Normal model

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```
library(dplyr)
library(mlbench)
library(UsingR)
```

Introduction

This Dataset of Ozone is a dataset which contains 13 meteorological variables of , and in this work we will do i dont know, maybe a normal model. The conclusions that we can get is that, if follows a normal distribution and the a priori distribution is i dont know, maybe gamma but i dont know. The distribution a posteriori is gamma? Perhaps

Here we can see a preview of the dataset:

```
#>   V1 V2 V3 V4   V5 V6 V7 V8    V9  V10 V11   V12 V13
#> 1  1  1  4  3 5480  8 20 NA    NA 5000 -15 30.56 200
#> 2  1  2  5  3 5660  6 NA 38    NA   NA -14    NA 300
#> 3  1  3  6  3 5710  4 28 40    NA 2693 -25 47.66 250
#> 4  1  4  7  5 5700  3 37 45    NA  590 -24 55.04 100
#> 5  1  5  1  5 5760  3 51 54 45.32 1450  25 57.02  60
#> 6  1  6  2  6 5720  4 69 35 49.64 1568  15 53.78  60
```

The dataset is originally obtained from: Leo Breiman, Department of Statistics, UC Berkeley. Data used in Leo Breiman and Jerome H. Friedman (1985), Estimating optimal transformations for multiple regression and correlation, JASA, 80, pp. 580-598.

Prior selection

We select the prior mean $\mu = 0.07$ and prior standard deviation $\sigma = 0.05$ for several reasons:

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Codes

conclusions