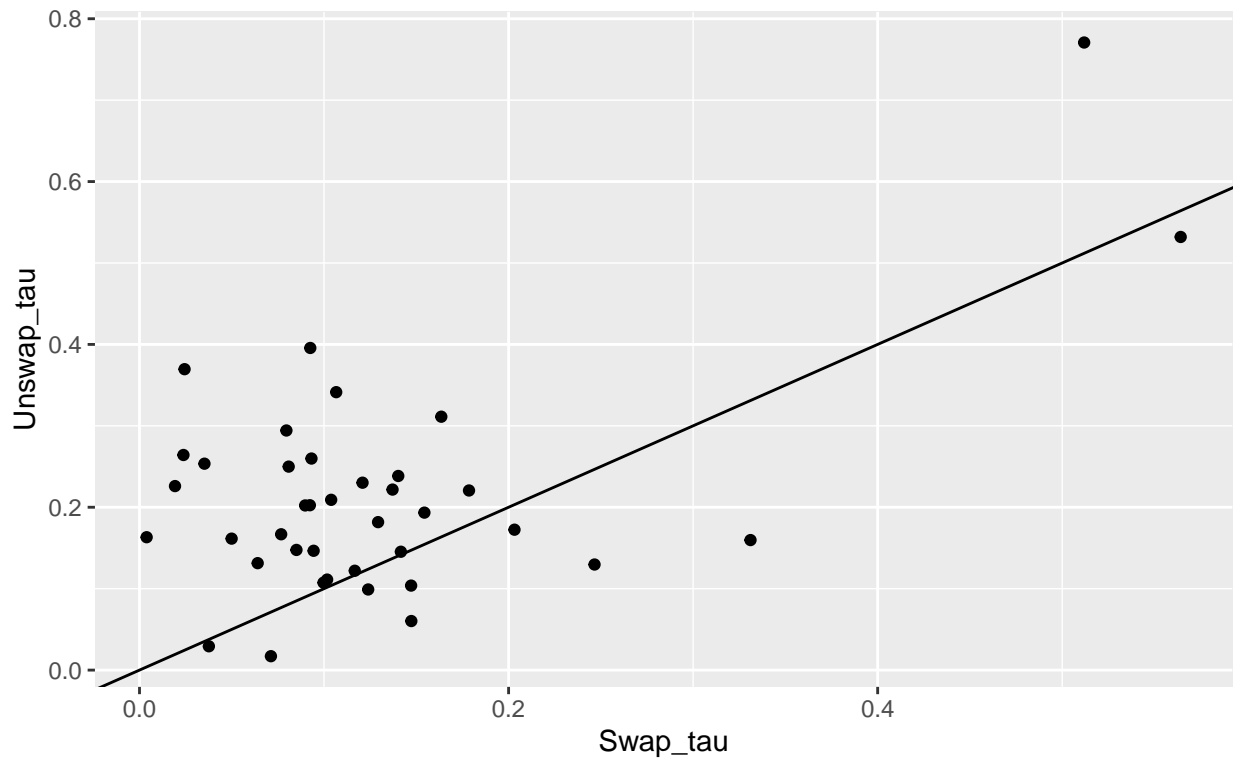# Swap Test for 39 Gene Data Set

Yixuan Yang

Compare tau
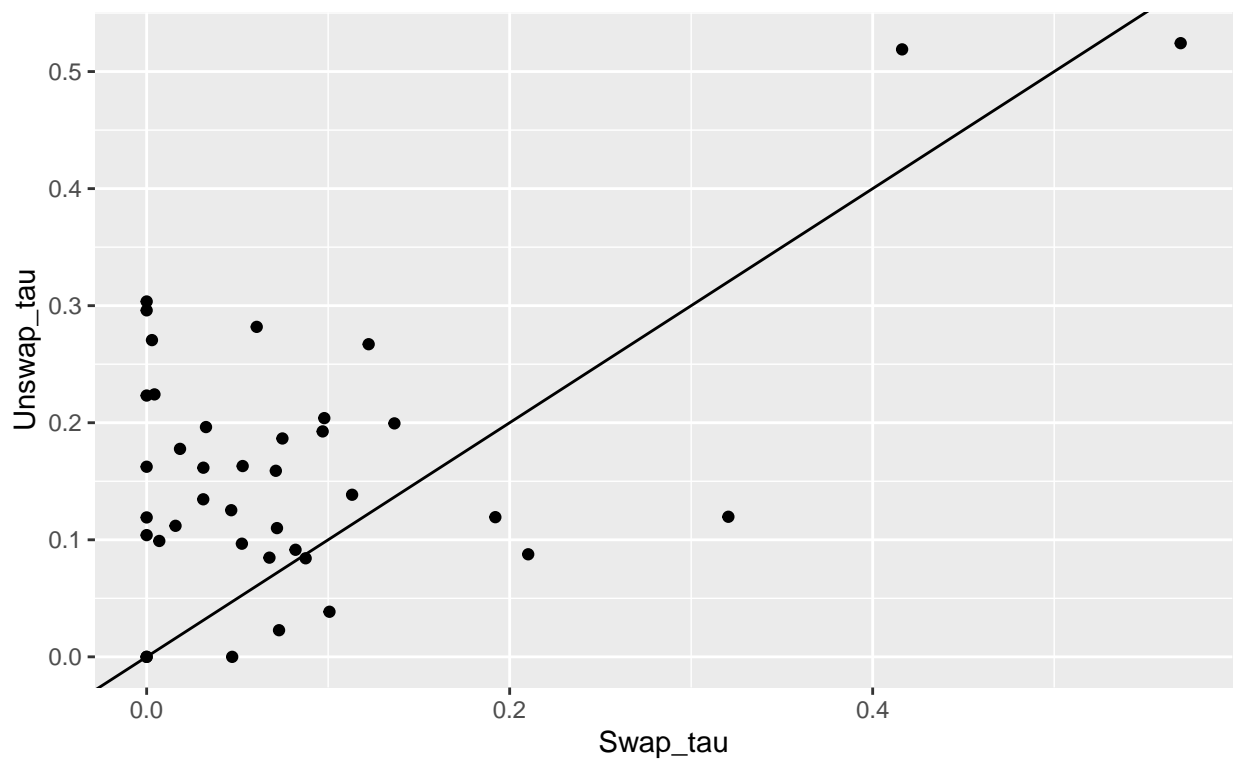
Swap Test (Xiang's original model)
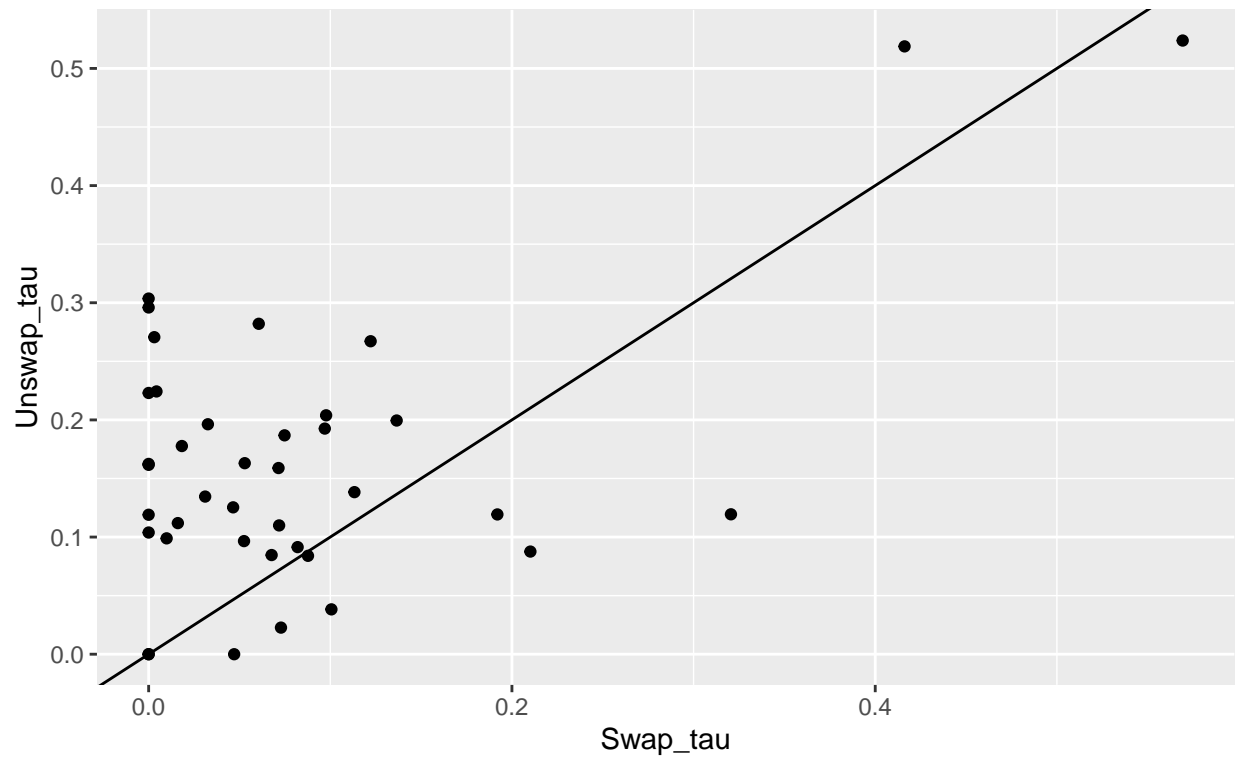for 39 fish data

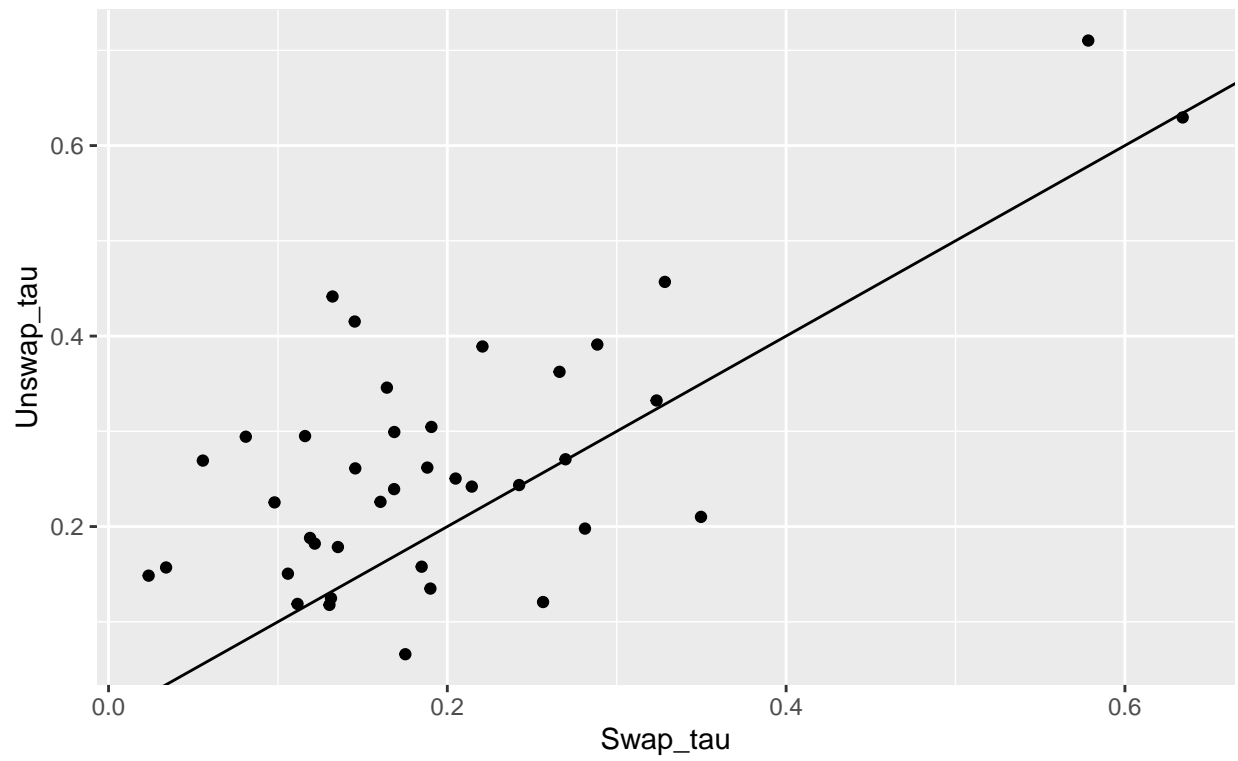## Swap Test (2−omega model)
for 39 fish data

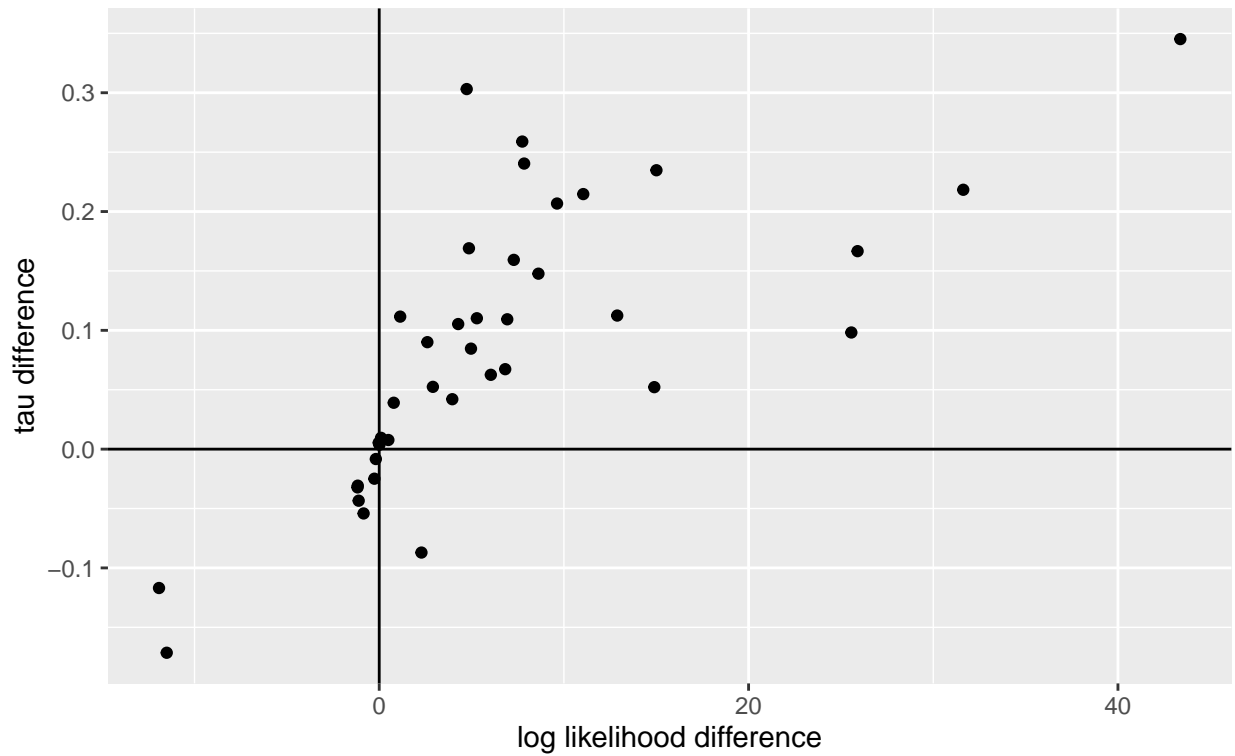## Swap Test (tau–omega model)
for 39 fish data

Swap Test (homogenizing omega model)
for 39 fish data

Likelihood difference v.s. tau difference

Swap Test (Xiang's original model)
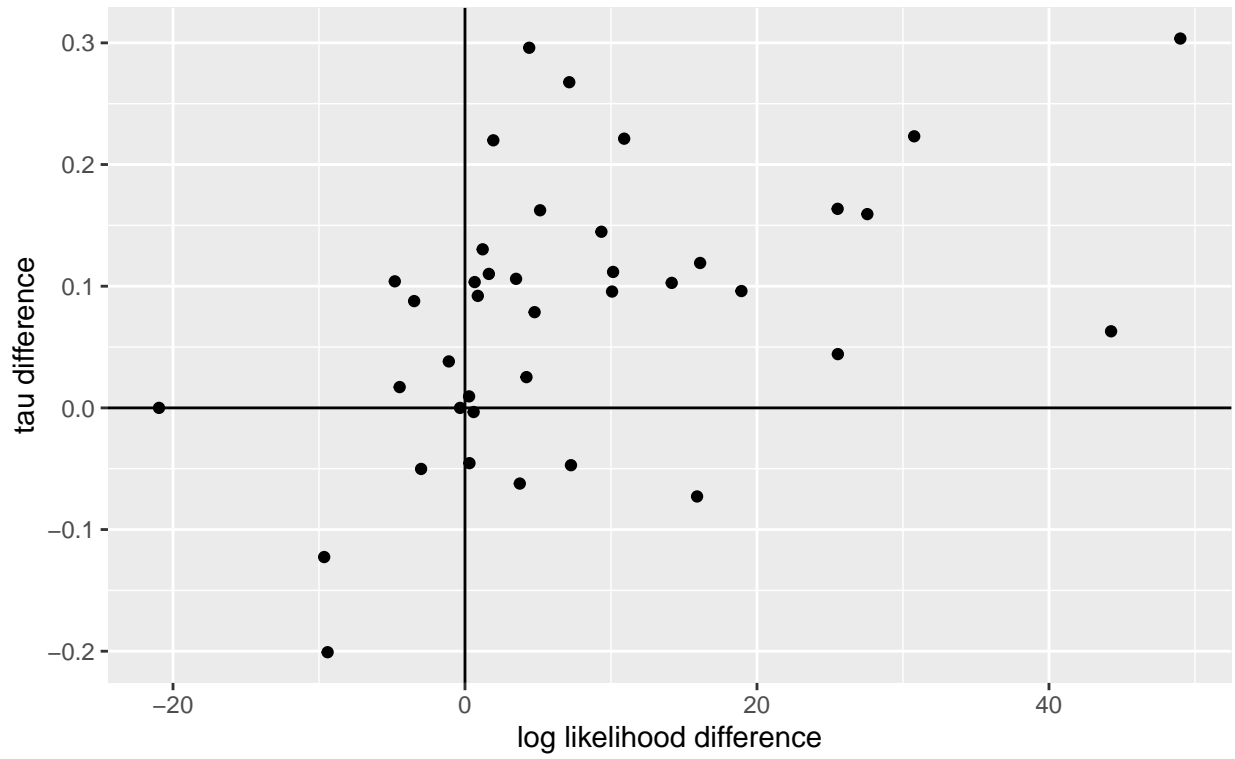Log likelihood vs tau for 39 fish data


```
## [1] "3rd quadrant:"

##                 llDiff      tauDiff
## Pillar222   -0.2613275 -0.024897845
## Pillar223  -11.5059415 -0.171402114
## Pillar1215  -0.8457670 -0.054145908
## Pillar2371  -0.1823022 -0.008327974
## Pillar2382 -11.9232218 -0.116894575
## Pillar3346  -1.1610424 -0.030756080
## Pillar3390  -1.1126438 -0.043405353
## Pillar4063  -1.1743747 -0.032214846
```
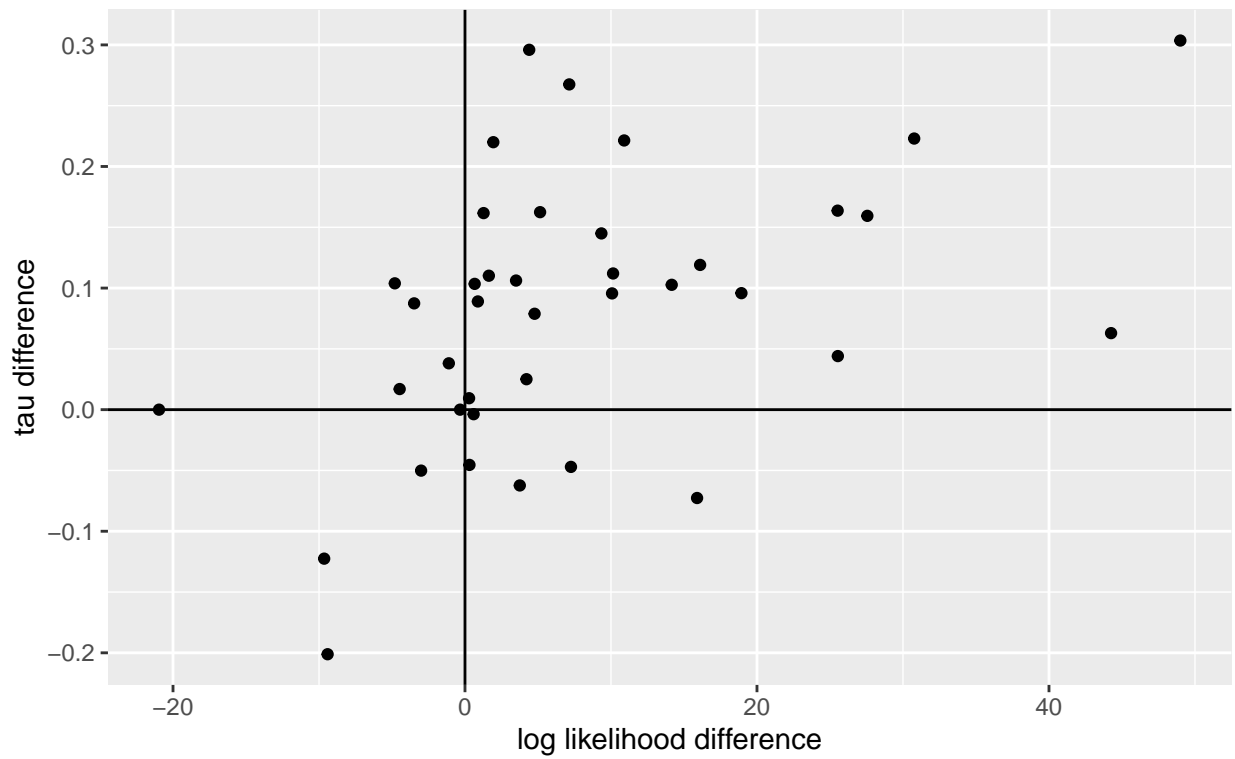
Swap Test (2-omega model)

Log likelihood vs tau for 39 fish data

Swap Test (tau–omega model)

Log likelihood vs tau for 39 fish data

Swap Test (homogenizing omega model)
Log likelihood vs tau for 39 fish data