**Model 11 – AIC 3218.163**

Linear mixed model fit by REML ['lmerMod']

Formula: therm\_t ~ pos\_beh + time\_od + sun + date + hab\_type + (1 | individual)

Data: prelim\_temp

REML criterion at convergence: 3179.3

Scaled residuals:

Min 1Q Median 3Q Max

-3.0066 -0.6316 0.0376 0.5655 4.7729

Random effects:

Groups Name Variance Std.Dev.

individual (Intercept) 0.1684 0.4104

Residual 2.8403 1.6853

Number of obs: 810, groups: individual, 12

Fixed effects:

Estimate Std. Error t value

(Intercept) 1.077e+03 1.200e+02 8.981

pos\_behSt 1.273e+00 2.330e-01 5.462

pos\_behQS 1.455e+00 3.275e-01 4.442

pos\_behQW 1.094e+00 2.591e-01 4.222

pos\_behBp 6.737e-01 2.655e-01 2.538

pos\_behSu 1.170e+00 5.887e-01 1.987

pos\_behVC 6.938e-01 4.074e-01 1.703

time\_odl\_morning 1.277e+00 1.889e-01 6.758

time\_ode\_afternoon 2.480e+00 2.364e-01 10.493

time\_odl\_afternoon 2.931e+00 1.985e-01 14.766

time\_odevening 2.446e+00 2.010e-01 12.170

sun 4.746e-02 3.108e-03 15.271

date -5.920e-02 6.773e-03 -8.741

hab\_typeBMWD 4.186e-01 8.002e-01 0.523

hab\_typeGA 1.243e+00 8.022e-01 1.549

hab\_typeGL 1.157e+00 8.182e-01 1.414

hab\_typeWD 1.124e+00 7.676e-01 1.465

*Confidence Intervals*

2.5 % 97.5 %

.sig01 0.18163457 0.67918164

.sigma 1.59036995 1.75472227

(Intercept) 840.23147915 1309.74088386

pos\_behSt 0.81428992 1.72206389

pos\_behQS 0.80921328 2.08565736

pos\_behQW 0.58641143 1.59456329

pos\_behBp 0.15036040 1.18483312

pos\_behSu 0.02008693 2.30893900

pos\_behVC -0.09995998 1.48342448

time\_odl\_morning 0.90413288 1.64010383

time\_ode\_afternoon 2.01250798 2.93476428

time\_odl\_afternoon 2.53643995 3.31194178

time\_odevening 2.05108311 2.83296557

sun 0.04149852 0.05370248

date -0.07232210 -0.04581272

hab\_typeBMWD -1.15283297 1.96122898

hab\_typeGA -0.30804659 2.81055119

hab\_typeGL -0.43428425 2.74515526

hab\_typeWD -0.36291189 2.62008007

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Estimate | Standard Error | t-value | Confidence | Intervals | Significance |
| Sit | 1.273e+00 | 2.330e-01 | 5.462 | 0.81428992 | 1.72206389 | \* |
| Quadrupedal Stand | 1.455e+00 | 3.275e-01 | 4.442 | 0.80921328 | 2.08565736 | \* |
| Quadrupedal Walk | 1.094e+00 | 2.591e-01 | 4.222 | 0.58641143 | 1.59456329 | \* |
| Bipedalism | 6.737e-01 | 2.655e-01 | 2.538 | 0.15036040 | 1.18483312 | \* |
| Suspensory | 1.170e+00 | 5.887e-01 | 1.987 | 0.02008693 | 2.30893900 | \* |
| Vertical Climb/Cling | 6.938e-01 | 4.074e-01 | 1.703 | -0.09995998 | 1.48342448 |  |
| Late Morning | 1.277e+00 | 1.889e-01 | 6.758 | 0.90413288 | 1.64010383 | \* |
| Early Afternoon | 2.480e+00 | 2.364e-01 | 10.493 | 2.01250798 | 2.93476428 | \* |
| Late Afternoon | 2.931e+00 | 1.985e-01 | 14.766 | 2.53643995 | 3.31194178 | \* |
| Evening | 2.446e+00 | 2.010e-01 | 12.170 | 2.05108311 | 2.83296557 | \* |
| Sun | 4.746e-02 | 3.108e-03 | 15.271 | 0.04149852 | 0.05370248 | \* |
| Date | -5.920e-02 | 6.773e-03 | -8.741 | -0.07232210 | -0.04581272 | \* |
| Bamboo Woodland | 4.186e-01 | 8.002e-01 | 0.523 | -1.15283297 | 1.96122898 |  |
| Gallery Forest | 1.243e+00 | 8.022e-01 | 1.549 | -0.30804659 | 2.81055119 |  |
| Grassland | 1.157e+00 | 8.182e-01 | 1.414 | -0.43428425 | 2.74515526 |  |
| Woodland | 1.124e+00 | 7.676e-01 | 1.465 | -0.36291189 | 2.62008007 |  |

**Model 14 – AIC 3218.819**

Linear mixed model fit by REML ['lmerMod']

Formula: therm\_t ~ pos\_beh + time\_od + sun + date + (1 | individual)

Data: prelim\_temp

REML criterion at convergence: 3188

Scaled residuals:

Min 1Q Median 3Q Max

-3.0346 -0.6326 0.0148 0.5389 4.3625

Random effects:

Groups Name Variance Std.Dev.

individual (Intercept) 0.2512 0.5012

Residual 2.8492 1.6880

Number of obs: 810, groups: individual, 12

Fixed effects:

Estimate Std. Error t value

(Intercept) 1.109e+03 1.215e+02 9.130

pos\_behSt 1.218e+00 2.291e-01 5.315

pos\_behQS 1.414e+00 3.245e-01 4.359

pos\_behQW 1.027e+00 2.530e-01 4.058

pos\_behBp 6.617e-01 2.608e-01 2.537

pos\_behSu 1.096e+00 5.859e-01 1.871

pos\_behVC 6.332e-01 4.038e-01 1.568

time\_odl\_morning 1.297e+00 1.864e-01 6.961

time\_ode\_afternoon 2.529e+00 2.294e-01 11.025

time\_odl\_afternoon 2.911e+00 1.927e-01 15.104

time\_odevening 2.431e+00 1.986e-01 12.241

sun 4.803e-02 2.880e-03 16.677

date -6.093e-02 6.859e-03 -8.882

*Confidence Intervals*

2.5 % 97.5 %

.sig01 0.26416170 0.81031964

.sigma 1.59666140 1.76155706

(Intercept) 866.27717099 1345.80040636

pos\_behSt 0.76562282 1.66078839

pos\_behQS 0.77293185 2.04139556

pos\_behQW 0.52742637 1.51592624

pos\_behBp 0.14716245 1.16584061

pos\_behSu -0.05059927 2.23310952

pos\_behVC -0.15586773 1.41741424

time\_odl\_morning 0.93047369 1.65776136

time\_ode\_afternoon 2.07717006 2.97283045

time\_odl\_afternoon 2.52770012 3.28262676

time\_odevening 2.04160883 2.81600573

sun 0.04246775 0.05379906

date -0.07430029 -0.04721919