

@Yj Y`'cZ'gdUfg]hm3

GYYa g'hc`k cf_ĩ

```
K1 <- kB(sqrt(D), 1)
mean(K1 > 0)
```

```
## [1] 0.18955
```

```
K2 <- kB(sqrt(D), 2)
mean(K2 > 0)
```

```
## [1] 0.3596
```

```
K025 <- kB(sqrt(D), 0.25)
mean(K025 > 0)
```

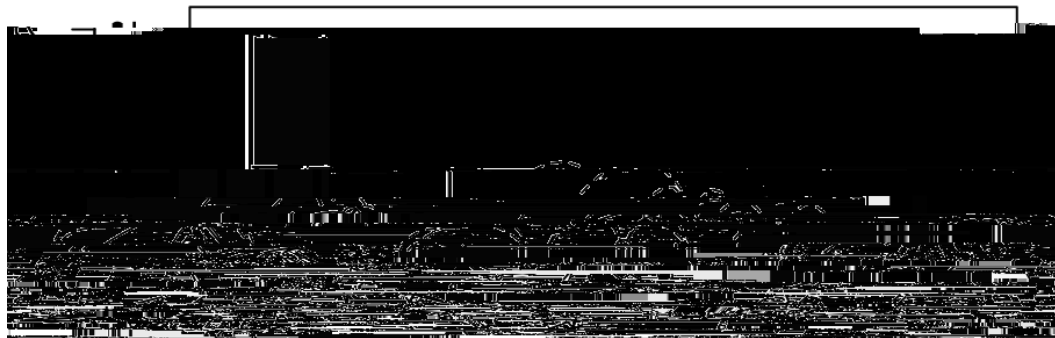
```
## [1] 0.0488875
```


DchYbhY

J]gi U`]n]b['7G? j Yfg]cb

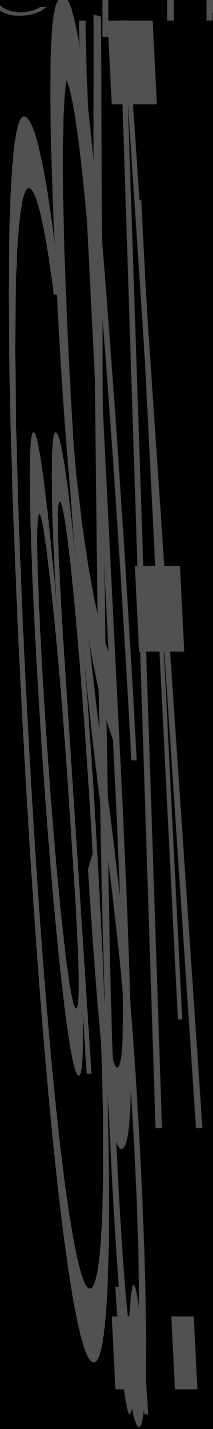
Hcc 'k][[`mUbX'hcc 'k]XY"

plot(x, y, ylim=c(-2, 2)); 0 Å(0.2%)`



B c b ! n Y ' ê h Y ê

@Y[YbXfYâ`]bYUfYâ



J]gi U`]n]b ['@

J]gi U`]n]b['h\Y'Wca V]bUh]cb

A i V\ 'VYhYf'cb'a YUb 'UbX'j Uf]UbV\"

FY`Uh]b[`Vca di hY`h]a Y`hc`gdUfg]hnh

6cfY\c`Y`g]a i `Uh]cb

<YfY`]g`Ub`]a d`Ya YbhUh]cb`]b`WtXYX`]bdi hg"

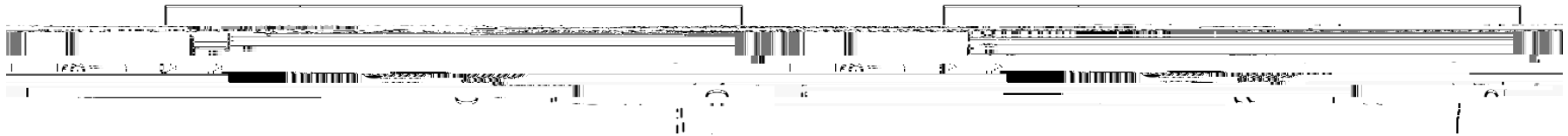
```
borehole <- function(x){  
  rw <- x[1] * (0.15 - 0.05) + 0.05  
  r <- mM
```


UFLVM'd`o`b`f`d`l`f`o`V`L`



DfYhmi[ccX`cb`h\Y`W`bj Yf[YbW`Zfcbh"

par(mfrow=



8]j]XY!UbX!Vcbei Yf'fY[fYgg]cb

H f b ' V U W _ h \ Y ' W

7; A 'df]cf'dfcWgg

HfYYg'a UmighcW\Ugh]W\`mVY'[fck b'Zfca 'U`YUZ'bcXY' 'k]h\ 'U'dfcVUV]`]hmi\ Uh'XYdYbXg
cb'h\Y'XYdh\ ' 'cZ'h\Uh'bcXY']b'h\Y'hfYYž' "

H\]g']bXi Wg'U'df]cf'Zcf'h\Y'Zi ``hfYY' 'j]U'h\Y'dfcVUV]`]hmi\ Uh']bhYfbU`'bcXYg' 'gd`]h
UbX`YUj Yg' 'Xc'bch

5g']b'h\Y'8A G'df]cf

HfYY'dfcdcgU'gYgY

A chc!j]gi U`]nUh]cb 'a UWc

Hc`j]gi U`]nY'h\Y'dfYX]W]j Y'gi fZUWfgZ=fä '[c]b['hc'k f]hY'U`]hY'a UWc'h\Uh'k Y'Wb'fY!
i_gY`]b'gYj YfU`j Uf]Uh]cbg`UhYf"

```
plot.mto <- function(out, outp)
{
  plot(outp$XX[, 1], outp$ZZ.km, ylab="accel", xlab="time",
       ylim=c(-150, 80), lty=2, col=1, type="l")
  points(mcycle)
  lines(outp$XX[, 1], outp$ZZ.km + 1.96*sqrt(outp$ZZ.ks2), col=2, lty=2)
  lines(outp$XX[, 1], outp$ZZ.km - 1.96*sqrt(outp$ZZ.ks2), col=2, lty=2)
  lines(out$XX[, 1], out$ZZ.mean, col=1, lwd=2)
  lines(out$XX[, 1], out$ZZ.q1, col=2, lwd=2)
  lines(out$XX[, 1], out$ZZ.q2, col=2, lwd=2)
}
```


675FH'gi fZUW'ZYUhi fYg

K \UhXc'k Y'[Yh3

H\Y'A 5D'Ygh]a UhY'\Ug'a UbmicZ'h\cgY'ZYUhi fYgž

Hfmtgp. trees(out. bcart)

:]h]b ['U'6H@A

< YfY`]g`h\Y`Z]h]b` ž

K Yf`i` gY`h\Y`d`c]h]b [`a UW

@]a]h]b [``]bYUf'a cXY`

@ 66`XUuJ

HfYYX'; Dg`k YfY`]bj YbhYX`Zcf`h\Y`fcW_YhVccghYf`f@ 66L`XUuJ"

B 5G5`gWYbh]ghg`_bYk`h\YmibYYXYX`hc`dUfh]h]cb`h\Y`a`cXY`fUbx`h\Y`XYg][bL`hc
gYdUfUHY`gi Vgcb]WUbx`gi dYfgcb]WgdYYXgž

Vi h`h\YmX]XbfiQ`gi cXY`]cb`h\Y`a`c]`X`Yf`YA A A Ě

H\cgY`Z]Yg`WcbhU]b

GdYYX

6i hmYU\žh\Uh'k Ug'dfYhmig`ck

`] bVi f b'dfYX]Wij Y'a YUb

Bcha i W'ja dUWicb'h\Y'gi fZUW"

```
t2 <- system.time(fit2 <-  
  btgpllm(X=X, Z=Y, XX=XX, bprior="b0", linburn=TRUE, verb
```


GYei Ybh]U`·XYg][b

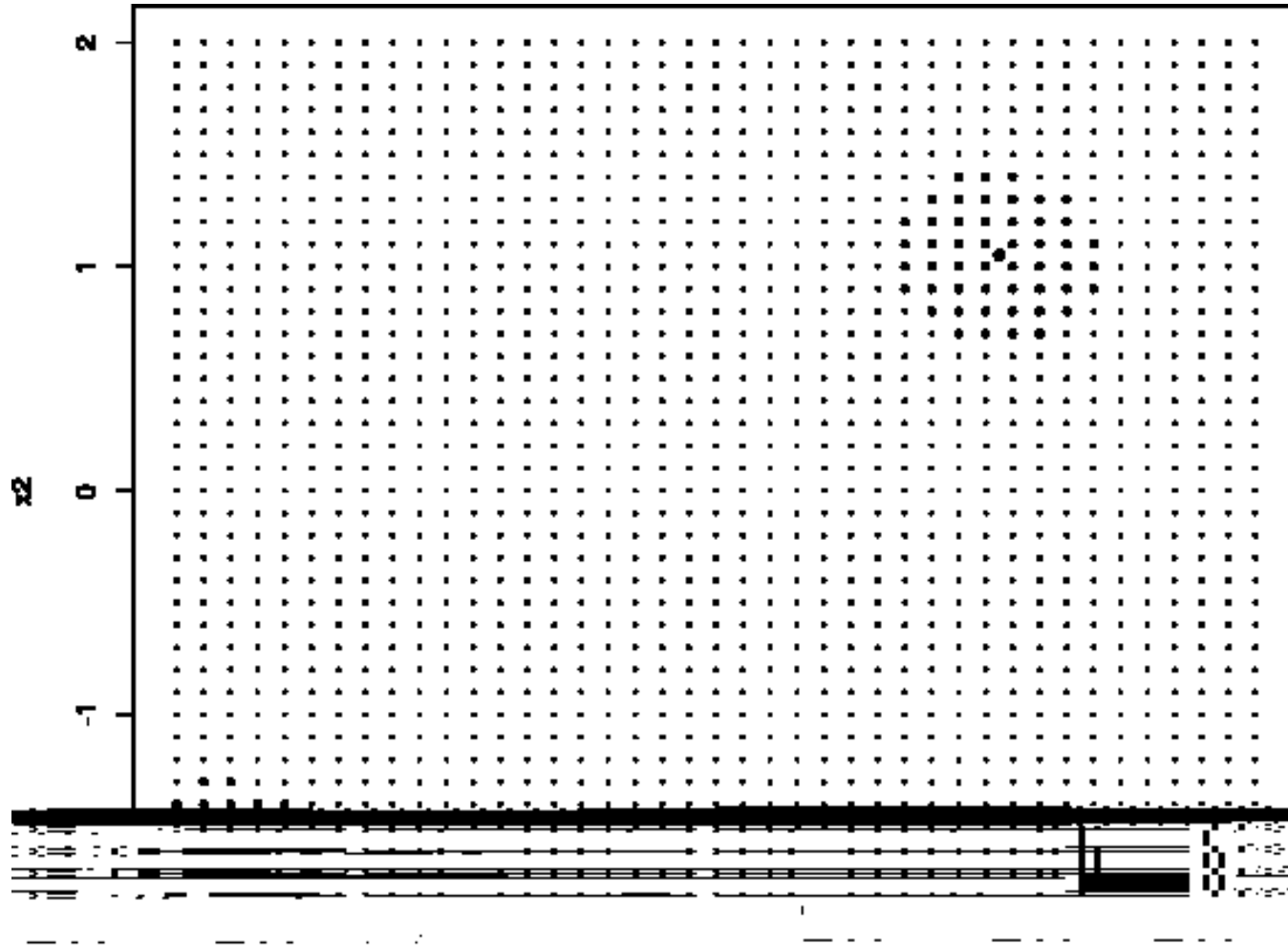
K#Y`U`f

G]a d`Y`YUZ'a cXY`g'Vi]`X'[fYUh'XYg][bg

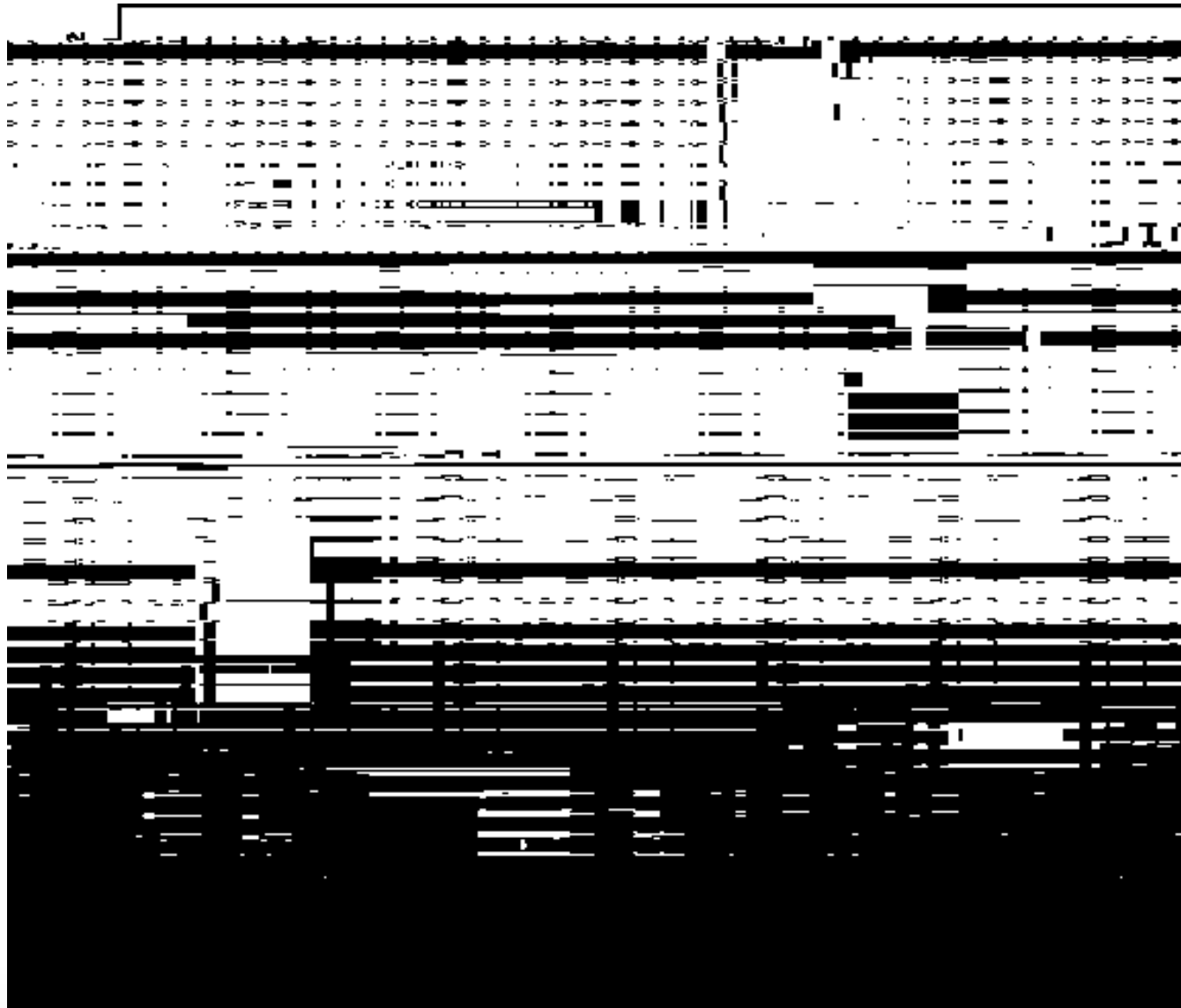
bÛ

@CW'gi V!V g

5b 'Ub]a Uh]c b 'õ 'f&Ł'



5b 'Ub]a Uh]c b 'õ 'fl Ł'



K \ Uh'UVci h'h\ Uh3

9'

5 'W]hYf]c

@cWJ`'gi V!XYg][bfgL

@`XYcA /XJ

7cbg]XYf`U'dfYX]W]cb`cW]h]cb` žXYbchYX`Vmi

`]b`h\Y`WŁXY`VY`c

H\cgY'fUX]vg

DfYX]W]cbg

J [gi U`]n]b['h\ Y'gi fZUVY

@cVU`]gchfcdnž[`cVU`'bcbghUh]cbUf

7Ub 'k Y 'Xc 'Yj Yb 'VYhYf

DfYX]W]b['k]h\ 'h\ Y'gi VgYh

C VgYfj Y'h\ Uh`cW]`gi VgYh; D'dfYXB

GUhY``]hY`XfU[

H\Y'gYh d

9gh]a UhYX`j Yfg]cb

: cf`h\Y`Ygh]a UhYX` `k Y`bYYX`hc`VUW_hfUW`h\fc i [\`k \Uh`k Y`X]X`YUf`]Yfž

<Yf

