Preliminary Photometry Results: Proper Statistics
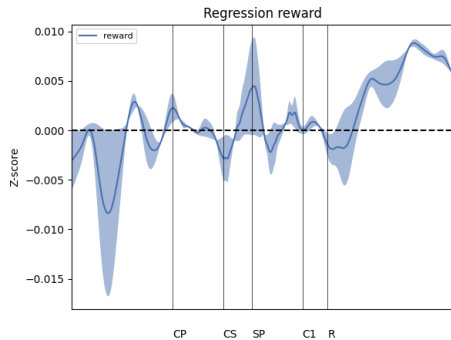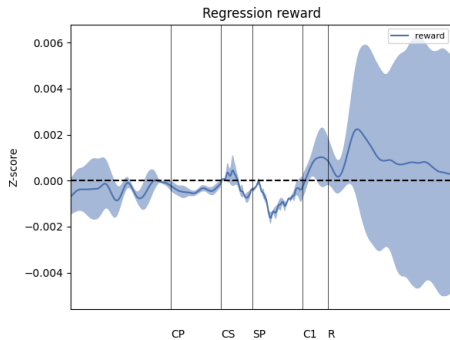
Beren Millidge
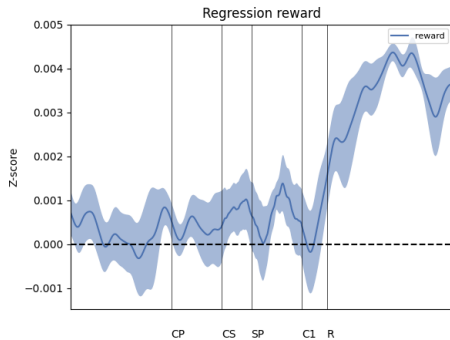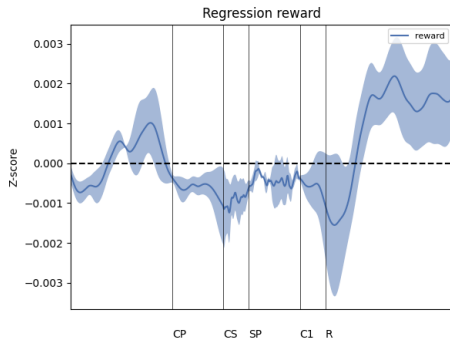
September 24, 2022

General Updates

- I think I'm now doing the regression analysis properly – each subject is fit separately and then we average / get standard deviations of the coefficients together. Also I'm putting everything directly into the GLM

- Results for the reward seem reasonable, although we have some more early pre-reward activity than in Juans data (I think). D1 DMS becomes highly variable but low mean after reward and I think this might relate to Juan's data where he had 1 subject who had a strong response in the other direction to reward?

- Strong responses to correct choice or not in the right window everywhere but D1 DMS

- Some different responses to force or free choice but no obvious patterns (to me)

- Surprisingly, no apparent effect of hemisphere (the z-scores are tiny!) – not sure why

- Some effects of repeated choice. Clean looking effects in D1 DLS.
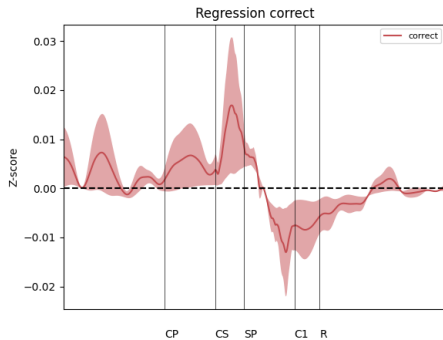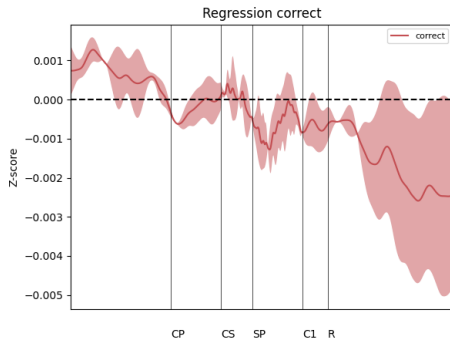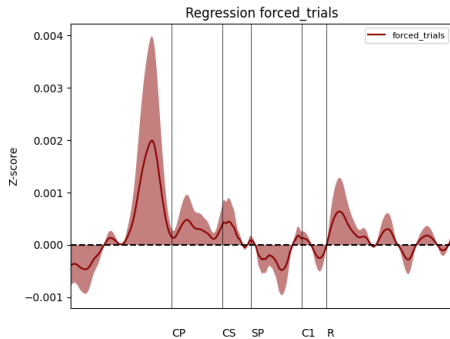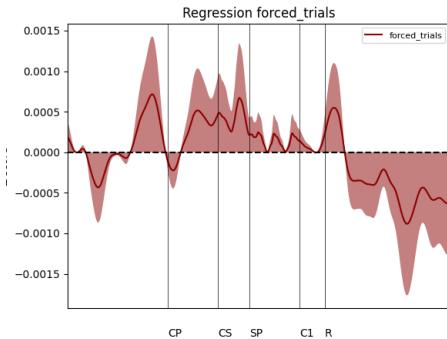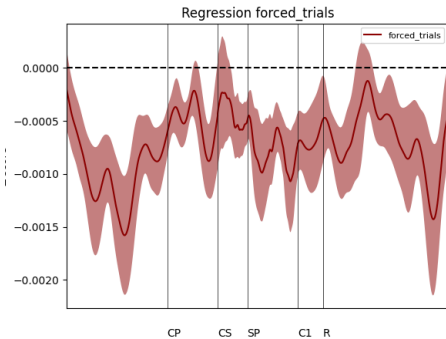
Reward Coefficient D1
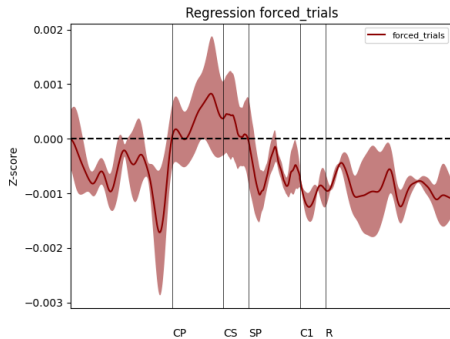
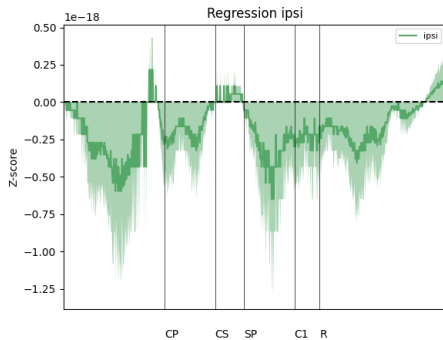# Reward Coefficient D2

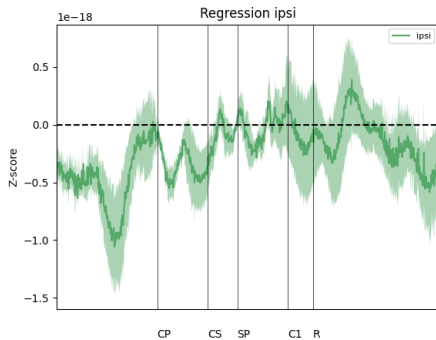# D1 Correct Coefficient

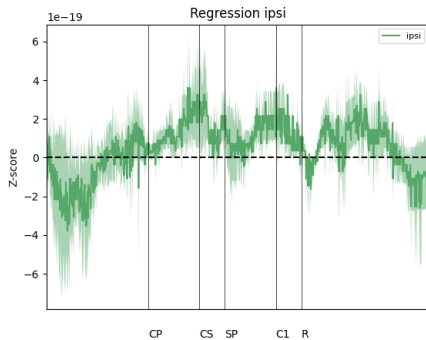# D2 Correct Coefficient
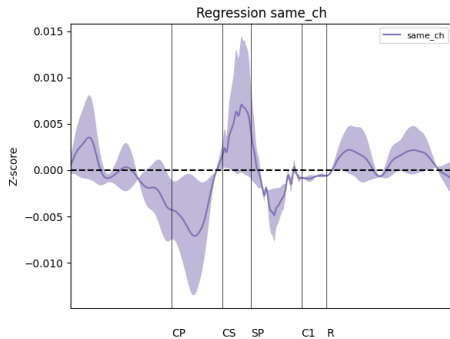
D1 Force vs Free Trials
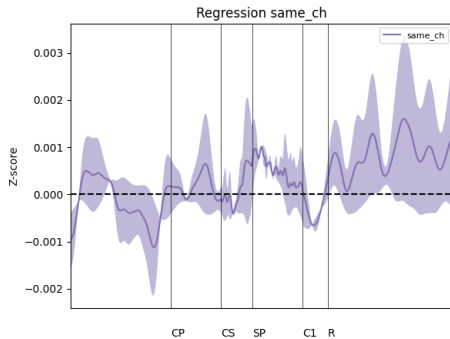
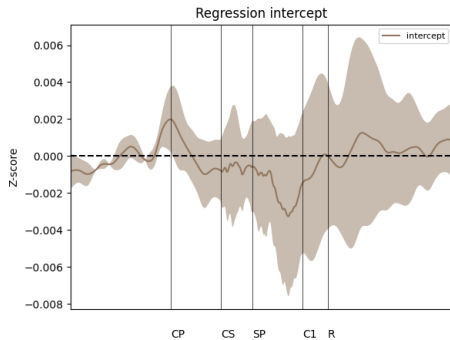# D2 Free vs Force Trials

D1 Ipsi vs Contra

D2 Ipsi vs Contra

D1 Repeat Choice

D2 Repeat Choice

D1 Intercept

D2 Intercept