

VMH LepRb-Vglut2 hM3Dq CLAMS

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Plotting and analyzing CLAMS data from the Core for Vglut2-Flp;Lepr-Cre mice that Paul injected with his Flp+Cre hM3Dq virus.

Overview

There are 8 mice that were subjected to the regimen of 2 days of 2 saline injections, followed by 2 days of 2 CNO injections.

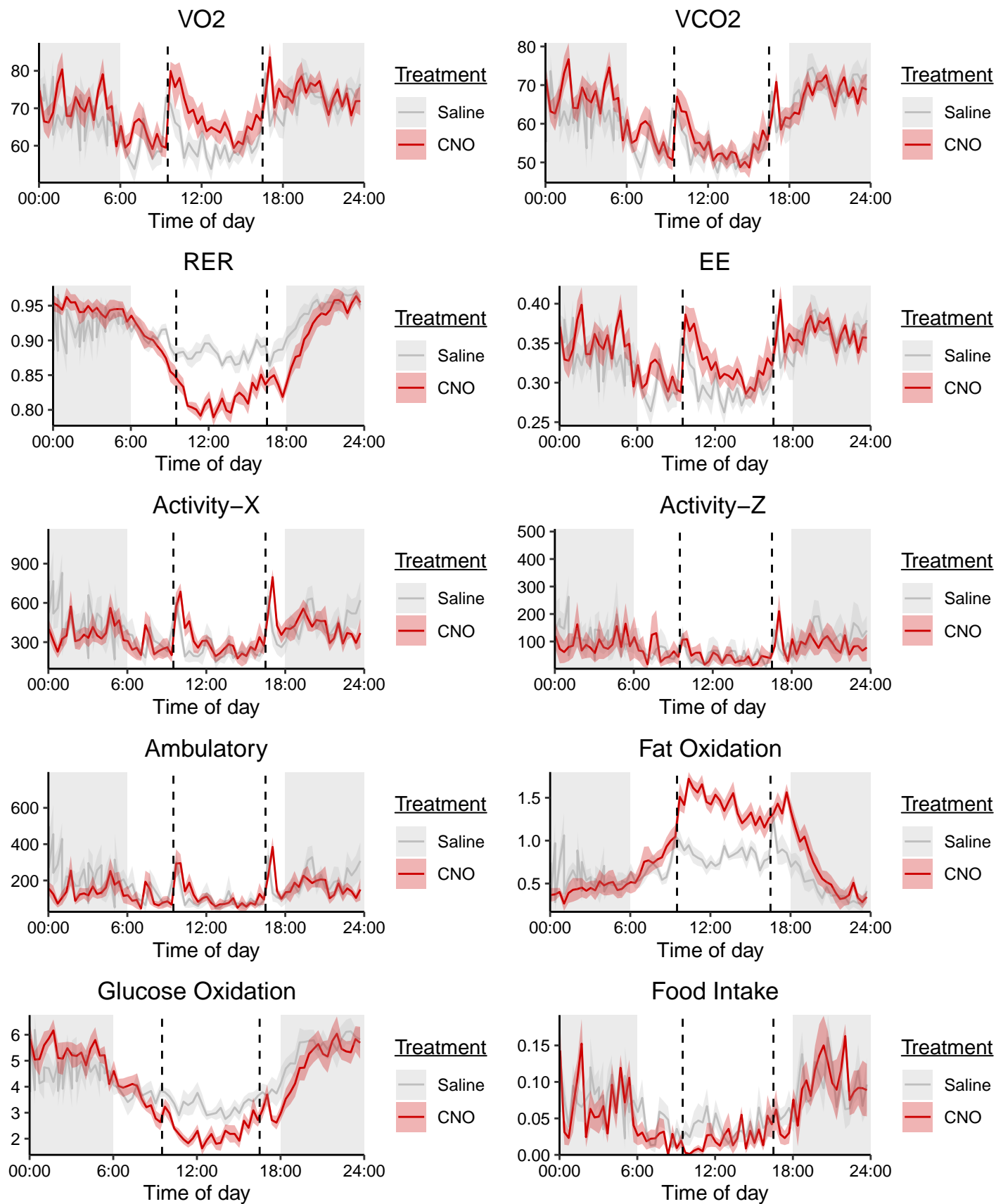
Table 1: Experiment full days

| Mouse | 2019-09-16 | 2019-09-17 | 2019-09-18 | 2019-09-19 |
|-------|------------|------------|------------|------------|
| 306 | Saline | Saline | CNO | CNO |
| 307 | Saline | Saline | CNO | CNO |
| 308 | Saline | Saline | CNO | CNO |
| 309 | Saline | Saline | CNO | CNO |
| 310 | Saline | Saline | CNO | CNO |
| 312 | Saline | Saline | CNO | CNO |
| 798 | Saline | Saline | CNO | CNO |
| NT | Saline | Saline | CNO | CNO |

Injectons were performed at 9:30am and 4:30pm.

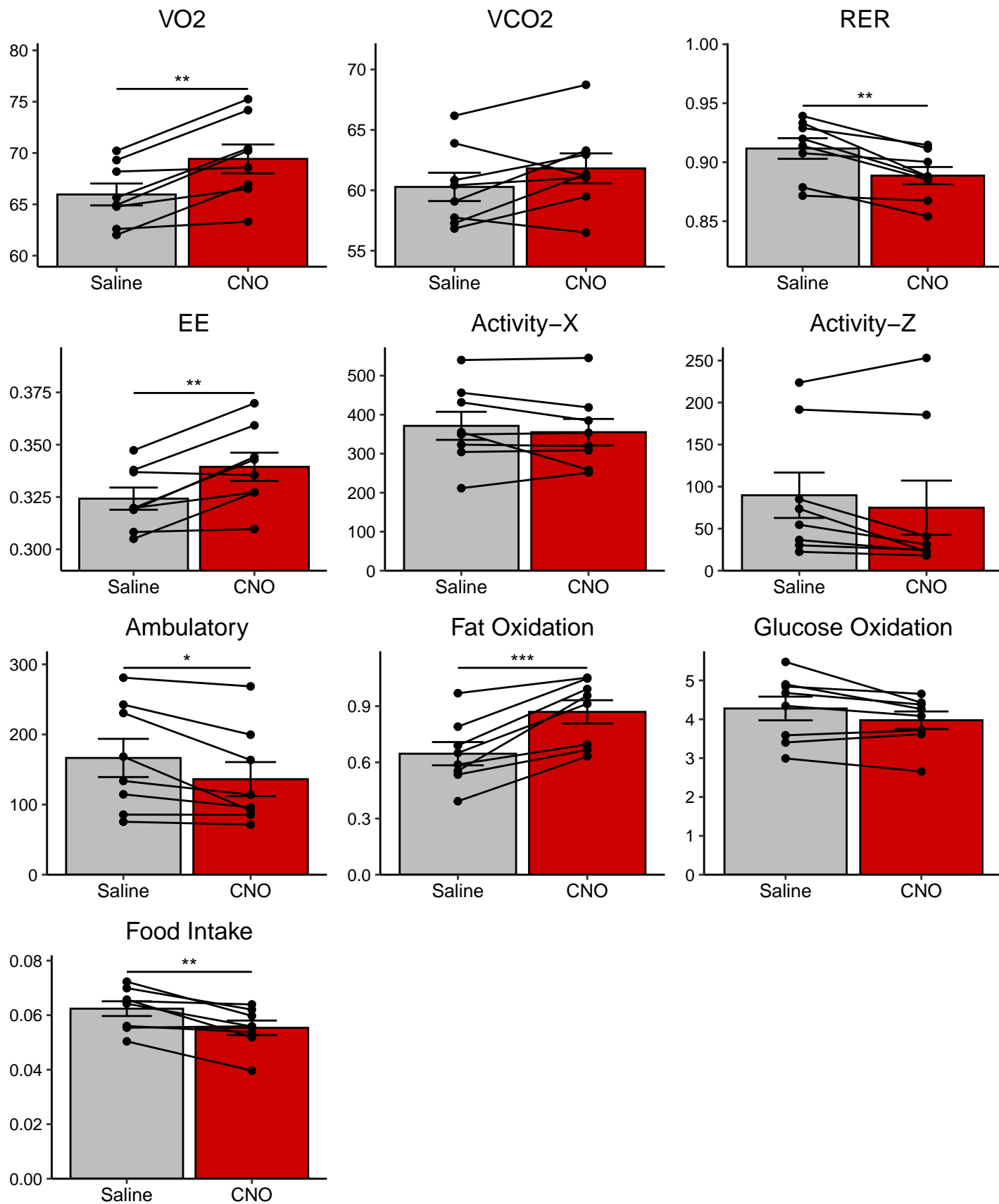
Averaged data

The full data, averaged across both days of treatment showing the mean and standard error. Dotted lines correspond to the injection times and the shaded gray corresponds to the light cycle.



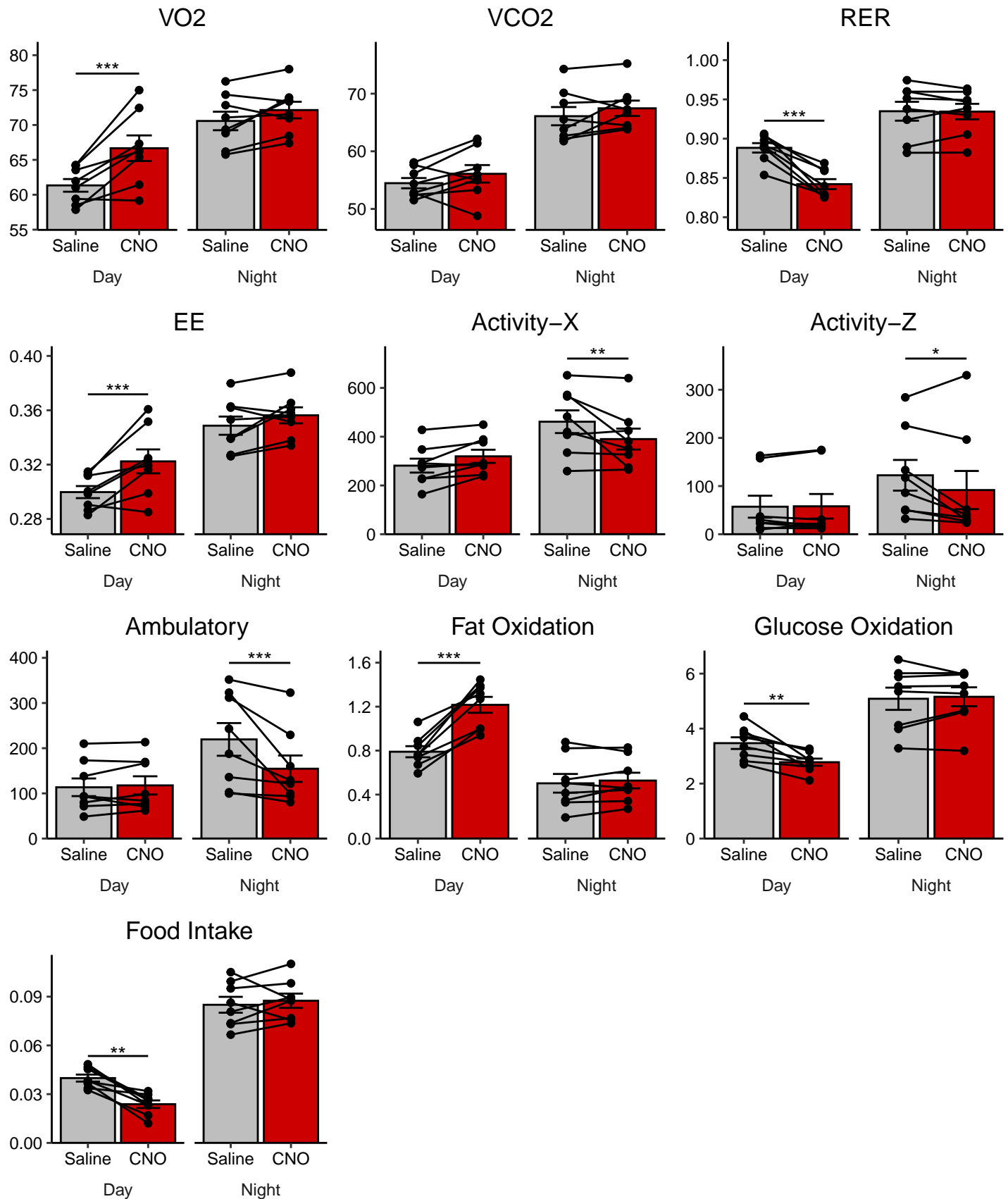
Paired summary

This is the data averaged by treatment with pairing because each mouse was given each treatment (Saline and CNO).



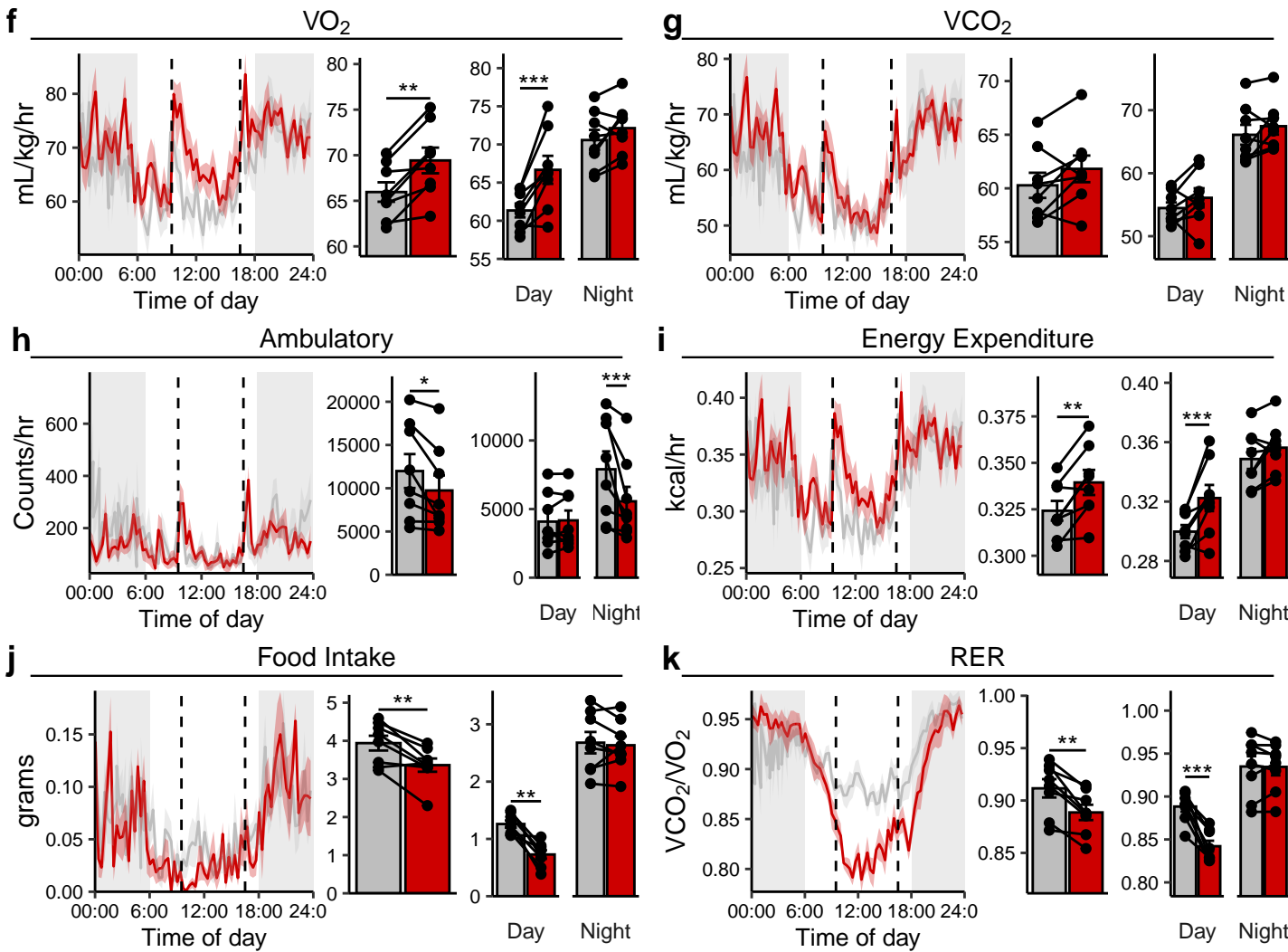
Paired summary - time of day

Same as previous, but now breaking out by time-of-day (Day v. Night).



Figure

Prepping a figure for the manuscript based on these plots.



Files

Saving workspace image as `clams.Rdata`.

Session info

```
## R version 3.6.3 (2020-02-29)
## Platform: x86_64-pc-linux-gnu (64-bit)
## Running under: Ubuntu 18.04.5 LTS
##
## Matrix products: default
## BLAS: /usr/lib/x86_64-linux-gnu/blas/libblas.so.3.7.1
## LAPACK: /usr/lib/x86_64-linux-gnu/lapack/liblapack.so.3.7.1
##
## locale:
##  [1] LC_CTYPE=en_US.UTF-8      LC_NUMERIC=C
##  [3] LC_TIME=en_US.UTF-8      LC_COLLATE=en_US.UTF-8
##  [5] LC_MONETARY=en_US.UTF-8  LC_MESSAGES=en_US.UTF-8
##  [7] LC_PAPER=en_US.UTF-8     LC_NAME=C
##  [9] LC_ADDRESS=C             LC_TELEPHONE=C
## [11] LC_MEASUREMENT=en_US.UTF-8 LC_IDENTIFICATION=C
##
## attached base packages:
## [1] stats      graphics  grDevices  utils      datasets  methods    base
##
## other attached packages:
##  [1] lubridate_1.7.9  kableExtra_1.2.1 knitr_1.30      emmeans_1.5.0
##  [5] lme4_1.1-23      Matrix_1.2-18    readxl_1.3.1    forcats_0.5.0
##  [9] stringr_1.4.0    dplyr_1.0.2      purrr_0.3.4     readr_1.3.1
## [13] tidyr_1.1.2      tibble_3.0.4     ggplot2_3.3.2   tidyverse_1.2.1
##
## loaded via a namespace (and not attached):
##  [1] Rcpp_1.0.5        mvtnorm_1.1-1     lattice_0.20-41  zoo_1.8-8
##  [5] assertthat_0.2.1  digest_0.6.25     plyr_1.8.6       R6_2.4.1
##  [9] cellranger_1.1.0  backports_1.1.10  evaluate_0.14    httr_1.4.2
## [13] pillar_1.4.6      rlang_0.4.8       multcomp_1.4-13  rstudioapi_0.11
## [17] minqa_1.2.4       nloptr_1.2.2.2    rmarkdown_2.4    labeling_0.3
## [21] splines_3.6.3     webshot_0.5.2     statmod_1.4.34   munsell_0.5.0
## [25] broom_0.7.0       compiler_3.6.3    modelr_0.1.2     xfun_0.18
## [29] pkgconfig_2.0.3   htmltools_0.5.0   tidyselect_1.1.0 codetools_0.2-16
## [33] viridisLite_0.3.0 fansi_0.4.1       crayon_1.3.4     withr_2.3.0
## [37] MASS_7.3-53       grid_3.6.3        nlme_3.1-149     jsonlite_1.7.1
## [41] xtable_1.8-4      gtable_0.3.0      lifecycle_0.2.0  magrittr_1.5
## [45] scales_1.1.1      estimability_1.3  cli_2.0.2         stringi_1.5.3
## [49] farver_2.0.3      xml2_1.3.2        ellipsis_0.3.1   generics_0.0.2
## [53] vctrs_0.3.4       cowplot_1.0.0     boot_1.3-25      sandwich_2.5-1
## [57] TH.data_1.0-10    tools_3.6.3       glue_1.4.2       hms_0.5.3
## [61] parallel_3.6.3    pbkrtest_0.4-8.6  survival_3.2-7   yaml_2.2.1
## [65] colorspace_1.4-1  rvest_0.3.6       haven_2.3.1
```