**APPLIED STATISTICS EXAM**

**DATE:** 12/07/2022

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**EXERCISE NUMBER N**

After checking for isotropy and normality (assumed/not assumed, anyway not an hypothesis) I fit a variogram model.

The variogram obtained with a [MODEL SPH GAUS] model and a sill of [PSILL] and a range of [RANGE], nugget? [MODEL ESTIMATES].

Model assumptions: ordinary/kriging.

[FITTED VARIOGRAM MODEL]

Then I use this model to perform the prediction and estimate the parameters.

I predict the [Y] using the first observation of the dataframe as a new observation to estimate [PARAMETERS] using GLS which are [A0, A1].

I predict using this population with kriging (ordinary/kriging) and I obtain a [Y] with a variance of [VARIANCE].

The variance of the prediction is very high, and it is not fully informative of the true uncertainty, since I did an universal kriging.

**POINT A)**

**POINT B)**

**POINT C)**

**POINT D)**