ERP figures

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R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
library(erpR)
```

```
## Loading required package: rpanel
## Loading required package: tcltk
## Package `rpanel', version 1.1-3: type help(rpanel) for summary information
```

```
library(R.matlab)
```

```
## R.matlab v3.6.1 (2016-10-19) successfully loaded. See ?R.matlab for help.
##
## Attaching package: 'R.matlab'
## The following objects are masked from 'package:base':
##
##     getOption, isOpen
```

```
library(dplyr)
```

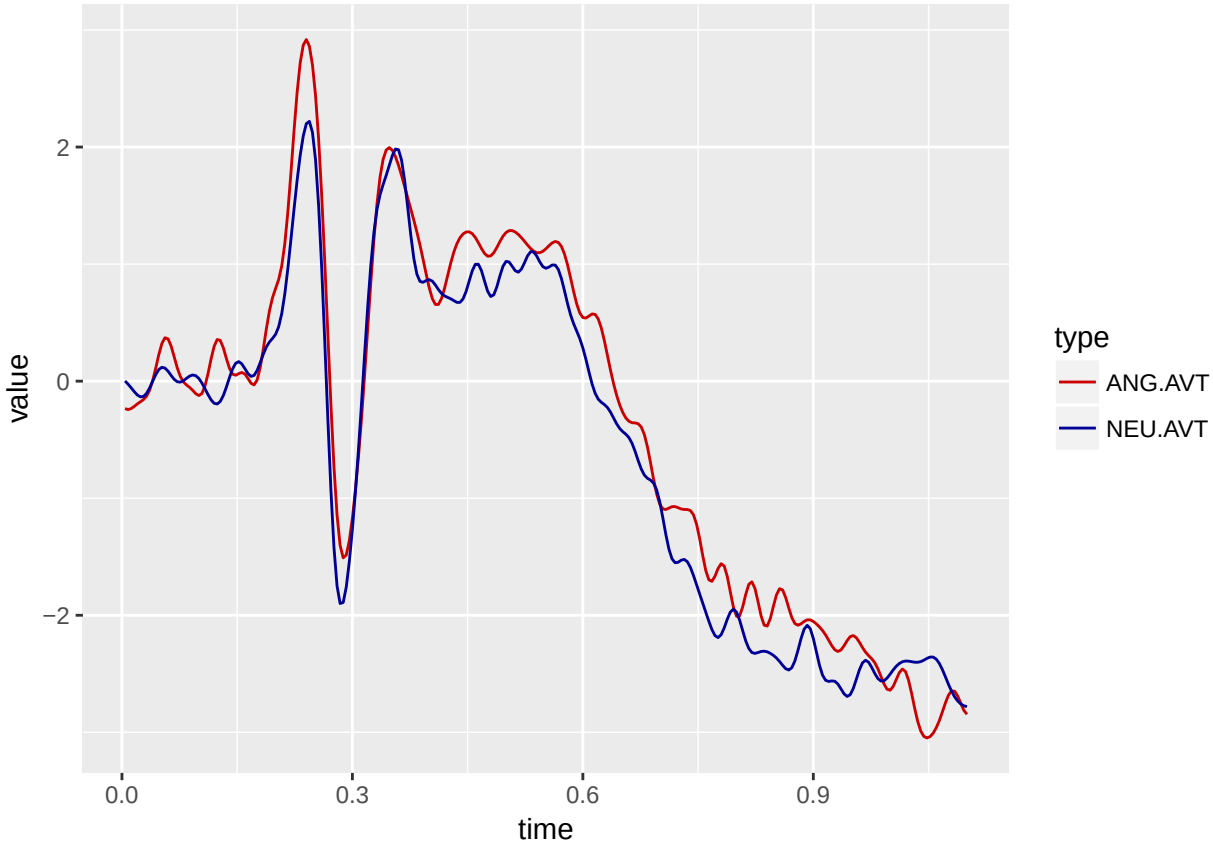
```
##
## Attaching package: 'dplyr'
## The following objects are masked from 'package:stats':
##
##     filter, lag
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
# imported data: rows = electrodes, columns = time points, entries = signal amplitudes
n28 <- readMat("n28_ave_ref_blc_dif_ave.mat")
# angry averted P7 channel 58
ang.avt <- n28$Angry.Averted.Average.multiple.subjects %>% data.frame()
names(ang.avt) <- c(1:275)
P7.ang.avt <- c(ang.avt[58,]) %>% as.numeric()
time <- c(1:275) %>% as.numeric() %>% time*4/1000
type.ang <- c(rep("ANG.AVT", 275))
P7.ang.avt.frame <- data.frame(time, P7.ang.avt, type.ang)
names(P7.ang.avt.frame) <- c("time", "value", "type")
# neutral averted P7 channel 58
neu.avt <- n28$Neutral.Averted.Average.multiple.subjects %>% data.frame()
names(neu.avt) <- c(1:275)
```

```
P7.neu.avt <- c(neu.avt[58,]) %>% as.numeric()
type.neu <- c(rep("NEU.AVT", 275))
P7.neu.avt.frame <- data.frame(time, P7.neu.avt, type.neu)
names(P7.neu.avt.frame) <- c("time", "value", "type")
# P7 channel 58 with both conditions
P7 <- rbind(P7.ang.avt.frame, P7.neu.avt.frame)
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.