

DOW-JONES FORECASTING.

LAFC ABK MCM

```
## Loading required package: reshape2
## Loading required package: ggplot2
## Loading required package: Matrix
## Loading required package: SparseM
##
## Attaching package: 'SparseM'
##
## The following object is masked from 'package:base':
##
##   backsolve
##
## Loading required package: glmnet
## Loaded glmnet 1.9-8
##
## Loading required package: xtable
## Loading required package: expm
##
## Attaching package: 'expm'
##
## The following object is masked from 'package:Matrix':
##
##   expm
##
## Loading required package: plyr
## Loading required package: parallel
## Loading required package: grpreg
## Loading required package: dplyr
##
## Attaching package: 'dplyr'
##
## The following object is masked from 'package:grpreg':
##
##   select
##
## The following objects are masked from 'package:plyr':
##
##   arrange, count, desc, failwith, id, mutate, rename, summarise,
##   summarize
##
## The following object is masked from 'package:stats':
```

```
##  
##   filter  
##  
## The following objects are masked from 'package:base':  
##  
##   intersect, setdiff, setequal, union  
##  
## Loading required package:  biglm  
## Loading required package:  DBI  
## Loading required package:  doMC  
## Loading required package:  foreach  
## foreach:  simple, scalable parallel programming from Revolution Analytics  
## Use Revolution R for scalability, fault tolerance and more.  
## http://www.revolutionanalytics.com  
## Loading required package:  iterators
```

This file (the source `.Rnw` version of it) contains the code necessary to replicate the forecasting and model evaluation results.

I am going to estimate a small variety of models on the Dow-Jones data, but compute only 474 forecasts. Another document using a more wider set of models and computing much fewer of forecasts has also been created. The chunk below sets some estimation parameters and defines the model specifications that will be estimated.

Now that the models are selected and the estimation parameters set, we can estimate them. Below we estimate and forecast with the set of models defined above.

```
## [1] TRUE
```

Model	h	beat bmk	RMAFE	Med AFE			Max AFE			frobenius		
				A	D	O	A	D	O	A	D	O
roll var 20 Lasso none dj cens lmat 1000 none	1			0.36	0.57	0.35	3.16	3.16	1.39	11.22	5.59	9.49
roll var 20 Lasso none dj cens lmat 1000 none	5			0.4	0.66	0.39	3.42	3.42	1.54	12.53	6.22	10.63
roll var 20 Lasso none dj cens lmat 1000 none	20			0.46	0.84	0.45	3.81	3.8	1.73	14.37	7.36	12.06
post var 20 Lasso none dj cens lmat 1000 none	1			0.3	0.5	0.29	2.89	2.89	1.24	9.71	5.02	8.1
post var 20 Lasso none dj cens lmat 1000 none	5			0.36	0.62	0.36	3.48	3.48	1.49	11.85	6.2	9.84
post var 20 Lasso none dj cens lmat 1000 none	20			0.43	0.77	0.42	3.9	3.9	1.71	13.78	7.23	11.49

TABLE 1. Summary statistics, h-step ahead recursive forecasts, all statistics averaged across forecast iterations.