

Problem n.1

The file `dinosaurs.txt` contains the length (in meters), the geological period and the diet of 274 dinosaurs.

- a) Formulate a complete ANOVA model to check if the treatments period and/or diet are significant. Verify the assumptions and possibly transform the variable length so that the assumptions are reasonably met.
- b) Through appropriate statistical tests, propose a reduced model.
- c) Report the estimates of the parameters of the model at point b).
- d) Provide Bonferroni intervals (global level 95%) for the differences between the mean value of the length belonging to the homogeneous groups identified by the model at point (b). Comment the results.

Upload your results here:

<https://forms.office.com/Pages/ResponsePage.aspx?id=K3EXCvNtXUKAjjCd8ope6-9ASOGWf2lHjvGX24HiqFVUQzNPNEU2SkFRQ1VHQ0dRVkRTNzVHUEhVTi4u>