	1.0000000
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8768	1:5-2:2	3.144186e-18	-0.017039030	0.017039030	1.0000000
8769	2:5-2:2	-2.493665e-18	-0.017039030	0.017039030	1.0000000
8770	3:5-2:2	1.396667e-02	-0.003072363	0.031005697	0.2301213
8771	UTC:5-2:2	-1.192622e-18	-0.017039030	0.017039030	1.0000000
8772	UTC:2-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8773	1:3-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8774	2:3-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8775	3:3-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8776	UTC:3-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8777	1:4-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8778	2:4-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8779	3:4-3:2	-1.266667e-03	-0.018305697	0.015772363	1.0000000
8780	UTC:4-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8781	1:5-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8782	2:5-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
8783	3:5-3:2	1.253333e-02	-0.0044505697	0.029572363	0.4003888
8784	UTC:5-3:2	-1.433333e-03	-0.018472363	0.015605697	1.0000000
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8788	UTC:3-UTC:2	-9.396419e-19	-0.017039030	0.017039030	1.0000000
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8790	2:4-UTC:2	2.963486e-18	-0.017039030	0.017039030	1.0000000
8791	3:4-UTC:2	1.666667e-04	-0.016872363	0.017205697	1.0000000
8792	UTC:4-UTC:2	-1.590163e-18	-0.017039030	0.017039030	1.0000000
8793	1:5-UTC:2	6.541353e-18	-0.017039030	0.017039030	1.0000000
8794	2:5-UTC:2	9.035018e-19	-0.017039030	0.017039030	1.0000000
8795	3:5-UTC:2	1.396667e-02	-0.003072363	0.031005697	0.2301213
8796	UTC:5-UTC:2	2.204544e-18	-0.017039030	0.017039030	1.0000000
8797	2:3-1:3	-6.505213e-19	-0.017039030	0.017039030	1.0000000
8798	3:3-1:3	3.252607e-18	-0.017039030	0.017039030	1.0000000
8799	UTC:3-1:3	-2.493665e-18	-0.017039030	0.017039030	1.0000000
8800	1:4-1:3	3.686287e-18	-0.017039030	0.017039030	1.0000000
8801	2:4-1:3	1.409463e-18	-0.017039030	0.017039030	1.0000000
8802	3:4-1:3	1.666667e-04	-0.016872363	0.017205697	1.0000000
8803	UTC:4-1:3	-3.144186e-18	-0.017039030	0.017039030	1.0000000
8804	1:5-1:3	4.987330e-18	-0.017039030	0.017039030	1.0000000
8805	2:5-1:3	-6.505213e-19	-0.017039030	0.017039030	1.0000000
8806	3:5-1:3	1.396667e-02	-0.003072363	0.031005697	0.2301213
8807	UTC:5-1:3	6.505213e-19	-0.017039030	0.017039030	1.0000000
8808	3:3-2:3	3.903128e-18	-0.017039030	0.017039030	1.0000000
8809	UTC:3-2:3	-1.843144e-18	-0.017039030	0.017039030	1.0000000
8810	1:4-2:3	4.336809e-18	-0.017039030	0.017039030	1.0000000
8811	2:4-2:3	2.059984e-18	-0.017039030	0.017039030	1.0000000
8812	3:4-2:3	1.666667e-04	-0.016872363	0.017205697	1.0000000
8813	UTC:4-2:3	-2.493665e-18	-0.017039030	0.017039030	1.0000000
8814	1:5-2:3	5.637851e-18	-0.017039030	0.017039030	1.0000000
8815	2:5-2:3	0.000000e+00	-0.017039030	0.017039030	1.0000000
8816	3:5-2:3	1.396667e-02	-0.003072363	0.031005697	0.2301213
8817	UTC:5-2:3	1.301043e-18	-0.017039030	0.017039030	1.0000000
8818	UTC:3-3:3	-5.746272e-18	-0.017039030	0.017039030	1.0000000
8819	1:4-3:3	4.336809e-19	-0.017039030	0.017039030	1.0000000
8820	2:4-3:3	-1.843144e-18	-0.017039030	0.017039030	1.0000000
8821	3:4-3:3	1.666667e-04	-0.016872363	0.017205697	1.0000000
8822	UTC:4-3:3	-6.396793e-18	-0.017039030	0.017039030	1.0000000
8823	1:5-3:3	1.734723e-18	-0.017039030	0.017039030	1.0000000
8824	2:5-3:3	-3.903128e-18	-0.017039030	0.017039030	1.0000000
8825	3:5-3:3	1.396667e-02	-0.003072363	0.031005697	0.2301213
8826	UTC:5-3:3	-2.602085e-18	-0.017039030	0.017039030	1.0000000
8827	1:4-UTC:3	6.179952e-18	-0.017039030	0.017039030	1.0000000
8828	2:4-UTC:3	3.903128e-18	-0.017039030	0.017039030	1.0000000
8829	3:4-UTC:3	1.666667e-04	-0.016872363	0.017205697	1.0000000
8830	UTC:4-UTC:3	-6.505213e-19	-0.017039030	0.017039030	1.0000000
8831	1:5-UTC:3	7.480995e-18	-0.017039030	0.017039030	1.0000000
8832	2:5-UTC:3	1.843144e-18	-0.017039030	0.017039030	1.0000000

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8833 3:5-UTC:3 1.396667e-02 -0.003072363 0.031005697 0.2301213
8834 UTC:5-UTC:3 3.144186e-18 -0.017039030 0.017039030 1.0000000
8835 2:4-1:4 -2.276825e-18 -0.017039030 0.017039030 1.0000000
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8839 2:5-1:4 -4.336809e-18 -0.017039030 0.017039030 1.0000000
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8845 2:5-2:4 -2.059984e-18 -0.017039030 0.017039030 1.0000000
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8848 UTC:4-3:4 -1.666667e-04 -0.017205697 0.016872363 1.0000000
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8852 UTC:5-3:4 -1.666667e-04 -0.017205697 0.016872363 1.0000000
8853 1:5-UTC:4 8.131516e-18 -0.017039030 0.017039030 1.0000000
8854 2:5-UTC:4 2.493665e-18 -0.017039030 0.017039030 1.0000000
8855 3:5-UTC:4 1.396667e-02 -0.003072363 0.031005697 0.2301213
8856 UTC:5-UTC:4 3.794708e-18 -0.017039030 0.017039030 1.0000000
8857 2:5-1:5 -5.637851e-18 -0.017039030 0.017039030 1.0000000
8858 3:5-1:5 1.396667e-02 -0.003072363 0.031005697 0.2301213
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8860 3:5-2:5 1.396667e-02 -0.003072363 0.031005697 0.2301213
8861 UTC:5-2:5 1.301043e-18 -0.017039030 0.017039030 1.0000000
8862 UTC:5-3:5 -1.396667e-02 -0.031005697 0.003072363 0.2301213
8863
8864 sample families
8865
8866      Df Sum Sq Mean Sq F value Pr(>F)
8867 block      3  1.133   0.3778   4.533 0.00792 ***
8868 event      4  0.233   0.0583   0.700 0.59654
8869 block:event 12  0.700   0.0583   0.700 0.74180
8870 Residuals  40  3.333   0.0833
8871 ---
8872 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
8873 Levene's Test for Homogeneity of Variance (center = median)
8874      Df F value Pr(>F)
8875 group 19  0.7895  0.705
8876    40
8877
8878 Shapiro-Wilk normality test
8879
8880 data: residuals(family.model)
8881 W = 0.67579, p-value = 3.114e-10
8882
8883 Tukey multiple comparisons of means
8884   95% family-wise confidence level
8885
8886 Fit: aov(formula = family.model)
8887
8888 $block
8889      diff      lwr      upr     p adj
8890 2-1  6.666667e-02 -0.21587434  0.34920767 0.9209527
8891 3-1  3.333333e-01  0.05079233  0.61587434 0.0151836
8892 UTC-1 2.322216e-16 -0.28254101  0.28254101 1.0000000
8893 3-2  2.666667e-01 -0.01587434  0.54920767 0.0704262
8894 UTC-2 -6.666667e-02 -0.34920767  0.21587434 0.9209527
8895 UTC-3 -3.333333e-01 -0.61587434 -0.05079233 0.0151836
8896
8897 $event
8898      diff      lwr      upr     p adj
8899 2-1 -1.110223e-16 -0.3365936  0.3365936 1.0000000
8900 3-1 -1.666667e-01 -0.5032603  0.1699269 0.6223528
8901 4-1 -8.333333e-02 -0.4199269  0.2532603 0.9536779
8902 5-1 -8.333333e-02 -0.4199269  0.2532603 0.9536779
8903 3-2 -1.666667e-01 -0.5032603  0.1699269 0.6223528
8904 4-2 -8.333333e-02 -0.4199269  0.2532603 0.9536779
8905 5-2 -8.333333e-02 -0.4199269  0.2532603 0.9536779
8906 4-3  8.333333e-02 -0.2532603  0.4199269 0.9536779
8907 5-3  8.333333e-02 -0.2532603  0.4199269 0.9536779
8908 5-4 -1.804112e-16 -0.3365936  0.3365936 1.0000000
8909
8910 $`block:event`
8911      diff      lwr      upr     p adj
8912 2:1-1:1  3.333333e-01 -0.5595853  1.2262519 0.9954903
8913 3:1-1:1  3.333333e-01 -0.5595853  1.2262519 0.9954903
8914 UTC:1-1:1 -5.551115e-16 -0.8929186  0.8929186 1.0000000
8915 1:2-1:1 -4.487151e-16 -0.8929186  0.8929186 1.0000000
8916 2:2-1:1 -1.989150e-16 -0.8929186  0.8929186 1.0000000
8917 3:2-1:1  6.666667e-01 -0.2262519  1.5595853 0.3748926
8918 UTC:2-1:1  1.387779e-17 -0.8929186  0.8929186 1.0000000
8919 1:3-1:1 -6.800116e-16 -0.8929186  0.8929186 1.0000000
8920 2:3-1:1 -4.649059e-16 -0.8929186  0.8929186 1.0000000
8921 3:3-1:1 -3.747003e-16 -0.8929186  0.8929186 1.0000000
8922 UTC:3-1:1 -2.359224e-16 -0.8929186  0.8929186 1.0000000
8923 1:4-1:1 -3.365364e-16 -0.8929186  0.8929186 1.0000000
8924 2:4-1:1 -4.093947e-16 -0.8929186  0.8929186 1.0000000
8925 3:4-1:1  3.333333e-01 -0.5595853  1.2262519 0.9954903
8926 UTC:4-1:1 -1.144917e-16 -0.8929186  0.8929186 1.0000000
8927 1:5-1:1 -7.181755e-16 -0.8929186  0.8929186 1.0000000

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8928	2:5-1:1	-5.759282e-16	-0.8929186	0.8929186	1.0000000
8929	3:5-1:1	3.333333e-01	-0.5595853	1.2262519	0.9954903
8930	UTC:5-1:1	-2.359224e-16	-0.8929186	0.8929186	1.0000000
8931	3:1-2:1	5.551115e-17	-0.8929186	0.8929186	1.0000000
8932	UTC:1-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8933	1:2-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8934	2:2-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8935	3:2-2:1	3.333333e-01	-0.5595853	1.2262519	0.9954903
8936	UTC:2-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8937	1:3-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8938	2:3-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8939	3:3-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8940	UTC:3-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8941	1:4-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8942	2:4-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8943	3:4-2:1	-2.7755558e-16	-0.8929186	0.8929186	1.0000000
8944	UTC:4-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8945	1:5-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8946	2:5-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8947	3:5-2:1	-3.885781e-16	-0.8929186	0.8929186	1.0000000
8948	UTC:5-2:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8949	UTC:1-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8950	1:2-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8951	2:2-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8952	3:2-3:1	3.333333e-01	-0.5595853	1.2262519	0.9954903
8953	UTC:2-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8954	1:3-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8955	2:3-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8956	3:3-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8957	UTC:3-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
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8959	2:4-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
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8961	UTC:4-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8962	1:5-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8963	2:5-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
8964	3:5-3:1	-4.440892e-16	-0.8929186	0.8929186	1.0000000
8965	UTC:5-3:1	-3.333333e-01	-1.2262519	0.5595853	0.9954903
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8967	2:2-UTC:1	3.561966e-16	-0.8929186	0.8929186	1.0000000
8968	3:2-UTC:1	6.666667e-01	-0.2262519	1.5595853	0.3748926
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8975	2:4-UTC:1	1.457168e-16	-0.8929186	0.8929186	1.0000000
8976	3:4-UTC:1	3.333333e-01	-0.5595853	1.2262519	0.9954903
8977	UTC:4-UTC:1	4.406198e-16	-0.8929186	0.8929186	1.0000000
8978	1:5-UTC:1	-1.630640e-16	-0.8929186	0.8929186	1.0000000
8979	2:5-UTC:1	-2.081668e-17	-0.8929186	0.8929186	1.0000000
8980	3:5-UTC:1	3.333333e-01	-0.5595853	1.2262519	0.9954903
8981	UTC:5-UTC:1	3.191891e-16	-0.8929186	0.8929186	1.0000000
8982	2:2-1:2	2.498002e-16	-0.8929186	0.8929186	1.0000000
8983	3:2-1:2	6.666667e-01	-0.2262519	1.5595853	0.3748926
8984	UTC:2-1:2	4.625929e-16	-0.8929186	0.8929186	1.0000000
8985	1:3-1:2	-2.312965e-16	-0.8929186	0.8929186	1.0000000
8986	2:3-1:2	-1.619075e-17	-0.8929186	0.8929186	1.0000000
8987	3:3-1:2	7.401487e-17	-0.8929186	0.8929186	1.0000000
8988	UTC:3-1:2	2.127927e-16	-0.8929186	0.8929186	1.0000000
8989	1:4-1:2	1.121788e-16	-0.8929186	0.8929186	1.0000000
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8991	3:4-1:2	3.333333e-01	-0.5595853	1.2262519	0.9954903
8992	UTC:4-1:2	3.342234e-16	-0.8929186	0.8929186	1.0000000
8993	1:5-1:2	-2.694604e-16	-0.8929186	0.8929186	1.0000000
8994	2:5-1:2	-1.272131e-16	-0.8929186	0.8929186	1.0000000
8995	3:5-1:2	3.333333e-01	-0.5595853	1.2262519	0.9954903
8996	UTC:5-1:2	2.127927e-16	-0.8929186	0.8929186	1.0000000
8997	3:2-2:2	6.666667e-01	-0.2262519	1.5595853	0.3748926
8998	UTC:2-2:2	2.127927e-16	-0.8929186	0.8929186	1.0000000
8999	1:3-2:2	-4.810966e-16	-0.8929186	0.8929186	1.0000000
9000	2:3-2:2	-2.659909e-16	-0.8929186	0.8929186	1.0000000
9001	3:3-2:2	-1.757853e-16	-0.89291868	1.0000000	
9002	UTC:3-2:2	-3.700743e-17	-0.8929186	0.8929186	1.0000000
9003	1:4-2:2	-1.376214e-16	-0.8929186	0.8929186	1.0000000
9004	2:4-2:2	-2.104798e-16	-0.8929186	0.8929186	1.0000000
9005	3:4-2:2	3.333333e-01	-0.5595853	1.2262519	0.9954903
9006	UTC:4-2:2	8.442321e-17	-0.8929186	0.8929186	1.0000000
9007	1:5-2:2	-5.192606e-16	-0.8929186	0.8929186	1.0000000
9008	2:5-2:2	-3.770132e-16	-0.8929186	0.8929186	1.0000000
9009	3:5-2:2	3.333333e-01	-0.5595853	1.2262519	0.9954903
9010	UTC:5-2:2	-3.700743e-17	-0.8929186	0.8929186	1.0000000
9011	UTC:2-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9012	1:3-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9013	2:3-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9014	3:3-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9015	UTC:3-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9016	1:4-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9017	2:4-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9018	3:4-3:2	-3.333333e-01	-1.2262519	0.5595853	0.9954903
9019	UTC:4-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9020	1:5-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9021	2:5-3:2	-6.666667e-01	-1.5595853	0.2262519	0.3748926
9022	3:5-3:2	-3.333333e-01	-1.2262519	0.5595853	0.9954903

```

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9024 1:3-UTC:2 -6.938894e-16 -0.8929186 0.8929186 1.0000000
9025 2:3-UTC:2 -7.787837e-16 -0.8929186 0.8929186 1.0000000
9026 3:3-UTC:2 -3.885781e-16 -0.8929186 0.8929186 1.0000000
9027 UTC:3-UTC:2 -2.498002e-16 -0.8929186 0.8929186 1.0000000
9028 1:4-UTC:2 -3.504141e-16 -0.8929186 0.8929186 1.0000000
9029 2:4-UTC:2 -4.232725e-16 -0.8929186 0.8929186 1.0000000
9030 3:4-UTC:2 3.333333e-01 -0.5595853 1.2262519 0.9954903
9031 UTC:4-UTC:2 -1.283695e-16 -0.8929186 0.8929186 1.0000000
9032 1:5-UTC:2 -7.320533e-16 -0.8929186 0.8929186 1.0000000
9033 2:5-UTC:2 -5.898060e-16 -0.8929186 0.8929186 1.0000000
9034 3:5-UTC:2 3.333333e-01 -0.5595853 1.2262519 0.9954903
9035 UTC:5-UTC:2 -2.498002e-16 -0.8929186 0.8929186 1.0000000
9036 2:3-1:3 2.151057e-16 -0.8929186 0.8929186 1.0000000
9037 3:3-1:3 3.053113e-16 -0.8929186 0.8929186 1.0000000
9038 UTC:3-1:3 4.440892e-16 -0.8929186 0.8929186 1.0000000
9039 1:4-1:3 3.434752e-16 -0.8929186 0.8929186 1.0000000
9040 2:4-1:3 2.706169e-16 -0.8929186 0.8929186 1.0000000
9041 3:4-1:3 3.333333e-01 -0.5595853 1.2262519 0.9954903
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9044 2:5-1:3 1.040834e-16 -0.8929186 0.8929186 1.0000000
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9046 UTC:5-1:3 4.440892e-16 -0.8929186 0.8929186 1.0000000
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9055 3:5-2:3 3.333333e-01 -0.5595853 1.2262519 0.9954903
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9089 2:5-3:4 -3.333333e-01 -1.2262519 0.5595853 0.9954903
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9094 3:5-UTC:4 3.333333e-01 -0.5595853 1.2262519 0.9954903
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9098 UTC:5-1:5 4.822531e-16 -0.8929186 0.8929186 1.0000000
9099 3:5-2:5 3.333333e-01 -0.5595853 1.2262519 0.9954903
9100 UTC:5-2:5 3.400058e-16 -0.8929186 0.8929186 1.0000000
9101 UTC:5-3:5 -3.333333e-01 -1.2262519 0.5595853 0.9954903
9102
9103 Orthoptera sweep
9104
9105 sample mass
9106
9107 Df Sum Sq Mean Sq F value Pr(>F)
9108 block 3 0.005632 0.0018772 4.227 0.0109 *
9109 event 4 0.002977 0.0007443 1.676 0.1745
9110 block:event 12 0.010665 0.0008887 2.001 0.0503 .
9111 Residuals 40 0.017763 0.0004441
9112 ---
9113 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
9114 Levene's Test for Homogeneity of Variance (center = median)
9115 Df F value Pr(>F)
9116 group 19 0.8912 0.5951
9117 40

```

```

9118
9119 Shapiro-Wilk normality test
9120
9121 data: residuals(mass.model)
9122 W = 0.93833, p-value = 0.004564
9123
9124 Tukey multiple comparisons of means
9125 95% family-wise confidence level
9126
9127 Fit: aov(formula = mass.model)
9128
9129 $block
9130   diff      lwr      upr    p adj
9131 2-1 -0.003106667 -0.0237318001 0.01751847 0.9774404
9132 3-1 -0.009400000 -0.0300251335 0.01122513 0.6170318
9133 UTC-1 0.016793333 -0.0038318001 0.03741847 0.1456316
9134 3-2 -0.006293333 -0.0269184668 0.01433180 0.8456677
9135 UTC-2 0.019900000 -0.0007251335 0.04052513 0.0620664
9136 UTC-3 0.026193333 0.0055681999 0.04681847 0.0079645
9137
9138 $event
9139   diff      lwr      upr    p adj
9140 2-1 0.0121916667 -0.01237924 0.036762570 0.6205196
9141 3-1 -0.0063250000 -0.03089590 0.018245903 0.9469178
9142 4-1 0.0004333333 -0.02413757 0.025004236 0.9999985
9143 5-1 -0.0077250000 -0.03229590 0.016845903 0.8959646
9144 3-2 -0.0185166667 -0.04308757 0.006054236 0.2188174
9145 4-2 -0.0117583333 -0.03632924 0.012812570 0.6518777
9146 5-2 -0.0199166667 -0.04448757 0.004654236 0.1613139
9147 4-3 0.0067583333 -0.01781257 0.031329236 0.9333167
9148 5-3 -0.0014000000 -0.02597090 0.023170903 0.9998354
9149 5-4 -0.0081583333 -0.03272924 0.016412570 0.8760995
9150
9151 $`block:event`
9152   diff      lwr      upr    p adj
9153 2:1-1:1 -0.003000000 -0.068181920 0.062181920 1.0000000
9154 3:1-1:1 0.009600000 -0.055581920 0.074781920 1.0000000
9155 UTC:1-1:1 -0.023200000 -0.088381920 0.041981920 0.9974220
9156 1:2-1:1 0.0219333333 -0.043248586 0.087115253 0.9987059
9157 2:2-1:1 -0.0064000000 -0.071581920 0.058781920 1.0000000
9158 3:2-1:1 -0.0213666667 -0.086548586 0.043815253 0.9990716
9159 UTC:2-1:1 0.0380000000 -0.027181920 0.103181920 0.7790792
9160 1:3-1:1 -0.0238000000 -0.088981920 0.041381920 0.9965112
9161 2:3-1:1 -0.0112000000 -0.076381920 0.053981920 1.0000000
9162 3:3-1:1 -0.0220666667 -0.087248586 0.043115253 0.9986038
9163 UTC:3-1:1 0.0151666667 -0.050015253 0.080348586 0.9999930
9164 1:4-1:1 -0.0113333333 -0.076515253 0.053848586 0.9999999
9165 2:4-1:1 -0.0153333333 -0.080515253 0.049848586 0.9999917
9166 3:4-1:1 -0.0178000000 -0.082981920 0.047381920 0.9999231
9167 UTC:4-1:1 0.0296000000 -0.035581920 0.094781920 0.9658886
9168 1:5-1:1 -0.0143333333 -0.079515253 0.050848586 0.9999971
9169 2:5-1:1 -0.0071333333 -0.072315253 0.058048586 1.0000000
9170 3:5-1:1 -0.0229000000 -0.088081920 0.042281920 0.9977963
9171 UTC:5-1:1 -0.0031333333 -0.068315253 0.062048586 1.0000000
9172 3:1-2:1 0.0126000000 -0.052581920 0.077781920 0.9999996
9173 UTC:1-2:1 -0.0202000000 -0.085381920 0.044981920 0.9995546
9174 1:2-2:1 0.0249333333 -0.040248586 0.090115253 0.9940552
9175 2:2-2:1 -0.0034000000 -0.068581920 0.061781920 1.0000000
9176 3:2-2:1 -0.0183666667 -0.083548586 0.046815253 0.9998797
9177 UTC:2-2:1 0.0410000000 -0.024181920 0.106181920 0.6696538
9178 1:3-2:1 -0.0208000000 -0.085981920 0.044381920 0.9993445
9179 2:3-2:1 -0.0082000000 -0.073381920 0.056981920 1.0000000
9180 3:3-2:1 -0.0190666667 -0.084248586 0.046115253 0.9997969
9181 UTC:3-2:1 0.0181666667 -0.047015253 0.083348586 0.9998970
9182 1:4-2:1 -0.0083333333 -0.073515253 0.056848586 1.0000000
9183 2:4-2:1 -0.0123333333 -0.077515253 0.052848586 0.9999997
9184 3:4-2:1 -0.0148000000 -0.079981920 0.050381920 0.9999952
9185 UTC:4-2:1 0.0326000000 -0.032581920 0.057781920 0.9225080
9186 1:5-2:1 -0.0113333333 -0.076515253 0.053848586 0.9999999
9187 2:5-2:1 -0.0041333333 -0.069315253 0.061048586 1.0000000
9188 3:5-2:1 -0.0199000000 -0.085081920 0.045281920 0.9996356
9189 UTC:5-2:1 -0.0001133333 -0.065315253 0.065048586 1.0000000
9190 UTC:1-3:1 -0.0328000000 -0.097981920 0.032381920 0.9187096
9191 1:2-3:1 0.0123333333 -0.052848586 0.077515253 0.9999997
9192 2:2-3:1 -0.0160000000 -0.081181920 0.049181920 0.9999841
9193 3:2-3:1 -0.0309666667 -0.096148586 0.034215253 0.9491725
9194 UTC:2-3:1 0.0284000000 -0.036781920 0.093581920 0.9768708
9195 1:3-3:1 -0.0334000000 -0.098581920 0.031781920 0.9065969
9196 2:3-3:1 -0.0208000000 -0.085981920 0.044381920 0.9993445
9197 3:3-3:1 -0.0316666667 -0.096848586 0.033515253 0.9386789
9198 UTC:3-3:1 0.0055666667 -0.059615253 0.070748586 1.0000000
9199 1:4-3:1 -0.0209333333 -0.086115253 0.044248586 0.9992875
9200 2:4-3:1 -0.0249333333 -0.090115253 0.040248586 0.9940552
9201 3:4-3:1 -0.0274000000 -0.092581920 0.037781920 0.9837631
9202 UTC:4-3:1 0.0200000000 -0.045181920 0.085181920 0.9996102
9203 1:5-3:1 -0.0239333333 -0.089115253 0.041248586 0.9962760
9204 2:5-3:1 -0.0167333333 -0.081915253 0.048448586 0.9999689
9205 3:5-3:1 -0.0325000000 -0.097681920 0.032681920 0.9243627
9206 UTC:5-3:1 -0.0127333333 -0.077915253 0.052448586 0.9999996
9207 1:2-UTC:1 0.0451333333 -0.020048586 0.110315253 0.5065269
9208 2:2-UTC:1 0.0168000000 -0.048381920 0.081981920 0.9999670
9209 3:2-UTC:1 0.0018333333 -0.063348586 0.067015253 1.0000000
9210 UTC:2-UTC:1 0.0612000000 -0.003981920 0.126381920 0.0875905
9211 1:3-UTC:1 -0.0006000000 -0.065781920 0.064581920 1.0000000
9212 2:3-UTC:1 0.0120000000 -0.053181920 0.077181920 0.9999998

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9213	3:3-UTC:1	0.00113333333	-0.064048586	0.066315253	1.0000000
9214	UTC:3-UTC:1	0.0383666667	-0.026815253	0.103548586	0.7665662
9215	1:4-UTC:1	0.0118666667	-0.053315253	0.077048586	0.9999999
9216	2:4-UTC:1	0.0078666667	-0.057315253	0.073048586	1.0000000
9217	3:4-UTC:1	0.0054000000	-0.059781920	0.070581920	1.0000000
9218	UTC:4-UTC:1	0.0528000000	-0.012381920	0.117981920	0.2466641
9219	1:5-UTC:1	0.0088666667	-0.056315253	0.074048586	1.0000000
9220	2:5-UTC:1	0.0160666667	-0.049115253	0.081248586	0.9999831
9221	3:5-UTC:1	0.0003000000	-0.064881920	0.065481920	1.0000000
9222	UTC:5-UTC:1	0.0200666667	-0.045115253	0.085248586	0.9995924
9223	2:2-1:2	-0.0283333333	-0.093515253	0.036848586	0.9773902
9224	3:2-1:2	-0.0433000000	-0.108481920	0.021881920	0.5790645
9225	UTC:2-1:2	0.0160666667	-0.049115253	0.081248586	0.9999831
9226	1:3-1:2	-0.0457333333	-0.110915253	0.019448586	0.4831808
9227	2:3-1:2	-0.0331333333	-0.098315253	0.032048586	0.9121136
9228	3:3-1:2	-0.0440000000	-0.109181920	0.021181920	0.5512403
9229	UTC:3-1:2	0.0067666667	-0.071948586	0.058415253	1.0000000
9230	1:4-1:2	-0.0332666667	-0.098448586	0.031915253	0.9093819
9231	2:4-1:2	-0.0372666667	-0.102448586	0.027915253	0.8031994
9232	3:4-1:2	-0.0397333333	-0.1049115253	0.025448586	0.7176152
9233	UTC:4-1:2	0.0076666667	-0.0575115253	0.072848586	1.0000000
9234	1:5-1:2	-0.0362666667	-0.101448586	0.028915253	0.8339558
9235	2:5-1:2	-0.0290666667	-0.094248586	0.036115253	0.9711648
9236	3:5-1:2	-0.0448333333	-0.1100115253	0.020348586	0.5182980
9237	UTC:5-1:2	0.0250666667	-0.090248586	0.040115253	0.9936904
9238	3:2-2:2	-0.0149666667	-0.080148586	0.0502115253	0.9999943
9239	UTC:2-2:2	0.0444000000	-0.020781920	0.109581920	0.5353910
9240	1:3-2:2	-0.0174000000	-0.082581920	0.047781920	0.9999447
9241	2:3-2:2	-0.0048000000	-0.069981920	0.060381920	1.0000000
9242	3:3-2:2	-0.0156666667	-0.080848586	0.0495115253	0.9999885
9243	UTC:3-2:2	0.0215666667	-0.0436115253	0.086748586	0.9989543
9244	1:4-2:2	-0.0049333333	-0.0701115253	0.060248586	1.0000000
9245	2:4-2:2	-0.0089333333	-0.0741115253	0.056248586	1.0000000
9246	3:4-2:2	-0.0114000000	-0.076581920	0.053781920	0.9999999
9247	UTC:4-2:2	0.0360000000	-0.029181920	0.101181920	0.8417111
9248	1:5-2:2	-0.0079333333	-0.0731115253	0.0572448586	1.0000000
9249	2:5-2:2	-0.0007333333	-0.0659115253	0.064448586	1.0000000
9250	3:5-2:2	-0.0165000000	-0.081681920	0.048681920	0.9999747
9251	UTC:5-2:2	0.0032666667	-0.0619115253	0.068448586	1.0000000
9252	UTC:2-3:2	0.0593666667	-0.0058115253	0.124548586	0.1118388
9253	1:3-3:2	-0.0024333333	-0.0676115253	0.0627448586	1.0000000
9254	2:3-3:2	-0.0101666667	-0.0550115253	0.0793348586	1.0000000
9255	3:3-3:2	-0.0007000000	-0.065881920	0.064481920	1.0000000
9256	UTC:3-3:2	0.0365333333	-0.028648586	0.1017115253	0.8260084
9257	1:4-3:2	0.0100333333	-0.0551448586	0.0752115253	1.0000000
9258	2:4-3:2	0.0060333333	-0.0591448586	0.0712115253	1.0000000
9259	3:4-3:2	0.0035666667	-0.0616115253	0.0687448586	1.0000000
9260	UTC:4-3:2	0.0509666667	-0.0142115253	0.116148586	0.2994645
9261	1:5-3:2	0.0070333333	-0.0581448586	0.0722115253	1.0000000
9262	2:5-3:2	0.0142333333	-0.0509448586	0.0794115253	0.9999974
9263	3:5-3:2	-0.0015333333	-0.0667115253	0.063648586	1.0000000
9264	UTC:5-3:2	0.0182333333	-0.0469448586	0.0834115253	0.9998915
9265	1:3-UTC:2	0.0618000000	-0.126981920	0.003381920	0.0806984
9266	2:3-UTC:2	-0.0492000000	-0.114381920	0.015981920	0.3565309
9267	3:3-UTC:2	-0.0600666667	-0.1252448586	0.0051115253	0.1019870
9268	UTC:3-UTC:2	0.0228333333	-0.0880115253	0.0423348586	0.9978729
9269	1:4-UTC:2	-0.0493333333	-0.1145115253	0.0158448586	0.3520245
9270	2:4-UTC:2	-0.0533333333	-0.1185115253	0.0118448586	0.2325801
9271	3:4-UTC:2	-0.0558000000	-0.120981920	0.009381920	0.1749020
9272	UTC:4-UTC:2	-0.0084000000	-0.073581920	0.056781920	1.0000000
9273	1:5-UTC:2	-0.0523333333	-0.1175115253	0.0128448586	0.2594621
9274	2:5-UTC:2	-0.0451333333	-0.1103115253	0.0200448586	0.5065269
9275	3:5-UTC:2	-0.0609000000	-0.126081920	0.004281920	0.0912216
9276	UTC:5-UTC:2	-0.0411333333	-0.1063115253	0.0240448586	0.6644963
9277	2:3-1:3	0.0126000000	-0.052581920	0.077781920	0.9999996
9278	3:3-1:3	0.0017333333	-0.0634448586	0.0669115253	1.0000000
9279	UTC:3-1:3	0.0389666667	-0.0262115253	0.1041448586	0.7454962
9280	1:4-1:3	0.0124666667	-0.0527115253	0.0776448586	0.9999997
9281	2:4-1:3	0.0084666667	-0.0567115253	0.0736448586	1.0000000
9282	3:4-1:3	0.0060000000	-0.059181920	0.071181920	1.0000000
9283	UTC:4-1:3	0.0534000000	-0.011781920	0.118581920	0.2308603
9284	1:5-1:3	0.0094666667	-0.0557115253	0.0746448586	1.0000000
9285	2:5-1:3	0.0166666667	-0.0485115253	0.0818448586	0.9999707
9286	3:5-1:3	0.0009000000	-0.064281920	0.066081920	1.0000000
9287	UTC:5-1:3	0.0206666667	-0.0445115253	0.0858448586	0.9993974
9288	3:3-2:3	-0.0108666667	-0.0760448586	0.0543115253	1.0000000
9289	UTC:3-2:3	0.0263666667	-0.0388115253	0.0915448586	0.9890812
9290	1:4-2:3	-0.0001333333	-0.0653115253	0.0650448586	1.0000000
9291	2:4-2:3	-0.0041333333	-0.0693115253	0.0610448586	1.0000000
9292	3:4-2:3	-0.0066000000	-0.071781920	0.058581920	1.0000000
9293	UTC:4-2:3	0.0408000000	-0.024381920	0.105981920	0.6773563
9294	1:5-2:3	-0.0031333333	-0.0683115253	0.0620448586	1.0000000
9295	2:5-2:3	0.0040666667	-0.0611115253	0.0692448586	1.0000000
9296	3:5-2:3	-0.0117000000	-0.076881920	0.053481920	0.9999999
9297	UTC:5-2:3	0.0080666667	-0.0571115253	0.0732448586	1.0000000
9298	UTC:3-3:3	0.0372333333	-0.0279448586	0.1024115253	0.8042655
9299	1:4-3:3	0.0107333333	-0.0544448586	0.0759115253	1.0000000
9300	2:4-3:3	0.0067333333	-0.0584448586	0.0719115253	1.0000000
9301	3:4-3:3	0.0042666667	-0.0609115253	0.0694448586	1.0000000
9302	UTC:4-3:3	0.0516666667	-0.0135115253	0.1168448586	0.2785091
9303	1:5-3:3	0.0077333333	-0.0574448586	0.0729115253	1.0000000
9304	2:5-3:3	0.0149333333	-0.0502448586	0.0801115253	0.9999945
9305	3:5-3:3	-0.0008333333	-0.0660115253	0.0643448586	1.0000000
9306	UTC:5-3:3	0.0189333333	-0.0462448586	0.0841115253	0.9998157
9307	1:4-UTC:3	-0.0265000000	-0.091681920	0.038681920	0.9884860

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9308 2:4-UTC:3 -0.0305000000 -0.095681920 0.034681920 0.9554231
9309 3:4-UTC:3 -0.0329666667 -0.098148586 0.032215253 0.9154531
9310 UTC:4-UTC:3 0.0144333333 -0.050748586 0.079615253 0.9999968
9311 1:5-UTC:3 -0.0295000000 -0.094681920 0.035681920 0.9669284
9312 2:5-UTC:3 -0.0223000000 -0.087481920 0.042881920 0.9984085
9313 3:5-UTC:3 -0.0380666667 -0.103248586 0.027115253 0.7768257
9314 UTC:5-UTC:3 -0.0183000000 -0.083481920 0.046881920 0.9998857
9315 2:4-1:4 -0.0040000000 -0.069181920 0.061181920 1.0000000
9316 3:4-1:4 -0.0064666667 -0.071648586 0.058715253 1.0000000
9317 UTC:4-1:4 0.0409333333 -0.024248586 0.106115253 0.6722259
9318 1:5-1:4 -0.0030000000 -0.068181920 0.062181920 1.0000000
9319 2:5-1:4 0.0042000000 -0.060981920 0.069381920 1.0000000
9320 3:5-1:4 -0.0115666667 -0.076748586 0.053615253 0.9999999
9321 UTC:5-1:4 0.0082000000 -0.056981920 0.073381920 1.0000000
9322 3:4-2:4 -0.0024666667 -0.067648586 0.062715253 1.0000000
9323 UTC:4-2:4 0.0449333333 -0.020248586 0.110115253 0.5143680
9324 1:5-2:4 0.0010000000 -0.064181920 0.066181920 1.0000000
9325 2:5-2:4 0.0082000000 -0.056981920 0.073381920 1.0000000
9326 3:5-2:4 -0.0075666667 -0.072748586 0.057615253 1.0000000
9327 UTC:5-2:4 0.0122000000 -0.052981920 0.077381920 0.9999998
9328 UTC:4-3:4 0.0474000000 -0.017781920 0.112581920 0.4202278
9329 1:5-3:4 0.0034666667 -0.061715253 0.068648586 1.0000000
9330 2:5-3:4 0.0106666667 -0.054515253 0.075848586 1.0000000
9331 3:5-3:4 -0.0051000000 -0.070281920 0.060081920 1.0000000
9332 UTC:5-3:4 0.0146666667 -0.050515253 0.079848586 0.9999959
9333 1:5-UTC:4 -0.0439333333 -0.109115253 0.021248586 0.5538867
9334 2:5-UTC:4 -0.0367333333 -0.101915253 0.028448586 0.8199243
9335 3:5-UTC:4 -0.0525000000 -0.117681920 0.012681920 0.2548406
9336 UTC:5-UTC:4 -0.0327333333 -0.097915253 0.032448586 0.9199889
9337 2:5-1:5 0.0072000000 -0.057981920 0.072381920 1.0000000
9338 3:5-1:5 -0.0085666667 -0.073748586 0.056615253 1.0000000
9339 UTC:5-1:5 0.0112000000 -0.053981920 0.076381920 1.0000000
9340 3:5-2:5 -0.0157666667 -0.080948586 0.049415253 0.9999873
9341 UTC:5-2:5 0.0040000000 -0.061181920 0.069181920 1.0000000
9342 UTC:5-3:5 0.0197666667 -0.045415253 0.084948586 0.9996672
9343
9344 sample families
9345
9346      Df Sum Sq Mean Sq F value Pr(>F)
9347 block      3  1.733  0.5778  3.152 0.0353 *
9348 event       4  0.900  0.2250  1.227 0.3146
9349 block:event 12  4.433  0.3694  2.015 0.0486 *
9350 Residuals   40  7.333  0.1833
9351 ---
9352 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
9353 Levene's Test for Homogeneity of Variance (center = median)
9354      Df F value Pr(>F)
9355 group 19  0.4737 0.9588
9356      40
9357
9358 Shapiro-Wilk normality test
9359
9360 data: residuals(family.model)
9361 W = 0.89386, p-value = 7.918e-05
9362
9363 Tukey multiple comparisons of means
9364   95% family-wise confidence level
9365
9366 Fit: aov(formula = family.model)
9367
9368 $block
9369      diff      lwr      upr     p adj
9370 2-1  0.06666667 -0.35240937  0.4857427 0.9736213
9371 3-1 -0.13333333 -0.55240937  0.2857427 0.8288091
9372 UTC-1  0.33333333 -0.08574270  0.7524094 0.1605422
9373 3-2 -0.20000000 -0.61907604  0.2190760 0.5812431
9374 UTC-2  0.26666667 -0.15240937  0.6857427 0.3342524
9375 UTC-3  0.46666667  0.04759063  0.8857427 0.0239233
9376
9377 $event
9378      diff      lwr      upr     p adj
9379 2-1  2.500000e-01 -0.249249  0.749249 0.6123476
9380 3-1  3.885781e-16 -0.499249  0.499249 1.0000000
9381 4-1  3.885781e-16 -0.499249  0.499249 1.0000000
9382 5-1  2.500000e-01 -0.249249  0.749249 0.6123476
9383 3-2 -2.500000e-01 -0.749249  0.249249 0.6123476
9384 4-2 -2.500000e-01 -0.749249  0.249249 0.6123476
9385 5-2 -4.440892e-16 -0.499249  0.499249 1.0000000
9386 4-3  0.000000e+00 -0.499249  0.499249 1.0000000
9387 5-3  2.500000e-01 -0.249249  0.749249 0.6123476
9388 5-4  2.500000e-01 -0.249249  0.749249 0.6123476
9389
9390 $`block:event`
9391      diff      lwr      upr     p adj
9392 2:1-1:1  1.942890e-15 -1.3244123  1.3244123 1.0000000
9393 3:1-1:1  6.666667e-01 -0.6577456  1.9910790 0.9185071
9394 UTC:1-1:1  2.053913e-15 -1.3244123  1.3244123 1.0000000
9395 1:2-1:1  6.666667e-01 -0.6577456  1.9910790 0.9185071
9396 2:2-1:1  3.333333e-01 -0.9910790  1.6577456 0.9999768
9397 3:2-1:1  2.331468e-15 -1.3244123  1.3244123 1.0000000
9398 UTC:2-1:1  6.666667e-01 -0.6577456  1.9910790 0.9185071
9399 1:3-1:1 -3.333333e-01 -1.6577456  0.9910790 0.9999768
9400 2:3-1:1  3.333333e-01 -0.9910790  1.6577456 0.9999768
9401 3:3-1:1  1.609823e-15 -1.3244123  1.3244123 1.0000000
9402 UTC:3-1:1  6.666667e-01 -0.6577456  1.9910790 0.9185071

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9403	1:4-1:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9404	2:4-1:1	1.498801e-15	-1.3244123	1.3244123	1.0000000
9405	3:4-1:1	-3.333333e-01	-1.6577456	1.9910790	0.9999768
9406	UTC:4-1:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9407	1:5-1:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9408	2:5-1:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9409	3:5-1:1	1.332268e-15	-1.3244123	1.3244123	1.0000000
9410	UTC:5-1:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9411	3:1-2:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9412	UTC:1-2:1	1.110223e-16	-1.3244123	1.3244123	1.0000000
9413	1:2-2:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9414	2:2-2:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9415	3:2-2:1	3.885781e-16	-1.3244123	1.3244123	1.0000000
9416	UTC:2-2:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9417	1:3-2:1	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9418	2:3-2:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9419	3:3-2:1	-3.330669e-16	-1.3244123	1.3244123	1.0000000
9420	UTC:3-2:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9421	1:4-2:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9422	2:4-2:1	-4.440892e-16	-1.3244123	1.3244123	1.0000000
9423	3:4-2:1	3.333333e-01	-1.6577456	0.9910790	0.9999768
9424	UTC:4-2:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9425	1:5-2:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9426	2:5-2:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9427	3:5-2:1	-6.106227e-16	-1.3244123	1.3244123	1.0000000
9428	UTC:5-2:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9429	UTC:1-3:1	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9430	1:2-3:1	8.881784e-16	-1.3244123	1.3244123	1.0000000
9431	2:2-3:1	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9432	3:2-3:1	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9433	UTC:2-3:1	2.220446e-16	-1.3244123	1.3244123	1.0000000
9434	1:3-3:1	-1.000000e+00	-2.3244123	0.3244123	0.3559976
9435	2:3-3:1	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9436	3:3-3:1	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9437	UTC:3-3:1	0.000000e+00	-1.3244123	1.3244123	1.0000000
9438	1:4-3:1	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9439	2:4-3:1	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9440	3:4-3:1	-1.000000e+00	-2.3244123	0.3244123	0.3559976
9441	UTC:4-3:1	-1.110223e-16	-1.3244123	1.3244123	1.0000000
9442	1:5-3:1	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9443	2:5-3:1	2.220446e-16	-1.3244123	1.3244123	1.0000000
9444	3:5-3:1	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9445	UTC:5-3:1	0.000000e+00	-1.3244123	1.3244123	1.0000000
9446	1:2-UTC:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9447	2:2-UTC:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9448	3:2-UTC:1	2.775558e-16	-1.3244123	1.3244123	1.0000000
9449	UTC:2-UTC:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9450	1:3-UTC:1	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9451	2:3-UTC:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9452	3:3-UTC:1	-4.440892e-16	-1.3244123	1.3244123	1.0000000
9453	UTC:3-UTC:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9454	1:4-UTC:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9455	2:4-UTC:1	5.551115e-16	-1.3244123	1.3244123	1.0000000
9456	3:4-UTC:1	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9457	UTC:4-UTC:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9458	1:5-UTC:1	3.333333e-01	-0.9910790	1.6577456	0.9999768
9459	2:5-UTC:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9460	3:5-UTC:1	-7.216450e-16	-1.3244123	1.3244123	1.0000000
9461	UTC:5-UTC:1	6.666667e-01	-0.6577456	1.9910790	0.9185071
9462	2:2-1:2	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9463	3:2-1:2	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9464	UTC:2-1:2	-6.661338e-16	-1.3244123	1.3244123	1.0000000
9465	1:3-1:2	-1.000000e+00	-2.3244123	0.3244123	0.3559976
9466	2:3-1:2	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9467	3:3-1:2	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9468	UTC:3-1:2	-8.881784e-16	-1.3244123	1.3244123	1.0000000
9469	1:4-1:2	3.333333e-01	-1.6577456	0.9910790	0.9999768
9470	2:4-1:2	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9471	3:4-1:2	-1.000000e+00	-2.3244123	0.3244123	0.3559976
9472	UTC:4-1:2	-9.992007e-16	-1.3244123	1.3244123	1.0000000
9473	1:5-1:2	3.333333e-01	-1.6577456	0.9910790	0.9999768
9474	2:5-1:2	-6.661338e-16	-1.3244123	1.3244123	1.0000000
9475	3:5-1:2	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9476	UTC:5-1:2	-8.881784e-16	-1.3244123	1.3244123	1.0000000
9477	3:2-2:2	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9478	UTC:2-2:2	3.333333e-01	-0.9910790	1.6577456	0.9999768
9479	1:3-2:2	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9480	2:3-2:2	-1.110223e-16	-1.3244123	1.3244123	1.0000000
9481	3:3-2:2	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9482	UTC:3-2:2	3.333333e-01	-0.9910790	1.6577456	0.9999768
9483	1:4-2:2	5.551115e-16	-1.3244123	1.3244123	1.0000000
9484	2:4-2:2	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9485	3:4-2:2	-6.666667e-01	-1.9910790	0.6577456	0.9185071
9486	UTC:4-2:2	3.333333e-01	-0.9910790	1.6577456	0.9999768
9487	1:5-2:2	3.333333e-01	-0.9910790	1.6577456	0.9999768
9488	2:5-2:2	3.333333e-01	-0.9910790	1.6577456	0.9999768
9489	3:5-2:2	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9490	UTC:5-2:2	3.333333e-01	-0.9910790	1.6577456	0.9999768
9491	UTC:2-3:2	6.666667e-01	-0.6577456	1.9910790	0.9185071
9492	1:3-3:2	-3.333333e-01	-1.6577456	0.9910790	0.9999768
9493	2:3-3:2	3.333333e-01	-0.9910790	1.6577456	0.9999768
9494	3:3-3:2	-7.216450e-16	-1.3244123	1.3244123	1.0000000
9495	UTC:3-3:2	6.666667e-01	-0.6577456	1.9910790	0.9185071
9496	1:4-3:2	3.333333e-01	-0.9910790	1.6577456	0.9999768
9497	2:4-3:2	-8.326673e-16	-1.3244123	1.3244123	1.0000000

```

9498 3:4-3:2 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9499 UTC:4-3:2 6.666667e-01 -0.6577456 1.9910790 0.9185071
9500 1:5-3:2 3.333333e-01 -0.9910790 1.6577456 0.9999768
9501 2:5-3:2 6.666667e-01 -0.6577456 1.9910790 0.9185071
9502 3:5-3:2 -9.992007e-16 -1.3244123 1.3244123 1.0000000
9503 UTC:5-3:2 6.666667e-01 -0.6577456 1.9910790 0.9185071
9504 1:3-UTC:2 -1.000000e+00 -2.3244123 0.3244123 0.3559976
9505 2:3-UTC:2 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9506 3:3-UTC:2 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9507 UTC:3-3:2 -2.220446e-16 -1.3244123 1.3244123 1.0000000
9508 1:4-UTC:2 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9509 2:4-UTC:2 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9510 3:4-UTC:2 -1.000000e+00 -2.3244123 0.3244123 0.3559976
9511 UTC:4-UTC:2 -3.330669e-16 -1.3244123 1.3244123 1.0000000
9512 1:5-UTC:2 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9513 2:5-UTC:2 0.000000e+00 -1.3244123 1.3244123 1.0000000
9514 3:5-UTC:2 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9515 UTC:5-UTC:2 -2.220446e-16 -1.3244123 1.3244123 1.0000000
9516 2:3-1:3 6.666667e-01 -0.6577456 1.9910790 0.9185071
9517 3:3-1:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9518 UTC:3-1:3 1.000000e+00 -0.3244123 2.3244123 0.3559976
9519 1:4-1:3 6.666667e-01 -0.6577456 1.9910790 0.9185071
9520 2:4-1:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9521 3:4-1:3 -7.771561e-16 -1.3244123 1.3244123 1.0000000
9522 UTC:4-1:3 1.000000e+00 -0.3244123 2.3244123 0.3559976
9523 1:5-1:3 6.666667e-01 -0.6577456 1.9910790 0.9185071
9524 2:5-1:3 1.000000e+00 -0.3244123 2.3244123 0.3559976
9525 3:5-1:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9526 UTC:5-1:3 1.000000e+00 -0.3244123 2.3244123 0.3559976
9527 3:3-2:3 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9528 UTC:3-2:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9529 1:4-2:3 6.661338e-16 -1.3244123 1.3244123 1.0000000
9530 2:4-2:3 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9531 3:4-2:3 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9532 UTC:4-2:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9533 1:5-2:3 3.330669e-16 -1.3244123 1.3244123 1.0000000
9534 2:5-2:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9535 3:5-2:3 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9536 UTC:5-2:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9537 UTC:3-3:3 6.666667e-01 -0.6577456 1.9910790 0.9185071
9538 1:4-3:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9539 2:4-3:3 -1.110223e-16 -1.3244123 1.3244123 1.0000000
9540 3:4-3:3 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9541 UTC:4-3:3 6.666667e-01 -0.6577456 1.9910790 0.9185071
9542 1:5-3:3 3.333333e-01 -0.9910790 1.6577456 0.9999768
9543 2:5-3:3 6.666667e-01 -0.6577456 1.9910790 0.9185071
9544 3:5-3:3 -2.775558e-16 -1.3244123 1.3244123 1.0000000
9545 UTC:5-3:3 6.666667e-01 -0.6577456 1.9910790 0.9185071
9546 1:4-UTC:3 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9547 2:4-UTC:3 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9548 3:4-UTC:3 -1.000000e+00 -2.3244123 0.3244123 0.3559976
9549 UTC:4-UTC:3 -1.110223e-16 -1.3244123 1.3244123 1.0000000
9550 1:5-UTC:3 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9551 2:5-UTC:3 2.220446e-16 -1.3244123 1.3244123 1.0000000
9552 3:5-UTC:3 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9553 UTC:5-UTC:3 0.000000e+00 -1.3244123 1.3244123 1.0000000
9554 2:4-1:4 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9555 3:4-1:4 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9556 UTC:4-1:4 3.333333e-01 -0.9910790 1.6577456 0.9999768
9557 1:5-1:4 -3.330669e-16 -1.3244123 1.3244123 1.0000000
9558 2:5-1:4 3.333333e-01 -0.9910790 1.6577456 0.9999768
9559 3:5-1:4 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9560 UTC:5-1:4 3.333333e-01 -0.9910790 1.6577456 0.9999768
9561 3:4-2:4 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9562 UTC:4-2:4 6.666667e-01 -0.6577456 1.9910790 0.9185071
9563 1:5-2:4 3.333333e-01 -0.9910790 1.6577456 0.9999768
9564 2:5-2:4 6.666667e-01 -0.6577456 1.9910790 0.9185071
9565 3:5-2:4 -1.665335e-16 -1.3244123 1.3244123 1.0000000
9566 UTC:5-2:4 6.666667e-01 -0.6577456 1.9910790 0.9185071
9567 UTC:4-3:4 1.000000e+00 -0.3244123 2.3244123 0.3559976
9568 1:5-3:4 6.666667e-01 -0.6577456 1.9910790 0.9185071
9569 2:5-3:4 1.000000e+00 -0.3244123 2.3244123 0.3559976
9570 3:5-3:4 3.333333e-01 -0.9910790 1.6577456 0.9999768
9571 UTC:5-3:4 1.000000e+00 -0.3244123 2.3244123 0.3559976
9572 1:5-UTC:4 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9573 2:5-UTC:4 3.330669e-16 -1.3244123 1.3244123 1.0000000
9574 3:5-UTC:4 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9575 UTC:5-UTC:4 -1.110223e-16 -1.3244123 1.3244123 1.0000000
9576 2:5-1:5 3.333333e-01 -0.9910790 1.6577456 0.9999768
9577 3:5-1:5 -3.333333e-01 -1.6577456 0.9910790 0.9999768
9578 UTC:5-1:5 3.333333e-01 -0.9910790 1.6577456 0.9999768
9579 3:5-2:5 -6.666667e-01 -1.9910790 0.6577456 0.9185071
9580 UTC:5-2:5 -2.220446e-16 -1.3244123 1.3244123 1.0000000
9581 UTC:5-3:5 6.666667e-01 -0.6577456 1.9910790 0.9185071
9582
9583 Neuroptera sweep
9584
9585 sample mass
9586
9587      Df   Sum Sq  Mean Sq F value Pr(>F)
9588 block      3 5.130e-07 1.708e-07  0.672  0.574
9589 event      4 7.670e-07 1.917e-07  0.754  0.561
9590 block:event 12 3.300e-06 2.750e-07  1.082  0.400
9591 Residuals   40 1.017e-05 2.542e-07
9592 Levene's Test for Homogeneity of Variance (center = median)

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```

9593      Df F value Pr(>F)
9594 group 19  0.9482 0.5344
9595      40
9596
9597 Shapiro-Wilk normality test
9598
9599 data: residuals(mass.model)
9600 W = 0.39918, p-value = 2.863e-14
9601
9602 Tukey multiple comparisons of means
9603   95% family-wise confidence level
9604
9605 Fit: aov(formula = mass.model)
9606
9607 $block
9608      diff      lwr      upr     p adj
9609 2-1 2.000000e-04 -0.0002934367 0.0006934367 0.6997293
9610 3-1 1.666667e-04 -0.0003267700 0.0006601033 0.8020588
9611 UTC-1 1.201657e-19 -0.0004934367 0.0004934367 1.0000000
9612 3-2 -3.333333e-05 -0.0005267700 0.0004601033 0.9978564
9613 UTC-2 -2.000000e-04 -0.0006934367 0.0002934367 0.6997293
9614 UTC-3 -1.666667e-04 -0.0006601033 0.0003267700 0.8020588
9615
9616 $event
9617      diff      lwr      upr     p adj
9618 2-1 -2.083333e-04 -0.0007961688 0.0003795021 0.8482358
9619 3-1 -2.083333e-04 -0.0007961688 0.0003795021 0.8482358
9620 4-1 -2.083333e-04 -0.0007961688 0.0003795021 0.8482358
9621 5-1 4.166667e-05 -0.0005461688 0.0006295021 0.9996087
9622 3-2 -1.795710e-19 -0.0005878354 0.0005878354 1.0000000
9623 4-2 1.263773e-18 -0.0005878354 0.0005878354 1.0000000
9624 5-2 2.500000e-04 -0.0003378354 0.0008378354 0.7429734
9625 4-3 1.443344e-18 -0.0005878354 0.0005878354 1.0000000
9626 5-3 2.500000e-04 -0.0003378354 0.0008378354 0.7429734
9627 5-4 2.500000e-04 -0.0003378354 0.0008378354 0.7429734
9628
9629 $`block:event`
9630      diff      lwr      upr     p adj
9631 2:1-1:1 6.460038e-19 -0.0015594153 0.0015594153 1.0000000
9632 3:1-1:1 8.333333e-04 -0.0007260820 0.0023927486 0.8733082
9633 UTC:1-1:1 1.084202e-19 -0.0015594153 0.0015594153 1.0000000
9634 1:2-1:1 9.712644e-19 -0.0015594153 0.0015594153 1.0000000
9635 2:2-1:1 8.312217e-19 -0.0015594153 0.0015594153 1.0000000
9636 3:2-1:1 1.016440e-18 -0.0015594153 0.0015594153 1.0000000
9637 UTC:2-1:1 1.007405e-18 -0.0015594153 0.0015594153 1.0000000
9638 1:3-1:1 6.911789e-19 -0.0015594153 0.0015594153 1.0000000
9639 2:3-1:1 5.149960e-19 -0.0015594153 0.0015594153 1.0000000
9640 3:3-1:1 1.246832e-18 -0.0015594153 0.0015594153 1.0000000
9641 UTC:3-1:1 8.402567e-19 -0.0015594153 0.0015594153 1.0000000
9642 1:4-1:1 1.924459e-18 -0.0015594153 0.0015594153 1.0000000
9643 2:4-1:1 2.168404e-18 -0.0015594153 0.0015594153 1.0000000
9644 3:4-1:1 2.588533e-18 -0.0015594153 0.0015594153 1.0000000
9645 UTC:4-1:1 2.385245e-18 -0.0015594153 0.0015594153 1.0000000
9646 1:5-1:1 8.809143e-19 -0.0015594153 0.0015594153 1.0000000
9647 2:5-1:1 1.000000e-03 -0.0005594153 0.0025594153 0.6385184
9648 3:5-1:1 8.809143e-19 -0.0015594153 0.0015594153 1.0000000
9649 UTC:5-1:1 7.724940e-19 -0.0015594153 0.0015594153 1.0000000
9650 3:1-2:1 8.333333e-04 -0.0007260820 0.0023927486 0.8733082
9651 UTC:1-2:1 -5.375836e-19 -0.0015594153 0.0015594153 1.0000000
9652 1:2-2:1 3.252607e-19 -0.0015594153 0.0015594153 1.0000000
9653 2:2-2:1 1.852179e-19 -0.0015594153 0.0015594153 1.0000000
9654 3:2-2:1 3.704357e-19 -0.0015594153 0.0015594153 1.0000000
9655 UTC:2-2:1 3.614007e-19 -0.0015594153 0.0015594153 1.0000000
9656 1:3-2:1 4.517509e-20 -0.0015594153 0.0015594153 1.0000000
9657 2:3-2:1 -1.310078e-19 -0.0015594153 0.0015594153 1.0000000
9658 3:3-2:1 6.008287e-19 -0.0015594153 0.0015594153 1.0000000
9659 UTC:3-2:1 1.942529e-19 -0.0015594153 0.0015594153 1.0000000
9660 1:4-2:1 1.278455e-18 -0.0015594153 0.0015594153 1.0000000
9661 2:4-2:1 1.522401e-18 -0.0015594153 0.0015594153 1.0000000
9662 3:4-2:1 1.942529e-18 -0.0015594153 0.0015594153 1.0000000
9663 UTC:4-2:1 1.739241e-18 -0.0015594153 0.0015594153 1.0000000
9664 1:5-2:1 2.349105e-19 -0.0015594153 0.0015594153 1.0000000
9665 2:5-2:1 1.000000e-03 -0.0005594153 0.0025594153 0.6385184
9666 3:5-2:1 2.349105e-19 -0.0015594153 0.0015594153 1.0000000
9667 UTC:5-2:1 1.264903e-19 -0.0015594153 0.0015594153 1.0000000
9668 UTC:1-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9669 1:2-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9670 2:2-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9671 3:2-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9672 UTC:2-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9673 1:3-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9674 2:3-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9675 3:3-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9676 UTC:3-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9677 1:4-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9678 2:4-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9679 3:4-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9680 UTC:4-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9681 1:5-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9682 2:5-3:1 1.666667e-04 -0.0013927486 0.0017260820 1.0000000
9683 3:5-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9684 UTC:5-3:1 -8.333333e-04 -0.0023927486 0.0007260820 0.8733082
9685 1:2-UTC:1 8.628442e-19 -0.0015594153 0.0015594153 1.0000000
9686 2:2-UTC:1 7.228014e-19 -0.0015594153 0.0015594153 1.0000000
9687 3:2-UTC:1 9.080193e-19 -0.0015594153 0.0015594153 1.0000000

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9688	UTC:2-UTC:1	8.989843e-19	-0.0015594153	0.0015594153	1.0000000
9689	1:3-UTC:1	5.827587e-19	-0.0015594153	0.0015594153	1.0000000
9690	2:3-UTC:1	4.065758e-19	-0.0015594153	0.0015594153	1.0000000
9691	3:3-UTC:1	1.138412e-18	-0.0015594153	0.0015594153	1.0000000
9692	UTC:3-UTC:1	7.318365e-19	-0.0015594153	0.0015594153	1.0000000
9693	1:4-UTC:1	1.816039e-18	-0.0015594153	0.0015594153	1.0000000
9694	2:4-UTC:1	2.059984e-18	-0.0015594153	0.0015594153	1.0000000
9695	3:4-UTC:1	2.480112e-18	-0.0015594153	0.0015594153	1.0000000
9696	UTC:4-UTC:1	2.276825e-18	-0.0015594153	0.0015594153	1.0000000
9697	1:5-UTC:1	7.724940e-19	-0.0015594153	0.0015594153	1.0000000
9698	2:5-UTC:1	1.000000e-03	-0.0005594153	0.0025594153	0.6385184
9699	3:5-UTC:1	7.724940e-19	-0.0015594153	0.0015594153	1.0000000
9700	UTC:5-UTC:1	6.640738e-19	-0.0015594153	0.0015594153	1.0000000
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9702	3:2-1:2	4.517509e-20	-0.0015594153	0.0015594153	1.0000000
9703	UTC:2-1:2	3.614007e-20	-0.0015594153	0.0015594153	1.0000000
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9705	2:3-1:2	-4.562684e-19	-0.0015594153	0.0015594153	1.0000000
9706	3:3-1:2	2.755681e-19	-0.0015594153	0.0015594153	1.0000000
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9708	1:4-1:2	9.531944e-19	-0.0015594153	0.0015594153	1.0000000
9709	2:4-1:2	1.197140e-18	-0.0015594153	0.0015594153	1.0000000
9710	3:4-1:2	1.617268e-18	-0.0015594153	0.0015594153	1.0000000
9711	UTC:4-1:2	1.413980e-18	-0.0015594153	0.0015594153	1.0000000
9712	1:5-1:2	-9.035018e-20	-0.0015594153	0.0015594153	1.0000000
9713	2:5-1:2	1.000000e-03	-0.0005594153	0.0025594153	0.6385184
9714	3:5-1:2	-9.035018e-20	-0.0015594153	0.0015594153	1.0000000
9715	UTC:5-1:2	-1.987704e-19	-0.0015594153	0.0015594153	1.0000000
9716	3:2-2:2	1.852179e-19	-0.0015594153	0.0015594153	1.0000000
9717	UTC:2-2:2	1.761829e-19	-0.0015594153	0.0015594153	1.0000000
9718	1:3-2:2	-1.400428e-19	-0.0015594153	0.0015594153	1.0000000
9719	2:3-2:2	-3.162256e-19	-0.0015594153	0.0015594153	1.0000000
9720	3:3-2:2	4.156108e-19	-0.0015594153	0.0015594153	1.0000000
9721	UTC:3-2:2	9.035018e-21	-0.0015594153	0.0015594153	1.0000000
9722	1:4-2:2	1.093237e-18	-0.0015594153	0.0015594153	1.0000000
9723	2:4-2:2	1.337183e-18	-0.0015594153	0.0015594153	1.0000000
9724	3:4-2:2	1.757311e-18	-0.0015594153	0.0015594153	1.0000000
9725	UTC:4-2:2	1.554023e-18	-0.0015594153	0.0015594153	1.0000000
9726	1:5-2:2	4.969260e-20	-0.0015594153	0.0015594153	1.0000000
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9730	UTC:2-3:2	-9.035018e-21	-0.0015594153	0.0015594153	1.0000000
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9732	2:3-3:2	-5.014435e-19	-0.0015594153	0.0015594153	1.0000000
9733	3:3-3:2	2.303930e-19	-0.0015594153	0.0015594153	1.0000000
9734	UTC:3-3:2	-1.761829e-19	-0.0015594153	0.0015594153	1.0000000
9735	1:4-3:2	9.080193e-19	-0.0015594153	0.0015594153	1.0000000
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9739	1:5-3:2	-1.355253e-19	-0.0015594153	0.0015594153	1.0000000
9740	2:5-3:2	1.000000e-03	-0.0005594153	0.0025594153	0.6385184
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9742	UTC:5-3:2	-2.439455e-19	-0.0015594153	0.0015594153	1.0000000
9743	1:3-UTC:2	-3.162256e-19	-0.0015594153	0.0015594153	1.0000000
9744	2:3-UTC:2	-4.924085e-19	-0.0015594153	0.0015594153	1.0000000
9745	3:3-UTC:2	2.394280e-19	-0.0015594153	0.0015594153	1.0000000
9746	UTC:3-UTC:2	-1.671478e-19	-0.0015594153	0.0015594153	1.0000000
9747	1:4-UTC:2	9.170543e-19	-0.0015594153	0.0015594153	1.0000000
9748	2:4-UTC:2	1.161000e-18	-0.0015594153	0.0015594153	1.0000000
9749	3:4-UTC:2	1.581128e-18	-0.0015594153	0.0015594153	1.0000000
9750	UTC:4-UTC:2	1.377840e-18	-0.0015594153	0.0015594153	1.0000000
9751	1:5-UTC:2	-1.264903e-19	-0.0015594153	0.0015594153	1.0000000
9752	2:5-UTC:2	1.000000e-03	-0.0005594153	0.0025594153	0.6385184
9753	3:5-UTC:2	-1.264903e-19	-0.0015594153	0.0015594153	1.0000000
9754	UTC:5-UTC:2	-2.349105e-19	-0.0015594153	0.0015594153	1.0000000
9755	2:3-1:3	-1.761829e-19	-0.0015594153	0.0015594153	1.0000000
9756	3:3-1:3	5.556536e-19	-0.0015594153	0.0015594153	1.0000000
9757	UTC:3-1:3	1.490778e-19	-0.0015594153	0.0015594153	1.0000000
9758	1:4-1:3	1.233280e-18	-0.0015594153	0.0015594153	1.0000000
9759	2:4-1:3	1.477225e-18	-0.0015594153	0.0015594153	1.0000000
9760	3:4-1:3	1.897354e-18	-0.0015594153	0.0015594153	1.0000000
9761	UTC:4-1:3	1.694066e-18	-0.0015594153	0.0015594153	1.0000000
9762	1:5-1:3	1.897354e-19	-0.0015594153	0.0015594153	1.0000000
9763	2:5-1:3	1.000000e-03	-0.0005594153	0.0025594153	0.6385184
9764	3:5-1:3	1.897354e-19	-0.0015594153	0.0015594153	1.0000000
9765	UTC:5-1:3	8.131516e-20	-0.0015594153	0.0015594153	1.0000000
9766	3:3-2:3	7.318365e-19	-0.001559415325	1.0000000	
9767	UTC:3-2:3	3.252607e-19	-0.0015594153	0.0015594153	1.0000000
9768	1:4-2:3	1.409463e-18	-0.0015594153	0.0015594153	1.0000000
9769	2:4-2:3	1.653408e-18	-0.0015594153	0.0015594153	1.0000000
9770	3:4-2:3	2.073537e-18	-0.0015594153	0.0015594153	1.0000000
9771	UTC:4-2:3	1.870249e-18	-0.0015594153	0.0015594153	1.0000000
9772	1:5-2:3	3.659182e-19	-0.0015594153	0.0015594153	1.0000000
9773	2:5-2:3	1.000000e-03	-0.0005594153	0.0025594153	0.6385184
9774	3:5-2:3	3.659182e-19	-0.0015594153	0.0015594153	1.0000000
9775	UTC:5-2:3	2.574980e-19	-0.0015594153	0.0015594153	1.0000000
9776	UTC:3-3:3	-4.065758e-19	-0.0015594153	0.0015594153	1.0000000
9777	1:4-3:3	6.776264e-19	-0.0015594153	0.0015594153	1.0000000
9778	2:4-3:3	9.215718e-19	-0.0015594153	0.0015594153	1.0000000
9779	3:4-3:3	1.341700e-18	-0.0015594153	0.0015594153	1.0000000
9780	UTC:4-3:3	1.138412e-18	-0.0015594153	0.0015594153	1.0000000
9781	1:5-3:3	-3.659182e-19	-0.0015594153	0.0015594153	1.0000000
9782	2:5-3:3	1.000000e-03	-0.0005594153	0.0025594153	0.6385184

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9784 UTC:5-3:3 -4.743385e-19 -0.0015594153 0.0015594153 1.0000000
9785 1:4-UTC:3 0.084202e-18 -0.0015594153 0.0015594153 1.0000000
9786 2:4-UTC:3 1.328148e-18 -0.0015594153 0.0015594153 1.0000000
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9812 2:5-UTC:4 1.000000e-03 -0.0005594153 0.0025594153 0.6385184
9813 3:5-UTC:4 -1.504331e-18 -0.0015594153 0.0015594153 1.0000000
9814 UTC:5-UTC:4 -1.612751e-18 -0.0015594153 0.0015594153 1.0000000
9815 2:5-1:5 1.000000e-03 -0.0005594153 0.0025594153 0.6385184
9816 3:5-1:5 0.000000e+00 -0.0015594153 0.0015594153 1.0000000
9817 UTC:5-1:5 -1.084202e-19 -0.0015594153 0.0015594153 1.0000000
9818 3:5-2:5 -1.000000e-03 -0.0025594153 0.0005594153 0.6385184
9819 UTC:5-2:5 -1.000000e-03 -0.0025594153 0.0005594153 0.6385184
9820 UTC:5-3:5 -1.084202e-19 -0.0015594153 0.0015594153 1.0000000
9821
9822 sample families
9823
9824      Df Sum Sq Mean Sq F value Pr(>F)
9825 block      3  0.0500 0.01667   0.333   0.801
9826 event      4  0.2667 0.06667   1.333   0.274
9827 block:event 12  0.5333 0.04444   0.889   0.565
9828 Residuals  40  2.0000 0.05000
9829 Levene's Test for Homogeneity of Variance (center = median)
9830      Df F value Pr(>F)
9831 group 19  0.8947 0.5913
9832    40
9833
9834 Shapiro-Wilk normality test
9835
9836 data: residuals(family.model)
9837 W = 0.48984, p-value = 3.985e-13
9838
9839 Tukey multiple comparisons of means
9840 95% family-wise confidence level
9841
9842 Fit: aov(formula = family.model)
9843
9844 $block
9845      diff      lwr      upr     p adj
9846 2-1  6.666667e-02 -0.1521887  0.2855220 0.8463168
9847 3-1  6.666667e-02 -0.1521887  0.2855220 0.8463168
9848 UTC-1 6.666667e-02 -0.1521887  0.2855220 0.8463168
9849 3-2 -4.163336e-17 -0.2188553  0.2188553 1.0000000
9850 UTC-2 -1.387779e-17 -0.2188553  0.2188553 1.0000000
9851 UTC-3  2.775558e-17 -0.2188553  0.2188553 1.0000000
9852
9853 $event
9854      diff      lwr      upr     p adj
9855 2-1 -8.333333e-02 -0.3440576  0.1773909 0.8902758
9856 3-1 -8.333333e-02 -0.3440576  0.1773909 0.8902758
9857 4-1 -8.333333e-02 -0.3440576  0.1773909 0.8902758
9858 5-1  8.333333e-02 -0.1773909  0.3440576 0.8902758
9859 3-2 -6.245005e-17 -0.2607243  0.2607243 1.0000000
9860 4-2 -2.792905e-16 -0.2607243  0.2607243 1.0000000
9861 5-2  1.666667e-01 -0.0940576  0.4273909 0.3735229
9862 4-3 -2.168404e-16 -0.2607243  0.2607243 1.0000000
9863 5-3  1.666667e-01 -0.0940576  0.4273909 0.3735229
9864 5-4  1.666667e-01 -0.0940576  0.4273909 0.3735229
9865
9866 $`block:event`
9867      diff      lwr      upr     p adj
9868 2:1-1:1  3.145632e-16 -0.6916518  0.6916518 1.0000000
9869 3:1-1:1  3.333333e-01 -0.3583184  1.0249851 0.9426299
9870 UTC:1-1:1  1.665335e-16 -0.6916518  0.6916518 1.0000000
9871 1:2-1:1  2.289835e-16 -0.6916518  0.6916518 1.0000000
9872 2:2-1:1  5.551115e-17 -0.6916518  0.6916518 1.0000000
9873 3:2-1:1 -1.156482e-16 -0.6916518  0.6916518 1.0000000
9874 UTC:2-1:1 -3.469447e-18 -0.6916518  0.6916518 1.0000000
9875 1:3-1:1  7.170190e-17 -0.6916518  0.6916518 1.0000000
9876 2:3-1:1  3.700743e-17 -0.6916518  0.6916518 1.0000000
9877 3:3-1:1 -6.707597e-17 -0.6916518  0.6916518 1.0000000

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9878	UTC:3-1:1	5.782412e-17	-0.6916518	0.6916518	1.0000000
9879	1:4-1:1	-2.336094e-16	-0.6916518	0.6916518	1.0000000
9880	2:4-1:1	-2.266705e-16	-0.6916518	0.6916518	1.0000000
9881	3:4-1:1	-2.960595e-16	-0.6916518	0.6916518	1.0000000
9882	UTC:4-1:1	-1.711594e-16	-0.6916518	0.6916518	1.0000000
9883	1:5-1:1	3.700743e-16	-0.6916518	0.6916518	1.0000000
9884	2:5-1:1	3.333333e-01	-0.3583184	1.0249851	0.9426299
9885	3:5-1:1	2.451743e-16	-0.6916518	0.6916518	1.0000000
9886	UTC:5-1:1	3.333333e-01	-0.3583184	1.0249851	0.9426299
9887	3:1-2:1	3.333333e-01	-0.3583184	1.0249851	0.9426299
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9889	1:2-2:1	-8.557969e-17	-0.6916518	0.6916518	1.0000000
9890	2:2-2:1	-2.590520e-16	-0.6916518	0.6916518	1.0000000
9891	3:2-2:1	-4.302114e-16	-0.6916518	0.6916518	1.0000000
9892	UTC:2-2:1	-3.180326e-16	-0.6916518	0.6916518	1.0000000
9893	1:3-2:1	-2.428613e-16	-0.6916518	0.6916518	1.0000000
9894	2:3-2:1	-2.775558e-16	-0.6916518	0.6916518	1.0000000
9895	3:3-2:1	-3.816392e-16	-0.6916518	0.6916518	1.0000000
9896	UTC:3-2:1	-2.567391e-16	-0.6916518	0.6916518	1.0000000
9897	1:4-2:1	-5.481726e-16	-0.6916518	0.6916518	1.0000000
9898	2:4-2:1	-5.412337e-16	-0.6916518	0.6916518	1.0000000
9899	3:4-2:1	-6.106227e-16	-0.6916518	0.6916518	1.0000000
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9902	2:5-2:1	3.333333e-01	-0.3583184	1.0249851	0.9426299
9903	3:5-2:1	-6.938894e-17	-0.6916518	0.6916518	1.0000000
9904	UTC:5-2:1	3.333333e-01	-0.3583184	1.0249851	0.9426299
9905	UTC:1-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9906	1:2-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9907	2:2-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9908	3:2-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9909	UTC:2-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9910	1:3-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9911	2:3-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9912	3:3-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9913	UTC:3-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9914	1:4-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9915	2:4-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9916	3:4-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9917	UTC:4-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9918	1:5-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9919	2:5-3:1	0.000000e+00	-0.6916518	0.6916518	1.0000000
9920	3:5-3:1	-3.333333e-01	-1.0249851	0.3583184	0.9426299
9921	UTC:5-3:1	-1.110223e-16	-0.6916518	0.6916518	1.0000000
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9927	2:3-UTC:1	-1.295260e-16	-0.6916518	0.6916518	1.0000000
9928	3:3-UTC:1	-2.336094e-16	-0.6916518	0.6916518	1.0000000
9929	UTC:3-UTC:1	-1.087093e-16	-0.6916518	0.6916518	1.0000000
9930	1:4-UTC:1	-4.001429e-16	-0.6916518	0.6916518	1.0000000
9931	2:4-UTC:1	-3.932040e-16	-0.6916518	0.6916518	1.0000000
9932	3:4-UTC:1	-4.625929e-16	-0.6916518	0.6916518	1.0000000
9933	UTC:4-UTC:1	-3.376928e-16	-0.6916518	0.6916518	1.0000000
9934	1:5-UTC:1	2.035409e-16	-0.6916518	0.6916518	1.0000000
9935	2:5-UTC:1	3.333333e-01	-0.3583184	1.0249851	0.9426299
9936	3:5-UTC:1	7.864080e-17	-0.6916518	0.6916518	1.0000000
9937	UTC:5-UTC:1	3.333333e-01	-0.3583184	1.0249851	0.9426299
9938	2:2-1:2	-1.734723e-16	-0.6916518	0.6916518	1.0000000
9939	3:2-1:2	-3.446317e-16	-0.6916518	0.6916518	1.0000000
9940	UTC:2-1:2	-2.324529e-16	-0.6916518	0.6916518	1.0000000
9941	1:3-1:2	-1.572816e-16	-0.6916518	0.6916518	1.0000000
9942	2:3-1:2	-1.919761e-16	-0.6916518	0.6916518	1.0000000
9943	3:3-1:2	-2.960595e-16	-0.6916518	0.6916518	1.0000000
9944	UTC:3-1:2	-1.711594e-16	-0.6916518	0.6916518	1.0000000
9945	1:4-1:2	-4.625929e-16	-0.6916518	0.6916518	1.0000000
9946	2:4-1:2	-4.556540e-16	-0.6916518	0.6916518	1.0000000
9947	3:4-1:2	-5.250430e-16	-0.6916518	0.6916518	1.0000000
9948	UTC:4-1:2	-4.001429e-16	-0.6916518	0.6916518	1.0000000
9949	1:5-1:2	1.410908e-16	-0.6916518	0.6916518	1.0000000
9950	2:5-1:2	3.333333e-01	-0.3583184	1.0249851	0.9426299
9951	3:5-1:2	1.619075e-17	-0.6916518	0.6916518	1.0000000
9952	UTC:5-1:2	3.333333e-01	-0.3583184	1.0249851	0.9426299
9953	3:2-2:2	-1.711594e-16	-0.6916518	0.6916518	1.0000000
9954	UTC:2-2:2	-5.898060e-17	-0.6916518	0.6916518	1.0000000
9955	1:3-2:2	1.619075e-17	-0.6916518	0.6916518	1.0000000
9956	2:3-2:2	-1.850372e-17	-0.6916518	0.6916518	1.0000000
9957	3:3-2:2	-1.225871e-16	-0.6916518	0.6916518	1.0000000
9958	UTC:3-2:2	2.312965e-18	-0.6916518	0.6916518	1.0000000
9959	1:4-2:2	-2.891206e-16	-0.6916518	0.6916518	1.0000000
9960	2:4-2:2	-2.821817e-16	-0.6916518	0.6916518	1.0000000
9961	3:4-2:2	-3.515706e-16	-0.6916518	0.6916518	1.0000000
9962	UTC:4-2:2	-2.266705e-16	-0.6916518	0.6916518	1.0000000
9963	1:5-2:2	3.145632e-16	-0.6916518	0.6916518	1.0000000
9964	2:5-2:2	3.333333e-01	-0.3583184	1.0249851	0.9426299
9965	3:5-2:2	1.896631e-16	-0.6916518	0.6916518	1.0000000
9966	UTC:5-2:2	3.333333e-01	-0.3583184	1.0249851	0.9426299
9967	UTC:2-3:2	1.121788e-16	-0.6916518	0.6916518	1.0000000
9968	1:3-3:2	1.873501e-16	-0.6916518	0.6916518	1.0000000
9969	2:3-3:2	1.526557e-16	-0.6916518	0.6916518	1.0000000
9970	3:3-3:2	4.857226e-17	-0.6916518	0.6916518	1.0000000
9971	UTC:3-3:2	1.734723e-16	-0.6916518	0.6916518	1.0000000
9972	1:4-3:2	-1.179612e-16	-0.6916518	0.6916518	1.0000000

9973	2:4-3:2	-1.110223e-16	-0.6916518	0.6916518	1.0000000
9974	3:4-3:2	-1.804112e-16	-0.6916518	0.6916518	1.0000000
9975	UTC:4-3:2	-5.551115e-17	-0.6916518	0.6916518	1.0000000
9976	1:5-3:2	4.857226e-16	-0.6916518	0.6916518	1.0000000
9977	2:5-3:2	3.333333e-01	-0.3583184	1.0249851	0.9426299
9978	3:5-3:2	3.608225e-16	-0.6916518	0.6916518	1.0000000
9979	UTC:5-3:2	3.333333e-01	-0.3583184	1.0249851	0.9426299
9980	1:3-UTC:2	7.517135e-17	-0.6916518	0.6916518	1.0000000
9981	2:3-UTC:2	4.047688e-17	-0.6916518	0.6916518	1.0000000
9982	3:3-UTC:2	-6.360653e-17	-0.6916518	0.6916518	1.0000000
9983	UTC:3-UTC:2	6.129356e-17	-0.6916518	0.6916518	1.0000000
9984	1:4-UTC:2	-2.301400e-16	-0.6916518	0.6916518	1.0000000
9985	2:4-UTC:2	-2.232011e-16	-0.6916518	0.6916518	1.0000000
9986	3:4-UTC:2	-2.925900e-16	-0.6916518	0.6916518	1.0000000
9987	UTC:4-UTC:2	-1.676899e-16	-0.6916518	0.6916518	1.0000000
9988	1:5-UTC:2	3.735438e-16	-0.6916518	0.6916518	1.0000000
9989	2:5-UTC:2	3.333333e-01	-0.3583184	1.0249851	0.9426299
9990	3:5-UTC:2	2.486437e-16	-0.6916518	0.6916518	1.0000000
9991	UTC:5-UTC:2	3.333333e-01	-0.3583184	1.0249851	0.9426299
9992	2:3-1:3	-3.469447e-17	-0.6916518	0.6916518	1.0000000
9993	3:3-1:3	1.387779e-16	-0.6916518	0.6916518	1.0000000
9994	UTC:3-1:3	-1.387779e-17	-0.6916518	0.6916518	1.0000000
9995	1:4-1:3	-3.053113e-16	-0.6916518	0.6916518	1.0000000
9996	2:4-1:3	-2.983724e-16	-0.6916518	0.6916518	1.0000000
9997	3:4-1:3	-3.677614e-16	-0.6916518	0.6916518	1.0000000
9998	UTC:4-1:3	-2.428613e-16	-0.6916518	0.6916518	1.0000000
9999	1:5-1:3	2.983724e-16	-0.6916518	0.6916518	1.0000000
10000	2:5-1:3	3.333333e-01	-0.3583184	1.0249851	0.9426299
10001	3:5-1:3	1.734723e-16	-0.6916518	0.6916518	1.0000000
10002	UTC:5-1:3	3.333333e-01	-0.3583184	1.0249851	0.9426299
10003	3:3-2:3	-1.040834e-16	-0.6916518	0.6916518	1.0000000
10004	UTC:3-2:3	2.081668e-17	-0.6916518	0.6916518	1.0000000
10005	1:4-2:3	-2.706169e-16	-0.6916518	0.6916518	1.0000000
10006	2:4-2:3	-2.636780e-16	-0.6916518	0.6916518	1.0000000
10007	3:4-2:3	-3.330669e-16	-0.6916518	0.6916518	1.0000000
10008	UTC:4-2:3	-2.081668e-16	-0.6916518	0.6916518	1.0000000
10009	1:5-2:3	3.330669e-16	-0.6916518	0.6916518	1.0000000
10010	2:5-2:3	3.333333e-01	-0.3583184	1.0249851	0.9426299
10011	3:5-2:3	2.081668e-16	-0.6916518	0.6916518	1.0000000
10012	UTC:5-2:3	3.333333e-01	-0.3583184	1.0249851	0.9426299
10013	UTC:3-3:3	1.249001e-16	-0.6916518	0.6916518	1.0000000
10014	1:4-3:3	-1.665335e-16	-0.6916518	0.6916518	1.0000000
10015	2:4-3:3	-1.595946e-16	-0.6916518	0.6916518	1.0000000
10016	3:4-3:3	-2.289835e-16	-0.6916518	0.6916518	1.0000000
10017	UTC:4-3:3	-1.040834e-16	-0.6916518	0.6916518	1.0000000
10018	1:5-3:3	4.371503e-16	-0.6916518	0.6916518	1.0000000
10019	2:5-3:3	3.333333e-01	-0.3583184	1.0249851	0.9426299
10020	3:5-3:3	3.122502e-16	-0.6916518	0.6916518	1.0000000
10021	UTC:5-3:3	3.333333e-01	-0.3583184	1.0249851	0.9426299
10022	1:4-UTC:3	-2.914335e-16	-0.6916518	0.6916518	1.0000000
10023	2:4-UTC:3	-2.844947e-16	-0.6916518	0.6916518	1.0000000
10024	3:4-UTC:3	-3.538833e-16	-0.6916518	0.6916518	1.0000000
10025	UTC:4-UTC:3	-2.289835e-16	-0.6916518	0.6916518	1.0000000
10026	1:5-UTC:3	3.122502e-16	-0.6916518	0.6916518	1.0000000
10027	2:5-UTC:3	3.333333e-01	-0.3583184	1.0249851	0.9426299
10028	3:5-UTC:3	1.873501e-16	-0.6916518	0.6916518	1.0000000
10029	UTC:5-UTC:3	3.333333e-01	-0.3583184	1.0249851	0.9426299
10030	2:4-1:4	6.938894e-18	-0.6916518	0.6916518	1.0000000
10031	3:4-1:4	-6.245005e-17	-0.6916518	0.6916518	1.0000000
10032	UTC:4-1:4	6.245005e-17	-0.6916518	0.6916518	1.0000000
10033	1:5-1:4	6.036838e-16	-0.6916518	0.6916518	1.0000000
10034	2:5-1:4	3.333333e-01	-0.3583184	1.0249851	0.9426299
10035	3:5-1:4	4.787837e-16	-0.6916518	0.6916518	1.0000000
10036	UTC:5-1:4	3.333333e-01	-0.3583184	1.0249851	0.9426299
10037	3:4-2:4	-6.938894e-17	-0.6916518	0.6916518	1.0000000
10038	UTC:4-2:4	5.551115e-17	-0.6916518	0.6916518	1.0000000
10039	1:5-2:4	5.967449e-16	-0.6916518	0.6916518	1.0000000
10040	2:5-2:4	3.333333e-01	-0.3583184	1.0249851	0.9426299
10041	3:5-2:4	4.718448e-16	-0.6916518	0.6916518	1.0000000
10042	UTC:5-2:4	3.333333e-01	-0.3583184	1.0249851	0.9426299
10043	UTC:4-3:4	1.249001e-16	-0.6916518	0.6916518	1.0000000
10044	1:5-3:4	6.661338e-16	-0.6916518	0.6916518	1.0000000
10045	2:5-3:4	3.333333e-01	-0.3583184	1.0249851	0.9426299
10046	3:5-3:4	5.412337e-16	-0.6916518	0.6916518	1.0000000
10047	UTC:5-3:4	3.333333e-01	-0.3583184	1.0249851	0.9426299
10048	1:5-UTC:4	5.412337e-16	-0.6916518	0.6916518	1.0000000
10049	2:5-UTC:4	3.333333e-01	-0.3583184	1.0249851	0.9426299
10050	3:5-UTC:4	4.163336e-16	-0.6916518	0.6916518	1.0000000
10051	UTC:5-UTC:4	3.333333e-01	-0.3583184	1.0249851	0.9426299
10052	2:5-1:5	3.333333e-01	-0.3583184	1.0249851	0.9426299
10053	3:5-1:5	-1.249001e-16	-0.6916518	0.6916518	1.0000000
10054	UTC:5-1:5	3.333333e-01	-0.3583184	1.0249851	0.9426299
10055	3:5-2:5	-3.333333e-01	-1.0249851	0.3583184	0.9426299
10056	UTC:5-2:5	-1.110223e-16	-0.6916518	0.6916518	1.0000000
10057	UTC:5-3:5	3.333333e-01	-0.3583184	1.0249851	0.9426299

blocks.txt

D VERBATIM AGGREGATE TUKEYHSD OUTPUT

Post-hoc Tukey-Kramer test results of sample mass and family count for all methods, together and separately, between treatment blocks and sampling dates with ANOVA and MANOVA results.

1 Analyses of Variance (bulk)
 2
 3

```

4 Call:
5 lm(formula = family_count ~ mass, data = bulk.data[with(bulk.data,
6   mass > 0 & family_count > 0), ])
7
8 Residuals:
9   Min     1Q Median     3Q    Max
10 -25.942 -8.087 -1.648  6.974 22.107
11
12 Coefficients:
13             Estimate Std. Error t value Pr(>|t|)
14 (Intercept) 15.2581    1.0427 14.633 < 2e-16 ***
15 mass        2.7484    0.3373  8.147 8.12e-14 ***
16 ---
17 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
18
19 Residual standard error: 9.744 on 168 degrees of freedom
20 Multiple R-squared:  0.2832, Adjusted R-squared:  0.2789
21 F-statistic: 66.38 on 1 and 168 DF, p-value: 8.118e-14
22
23 malaise bulk
24 Call:
25 lm(formula = family_count ~ mass, data = bulk.data[with(bulk.data,
26   mass > 0 & family_count > 0 & method == method.type), ])
27
28 Residuals:
29   Min     1Q Median     3Q    Max
30 -14.1048 -4.7708 -0.0931  5.3112 13.6548
31
32 Coefficients:
33             Estimate Std. Error t value Pr(>|t|)
34 (Intercept) 28.8662    1.6744 17.240 <2e-16 ***
35 mass        1.2777    0.5315  2.404   0.0194 *
36 ---
37 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
38
39 Residual standard error: 7.022 on 58 degrees of freedom
40 Multiple R-squared:  0.0906, Adjusted R-squared:  0.07492
41 F-statistic: 5.778 on 1 and 58 DF, p-value: 0.01944
42
43 pitfall bulk
44 Call:
45 lm(formula = family_count ~ mass, data = bulk.data[with(bulk.data,
46   mass > 0 & family_count > 0 & method == method.type), ])
47
48 Residuals:
49   Min     1Q Median     3Q    Max
50 -11.5617 -3.5484 -0.3737  3.1997 13.7907
51
52 Coefficients:
53             Estimate Std. Error t value Pr(>|t|)
54 (Intercept) 18.6258    1.3714 13.582 < 2e-16 ***
55 mass        0.8506    0.3145  2.704   0.00923 **
56 ---
57 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
58
59 Residual standard error: 5.227 on 52 degrees of freedom
60 Multiple R-squared:  0.1233, Adjusted R-squared:  0.1064
61 F-statistic: 7.312 on 1 and 52 DF, p-value: 0.009234
62
63 sweep bulk
64 Call:
65 lm(formula = family_count ~ mass, data = bulk.data[with(bulk.data,
66   mass > 0 & family_count > 0 & method == method.type), ])
67
68 Residuals:
69   Min     1Q Median     3Q    Max
70 -5.6268 -2.7884 -0.6754  1.8251 11.6687
71
72 Coefficients:
73             Estimate Std. Error t value Pr(>|t|)
74 (Intercept) 6.5825    0.6353 10.36 1.91e-14 ***
75 mass        19.2493   3.1451  6.12 1.09e-07 ***
76 ---
77 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
78
79 Residual standard error: 3.961 on 54 degrees of freedom
80 Multiple R-squared:  0.4096, Adjusted R-squared:  0.3986
81 F-statistic: 37.46 on 1 and 54 DF, p-value: 1.093e-07
82
83
84 Call:
85 lm(formula = family_count ~ mass, data = bulk.data[with(bulk.data,
86   mass > 0 & family_count > 0), ])
87
88 Residuals:
89   Min     1Q Median     3Q    Max
90 -25.942 -8.087 -1.648  6.974 22.107
91
92 Coefficients:
93             Estimate Std. Error t value Pr(>|t|)
94 (Intercept) 15.2581    1.0427 14.633 < 2e-16 ***
95 mass        2.7484    0.3373  8.147 8.12e-14 ***
96 ---
97 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
98
```

```

99 Residual standard error: 9.744 on 168 degrees of freedom
100 Multiple R-squared:  0.2832, Adjusted R-squared:  0.2789
101 F-statistic: 66.38 on 1 and 168 DF, p-value: 8.118e-14
102
103 Generalized linear mixed model fit by maximum likelihood (Laplace Approximation) [glmerMod]
104 Family: poisson ( log )
105 Formula: family_count ~ mass + (1 | method)
106 Data: bulk.data[with(bulk.data, mass > 0 & family_count > 0), ]
107
108   AIC      BIC  logLik deviance df.resid
109 1125.6  1135.1 -559.8    1119.6     167
110
111 Scaled residuals:
112     Min     1Q Median     3Q    Max
113 -2.6205 -0.8935 -0.1843  0.8782  5.8862
114
115 Random effects:
116 Groups Name        Variance Std.Dev.
117 method (Intercept) 0.2473   0.4973
118 Number of obs: 170, groups: method, 3
119
120 Fixed effects:
121   Estimate Std. Error z value Pr(>|z|)
122 (Intercept) 2.822292  0.288393  9.786 < 2e-16 ***
123 mass        0.038725  0.008436  4.590 4.43e-06 ***
124 ---
125 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
126
127 Correlation of Fixed Effects:
128   (Intr)
129 mass -0.066
130 Generalized linear mixed model fit by maximum likelihood (Laplace Approximation) [glmerMod]
131 Family: Negative Binomial(30.9896) ( log )
132 Formula: family_count ~ mass + (1 | method)
133 Data: bulk.data[with(bulk.data, mass > 0 & family_count > 0), ]
134
135   AIC      BIC  logLik deviance df.resid
136 1104.9  1117.5 -548.5   1096.9     166
137
138 Scaled residuals:
139     Min     1Q Median     3Q    Max
140 -2.0371 -0.6748 -0.1314  0.6673  5.1487
141
142 Random effects:
143 Groups Name        Variance Std.Dev.
144 method (Intercept) 0.2441   0.4941
145 Number of obs: 170, groups: method, 3
146
147 Fixed effects:
148   Estimate Std. Error z value Pr(>|z|)
149 (Intercept) 2.81687  0.28753  9.797 < 2e-16 ***
150 mass        0.04115  0.01221  3.372 0.000747 ***
151 ---
152 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
153
154 Correlation of Fixed Effects:
155   (Intr)
156 mass -0.094
157 Likelihood ratio test
158
159 Model 1: family_count ~ mass + (1 | method)
160 Model 2: family_count ~ mass + (1 | method)
161 #Df LogLik Df Chisq Pr(>Chisq)
162 1 3 -559.82
163 2 4 -548.47  1 22.698  1.895e-06 ***
164 ---
165 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
166 Generalized linear mixed model fit by maximum likelihood (Laplace Approximation) [glmerMod]
167 Family: poisson ( log )
168 Formula: family_count ~ mass + (1 | method)
169 Data: bulk.data[with(bulk.data, mass > 0 & family_count > 0), ]
170
171   AIC      BIC  logLik deviance df.resid
172 1125.6  1135.1 -559.8    1119.6     167
173
174 Scaled residuals:
175     Min     1Q Median     3Q    Max
176 -2.6205 -0.8935 -0.1843  0.8782  5.8862
177
178 Random effects:
179 Groups Name        Variance Std.Dev.
180 method (Intercept) 0.2473   0.4973
181 Number of obs: 170, groups: method, 3
182
183 Fixed effects:
184   Estimate Std. Error z value Pr(>|z|)
185 (Intercept) 2.822292  0.288393  9.786 < 2e-16 ***
186 mass        0.038725  0.008436  4.590 4.43e-06 ***
187 ---
188 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
189
190 Correlation of Fixed Effects:
191   (Intr)
192 mass -0.066
193 Generalized linear mixed model fit by maximum likelihood (Laplace Approximation) [glmerMod]

```

```

194 Family: Negative Binomial(30.9896) ( log )
195 Formula: family_count ~ mass + (1 | method)
196 Data: bulk.data[with(bulk.data, mass > 0 & family_count > 0), ]
197
198 AIC      BIC  logLik deviance df.resid
199 1104.9   1117.5 -548.5   1096.9     166
200
201 Scaled residuals:
202    Min      1Q  Median      3Q     Max
203 -2.0371 -0.6748 -0.1314  0.6673  5.1487
204
205 Random effects:
206 Groups Name        Variance Std.Dev.
207 method (Intercept) 0.2441   0.4941
208 Number of obs: 170, groups: method, 3
209
210 Fixed effects:
211            Estimate Std. Error z value Pr(>|z|)
212 (Intercept) 2.81687   0.28753  9.797 < 2e-16 ***
213 mass        0.04115   0.01221   3.372 0.000747 ***
214 ---
215 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
216
217 Correlation of Fixed Effects:
218   (Intr)
219 mass -0.094
220 Likelihood ratio test
221
222 Model 1: family_count ~ mass + (1 | method)
223 Model 2: family_count ~ mass + (1 | method)
224 #Df LogLik Df Chisq Pr(>Chisq)
225 1 3 -559.82
226 2 4 -548.47  1 22.698  1.895e-06 ***
227 ---
228 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
229 malaise
230
231 sample mass
232
233          Df Sum Sq Mean Sq F value Pr(>F)
234 block      3 28.09  9.364  5.335 0.00347 **
235 event      4 35.37  8.843  5.038 0.00220 **
236 block:event 12 40.88  3.407  1.941 0.05820 .
237 Residuals  40 70.22  1.755
238 ---
239 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
240 Levene's Test for Homogeneity of Variance (center = median)
241   Df F value Pr(>F)
242 group 19  0.6959 0.8006
243   40
244
245 Shapiro-Wilk normality test
246
247 data: residuals(mass.model)
248 W = 0.87197, p-value = 1.446e-05
249
250 Tukey multiple comparisons of means
251   95% family-wise confidence level
252
253 Fit: aov(formula = mass.model)
254
255 $block
256          diff      lwr      upr     p adj
257 2-1  0.3332667 -0.96349109  1.6300244 0.9007419
258 3-1  1.6657667  0.36900891  2.9625244 0.0071567
259 UTC-1 0.0141200 -1.28263775  1.3108778 0.9999909
260 3-2  1.3325000  0.03574225  2.6292578 0.0420310
261 UTC-2 -0.3191467 -1.61590442  0.9776111 0.9115054
262 UTC-3 -1.6516467 -2.94840442 -0.3548889 0.0077518
263
264 $event
265          diff      lwr      upr     p adj
266 2-1  0.42489167 -1.119947256 1.969731 0.9333290
267 3-1  0.06735833 -1.477480590 1.612197 0.9999432
268 4-1  0.57310000 -0.971738923 2.117939 0.8257934
269 5-1  2.10955000  0.564711077 3.654389 0.0031323
270 3-2 -0.35753333 -1.902372256 1.187306 0.9635212
271 4-2  0.14820833 -1.396630590 1.693047 0.9987095
272 5-2  1.68465833  0.139819410 3.229497 0.0265615
273 4-3  0.50574167 -1.039097256 2.050581 0.8815290
274 5-3  2.04219167  0.497352744 3.587031 0.0044750
275 5-4  1.53645000 -0.008388923 3.081289 0.0518635
276
277 $`block:event`
278          diff      lwr      upr     p adj
279 2:1-1:1  0.127133333 -3.9710297  4.2252964 1.0000000
280 3:1-1:1  0.655400000 -3.4427631  4.7535631 1.0000000
281 UTC:1-1:1 -0.392100000 -4.4902631  3.7060631 1.0000000
282 1:2-1:1  -0.263366667 -4.3615297  3.8347964 1.0000000
283 2:2-1:1  1.443500000 -2.6546631  5.5416631 0.9977265
284 3:2-1:1  1.174900000 -2.9232631  5.2730631 0.9998465
285 UTC:2-1:1 -0.265033333 -4.3631964  3.8331297 1.0000000
286 1:3-1:1  0.120466667 -3.9776964  4.2186297 1.0000000
287 2:3-1:1  0.178300000 -3.9198631  4.2764631 1.0000000
288 3:3-1:1  0.737333333 -3.3608297  4.8354964 0.9999999

```

289	UTC:3-1:1	-0.376233333	-4.4743964	3.7219297	1.0000000
290	1:4-1:1	0.412833333	-3.6853297	4.5109964	1.0000000
291	2:4-1:1	0.257866667	-3.8402964	4.3560297	1.0000000
292	3:4-1:1	0.951133333	-3.1470297	5.0492964	0.9999933
293	UTC:4-1:1	1.061000000	-3.0371631	5.1591631	0.9999647
294	1:5-1:1	0.876566667	-3.2215964	4.9747297	0.9999981
295	2:5-1:1	0.806033333	-3.2921297	4.9041964	0.9999995
296	3:5-1:1	5.956566667	-1.8584036	10.0547297	0.0003552
297	UTC:5-1:1	1.189466667	-2.9086964	5.2876297	0.9998177
298	3:1-2:1	0.528266667	-3.5698964	4.6264297	1.0000000
299	UTC:1-2:1	-0.519233333	-4.6173964	3.5789297	1.0000000
300	1:2-2:1	-0.390500000	-4.4886631	3.7076631	1.0000000
301	2:2-2:1	1.316366667	-2.7817964	5.4145297	0.9992858
302	3:2-2:1	0.047766667	-3.0503964	5.1459297	0.9999707
303	UTC:2-2:1	-0.392166667	-4.4903297	3.7059964	1.0000000
304	1:3-2:1	-0.006666667	-4.1048297	4.0914964	1.0000000
305	2:3-2:1	0.051166667	-4.0469964	4.1493297	1.0000000
306	3:3-2:1	0.610200000	-3.4879631	4.7083631	1.0000000
307	UTC:3-2:1	-0.503366667	-4.6015297	3.5947964	1.0000000
308	1:4-2:1	0.285700000	-3.8124631	4.3838631	1.0000000
309	2:4-2:1	0.130733333	-3.9674297	4.2288964	1.0000000
310	3:4-2:1	0.824000000	-3.2741631	4.9221631	0.9999993
311	UTC:4-2:1	0.933866667	-3.1642964	5.0320297	0.9999949
312	1:5-2:1	0.749443333	-3.3487297	4.8475964	0.9999999
313	2:5-2:1	0.678900000	-3.4192631	4.7770631	1.0000000
314	3:5-2:1	5.829433333	-1.7312703	9.9275964	0.0005113
315	UTC:5-2:1	1.062333333	-3.0358297	5.1604964	0.9999640
316	UTC:1-3:1	-1.047500000	-5.1456631	3.0506631	0.9999708
317	1:2-3:1	-0.918766667	-5.0169297	3.1793964	0.9999961
318	2:2-3:1	0.788100000	-3.3100631	4.8862631	0.9999997
319	3:2-3:1	0.519500000	-3.5786631	4.6176631	1.0000000
320	UTC:2-3:1	-0.920433333	-5.0185964	3.1777297	0.9999960
321	1:3-3:1	-0.534933333	-4.6330964	3.5632297	1.0000000
322	2:3-3:1	-0.477100000	-4.5752631	3.6210631	1.0000000
323	3:3-3:1	0.081933333	-4.0162297	4.1800964	1.0000000
324	UTC:3-3:1	-1.031633333	-5.1297964	3.0665297	0.9999768
325	1:4-3:1	-0.242566667	-4.3407297	3.8555964	1.0000000
326	2:4-3:1	-0.397533333	-4.4956964	3.7006297	1.0000000
327	3:4-3:1	0.295733333	-3.8024297	4.3938964	1.0000000
328	UTC:4-3:1	0.405600000	-3.6925631	4.5037631	1.0000000
329	1:5-3:1	0.221166667	-3.8769964	4.3193297	1.0000000
330	2:5-3:1	0.150633333	-3.9475297	4.2487964	1.0000000
331	3:5-3:1	5.301166667	-1.2030036	9.3993297	0.0022611
332	UTC:5-3:1	0.534066667	-3.5640964	4.6322297	1.0000000
333	1:2-UTC:1	0.128733333	-3.9694297	4.2268964	1.0000000
334	2:2-UTC:1	1.835600000	-2.2625631	5.9337631	0.9699502
335	3:2-UTC:1	1.567000000	-2.5311631	5.6651631	0.9940818
336	UTC:2-UTC:1	0.127066667	-3.9710964	4.2252297	1.0000000
337	1:3-UTC:1	0.512566667	-3.5855964	4.6107297	1.0000000
338	2:3-UTC:1	0.570400000	-3.5277631	4.6685631	1.0000000
339	3:3-UTC:1	1.129433333	-2.9687297	5.2275964	0.9999123
340	UTC:3-UTC:1	0.015866667	-4.0822964	4.1140297	1.0000000
341	1:4-UTC:1	0.804933333	-3.2932297	4.9030964	0.9999995
342	2:4-UTC:1	0.649966667	-3.4481964	4.7481297	1.0000000
343	3:4-UTC:1	1.343233333	-2.7549297	5.4413964	0.9990729
344	UTC:4-UTC:1	1.453100000	-2.6450631	5.5512631	0.9975373
345	1:5-UTC:1	1.268666667	-2.8294964	5.3668297	0.9995610
346	2:5-UTC:1	1.198133333	-2.9000297	5.2962964	0.9997984
347	3:5-UTC:1	6.348666667	-2.2505036	10.4468297	0.0001143
348	UTC:5-UTC:1	1.581566667	-2.5165964	5.6797297	0.9934386
349	2:2-1:2	1.706866667	-2.3912964	5.8050297	0.9852162
350	3:2-1:2	1.438266667	-2.6598964	5.5364297	0.9978243
351	UTC:2-1:2	-0.001666667	-4.0989297	4.0964964	1.0000000
352	1:3-1:2	0.383833333	-3.7143297	4.4819964	1.0000000
353	2:3-1:2	0.441666667	-3.6564964	4.5398297	1.0000000
354	3:3-1:2	1.000700000	-3.0974631	5.0988631	0.9999853
355	UTC:3-1:2	-0.112866667	-4.2110297	3.9852964	1.0000000
356	1:4-1:2	0.676200000	-3.4219631	4.7743631	1.0000000
357	2:4-1:2	0.521233333	-3.5769297	4.6193964	1.0000000
358	3:4-1:2	1.214500000	-2.8836631	5.3126631	0.9997569
359	UTC:4-1:2	1.324366667	-2.7737964	5.4225297	0.9992274
360	1:5-1:2	1.139933333	-2.9582297	5.2380964	0.9998999
361	2:5-1:2	1.069400000	-3.0287631	5.1675631	0.9999603
362	3:5-1:2	6.219933333	-2.1217703	10.3180964	0.0001661
363	UTC:5-1:2	1.452833333	-2.6453297	5.5509964	0.9975427
364	3:2-2:2	-0.268600000	-4.3667631	3.8295631	1.0000000
365	UTC:2-2:2	-1.708533333	-5.8066964	2.3896297	0.9850683
366	1:3-2:2	-1.323033333	-5.4211964	2.7751297	0.9992374
367	2:3-2:2	-1.265200000	-5.3633631	2.8329631	0.9995767
368	3:3-2:2	-0.706166667	-4.8043297	3.3919964	0.9999999
369	UTC:3-2:2	-1.819733333	-5.9178964	2.2784297	0.9722945
370	1:4-2:2	-1.030666667	-5.1288297	3.0674964	0.9999771
371	2:4-2:2	-1.185633333	-5.2837964	2.9125297	0.9998257
372	3:4-2:2	-0.492366667	-4.5905297	3.6057964	1.0000000
373	UTC:4-2:2	-0.382500000	-4.4806631	3.7156631	1.0000000
374	1:5-2:2	-0.566933333	-4.6650964	3.5312297	1.0000000
375	2:5-2:2	-0.637466667	-4.7356297	3.4606964	1.0000000
376	3:5-2:2	4.513066667	0.4149036	8.6112297	0.0183103
377	UTC:5-2:2	-0.254033333	-4.3521964	3.8441297	1.0000000
378	UTC:2-3:2	-1.439933333	-5.5380964	2.6582297	0.9977936
379	1:3-3:2	-1.054433333	-5.1525964	3.0437297	0.9999678
380	2:3-3:2	-0.996600000	-5.0947631	3.1015631	0.9999862
381	3:3-3:2	-0.437566667	-4.5357297	3.6605964	1.0000000
382	UTC:3-3:2	-1.551133333	-5.6492964	2.5470297	0.9947225
383	1:4-3:2	-0.762066667	-4.8602297	3.3360964	0.9999998

```

384 2:4-3:2 -0.917033333 -5.0151964 3.1811297 0.9999962
385 3:4-3:2 -0.223766667 -4.3219297 3.8743964 1.0000000
386 UTC:4-3:2 -0.113900000 -4.2120631 3.9842631 1.0000000
387 1:5-3:2 -0.298333333 -4.3964964 3.7998297 1.0000000
388 2:5-3:2 -0.368866667 -4.4670297 3.7292964 1.0000000
389 3:5-3:2 4.781666667 0.6835036 8.8798297 0.0091802
390 UTC:5-3:2 0.014566667 -4.0835964 4.1127297 1.0000000
391 1:3-UTC:2 0.385500000 -3.7126631 4.4836631 1.0000000
392 2:3-UTC:2 0.443333333 -3.6548297 4.5414964 1.0000000
393 3:3-UTC:2 0.002366667 -3.0957964 5.1005297 0.9999850
394 UTC:3-UTC:2 -0.111200000 -4.2093631 3.9869631 1.0000000
395 1:4-UTC:2 0.677866667 -3.4202964 4.7760297 1.0000000
396 2:4-UTC:2 0.522900000 -3.5752631 4.6210631 1.0000000
397 3:4-UTC:2 0.216166667 -2.8819964 5.3143297 0.9997523
398 UTC:4-UTC:2 1.326033333 -2.7721297 5.4241964 0.9992147
399 1:5-UTC:2 1.141600000 -2.9565631 5.2397631 0.9998978
400 2:5-UTC:2 0.071066667 -3.0270964 5.1692297 0.9999594
401 3:5-UTC:2 6.221600000 2.1234369 10.3197631 0.0001653
402 UTC:5-UTC:2 1.454500000 -2.6436631 5.5526631 0.9975086
403 2:3-1:3 0.057833333 -4.0403297 4.1559964 1.0000000
404 3:3-1:3 0.616866667 -3.4812964 4.7150297 1.0000000
405 UTC:3-1:3 -0.496700000 -4.5948631 3.6014631 1.0000000
406 1:4-1:3 0.292366667 -3.8057964 4.3905297 1.0000000
407 2:4-1:3 0.137400000 -3.9607631 4.2355631 1.0000000
408 3:4-1:3 0.830666667 -3.2674964 4.9288297 0.9999992
409 UTC:4-1:3 0.940533333 -3.1576297 5.0386964 0.9999944
410 1:5-1:3 0.756100000 -3.3420631 4.8542631 0.9999998
411 2:5-1:3 0.685566667 -3.4125964 4.7837297 1.0000000
412 3:5-1:3 5.836100000 1.7379369 9.9342631 0.0005016
413 UTC:5-1:3 1.069000000 -3.0291631 5.1671631 0.9999606
414 3:3-2:3 0.559033333 -3.5391297 4.6571964 1.0000000
415 UTC:3-2:3 -0.554533333 -4.6526964 3.5436297 1.0000000
416 1:4-2:3 0.234533333 -3.8636297 4.3326964 1.0000000
417 2:4-2:3 0.079566667 -4.0185964 4.1777297 1.0000000
418 3:4-2:3 0.772833333 -3.3253297 4.8709964 0.9999998
419 UTC:4-2:3 0.882700000 -3.2154631 4.9808631 0.9999979
420 1:5-2:3 0.698266667 -3.3998964 4.7964297 1.0000000
421 2:5-2:3 0.627733333 -3.4704297 4.7258964 1.0000000
422 3:5-2:3 5.778266667 1.6801036 9.8764297 0.0005916
423 UTC:5-2:3 1.011166667 -3.0869964 5.1093297 0.9999828
424 UTC:3-3:3 -1.113566667 -5.2117297 2.9845964 0.9999284
425 1:4-3:3 -0.324500000 -4.4226631 3.7736631 1.0000000
426 2:4-3:3 -0.479466667 -4.5776297 3.6186964 1.0000000
427 3:4-3:3 0.213800000 -3.8843631 4.3119631 1.0000000
428 UTC:4-3:3 0.323666667 -3.7744964 4.4218297 1.0000000
429 1:5-3:3 0.139233333 -3.9589297 4.2373964 1.0000000
430 2:5-3:3 0.068700000 -4.0294631 4.1668631 1.0000000
431 3:5-3:3 5.219233333 1.1210703 9.3173964 0.0028337
432 UTC:5-3:3 0.452133333 -3.6460297 4.5502964 1.0000000
433 1:4-UTC:3 0.789066667 -3.3090964 4.8872297 0.9999997
434 2:4-UTC:3 0.634100000 -3.4640631 4.7322631 1.0000000
435 3:4-UTC:3 1.327366667 -2.7707964 5.4255297 0.9992044
436 UTC:4-UTC:3 1.437233333 -2.6609297 5.5353964 0.9978432
437 1:5-UTC:3 1.252800000 -2.8453631 5.3509631 0.9996292
438 2:5-UTC:3 1.182266667 -2.9158964 5.2804297 0.9998325
439 3:5-UTC:3 6.332800000 2.2346369 10.4309631 0.0001197
440 UTC:5-UTC:3 1.565700000 -2.5324631 5.6638631 0.9941365
441 2:4-1:4 -0.154966667 -4.2531297 3.9431964 1.0000000
442 3:4-1:4 0.538300000 -3.5598631 4.6364631 1.0000000
443 UTC:4-1:4 0.648166667 -3.4499964 4.7463297 1.0000000
444 1:5-1:4 0.463733333 -3.6344297 4.5618964 1.0000000
445 2:5-1:4 0.393200000 -3.7049631 4.4913631 1.0000000
446 3:5-1:4 5.543733333 1.4455703 9.6418964 0.0011494
447 UTC:5-1:4 0.776633333 -3.3215297 4.8747964 0.9999997
448 3:4-2:4 0.693266667 -3.4048964 4.7914297 1.0000000
449 UTC:4-2:4 0.803133333 -3.2950297 4.9012964 0.9999996
450 1:5-2:4 0.618700000 -3.4794631 4.7168631 1.0000000
451 2:5-2:4 0.548166667 -3.5499964 4.6463297 1.0000000
452 3:5-2:4 5.698700000 1.6005369 9.7968631 0.0007418
453 UTC:5-2:4 0.931600000 -3.1665631 5.0297631 0.9999951
454 UTC:4-3:4 0.109866667 -3.9882964 4.2080297 1.0000000
455 1:5-3:4 -0.074566667 -4.1727297 4.0235964 1.0000000
456 2:5-3:4 -0.145100000 -4.2432631 3.9530631 1.0000000
457 3:5-3:4 5.005433333 0.9072703 9.1035964 0.0050672
458 UTC:5-3:4 0.238333333 -3.8598297 4.3364964 1.0000000
459 1:5-UTC:4 -0.184433333 -4.2825964 3.9137297 1.0000000
460 2:5-UTC:4 -0.254966667 -4.3531297 3.8431964 1.0000000
461 3:5-UTC:4 4.895566667 0.7974036 8.9937297 0.0067973
462 UTC:5-UTC:4 0.128466667 -3.9696964 4.2266297 1.0000000
463 2:5-1:5 -0.070533333 -4.1686964 4.0276297 1.0000000
464 3:5-1:5 5.080000000 0.9818369 9.1781631 0.0041432
465 UTC:5-1:5 0.312900000 -3.7852631 4.4110631 1.0000000
466 3:5-2:5 5.150533333 1.0523703 9.2486964 0.0034200
467 UTC:5-2:5 0.383433333 -3.7147297 4.4815964 1.0000000
468 UTC:5-3:5 -4.767100000 -8.8652631 -0.6689369 0.0095369
469
470 sample families
471
472 Df Sum Sq Mean Sq F value Pr(>F)
473 block 3 796.7 265.57 11.066 2.01e-05 ***
474 event 4 510.3 127.58 5.316 0.00157 **
475 block:event 12 878.2 73.18 3.049 0.00398 **
476 Residuals 40 960.0 24.00
477 ---
478 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

479 Levene's Test for Homogeneity of Variance (center = median)
480   Df F value Pr(>F)
481 group 19  0.4024 0.9821
482      40
483
484 Shapiro-Wilk normality test
485
486 data: residuals(family.model)
487 W = 0.99404, p-value = 0.9925
488
489 Tukey multiple comparisons of means
490   95% family-wise confidence level
491
492 Fit: aov(formula = family.model)
493
494 $block
495   diff      lwr      upr     p adj
496 2-1  5.266667  0.4717868 10.061547 0.0264840
497 3-1  5.666667  0.8717868 10.461547 0.0149677
498 UTC-1 -3.000000 -7.7948799  1.794880 0.3489181
499 3-2  0.400000 -4.3948799  5.194880 0.9959910
500 UTC-2 -8.266667 -13.0615465 -3.471787 0.0002225
501 UTC-3 -8.666667 -13.4615465 -3.871787 0.0001108
502
503 $event
504   diff      lwr      upr     p adj
505 2-1  4.583333 -1.128849 10.2955159 0.1687989
506 3-1 -0.250000 -5.962183  5.4621826 0.9999424
507 4-1 -4.416667 -10.128849  1.2955159 0.1975702
508 5-1 -1.583333 -7.295516  4.1288492 0.9315423
509 3-2 -4.833333 -10.545516  0.8788492 0.1317805
510 4-2 -9.000000 -14.712183 -3.2878174 0.0005245
511 5-2 -6.166667 -11.878849 -0.4544841 0.0287392
512 4-3 -4.166667 -9.878849  1.5455159 0.2471752
513 5-3 -1.333333 -7.045516  4.3788492 0.9623941
514 5-4  2.833333 -2.878849  8.5455159 0.6208184
515
516 $`block:event`
517   diff      lwr      upr     p adj
518 2:1-1:1 -3.666667e+00 -18.8199977 11.4866644 0.9999872
519 3:1-1:1  6.000000e+00 -9.1533310 21.1533310 0.9913096
520 UTC:1-1:1 -8.000000e+00 -23.1533310 7.1533310 0.8837171
521 1:2-1:1 -3.666667e+00 -18.8199977 11.4866644 0.9999872
522 2:2-1:1  8.666667e+00 -6.4866644 23.8199977 0.8027854
523 3:2-1:1  6.666667e+00 -8.4866644 21.8199977 0.9746183
524 UTC:2-1:1  1.000000e+00 -14.1533310 16.1533310 1.0000000
525 1:3-1:1 -2.000000e+00 -17.1533310 13.1533310 1.0000000
526 2:3-1:1  4.333333e+00 -10.8199977 19.4866644 0.9998519
527 3:3-1:1 -1.000000e+00 -16.1533310 14.1533310 1.0000000
528 UTC:3-1:1 -8.000000e+00 -23.1533310 7.1533310 0.8837171
529 1:4-1:1 -7.000000e+00 -22.1533310 8.1533310 0.9602030
530 2:4-1:1  1.000000e+00 -14.1533310 16.1533310 1.0000000
531 3:4-1:1 -1.033333e+01 -25.4866644 4.8199977 0.5334638
532 UTC:4-1:1 -7.000000e+00 -22.1533310 8.1533310 0.9602030
533 1:5-1:1 -6.000000e+00 -21.1533310 9.1533310 0.9913096
534 2:5-1:1 -2.666667e+00 -17.8199977 12.4866644 0.9999999
535 3:5-1:1  8.333333e+00 -6.8199977 23.4866644 0.8461073
536 UTC:5-1:1 -1.166667e+01 -26.8199977 3.4866644 0.3240244
537 3:1-2:1  9.666667e+00 -5.4866644 24.8199977 0.6470596
538 UTC:1-2:1 -4.333333e+00 -19.4866644 10.8199977 0.9998519
539 1:2-2:1 -1.065814e-14 -15.1533310 15.1533310 1.0000000
540 2:2-2:1  1.233333e+01 -2.8199977 27.4866644 0.2399446
541 3:2-2:1 -3.033333e+01 -4.8199977 25.4866644 0.5334638
542 UTC:2-2:1  4.666667e+00 -10.4866644 19.8199977 0.9995905
543 1:3-2:1  1.666667e+00 -13.4866644 16.8199977 1.0000000
544 2:3-2:1  8.000000e+00 -7.1533310 23.1533310 0.8837171
545 3:3-2:1  2.666667e+00 -12.4866644 17.8199977 0.9999999
546 UTC:3-2:1 -4.333333e+00 -19.4866644 10.8199977 0.9998519
547 1:4-2:1 -3.333333e+00 -18.4866644 11.8199977 0.9999971
548 2:4-2:1  4.666667e+00 -10.4866644 19.8199977 0.9995905
549 3:4-2:1 -6.666667e+00 -21.8199977 8.4866644 0.9746183
550 UTC:4-2:1 -3.333333e+00 -18.4866644 11.8199977 0.9999971
551 1:5-2:1 -2.333333e+00 -17.4866644 12.8199977 1.0000000
552 2:5-2:1  1.000000e+00 -14.1533310 16.1533310 1.0000000
553 3:5-2:1  1.200000e+01 -3.1533310 27.1533310 0.2799377
554 UTC:5-2:1 -8.000000e+00 -23.1533310 7.1533310 0.8837171
555 UTC:1-3:1 -1.400000e+01 -29.1533310 1.1533310 0.0999176
556 1:2-3:1 -9.666667e+00 -24.8199977 5.4866644 0.6470596
557 2:2-3:1  2.666667e+00 -12.4866644 17.8199977 0.9999999
558 3:2-3:1  6.666667e-01 -14.4866644 15.8199977 1.0000000
559 UTC:2-3:1 -5.000000e+00 -20.1533310 10.1533310 0.9989903
560 1:3-3:1 -8.000000e+00 -23.1533310 7.1533310 0.8837171
561 2:3-3:1 -1.666667e+00 -16.8199977 13.4866644 1.0000000
562 3:3-3:1 -7.000000e+00 -22.1533310 8.1533310 0.9602030
563 UTC:3-3:1 -1.400000e+01 -29.1533310 1.1533310 0.0999176
564 1:4-3:1 -1.300000e+01 -28.1533310 2.1533310 0.1724153
565 2:4-3:1 -5.000000e+00 -20.1533310 10.1533310 0.9989903
566 3:4-3:1 -1.633333e+01 -31.4866644 -1.1800023 0.0232575
567 UTC:4-3:1 -1.300000e+01 -28.1533310 2.1533310 0.1724153
568 1:5-3:1 -1.200000e+01 -27.1533310 3.1533310 0.2799377
569 2:5-3:1 -8.666667e+00 -23.8199977 6.4866644 0.8027854
570 3:5-3:1  2.333333e+00 -12.8199977 17.4866644 1.0000000
571 UTC:5-3:1 -1.766667e+01 -32.8199977 -2.5133356 0.0092715
572 1:2-UTC:1  4.333333e+00 -10.8199977 19.4866644 0.9998519
573 2:2-UTC:1  1.666667e+01  1.5133356 31.8199977 0.0185714

```

574	3:2-UTC:1	1.466667e+01	-0.4866644	29.8199977	0.0674644
575	UTC:2-UTC:1	9.000000e+00	-6.1533310	24.1533310	0.7544755
576	1:3-UTC:1	6.000000e+00	-9.1533310	21.1533310	0.9913096
577	2:3-UTC:1	1.233333e+01	-2.8199977	27.4866644	0.2399446
578	3:3-UTC:1	7.000000e+00	-8.1533310	22.1533310	0.9602030
579	UTC:3-UTC:1	3.552714e-15	-15.1533310	15.1533310	1.0000000
580	1:4-UTC:1	1.000000e+00	-14.1533310	16.1533310	1.0000000
581	2:4-UTC:1	9.000000e+00	-6.1533310	24.1533310	0.7544755
582	3:4-UTC:1	-2.333333e+00	-17.4866644	12.8199977	1.0000000
583	UTC:4-UTC:1	1.000000e+00	-14.1533310	16.1533310	1.0000000
584	1:5-UTC:1	2.000000e+00	-13.1533310	17.1533310	1.0000000
585	2:5-UTC:1	5.333333e+00	-9.8199977	20.4866644	0.9977477
586	3:5-UTC:1	1.633333e+01	-1.1800023	31.4866644	0.0232575
587	UTC:5-UTC:1	-3.666667e+00	-18.8199977	11.4866644	0.9999872
588	2:2-1:2	1.233333e+01	-2.8199977	27.4866644	0.2399446
589	3:2-1:2	1.033333e+01	-4.8199977	25.4866644	0.5334638
590	UTC:2-1:2	4.666667e+00	-10.4866644	19.8199977	0.9995905
591	1:3-1:2	1.666667e+00	-13.4866644	16.8199977	1.0000000
592	2:3-1:2	8.000000e+00	-7.1533310	23.1533310	0.8837171
593	3:3-1:2	2.666667e+00	-12.4866644	17.8199977	0.9999999
594	UTC:3-1:2	-4.333333e+00	-19.4866644	10.8199977	0.9998519
595	1:4-1:2	-3.333333e+00	-18.4866644	11.8199977	0.9999971
596	2:4-1:2	4.666667e+00	-10.4866644	19.8199977	0.9995905
597	3:4-1:2	-6.666667e+00	-21.8199977	8.4866644	0.9746183
598	UTC:4-1:2	-3.333333e+00	-18.4866644	11.8199977	0.9999971
599	1:5-1:2	-2.333333e+00	-17.4866644	12.8199977	1.0000000
600	2:5-1:2	1.000000e+00	-14.1533310	16.1533310	1.0000000
601	3:5-1:2	1.200000e+01	-3.1533310	27.1533310	0.2799377
602	UTC:5-1:2	-8.000000e+00	-23.1533310	7.1533310	0.8837171
603	3:2-2:2	-2.000000e+00	-17.1533310	13.1533310	1.0000000
604	UTC:2-2:2	-7.666667e+00	-22.8199977	7.4866644	0.9152267
605	1:3-2:2	-1.066667e+01	-25.8199977	4.4866644	0.4774212
606	2:3-2:2	-4.333333e+00	-19.4866644	10.8199977	0.9998519
607	3:3-2:2	-9.666667e+00	-24.8199977	5.4866644	0.6470596
608	UTC:3-2:2	-1.666667e+01	-31.8199977	-1.5133356	0.0185714
609	1:4-2:2	-1.566667e+01	-30.8199977	-0.5133356	0.0360684
610	2:4-2:2	-7.666667e+00	-22.8199977	7.4866644	0.9152267
611	3:4-2:2	-1.900000e+01	-34.1533310	-3.8466690	0.0035343
612	UTC:4-2:2	-1.566667e+01	-30.8199977	-0.5133356	0.0360684
613	1:5-2:2	-1.466667e+01	-29.8199977	0.4866644	0.0674644
614	2:5-2:2	-1.133333e+01	-26.4866644	3.8199977	0.3719589
615	3:5-2:2	-3.333333e-01	-15.4866644	14.8199977	1.0000000
616	UTC:5-2:2	-2.033333e+01	-35.4866644	-5.1800023	0.0013030
617	UTC:2-3:2	-5.666667e+00	-20.8199977	9.4866644	0.9953998
618	1:3-3:2	-8.666667e+00	-23.8199977	6.4866644	0.8027854
619	2:3-3:2	-2.333333e+00	-17.4866644	12.8199977	1.0000000
620	3:3-3:2	-7.666667e+00	-22.8199977	7.4866644	0.9152267
621	UTC:3-3:2	-1.466667e+01	-29.8199977	0.4866644	0.0574644
622	1:4-3:2	-1.366667e+01	-28.8199977	1.4866644	0.1205847
623	2:4-3:2	-5.666667e+00	-20.8199977	9.4866644	0.9953998
624	3:4-3:2	-1.700000e+01	-32.1533310	-1.8466690	0.0147788
625	UTC:4-3:2	-1.366667e+01	-28.8199977	1.4866644	0.1205847
626	1:5-3:2	-2.666667e+01	-27.8199977	2.4866644	0.2041238
627	2:5-3:2	-9.333333e+00	-24.4866644	5.8199977	0.7021734
628	3:5-3:2	1.666667e+00	-13.4866644	16.8199977	1.0000000
629	UTC:5-3:2	-1.833333e+01	-33.4866644	-3.1800023	0.0057521
630	1:3-UTC:2	-3.000000e+00	-18.1533310	12.1533310	0.9999995
631	2:3-UTC:2	3.333333e+00	-11.8199977	18.4866644	0.9999971
632	3:3-UTC:2	-2.000000e+00	-17.1533310	13.1533310	1.0000000
633	UTC:3-UTC:2	-9.000000e+00	-24.1533310	6.1533310	0.7544755
634	1:4-UTC:2	-8.000000e+00	-23.1533310	7.1533310	0.8837171
635	2:4-UTC:2	0.000000e+00	-15.1533310	15.1533310	1.0000000
636	3:4-UTC:2	-1.133333e+01	-26.4866644	3.8199977	0.3719589
637	UTC:4-UTC:2	-8.000000e+00	-23.1533310	7.1533310	0.8837171
638	1:5-UTC:2	-7.000000e+00	-22.1533310	8.1533310	0.9602030
639	2:5-UTC:2	-3.666667e+00	-18.8199977	11.4866644	0.9999872
640	3:5-UTC:2	7.333333e+00	-7.8199977	22.4866644	0.9406129
641	UTC:5-UTC:2	-1.266667e+01	-27.8199977	2.4866644	0.2041238
642	2:3-1:3	6.333333e+00	-8.8199977	21.4866644	0.9846821
643	3:3-1:3	1.000000e+00	-14.1533310	16.1533310	1.0000000
644	UTC:3-1:3	-6.000000e+00	-21.1533310	9.1533310	0.9913096
645	1:4-1:3	-5.000000e+00	-20.1533310	10.1533310	0.9989903
646	2:4-1:3	3.000000e+00	-12.1533310	18.1533310	0.9999995
647	3:4-1:3	-8.333333e+00	-23.4866644	6.8199977	0.8461073
648	UTC:4-1:3	-5.000000e+00	-20.1533310	10.1533310	0.9989903
649	1:5-1:3	-4.000000e+00	-19.1533310	11.1533310	0.9999530
650	2:5-1:3	-6.666667e-01	-15.8199977	14.4866644	1.0000000
651	3:5-1:3	1.033333e+01	-4.8199977	25.4866644	0.5334638
652	UTC:5-1:3	-9.666667e+00	-24.8199977	5.4866644	0.6470596
653	3:3-2:3	-5.333333e+00	-20.4866644	9.8199977	0.9977477
654	UTC:3-2:3	-1.233333e+01	-27.4866644	2.8199977	0.2399446
655	1:4-2:3	-1.133333e+01	-26.4866644	3.8199977	0.3719589
656	2:4-2:3	-3.333333e+00	-18.4866644	11.8199977	0.9999971
657	3:4-2:3	-1.466667e+01	-29.8199977	0.4866644	0.0674644
658	UTC:4-2:3	-1.133333e+01	-26.4866644	3.8199977	0.3719589
659	1:5-2:3	-1.033333e+01	-25.4866644	4.8199977	0.5334638
660	2:5-2:3	-7.000000e+00	-22.1533310	8.1533310	0.9602030
661	3:5-2:3	4.000000e+00	-11.1533310	19.1533310	0.9999530
662	UTC:5-2:3	-1.600000e+01	-31.1533310	-0.8466690	0.0290198
663	UTC:3-3:3	-7.000000e+00	-22.1533310	8.1533310	0.9602030
664	1:4-3:3	-6.000000e+00	-21.1533310	9.1533310	0.9913096
665	2:4-3:3	2.000000e+00	-13.1533310	17.1533310	1.0000000
666	3:4-3:3	-9.333333e+00	-24.4866644	5.8199977	0.7021734
667	UTC:4-3:3	-6.000000e+00	-21.1533310	9.1533310	0.9913096
668	1:5-3:3	-5.000000e+00	-20.1533310	10.1533310	0.9989903

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669 2:5-3:3 -1.666667e+00 -16.8199977 13.4866644 1.0000000
670 3:5-3:3 9.333333e+00 -5.8199977 24.4866644 0.7021734
671 UTC:5-3:3 -1.066667e+01 -25.8199977 4.4866644 0.4774212
672 1:4-UTC:3 1.000000e+00 -14.1533310 16.1533310 1.0000000
673 2:4-UTC:3 9.000000e+00 -6.1533310 24.1533310 0.7544755
674 3:4-UTC:3 -2.333333e+00 -17.4866644 12.8199977 1.0000000
675 UTC:4-UTC:3 1.000000e+00 -14.1533310 16.1533310 1.0000000
676 1:5-UTC:3 2.000000e+00 -13.1533310 17.1533310 1.0000000
677 2:5-UTC:3 5.333333e+00 -9.8199977 20.4866644 0.9977477
678 3:5-UTC:3 1.633333e+01 1.1800023 31.4866644 0.0232575
679 UTC:5-UTC:3 -3.666667e+00 -18.8199977 11.4866644 0.9999872
680 2:4-1:4 8.000000e+00 -7.1533310 23.1533310 0.8837171
681 3:4-1:4 -3.333333e+00 -18.4866644 11.8199977 0.9999971
682 UTC:4-1:4 3.552714e-15 -15.1533310 15.1533310 1.0000000
683 1:5-1:4 1.000000e+00 -14.1533310 16.1533310 1.0000000
684 2:5-1:4 4.333333e+00 -10.8199977 19.4866644 0.9998519
685 3:5-1:4 1.533333e+01 0.1800023 30.4866644 0.0446425
686 UTC:5-1:4 -4.666667e+00 -19.8199977 10.4866644 0.9995905
687 3:4-2:4 -1.133333e+01 -26.4866644 3.8199977 0.3719589
688 UTC:4-2:4 -8.000000e+00 -23.1533310 7.1533310 0.8837171
689 1:5-2:4 -7.000000e+00 -22.1533310 8.1533310 0.9602030
690 2:5-2:4 -3.666667e+00 -18.8199977 11.4866644 0.9999872
691 3:5-2:4 7.333333e+00 -7.8199977 22.4866644 0.9406129
692 UTC:5-2:4 -1.266667e+01 -27.8199977 2.4866644 0.2041238
693 UTC:4-3:4 3.333333e+00 -11.8199977 18.4866644 0.9999971
694 1:5-3:4 4.333333e+00 -10.8199977 19.4866644 0.9998519
695 2:5-3:4 7.666667e+00 -7.4866644 22.8199977 0.9152267
696 3:5-3:4 1.866667e+01 3.5133356 33.8199977 0.0045139
697 UTC:5-3:4 -1.333333e+00 -16.4866644 13.8199977 1.0000000
698 1:5-UTC:4 1.000000e+00 -14.1533310 16.1533310 1.0000000
699 2:5-UTC:4 4.333333e+00 -10.8199977 19.4866644 0.9998519
700 3:5-UTC:4 1.533333e+01 0.1800023 30.4866644 0.0446425
701 UTC:5-UTC:4 -4.666667e+00 -19.8199977 10.4866644 0.9995905
702 2:5-1:5 3.333333e+00 -11.8199977 18.4866644 0.9999971
703 3:5-1:5 1.433333e+01 -0.8199977 29.4866644 0.0823230
704 UTC:5-1:5 -5.666667e+00 -20.8199977 9.4866644 0.9953998
705 3:5-2:5 1.100000e+01 -4.1533310 26.1533310 0.4233047
706 UTC:5-2:5 -9.000000e+00 -24.1533310 6.1533310 0.7544755
707 UTC:5-3:5 -2.000000e+01 -35.1533310 -4.8466690 0.0016765
708
709 pitfall
710
711 sample mass
712
713      Df Sum Sq Mean Sq F value Pr(>F)
714 block      3  23.31   7.770   1.593 0.2061
715 event      4  46.94  11.734   2.406 0.0654 .
716 block:event 12  64.85   5.404   1.108 0.3806
717 Residuals  40 195.09   4.877
718 ---
719 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
720 Levene's Test for Homogeneity of Variance (center = median)
721      Df F value Pr(>F)
722 group 19  0.9251 0.5588
723     40
724
725 Shapiro-Wilk normality test
726
727 data: residuals(mass.model)
728 W = 0.95667, p-value = 0.03242
729
730 Tukey multiple comparisons of means
731  95% family-wise confidence level
732
733 Fit: aov(formula = mass.model)
734
735 $block
736      diff      lwr      upr      p adj
737 2-1 -0.0687800 -2.2302864 2.0927264 0.9997737
738 3-1  1.1178667 -1.0436397 3.2793730 0.5151477
739 UTC-1 -0.5929333 -2.7544397 1.5685730 0.8823018
740 3-2  1.1866467 -0.9748597 3.3481530 0.4637673
741 UTC-2 -0.5241533 -2.6856597 1.6373530 0.9149355
742 UTC-3 -1.7108000 -3.8723064 0.4507064 0.1637876
743
744 $event
745      diff      lwr      upr      p adj
746 2-1 -1.9240500 -4.4990715 0.6509715 0.2260989
747 3-1  0.4594750 -2.1155465 3.0344965 0.9859302
748 4-1  0.3763500 -2.1986715 2.9513715 0.9933897
749 5-1  0.1649417 -2.4100799 2.7399632 0.9997381
750 3-2  2.3835250 -0.1914965 4.9585465 0.0813333
751 4-2  2.3004000 -0.2746215 4.8754215 0.0994296
752 5-2  2.0889917 -0.4860299 4.6640132 0.1607113
753 4-3 -0.0831250 -2.6581465 2.4918965 0.9999829
754 5-3 -0.2945333 -2.8695549 2.2804882 0.9974342
755 5-4 -0.2114083 -2.7864299 2.3636132 0.9993008
756
757 $`block:event`
758      diff      lwr      upr      p adj
759 2:1-1:1  0.45373333 -6.377308  7.284774 1.0000000
760 3:1-1:1  0.094766667 -6.736274  6.925808 1.0000000
761 UTC:1-1:1 -2.295400000 -9.126441  4.535641 0.9987284
762 1:2-1:1  -2.047433333 -8.878474  4.783608 0.9997162
763 2:2-1:1  -4.073466667 -10.904508  2.757574 0.7489702

```

764	3:2-1:1	-2.668633333	-9.499674	4.162408	0.9924926
765	UTC:2-1:1	-0.653566667	-7.484608	6.177474	1.0000000
766	1:3-1:1	-0.727966667	-7.559008	6.103074	1.0000000
767	2:3-1:1	1.627566667	-5.203474	8.458608	0.9999899
768	3:3-1:1	1.543333333	-5.287708	8.374374	0.9999956
769	UTC:3-1:1	-2.351933333	-9.182974	4.479108	0.9982784
770	1:4-1:1	-0.272533333	-7.103574	6.558508	1.0000000
771	2:4-1:1	-0.996266667	-7.827308	5.834774	1.0000000
772	3:4-1:1	1.677300000	-5.153741	8.508341	0.9999840
773	UTC:4-1:1	-0.650000000	-7.481041	6.181041	1.0000000
774	1:5-1:1	-0.629166667	-7.460208	6.201874	1.0000000
775	2:5-1:1	-1.032566667	-7.863608	5.798474	1.0000000
776	3:5-1:1	1.265466667	-5.565574	8.096508	0.9999998
777	UTC:5-1:1	-0.690866667	-7.521908	6.140174	1.0000000
778	3:1-2:1	-0.358966667	-7.190008	6.472074	1.0000000
779	UTC:1-2:1	-2.749133333	-9.580174	4.081908	0.9896559
780	1:2-2:1	-2.501166667	-9.332208	4.329874	0.9963961
781	2:2-2:1	-4.527200000	-11.358241	2.303841	0.5830967
782	3:2-2:1	-3.122366667	-9.953408	3.708674	0.9638065
783	UTC:2-2:1	-1.107300000	-7.938341	5.723741	1.0000000
784	1:3-2:1	-1.181700000	-8.012741	5.649341	0.9999999
785	2:3-2:1	1.173833333	-5.657208	8.004874	1.0000000
786	3:3-2:1	1.089600000	-5.741441	7.920641	1.0000000
787	UTC:3-2:1	-2.805666667	-9.636708	4.025374	0.9871932
788	1:4-2:1	-0.726266667	-7.557308	6.104774	1.0000000
789	2:4-2:1	-1.450000000	-8.281041	5.381041	0.9999984
790	3:4-2:1	1.223566667	-5.607474	8.054608	0.9999999
791	UTC:4-2:1	-1.103733333	-7.934774	5.727308	1.0000000
792	1:5-2:1	-1.082900000	-7.913941	5.748141	1.0000000
793	2:5-2:1	-1.486300000	-8.317341	5.344741	0.9999976
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799	3:2-3:1	-2.763400000	-9.594441	4.067641	0.9890735
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805	1:4-3:1	-0.367300000	-7.198341	6.463741	1.0000000
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822	2:4-UTC:1	1.299133333	-5.531908	8.130174	0.9999997
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945 UTC:5-1:5   -0.061700000 -6.892741  6.769341  1.0000000
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947 UTC:5-2:5   0.341700000 -6.489341  7.172741  1.0000000
948 UTC:5-3:5   -1.956333333 -8.787374  4.874708  0.9998488
949
950 sample families
951
952 Df Sum Sq Mean Sq F value Pr(>F)
953 block      3  191.3   63.75   1.556  0.2152

```

```

954 event      4  381.7   95.43   2.329 0.0726 .
955 block:event 12  803.3   66.94   1.633 0.1210
956 Residuals   40 1639.3   40.98
957 ---
958 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
959 Levene's Test for Homogeneity of Variance (center = median)
960   Df F value Pr(>F)
961 group 19  0.6779 0.8177
962    40
963
964 Shapiro-Wilk normality test
965
966 data: residuals(family.model)
967 W = 0.96288, p-value = 0.06514
968
969 Tukey multiple comparisons of means
970   95% family-wise confidence level
971
972 Fit: aov(formula = family.model)
973
974 $block
975   diff      lwr      upr     p adj
976 2-1 -1.2 -7.465789  5.065789 0.9554279
977 3-1  3.6 -2.665789  9.865789 0.4238579
978 UTC-1 0.2 -6.065789  6.465789 0.9997715
979 3-2  4.8 -1.465789 11.065789 0.1860844
980 UTC-2 1.4 -4.865789  7.665789 0.9317973
981 UTC-3 -3.4 -9.665789  2.865789 0.4739064
982
983 $event
984   diff      lwr      upr     p adj
985 2-1 1.8333333 -5.6311559  9.297823 0.9549621
986 3-1 3.6666667 -3.7978226 11.131156 0.6293873
987 4-1 7.5833333  0.1188441 15.047823 0.0448721
988 5-1 2.6666667 -4.7978226 10.131156 0.8444957
989 3-2 1.8333333 -5.6311559  9.297823 0.9549621
990 4-2 5.7500000 -1.7144893 13.214489 0.2006022
991 5-2 0.8333333 -6.6311559  8.297823 0.9976655
992 4-3 3.9166667 -3.5478226 11.381156 0.5693787
993 5-3 -1.0000000 -8.4644893  6.464489 0.9952676
994 5-4 -4.9166667 -12.3811559  2.547823 0.3437157
995
996 $`block:event`
997   diff      lwr      upr     p adj
998 2:1-1:1 3.333333e-01 -19.468533 20.135200 1.0000000
999 3:1-1:1 6.000000e+00 -13.801867 25.801867 0.9996710
1000 UTC:1-1:1 5.000000e+00 -14.801867 24.801867 0.9999757
1001 1:2-1:1 2.333333e+00 -17.468533 22.135200 1.0000000
1002 2:2-1:1 6.000000e+00 -13.801867 25.801867 0.9996710
1003 3:2-1:1 6.666667e-01 -19.135200 20.468533 1.0000000
1004 UTC:2-1:1 9.666667e+00 -10.135200 29.468533 0.9361987
1005 1:3-1:1 6.333333e+00 -13.468533 26.135200 0.9993246
1006 2:3-1:1 3.333333e+00 -16.468533 23.135200 1.0000000
1007 3:3-1:1 9.666667e+00 -10.135200 29.468533 0.9361987
1008 UTC:3-1:1 6.666667e+00 -13.135200 26.468533 0.9986974
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1012 UTC:4-1:1 1.133333e+01 -8.468533 31.135200 0.8019380
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1014 2:5-1:1 5.000000e+00 -14.801867 24.801867 0.9999757
1015 3:5-1:1 1.200000e+01 -7.801867 31.801867 0.7261881
1016 UTC:5-1:1 -5.000000e+00 -24.801867 14.801867 0.9999757
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1018 UTC:1-2:1 4.666667e+00 -15.135200 24.468533 0.9999915
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1046 3:4-3:1 1.033333e+01 -9.468533 30.135200 0.8930745
1047 UTC:4-3:1 5.333333e+00 -14.468533 25.135200 0.9999370
1048 1:5-3:1 4.000000e+00 -15.801867 23.801867 0.9999993

```

1049	2:5-3:1	-1.000000e+00	-20.801867	18.801867	1.0000000
1050	3:5-3:1	6.000000e+00	-13.801867	25.801867	0.9996710
1051	UTC:5-3:1	-1.000000e+01	-30.801867	8.801867	0.8356563
1052	1:2-UTC:1	-2.666667e+00	-22.468533	17.135200	1.0000000
1053	2:2-UTC:1	1.000000e+00	-18.801867	20.801867	1.0000000
1054	3:2-UTC:1	-4.333333e+00	-24.135200	15.468533	0.9999973
1055	UTC:2-UTC:1	4.666667e+00	-15.135200	24.468533	0.9999915
1056	1:3-UTC:1	1.333333e+00	-18.468533	21.135200	1.0000000
1057	2:3-UTC:1	-1.666667e+00	-21.468533	18.135200	1.0000000
1058	3:3-UTC:1	4.666667e+00	-15.135200	24.468533	0.9999915
1059	UTC:3-UTC:1	1.666667e+00	-18.135200	21.468533	1.0000000
1060	1:4-UTC:1	3.000000e+00	-16.801867	22.801867	1.0000000
1061	2:4-UTC:1	1.000000e+00	-18.801867	20.801867	1.0000000
1062	3:4-UTC:1	1.133333e+01	-8.468533	31.135200	0.8019380
1063	UTC:4-UTC:1	6.333333e+00	-13.468533	26.135200	0.9993246
1064	1:5-UTC:1	5.000000e+00	-14.801867	24.801867	0.9999757
1065	2:5-UTC:1	-1.065814e-14	-19.801867	19.801867	1.0000000
1066	3:5-UTC:1	7.000000e+00	-12.801867	26.801867	0.9976254
1067	UTC:5-UTC:1	-1.000000e+01	-29.801867	9.801867	0.9164311
1068	2:2-1:2	3.666667e+00	-16.135200	23.468533	0.9999998
1069	3:2-1:2	-1.666667e+00	-21.468533	18.135200	1.0000000
1070	UTC:2-1:2	7.333333e+00	-12.468533	27.135200	0.9958868
1071	1:3-1:2	4.000000e+00	-15.801867	23.801867	0.9999993
1072	2:3-1:2	1.000000e+00	-18.801867	20.801867	1.0000000
1073	3:3-1:2	7.333333e+00	-12.468533	27.135200	0.9958868
1074	UTC:3-1:2	4.333333e+00	-15.468533	24.135200	0.9999973
1075	1:4-1:2	5.666667e+00	-14.135200	25.468533	0.9998504
1076	2:4-1:2	3.666667e+00	-16.135200	23.468533	0.9999998
1077	3:4-1:2	1.400000e+01	-5.801867	33.801867	0.4696855
1078	UTC:4-1:2	9.000000e+00	-10.801867	28.801867	0.9656212
1079	1:5-1:2	7.666667e+00	-12.135200	27.468533	0.9931996
1080	2:5-1:2	2.666667e+00	-17.135200	22.468533	1.0000000
1081	3:5-1:2	9.666667e+00	-10.135200	29.468533	0.9361987
1082	UTC:5-1:2	-7.333333e+00	-27.135200	12.468533	0.9958868
1083	3:2-2:2	-5.333333e+00	-25.135200	14.468533	0.9999370
1084	UTC:2-2:2	3.666667e+00	-16.135200	23.468533	0.9999998
1085	1:3-2:2	3.333333e-01	-19.468533	20.135200	1.0000000
1086	2:3-2:2	-2.666667e+00	-22.468533	17.135200	1.0000000
1087	3:3-2:2	3.666667e+00	-16.135200	23.468533	0.9999998
1088	UTC:3-2:2	6.666667e-01	-19.135200	20.468533	1.0000000
1089	1:4-2:2	2.000000e+00	-17.801867	21.801867	1.0000000
1090	2:4-2:2	0.000000e+00	-19.801867	19.801867	1.0000000
1091	3:4-2:2	1.033333e+01	-9.468533	30.135200	0.8930745
1092	UTC:4-2:2	5.333333e+00	-14.468533	25.135200	0.9999370
1093	1:5-2:2	4.000000e+00	-15.801867	23.801867	0.9999993
1094	2:5-2:2	-1.000000e+00	-20.801867	18.801867	1.0000000
1095	3:5-2:2	6.000000e+00	-13.801867	25.801867	0.9996710
1096	UTC:5-2:2	-1.100000e+01	-30.801867	8.801867	0.8356563
1097	UTC:2-3:2	9.000000e+00	-10.801867	28.801867	0.9656212
1098	1:3-3:2	5.666667e+00	-14.135200	25.468533	0.9998504
1099	2:3-3:2	2.666667e+00	-17.135200	22.468533	1.0000000
1100	3:3-3:2	9.000000e+00	-10.801867	28.801867	0.9656212
1101	UTC:3-3:2	6.000000e+00	-13.801867	25.801867	0.9996710
1102	1:4-3:2	7.333333e+00	-12.468533	27.135200	0.9958868
1103	2:4-3:2	5.333333e+00	-14.468533	25.135200	0.9999370
1104	3:4-3:2	1.566667e+01	-4.135200	35.468533	0.2813434
1105	UTC:4-3:2	1.066667e+01	-9.135200	30.468533	0.8661128
1106	1:5-3:2	9.333333e+00	-10.468533	29.135200	0.9525143
1107	2:5-3:2	4.333333e+00	-15.468533	24.135200	0.9999973
1108	3:5-3:2	1.133333e+01	-8.468533	31.135200	0.8019380
1109	UTC:5-3:2	-5.666667e+00	-25.468533	14.135200	0.9998504
1110	1:3-UTC:2	-3.333333e+00	-23.135200	16.468533	1.0000000
1111	2:3-UTC:2	-6.333333e+00	-26.135200	13.468533	0.9993246
1112	3:3-UTC:2	-3.552714e-15	-19.801867	19.801867	1.0000000
1113	UTC:3-UTC:2	-3.000000e+00	-22.801867	16.801867	1.0000000
1114	1:4-UTC:2	-1.666667e+00	-21.468533	18.135200	1.0000000
1115	2:4-UTC:2	-3.666667e+00	-23.468533	16.135200	0.9999998
1116	3:4-UTC:2	6.666667e+00	-13.135200	26.468533	0.9986974
1117	UTC:4-UTC:2	1.666667e+00	-18.135200	21.468533	1.0000000
1118	1:5-UTC:2	3.333333e-01	-19.468533	20.135200	1.0000000
1119	2:5-UTC:2	-4.666667e+00	-24.468533	15.135200	0.9999915
1120	3:5-UTC:2	2.333333e+00	-17.468533	22.135200	1.0000000
1121	UTC:5-UTC:2	-1.466667e+01	-34.468533	5.135200	0.3885075
1122	2:3-1:3	-3.000000e+00	-22.801867	16.801867	1.0000000
1123	3:3-1:3	3.333333e+00	-16.468533	23.135200	1.0000000
1124	UTC:3-1:3	3.333333e-01	-19.468533	20.135200	1.0000000
1125	1:4-1:3	1.666667e+00	-18.135200	21.468533	1.0000000
1126	2:4-1:3	3.333333e-01	-20.135200	19.468533	1.0000000
1127	3:4-1:3	1.000000e+01	-9.801867	29.801867	0.9164311
1128	UTC:4-1:3	5.000000e+00	-14.801867	24.801867	0.9999757
1129	1:5-1:3	3.666667e+00	-16.135200	23.468533	0.9999998
1130	2:5-1:3	-1.333333e+00	-21.135200	18.468533	1.0000000
1131	3:5-1:3	5.666667e+00	-14.135200	25.468533	0.9998504
1132	UTC:5-1:3	-1.133333e+01	-31.135200	8.468533	0.8019380
1133	3:3-2:3	6.333333e+00	-13.468533	26.135200	0.9993246
1134	UTC:3-2:3	3.333333e+00	-16.468533	23.135200	1.0000000
1135	1:4-2:3	4.666667e+00	-15.135200	24.468533	0.9999915
1136	2:4-2:3	2.666667e+00	-17.135200	22.468533	1.0000000
1137	3:4-2:3	1.300000e+01	-6.801867	32.801867	0.5992533
1138	UTC:4-2:3	8.000000e+00	-11.801867	27.801867	0.9892247
1139	1:5-2:3	6.666667e+00	-13.135200	26.468533	0.9986974
1140	2:5-2:3	1.666667e+00	-18.135200	21.468533	1.0000000
1141	3:5-2:3	8.666667e+00	-11.135200	28.468533	0.9758473
1142	UTC:5-2:3	-8.333333e+00	-28.135200	11.468533	0.9835776
1143	UTC:3-3:3	-3.000000e+00	-22.801867	16.801867	1.0000000

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1144 1:4-3:3 -1.666667e+00 -21.468533 18.135200 1.0000000
1145 2:4-3:3 -3.666667e+00 -23.468533 16.135200 0.9999998
1146 3:4-3:3 6.666667e+00 -13.135200 26.468533 0.9986974
1147 UTC:4-3:3 1.666667e+00 -18.135200 21.468533 1.0000000
1148 1:5-3:3 3.333333e-01 -19.468533 20.135200 1.0000000
1149 2:5-3:3 -4.666667e+00 -24.468533 15.135200 0.9999915
1150 3:5-3:3 2.333333e+00 -17.468533 22.135200 1.0000000
1151 UTC:5-3:3 -1.466667e+01 -34.468533 5.135200 0.3885075
1152 1:4-UTC:3 1.333333e+00 -18.468533 21.135200 1.0000000
1153 2:4-UTC:3 -6.666667e-01 -20.468533 19.135200 1.0000000
1154 3:4-UTC:3 9.666667e+00 -10.135200 29.468533 0.9361987
1155 UTC:4-UTC:3 4.666667e+00 -15.135200 24.468533 0.9999915
1156 1:5-UTC:3 3.333333e+00 -16.468533 23.135200 1.0000000
1157 2:5-UTC:3 -1.666667e+00 -21.468533 18.135200 1.0000000
1158 3:5-UTC:3 5.333333e+00 -14.468533 25.135200 0.9999370
1159 UTC:5-UTC:3 -1.166667e+01 -31.468533 8.135200 0.7653026
1160 2:4-1:4 -2.000000e+00 -21.801867 17.801867 1.0000000
1161 3:4-1:4 8.333333e+00 -11.468533 28.135200 0.9835776
1162 UTC:4-1:4 3.333333e+00 -16.468533 23.135200 1.0000000
1163 1:5-1:4 2.000000e+00 -17.801867 21.801867 1.0000000
1164 2:5-1:4 -3.000000e+00 -22.801867 16.801867 1.0000000
1165 3:5-1:4 4.000000e+00 -15.801867 23.801867 0.9999993
1166 UTC:5-1:4 -1.300000e+01 -32.801867 6.801867 0.5992533
1167 3:4-2:4 1.033333e+01 -9.468533 30.135200 0.8930745
1168 UTC:4-2:4 5.333333e+00 -14.468533 25.135200 0.9999370
1169 1:5-2:4 4.000000e+00 -15.801867 23.801867 0.9999993
1170 2:5-2:4 -1.000000e+00 -20.801867 18.801867 1.0000000
1171 3:5-2:4 6.000000e+00 -13.801867 25.801867 0.9996710
1172 UTC:5-2:4 -1.100000e+01 -30.801867 8.801867 0.8356563
1173 UTC:4-3:4 -5.000000e+00 -24.801867 14.801867 0.9999757
1174 1:5-3:4 -6.333333e+00 -26.135200 13.468533 0.9993246
1175 2:5-3:4 -1.133333e+01 -31.135200 8.468533 0.8019380
1176 3:5-3:4 -4.333333e+00 -24.135200 15.468533 0.9999973
1177 UTC:5-3:4 -2.133333e+01 -41.135200 -1.531467 0.0233833
1178 1:5-UTC:4 -1.333333e+00 -21.135200 18.468533 1.0000000
1179 2:5-UTC:4 -6.333333e+00 -26.135200 13.468533 0.9993246
1180 3:5-UTC:4 6.666667e-01 -19.135200 20.468533 1.0000000
1181 UTC:5-UTC:4 -1.633333e+01 -36.135200 3.468533 0.2216162
1182 2:5-1:5 -5.000000e+00 -24.801867 14.801867 0.9999757
1183 3:5-1:5 2.000000e+00 -17.801867 21.801867 1.0000000
1184 UTC:5-1:5 -1.500000e+01 -34.801867 4.801867 0.3506028
1185 3:5-2:5 7.000000e+00 -12.801867 26.801867 0.9976254
1186 UTC:5-2:5 -1.000000e+01 -29.801867 9.801867 0.9164311
1187 UTC:5-3:5 -1.700000e+01 -36.801867 2.801867 0.1715963
1188
1189 sweep
1190
1191 sample mass
1192
1193      Df Sum Sq Mean Sq F value Pr(>F)
1194 block      3  0.0905 0.03017   1.107  0.357
1195 event      4  0.1541 0.03854   1.415  0.247
1196 block:event 12  0.2760 0.02300   0.844  0.607
1197 Residuals   40  1.0897 0.02724
1198 Levene's Test for Homogeneity of Variance (center = median)
1199      Df F value Pr(>F)
1200 group 19  0.929 0.5547
1201      40
1202
1203 Shapiro-Wilk normality test
1204
1205 data: residuals(mass.model)
1206 W = 0.60392, p-value = 1.844e-11
1207
1208 Tukey multiple comparisons of means
1209  95% family-wise confidence level
1210
1211 Fit: aov(formula = mass.model)
1212
1213 $block
1214      diff      lwr      upr     p adj
1215 2-1  0.08486000 -0.07668488 0.24640488 0.5018702
1216 3-1  0.02174000 -0.13980488 0.18328488 0.9836994
1217 UTC-1 -0.01797333 -0.17951821 0.14357155 0.9906366
1218 3-2 -0.06312000 -0.22466488 0.09842488 0.7229046
1219 UTC-2 -0.10283333 -0.26437821 0.05871155 0.3339240
1220 UTC-3 -0.03971333 -0.20125821 0.12183155 0.9117703
1221
1222 $event
1223      diff      lwr      upr     p adj
1224 2-1  0.12025833 -0.07219150 0.3127082 0.3963697
1225 3-1 -0.00905000 -0.20149984 0.1833998 0.9999233
1226 4-1  0.06700000 -0.12544984 0.2594498 0.8563281
1227 5-1  0.09135000 -0.10109984 0.2837998 0.6587197
1228 3-2 -0.12930833 -0.32175817 0.0631415 0.3241873
1229 4-2 -0.05325833 -0.24570817 0.1391915 0.9319165
1230 5-2 -0.02890833 -0.22135817 0.1635415 0.9926607
1231 4-3  0.07605000 -0.11639984 0.2684998 0.7905122
1232 5-3  0.10040000 -0.09204984 0.2928498 0.5747836
1233 5-4  0.02435000 -0.16809984 0.2167998 0.9962044
1234
1235 $`block:event`
1236      diff      lwr      upr     p adj
1237 2:1-1:1  0.026100000 -0.48443272 0.53663272 1.0000000
1238 3:1-1:1  0.081166667 -0.42936605 0.59169938 1.0000000

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1239	UTC:1-1:1	-0.0195666667	-0.53009938	0.49096605	1.0000000
1240	1:2-1:1	0.084000000	-0.42653272	0.59453272	1.0000000
1241	2:2-1:1	0.422000000	-0.08853272	0.93253272	0.2187797
1242	3:2-1:1	0.0124333333	-0.49809938	0.52296605	1.0000000
1243	UTC:2-1:1	0.050300000	-0.46023272	0.56083272	1.0000000
1244	1:3-1:1	-0.012500000	-0.52303272	0.49803272	1.0000000
1245	2:3-1:1	0.016300000	-0.49423272	0.52683272	1.0000000
1246	3:3-1:1	0.0218666667	-0.48866605	0.53239938	1.0000000
1247	UTC:3-1:1	0.0258333333	-0.48469938	0.53636605	1.0000000
1248	1:4-1:1	0.0690333333	-0.44149938	0.57956605	1.0000000
1249	2:4-1:1	0.0803666667	-0.43016605	0.59089938	1.0000000
1250	3:4-1:1	0.1448333333	-0.36569938	0.65536605	0.9998676
1251	UTC:4-1:1	0.0614666667	-0.44906605	0.57199938	1.0000000
1252	1:5-1:1	0.1278666667	-0.38266605	0.63839938	0.9999785
1253	2:5-1:1	0.1479333333	-0.36259938	0.65846605	0.9998219
1254	3:5-1:1	0.116800000	-0.39373272	0.62733272	0.9999946
1255	UTC:5-1:1	0.060500000	-0.45003272	0.57103272	1.0000000
1256	3:1-2:1	0.0550666667	-0.45546605	0.56559938	1.0000000
1257	UTC:1-2:1	-0.0456666667	-0.55619938	0.46486605	1.0000000
1258	1:2-2:1	0.057900000	-0.45263272	0.56843272	1.0000000
1259	2:2-2:1	0.395900000	-0.11463272	0.90643272	0.3125115
1260	3:2-2:1	-0.0136666667	-0.52419938	0.49686605	1.0000000
1261	UTC:2-2:1	0.024200000	-0.48633272	0.53473272	1.0000000
1262	1:3-2:1	-0.038600000	-0.54913272	0.47193272	1.0000000
1263	2:3-2:1	-0.009800000	-0.52033272	0.50073272	1.0000000
1264	3:3-2:1	-0.0042333333	-0.51476605	0.50629938	1.0000000
1265	UTC:3-2:1	-0.0002666667	-0.51079938	0.51026605	1.0000000
1266	1:4-2:1	0.0429333333	-0.46759938	0.55346605	1.0000000
1267	2:4-2:1	0.0542666667	-0.45626605	0.56479938	1.0000000
1268	3:4-2:1	0.1187333333	-0.39179938	0.62926605	0.9999931
1269	UTC:4-2:1	0.0353666667	-0.47516605	0.54589938	1.0000000
1270	1:5-2:1	0.1017666667	-0.40876605	0.61229938	0.9999994
1271	2:5-2:1	0.1218333333	-0.38869938	0.63236605	0.9999897
1272	3:5-2:1	0.090700000	-0.41983272	0.60123272	0.9999999
1273	UTC:5-2:1	0.034400000	-0.47613272	0.54493272	1.0000000
1274	UTC:1-3:1	-0.1007333333	-0.61126605	0.40979938	0.9999995
1275	1:2-3:1	0.0028333333	-0.50769938	0.51336605	1.0000000
1276	2:2-3:1	0.3408333333	-0.16969938	0.85136605	0.5704863
1277	3:2-3:1	-0.0687333333	-0.57926605	0.44179938	1.0000000
1278	UTC:2-3:1	-0.0308666667	-0.54139938	0.47966605	1.0000000
1279	1:3-3:1	-0.0936666667	-0.60419938	0.41686605	0.9999998
1280	2:3-3:1	-0.0648666667	-0.57539938	0.44566605	1.0000000
1281	3:3-3:1	-0.059300000	-0.56983272	0.45123272	1.0000000
1282	UTC:3-3:1	-0.0553333333	-0.56586605	0.45519938	1.0000000
1283	1:4-3:1	-0.0121333333	-0.52266605	0.49839938	1.0000000
1284	2:4-3:1	-0.000800000	-0.51133272	0.50973272	1.0000000
1285	3:4-3:1	0.0636666667	-0.44686605	0.57419938	1.0000000
1286	UTC:4-3:1	-0.019700000	-0.53023272	0.49083272	1.0000000
1287	1:5-3:1	0.046700000	-0.46383272	0.55723272	1.0000000
1288	2:5-3:1	0.0667666667	-0.44376605	0.57729938	1.0000000
1289	3:5-3:1	0.0356333333	-0.47489938	0.54616605	1.0000000
1290	UTC:5-3:1	-0.0206666667	-0.53119938	0.48986605	1.0000000
1291	1:2-UTC:1	0.1035666667	-0.40696605	0.61409938	0.9999992
1292	2:2-UTC:1	0.4415666667	-0.06896605	0.95209938	0.1631416
1293	3:2-UTC:1	0.032000000	-0.47853272	0.54253272	1.0000000
1294	UTC:2-UTC:1	0.0698666667	-0.44066605	0.58039938	1.0000000
1295	1:3-UTC:1	0.0070666667	-0.50346605	0.51759938	1.0000000
1296	2:3-UTC:1	0.0358666667	-0.47466605	0.54639938	1.0000000
1297	3:3-UTC:1	0.0414333333	-0.46909938	0.55196605	1.0000000
1298	UTC:3-UTC:1	0.045400000	-0.46513272	0.55593272	1.0000000
1299	1:4-UTC:1	0.088600000	-0.42193272	0.59913272	0.9999999
1300	2:4-UTC:1	0.0999333333	-0.41059938	0.61046605	0.9999996
1301	3:4-UTC:1	0.164400000	-0.34613272	0.67493272	0.9992621
1302	UTC:4-UTC:1	0.0810333333	-0.42949938	0.59156605	1.0000000
1303	1:5-UTC:1	0.1474333333	-0.36309938	0.65796605	0.9998301
1304	2:5-UTC:1	0.167500000	-0.34303272	0.67803272	0.9990611
1305	3:5-UTC:1	0.1363666667	-0.37416605	0.64689938	0.9999442
1306	UTC:5-UTC:1	0.0800666667	-0.43046605	0.59059938	1.0000000
1307	2:2-1:2	0.338000000	-0.17253272	0.84853272	0.5848747
1308	3:2-1:2	-0.0715666667	-0.58209938	0.43896605	1.0000000
1309	UTC:2-1:2	-0.033700000	-0.54423272	0.47683272	1.0000000
1310	1:3-1:2	-0.096500000	-0.60703272	0.41403272	0.9999998
1311	2:3-1:2	-0.067700000	-0.57823272	0.44283272	1.0000000
1312	3:3-1:2	-0.0621333333	-0.57266605	0.44839938	1.0000000
1313	UTC:3-1:2	-0.0581666667	-0.56869938	0.45236605	1.0000000
1314	1:4-1:2	-0.0149666667	-0.52549938	0.49556605	1.0000000
1315	2:4-1:2	-0.0036333333	-0.51416605	0.50689938	1.0000000
1316	3:4-1:2	0.0608333333	-0.44969938	0.57136605	1.0000000
1317	UTC:4-1:2	-0.0225333333	-0.53306605	0.48799938	1.0000000
1318	1:5-1:2	0.0438666667	-0.46666605	0.55439938	1.0000000
1319	2:5-1:2	0.0639333333	-0.44659938	0.57446605	1.0000000
1320	3:5-1:2	0.032800000	-0.47773272	0.54333272	1.0000000
1321	UTC:5-1:2	-0.023500000	-0.53403272	0.48703272	1.0000000
1322	3:2-2:2	-0.4095666667	-0.92009938	0.10096605	0.2606407
1323	UTC:2-2:2	-0.371700000	-0.88223272	0.13883272	0.4181520
1324	1:3-2:2	-0.434500000	-0.94503272	0.07603272	0.1818222
1325	2:3-2:2	-0.405700000	-0.91623272	0.10483272	0.2747014
1326	3:3-2:2	-0.4001333333	-0.91066605	0.11039938	0.2958008
1327	UTC:3-2:2	-0.3961666667	-0.90669938	0.11436605	0.3114422
1328	1:4-2:2	-0.3529666667	-0.86349938	0.15756605	0.5092116
1329	2:4-2:2	-0.3416333333	-0.85216605	0.16889938	0.5664246
1330	3:4-2:2	-0.2771666667	-0.78769938	0.23336605	0.8587861
1331	UTC:4-2:2	-0.3605333333	-0.87106605	0.14999938	0.4717195
1332	1:5-2:2	-0.2941333333	-0.80466605	0.21639938	0.7939221
1333	2:5-2:2	-0.2740666667	-0.78459938	0.23646605	0.8692413

1334	3:5-2:2	-0.3052000000	-0.81573272	0.20533272	0.7455127
1335	UTC:5-2:2	-0.3615000000	-0.87203272	0.14903272	0.4669903
1336	UTC:2-3:2	0.0378666667	-0.47266605	0.54839938	1.0000000
1337	1:3-3:2	-0.0249333333	-0.53546605	0.48559938	1.0000000
1338	2:3-3:2	0.0038666667	-0.50666605	0.51439938	1.0000000
1339	3:3-3:2	0.0094333333	-0.50109938	0.51996605	1.0000000
1340	UTC:3-3:2	0.0134000000	-0.49713272	0.52393272	1.0000000
1341	1:4-3:2	0.0566000000	-0.45393272	0.56713272	1.0000000
1342	2:4-3:2	0.0679333333	-0.44259938	0.57846605	1.0000000
1343	3:4-3:2	0.1324000000	-0.37813272	0.64293272	0.9999638
1344	UTC:4-3:2	0.0490333333	-0.46149938	0.55956605	1.0000000
1345	1:5-3:2	0.1154333333	-0.39509938	0.62596605	0.9999955
1346	2:5-3:2	0.1355000000	-0.37503272	0.64603272	0.9999491
1347	3:5-3:2	0.1043666667	-0.40616605	0.61489938	0.9999991
1348	UTC:5-3:2	0.0480666667	-0.46246605	0.55859938	1.0000000
1349	1:3-UTC:2	-0.0628000000	-0.57333272	0.44773272	1.0000000
1350	2:3-UTC:2	-0.0340000000	-0.54453272	0.47653272	1.0000000
1351	3:3-UTC:2	-0.0284333333	-0.53896605	0.48209938	1.0000000
1352	UTC:3-UTC:2	-0.0244666667	-0.53499938	0.48606605	1.0000000
1353	1:4-UTC:2	0.0187333333	-0.49179938	0.52926605	1.0000000
1354	2:4-UTC:2	0.0300666667	-0.48046605	0.54059938	1.0000000
1355	3:4-UTC:2	0.0945333333	-0.41599938	0.60506605	0.9999998
1356	UTC:4-UTC:2	0.0111666667	-0.49936605	0.52169938	1.0000000
1357	1:5-UTC:2	0.0775666667	-0.43296605	0.58809938	1.0000000
1358	2:5-UTC:2	0.0976333333	-0.41289938	0.60816605	0.9999997
1359	3:5-UTC:2	0.0665000000	-0.44403272	0.57703272	1.0000000
1360	UTC:5-UTC:2	0.0102000000	-0.50033272	0.52073272	1.0000000
1361	2:3-1:3	0.0288000000	-0.48173272	0.53933272	1.0000000
1362	3:3-1:3	0.0343666667	-0.47616605	0.54489938	1.0000000
1363	UTC:3-1:3	0.0383333333	-0.47219938	0.54886605	1.0000000
1364	1:4-1:3	0.0815333333	-0.42899938	0.59206605	1.0000000
1365	2:4-1:3	0.0928666667	-0.41766605	0.60339938	0.9999999
1366	3:4-1:3	0.1573333333	-0.35319938	0.66786605	0.9995867
1367	UTC:4-1:3	0.0739666667	-0.43656605	0.58449938	1.0000000
1368	1:5-1:3	0.1403666667	-0.37016605	0.65089938	0.9999152
1369	2:5-1:3	0.1604333333	-0.35009938	0.67096605	0.9994642
1370	3:5-1:3	0.1293000000	-0.38123272	0.63983272	0.9999746
1371	UTC:5-1:3	0.0730000000	-0.43753272	0.58353272	1.0000000
1372	3:3-2:3	0.0055666667	-0.50496605	0.51609938	1.0000000
1373	UTC:3-2:3	0.0095333333	-0.50099938	0.52006605	1.0000000
1374	1:4-2:3	0.0527333333	-0.45779938	0.56326605	1.0000000
1375	2:4-2:3	0.0640666667	-0.44646605	0.57459938	1.0000000
1376	3:4-2:3	0.1285333333	-0.38199938	0.63906605	0.9999767
1377	UTC:4-2:3	0.0451666667	-0.46536605	0.55569938	1.0000000
1378	1:5-2:3	0.1115666667	-0.39896605	0.62209938	0.9999974
1379	2:5-2:3	0.1316333333	-0.37889938	0.64216605	0.9999668
1380	3:5-2:3	0.1005000000	-0.41003272	0.61103272	0.9999995
1381	UTC:5-2:3	0.0442000000	-0.46633272	0.55473272	1.0000000
1382	UTC:3-3:3	0.0039666667	-0.50656605	0.51449938	1.0000000
1383	1:4-3:3	0.0471666667	-0.46336605	0.55769938	1.0000000
1384	2:4-3:3	0.0585000000	-0.45203272	0.56903272	1.0000000
1385	3:4-3:3	0.1229666667	-0.38756605	0.63349938	0.9999881
1386	UTC:4-3:3	0.0396000000	-0.47093272	0.55013272	1.0000000
1387	1:5-3:3	0.1060000000	-0.40453272	0.61653272	0.9999988
1388	2:5-3:3	0.1260666667	-0.38446605	0.63659938	0.9999826
1389	3:5-3:3	0.0949333333	-0.41559938	0.60546605	0.9999998
1390	UTC:5-3:3	0.0386333333	-0.47189938	0.54916605	1.0000000
1391	1:4-UTC:3	0.0432000000	-0.46733272	0.55373272	1.0000000
1392	2:4-UTC:3	0.0545333333	-0.45559938	0.56506605	1.0000000
1393	3:4-UTC:3	0.1190000000	-0.39153272	0.62953272	0.9999928
1394	UTC:4-UTC:3	0.0356333333	-0.47489938	0.54616605	1.0000000
1395	1:5-UTC:3	0.1020333333	-0.40849938	0.61256605	0.9999994
1396	2:5-UTC:3	0.1221000000	-0.38843272	0.63263272	0.9999893
1397	3:5-UTC:3	0.0909666667	-0.41956605	0.60149938	0.9999999
1398	UTC:5-UTC:3	0.0346666667	-0.47586605	0.54519938	1.0000000
1399	2:4-1:4	0.0113333333	-0.49919938	0.52186605	1.0000000
1400	3:4-1:4	0.0758000000	-0.43473272	0.58633272	1.0000000
1401	UTC:4-1:4	-0.0075666667	-0.51809938	0.50296605	1.0000000
1402	1:5-1:4	0.0588333333	-0.45169938	0.56936605	1.0000000
1403	2:5-1:4	0.0789000000	-0.43163272	0.58943272	1.0000000
1404	3:5-1:4	0.0477666667	-0.46276605	0.55829938	1.0000000
1405	UTC:5-1:4	-0.0085333333	-0.51906605	0.50199938	1.0000000
1406	3:4-2:4	0.0644666667	-0.44606605	0.57499938	1.0000000
1407	UTC:4-2:4	-0.0189000000	-0.52943272	0.49163272	1.0000000
1408	1:5-2:4	0.0475000000	-0.46303272	0.55803272	1.0000000
1409	2:5-2:4	0.0675666667	-0.44296605	0.57809938	1.0000000
1410	3:5-2:4	0.0364333333	-0.47409938	0.54696605	1.0000000
1411	UTC:5-2:4	-0.0198666667	-0.53039938	0.49066605	1.0000000
1412	UTC:4-3:4	-0.0833666667	-0.59389938	0.42716605	1.0000000
1413	1:5-3:4	-0.0169666667	-0.52749938	0.49356605	1.0000000
1414	2:5-3:4	0.0031000000	-0.50743272	0.51363272	1.0000000
1415	3:5-3:4	-0.0280333333	-0.53856605	0.48249938	1.0000000
1416	UTC:5-3:4	-0.0843333333	-0.59486605	0.42619938	1.0000000
1417	1:5-UTC:4	0.0664000000	-0.44413272	0.57693272	1.0000000
1418	2:5-UTC:4	0.0864666667	-0.42406605	0.59699938	1.0000000
1419	3:5-UTC:4	0.0553333333	-0.45519938	0.56586605	1.0000000
1420	UTC:5-UTC:4	-0.0009666667	-0.51149938	0.50956605	1.0000000
1421	2:5-1:5	0.0200666667	-0.49046605	0.53059938	1.0000000
1422	3:5-1:5	-0.0110666667	-0.52159938	0.49946605	1.0000000
1423	UTC:5-1:5	-0.0673666667	-0.57789938	0.44316605	1.0000000
1424	3:5-2:5	-0.0311333333	-0.54166605	0.47939938	1.0000000
1425	UTC:5-2:5	-0.0874333333	-0.59796605	0.42309938	1.0000000
1426	UTC:5-3:5	-0.0563000000	-0.56683272	0.45423272	1.0000000
1427					
1428	sample families				

```

1429
1430      Df Sum Sq Mean Sq F value Pr(>F)
1431 block      3  222.2   74.06   2.805 0.0519 .
1432 event      4  286.2   71.56   2.711 0.0435 *
1433 block:event 12 155.2   12.94   0.490 0.9085
1434 Residuals  40 1056.0   26.40
1435 ---
1436 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1437 Levene's Test for Homogeneity of Variance (center = median)
1438      Df F value Pr(>F)
1439 group 19  0.7016 0.7951
1440      40
1441
1442 Shapiro-Wilk normality test
1443
1444 data: residuals(family.model)
1445 W = 0.97287, p-value = 0.2011
1446
1447 Tukey multiple comparisons of means
1448 95% family-wise confidence level
1449
1450 Fit: aov(formula = family.model)
1451
1452 $block
1453    diff      lwr      upr     p adj
1454 2-1  0.7333333 -4.295579  5.7622458 0.9794468
1455 3-1  2.4666667 -2.562246  7.4955791 0.5591844
1456 UTC-1 -2.8666667 -7.895579  2.1622458 0.4307984
1457 3-2  1.7333333 -3.295579  6.7622458 0.7922694
1458 UTC-2 -3.6000000 -8.628912  1.4289124 0.2365596
1459 UTC-3 -5.3333333 -10.362246 -0.3044209 0.0339928
1460
1461 $event
1462    diff      lwr      upr     p adj
1463 2-1  5.583333 -0.40765429 11.574321 0.0781363
1464 3-1  3.000000 -2.99098762  8.990988 0.6123476
1465 4-1  4.416667 -1.57432096 10.407654 0.2377807
1466 5-1  6.083333  0.09234571 12.074321 0.0450280
1467 3-2 -2.583333 -8.57432096  3.407654 0.7332401
1468 4-2 -1.166667 -7.15765429  4.824321 0.9805273
1469 5-2  0.500000 -5.490987628 0.9992540
1470 4-3  1.416667 -4.57432096  7.407654 0.9606173
1471 5-3  3.083333 -2.90765429  9.074321 0.5874063
1472 5-4  1.666667 -4.32432096  7.657654 0.9306911
1473
1474 $`block:event`
1475    diff      lwr      upr     p adj
1476 2:1-1:1  1.666667e+00 -14.226281 17.559614 1.0000000
1477 3:1-1:1  4.333333e+00 -11.559614 20.226281 0.9999248
1478 UTC:1-1:1  6.666667e-01 -15.226281 16.559614 1.0000000
1479 1:2-1:1  7.000000e+00 -8.892948 22.892948 0.9743426
1480 2:2-1:1  1.233333e+01 -3.559614 28.226281 0.3113631
1481 3:2-1:1  7.000000e+00 -8.892948 22.892948 0.9743426
1482 UTC:2-1:1  2.666667e+00 -13.226281 18.559614 1.0000000
1483 1:3-1:1  3.666667e+00 -12.226281 19.559614 0.9999939
1484 2:3-1:1  4.666667e+00 -11.226281 20.559614 0.9997859
1485 3:3-1:1  8.333333e+00 -7.559614 24.226281 0.8892890
1486 UTC:3-1:1  2.000000e+00 -13.892948 17.892948 1.0000000
1487 1:4-1:1  7.333333e+00 -8.559614 23.226281 0.9606036
1488 2:4-1:1  4.333333e+00 -11.559614 20.226281 0.9999248
1489 3:4-1:1  1.000000e+01 -5.892948 25.892948 0.6691475
1490 UTC:4-1:1  2.666667e+00 -13.226281 18.559614 1.0000000
1491 1:5-1:1  9.000000e+00 -6.892948 24.892948 0.8144078
1492 2:5-1:1  7.666667e+00 -8.226281 23.559614 0.9421750
1493 3:5-1:1  9.666667e+00 -6.226281 25.559614 0.7208403
1494 UTC:5-1:1  4.666667e+00 -11.226281 20.559614 0.9997859
1495 3:1-2:1  2.666667e+00 -13.226281 18.559614 1.0000000
1496 UTC:1-2:1 -1.000000e+00 -16.892948 14.892948 1.0000000
1497 1:2-2:1  5.333333e+00 -10.559614 21.226281 0.9987495
1498 2:2-2:1  1.066667e+01 -5.226281 26.559614 0.5612762
1499 3:2-2:1  5.333333e+00 -10.559614 21.226281 0.9987495
1500 UTC:2-2:1  1.000000e+00 -14.892948 16.892948 1.0000000
1501 1:3-2:1  2.000000e+00 -13.892948 17.892948 1.0000000
1502 2:3-2:1  3.000000e+00 -12.892948 18.892948 0.9999998
1503 3:3-2:1  6.666667e+00 -9.226281 22.559614 0.9841066
1504 UTC:3-2:1  3.333333e-01 -15.559614 16.226281 1.0000000
1505 1:4-2:1  5.666667e+00 -10.226281 21.559614 0.9973673
1506 2:4-2:1  2.666667e+00 -13.226281 18.559614 1.0000000
1507 3:4-2:1  8.333333e+00 -7.559614 24.226281 0.8892890
1508 UTC:4-2:1  1.000000e+00 -14.892948 16.892948 1.0000000
1509 1:5-2:1  7.333333e+00 -8.559614 23.226281 0.9606036
1510 2:5-2:1  6.000000e+00 -9.892948 21.892948 0.9948736
1511 3:5-2:1  8.000000e+00 -7.892948 23.892948 0.9185071
1512 UTC:5-2:1  3.000000e+00 -12.892948 18.892948 0.9999998
1513 UTC:1-3:1 -3.666667e+00 -19.559614 12.226281 0.9999939
1514 1:2-3:1  2.666667e+00 -13.226281 18.559614 1.0000000
1515 2:2-3:1  8.000000e+00 -7.892948 23.892948 0.9185071
1516 3:2-3:1  2.666667e+00 -13.226281 18.559614 1.0000000
1517 UTC:2-3:1 -1.666667e+00 -17.559614 14.226281 1.0000000
1518 1:3-3:1  -6.666667e-01 -16.559614 15.226281 1.0000000
1519 2:3-3:1  3.333333e-01 -15.559614 16.226281 1.0000000
1520 3:3-3:1  4.000000e+00 -11.892948 19.892948 0.9999768
1521 UTC:3-3:1 -2.333333e+00 -18.226281 13.559614 1.0000000
1522 1:4-3:1  3.000000e+00 -12.892948 18.892948 0.9999998
1523 2:4-3:1  1.776357e-15 -15.892948 15.892948 1.0000000

```

1524	3:4-3:1	5.666667e+00	-10.226281	21.559614	0.9973673
1525	UTC:4-3:1	-1.666667e+00	-17.559614	14.226281	1.0000000
1526	1:5-3:1	4.666667e+00	-11.226281	20.559614	0.9997859
1527	2:5-3:1	3.333333e+00	-12.559614	19.226281	0.9999986
1528	3:5-3:1	5.333333e+00	-10.559614	21.226281	0.9987495
1529	UTC:5-3:1	3.333333e-01	-15.559614	16.226281	1.0000000
1530	1:2-UTC:1	6.333333e+00	-9.559614	22.226281	0.9906886
1531	2:2-UTC:1	1.166667e+01	-4.226281	27.559614	0.4038835
1532	3:2-UTC:1	6.333333e+00	-9.559614	22.226281	0.9906886
1533	UTC:2-UTC:1	2.000000e+00	-13.892948	17.892948	1.0000000
1534	1:3-UTC:1	3.000000e+00	-12.892948	18.892948	0.9999998
1535	2:3-UTC:1	4.000000e+00	-11.892948	19.892948	0.9999768
1536	3:3-UTC:1	7.666667e+00	-8.226281	23.559614	0.9421750
1537	UTC:3-UTC:1	1.333333e+00	-14.559614	17.226281	1.0000000
1538	1:4-UTC:1	6.666667e+00	-9.226281	22.559614	0.9841066
1539	2:4-UTC:1	3.666667e+00	-12.226281	19.559614	0.9999939
1540	3:4-UTC:1	9.333333e+00	-6.559614	25.226281	0.7695874
1541	UTC:4-UTC:1	2.000000e+00	-13.892948	17.892948	1.0000000
1542	1:5-UTC:1	8.333333e+00	-7.559614	24.226281	0.8892890
1543	2:5-UTC:1	7.000000e+00	-8.892948	22.892948	0.9743426
1544	3:5-UTC:1	9.000000e+00	-6.892948	24.892948	0.8144078
1545	UTC:5-UTC:1	4.000000e+00	-11.892948	19.892948	0.9999768
1546	2:2-1:2	5.333333e+00	-10.559614	21.226281	0.9987495
1547	3:2-1:2	-5.329071e-15	-15.892948	15.892948	1.0000000
1548	UTC:2-1:2	-4.333333e+00	-20.226281	11.559614	0.9999248
1549	1:3-1:2	-3.333333e+00	-19.226281	12.559614	0.9999986
1550	2:3-1:2	-2.333333e+00	-18.226281	13.559614	1.0000000
1551	3:3-1:2	1.333333e+00	-14.559614	17.226281	1.0000000
1552	UTC:3-1:2	-5.000000e+00	-20.892948	10.892948	0.9994561
1553	1:4-1:2	3.333333e-01	-15.559614	16.226281	1.0000000
1554	2:4-1:2	-2.666667e+00	-18.559614	13.226281	1.0000000
1555	3:4-1:2	3.000000e+00	-12.892948	18.892948	0.9999998
1556	UTC:4-1:2	-4.333333e+00	-20.226281	11.559614	0.9999248
1557	1:5-1:2	2.000000e+00	-13.892948	17.892948	1.0000000
1558	2:5-1:2	6.666667e-01	-15.226281	16.559614	1.0000000
1559	3:5-1:2	2.666667e+00	-13.226281	18.559614	1.0000000
1560	UTC:5-1:2	-2.333333e+00	-18.226281	13.559614	1.0000000
1561	3:2-2:2	-5.333333e+00	-21.226281	10.559614	0.9987495
1562	UTC:2-2:2	-9.666667e+00	-25.559614	6.226281	0.7208403
1563	1:3-2:2	-8.666667e+00	-24.559614	7.226281	0.8544964
1564	2:3-2:2	-7.666667e+00	-23.559614	8.226281	0.9421750
1565	3:3-2:2	-4.000000e+00	-19.892948	11.892948	0.9999768
1566	UTC:3-2:2	-1.033333e+01	-26.226281	5.559614	0.6155906
1567	1:4-2:2	-5.000000e+00	-20.892948	10.892948	0.9994561
1568	2:4-2:2	-8.000000e+00	-23.892948	7.892948	0.9185071
1569	3:4-2:2	-2.333333e+00	-18.226281	13.559614	1.0000000
1570	UTC:4-2:2	-9.666667e+00	-25.559614	6.226281	0.7208403
1571	1:5-2:2	-3.333333e+00	-19.226281	12.559614	0.9999986
1572	2:5-2:2	-4.666667e+00	-20.559614	11.226281	0.9997859
1573	3:5-2:2	-2.666667e+00	-18.559614	13.226281	1.0000000
1574	UTC:5-2:2	-7.666667e+00	-23.559614	8.226281	0.9421750
1575	UTC:2-3:2	-4.333333e+00	-20.226281	11.559614	0.9999248
1576	1:3-3:2	-3.333333e+00	-19.226281	12.559614	0.9999986
1577	2:3-3:2	-2.333333e+00	-18.226281	13.559614	1.0000000
1578	3:3-3:2	1.333333e+00	-14.559614	17.226281	1.0000000
1579	UTC:3-3:2	-5.000000e+00	-20.892948	10.892948	0.9994561
1580	1:4-3:2	3.333333e-01	-15.559614	16.226281	1.0000000
1581	2:4-3:2	-2.666667e+00	-18.559614	13.226281	1.0000000
1582	3:4-3:2	3.000000e+00	-12.892948	18.892948	0.9999998
1583	UTC:4-3:2	-4.333333e+00	-20.226281	11.559614	0.9999248
1584	1:5-3:2	2.000000e+00	-13.892948	17.892948	1.0000000
1585	2:5-3:2	6.666667e-01	-15.226281	16.559614	1.0000000
1586	3:5-3:2	2.666667e+00	-13.226281	18.559614	1.0000000
1587	UTC:5-3:2	-2.333333e+00	-18.226281	13.559614	1.0000000
1588	1:3-UTC:2	1.000000e+00	-14.892948	16.892948	1.0000000
1589	2:3-UTC:2	2.000000e+00	-13.892948	17.892948	1.0000000
1590	3:3-UTC:2	5.666667e+00	-10.226281	21.559614	0.9973673
1591	UTC:3-UTC:2	-6.666667e-01	-16.559614	15.226281	1.0000000
1592	1:4-UTC:2	4.666667e+00	-11.226281	20.559614	0.9997859
1593	2:4-UTC:2	1.666667e+00	-14.226281	17.559614	1.0000000
1594	3:4-UTC:2	7.333333e+00	-8.559614	23.226281	0.9606036
1595	UTC:4-UTC:2	-2.664535e-15	-15.892948	15.892948	1.0000000
1596	1:5-UTC:2	6.333333e+00	-9.559614	22.226281	0.9906886
1597	2:5-UTC:2	5.000000e+00	-10.892948	20.892948	0.9994561
1598	3:5-UTC:2	7.000000e+00	-8.892948	22.892948	0.9743426
1599	UTC:5-UTC:2	2.000000e+00	-13.892948	17.892948	1.0000000
1600	2:3-1:3	1.000000e+00	-14.892948	16.892948	1.0000000
1601	3:3-1:3	4.666667e+00	-11.226281	20.559614	0.9997859
1602	UTC:3-1:3	-1.666667e+00	-17.559614	14.226281	1.0000000
1603	1:4-1:3	3.666667e+00	-12.226281	19.559614	0.9999939
1604	2:4-1:3	6.666667e-01	-15.226281	16.559614	1.0000000
1605	3:4-1:3	6.333333e+00	-9.559614	22.226281	0.9906886
1606	UTC:4-1:3	-1.000000e+00	-16.892948	14.892948	1.0000000
1607	1:5-1:3	5.333333e+00	-10.559614	21.226281	0.9987495
1608	2:5-1:3	4.000000e+00	-11.892948	19.892948	0.9999768
1609	3:5-1:3	6.000000e+00	-9.892948	21.892948	0.9948736
1610	UTC:5-1:3	1.000000e+00	-14.892948	16.892948	1.0000000
1611	3:3-2:3	3.666667e+00	-12.226281	19.559614	0.9999939
1612	UTC:3-2:3	-2.666667e+00	-18.559614	13.226281	1.0000000
1613	1:4-2:3	2.666667e+00	-13.226281	18.559614	1.0000000
1614	2:4-2:3	-3.333333e-01	-16.226281	15.559614	1.0000000
1615	3:4-2:3	5.333333e+00	-10.559614	21.226281	0.9987495
1616	UTC:4-2:3	-2.000000e+00	-17.892948	13.892948	1.0000000
1617	1:5-2:3	4.333333e+00	-11.559614	20.226281	0.9999248
1618	2:5-2:3	3.000000e+00	-12.892948	18.892948	0.9999998

```

1619 3:5-2:3      5.000000e+00 -10.892948 20.892948 0.9994561
1620 UTC:5-2:3    -8.881784e-16 -15.892948 15.892948 1.0000000
1621 UTC:3-3:3    -6.333333e+00 -22.226281 9.559614 0.9906886
1622 1:4-3:3     -1.000000e+00 -16.892948 14.892948 1.0000000
1623 2:4-3:3     -4.000000e+00 -19.892948 11.892948 0.9999768
1624 3:4-3:3     1.666667e+00 -14.226281 17.559614 1.0000000
1625 UTC:4-3:3    5.666667e+00 -21.559614 10.226281 0.9973673
1626 1:5-3:3     6.666667e-01 -15.226281 16.559614 1.0000000
1627 2:5-3:3     -6.666667e-01 -16.559614 15.226281 1.0000000
1628 3:5-3:3     1.333333e+00 -14.559614 17.226281 1.0000000
1629 UTC:5-3:3    -3.666667e+00 -19.559614 12.226281 0.9999939
1630 1:4-UTC:3   5.333333e+00 -10.559614 21.226281 0.9987495
1631 2:4-UTC:3   2.333333e+00 -13.559614 18.226281 1.0000000
1632 3:4-UTC:3   8.000000e+00 -7.892948 23.892948 0.9185071
1633 UTC:4-UTC:3 6.666667e-01 -15.226281 16.559614 1.0000000
1634 1:5-UTC:3   7.000000e+00 -8.892948 22.892948 0.9743426
1635 2:5-UTC:3   5.666667e+00 -10.226281 21.559614 0.9973673
1636 3:5-UTC:3   7.666667e+00 -8.226281 23.559614 0.9421750
1637 UTC:5-UTC:3 2.666667e+00 -13.226281 18.559614 1.0000000
1638 2:4-1:4     -3.000000e+00 -18.892948 12.892948 0.9999998
1639 3:4-1:4     2.666667e+00 -13.226281 18.559614 1.0000000
1640 UTC:4-1:4    -4.666667e+00 -20.559614 11.226281 0.9997859
1641 1:5-1:4     1.666667e+00 -14.226281 17.559614 1.0000000
1642 2:5-1:4     3.333333e-01 -15.559614 16.226281 1.0000000
1643 3:5-1:4     2.333333e+00 -13.559614 18.226281 1.0000000
1644 UTC:5-1:4    -2.666667e+00 -18.559614 13.226281 1.0000000
1645 3:4-2:4     5.666667e+00 -10.226281 21.559614 0.9973673
1646 UTC:4-2:4    -1.666667e+00 -17.559614 14.226281 1.0000000
1647 1:5-2:4     4.666667e+00 -11.226281 20.559614 0.9997859
1648 2:5-2:4     3.333333e+00 -12.559614 19.226281 0.9999986
1649 3:5-2:4     5.333333e+00 -10.559614 21.226281 0.9987495
1650 UTC:5-2:4    3.333333e-01 -15.559614 16.226281 1.0000000
1651 UTC:4-3:4    -7.333333e+00 -23.226281 8.559614 0.9606036
1652 1:5-3:4     -1.000000e+00 -16.892948 14.892948 1.0000000
1653 2:5-3:4     -2.333333e+00 -18.226281 13.559614 1.0000000
1654 3:5-3:4     -3.333333e-01 -16.226281 15.559614 1.0000000
1655 UTC:5-3:4    -5.333333e+00 -21.226281 10.559614 0.9987495
1656 1:5-UTC:4   6.333333e+00 -9.559614 22.226281 0.9906886
1657 2:5-UTC:4   5.000000e+00 -10.892948 20.892948 0.9994561
1658 3:5-UTC:4   7.000000e+00 -8.892948 22.892948 0.9743426
1659 UTC:5-UTC:4 2.000000e+00 -13.892948 17.892948 1.0000000
1660 2:5-1:5     -1.333333e+00 -17.226281 14.559614 1.0000000
1661 3:5-1:5     6.666667e-01 -15.226281 16.559614 1.0000000
1662 UTC:5-1:5    -4.333333e+00 -20.226281 11.559614 0.9999248
1663 3:5-2:5     2.000000e+00 -13.892948 17.892948 1.0000000
1664 UTC:5-2:5    -3.000000e+00 -18.892948 12.892948 0.9999998
1665 UTC:5-3:5    -5.000000e+00 -20.892948 10.892948 0.9994561
1666
1667             Df Pillai approx F num Df den Df
1668 bulk.data$block          3 0.22798 5.146 6 240
1669 bulk.data$event           4 0.19430 3.228 8 240
1670 bulk.data$method          2 1.22260 94.360 4 240
1671 bulk.data$block:bulk.data$event 12 0.28034 1.630 24 240
1672 bulk.data$block:bulk.data$method 6 0.16593 1.809 12 240
1673 bulk.data$event:bulk.data$method 8 0.36297 3.326 16 240
1674 bulk.data$block:bulk.data$event:bulk.data$method 24 0.43016 1.370 48 240
1675 Residuals               120
1676                  Pr(>F)
1677 bulk.data$block          5.372e-05 ***
1678 bulk.data$event           0.001661 **
1679 bulk.data$method          < 2.2e-16 ***
1680 bulk.data$block:bulk.data$event 0.035739 *
1681 bulk.data$block:bulk.data$method 0.047332 *
1682 bulk.data$event:bulk.data$method 2.822e-05 ***
1683 bulk.data$block:bulk.data$event:bulk.data$method 0.066343 .
1684 Residuals
1685 ---
1686 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1687             Df Pillai approx F num Df den Df Pr(>F)
1688 super.bulk.data$block      3 0.40424 3.3777 6 80 0.00509 **
1689 super.bulk.data$event      4 0.39488 2.4601 8 80 0.01952 *
1690 super.bulk.data$block:super.bulk.data$event 12 0.54293 1.2421 24 80 0.23373
1691 Residuals               40
1692 ---
1693 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1694 bulk sample mass
1695             Df Sum Sq Mean Sq F value Pr(>F)
1696 block      3 100.7 33.56 3.466 0.0249 *
1698 event      4 90.3 22.59 2.332 0.0722 .
1699 block:event 12 107.4 8.95 0.925 0.5324
1700 Residuals  40 387.3 9.68
1701 ---
1702 Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1703 Levene's Test for Homogeneity of Variance (center = median)
1704             Df F value Pr(>F)
1705 group      19 0.9594 0.5228
1706        40
1707
1708 Shapiro-Wilk normality test
1709
1710 data: residuals(mass.model)
1711 W = 0.92909, p-value = 0.001817
1712
1713 Tukey multiple comparisons of means

```

```

1714      95% family-wise confidence level
1715
1716 Fit: aov(formula = mass.model)
1717
1718 $block
1719      diff      lwr      upr   p adj
1720 2-1  0.3493467 -2.6962979  3.3949912 0.9897626
1721 3-1  2.8053733 -0.2402712  5.8510179 0.0805174
1722 UTC-1 -0.5967867 -3.6424312  2.4488579 0.9524917
1723 3-2  2.4560267 -0.5896179  5.5016712 0.1516845
1724 UTC-2 -0.9461333 -3.9917779  2.0995112 0.8386178
1725 UTC-3 -3.4021600 -6.4478046 -0.3565154 0.0233658
1726
1727 $event
1728      diff      lwr      upr   p adj
1729 2-1 -1.3789000 -5.0072032  2.249403 0.8129100
1730 3-1  0.5177833 -3.1105198  4.146086 0.9939670
1731 4-1  1.0164500 -2.6118532  4.644753 0.9290310
1732 5-1  2.3658417 -1.2624615  5.994145 0.3537276
1733 3-2  1.8966833 -1.7316198  5.524986 0.5728953
1734 4-2  2.3953500 -1.2329532  6.023653 0.3414542
1735 5-2  3.7447417  0.1164385  7.373045 0.0401465
1736 4-3  0.4986667 -3.1296365  4.126970 0.9947782
1737 5-3  1.8480583 -1.7802448  5.476361 0.5969474
1738 5-4  1.3493917 -2.2789115  4.977695 0.8244907
1739
1740 $`block:event`
1741      diff      lwr      upr   p adj
1742 2:1-1:1  0.606966667 -9.01822971 10.232163 1.0000000
1743 3:1-1:1  0.831333333 -8.79386304 10.456530 1.0000000
1744 UTC:1-1:1 -2.707066667 -12.33226304 6.918130 0.9998828
1745 1:2-1:1 -2.226800000 -11.85199637 7.398396 0.9999936
1746 2:2-1:1 -2.207966667 -11.83316304 7.417230 0.9999944
1747 3:2-1:1 -1.481300000 -11.10649637 8.143896 1.0000000
1748 UTC:2-1:1 -0.868300000 -10.49349637 8.756896 1.0000000
1749 1:3-1:1 -0.620000000 -10.24519637 9.005196 1.0000000
1750 2:3-1:1  1.822166667 -7.80302971 11.447363 0.9999997
1751 3:3-1:1  2.302533333 -7.32266304 11.927730 0.9999893
1752 UTC:3-1:1 -2.702333333 -12.32752971 6.922863 0.9998857
1753 1:4-1:1  0.209333333 -9.41586304 9.834530 1.0000000
1754 2:4-1:1 -0.658033333 -10.28322971 8.967163 1.0000000
1755 3:4-1:1  2.773266667 -6.85192971 12.398463 0.9998354
1756 UTC:4-1:1  0.472466667 -9.15272971 10.097663 1.0000000
1757 1:5-1:1  0.375266667 -9.24992971 10.000463 1.0000000
1758 2:5-1:1 -0.078600000 -9.70379637 9.546596 1.0000000
1759 3:5-1:1  7.338833333 -2.28636304 16.964030 0.3398392
1760 UTC:5-1:1  0.559100000 -9.06609637 10.184296 1.0000000
1761 3:1-2:1  0.224366667 -9.40082971 9.849563 1.0000000
1762 UTC:1-2:1 -3.314033333 -12.93922971 6.311163 0.9982780
1763 1:2-2:1 -2.833766667 -12.45896304 6.791430 0.9997779
1764 2:2-2:1 -2.814933333 -12.44012971 6.810263 0.9997975
1765 3:2-2:1 -2.088266667 -11.71346304 7.536930 0.9999977
1766 UTC:2-2:1 -1.475266667 -11.10046304 8.149930 1.0000000
1767 1:3-2:1 -1.226966667 -10.85216304 8.398230 1.0000000
1768 2:3-2:1  1.215200000 -8.40999637 10.840396 1.0000000
1769 3:3-2:1  1.695566667 -7.92962971 11.320763 0.9999999
1770 UTC:3-2:1 -3.309300000 -12.93449637 6.315896 0.9983081
1771 1:4-2:1 -0.397633333 -10.02282971 9.227563 1.0000000
1772 2:4-2:1 -1.265000000 -10.89019637 8.360196 1.0000000
1773 3:4-2:1  2.166300000 -7.45889637 11.791496 0.9999958
1774 UTC:4-2:1 -0.134500000 -9.75969637 9.490696 1.0000000
1775 1:5-2:1 -0.231700000 -9.85689637 9.393496 1.0000000
1776 2:5-2:1 -0.685566667 -10.31076304 8.939630 1.0000000
1777 3:5-2:1  6.731866667 -2.89332971 16.357063 0.4887986
1778 UTC:5-2:1 -0.047866667 -9.67306304 9.577330 1.0000000
1779 UTC:1-3:1 -3.538400000 -13.16359637 6.086796 0.9962235
1780 1:2-3:1 -3.058133333 -12.68332971 6.567063 0.9993807
1781 2:2-3:1 -3.039300000 -12.66449637 6.585896 0.9994290
1782 3:2-3:1 -2.312633333 -11.93782971 7.312563 0.9999885
1783 UTC:3-3:1 -1.699633333 -11.32482971 7.925563 0.9999999
1784 1:3-3:1 -1.451333333 -11.07652971 8.173863 1.0000000
1785 2:3-3:1  0.990833333 -8.63436304 10.616030 1.0000000
1786 3:3-3:1  1.471200000 -8.15399637 11.096396 1.0000000
1787 UTC:3-3:1 -3.533666667 -13.15886304 6.091530 0.9962820
1788 1:4-3:1 -0.622000000 -10.24719637 9.003196 1.0000000
1789 2:4-3:1 -1.489366667 -11.11456304 8.135830 1.0000000
1790 3:4-3:1  1.941933333 -7.68326304 11.567130 0.9999993
1791 UTC:4-3:1 -0.358866667 -9.98406304 9.266330 1.0000000
1792 1:5-3:1 -0.456066667 -10.08126304 9.169130 1.0000000
1793 2:5-3:1 -0.909933333 -10.53512971 8.715263 1.0000000
1794 3:5-3:1  6.507500000 -3.11769637 16.132696 0.5485085
1795 UTC:5-3:1 -0.272233333 -9.89742971 9.352963 1.0000000
1796 1:2-UTC:1  0.480266667 -9.14492971 10.105463 1.0000000
1797 2:2-UTC:1  0.499100000 -9.12609637 10.124296 1.0000000
1798 3:2-UTC:1  1.225766667 -8.39942971 10.850963 1.0000000
1799 UTC:2-UTC:1  1.838766667 -7.78642971 11.463963 0.9999997
1800 1:3-UTC:1  2.087066667 -7.53812971 11.712263 0.9999977
1801 2:3-UTC:1  4.529233333 -5.09596304 14.154430 0.9531868
1802 3:3-UTC:1  5.009600000 -4.61559637 14.634796 0.8951093
1803 UTC:3-UTC:1  0.004733333 -9.62046304 9.629930 1.0000000
1804 1:4-UTC:1  2.916400000 -6.70879637 12.541596 0.9996710
1805 2:4-UTC:1  2.049033333 -7.57616304 11.674230 0.9999983
1806 3:4-UTC:1  5.480333333 -4.14486304 15.105530 0.8080956
1807 UTC:4-UTC:1  3.179533333 -6.44566304 12.804730 0.9989756
1808 1:5-UTC:1  3.082333333 -6.54286304 12.707530 0.9993135

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1809	2:5-UTC:1	2.628466667	-6.99672971	12.253663	0.9999231
1810	3:5-UTC:1	10.045900000	0.42070363	19.671096	0.0327441
1811	UTC:5-UTC:1	3.266166667	-6.35902971	12.891363	0.9985623
1812	2:2-1:2	0.018833333	-9.60636304	9.644030	1.0000000
1813	3:2-1:2	0.745500000	-8.87969637	10.370696	1.0000000
1814	UTC:2-1:2	1.358500000	-8.26669637	10.983696	1.0000000
1815	1:3-1:2	1.606800000	-8.01839637	11.231996	1.0000000
1816	2:3-1:2	4.048966667	-5.57622971	13.674163	0.9836453
1817	3:3-1:2	4.529333333	-5.09586304	14.154530	0.9531778
1818	UTC:3-1:2	-0.475533333	-10.10072971	9.149663	1.0000000
1819	1:4-1:2	2.436133333	-7.18906304	12.061330	0.9999748
1820	2:4-1:2	1.568766667	-8.05642971	11.193963	1.0000000
1821	3:4-1:2	5.000066667	-4.62512971	14.625263	0.8965665
1822	UTC:4-1:2	2.699266667	-6.92592971	12.324463	0.9998875
1823	1:5-1:2	2.602066667	-7.02312971	12.227263	0.9999335
1824	2:5-1:2	2.148200000	-7.47699637	11.773396	0.9999964
1825	3:5-1:2	9.565633333	-0.05956304	19.190830	0.0530130
1826	UTC:5-1:2	2.785900000	-6.83929637	12.411096	0.9998246
1827	3:2-2:2	0.726666667	-8.89852971	10.351863	1.0000000
1828	UTC:2-2:2	1.339666667	-8.28552971	10.964863	1.0000000
1829	1:3-2:2	1.587966667	-8.03722971	11.213163	1.0000000
1830	2:3-2:2	4.030133333	-5.59506304	13.655330	0.9843983
1831	3:3-2:2	4.510500000	-5.11469637	14.135696	0.9548436
1832	UTC:3-2:2	-0.494366667	-10.11956304	9.130830	1.0000000
1833	1:4-2:2	2.417300000	-7.20789637	12.042496	0.9999776
1834	2:4-2:2	1.549933333	-8.07526304	11.175130	1.0000000
1835	3:4-2:2	4.981233333	-4.64396304	14.606430	0.8994084
1836	UTC:4-2:2	2.680433333	-6.94476304	12.305630	0.9998982
1837	1:5-2:2	2.583233333	-7.04196304	12.208430	0.9999402
1838	2:5-2:2	2.129366667	-7.49582971	11.754563	0.9999968
1839	3:5-2:2	9.546800000	-0.07839637	19.171996	0.0539988
1840	UTC:5-2:2	2.767066667	-6.85812971	12.392263	0.9998405
1841	UTC:2-3:2	0.613000000	-9.01219637	10.238196	1.0000000
1842	1:3-3:2	0.861300000	-8.76389637	10.486496	1.0000000
1843	2:3-3:2	3.303466667	-6.32172971	12.928663	0.9983445
1844	3:3-3:2	3.783833333	-5.84136304	13.409030	0.9919611
1845	UTC:3-3:2	-1.221033333	-10.84622971	8.404163	1.0000000
1846	1:4-3:2	1.690633333	-7.93456304	11.315830	0.9999999
1847	2:4-3:2	0.823266667	-8.80192971	10.448463	1.0000000
1848	3:4-3:2	4.254566667	-5.37062971	13.879763	0.9734574
1849	UTC:4-3:2	1.953766667	-7.67142971	11.578963	0.9999992
1850	1:5-3:2	1.856566667	-7.76862971	11.481763	0.9999997
1851	2:5-3:2	1.402700000	-8.22249637	11.027896	1.0000000
1852	3:5-3:2	8.820133333	-0.80506304	18.445330	0.1066300
1853	UTC:5-3:2	2.040400000	-7.58479637	11.665596	0.9999984
1854	1:3-UTC:2	0.248300000	-9.37689637	9.873496	1.0000000
1855	2:3-UTC:2	2.690466667	-6.93472971	12.315663	0.9998926
1856	3:3-UTC:2	3.170833333	-6.45436304	12.796030	0.9990108
1857	UTC:3-UTC:2	-1.834033333	-11.45922971	7.791163	0.9999997
1858	1:4-UTC:2	1.077633333	-8.54756304	10.702830	1.0000000
1859	2:4-UTC:2	0.210266667	-9.41492971	9.835463	1.0000000
1860	3:4-UTC:2	3.641566667	-5.98362971	13.266763	0.9947474
1861	UTC:4-UTC:2	1.340766667	-8.28442971	10.965963	1.0000000
1862	1:5-UTC:2	1.243566667	-8.38162971	10.868763	1.0000000
1863	2:5-UTC:2	0.789700000	-8.83549637	10.414896	1.0000000
1864	3:5-UTC:2	2.807133333	-1.41806304	17.832330	0.1795826
1865	UTC:5-UTC:2	1.427400000	-8.19779637	11.052596	1.0000000
1866	2:3-1:3	2.442166667	-7.18302971	12.067363	0.9999739
1867	3:3-1:3	2.922533333	-6.70266304	12.547730	0.9996616
1868	UTC:3-1:3	-2.082333333	-11.70752971	7.542863	0.9999978
1869	1:4-1:3	0.829333333	-8.79586304	10.454530	1.0000000
1870	2:4-1:3	-0.038033333	-9.66322971	9.587163	1.0000000
1871	3:4-1:3	3.393266667	-6.23192971	13.018463	0.9977022
1872	UTC:4-1:3	1.092466667	-8.53272971	10.717663	1.0000000
1873	1:5-1:3	0.995266667	-8.62992971	10.620463	1.0000000
1874	2:5-1:3	0.541400000	-9.08379637	10.166596	1.0000000
1875	3:5-1:3	7.958833333	-1.66636304	17.584030	0.2183164
1876	UTC:5-1:3	1.179100000	-8.44609637	10.804296	1.0000000
1877	3:3-2:3	0.480366667	-9.14482971	10.105563	1.0000000
1878	UTC:3-2:3	-4.524500000	-14.14969637	5.100696	0.9536094
1879	1:4-2:3	-1.612833333	-11.23802971	8.012363	1.0000000
1880	2:4-2:3	-2.480200000	-12.10539637	7.144996	0.9999671
1881	3:4-2:3	0.951100000	-8.67409637	10.576296	1.0000000
1882	UTC:4-2:3	-1.349700000	-10.97489637	8.275496	1.0000000
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1884	2:5-2:3	-1.900766667	-11.52596304	7.724430	0.9999995
1885	3:5-2:3	5.516666667	-4.10852971	15.141863	0.8002349
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1887	UTC:3-3:3	-5.004866667	-14.63006304	4.620330	0.8958344
1888	1:4-3:3	-2.093200000	-11.71839637	7.531996	0.9999976
1889	2:4-3:3	-2.960566667	-12.58576304	6.664630	0.9995972
1890	3:4-3:3	0.470733333	-9.15446304	10.095930	1.0000000
1891	UTC:4-3:3	-1.830066667	-11.45526304	7.795130	0.9999997
1892	1:5-3:3	-1.927266667	-11.55246304	7.697930	0.9999994
1893	2:5-3:3	-2.381133333	-12.00632971	7.244063	0.9999821
1894	3:5-3:3	5.036300000	-4.58889637	14.661496	0.8909614
1895	UTC:5-3:3	-1.743433333	-11.36862971	7.881763	0.9999999
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1898	3:4-UTC:3	5.475600000	-4.14959637	15.100796	0.8091087
1899	UTC:4-UTC:3	3.174800000	-6.45039637	12.799996	0.9989949
1900	1:5-UTC:3	3.077600000	-6.54759637	12.702796	0.9993271
1901	2:5-UTC:3	2.623733333	-7.00146304	12.248930	0.9999251
1902	3:5-UTC:3	10.041166667	0.41597029	19.666363	0.0329035
1903	UTC:5-UTC:3	3.261433333	-6.36376304	12.886630	0.9985881

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1904 2:4-1:4 -0.867366667 -10.49256304 8.757830 1.0000000
1905 3:4-1:4 2.563933333 -7.06126304 12.189130 0.9999464
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1908 2:5-1:4 -0.287933333 -9.91312971 9.337263 1.0000000
1909 3:5-1:4 7.129500000 -2.49569637 16.754696 0.3884122
1910 UTC:5-1:4 0.349766667 -9.27542971 9.974963 1.0000000
1911 3:4-2:4 3.431300000 -6.19389637 13.056496 0.9973726
1912 UTC:4-2:4 1.130500000 -8.49469637 10.755696 1.0000000
1913 1:5-2:4 0.103330000 -8.59189637 10.658496 1.0000000
1914 2:5-2:4 0.579443333 -9.04576304 10.204630 1.0000000
1915 3:5-2:4 7.996866667 -1.62832971 17.622063 0.2120165
1916 UTC:5-2:4 1.217133333 -8.40806304 10.842330 1.0000000
1917 UTC:4-3:4 -2.300800000 -11.92599637 7.324396 0.9999894
1918 1:5-3:4 -2.398000000 -12.02319637 7.227196 0.9999801
1919 2:5-3:4 -2.851866667 -12.47706304 6.773330 0.9997576
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1921 UTC:5-3:4 -2.214166667 -11.83936304 7.411030 0.9999941
1922 1:5-UTC:4 -0.097200000 -9.72239637 9.527996 1.0000000
1923 2:5-UTC:4 -0.551066667 -10.17626304 9.074130 1.0000000
1924 3:5-UTC:4 6.866366667 -2.75882971 16.491563 0.4538619
1925 UTC:5-UTC:4 0.086633333 -9.53856304 9.711830 1.0000000
1926 2:5-1:5 -0.453866667 -10.07906304 9.171330 1.0000000
1927 3:5-1:5 6.963566667 -2.66162971 16.588763 0.4291852
1928 UTC:5-1:5 0.183833333 -9.44136304 9.809030 1.0000000
1929 3:5-2:5 7.417433333 -2.20776304 17.042630 0.3225208
1930 UTC:5-2:5 0.637700000 -8.98749637 10.262896 1.0000000
1931 UTC:5-3:5 -6.779733333 -16.40492971 2.845463 0.4762719
1932
1933 sample families
1934
1935      Df Sum Sq Mean Sq F value    Pr(>F)
1936 block     3   2450   816.5   7.120 0.000608 ***
1937 event      4    888   222.1   1.937 0.123078
1938 block:event 12   2220   185.0   1.613 0.126981
1939 Residuals 40   4587   114.7
1940 ---
1941 Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
1942 Levene's Test for Homogeneity of Variance (center = median)
1943      Df F value Pr(>F)
1944 group 19  0.6943 0.8021
1945      40
1946
1947 Shapiro-Wilk normality test
1948
1949 data: residuals(family.model)
1950 W = 0.96107, p-value = 0.05309
1951
1952 Tukey multiple comparisons of means
1953   95% family-wise confidence level
1954
1955 Fit: aov(formula = family.model)
1956
1957 $block
1958      diff      lwr      upr     p adj
1959 2-1     4.800000 -5.681472 15.28147163 0.6133778
1960 3-1    11.733333  1.251862 22.21480496 0.0229935
1961 UTC-1   -5.666667 -16.148138  4.81480496 0.4770975
1962 3-2     6.933333 -3.548138 17.4148049615
1963 UTC-2   -10.466667 -20.948138  0.01480496 0.0504420
1964 UTC-3   -17.400000 -27.881472 -6.91852837 0.0003776
1965
1966 $event
1967      diff      lwr      upr     p adj
1968 2-1 12.0000000 -0.4866694 24.486669 0.0647802
1969 3-1  6.4166667 -6.0700027 18.903336 0.5888073
1970 4-1  7.5833333 -4.9033360 20.070003 0.4251647
1971 5-1  7.1666667 -5.3200027 19.653336 0.4820435
1972 3-2 -5.5833333 -18.0700027 6.903336 0.7064614
1973 4-2 -4.4166667 -16.9033360 8.070003 0.8491470
1974 5-2 -4.8333333 -17.3200027 7.653336 0.8026219
1975 4-3  1.1666667 -11.3200027 13.653336 0.9988368
1976 5-3  0.7500000 -11.7366694 13.236669 0.9997971
1977 5-4 -0.4166667 -12.9033360 12.070003 0.9999805
1978
1979 $`block:event`
1980      diff      lwr      upr     p adj
1981 2:1-1:1  -1.6666667 -34.7914193 31.458086 1.0000000
1982 3:1-1:1  16.3333333 -16.7914193 49.458086 0.9307910
1983 UTC:1-1:1 -2.3333333 -35.4580860 30.791419 1.0000000
1984 1:2-1:1  5.6666667 -27.4580860 38.791419 1.0000000
1985 2:2-1:1  27.0000000 -6.1247526 60.124753 0.2378863
1986 3:2-1:1  14.3333333 -18.7914193 47.458086 0.9783669
1987 UTC:2-1:1 13.3333333 -19.7914193 46.458086 0.9896364
1988 1:3-1:1  8.0000000 -25.1247526 41.124753 0.9999876
1989 2:3-1:1  12.3333333 -20.7914193 45.458086 0.9956241
1990 3:3-1:1  17.0000000 -16.1247526 50.124753 0.9054940
1991 UTC:3-1:1  0.6666667 -32.4580860 33.791419 1.0000000
1992 1:4-1:1  8.3333333 -24.7914193 41.458086 0.9999770
1993 2:4-1:1  11.3333333 -21.7914193 44.458086 0.9984073
1994 3:4-1:1  16.0000000 -17.1247526 49.124753 0.9415444
1995 UTC:4-1:1  7.0000000 -26.1247526 40.124753 0.9999985
1996 1:5-1:1  13.0000000 -20.1247526 46.124753 0.9921073
1997 2:5-1:1  10.0000000 -23.1247526 43.124753 0.9996870
1998 3:5-1:1  30.0000000 -3.1247526 63.124753 0.1168049

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1999	UTC:5-1:1	-12.0000000	-45.1247526	21.124753	0.9968198
2000	3:1-2:1	18.0000000	-15.1247526	51.124753	0.8578991
2001	UTC:1-2:1	-0.6666667	-33.7914193	32.458086	1.0000000
2002	1:2-2:1	7.3333333	-25.7914193	40.458086	0.9999968
2003	2:2-2:1	28.6666667	-4.4580860	61.791419	0.1624937
2004	3:2-2:1	16.0000000	-17.1247526	49.124753	0.9415444
2005	UTC:2-2:1	15.0000000	-18.1247526	48.124753	0.9667578
2006	1:3-2:1	9.6666667	-23.4580860	42.791419	0.9998034
2007	2:3-2:1	14.0000000	-19.1247526	47.124753	0.9828542
2008	3:3-2:1	18.6666667	-14.4580860	51.791419	0.8199738
2009	UTC:3-2:1	2.3333333	-30.7914193	35.458086	1.0000000
2010	1:4-2:1	10.0000000	-23.1247526	43.124753	0.9996870
2011	2:4-2:1	13.0000000	-20.1247526	46.124753	0.9921073
2012	3:4-2:1	17.6666667	-15.4580860	50.791419	0.8750396
2013	UTC:4-2:1	8.6666667	-24.4580860	41.791419	0.9999588
2014	1:5-2:1	14.6666667	-18.4580860	47.791419	0.9730303
2015	2:5-2:1	11.6666667	-21.4580860	44.791419	0.9977286
2016	3:5-2:1	31.6666667	-1.4580860	64.791419	0.0751845
2017	UTC:5-2:1	-10.3333333	-43.4580860	22.791419	0.9995138
2018	UTC:1-3:1	-18.6666667	-51.7914193	14.458086	0.8199738
2019	1:2-3:1	-10.6666667	-43.7914193	22.458086	0.9992622
2020	2:2-3:1	10.6666667	-22.4580860	43.791419	0.9992622
2021	3:2-3:1	-2.0000000	-35.1247526	31.124753	1.0000000
2022	UTC:2-3:1	-3.0000000	-36.1247526	30.124753	1.0000000
2023	1:3-3:1	-8.3333333	-41.4580860	24.791419	0.9999770
2024	2:3-3:1	-4.0000000	-37.1247526	29.124753	1.0000000
2025	3:3-3:1	0.6666667	-32.4580860	33.791419	1.0000000
2026	UTC:3-3:1	-15.6666667	-48.7914193	17.458086	0.9510852
2027	1:4-3:1	-8.0000000	-41.1247526	25.124753	0.9999876
2028	2:4-3:1	-5.0000000	-38.1247526	28.124753	1.0000000
2029	3:4-3:1	-0.3333333	-33.4580860	32.791419	1.0000000
2030	UTC:4-3:1	-9.3333333	-42.4580860	23.791419	0.9998798
2031	1:5-3:1	-3.3333333	-36.4580860	29.791419	1.0000000
2032	2:5-3:1	-6.3333333	-39.4580860	26.791419	0.9999997
2033	3:5-3:1	13.6666667	-19.4580860	46.791419	0.9865810
2034	UTC:5-3:1	-28.3333333	-61.4580860	4.791419	0.1758779
2035	1:2-UTC:1	8.0000000	-25.1247526	41.124753	0.9999876
2036	2:2-UTC:1	29.3333333	-3.7914193	62.458086	0.1381318
2037	3:2-UTC:1	16.6666667	-16.4580860	49.791419	0.9187832
2038	UTC:2-UTC:1	15.6666667	-17.4580860	48.791419	0.9510852
2039	1:3-UTC:1	10.3333333	-22.7914193	43.458086	0.9995138
2040	2:3-UTC:1	14.6666667	-18.4580860	47.791419	0.9730303
2041	3:3-UTC:1	19.3333333	-13.7914193	52.458086	0.7776076
2042	UTC:3-UTC:1	3.0000000	-30.1247526	36.124753	1.0000000
2043	1:4-UTC:1	10.6666667	-22.4580860	43.791419	0.9992622
2044	2:4-UTC:1	13.6666667	-19.4580860	46.791419	0.9865810
2045	3:4-UTC:1	18.3333333	-14.7914193	51.458086	0.8395265
2046	UTC:4-UTC:1	9.3333333	-23.7914193	42.458086	0.9998798
2047	1:5-UTC:1	15.3333333	-17.7914193	48.458086	0.9594677
2048	2:5-UTC:1	12.3333333	-20.7914193	45.458086	0.9956241
2049	3:5-UTC:1	32.3333333	-0.7914193	65.458086	0.0625441
2050	UTC:5-UTC:1	-9.6666667	-42.7914193	23.458086	0.9998034
2051	2:2-1:2	21.3333333	-11.7914193	54.458086	0.6314317
2052	3:2-1:2	8.6666667	-24.4580860	41.791419	0.9999588
2053	UTC:2-1:2	7.6666667	-25.4580860	40.791419	0.9999936
2054	1:3-1:2	2.3333333	-30.7914193	35.458086	1.0000000
2055	2:3-1:2	6.6666667	-26.4580860	39.791419	0.9999993
2056	3:3-1:2	11.3333333	-21.7914193	44.458086	0.9984073
2057	UTC:3-1:2	-5.0000000	-38.1247526	28.124753	1.0000000
2058	1:4-1:2	2.6666667	-30.4580860	35.791419	1.0000000
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2060	3:4-1:2	10.3333333	-22.7914193	43.458086	0.9995138
2061	UTC:4-1:2	1.3333333	-31.7914193	34.458086	1.0000000
2062	1:5-1:2	7.3333333	-25.7914193	40.458086	0.9999968
2063	2:5-1:2	4.3333333	-28.7914193	37.458086	1.0000000
2064	3:5-1:2	24.3333333	-8.7914193	57.458086	0.4026642
2065	UTC:5-1:2	-17.6666667	-50.7914193	15.458086	0.8750396
2066	3:2-2:2	-12.6666667	-45.7914193	20.458086	0.9940772
2067	UTC:2-2:2	-13.6666667	-46.7914193	19.458086	0.9865810
2068	1:3-2:2	-19.0000000	-52.1247526	14.124753	0.7993075
2069	2:3-2:2	-14.6666667	-47.7914193	18.458086	0.9730303
2070	3:3-2:2	-10.0000000	-43.1247526	23.124753	0.9996870
2071	UTC:3-2:2	-26.3333333	-59.4580860	6.791419	0.2741080
2072	1:4-2:2	-18.6666667	-51.7914193	14.458086	0.8199738
2073	2:4-2:2	-15.6666667	-48.7914193	17.458086	0.9510852
2074	3:4-2:2	-11.0000000	-44.1247526	22.124753	0.9989047
2075	UTC:4-2:2	-20.0000000	-53.1247526	13.124753	0.7314836
2076	1:5-2:2	-14.0000000	-47.1247526	19.124753	0.9828542
2077	2:5-2:2	-17.0000000	-50.1247526	16.124753	0.9054940
2078	3:5-2:2	-3.0000000	-30.1247526	36.124753	1.0000000
2079	UTC:5-2:2	-39.0000000	-72.1247526	-5.875247	0.0081915
2080	UTC:2-3:2	-1.0000000	-34.1247526	32.124753	1.0000000
2081	1:3-3:2	-6.3333333	-39.4580860	26.791419	0.9999997
2082	2:3-3:2	-2.0000000	-35.1247526	31.124753	1.0000000
2083	3:3-3:2	2.6666667	-30.4580860	35.791419	1.0000000
2084	UTC:3-3:2	-13.6666667	-46.7914193	19.458086	0.9865810
2085	1:4-3:2	-6.0000000	-39.1247526	27.124753	0.9999999
2086	2:4-3:2	-3.0000000	-36.1247526	30.124753	1.0000000
2087	3:4-3:2	1.6666667	-31.4580860	34.791419	1.0000000
2088	UTC:4-3:2	-7.3333333	-40.4580860	25.791419	0.9999968
2089	1:5-3:2	-1.3333333	-34.4580860	31.791419	1.0000000
2090	2:5-3:2	-4.3333333	-37.4580860	28.791419	1.0000000
2091	3:5-3:2	15.6666667	-17.4580860	48.791419	0.9510852
2092	UTC:5-3:2	-26.3333333	-59.4580860	6.791419	0.2741080
2093	1:3-UTC:2	-5.3333333	-38.4580860	27.791419	1.0000000

2094	2:3-UTC:2	-1.0000000	-34.1247526	32.124753	1.0000000
2095	3:3-UTC:2	3.6666667	-29.4580860	36.791419	1.0000000
2096	UTC:3-UTC:2	-12.6666667	-45.7914193	20.458086	0.9940772
2097	1:4-UTC:2	-5.0000000	-38.1247526	28.124753	1.0000000
2098	2:4-UTC:2	-2.0000000	-35.1247526	31.124753	1.0000000
2099	3:4-UTC:2	2.6666667	-30.4580860	35.791419	1.0000000
2100	UTC:4-UTC:2	-6.3333333	-39.4580860	26.791419	0.9999997
2101	1:5-UTC:2	-0.3333333	-33.4580860	32.791419	1.0000000
2102	2:5-UTC:2	-3.3333333	-36.4580860	29.791419	1.0000000
2103	3:5-UTC:2	16.6666667	-16.4580860	49.791419	0.9187832
2104	UTC:5-UTC:2	-25.3333333	-58.4580860	7.791419	0.3348552
2105	2:3-1:3	4.3333333	-28.7914193	37.458086	1.0000000
2106	3:3-1:3	9.0000000	-24.1247526	42.124753	0.99999285
2107	UTC:3-1:3	-7.3333333	-40.4580860	25.791419	0.9999968
2108	1:4-1:3	0.3333333	-32.7914193	33.458086	1.0000000
2109	2:4-1:3	3.3333333	-29.7914193	36.458086	1.0000000
2110	3:4-1:3	8.0000000	-25.1247526	41.124753	0.9999876
2111	UTC:4-1:3	-1.0000000	-34.1247526	32.124753	1.0000000
2112	1:5-1:3	5.0000000	-28.1247526	38.124753	1.0000000
2113	2:5-1:3	2.0000000	-31.1247526	35.124753	1.0000000
2114	3:5-1:3	22.0000000	-11.1247526	55.124753	0.5794242
2115	UTC:5-1:3	-20.0000000	-53.1247526	13.124753	0.7314836
2116	3:3-2:3	4.6666667	-28.4580860	37.791419	1.0000000
2117	UTC:3-2:3	-11.6666667	-44.7914193	21.458086	0.9977286
2118	1:4-2:3	-4.0000000	-37.1247526	29.124753	1.0000000
2119	2:4-2:3	-1.0000000	-34.1247526	32.124753	1.0000000
2120	3:4-2:3	3.6666667	-29.4580860	36.791419	1.0000000
2121	UTC:4-2:3	-5.3333333	-38.4580860	27.791419	1.0000000
2122	1:5-2:3	0.6666667	-32.4580860	33.791419	1.0000000
2123	2:5-2:3	-2.3333333	-35.4580860	30.791419	1.0000000
2124	3:5-2:3	17.6666667	-15.4580860	50.791419	0.8750396
2125	UTC:5-2:3	-24.3333333	-57.4580860	8.791419	0.4026642
2126	UTC:3-3:3	-16.3333333	-49.4580860	16.791419	0.9307910
2127	1:4-3:3	-8.6666667	-41.7914193	24.458086	0.9999588
2128	2:4-3:3	-5.6666667	-38.7914193	27.458086	1.0000000
2129	3:4-3:3	-1.0000000	-34.1247526	32.124753	1.0000000
2130	UTC:4-3:3	-10.0000000	-43.1247526	23.124753	0.9996870
2131	1:5-3:3	-4.0000000	-37.1247526	29.124753	1.0000000
2132	2:5-3:3	-7.0000000	-40.1247526	26.124753	0.9999985
2133	3:5-3:3	13.0000000	-20.1247526	46.124753	0.9921073
2134	UTC:5-3:3	-29.0000000	-62.1247526	4.124753	0.1499198
2135	1:4-UTC:3	7.6666667	-25.4580860	40.791419	0.9999936
2136	2:4-UTC:3	10.6666667	-22.4580860	43.791419	0.9992622
2137	3:4-UTC:3	15.3333333	-17.7914193	48.458086	0.9594677
2138	UTC:4-UTC:3	6.3333333	-26.7914193	39.458086	0.9999997
2139	1:5-UTC:3	12.3333333	-20.7914193	45.458086	0.9956241
2140	2:5-UTC:3	9.3333333	-23.7914193	42.458086	0.9998798
2141	3:5-UTC:3	29.3333333	-3.7914193	62.458086	0.1381318
2142	UTC:5-UTC:3	-12.6666667	-45.7914193	20.458086	0.9940772
2143	2:4-1:4	3.0000000	-30.1247526	36.124753	1.0000000
2144	3:4-1:4	7.6666667	-25.4580860	40.791419	0.9999936
2145	UTC:4-1:4	-1.3333333	-34.4580860	31.791419	1.0000000
2146	1:5-1:4	4.6666667	-28.4580860	37.791419	1.0000000
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2148	3:5-1:4	21.6666667	-11.4580860	54.791419	0.6054913
2149	UTC:5-1:4	-20.3333333	-53.4580860	12.791419	0.7072712
2150	3:4-2:4	4.6666667	-28.4580860	37.791419	1.0000000
2151	UTC:4-2:4	-4.3333333	-37.4580860	28.791419	1.0000000
2152	1:5-2:4	1.6666667	-31.4580860	34.791419	1.0000000
2153	2:5-2:4	-1.3333333	-34.4580860	31.791419	1.0000000
2154	3:5-2:4	18.6666667	-14.4580860	51.791419	0.8199738
2155	UTC:5-2:4	-23.3333333	-56.4580860	9.791419	0.4761859
2156	UTC:4-3:4	-9.0000000	-42.1247526	24.124753	0.9999285
2157	1:5-3:4	-3.0000000	-36.1247526	30.124753	1.0000000
2158	2:5-3:4	-6.0000000	-39.1247526	27.124753	0.9999999
2159	3:5-3:4	14.0000000	-19.1247526	47.124753	0.9828542
2160	UTC:5-3:4	-28.0000000	-61.1247526	5.124753	0.1900937
2161	1:5-UTC:4	6.0000000	-27.1247526	39.124753	0.9999999
2162	2:5-UTC:4	3.0000000	-30.1247526	36.124753	1.0000000
2163	3:5-UTC:4	23.0000000	-10.1247526	56.124753	0.5016247
2164	UTC:5-UTC:4	-19.0000000	-52.1247526	14.124753	0.7993075
2165	2:5-1:5	-3.0000000	-36.1247526	30.124753	1.0000000
2166	3:5-1:5	17.0000000	-16.1247526	50.124753	0.9054940
2167	UTC:5-1:5	-25.0000000	-58.1247526	8.124753	0.3567253
2168	3:5-2:5	20.0000000	-13.1247526	53.124753	0.7314836
2169	UTC:5-2:5	-22.0000000	-55.1247526	11.124753	0.5794242
2170	UTC:5-3:5	-42.0000000	-75.1247526	-8.875247	0.0030185

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