## $102008\_Axcpt\_singleNEUROIMAGING.rnw$

compiled November 27, 2018

This file summarizes 102008's behavioral performance on the DMCC Axcpt task, NEUROIMAGING version.

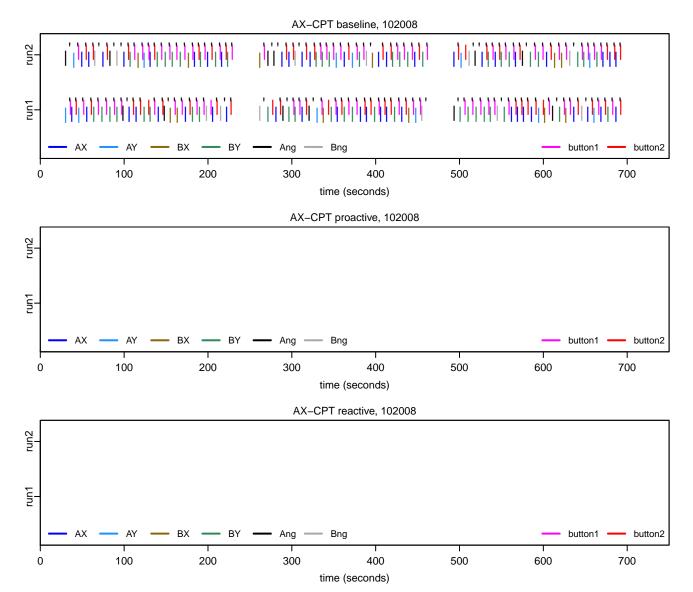
## Quality Control: expected stimuli and responses?

The first block of code reads in the eprime output files (e-recovery or .csv), and then checks whether the expected number and types of trials was present in each run and block. Unless a run was known to end early, any error messages printed below should be investigated.

## [1] "Found an error in the AX-CPT trial counting or stimulus matching? FALSE"

These plots show the time and type of every trial (blues and greens) and response (reds); black tick marks indicate correct trials. The trial types and responses should be random (e.g., not an entire block of AX), and errors should be approximately equal across the runs (check if a participant appears to have stopped responding or suddenly increased in errors).

To increase visibility of the different trial-type colors, AX and BY are plotted in the center, AY and BX a little below, and Ang and Bng a bit above. There are tick marks (indicating correct responses) for no-go trials without a response (since no response is correct).



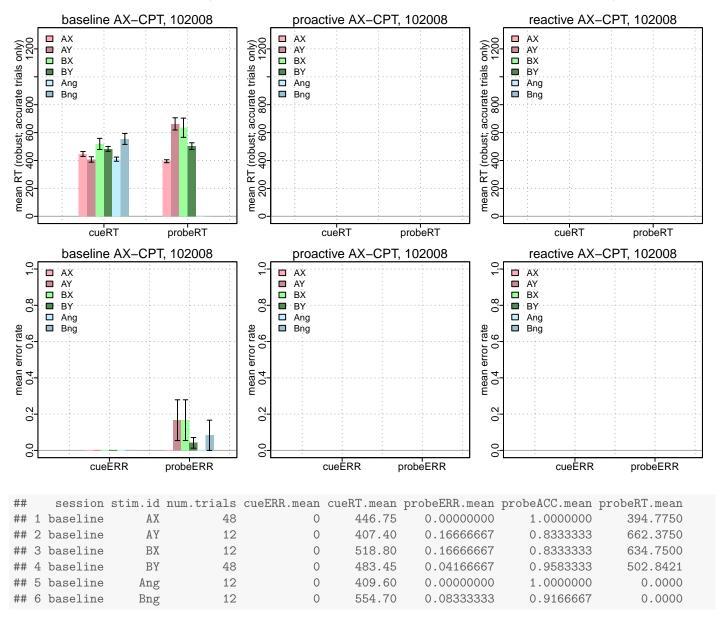
## Single-subject statistics for 102008

ACC is accuracy rate; ERR is error rate. Plot error bars are standard error of the mean.

cue: We hope for consistent RT and consistently low error rates (high accuracy) across sessions and trial types.

probe: We hope that the error rate will be higher and RT slower on AY and BX trials than AX and BY trials.

Robust statistics for RT? TRUE (Robust statistics never used for ERR, since typically very few errors.)



## AX-CPT derived measures for 102008

Robust statistics for RT? TRUE (Only used for RT mean calculations.)

```
## [1] "AX-CPT accuracy-based derived measures"
     session.id Acue.bias BX.interference dprime.context PBI.errors
## 1
      baseline 0.7246671
                               0.7656155
                                               3.188182
## 2
           <NA>
                      NA
                                      NA
                                                     NA
                                                                 NA
## 3
           <NA>
                      NA
                                      NA
                                                     NA
                                                                NA
## [1] ""
## [1] "AX-CPT RT derived measures"
     session.id BX.interference.RT
                                     PBI.RT BX.interference.RTnorm PBI.RTnorm
                                                         0.7301811 0.09505376
       baseline
                         131.9079 0.0212971
## 1
## 2
          <NA>
                                                                 NA
                               NA
                                         NA
                                                                            NA
## 3
          <NA>
                               NA
                                         NA
                                                                NA
                                                                            NA
```