

# LAB: Linear Regression on Whiteside data (2)

2025-03-18

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M1 MIDS/MFA/LOGOS

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```
# We will use the following packages.  
# If needed, install them : pak::pkg_install().  
stopifnot(  
  require("MASS"),  
  require("isotone"),  
  require("magrittr"),  
  require("lobstr"),  
  require("ggforce"),  
  require("patchwork"),  
  require("gt"),  
  require("glue"),  
  require("skimr"),  
  require("corrr"),  
  require("GGally"),  
  require("broom"),  
  require("tidyverse"),  
  require("ggfortify"),  
  require("autoplotly")  
)
```

```
data(whiteside)
```

## Model comparison

### **i** Question

For the Whiteside data, build a linear model where the covariates are the interactions of `Insul` with powers of `Temp` (up to degree 5).

### **i** Question

Compare model `Gas ~ Insul * poly(Temp, 5, raw=T)` with models `Gas ~ Insul + Temp` and `Gas ~ Insul * Temp`.