Rail

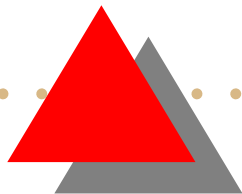## (STATS660.2: Case studies in linear mixed models)

Anonymous

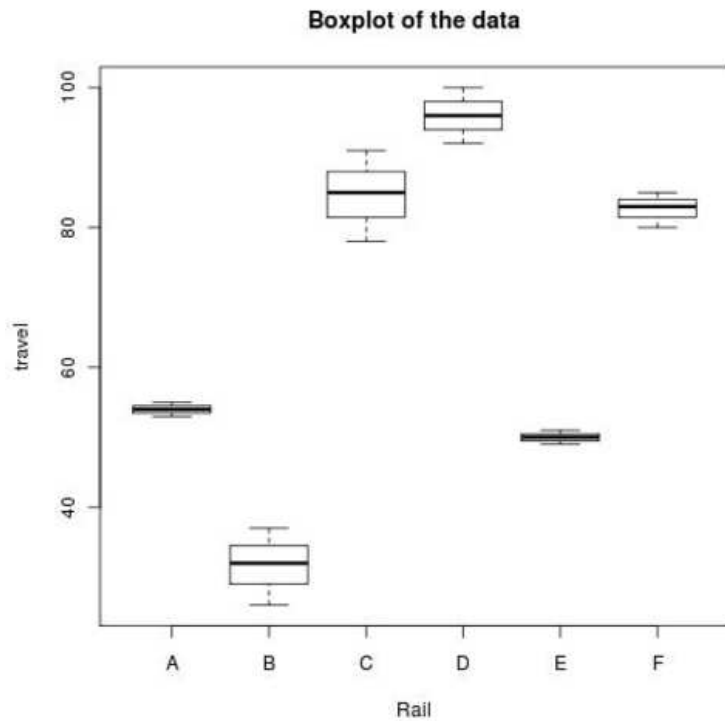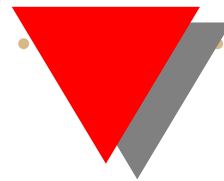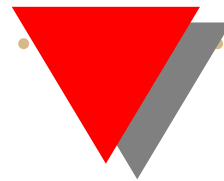# *The Data*

Figure 1: Boxplot of the data

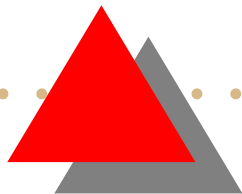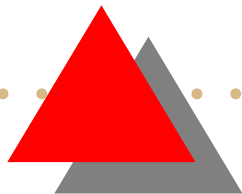# *The Model and Hypothesis*

Matrix formulation

Anova tables, tests and estimates of variance components.

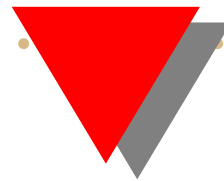# *Estimating equations (for mu and beta) and solutions.*
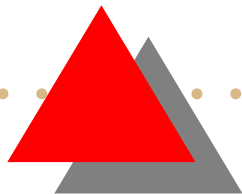
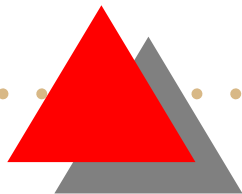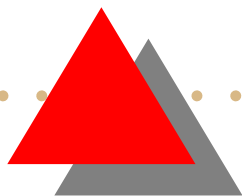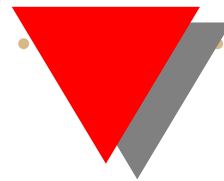# *REML estimates (of variances).*

LRT of hypothesis

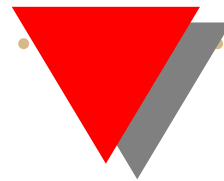# *Estimates with all effects fixed*

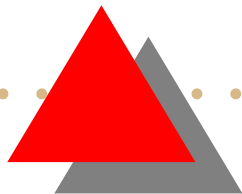# *The SS - formulas in the ANOVA table*
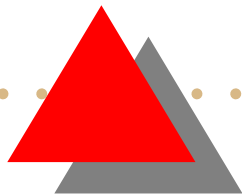
SS computed "by hand"

ML estimates

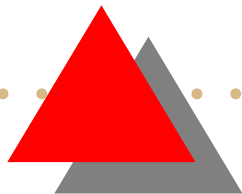# Compare estimates of fixed effects [sl30 vs sl60]

Compare variance and SS estimates [sl25, sl 35, sl55, sl60]

Compare results from assuming fixed vs random effects

Discussion