test of lab3

test of lab3

March 29, 2016

```
setwd("C://Users//nan66//Google Drive//stt864//LAB3")
polls2008<-read.csv(file="2008-polls.csv",header=TRUE)
polls2012<-read.csv(file="2012-polls.csv",header=TRUE)
results2008<-read.csv(file="2008-results.csv",header=TRUE)


pollers<-c("ARG", "EPICMRA", "InsiderAdvantage", "MaristColl", "MasonDixon", "MuhlenbergColl",
           "QuinnipiacU", "Rasmussen", "SienaColl","SuffolkU","SurveyUSA", "UofCincinnati","UofNewHampsh
subsamplesID2008<-polls2008[,5]%in%pollers
polls2008sub<-polls2008[subsamplesID2008,]
subsamplesID2012<-polls2012[,5]%in%pollers
polls2012sub<-polls2012[subsamplesID2012,]


winers2008<-(results2008[,2]-results2008[,3]>0)+0
StateID2008<-results2008[,1]
Allresponses<-NULL
for (sid in 1:51)
{
 polls2008substate<-polls2008sub[polls2008sub$State==StateID2008[sid],]
 pollwiners2008state<-(polls2008substate[,2]-polls2008substate[,3]>0)+0
 pollwinersIND<-(pollwiners2008state==winers2008[sid])+0
 Allresponses<-c(Allresponses,pollwinersIND)
}
margins<-abs(polls2008sub[,2]-polls2008sub[,3])
lagtime<-rep(0,dim(polls2008sub)[1])
electiondate2008<-c("Nov 04 2008")
for (i in 1:dim(polls2008sub)[1])
{
 lagtime[i]<-as.Date(electiondate2008, format="%b %d %Y")-as.Date(as.character(polls2008sub[i,4]), forma
}
dataset2008<-cbind(Allresponses,as.character(polls2008sub[,1]),margins,lagtime,as.character(polls2008sub


stateslist<-unique(dataset2008[which(dataset2008[,1]=="0"),2])
subdataset2008<-dataset2008[dataset2008[,2]%in%stateslist,]


resp<-as.integer(subdataset2008[,1])
statesFAC<-as.factor(subdataset2008[,2])
margins<-as.double(subdataset2008[,3])
lagtime<-as.double(subdataset2008[,4])
pollersFAC<-as.factor(subdataset2008[,5])
logitreg<-glm(resp~statesFAC+margins+lagtime+pollersFAC,family="binomial")
summary(logitreg)
```

```
##
```

```
## Call:
## glm(formula = resp ~ statesFAC + margins + lagtime + pollersFAC,
##     family = "binomial")
##
## Deviance Residuals:
##     Min       1Q   Median       3Q      Max
## -2.5779  -0.5603   0.2084   0.5631   2.5537
##
## Coefficients:
##                              Estimate Std. Error z value Pr(>|z|)
## (Intercept)                  0.477331   0.602829   0.792 0.428466
## statesFACFL                 -1.647375   0.547285  -3.010 0.002612 **
## statesFACGA                  1.354619   1.157192   1.171 0.241756
## statesFACIN                 -3.359969   0.926903  -3.625 0.000289 ***
## statesFACMA                  2.064918   1.233361   1.674 0.094087 .
## statesFACMI                 -0.109506   0.733656  -0.149 0.881348
## statesFACMN                  1.576421   0.909859   1.733 0.083167 .
## statesFACMO                 -0.427149   0.614079  -0.696 0.486683
## statesFACMT                  1.572071   1.165776   1.349 0.177491
## statesFACNC                 -2.289227   0.641511  -3.568 0.000359 ***
## statesFACND                  0.582515   1.411664   0.413 0.679867
## statesFACNH                  0.608812   0.770412   0.790 0.429386
## statesFACNJ                  0.562342   0.953698   0.590 0.555429
## statesFACNM                  0.115791   0.722887   0.160 0.872741
## statesFACNV                 -0.782439   0.620767  -1.260 0.207511
## statesFACNY                  1.106166   1.220608   0.906 0.364808
## statesFACOH                 -1.456813   0.554890  -2.625 0.008655 **
## statesFACOR                  2.466634   1.227231   2.010 0.044440 *
## statesFACPA                  0.999567   0.706504   1.415 0.157125
## statesFACVA                 -0.764514   0.578862  -1.321 0.186595
## statesFACWA                  2.049390   1.222229   1.677 0.093589 .
## statesFACWI                  1.724056   0.952639   1.810 0.070332 .
## statesFACWV                  0.176470   1.192351   0.148 0.882341
## margins                      0.243394   0.038387   6.341 2.29e-10 ***
## lagtime                     -0.010550   0.001722  -6.128 8.89e-10 ***
## pollersFACEPICMRA            1.884727   1.341388   1.405 0.160004
## pollersFACInsiderAdvantage   0.831820   0.586503   1.418 0.156112
## pollersFACMaristColl         1.899700   1.201596   1.581 0.113883
## pollersFACMasonDixon         0.368782   0.590033   0.625 0.531958
## pollersFACMuhlenbergColl    -0.107470   1.516623  -0.071 0.943508
## pollersFACQuinnipiacU        1.742448   0.629726   2.767 0.005658 **
## pollersFACRasmussen          0.273553   0.451894   0.605 0.544948
## pollersFACSienaColl         15.026258 542.747543   0.028 0.977913
## pollersFACSuffolkU           1.166058   0.920064   1.267 0.205024
## pollersFACSurveyUSA          0.831435   0.518039   1.605 0.108501
## pollersFACUofCincinnati      0.399582   1.113652   0.359 0.719742
## pollersFACUofNewHampshire   -1.361725   1.333940  -1.021 0.307335
## pollersFACZogby              0.501113   0.745531   0.672 0.501484
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 792.52  on 662  degrees of freedom
```

```
## Residual deviance: 492.68  on 625  degrees of freedom
## AIC: 568.68
##
## Number of Fisher Scoring iterations: 15
```

```
unique(statesFAC)
```

```
##  [1] CO FL GA IN MA MI MN MO MT NC ND NH NJ NM NV NY OH OR PA VA WA WI WV
## 23 Levels: CO FL GA IN MA MI MN MO MT NC ND NH NJ NM NV NY OH OR PA ... WV
```