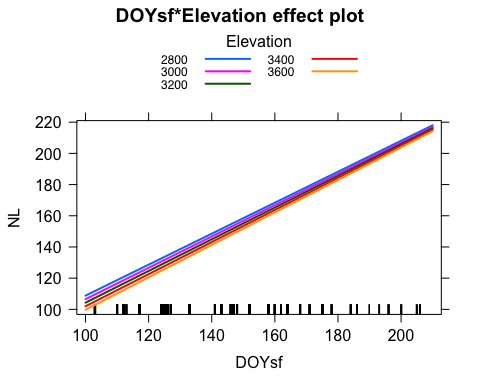
###### 1. NL ~ DOYsf\*Elevation + Species + (1|PlotPair) + (1|Plot\_ID) + (1|Subplot\_ID), data = pheno)

## Warning: Some predictor variables are on very different scales: consider  
## rescaling  
  
## Warning: Some predictor variables are on very different scales: consider  
## rescaling

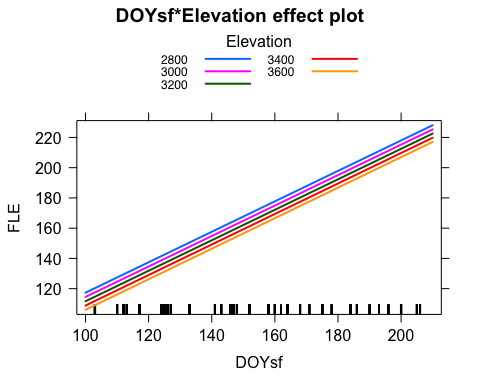


## Type III Analysis of Variance Table with Kenward-Roger's method  
## Sum Sq Mean Sq NumDF DenDF F value Pr(>F)   
## DOYsf 1424.8 1424.77 1 1111.76 84.7313 < 2.2e-16 \*\*\*  
## Elevation 251.7 251.71 1 299.66 14.9694 0.0001341 \*\*\*  
## Species 15190.5 192.28 79 1452.44 11.4350 < 2.2e-16 \*\*\*  
## DOYsf:Elevation 75.3 75.30 1 1092.22 4.4778 0.0345635 \*   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

## Estimate Std. Error df  
## (Intercept) 5.850953e+01 1.375196e+01 262.8203  
## DOYsf 8.255040e-01 8.868072e-02 1081.7473  
## Elevation -1.735095e-02 4.422702e-03 276.0000  
## SpeciesAchnatherum nelsonii -2.998524e+00 9.773104e-01 1449.1370  
## SpeciesAgoseris aurantiaca -3.647416e-01 1.144509e+00 1436.0908  
## SpeciesAgoseris glauca 3.489247e-01 9.582987e-01 1444.4211  
## SpeciesAgoseris sp. 1.983210e+00 1.671820e+00 1436.6913  
## SpeciesAntennaria rosea 1.017619e+01 2.537721e+00 1475.6722  
## SpeciesAquilegia caerulea -7.750797e-01 3.016661e+00 1466.6972  
## SpeciesArnica mollis 2.272156e+00 4.300039e+00 1452.3005  
## SpeciesArnica perryi 4.594122e+00 1.460523e+00 1441.7907  
## SpeciesArtemisia scopulorum 3.247021e+00 3.057665e+00 1435.7089  
## SpeciesArtemisia tridentata 3.606039e+00 8.251925e-01 1434.8793  
## SpeciesBistorta bistortoides 7.595225e+00 1.523062e+00 1451.8156  
## SpeciesBoechera stricta 2.567348e-01 9.515313e-01 1437.1646  
## SpeciesBromelica spectabilis -2.367040e+00 1.316466e+00 1427.8494  
## SpeciesBromopsis lanatipes -4.497935e+00 9.167200e-01 1432.4489  
## SpeciesCalochortus gunnisonii 2.325948e+01 4.204649e+00 1461.4403  
## SpeciesCarex sp. 3.323943e+00 1.850438e+00 1460.1667  
## SpeciesCastilleja sulphurea 2.890112e-01 1.029184e+00 1435.4177  
## SpeciesCeratochloa carinata -1.312410e+00 1.319188e+00 1451.6380  
## SpeciesClaytonia lanciolata -2.516972e+00 9.127414e-01 1438.7611  
## SpeciesDanthonia intermedia 2.885750e+00 2.171196e+00 1444.4021  
## SpeciesDelphinium barbeyi 1.570007e+00 3.010173e+00 1459.7638  
## SpeciesDelphinium nuttallianum -2.727023e+00 7.469424e-01 1437.6737  
## SpeciesDeschampsia cespitosa -1.961524e+00 1.110274e+00 1428.8371  
## SpeciesDraba aurea -2.289872e+00 9.445167e-01 1435.9657  
## SpeciesElymus canadensis 5.402930e-01 2.165669e+00 1444.2654  
## SpeciesElymus lanceolatus -1.749225e+00 1.125144e+00 1442.4328  
## SpeciesErigeron coulteri 2.735801e+00 1.990617e+00 1444.2627  
## SpeciesErigeron glacialis 2.062136e+00 1.315839e+00 1434.8387  
## SpeciesErigeron speciosus 7.652636e-01 7.552134e-01 1441.0004  
## SpeciesEriogonum umbellatum 2.051959e+00 1.277738e+00 1441.0827  
## SpeciesErythronium grandiflorum -1.824060e+00 8.135972e-01 1430.6695  
## SpeciesFestuca earlei -5.801489e-01 1.076255e+00 1433.9284  
## SpeciesFestuca idahoensis -5.651827e+00 2.161320e+00 1462.8008  
## SpeciesFestuca sp. -1.018676e+00 1.118927e+00 1433.5914  
## SpeciesFestuca thurberi -3.221411e+00 1.018608e+00 1435.0557  
## SpeciesFrageria virginiana 2.866109e+00 3.018066e+00 1464.2986  
## SpeciesGalium septentrionale 7.234109e+00 4.181791e+00 1444.1391  
## SpeciesGentianella acuta -2.854788e+00 4.216093e+00 1458.6329  
## SpeciesGeum rossii 1.247021e+00 3.057665e+00 1435.7089  
## SpeciesGeum triflorum -1.138342e+01 3.002071e+00 1461.9826  
## Speciesgram3 -2.649761e+00 2.978370e+00 1444.0012  
## SpeciesHelianthella quinquenervis 2.949247e+00 8.728462e-01 1442.1017  
## SpeciesHeliomeris multiflora 1.436854e+00 9.426721e-01 1441.9728  
## SpeciesHeuchera parvifolia -2.331332e+00 1.058218e+00 1430.6478  
## SpeciesHieracium gracilis 3.460199e+00 2.184119e+00 1444.4055  
## SpeciesHymenoxys hoopesii -3.461704e+00 9.942913e-01 1437.6390  
## SpeciesIpomopsis aggregata 1.932535e+00 1.209713e+00 1458.9454  
## SpeciesJuncus articus 4.944064e-01 1.260418e+00 1451.1782  
## SpeciesLathyrus lanzwertii 1.215770e+00 8.798314e-01 1439.8978  
## SpeciesLigustacum porteri 6.585370e+00 1.256146e+00 1444.9358  
## SpeciesLinum lewisii -2.970422e+00 8.290167e-01 1436.5655  
## SpeciesLupinus argenteus 1.450208e+01 1.063907e+00 1453.4601  
## SpeciesLupinus sp. 6.693399e+00 1.979039e+00 1437.8296  
## SpeciesMertensia fusiformis -9.820642e-02 8.243570e-01 1449.3529  
## SpeciesMoss -1.058337e+00 2.474337e+00 1457.6364  
## SpeciesPhleum alpinum -1.493297e+00 1.205684e+00 1436.2312  
## SpeciesPhleum pratense -4.408093e+00 1.793899e+00 1439.9878  
## SpeciesPoa cusickii -1.178630e+00 1.210867e+00 1439.4933  
## SpeciesPoa leptocoma -1.449107e+00 1.568327e+00 1431.7773  
## SpeciesPoa pratensis -4.929689e+00 8.964600e-01 1427.9142  
## SpeciesPotentilla gracilis -2.706171e+00 7.540909e-01 1438.7601  
## SpeciesPotentilla sp. -1.494989e-01 1.977045e+00 1438.6024  
## SpeciesPseudocymopterus montanus -5.046112e-01 8.507314e-01 1435.4737  
## SpeciesRanunculus inamoenus -2.011154e+00 1.038568e+00 1436.9027  
## SpeciesSenecio crassulus -1.666889e+00 7.756774e-01 1429.4346  
## SpeciesSenecio serra 5.051870e+00 2.476247e+00 1462.4667  
## SpeciesSibaldia procumbens -1.025252e+00 9.721780e-01 1433.8299  
## SpeciesSolidago simplex -3.145736e+00 1.938314e+00 1440.0701  
## SpeciesTaraxacum officinale -2.347879e+00 7.647749e-01 1440.3857  
## SpeciesThalictrum fendleri -1.058693e-01 1.374499e+00 1454.5963  
## SpeciesTragopogon dubius -1.606331e+00 3.001682e+00 1425.4021  
## SpeciesTrisetum spicatum -1.449706e+00 1.266357e+00 1429.8735  
## SpeciesVaccinium cespitosum 2.844725e+00 1.121337e+00 1433.3238  
## SpeciesValeriana edulis -3.245310e+00 3.010542e+00 1461.5506  
## SpeciesValeriana occidentalis -6.806344e+00 9.221299e-01 1432.6822  
## SpeciesVeronica wormskjoldii 1.241547e+00 1.183400e+00 1435.1849  
## SpeciesVicia americana 3.460938e+00 9.432985e-01 1436.2906  
## SpeciesViola adunca 3.394344e-01 1.051055e+00 1435.2223  
## SpeciesViola nuttallii 2.338311e+00 9.266884e-01 1436.1495  
## DOYsf:Elevation 5.986959e-05 2.796750e-05 1061.5334  
## t value Pr(>|t|)  
## (Intercept) 4.25463078 2.914738e-05  
## DOYsf 9.30872062 6.985056e-20  
## Elevation -3.92315660 1.103780e-04  
## SpeciesAchnatherum nelsonii -3.06813880 2.193898e-03  
## SpeciesAgoseris aurantiaca -0.31868829 7.500092e-01  
## SpeciesAgoseris glauca 0.36410849 7.158303e-01  
## SpeciesAgoseris sp. 1.18625777 2.357167e-01  
## SpeciesAntennaria rosea 4.00997225 6.376252e-05  
## SpeciesAquilegia caerulea -0.25693296 7.972666e-01  
## SpeciesArnica mollis 0.52840361 5.973000e-01  
## SpeciesArnica perryi 3.14553176 1.691723e-03  
## SpeciesArtemisia scopulorum 1.06192831 2.884468e-01  
## SpeciesArtemisia tridentata 4.36993698 1.332229e-05  
## SpeciesBistorta bistortoides 4.98681211 6.877215e-07  
## SpeciesBoechera stricta 0.26981220 7.873435e-01  
## SpeciesBromelica spectabilis -1.79802663 7.238396e-02  
## SpeciesBromopsis lanatipes -4.90655226 1.032867e-06  
## SpeciesCalochortus gunnisonii 5.53184851 3.749224e-08  
## SpeciesCarex sp. 1.79630087 7.265332e-02  
## SpeciesCastilleja sulphurea 0.28081581 7.788921e-01  
## SpeciesCeratochloa carinata -0.99486145 3.199695e-01  
## SpeciesClaytonia lanciolata -2.75759651 5.896449e-03  
## SpeciesDanthonia intermedia 1.32910588 1.840229e-01  
## SpeciesDelphinium barbeyi 0.52156700 6.020510e-01  
## SpeciesDelphinium nuttallianum -3.65091459 2.706734e-04  
## SpeciesDeschampsia cespitosa -1.76670232 7.749156e-02  
## SpeciesDraba aurea -2.42438497 1.545711e-02  
## SpeciesElymus canadensis 0.24948081 8.030244e-01  
## SpeciesElymus lanceolatus -1.55466856 1.202444e-01  
## SpeciesErigeron coulteri 1.37434847 1.695467e-01  
## SpeciesErigeron glacialis 1.56716406 1.172968e-01  
## SpeciesErigeron speciosus 1.01330771 3.110833e-01  
## SpeciesEriogonum umbellatum 1.60593178 1.085080e-01  
## SpeciesErythronium grandiflorum -2.24196882 2.511612e-02  
## SpeciesFestuca earlei -0.53904421 5.899400e-01  
## SpeciesFestuca idahoensis -2.61498905 9.014744e-03  
## SpeciesFestuca sp. -0.91040461 3.627622e-01  
## SpeciesFestuca thurberi -3.16256177 1.596626e-03  
## SpeciesFrageria virginiana 0.94965082 3.424464e-01  
## SpeciesGalium septentrionale 1.72990697 8.386055e-02  
## SpeciesGentianella acuta -0.67711702 4.984391e-01  
## SpeciesGeum rossii 0.40783443 6.834560e-01  
## SpeciesGeum triflorum -3.79185484 1.556140e-04  
## Speciesgram3 -0.88966817 3.737923e-01  
## SpeciesHelianthella quinquenervis 3.37888505 7.472154e-04  
## SpeciesHeliomeris multiflora 1.52423477 1.276694e-01  
## SpeciesHeuchera parvifolia -2.20307381 2.774847e-02  
## SpeciesHieracium gracilis 1.58425375 1.133549e-01  
## SpeciesHymenoxys hoopesii -3.48157901 5.133921e-04  
## SpeciesIpomopsis aggregata 1.59751436 1.103676e-01  
## SpeciesJuncus articus 0.39225594 6.949267e-01  
## SpeciesLathyrus lanzwertii 1.38182139 1.672409e-01  
## SpeciesLigustacum porteri 5.24251974 1.819005e-07  
## SpeciesLinum lewisii -3.58306632 3.509275e-04  
## SpeciesLupinus argenteus 13.63096049 6.648621e-40  
## SpeciesLupinus sp. 3.38214668 7.385265e-04  
## SpeciesMertensia fusiformis -0.11913093 9.051881e-01  
## SpeciesMoss -0.42772562 6.689141e-01  
## SpeciesPhleum alpinum -1.23854832 2.157152e-01  
## SpeciesPhleum pratense -2.45726934 1.411697e-02  
## SpeciesPoa cusickii -0.97337645 3.305298e-01  
## SpeciesPoa leptocoma -0.92398292 3.556509e-01  
## SpeciesPoa pratensis -5.49906247 4.517613e-08  
## SpeciesPotentilla gracilis -3.58865315 3.435421e-04  
## SpeciesPotentilla sp. -0.07561732 9.397341e-01  
## SpeciesPseudocymopterus montanus -0.59314982 5.531743e-01  
## SpeciesRanunculus inamoenus -1.93646725 5.300637e-02  
## SpeciesSenecio crassulus -2.14894634 3.180615e-02  
## SpeciesSenecio serra 2.04013191 4.151652e-02  
## SpeciesSibaldia procumbens -1.05459324 2.917891e-01  
## SpeciesSolidago simplex -1.62292374 1.048246e-01  
## SpeciesTaraxacum officinale -3.07002615 2.180414e-03  
## SpeciesThalictrum fendleri -0.07702389 9.386151e-01  
## SpeciesTragopogon dubius -0.53514378 5.926339e-01  
## SpeciesTrisetum spicatum -1.14478425 2.524901e-01  
## SpeciesVaccinium cespitosum 2.53690539 1.128902e-02  
## SpeciesValeriana edulis -1.07798195 2.812197e-01  
## SpeciesValeriana occidentalis -7.38111173 2.650065e-13  
## SpeciesVeronica wormskjoldii 1.04913512 2.942926e-01  
## SpeciesVicia americana 3.66897376 2.524281e-04  
## SpeciesViola adunca 0.32294641 7.467829e-01  
## SpeciesViola nuttallii 2.52329740 1.173319e-02  
## DOYsf:Elevation 2.14068436 3.252680e-02

###### 2. FLE ~ DOYsf\*Elevation + Species + (1|PlotPair) + (1|Plot\_ID) + (1|Subplot\_ID), data = pheno)

## Warning: Some predictor variables are on very different scales: consider  
## rescaling  
  
## Warning: Some predictor variables are on very different scales: consider  
## rescaling



## Type III Analysis of Variance Table with Kenward-Roger's method  
## Sum Sq Mean Sq NumDF DenDF F value Pr(>F)   
## DOYsf 2403.5 2403.53 1 1420.26 101.6150 < 2.2e-16 \*\*\*  
## Elevation 168.9 168.93 1 147.83 7.1421 0.008375 \*\*   
## Species 21578.0 269.72 80 1488.62 11.4032 < 2.2e-16 \*\*\*  
## DOYsf:Elevation 0.2 0.23 1 1408.54 0.0097 0.921647   
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

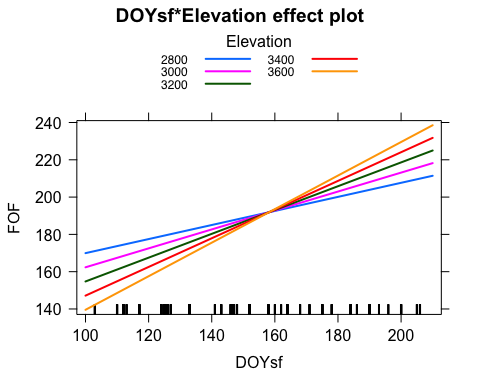
## Estimate Std. Error df  
## (Intercept) 6.124733e+01 1.685803e+01 136.0493  
## DOYsf 9.983588e-01 9.831106e-02 1414.2834  
## Elevation -1.443525e-02 5.358588e-03 143.9532  
## SpeciesAchnatherum nelsonii -4.526036e+00 1.161217e+00 1488.1939  
## SpeciesAgoseris aurantiaca -4.579268e+00 1.359276e+00 1479.6258  
## SpeciesAgoseris glauca -5.026535e+00 1.079263e+00 1483.0751  
## SpeciesAgoseris sp. -2.909728e+00 1.985337e+00 1482.7552  
## SpeciesAntennaria rosea 1.103209e+01 2.637490e+00 1500.9837  
## SpeciesAquilegia caerulea -5.765860e+00 3.588926e+00 1496.8130  
## SpeciesArnica mollis -3.654156e+00 3.735384e+00 1511.8491  
## SpeciesArnica perryi 1.100873e+00 1.803449e+00 1485.3307  
## SpeciesArtemisia scopulorum 3.426839e+00 3.020221e+00 1493.7992  
## SpeciesArtemisia tridentata 1.799867e+00 9.798279e-01 1479.5004  
## SpeciesBistorta bistortoides 1.606072e+00 1.662917e+00 1488.6685  
## SpeciesBoechera stricta -2.757063e+00 1.142120e+00 1479.2505  
## SpeciesBromelica spectabilis -6.426531e+00 1.562442e+00 1476.0505  
## SpeciesBromopsis lanatipes -7.105701e+00 1.088629e+00 1478.6257  
## SpeciesCalochortus gunnisonii 1.276862e+01 5.000115e+00 1496.6205  
## SpeciesCarex sp. 3.946807e-01 2.057271e+00 1508.9812  
## SpeciesCastilleja sulphurea -5.285489e+00 1.205315e+00 1479.5189  
## SpeciesCeratochloa carinata -5.701706e+00 1.568827e+00 1487.8435  
## SpeciesClaytonia lanciolata -9.161285e+00 1.085217e+00 1482.1779  
## SpeciesDanthonia intermedia -2.996984e+00 2.576306e+00 1483.3022  
## SpeciesDelphinium barbeyi 4.693377e+00 3.578794e+00 1492.2160  
## SpeciesDelphinium nuttallianum -8.453228e+00 8.873460e-01 1481.2658  
## SpeciesDeschampsia cespitosa -6.786733e+00 1.296044e+00 1477.5422  
## SpeciesDraba aurea -6.546230e+00 1.120978e+00 1481.4051  
## SpeciesElymus canadensis -3.303337e+00 2.570655e+00 1485.7146  
## SpeciesElymus lanceolatus -6.841348e+00 1.337068e+00 1483.1559  
## SpeciesErigeron coulteri -1.679839e+00 2.594783e+00 1488.7125  
## SpeciesErigeron glacialis -3.211122e+00 1.481498e+00 1480.8835  
## SpeciesErigeron speciosus -4.844573e+00 8.972718e-01 1482.7119  
## SpeciesEriogonum umbellatum -2.275206e+00 1.518047e+00 1481.1232  
## SpeciesErythronium grandiflorum -7.774137e+00 9.718991e-01 1477.3373  
## SpeciesFestuca earlei -4.409919e+00 1.279719e+00 1480.8843  
## SpeciesFestuca idahoensis -3.140234e+00 2.572066e+00 1502.5819  
## SpeciesFestuca sp. -3.106501e+00 1.332427e+00 1480.8828  
## SpeciesFestuca thurberi -4.023266e+00 1.209643e+00 1480.4514  
## SpeciesFrageria virginiana -1.523206e+00 3.594814e+00 1498.1005  
## SpeciesGalium septentrionale 7.387483e-01 4.966666e+00 1483.7040  
## SpeciesGentianella acuta -7.800519e+00 5.004251e+00 1494.8000  
## SpeciesGeum rossii -6.004052e+00 3.003404e+00 1479.4344  
## SpeciesGeum triflorum -5.857449e+00 3.570870e+00 1500.5730  
## Speciesgram3 -5.670217e+00 3.537255e+00 1483.5733  
## SpeciesHelianthella quinquenervis 1.597223e-01 1.020012e+00 1484.1811  
## SpeciesHeliomeris multiflora -3.796339e+00 1.120901e+00 1484.5570  
## SpeciesHeuchera parvifolia -4.251907e+00 1.256388e+00 1477.8447  
## SpeciesHieracium gracilis 5.161120e-01 2.173597e+00 1495.0295  
## SpeciesHymenoxys hoopesii -8.300003e+00 1.182480e+00 1482.1565  
## SpeciesIpomopsis aggregata -2.945441e+00 1.438999e+00 1491.9096  
## SpeciesJuncus articus -6.050096e+00 1.761947e+00 1475.8268  
## SpeciesLathyrus lanzwertii 3.307439e-01 1.045499e+00 1482.5230  
## SpeciesLigustacum porteri 8.249871e+00 1.453788e+00 1487.2360  
## SpeciesLinum lewisii -8.185769e+00 9.908362e-01 1480.7993  
## SpeciesLupinus argenteus 8.316506e+00 1.265276e+00 1489.6640  
## SpeciesLupinus sp. 3.590183e+00 2.345530e+00 1484.4257  
## SpeciesMertensia fusiformis -5.506948e+00 9.874911e-01 1487.6485  
## SpeciesMoss -1.222290e+01 4.966117e+00 1482.2102  
## SpeciesPhleum alpinum -6.341897e+00 1.320164e+00 1479.9120  
## SpeciesPhleum pratense -1.124319e+01 2.129713e+00 1484.8819  
## SpeciesPoa cusickii -6.454196e+00 1.284767e+00 1484.3838  
## SpeciesPoa leptocoma -3.915234e+00 1.860922e+00 1478.3360  
## SpeciesPoa pratensis -5.747479e+00 1.075640e+00 1476.3838  
## SpeciesPotentilla gracilis -2.795451e+00 8.957833e-01 1481.6275  
## SpeciesPotentilla sp. -2.291059e+00 2.038730e+00 1484.4899  
## SpeciesPseudocymopterus montanus -3.458997e+00 9.948587e-01 1480.9131  
## SpeciesRanunculus inamoenus -7.455441e+00 1.255027e+00 1480.5180  
## SpeciesSaxifrage sp. -6.966071e+00 5.008687e+00 1484.1087  
## SpeciesSenecio crassulus -6.640175e+00 9.059247e-01 1476.7917  
## SpeciesSenecio serra 2.403060e+00 2.945275e+00 1494.0236  
## SpeciesSibaldia procumbens -5.238667e+00 1.114636e+00 1478.9449  
## SpeciesSolidago simplex -7.574895e+00 2.121362e+00 1482.0363  
## SpeciesTaraxacum officinale -7.995313e+00 9.166653e-01 1482.7056  
## SpeciesThalictrum fendleri -2.738397e+00 1.634174e+00 1491.0384  
## SpeciesTragopogon dubius -1.103657e+01 3.559447e+00 1478.3857  
## SpeciesTrisetum spicatum -6.446069e+00 1.405705e+00 1478.6460  
## SpeciesVaccinium cespitosum -7.172826e-01 1.269639e+00 1481.2289  
## SpeciesValeriana edulis -2.540722e+00 3.577519e+00 1493.0096  
## SpeciesValeriana occidentalis -1.034710e+01 1.094741e+00 1478.4044  
## SpeciesVeronica wormskjoldii -2.143891e+00 1.287718e+00 1482.7220  
## SpeciesVicia americana -1.395961e+00 1.120113e+00 1482.5711  
## SpeciesViola adunca -1.688927e+00 1.203142e+00 1479.9878  
## SpeciesViola nuttallii -2.295450e+00 1.101382e+00 1480.9937  
## DOYsf:Elevation 3.033866e-06 3.060428e-05 1402.3132  
## t value Pr(>|t|)  
## (Intercept) 3.63312493 3.957735e-04  
## DOYsf 10.15510092 1.957109e-23  
## Elevation -2.69385427 7.902603e-03  
## SpeciesAchnatherum nelsonii -3.89766673 1.014399e-04  
## SpeciesAgoseris aurantiaca -3.36890284 7.740773e-04  
## SpeciesAgoseris glauca -4.65737664 3.489161e-06  
## SpeciesAgoseris sp. -1.46560944 1.429667e-01  
## SpeciesAntennaria rosea 4.18280029 3.046079e-05  
## SpeciesAquilegia caerulea -1.60656973 1.083597e-01  
## SpeciesArnica mollis -0.97825448 3.281050e-01  
## SpeciesArnica perryi 0.61042677 5.416725e-01  
## SpeciesArtemisia scopulorum 1.13463203 2.567116e-01  
## SpeciesArtemisia tridentata 1.83692101 6.642205e-02  
## SpeciesBistorta bistortoides 0.96581632 3.342930e-01  
## SpeciesBoechera stricta -2.41398766 1.589978e-02  
## SpeciesBromelica spectabilis -4.11313296 4.118562e-05  
## SpeciesBromopsis lanatipes -6.52720282 9.183713e-11  
## SpeciesCalochortus gunnisonii 2.55366625 1.075793e-02  
## SpeciesCarex sp. 0.19184673 8.478881e-01  
## SpeciesCastilleja sulphurea -4.38514952 1.240972e-05  
## SpeciesCeratochloa carinata -3.63437543 2.881364e-04  
## SpeciesClaytonia lanciolata -8.44189588 7.330476e-17  
## SpeciesDanthonia intermedia -1.16328706 2.449002e-01  
## SpeciesDelphinium barbeyi 1.31144085 1.899106e-01  
## SpeciesDelphinium nuttallianum -9.52641627 6.377107e-21  
## SpeciesDeschampsia cespitosa -5.23650125 1.872526e-07  
## SpeciesDraba aurea -5.83975016 6.414494e-09  
## SpeciesElymus canadensis -1.28501747 1.989865e-01  
## SpeciesElymus lanceolatus -5.11668025 3.515937e-07  
## SpeciesErigeron coulteri -0.64739085 5.174788e-01  
## SpeciesErigeron glacialis -2.16748280 3.035697e-02  
## SpeciesErigeron speciosus -5.39922514 7.784171e-08  
## SpeciesEriogonum umbellatum -1.49877203 1.341459e-01  
## SpeciesErythronium grandiflorum -7.99891370 2.513673e-15  
## SpeciesFestuca earlei -3.44600609 5.848438e-04  
## SpeciesFestuca idahoensis -1.22089939 2.223157e-01  
## SpeciesFestuca sp. -2.33145971 1.986270e-02  
## SpeciesFestuca thurberi -3.32599566 9.026045e-04  
## SpeciesFrageria virginiana -0.42372321 6.718285e-01  
## SpeciesGalium septentrionale 0.14874127 8.817780e-01  
## SpeciesGentianella acuta -1.55877851 1.192605e-01  
## SpeciesGeum rossii -1.99908253 4.578207e-02  
## SpeciesGeum triflorum -1.64034235 1.011436e-01  
## Speciesgram3 -1.60299940 1.091477e-01  
## SpeciesHelianthella quinquenervis 0.15658862 8.755904e-01  
## SpeciesHeliomeris multiflora -3.38686283 7.254418e-04  
## SpeciesHeuchera parvifolia -3.38423146 7.324614e-04  
## SpeciesHieracium gracilis 0.23744602 8.123433e-01  
## SpeciesHymenoxys hoopesii -7.01914777 3.386506e-12  
## SpeciesIpomopsis aggregata -2.04686777 4.084596e-02  
## SpeciesJuncus articus -3.43375503 6.117600e-04  
## SpeciesLathyrus lanzwertii 0.31635039 7.517811e-01  
## SpeciesLigustacum porteri 5.67474156 1.666941e-08  
## SpeciesLinum lewisii -8.26147518 3.156000e-16  
## SpeciesLupinus argenteus 6.57288012 6.806244e-11  
## SpeciesLupinus sp. 1.53064919 1.260692e-01  
## SpeciesMertensia fusiformis -5.57670580 2.906875e-08  
## SpeciesMoss -2.46125999 1.395824e-02  
## SpeciesPhleum alpinum -4.80387038 1.714201e-06  
## SpeciesPhleum pratense -5.27920455 1.489939e-07  
## SpeciesPoa cusickii -5.02362966 5.684749e-07  
## SpeciesPoa leptocoma -2.10392093 3.555387e-02  
## SpeciesPoa pratensis -5.34331136 1.055810e-07  
## SpeciesPotentilla gracilis -3.12067796 1.839182e-03  
## SpeciesPotentilla sp. -1.12376750 2.612934e-01  
## SpeciesPseudocymopterus montanus -3.47687276 5.219655e-04  
## SpeciesRanunculus inamoenus -5.94046338 3.536764e-09  
## SpeciesSaxifrage sp. -1.39079784 1.644952e-01  
## SpeciesSenecio crassulus -7.32972046 3.782787e-13  
## SpeciesSenecio serra 0.81590342 4.146854e-01  
## SpeciesSibaldia procumbens -4.69989129 2.845162e-06  
## SpeciesSolidago simplex -3.57077017 3.673048e-04  
## SpeciesTaraxacum officinale -8.72217201 7.189072e-18  
## SpeciesThalictrum fendleri -1.67570718 9.400522e-02  
## SpeciesTragopogon dubius -3.10064234 1.967492e-03  
## SpeciesTrisetum spicatum -4.58564953 4.907612e-06  
## SpeciesVaccinium cespitosum -0.56495010 5.721933e-01  
## SpeciesValeriana edulis -0.71019109 4.776966e-01  
## SpeciesValeriana occidentalis -9.45163845 1.257047e-20  
## SpeciesVeronica wormskjoldii -1.66487679 9.614861e-02  
## SpeciesVicia americana -1.24626800 2.128629e-01  
## SpeciesViola adunca -1.40376357 1.605991e-01  
## SpeciesViola nuttallii -2.08415445 3.731715e-02  
## DOYsf:Elevation 0.09913209 9.210476e-01

###### 3. FOF ~ DOYsf\*Elevation + Species + (1|PlotPair) + (1|Plot\_ID) + (1|Subplot\_ID), data = pheno)

## Warning: Some predictor variables are on very different scales: consider  
## rescaling

## boundary (singular) fit: see ?isSingular

## Warning: Some predictor variables are on very different scales: consider  
## rescaling

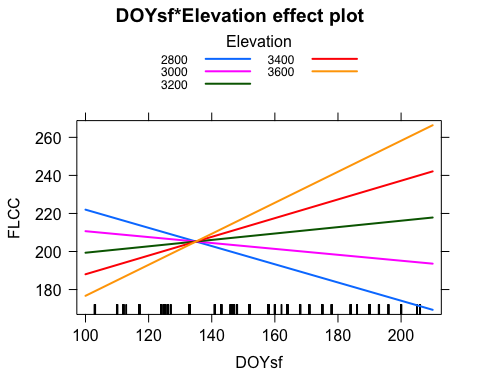


## Type III Analysis of Variance Table with Kenward-Roger's method  
## Sum Sq Mean Sq NumDF DenDF F value Pr(>F)   
## DOYsf 5791 5790.9 1 303.21 78.475 < 2.2e-16 \*\*\*  
## Elevation 14594 14594.1 1 157.80 197.771 < 2.2e-16 \*\*\*  
## Species 396630 5085.0 78 1284.81 68.889 < 2.2e-16 \*\*\*  
## DOYsf:Elevation 12608 12607.9 1 278.70 170.855 < 2.2e-16 \*\*\*  
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

## Estimate Std. Error df  
## (Intercept) 4.360704e+02 23.05362929 124.6628  
## DOYsf -1.452072e+00 0.16073848 230.2092  
## Elevation -1.033131e-01 0.00716429 114.0298  
## SpeciesAchnatherum nelsonii 6.905043e+00 2.83657615 1320.4279  
## SpeciesAgoseris aurantiaca 8.967034e+00 3.51268967 1312.9876  
## SpeciesAgoseris glauca -1.357583e+01 2.61011085 1310.9810  
## SpeciesAgoseris sp. 1.250621e+01 3.52073255 1286.0231  
## SpeciesAquilegia caerulea -2.357692e+01 6.43756649 1318.5212  
## SpeciesArnica mollis -1.697255e+01 6.50786077 1302.8982  
## SpeciesArnica perryi -1.146651e+01 3.69303167 1303.0385  
## SpeciesArtemisia scopulorum -2.237287e+01 8.90809136 1314.2516  
## SpeciesArtemisia tridentata 2.694485e+01 2.58506733 1311.9915  
## SpeciesBistorta bistortoides -1.535817e+01 3.33151377 1316.1904  
## SpeciesBoechera stricta -1.988196e+01 2.68402859 1313.8281  
## SpeciesBromelica spectabilis -5.493459e+00 2.72551087 1283.1917  
## SpeciesBromopsis lanatipes 1.210485e+01 2.74046338 1302.6787  
## SpeciesCalochortus gunnisonii 1.953744e+00 8.88135501 1321.9174  
## SpeciesCarex sp. -2.679669e+01 3.27917315 1306.7895  
## SpeciesCastilleja sulphurea -1.435998e+01 2.74988465 1312.3723  
## SpeciesCeratochloa carinata 1.605339e+01 2.64661378 1286.2578  
## SpeciesClaytonia lanciolata -4.825075e+01 2.57906149 1207.7713  
## SpeciesDanthonia intermedia 1.225076e+01 4.79327096 1320.8445  
## SpeciesDelphinium barbeyi 4.230800e-01 6.43756649 1318.5212  
## SpeciesDelphinium nuttallianum -3.093615e+01 2.45323959 1265.1912  
## SpeciesDeschampsia cespitosa -9.846367e+00 2.70052427 1309.3277  
## SpeciesDraba aurea -3.365899e+01 2.51427354 1315.0454  
## SpeciesElymus canadensis -8.545302e+00 5.38371723 1311.1774  
## SpeciesElymus lanceolatus 1.114164e+01 2.49492379 1267.7377  
## SpeciesErigeron coulteri -7.684615e+00 4.10144547 1266.4921  
## SpeciesErigeron glacialis -1.356450e+01 3.02897861 1312.9005  
## SpeciesErigeron speciosus 2.222100e+00 2.34141504 1290.2831  
## SpeciesEriogonum umbellatum -1.056906e+01 4.06046949 1305.4933  
## SpeciesErythronium grandiflorum -4.119000e+01 2.36764305 1311.7489  
## SpeciesFestuca earlei 5.229399e-01 2.83742613 1193.0612  
## SpeciesFestuca idahoensis 1.755394e+01 6.46162179 1312.2481  
## SpeciesFestuca sp. -5.175885e+00 2.85160437 1317.3343  
## SpeciesFestuca thurberi 6.870173e+00 3.20991491 1307.4082  
## SpeciesFrageria virginiana -2.978463e+01 6.43916829 1318.0345  
## SpeciesGalium septentrionale 6.644433e-01 8.85730693 1317.2520  
## SpeciesGentianella acuta -4.120909e+00 6.44673018 1317.7113  
## SpeciesGeum rossii -3.325698e+01 4.87066504 1263.0304  
## SpeciesGeum triflorum -2.449629e+01 6.45522217 1315.9514  
## Speciesgram3 3.418140e+00 3.51163049 1304.5794  
## SpeciesHelianthella quinquenervis -5.461967e+00 2.73497904 1296.7775  
## SpeciesHeliomeris multiflora 1.082347e+01 2.58450402 1178.4493  
## SpeciesHeuchera parvifolia -2.069479e+01 2.86763631 1303.2501  
## SpeciesHieracium gracilis -1.119585e+01 3.71660142 1315.2259  
## SpeciesHymenoxys hoopesii -1.422098e+01 3.52754598 1237.9711  
## SpeciesIpomopsis aggregata -1.617632e+01 3.40016215 1287.9920  
## SpeciesJuncus articus -2.205639e+01 2.82071036 1319.0263  
## SpeciesLathyrus lanzwertii -2.299811e+01 2.52285014 1282.5363  
## SpeciesLigustacum porteri -1.380704e+01 3.53062377 1267.2901  
## SpeciesLinum lewisii -1.655921e+01 2.55601193 1310.4216  
## SpeciesLupinus argenteus -2.747409e+01 3.45818820 1320.9293  
## SpeciesMertensia fusiformis -4.019505e+01 2.40280356 1255.5324  
## SpeciesMoss -5.588821e+01 8.85547924 1317.6340  
## SpeciesPhleum alpinum -8.034632e+00 2.75102786 1314.0118  
## SpeciesPhleum pratense 8.837723e+00 3.35642419 1321.6889  
## SpeciesPoa cusickii -8.238521e+00 2.68765992 1312.3825  
## SpeciesPoa leptocoma -1.233639e+00 2.86442688 1299.3013  
## SpeciesPoa pratensis -1.263624e+00 2.48367038 1309.9200  
## SpeciesPotentilla gracilis -1.518254e+01 2.34020914 1283.1491  
## SpeciesPotentilla sp. -1.976239e+01 3.90653092 1301.7806  
## SpeciesPseudocymopterus montanus -2.507758e+01 2.51168393 1301.8537  
## SpeciesRanunculus inamoenus -3.690913e+01 2.95076878 1307.5794  
## SpeciesSenecio crassulus -1.387977e+01 2.33170652 1312.4159  
## SpeciesSenecio serra 1.542308e+01 6.43756649 1318.5212  
## SpeciesSibaldia procumbens -3.149031e+01 2.54498566 1311.3048  
## SpeciesSolidago simplex 2.399045e+00 4.37021436 1302.5986  
## SpeciesTaraxacum officinale -2.955285e+01 2.43506393 1294.9328  
## SpeciesThalictrum fendleri -2.390529e+01 3.29891910 1298.7048  
## SpeciesTragopogon dubius -2.427572e+01 8.88270681 1319.5238  
## SpeciesTrisetum spicatum -6.533593e+00 3.33505464 1315.7997  
## SpeciesVaccinium cespitosum -1.987353e+01 3.03366835 1320.2232  
## SpeciesValeriana edulis -8.739228e+00 6.44613410 1308.0802  
## SpeciesValeriana occidentalis -3.902127e+01 2.62687767 1312.6440  
## SpeciesVeronica sp. -5.810381e-01 8.85115673 1318.1262  
## SpeciesVeronica wormskjoldii -1.657355e+01 2.77165209 1312.6230  
## SpeciesVicia americana -2.849129e+01 2.83507908 1289.2191  
## SpeciesViola adunca -2.629068e+01 2.67586233 1308.5027  
## SpeciesViola nuttallii -3.393988e+01 2.65365773 1238.6859  
## DOYsf:Elevation 6.533054e-04 0.00004896 210.6690  
## t value Pr(>|t|)  
## (Intercept) 18.91547660 1.920181e-38  
## DOYsf -9.03375320 6.887606e-17  
## Elevation -14.42056570 1.829242e-27  
## SpeciesAchnatherum nelsonii 2.43428784 1.505293e-02  
## SpeciesAgoseris aurantiaca 2.55275453 1.079981e-02  
## SpeciesAgoseris glauca -5.20124716 2.294723e-07  
## SpeciesAgoseris sp. 3.55216149 3.958935e-04  
## SpeciesAquilegia caerulea -3.66239635 2.597592e-04  
## SpeciesArnica mollis -2.60800707 9.211227e-03  
## SpeciesArnica perryi -3.10490398 1.944440e-03  
## SpeciesArtemisia scopulorum -2.51152180 1.214032e-02  
## SpeciesArtemisia tridentata 10.42326738 1.703707e-24  
## SpeciesBistorta bistortoides -4.60996634 4.418724e-06  
## SpeciesBoechera stricta -7.40750633 2.293373e-13  
## SpeciesBromelica spectabilis -2.01557040 4.405306e-02  
## SpeciesBromopsis lanatipes 4.41708095 1.083350e-05  
## SpeciesCalochortus gunnisonii 0.21998259 8.259187e-01  
## SpeciesCarex sp. -8.17178157 7.108439e-16  
## SpeciesCastilleja sulphurea -5.22203137 2.055825e-07  
## SpeciesCeratochloa carinata 6.06563220 1.725426e-09  
## SpeciesClaytonia lanciolata -18.70864662 8.724480e-69  
## SpeciesDanthonia intermedia 2.55582495 1.070480e-02  
## SpeciesDelphinium barbeyi 0.06572049 9.476103e-01  
## SpeciesDelphinium nuttallianum -12.61032680 1.982153e-34  
## SpeciesDeschampsia cespitosa -3.64609450 2.766935e-04  
## SpeciesDraba aurea -13.38716377 2.076356e-38  
## SpeciesElymus canadensis -1.58724950 1.126973e-01  
## SpeciesElymus lanceolatus 4.46572466 8.690205e-06  
## SpeciesErigeron coulteri -1.87363584 6.121076e-02  
## SpeciesErigeron glacialis -4.47824165 8.179461e-06  
## SpeciesErigeron speciosus 0.94904158 3.427772e-01  
## SpeciesEriogonum umbellatum -2.60291516 9.348217e-03  
## SpeciesErythronium grandiflorum -17.39704663 3.715616e-61  
## SpeciesFestuca earlei 0.18430080 8.538088e-01  
## SpeciesFestuca idahoensis 2.71664658 6.681366e-03  
## SpeciesFestuca sp. -1.81507813 6.973922e-02  
## SpeciesFestuca thurberi 2.14029743 3.251533e-02  
## SpeciesFrageria virginiana -4.62553917 4.103734e-06  
## SpeciesGalium septentrionale 0.07501640 9.402131e-01  
## SpeciesGentianella acuta -0.63922471 5.227879e-01  
## SpeciesGeum rossii -6.82801705 1.334002e-11  
## SpeciesGeum triflorum -3.79480145 1.544752e-04  
## Speciesgram3 0.97337678 3.305465e-01  
## SpeciesHelianthella quinquenervis -1.99707820 4.602536e-02  
## SpeciesHeliomeris multiflora 4.18783150 3.026132e-05  
## SpeciesHeuchera parvifolia -7.21667060 9.017537e-13  
## SpeciesHieracium gracilis -3.01239008 2.641505e-03  
## SpeciesHymenoxys hoopesii -4.03140918 5.882864e-05  
## SpeciesIpomopsis aggregata -4.75751491 2.180931e-06  
## SpeciesJuncus articus -7.81944520 1.079068e-14  
## SpeciesLathyrus lanzwertii -9.11592352 2.925371e-19  
## SpeciesLigustacum porteri -3.91065215 9.692546e-05  
## SpeciesLinum lewisii -6.47853416 1.307325e-10  
## SpeciesLupinus argenteus -7.94464874 4.139043e-15  
## SpeciesMertensia fusiformis -16.72839430 7.292021e-57  
## SpeciesMoss -6.31114456 3.775683e-10  
## SpeciesPhleum alpinum -2.92059292 3.553293e-03  
## SpeciesPhleum pratense 2.63307698 8.560197e-03  
## SpeciesPoa cusickii -3.06531370 2.218802e-03  
## SpeciesPoa leptocoma -0.43067578 6.667756e-01  
## SpeciesPoa pratensis -0.50877286 6.109971e-01  
## SpeciesPotentilla gracilis -6.48768540 1.241601e-10  
## SpeciesPotentilla sp. -5.05880833 4.822540e-07  
## SpeciesPseudocymopterus montanus -9.98436786 1.138138e-22  
## SpeciesRanunculus inamoenus -12.50831052 5.442826e-34  
## SpeciesSenecio crassulus -5.95262300 3.381882e-09  
## SpeciesSenecio serra 2.39579351 1.672315e-02  
## SpeciesSibaldia procumbens -12.37347283 2.435352e-33  
## SpeciesSolidago simplex 0.54895356 5.831314e-01  
## SpeciesTaraxacum officinale -12.13637477 3.516876e-32  
## SpeciesThalictrum fendleri -7.24640189 7.319025e-13  
## SpeciesTragopogon dubius -2.73291955 6.361396e-03  
## SpeciesTrisetum spicatum -1.95906628 5.031595e-02  
## SpeciesVaccinium cespitosum -6.55099109 8.169597e-11  
## SpeciesValeriana edulis -1.35573163 1.754186e-01  
## SpeciesValeriana occidentalis -14.85461894 2.967420e-46  
## SpeciesVeronica sp. -0.06564545 9.476701e-01  
## SpeciesVeronica wormskjoldii -5.97966551 2.878086e-09  
## SpeciesVicia americana -10.04955864 6.280744e-23  
## SpeciesViola adunca -9.82512261 4.964638e-22  
## SpeciesViola nuttallii -12.78984824 2.856091e-35  
## DOYsf:Elevation 13.34365498 7.651392e-30

###### 4. FLCC ~ DOYsf\*Elevation + Species + (1|PlotPair) + (1|Plot\_ID) + (1|Subplot\_ID), data = pheno)

## Warning: Some predictor variables are on very different scales: consider  
## rescaling  
  
## Warning: Some predictor variables are on very different scales: consider  
## rescaling



## Type III Analysis of Variance Table with Kenward-Roger's method  
## Sum Sq Mean Sq NumDF DenDF F value Pr(>F)   
## DOYsf 49410 49410 1 1135.05 234.988 < 2.2e-16 \*\*\*  
## Elevation 36613 36613 1 219.06 174.127 < 2.2e-16 \*\*\*  
## Species 170153 2181 78 1264.49 10.374 < 2.2e-16 \*\*\*  
## DOYsf:Elevation 55257 55257 1 1118.61 262.796 < 2.2e-16 \*\*\*  
## ---  
## Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

## Estimate Std. Error df  
## (Intercept) 874.46342080 5.225759e+01 196.0207  
## DOYsf -5.00654568 3.230621e-01 1122.2541  
## Elevation -0.21833250 1.636143e-02 196.6842  
## SpeciesAchnatherum nelsonii 19.92427894 3.823935e+00 1272.0823  
## SpeciesAgoseris aurantiaca -0.70551258 4.345022e+00 1263.3601  
## SpeciesAgoseris glauca 1.10931794 3.389403e+00 1255.8436  
## SpeciesAgoseris sp. 15.54214369 5.165331e+00 1264.6181  
## SpeciesAntennaria rosea 5.87677476 1.072796e+01 1262.4851  
## SpeciesAquilegia caerulea 6.26686682 1.072107e+01 1284.8721  
## SpeciesArnica mollis 8.13542810 1.099049e+01 1263.0292  
## SpeciesArnica perryi 11.92855464 5.737027e+00 1266.2116  
## SpeciesArtemisia scopulorum 10.35283922 1.085514e+01 1276.3202  
## SpeciesArtemisia tridentata -3.47800478 3.596447e+00 1258.4454  
## SpeciesBistorta bistortoides 2.15777949 4.708462e+00 1265.9927  
## SpeciesBoechera stricta 9.27647911 3.641910e+00 1261.8392  
## SpeciesBromelica spectabilis 17.94047078 3.979621e+00 1261.1510  
## SpeciesBromopsis lanatipes 17.31290938 4.265462e+00 1267.8901  
## SpeciesCalochortus gunnisonii 21.43234535 1.498082e+01 1284.6723  
## SpeciesCarex sp. 10.43712835 5.096170e+00 1270.5222  
## SpeciesCastilleja sulphurea 7.46615384 3.850606e+00 1264.1790  
## SpeciesCeratochloa carinata 19.07895526 3.535043e+00 1267.0931  
## SpeciesClaytonia lanciolata -35.61375461 4.169033e+00 1256.1871  
## SpeciesDanthonia intermedia 11.78917443 7.700794e+00 1260.0707  
## SpeciesDelphinium barbeyi 11.64665877 1.482210e+01 1268.2370  
## SpeciesDelphinium nuttallianum -23.87325834 3.309947e+00 1258.1312  
## SpeciesDeschampsia cespitosa 5.36935813 3.804650e+00 1254.0487  
## SpeciesDraba aurea -4.93221956 3.620471e+00 1260.3538  
## SpeciesElymus canadensis 21.59907115 7.691843e+00 1263.2200  
## SpeciesElymus lanceolatus 25.19067907 3.163135e+00 1258.8510  
## SpeciesErigeron coulteri 0.78480172 6.078450e+00 1261.8241  
## SpeciesErigeron glacialis 6.10769914 4.408272e+00 1254.7424  
## SpeciesErigeron speciosus 13.26918733 2.824592e+00 1264.9094  
## SpeciesEriogonum umbellatum 20.34289882 5.119160e+00 1273.3092  
## SpeciesErythronium grandiflorum -18.71536883 3.669517e+00 1252.8440  
## SpeciesFestuca earlei 14.71625621 3.994152e+00 1259.9729  
## SpeciesFestuca sp. 10.64376964 4.006433e+00 1264.3834  
## SpeciesFestuca thurberi 25.53371300 4.914363e+00 1261.4037  
## SpeciesFrageria virginiana 12.89861231 1.071694e+01 1283.8311  
## SpeciesGalium septentrionale 24.05121015 1.481914e+01 1269.0018  
## SpeciesGentianella acuta 8.08563258 1.064231e+01 1273.3596  
## SpeciesGeum rossii -2.45075923 7.927030e+00 1254.6701  
## SpeciesGeum triflorum -7.09501158 1.065823e+01 1283.5912  
## Speciesgram3 17.34971481 5.608007e+00 1264.1527  
## SpeciesHelianthella quinquenervis 17.53524267 3.275909e+00 1266.9318  
## SpeciesHeliomeris multiflora 17.13824645 3.575172e+00 1260.6643  
## SpeciesHeuchera parvifolia 1.11428968 3.846159e+00 1257.0825  
## SpeciesHieracium gracilis 5.02797356 6.100152e+00 1261.2890  
## SpeciesHymenoxys hoopesii -3.67076870 4.064577e+00 1260.9176  
## SpeciesIpomopsis aggregata 9.10466500 4.938558e+00 1265.6816  
## SpeciesJuncus articus 3.07176207 4.056443e+00 1265.8882  
## SpeciesLathyrus lanzwertii 6.66752626 3.340668e+00 1260.7437  
## SpeciesLigustacum porteri 8.89022809 4.431118e+00 1271.8072  
## SpeciesLinum lewisii 13.68676836 3.196271e+00 1258.8492  
## SpeciesLupinus argenteus 5.42899058 5.336748e+00 1273.8248  
## SpeciesLupinus sp. 10.74162798 1.483935e+01 1263.7619  
## SpeciesMertensia fusiformis -16.52145616 3.909762e+00 1268.5791  
## SpeciesPhleum alpinum 8.04548952 3.809496e+00 1258.1122  
## SpeciesPhleum pratense 24.05932744 5.668336e+00 1278.9944  
## SpeciesPoa cusickii 4.40019188 3.770271e+00 1256.7702  
## SpeciesPoa leptocoma 11.19578235 4.079109e+00 1258.7228  
## SpeciesPoa pratensis 18.95277582 3.322569e+00 1256.8104  
## SpeciesPotentilla fruiticosa 33.73805074 1.481112e+01 1269.0677  
## SpeciesPotentilla gracilis 2.84439797 2.833783e+00 1263.5821  
## SpeciesPotentilla sp. 1.46261589 6.117025e+00 1259.0576  
## SpeciesPseudocymopterus montanus 12.93672191 3.222394e+00 1259.7173  
## SpeciesRanunculus inamoenus 9.26664536 5.628390e+00 1247.7031  
## SpeciesSaxifrage sp. -6.21808912 1.491162e+01 1260.0131  
## SpeciesSenecio crassulus 10.27116727 2.951777e+00 1252.0911  
## SpeciesSenecio serra 23.16208261 7.737885e+00 1286.0260  
## SpeciesSibaldia procumbens 2.36807876 3.418286e+00 1254.5119  
## SpeciesSolidago simplex 21.97072358 6.949726e+00 1265.5105  
## SpeciesTaraxacum officinale 11.08695565 3.468492e+00 1268.4764  
## SpeciesThalictrum fendleri 1.93240810 5.134761e+00 1280.7780  
## SpeciesTrisetum spicatum 3.19304370 5.038571e+00 1254.9226  
## SpeciesVaccinium cespitosum 6.44811537 3.889213e+00 1263.0342  
## SpeciesValeriana edulis 25.20288283 1.483217e+01 1271.5413  
## SpeciesValeriana occidentalis -13.29359684 4.046554e+00 1259.6079  
## SpeciesVeronica wormskjoldii 0.91472525 3.871317e+00 1259.0284  
## SpeciesVicia americana 1.68017211 4.249896e+00 1271.4716  
## SpeciesViola adunca 14.21341426 3.823158e+00 1257.7719  
## SpeciesViola nuttallii 12.81161669 3.862778e+00 1258.4428  
## DOYsf:Elevation 0.00161712 9.863333e-05 1104.6532  
## t value Pr(>|t|)  
## (Intercept) 16.7337100 1.263815e-39  
## DOYsf -15.4971629 3.123111e-49  
## Elevation -13.3443449 2.398797e-29  
## SpeciesAchnatherum nelsonii 5.2104123 2.196220e-07  
## SpeciesAgoseris aurantiaca -0.1623726 8.710384e-01  
## SpeciesAgoseris glauca 0.3272900 7.435031e-01  
## SpeciesAgoseris sp. 3.0089350 2.673527e-03  
## SpeciesAntennaria rosea 0.5477997 5.839263e-01  
## SpeciesAquilegia caerulea 0.5845374 5.589614e-01  
## SpeciesArnica mollis 0.7402242 4.593015e-01  
## SpeciesArnica perryi 2.0792222 3.779780e-02  
## SpeciesArtemisia scopulorum 0.9537271 3.404024e-01  
## SpeciesArtemisia tridentata -0.9670669 3.336964e-01  
## SpeciesBistorta bistortoides 0.4582769 6.468322e-01  
## SpeciesBoechera stricta 2.5471471 1.097863e-02  
## SpeciesBromelica spectabilis 4.5080853 7.149386e-06  
## SpeciesBromopsis lanatipes 4.0588590 5.232995e-05  
## SpeciesCalochortus gunnisonii 1.4306527 1.527730e-01  
## SpeciesCarex sp. 2.0480338 4.076189e-02  
## SpeciesCastilleja sulphurea 1.9389554 5.272907e-02  
## SpeciesCeratochloa carinata 5.3970921 8.077093e-08  
## SpeciesClaytonia lanciolata -8.5424491 3.749509e-17  
## SpeciesDanthonia intermedia 1.5309038 1.260442e-01  
## SpeciesDelphinium barbeyi 0.7857632 4.321530e-01  
## SpeciesDelphinium nuttallianum -7.2125813 9.453648e-13  
## SpeciesDeschampsia cespitosa 1.4112620 1.584154e-01  
## SpeciesDraba aurea -1.3623142 1.733422e-01  
## SpeciesElymus canadensis 2.8080488 5.060973e-03  
## SpeciesElymus lanceolatus 7.9638324 3.702270e-15  
## SpeciesErigeron coulteri 0.1291121 8.972895e-01  
## SpeciesErigeron glacialis 1.3855085 1.661432e-01  
## SpeciesErigeron speciosus 4.6977358 2.917928e-06  
## SpeciesEriogonum umbellatum 3.9738746 7.468072e-05  
## SpeciesErythronium grandiflorum -5.1002262 3.915190e-07  
## SpeciesFestuca earlei 3.6844510 2.389175e-04  
## SpeciesFestuca sp. 2.6566698 7.991013e-03  
## SpeciesFestuca thurberi 5.1957322 2.375905e-07  
## SpeciesFrageria virginiana 1.2035726 2.289767e-01  
## SpeciesGalium septentrionale 1.6229824 1.048415e-01  
## SpeciesGentianella acuta 0.7597627 4.475371e-01  
## SpeciesGeum rossii -0.3091649 7.572475e-01  
## SpeciesGeum triflorum -0.6656840 5.057327e-01  
## Speciesgram3 3.0937398 2.019853e-03  
## SpeciesHelianthella quinquenervis 5.3527863 1.027233e-07  
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## SpeciesHeuchera parvifolia 0.2897149 7.720821e-01  
## SpeciesHieracium gracilis 0.8242374 4.099605e-01  
## SpeciesHymenoxys hoopesii -0.9031122 3.666388e-01  
## SpeciesIpomopsis aggregata 1.8435878 6.547688e-02  
## SpeciesJuncus articus 0.7572552 4.490379e-01  
## SpeciesLathyrus lanzwertii 1.9958664 4.616329e-02  
## SpeciesLigustacum porteri 2.0063174 4.503380e-02  
## SpeciesLinum lewisii 4.2821051 1.991984e-05  
## SpeciesLupinus argenteus 1.0172845 3.092113e-01  
## SpeciesLupinus sp. 0.7238609 4.692851e-01  
## SpeciesMertensia fusiformis -4.2256941 2.552493e-05  
## SpeciesPhleum alpinum 2.1119567 3.488685e-02  
## SpeciesPhleum pratense 4.2445130 2.348855e-05  
## SpeciesPoa cusickii 1.1670758 2.434011e-01  
## SpeciesPoa leptocoma 2.7446634 6.143429e-03  
## SpeciesPoa pratensis 5.7042543 1.455587e-08  
## SpeciesPotentilla fruiticosa 2.2778862 2.289904e-02  
## SpeciesPotentilla gracilis 1.0037457 3.156934e-01  
## SpeciesPotentilla sp. 0.2391058 8.110625e-01  
## SpeciesPseudocymopterus montanus 4.0146313 6.305268e-05  
## SpeciesRanunculus inamoenus 1.6464114 9.993092e-02  
## SpeciesSaxifrage sp. -0.4169962 6.767522e-01  
## SpeciesSenecio crassulus 3.4796559 5.193067e-04  
## SpeciesSenecio serra 2.9933351 2.812138e-03  
## SpeciesSibaldia procumbens 0.6927679 4.885835e-01  
## SpeciesSolidago simplex 3.1613798 1.607503e-03  
## SpeciesTaraxacum officinale 3.1964776 1.425485e-03  
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## SpeciesVaccinium cespitosum 1.6579488 9.757613e-02  
## SpeciesValeriana edulis 1.6992041 8.952534e-02  
## SpeciesValeriana occidentalis -3.2851648 1.047269e-03  
## SpeciesVeronica wormskjoldii 0.2362827 8.132517e-01  
## SpeciesVicia americana 0.3953443 6.926551e-01  
## SpeciesViola adunca 3.7177158 2.098725e-04  
## SpeciesViola nuttallii 3.3166847 9.369209e-04  
## DOYsf:Elevation 16.3952643 3.080217e-54