165032_Axcpt_singleNEUROIMAGING.rnw
compiled November 27, 2018
This file summarizes 165032's behavioral performance on the DMCC Axcpt task, NEUROIMAGING version.

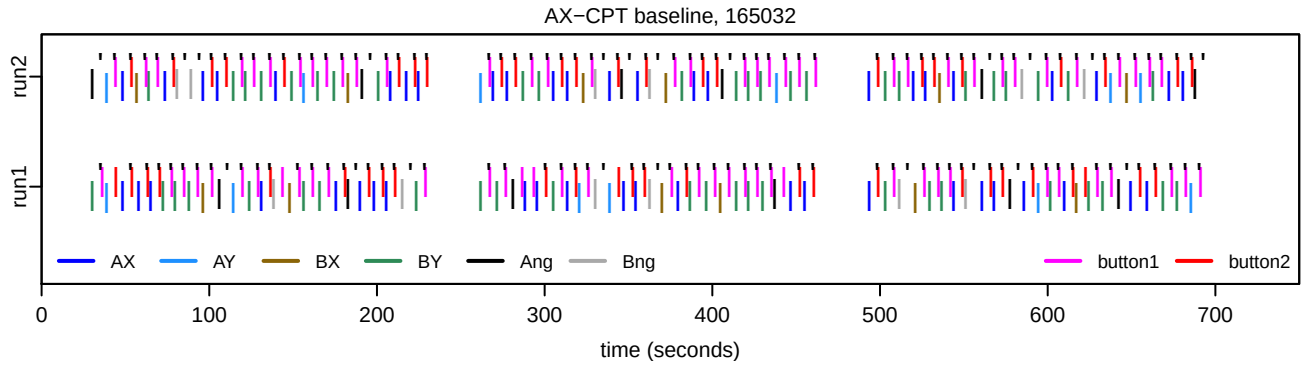
Quality Control: expected stimuli and responses?

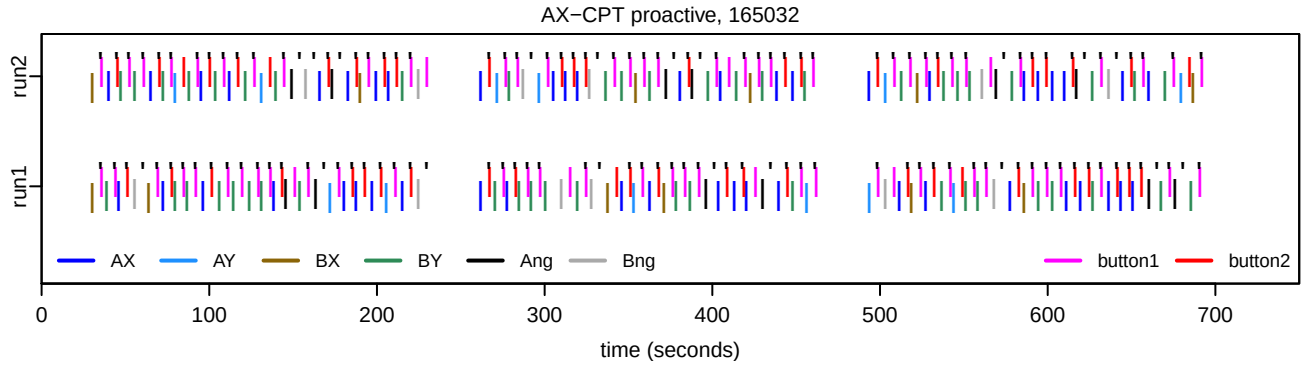
The first block of code reads in the eprime output files (e-recovery or .csv), and then checks whether the expected number and types of trials was present in each run and block. Unless a run was known to end early, any error messages printed below should be investigated.

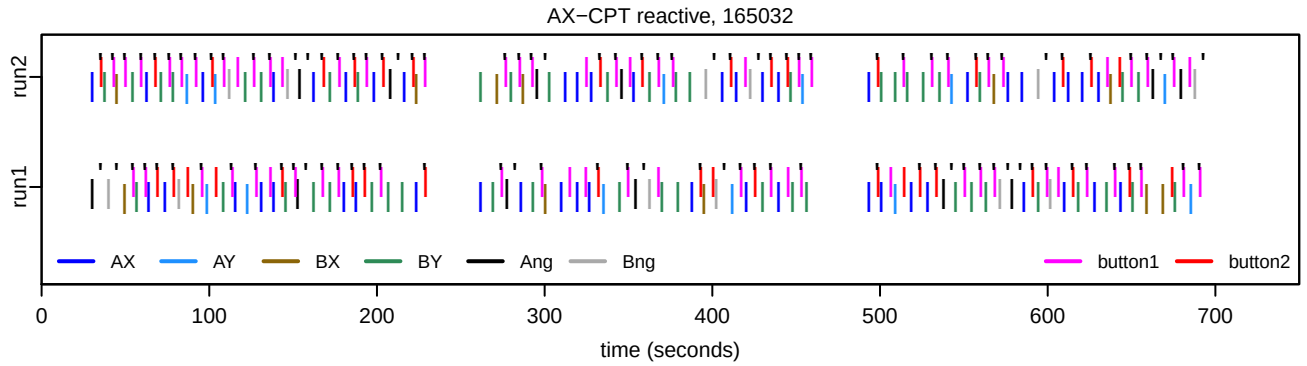
```
## [1] "Found an error in the AX-CPT trial counting or stimulus matching? FALSE"
```

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).

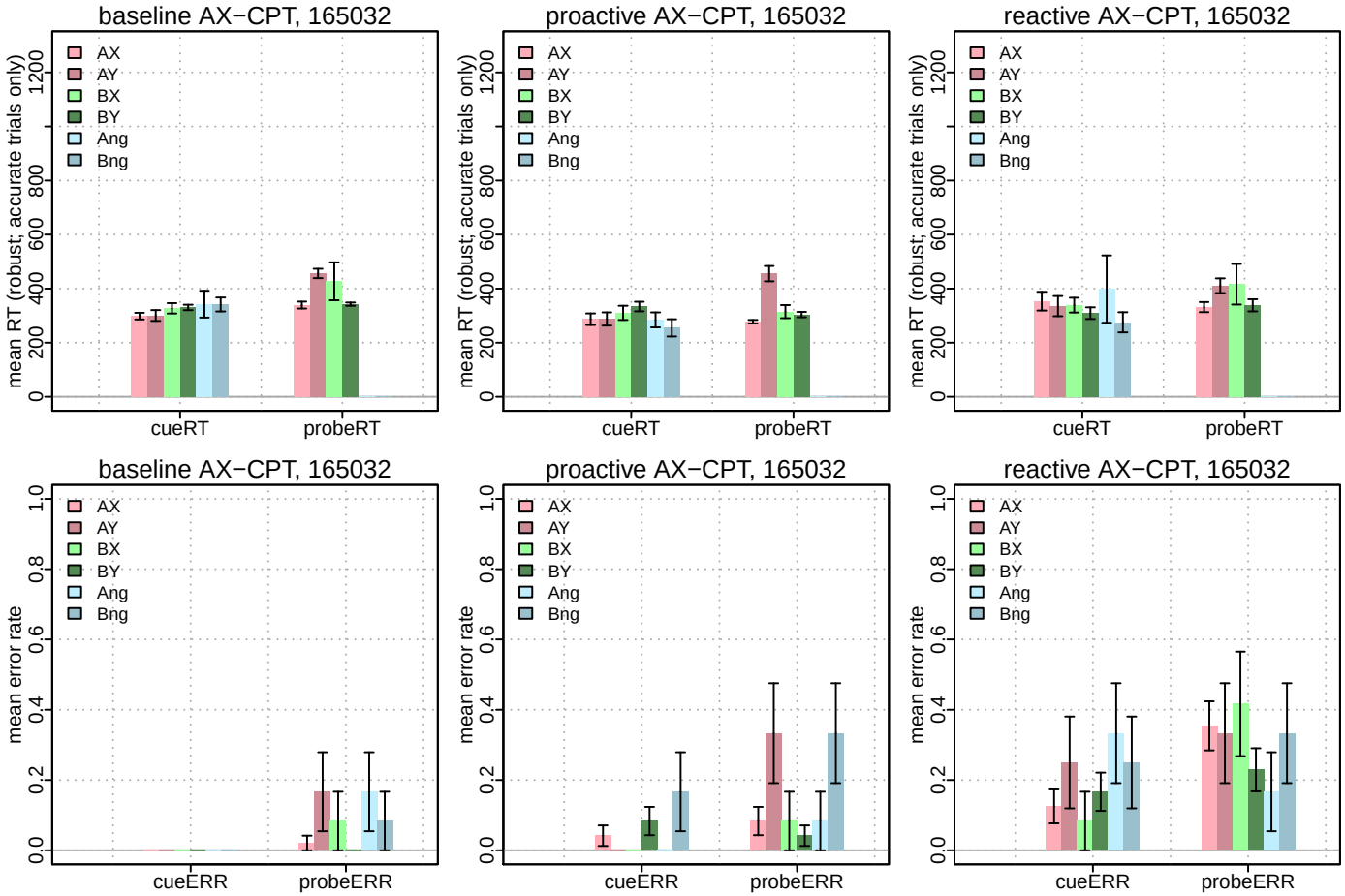






Single-subject statistics for 165032

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.)




```
##      session stim.id num.trials cueERR.mean cueRT.mean probeERR.mean probeACC.mean probeRT.mean
## 1   baseline      AX         48  0.00000000   298.2750    0.02083333     0.9791667     339.1795
## 2   baseline      AY         12  0.00000000   300.6000    0.16666667     0.8333333     456.2500
## 3   baseline      BX         12  0.00000000   327.2000    0.08333333     0.9166667     427.1111
## 4   baseline      BY         48  0.00000000   330.4000    0.00000000     1.0000000     342.6500
## 5   baseline     Ang         12  0.00000000   342.5000    0.16666667     0.8333333       0.0000
## 6   baseline     Bng         12  0.00000000   341.4000    0.08333333     0.9166667       0.0000
## 7  proactive      AX         48  0.04166667   286.8421    0.08333333     0.9166667     277.4722
## 8  proactive      AY         12  0.00000000   287.7000    0.33333333     0.6666667     455.5000
## 9  proactive      BX         12  0.00000000   310.3000    0.08333333     0.9166667     314.8889
## 10 proactive      BY         48  0.08333333   333.7778    0.04166667     0.9583333     303.9737
## 11 proactive     Ang         12  0.00000000   284.3000    0.08333333     0.9166667       0.0000
## 12 proactive     Bng         12  0.16666667   254.8750    0.33333333     0.6666667       0.0000
## 13  reactive      AX         48  0.12500000   353.6471    0.35416667     0.6458333     331.6800
## 14  reactive      AY         12  0.25000000   335.3333    0.33333333     0.6666667     410.8750
## 15  reactive      BX         12  0.08333333   339.0000    0.41666667     0.5833333     416.2857
## 16  reactive      BY         48  0.16666667   309.2188    0.22916667     0.7708333     338.2903
## 17  reactive     Ang         12  0.33333333   398.3750    0.16666667     0.8333333       0.0000
## 18  reactive     Bng         12  0.25000000   275.4444    0.33333333     0.6666667       0.0000
```

AX-CPT derived measures for 165032

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  0.50122348       1.1203783      3.0702504       0.25
## 2  proactive  0.46690191       0.4366596      2.5279088       0.50
## 3   reactive -0.01480947       0.5294474      0.5601345      -0.10
## [1] ""
## [1] "AX-CPT RT derived measures"
##   session.id BX.interference.RT      PBI.RT BX.interference.RTnorm  PBI.RTnorm
## 1   baseline           84.46111  0.03298638              0.8004726  0.21594224
## 2  proactive           10.91520  0.18251965              0.1161006  0.95804331
## 3   reactive           77.99539 -0.00654131              0.5106798 -0.05020955
```