Data Analysis 2 Prompt

The client is interested in how Starch content is effected by the type of tissues in pine, the treatment (drought and control) and time/dayPeriod when the tissue was collected (and potential interactions). In the data set, the "row" and the "column" describes a physical location where the tissue was collected within a sample. The client recoded these two variables as "chamber" because not all row-column combination was present in the data.

The "time" column in the data set describes a time segment within the "dayPeriod". Hint: Try to fit a model with only considering "dayPeriod" for time effect first, and then you can try to do some nesting with the "time" variable.

Another information that the client provided is that they collected the data in two locations (="campagne" variable in the data set), and they have several samples (located in "sample" column in the data set) within the two locations. The "row" and "column" variables describe the location within the sample (which was recoded as "chamber").

Analyze the data, provide model description and formulation, check assumptions, and answer the client's questions. If you see any effect, investigate further. Present 2-3 models but at the end justify why you would use each or pick your favorite and justify why it is your favorite.