

Hypothesis Testing for NSF Office Stress Project - Reduced Sensor Set

Below are the test results for each of the Conditions that had $n \geq 7$ subjects. Statistical testing can have three different possible outcomes: the data is already normal (t-test), the logarithm of the data is normal (t-test with log data), or the data is NOT normal (Wilcoxon test).

For notation, let:

WB-RB = Writing Baseline - Resting Baseline
SC-RB = Stress Condition - Resting Baseline
SC-WB = Stress Condition - Writing Baseline
DT-RB = Dual Task - Resting Baseline
DT-WB = Dual Task - Writing Baseline
DT-SC = Dual Task - Stress Condition
P-RB = Presentation - Resting Baseline
P-WB = Presentation - Writing Baseline
P-SC = Presentation - Stress Condition
P-DT = Presentation - Dual Task

For each of the graphs, let:

* = $0.01 < p \leq 0.05$

** = $0.001 < p \leq 0.01$

*** = $p \leq 0.001$

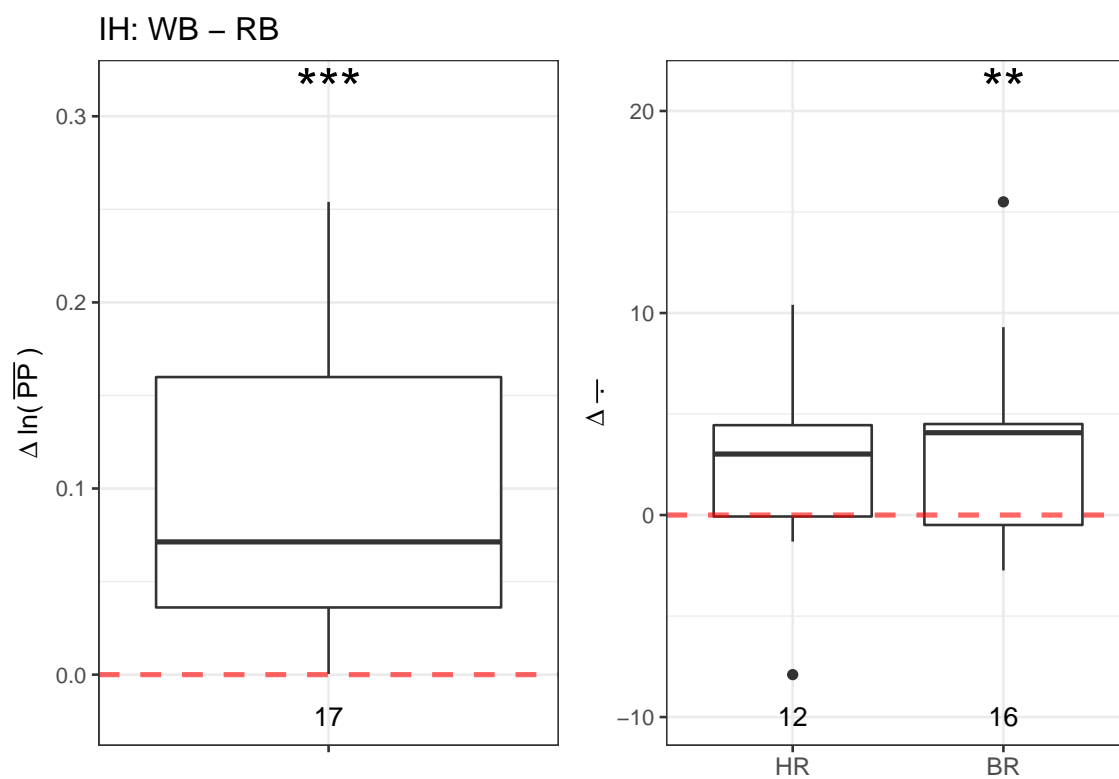
? = Did not run statistical test ($n < 7$)

Differences in **Reduced Sensor Set**:

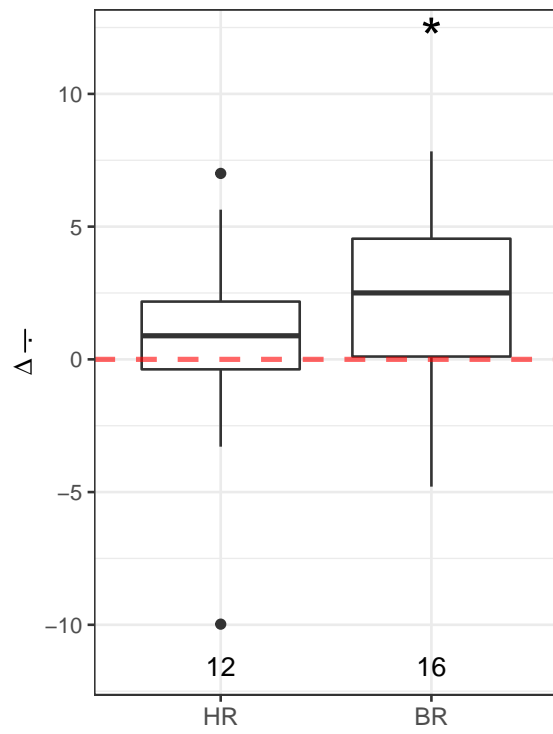
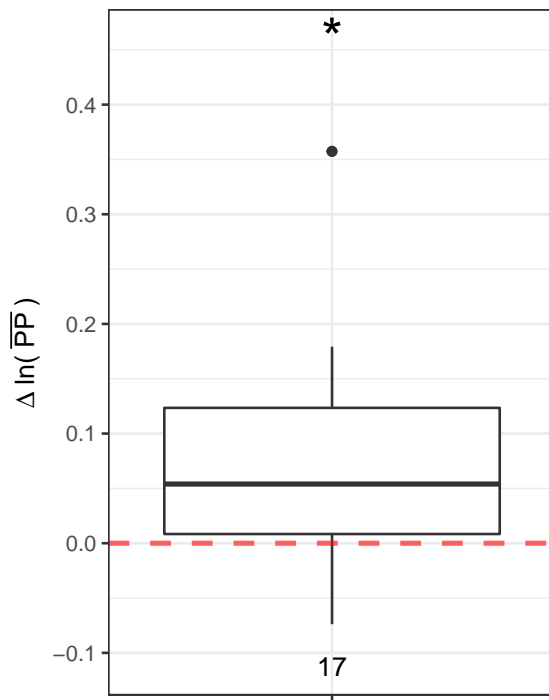
- Signals for D.EDA, N.EDA, D.HR, and N.HR and removed completely.
- **Breathing Rate** (BR) measurements for the **Presentation** session are removed completely.
- Easier on the eyes.

Intermittent-High (IH)

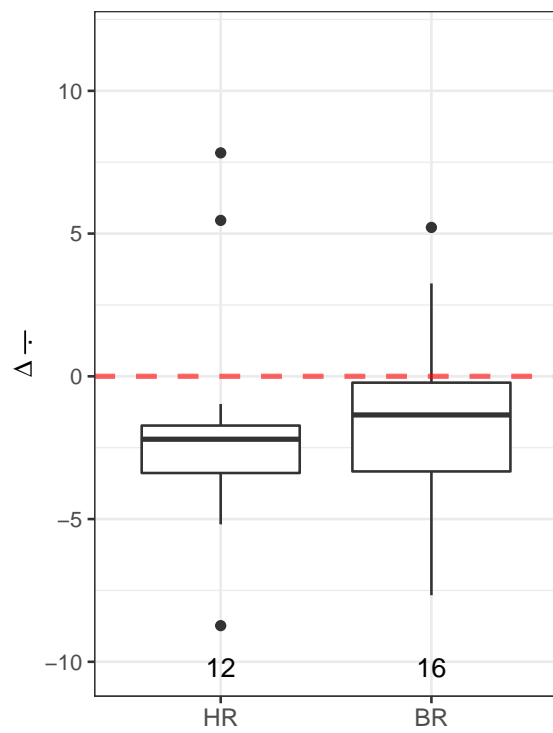
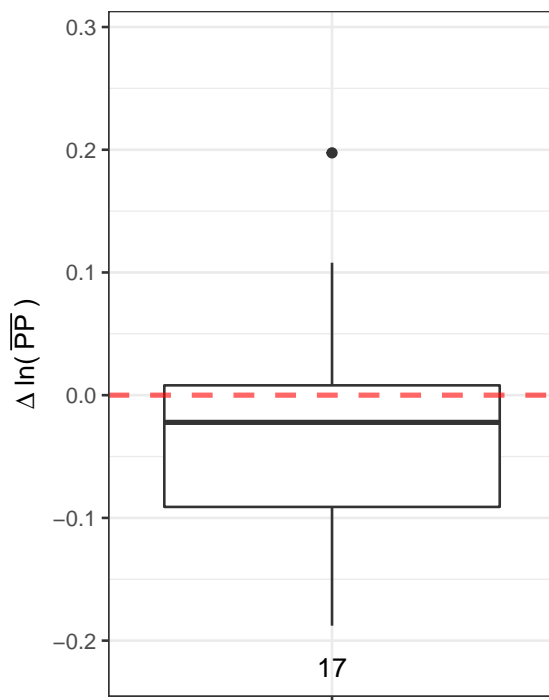
Sensor Channels per Session

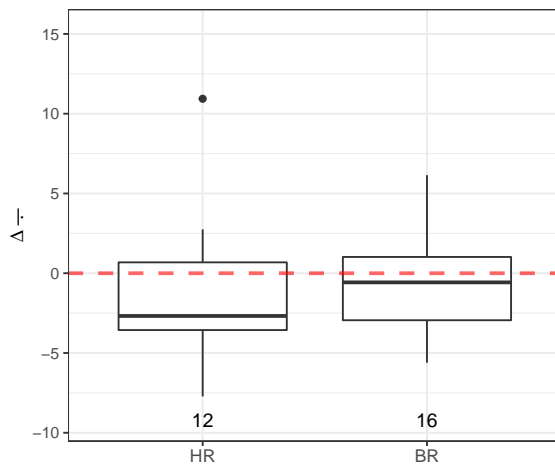
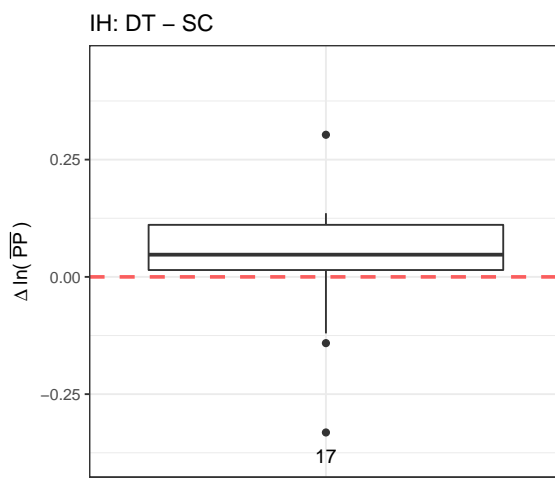
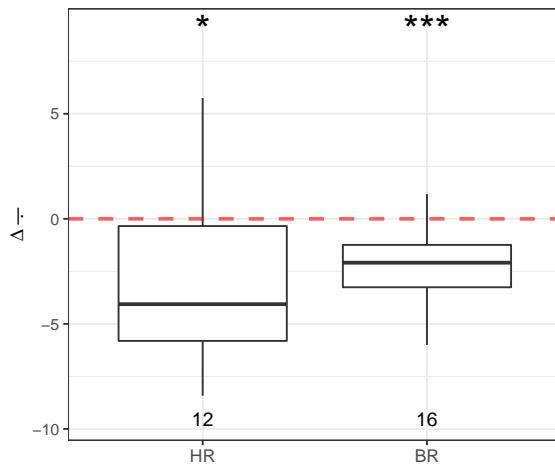
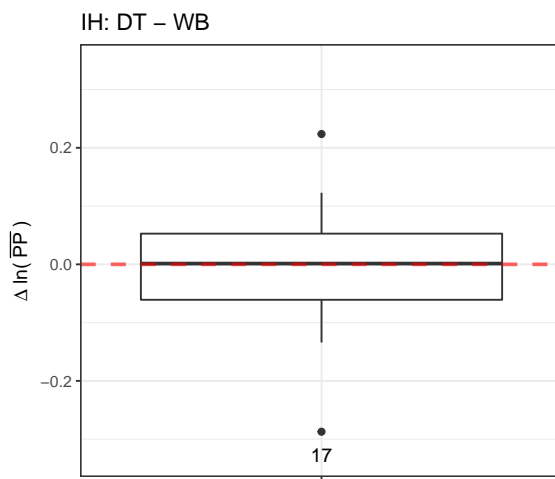
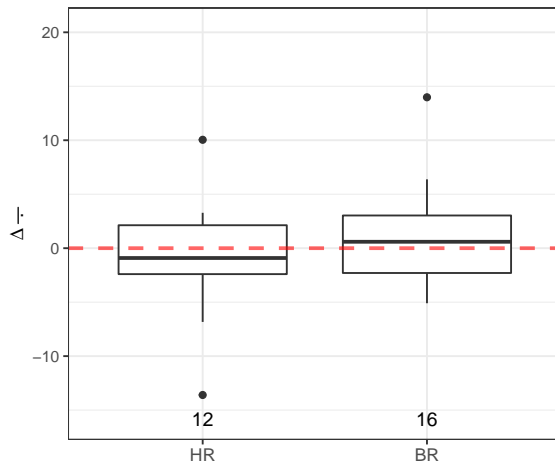
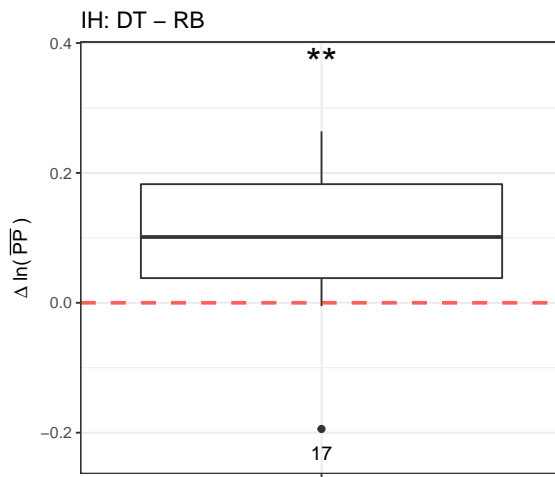


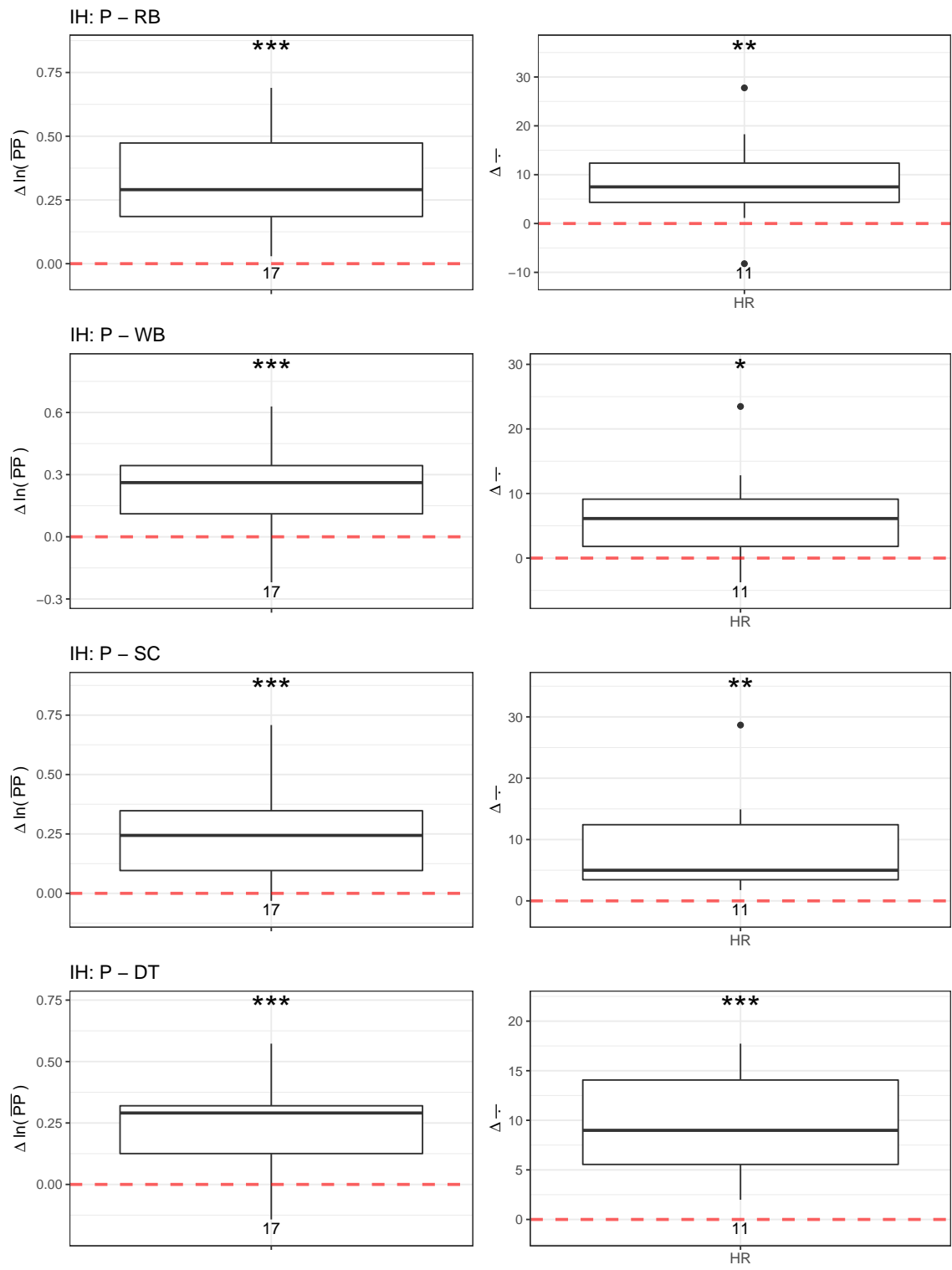
IH: SC – RB



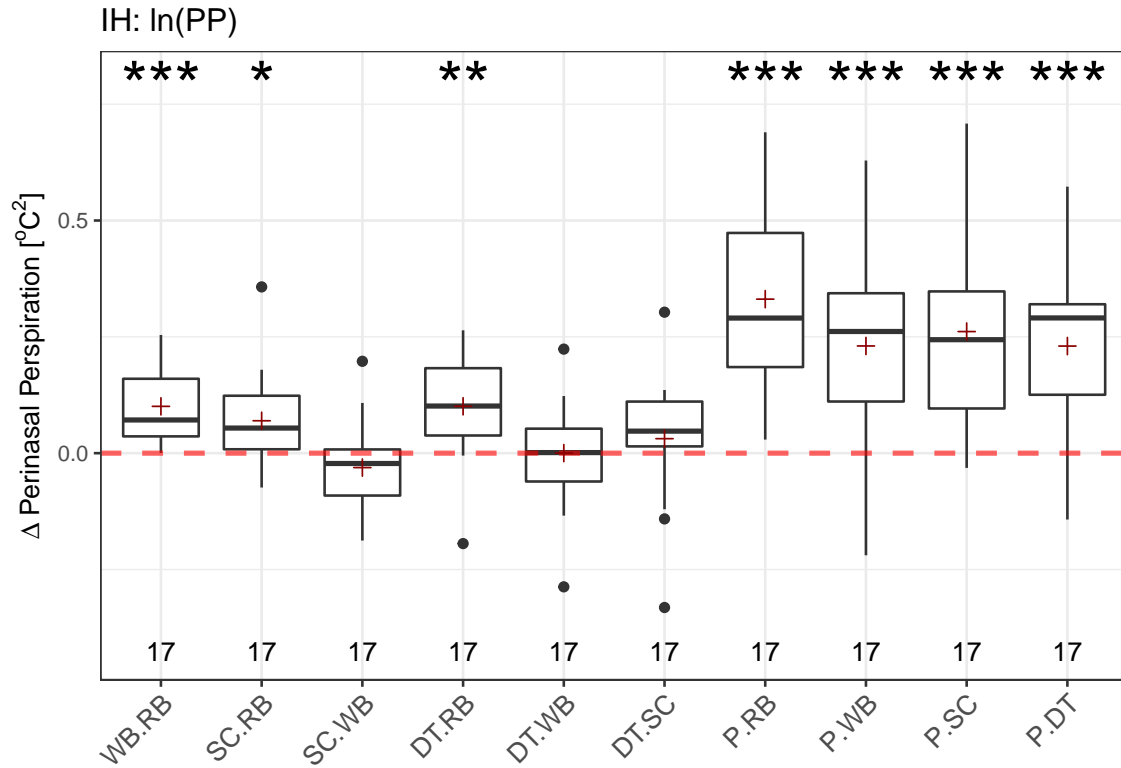
IH: SC – WB





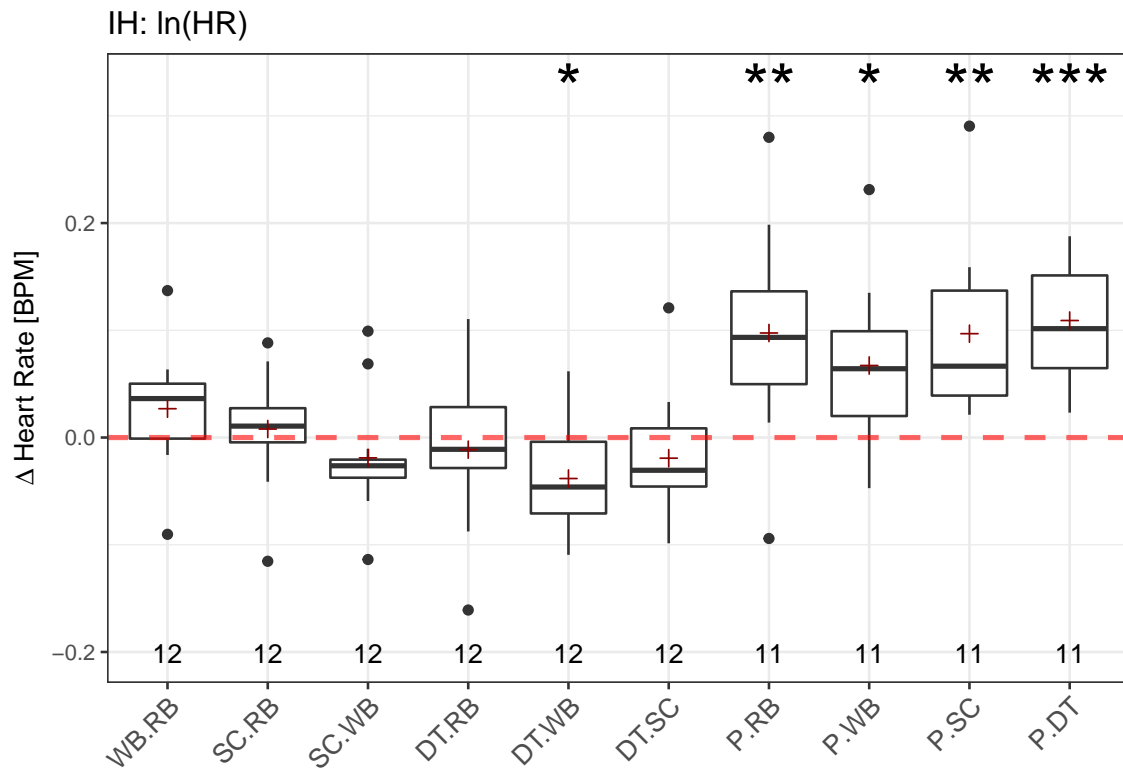


Sensor Channel across Session



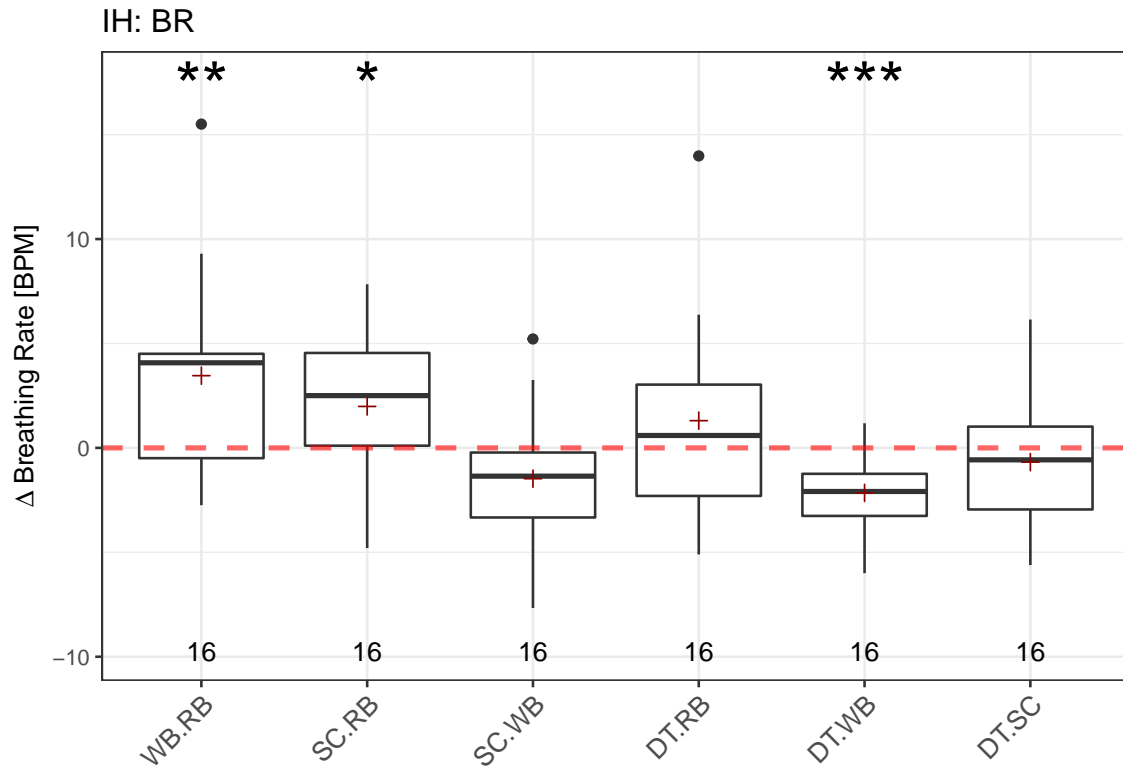
```
## In the following tests, we applied ln(PP).
##
## Writing Baseline - Resting Baseline
## t-test p = 1e-04 < 0.001 ***
##
## Stress Condition - Resting Baseline
## t-test p = 0.0145 < 0.05 *
##
## StressCondition - Writing Baseline
## t-test p = 0.2084 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.0016 < 0.01 **
##
## Dual Task - Writing Baseline
## t-test p = 0.9946 > 0.05
##
## Dual Task - Stress Condition
## t-test p = 0.3697 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0 < 0.001 ***
##
```

```
## Presentation - Writing Baseline
## t-test p = 2e-04 < 0.001 ***
##
## Presentation - Stress Condition
## t-test p = 1e-04 < 0.001 ***
##
## Presentation - Dual Task
## t-test p = 2e-04 < 0.001 ***
```

```
## Writing Baseline - Resting Baseline
## Transformed t-test p = 0.1185 > 0.05
##
## Stress Condition - Resting Baseline
## Transformed t-test p = 0.6095 > 0.05
##
## StressCondition - Writing Baseline
## Transformed t-test p = 0.2597 > 0.05
##
## Dual Task - Resting Baseline
## Transformed t-test p = 0.5735 > 0.05
##
## Dual Task - Writing Baseline
## Transformed t-test p = 0.0172 < 0.05  *
##
## Dual Task - Stress Condition
## Transformed t-test p = 0.2853 > 0.05
##
## Presentation - Resting Baseline
## Transformed t-test p = 0.0079 < 0.01  **
##
## Presentation - Writing Baseline
## Transformed t-test p = 0.0153 < 0.05  *
##
## Presentation - Stress Condition
```

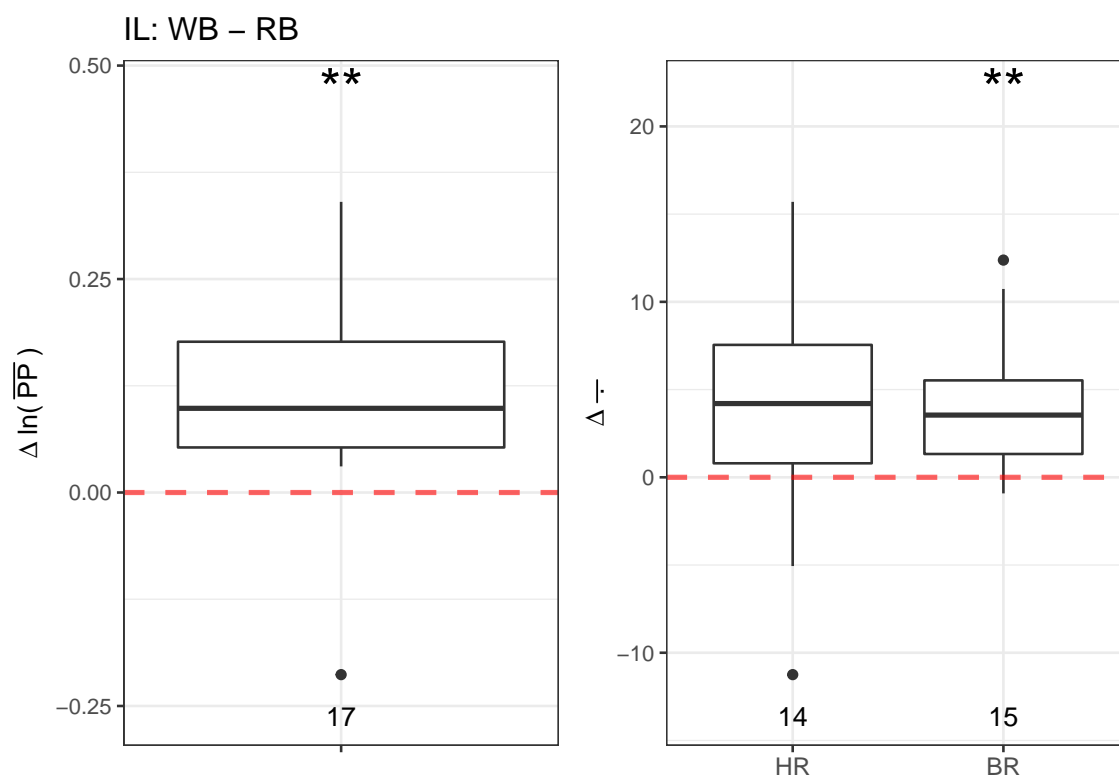
```
## Transformed t-test p = 0.0026 < 0.01  **
##
## Presentation - Dual Task
## Transformed t-test p = 0 < 0.001  ***
```

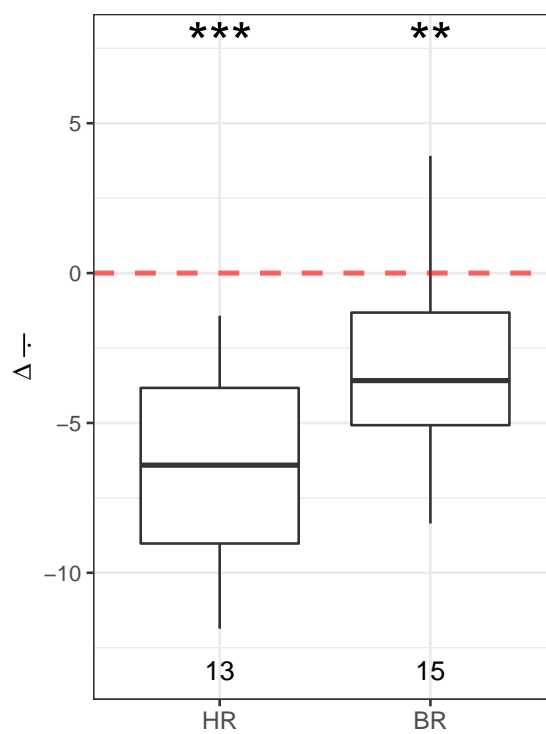
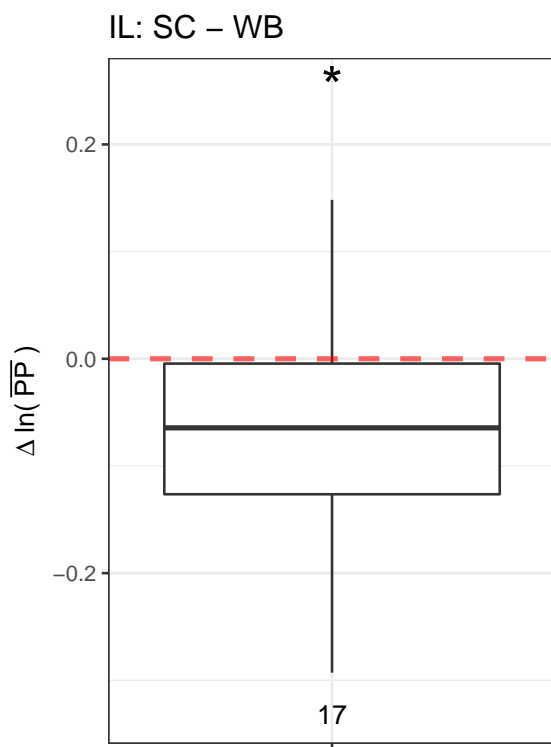
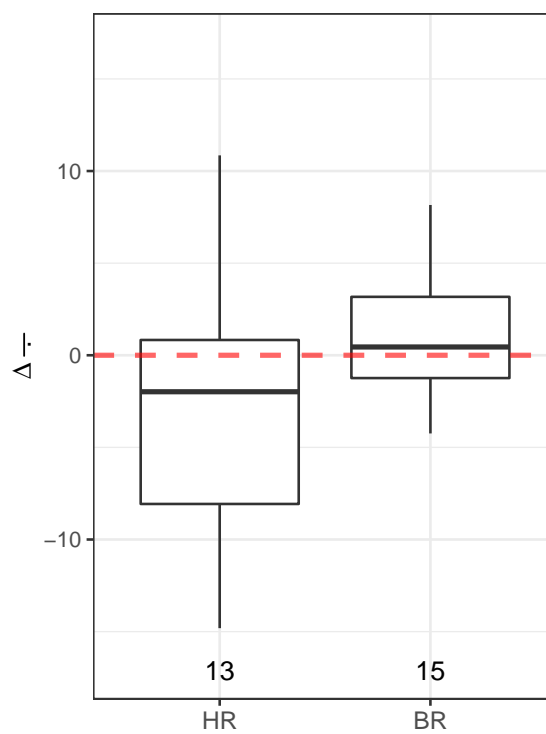
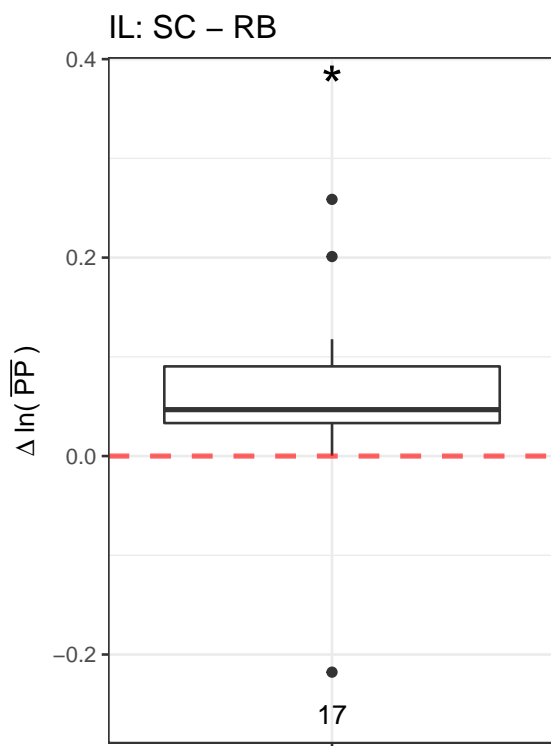


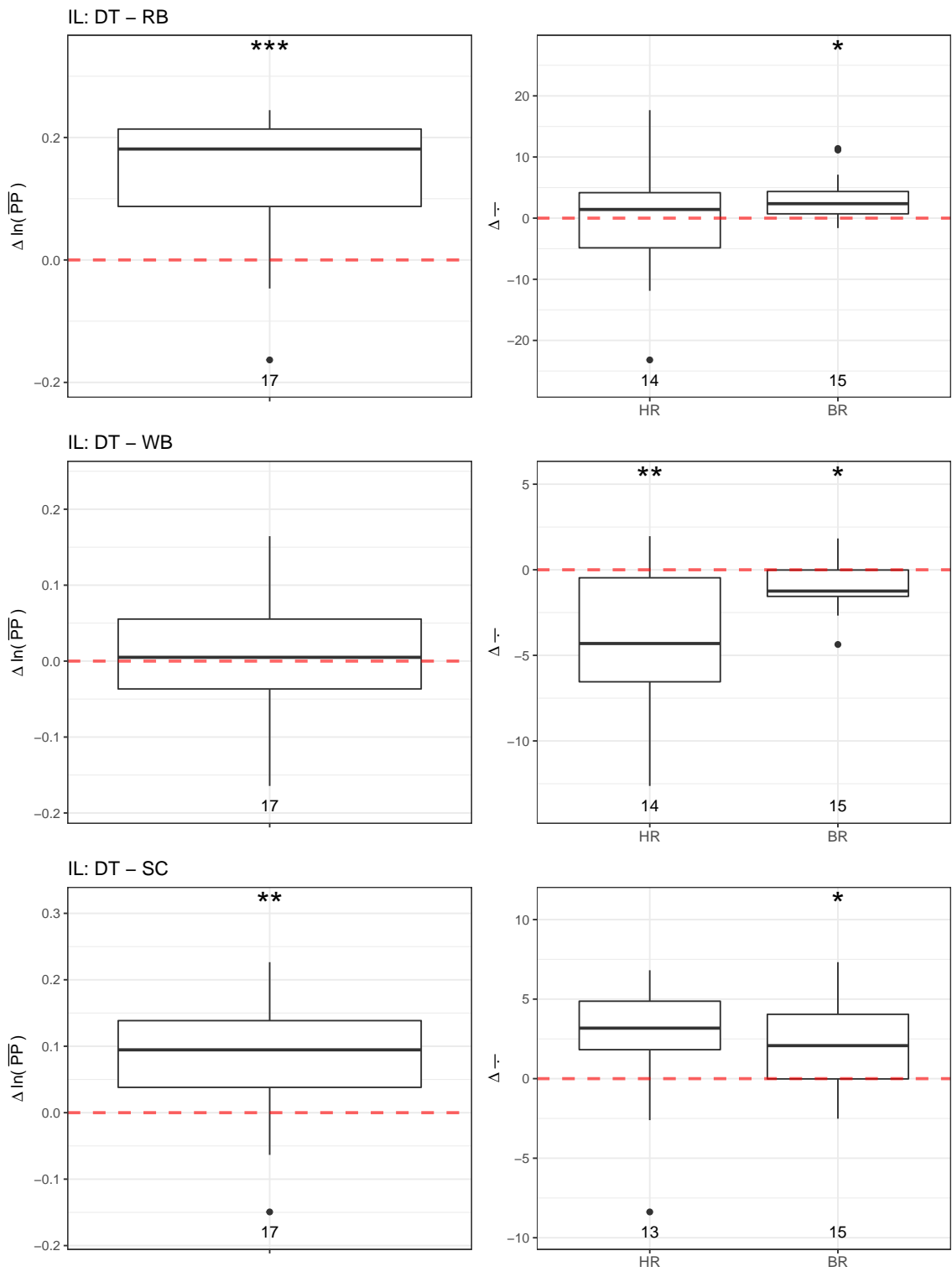
```
## Writing Baseline - Resting Baseline
## t-test p = 0.0086 < 0.01  **
##
## Stress Condition - Resting Baseline
## t-test p = 0.0455 < 0.05  *
##
## StressCondition - Writing Baseline
## t-test p = 0.0933 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.2969 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 5e-04 < 0.001  ***
##
## Dual Task - Stress Condition
## t-test p = 0.3543 > 0.05
```

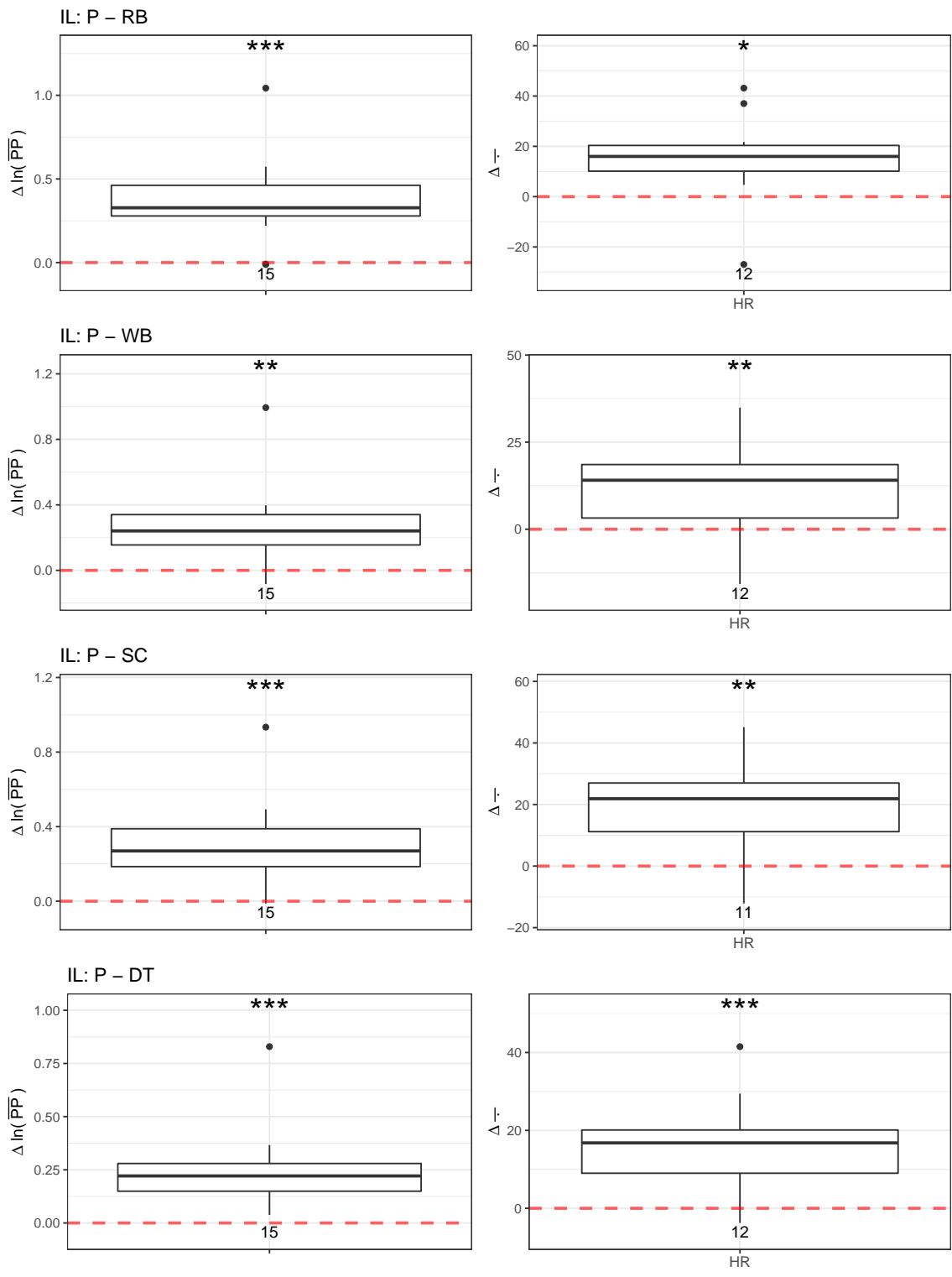

Intermittent-Low (IL)

Sensor Channels per Session

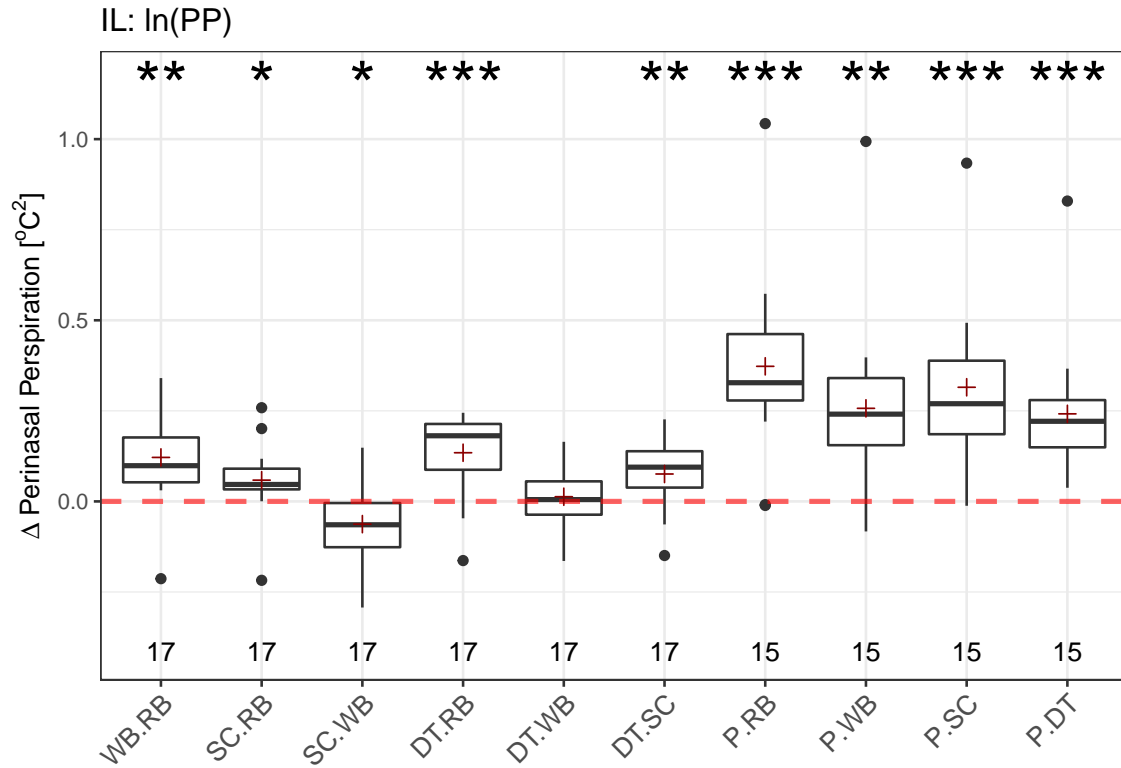






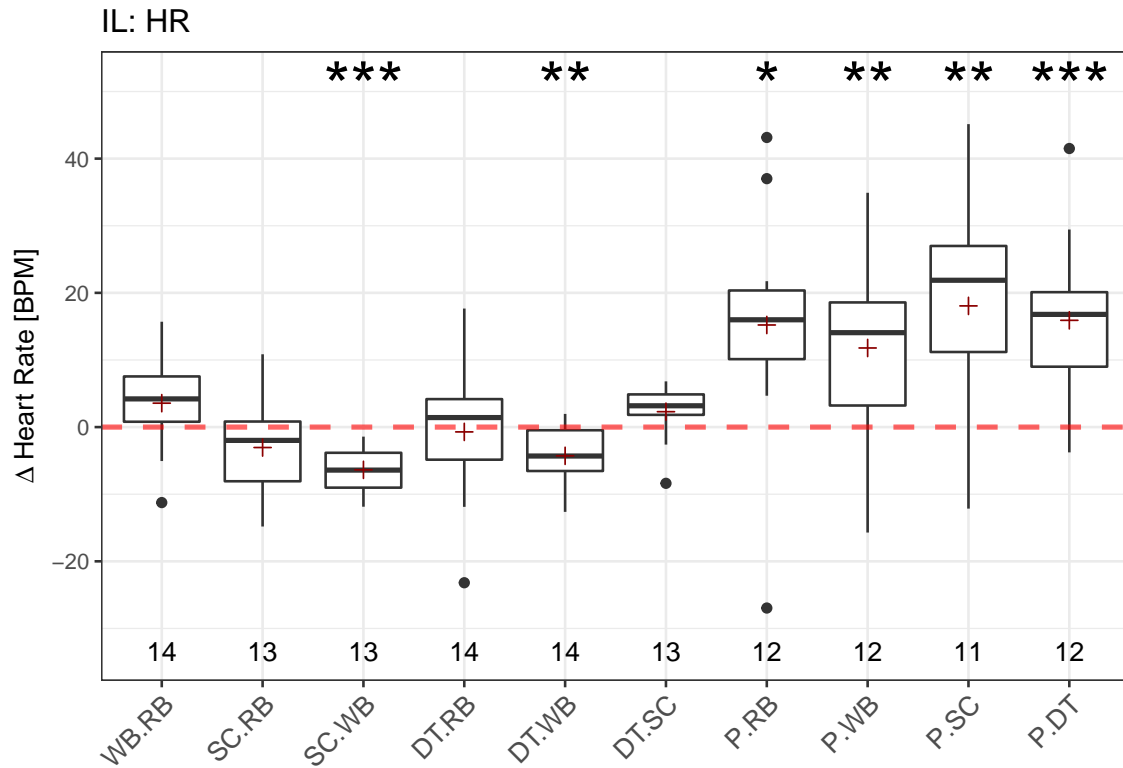


Sensor Channel across Session



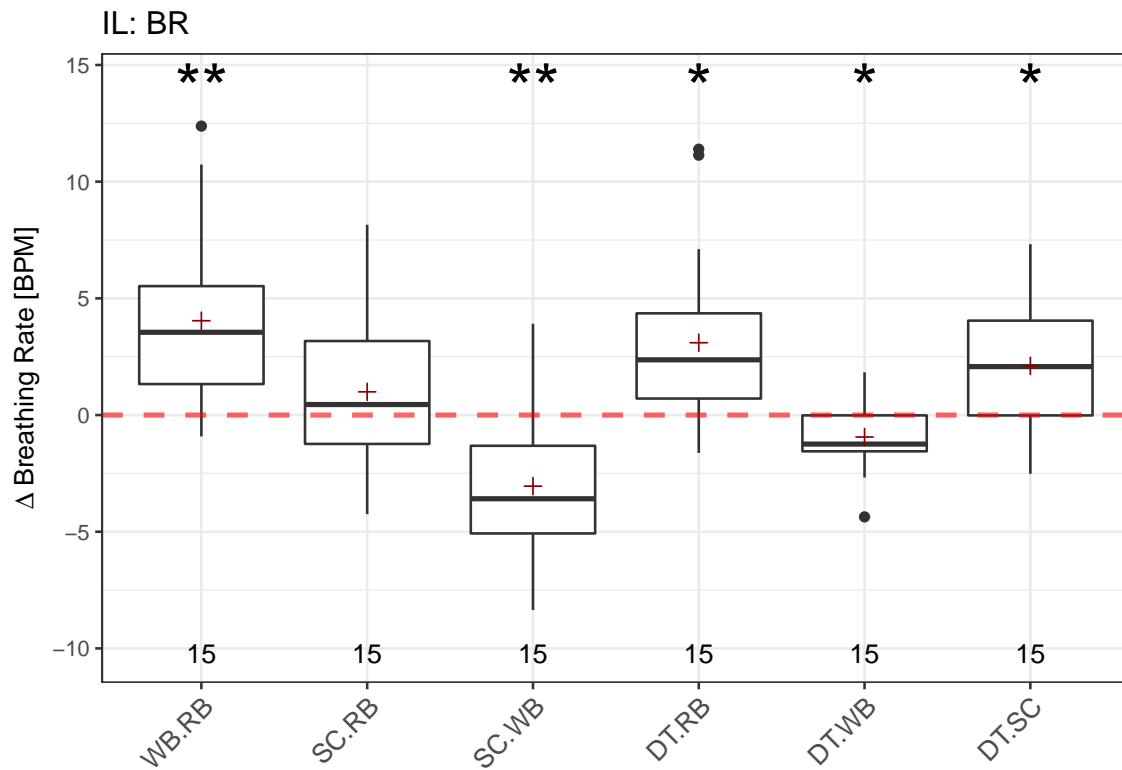
```
## Writing Baseline - Resting Baseline
## t-test p = 0.0012 < 0.01  **
##
## Stress Condition - Resting Baseline
## t-test p = 0.0261 < 0.05  *
##
## StressCondition - Writing Baseline
## t-test p = 0.0272 < 0.05  *
##
## Dual Task - Resting Baseline
## t-test p = 2e-04 < 0.001  ***
##
## Dual Task - Writing Baseline
## t-test p = 0.561 > 0.05
##
## Dual Task - Stress Condition
## t-test p = 0.0054 < 0.01  **
##
## Presentation - Resting Baseline
## t-test p = 0 < 0.001  ***
##
## Presentation - Writing Baseline
## t-test p = 0.0013 < 0.01  **
```

```
##  
## Presentation - Stress Condition  
## t-test p = 1e-04 < 0.001 ***  
##  
## Presentation - Dual Task  
## t-test p = 2e-04 < 0.001 ***
```



```
## Writing Baseline - Resting Baseline
## t-test p = 0.0689 > 0.05
##
## Stress Condition - Resting Baseline
## t-test p = 0.1422 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0 < 0.001 ***
##
## Dual Task - Resting Baseline
## t-test p = 0.7837 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0.0043 < 0.01 **
##
## Dual Task - Stress Condition
## t-test p = 0.0676 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0.0111 < 0.05 *
##
## Presentation - Writing Baseline
## t-test p = 0.0089 < 0.01 **
##
## Presentation - Stress Condition
```

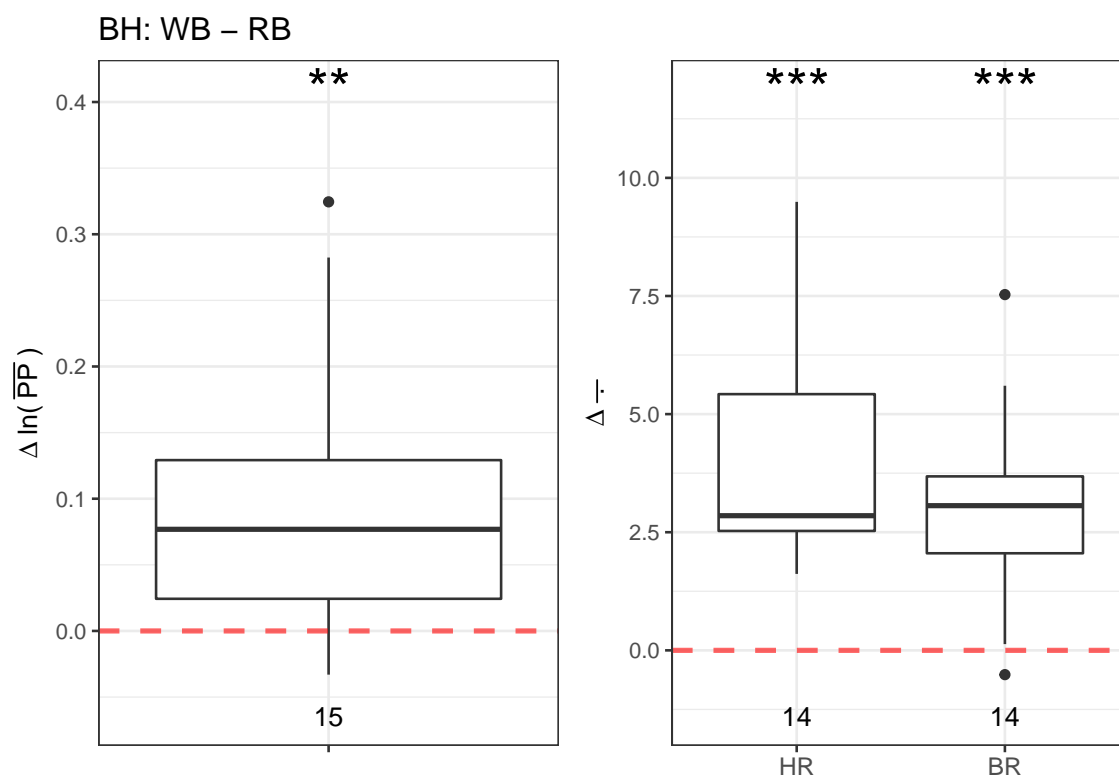
```
## t-test p = 0.0027 < 0.01 **  
##  
## Presentation - Dual Task  
## t-test p = 0.001 < 0.001 ***
```



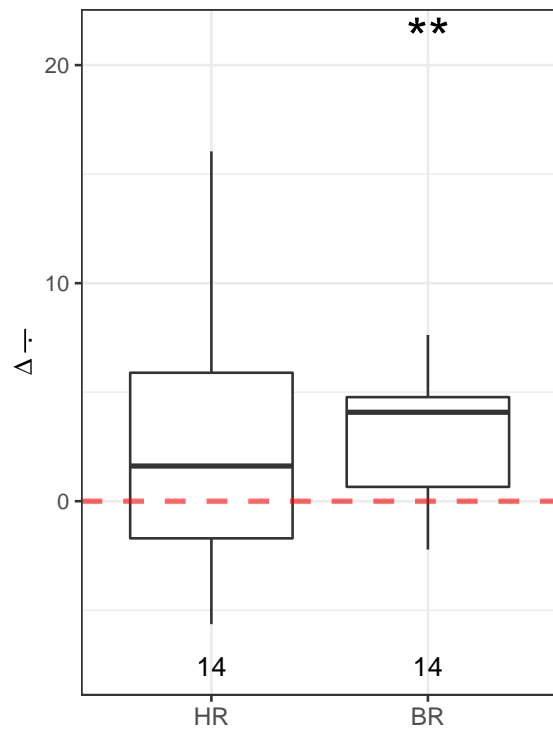
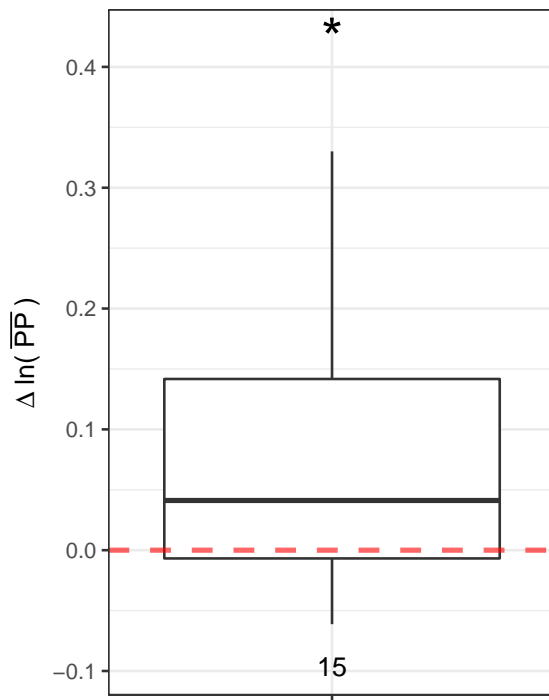
```
## Writing Baseline - Resting Baseline
## t-test p = 0.0011 < 0.01  **
##
## Stress Condition - Resting Baseline
## t-test p = 0.2825 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.003 < 0.01  **
##
## Dual Task - Resting Baseline
## t-test p = 0.0104 < 0.05  *
##
## Dual Task - Writing Baseline
## t-test p = 0.0371 < 0.05  *
##
## Dual Task - Stress Condition
## t-test p = 0.0181 < 0.05  *
```


Batch-High (BH)

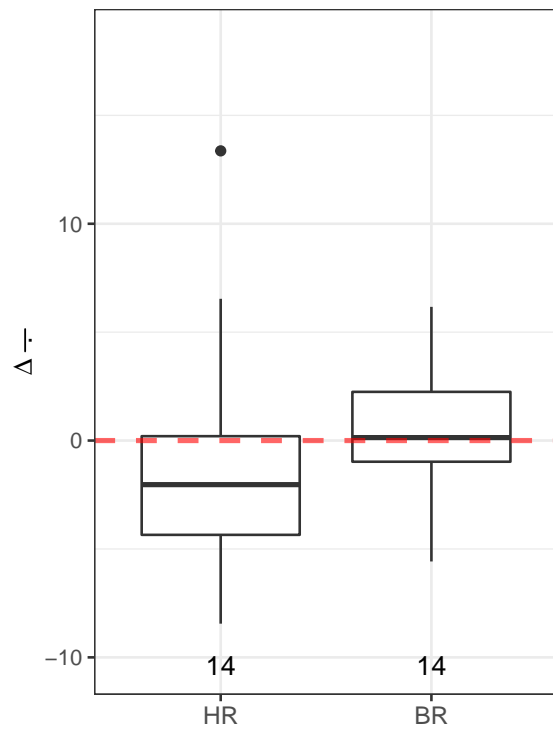
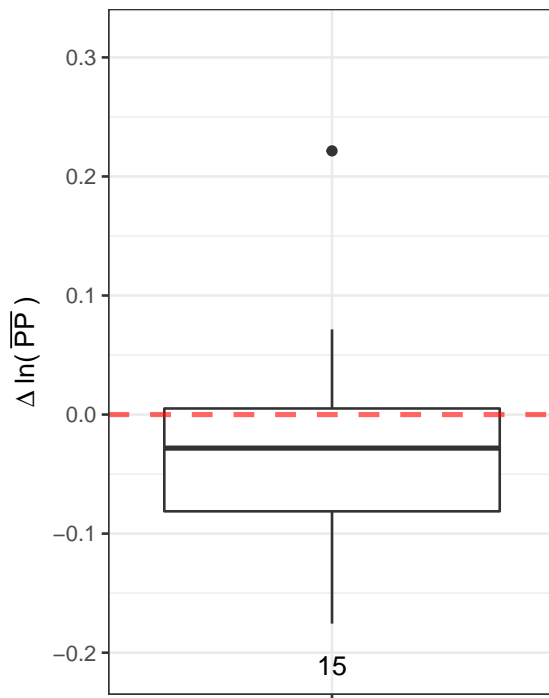
Sensor Channels per Session



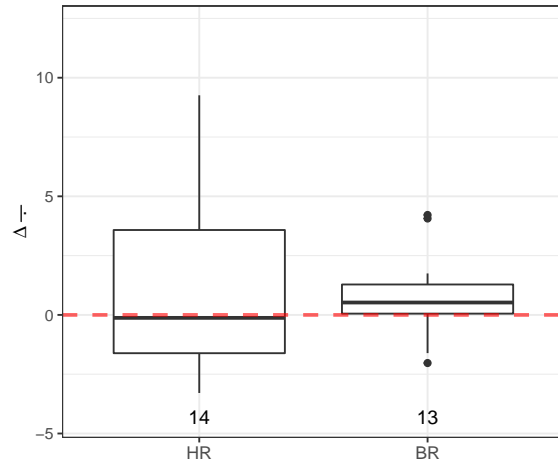
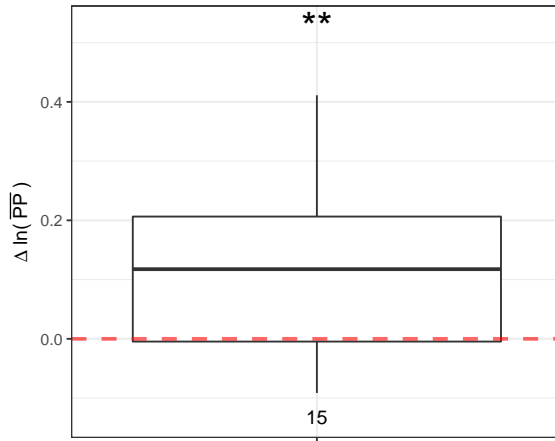
BH: SC – RB



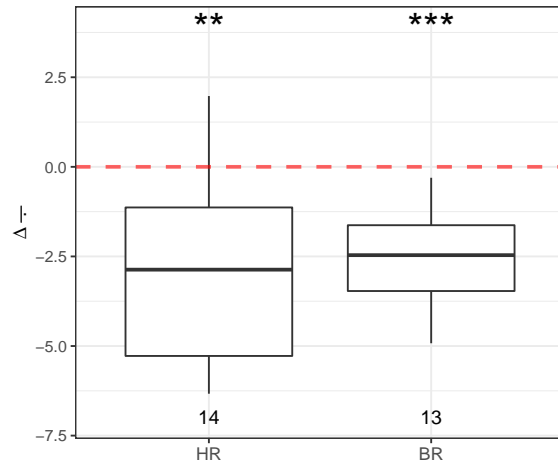
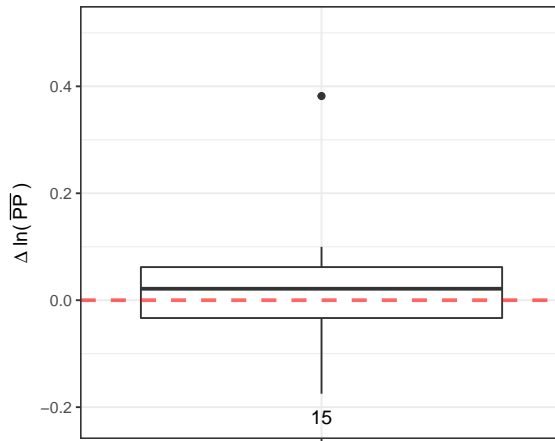
BH: SC – WB



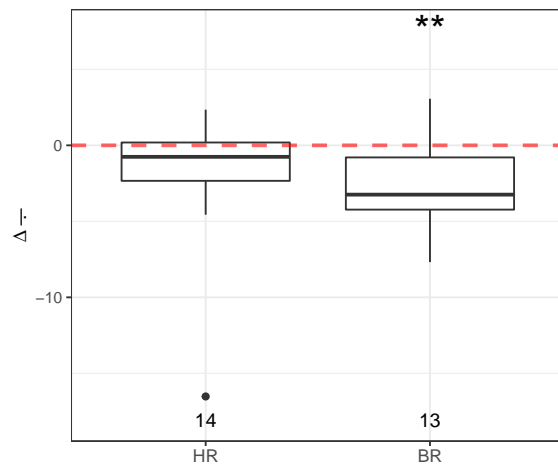
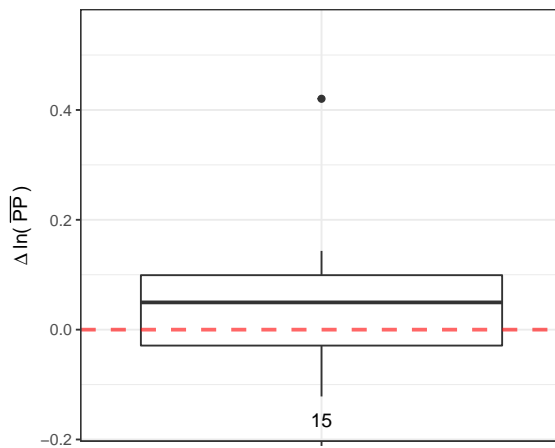
BH: DT – RB

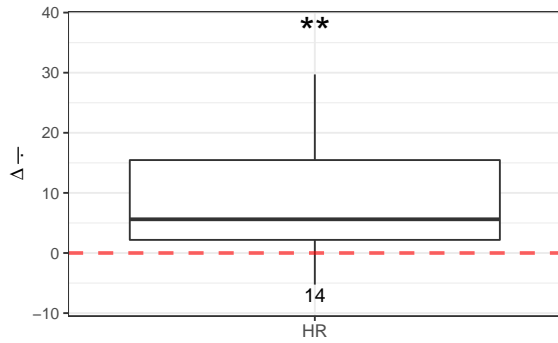
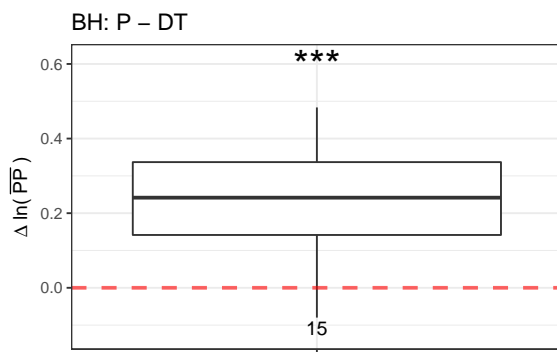
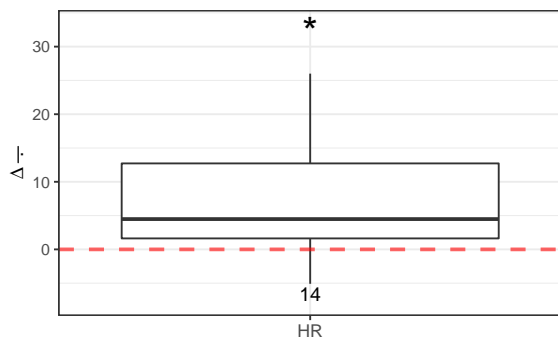
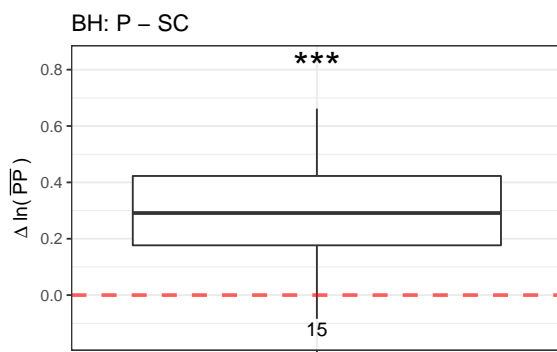
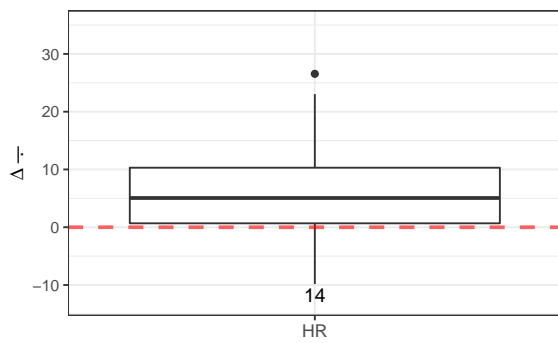
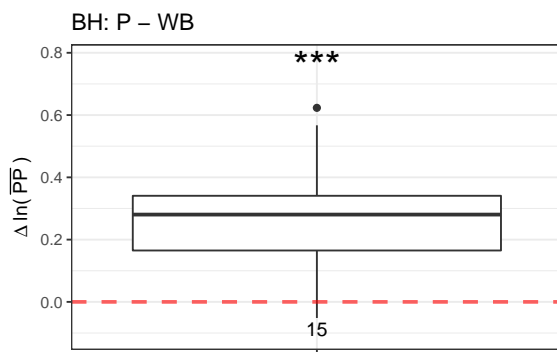
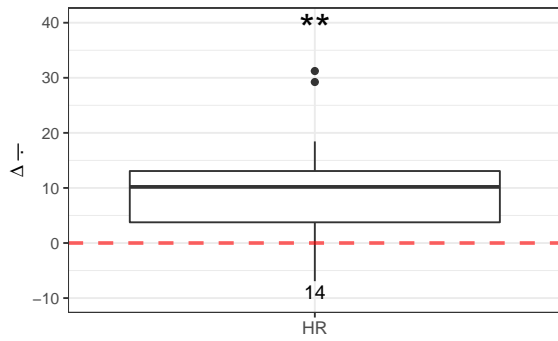
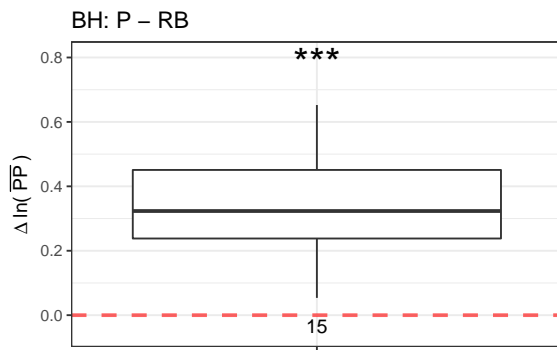


BH: DT – WB

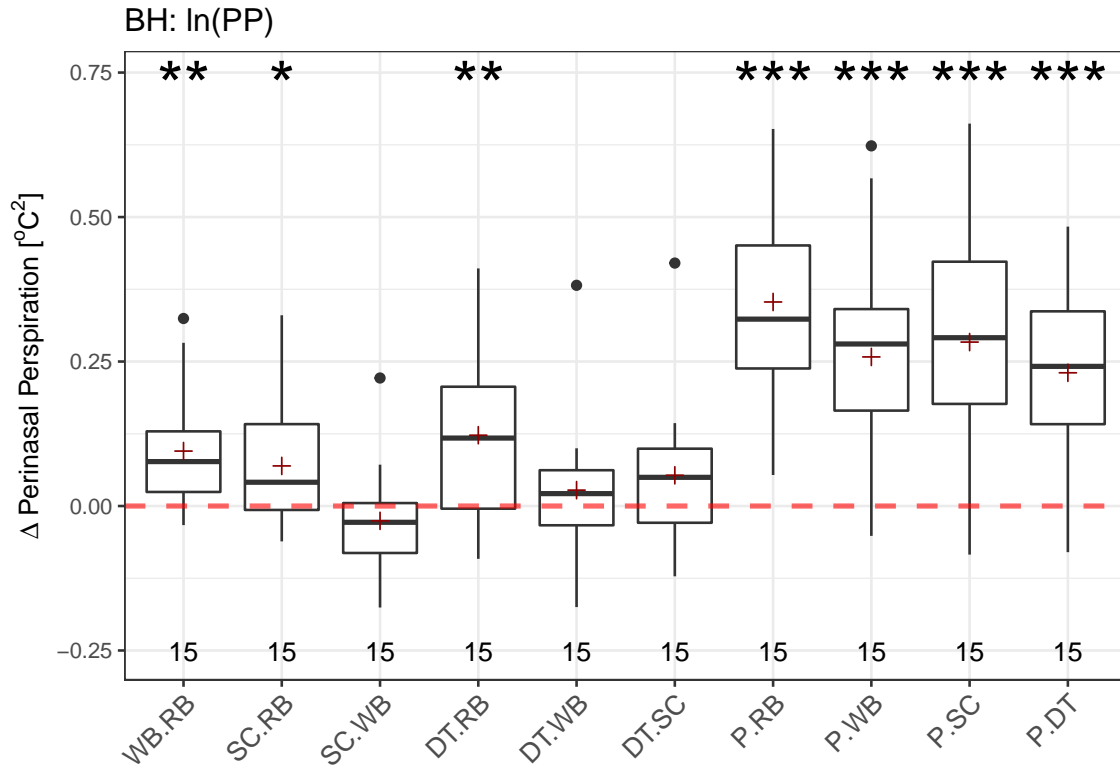


BH: DT – SC



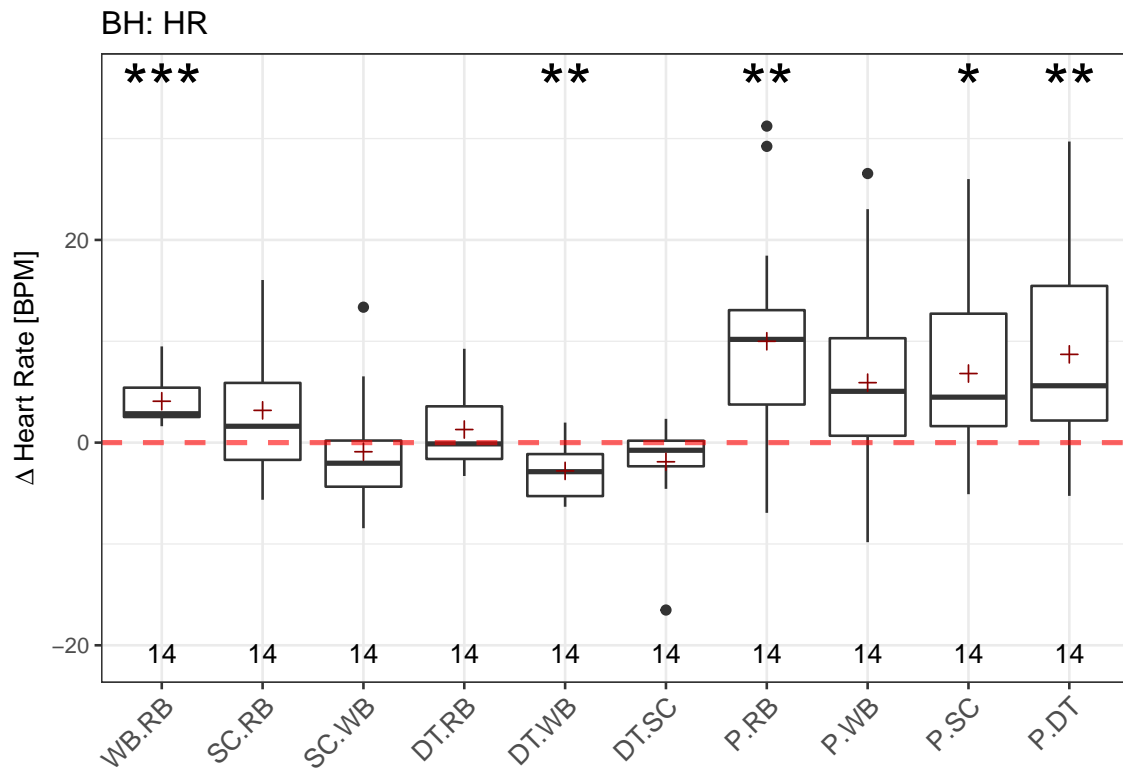


Sensor Channel across Session



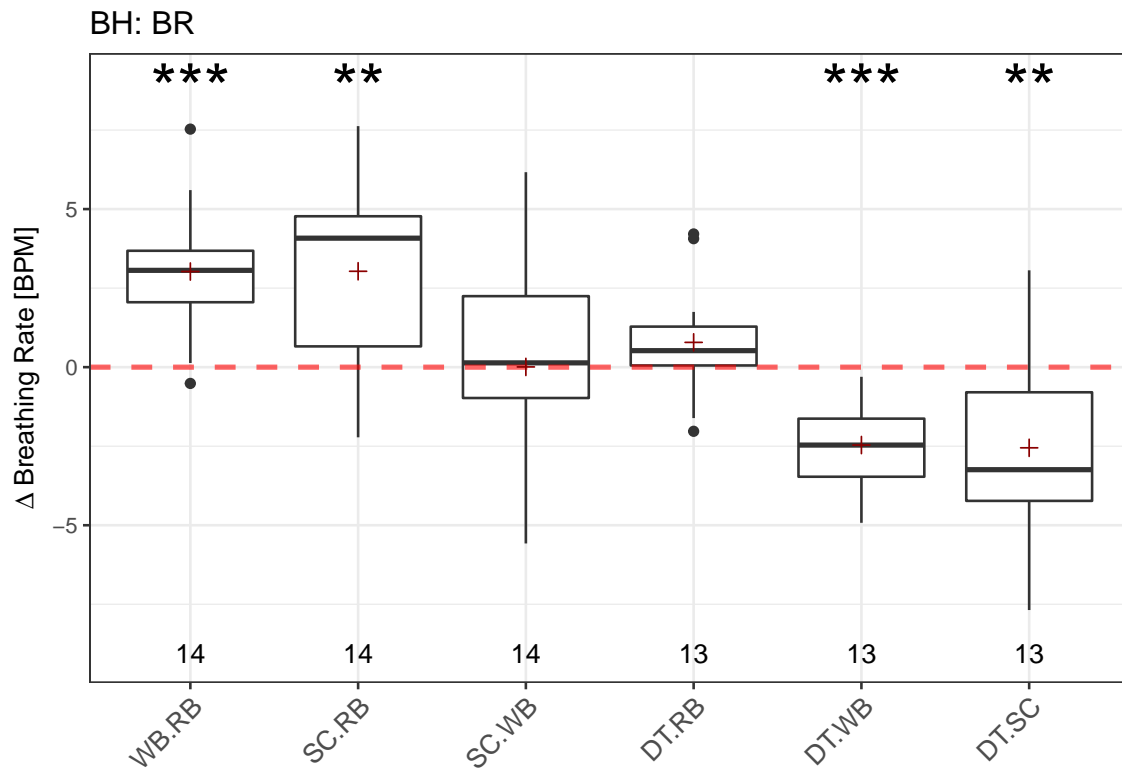
```
## Writing Baseline - Resting Baseline
## t-test p = 0.0039 < 0.01 **
##
## Stress Condition - Resting Baseline
## t-test p = 0.0215 < 0.05 *
##
## StressCondition - Writing Baseline
## t-test p = 0.3011 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.0032 < 0.01 **
##
## Dual Task - Writing Baseline
## t-test p = 0.3915 > 0.05
##
## Dual Task - Stress Condition
## t-test p = 0.1264 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0 < 0.001 ***
##
## Presentation - Writing Baseline
## t-test p = 1e-04 < 0.001 ***
```

```
##  
## Presentation - Stress Condition  
## t-test p = 1e-04 < 0.001 ***  
##  
## Presentation - Dual Task  
## t-test p = 0 < 0.001 ***
```



```
## Writing Baseline - Resting Baseline
## t-test p = 0 < 0.001 ***
##
## Stress Condition - Resting Baseline
## t-test p = 0.0805 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.559 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.2422 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0.0017 < 0.01 **
##
## Dual Task - Stress Condition
## t-test p = 0.1489 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0.0051 < 0.01 **
##
## Presentation - Writing Baseline
## t-test p = 0.05 > 0.05
##
## Presentation - Stress Condition
```

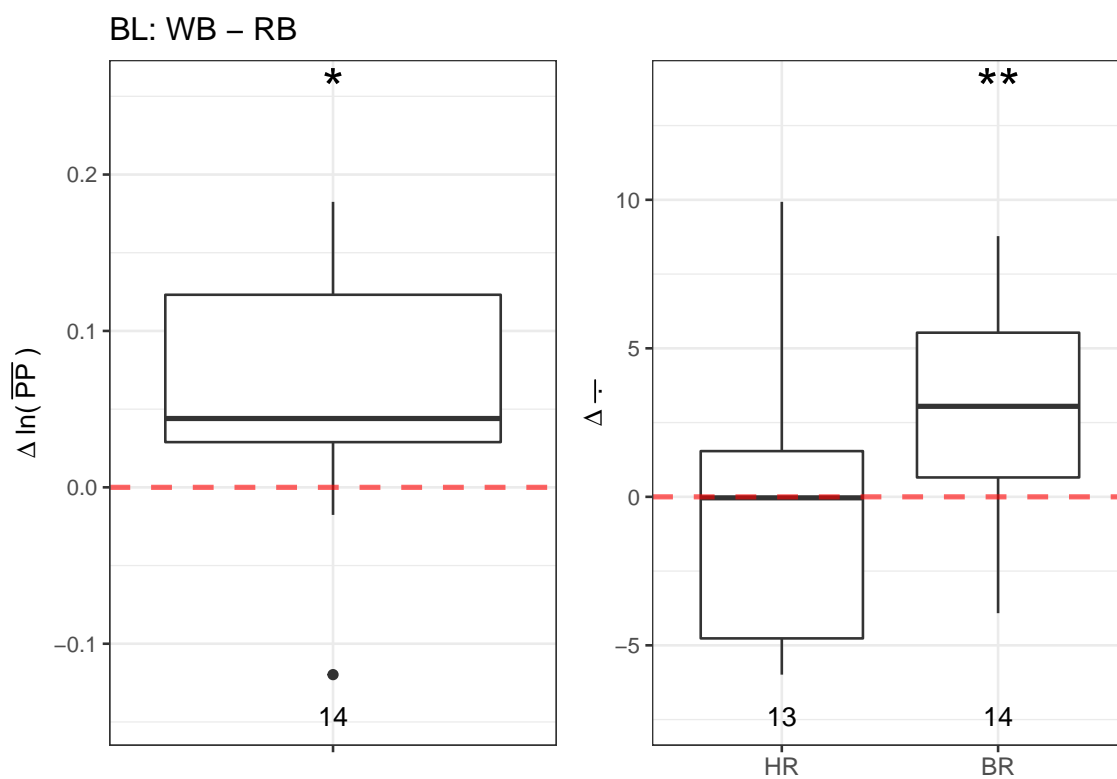
```
## t-test p = 0.0136 < 0.05  *  
##  
## Presentation - Dual Task  
## t-test p = 0.0074 < 0.01  **
```

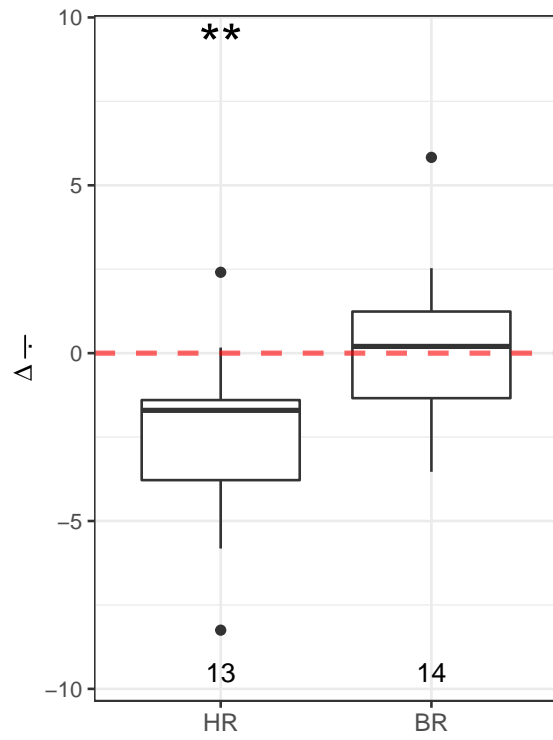
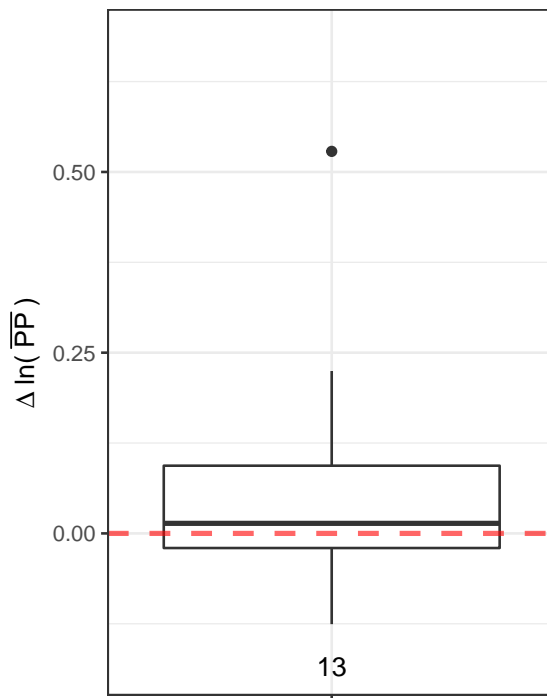
```
## Writing Baseline - Resting Baseline
## t-test p = 1e-04 < 0.001 ***
##
## Stress Condition - Resting Baseline
## t-test p = 0.0026 < 0.01 **
##
## StressCondition - Writing Baseline
## t-test p = 0.993 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.1451 > 0.05
##
## Dual Task - Writing Baseline
## t-test p = 0 < 0.001 ***
##
## Dual Task - Stress Condition
## t-test p = 0.0096 < 0.01 **
```


Batch-Low (BL)

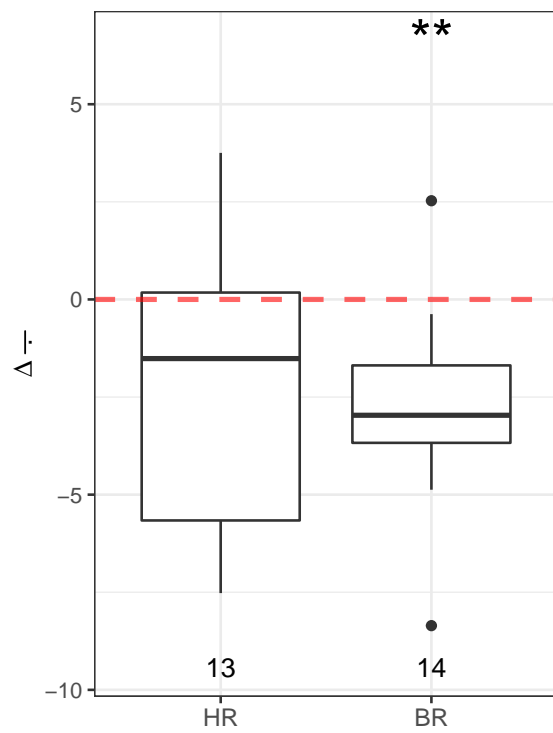
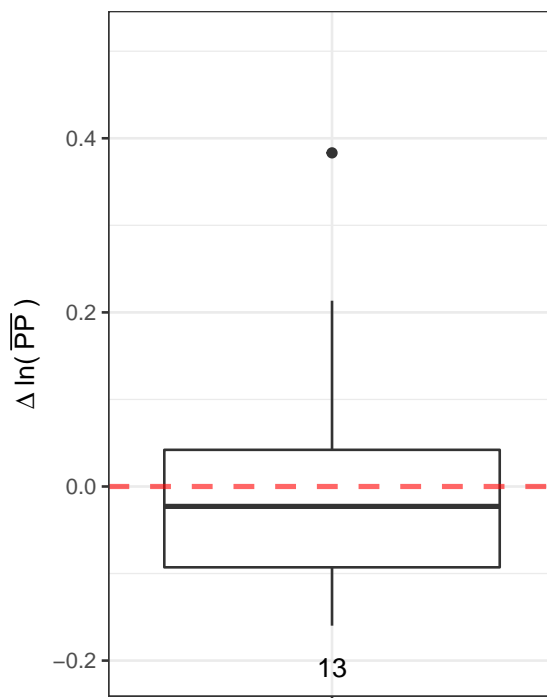
Sensor Channels per Session



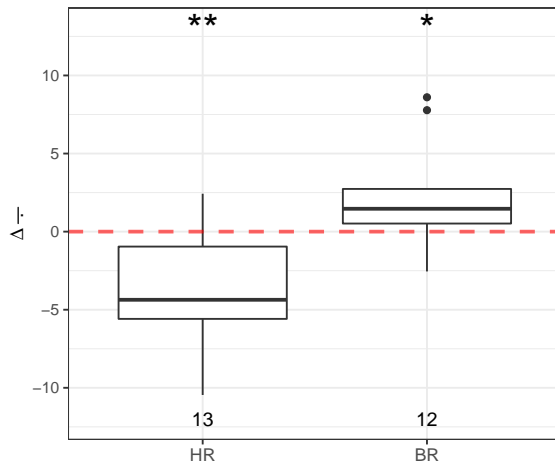
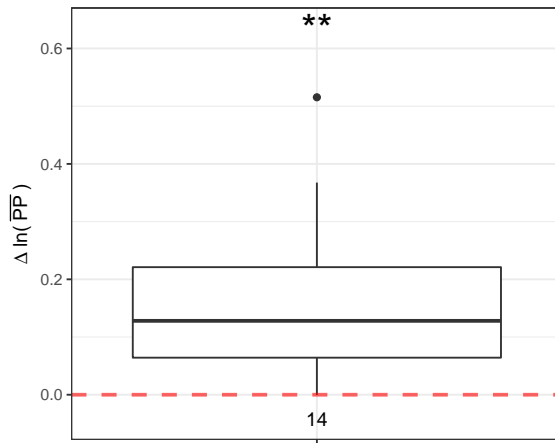
BL: SC – RB



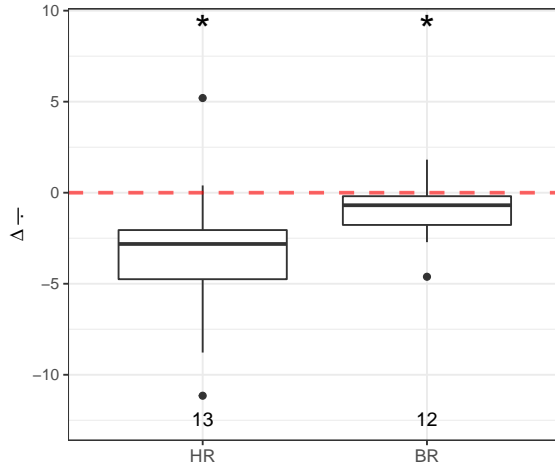
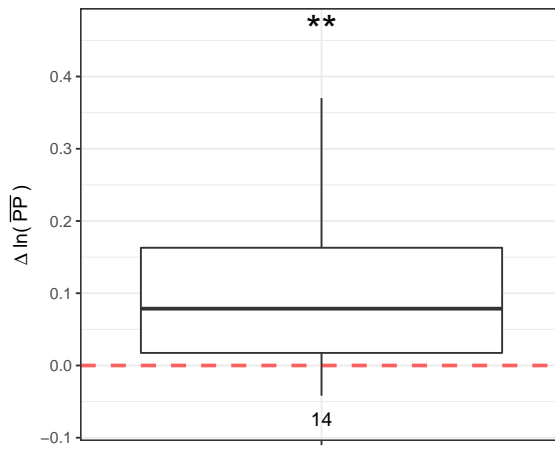
BL: SC – WB



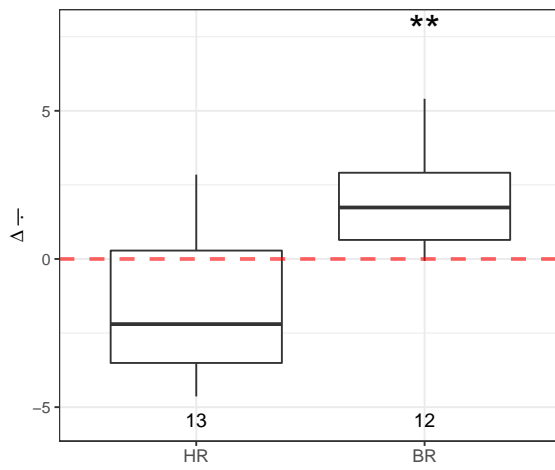
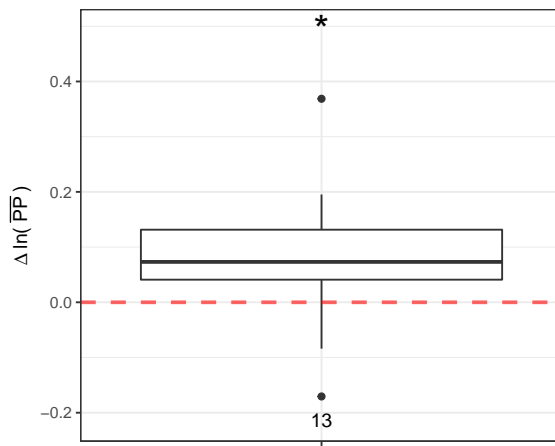
BL: DT – RB

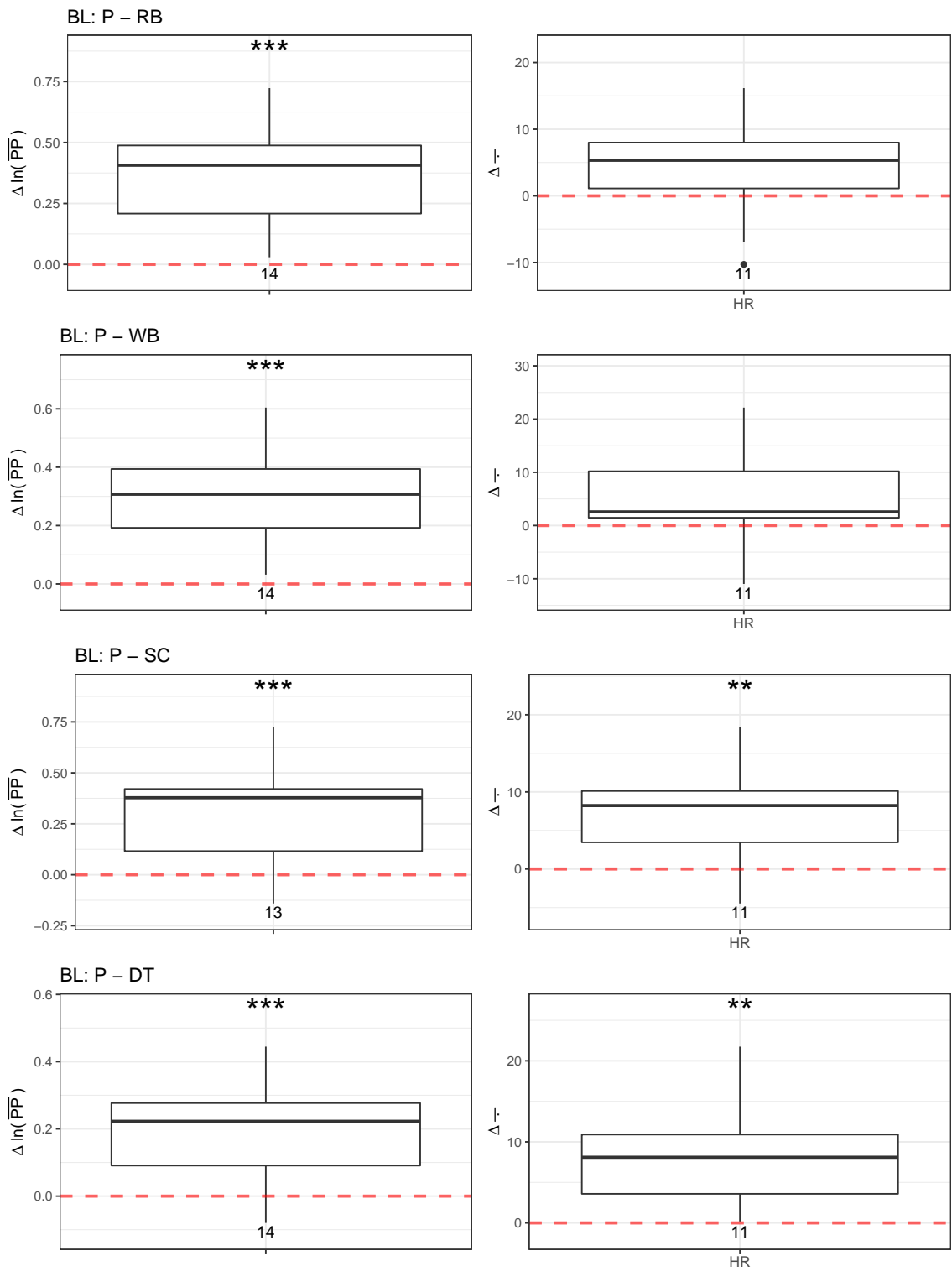


BL: DT – WB

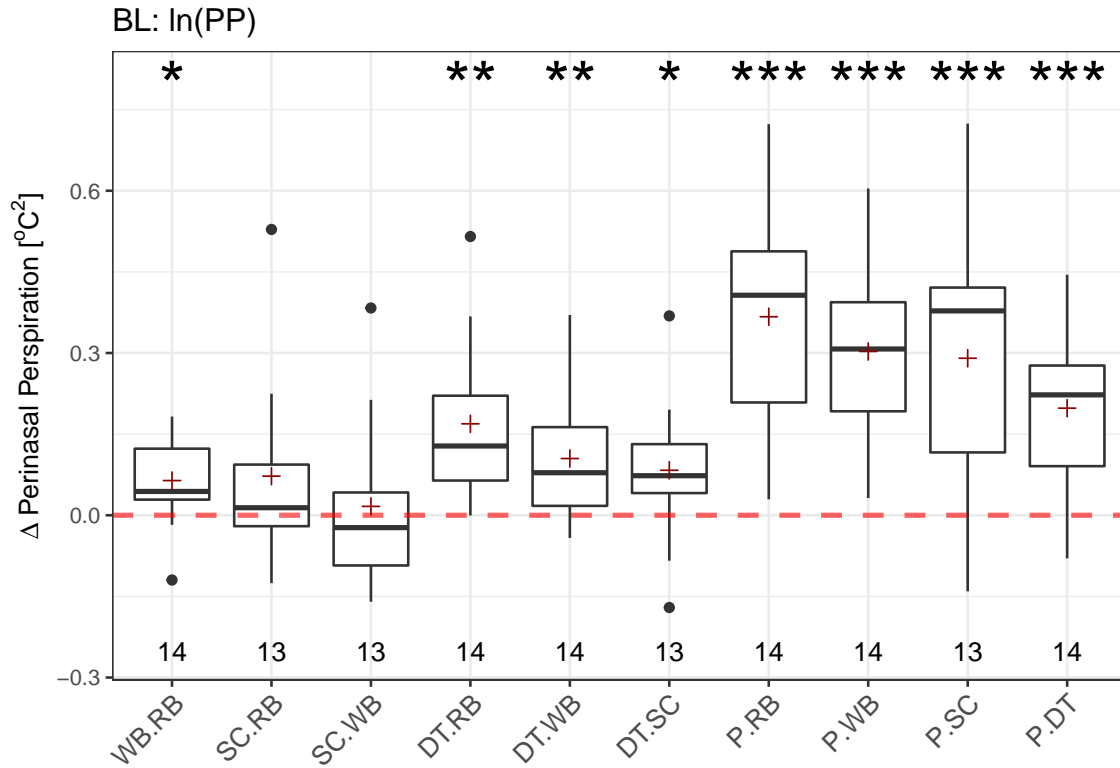


BL: DT – SC





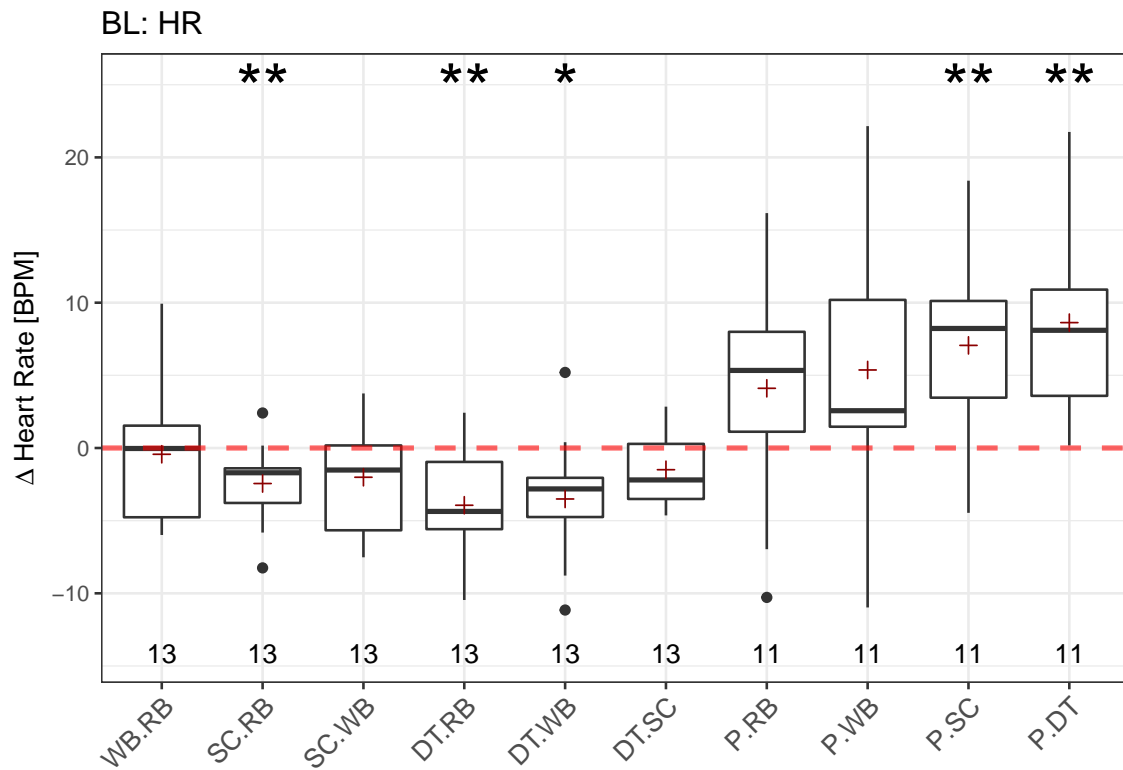
Sensor Channel across Session



```
## Writing Baseline - Resting Baseline
## t-test p = 0.0129 < 0.05  *
##
## Stress Condition - Resting Baseline
## t-test p = 0.1391 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.7092 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.001 < 0.01  **
##
## Dual Task - Writing Baseline
## t-test p = 0.0063 < 0.01  **
##
## Dual Task - Stress Condition
## t-test p = 0.0466 < 0.05  *
##
## Presentation - Resting Baseline
## t-test p = 0 < 0.001  ***
##
## Presentation - Writing Baseline
## t-test p = 0 < 0.001  ***
```

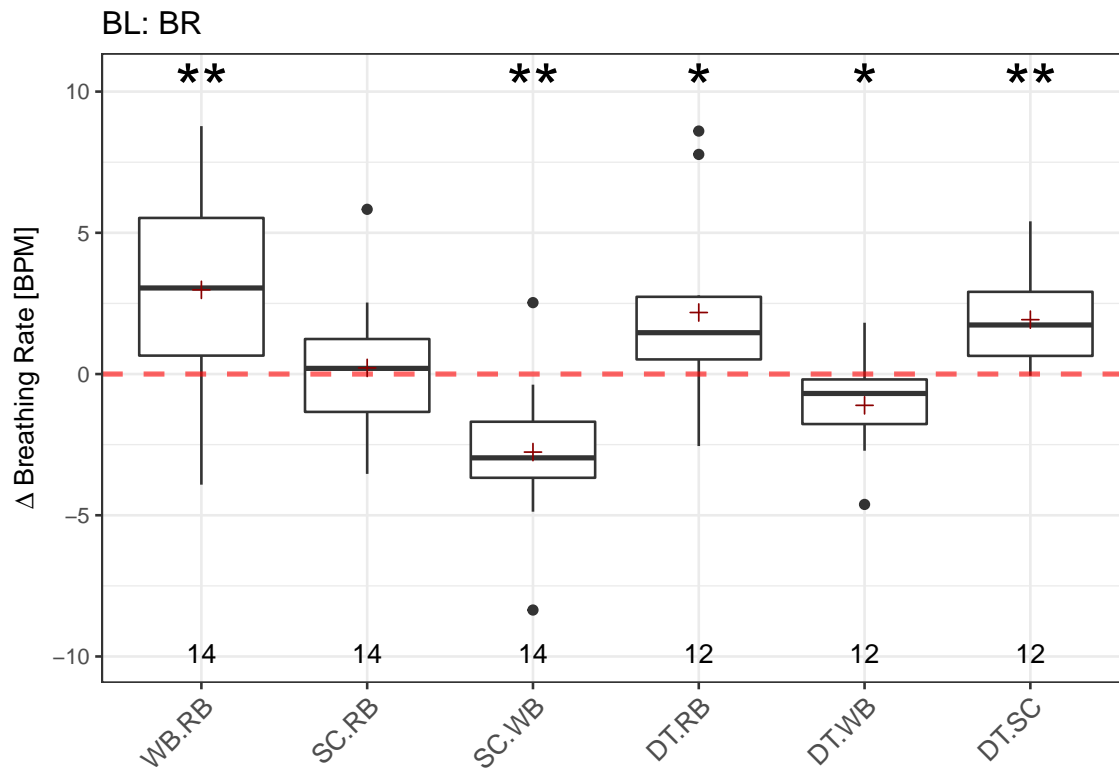


```
##  
## Presentation - Stress Condition  
## t-test p = 8e-04 < 0.001 ***  
##  
## Presentation - Dual Task  
## t-test p = 3e-04 < 0.001 ***
```



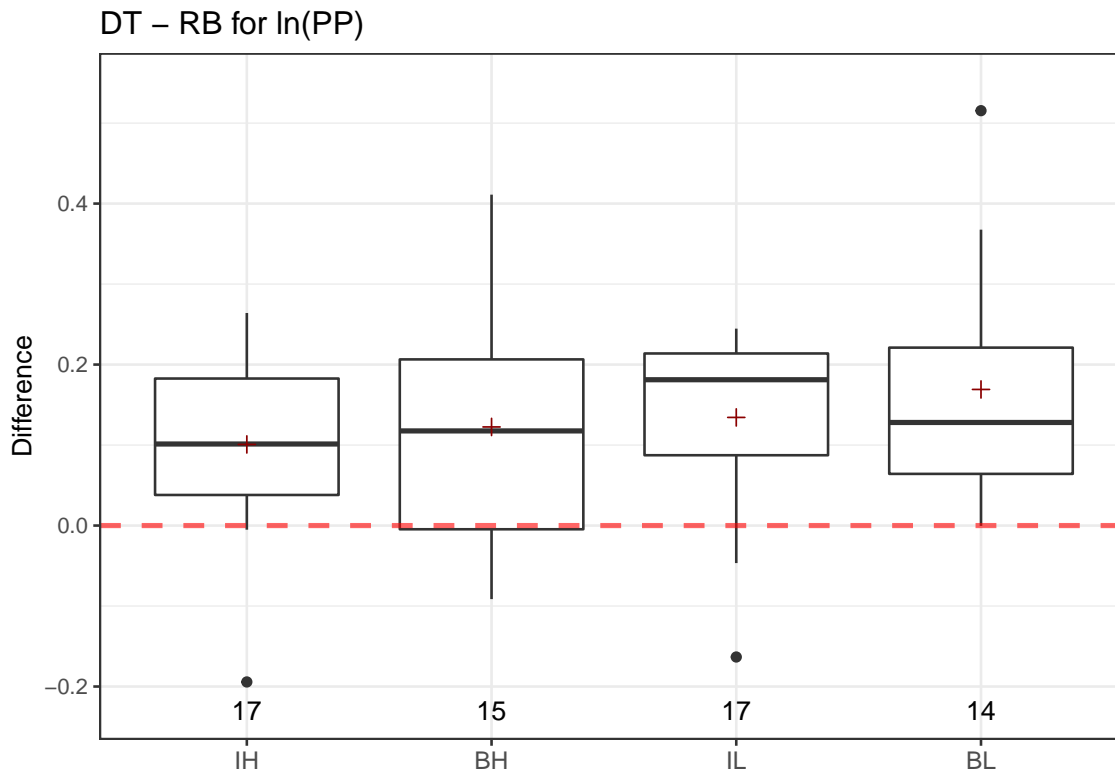
```
## Writing Baseline - Resting Baseline
## t-test p = 0.7394 > 0.05
##
## Stress Condition - Resting Baseline
## t-test p = 0.0068 < 0.01 **
##
## StressCondition - Writing Baseline
## t-test p = 0.081 > 0.05
##
## Dual Task - Resting Baseline
## t-test p = 0.0028 < 0.01 **
##
## Dual Task - Writing Baseline
## t-test p = 0.0103 < 0.05 *
##
## Dual Task - Stress Condition
## t-test p = 0.0577 > 0.05
##
## Presentation - Resting Baseline
## t-test p = 0.1093 > 0.05
##
## Presentation - Writing Baseline
## t-test p = 0.0833 > 0.05
##
## Presentation - Stress Condition
```

```
## t-test p = 0.0069 < 0.01 **  
##  
## Presentation - Dual Task  
## t-test p = 0.0019 < 0.01 **
```

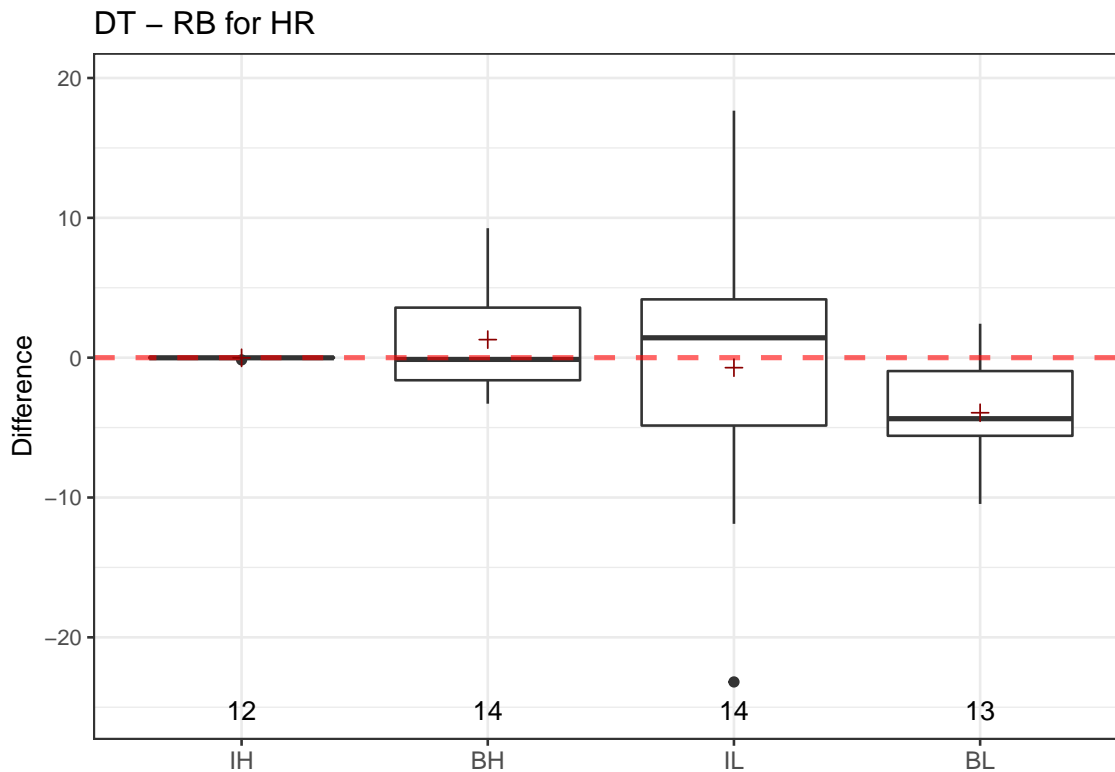


```
## Writing Baseline - Resting Baseline
## t-test p = 0.005 < 0.01  **
##
## Stress Condition - Resting Baseline
## t-test p = 0.7386 > 0.05
##
## StressCondition - Writing Baseline
## t-test p = 0.0012 < 0.01  **
##
## Dual Task - Resting Baseline
## t-test p = 0.0373 < 0.05  *
##
## Dual Task - Writing Baseline
## t-test p = 0.0368 < 0.05  *
##
## Dual Task - Stress Condition
## t-test p = 0.002 < 0.01  **
```

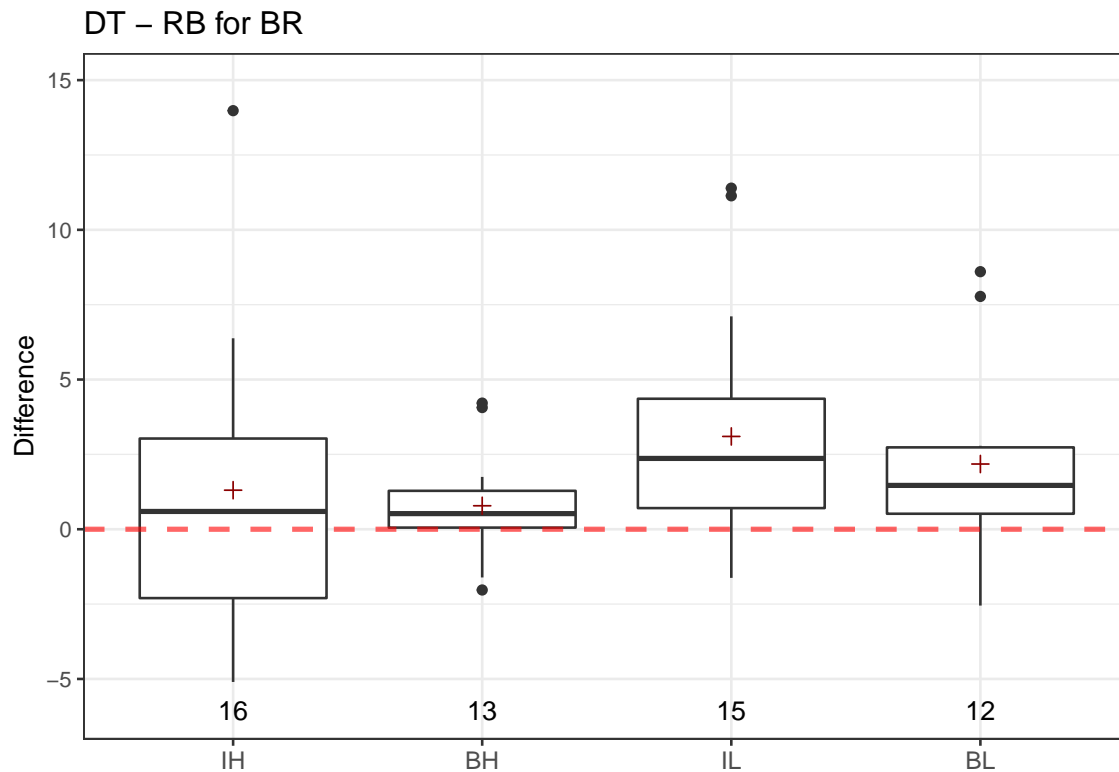

Across Sessions



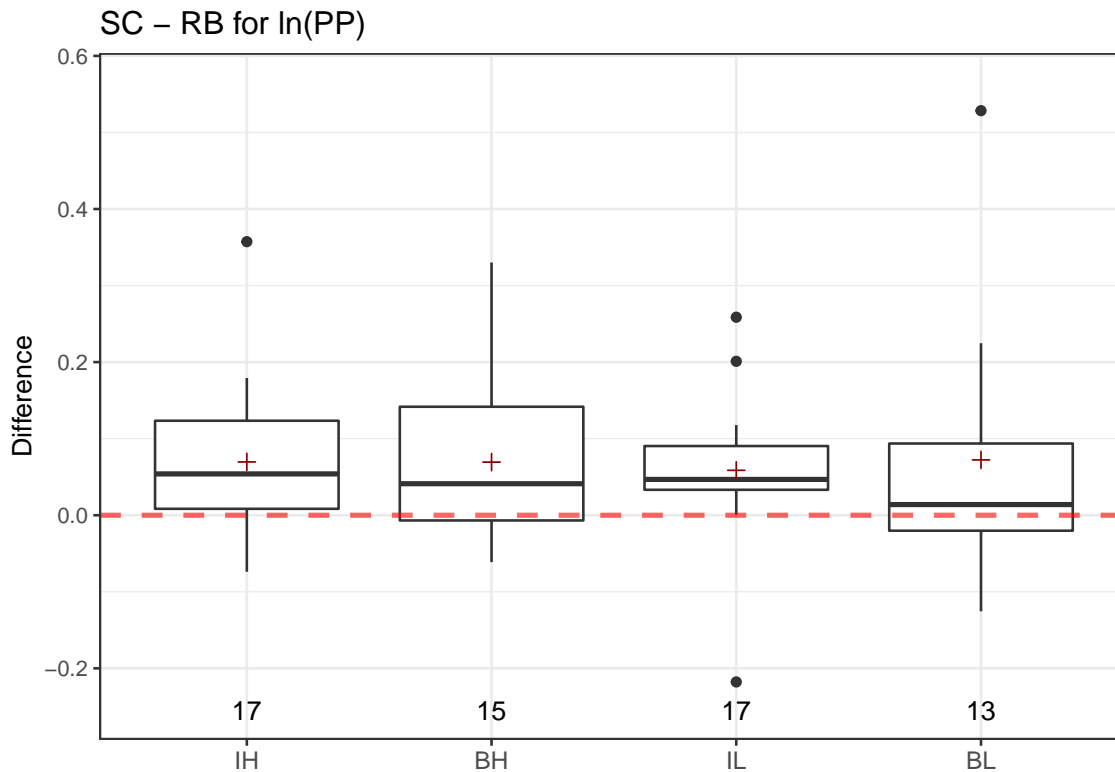
```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition   3 0.0371  0.01235   0.768  0.516
## Residuals  59 0.9484  0.01607
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff           lwr           upr           p adj
## BL-BH  0.04655998 -0.07800001  0.17111997  0.7566681
## IH-BH -0.02173941 -0.14047861  0.09699979  0.9623489
## IL-BH  0.01182058 -0.10691862  0.13055978  0.9935469
## IH-BL -0.06829939 -0.18927048  0.05267170  0.4483409
## IL-BL -0.03473940 -0.15571048  0.08623169  0.8723476
## IL-IH  0.03355999 -0.08140874  0.14852873  0.8668803
```



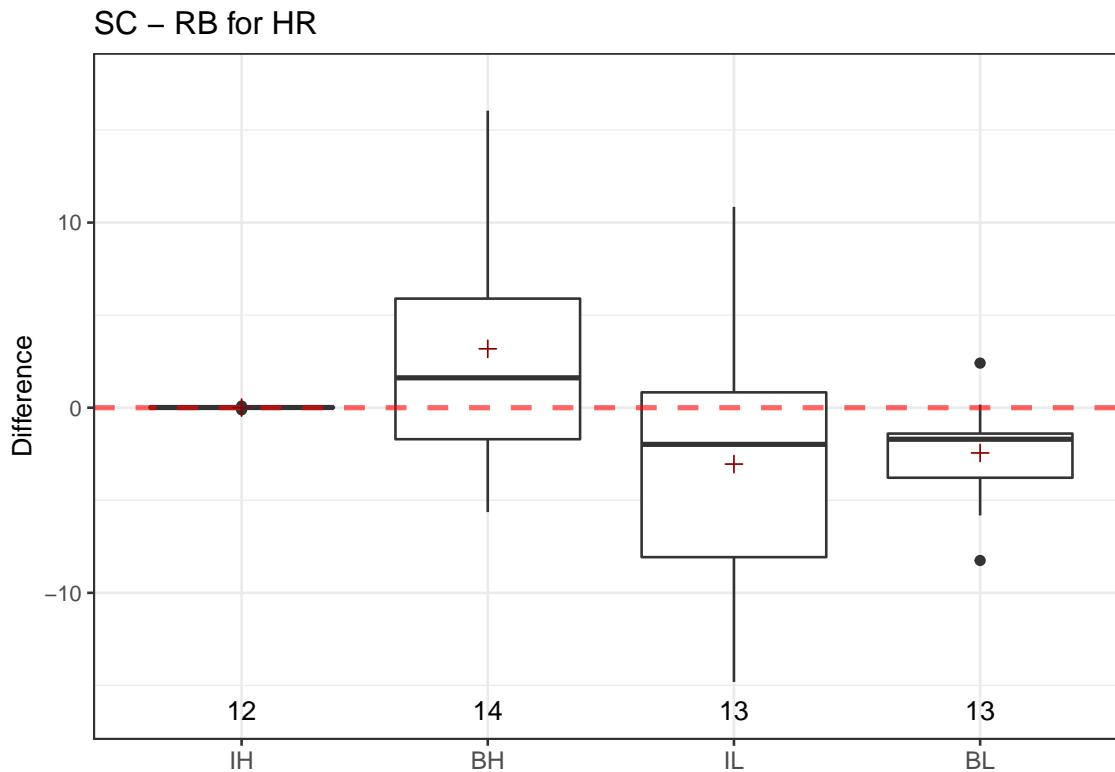
```
##          Df Sum Sq Mean Sq F value Pr(>F)
## Condition    3   196.9    65.62   2.061  0.118
## Residuals   49  1559.9    31.83
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##          diff          lwr          upr          p adj
## BL-BH -5.2299412 -11.009325  0.5494428  0.0891252
## IH-BH -1.3023021  -7.205229  4.6006247  0.9356236
## IL-BH -2.0060477  -7.677396  3.6653009  0.7831604
## IH-BL  3.9276391  -2.079159  9.9344376  0.3150719
## IL-BL  3.2238935  -2.555490  9.0032775  0.4550405
## IL-IH -0.7037456  -6.606672  5.1991811  0.9888315
```

```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition   3   44.2   14.75   1.049  0.379
## Residuals  52  731.2   14.06
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff           lwr          upr          p adj
## BL-BH  1.3946829 -2.589543  5.378909  0.7894296
## IH-BH  0.5202144 -3.196024  4.236453  0.9823043
## IL-BH  2.3153538 -1.456006  6.086714  0.3714003
## IH-BL -0.8744686 -4.675178  2.926241  0.9282430
## IL-BL  0.9206709 -2.933952  4.775294  0.9206038
## IL-IH  1.7951394 -1.781799  5.372078  0.5471284
```

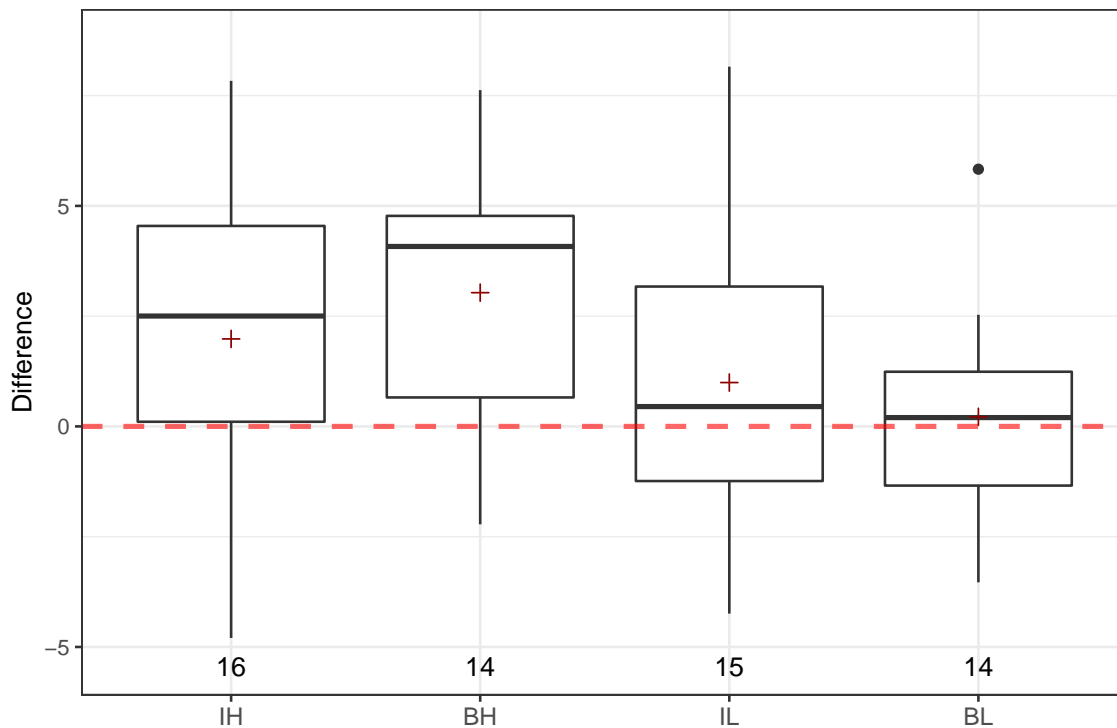


```
## [1] "Removed 0 subjects who had Stroop scores less than 0."
##
## ---
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition   3  0.0017  0.000581    0.042  0.989
## Residuals  58  0.8071  0.013916
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff           lwr           upr           p adj
## BL-BH  0.0028961617 -0.1153422  0.12113454  0.9999012
## IH-BH  0.0002650717 -0.1102704  0.11080054  0.9999999
## IL-BH -0.0107075764 -0.1212430  0.09982789  0.9940359
## IH-BL -0.0026310900 -0.1175949  0.11233274  0.9999194
## IL-BL -0.0136037381 -0.1285676  0.10136009  0.9892655
## IL-IH -0.0109726481 -0.1179982  0.09605285  0.9929513
```

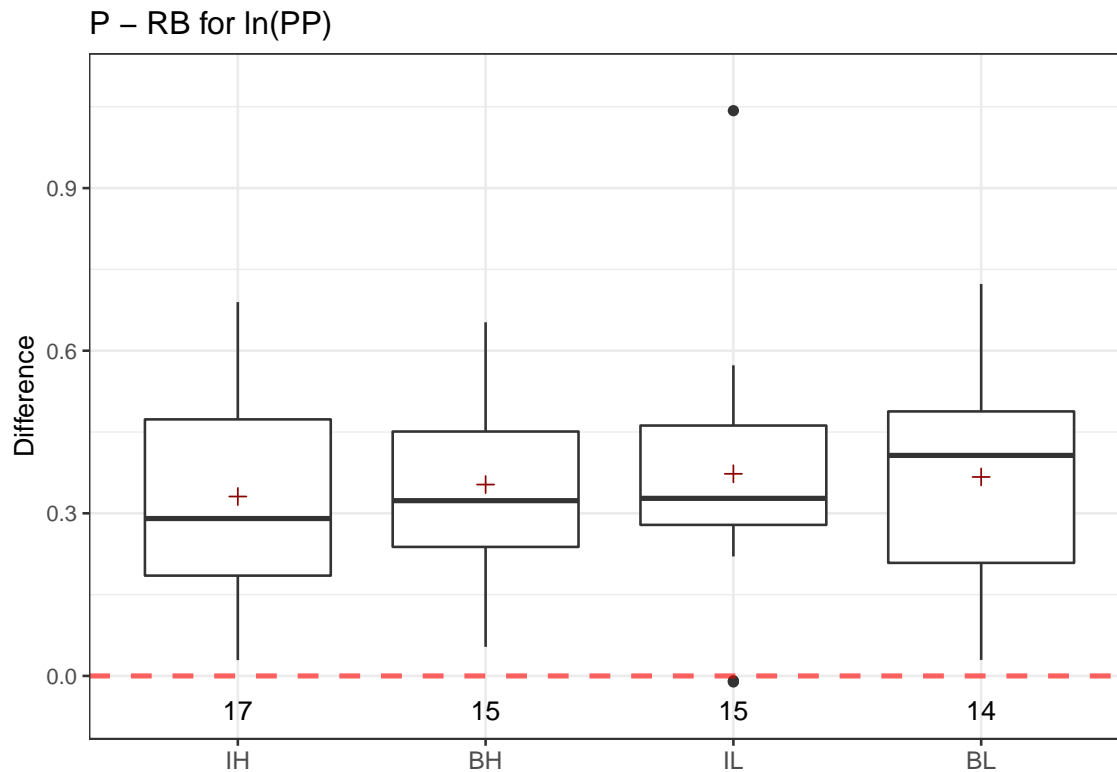


```
## [1] "Removed 0 subjects who had Stroop scores less than 0."
##
## ---
##              Df Sum Sq Mean Sq F value Pr(>F)
## Condition      3  326.3   108.75    4.397 0.00821 **
## Residuals     48 1187.2    24.73
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##          diff          lwr          upr      p adj
## BL-BH -5.6268272 -10.724702 -0.528952 0.0252515
## IH-BH -3.1742515  -8.381101  2.032598 0.3759612
## IL-BH -6.2269809 -11.324856 -1.129106 0.0109623
## IH-BL  2.4525757  -2.845897  7.751049 0.6099621
## IL-BL -0.6001537  -5.791576  4.591268 0.9897684
## IL-IH -3.0527294  -8.351202  2.245743 0.4260203
```

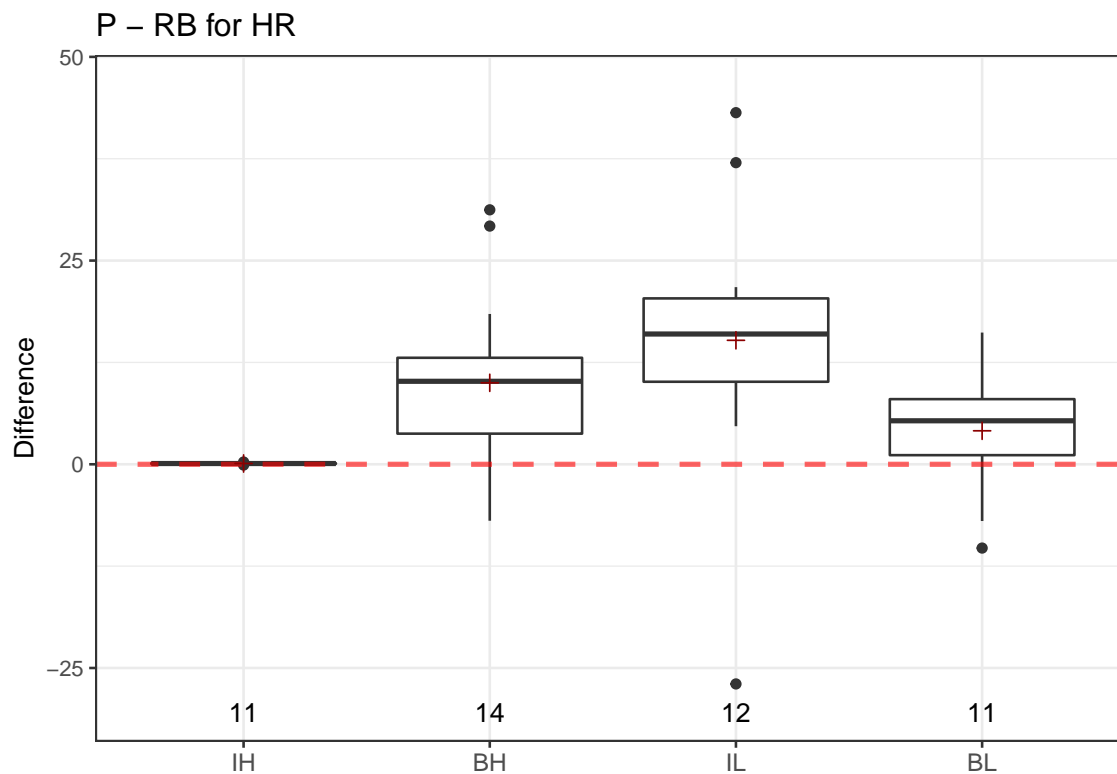
SC – RB for BR



```
## [1] "Removed 0 subjects who had Stroop scores less than 0."
##
## ---
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition   3   63.3    21.09     2.07  0.115
## Residuals  55  560.5    10.19
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff           lwr           upr          p adj
## BL-BH -2.8155027 -6.012142  0.3811366  0.1028598
## IH-BH -1.0483755 -4.143508  2.0467572  0.8062112
## IL-BH -2.0379024 -5.180813  1.1050080  0.3243938
## IH-BL  1.7671272 -1.328005  4.8622598  0.4370443
## IL-BL  0.7776002 -2.365310  3.9205106  0.9131739
## IL-IH -0.9895270 -4.029137  2.0500831  0.8240506
```



```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition    3  0.0167  0.00556    0.12  0.948
## Residuals   57  2.6351  0.04623
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff           lwr           upr           p adj
## BL-BH  0.014007429 -0.1974467  0.2254616  0.9980630
## IH-BH -0.022049201 -0.2236219  0.1795235  0.9914585
## IL-BH  0.019829526 -0.1879469  0.2276059  0.9942825
## IH-BL -0.036056630 -0.2414182  0.1693050  0.9664462
## IL-BL  0.005822097 -0.2056321  0.2172762  0.9998595
## IL-IH  0.041878727 -0.1596940  0.2434514  0.9462227
```



```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Condition   3   1529    509.8   4.078 0.0122 *
## Residuals  44   5501    125.0
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## ---
##
##      Tukey multiple comparisons of means
##      95% family-wise confidence level
##
## Fit: aov(formula = formula(paste(diff, "~ Condition")), data = anova_df)
##
## $Condition
##           diff           lwr           upr          p adj
## BL-BH -5.891227 -17.919328   6.136874 0.5630282
## IH-BH -9.902191 -21.930292   2.125910 0.1396724
## IL-BH  5.215860  -6.528232  16.959952 0.6388917
## IH-BL -4.010964 -16.740309   8.718381 0.8344664
## IL-BL 11.107087  -1.354242  23.568416 0.0959908
## IL-IH 15.118051   2.656722  27.579380 0.0118054
```

Summary

Condition	Difference	Measure	p	Test	n	Significance
BH	WB - RB	PP	0.0038869	t-test	15	**
BH	WB - RB	HR	0.0000470	t-test	14	***
BH	WB - RB	BR	0.0000993	t-test	14	***
BH	SC - RB	PP	0.0215038	t-test	15	*
BH	SC - RB	HR	0.0805282	t-test	14	
BH	SC - RB	BR	0.0026189	t-test	14	**
BH	SC - WB	PP	0.3011111	t-test	15	
BH	SC - WB	HR	0.5589881	t-test	14	
BH	SC - WB	BR	0.9929885	t-test	14	
BH	DT - RB	PP	0.0031738	t-test	15	**
BH	DT - RB	HR	0.2421935	t-test	14	
BH	DT - RB	BR	0.1450731	t-test	13	
BH	DT - WB	PP	0.3915045	t-test	15	
BH	DT - WB	HR	0.0017455	t-test	14	**
BH	DT - WB	BR	0.0000109	t-test	13	***
BH	DT - SC	PP	0.1264163	t-test	15	
BH	DT - SC	HR	0.1489480	t-test	14	
BH	DT - SC	BR	0.0095733	t-test	13	**
BH	P - RB	PP	0.0000019	t-test	15	***
BH	P - RB	HR	0.0051343	t-test	14	**
BH	P - WB	PP	0.0001211	t-test	15	***
BH	P - WB	HR	0.0500403	t-test	14	
BH	P - SC	PP	0.0001008	t-test	15	***
BH	P - SC	HR	0.0135531	t-test	14	*
BH	P - DT	PP	0.0000374	t-test	15	***
BH	P - DT	HR	0.0073807	t-test	14	**
BL	WB - RB	PP	0.0129487	t-test	14	*
BL	WB - RB	HR	0.7393780	t-test	13	
BL	WB - RB	BR	0.0050298	t-test	14	**
BL	SC - RB	PP	0.1390646	t-test	13	
BL	SC - RB	HR	0.0068419	t-test	13	**
BL	SC - RB	BR	0.7386400	t-test	14	
BL	SC - WB	PP	0.7092246	t-test	13	
BL	SC - WB	HR	0.0810305	t-test	13	
BL	SC - WB	BR	0.0012367	t-test	14	**
BL	DT - RB	PP	0.0010125	t-test	14	**
BL	DT - RB	HR	0.0028318	t-test	13	**
BL	DT - RB	BR	0.0372882	t-test	12	*
BL	DT - WB	PP	0.0063266	t-test	14	**
BL	DT - WB	HR	0.0103391	t-test	13	*
BL	DT - WB	BR	0.0368129	t-test	12	*
BL	DT - SC	PP	0.0465502	t-test	13	*
BL	DT - SC	HR	0.0577026	t-test	13	
BL	DT - SC	BR	0.0020040	t-test	12	**
BL	P - RB	PP	0.0000257	t-test	14	***

(continued)

Condition	Difference	Measure	p	Test	n	Significance
BL	P - RB	HR	0.1092566	t-test	11	
BL	P - WB	PP	0.0000187	t-test	14	***
BL	P - WB	HR	0.0833217	t-test	11	
BL	P - SC	PP	0.0008398	t-test	13	***
BL	P - SC	HR	0.0068502	t-test	11	**
BL	P - DT	PP	0.0002748	t-test	14	***
BL	P - DT	HR	0.0019303	t-test	11	**
IH	WB - RB	PP	0.0000999	t-test	17	***
IH	WB - RB	HR	0.1185091	Transformed t-test	12	
IH	WB - RB	BR	0.0086109	t-test	16	**
IH	SC - RB	PP	0.0145060	t-test	17	*
IH	SC - RB	HR	0.6094900	Transformed t-test	12	
IH	SC - RB	BR	0.0454605	t-test	16	*
IH	SC - WB	PP	0.2084476	t-test	17	
IH	SC - WB	HR	0.2597084	Transformed t-test	12	
IH	SC - WB	BR	0.0933387	t-test	16	
IH	DT - RB	PP	0.0016239	t-test	17	**
IH	DT - RB	HR	0.5734584	Transformed t-test	12	
IH	DT - RB	BR	0.2969312	t-test	16	
IH	DT - WB	PP	0.9946474	t-test	17	
IH	DT - WB	HR	0.0171595	Transformed t-test	12	*
IH	DT - WB	BR	0.0005234	t-test	16	***
IH	DT - SC	PP	0.3697148	t-test	17	
IH	DT - SC	HR	0.2853287	Transformed t-test	12	
IH	DT - SC	BR	0.3543299	t-test	16	
IH	P - RB	PP	0.0000079	t-test	17	***
IH	P - RB	HR	0.0079289	Transformed t-test	11	**
IH	P - WB	PP	0.0002411	t-test	17	***
IH	P - WB	HR	0.0152592	Transformed t-test	11	*
IH	P - SC	PP	0.0000697	t-test	17	***
IH	P - SC	HR	0.0026035	Transformed t-test	11	**
IH	P - DT	PP	0.0001591	t-test	17	***
IH	P - DT	HR	0.0000458	Transformed t-test	11	***
IL	WB - RB	PP	0.0011525	t-test	17	**
IL	WB - RB	HR	0.0688632	t-test	14	
IL	WB - RB	BR	0.0011096	t-test	15	**
IL	SC - RB	PP	0.0261497	t-test	17	*
IL	SC - RB	HR	0.1422368	t-test	13	
IL	SC - RB	BR	0.2825139	t-test	15	
IL	SC - WB	PP	0.0272285	t-test	17	*
IL	SC - WB	HR	0.0000090	t-test	13	***
IL	SC - WB	BR	0.0029752	t-test	15	**
IL	DT - RB	PP	0.0001960	t-test	17	***
IL	DT - RB	HR	0.7836686	t-test	14	
IL	DT - RB	BR	0.0103798	t-test	15	*
IL	DT - WB	PP	0.5609825	t-test	17	
IL	DT - WB	HR	0.0043171	t-test	14	**

(continued)

Condition	Difference	Measure	p	Test	n	Significance
IL	DT - WB	BR	0.0371126	t-test	15	*
IL	DT - SC	PP	0.0053685	t-test	17	**
IL	DT - SC	HR	0.0676031	t-test	13	
IL	DT - SC	BR	0.0180613	t-test	15	*
IL	P - RB	PP	0.0000487	t-test	15	***
IL	P - RB	HR	0.0110591	t-test	12	*
IL	P - WB	PP	0.0012790	t-test	15	**
IL	P - WB	HR	0.0089131	t-test	12	**
IL	P - SC	PP	0.0000712	t-test	15	***
IL	P - SC	HR	0.0026560	t-test	11	**
IL	P - DT	PP	0.0002236	t-test	15	***
IL	P - DT	HR	0.0009767	t-test	12	***