

Anova of SBW-balsam fir results (past/present)

Emergence date (past/present data)

```
##              Df Sum Sq Mean Sq F value    Pr(>F)
## Site           5   3374    674.8    17.89 3.2e-13 ***
## Residuals     120   4527     37.7
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## Pairwise comparisons using t tests with pooled SD
##
## data:  Emergence and Site
##
##      Site1  Site2  Site3  Site4  Site5
## Site2 0.20440 -      -      -      -
## Site3 1.00000 0.64190 -      -      -
## Site4 0.00574 1.00000 0.02647 -      -
## Site5 2.0e-09 0.00021 2.0e-08 0.01493 -
## Site6 1.5e-08 0.00102 1.4e-07 0.05283 1.00000
##
## P value adjustment method: bonferroni
```

Budburst date (past/present data)

```
##              Df Sum Sq Mean Sq F value    Pr(>F)
## Site           5   1332    266.43    21.72 1.94e-15 ***
## Residuals     120   1472     12.26
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## Pairwise comparisons using t tests with pooled SD
##
## data:  Budburst and Site
##
##      Site1  Site2  Site3  Site4  Site5
## Site2 0.21247 -      -      -      -
## Site3 1.00000 1.00000 -      -      -
## Site4 0.00062 1.00000 0.01185 -      -
## Site5 6.5e-09 0.00050 3.5e-07 0.18502 -
## Site6 3.1e-12 8.8e-07 2.2e-10 0.00155 1.00000
##
## P value adjustment method: bonferroni
```

Mismatch (past/present data)

```
##              Df Sum Sq Mean Sq F value    Pr(>F)
## Site           5   545.7    109.13    11.08 8.7e-09 ***
```

```
## Residuals    120 1182.1    9.85
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## Pairwise comparisons using t tests with pooled SD
##
## data:  Mismatch and Site
##
##           Site1  Site2  Site3  Site4  Site5
## Site2 0.5382 -      -      -      -
## Site3 1.0000 0.5175 -      -      -
## Site4 0.2684 1.0000 0.2572 -      -
## Site5 1.4e-07 0.0014 1.3e-07 0.0038 -
## Site6 0.0042 1.0000 0.0039 1.0000 0.2517
##
## P value adjustment method: bonferroni
```

Emergence date (RCP 2.6)

```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Site           5 305237    61047   3334 <2e-16 ***
## Residuals    7194 131707         18
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## Pairwise comparisons using t tests with pooled SD
##
## data:  Emergence and Site
##
##           Site1  Site2  Site3  Site4  Site5
## Site2 <2e-16 -      -      -      -
## Site3 <2e-16 <2e-16 -      -      -
## Site4 <2e-16 <2e-16 <2e-16 -      -
## Site5 <2e-16 <2e-16 <2e-16 <2e-16 -
## Site6 <2e-16 <2e-16 <2e-16 <2e-16 <2e-16
##
## P value adjustment method: bonferroni
```

Budburst date (RCP 2.6)

```
##           Df Sum Sq Mean Sq F value Pr(>F)
## Site           5  94260    18852   2896 <2e-16 ***
## Residuals    7194  46827         7
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## Pairwise comparisons using t tests with pooled SD
##
## data:  Budburst and Site
##
##           Site1  Site2  Site3  Site4  Site5
## Site2 <2e-16 -      -      -      -
## Site3 <2e-16 <2e-16 -      -      -
```

```
## Site4 <2e-16 <2e-16 <2e-16 - -
## Site5 <2e-16 <2e-16 <2e-16 <2e-16 -
## Site6 <2e-16 <2e-16 <2e-16 <2e-16 1
##
## P value adjustment method: bonferroni
```

Mismatch (RCP 2.6)

```
##              Df Sum Sq Mean Sq F value Pr(>F)
## Site              5  66174    13235    2316 <2e-16 ***
## Residuals       7194   41116         6
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

##
## Pairwise comparisons using t tests with pooled SD
##
## data:  Mismatch and Site
##
##           Site1 Site2 Site3 Site4 Site5
## Site2 <2e-16 -      -      -      -
## Site3 <2e-16 <2e-16 -      -      -
## Site4 <2e-16 <2e-16 <2e-16 -      -
## Site5 <2e-16 <2e-16 <2e-16 <2e-16 -
## Site6 <2e-16 <2e-16 <2e-16 <2e-16 <2e-16
##
## P value adjustment method: bonferroni
```