Bayesian Longitudinal Multilevel Models

true

2021-08-24

Contents

1 Gutten Tree Data

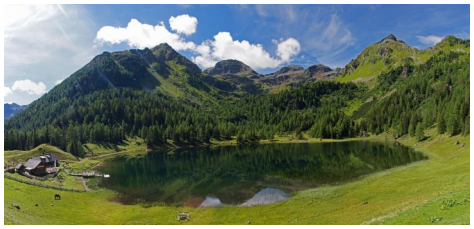

Figure 1: Norway Spruce and Larch Forest in Austrian Alps, https://ec.europa.eu/jrc/en/research-topic/forestry/qr-tree-project/norway-spruce

The data used in this example are derived from the R package *Functions and Datasets for "Forest Analytics with R"*.

According to the documentation, the source of these data are: "von Guttenberg's Norway spruce (Picea abies [L.] Karst) tree measurement data."

The documentation goes on to further note that:

> "The data are measures from 107 trees. The trees were selected as being of average size from healthy and well stocked stands in the Alps."

2 Import The Data

```
## # A tibble: 1,200 x 9
##         site  location  tree age_base height dbh_cm volume age_bh   tree_ID
##    <dbl+lbl> <dbl+lbl> <dbl>    <dbl>  <dbl>  <dbl>  <dbl>  <dbl> <dbl+lbl>
##  1     1 [1]     1 [1]     1       20    4.2    4.6      5   9.67   1 [1.1]
##  2     1 [1]     1 [1]     1       30    9.3   10.2     38  19.7    1 [1.1]
##  3     1 [1]     1 [1]     1       40   14.9   14.9    123  29.7    1 [1.1]
##  4     1 [1]     1 [1]     1       50   19.7   18.3    263  39.7    1 [1.1]
##  5     1 [1]     1 [1]     1       60   23     20.7    400  49.7    1 [1.1]
##  6     1 [1]     1 [1]     1       70   25.8   22.6    555  59.7    1 [1.1]
##  7     1 [1]     1 [1]     1       80   27.4   24.1    688  69.7    1 [1.1]
```