

```

library(rstan)

## Loading required package: Rcpp
## Loading required package: ggplot2
## rstan (Version 2.8.0, packaged: 2015-09-19 14:48:38 UTC, GitRev:
05c3d0058b6a)
## For execution on a local, multicore CPU with excess RAM we recommend
calling
## rstan_options(auto_write = TRUE)
## options(mc.cores = parallel::detectCores())

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options(mc.cores = parallel::detectCores())

#library(ShinyStan) #not available on cran for R3.2.2
library(shinystan) #downloaded from cran

## Loading required package: shiny
##
## This is shinystan version 2.0.1

pgm_name="precip_gamma_test"

rainfall=read.csv("amherstPRECIP.csv")
names(rainfall)<-c("n", "year", "month", "day", "rain_mm", "X01")

str(rainfall)

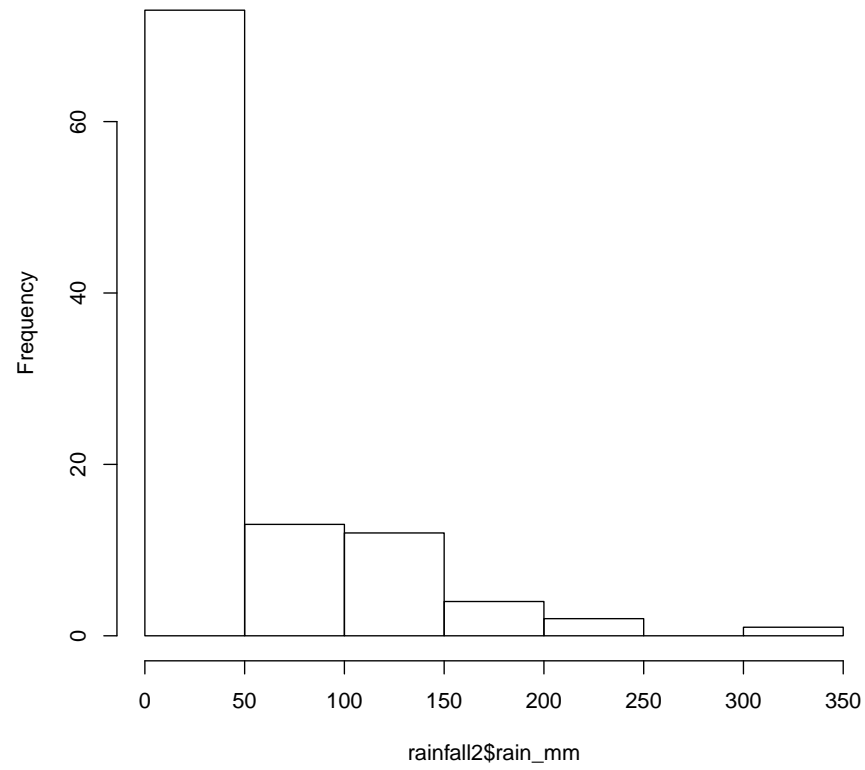
## 'data.frame': 43981 obs. of 6 variables:
## $ n : int 2 3 4 5 6 7 8 9 10 11 ...
## $ year : int 1893 1893 1893 1893 1893 1893 1893 1893 1893 1893 ...
## $ month : int 1 1 1 1 1 1 1 1 1 1 ...
## $ day : int 2 3 4 5 6 7 8 9 10 11 ...
## $ rain_mm: num 215 0 0 0 4 0 0 NaN 6 NaN ...
## $ X01 : int 0 0 0 0 0 0 0 0 0 0 ...

rainfall2<-subset(rainfall,!is.na(rain_mm) & year>1990 & year < 1992 & rain_mm>0)

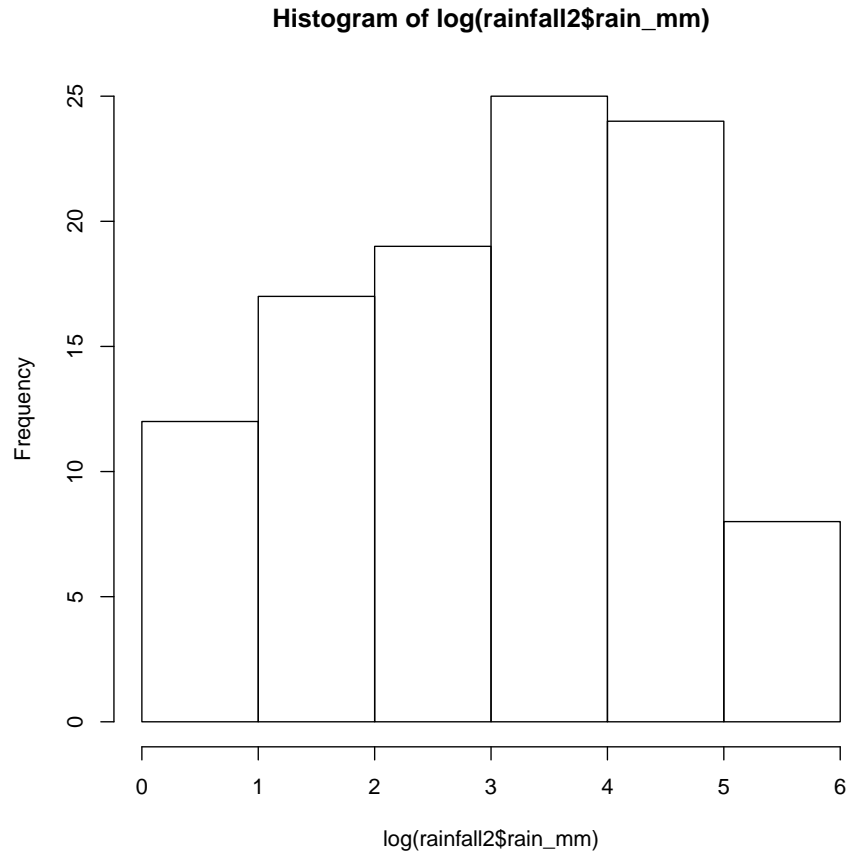
hist(rainfall2$rain_mm)

```

Histogram of rainfall2\$rain\_mm



```
hist(log(rainfall2$rain_mm))
```



```
y<-log(rainfall2$rain_mm) #rainfall mm
Nobs<-length(y)           #number of obs

stanfit<-stan("precip_gamma_test.stan")

launch_shinystan(stanfit)

##
## Loading...
## Note: for large models ShinyStan may take a few moments to launch.
##
## Listening on http://127.0.0.1:5635
```