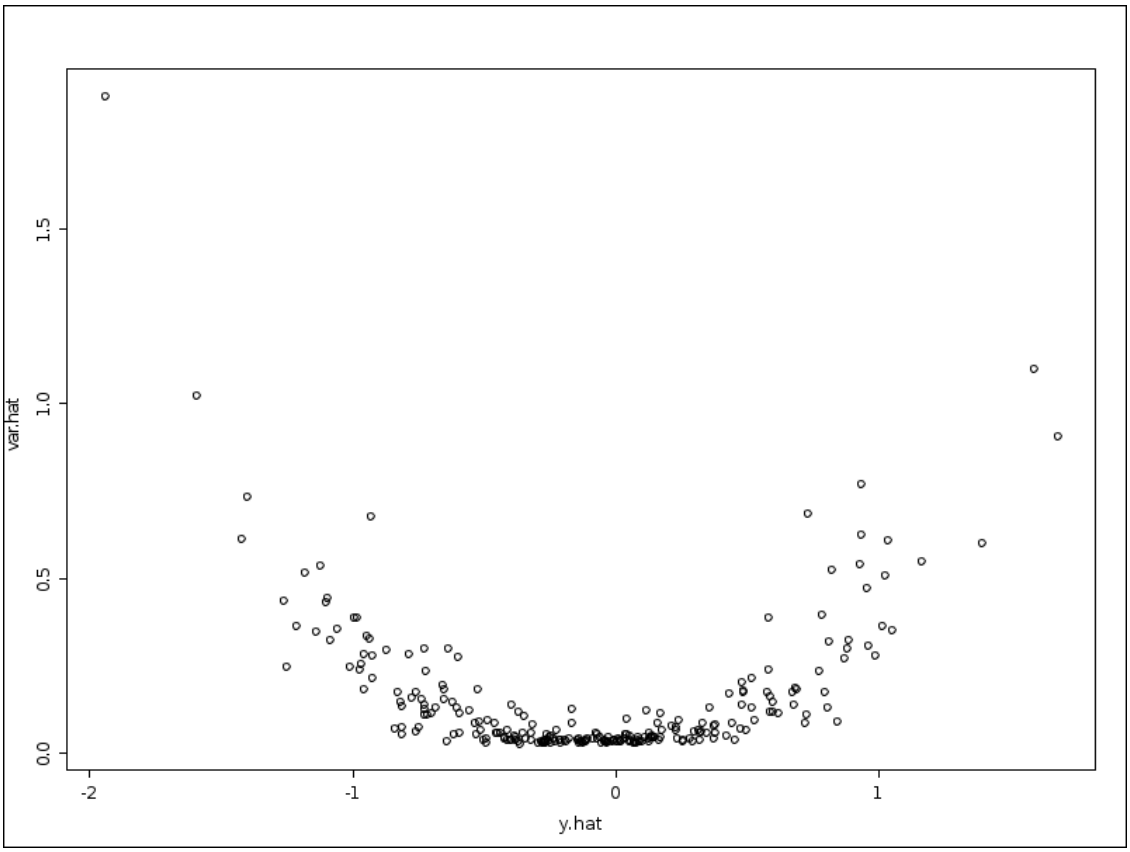
rf_ci

August 17, 2017

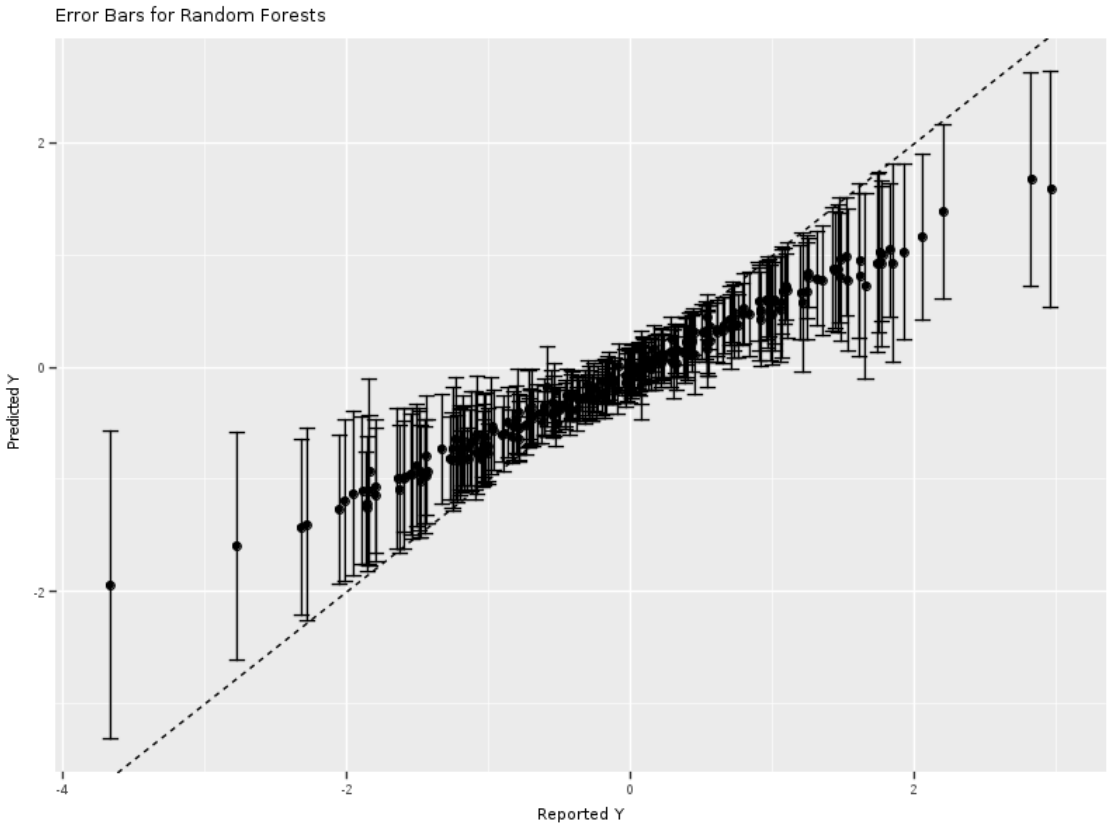
In [26]:
```
library(randomForest)
library(randomForestCI)
library(dplyr)
library(ggplot2)

## see : http://blog.revolutionanalytics.com/2016/03/confidence-intervals-
```

Incomplete code

In [3]:
```
n = 250
p = 100
X = matrix(rnorm(n * p), n, p)
Y = rnorm(n)

rf = randomForest(X, Y, keep.inbag = TRUE, replace = TRUE)

ij = randomForestInfJack(rf, X, calibrate = TRUE)

plot(ij)
```




```
In [13]: df <- data.frame(y = Y, ij)
         df <- mutate(df, se = sqrt(var.hat))

In [28]: p1 <- ggplot(df, aes(x = y, y = y.hat))

         p1 + geom_errorbar(aes(ymin=y.hat-se, ymax=y.hat+se), width=.1) +
                   geom_point() +
                   geom_abline(intercept=0, slope=1, linetype=2) +
                   xlab("Reported Y") +
                   ylab("Predicted Y") +
                   ggtitle("Error Bars for Random Forests")
```


Error Bars for Random Forests
Predicted Y
Reported Y
2
0
-2
-4
-2
0
2

In [ ]: