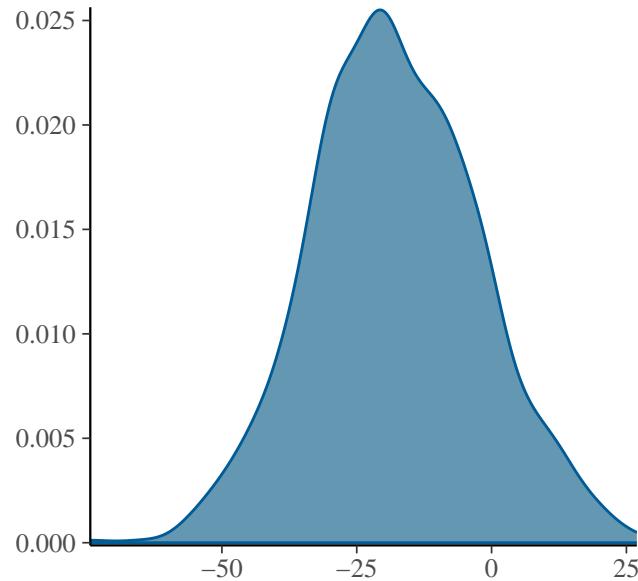


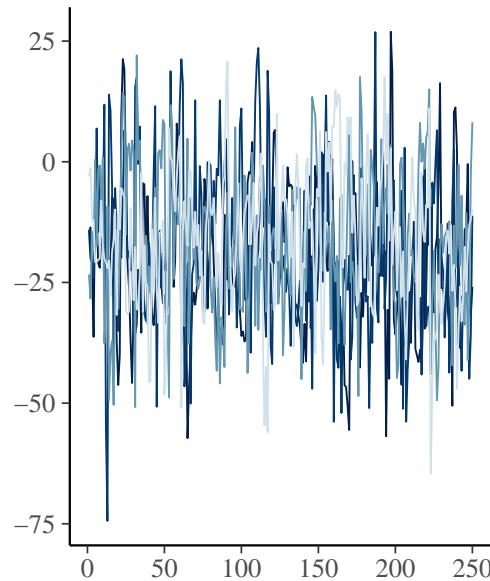


help("MCMC-combos")

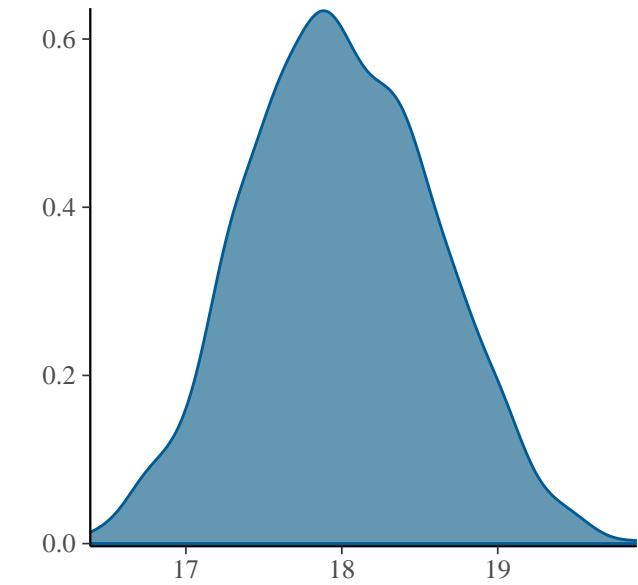
alpha



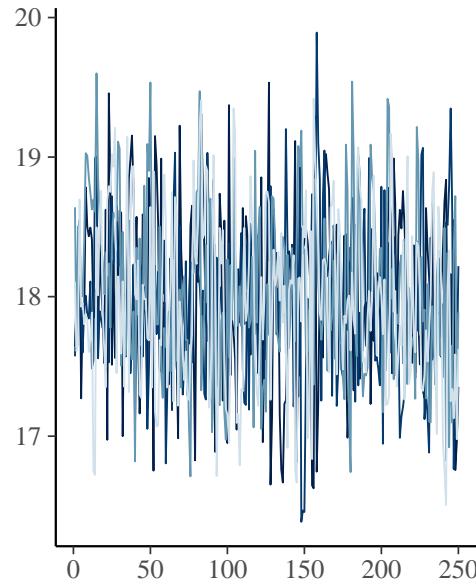
alpha



sigma



sigma

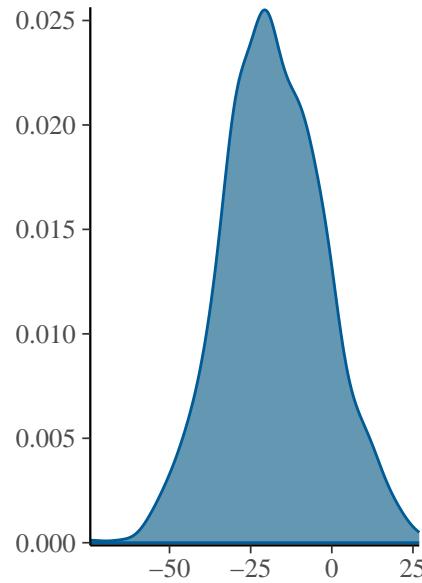


Chain

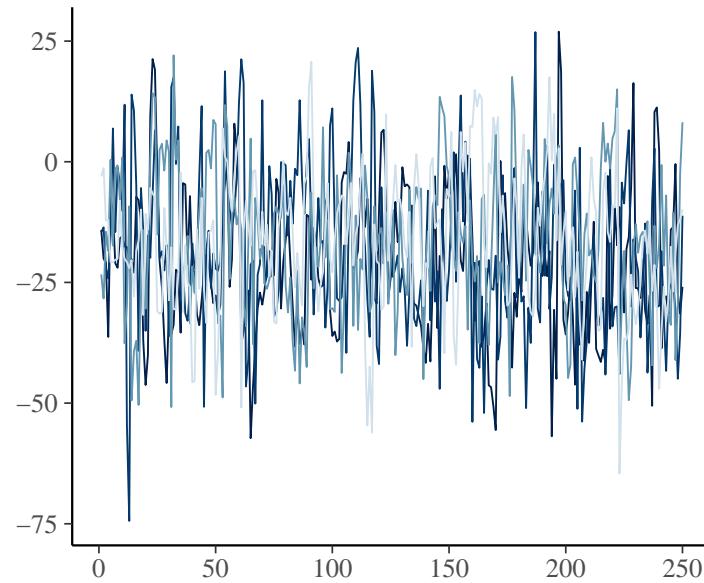
- 1
- 2
- 3
- 4

help("MCMC-combos")

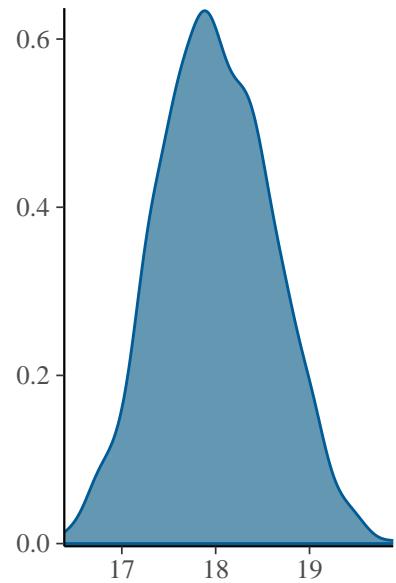
alpha



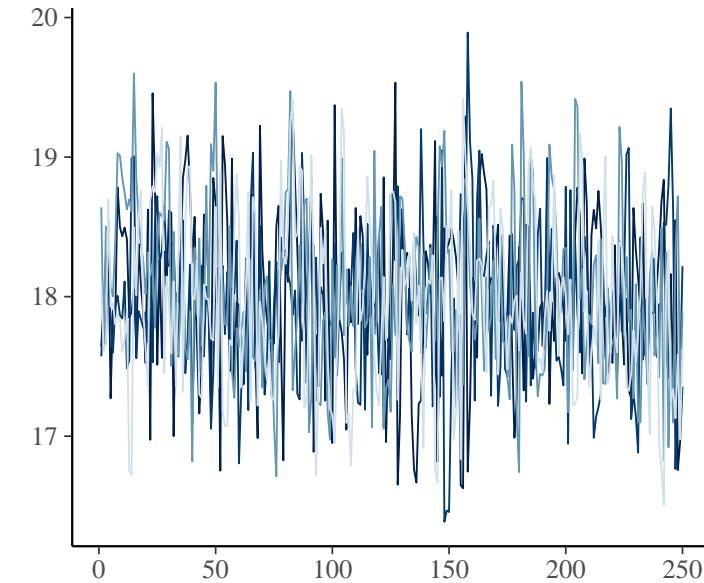
alpha



sigma



sigma



Chain

— 1

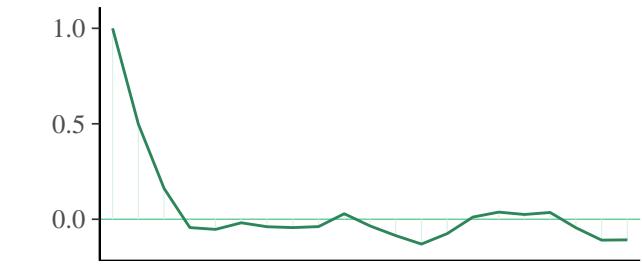
— 2

— 3

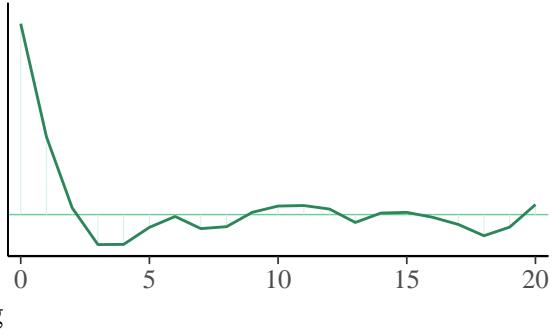
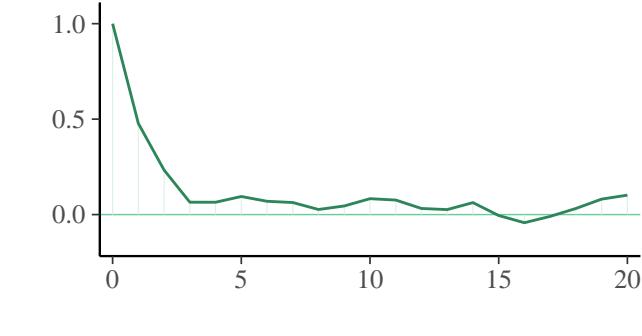
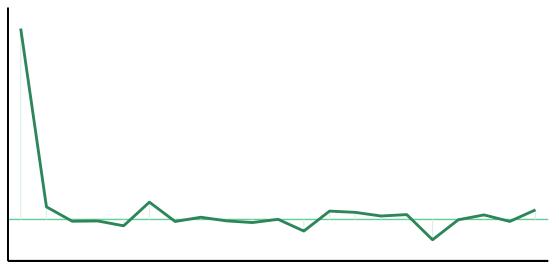
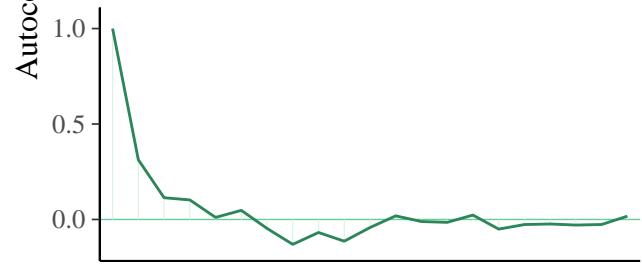
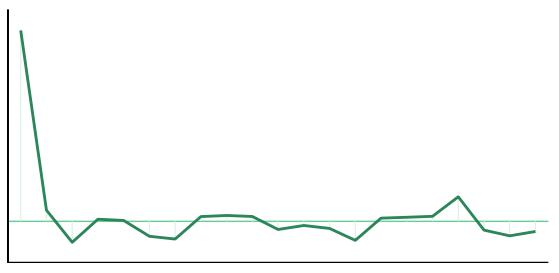
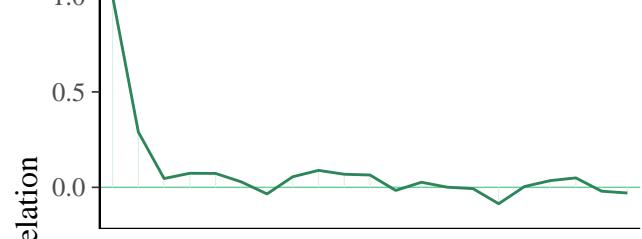
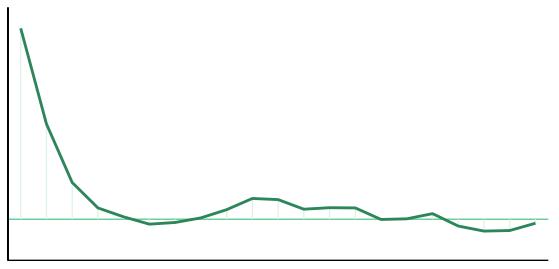
— 4

help("MCMC-diagnostics")

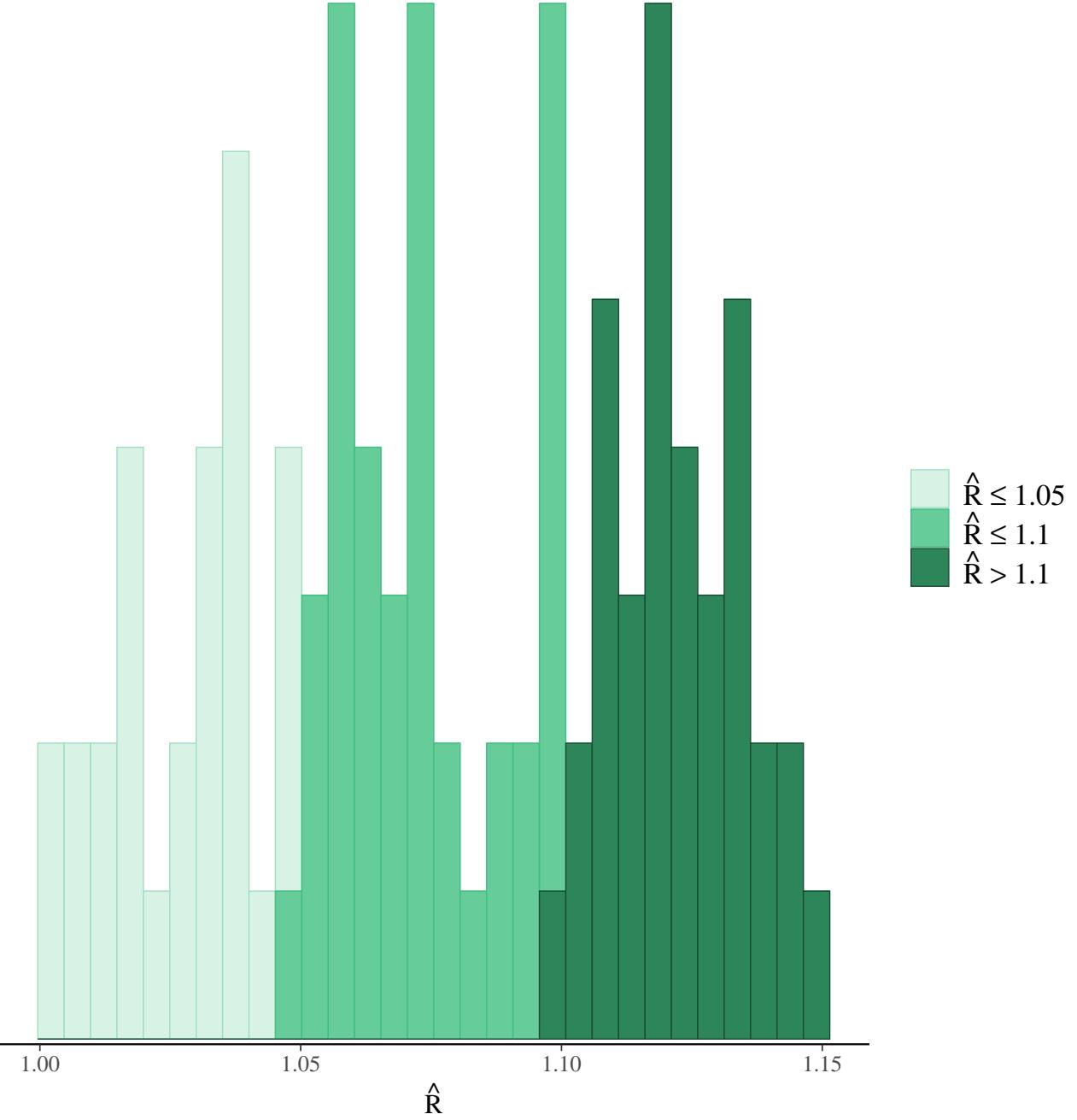
alpha



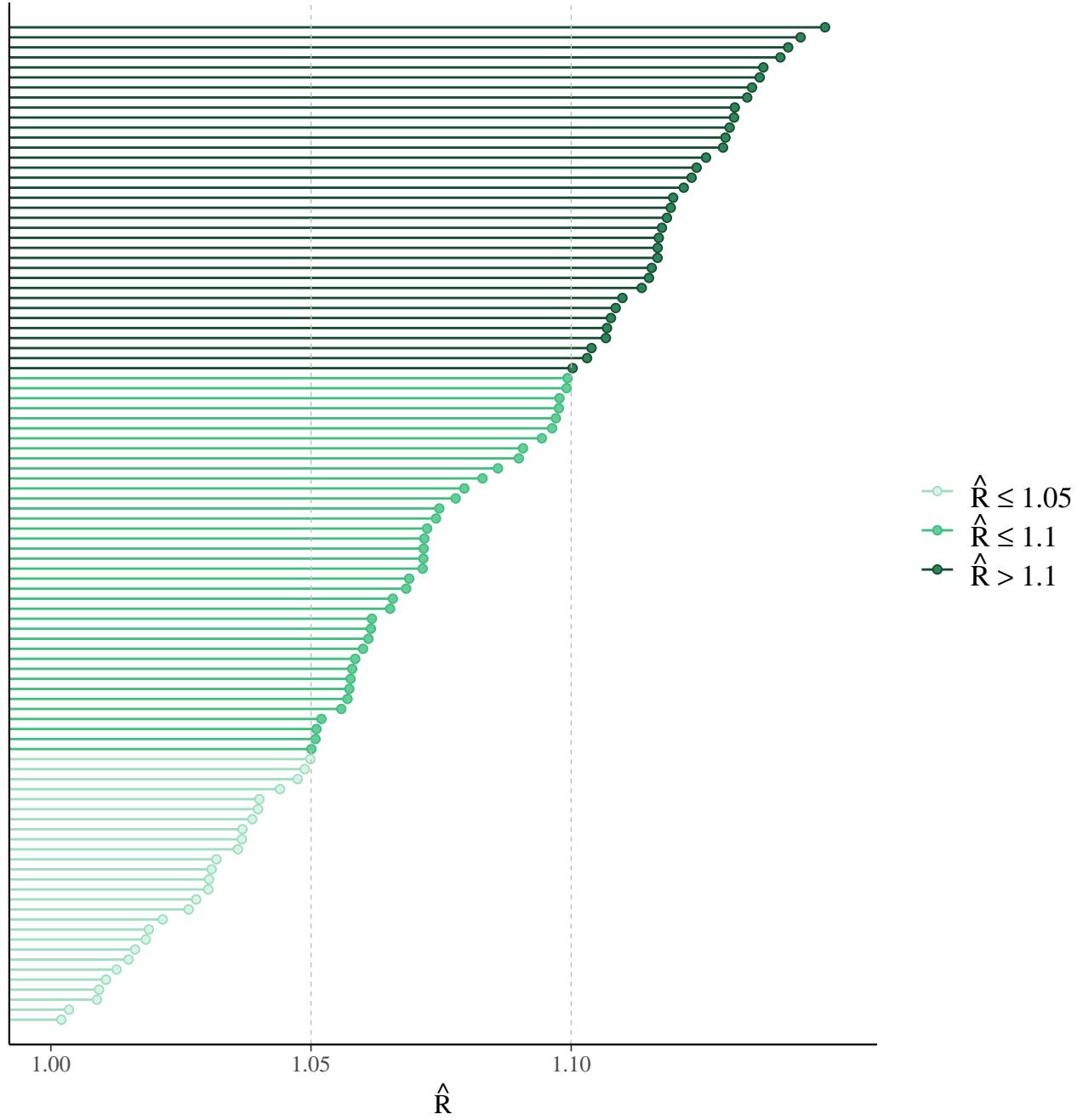
beta[1]



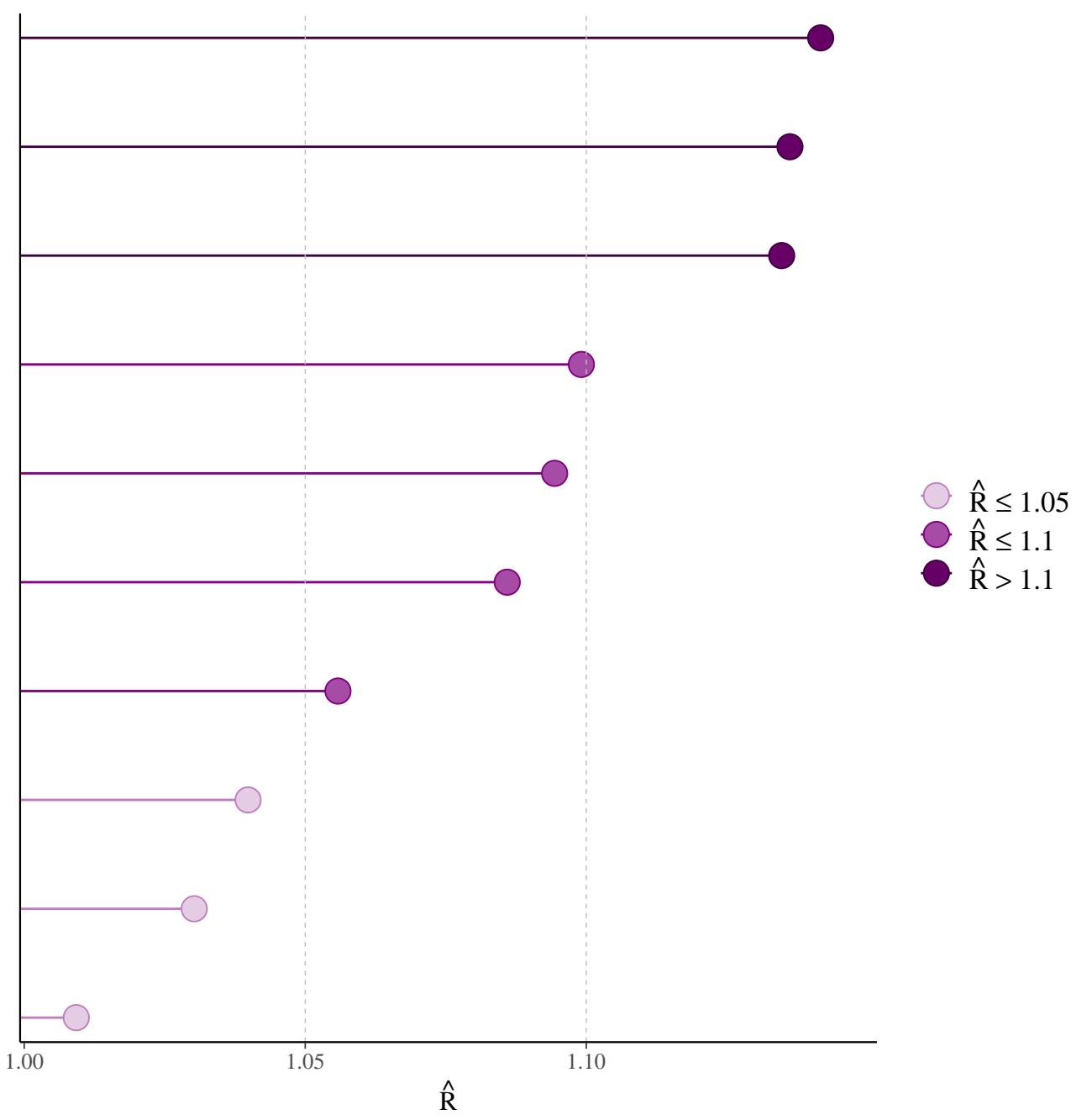
help("MCMC-diagnostics")



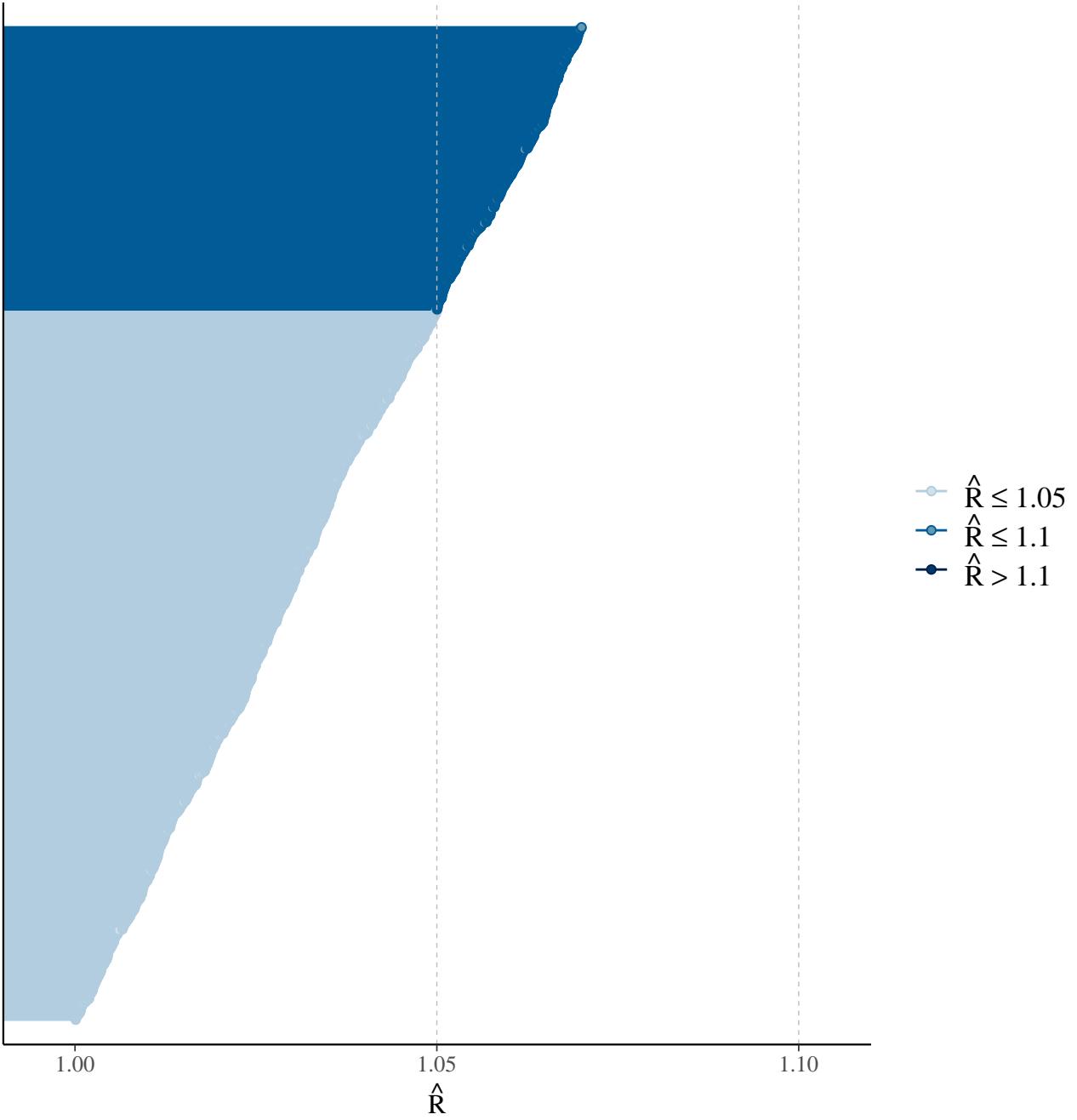
help("MCMC-diagnostics")



help("MCMC-diagnostics")

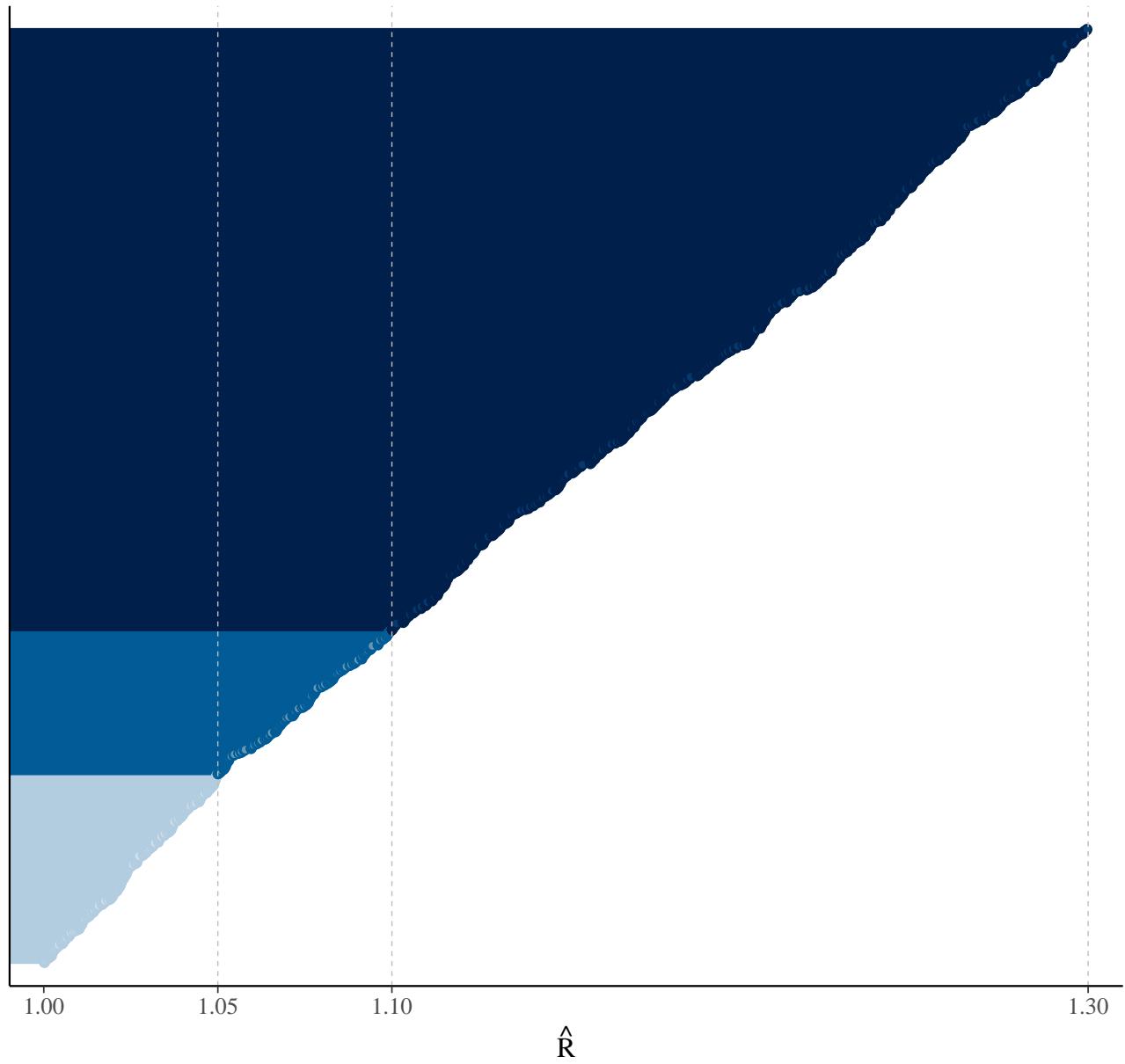


help("MCMC-diagnostics")

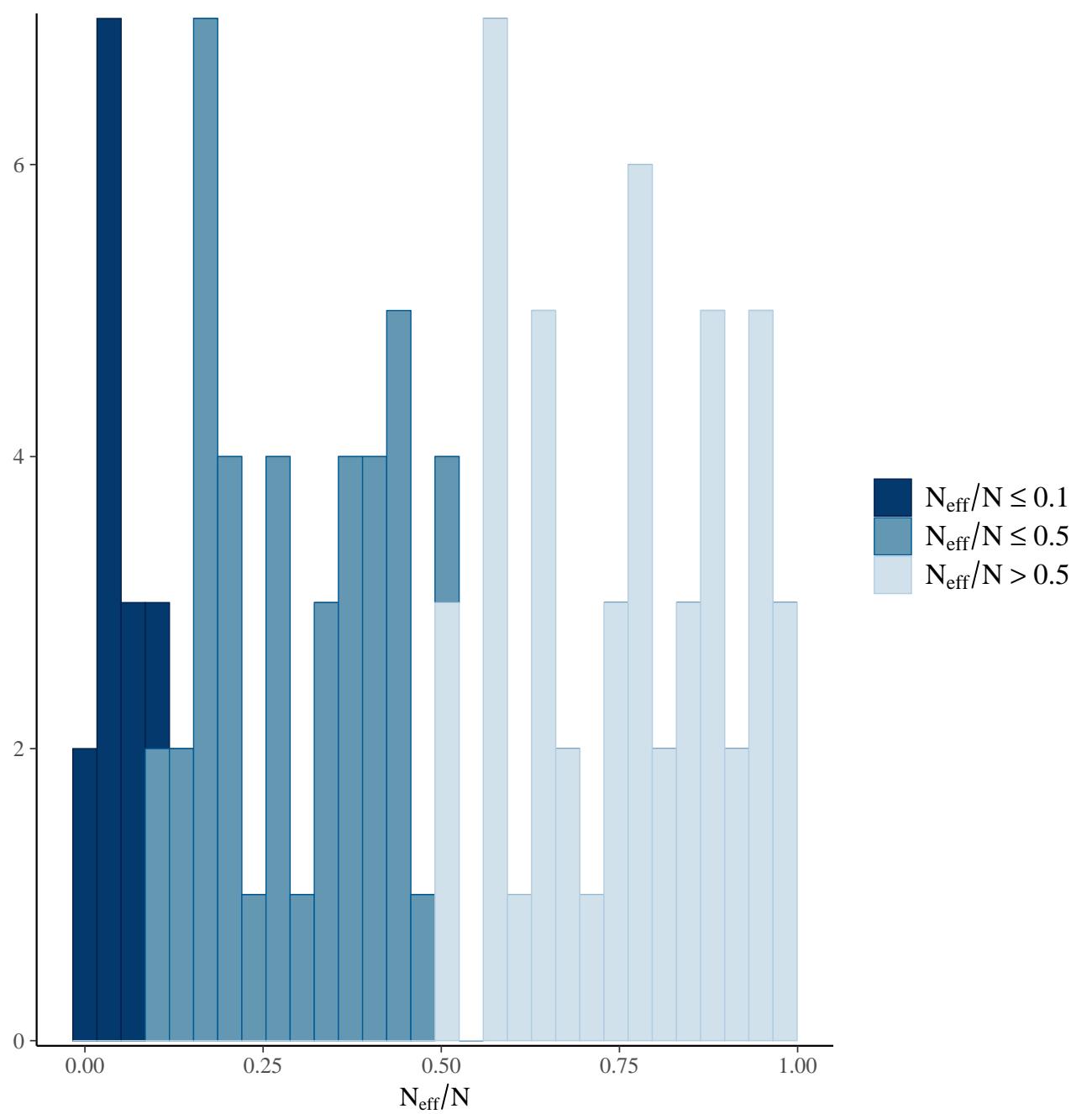


$\hat{R} \leq 1.05$   $\hat{R} \leq 1.1$   $\hat{R} > 1.1$

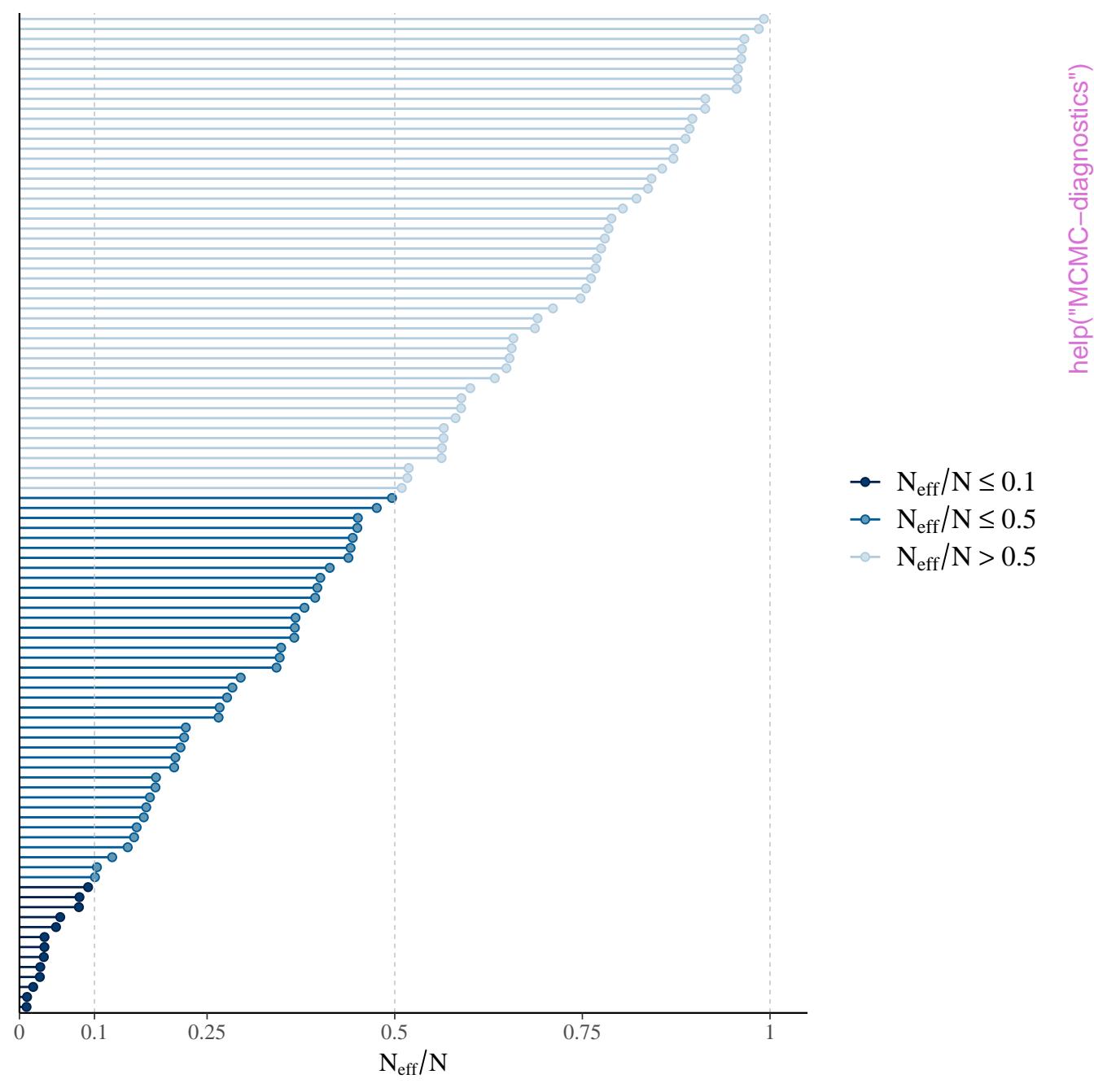
help("MCMC-diagnostics")



help("MCMC-diagnostics")

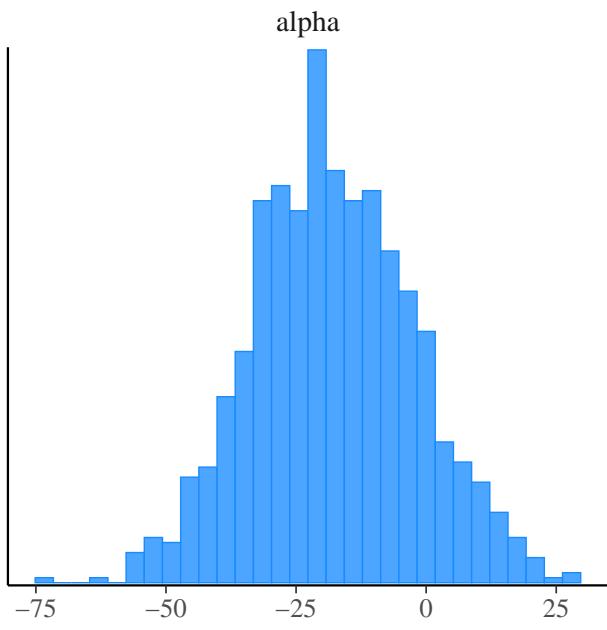


help("MCMC-diagnostics")

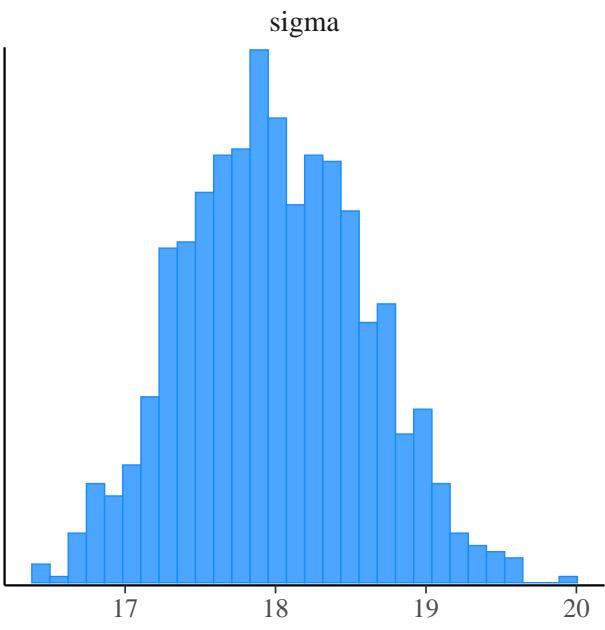


help("MCMC-distributions")

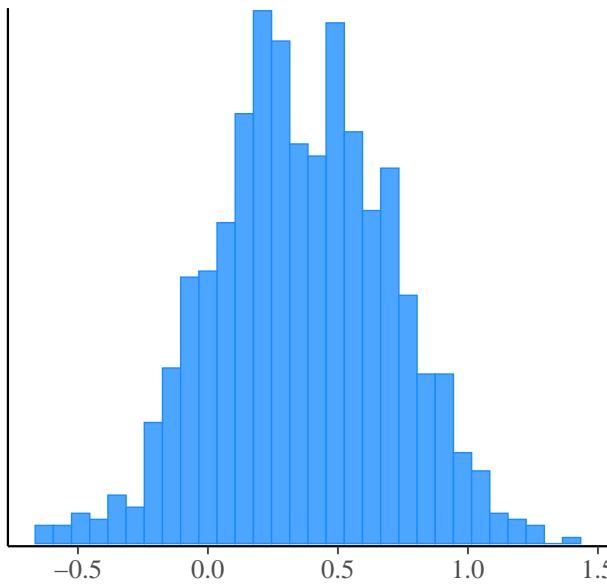
alpha



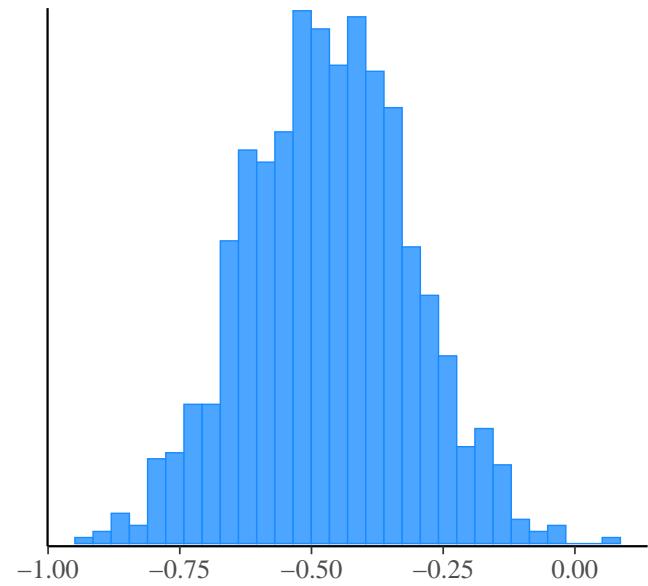
sigma



beta[1]

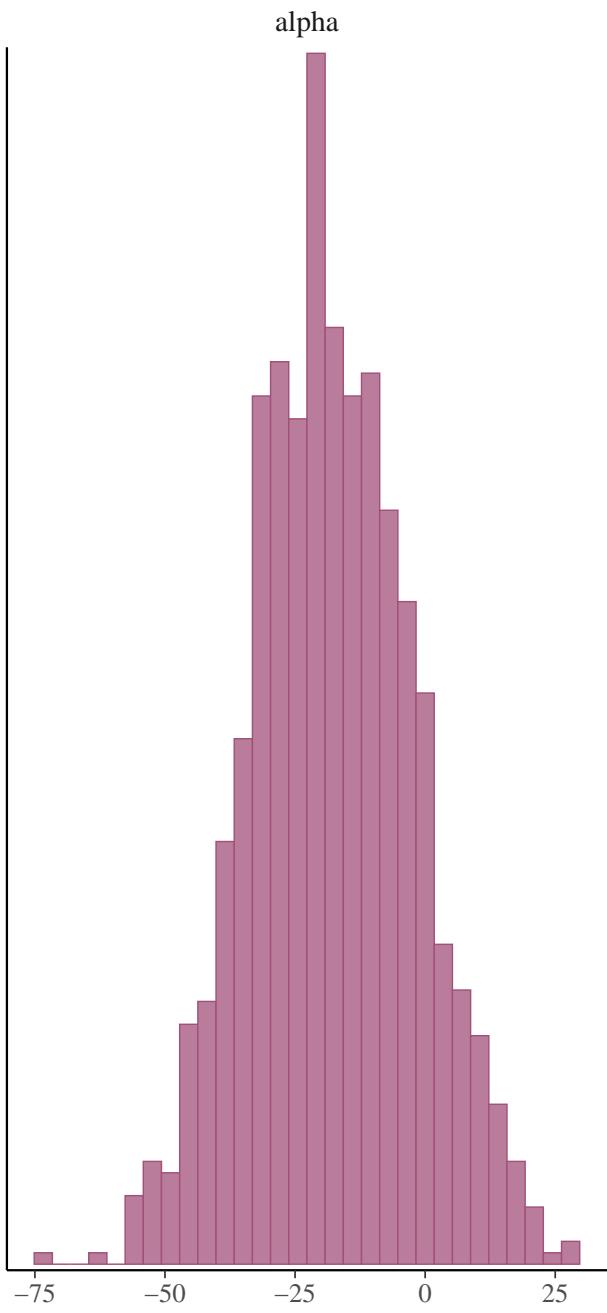


beta[2]

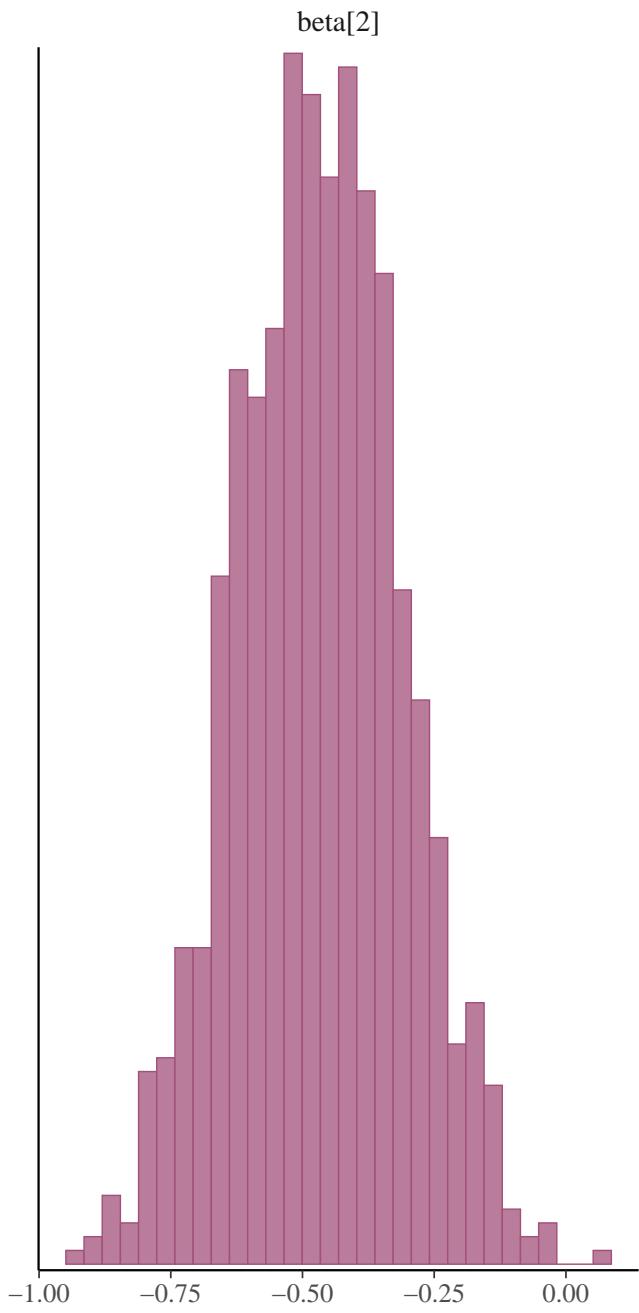


help("MCMC-distributions")

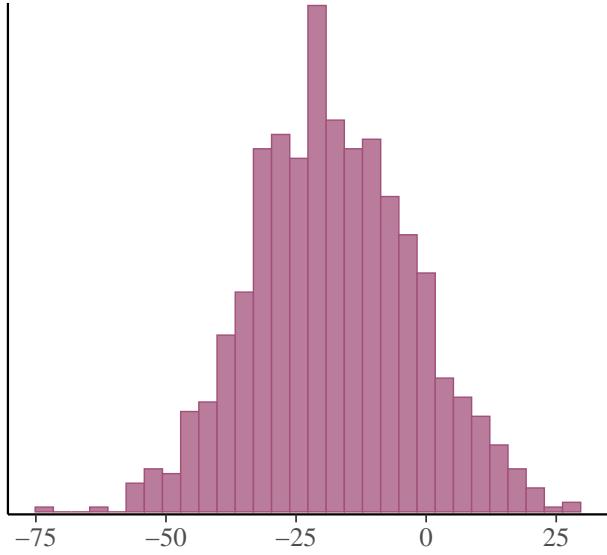
alpha



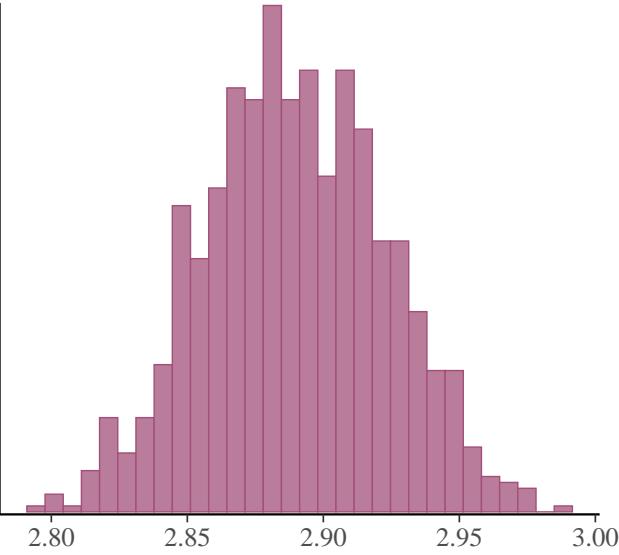
beta[2]



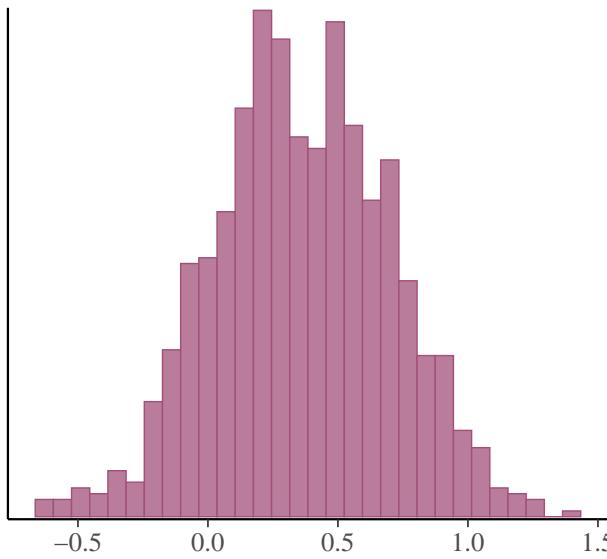
$\alpha$



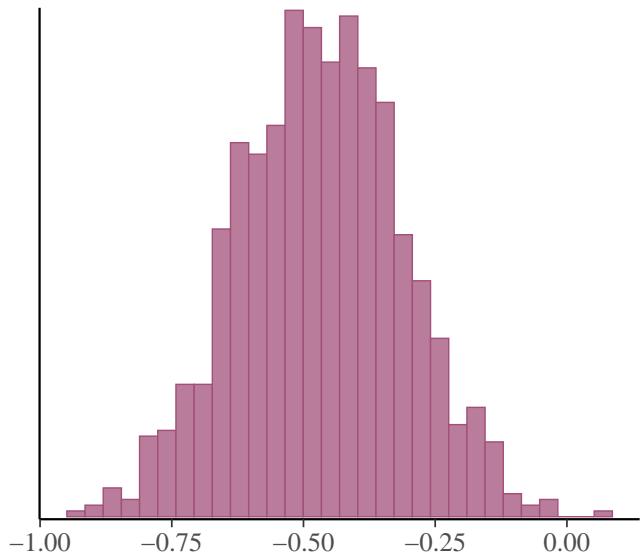
$\log(\sigma)$



$\beta_1$



$\beta_2$



help("MCMC-distributions")

```
help("MCMC-distributions")
```

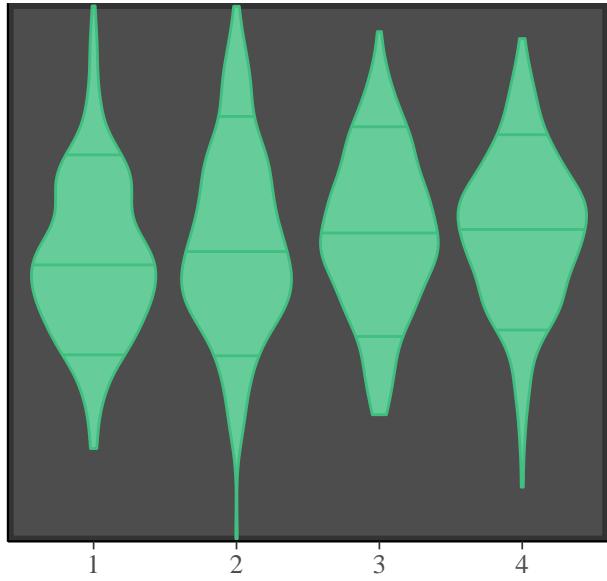
sigma

17 18 19

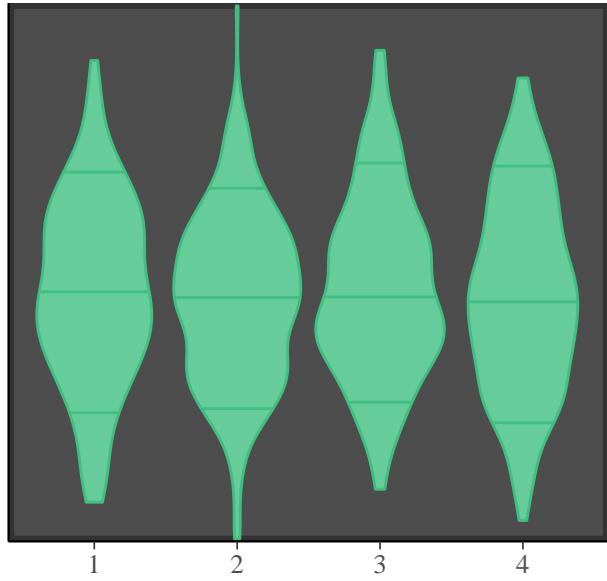
beta[2]

-0.75 -0.50 -0.25 0.00

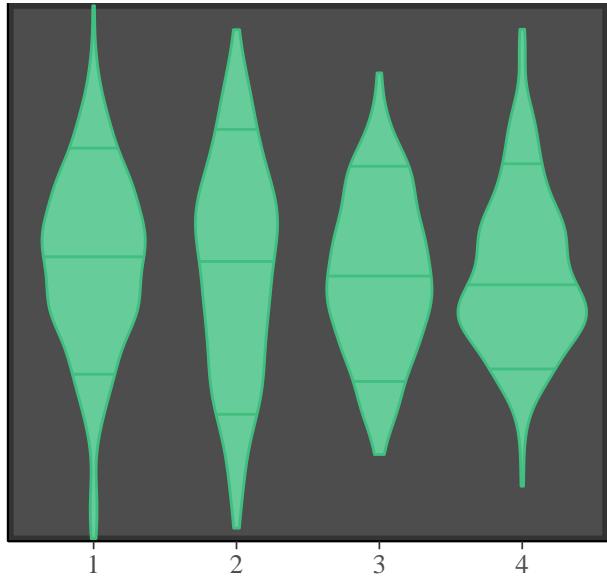
alpha



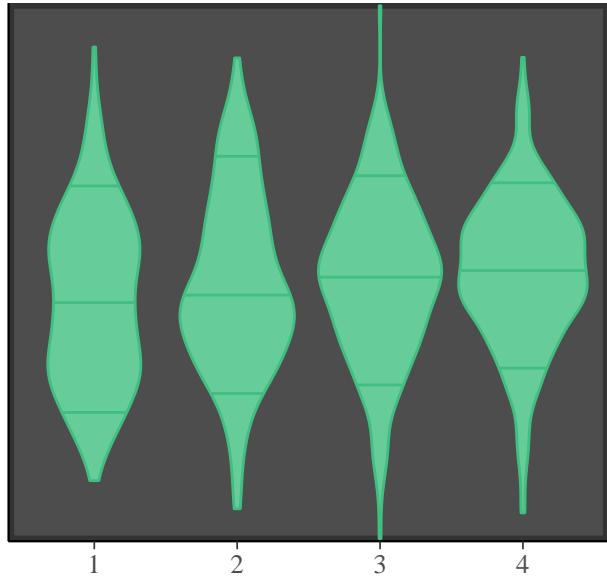
sigma



beta[1]

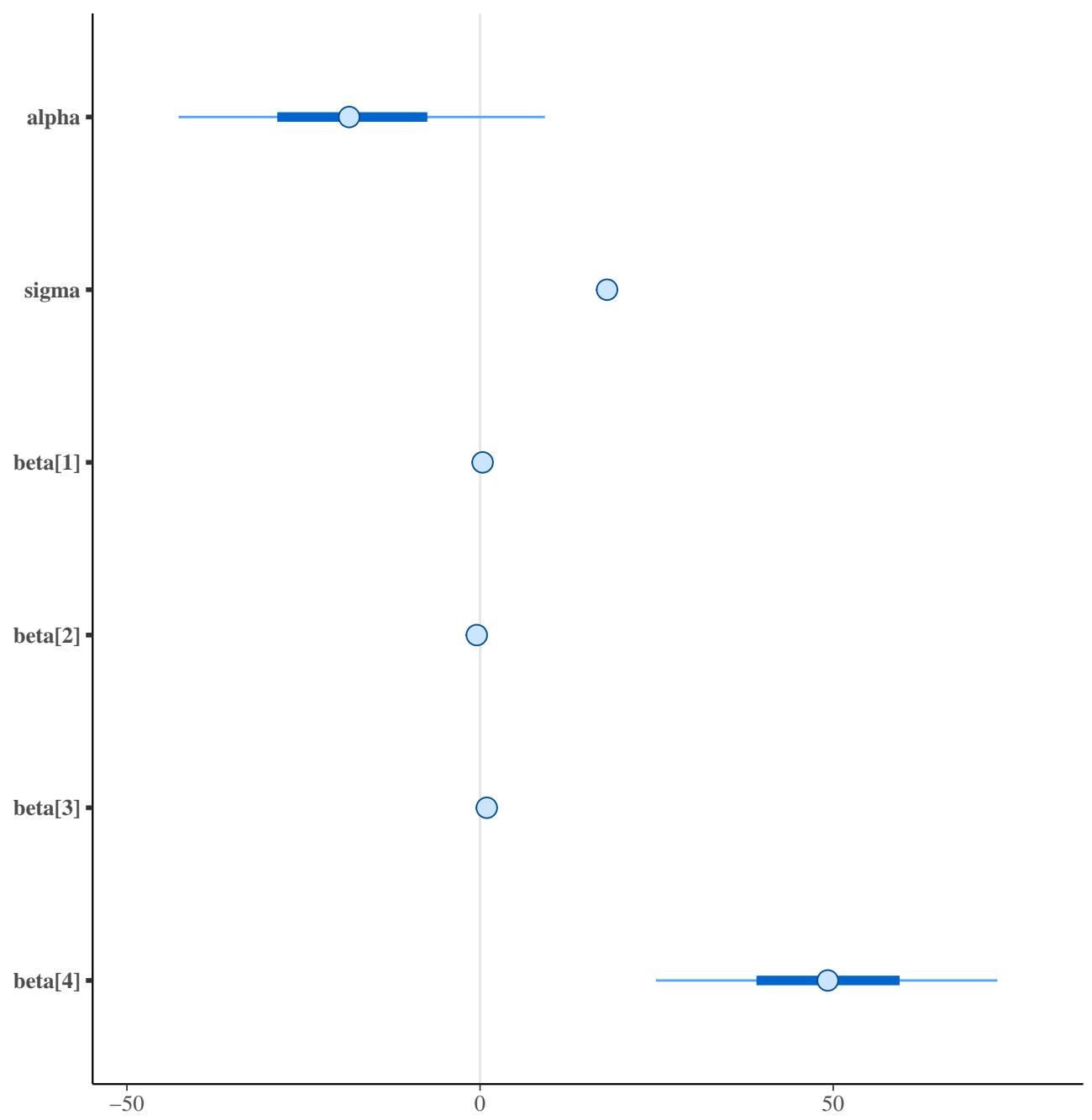


beta[2]

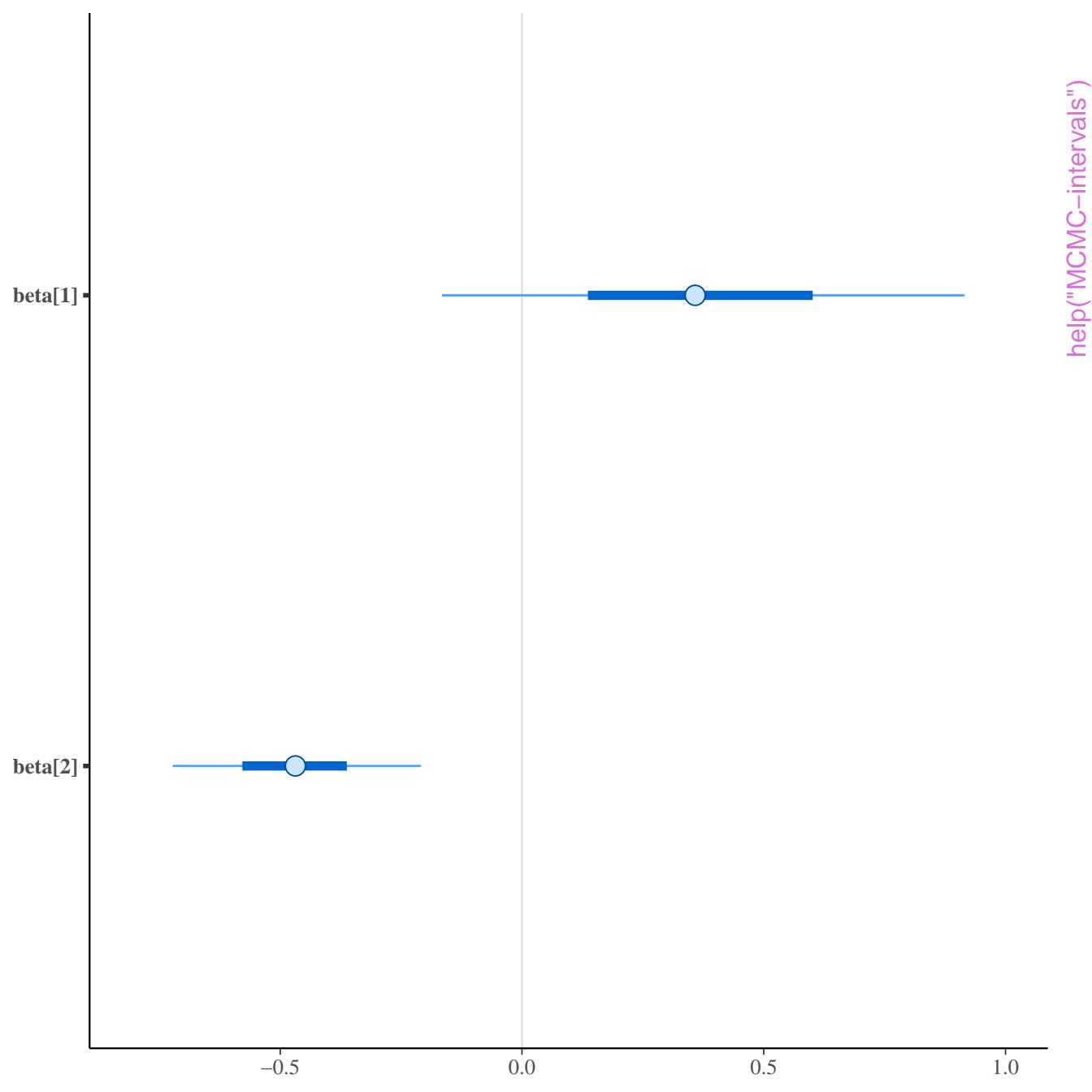


help("MCMC-distributions")

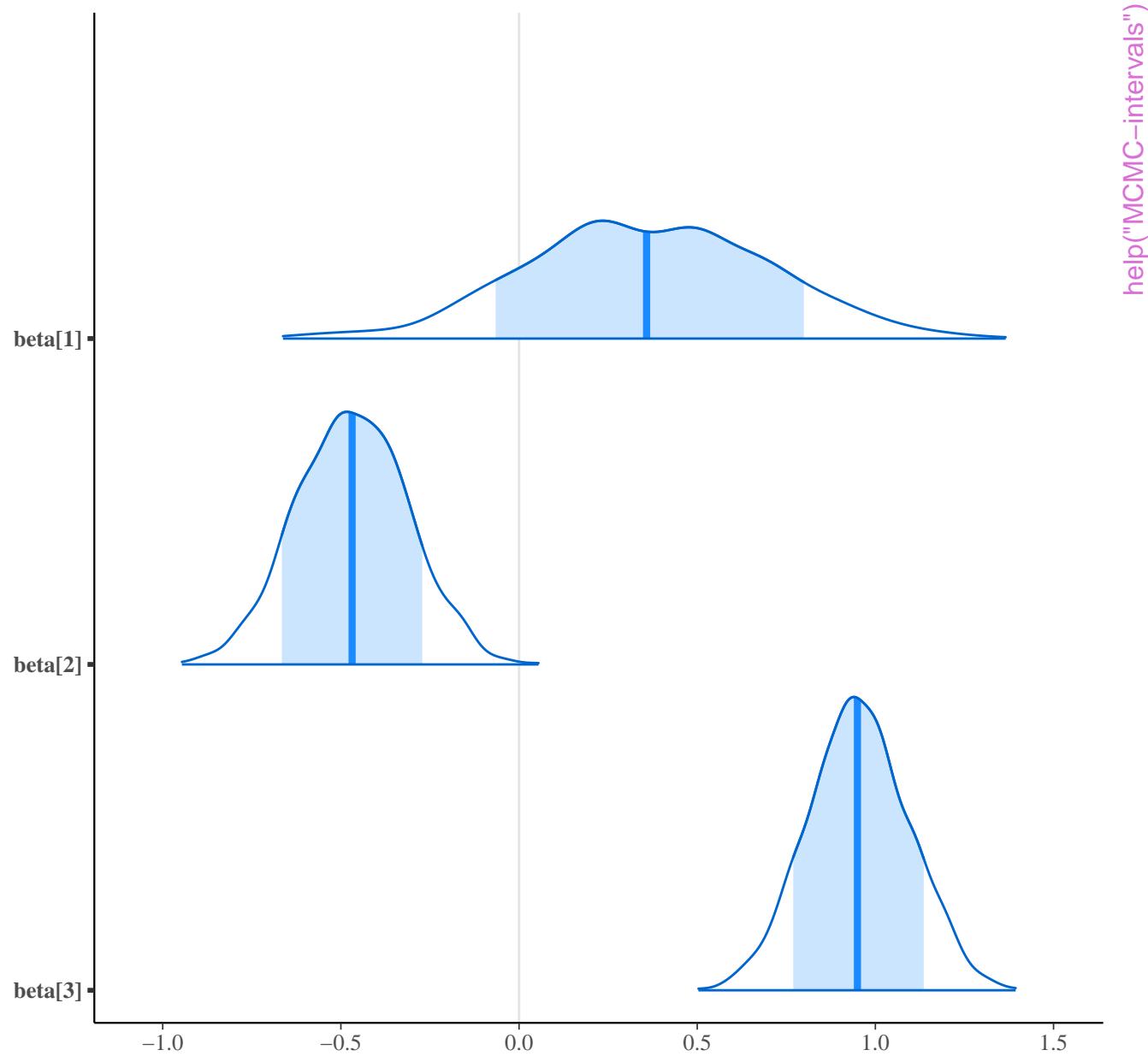
```
help("MCMC-intervals")
```



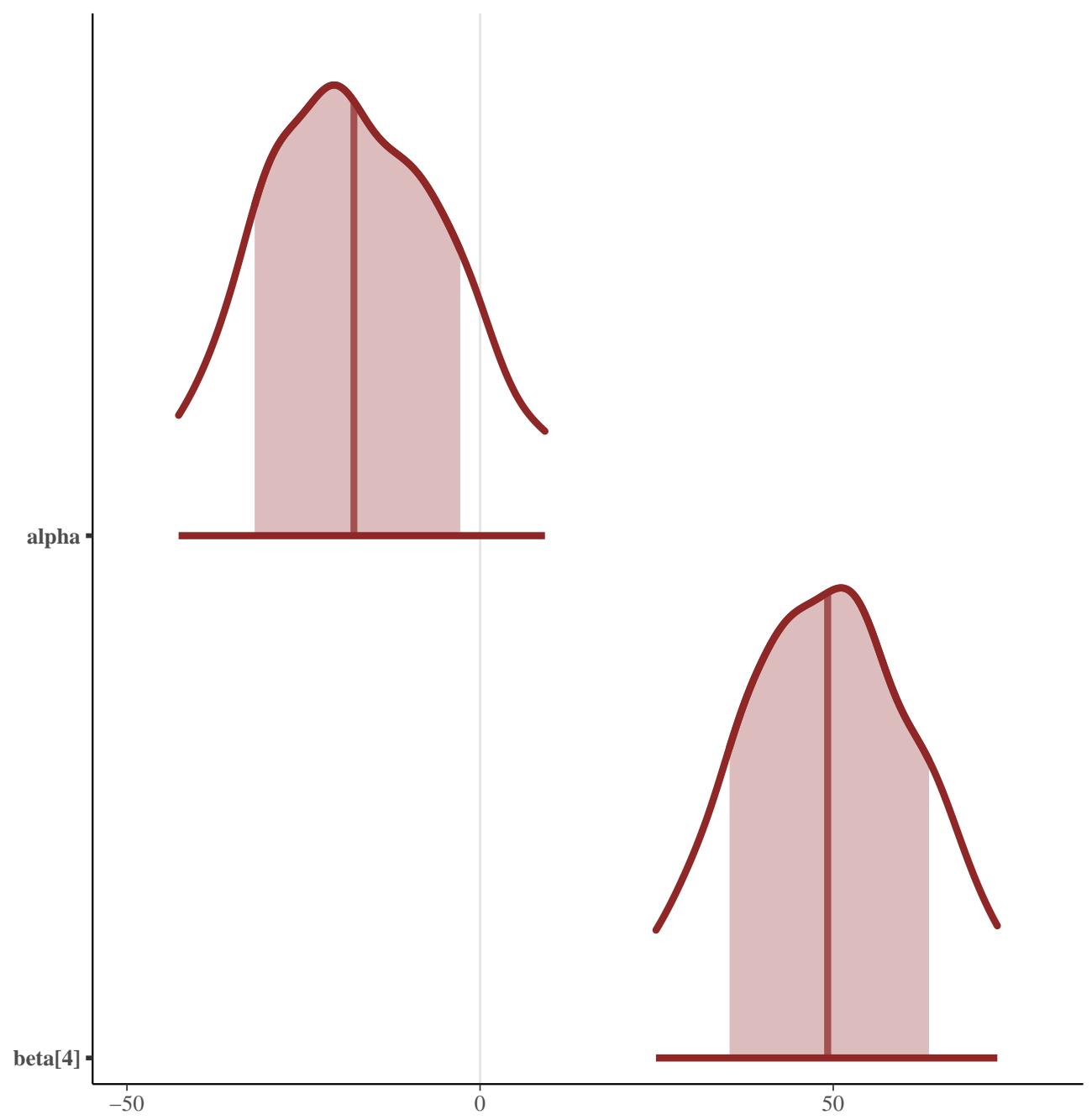
```
help("MCMC-intervals")
```



Posterior distributions  
with medians and 80% intervals

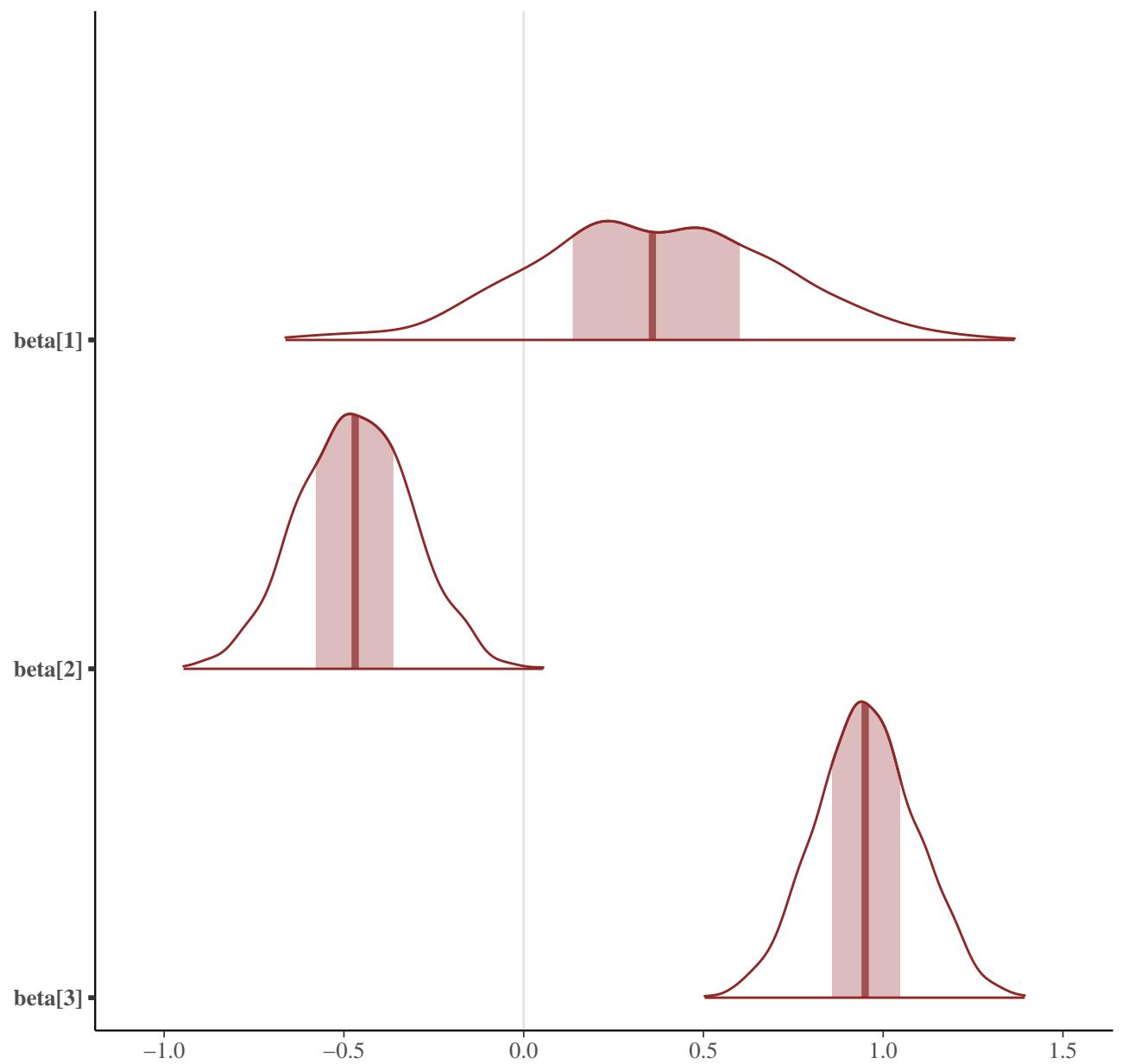


help("MCMC-intervals")



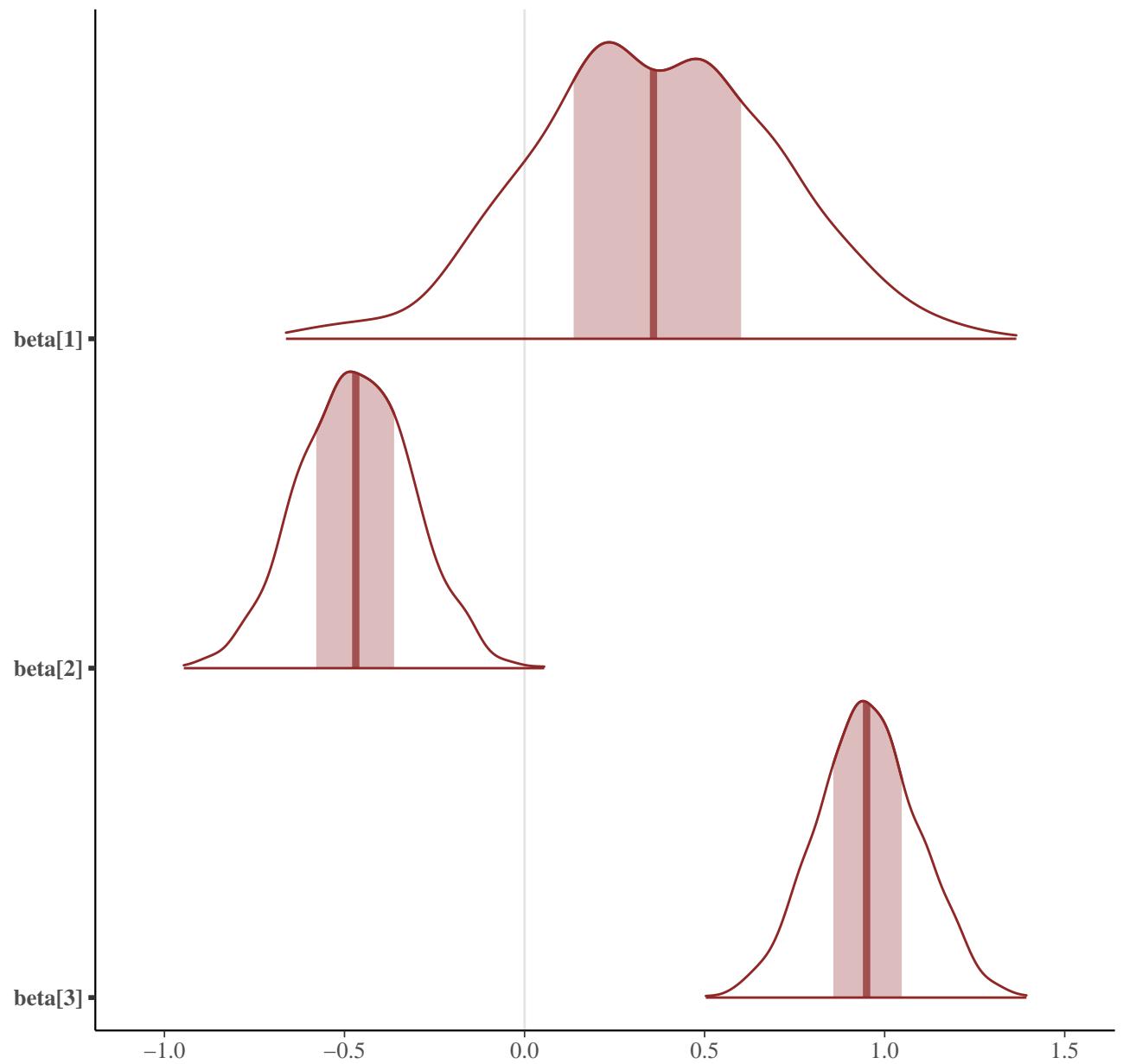
Curves have same area

A wide, uncertain interval is spread thin when areas are equal



Curves have same maximum height

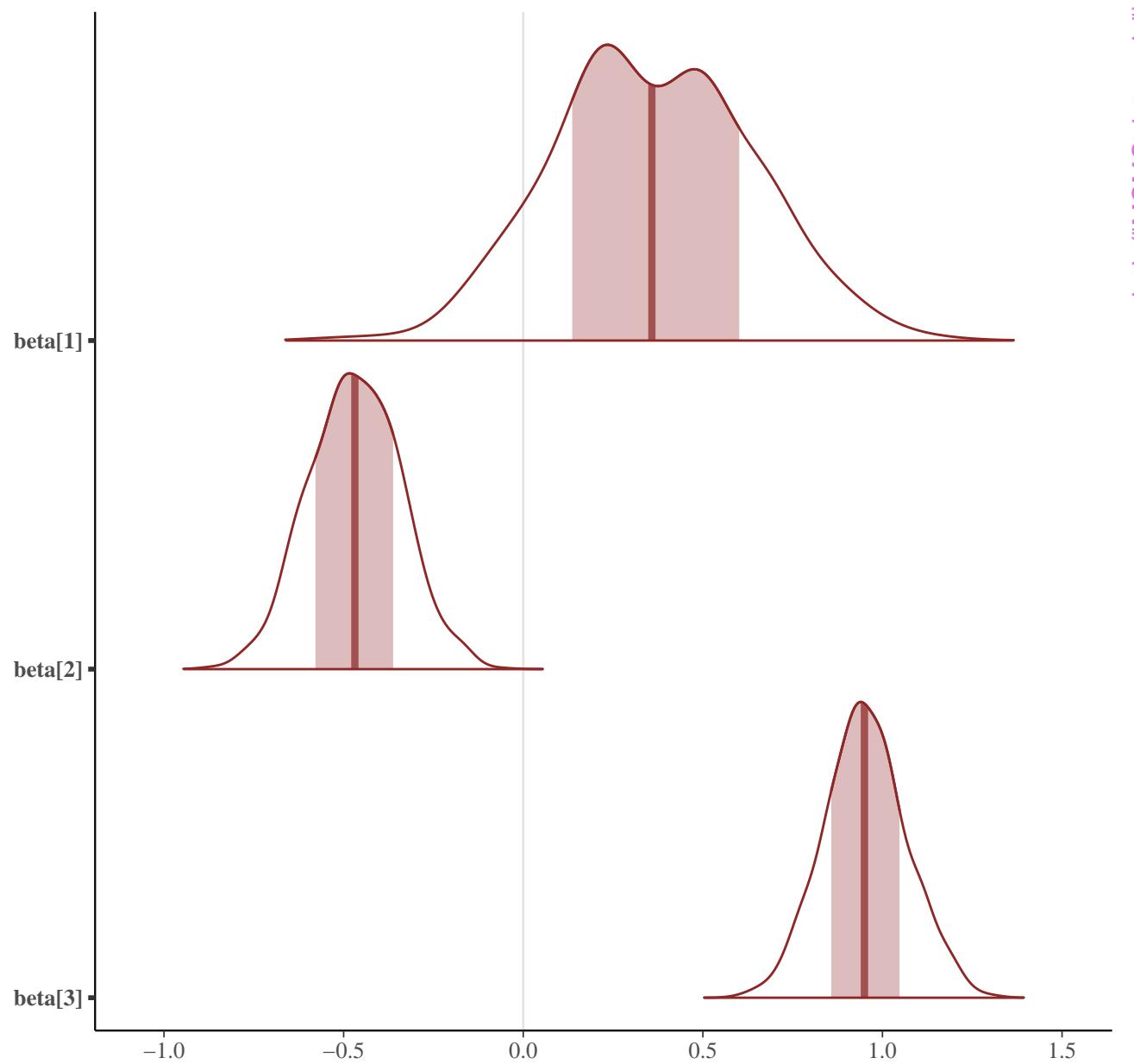
Local curvature is clearer but more uncertain curves use more area



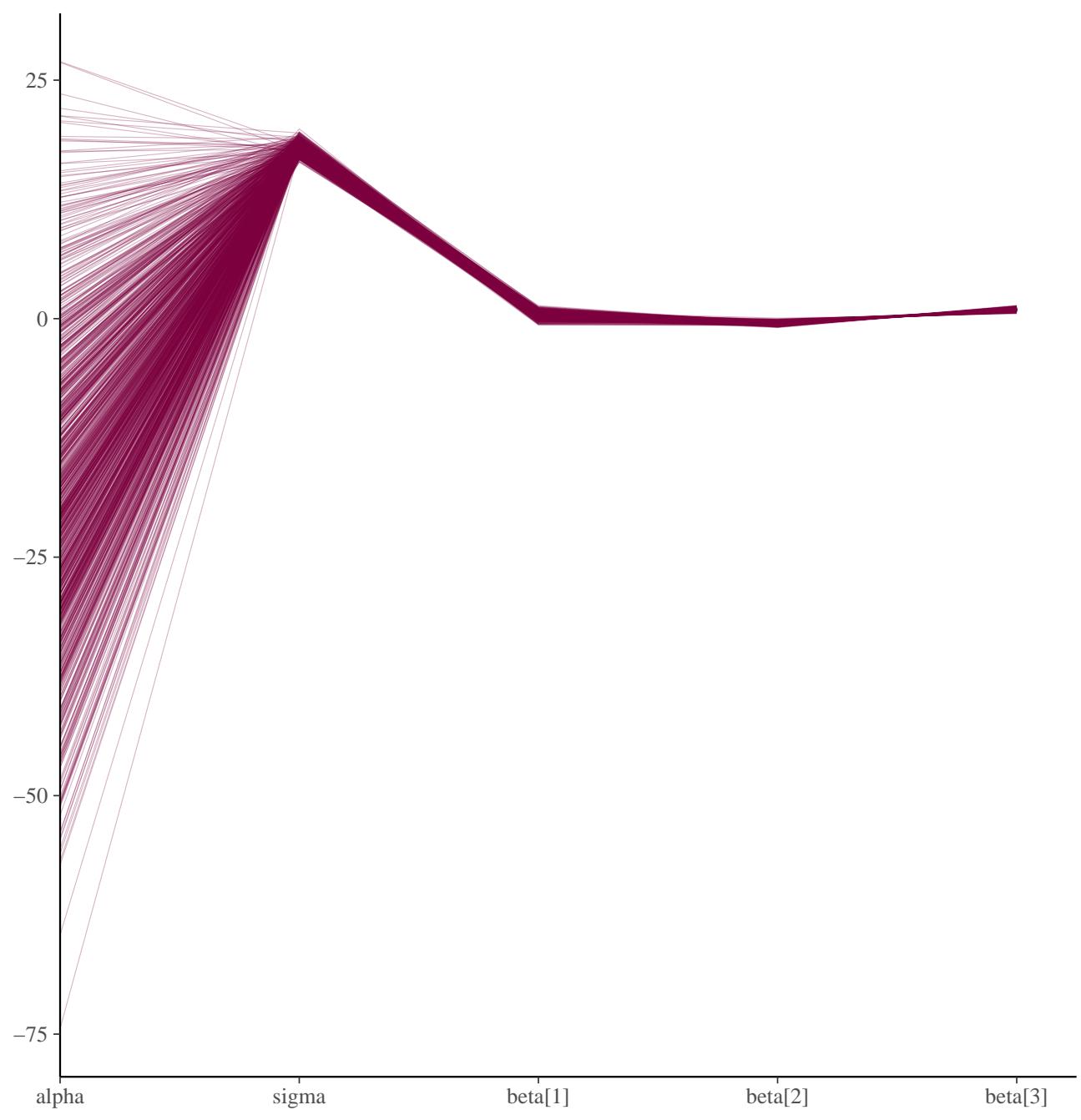
help("MCMC-intervals")

Same maximum heights but heights scaled by square-root

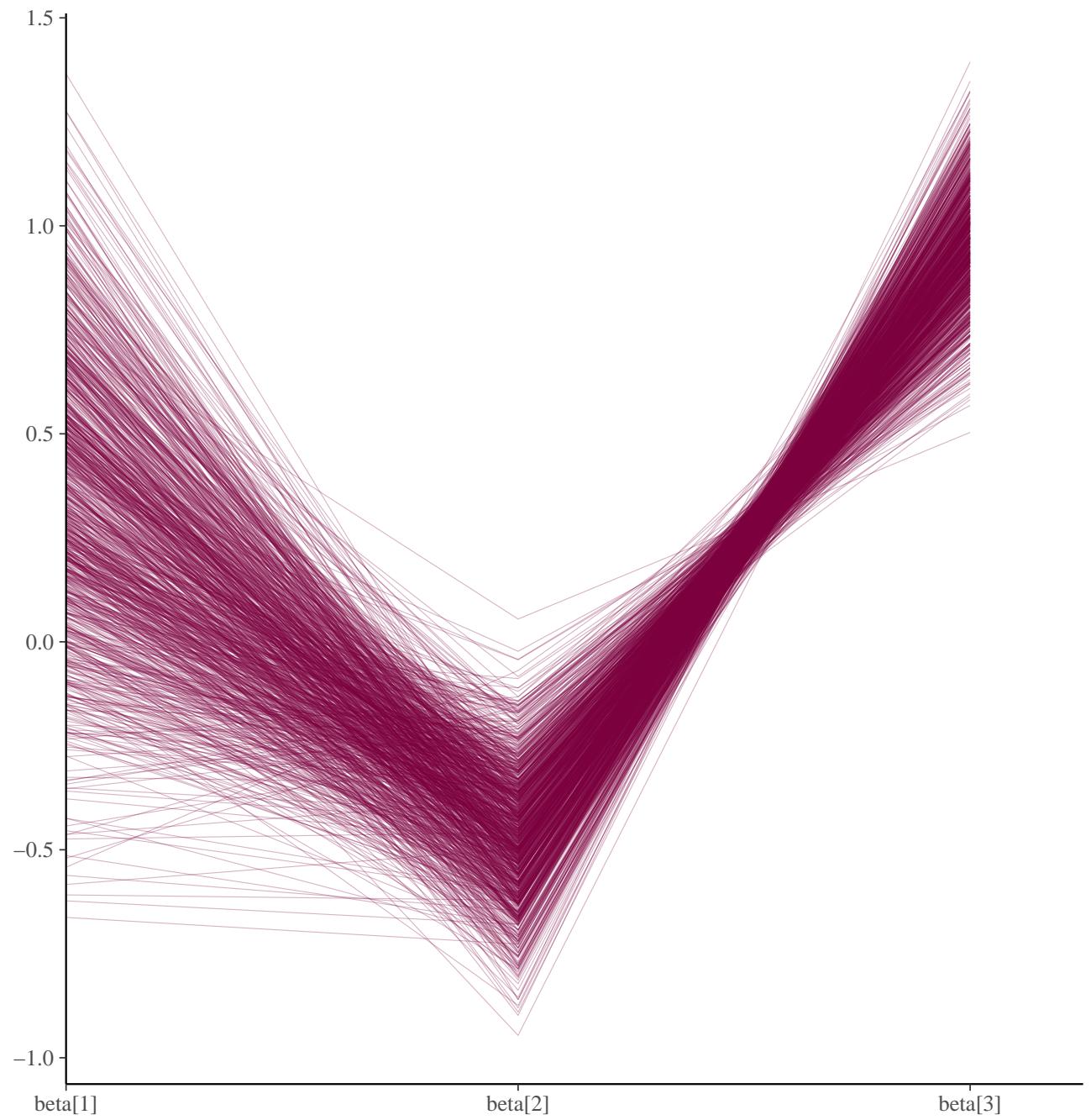
Compromise: Local curvature is accentuated and less area is used



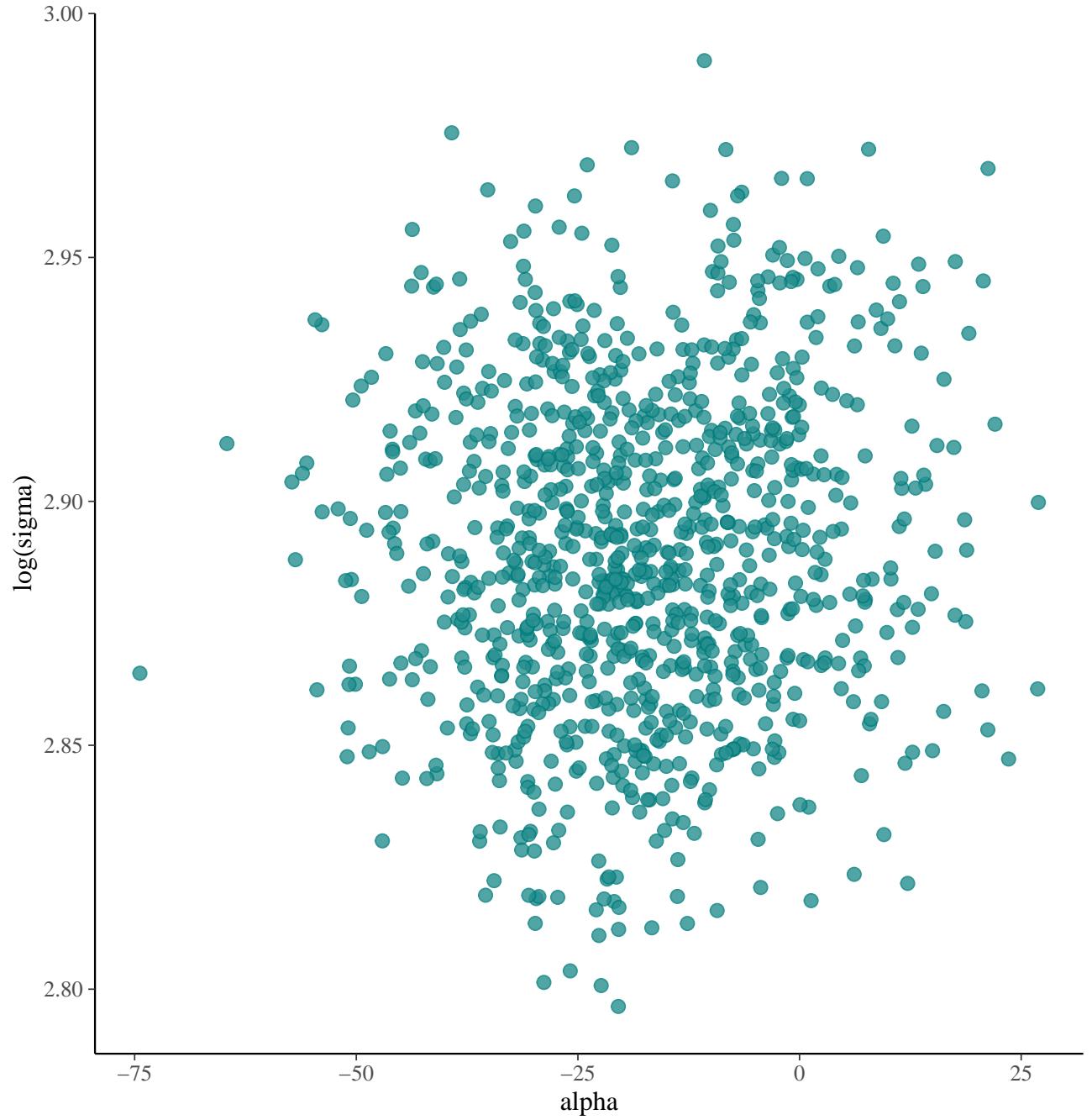
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help("MCMC-parcoord")
```



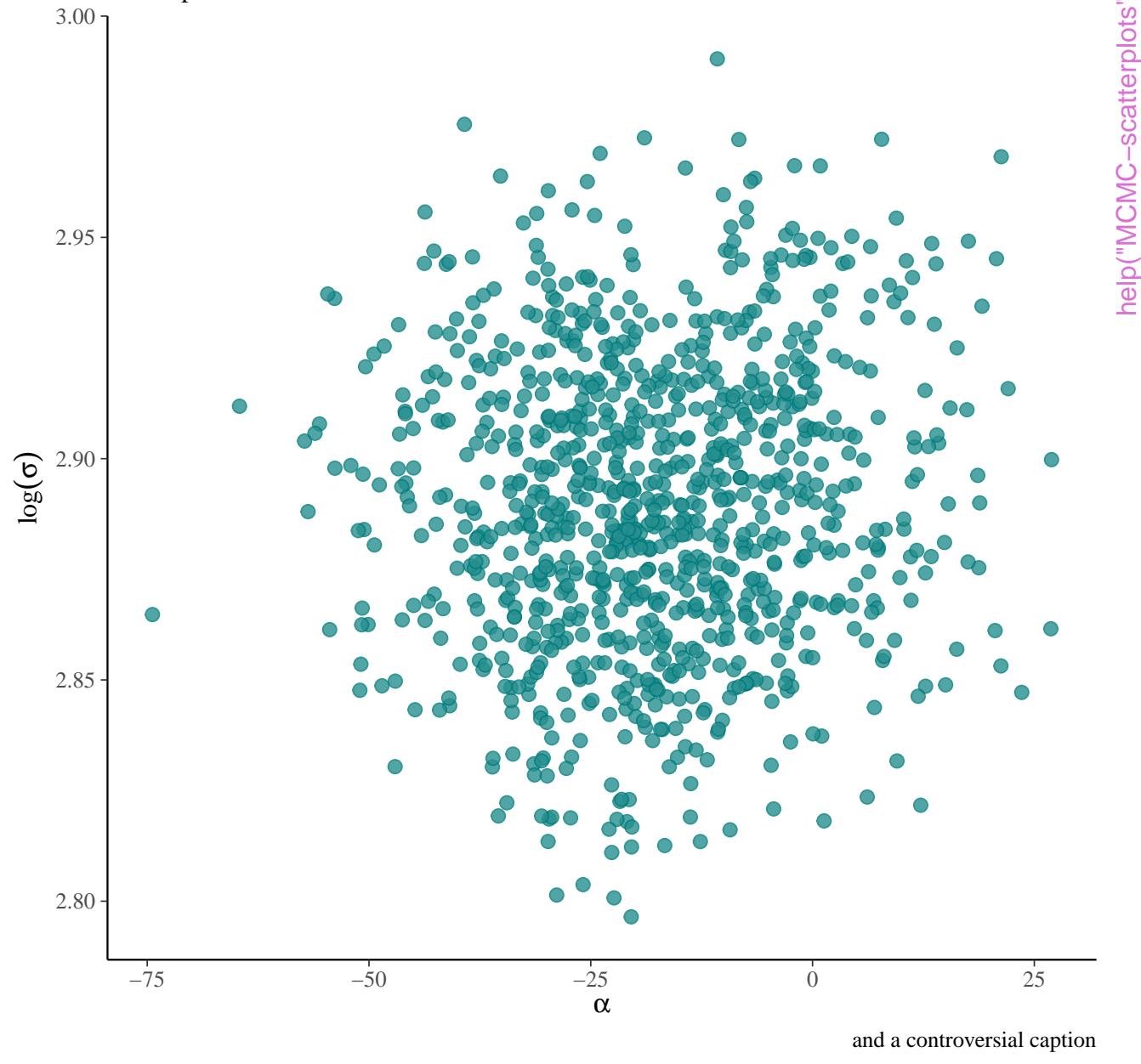
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help("MCMC-parcoord")
```



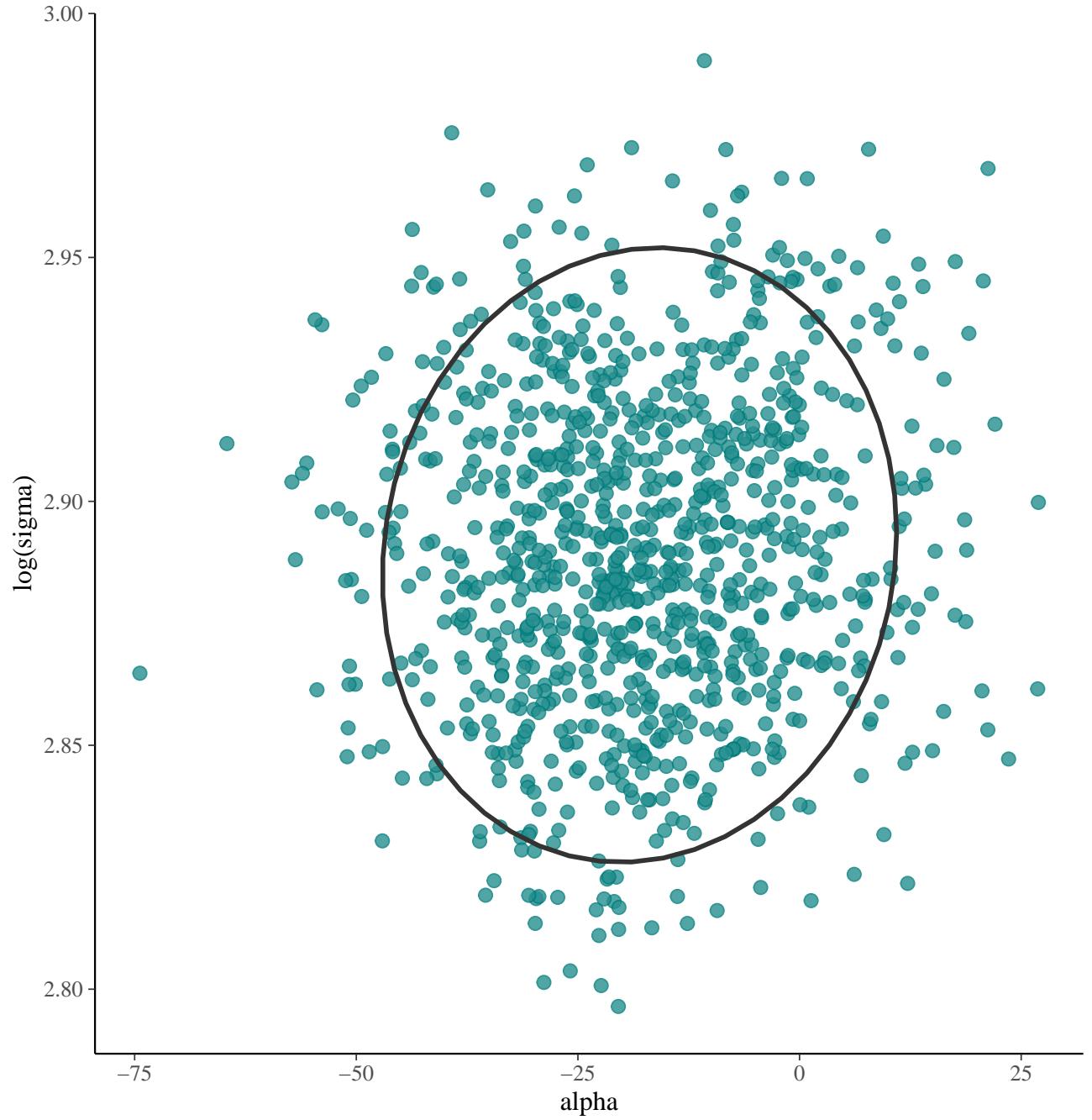
help("MCMC-scatterplots")



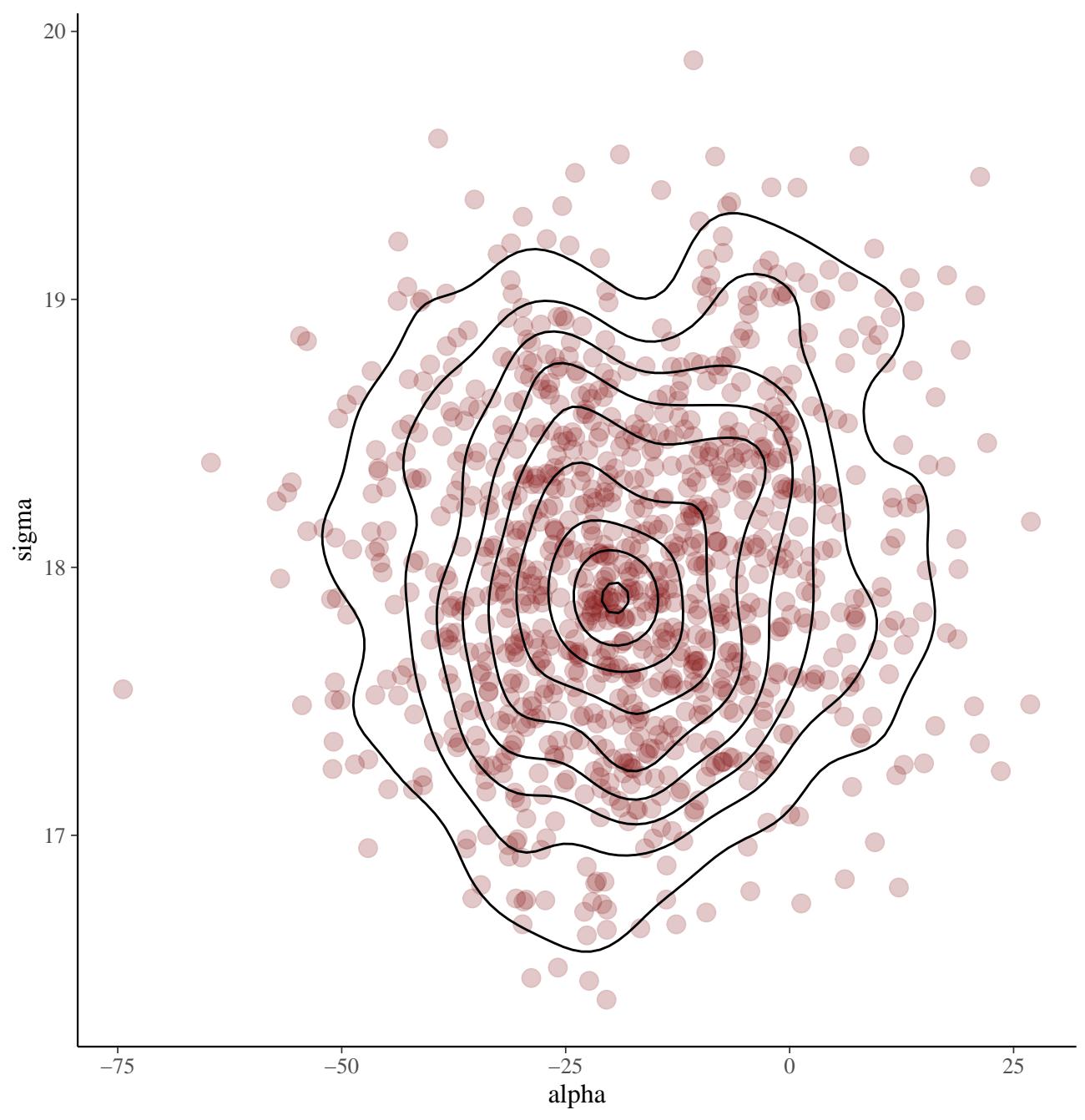
Insert your own headline-grabbing title  
with a provocative subtitle



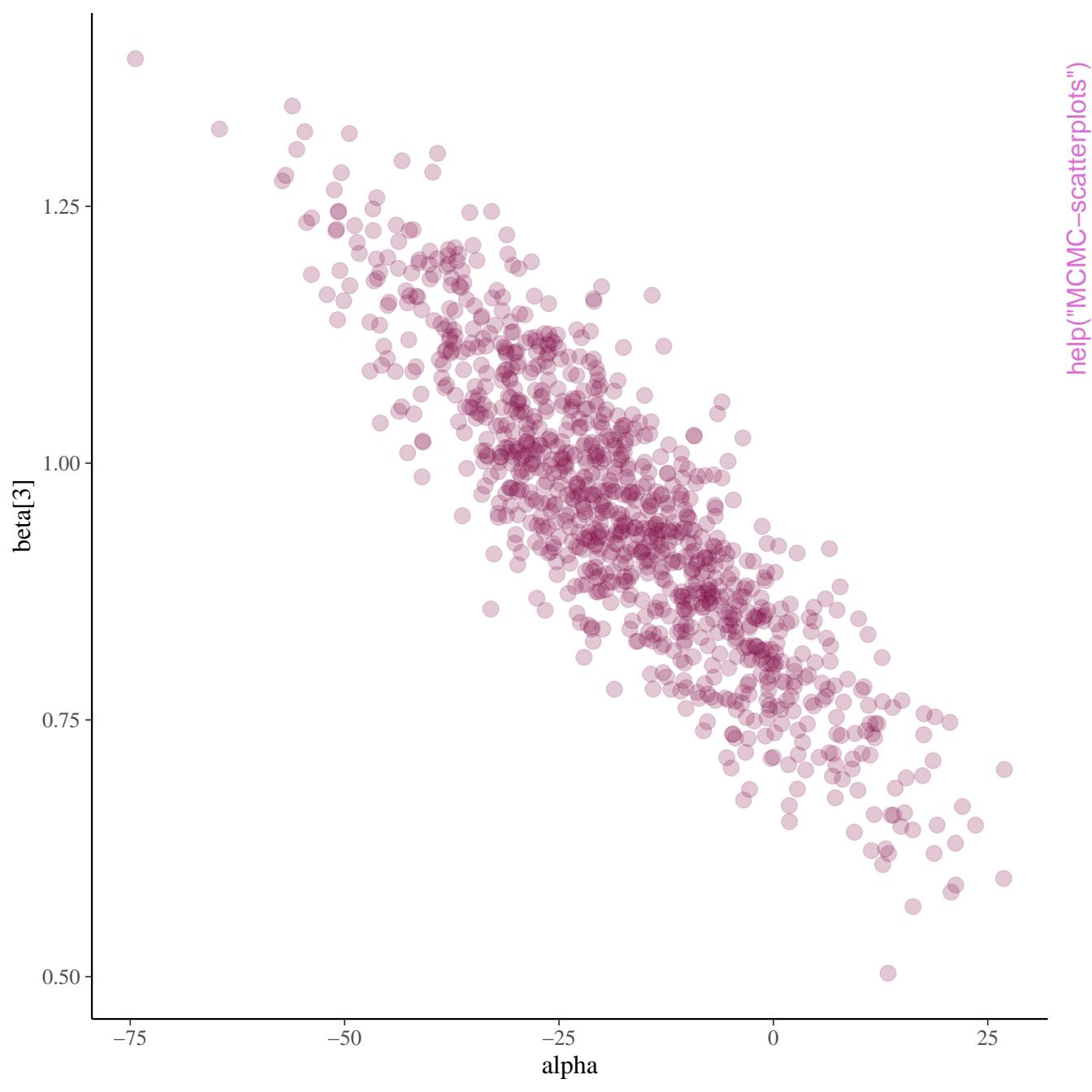
help("MCMC-scatterplots")



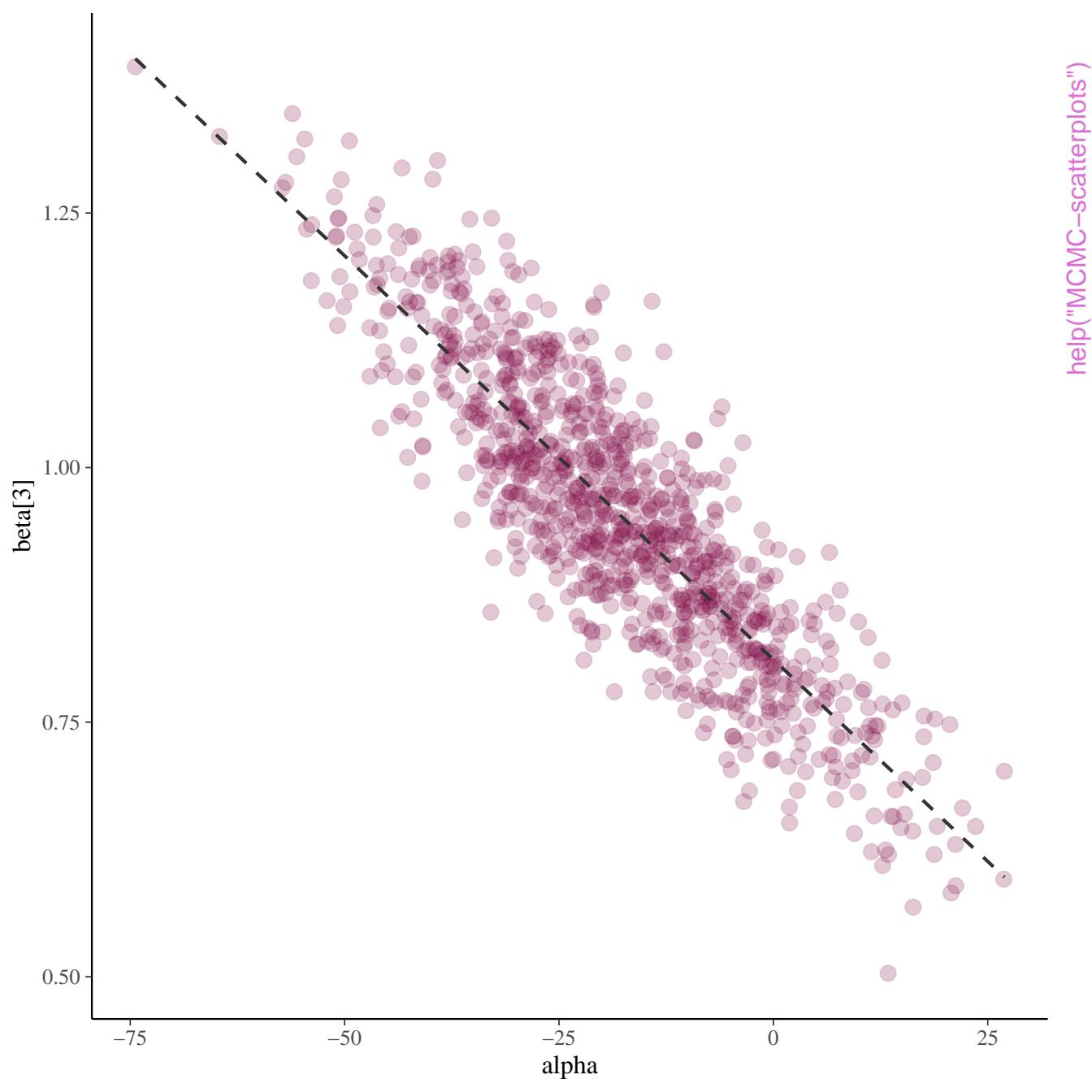
help("MCMC-scatterplots")



help("MCMC-scatterplots")

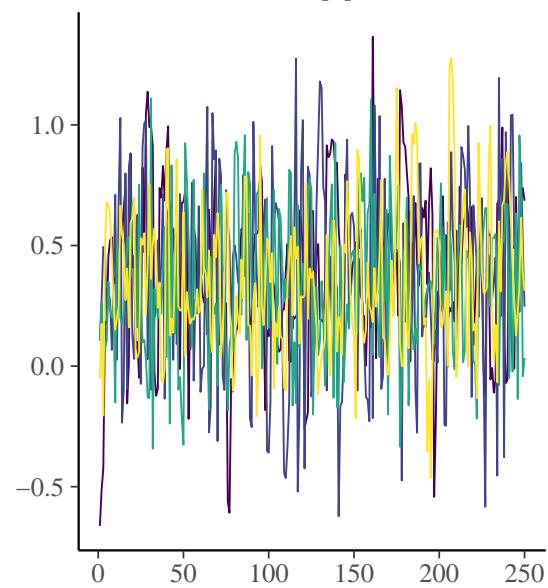


help("MCMC-scatterplots")

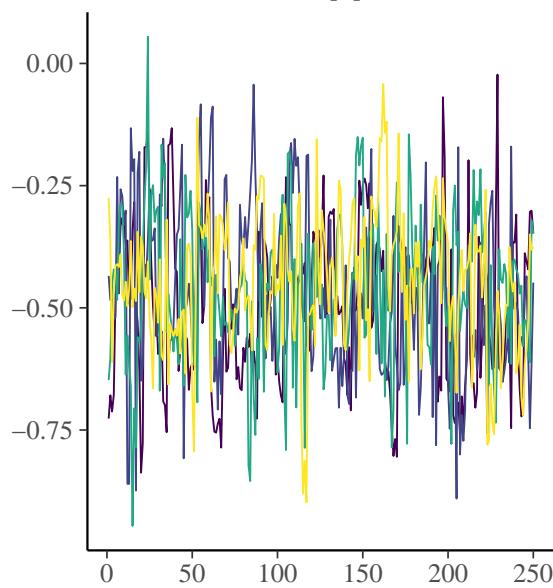


help("MCMC-traces")

beta[1]



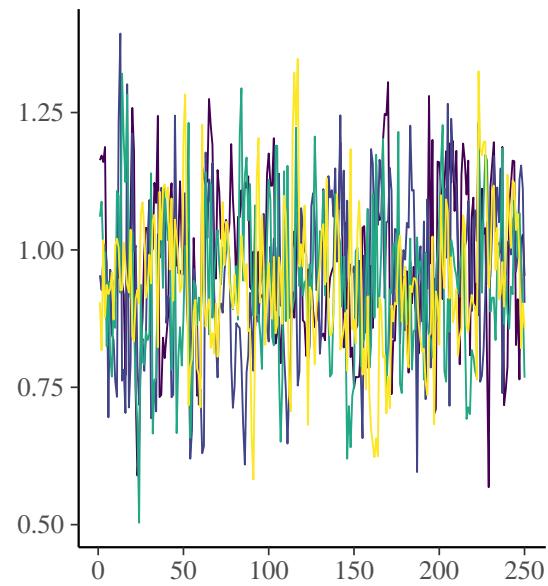
beta[2]



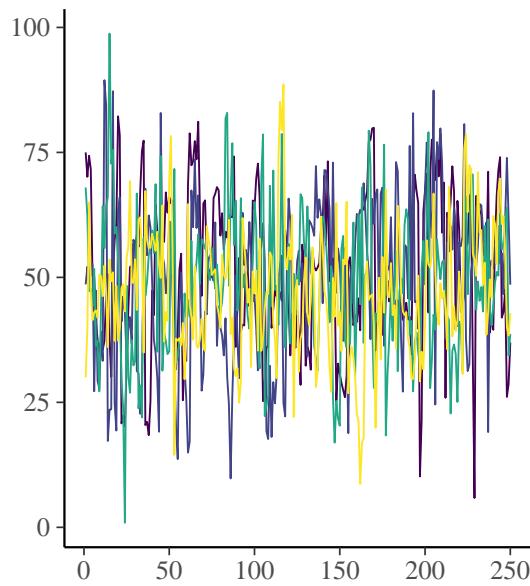
Chain

- 1
- 2
- 3
- 4

beta[3]

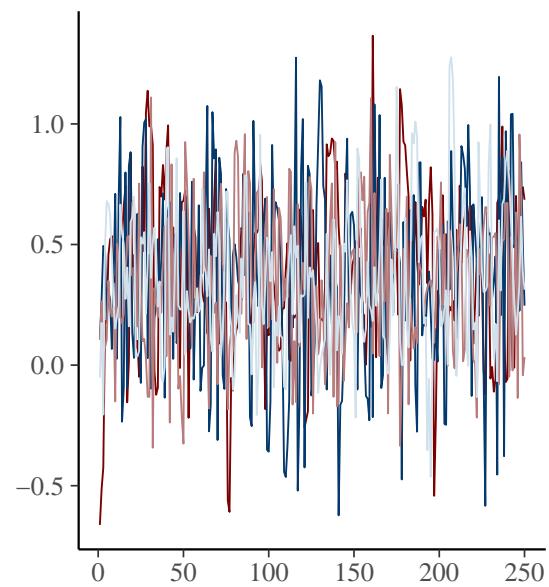


beta[4]

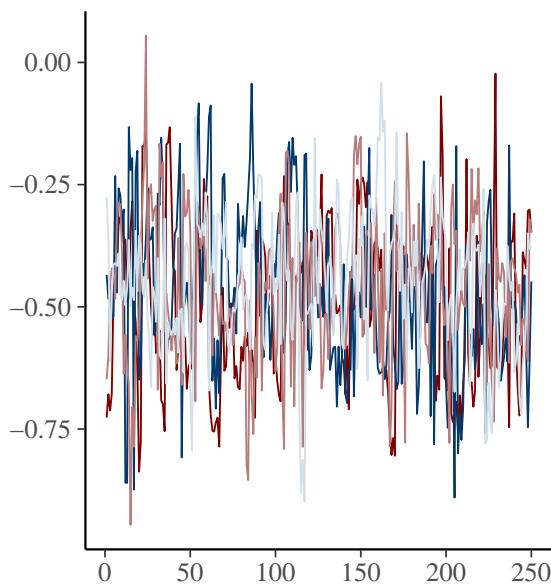


help("MCMC-traces")

beta[1]



beta[2]



Chain

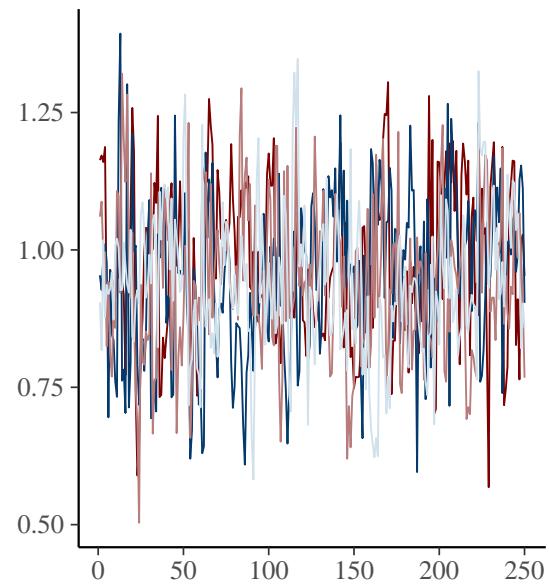
— 1

— 2

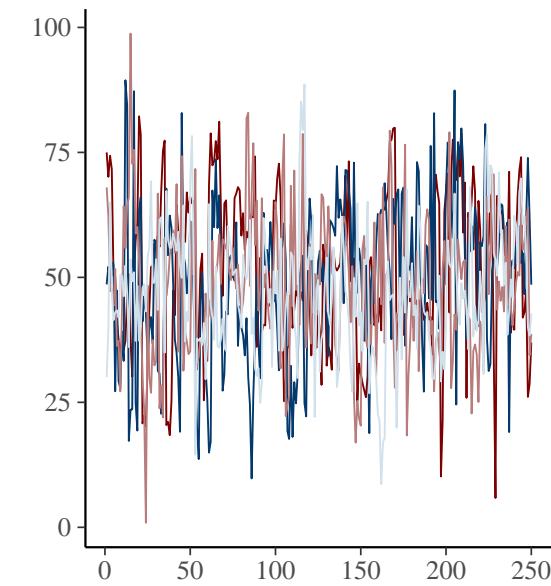
— 3

— 4

beta[3]

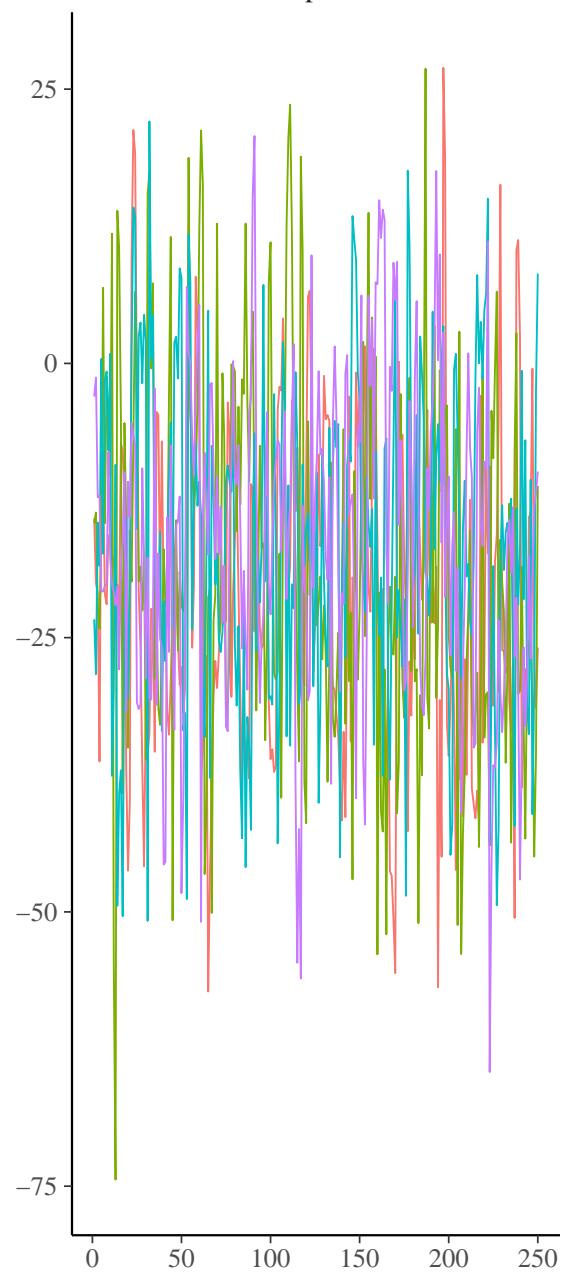


beta[4]

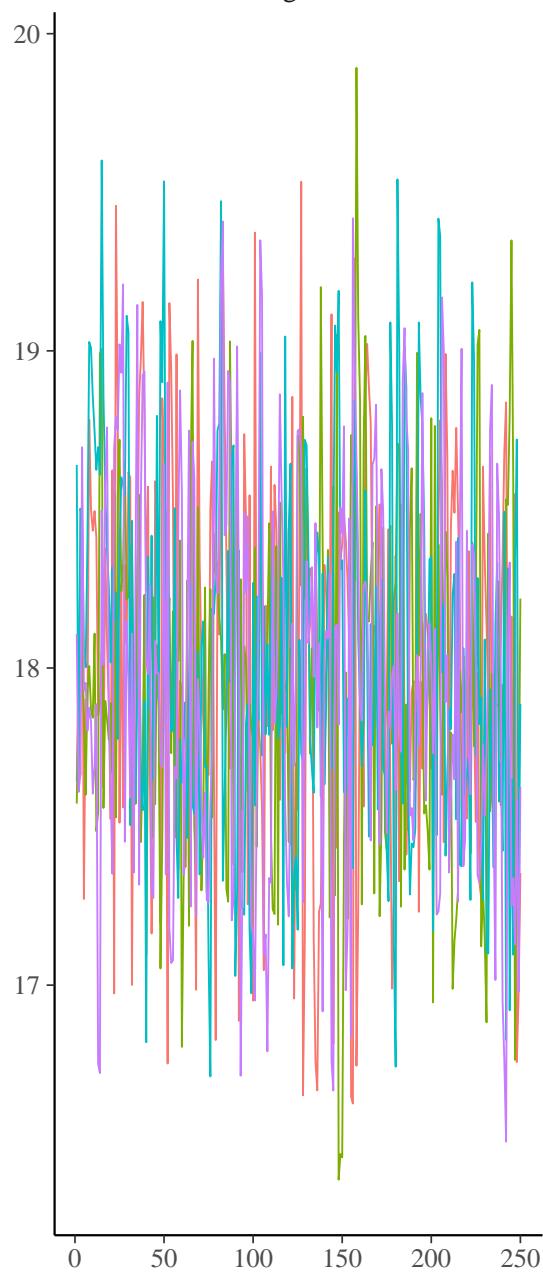


help("MCMC-traces")

alpha



sigma

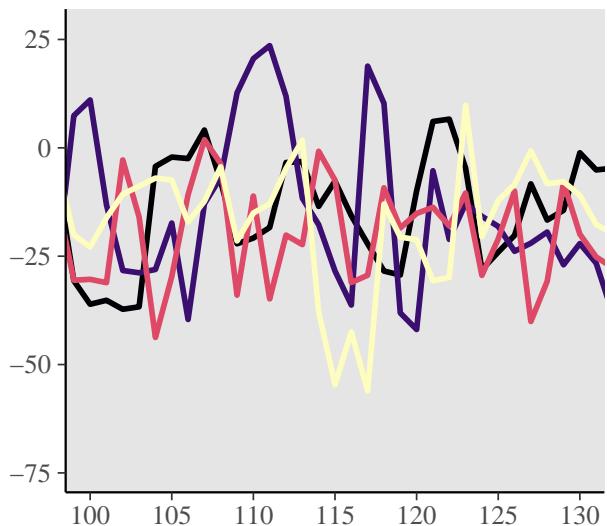


chain

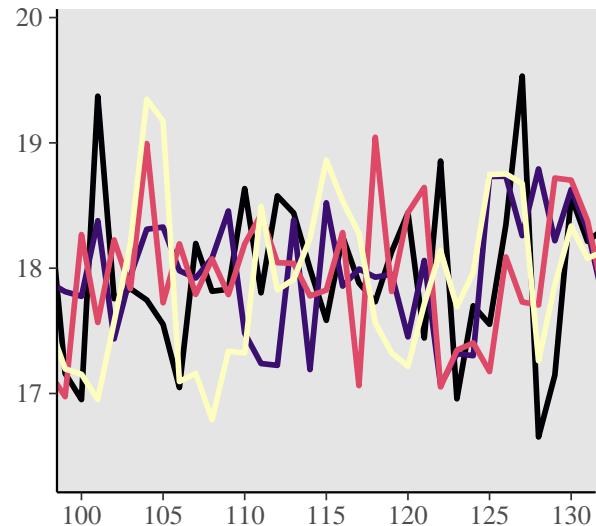
- 1
- 2
- 3
- 4

Chain — 1 — 2 — 3 — 4

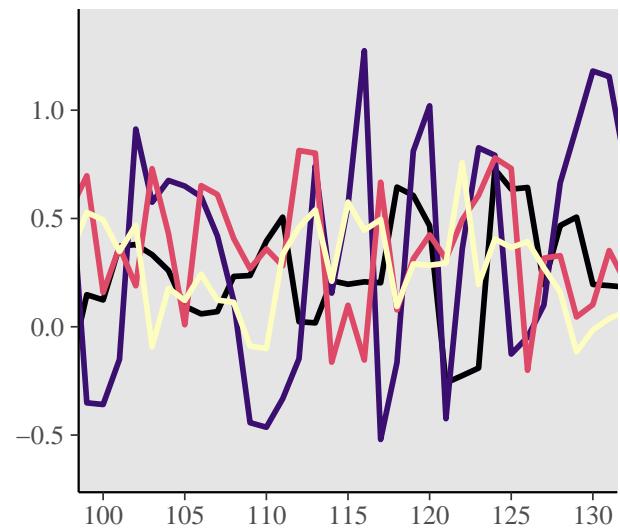
alpha



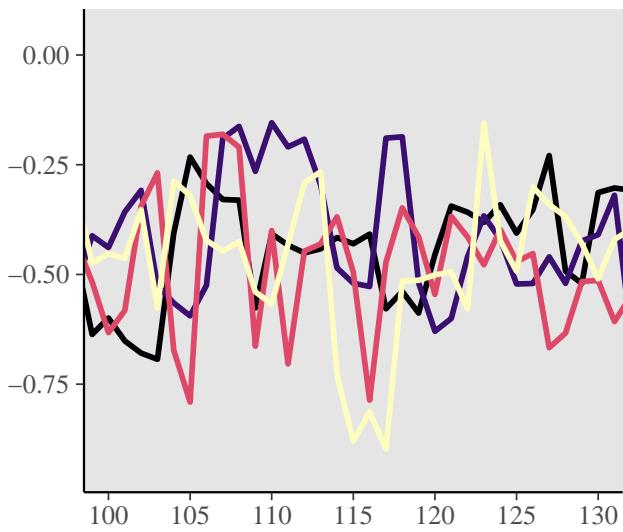
sigma



beta[1]



beta[2]



help("MCMC-traces")

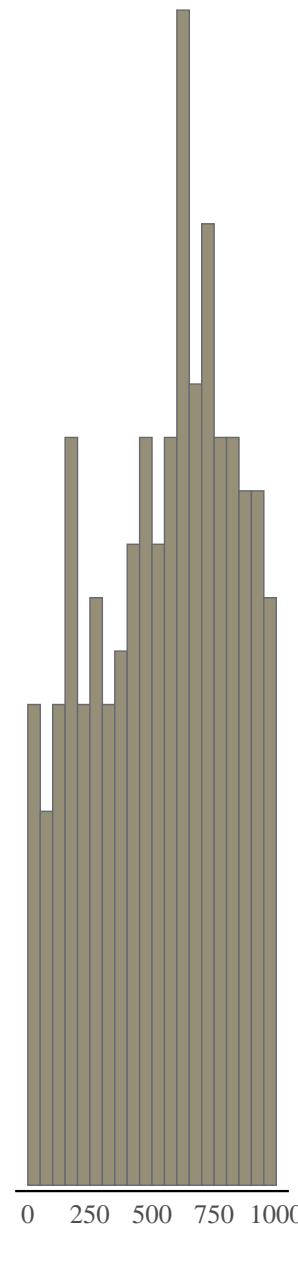
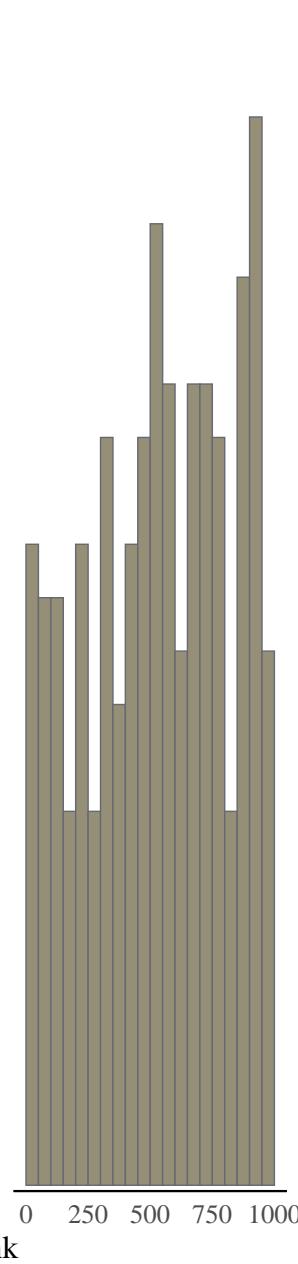
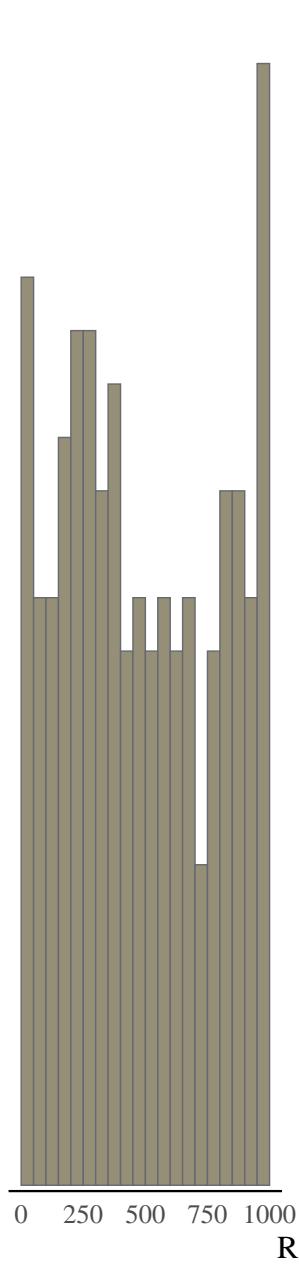
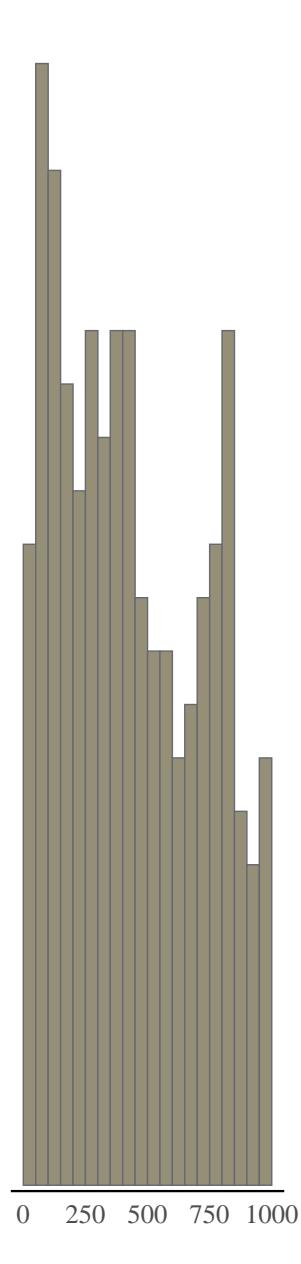
alpha, 1

alpha, 2

alpha, 3

alpha, 4

help("MCMC-traces")



1

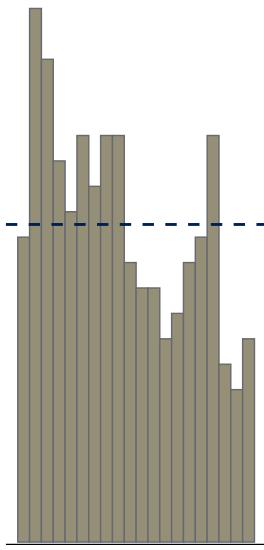
2

3

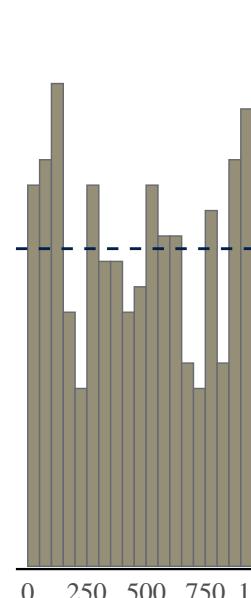
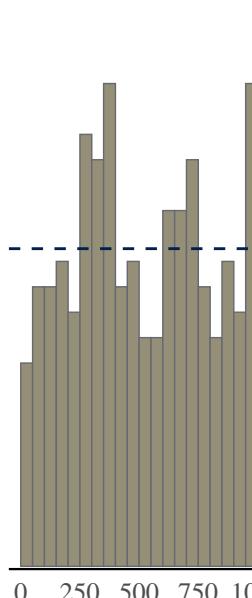
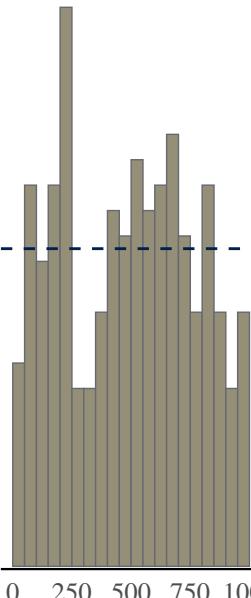
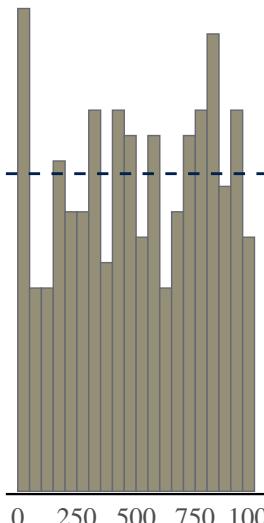
4

help("MCMC-traces")

alpha

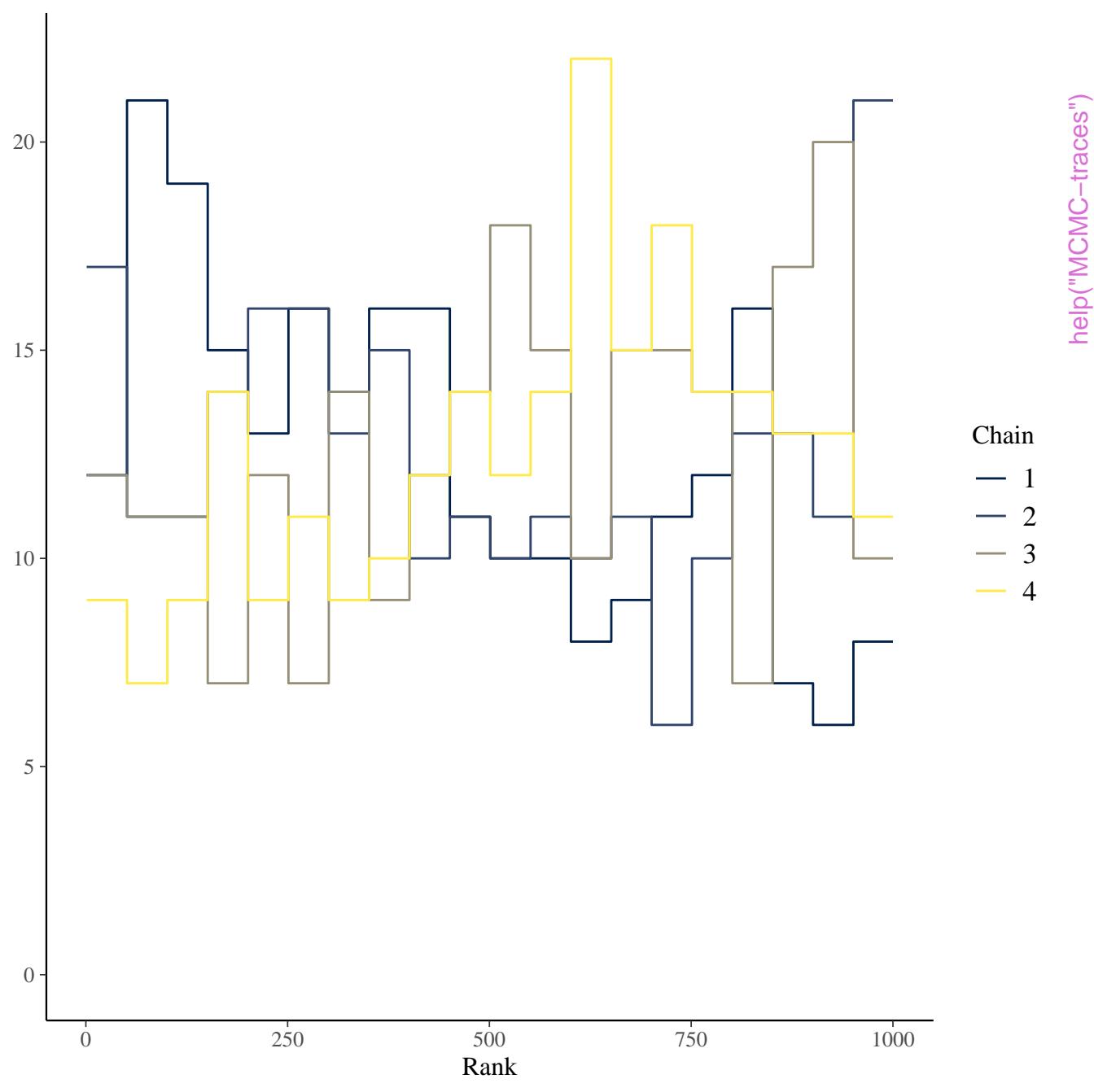


sigma



Rank

help("MCMC-traces")



help("MCMC-traces")

alpha

sigma

beta[1]

beta[2]

beta[3]

beta[4]

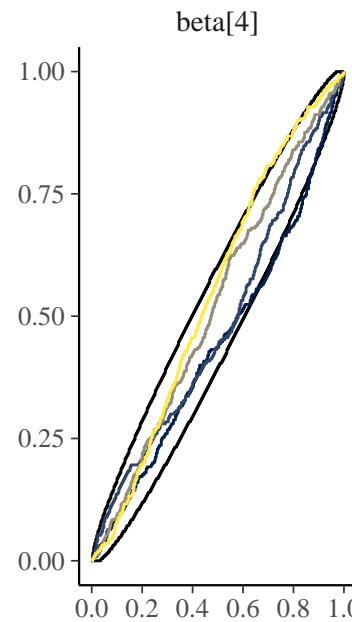
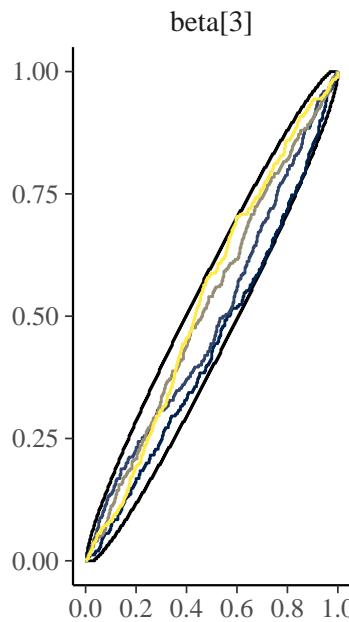
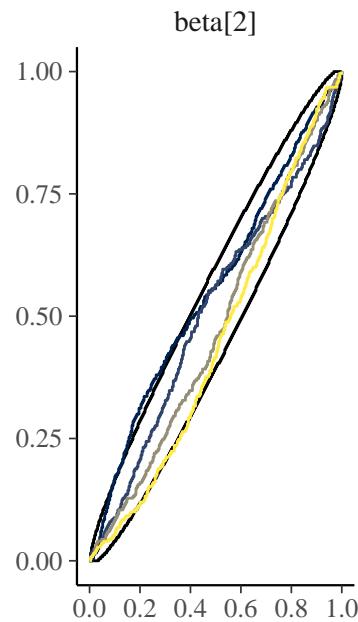
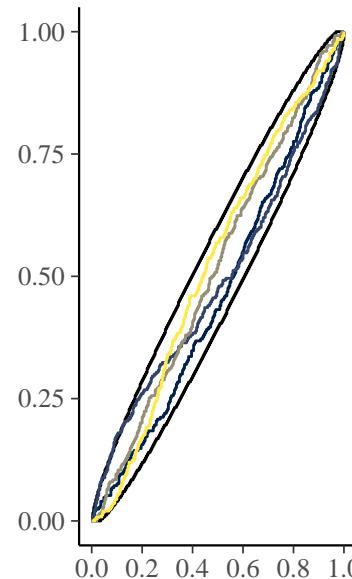
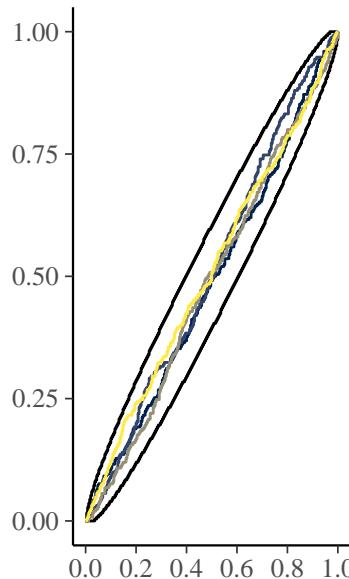
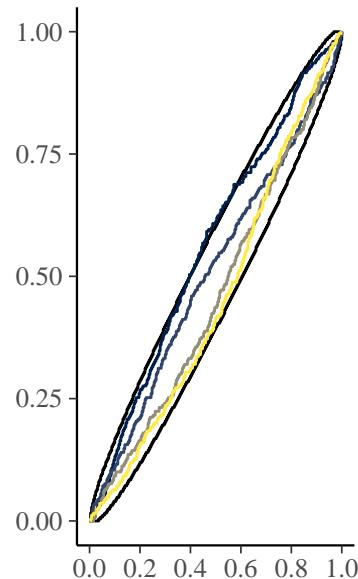
Chain

— 1

— 2

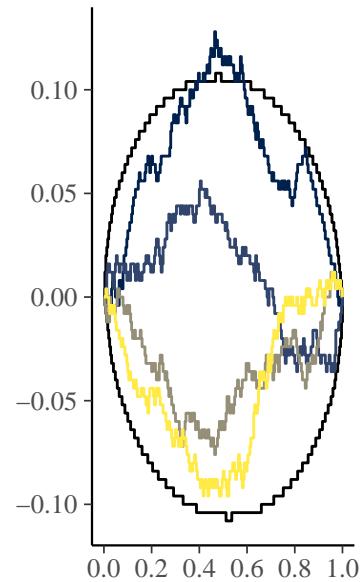
— 3

— 4

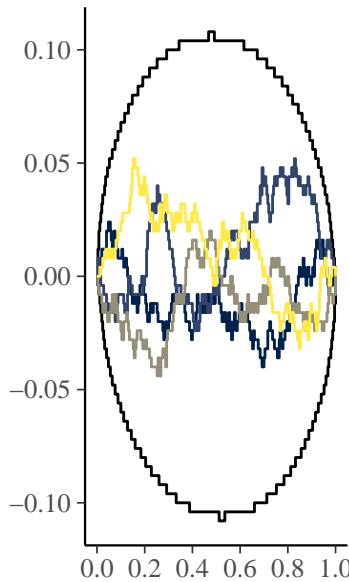


help("MCMC-traces")

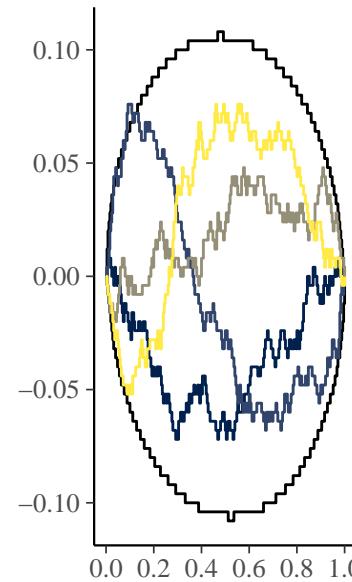
alpha



sigma



beta[1]



Chain

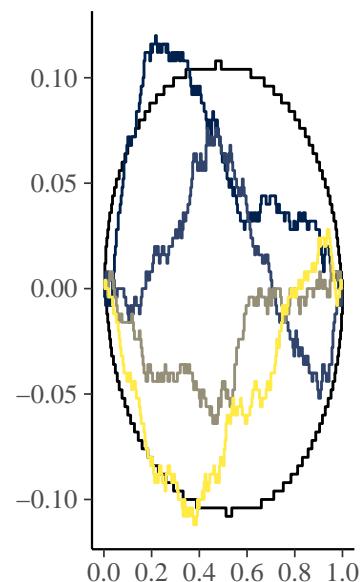
— 1

— 2

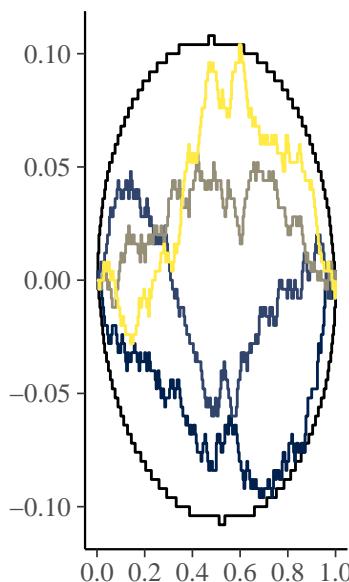
— 3

— 4

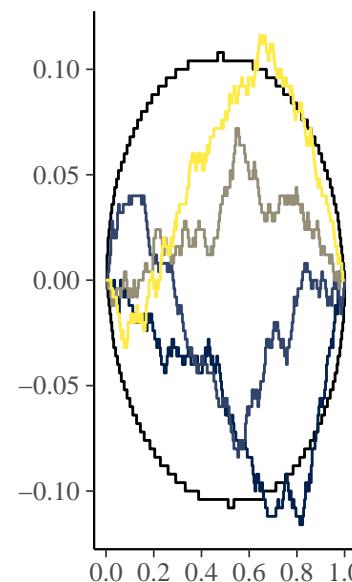
beta[2]



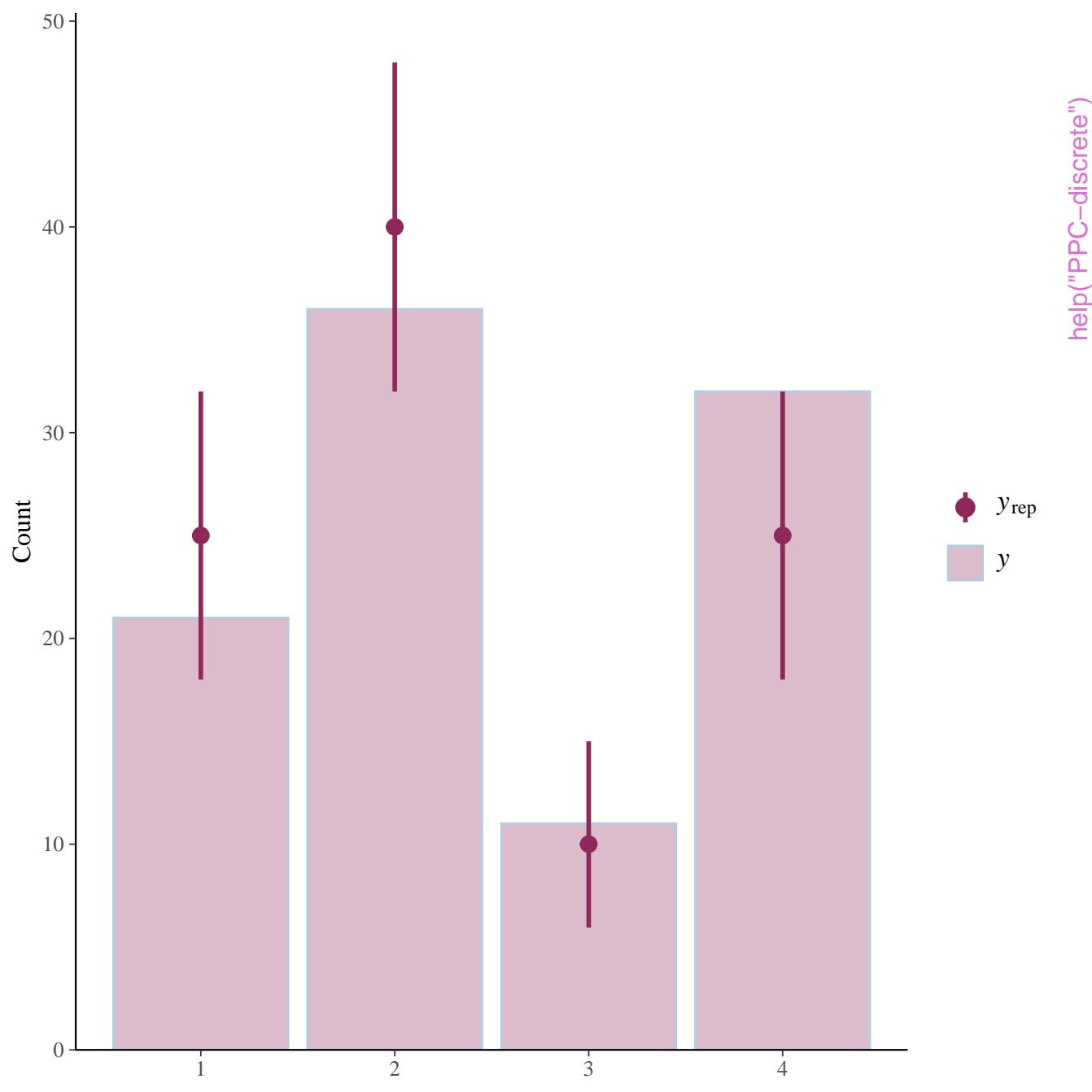
beta[3]



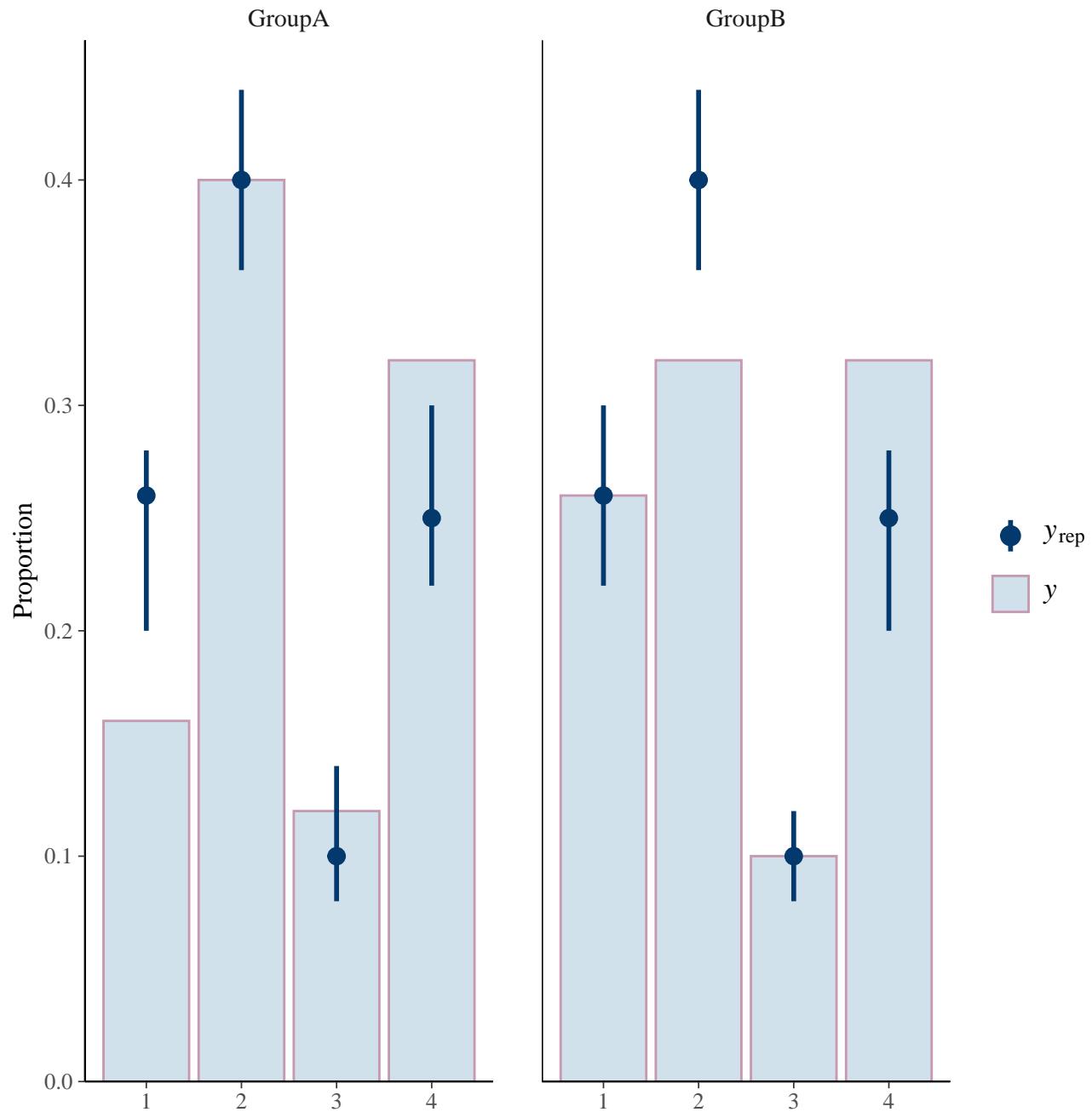
beta[4]



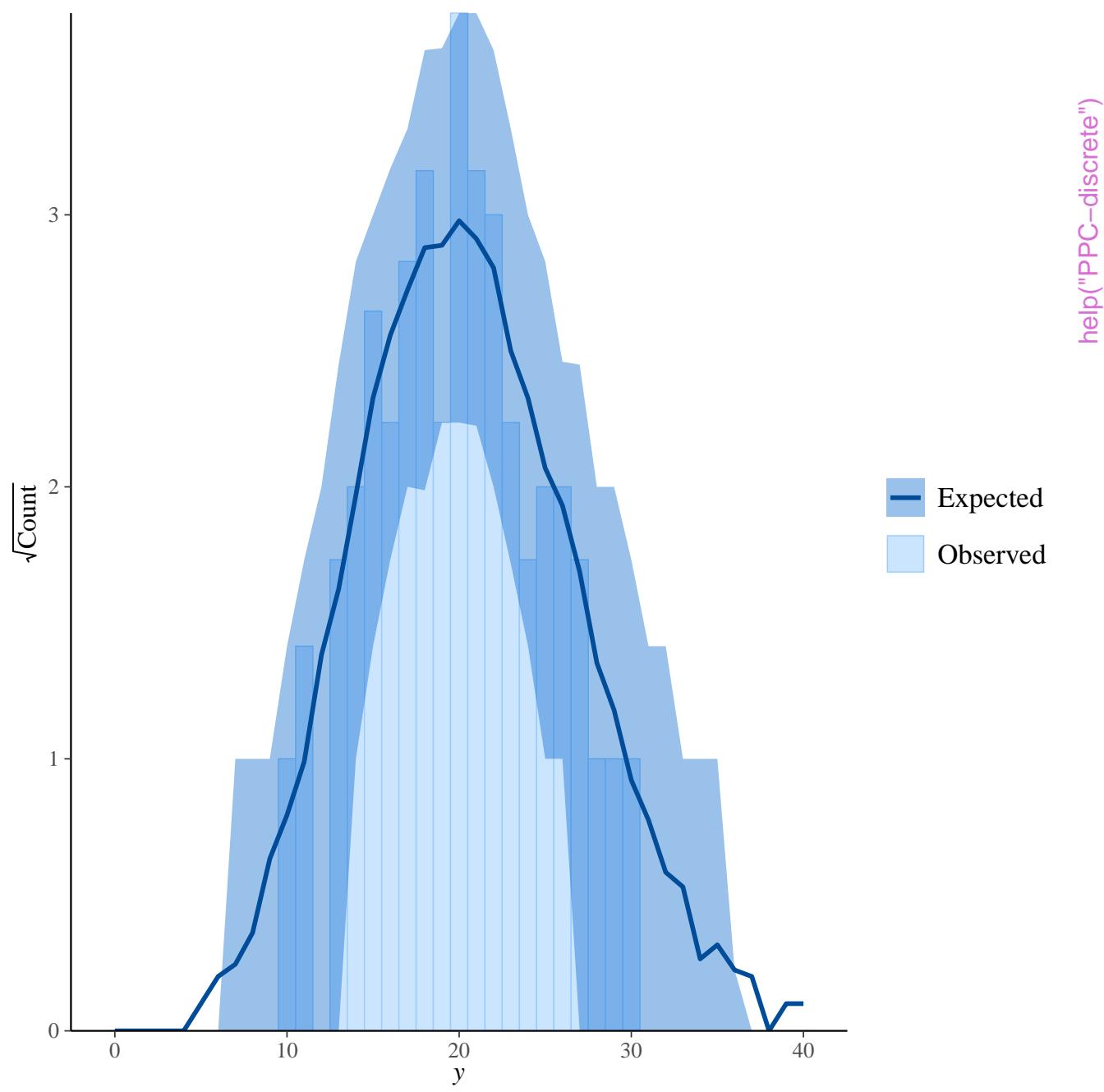
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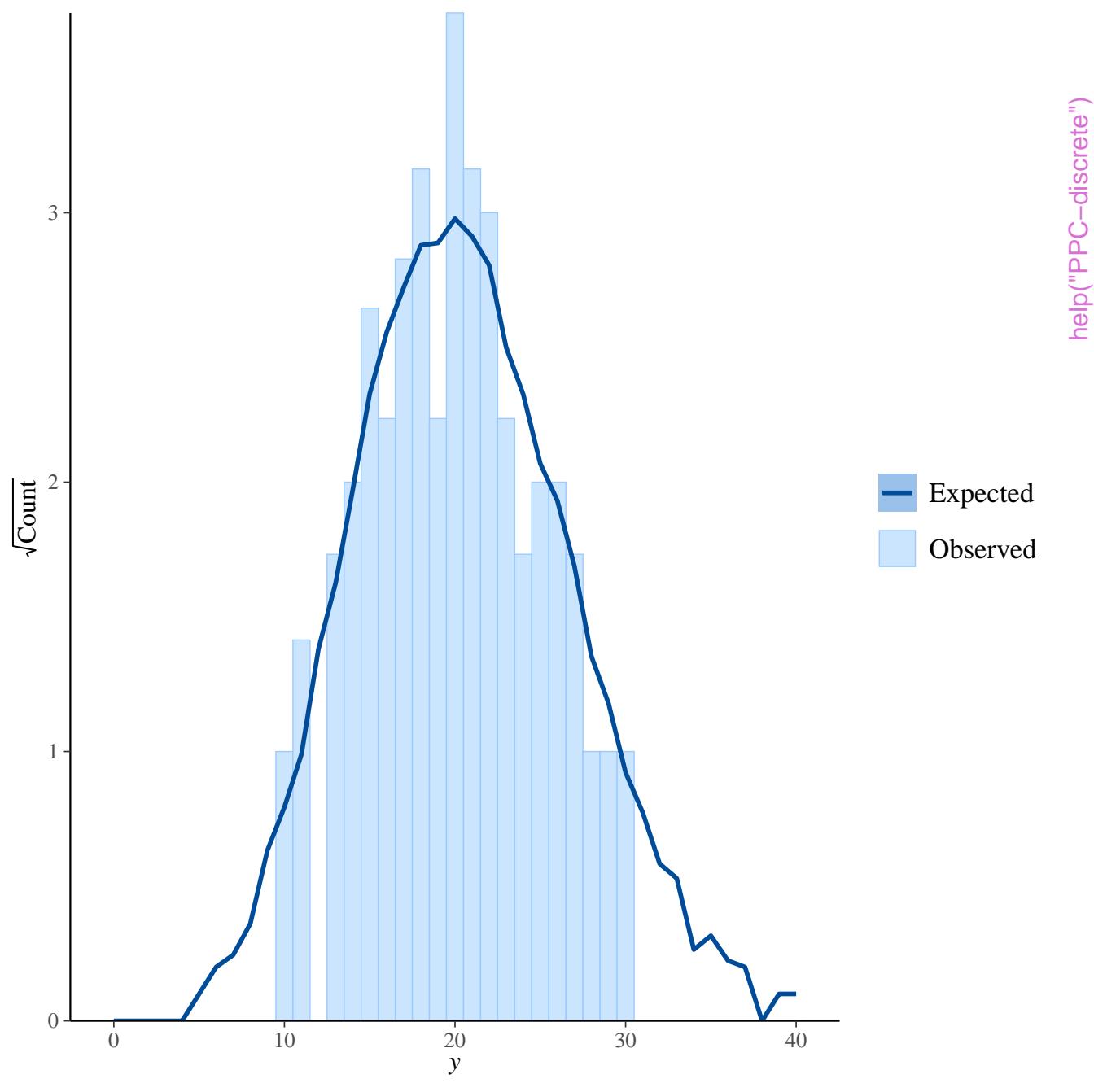
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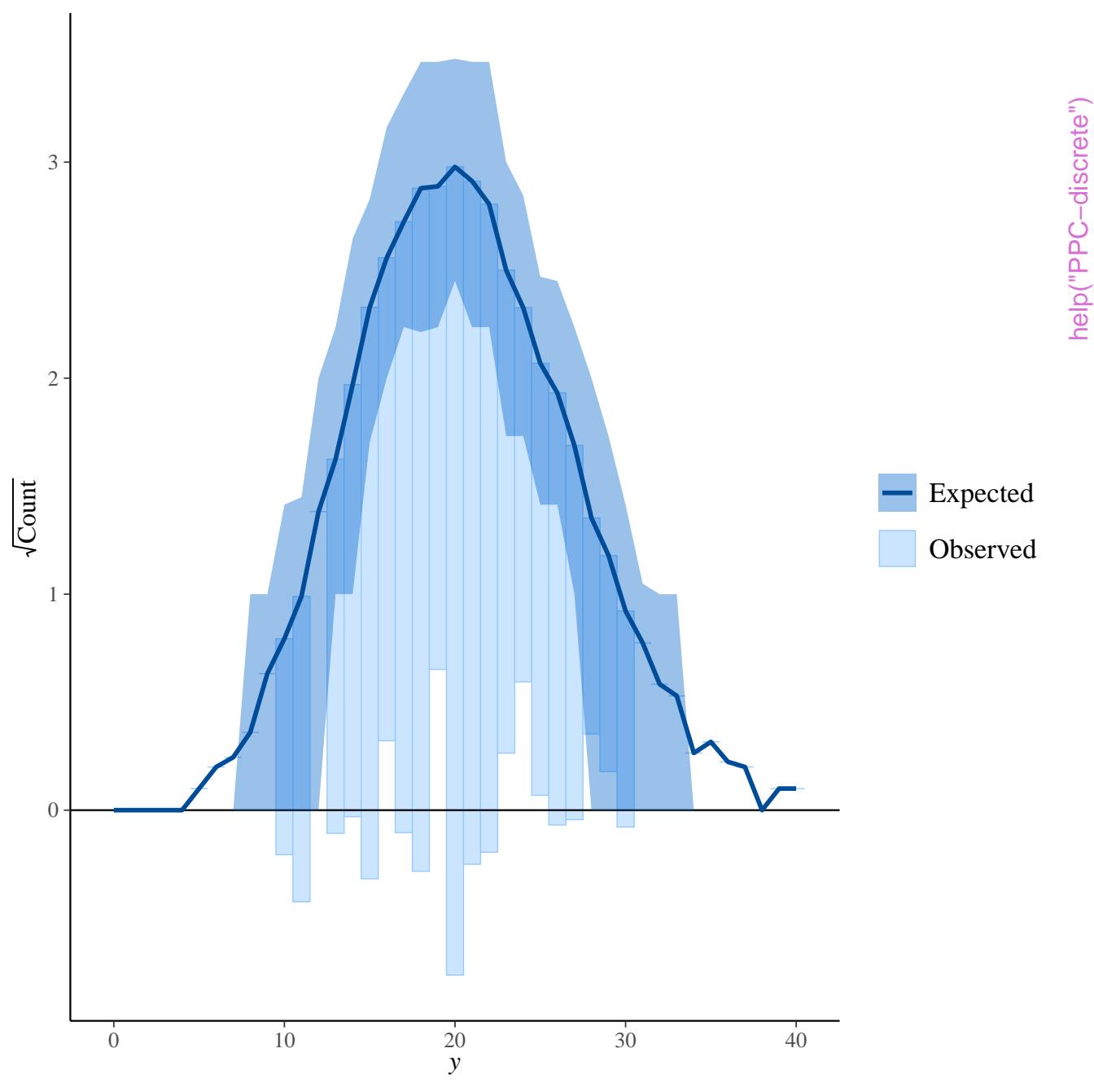
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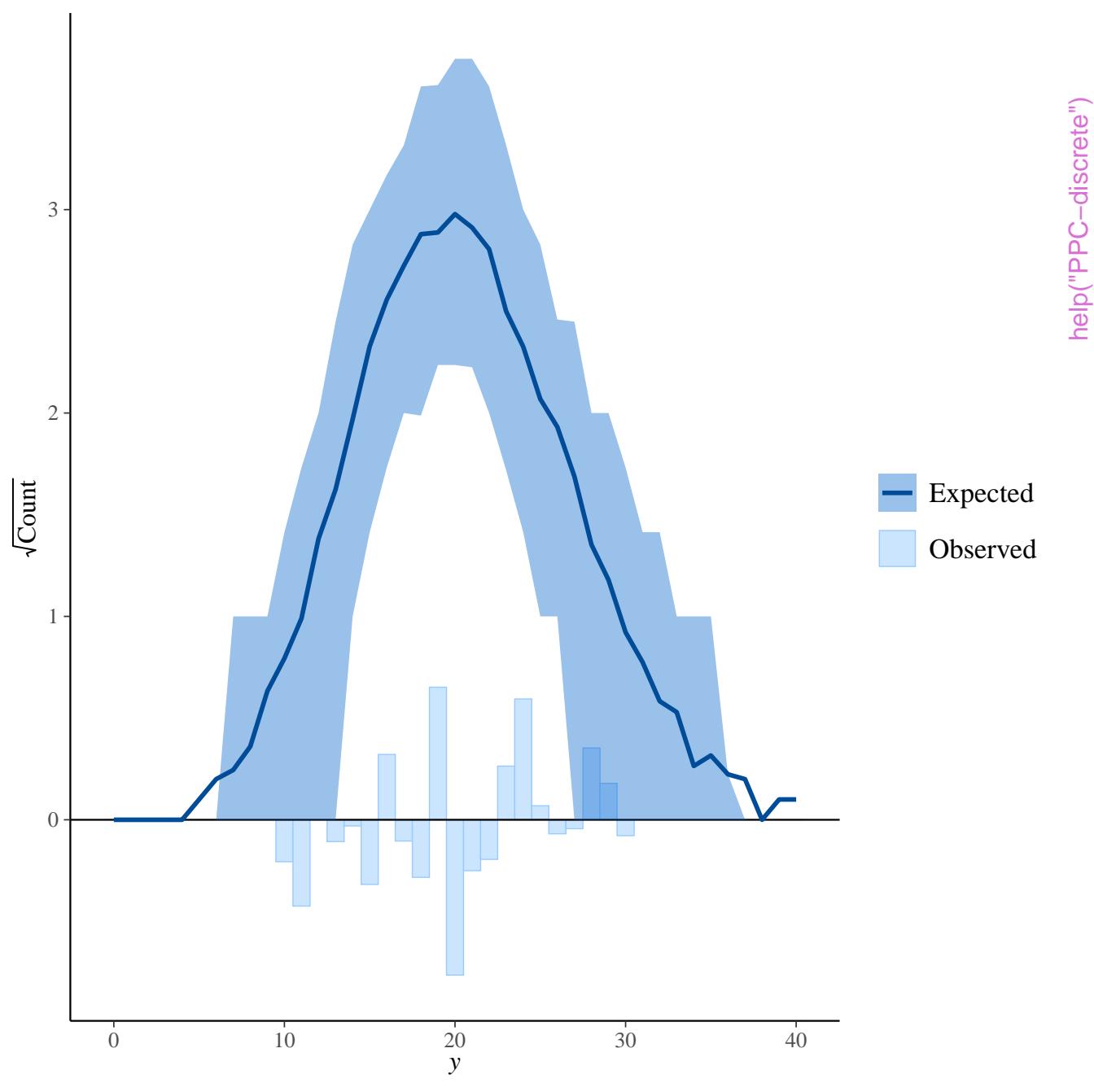
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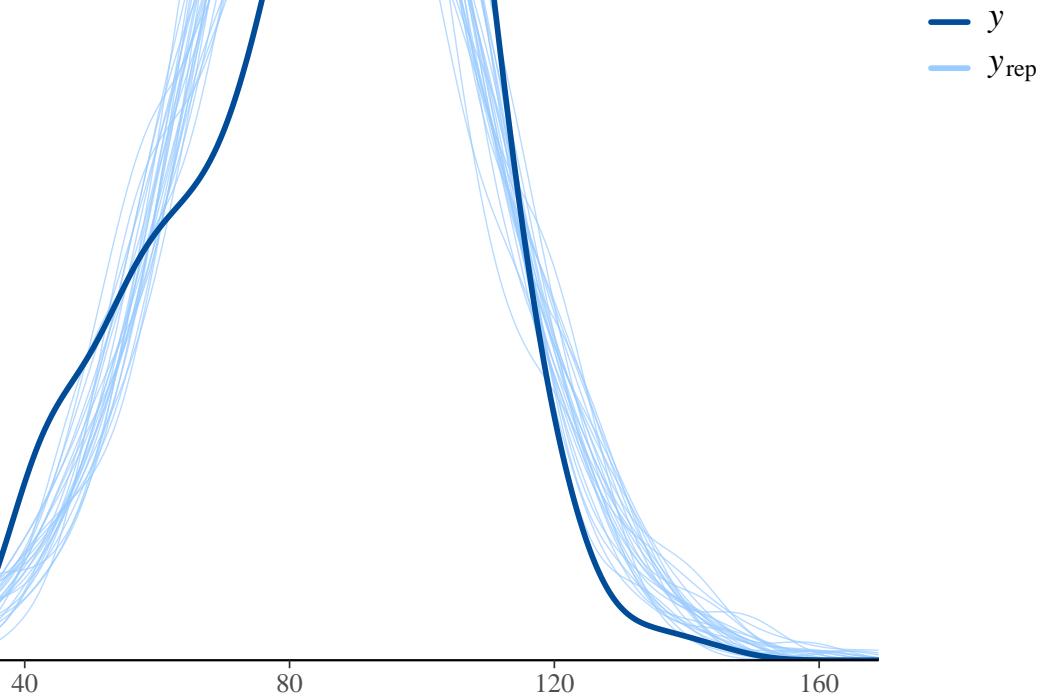
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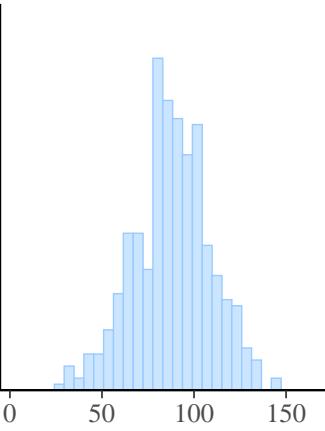
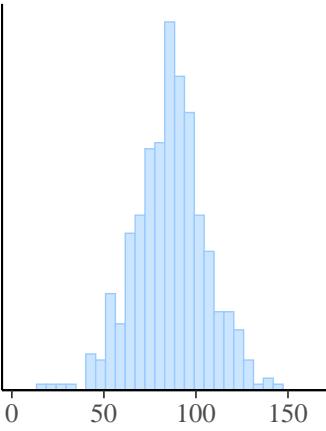
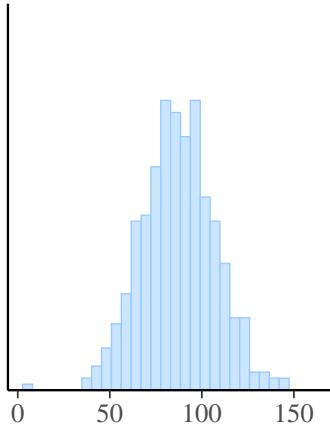
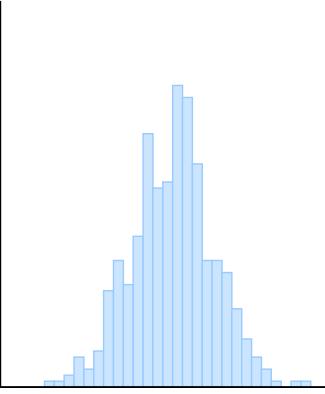
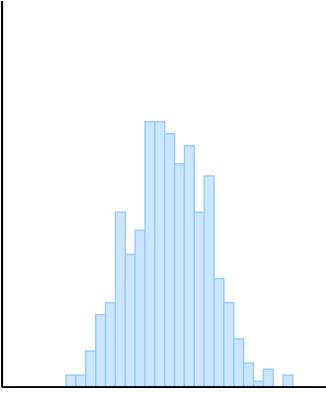
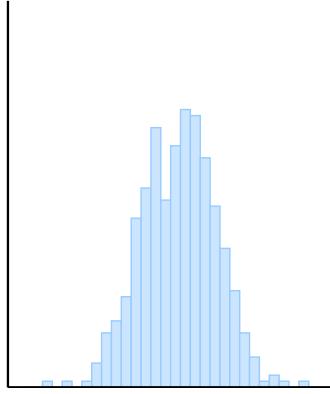
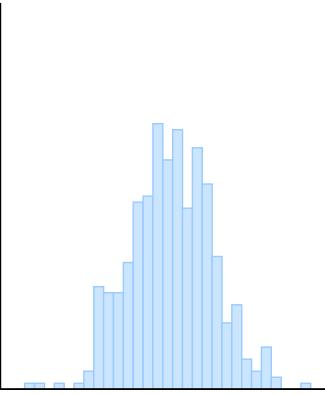
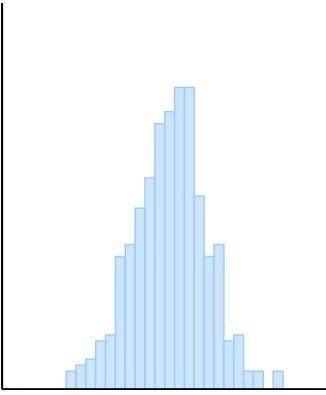
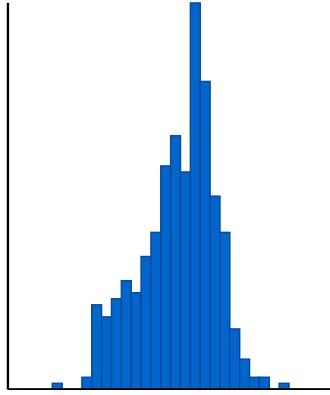
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help("PPC-distributions")

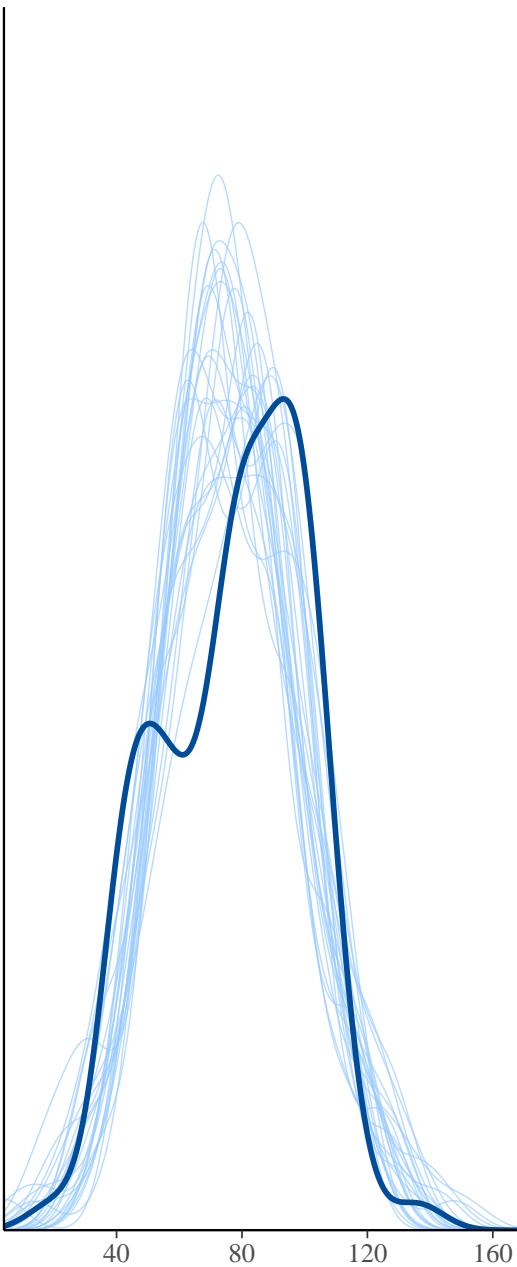


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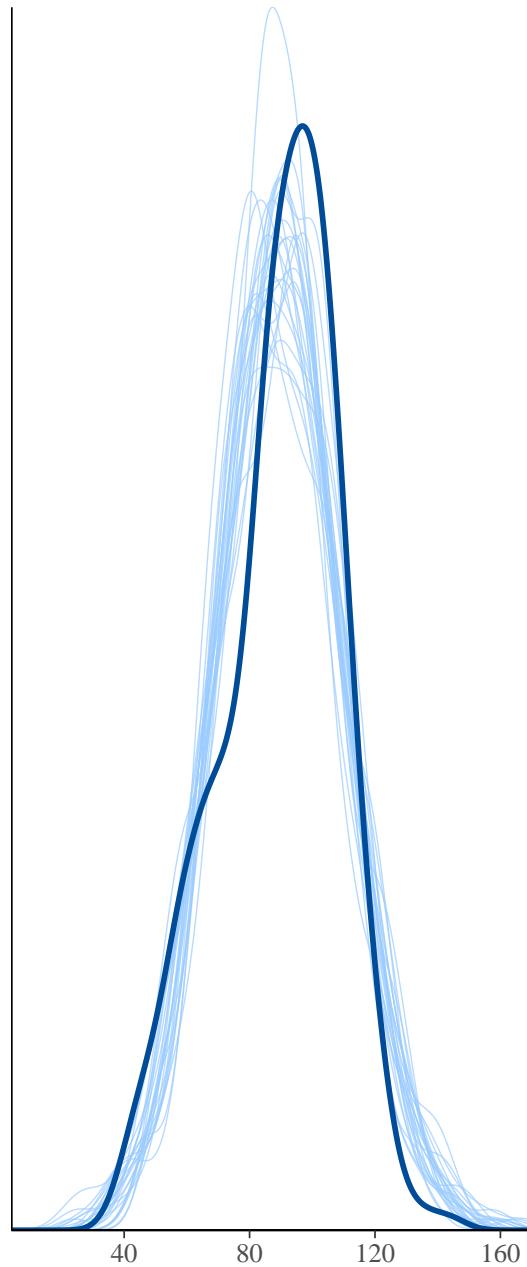


$y$   
 $y_{rep}$

GroupA



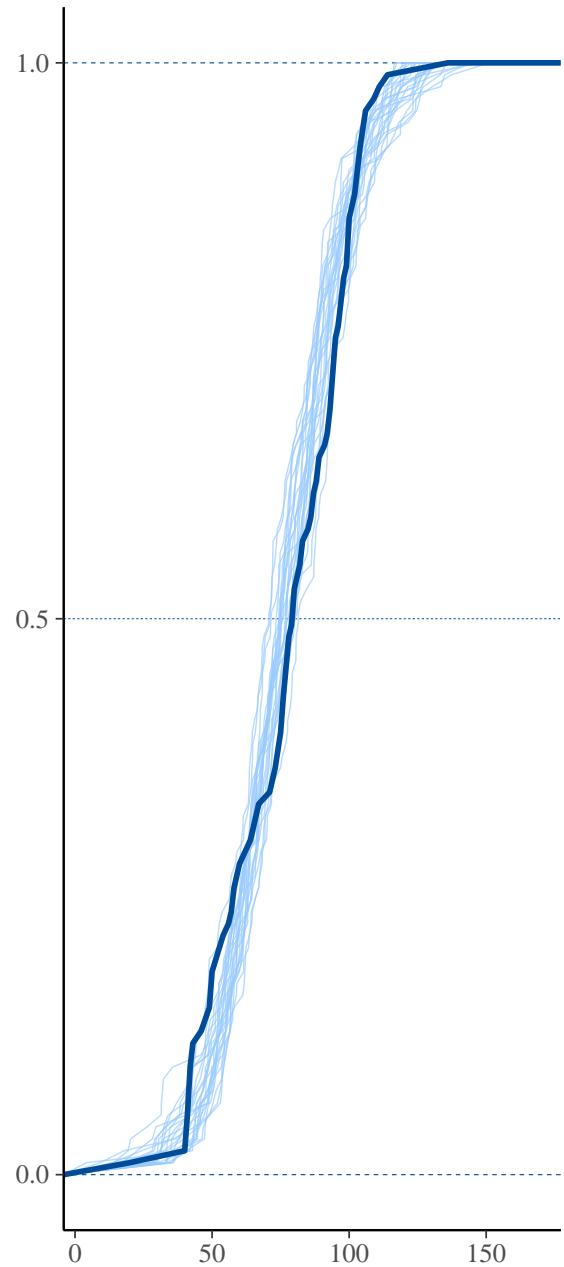
GroupB



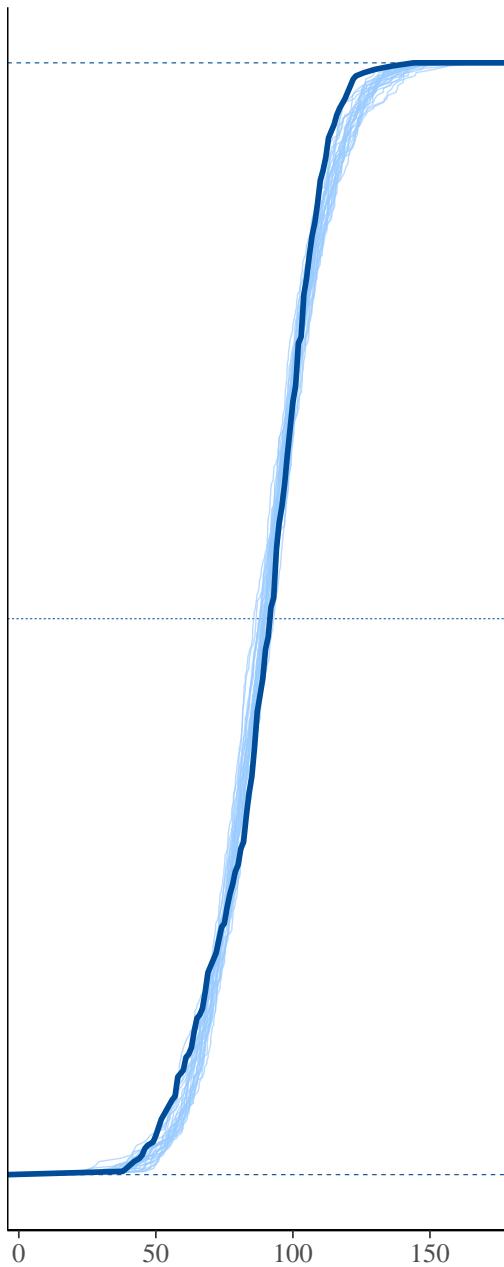
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help("PPC-distributions")

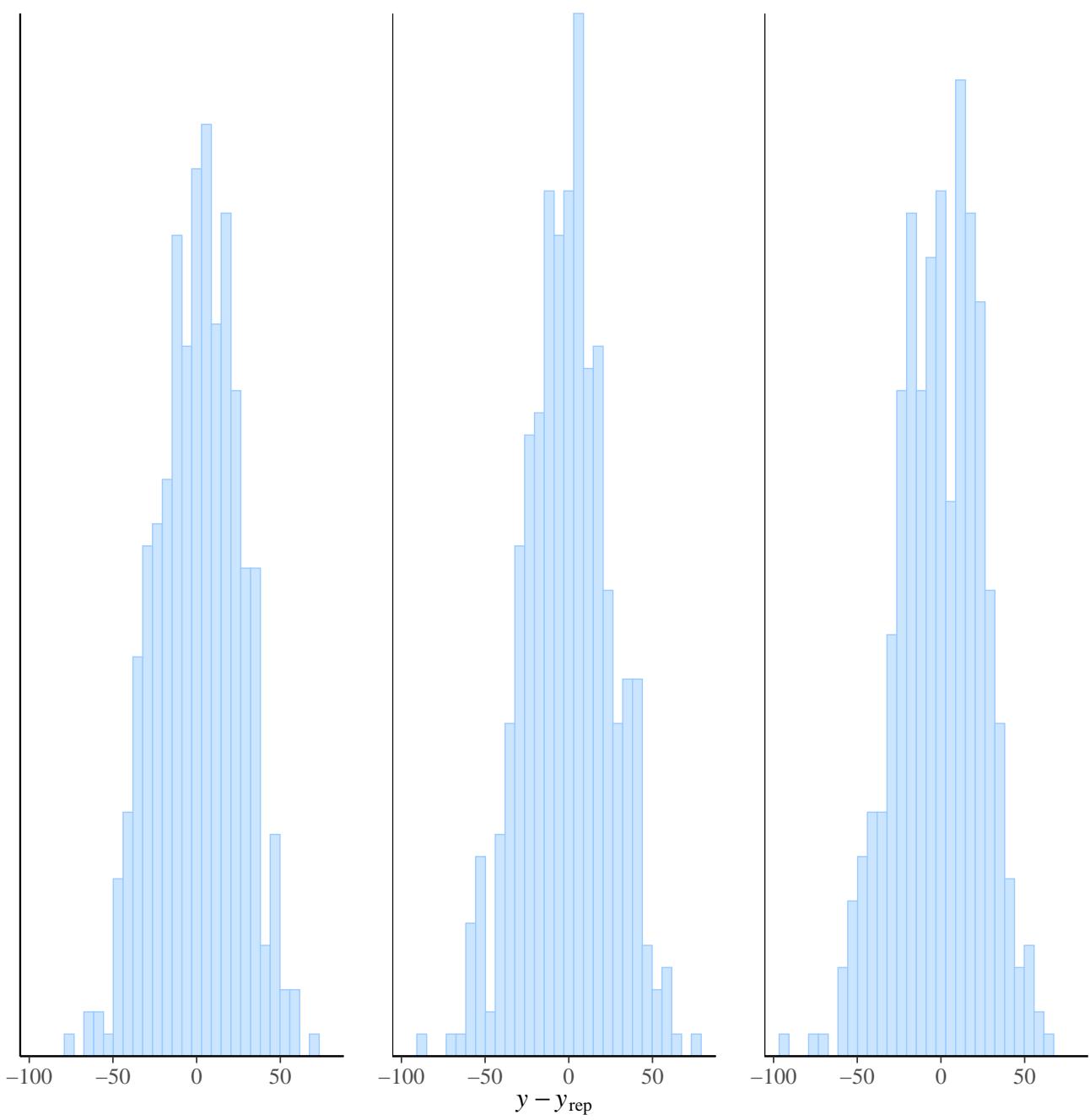
GroupA



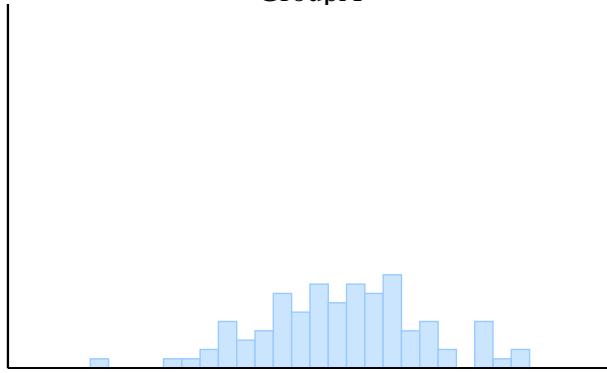
GroupB



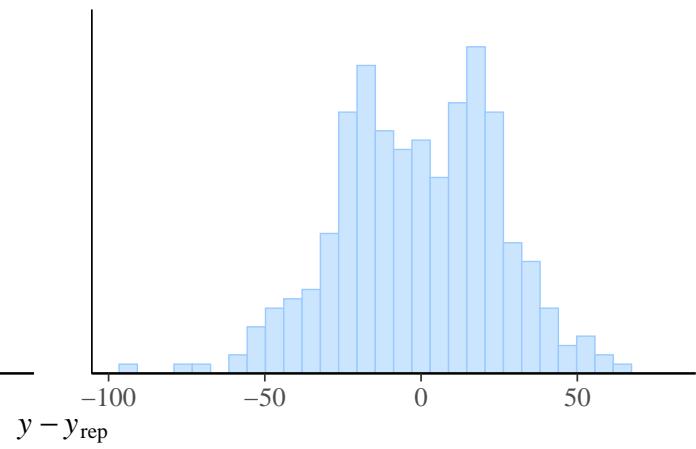
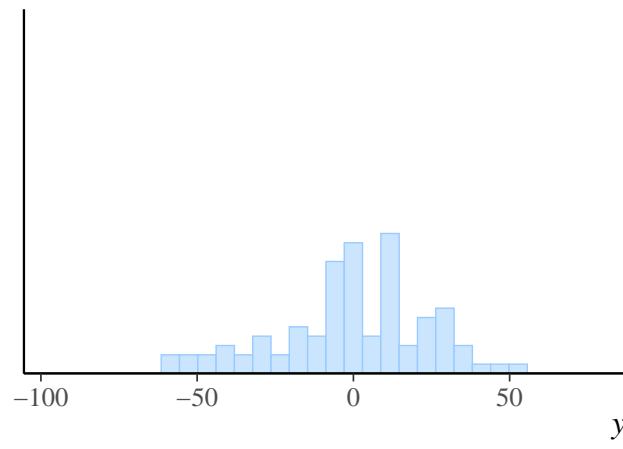
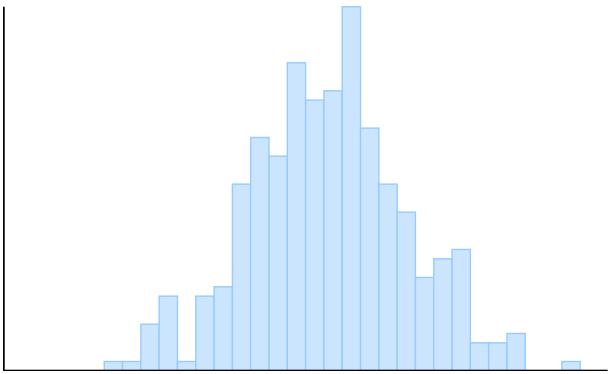
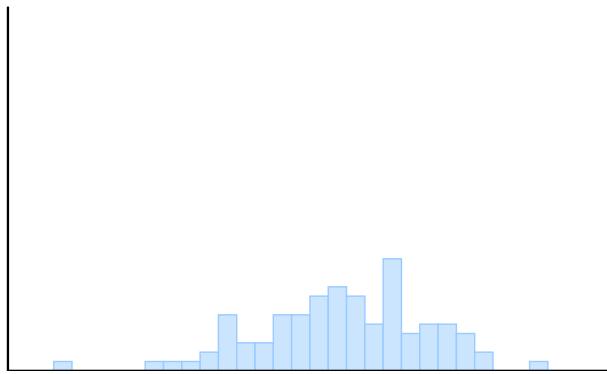
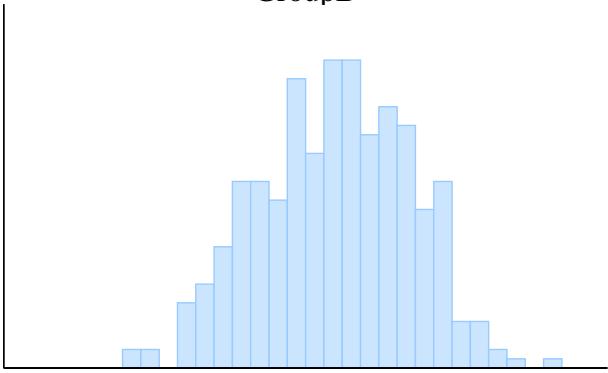
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GroupA

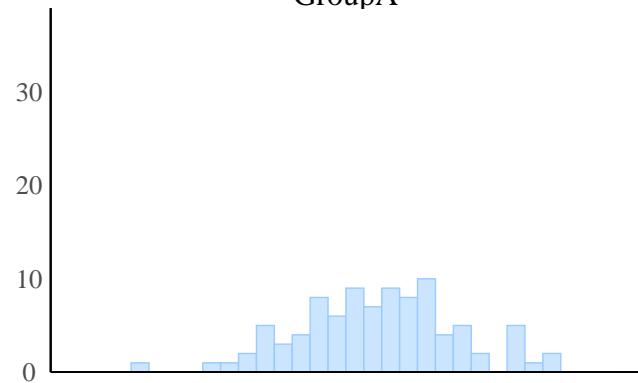


GroupB

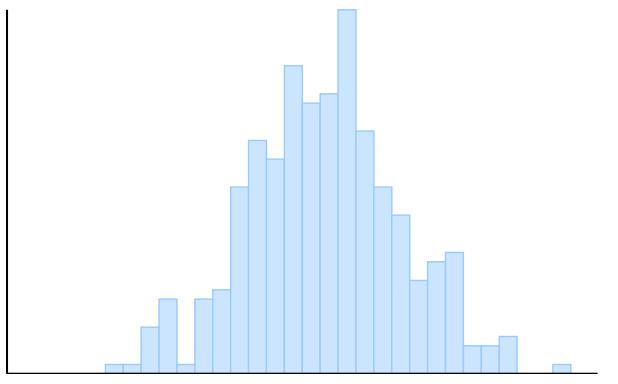
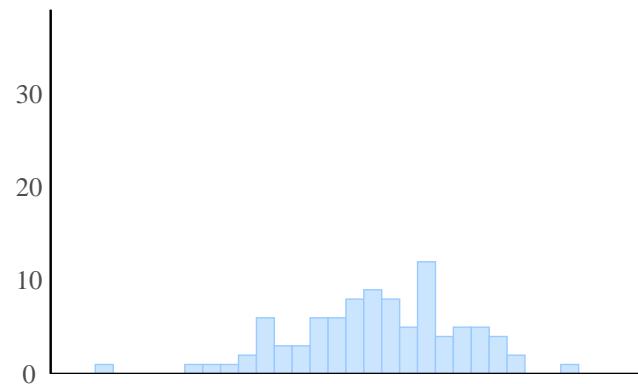
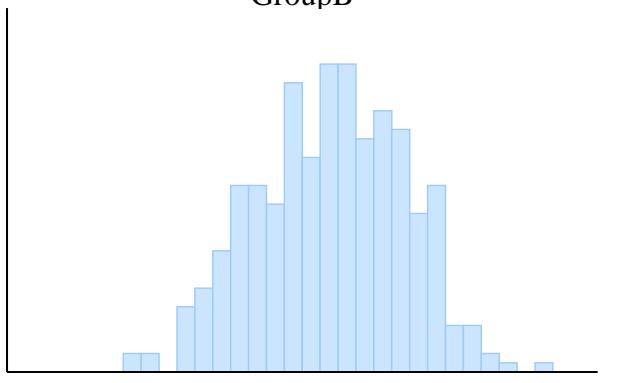


help("PPC-errors")

GroupA



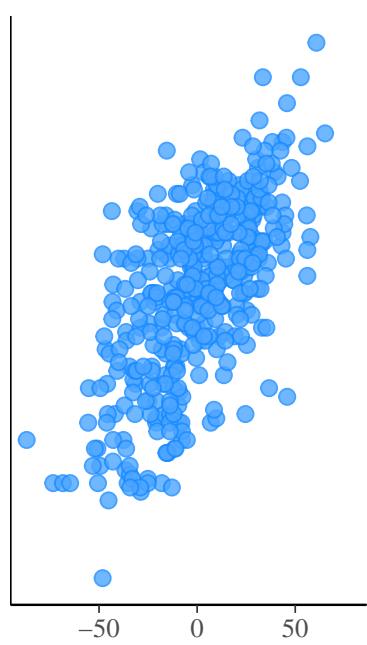
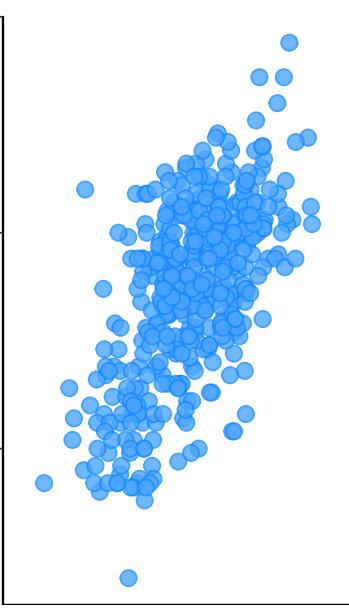
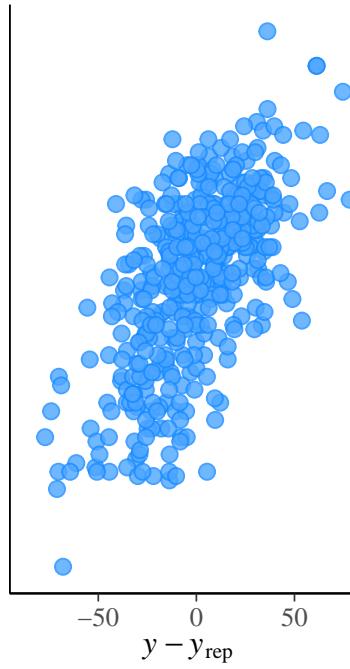
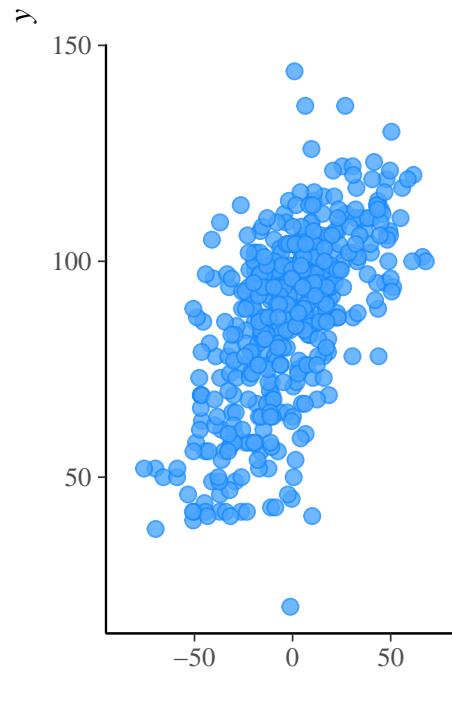
GroupB



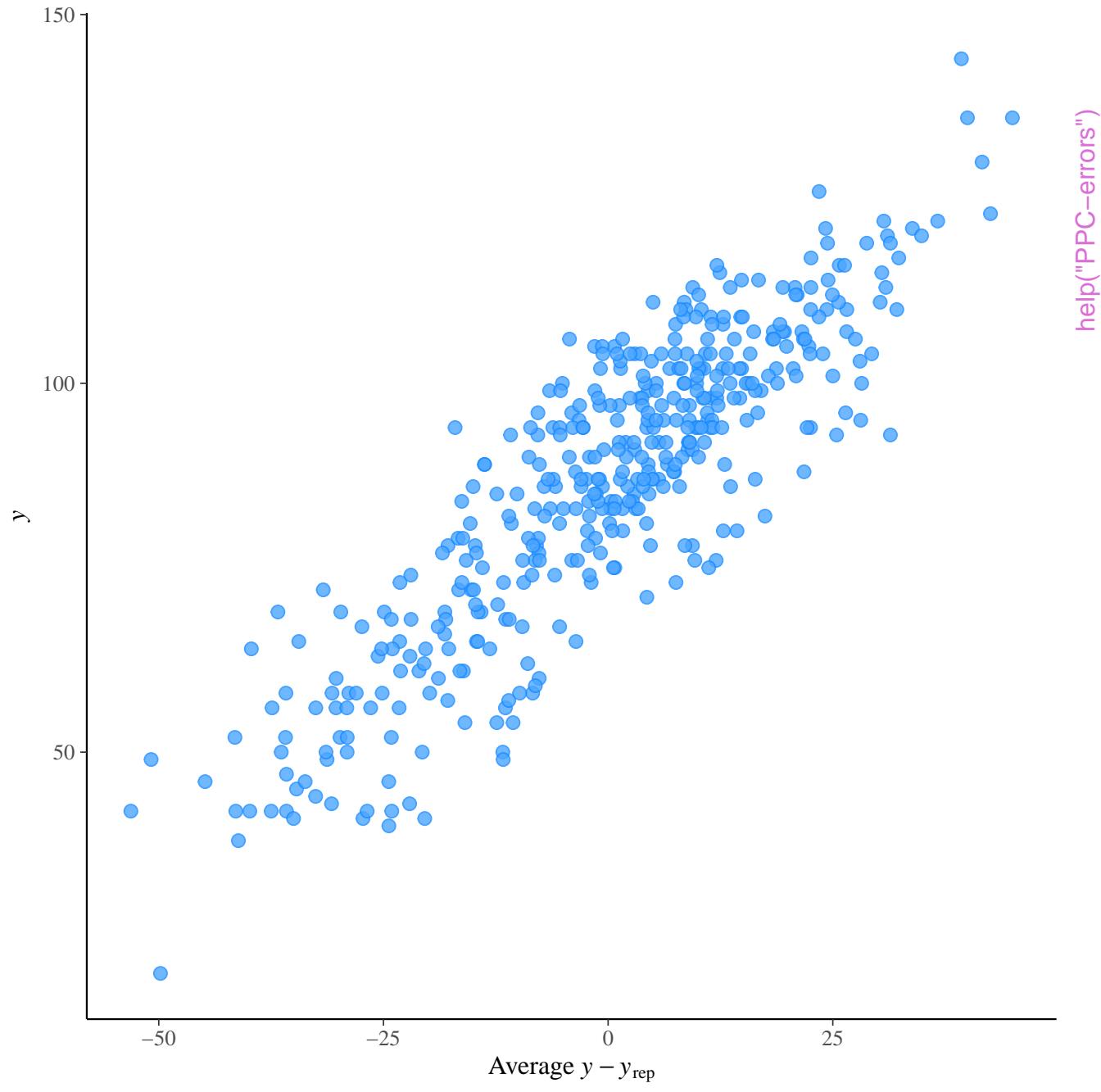
$y - y_{rep}$

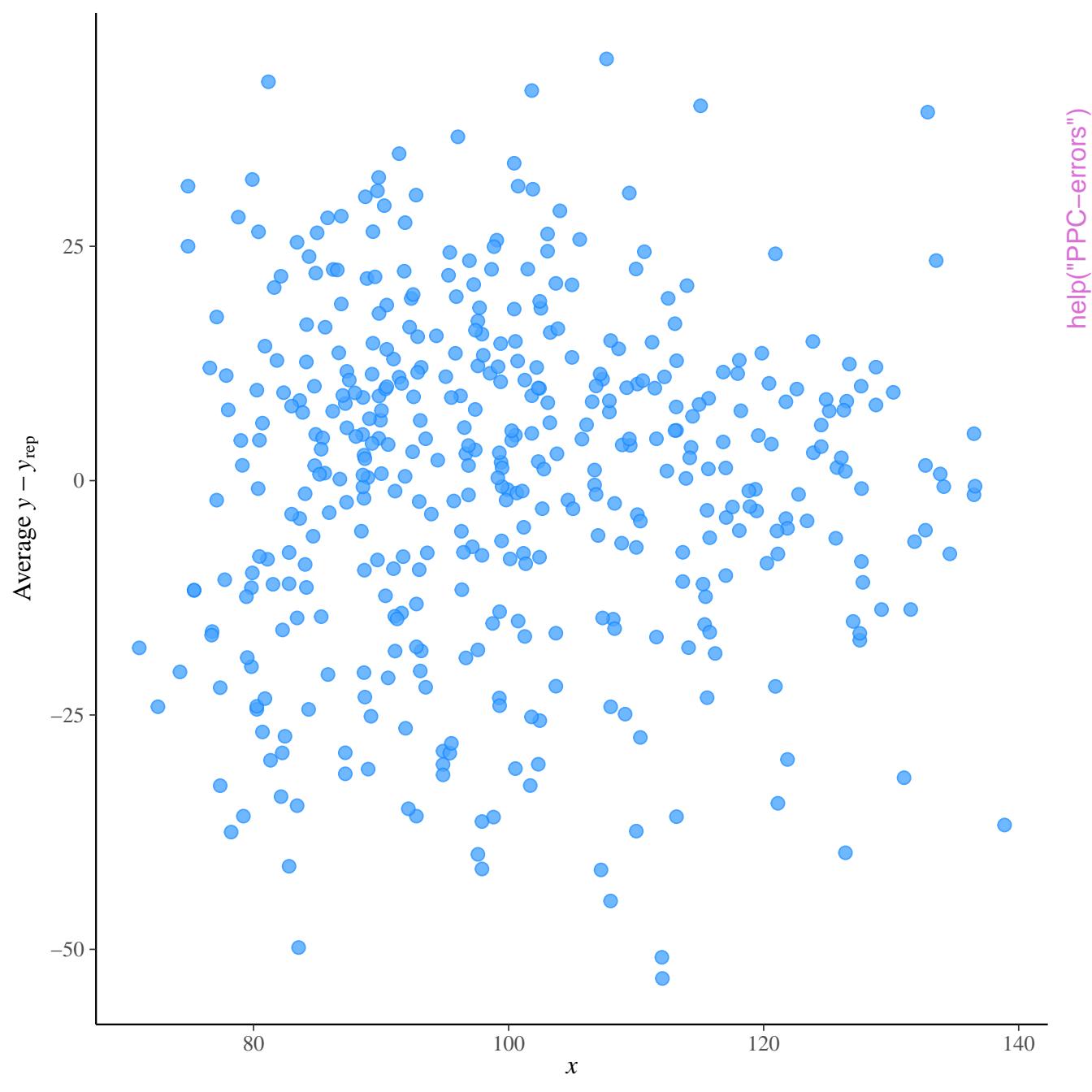
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help("PPC-errors")



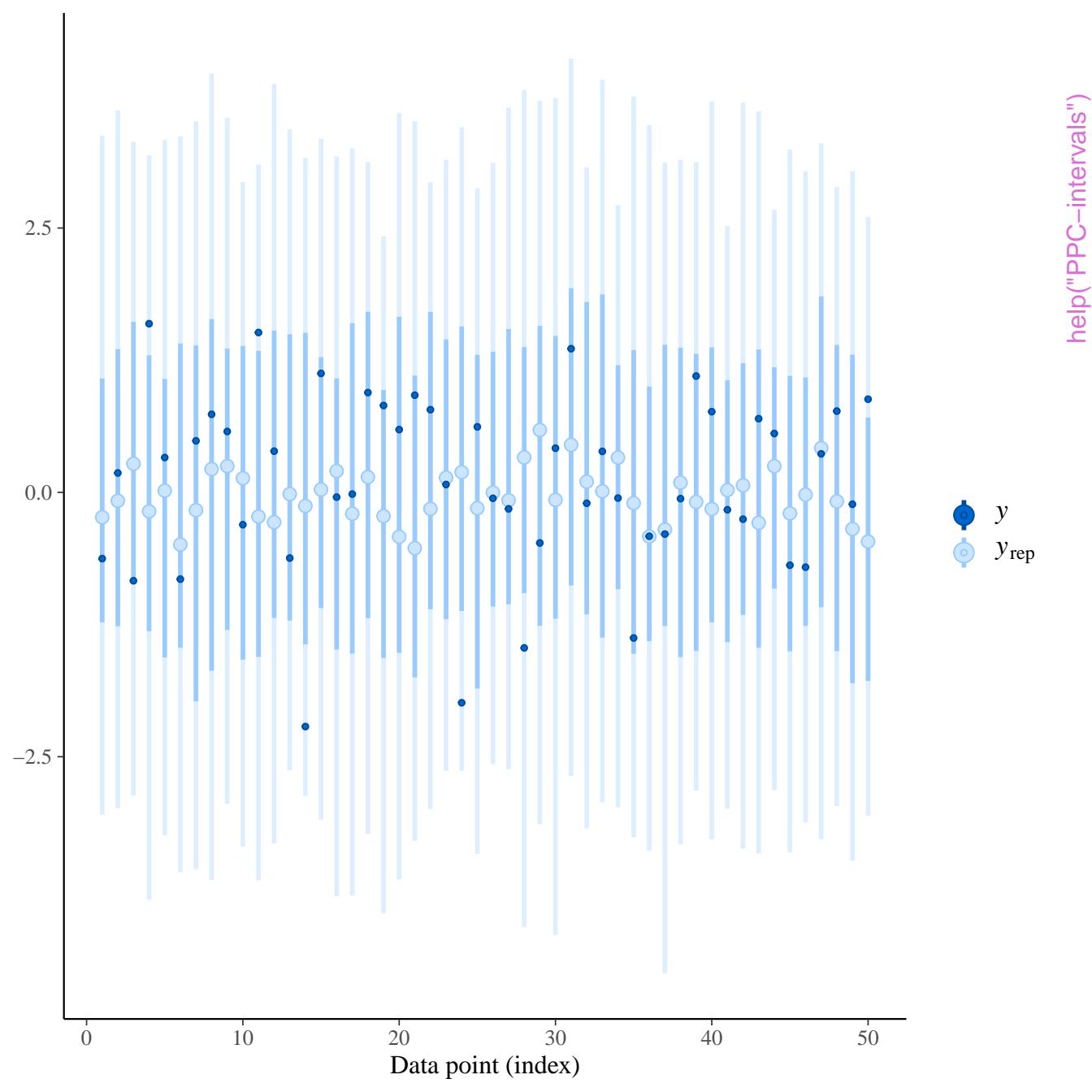
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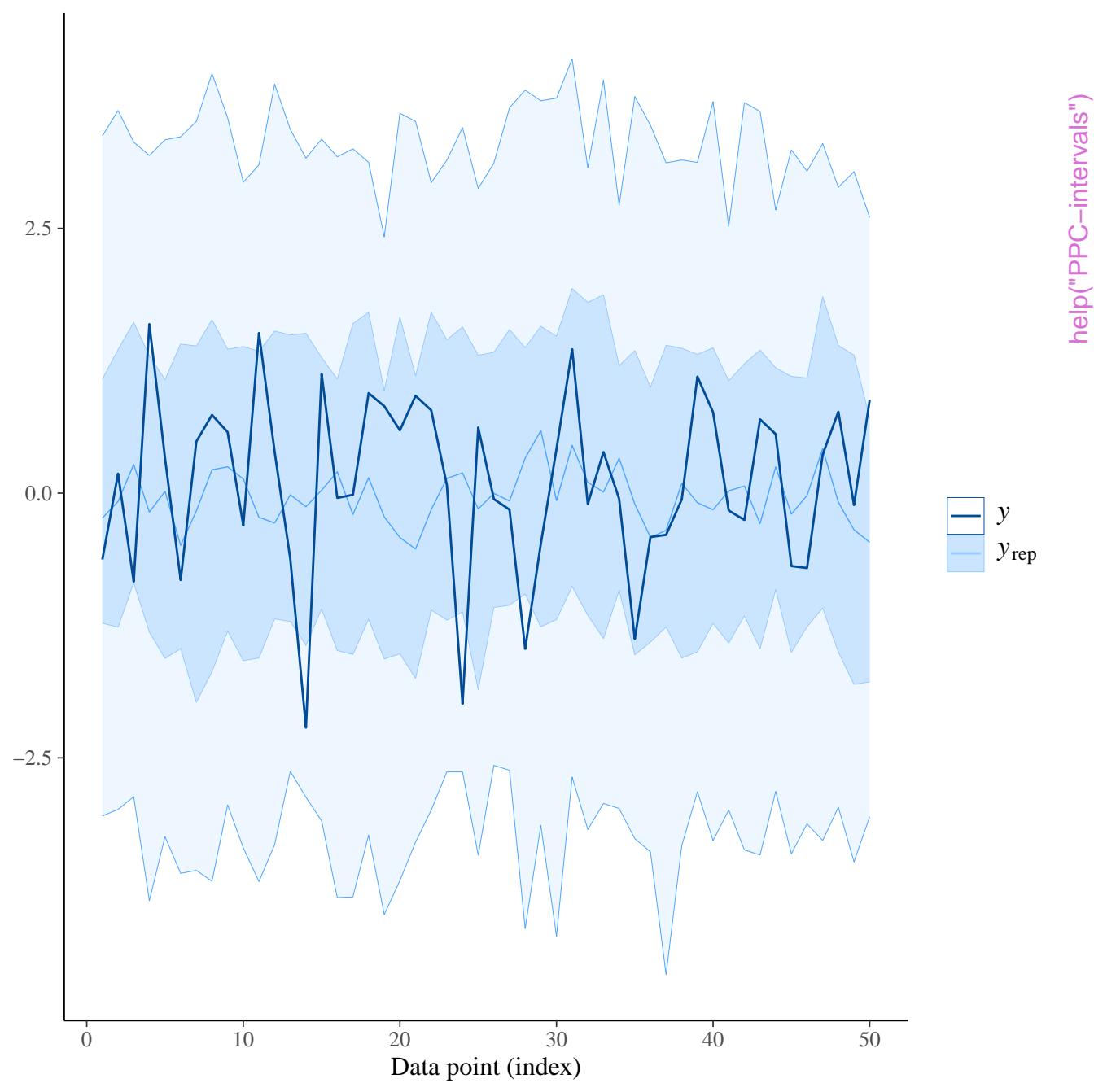


help("PPC-errors")

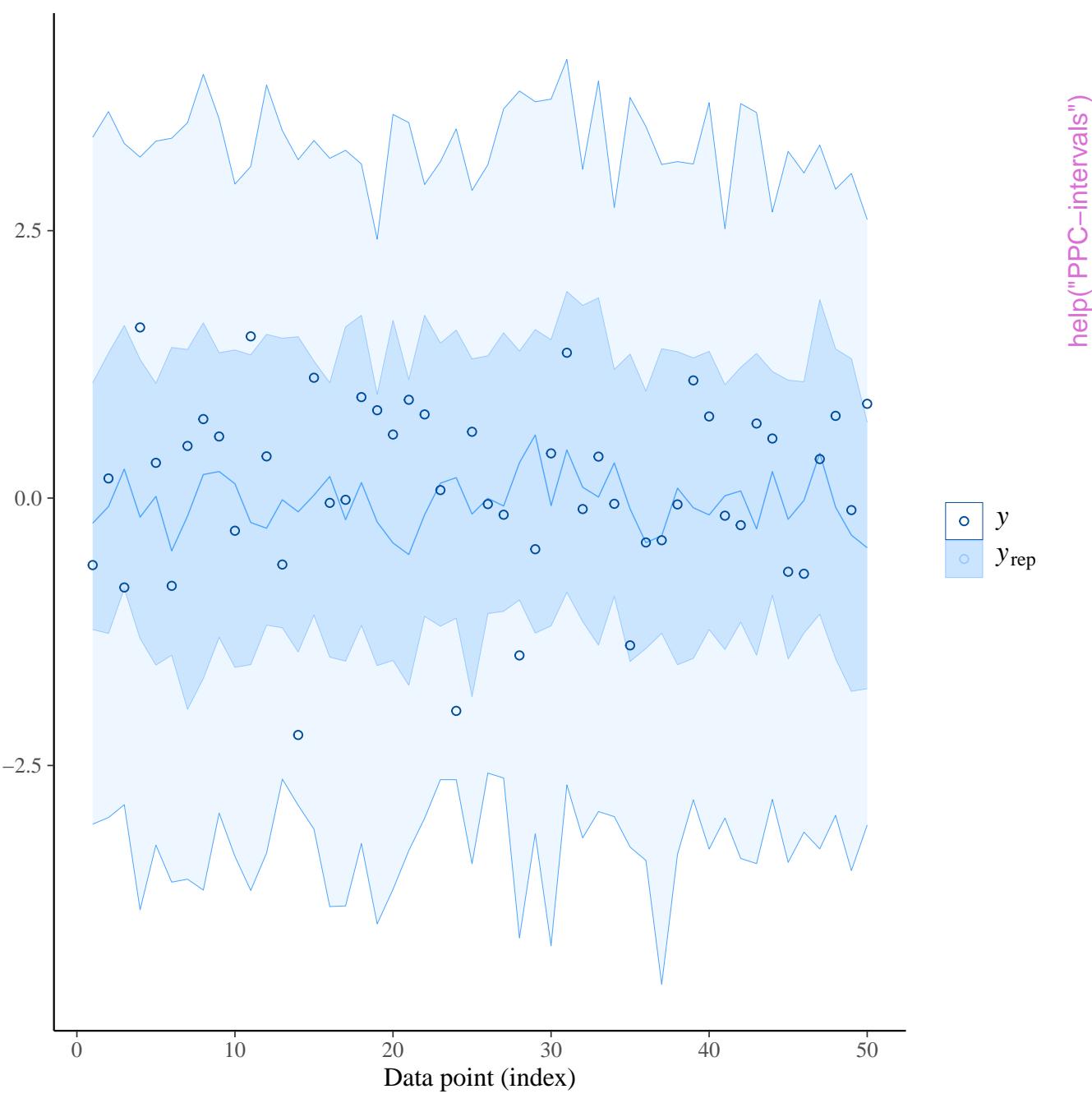
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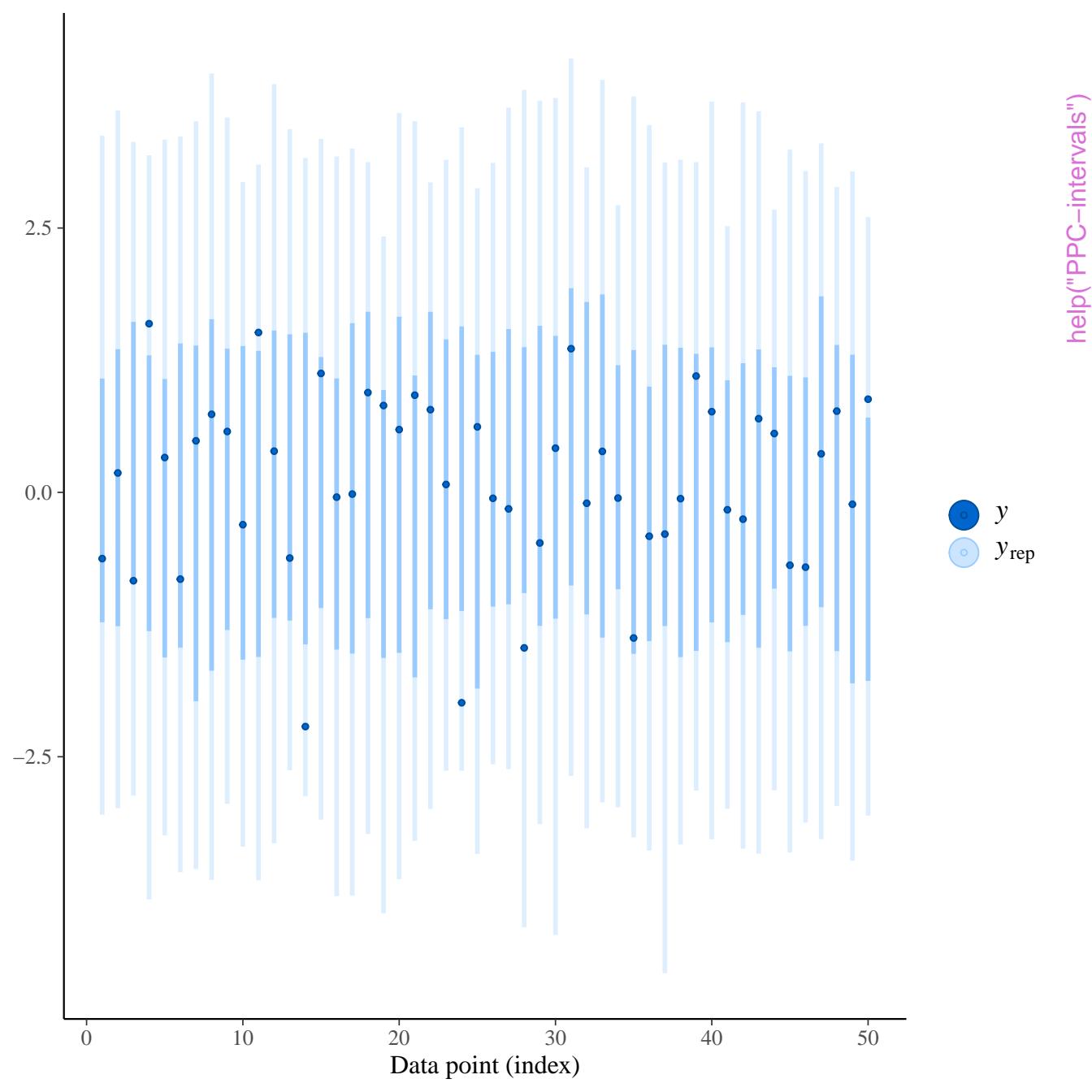
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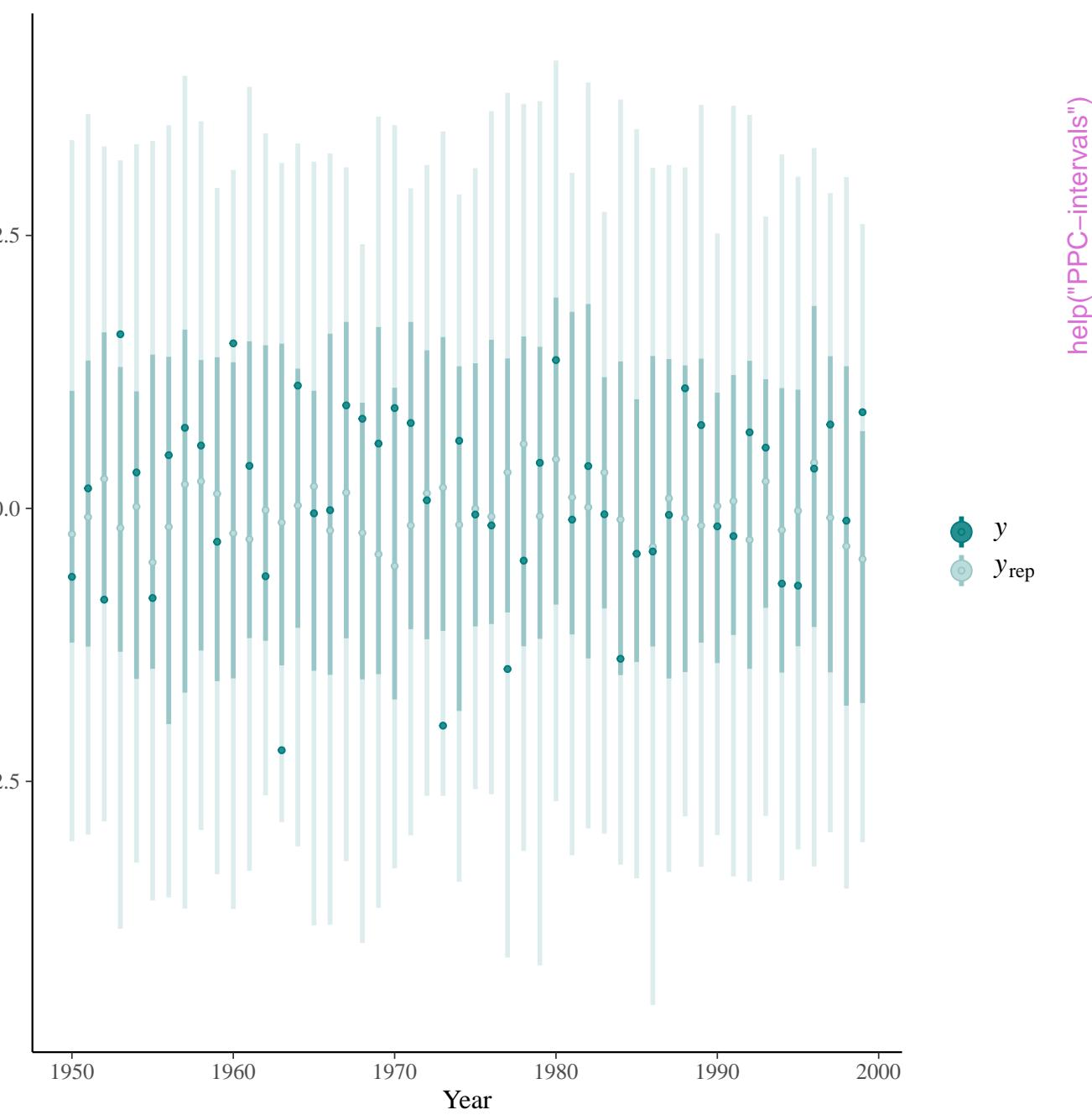
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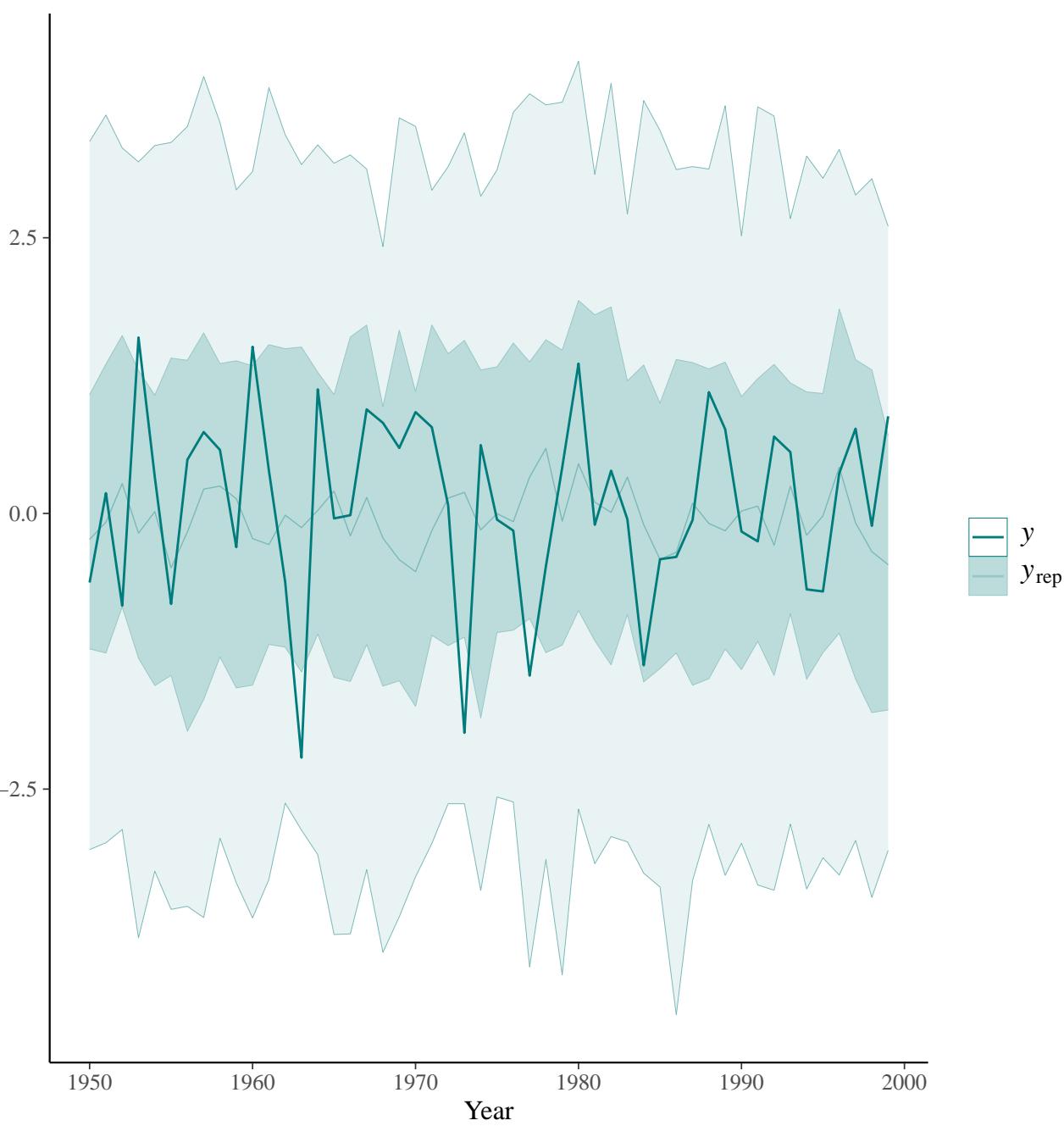
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help("PPC-intervals")

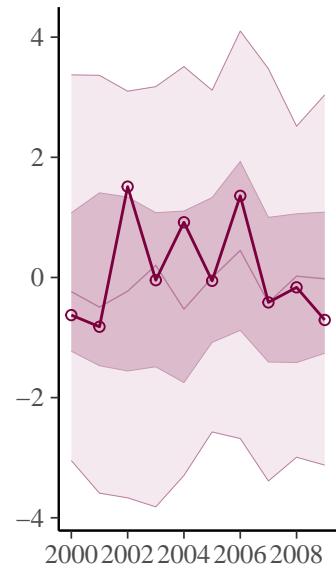


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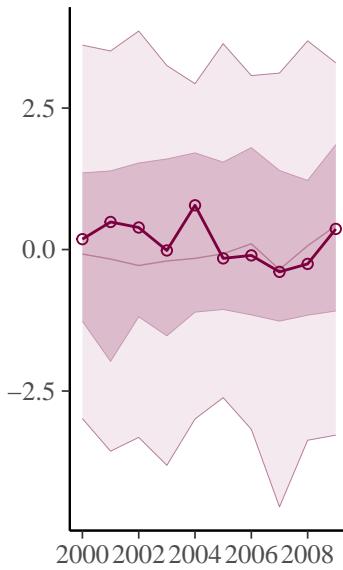


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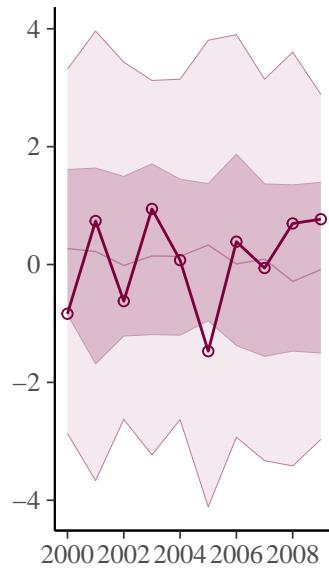
A



B

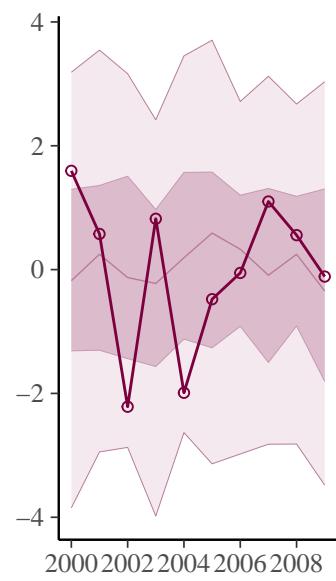


C

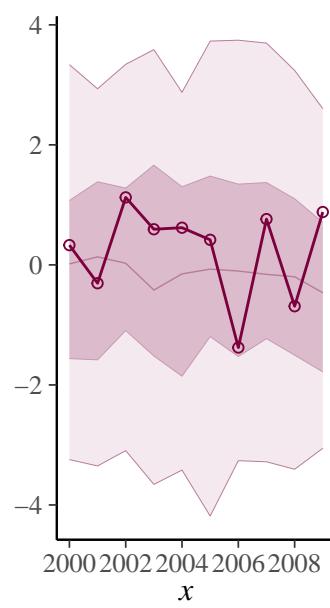


$y$   
 $y_{rep}$

D

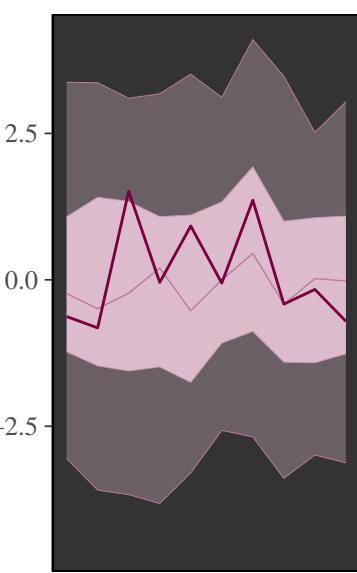


E

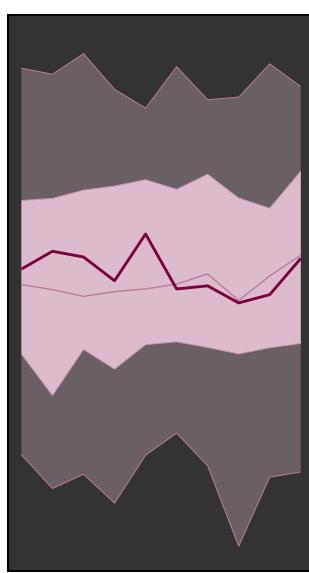


help("PPC-intervals")

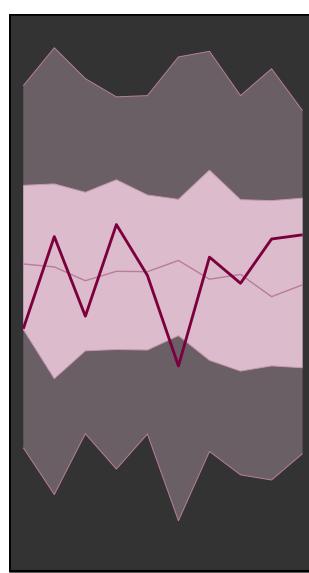
A



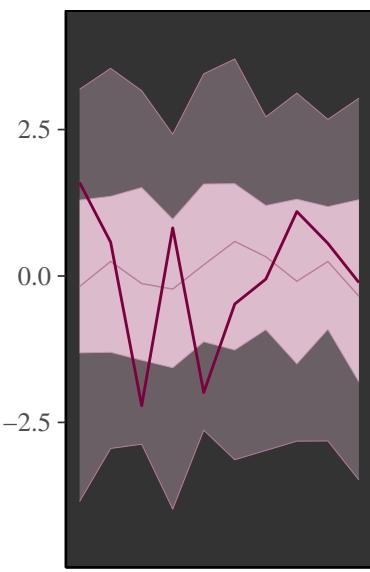
B



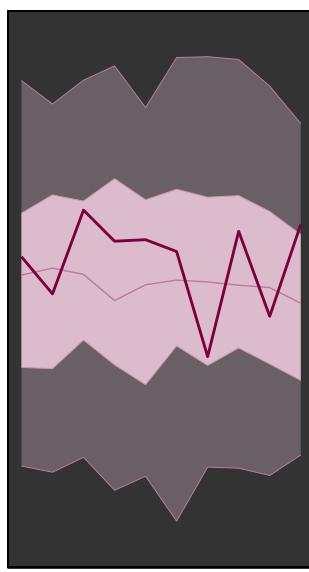
C



D

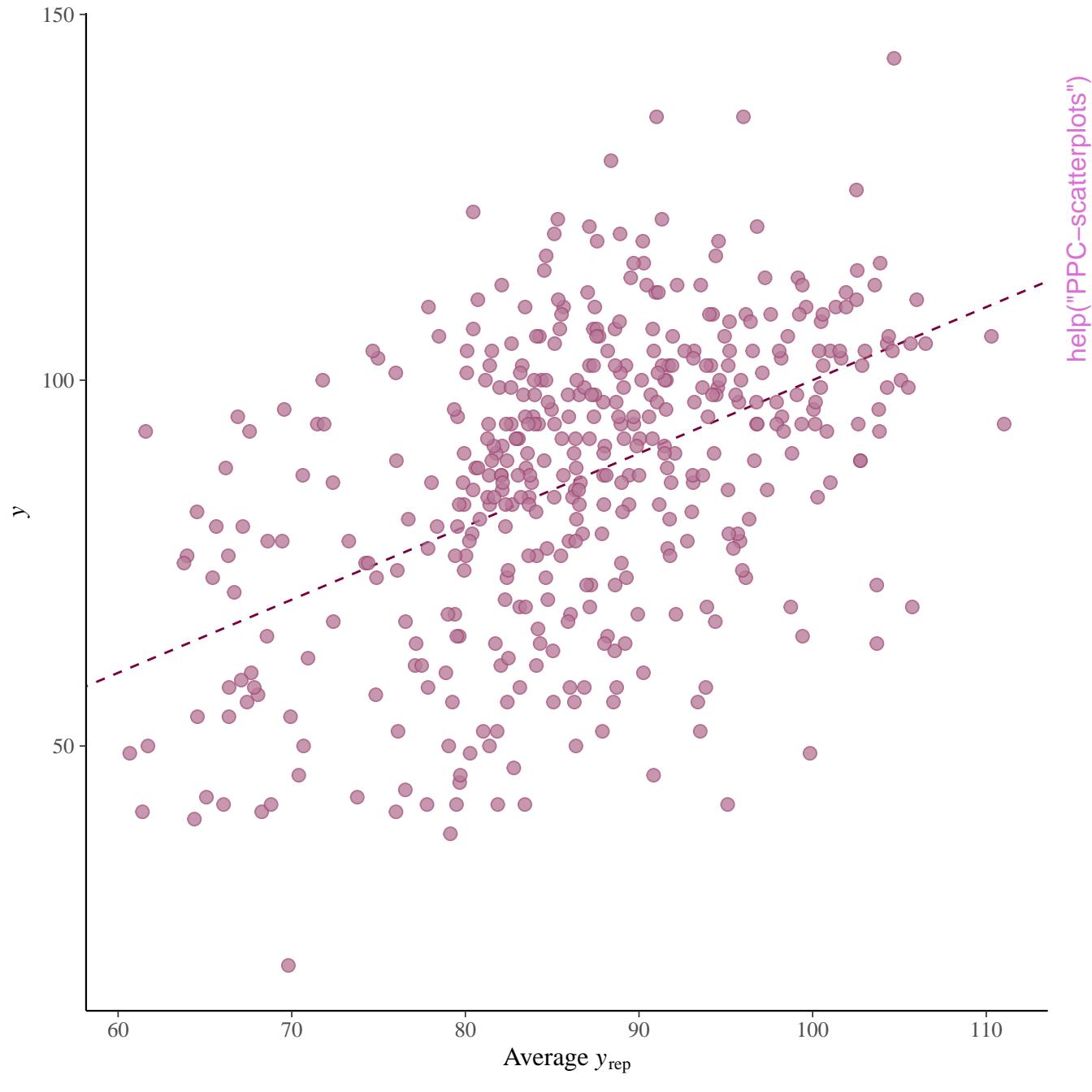


E

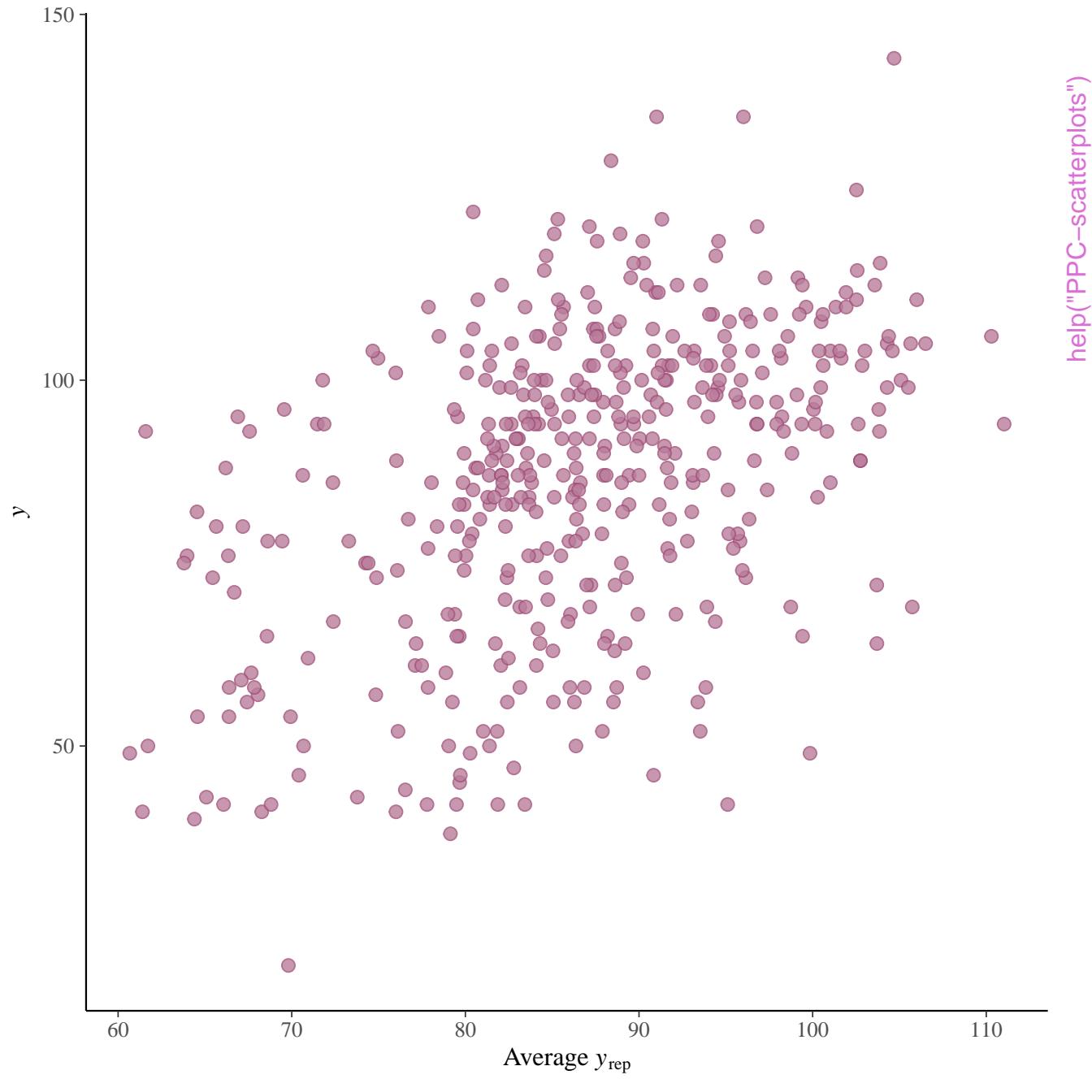


$x$

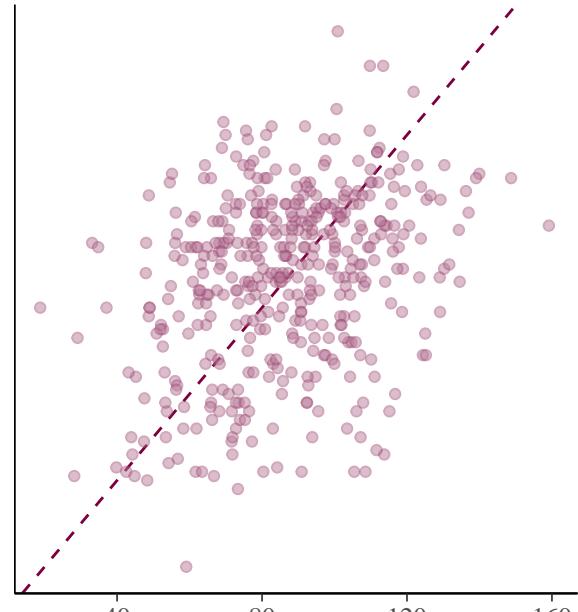
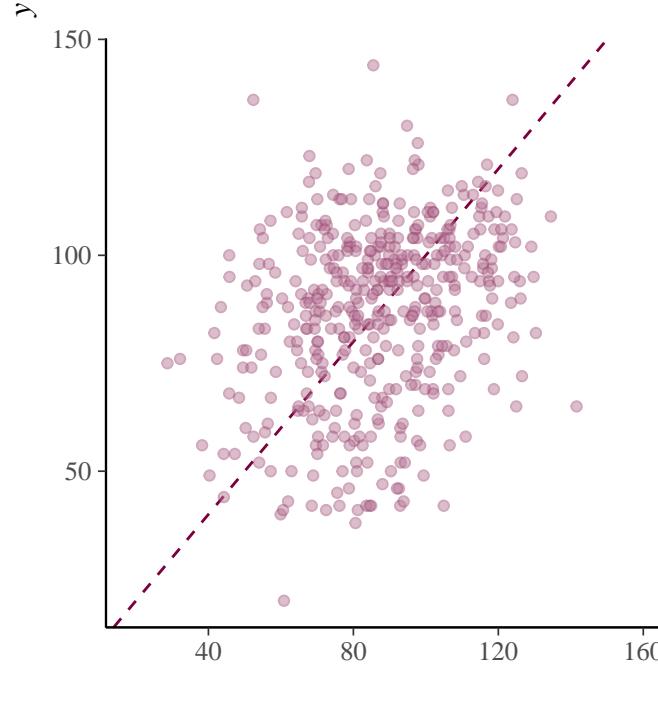
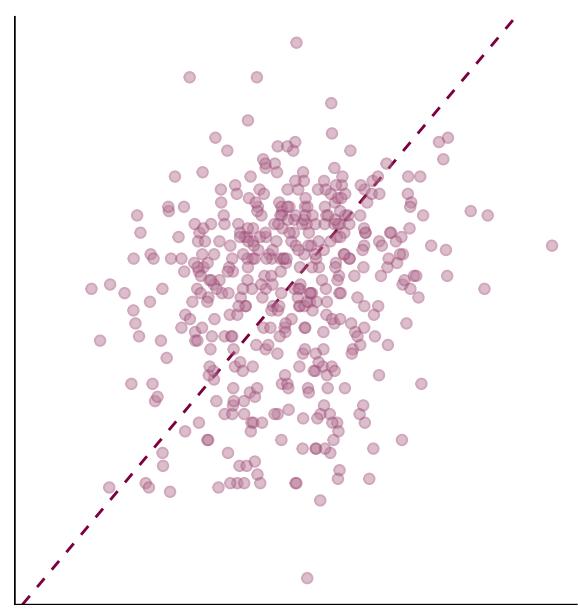
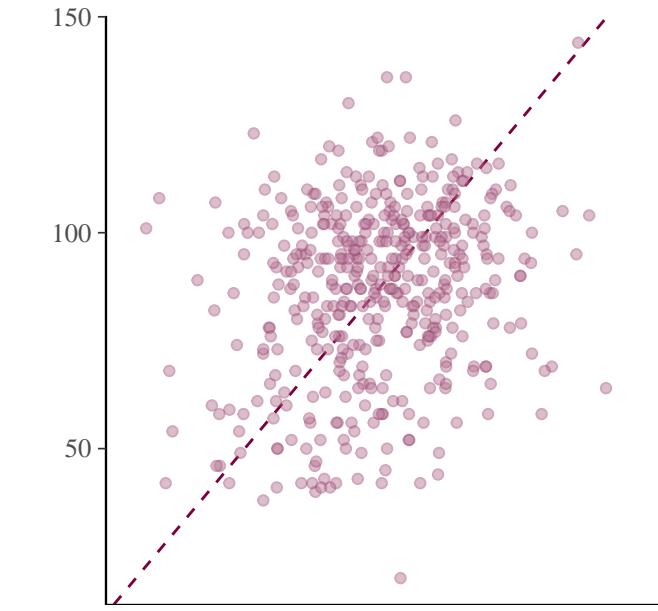
 y  
y<sub>rep</sub>



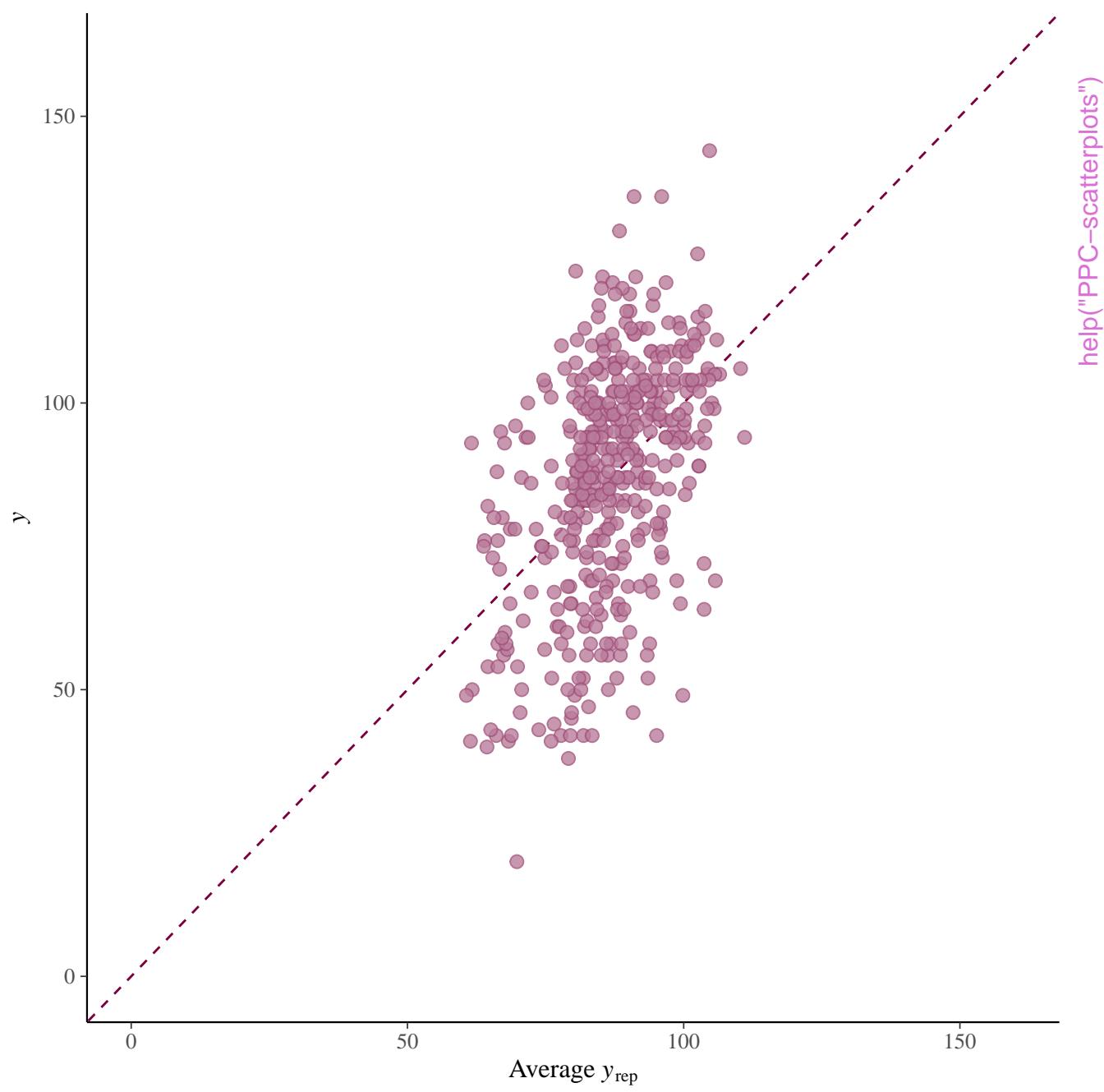
help("PPC-scatterplots")



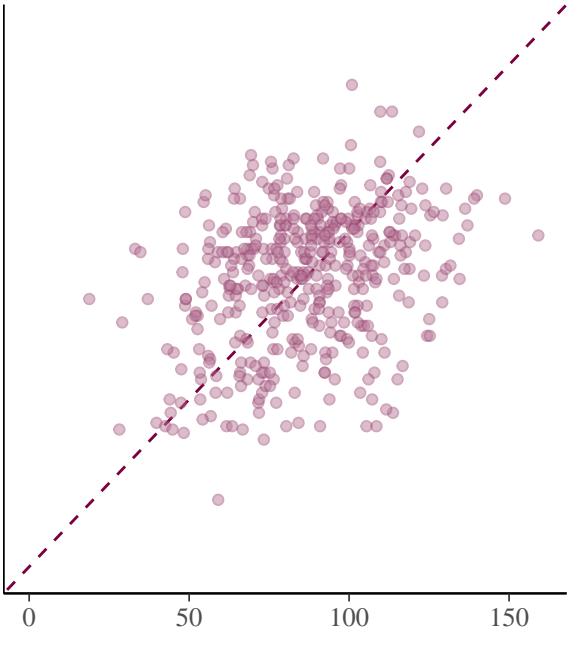
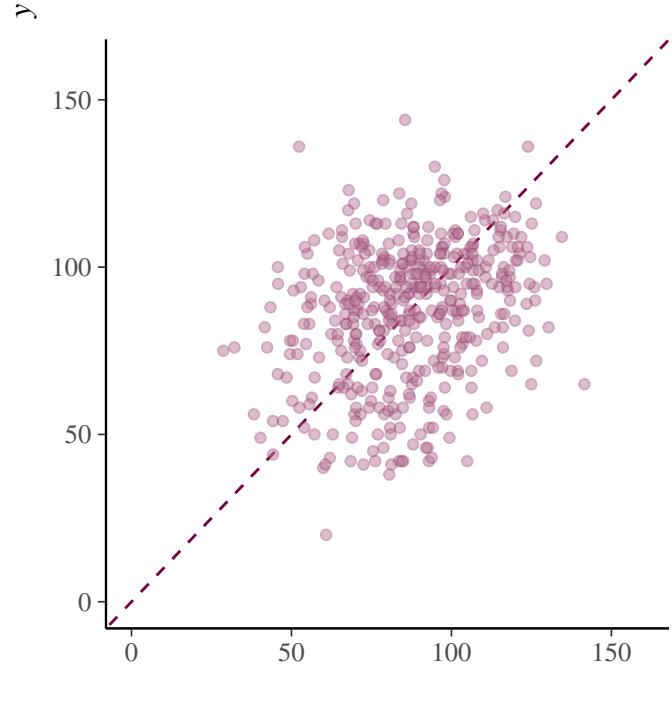
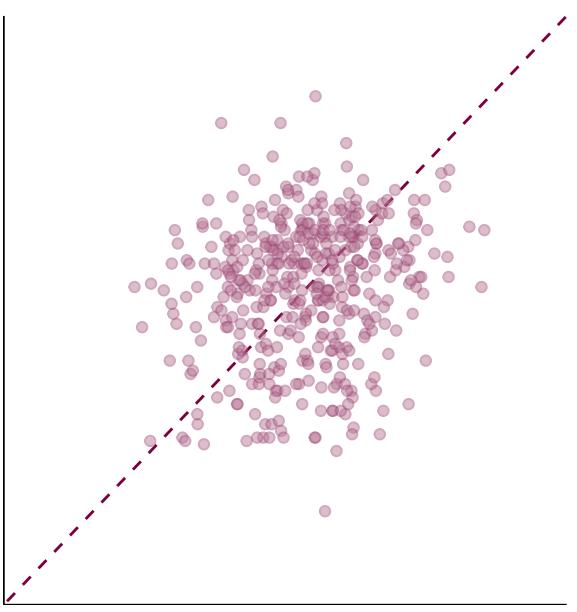
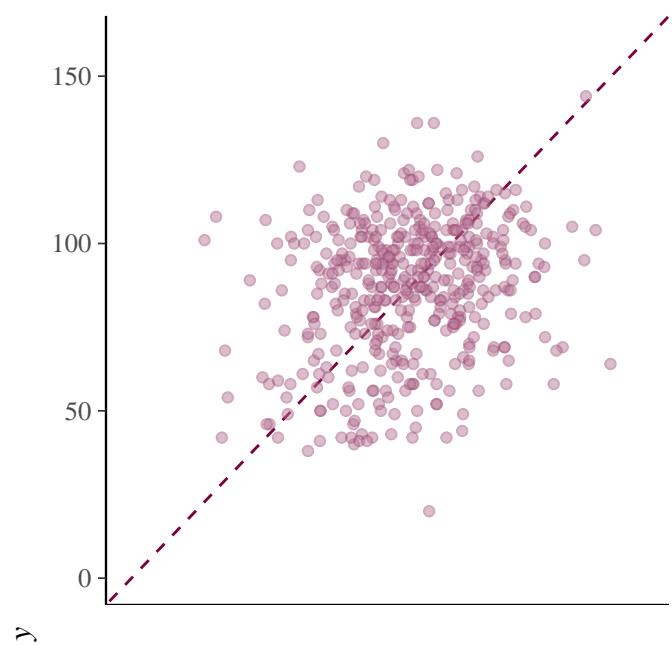
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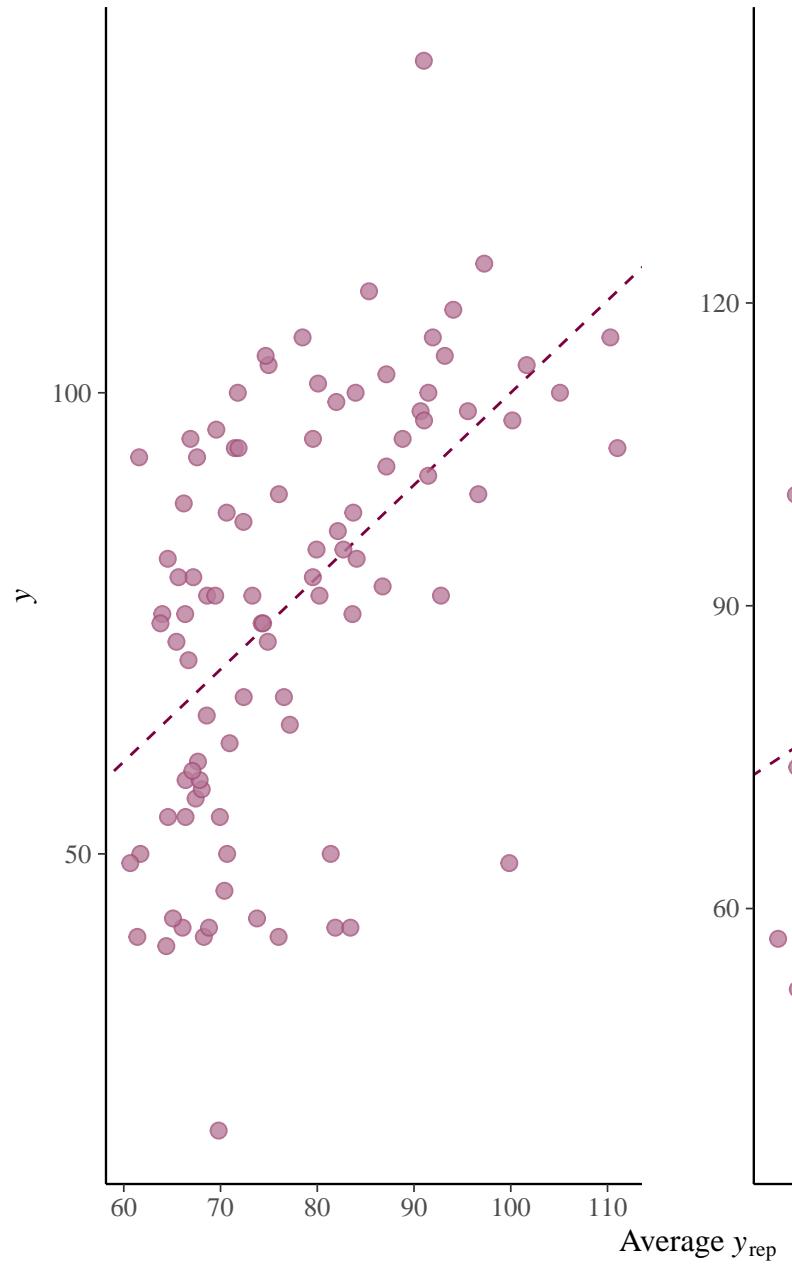
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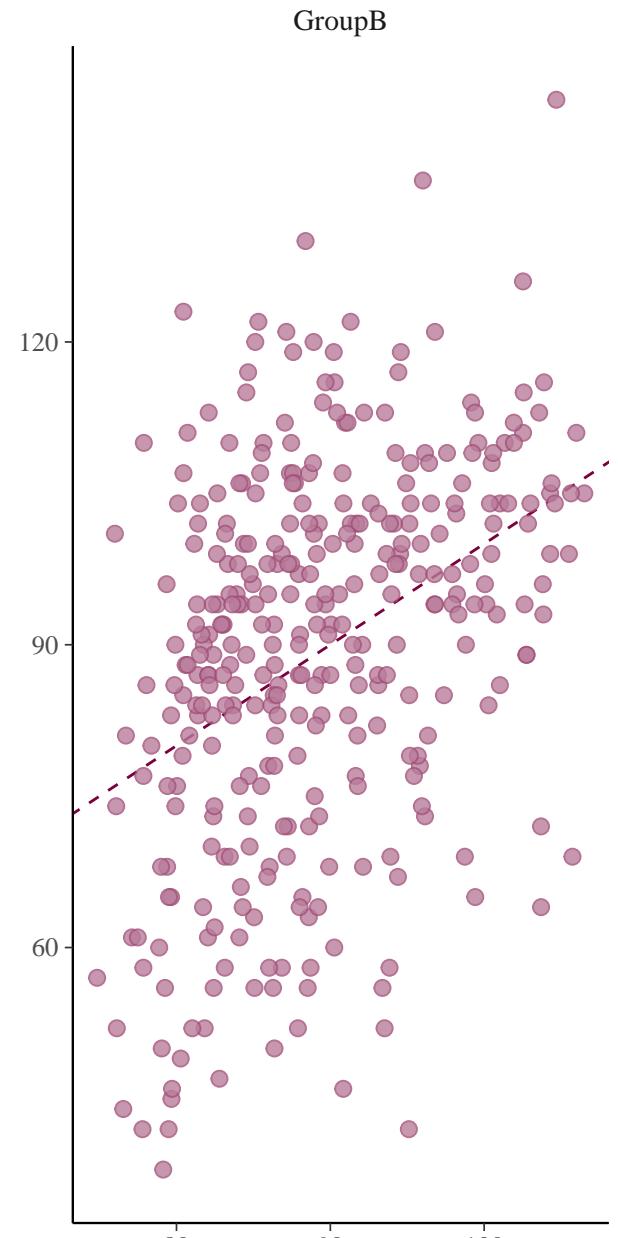
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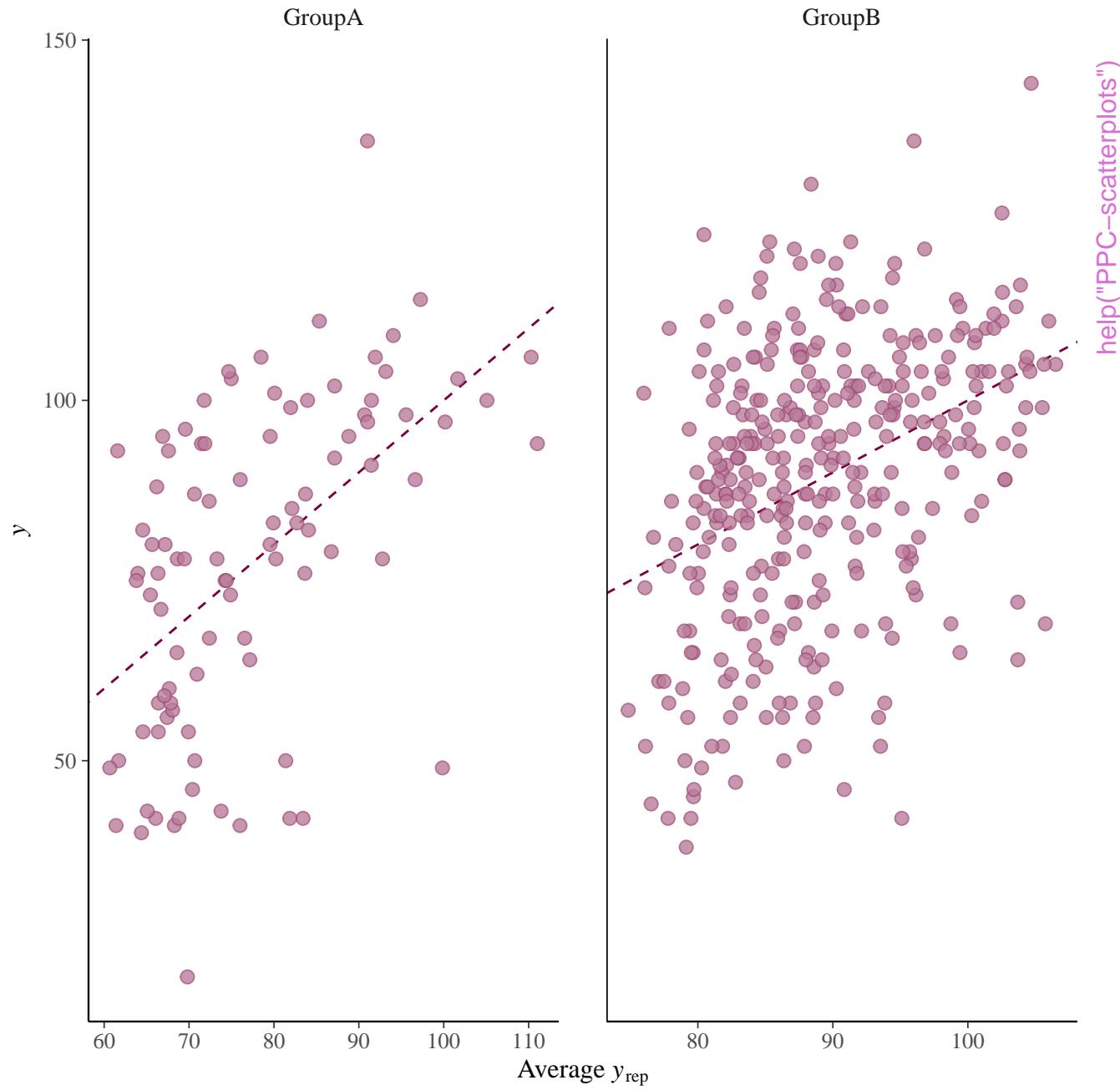
GroupA



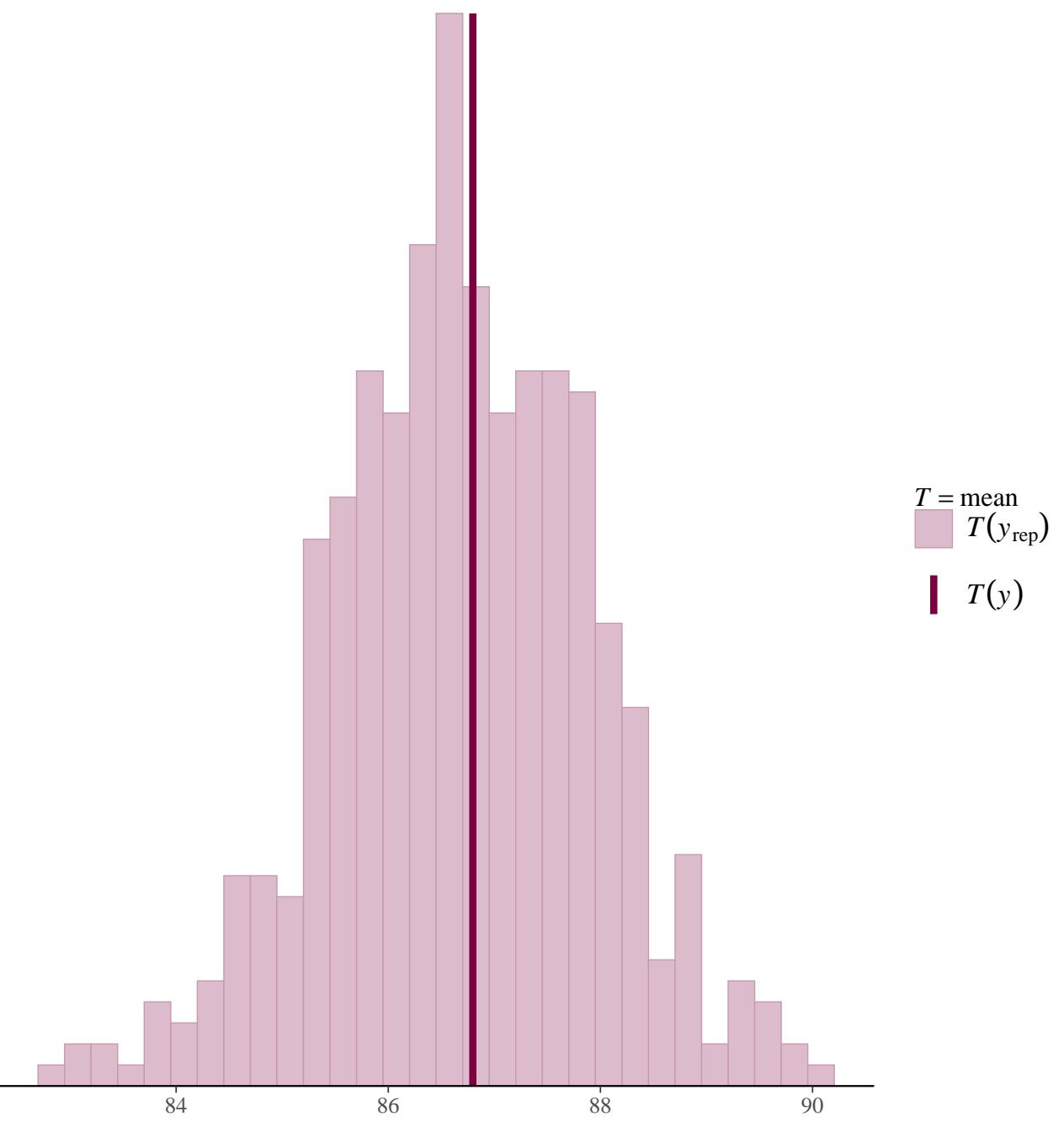
GroupB



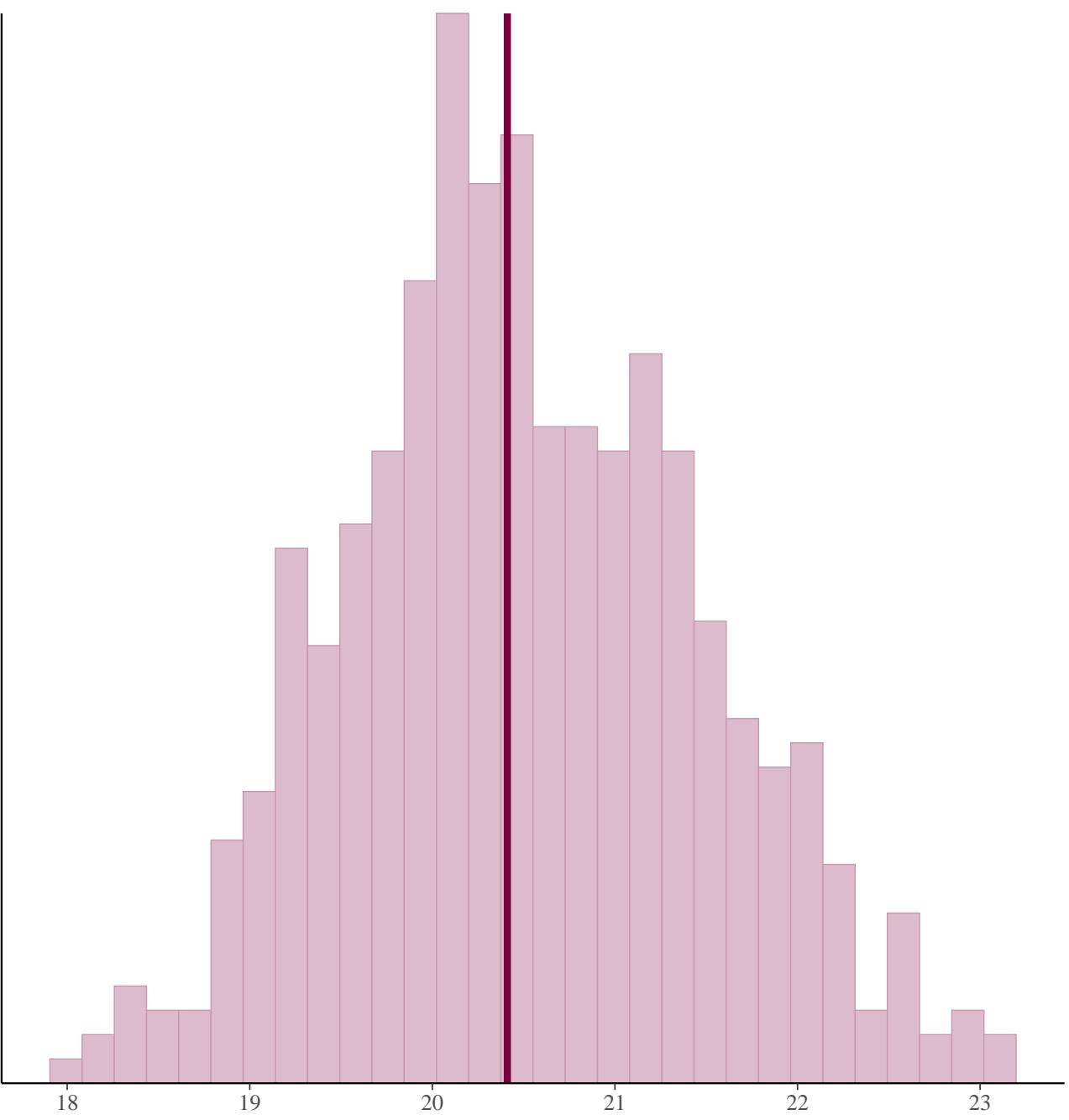
help("PPC-scatterplots")



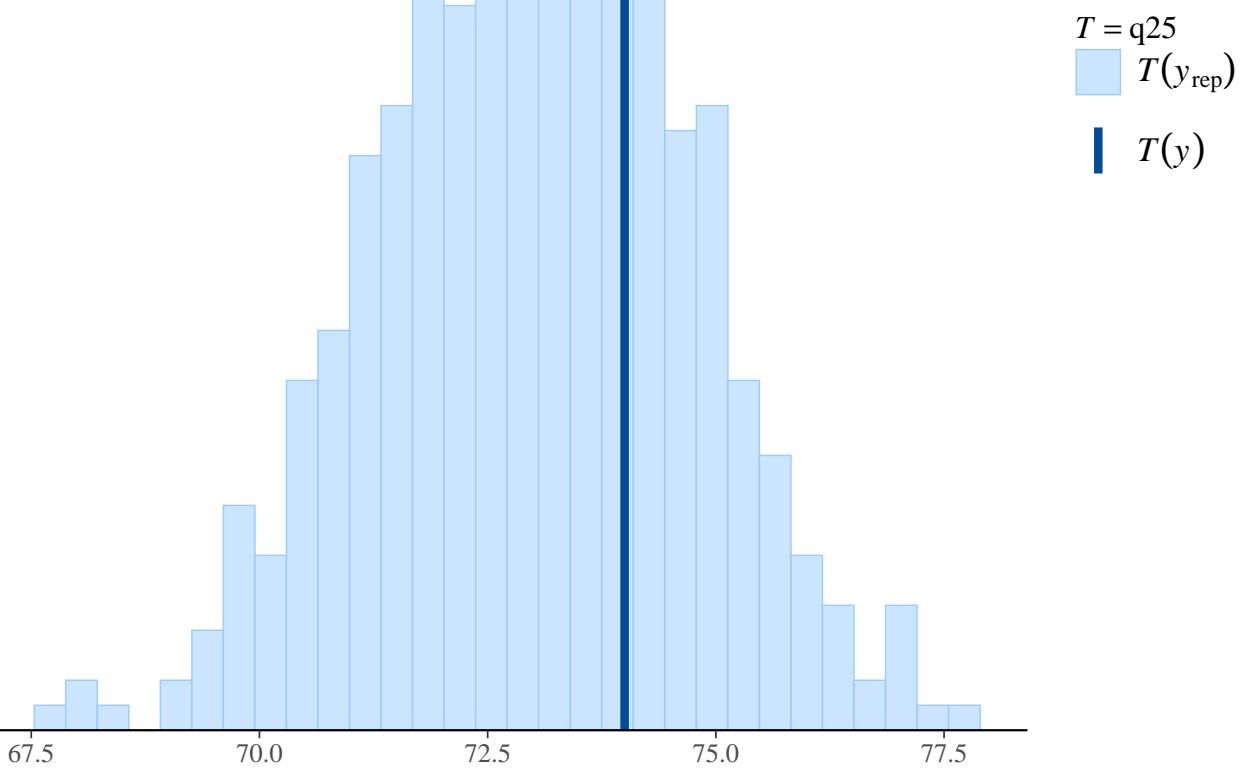
help("PPC-test-statistics")



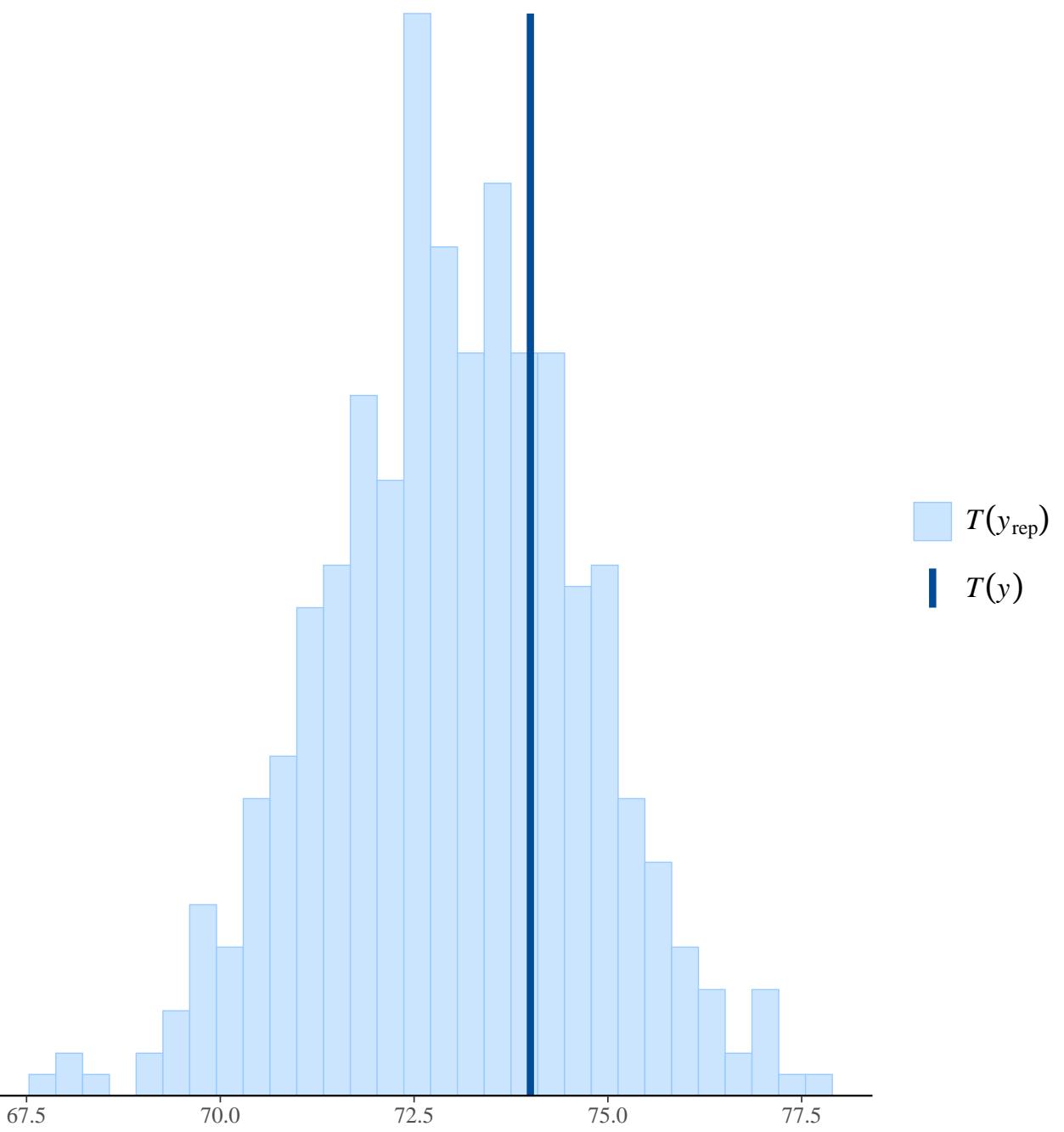
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help("PPC-test-statistics")

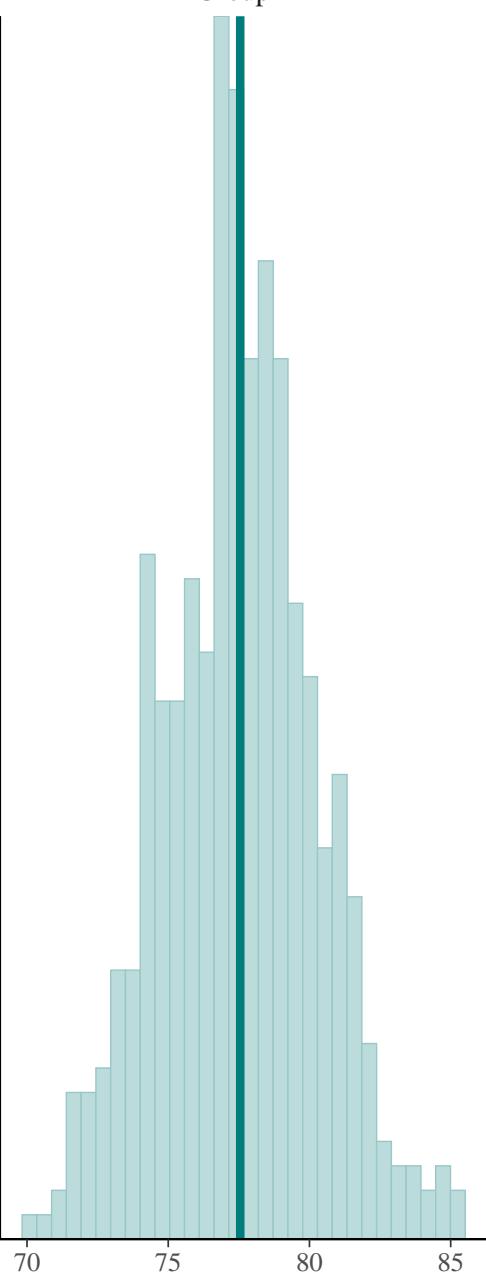


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help("PPC-test-statistics")
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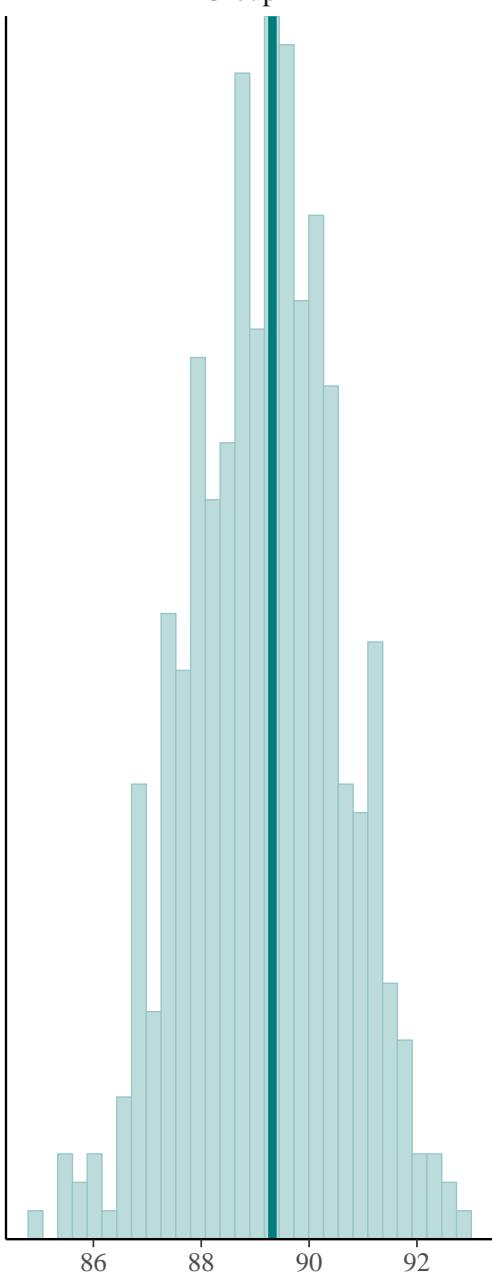


help("PPC-test-statistics")

GroupA



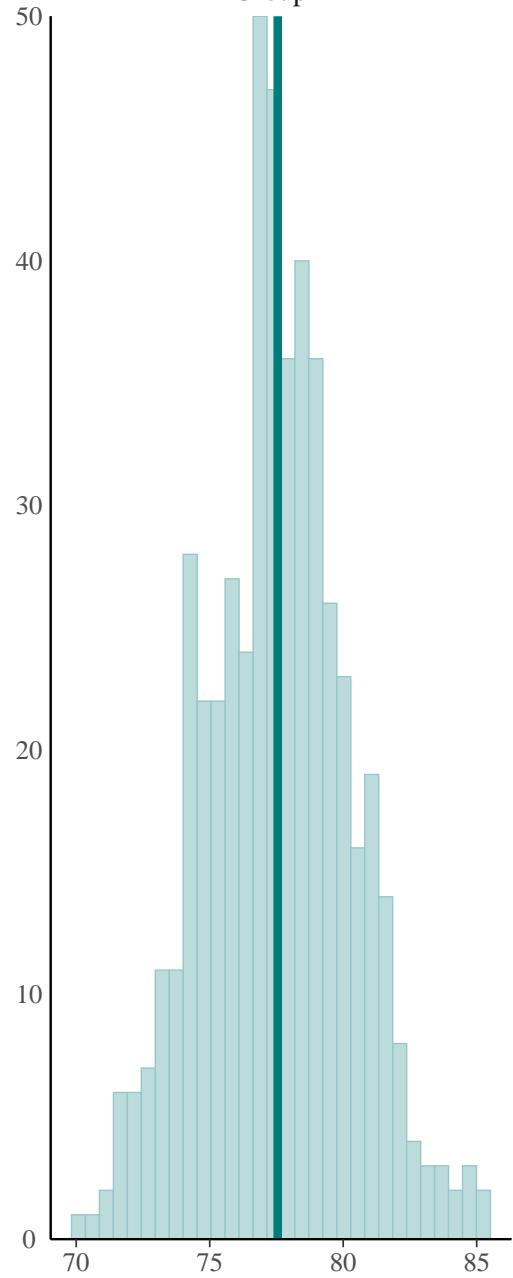
GroupB



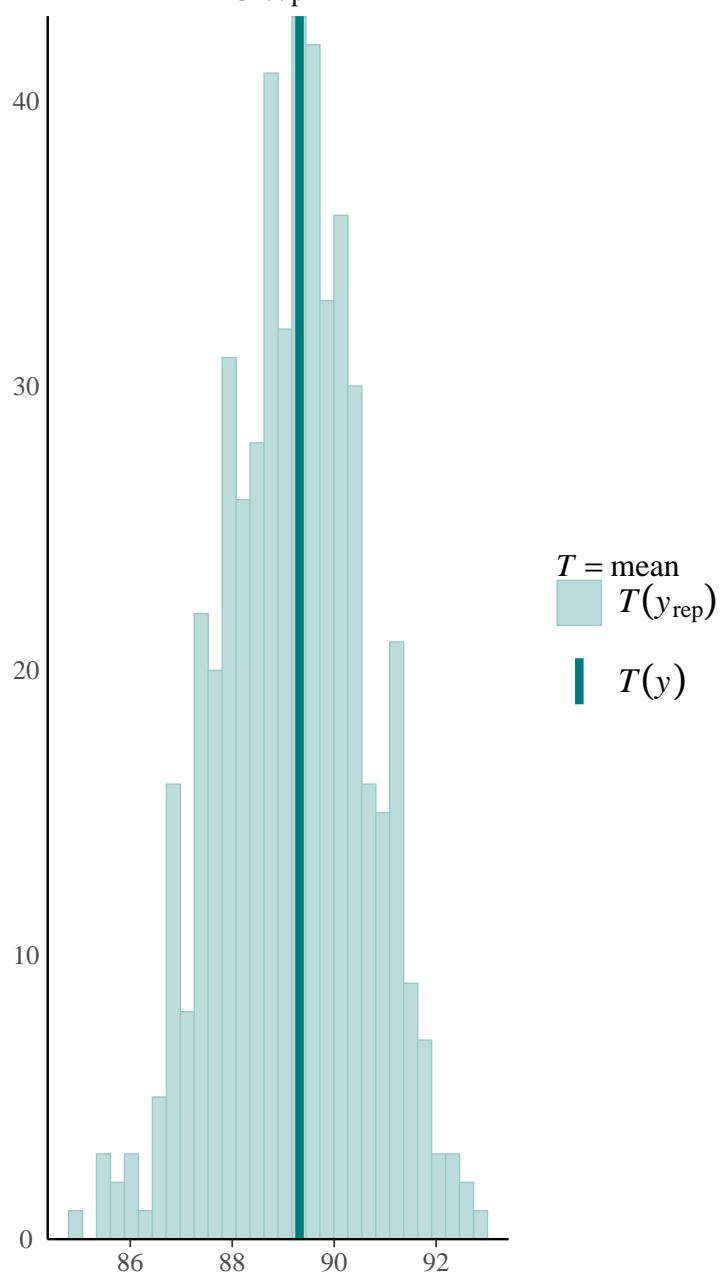
$T = \text{mean}$   
 $T(y_{\text{rep}})$   
 $T(y)$

help("PPC-test-statistics")

GroupA



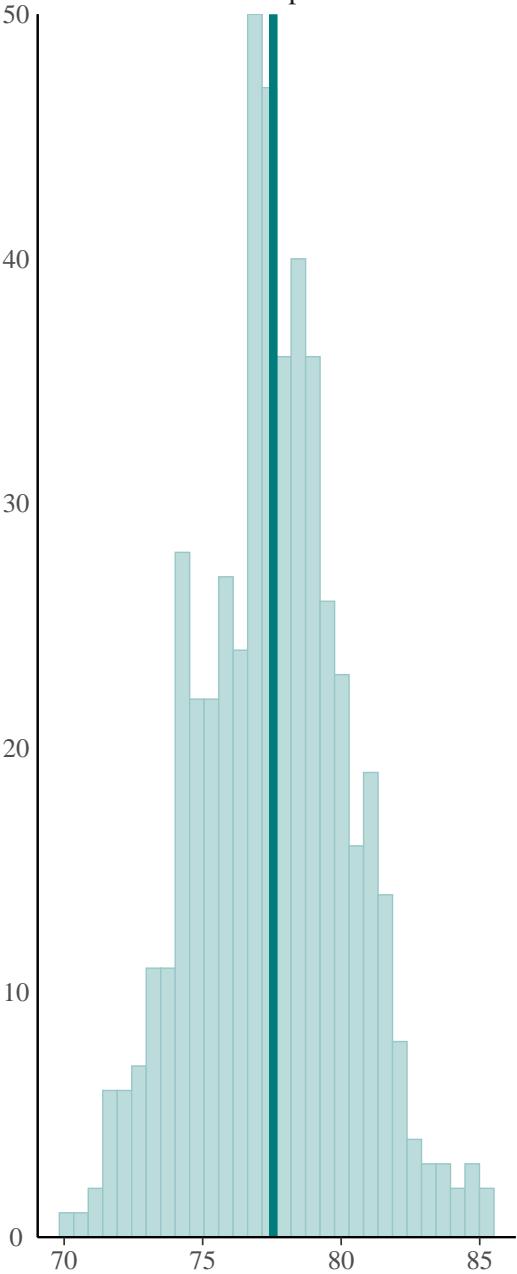
GroupB



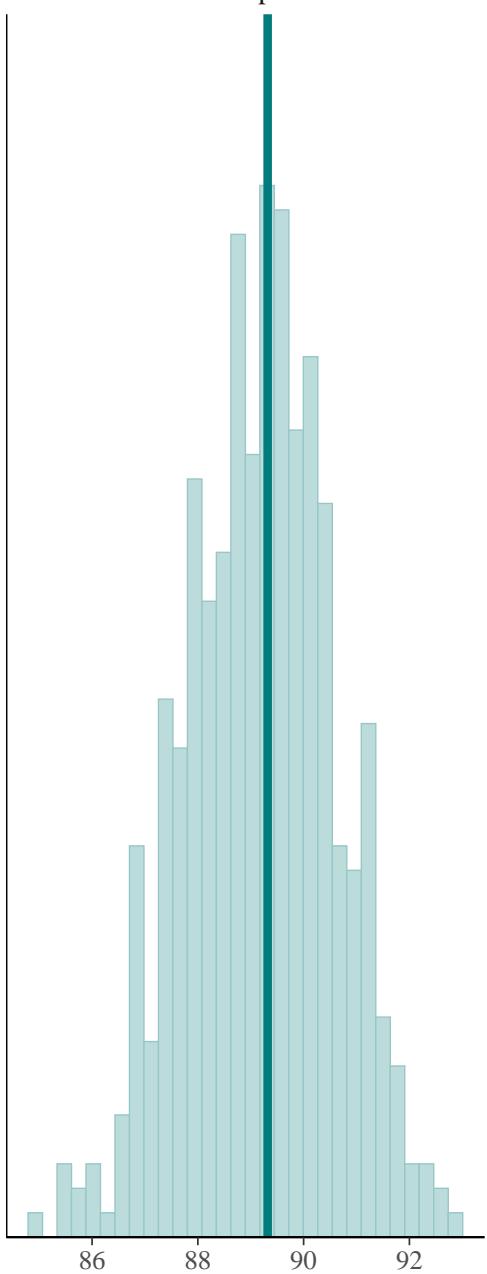
$T = \text{mean}$   
 $T(y_{\text{rep}})$   
 $T(y)$

help("PPC-test-statistics")

GroupA

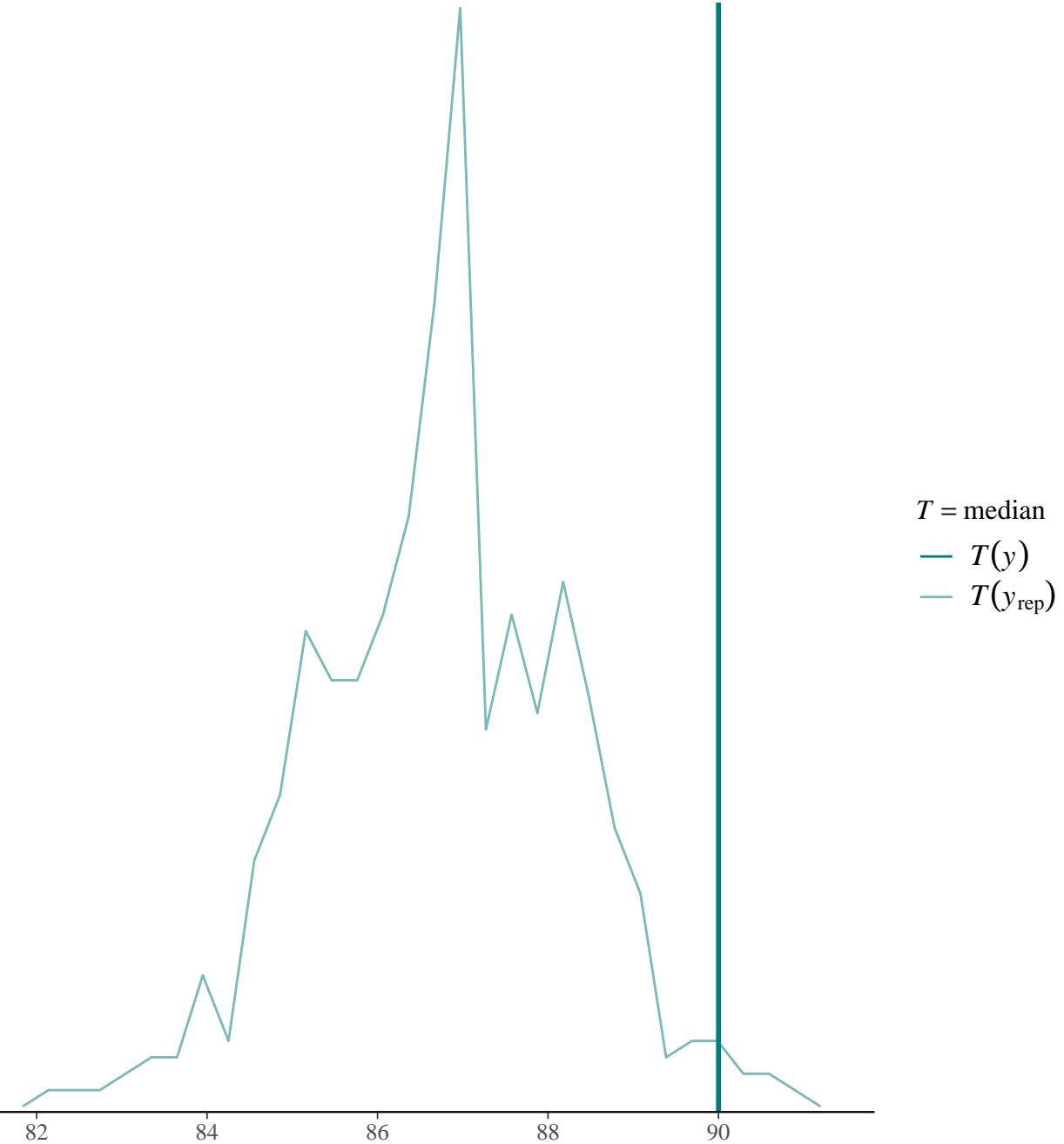


GroupB



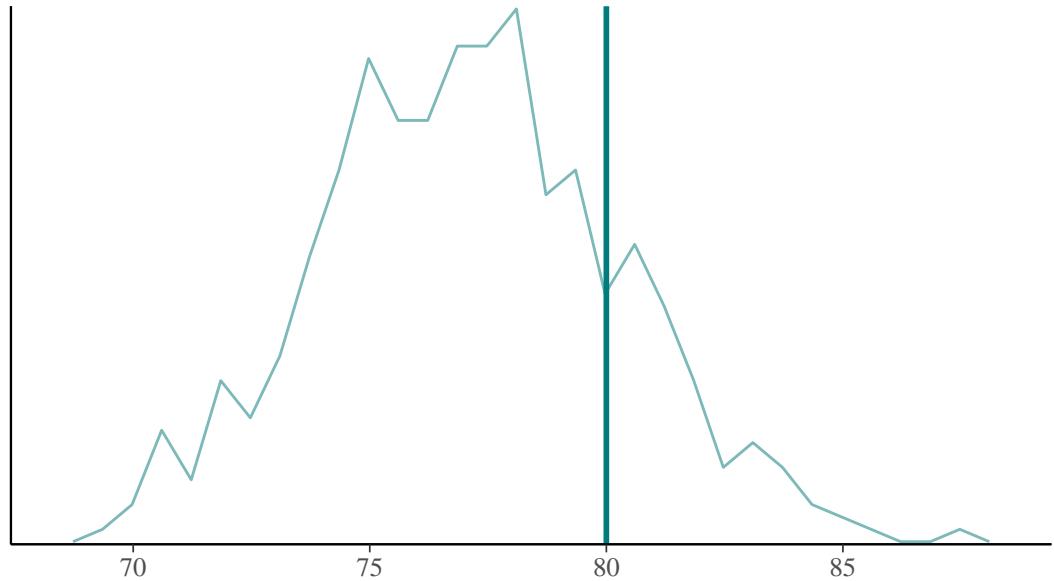
$T = \text{mean}$   
 $T(y_{\text{rep}})$   
 $T(y)$

help("PPC-test-statistics")

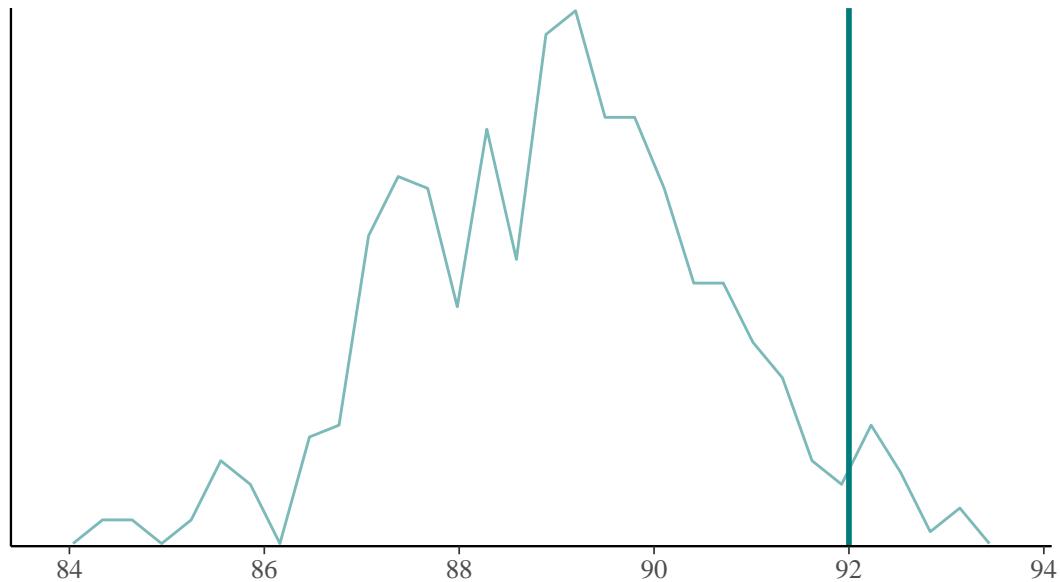


help("PPC-test-statistics")

GroupA

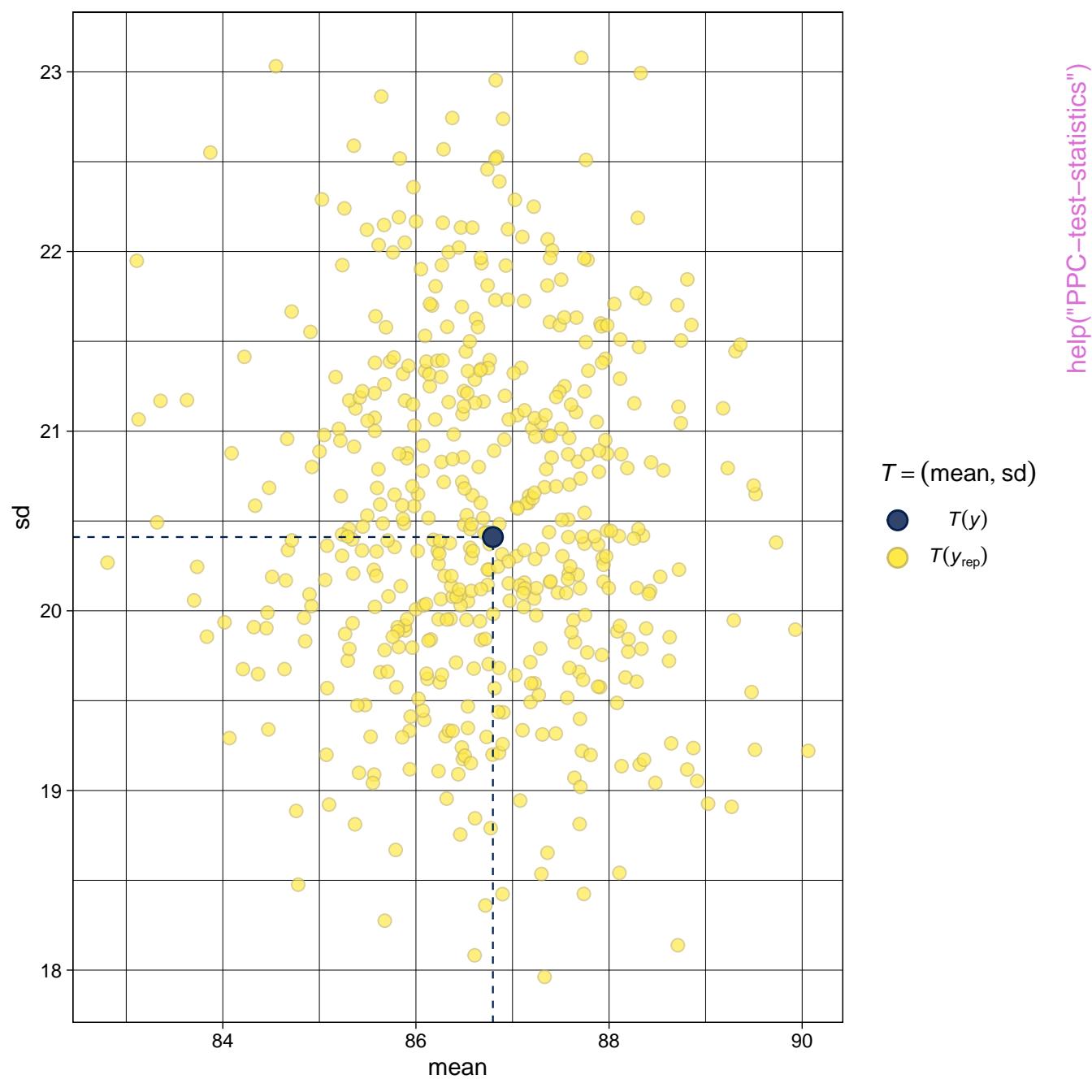


GroupB

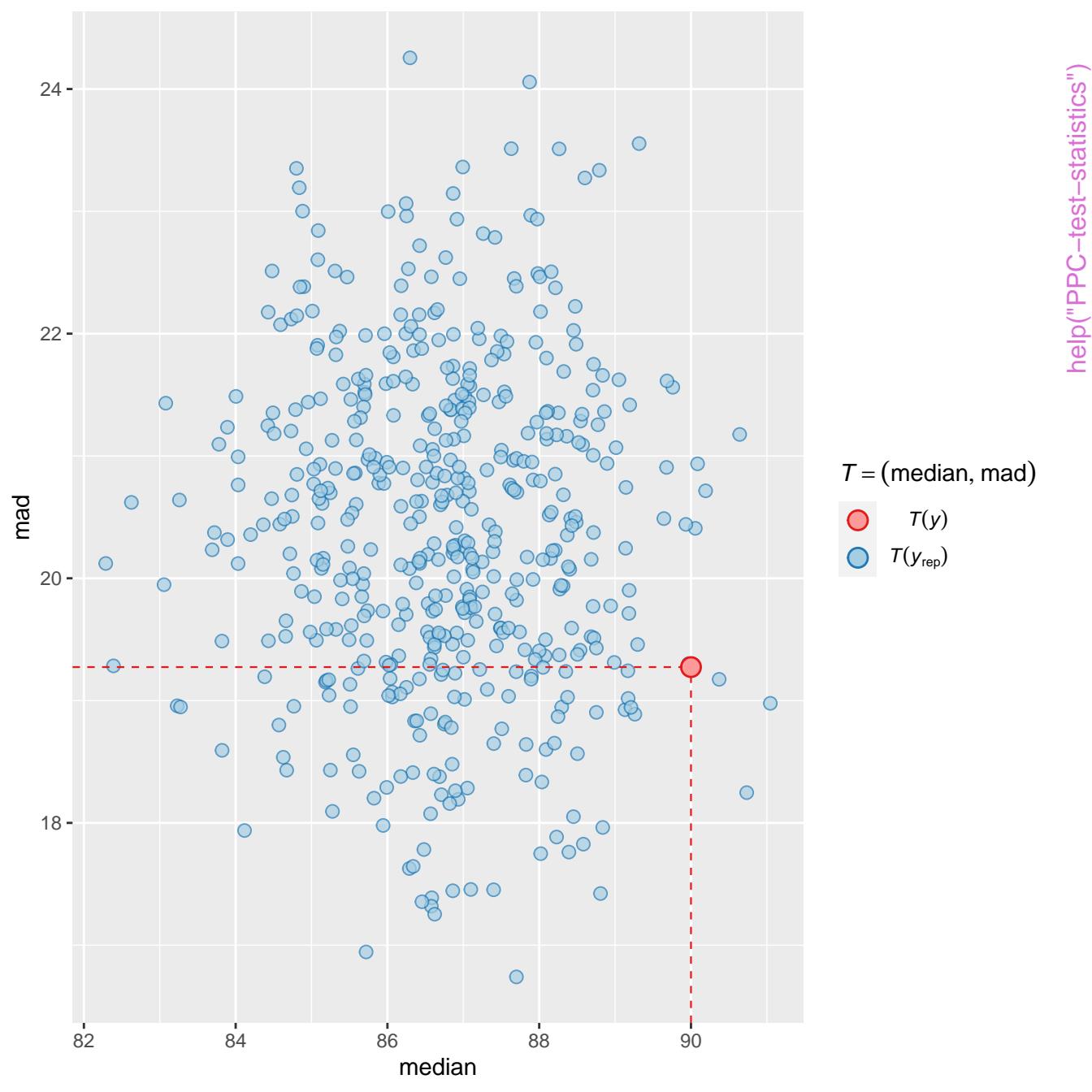


$T = \text{median}$   
 $\text{---} T(y)$   
 $\text{—} T(y_{rep})$

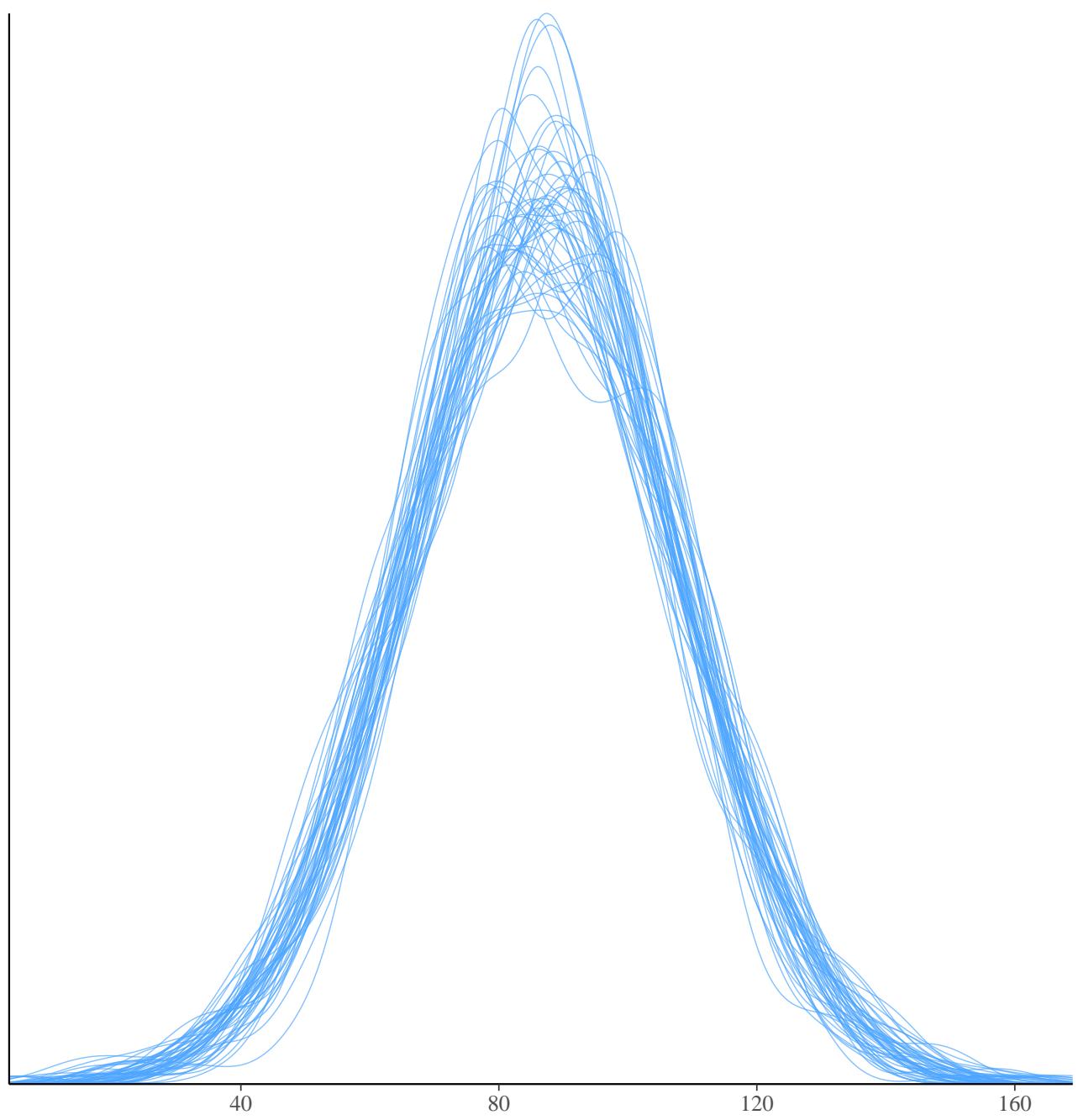
help("PPC-test-statistics")



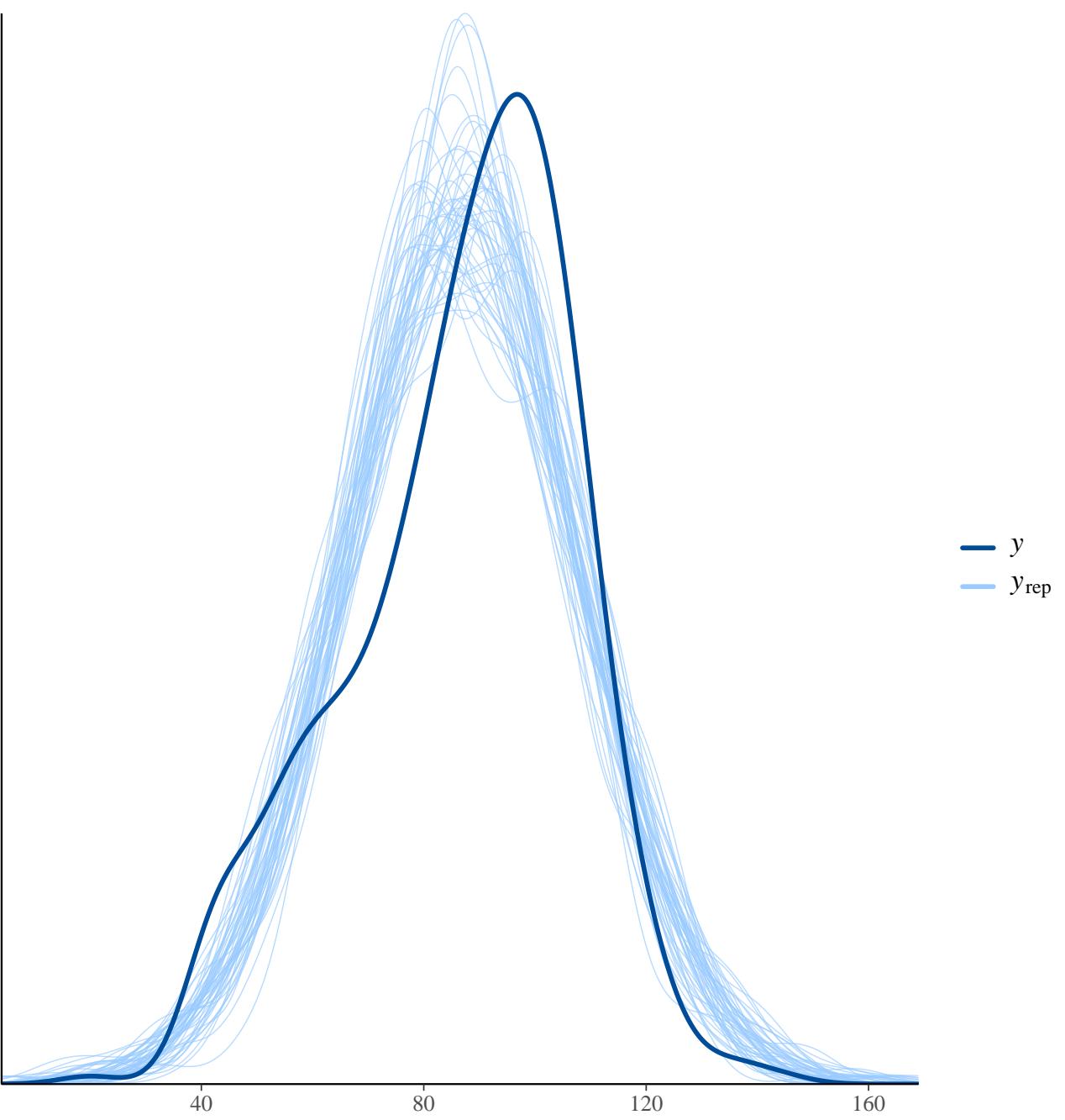
help("PPC-test-statistics")



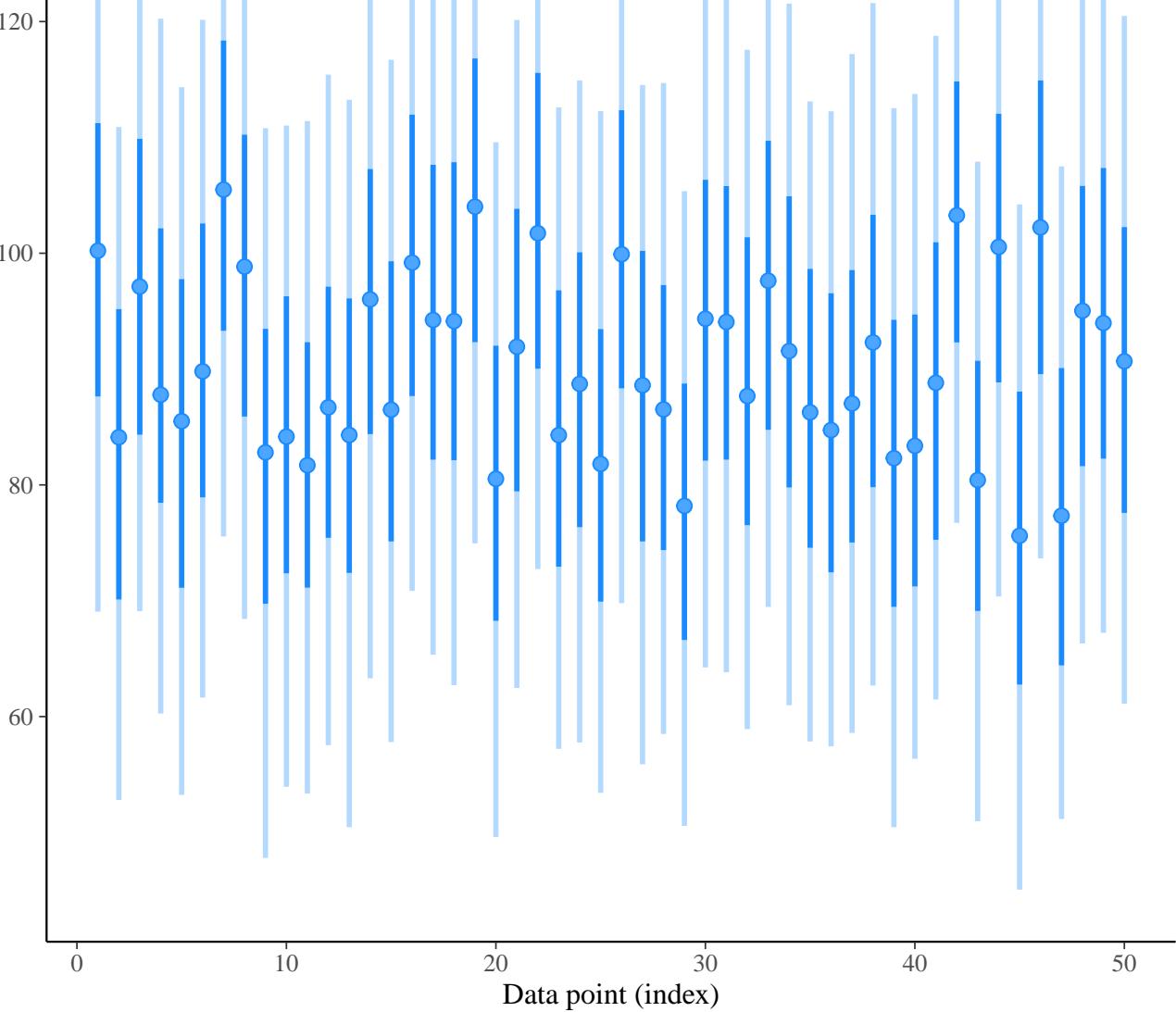
help("PPD-distributions")



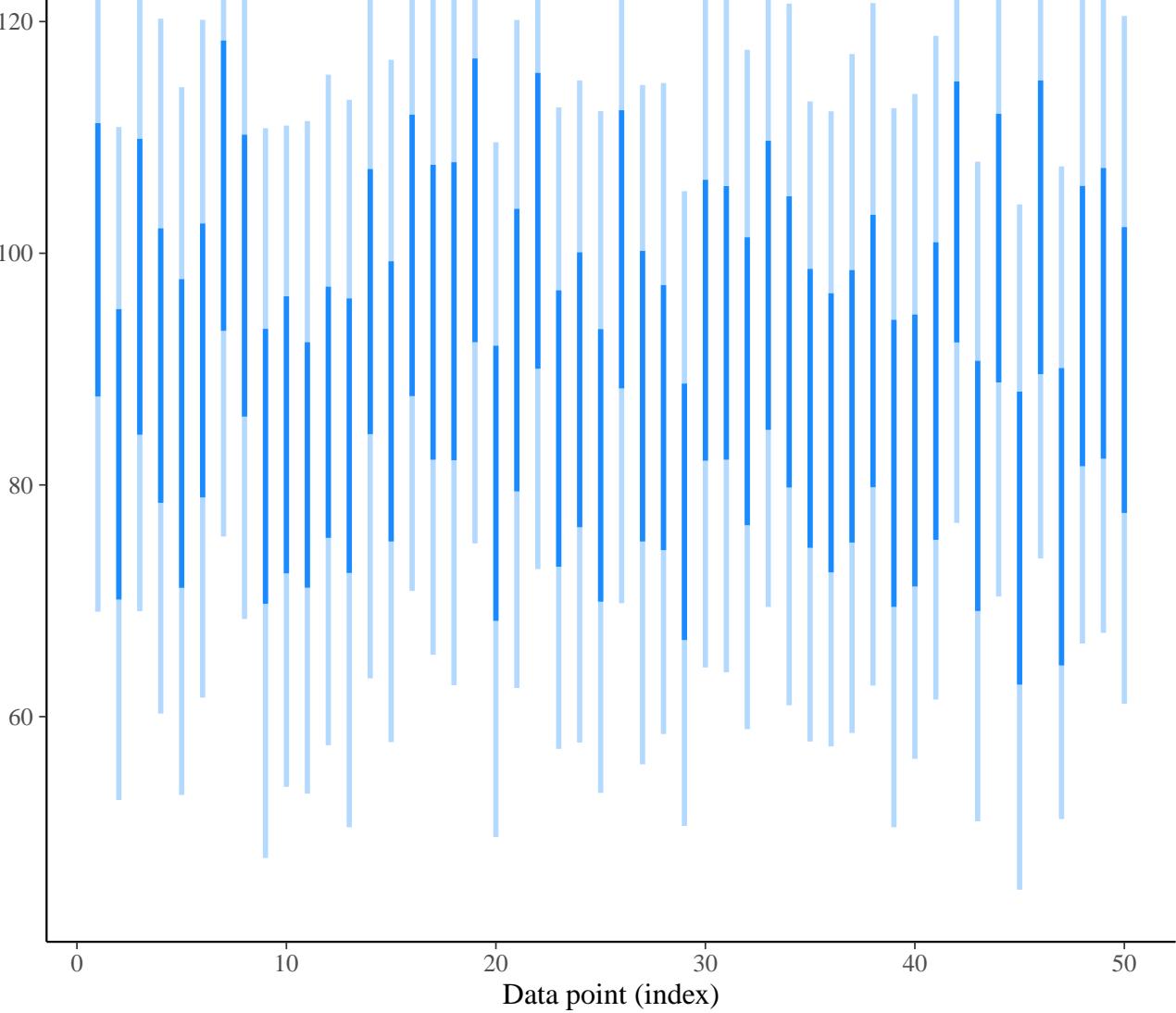
help("PPD-distributions")



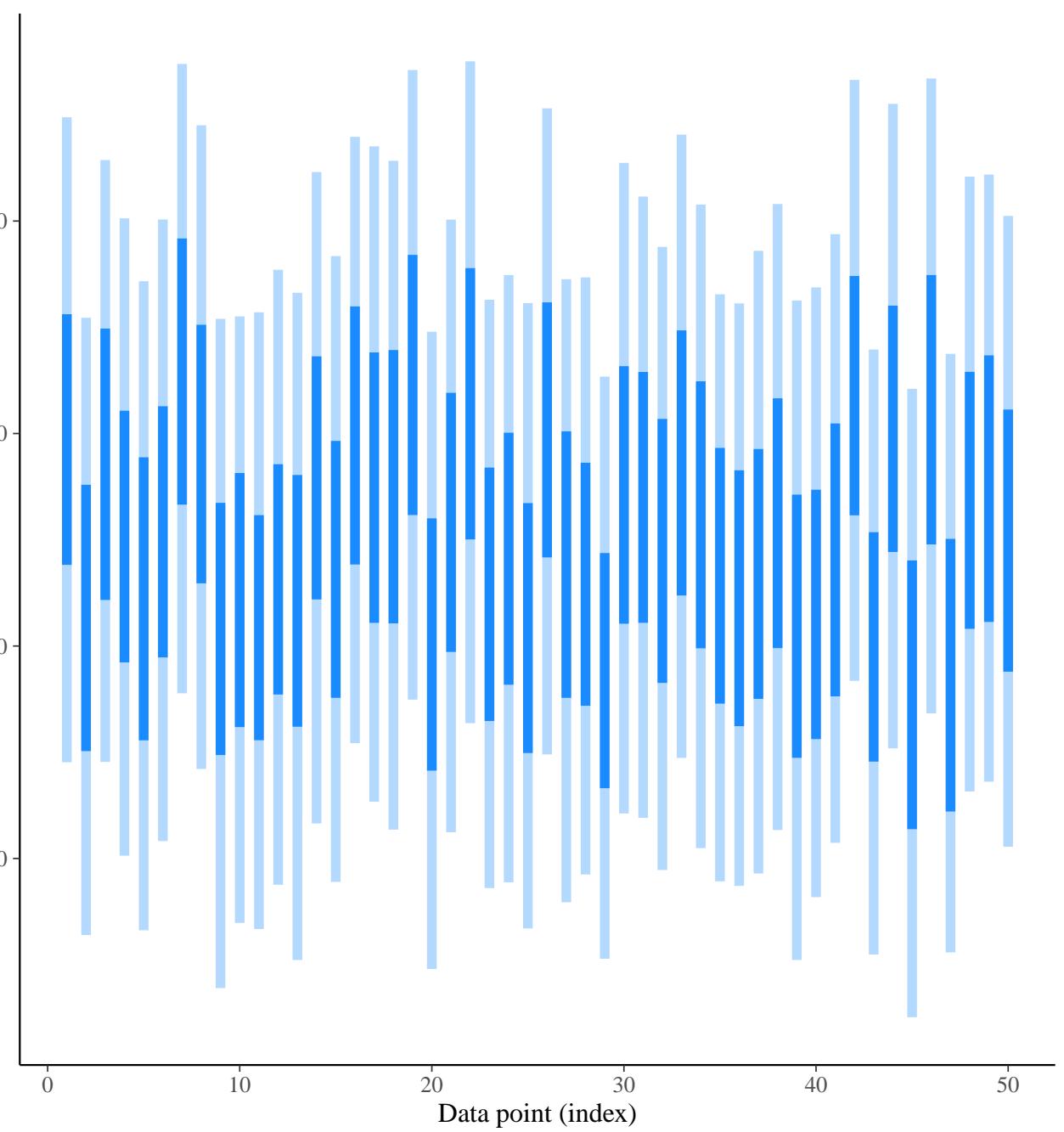
help("PPD-intervals")



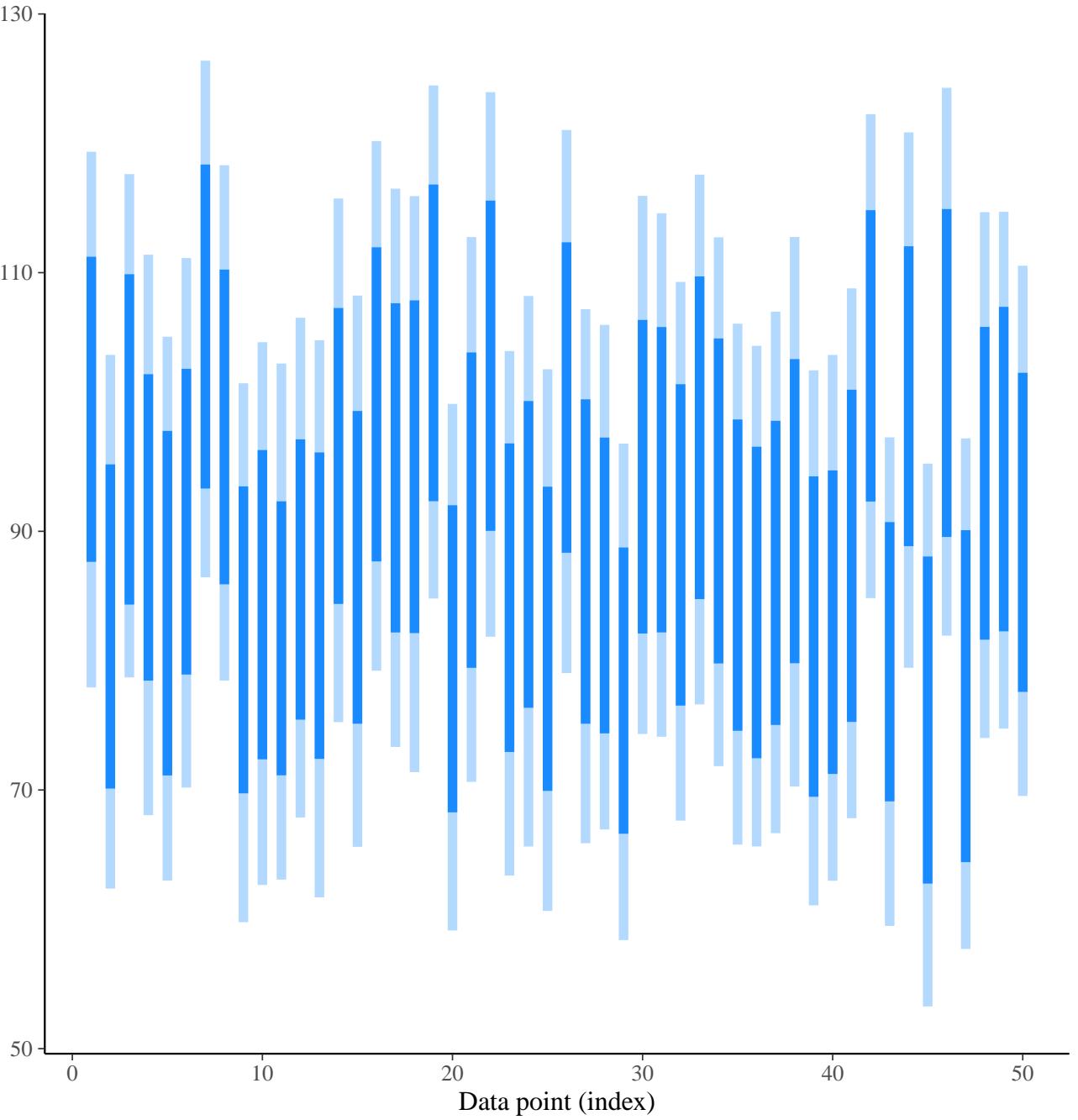
help("PPD-intervals")

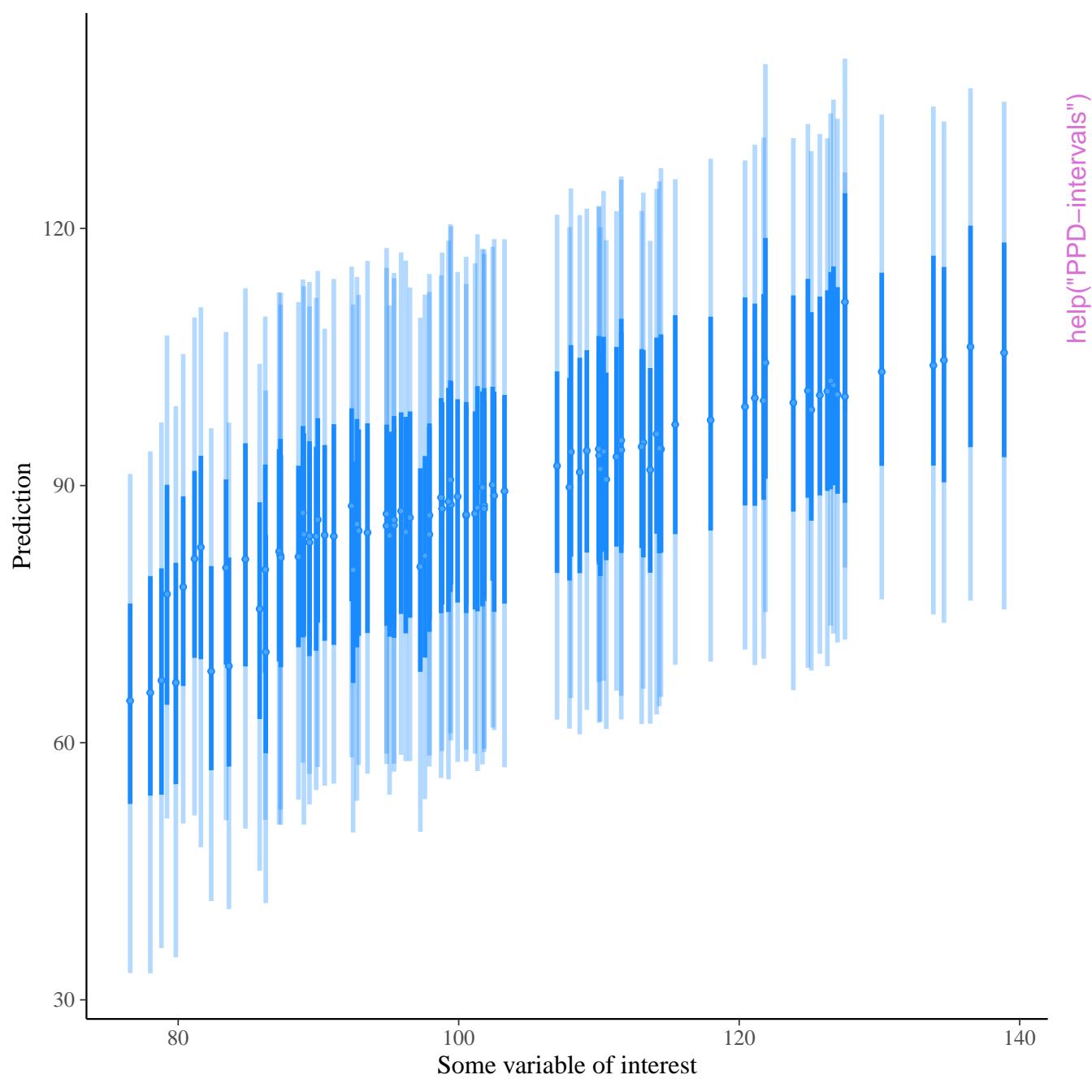


help("PPD-intervals")



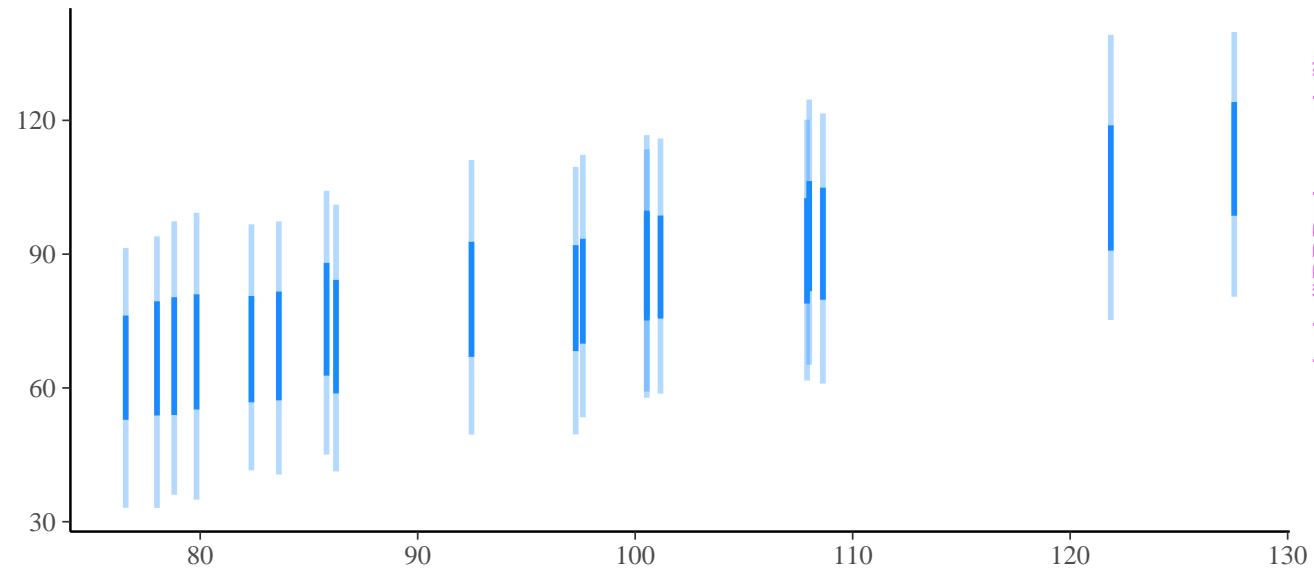
help("PPD-intervals")



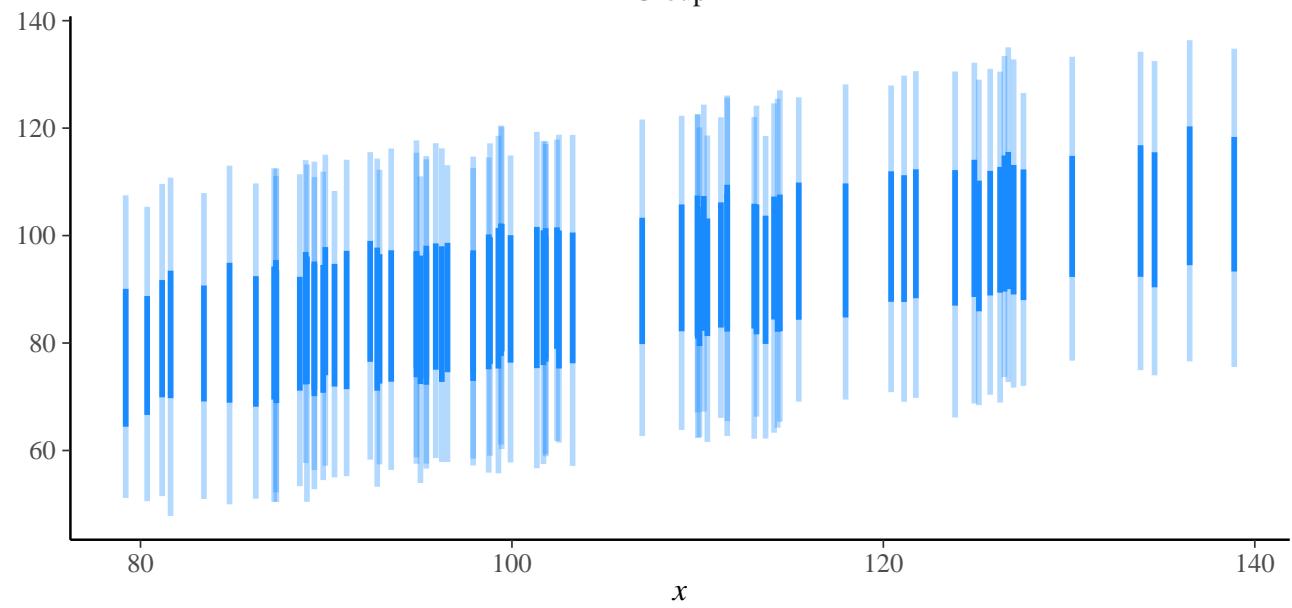


help("PPD-intervals")

GroupA

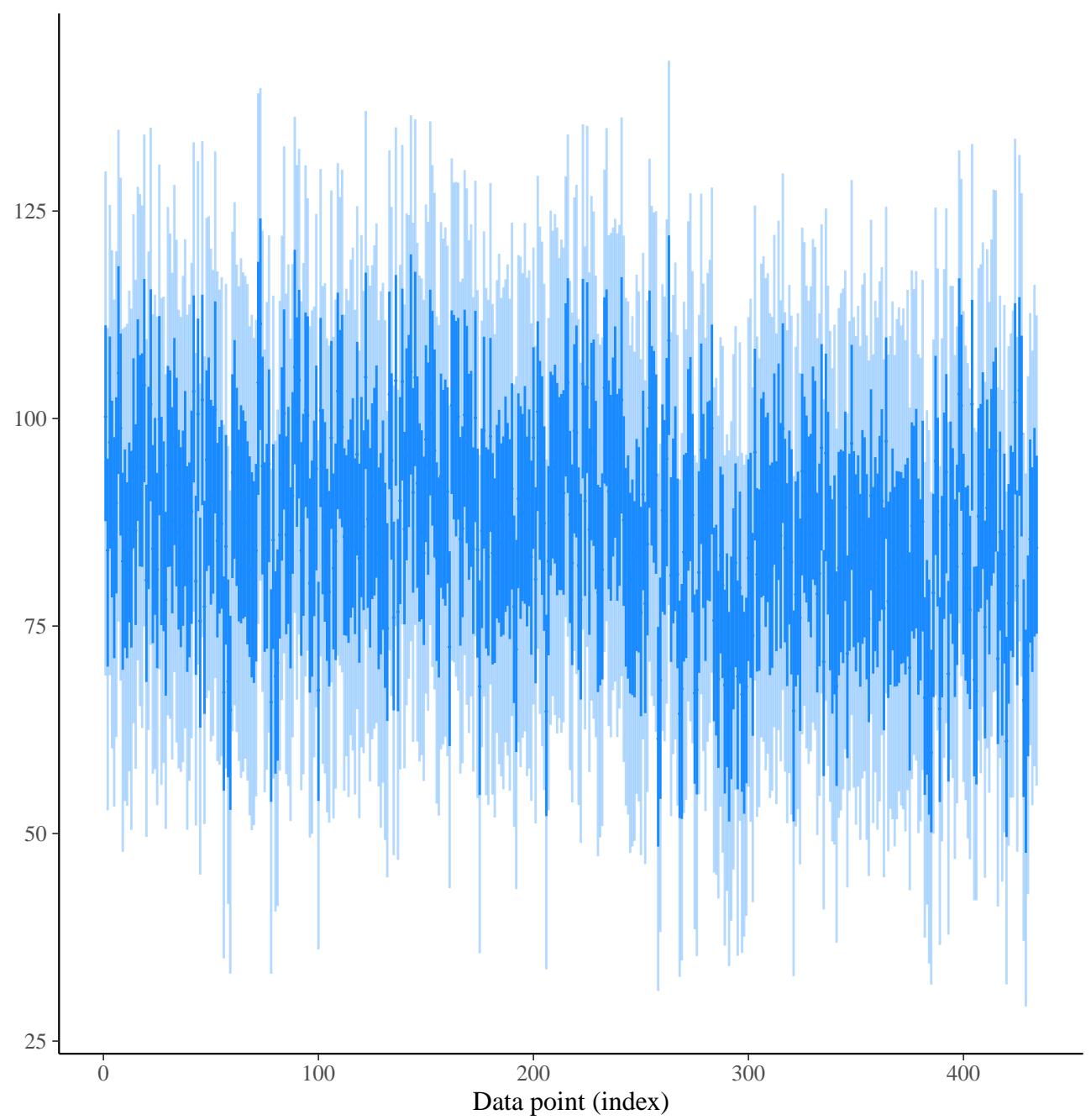


GroupB

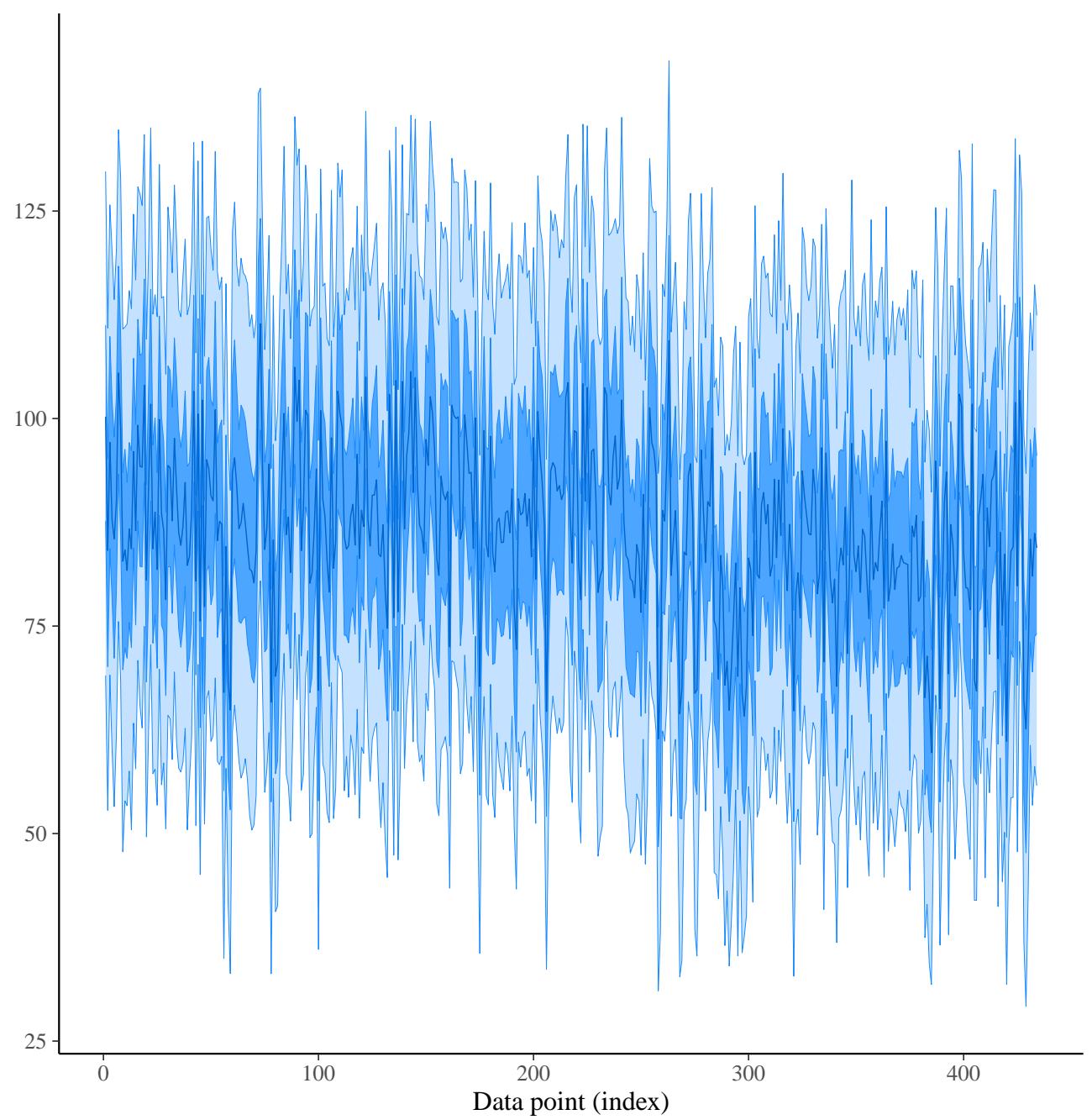


help("PPD-intervals")

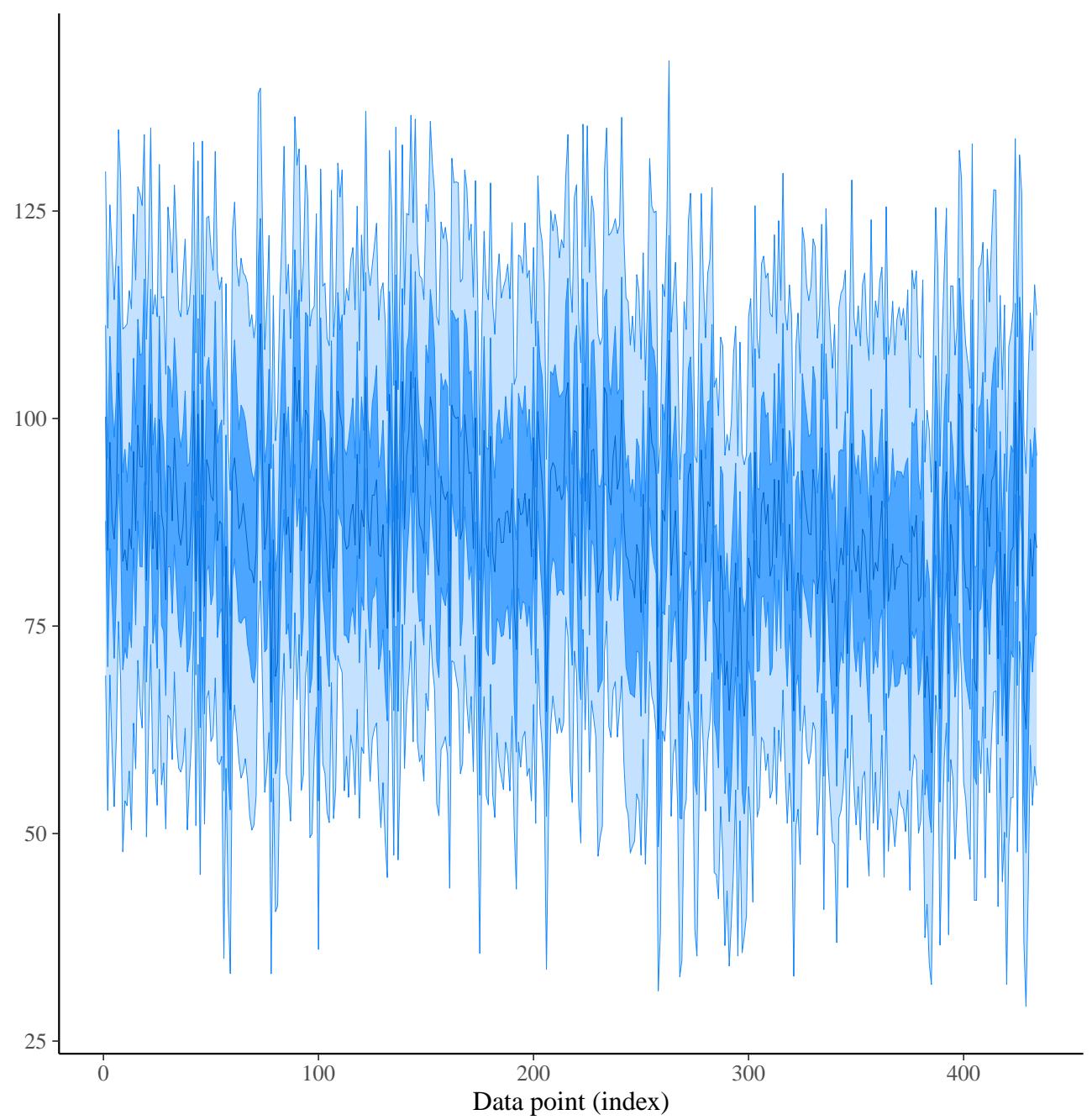
help("PPD-intervals")



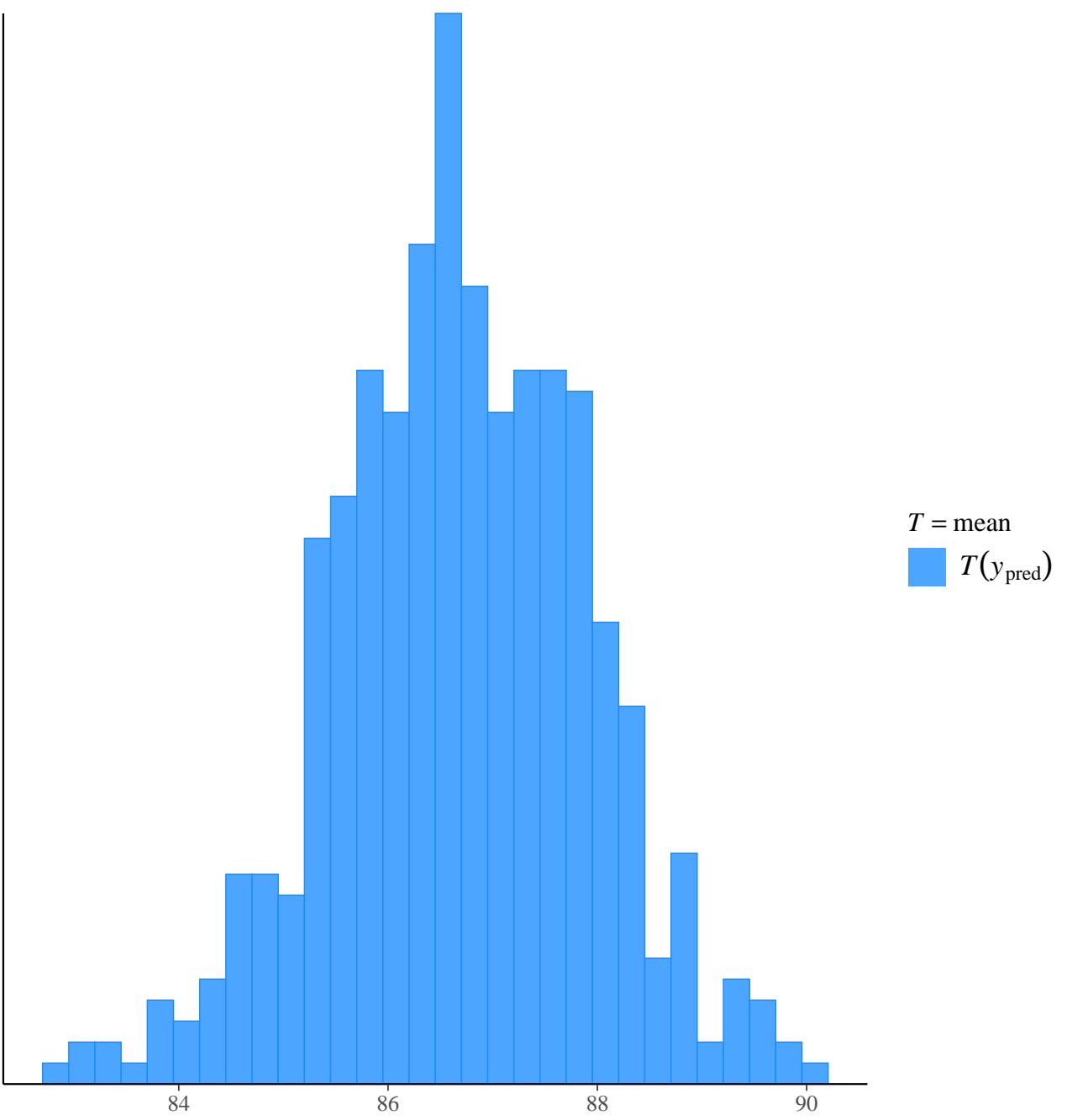
help("PPD-intervals")



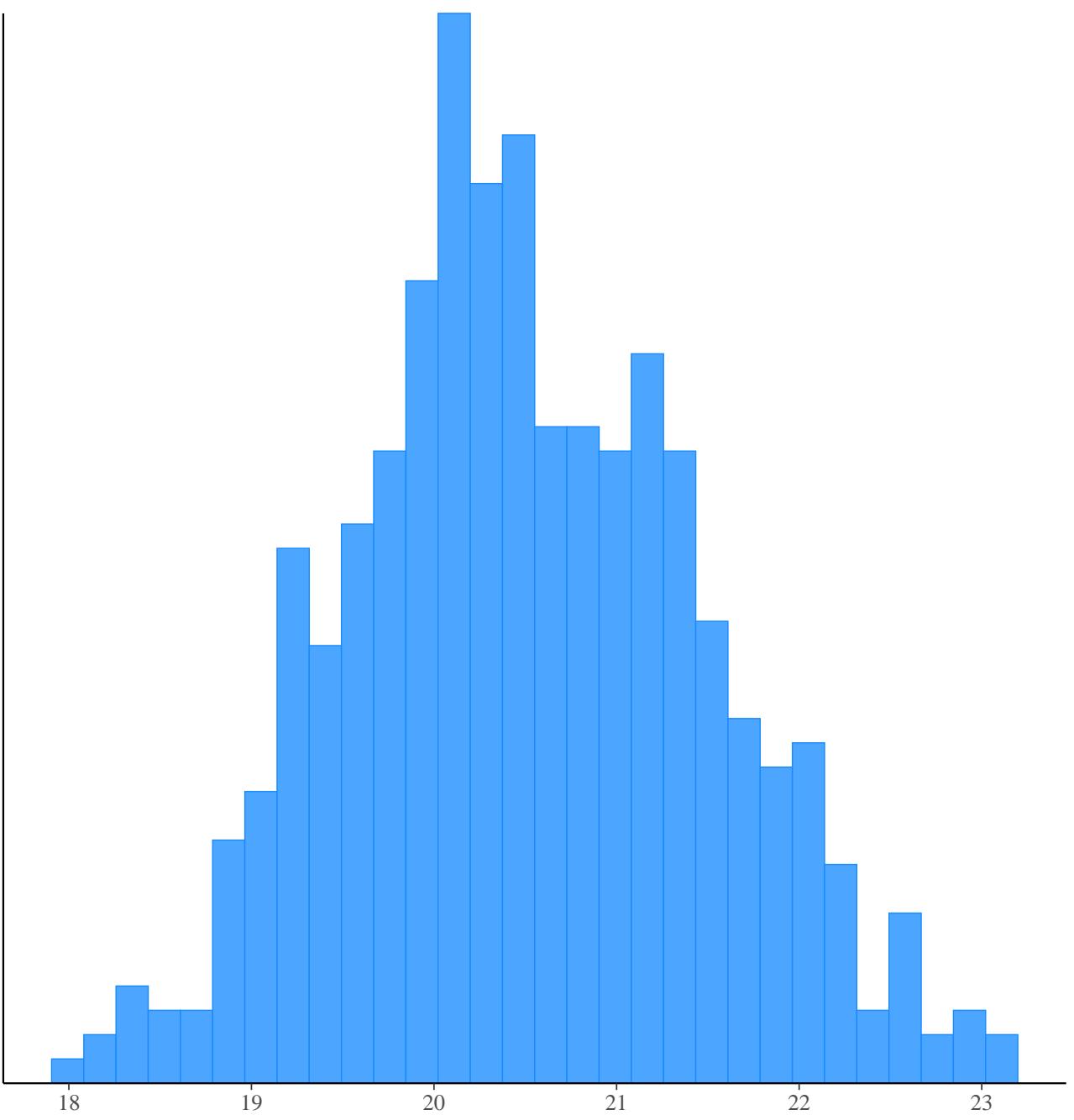
help("PPD-intervals")



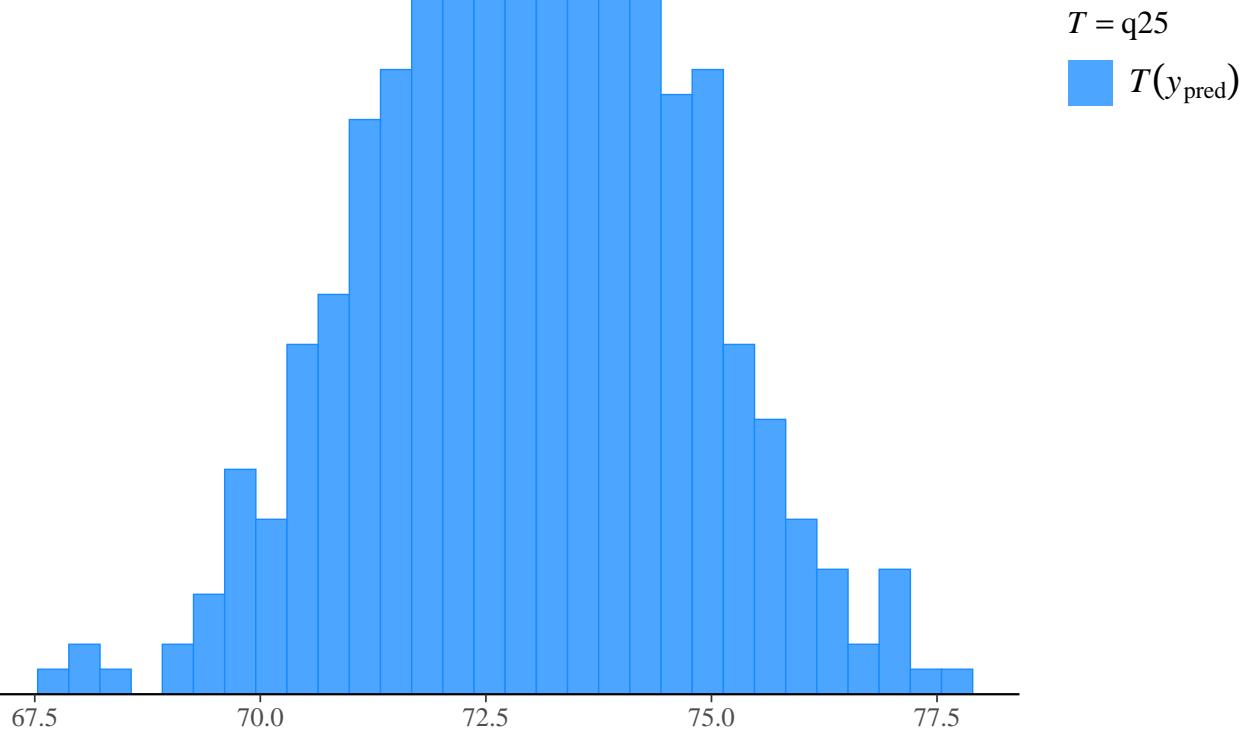
help("PPD-test-statistics")



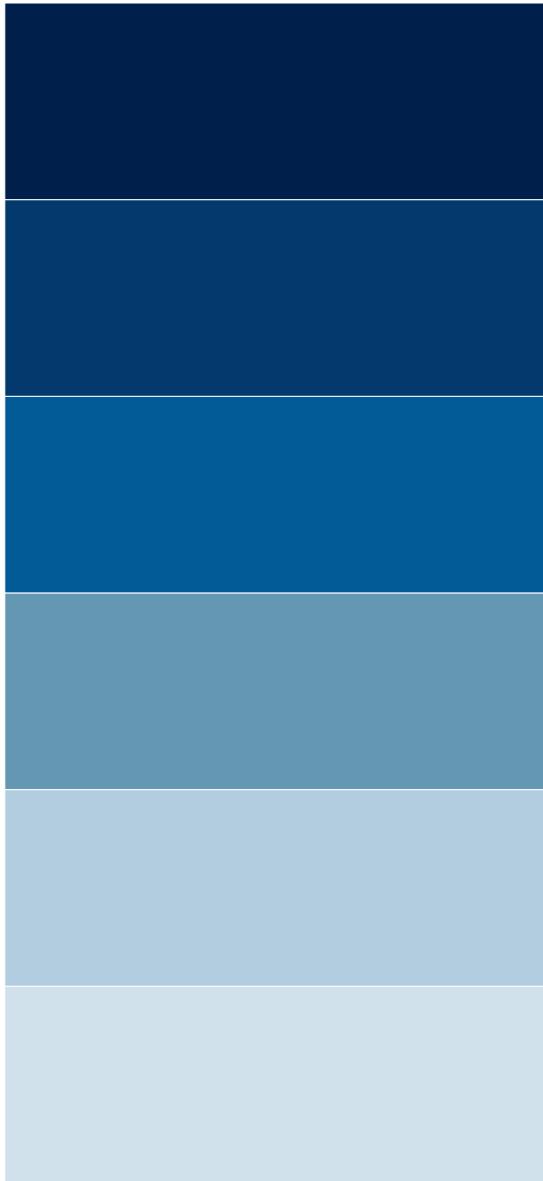
```
help("PPD-test-statistics")
```



help("PPD-test-statistics")

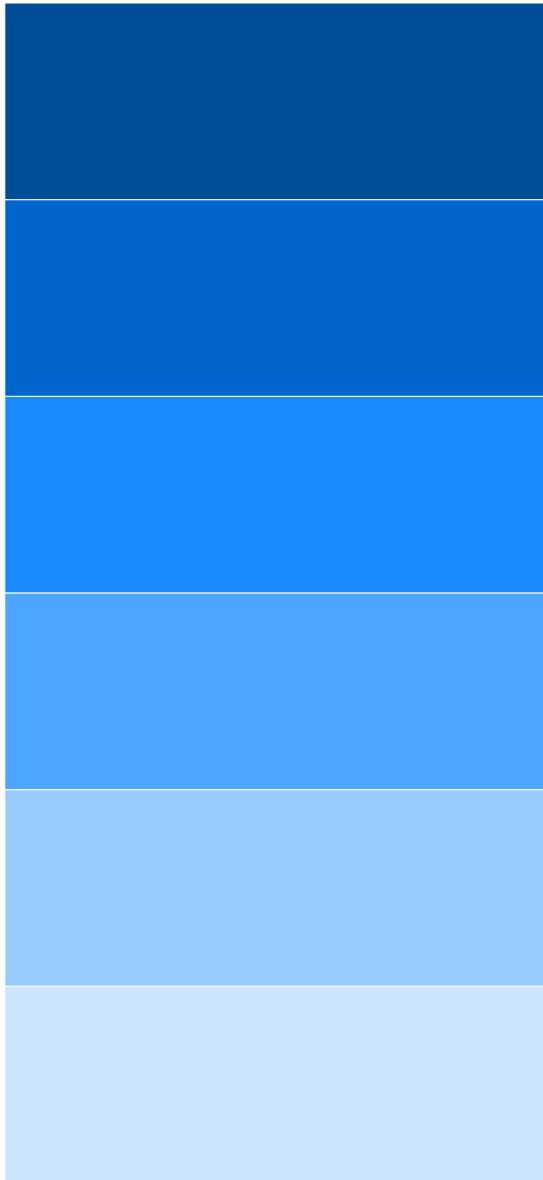


```
help("bayesplot-colors")
```



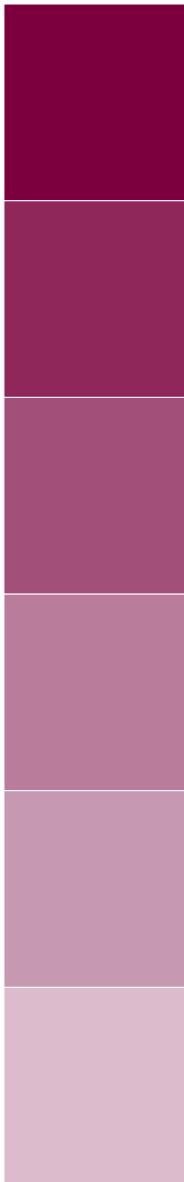
**blue**

```
help("bayesplot-colors")
```

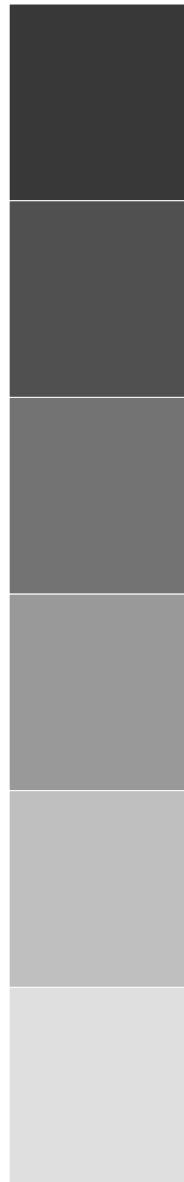


**brightblue**

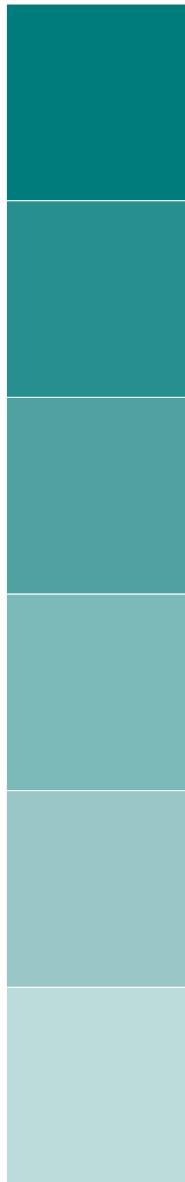
```
help("bayesplot-colors")
```



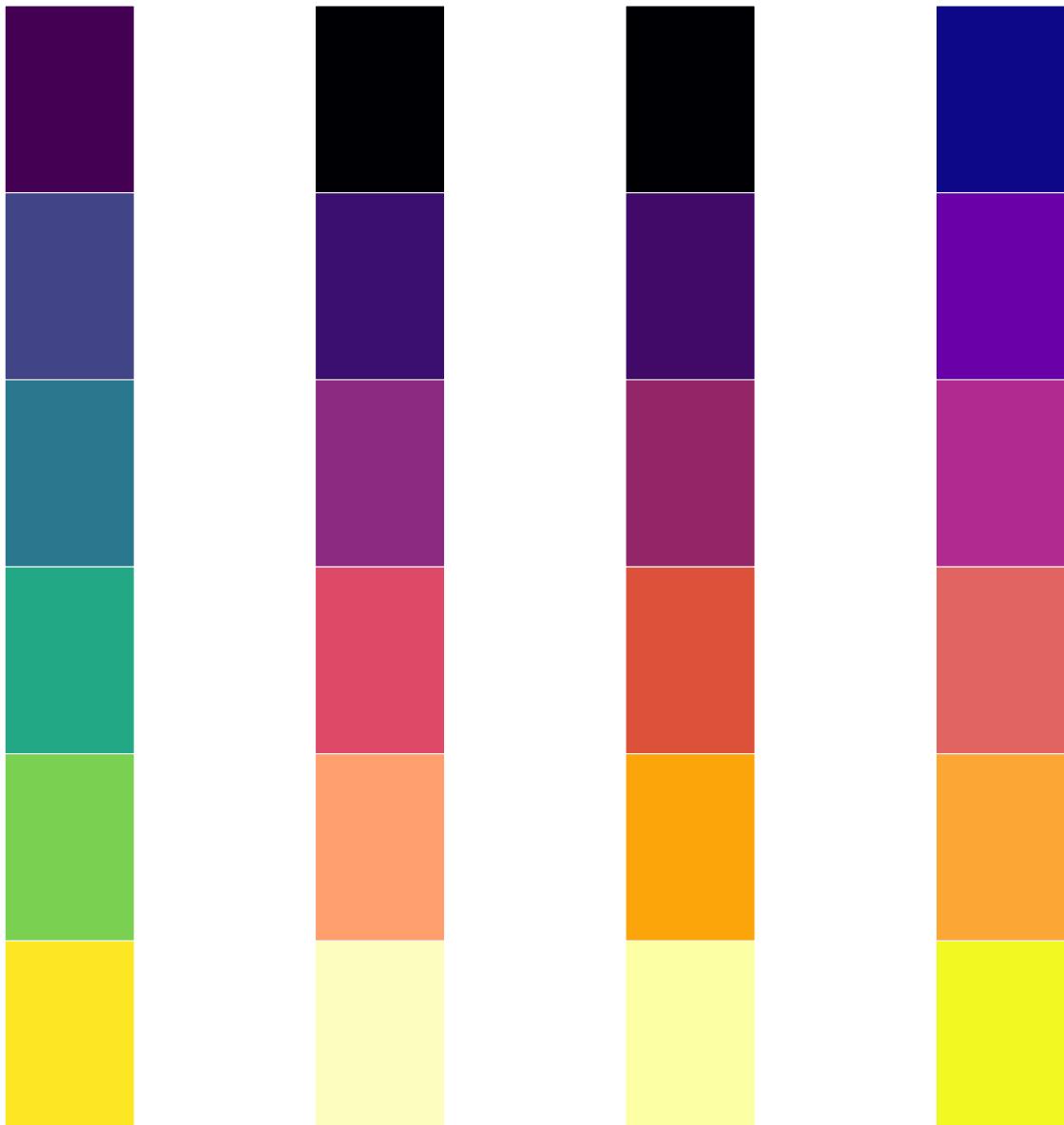
pink



gray

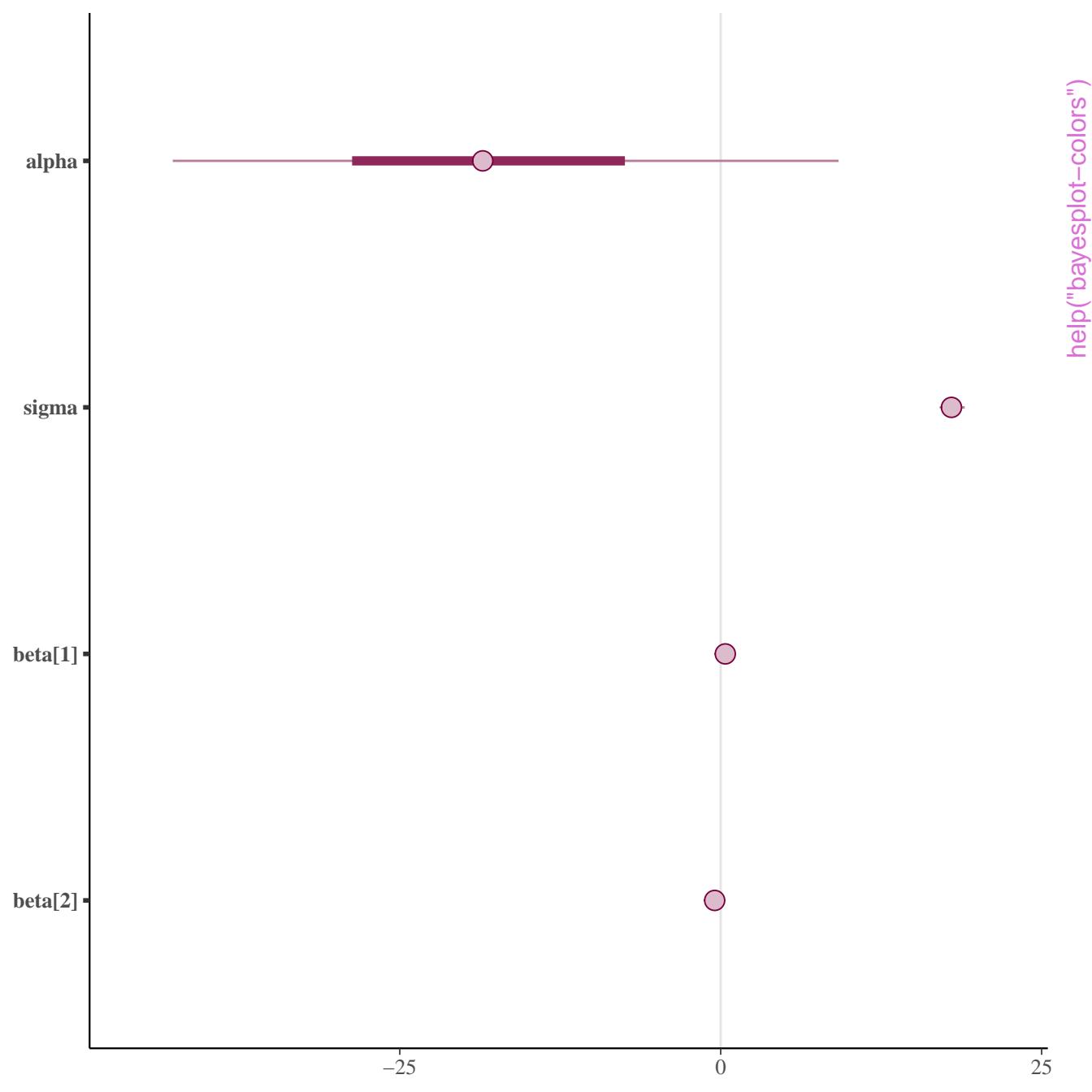


teal

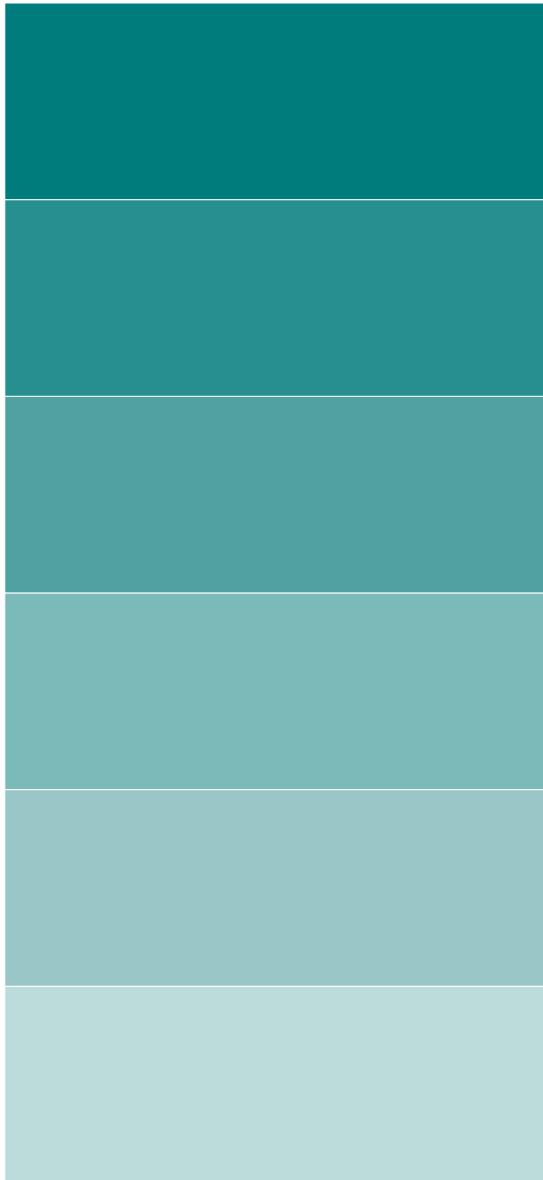


help("bayesplot-colors")

```
help("bayesplot-colors")
```

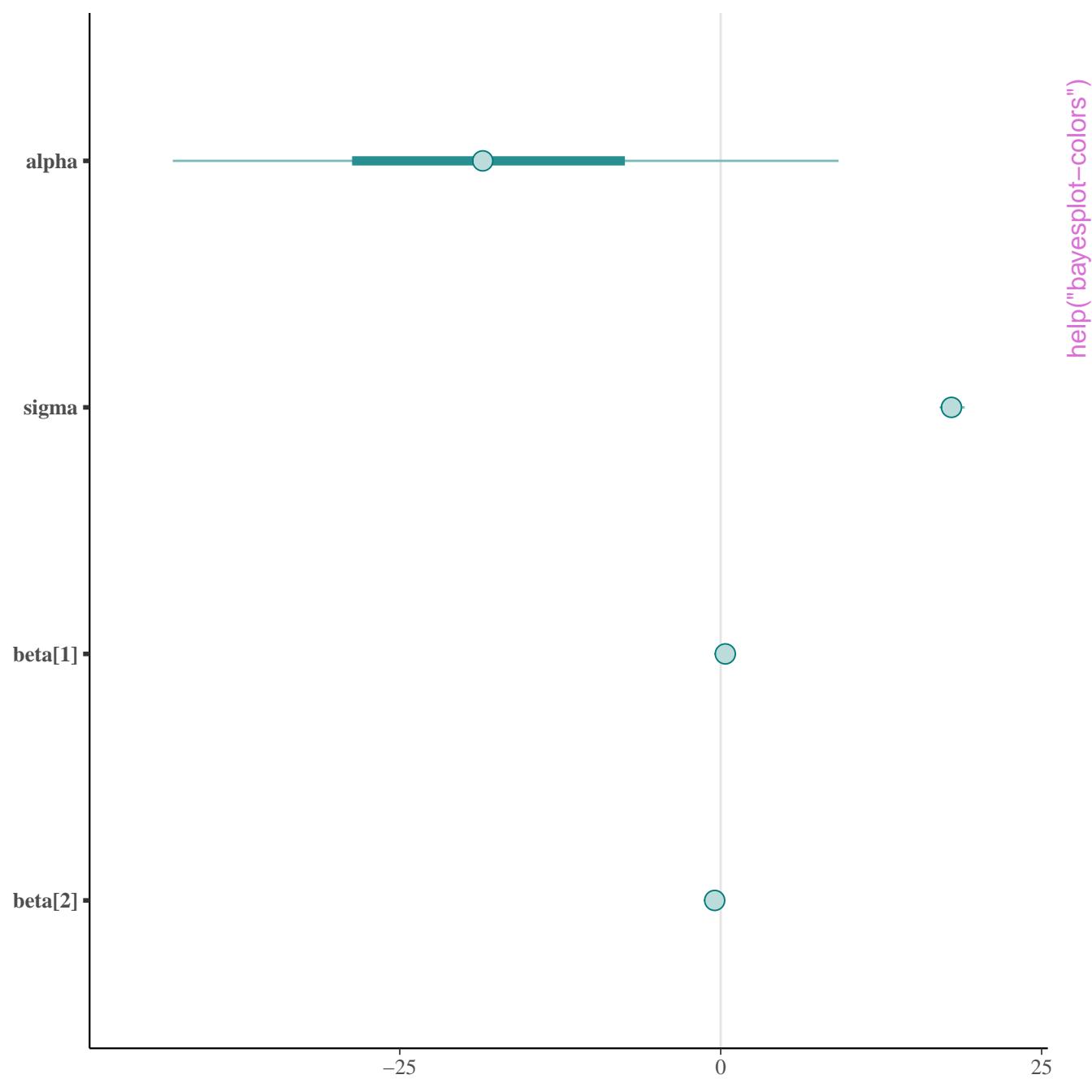


```
help("bayesplot-colors")
```

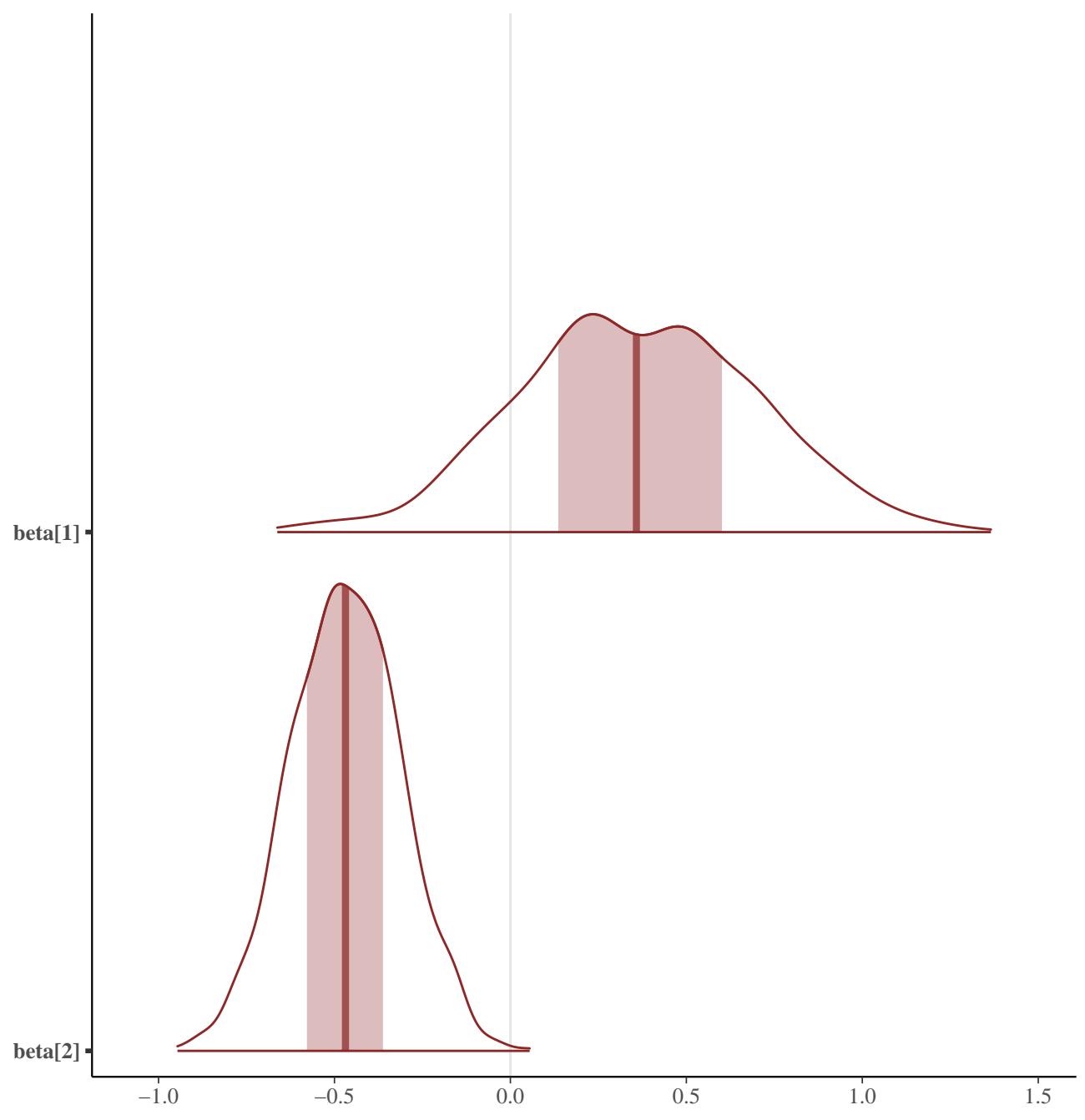


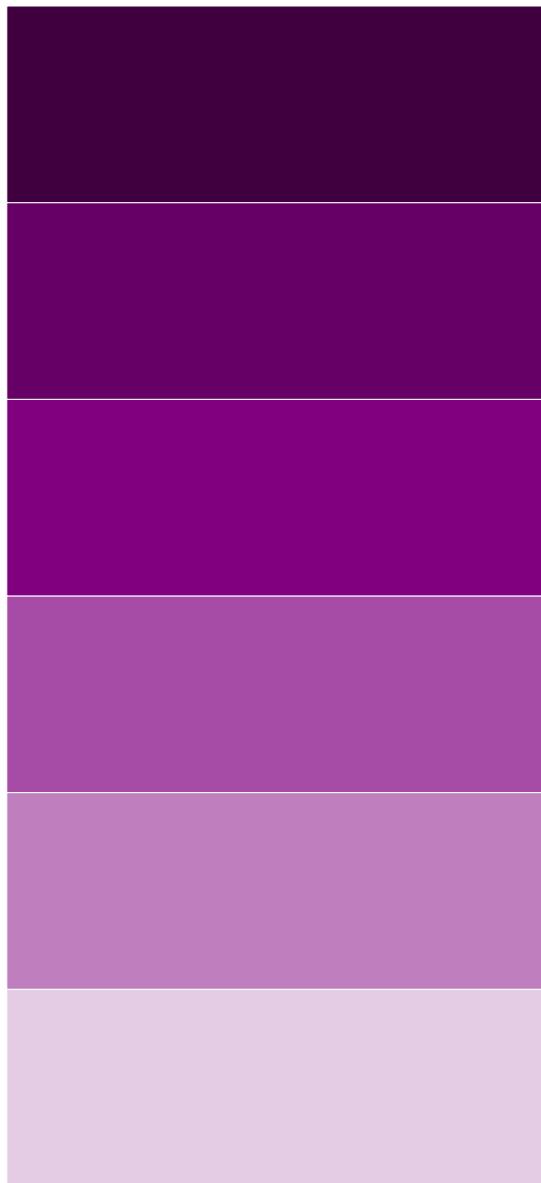
**teal**

help("bayesplot-colors")



help("bayesplot-colors")

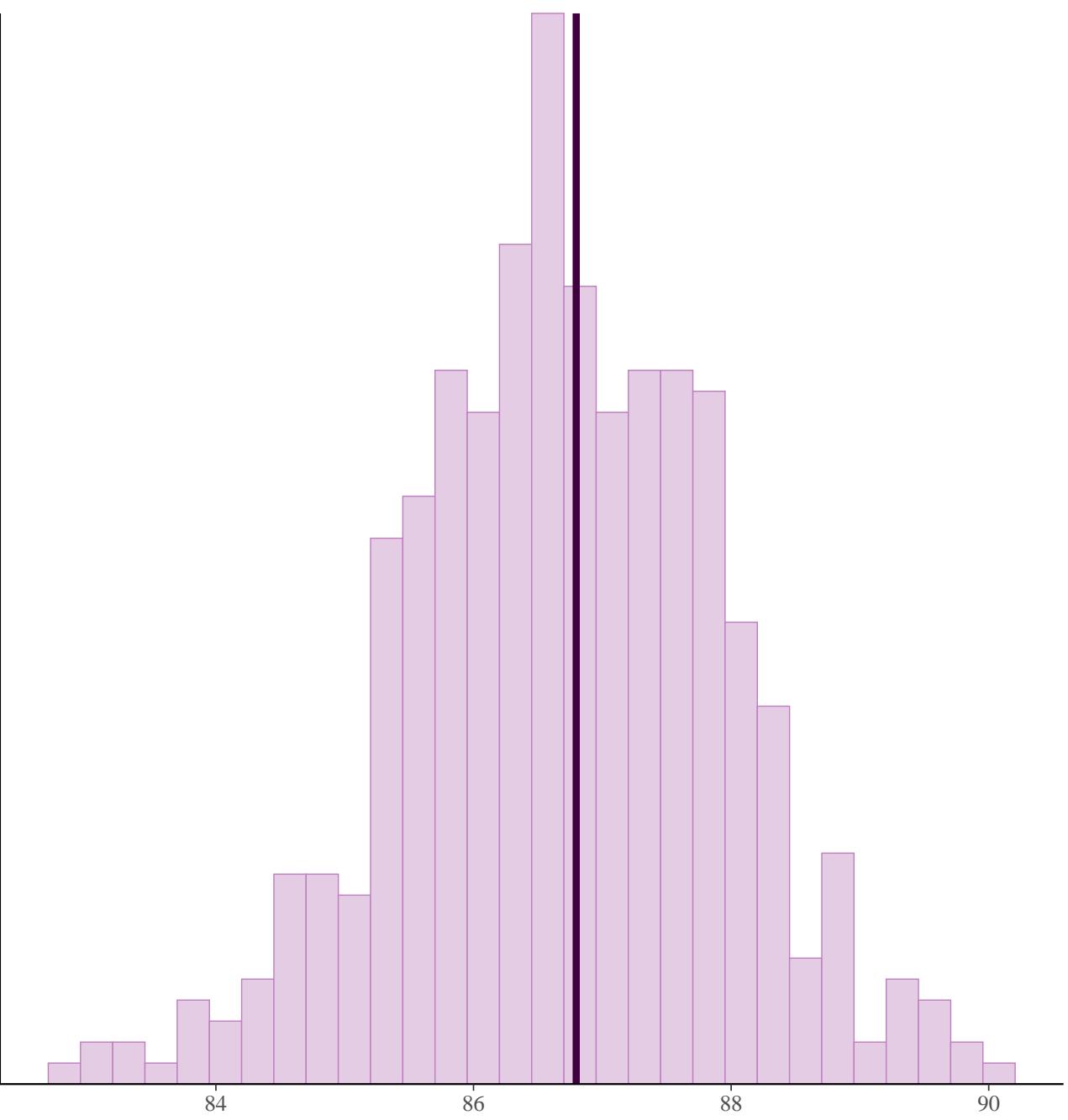




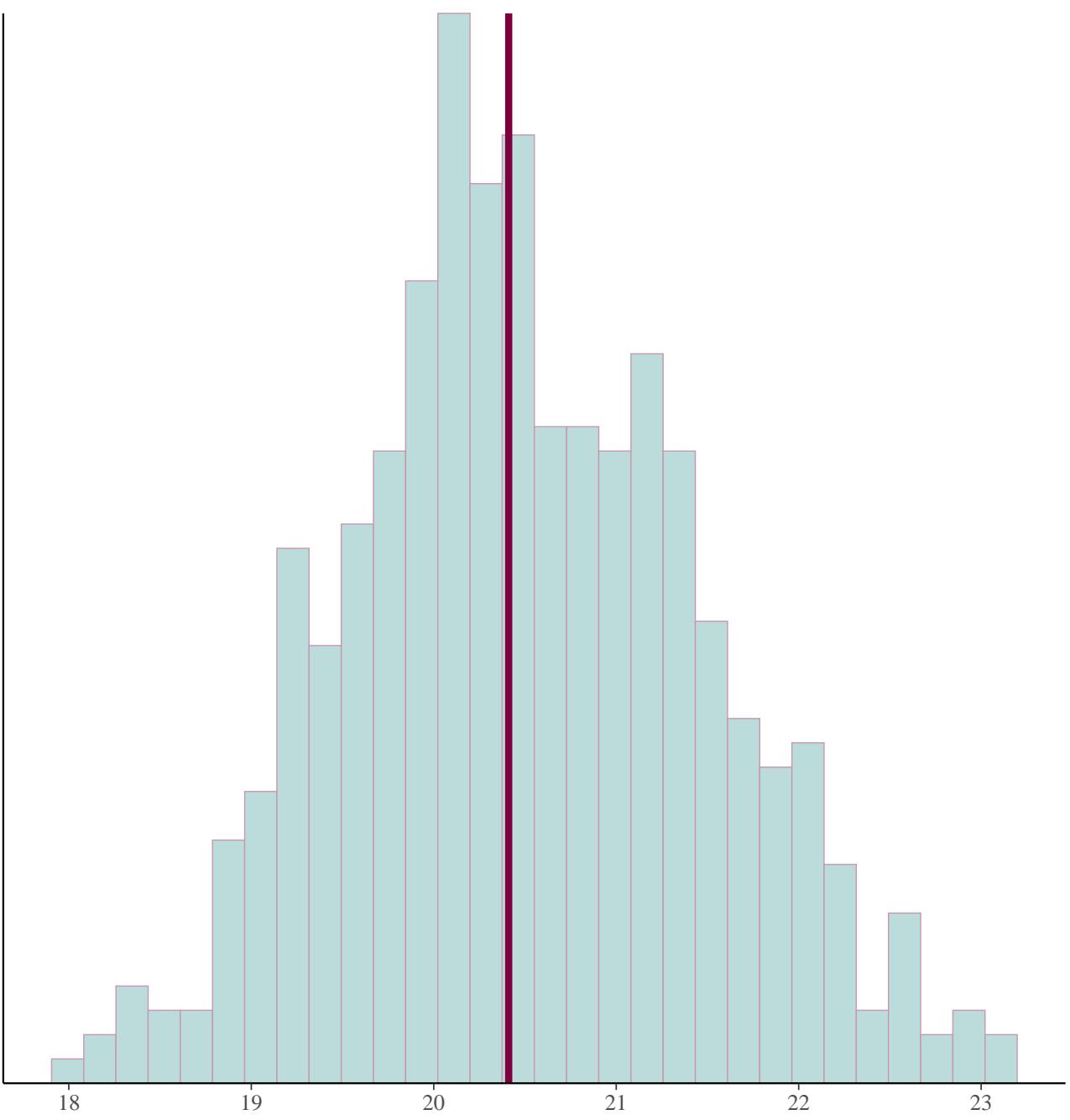
**purple**

help("bayesplot-colors")

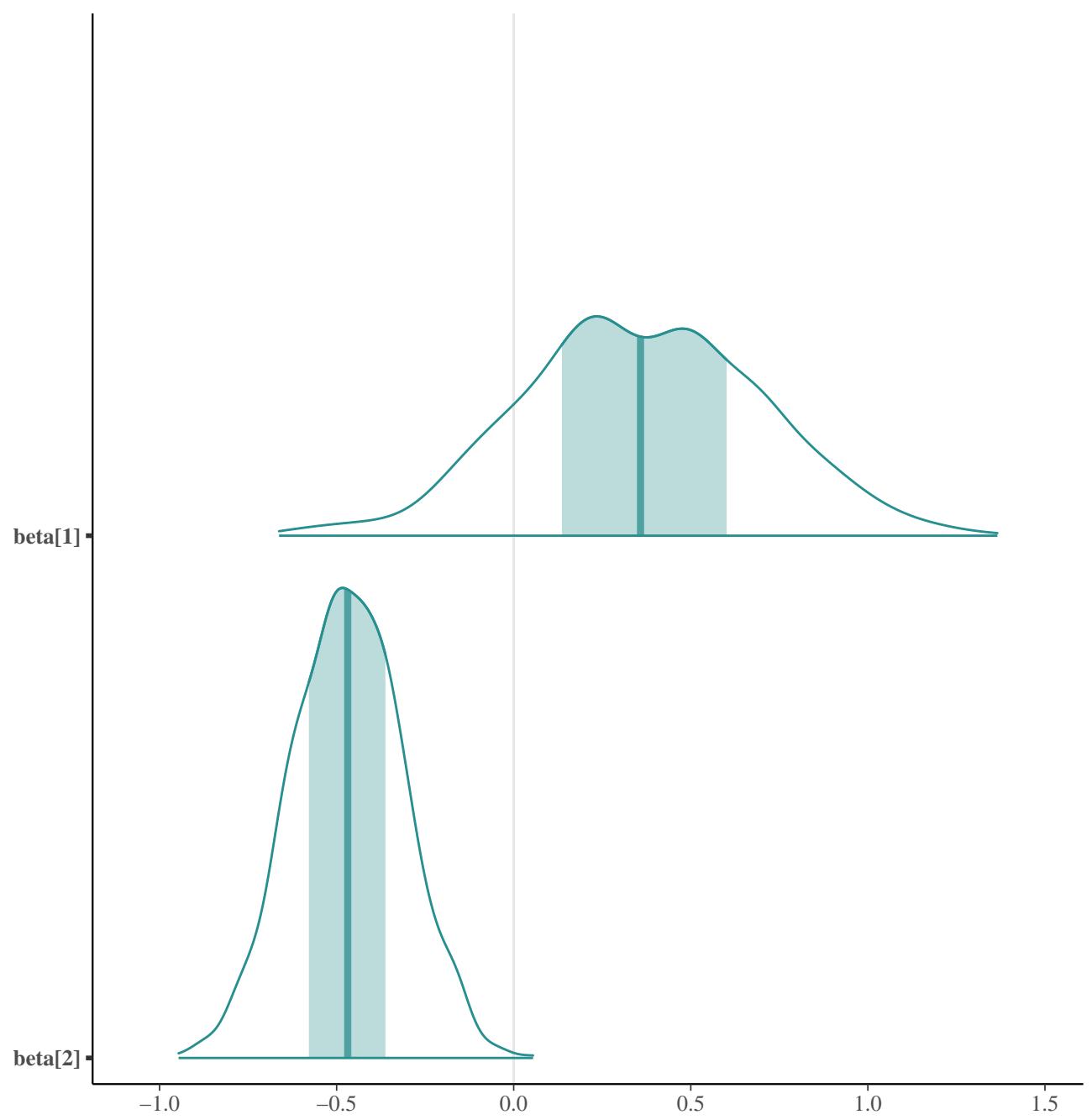
```
help("bayesplot-colors")
```



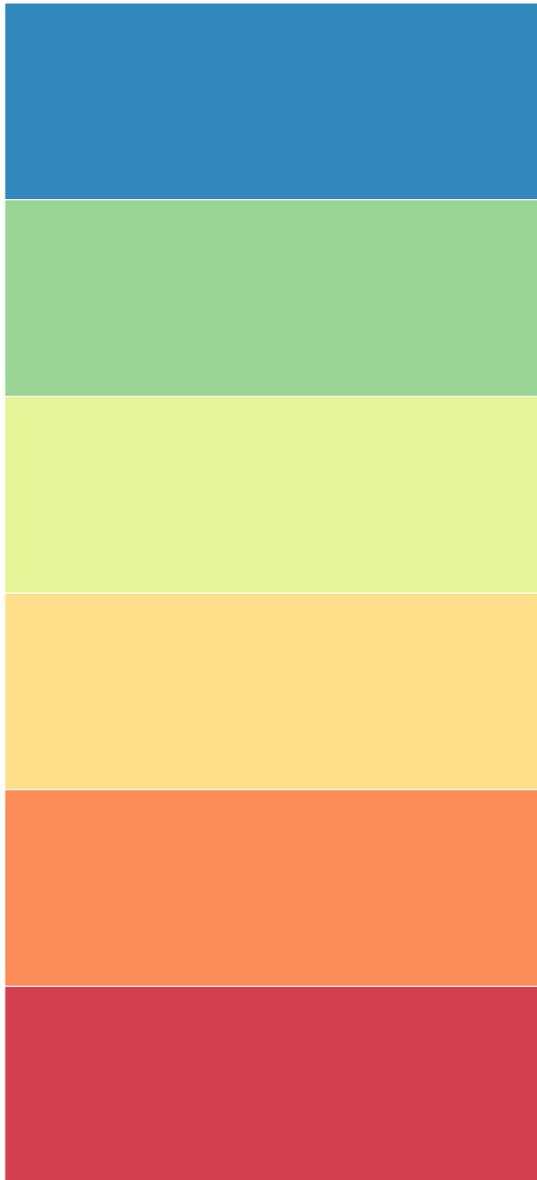
help("bayesplot-colors")



help("bayesplot")

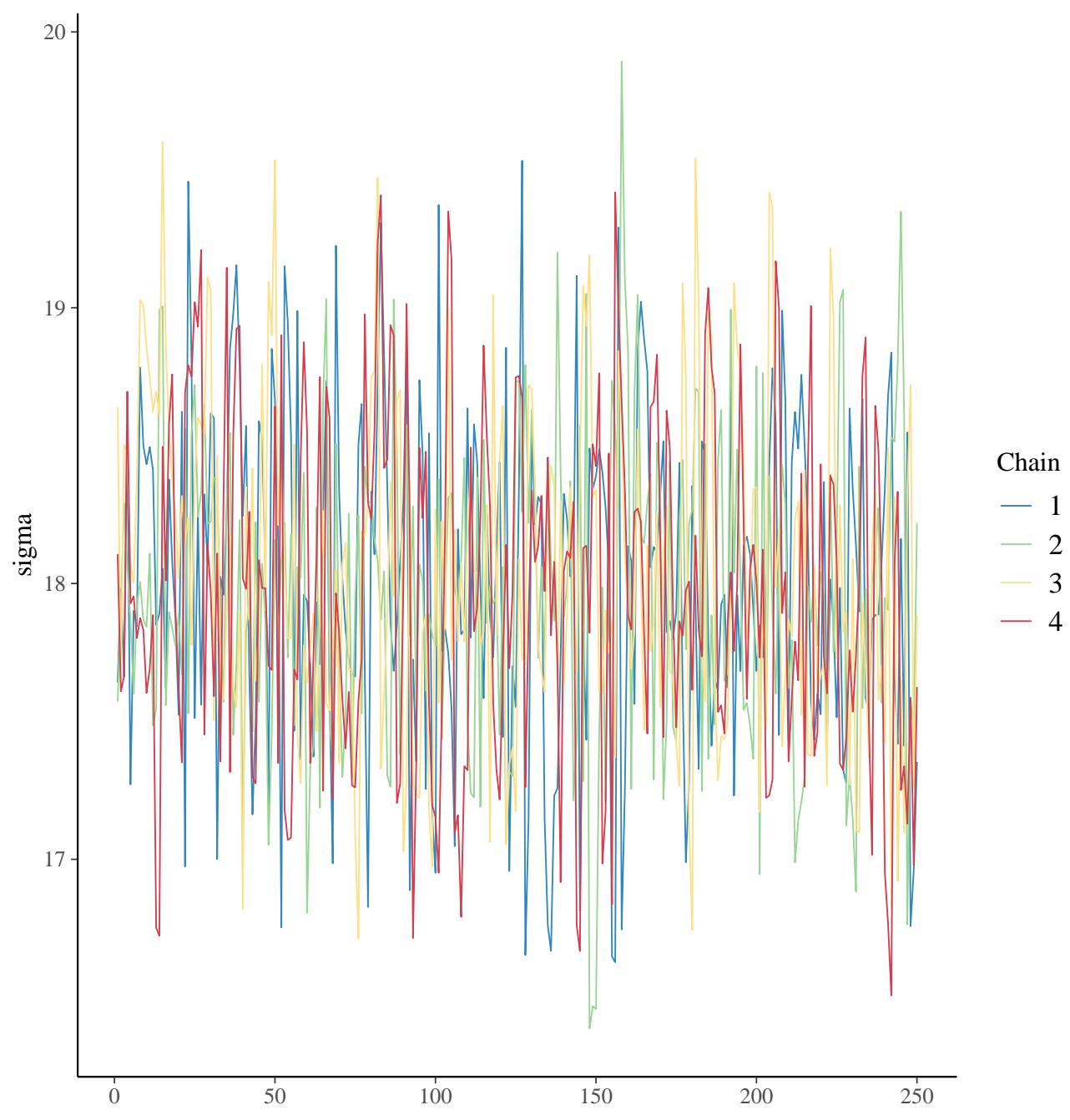


```
help("bayesplot-colors")
```

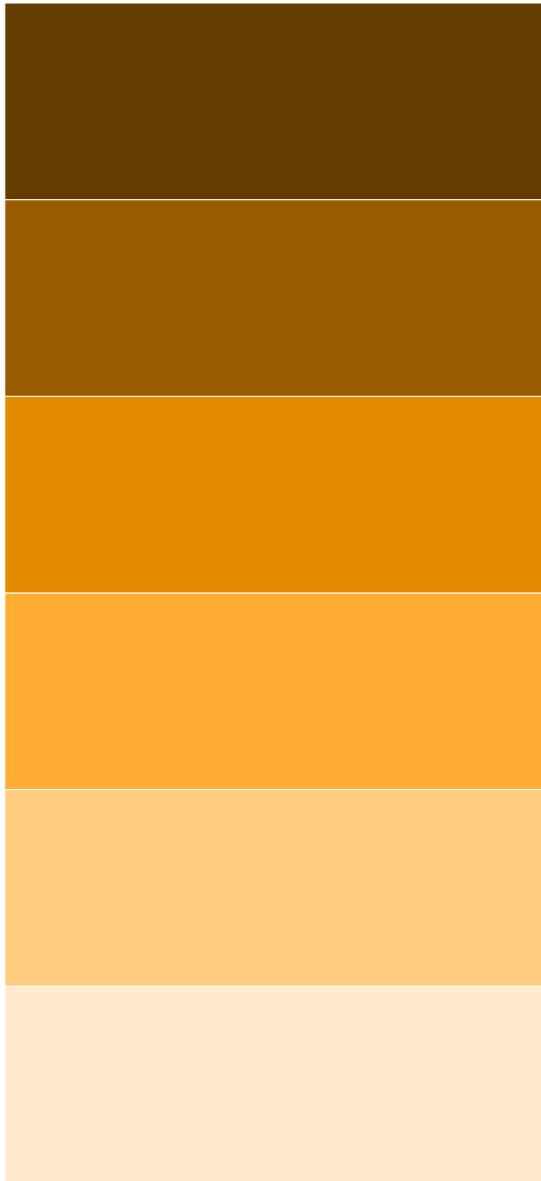


**brewer-Spectral**

help("bayesplot-colors")

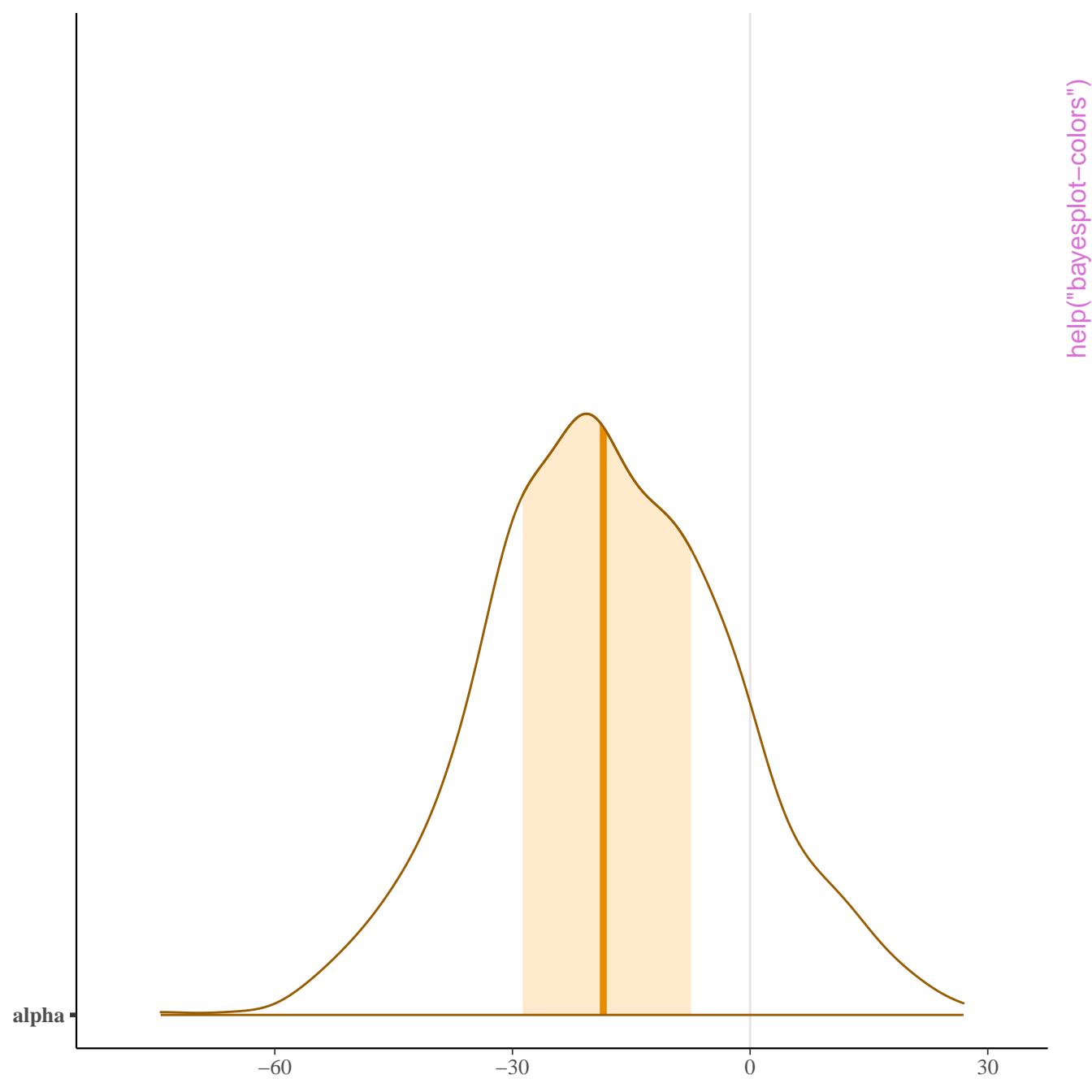


```
help("bayesplot-colors")
```



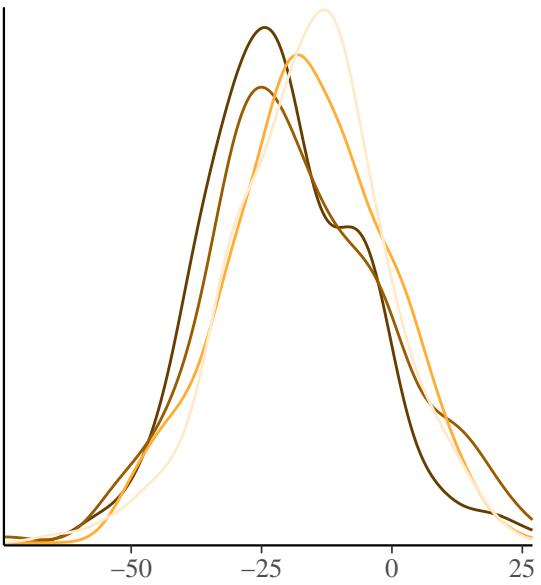
**custom**

help("bayesplot-colors")

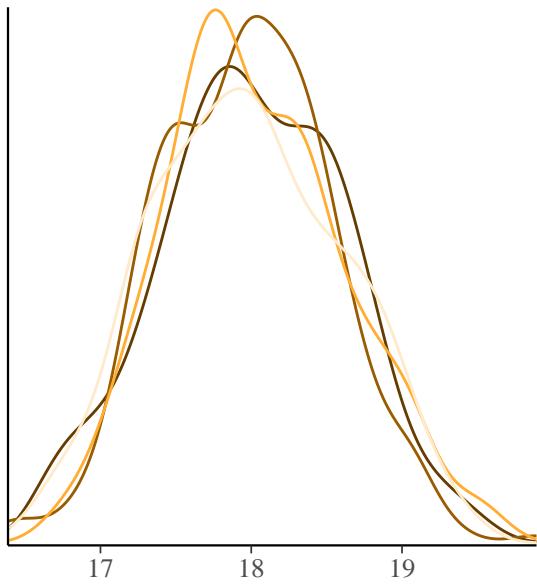


help("bayesplot-colors")

alpha



sigma



Chain

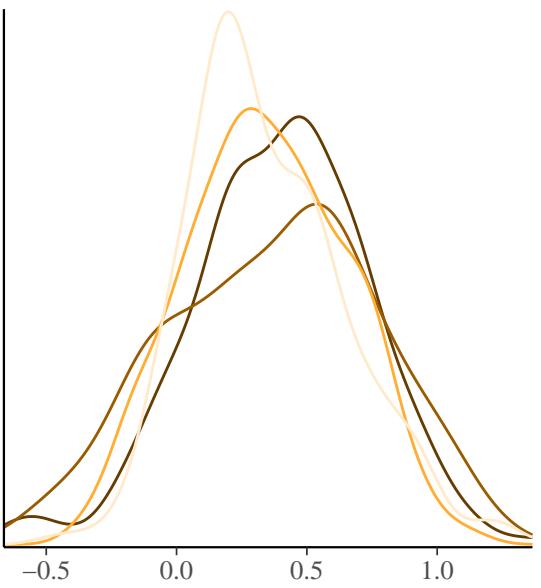
1

2

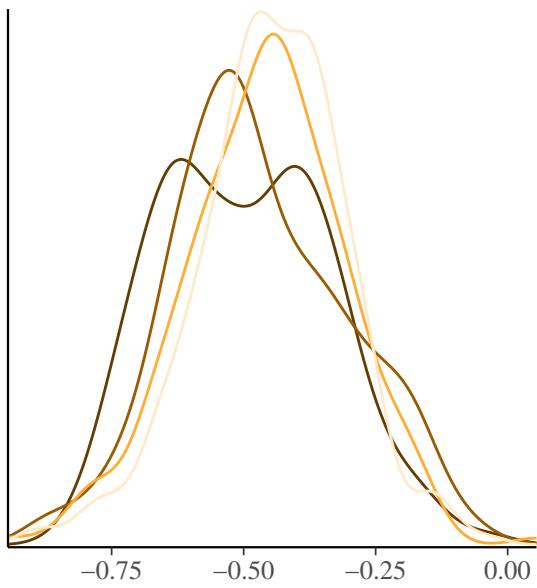
3

4

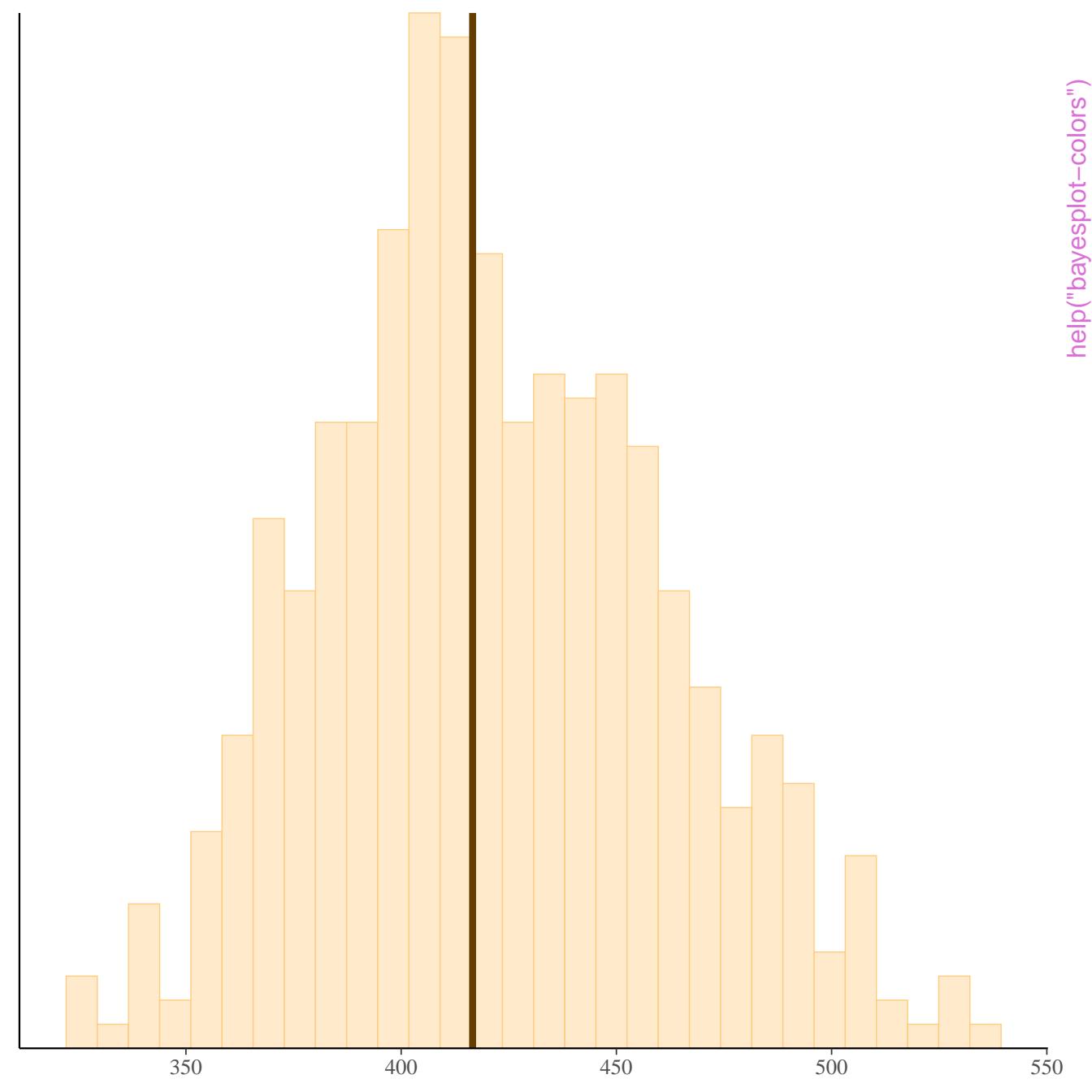
beta[1]



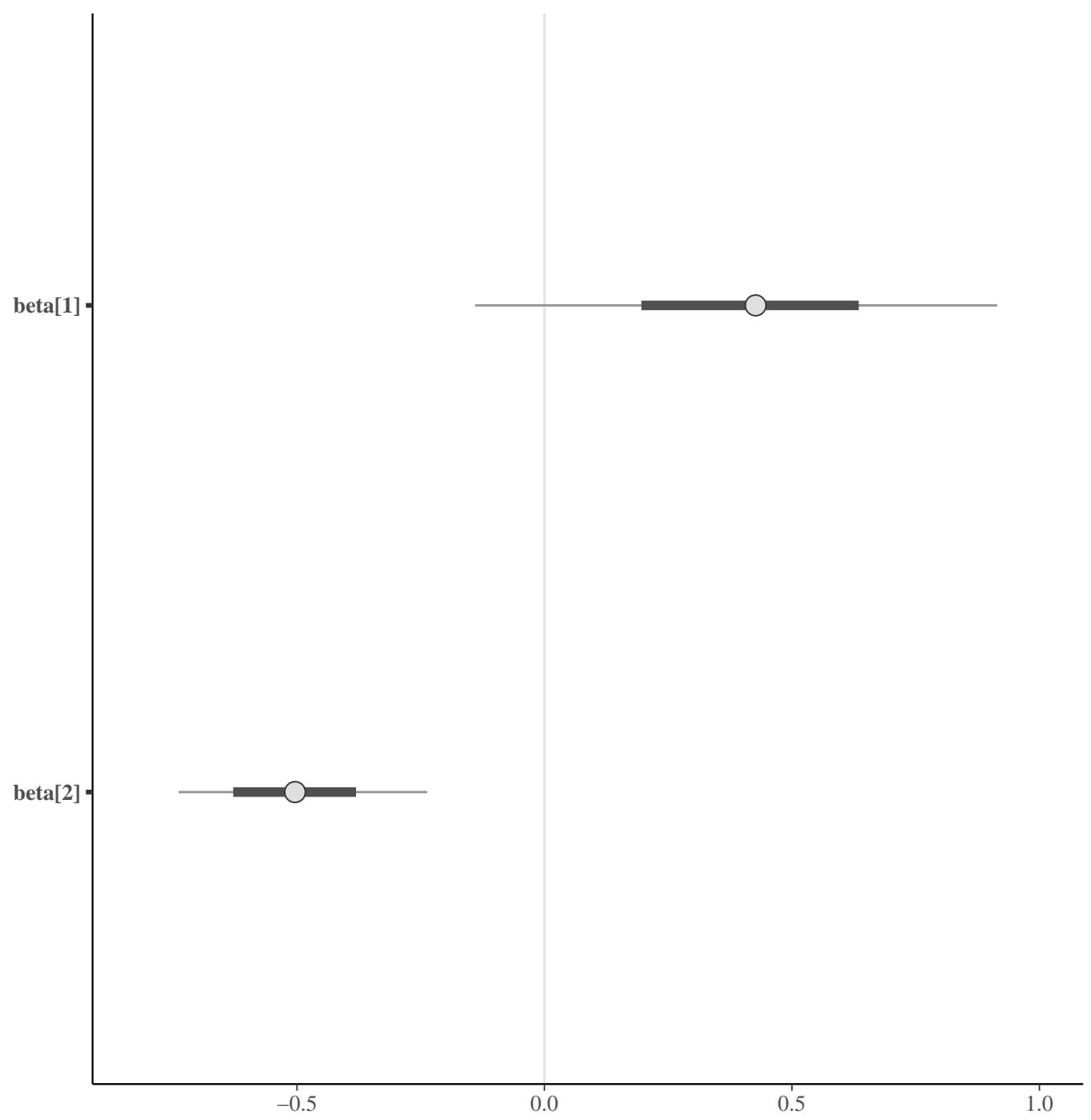
beta[2]



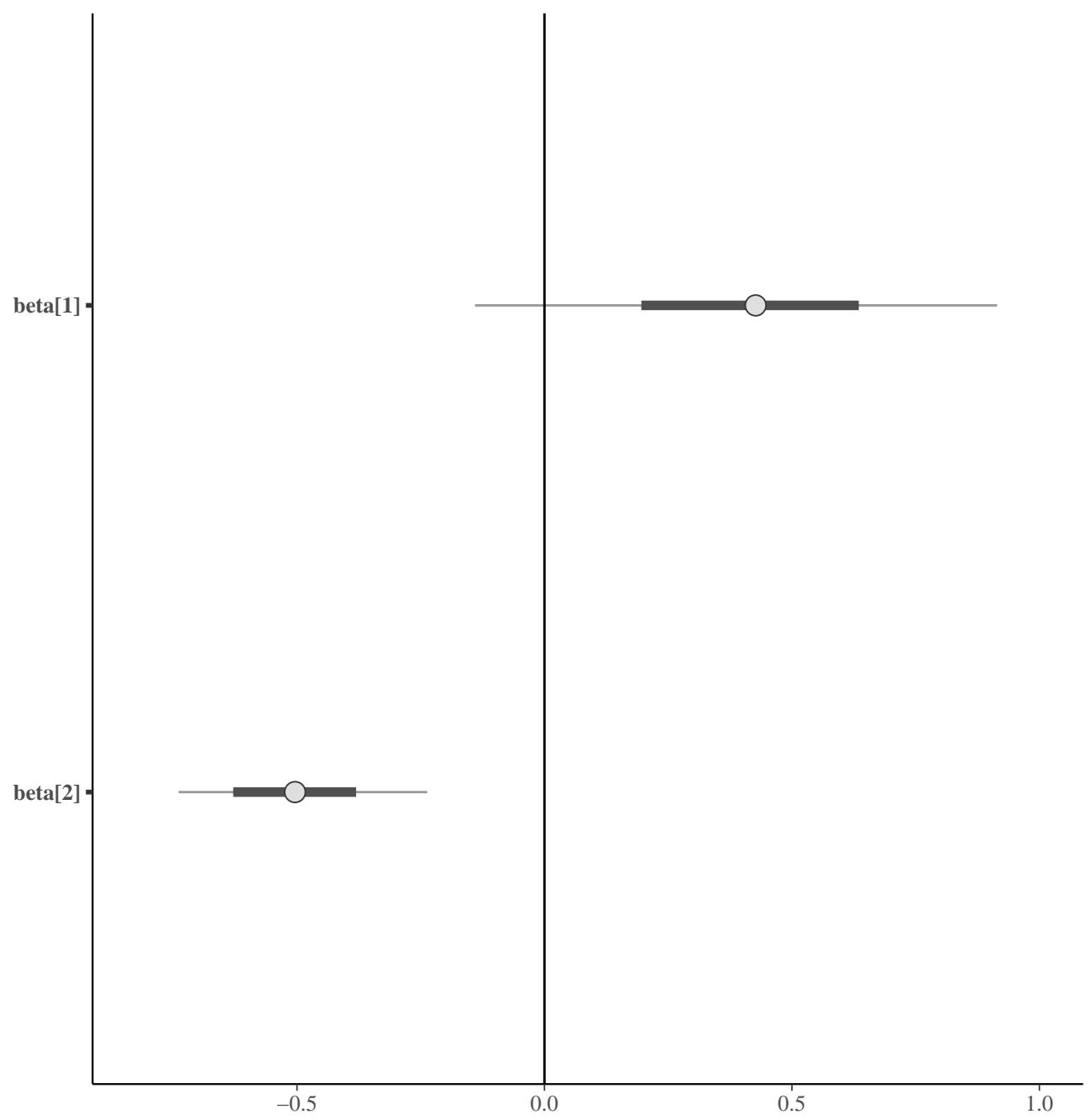
help("bayesplot-colors")



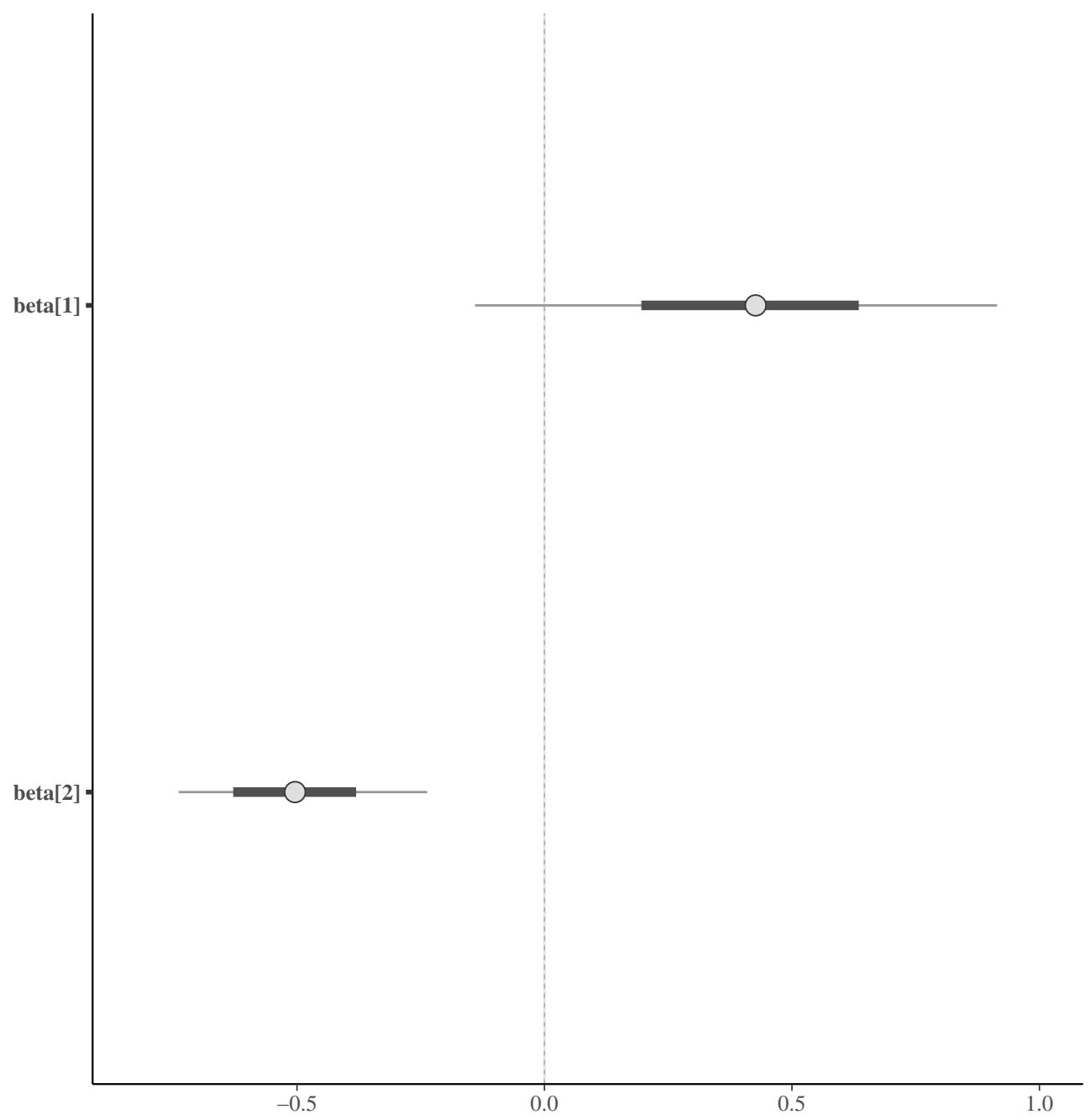
```
help("bayesplot-helpers")
```



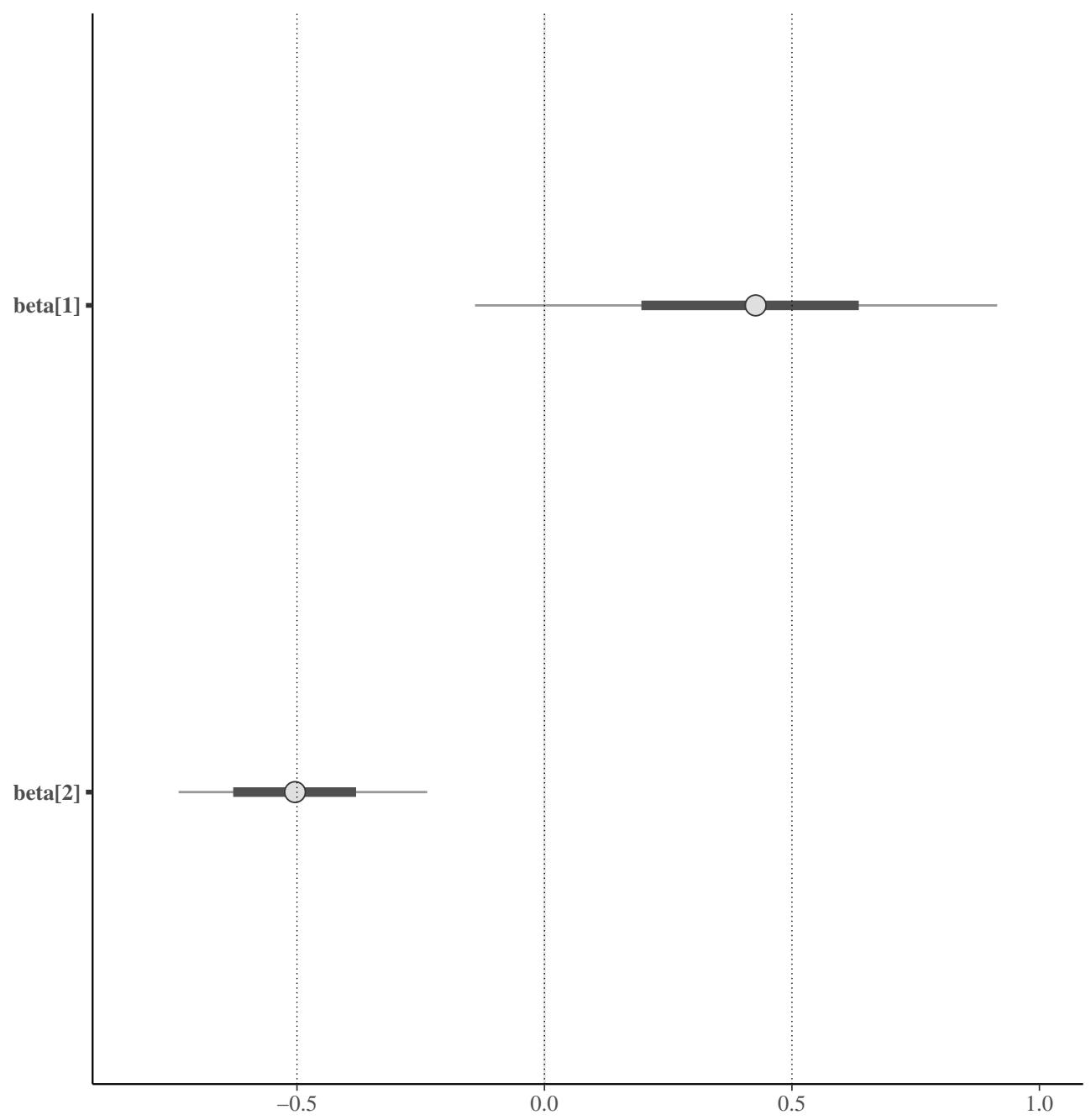
help("bayesplot-helpers")



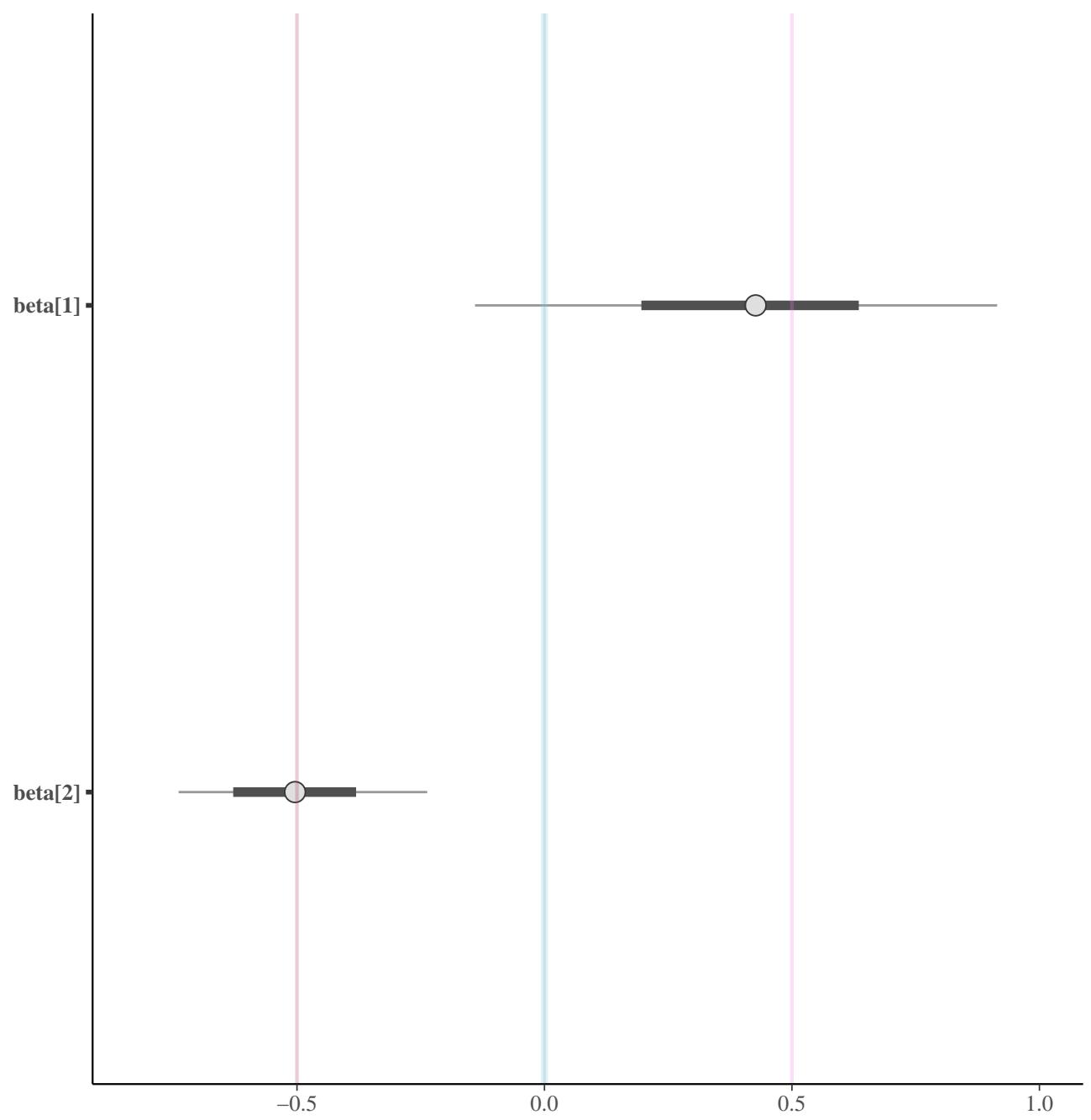
```
help("bayesplot-helpers")
```



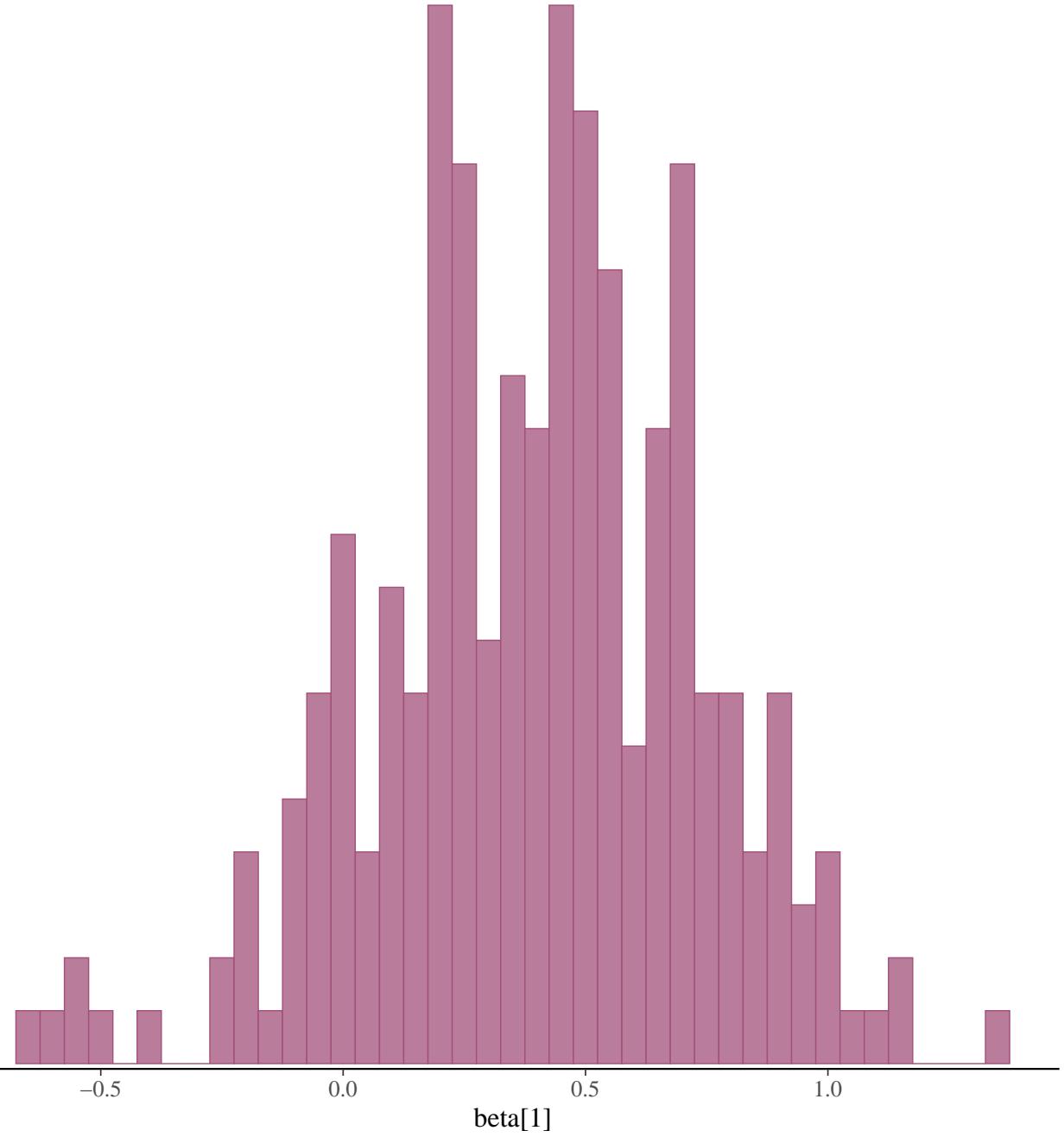
help("bayesplot-helpers")



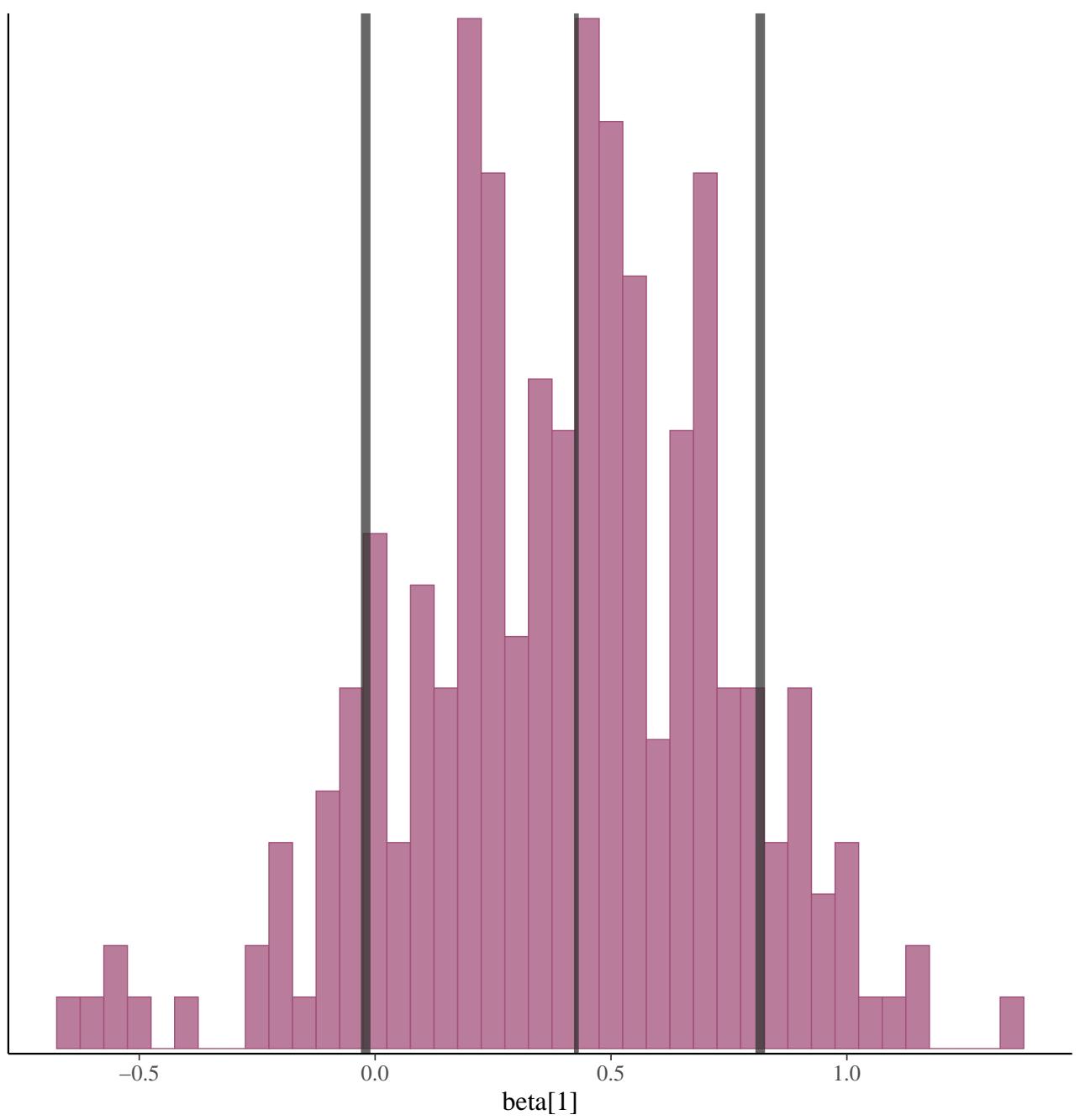
help("bayesplot-helpers")



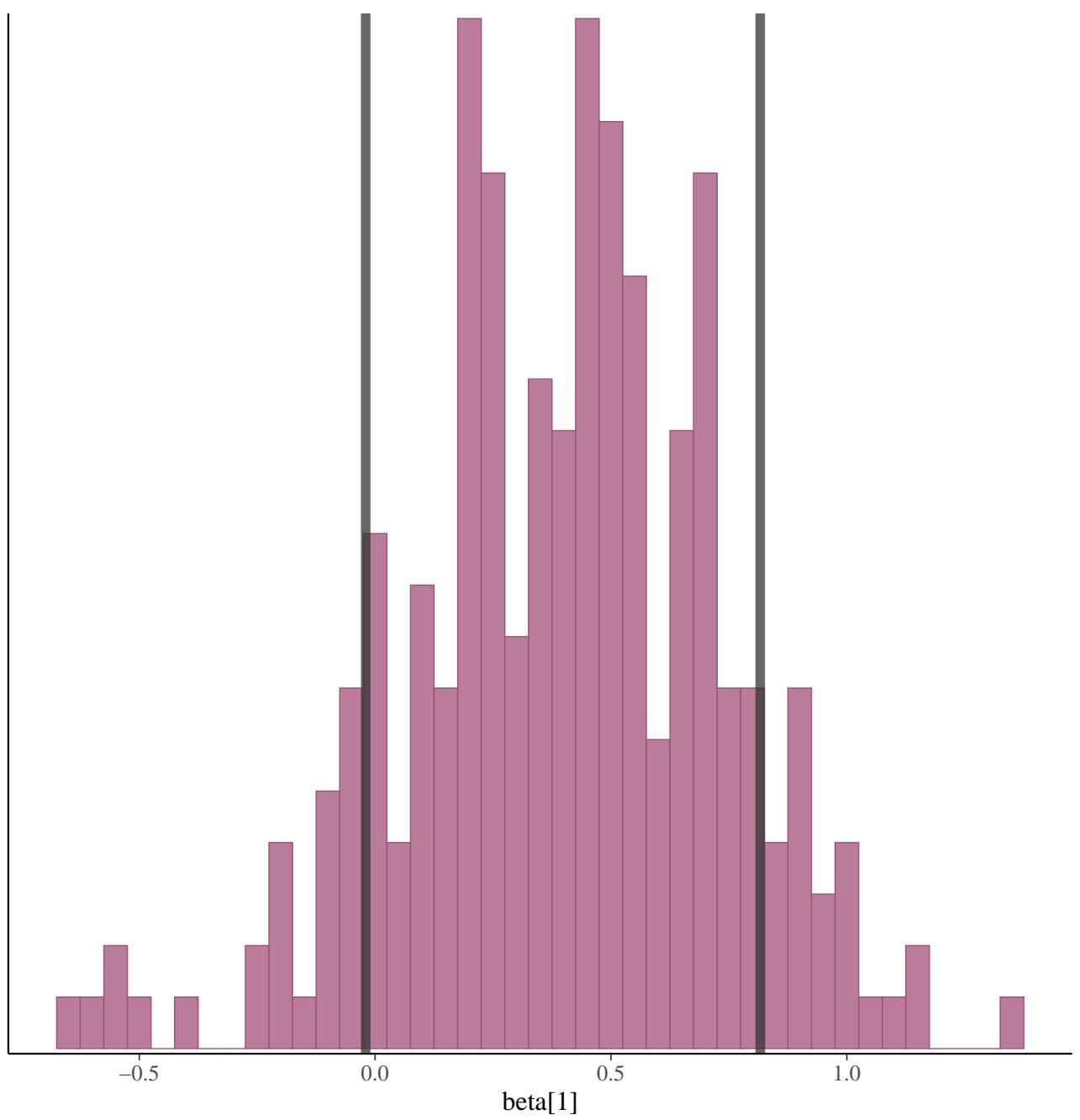
```
help("bayesplot-helpers")
```



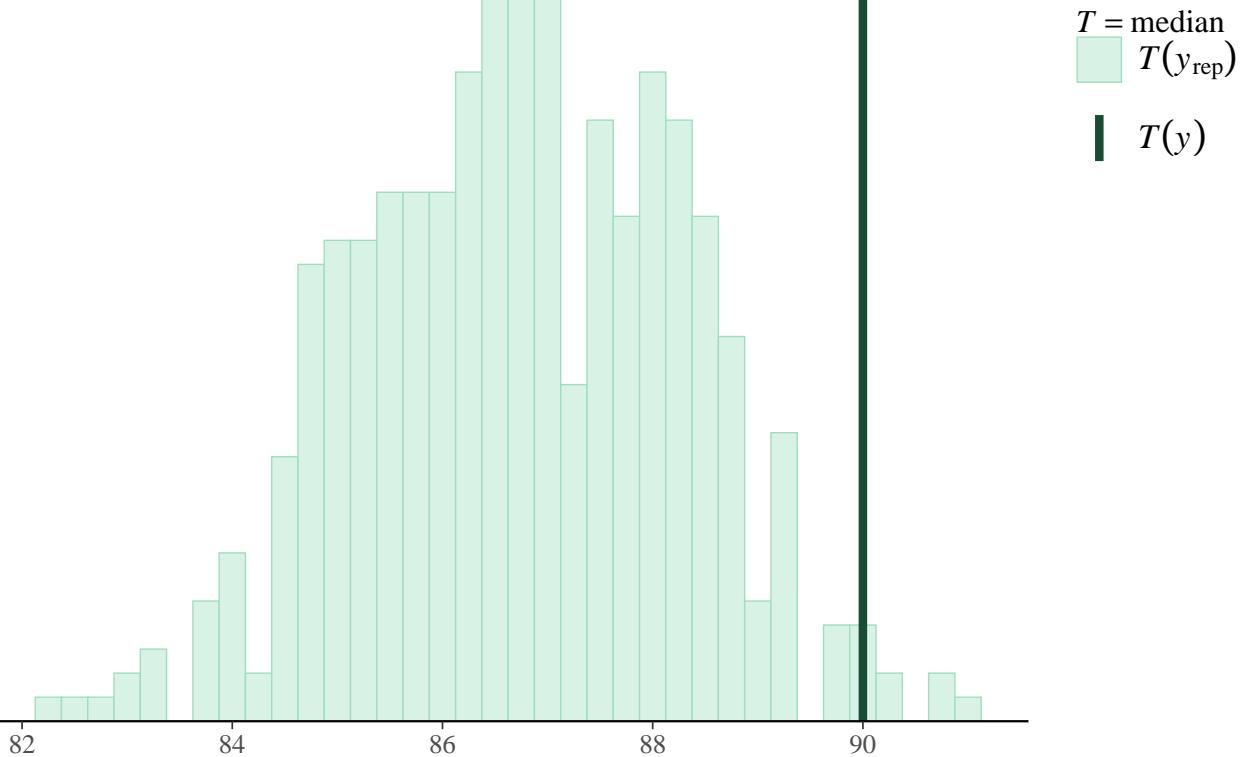
```
help("bayesplot-helpers")
```



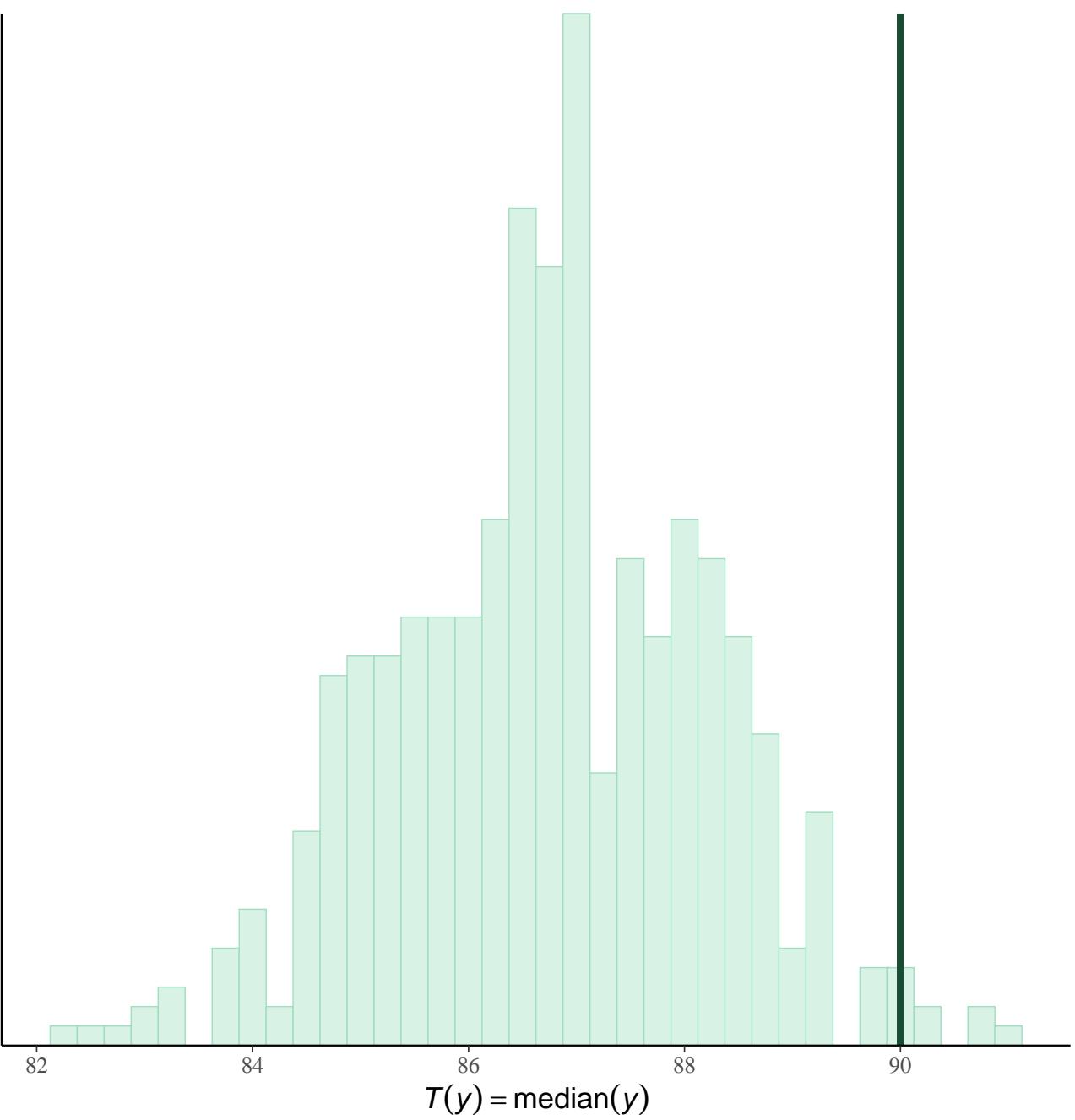
```
help("bayesplot-helpers")
```



help("bayesplot-helpers")

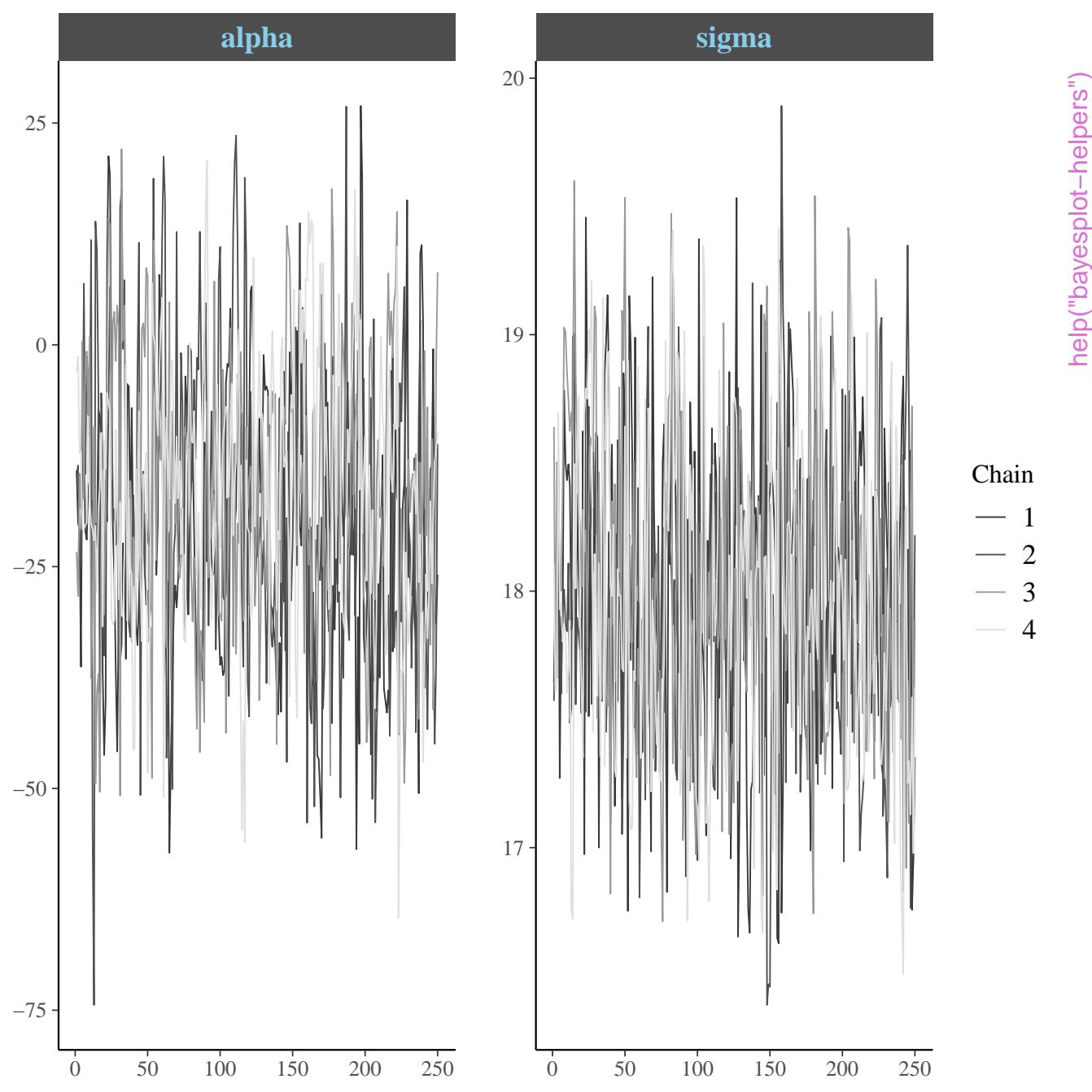


help("bayesplot-helpers")



**alpha**

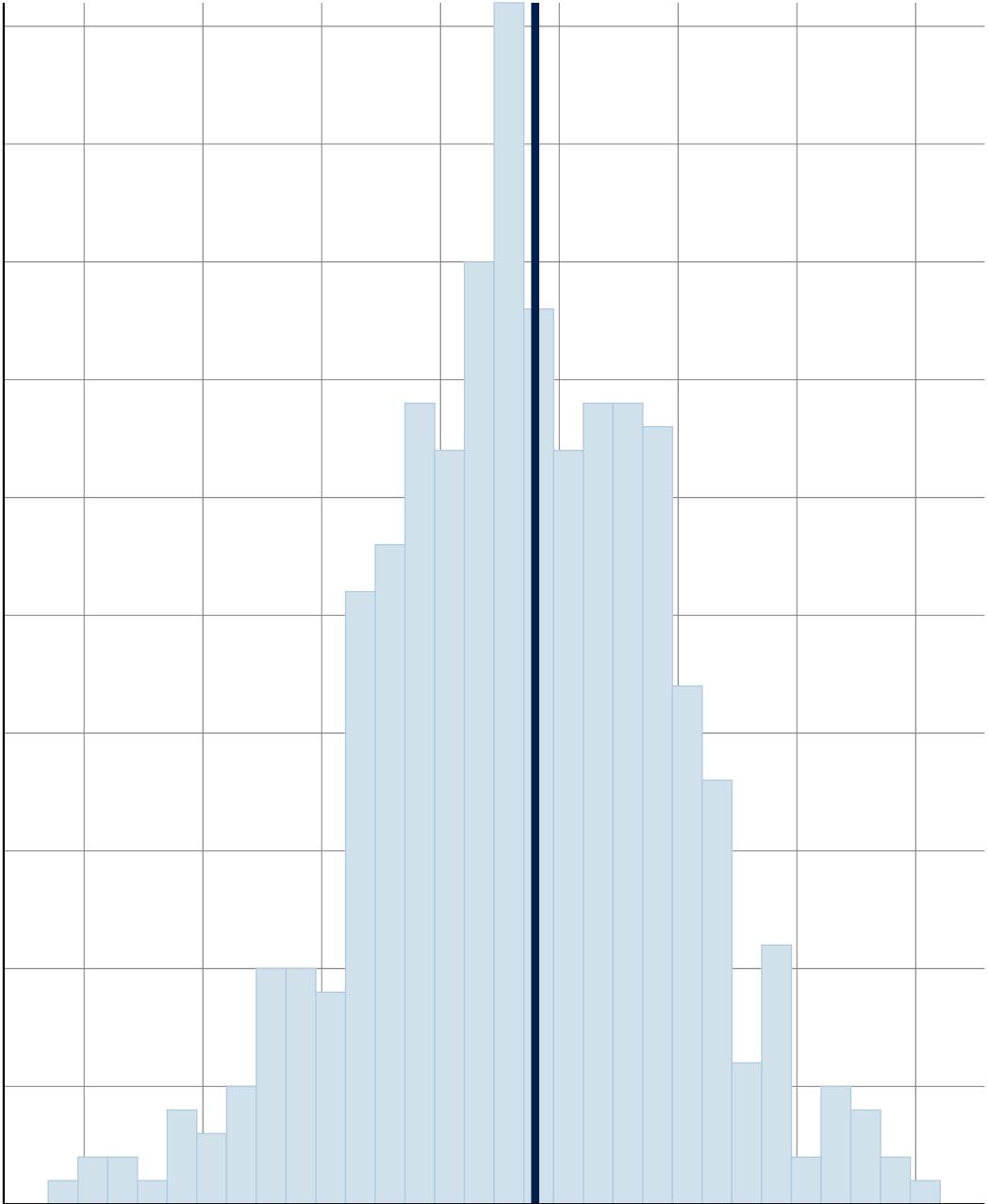
**sigma**

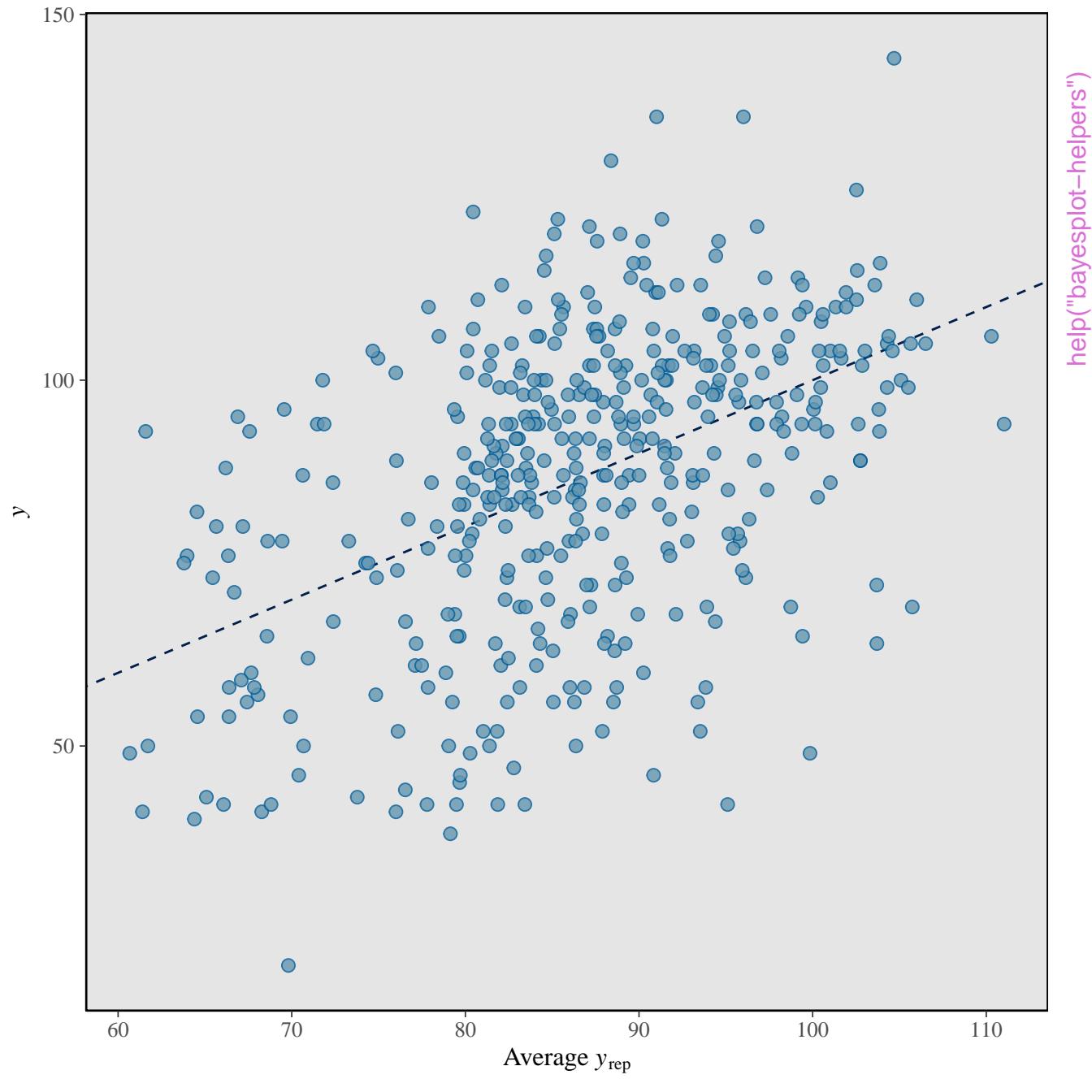


help("bayesplot")

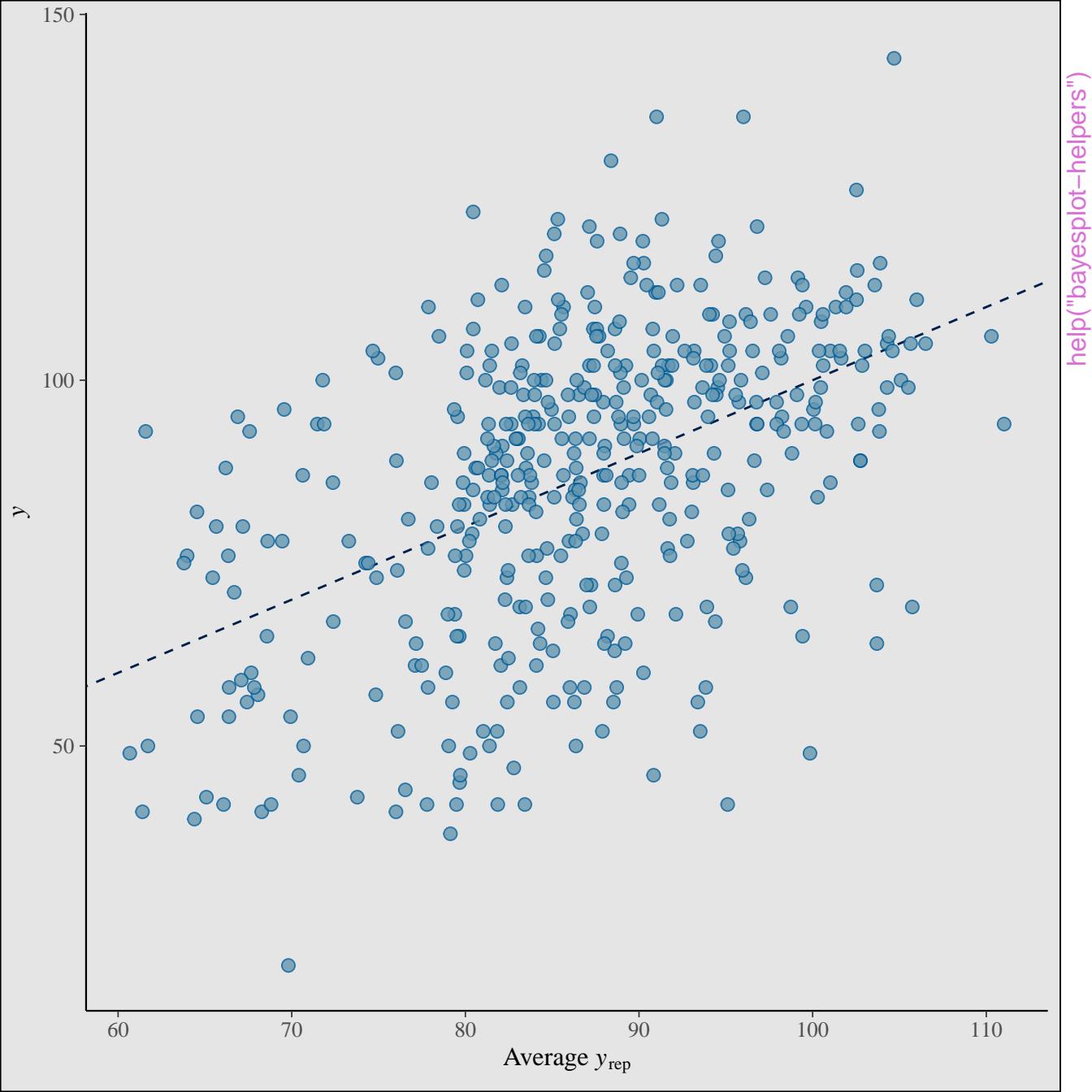
$T = \text{mean}$   
 $T(y_{\text{rep}})$   
|  $T(y)$

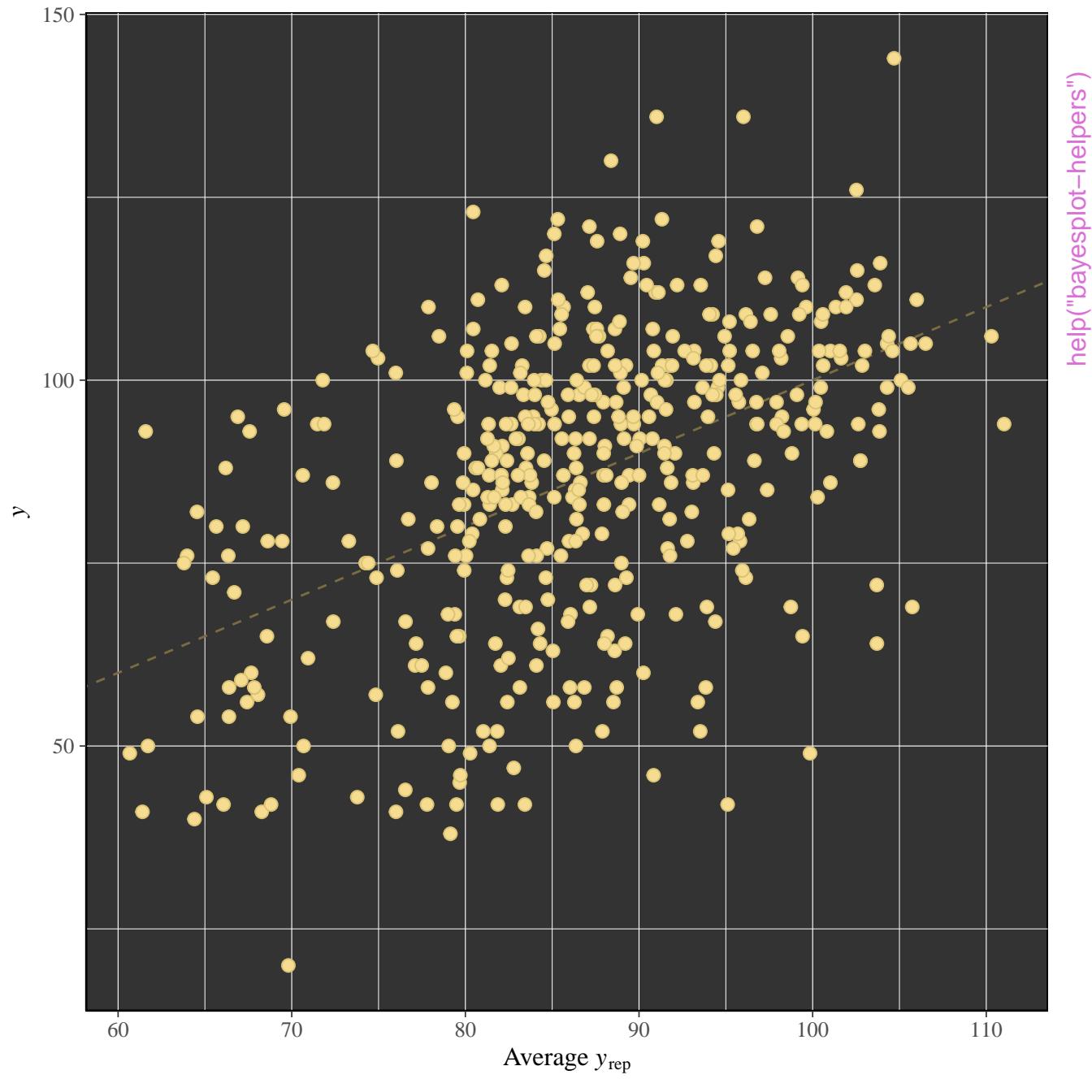
84 86 88 90





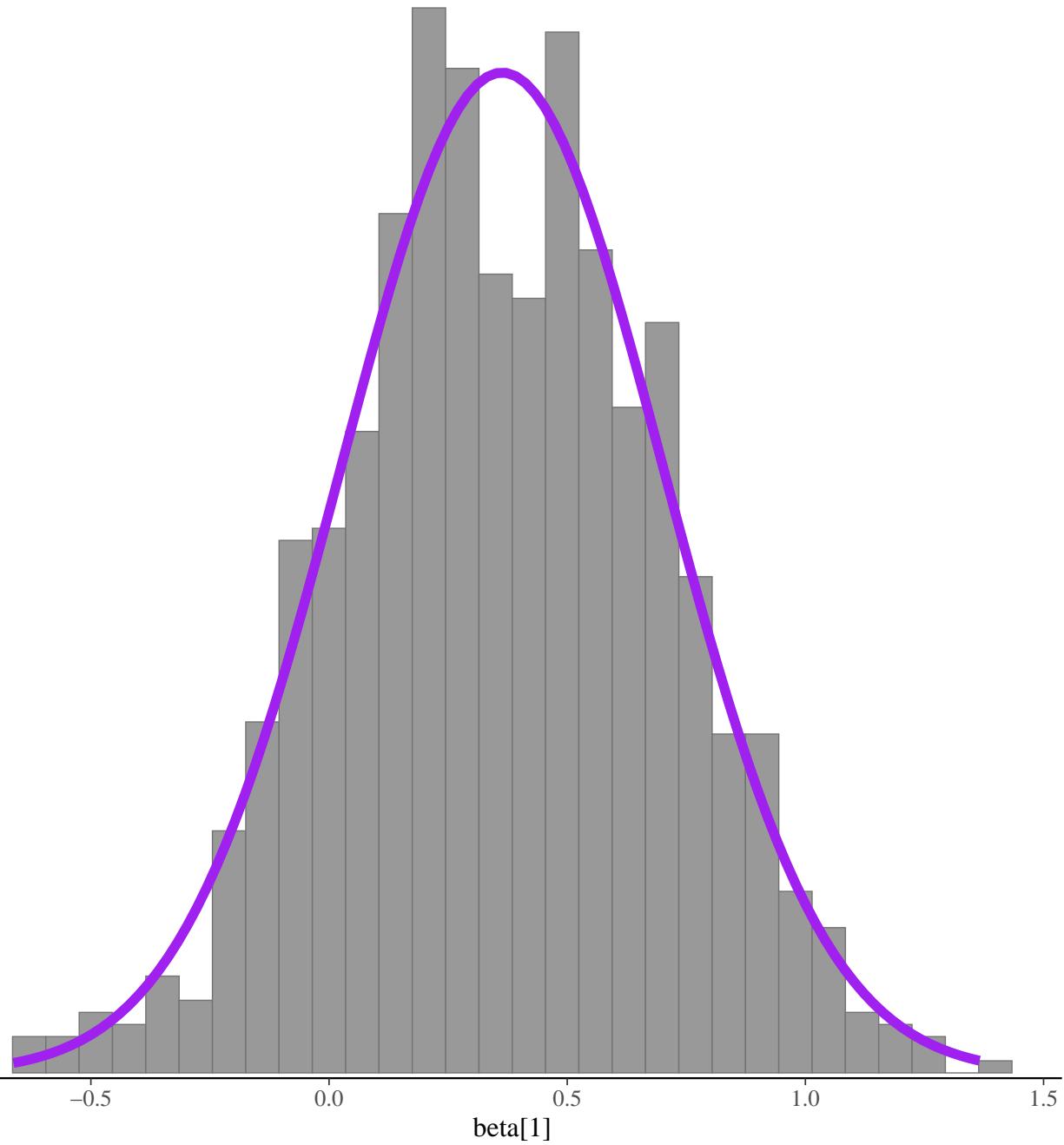
help("bayesplot-helpers")



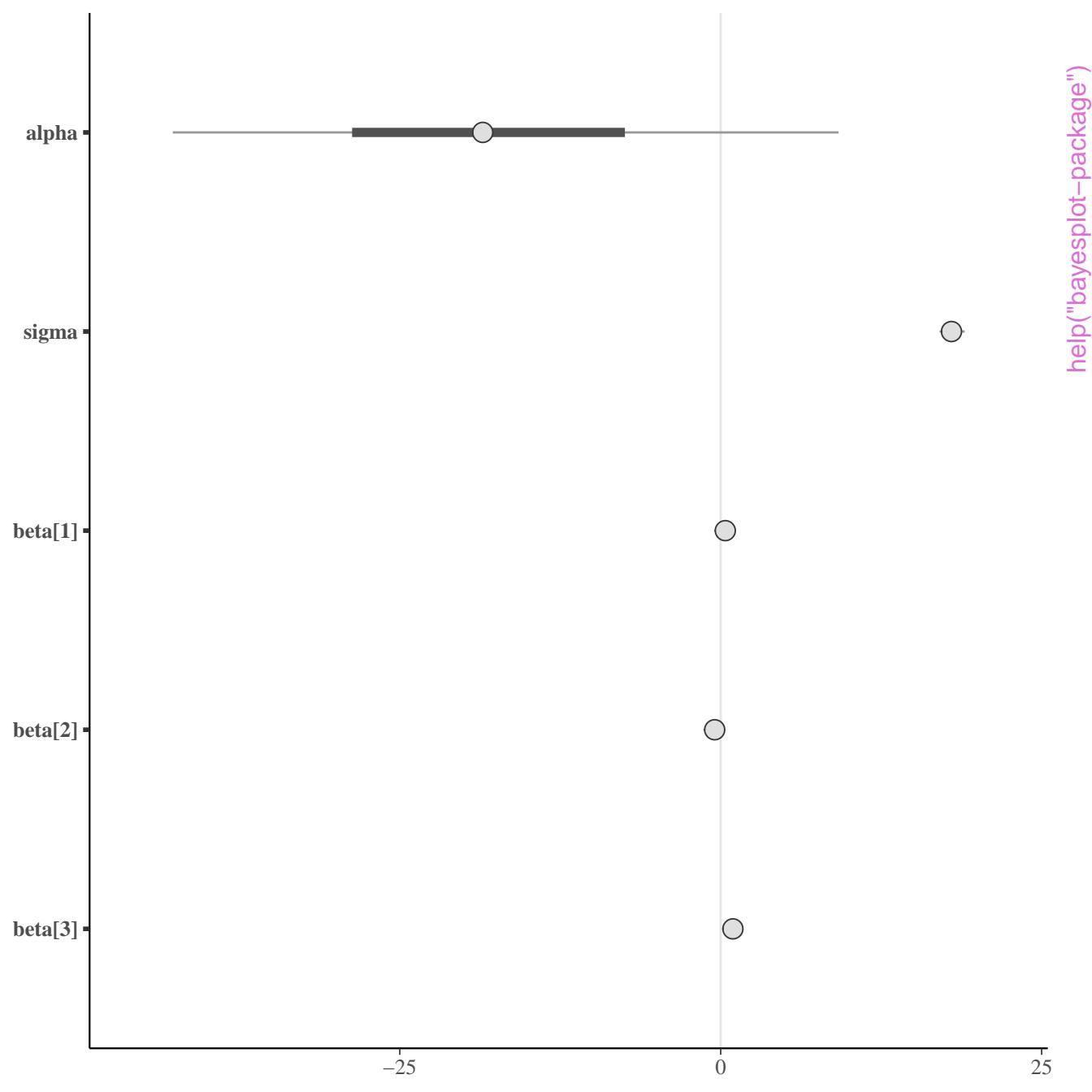


help("bayesplot-helpers")

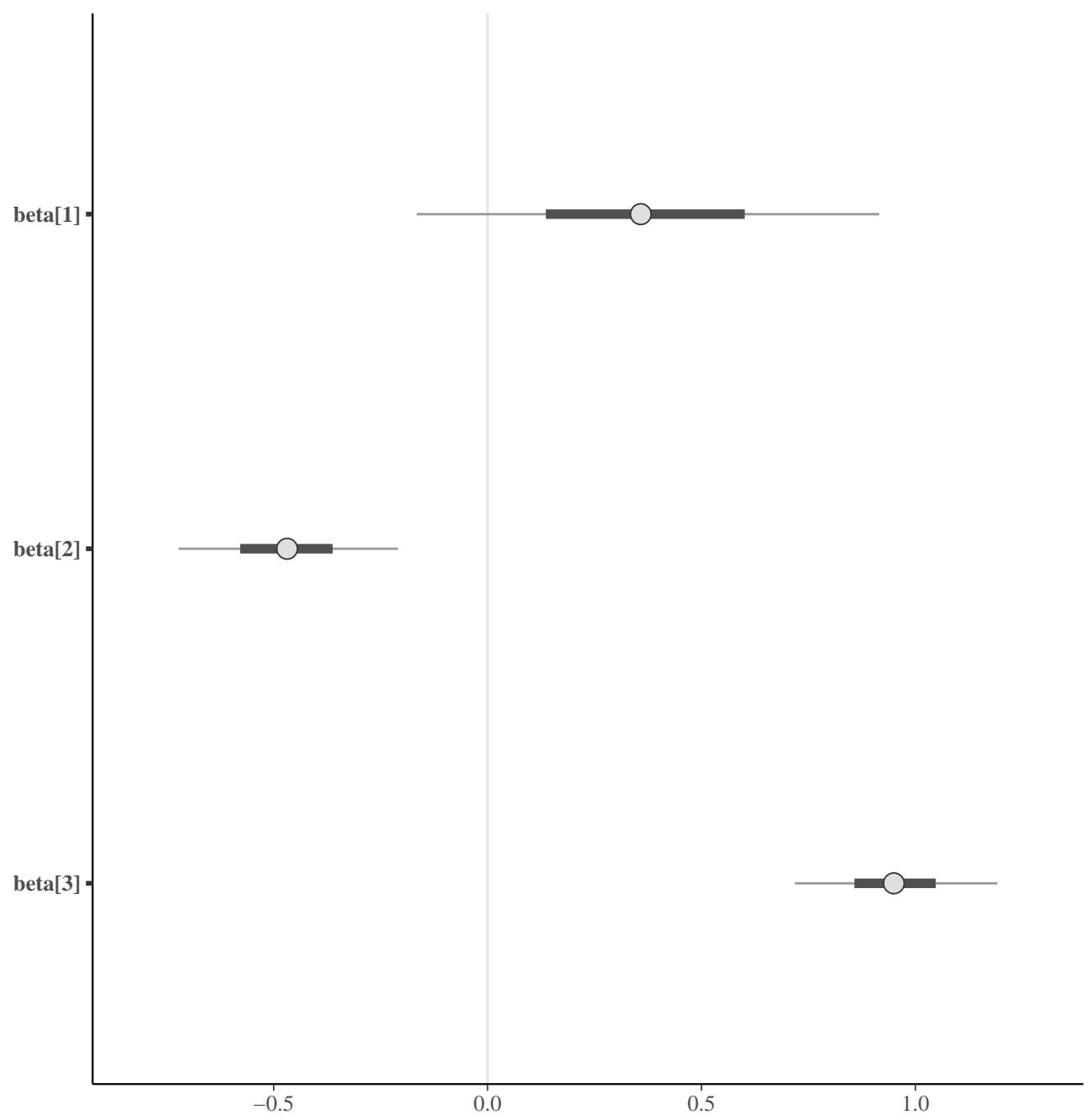
help("bayesplot-helpers")



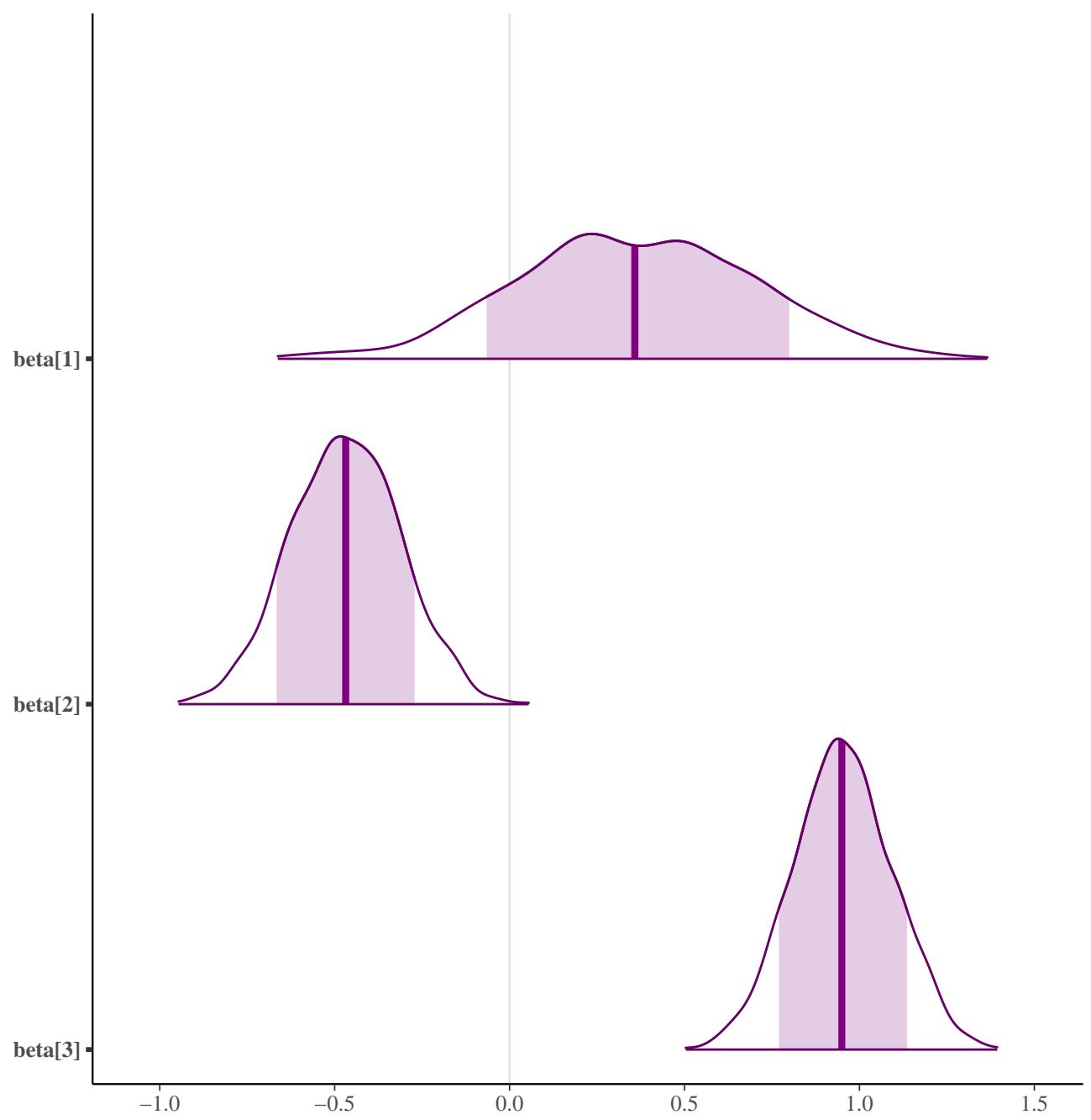
```
help("bayesplot-package")
```



```
help("bayesplot-package")
```

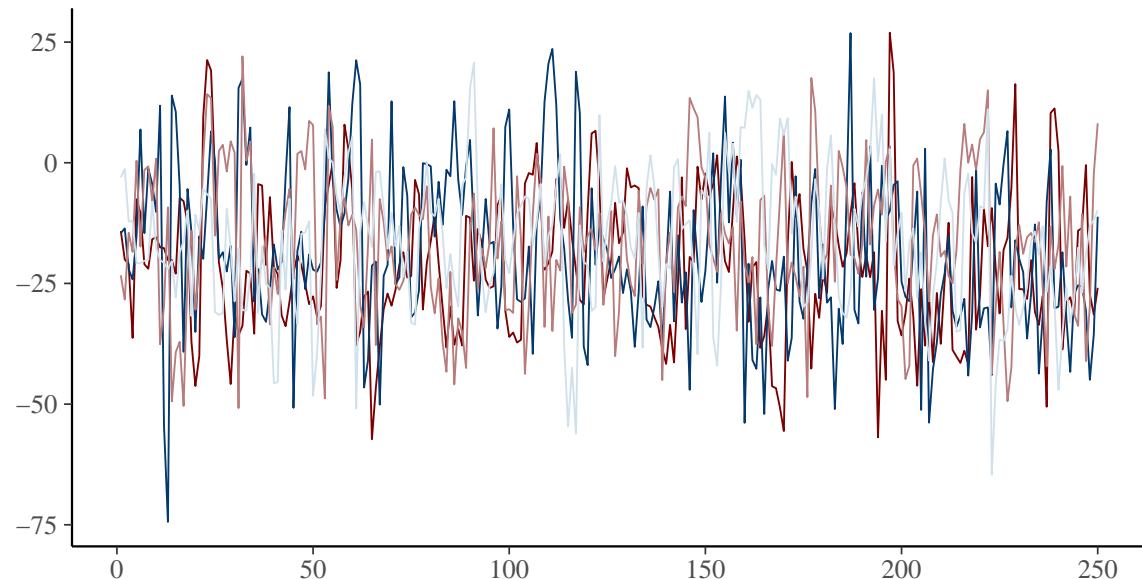


```
help("bayesplot-package")
```

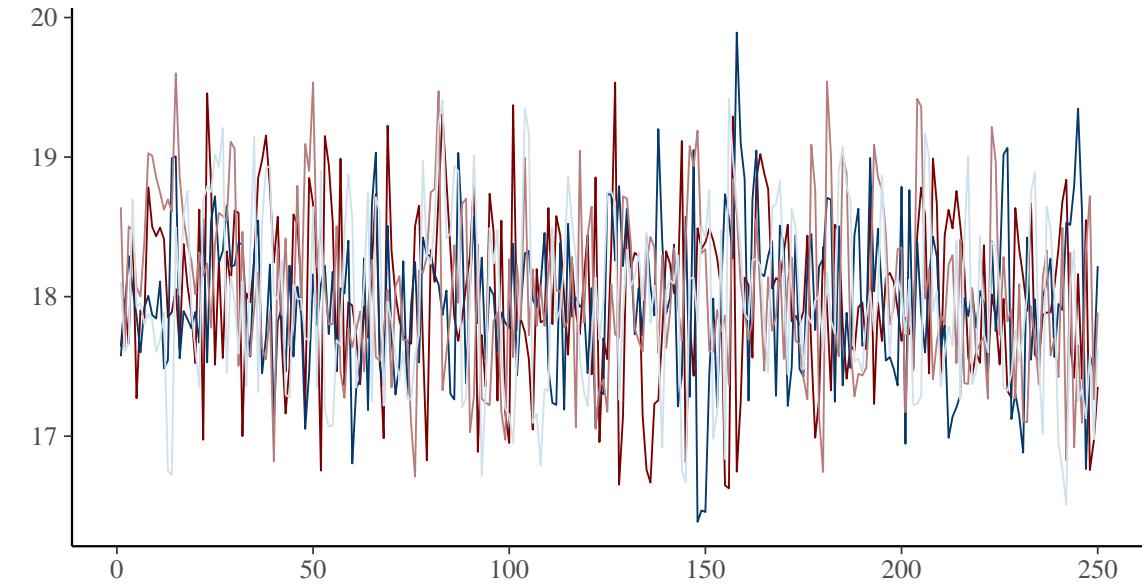


```
help("bayesplot-package")
```

alpha



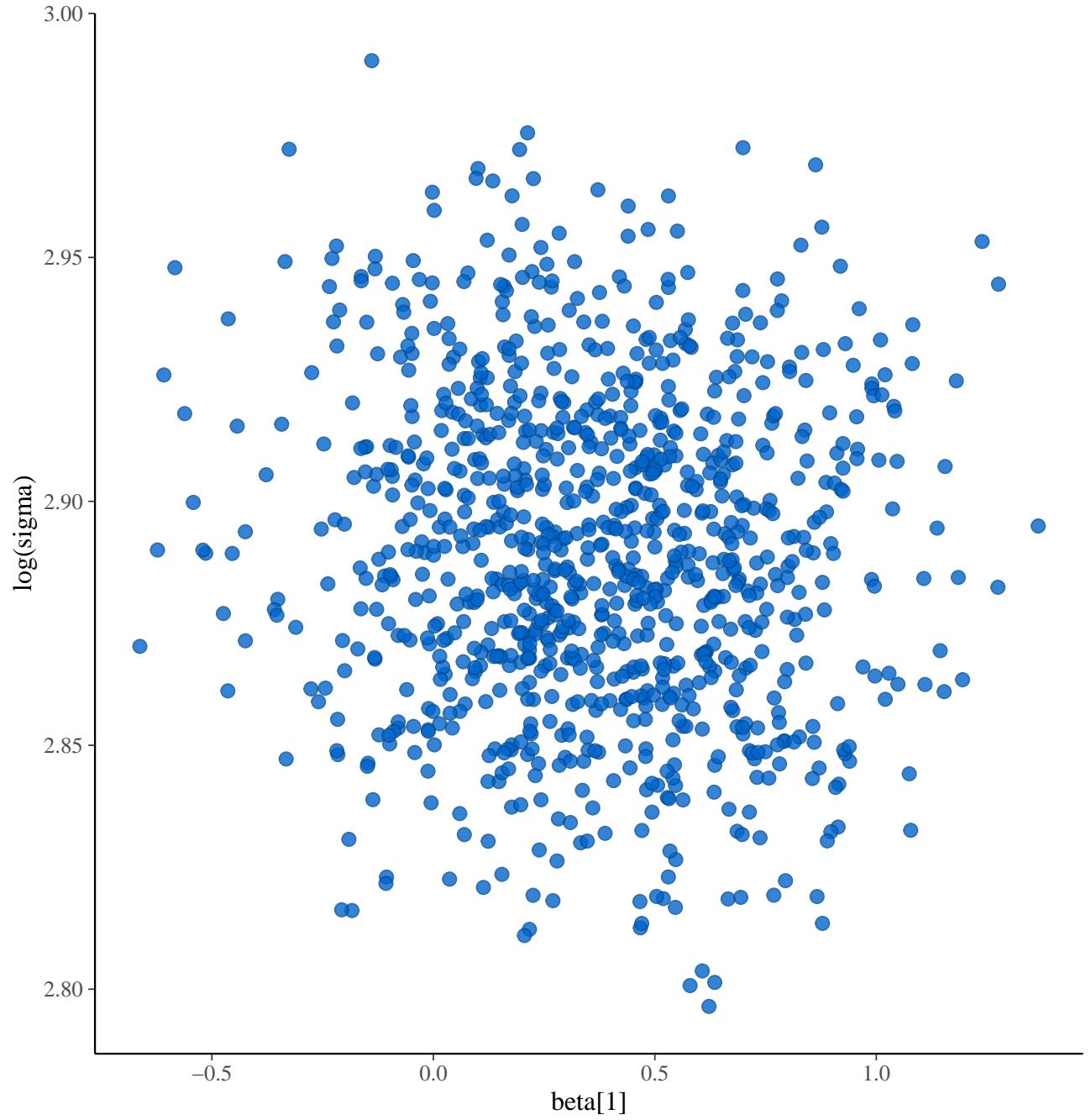
sigma



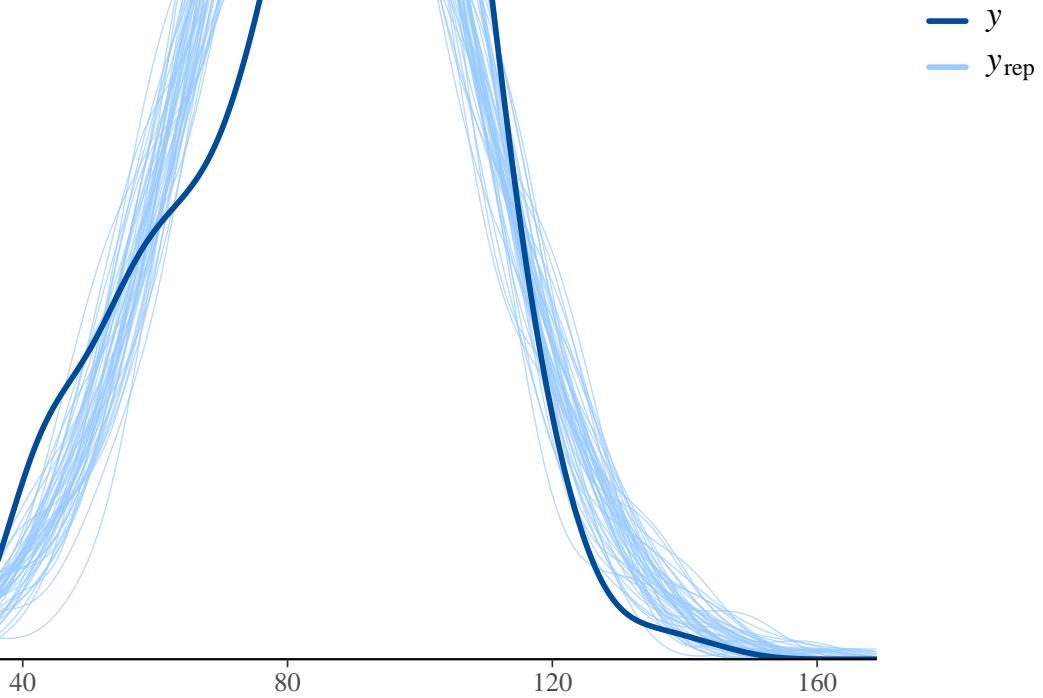
Chain

- 1
- 2
- 3
- 4

```
help("bayesplot-package")
```

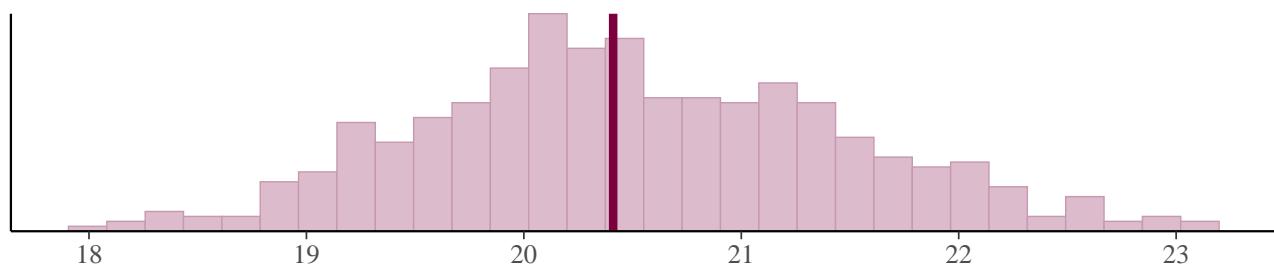


help("bayesplot-package")

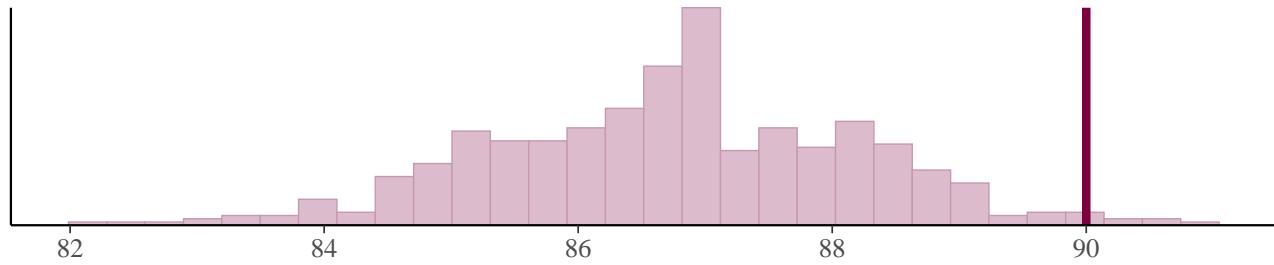


help("bayesplot\_grid")

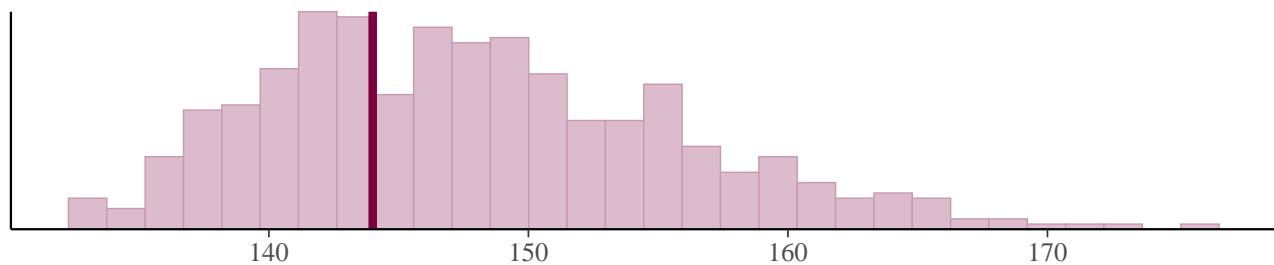
sd



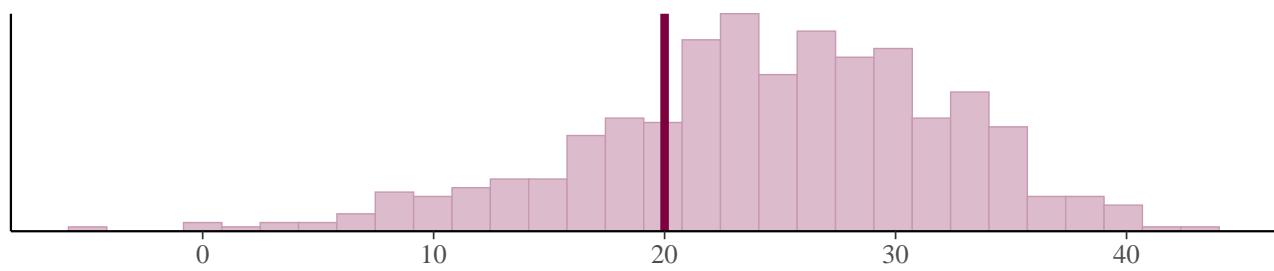
median



max

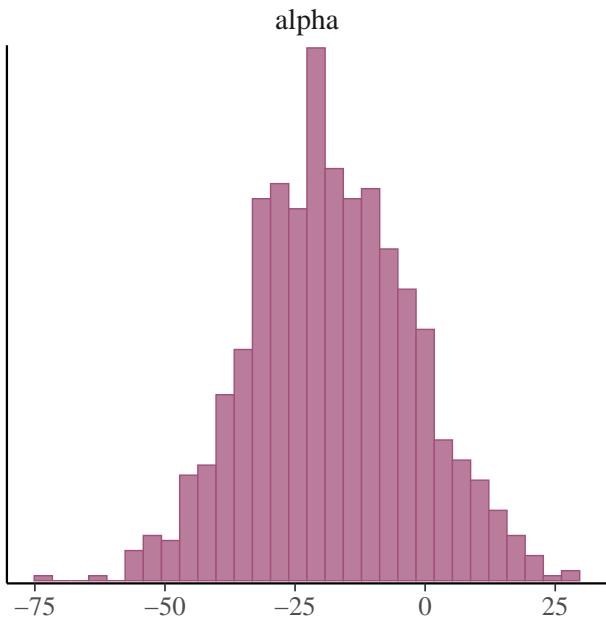


min

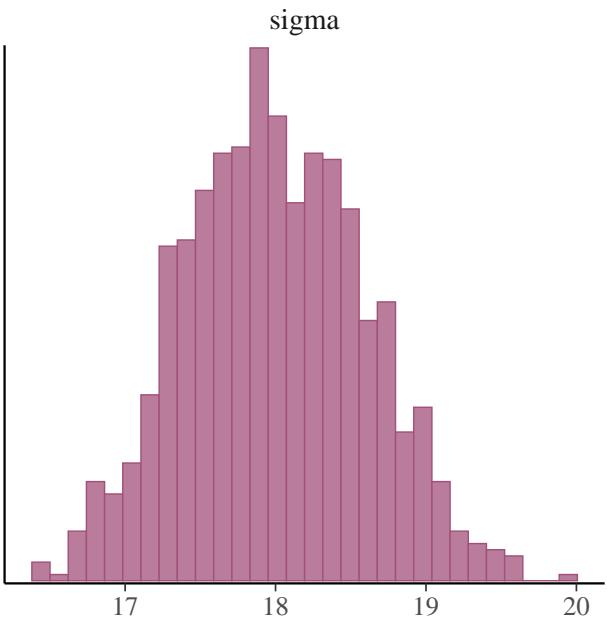


help("bayesplot\_theme\_get")

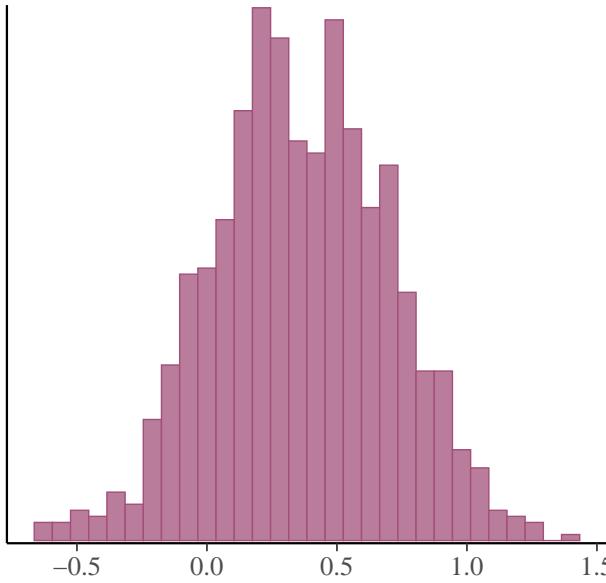
alpha



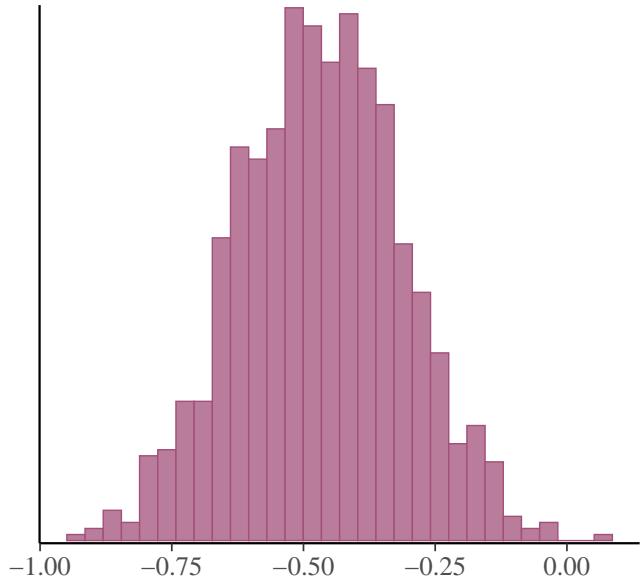
sigma



beta[1]

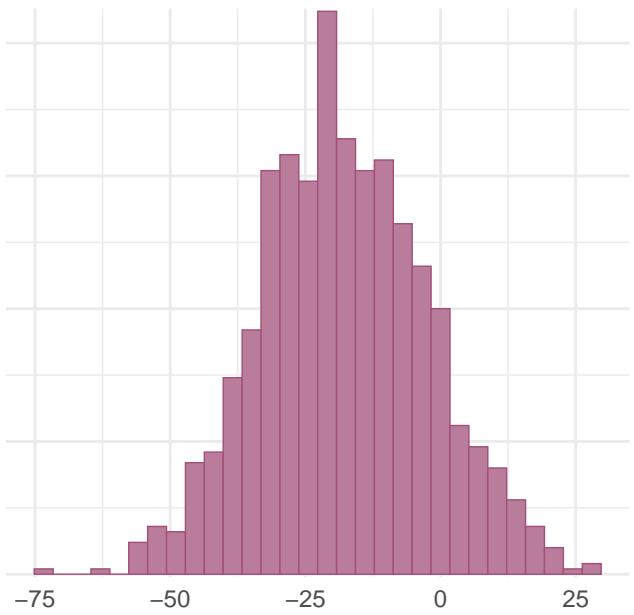


beta[2]

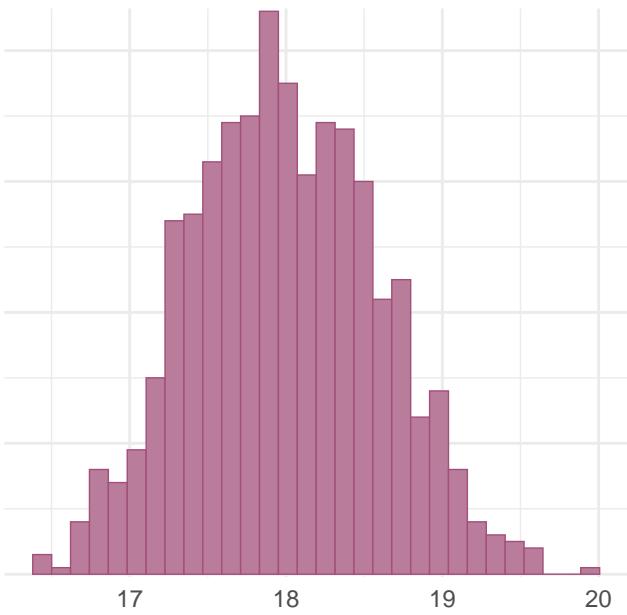


```
help("bayesplot_theme_get")
```

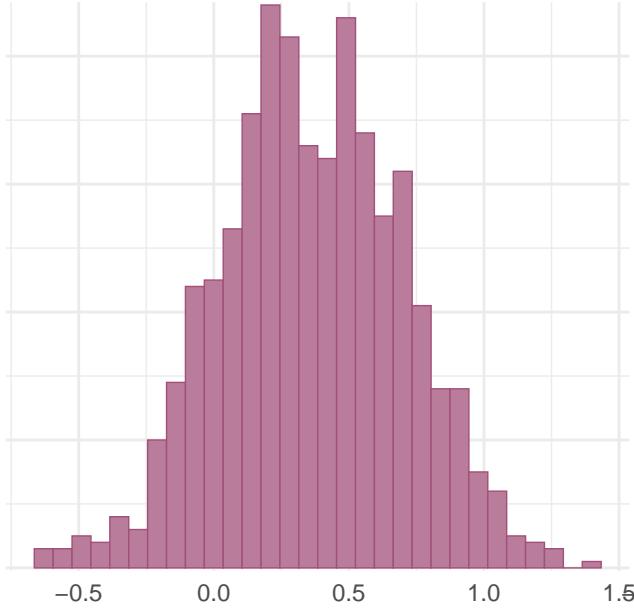
alpha



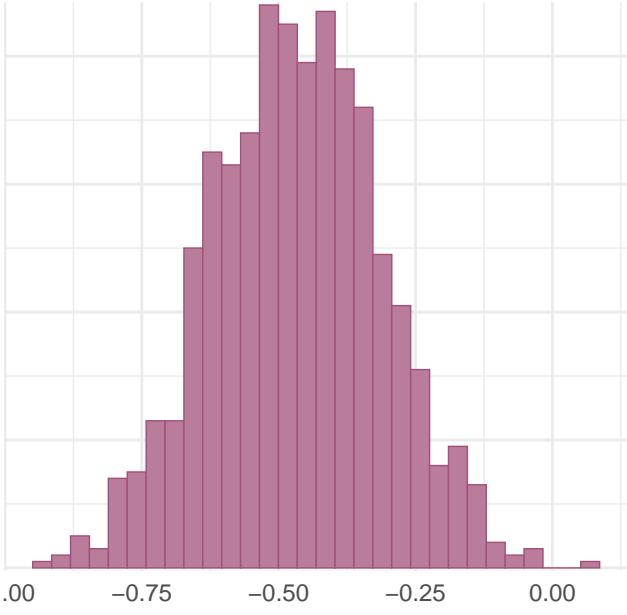
sigma



beta[1]

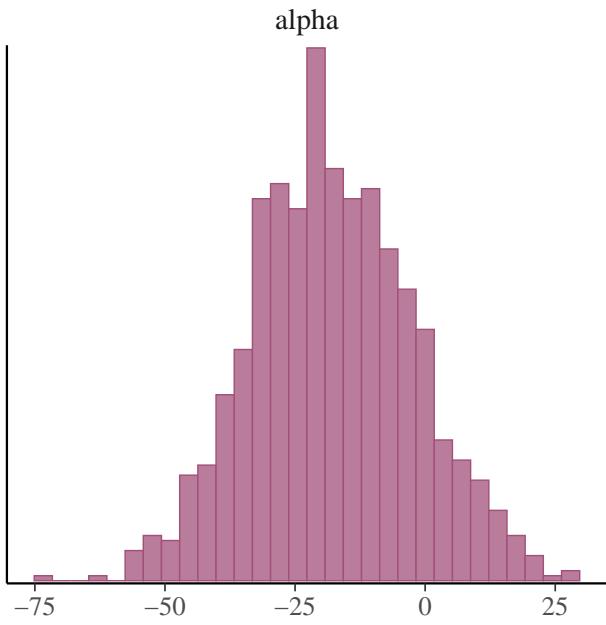


beta[2]

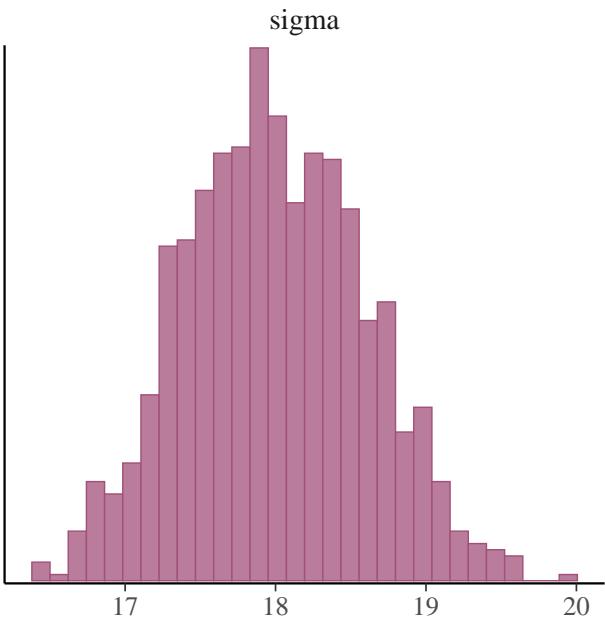


help("bayesplot\_theme\_get")

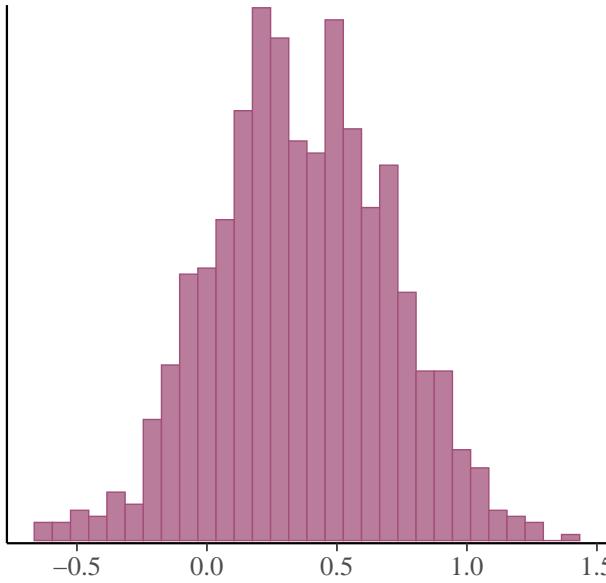
alpha



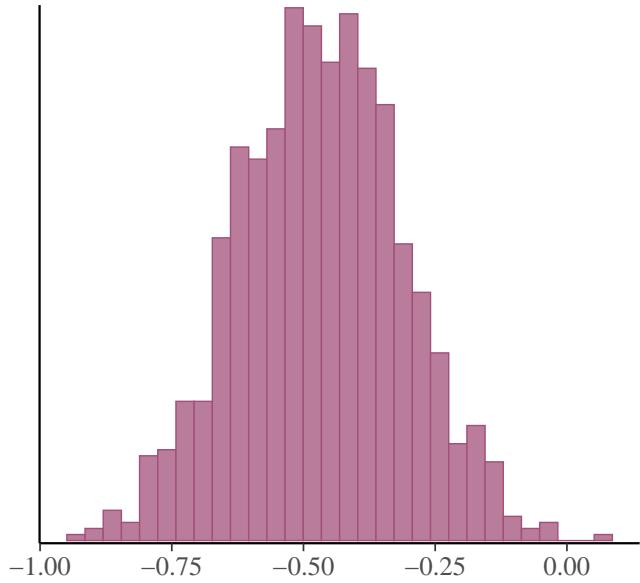
sigma



beta[1]

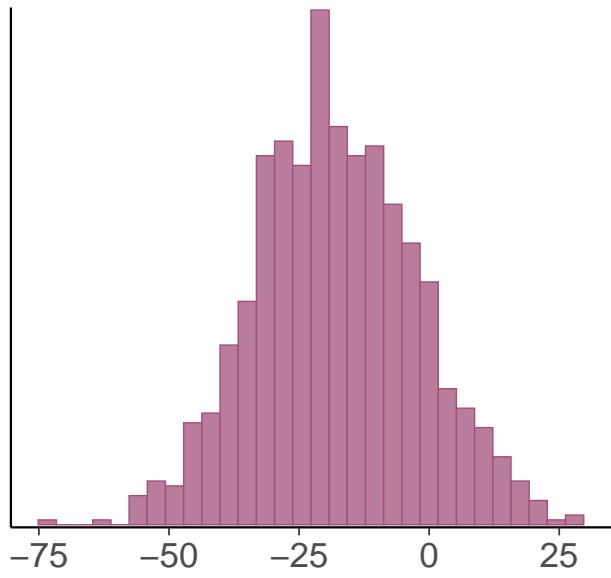


beta[2]

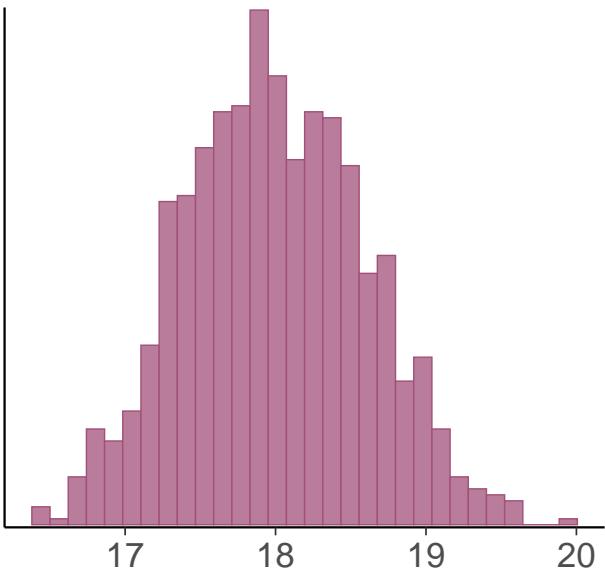


```
help("bayesplot_theme_get")
```

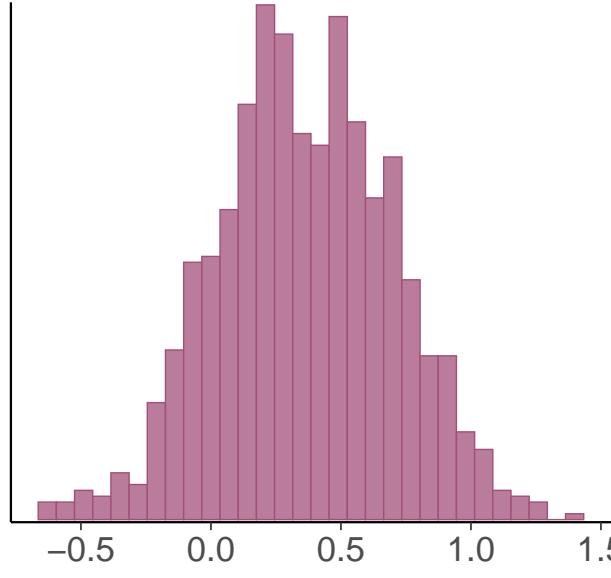
alpha



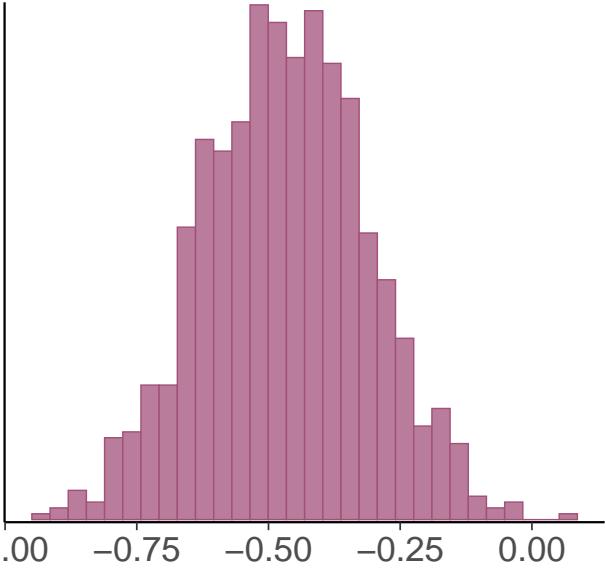
sigma



beta[1]

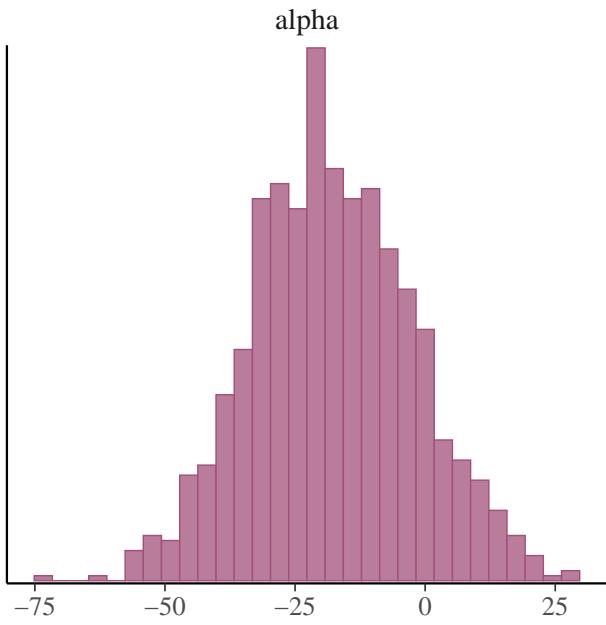


beta[2]

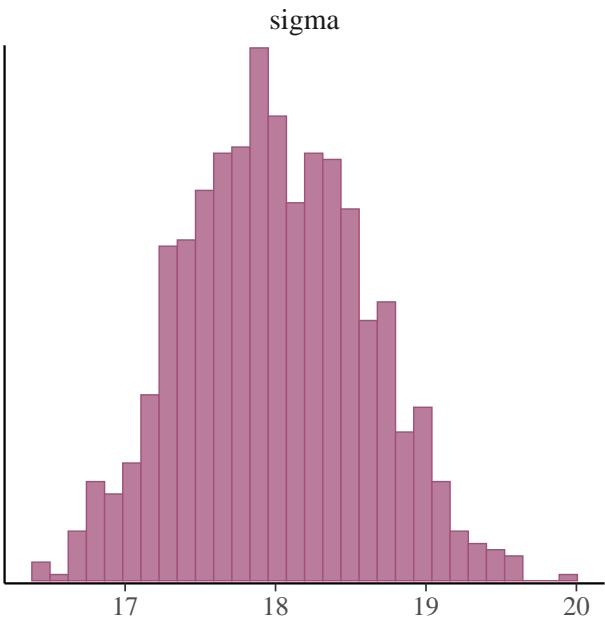


help("bayesplot\_theme\_get")

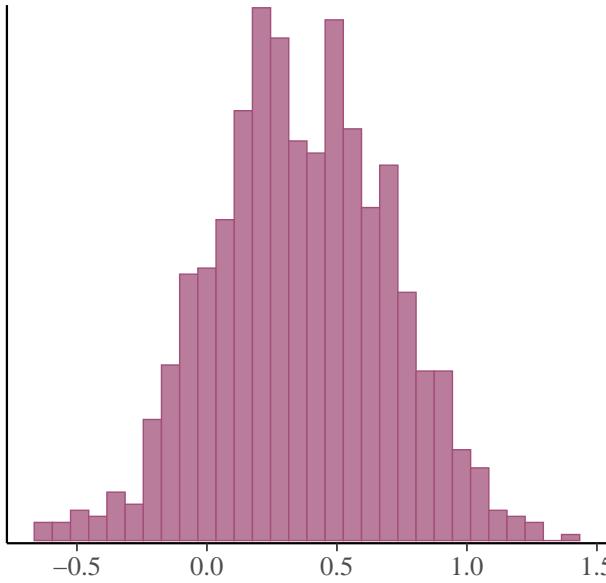
alpha



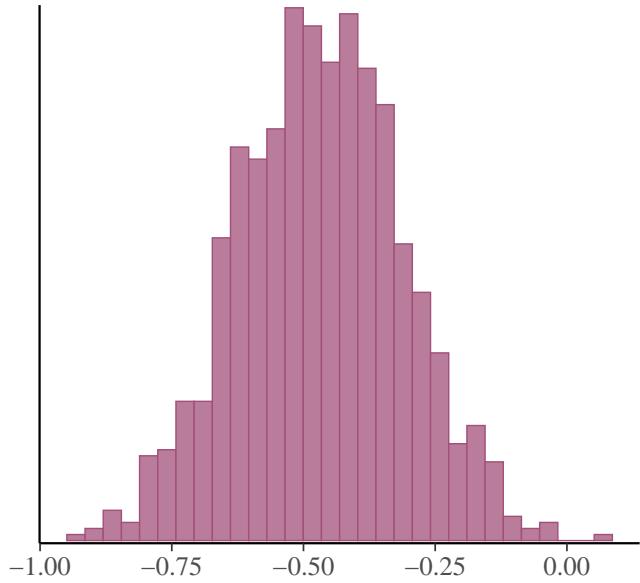
sigma



beta[1]

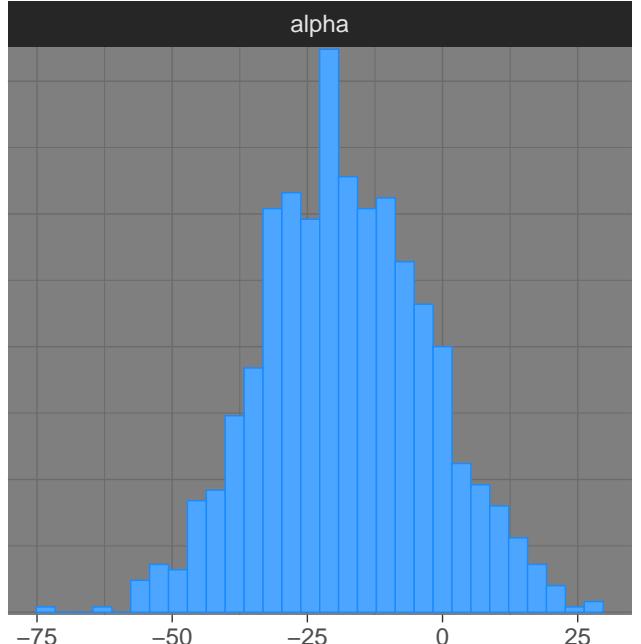


beta[2]

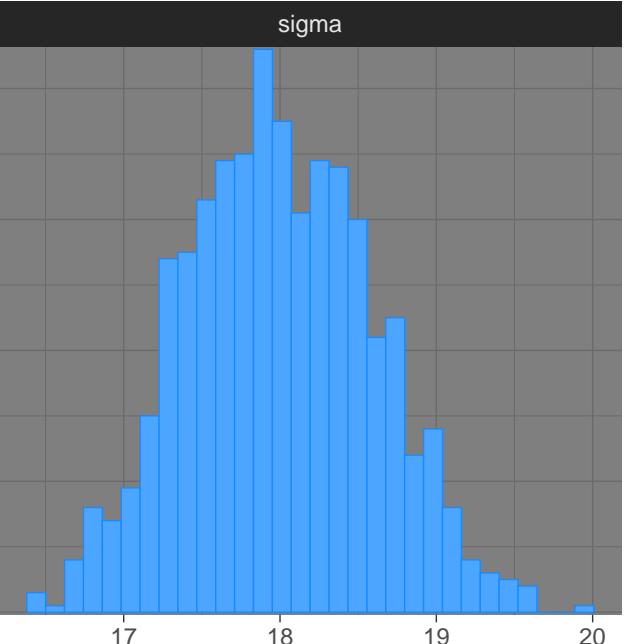


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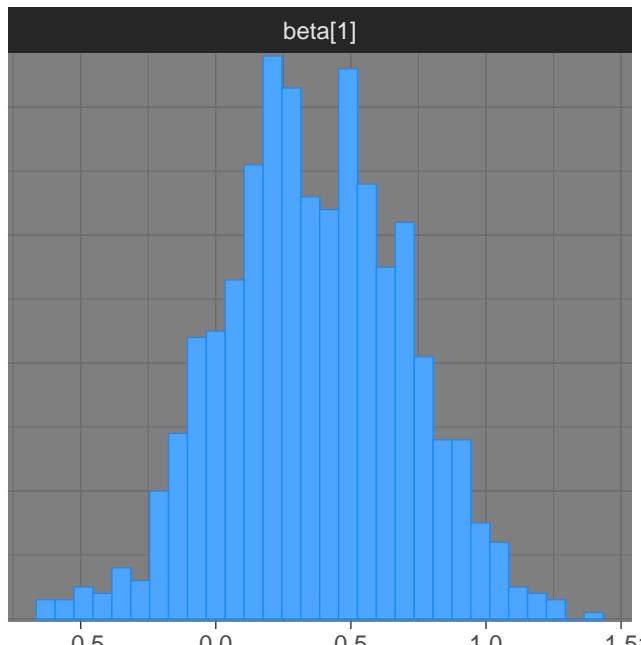
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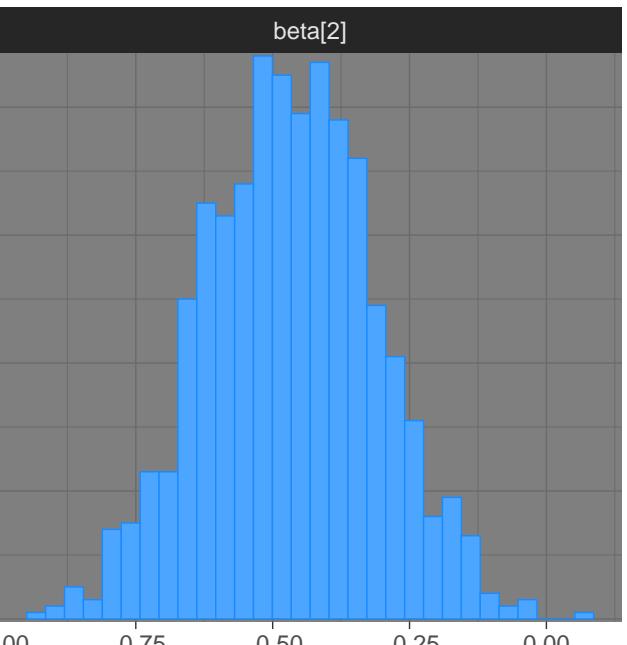
sigma



beta[1]

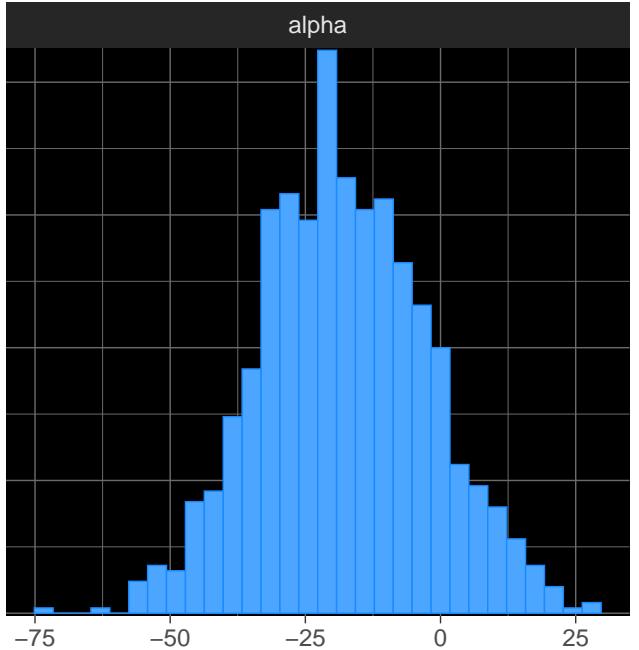


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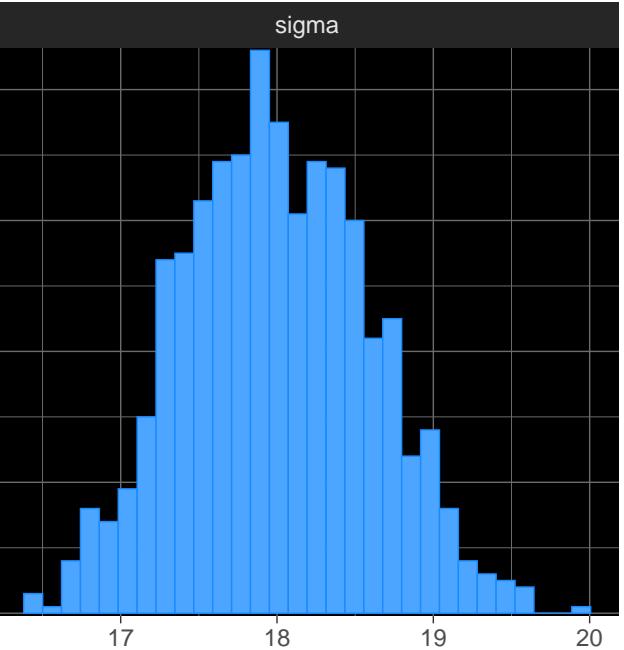


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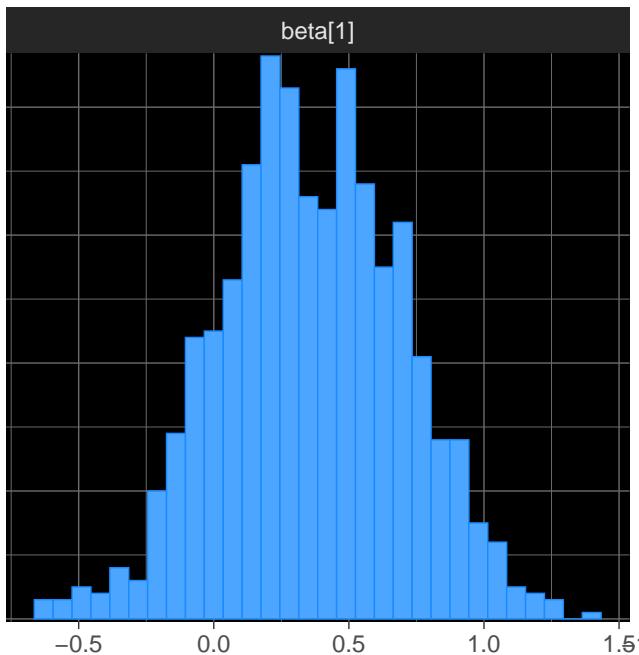
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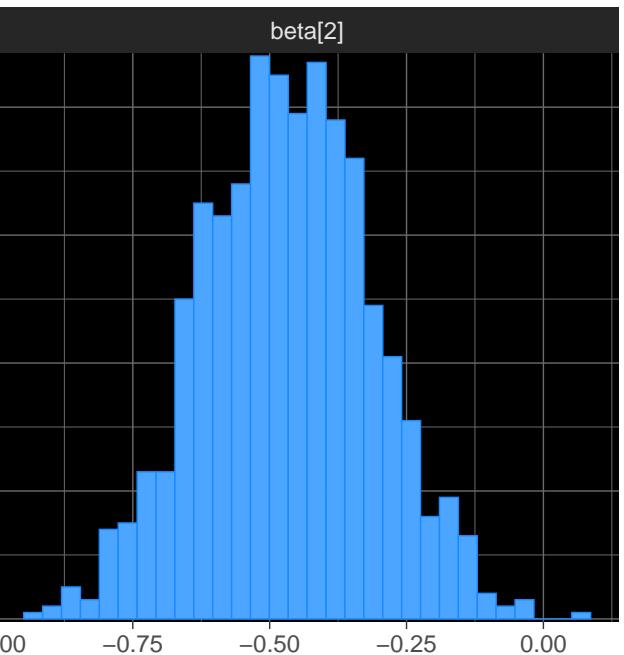
sigma



beta[1]

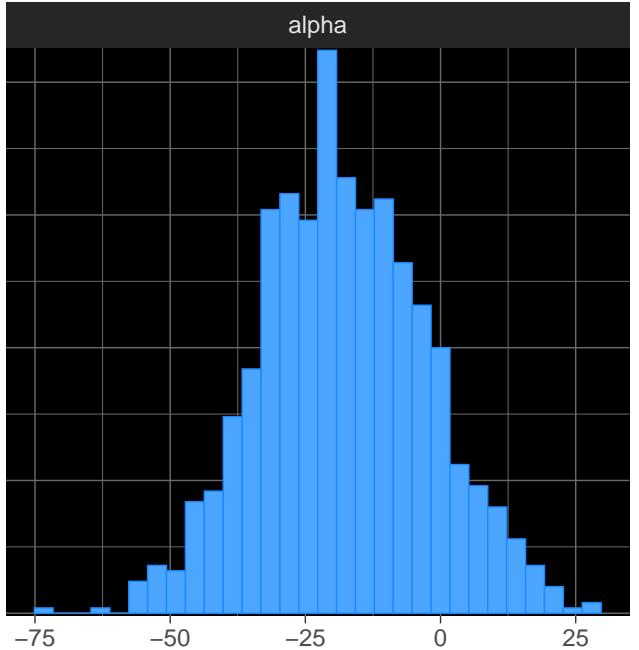


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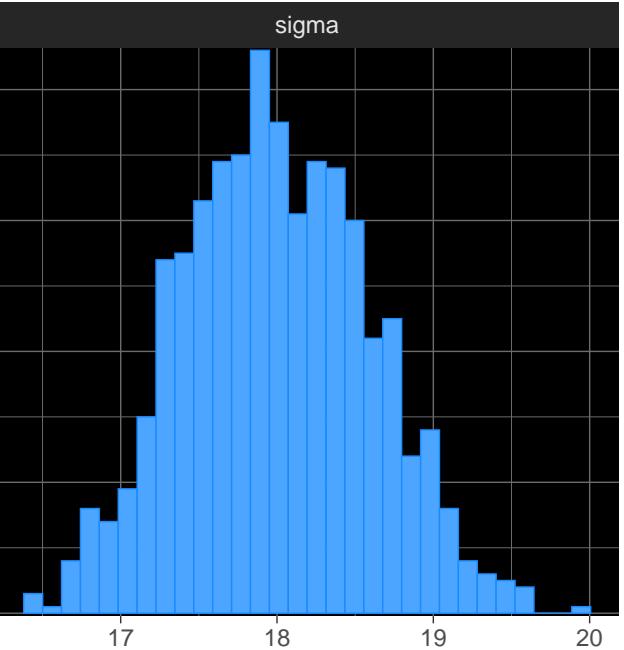


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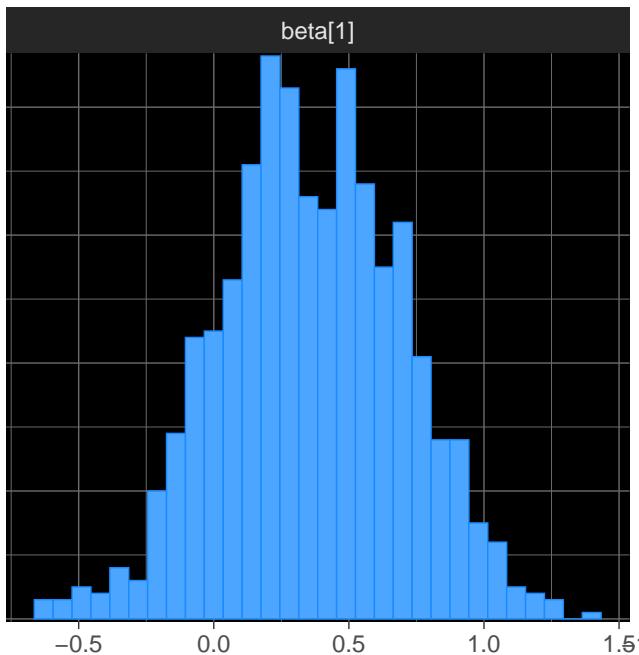
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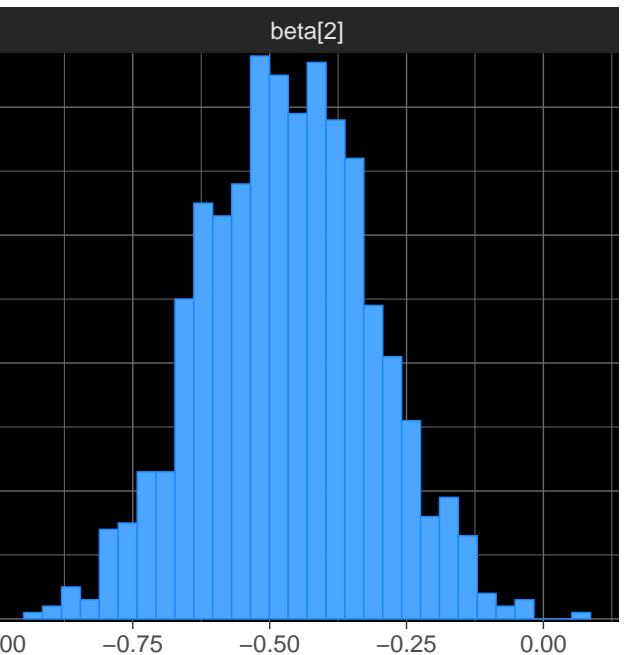
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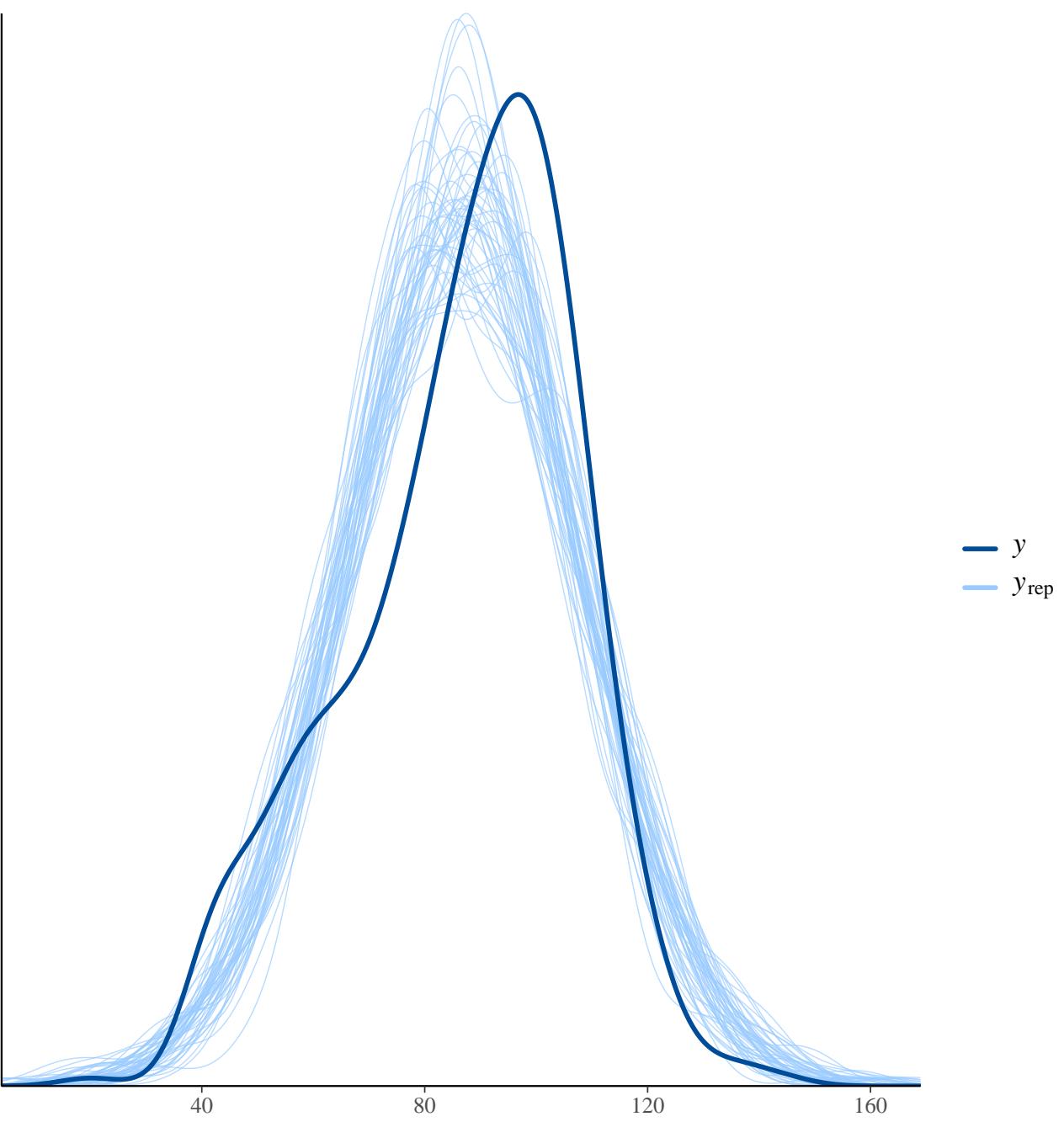
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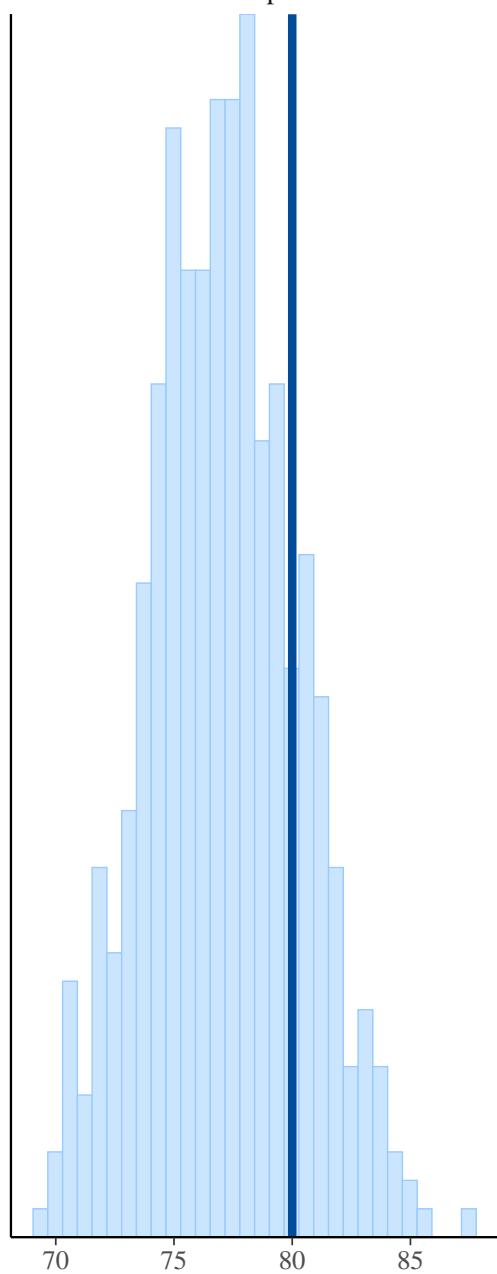
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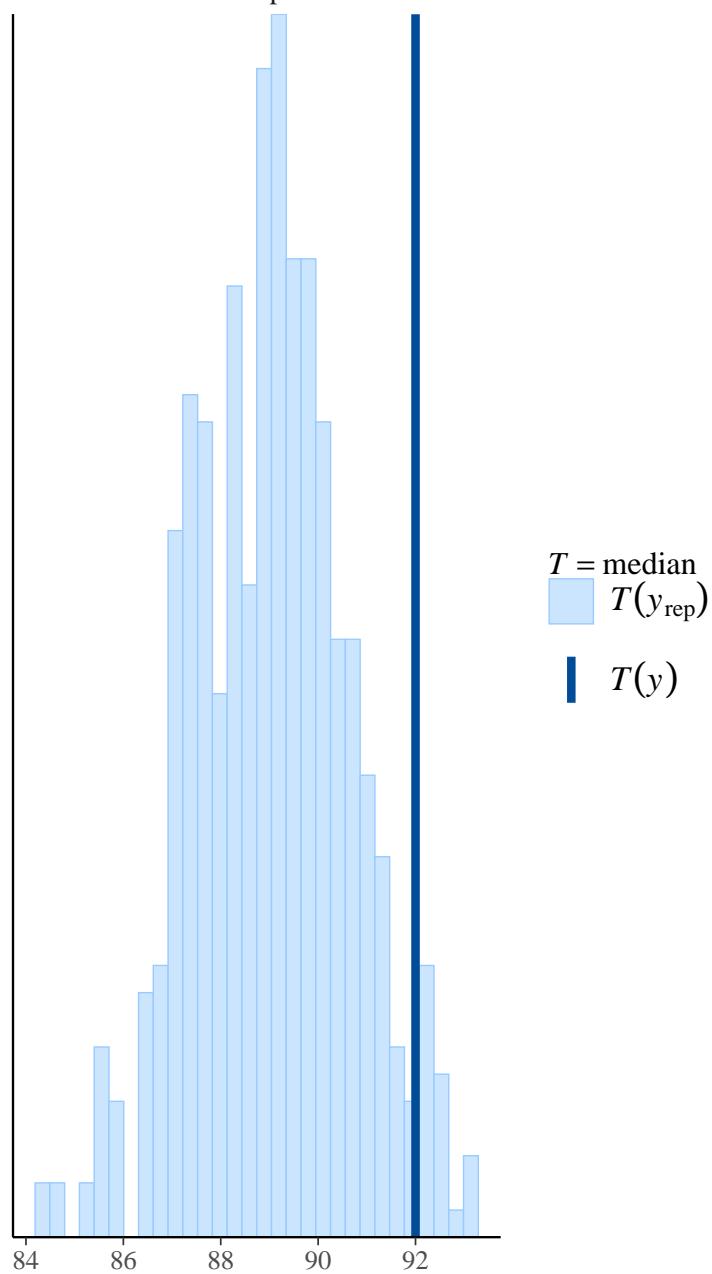
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GroupA

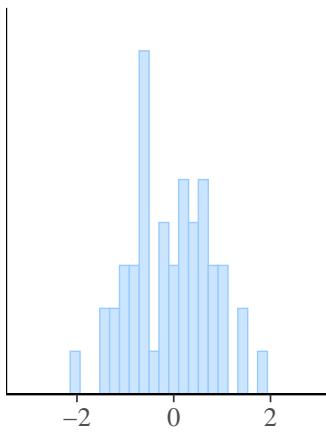
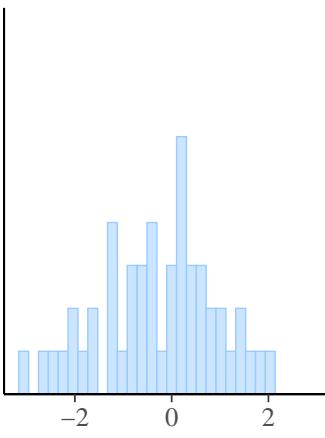
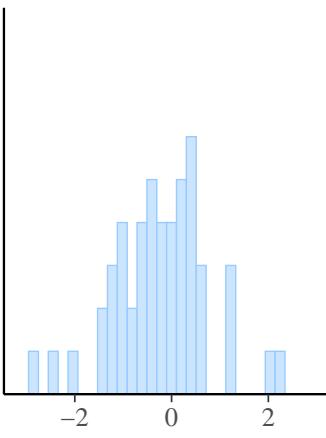
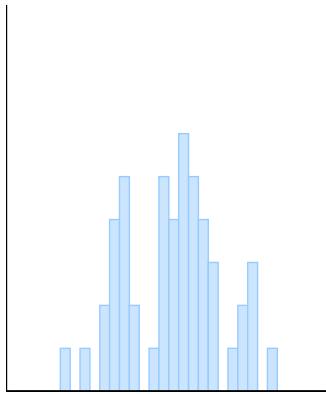
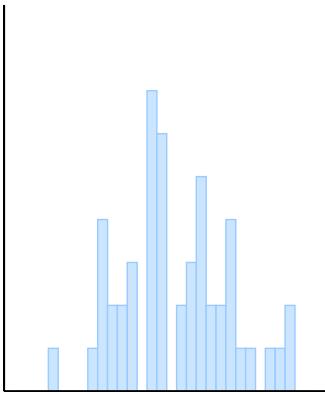
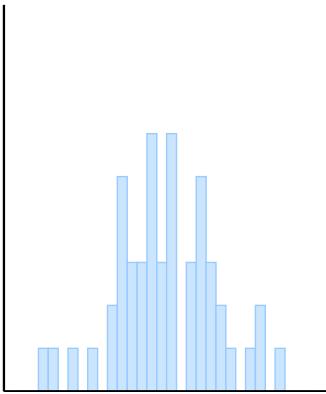
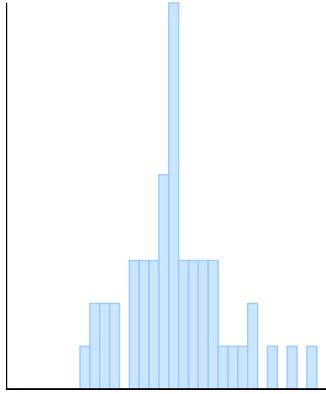
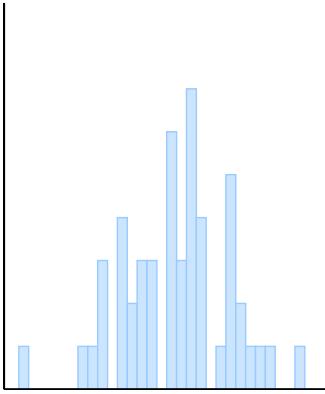
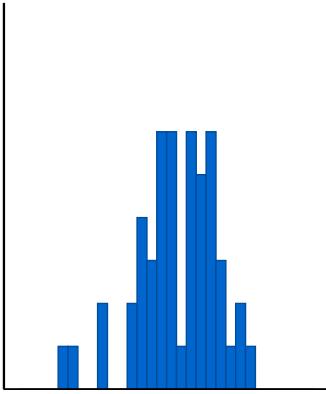


GroupB



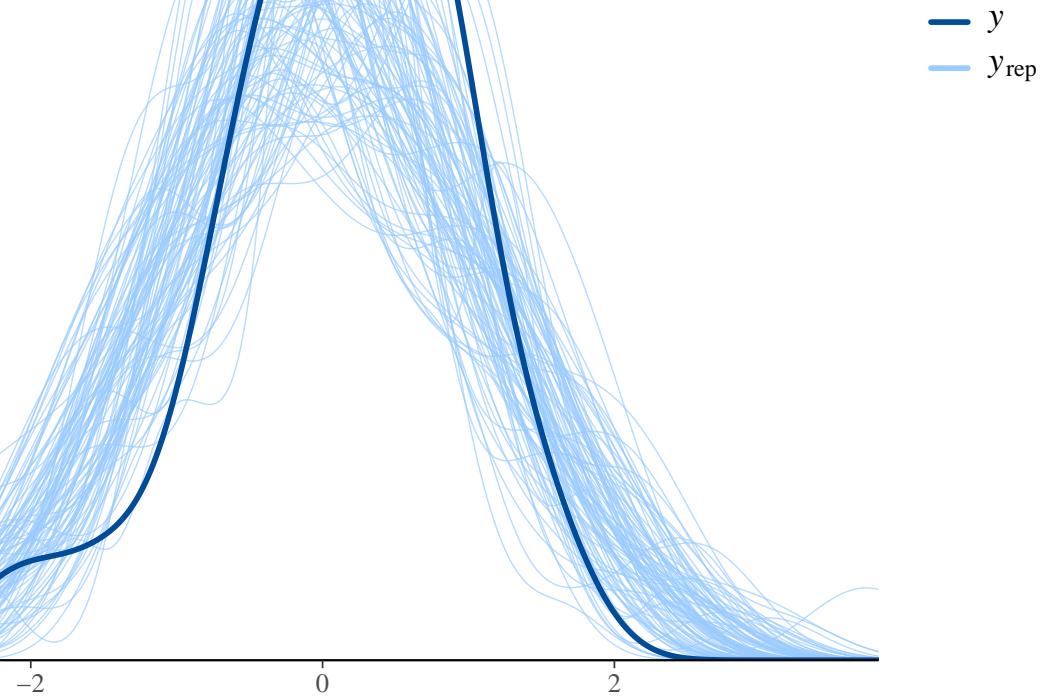
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help("pp\_check")

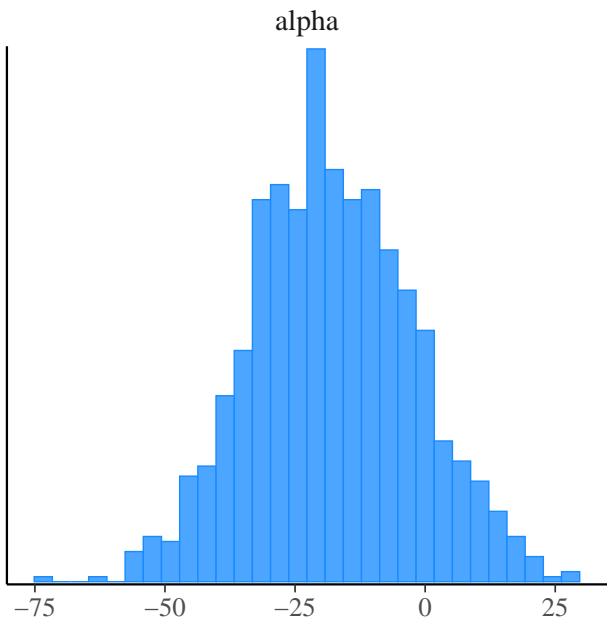


$y$   
  $y_{rep}$

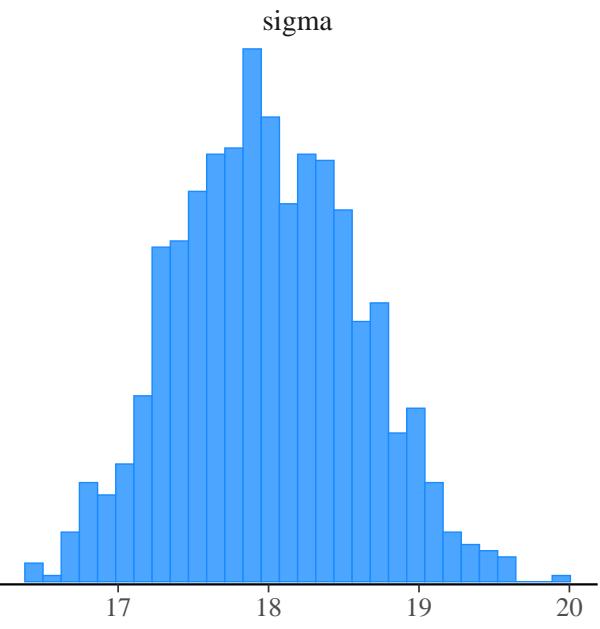
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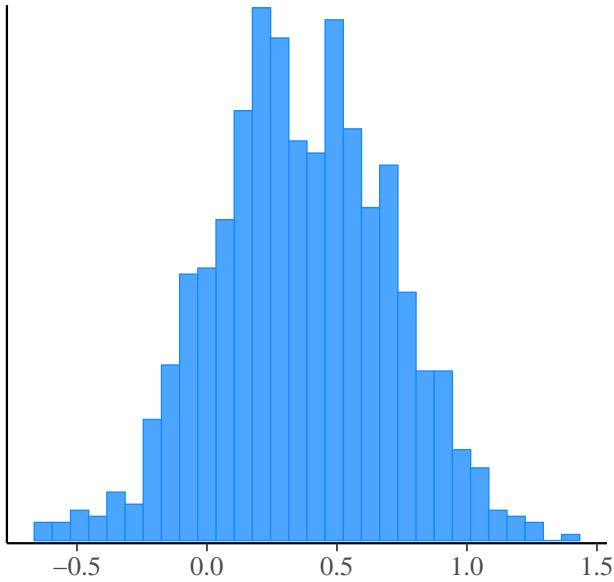
alpha



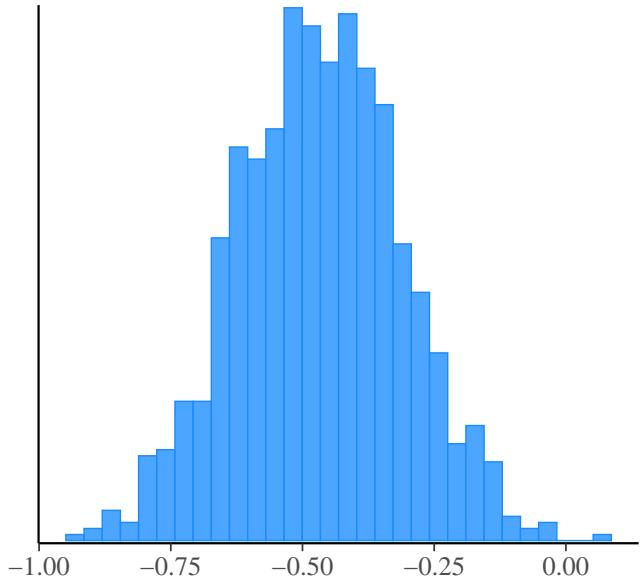
sigma



beta[1]

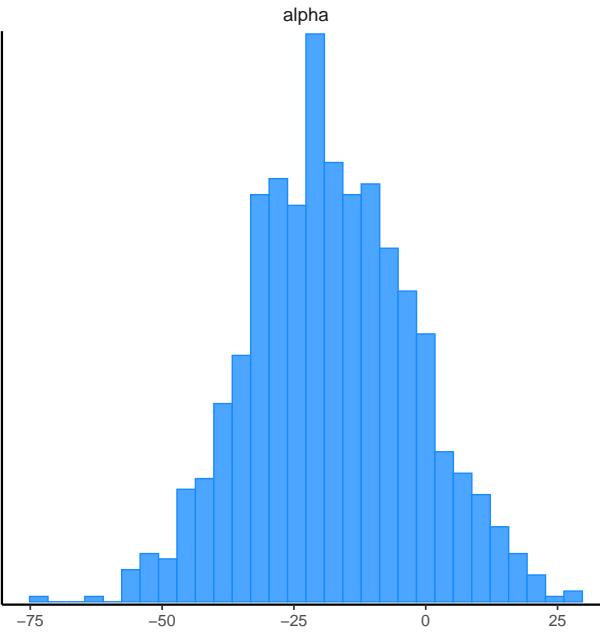


beta[2]

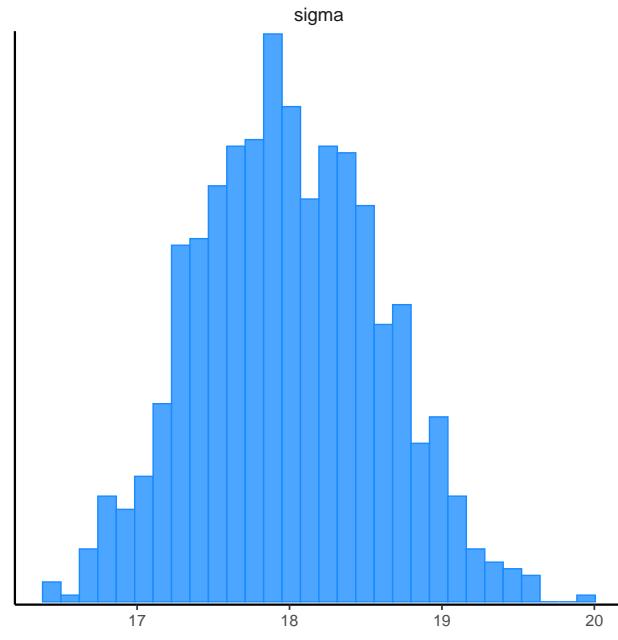


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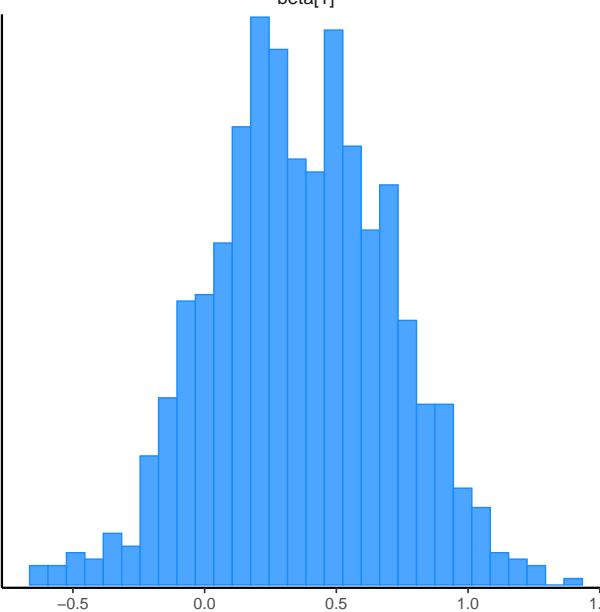
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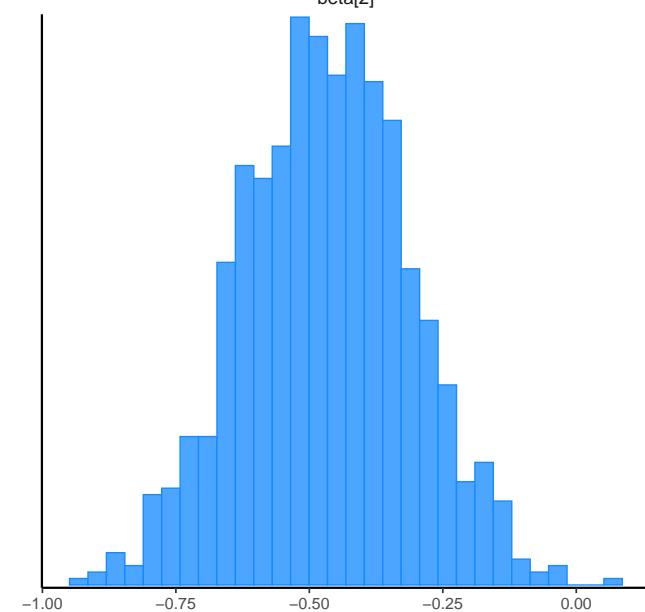
sigma



beta[1]

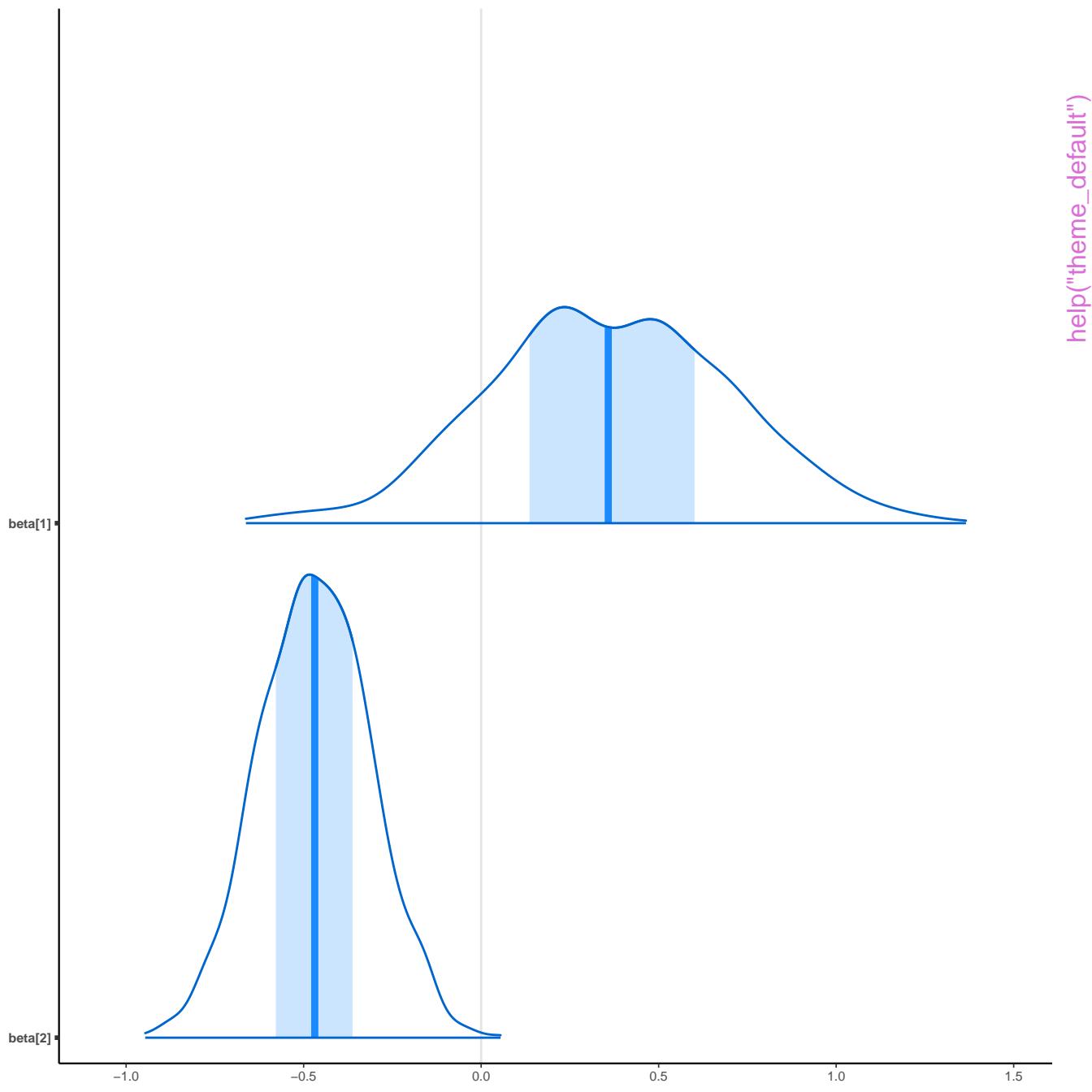


beta[2]

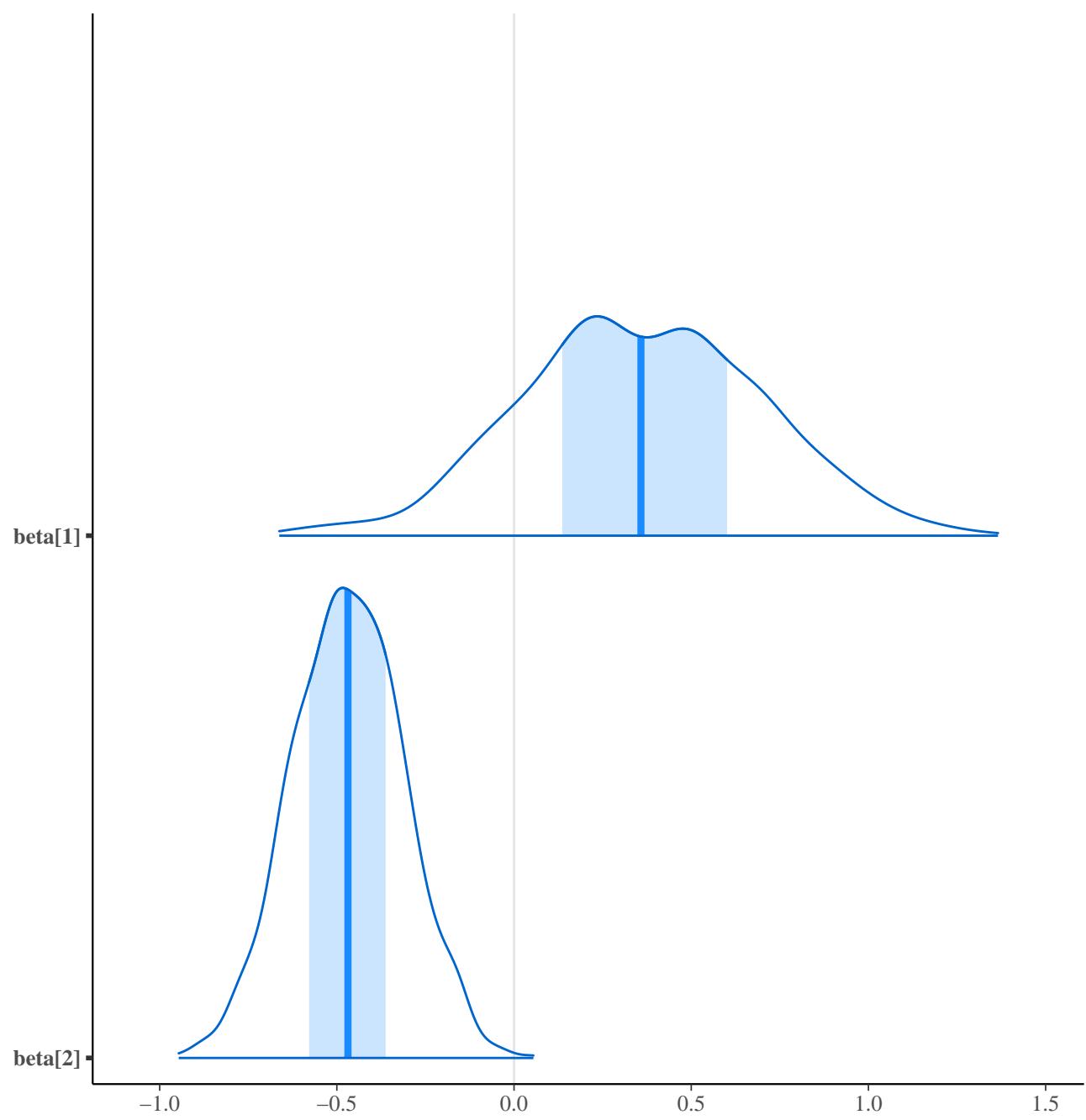


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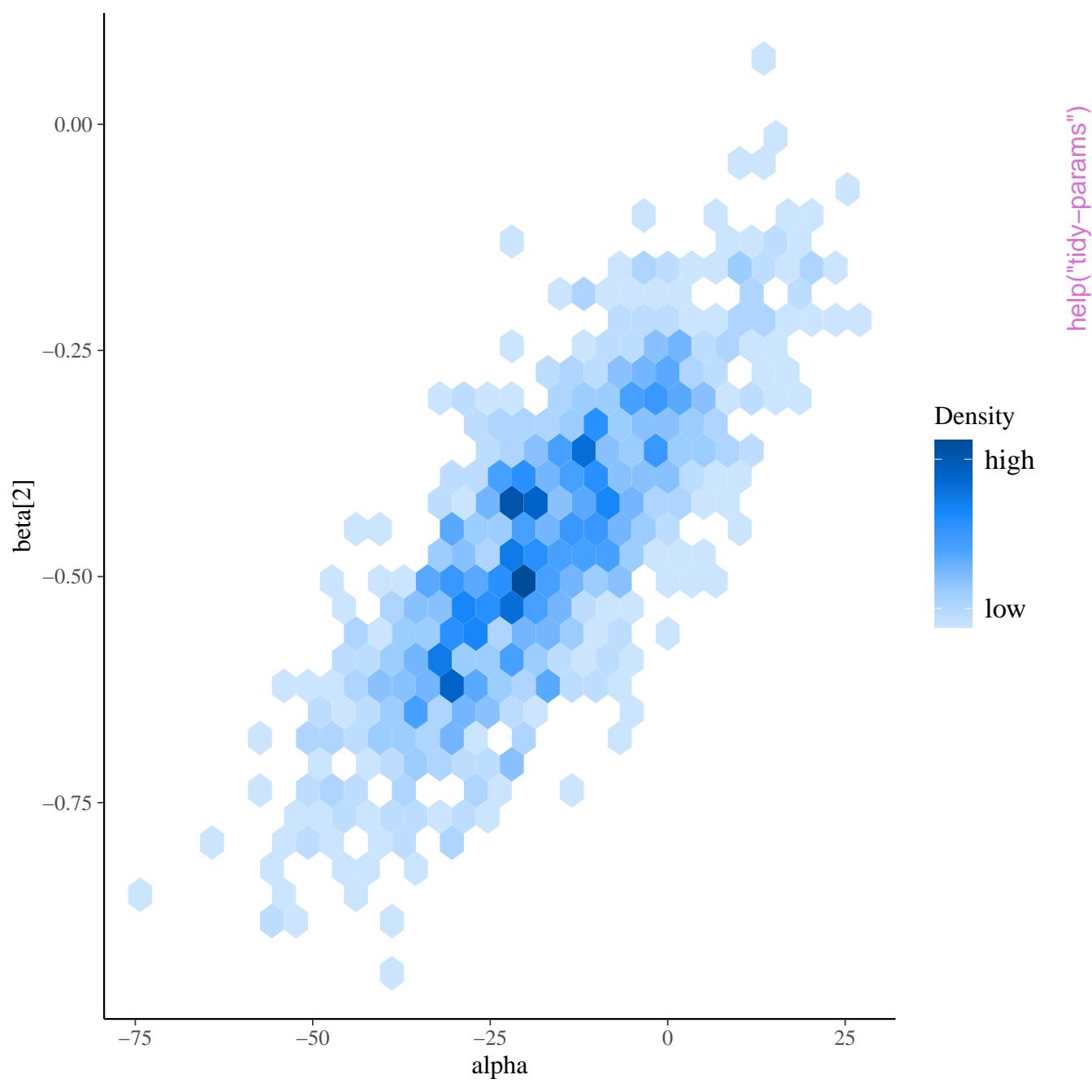
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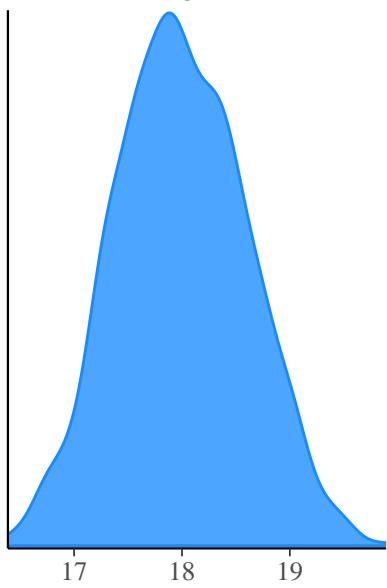
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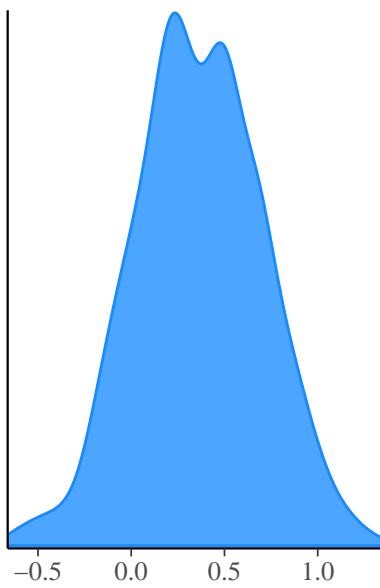
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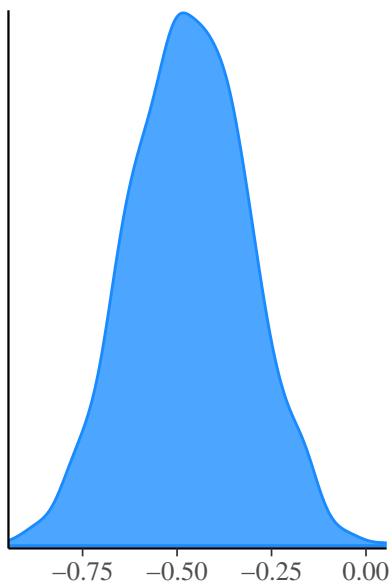
sigma



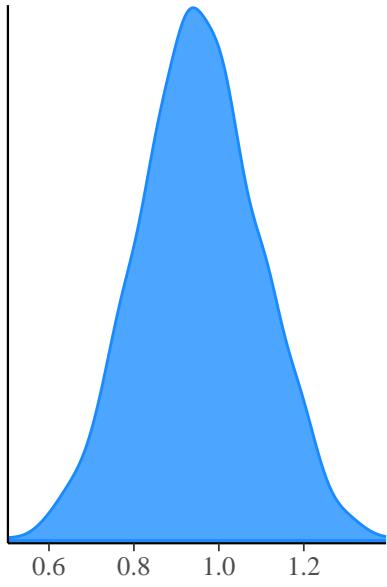
beta[1]



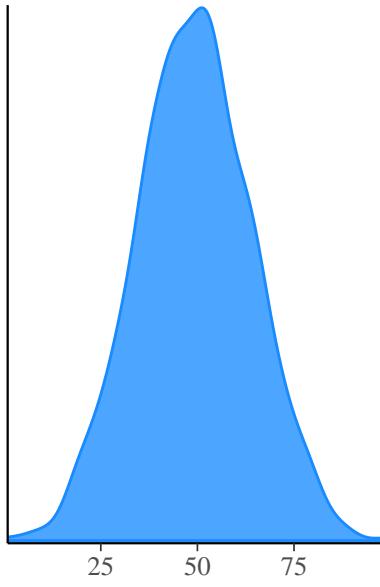
beta[2]



beta[3]

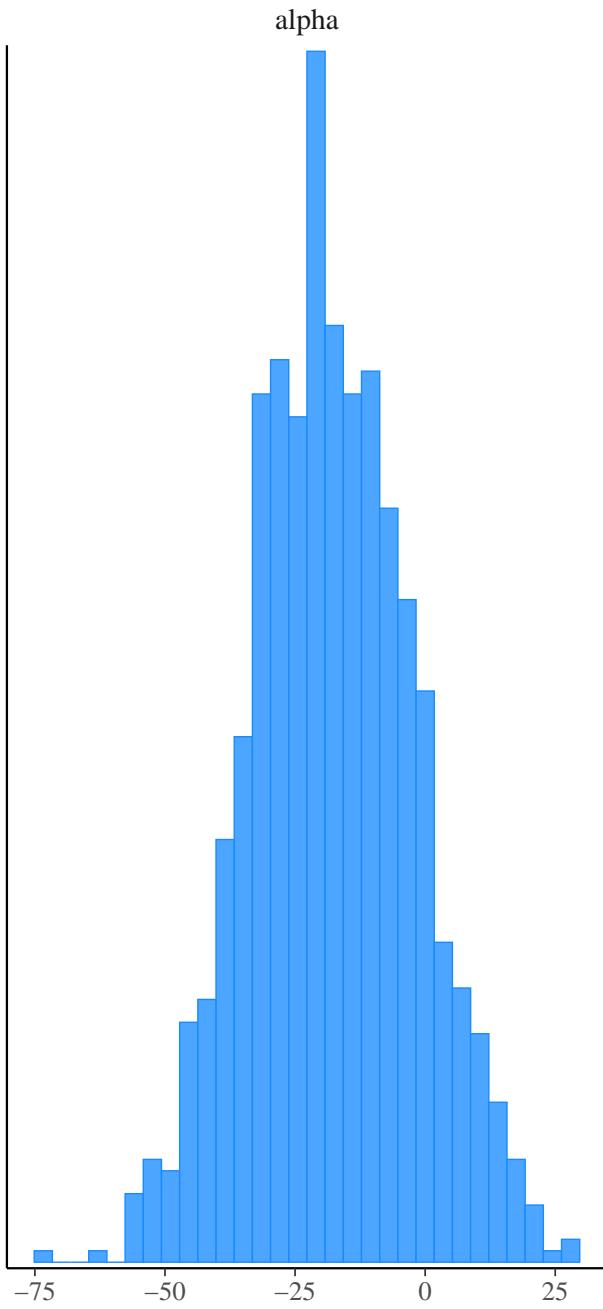


beta[4]

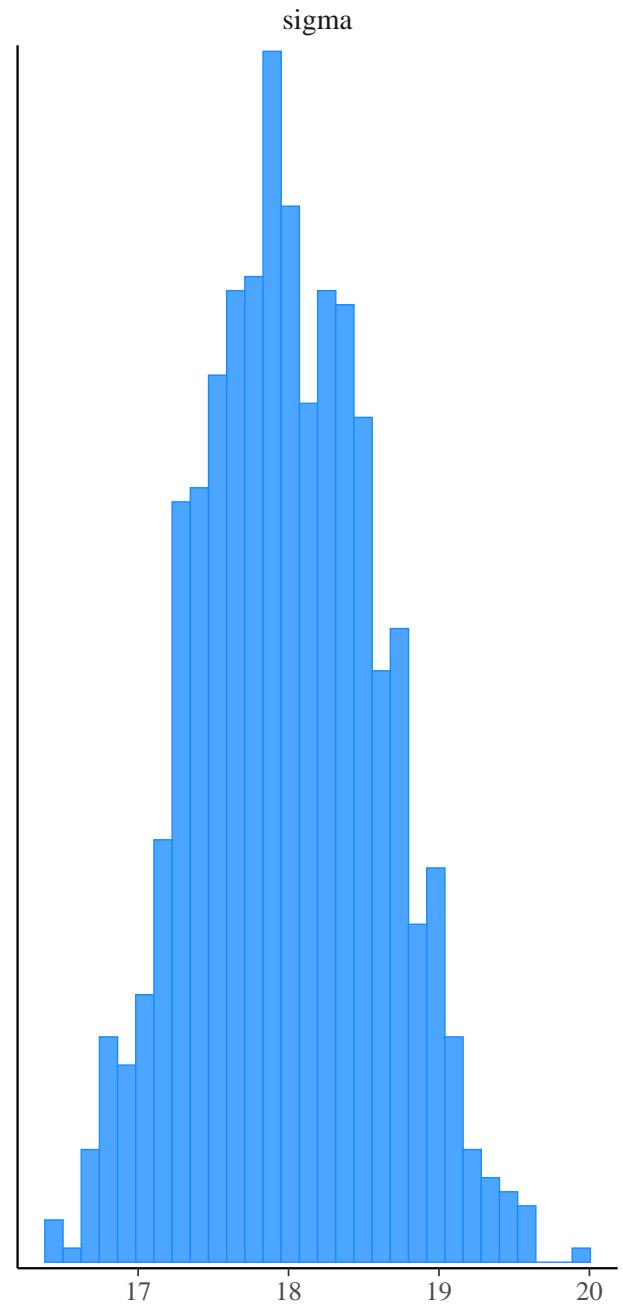


help("tidy-params")

alpha



sigma



help("tidy-params")

beta[1]

beta[3]

beta[4]

help("tidy-params")

