

# USING VARIABLES

Variables can hold many things,  
allowing you to organize your work

► text, vectors, data-frames,  
arrays, matrices, lists, ...

► fit results

► plot characteristics

## Examples

► Create data-frames to hold data  
for plots.

► Include new variables in the  
relevant data-frames.

► When fitting, save the results in  
unique variables.

R input and response:

```
## lm() is linear-model fit
fit1 <- lm (GGALTB ~ GGALT, data=Data)
summary(fit1)
##
## Call:
## lm(formula = GGALTB ~ GGALT, data = Data)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.77737 -0.00101 -0.00004  0.00094  0.37749
##
## Coefficients:
##              Estimate Std. Error  t value Pr(>|t|)
## (Intercept) -1.936e-03  4.312e-04 -4.491e+00 7.14e-05
## GGALT        1.000e+00  3.539e-08  2.826e+07 < 2e-16
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.01321 on 21359 degrees of freedom
## Multiple R-squared:  1, Adjusted R-squared:
## F-statistic: 7.986e+14 on 1 and 21359 DF, p-value:
## coefficients(fit1) # or summary(fit1)$coefficients
## (Intercept)          GGALT
## -0.00193629  1.00000016
```