```r
library(PanelCurrentStatus)
```

```r
data <- readRDS("data.rds")
n <- nrow(data)
delta <- as.matrix(data[, 1:5])
ctime <- as.matrix(data[, 5 + 1:5])
predictors <- as.matrix(data[, 10 + 1:3])
```

```r
fit <- ccl.fit(delta, ctime, predictors, n.ptb = 500, seed = 1)
data.frame(est = fit[[2]], est.se = fit[[3]])
```

```
##         est     est.se
## 1 0.6418898 0.04868211
## 2 0.5514986 0.05546564
## 3 0.5327539 0.05103419
```

```r
alldata <- NULL
for (k in 1:ncol(delta)) {
  DF <- data.frame(delta = delta[, k], ctime = ctime[, k], predictors)
  alldata <- rbind(alldata, DF)
}
t0 <- median(alldata$ctime)
h <- sd(alldata$ctime) / n^0.3
ans <- ccl.roc(alldata, fit, t0, h)
data.frame(roc = ans[[1]], roc.se = ans[[2]])
```

```
##                       roc     roc.se
## auc.tilde.lower 0.6049827 0.02274278
## auc.tilde.upper 0.6049842 0.02274271
## tpr.05.tilde    0.1307085 0.02560484
## tpr.10.tilde    0.1799483 0.02859876
```

```r
proc.time()
```

```
##    user  system elapsed
##  15.747   1.576  17.362
```