## plot an ROC curve computed by logit.roc()

## typical usage: logit.roc.plot(roc(model, dataset))

## argument

## r an ROC curve returned by logit.roc()

logit.roc.plot <- function(r, title="ROC curve") {

old.par <- par(no.readonly = TRUE); on.exit(par(old.par))

par(xaxs="i", yaxs="i")

plot(1 - r$spec, r$sens, xlim=c(0, 1), ylim=c(0,1), type="l",

xlab="(1 - specificity): false positive rate",

ylab="sensitivity: true positive rate",

col="blue", lwd=2);

points(1 - r$spec, r$sens, pch=20, cex=2, col="blue");

abline(0, 1, lty=2);

segments(1-r$spec, 1-r$spec, 1-r$spec, r$sens, lty=2)

text(0, 0.9, paste("Area under ROC:",round(logit.roc.area(r),4)), pos=4)

title(main = title)

}